

# WP-803H DMX/RDM CV Decoder



CE RoHS IP67

WP-803H uses the RDM protocol and supports DMX512/RDM signal bi-directional communication. The RDM protocol enables the remote management such as reading / writing DMX address (For RDM functions the DMX master must be RDM compliant). WP-803H has 3 channel output with max. 1.2A output for each channel. It can be used to control DIM, CT, RGB constant voltage lights and achieve 0-100% dimming or various lighting effects. WP-803H can be operated in DMX mode or in customized mode.

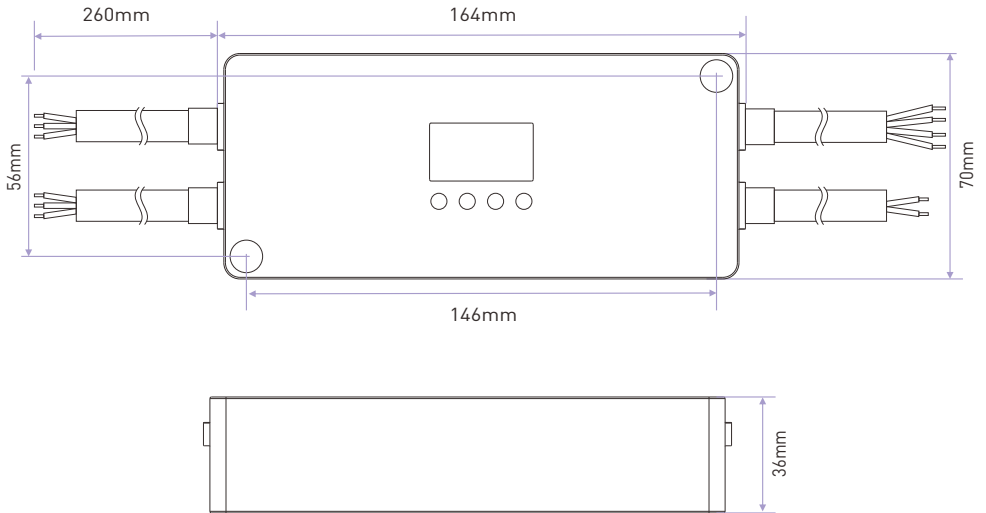
It is easy to set address via digital display and buttons. WP-803H is a waterproof decoder with IP67 rating, suitable for outdoor and damp environments.

## Product Parameters

### WP-803H

Input Signal:	DMX512, RDM	Working Temp.:	-20°C~50°C
Input Voltage:	100-240V~	Weight(N.W.):	670g
Input Current:	Max. 3.7A	Dimensions(L×W×H):	L164×W70×H36mm
Output Voltage:	3×(100-240)V ==	Package Size(L×W×H):	L230×W95×H47mm
Output Current:	Max. 1.2A/CH Max. 3.6A(3CH)	Waterproofing Grade:	IP67
Output Power:	[83-288]W/CH Max. 864W(3CH)	Protection:	Short circuit, over temperature, over current protection, auto recovery.
Lightning Inrush Current:	2KV		

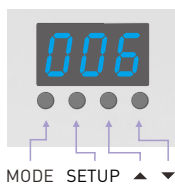
## Product Size



## Main Component Description



Digital display:



- **Access Configuration:** Long press the MODE button for more than 2s.
- **Adjust Value:** Short press ▲ or ▼ button.
- **Back to Start Page:** Long press the MODE button for 2s again or after 15 seconds of inactivity.
- **Save Configuration:** Long press the SETUP button for more than 2s.
- **Reset It to Factory Defaults:** Long press MODE, ▲, ▼ button simultaneously for 2s.

## OLED display interface

### DMX mode



Interface of DMX mode

Short press the MODE button and ▲ button simultaneously. When the screen displays "L-1", it enters the DMX mode. Long press Mode button for 2s to enter the menu. After parameter settings are completed, Long press the SETUP button for more than 2s to save the configuration.

#### 1. DMX address setting



Press ▲ or ▼ button to set the DMX address.  
DMX address range: 1-512

#### 2. Resolution



Short press MODE button to switch the menu to "r".  
Press ▲ or ▼ 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 MODE button to switch the menu to "F".  
Press ▲ or ▼ button to select PWM frequency and the third value on the screen will display H or L.  
Options: **F-H (3600Hz)** / F-L (300Hz)

#### 4. Dimming mode



Short press MODE button to switch the menu to "d".  
Press ▲ or ▼ 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 MODE button to switch the menu to "C".  
Press ▲ or ▼ button to select the channels and the third value on the screen will display 1, 2 or 3.  
Options:  
**C-3 (3 channel output occupies corresponding 3 DMX addresses)**  
C-1 (3 channel output occupies DMX address 1)  
C-2 (1st channel output occupies DMX address 1;  
2nd and 3rd channel output occupy DMX address 2)

#### 6. Screen timeout



Short press MODE button to switch the menu to "n".  
Press ▲ or ▼ 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)

## Customized mode



Interface of customized mode

Short press the MODE and ▼ button simultaneously. When the screen displays "L-2", it enters the customized mode. Long press the MODE button for 2s to enter the menu. After parameter settings are completed, Long press the SETUP button for more than 2s to save the configuration.

### 1. Lighting effects



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



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

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

Press ▲ or ▼ 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 MODE button to switch the menu to "S".

Press ▲ or ▼ 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 MODE button to switch the menu to "B".

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

Default: B-8

Options: B-1 / B-2 ····· B-7 / B-8

Brightness levels, brightness increases one by one

### 4. Screen timeout



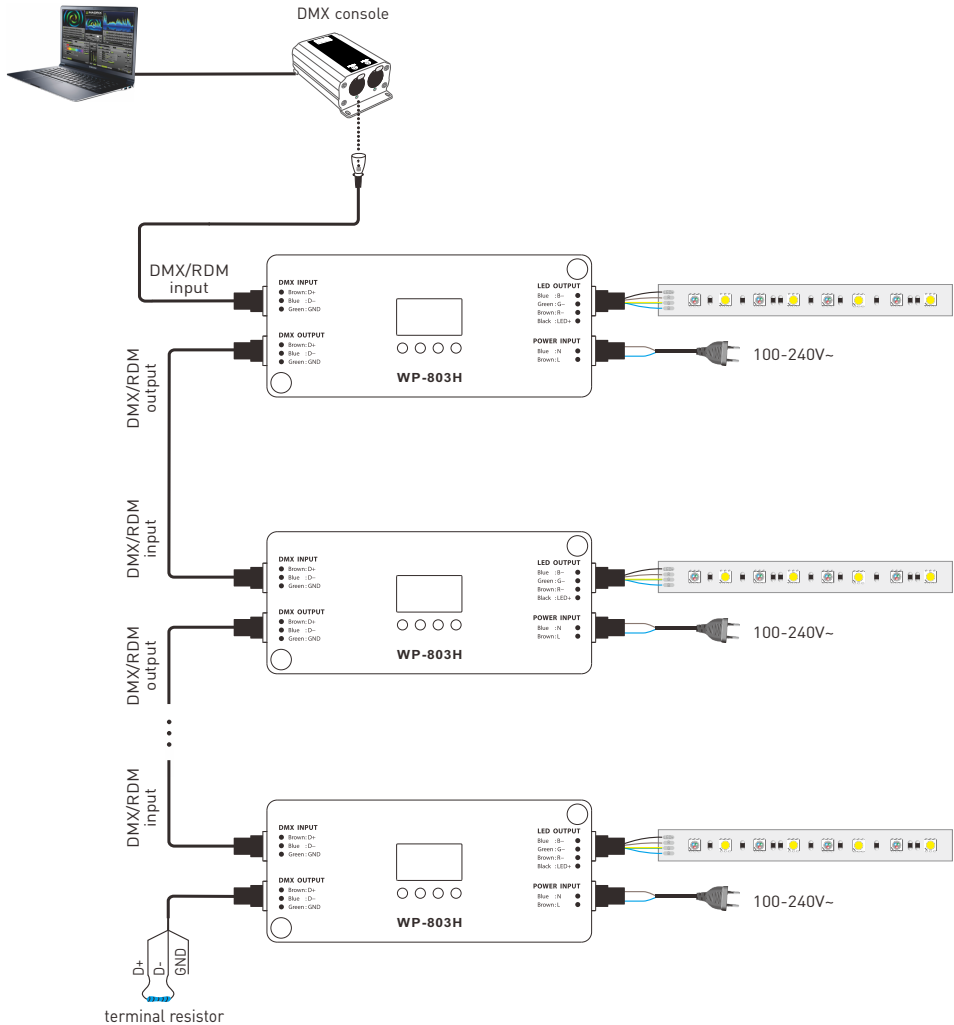
Short press MODE button to switch the menu to "n".

Press ▲ or ▼ 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)

## 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.

## Attentions

- This product must be installed and adjusted by a qualified professional.
  - 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 a accident.
  - If a fault occurs, please do not attempt to fix the product by yourself. If you have any question, 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.