DMX CONTROLLER/DECODER FOR STRIP LIGHTS

Description:

Our DMX Decoder converts a DMX signal into an analog PWM signal to control your low-voltage LED strip lights from your DMX512 control system. We have three product options, choose between 3 Channel (RGB), 4 Channel (RGBW), or 5 Channel (RGBCCT).

With this Decoder you will have complete control over your light pattern options and color dimming controls, perfect for synchronizing with music, or creating the perfect lighting atmosphere for any event.

It is built to last, equipped with a built-in thermal protection system, ensuring it can operate at high temperatures without compromising its performance or lifespan. It uses a wide voltage input range (DC12V-24V), making it suitable for any of our NUR low voltage strip lights.

Technical Specifications:

- Supply voltage: DC12～24V
- Static power consumption: <1W
- Output options: 3 channels, 4 channels, 5 channels
- Output current: Each channel 4A or 8A optional
- Output power: 4A each channel 12V:<144W, 24V:<288W
            8A each channel 12V:<288W, 24V:<576W
- Working temperature: -20-60 °
- External dimension: L6.53xW2.63xH1.61in.
- Packing size: L6.69xW3.74xH1.96in.
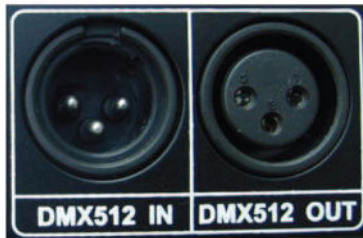- Net weight: 0.79lbs
- Gross weight: 0.89lbs

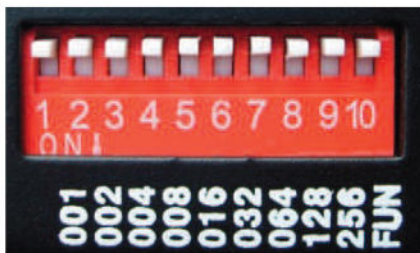## Dimension:

Unit: Inch

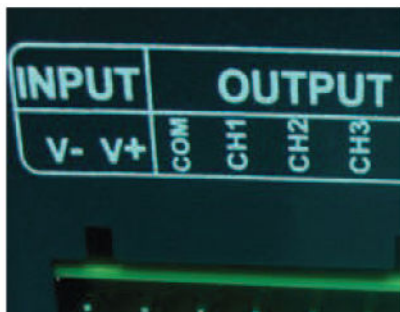## Connection Description:

DMX Input/output interface:

DMX Input/output interface：RJ45 Port

Address code and set feature service interface:

Power and Load interface:

Adopt male and female connector with screw.

Direction for Use:

This product complies with DMX512 protocol and is compatible with auto-index addressing and the manual establishment address.

Each universal DMX controller takes up 3 DMX addresses. It adopts 2 ways (auto-index addressing and code switch) to set up the address. When adopting the auto-index addressing, all switches are in "off" status. When adopting the code switch to set up the address, the 10th bit(FUN) is "off" status, and the other 9 bits are binary value code switches that are used to set up the DMX starting address code. The first bit is the lowest-order bit, and the ninth is the highest-order bit. That can set up 511 address codes. The DMX starting address code is equal to the sum of the 1st to 9th bit. If move down one bit of the code switch ("ON" set "1"), you can get the place value of this bit. If move up (set "0"), the place-value is 0.

For example: If you want to set up DMX starting address code for 73, you should move down the 7th, 4th, and 1st bit of code switch for "1", and others for "0", Then the place values sum of 1st to 9th bit is 64+8+1. That is to say, the DMX512 starting address code is 73. (The correspondence dials code position is as follows)

To choose the channel from the Dial In-line Package(DIP) Switch:

Decimals	1	2	3	4	5	6	7	8	9	10
Weight-number	1	2	4	8	16	32	64	128	256	FUN

1. Example 1:

Like figure 1, to set up the DMX starting address code for 37, should move down the 6th, 3th, 1st bit for "1", others for "0". Then the place-value's sum of 1st to 9th bit is 32+4+1, as is for 37.
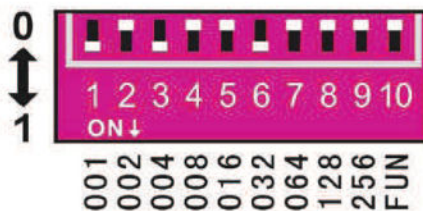

figure 1:

2. Example 2:

Like figure 2, to set up the DMX starting address code for 328, should move down the 9th, 7th, 4th bit for "1", others for "0". Then the place-value's sum of 1st to 9th bit is 256+64+8, as is for 328.
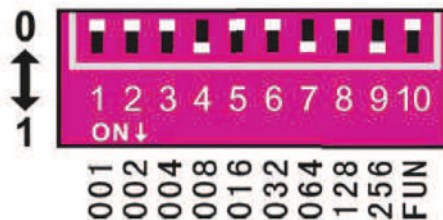

figure 2:

Other function's direction for use:

1. Test function:

The DIP switch's 10th bit is "FUN", for built-in function key. When "FUN"="OFF", is for DMX decoder function. This is used to adopt DMX signal. When "FUN"="ON", the test function like figure 3:

1-9 switch OFF: black

Switch 1=ON: red

Switch 2=ON: green

Switch 3=ON: blue

Switch 4=ON: yellow

Switch 5=ON: purple

Switch 6=ON: cyan

Switch 7=ON: white

figure 3:

Switch 8=ON: Seven-color jumpy changing (8 grades of speeds are available)

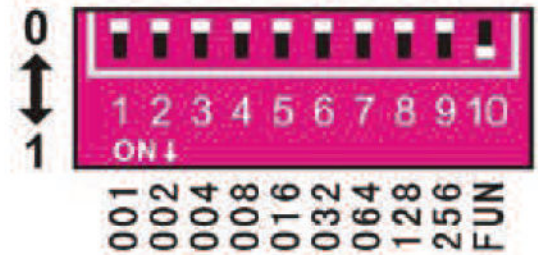Switch 9=ON: All-color gradual changing (8 grades of speeds are available)

2. Speed choice of jumpy changing and gradual changing effect:

In test function, when switch 8=ON, is for seven-color jumpy changing effect. When switch 9=ON, is for seven-color gradual changing effect. 8 grades of speeds are available for each effect:

1-7 switch OFF: 0 grades of speeds

Switch 1=ON: 1 grade of speeds

Switch 2=ON: 2 grades of speeds

Switch 3=ON: 3 grades of speeds

Switch 4=ON: 4 grades of speeds

Switch 5=ON: 5 grades of speeds

Switch 6=ON: 6 grades of speeds

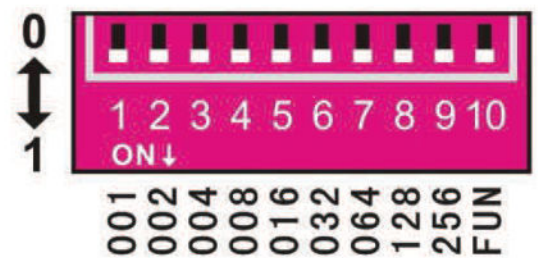Switch 7=ON: 7 grades of speeds (maximum speed)

figure 4:

Like figure 4, when all switches are "ON" at the same time, the more value is taken as final. The state of decoder is gradual changing of test function. Its variable speed is 7. In addition, when signal indicator (green) blinks slowly, it runs the built-in program effectiveness of decoder. When the decoder receives the DMX signal, signal indicator will flash rapidly.

Typical Application:

Typical application 1: Small power LED connection:
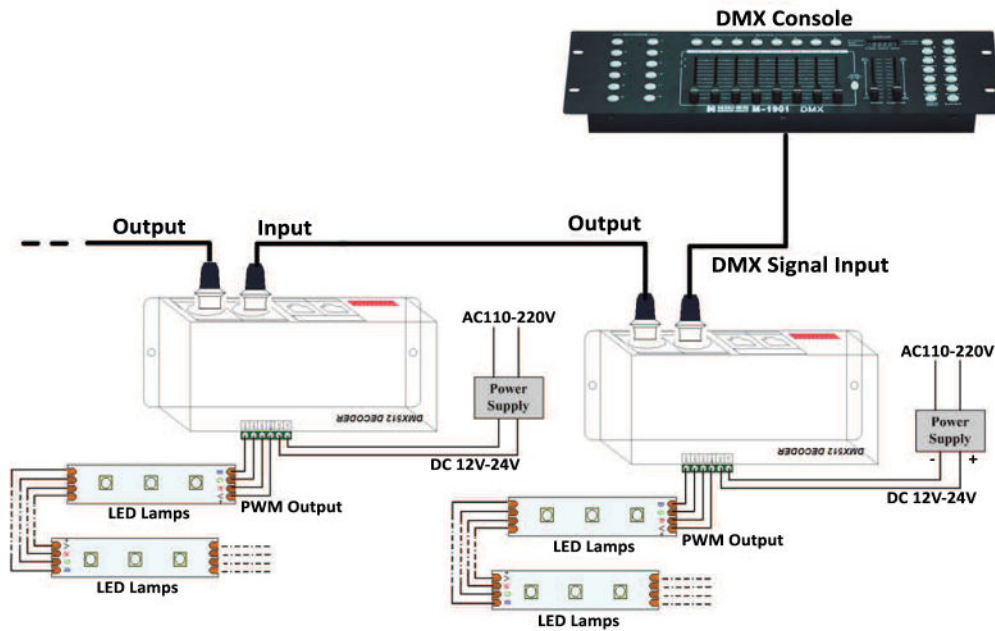
Typical application 2: High power LED connection:
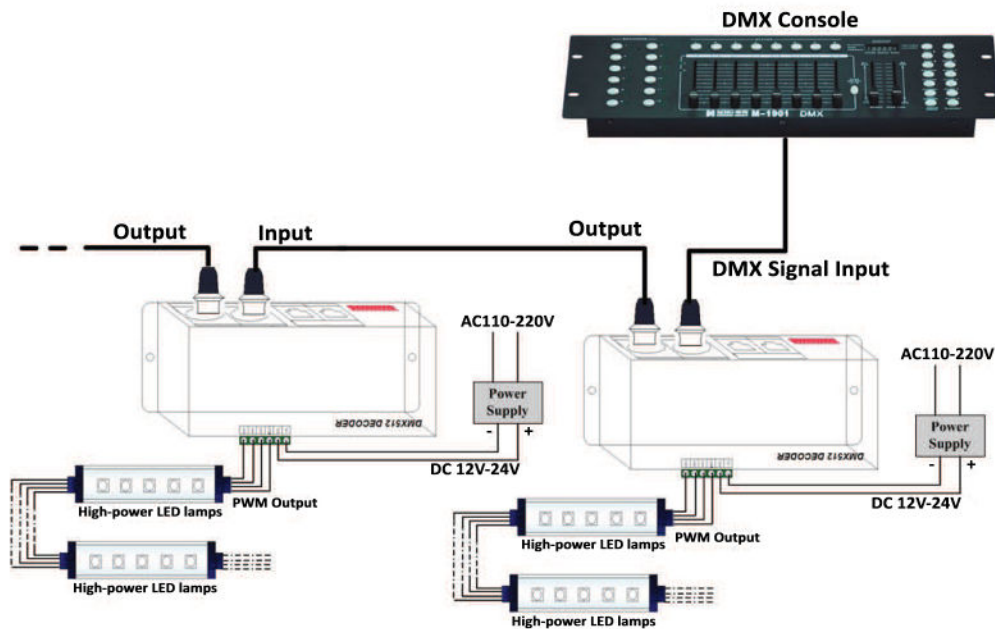
⚠ Cautions:

1. This products Input voltage is DC12~24V,other input voltage are not allowed.
2. Lead wire should be connected correctly, according to the wire color and the connecting diagram offers.
3. Overload are prohibited.

Ordering Guide: CONT-DEC-RGB-DMX-3C

Product	Color Temperature	Model	Channels
CONT-DEC	RGB RGBW RGBCCT	DMX	3C 4C 5C