## Model Number: SE-XS01

## Product name: DMX512 decoder 3 channel

## Product

## specification



## Product Description

DMX Decoder controller adopts the advanced micro control unit, it receives standard DMX-512 digital control signal and transformed it into PWM signal for driving LED; You could connect DMX module with DMX digital console to achieve dimming or various changes in procedures. When the decoder is not connected to the DMX console, this decoder can be used as a synchronous controller, it can be used to multiple decoders or LED lights for synchronous control.

## Technical Parameters

Working temperature: $-20-60^{\circ} \mathrm{C}$
Input voltage: DC12V~24V
Output current: 8A/ch
Output power: $12 \mathrm{~V}:<288 \mathrm{~W}, 24 \mathrm{~V}:<576 \mathrm{~W}$
Controller size: L166xW67×H41mm
Packing box size: $\mathrm{L} 176 \times$ W $84 \times \mathrm{H} 50 \mathrm{~mm}$
Net weight: 360 g
Gross weight: 408 g
Output: 3 channels
DMX512 standard: DMX512/1990
Accessories: DMX signal plugs 1 pair

## Connection description:

DMX input \& output interface:


DMX input \& output interface: RJ45 interface


Address code and function Settings interface:


Power and load interface:


Used to plug with screw as load output interface

## Instructions:

## 1. DMX address code settings

Each DMX decoder occupied 3 DMX addresses, adopt coding switch to set address, it is a binary numerical code switch which is setting DMX original address code from 1 to 9,1 is the lowest, and 9 is the highest, there are total 511 addresses codes could be set. DMX original address code equal aggregate value of the coding switch value from 1 to 9 , dial the coding switch downwards(ON is set 1 ), the value of bit can be gotten, on the contrary, dial the coding switch upwards(ON is set 0 ), the value of bit is 0 . DMX signal can be received when coding switch $\operatorname{FUN}(10)=\operatorname{OFF}(\mathrm{ON}$ is set 0$)$. Choosing the code position is according to the form
as below, by using the dial code switch to channel for choices.

| Digit | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 权数 | 1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 | FUN |

For example A:Look at the following picture, if you want to set 37 as the address code, you can only dial down the 1 , the 3 and the 6 code switch, the aggregate value of coding switch value from 1 to 9 is $32+4+1$, it means the original address code of DMX512 is 37 . And the next two channels are 38 and 39.


For example B:Look at the following picture, if you want to set 328 as the address code, you can only dial down the 9 , the 7 and the 4 code switch, the aggregate value of coding switch value from 1 to 9 is $256+64+8$, it means the original address code of DMX512 is 328. And the next two channels are corresponding to 329 and 330.


## 2. Other functions direction for use:

## Testing function:

The 10 bit of coding switch is "FUN", that is a built-in function button. FUN=OFF, it shows the DMX decoder function, $D M X$ signal can be received. When $F U N=O N$, the $D M X$ decoder function as below, (channel 1-means connect red light, channel 2-means connect green light, channel 3-means connect blue light).

The default coding switch1-9 is off: black
Switch1=ON: red
Switch2=ON: green
Switch3=ON: blue
Switch4=ON: yellow
Switch5=ON: purple
Switch6=ON: cyan
Switch7=ON: white


Switch8=ON: seven-color jumpy changing(8 steps speed choices)

Switch9=ON: seven-color gradual changing(8 steps speed choices)
3. The speed choice of jumpy changing, gradual changing effect

When test the function, switch $8=$ ON shows the seven-color jumpy changing effect, switch $9=O N$ shows the seven-color gradual changing effect, every effect has 8 steps speed choices:
Switch from 1 to 7=OFF: 0 steps


Switch1=ON: 1 steps
Switch2=ON: 2 steps
Switch3=ON: 3 steps
Switch4=ON: 4 steps
Switch5=ON: 5 steps
Switch6=ON: 6 steps
Switch7=ON: 7 steps (the fastest speed)
When there are several switches=ON at the same time, the switch of big value as standard.


Note: When all code switches $=\mathrm{ON}$, the decoder status is the gradual change effect of test function, change speed is 7 . In addition, when the indicator light (green) slow flashing, it means decoders built-in effect change. When the DMX512 controller is enabled, the indicator light into rapid flashing.

## Typical application

Application circuit 1: When small power LED lamps and lanterns is connected:


Application circuit 2: When High power LED lamps and lanterns is connected:


## Cautions:

1. This product only use on supply voltage $\mathrm{DC} 12-24 \mathrm{~V}$, do not input on other voltage.

2, The lead wire shall be according to the wiring diagram of the color and label, connect correctly.
3, This product cannot be overloaded.

