

# Декодер BS-DMX-48-350mA

## User Manual



Before using this controller, please read this notebook carefully.

## **Introduction**

This controller adopts the most advanced PWM (Pulse Width Modulation) digital light adjust technology. It can be used with either single color or RGB controllers. This item can also work together with DMX master controller or DMX512 control console to form a complete lamp control system.

### **★ Product feature**

- ◆ To meet DMX512 standard protocol
- ◆ IR remote control

### **★ Technology specification**

- ◆ Input signal:DMX512/1900
- ◆ Input voltage:DC12~48V
- ◆ Rated load current: 350mA\*3 Channels.
- ◆ Consumed power: 12.6W (12V)/50W (48V)
- ◆ Output signal: DMX512/1990
- ◆ Output signal: 3-way constant current PWM
- ◆ Dimension: Master:87\*87\*56mm

### **★ Function**

- ◆ Three-way output to realize the connection of single color or RGB full-color lamps.
- ◆ Brightness adjustment from 0 to 100%, 128-level gray-scale.
- ◆ Control way: IR remote control, valid in 8M(without barrier)
- ◆ International standard DMX512 output protocol, DIP switch decides the protocol address.
- ◆ 7 static colors, 4 dynamic colors. Static has 16-level brightness adjustment, dynamic has 16-level speed adjustment.

3. Mode description

This controller is divided into DMX control state and non-DMX control state. The default state is DMX when power on. As long as the DMX512 signal is available, the controller will receive DMX512 signal automatically to control the brightness of LED.

Press P1 to enter static (red, green, blue, yellow, cyan, purple and white).Press P1 one time color changes for the next. Press BRIGHTNESS+/- can adjust brightness. And the total brightness level is 16, it's 0 ordinarily, that is no light. Under static, only press BRIGHTNESS+ will light up the LED.

P2, P3, P4, P5 are dynamic modes, in these four modes, press FADE will change mode between gradual change and jump change. Press SPEED\_SLOW and SPEED\_RAPIDE can control speed of gradual change and jump change which has 16-level.

Modes in non-DMX as following chart.

Mode	FADE is 0	FADE is 1
P1	Red, green, blue, yellow, cyan, purple, white static mode	
P2	Red, yellow, green, cyan, blue, purple jump change	Red, yellow, green, cyan, blue, purple gradual change
P3	Red, yellow, green, cyan, blue, purple sudden change	Red, yellow, green, cyan, blue, purple 6 colors fade-in and fade-out
P4	Red, green, blue jump change	Red, green, blue gradual change
P5	Red, green, blue sudden change	Red, green, blue fade-in and fade-out

4. Structure.

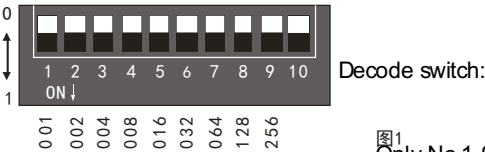


图1 Only No.1-9 keys can work. Stir No 10 to change working mode.

The decoding computational formula as follows:

Value of first switch×2<sup>0</sup>+ value of second switch×2<sup>1</sup>+ value of third switch×2<sup>2</sup>+ value of fourth switch×2<sup>3</sup>  
+ value of fifth switch x 2<sup>4</sup>+ value of sixth switch×2<sup>5</sup>+ value of seventh switch×2<sup>6</sup>+ value of eighth switch×2<sup>7</sup>  
+ value of ninth switch×2<sup>8</sup>=decoding value

Signal interface:



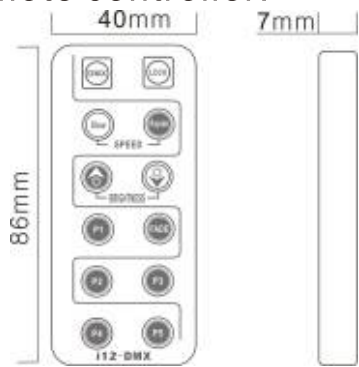
Brown is earth wire. White-orange is signal A, orange is signal B. The others rest temporarily. Standard wire order is: white-orange, orange, white-green, blue, white-blue, green, white-brown, brown. Left and

right net interfaces are parallel connection.

5(1).View of major controller



(2)View of remote controller:



6.Connection diagram of system.

