LED Technologies
Creative LED & Effect Technology for the Trade Professional

# LEDTech Eco Decoder 3x6 Amp

## RGB & Single Colour

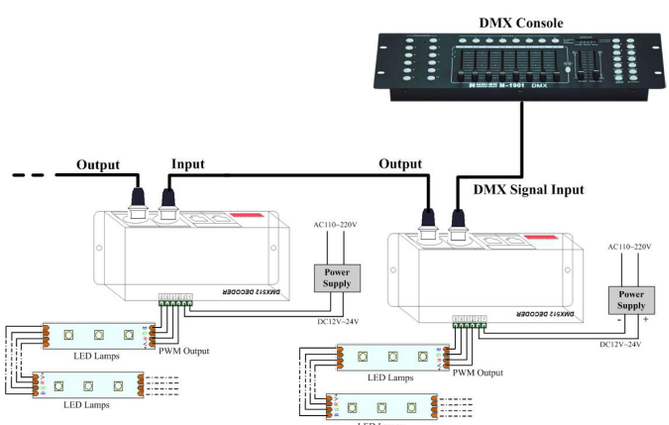

## Technical Parameters

| | |
|---|---|
| **Model Number** | 100.488 |
| **Working temperature:** | -20-60 °C |
| **Supply voltage:** | DC12~24V |
| **Output** | 3 channels |
| **Output Power** | 30W |
| **External dimension:** | L166 × W67 × H41mm |
| **Net weight:** | 360g |
| **Gross weight:** | 408g |
| **Static power consumption:** | <1W |
| **Output current:** | each channel 4A or 8A optional |
| **Output power:** | 12V:<144W, 24V:<288W |

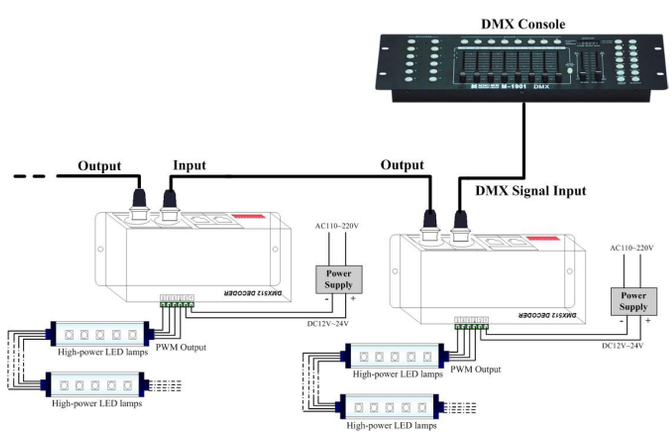
## Product Description

The LedTech range of DMX512 Decoders can be connected to a suitable DMX source or linked together in order to control our 12v or 24v LED lighting products by DMX. This three channel Eco Decoder has two DMX input options and output terminal blocks capable of 6A per channel when connected to a suitable LED Driver.

Typical application 1 small power LED connection:




Typical application 2 high power LED connection:




If you require Technical support or for general enquiries, Please do not hesitate to contact one of our LED Technical experts on the contact information provided.

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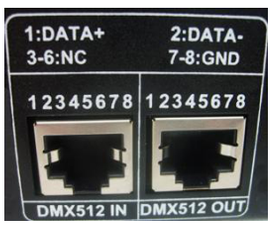
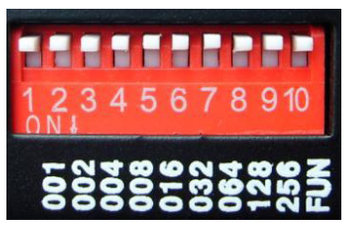
DMX Input/output interface

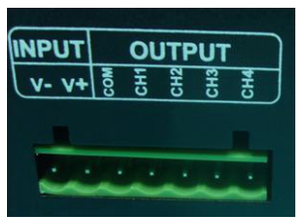

DMX Input/output interface RJ45 Port




Address code and set feature service interface:




Power and Load interface:




Adopt male and female connector with screw.

## Direction for use

**This product is in compliance with DMX512 protocol, and compatible autoindex addressing and 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 “off” status.

When adopting the code switch to set up address, the 10th bit(FUN) is “off” status, and other 9 bits are binary value code switch which 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 1st to 9th bit. If move down one bit of 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-value’s 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 |

### 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.

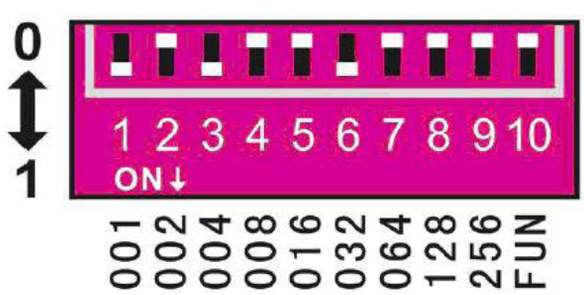



Figure 1

### 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.

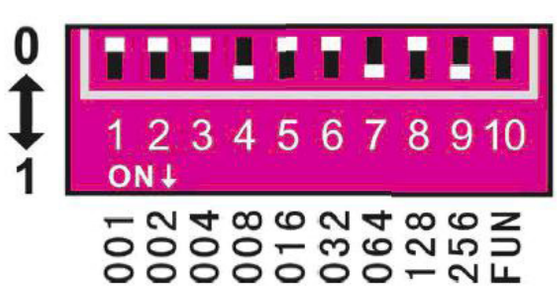



Figure 2

# LEDTech Eco Decoder 3x6 Amp

## 1. Test function:

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
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)

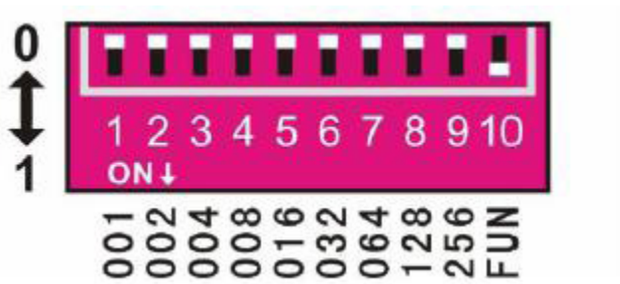



Figure 3

## 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 forseven-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)

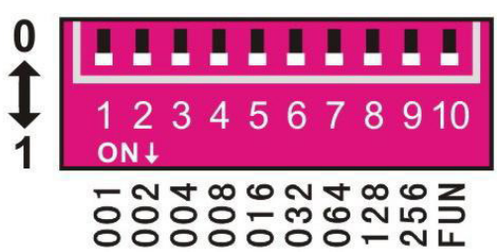



Figure 4

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.

### 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.

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