

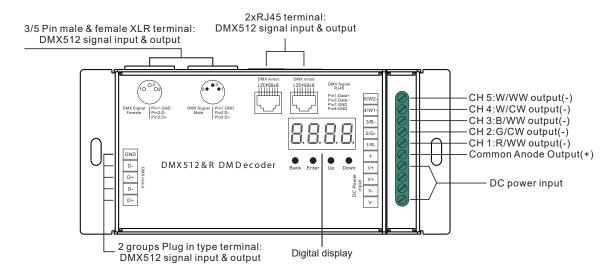
#### PRODUCT DATA:

INPUT VOLTAGE	OUTPUT CURRENT	OUTPUT POWER	REMARKS	SIZE (LXWXH)	PROTECTION
12-24V DC	5 X 8A	5 X (96-192)W	CONSTANT VOLTAGE	6.46" X 2.87" X 1.50"	SHORT CIRCUIT

#### **FEATURES:**

- RDM function can realize intercommunication between DMX master and decoder.
- Easy to set and show DMX address on built-in digital display.
- Multiple kinds of DMX in/out ports: RJ 45, XLR, normal screws.
- Total 5 PWM output channels. DMX channel quantity from 1CH~5CH settable
- PWM output resolution ratio 8bit, 16bit settable.
- Output PWM frequency from 500HZ ~ 30K HZ settable.
- Output dimming curve gamma value from 0.1 ~ 9.9 settable.
- Decoding mode settable.
- Galvanic isolation

#### **FUNCTION INTRODUCTION:**





# SAFETY INFORMATION

**WARNING:** These products may represent a potential shock or fire hazard if improperly installed or attached in any way. Products should be installed in accordance with these instructions, local electrical codes and the National Electric Code (NEC).

- DO NOT install with power applied to device.
- DO NOT operate the dial switches for device mode selection with power applied to device.
- DO NOT expose the device to moisture.



# **Button introduction**

Up, Down button is for menu selection. After power on the decoder, if keep on clicking Up button, you will find below menu on display:

DMX signal indicator •:: When DMX signal input is detected, the indicator on

the display following after turns on red .XXX

Means DMX address. factory defaults setting is 001. L XXX

HXX Means DMX channels quantity, factory defaults setting is Ch05

Means Bit (8bit or 16bit). factory defaults setting is 16bit

BBXX Means output PWM frequency. factory defaults setting is 1K HZ

Means output dimming curve gamma value, factory defaults setting is ga 1.5

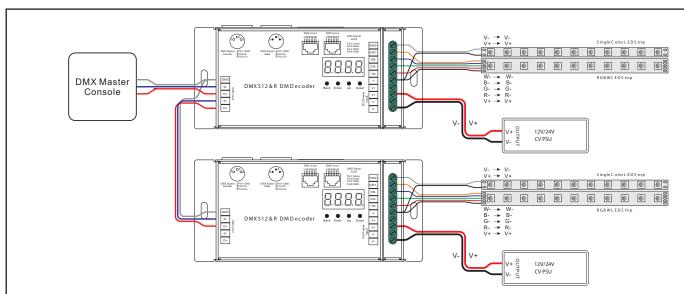
Means Decoding mode, factory defaults setting is dp1.1





# Wiring Diagram

HPxx



### 1. DMX address setting:

Select menu 🕌 🗶🗶 press button "Enter" until, display flashes, then press or hold button "Up" / "Down" to set DMX address, then press button "Back" to confirm.

#### 2. DMX channel quantity setting:

Select menu,  $\frac{1}{2}$  XX press button "Enter", display flashes, then click button "Up" / "Down"

to set DMX channel quantity, then press button "Back" to confirm.

For example the DMX address is already set 001.

CH01=1 DMX address for all the output channels, which are all address 001.

CH02=2 DMX addresses, output 1&3 is address 001, output 2,4&5 is address 002.

CH03=3 DMX addresses, output 1, 2 is address 001,002, output 3,4&5 is address 003.

CH04=4 DMX addresses, output 1,2,3 is address 001,002,003, output 4&5 is address 004.

#### 3. PWM output resolution Bit setting:

Select menu 📈 🧸 🗙 press button "Enter",display flashes, then press button "Up" / "Down" to choose 08 or 16 bit, then press button "Back" to confirm.

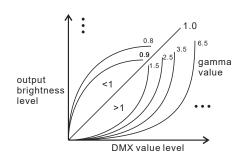


#### 4. output PWM frequency setting:

Select menu XX, press button "Enter", display flashes, then press button "Up" / "Down" to choose 00~30, then press button "Back" to confirm. 00=500HZ, 01=1kHZ, 02=2kHZ....30=30kHZ.

#### 5. output dimming curve gamma value setting:

Select menu  $\Pi \times X$ , press button "Enter", display flashes, then click or hold button "Up" / "Down" to choose 0.1~9.9, then press button "Back" to confirm.



#### 6. output dimming curve gamma value setting:

Select menu XX, press button "Enter", display flashes, then press or hold button "Up" / "Down" to choose the decoding mode, then press button "Back" to confirm. "dPxx" means the DMX address quantity used for control of corresponding PWM output channel quantity. 1st "x" is DMX address quantity, 2nd "x" is PWM channel quantity.

Micro dimming: the micro dimming effect can only be visible when the dimming curve gamma value is set lower than 1.4, and the lower the value is, the more visible the micro dimming effect will be.

#### DMX address is 001, CH01

DMX Console Slider number DMX channel	dp1.1	dp2.1
1	for all output dimming	for all output dimming
2	No use	for all output micro dimming

#### DMX address is 001, CH02

DMX Console Slider number DMX channel	dp1.1	dp2.1	dp3.2
1	for output 1&3 dimming	for output 1&3 dimming	for output 1&3 dimming
2	for output 2,4 &5 dimming	for output 1&3 micro dimming	for output 2,4 &5 dimming
3		for output 2,4 &5 dimming	for all output dimming
4		for output 2,4&5 micro dimming	

#### DMX address is 001, CH03

DMX Console Slider number DMX channel	dp1.1	dp2.1	dp4.3	dp5.3
1	for output 1 dimming	for output 1 dimming	for output 1 dimming	for output 1 dimming
2	for output 2 dimming	for output 1 micro dimming	for output 2 dimming	for output 2 dimming
3	for output 3,4 &5 dimming	for output 2 dimming	for output 3,4&5 dimming	for output 3,4&5 dimming
4		for output 2 micro dimming	for all output master dimming	for all output master dimming
5		for output 3,4 &5 dimming		strobe effects
6		for output 3,4&5 micro dimming		



### DMX address is 001, CH04

DMX Console Slider number DMX channel	dp1.1	dp2.1	dp5.4	dp6.4
1	for output 1 dimming	for output 1 dimming	for output 1 dimming	for output 1 dimming
2	for output 2 dimming	for output 1 micro dimming	for output 2 dimming	for output 2 dimming
3	for output 3 dimming	for output 2 dimming	for output 3 dimming	for output 3 dimming
4	for output 4&5 dimming	for output 2 micro dimming	for output 4&5 dimming	for output 4&5 dimming
5		for output 3 dimming	for all output master dimming	for all output master dimming
6		for output 3 micro dimming		strobe effects
7		for output 4 &5 dimming		
8		for output 4&5 micro dimming		

### DMX address is 001, CH05

DMX Console Slider number DMX channel	dp1.1	dp2.1	dp6.5	dp7.5
1	for output 1 dimming	for output 1 dimming	for output 1 dimming	for output 1 dimming
2	for output 2 dimming	for output 1 micro dimming	for output 2 dimming	for output 2 dimming
3	for output 3 dimming	for output 2 dimming	for output 3 dimming	for output 3 dimming
4	for output 4 dimming	for output 2 micro dimming	for output 4 dimming	for output 4 dimming
5	for output 5 dimming	for output 3 dimming	for output 5 dimming	for output 5 dimming
6		for output 3 micro dimming	for all output master dimming	for all output master dimming
7		for output 4 dimming		strobe effects
8		for output 4 micro dimming		
9		for output 5 dimming		
10		for output 5 micro dimming		

### Short circuit protection

If short circuit of the connected load is detected, the display will flash to alarm and the load will be forced to open circuit status. Once the fault is removed, the decoder will recover after re-powered on.

## The data definitions for strobe channel are as follows:

{0, 7},//undefined

{8, 65},//slow strobe-->fast strobe

{66, 71},//undefined

{72, 127},//slow push fast close

{128, 133},//undefined

{134, 189},//slow close fast push

{190, 195},//undefined

{196, 250},//random strobe

{251, 255},//undefined



## The supported RDM PIDs are as follows:

DISC\_UNIQUE\_BRANCH
DISC\_MUTE
DISC\_UN\_MUTE
DEVICE\_INFO
DMX\_START\_ADDRESS
IDENTIFY\_DEVICE
SOFTWARE\_VERSION\_LABEL
DMX\_PERSONALITY
DMX\_PERSONALITY\_DESCRIPTION
SLOT\_INFO
SLOT\_INFO
SLOT\_DESCRIPTION
MANUFACTURER\_LABEL
SUPPORTED\_PARAMETERS

### Restore to Factory Default Setting

Press and hold down both "Back" and "Enter" buttons until the digital display turns off, then release the buttons, system will reset and the digital display will turn on again, all settings will be restored to factory default.

Default settings are as follows:

DMX Address Code: a001

DMX Address Quantity: SW1=0: ch05, SW1=1: ch04

PWM Resolution Mode: bt16

PWM Resolution Mode: bt16 PWM Frequency: pf01 Gamma: ga1.5

Decoding Mode: dp1.1