

HM4

DMX/RDM High-Voltage Waterproof Decoder



The HM4 is a high-performance LED constant-voltage controller with IP67 waterproof rating, designed for precise control of LED fixtures by receiving standard DMX/RDM protocol signals. Featuring 4 channels with a maximum output current of 6.4A and maximum output power up to 1536W, it reliably drives various constant-voltage LED fixtures.

The HM4 flexibly enables dimming, color temperature adjustment, and full-color RGB/RGBW control for diverse lighting requirements. It offers both DMX decoder mode and DMX master mode. In DMX decoder mode, parameters such as DMX address, resolution, dimming ramp time, and dimming mode can be configured. DMX master mode allows setting 33 lighting effects, speed, brightness, and other parameters. Mode switching and parameter configuration within each mode can be performed via three methods: NFC Lighting app, RDM-WIFI app, or physical buttons, balancing intuitive operation with deep customization.

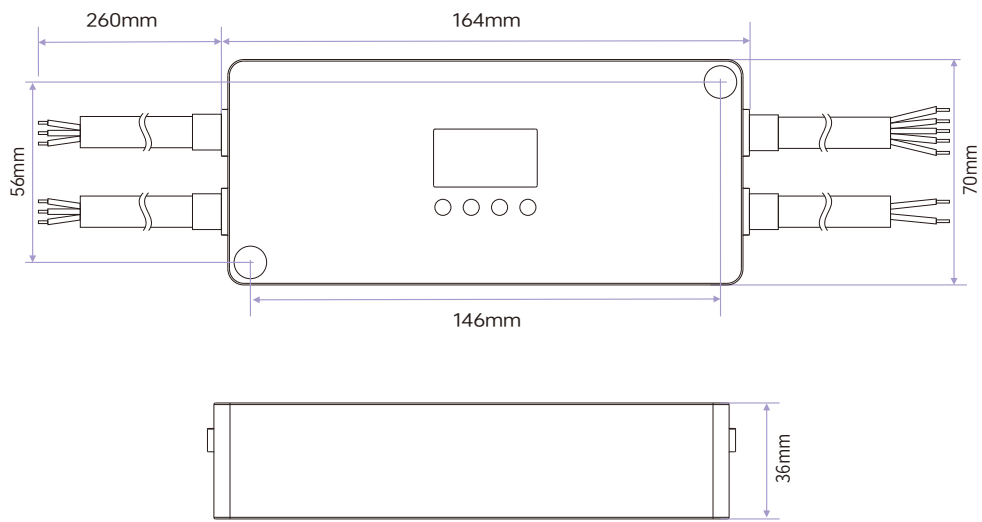
Boasting IP67 waterproof performance and stable operation, the HM4 is suitable for diverse indoor and outdoor environments. It reliably functions even in humid conditions, delivering an efficient and flexible control solution for lighting systems.

Technical Specifications

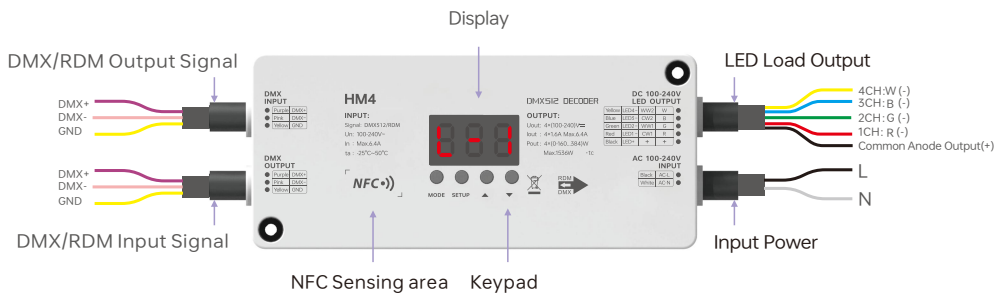
HM4

Input signal:	DMX512, RDM	Operating temperature:	-25°C-50°C
Input Voltage:	100-240V~	Product Weight:	670g
Input current:	Max. 6.4A	Product dimensions:	L164×W70×H36mm
Output Voltage:	4×(100-240)V =	Package dimensions:	L230×W95×H47mm
Output Current:	4CH×1.6A Max. 6.4A	Waterproof rating:	IP67
Output Power:	4CH×(0-160...384)W Max. 1536W	Protect:	Short-circuit, over-temperature, and over-current protection
Surge:	4KV		

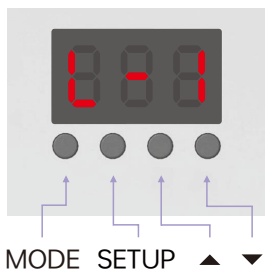
Product Dimensions



Parts Diagram



Address Display :



- Enter Configuration: Short press or long press the MODE key for 2 seconds.
- Adjust Values: Short press the ▲ or ▼ key.
- Return to Initial Page: Long press the MODE key again for 2 seconds or no operation for 15 seconds.
- Save Configuration: Long press the SETUP key for over 2 seconds.
- Restore Factory Settings: Simultaneously long press the MODE, ▲ , ▼ keys for 2 seconds.

DMX decoder mode



DMX Decoding Mode Interface

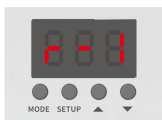
Press and hold both the MODE and ▲ keys simultaneously. When the display shows "L-1," the device enters DMX decoding mode. Press the MODE key briefly to access the menu (if entering settings after saving or timeout, press and hold the MODE key to enter). After completing parameter settings, press and hold the SETUP key for over 2 seconds to save the configuration.

1. DMX Address Setup



Press the ▲ or ▼ key to select and configure the DMX address.
Range: 1 to 512

2. Resolution



Press the MODE button briefly to switch the menu to "r".
Press the ▲ or ▼ button to select; the third digit will display 1 or 2.
Options: **r-1 (8bit)** / r-2 (16bit)

3. Dimming transition time



Press the MODE button briefly to switch the menu to "d".
Press the ▲ or ▼ button to select; the third digit will display 1 or 2.
Options: **d-1 (Smooth)** / d-2 (Standard)

4. Dimming Mode



Press the MODE key briefly to switch the menu to "C".
Press the ▲ or ▼ key to select. The third digit display shows 1 to 6.
Options:

Model	Addr.	Number and type of lamps installed	Instruction
C-1	1	4 DIM lights	Address 001 controls 4 output channels, uniformly regulating the brightness of 4 lights.
C-2	2	2 CT lights	Addr. 001 controls outputs CH1 and CH3, corresponding to CW light for lights 1 and 2; Addr. 002 controls outputs CH2 and CH4, corresponding to WW light for lights 1 and 2.
C-3	3	1 RGB light	Addr. 001 controls CH1 output, corresponding to R brightness; Addr. 002 controls CH2 output, corresponding to G brightness; Addr. 003 controls CH3 and CH4 outputs, corresponding to B brightness.
C-4	4	1 RGBW light	Addr. 001 controls CH1 output, corresponding to R brightness; Addr. 002 controls CH2 output, corresponding to G brightness; Addr. 003 controls CH3 output, corresponding to B brightness; Addr. 004 controls CH4 output, corresponding to W brightness.
C-5	4	2 CT lights	Addr. 001 controls CH1 output, corresponding to the CW lamp of light 1; Addr. 002 controls CH2 output, corresponding to the WW lamp of light 1; Addr. 003 controls CH3 output, corresponding to the CW lamp of light 2; Addr. 004 controls CH4 output, corresponding to the WW lamp of light 2.
C-6	4	4 DIM lights	Addr. 001 controls CH1 output, corresponding to the brightness of light 1; Addr. 002 controls CH2 output, corresponding to the brightness of light 2; Addr. 003 controls CH3 output, corresponding to the brightness of light 3; Addr. 004 controls CH4 output, corresponding to the brightness of light 4.

5. Displayed time



Press the MODE button briefly to switch the menu to "n".
Press the ▲ or ▼ key to select; the third digit will display 1 or 2.
Options: **n-1 (Digital tube stays lit)** / n-2 (Will turn off if no operation within 30 seconds)

DMX control mode



DMX Control Mode Interface

Press and hold the MODE and ▼ key simultaneously.
When the display shows "L-2", the device enters DMX master control mode.
Press the MODE key briefly to access the menu (if entering settings after saving or timeout, press and hold the MODE key to enter). After completing parameter settings, press and hold the SETUP key for over 2 seconds to save the configuration.

1. Light Effects



Example: E-1 (Black)



Example: E17
(Rainbow Fade-in/Fade-Out)

Press the MODE key briefly to switch the menu to "E".
Press the ▲ or ▼ key to select. The display will show options 1 to 33.
Options:

E-1 (Black)	E12 (RGB Strobing)	E23 (Blue-Purple Gradient)
E-2 (Red)	E13 (Rainbow Strobing)	E24 (Green-Yellow Gradient)
E-3 (Green)	E14 (RGB Jumping)	E25 (Blue-Cyan Gradient)
E-4 (Blue)	E15 (Rainbow Jumping)	E26 (Red-Purple Gradient)
E-5 (Yellow)	E16 (RGB Fade-in/Fade-out)	E27 (Blue-White Gradient)
E-6 (Purple)	E17 (Rainbow Fade-in/Fade-out)	E28 (Yellow-Purple-Cyan Gradient)
E-7 (Cyan)	E18 (Red-Green Gradient)	E29 (RGB Gradient)
E-8 (White)	E19 (Red-Blue Gradient)	E30 (Rainbow Gradient)
E-9 (Red Strobe)	E20 (Green-Blue Gradient)	E31 (RGB+White Gradient)
E-10 (Green Strobe)	E21 (Red-Yellow Gradient)	E32 (RGBW Gradient)
E-11 (Blue Strobe)	E22 (Green-Cyan Gradient)	E33 (RGY Gradient)

2. Speed



Press the MODE key briefly to switch the menu to "S".

Press the ▲ or ▼ key to select. The third digit displays 1 to 8.

Default value: **S-5**

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

Speed levels, ascending in order

3. Brightness



Press the MODE key briefly to switch the menu to "b".

Press the ▲ or ▼ key to select. The second and third digit displays 00 to FF.

Default value: **bFF**

Options: b00 / b01 bFE / bFF

Brightness levels, in ascending order

4. Displayed time



Press the MODE key briefly to switch the menu to "n".

Press the ▲ or ▼ key to select. The third digit display shows 1 or 2.

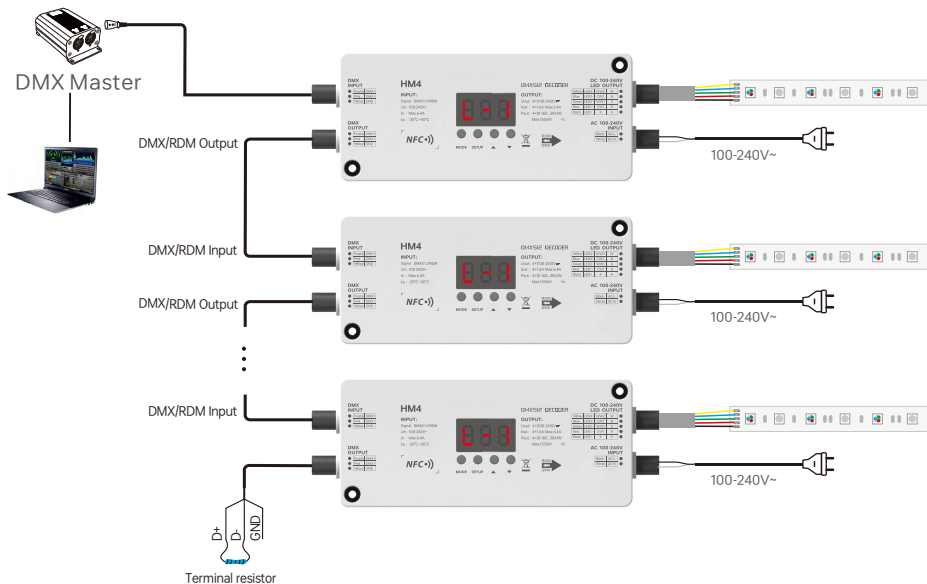
Options: **n-1 (Digit display stays on) /**

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

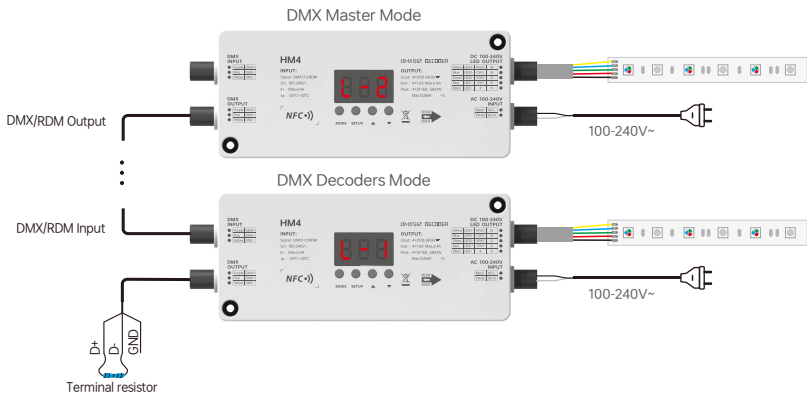
Connection Diagram

DMX Decoder Mode Connection

(The decoder mode can be set to DIM, CT, RGB, or RGBW via the NFC Lighting App or WiFi-RDM App.)

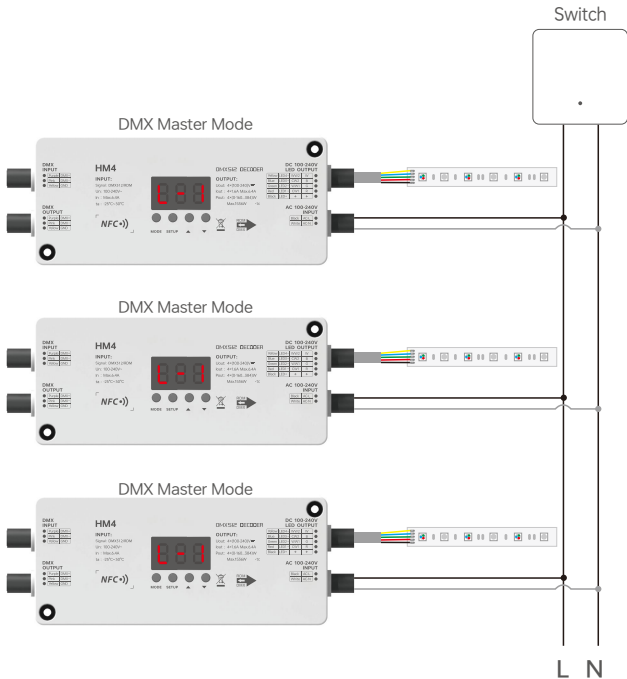


DMX Master Mode Connection (Set one decoder to DMX master mode via the NFC lighting app or WiFi-RDM app, while configuring the others as DMX decoders to form a single DMX control system.)



AC Synchronization (Multiple controllers in the same circuit can be powered up simultaneously and synchronized dynamically via AC power.)

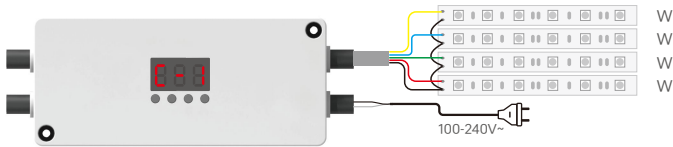
* The controller must be set to DMX master mode, and all controllers must be in the same dynamic mode with identical speed settings.



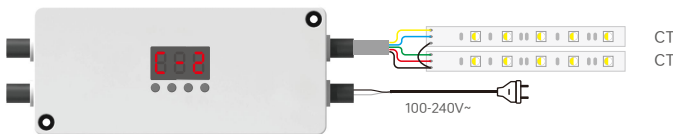
- * Notes:**
1. If a DMX signal is received during operation, AC synchronization will cease.
 2. If speed or dynamic effects are altered mid-operation, visual desynchronization may occur, requiring a power cycle to restore synchronization.

Mode Connection Diagram

1. C-1(DIM Synchronous control)

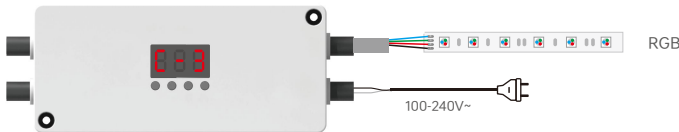


2. C-2(CT Synchronous control)

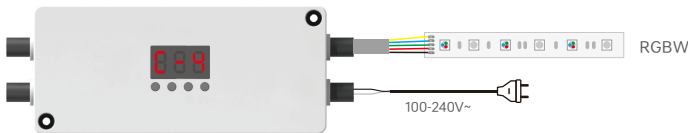


*C-2 CT mode: The output of CW is constant power; Address 001 is to adjust the brightness;
Address 002 is to adjust the color temperature.

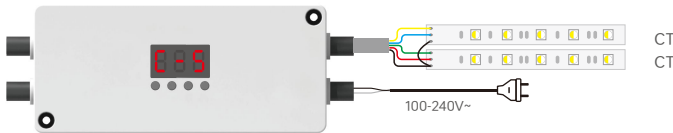
3. C-3(RGB)



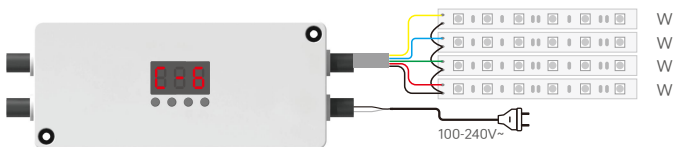
4. C-4(RGBW)



5. C-5(CT Independent control)



6. C-6(DIM Independent control)

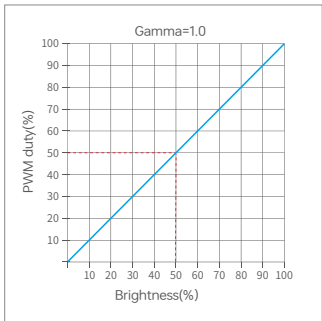


Address Setting Table

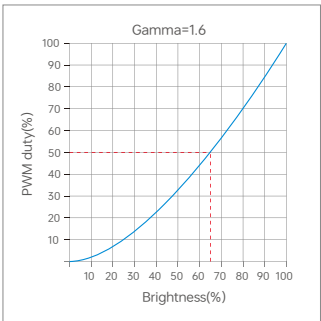
Mode	C-1 (DIM Synchronized Control)	C-2 (CT Synchronized Control)	C-3(RGB)	C-4(RGBW)	C-5 (CT Independent Control)	C-6 (DIM Independent Control)
Channel 1	001	001	001	001	001	001
Channel 2	001	002	002	002	002	002
Channel 3	001	001	003	003	003	003
Channel 4	001	002	003	004	004	004

*C-2 CT mode: The output of CW is constant power; Address 001 is to adjust the brightness; Address 002 is to adjust the color temperature.

Dimming Curve Setting



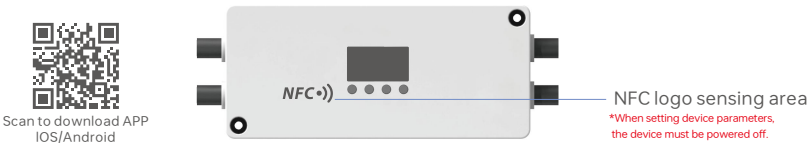
Linear dimming curve



Logarithmic dimming curve

Use the NFC Lighting APP

Scan the QR code below with your mobile phone and follow the prompts to complete the APP installation (According to performance requirements, you need to use a NFC-capable Android phone, or an iphone 8 and later that are compatible with iOS 13 or higher).



1.Read the LED driver

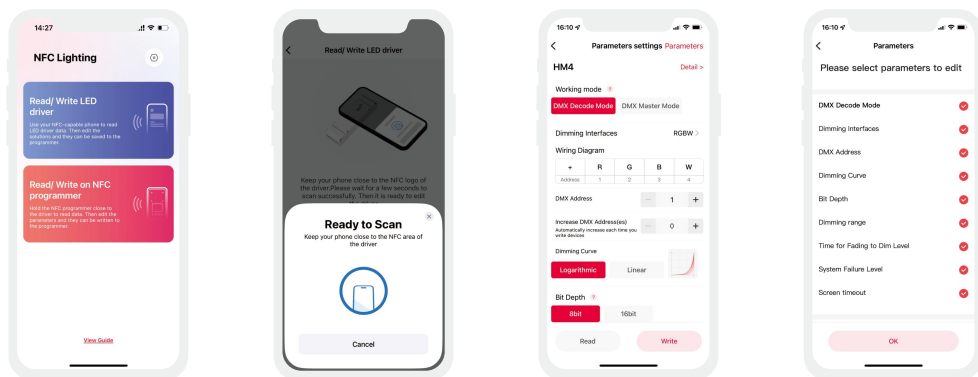
On the APP home page, click **[Read/Write LED driver]** , then keep the programmer's sensing area close to the NFC logo sensing area to read the driver parameters.

2. Edit parameters

Click [Parameters] to edit parameters such as DMX decoding mode, dimming interface, DMX address, dimming curve, bit depth, dimming range, dimming fade time, system fault state, on-screen display.

3. Write to the driver

After completing the parameter settings, click **[Write]** in the upper right corner, and keep the programmer's sensing area close to the NFC logo sensing area, so the parameters can be written to the driver.



RDM Operations

1. HM4 can work with a RDM-compliant address editor.

It is recommended to use the LTECH RDM editor (Model:WiFi-RDM01). Through the APP, set the screen timeout, unicast/multicast, and other parameters for Hm4. For detailed operations, please refer to the WiFi-RDM01 manual.



APP

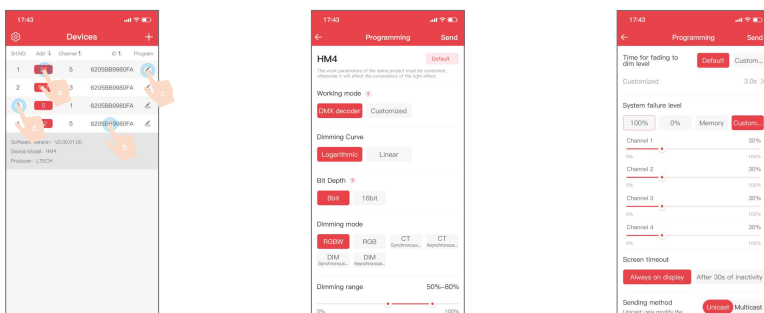


* The WiFi-RDM01 editor and the constant voltage decoder are sold separately.

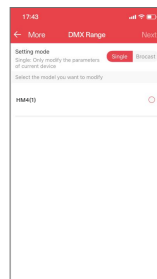
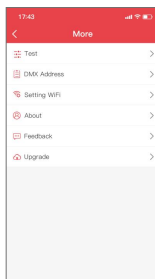
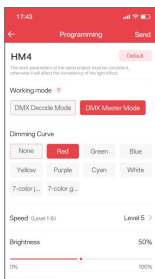
2. Select the working mode through the APP.

DMX Decoder mode: Set the dimming curve, bit depth, dimming mode, dimming range, etc.

DMX Control mode: Set lighting effects, speed, brightness, etc.



- a: Click the box corresponding to 'Address' to edit the address.
- b: Click "ID", get more product details.
- c: Click "⚙️", enter edited interface.
- d: Click "No.", issue the recognizing command.



Transportation and Storage

1. Transportation

Products can be shipped via vehicles, boats and planes.

During transportation, products should be protected from rain and sun. Please avoid severe shock and vibration during the loading and unloading process.

2. Storage

The storage conditions should comply with the Class I Environmental Standards. The products that have been stored for more than six months are recommended to be re-inspected and can be used only after they have been qualified.

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.

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 water proof 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.

* 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.

HM4

DMX/RDM 高压防水解码器



HM4是一款具备IP67防水等级的高性能LED恒压控制器，接收标准DMX/RDM协议信号，专为精准调控LED灯具设计。具有4通道，最大输出电流可达6.4A，最大输出功率高达1536W，能稳定驱动各类LED恒压灯具。

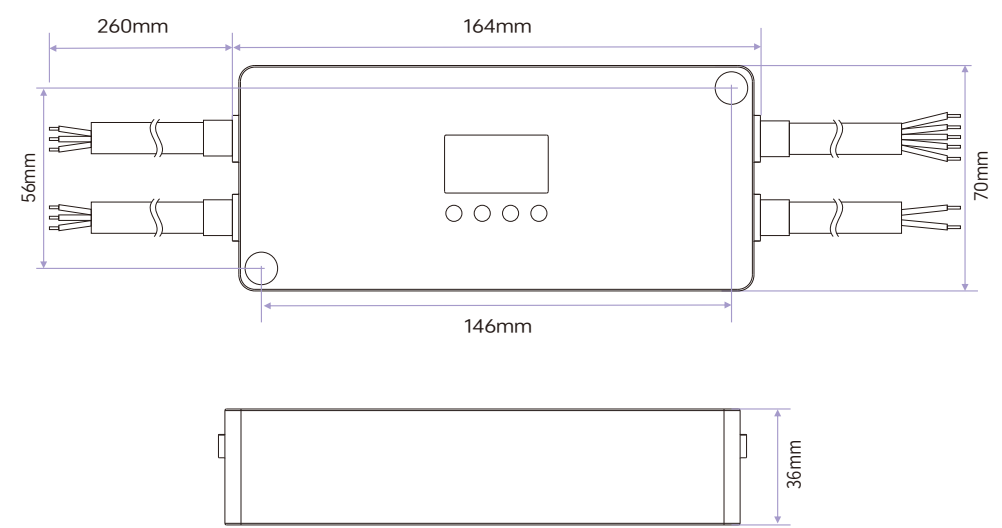
HM4可灵活实现灯具的调光、色温调节及RGB、RGBW全彩控制，适配多样化照明需求。具有DMX解码模式和DMX主控模式，在DMX解码器模式，可以设置DMX地址，分辨率，调光渐变时间，调光模式等参数。DMX主控模式可以设置33种灯光效果，速度，亮度等参数。可以通过3种方式（NFC Lighting app，RDM-WIFI app或按键）切换模式以及设置模式下的各项参数，兼顾直观操作与深度定制。

凭借IP67级防水性能与稳定的运行表现，HM4可广泛应用于室内外各类环境，即使在潮湿场景中也能可靠工作，为照明系统提供高效、灵活的控制解决方案。

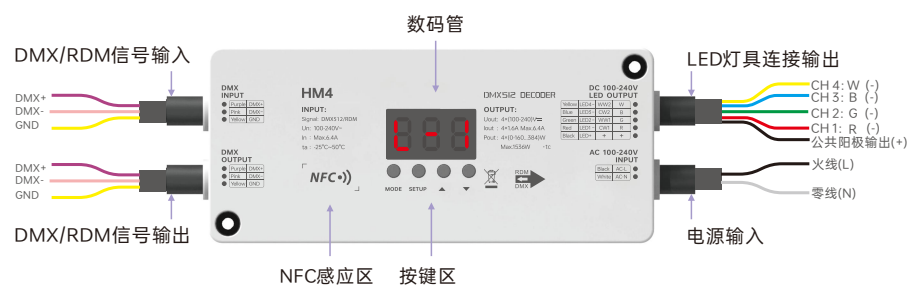
技术参数

HM4			
输入信号:	DMX512, RDM	工作温度:	-25℃-50℃
输入电压:	100-240V~	产品重量:	670克
输入电流:	Max. 6.4A	产品尺寸:	L164×W70×H36mm
输出电压:	4×(100-240)V =	包装尺寸:	L230×W95×H47mm
输出电流:	4路×1.6A Max. 6.4A	防水等级:	IP67
输出功率:	4路×(0-160...384)W Max. 1536W	保 护:	短路、过温、过流保护
浪 涌:	4KV		

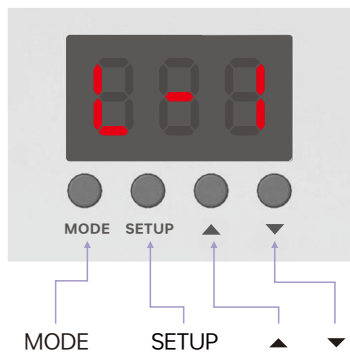
产品尺寸



产品部件图



数码管操作界面图



- 进入配置：短按或长按MODE键2秒
- 调整数值：短按▲ 或▼ 键
- 返回初始页：再次长按MODE键2秒或无操作15秒
- 保存配置：长按SETUP键2秒以上
- 恢复出厂：同时长按MODE、▲ 、▼ 键2秒

DMX解码模式



DMX解码模式界面

同时长按MODE和 ▲ 键，数码管显示“L-1”时，进入DMX解码模式短按MODE键即可进入菜单(如保存或超时后，后面进入设置界面则要长按MODE键进入)。参数设置完成后，长按SETUP 键2秒以上保存配置

1. DMX地址设置



按 ▲ 或▼ 键进行选择，进行DMX地址设置
范围：1~512

2. 分辨率



短按MODE键，将菜单切换到“r”
按 ▲ 或▼ 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. 调光渐变时间



短按MODE键，将菜单切换到“d”
按 ▲ 或▼ 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)

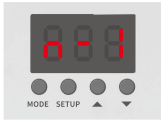
4. 调光模式



短按MODE键，将菜单切换到“C”
按 ▲ 或 ▼ 键进行选择，第三个数码管显示1~6
可选项：

模式号	地址数	接灯数量与类型	说明
C-1	1	4个调光灯	001地址控制4个通道输出，统一控制4个灯的亮度。
C-2	2	2个色温灯	001地址控制CH1,CH3输出，对应1和2灯的冷白光； 002地址控制CH2,CH4输出，对应1和2灯的暖白光。
C-3	3	1个RGB灯	001地址控制CH1输出，对应R的亮度； 002地址控制CH2输出，对应G的亮度； 003地址控制CH3和CH4输出，对应B的亮度。
C-4	4	1个RGBW灯	001地址控制CH1输出，对应R的亮度； 002地址控制CH2输出，对应G的亮度； 003地址控制CH3输出，对应B的亮度； 004地址控制CH4输出，对应W的亮度。
C-5	4	2个色温灯	001地址控制CH1输出，对应1灯的冷白光； 002地址控制CH2输出，对应1灯的暖白光； 003地址控制CH3输出，对应2灯的冷白光； 004地址控制CH4输出，对应2灯的暖白光。
C-6	4	4个调光灯	001地址控制CH1输出，对应1灯的亮度； 002地址控制CH2输出，对应2灯的亮度； 003地址控制CH3输出，对应3灯的亮度； 004地址控制CH4输出，对应4灯的亮度。

5. 屏显时间



短按MODE键，将菜单切换到“n”
按 ▲ 或 ▼ 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）

DMX主控模式



DMX主控模式界面

同时长按MODE和 ▼ 键，数码管显示“L-2”时，进入DMX主控模式短按MODE键即可进入菜单（如保存或超时后，后面进入设置界面则要长按MODE键进入）。参数设置完成后，长按SETUP键2秒以上保存配置

1. 灯光效果



例:E-1（黑色）



例:E17（七彩渐明晰暗）

短按MODE键，将菜单切换到“E”
按 ▲ 或 ▼ 键进行选择，可选项数码管显示1~33
可选项：

E-1（黑色）	E12（RGB频闪）	E23（蓝紫渐变）
E-2（红色）	E13（七彩频闪）	E24（绿黄渐变）
E-3（绿色）	E14（RGB跳变）	E25（蓝青渐变）
E-4（蓝色）	E15（七彩跳变）	E26（红紫渐变）
E-5（黄色）	E16（RGB渐明晰暗）	E27（蓝白渐变）
E-6（紫色）	E17（七彩渐明晰暗）	E28（黄紫青渐变）
E-7（青色）	E18（红绿渐变）	E29（RGB渐变）
E-8（白色）	E19（红蓝渐变）	E30（七彩渐变）
E-9（红色频闪）	E20（绿蓝渐变）	E31（RGB+W渐变）
E10（绿色频闪）	E21（红黄渐变）	E32（RGBW渐变）
E11（蓝色频闪）	E22（绿青渐变）	E33（RGBY渐变）

2. 速度



短按MODE键，将菜单切换到“S”
按▲或▼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MODE键，将菜单切换到“b”
按▲或▼键进行选择，第二、第三个数码管显示00~FF
默认值：**bFF**
可选项：b00/b01 ····· bFE/bFF

亮度等级，依次递增

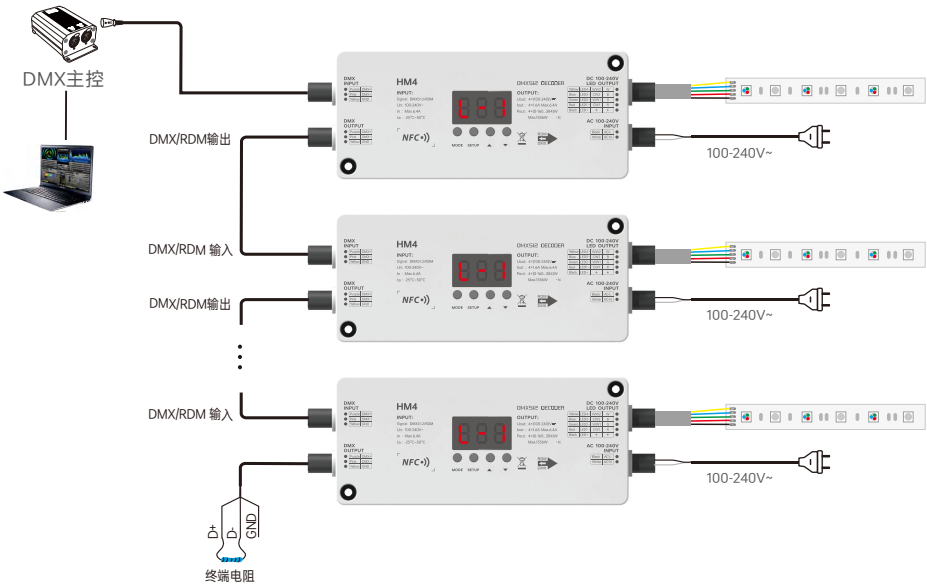
4. 屏显时间



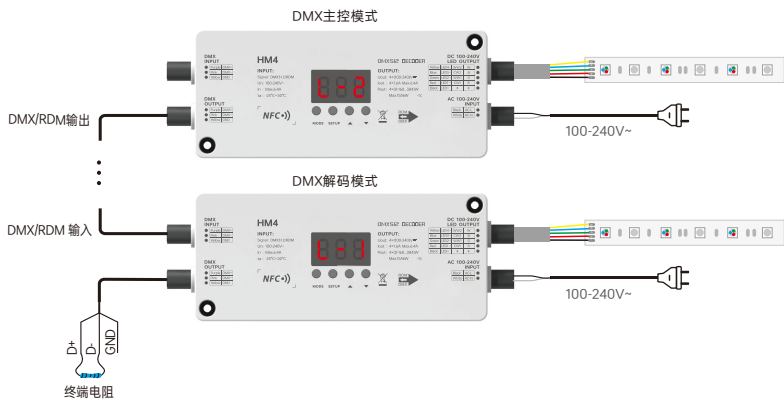
短按MODE键，将菜单切换到“n”
按▲或▼键进行选择，第三个数码管显示1或2
可选项：**n-1**（数码管常亮）/ n-2（30s内无操作将熄灭）

连接示意图

DMX解码模式连接（可通过NFC lighting app或者WiFi-RDM把解码器模式设置成DIM,CT,RGB,RGBW）

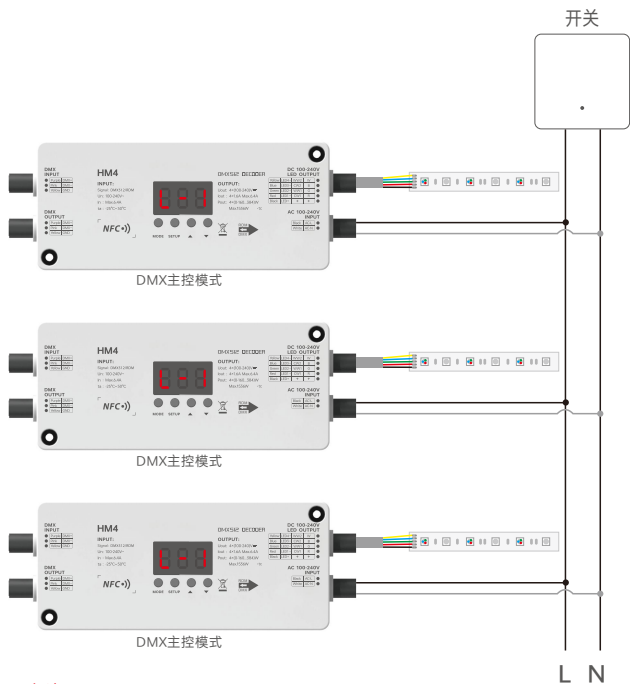


DMX主控模式连接(可通过NFC lighting app或者WiFi-RDM把其中1个解码器设置成DMX主控模式，其他设置成DMX解码器模式，组成1个DMX控制系统。)



交流同步(同一回路的多台控制器同时上电，可通过交流电源同步动态模式。)

* 需要把控制器设置成DMX主控模式，且要在同一个动态模式下，速度设置成一样。

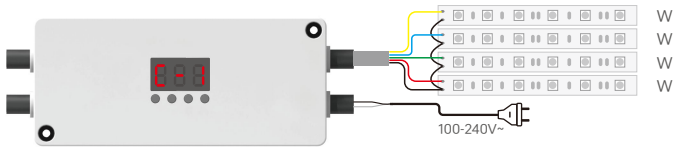


*** 备注:**

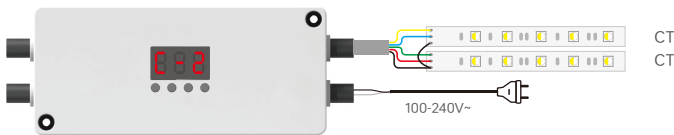
- 1. 若中途有收到DMX信号，则会停止AC同步。
- 2. 若中途更改了速度，动态效果，则会出现画面不同步，需重新上电。

模式连接示意图

1. C-1(调光同步控制)

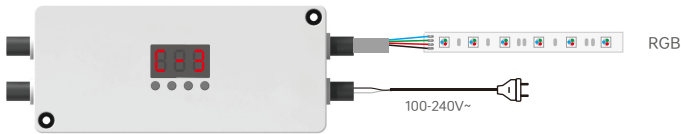


2. C-2(色温同步控制)

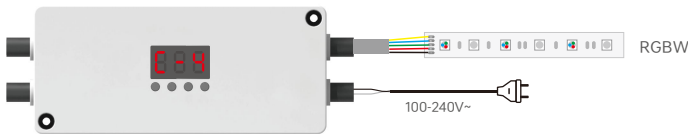


*C-2色温模式下, CW输出为恒功率, 地址001为调节亮度加减, 地址002调节色温变化。

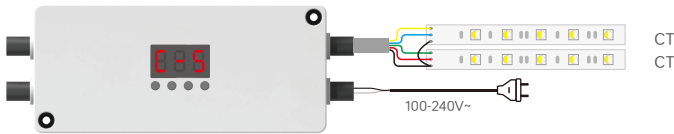
3. C-3(RGB)



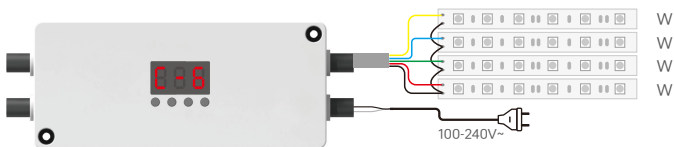
4. C-4(RGBW)



5. C-5(色温独立控制)



6. C-6(调光独立控制)

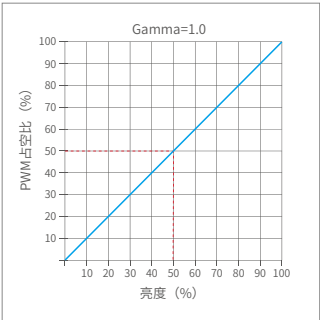


模式地址设置表

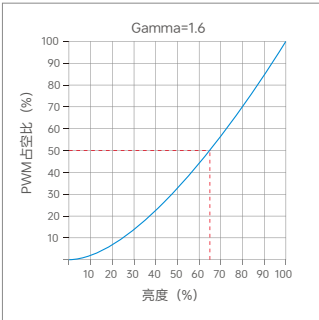
模式	C-1(调光同步控制)	C-2(色温同步控制)	C-3(RGB)	C-4(RGBW)	C-5(色温独立控制)	C-6(调光独立控制)
通道1	001	001	001	001	001	001
通道2	001	002	002	002	002	002
通道3	001	001	003	003	003	003
通道4	001	002	003	004	004	004

*C-2色温模式下，CW输出为恒功率，地址001为调节亮度加减，地址002调节色温变化。

调光曲线



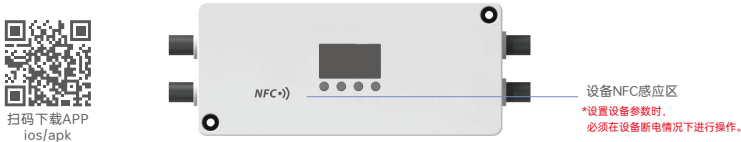
线性调光曲线



对数调光曲线

搭配NFC Lighting APP 使用

通过手机扫描下方二维码，按提示完成APP安装。(因性能需求，要求手机型号苹果：iPhone8及以上、且操作系统 iOS13 及以上；安卓：具备NFC功能机型)



1.读取设备

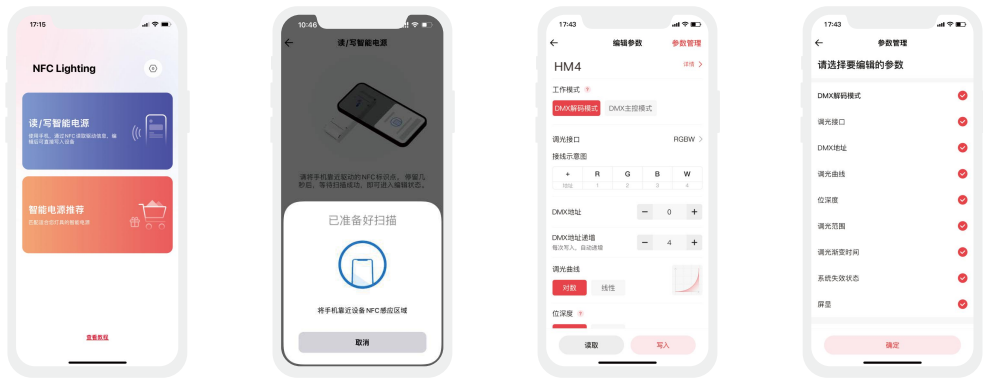
在APP【首页】点击“读/写智能电源” 将手机感应区域靠近驱动器NFC感应区，读取设备参数。

2. 编辑参数

点击【参数管理】可编辑DMX解码模式、调光接口、DMX地址、调光曲线、位深度、调光范围、调光渐变时间、系统失效状态、屏显等参数。

3. 写入驱动器

参数设置完成后，点击右上角【写入】，将手机感应区域靠近驱动器NFC感应区，即可写入驱动器成功修改参数。



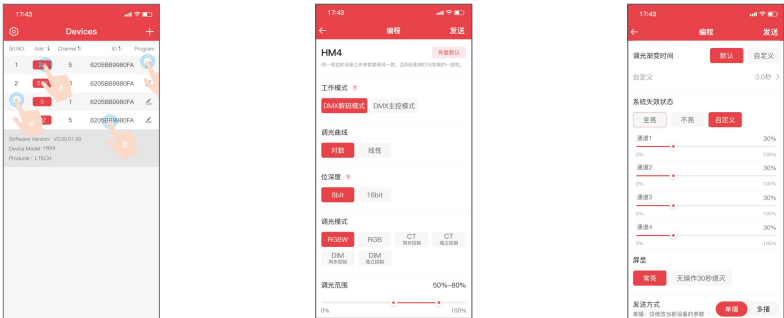
RDM 操作

1. HM4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），可通过APP设置HM4的屏显方式、单播/多播等参数，具体请参看WiFi-RDM01的使用说明书。

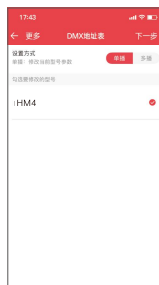


APP * WiFi-RDM01编辑器与恒压解码器不配套销售。

2.通过APP选择工作模式。
DMX解码模式：可设置调光曲线、位深度、调光模式、调光范围等。
DMX主控模式：可设置灯光效果、速度、亮度等。



- 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。



运输和贮存

1. 运输

产品适用车、船、飞机交通运输工具运输。

在运输中，应使用遮蓬进行防雨和防晒，并保持文明装卸，不应有剧烈振动、撞击等。

2. 贮存

贮存符合Ⅰ类环境的规定。贮存期限超过6个月的产品建议重新检验，合格后方可使用。

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；
- 无我司签订的合同或发票凭证。

1. 修理或更换是我司对客户唯一的补救措施。雷特不承担任何附带引起的损害赔偿責任，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。

注意事项

- 本产品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；
- 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。