7、Conjunction Diagram
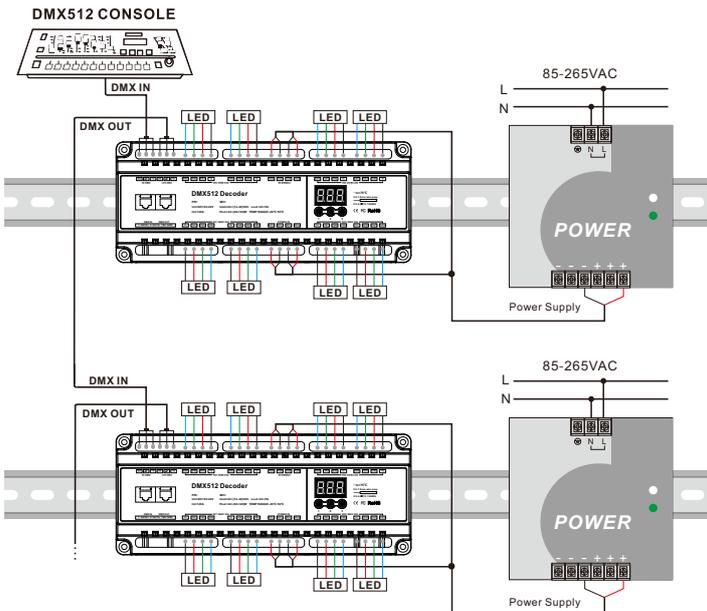
1) Connet to DMX system(take 24CH decoder as example):

8、After Sales

From the day you purchase our products within 3 years, if being used properly in accordance with the instruction, and quality problems occur, we provide free repair or replacement services except the following cases:
1. Any defects caused by wrong operations.
2. Any damages caused by inappropriate power supply or abnormal voltage.
3. Any damages caused by unauthorized removal, maintenance, modifying circuit, incorrect connections and replacing chips.
4. Any damages due to transportation, breaking, flooded water after the purchase.
5. Any damages caused by earthquake, fire, flood, lightning strike etc force majeure of natural disasters.
6. Any damages caused by negligence, inappropriate storing at high temperature and humidity environment or near harmful chemicals.

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DIN Rail DMX512 Constant Voltage Decoder
User Manual

DIN Rail Size: TS-35/7.5 or TS-35/15

CE FC RoHS

(Please read through this manual carefully before use)

1、Brief Introduction

Welcome to use the DIN Rail high Power DMX512 constant voltage decoder is specially developed for constant voltage LED lamps. It adopts advanced microcomputer control technology to convert universal DMX512/1990 digital signal to PWM signal. 24/32/40 output channels, can be used to control constant voltage single color, color temperature, RGB, RGBW, RGBWY type lamps. DIN Rail/screw dual-use installation method for easy installation.

2、Specifications

| Model	40 CH Decoder	32 CH Decoder	24 CH Decoder
Input voltage	DC12V-DC24V	DC12V-DC24V	DC12V-DC24V
Max load current	3A×40CH	3A×32CH	5A×24CH
Max Output Power	1440W (12V) / 2880W(24V)	1152W (12V) / 2304W(24V)	1440W (12V) / 2880W(24V)
Input Signal	DMX512/8 bit/16 bit selectable	DMX512/8 bit/16 bit selectable	DMX512/8 bit/16 bit selectable
Output Signal	Constant Voltage PWM	Constant Voltage PWM	Constant Voltage PWM
Decode Channel	40CH	32CH	24CH
DMX512 socket	RJ45、Terminal Block	RJ45、Terminal Block	RJ45、Terminal Block
Dimension	L218×W90×H58.5(mm)	L218×W90×H58.5(mm)	L218×W90×H58.5(mm)
Weight (G.W)	372g	331g	305g

3、Basic Features

1. Automatically adapts input voltage DC12V-24V.
2. Input standard DMX512 signal; 3-digital-display shows DMX address code.
3. 6 color changing modes and 10 speed scales.
4. DMX decoding supports 8-bit,16-bit.
5. Indicator of the DMX512 signal receiving status.
6. Wrong wiring protection at DMX port. Power loss memory function.
7. The DIN rail style facilitates the installation of large-scale projects.

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4、Safety warnings

1. To ensure your safety and product properly usage, please read the user manual carefully.
2. To avoid installed the product in minefield, strong magnetic field and high voltage area.
3. To ensure the wiring is correct and firm avoiding short circuit damages to components and cause fire.
4. Please install the product in a well ventilated area to ensure appropriate temperature environment.
5. The product must be worked with DC constant voltage power supply.
   Please check the consistence of input power with the product, if the output voltage of the power comply with that of the product.
6. Connect the wire with the power on is forbidden. Ensure proper wiring first then check to ensure no short-circuit, then power on !
7. Don't repair it by yourself whenever an error occur. Contact the supplier for any inquiry.

5. Dimensions
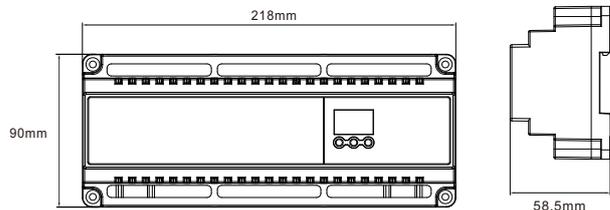
6.Operating instructions

1. The decoder has three buttons, which are No. 1, No. 2, and button No.3. When power on, the digital displays the current digital DMX address. The last decimal point will flash when there is signal in. Three-digital-display goes off without operation for 30 seconds, press any key to turn it on.

2. Set DMX address
Long press the button No. 1 for 2 seconds to enter the DMX512 address setting, the digital tube flashes, button No. 1 to set the hundredth digit, the value is 0-5, button No.2 to set the tenth digit, the value is 0-9, button No.3 to set a units digit , the value is 0-9, DMX512 address value 001-512;

Press and hold the button No. 1 for 2 seconds to exit the setting DMX512 address. NO operate for 10 seconds, will exit automatically.

← DMX communication status indication
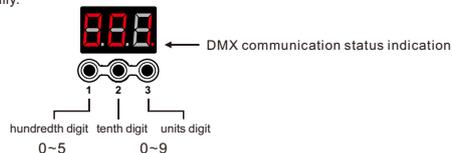
The last decimal point will flash when there is signal in. If not received, the decimal point does not ON, and the digital tube only displays the current DMX address. When the input signal of the decoder is wrong connected or short-circuit, the decimal point of the digital tube does not ON, and the digital tube only displays the current DMX address, the decoder works again after the short circuit or the wrong wiring is cleared.

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Enter the self-test mode, as follows:

Numerical settings	Pattern mode	Numerical settings	Pattern mode
513	Solid color: Red	520-529	RGB Skipping
514	Solid color: Green	530-539	Color Skipping
515	Solid color: Blue	540-549	White flicker
516	Solid color: Yellow	550-559	RGB Fading
517	Solid color: Purple	560-569	Color Fading
518	Solid color: Cyan	570-579	White Fading
519	Solid color: White	580-599	All bright

*520-579, First two digital indicate the modes, the third one shows the speed. 10 speed levels ,from 0-9 speed decreasing. Total: 6 modes ,such as :

Mode   Speed level 4

Speed for Program 520 – 579 (Color Changing Fading Mode) for one step and not for the whole program:
0=0,5 sec. | 1=1 sec. | 2=2 sec. | 3=3 sec. | 4=5 sec. | 5=10 sec. | 6=15 sec. | 7=30 sec. | 8=60 sec. | 9=120 sec.
Speed for Program 570 - 579 (one step and not for the whole program):
0=0,02 sec.| 1= 0,04 sec.| 2=0,1 sec.| 3=0,2 sec.| 4=0,5 sec.| 5=1 sec.| 6=2 sec.| 7=5 sec.| 8=10 sec.| 9=15 sec.

3. Control mode settings
(1) The 40-channel decoder can work in five control modes of DIM\CT\RGB\RGBW\RGBWY.
(2) The 32-channel decoder can work in four control modes of DIM\CT\RGB\RGBW.
(3) The 24-channel decoder can work in three control modes of DIM\CT\RGB.

Long press the button No.2 for 2 seconds to enter the control mode setting, the digital tube flashes, press the button No.3 to switch settings, the digital display 1CH, 2CH, 3CH, 4CH, 5CH, corresponding to DIM \ CT \RGB \ RGBW \ RGBWY five modes.
When the working mode is RGB, the white light in the built-in mode corresponds to RGB, in the other modes W is ON.
Press and hold the button No.2 for 2 seconds to exit the control mode setting. NO operate for 10 seconds, will exit automatically.

DIM control mode   CT control mode   RGB control mode   RGBW control mode   RGBWY control mode

3. DMX digit setting
The decoder works on 8-bit or 16-bit.
Long press the button No. 3 for 2 seconds to enter the setting, the digital tube flashes, press the button No. 3 to switch settings, the digital tube displays 08b, 16b respectively corresponding to 8-bit, 16-bit mode. Press button No. 3 again for 2 seconds to exit the DMX digit setting. NO operate for 10 seconds, will exit automatically.

8 bit   16 bit

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