

**DIN Rail DMX 512 Decoder 4-Channels 5A**  
SKU: EL-BC834-DIN



(Please read through this manual carefully before use)

**1. Brief Introduction**

Introducing our DIN Rail DMX 512 Decoder - designed for constant voltage LED lights. This decoder employs advanced micro-computer control technology, seamlessly converting standard DMX512/1990 signals into precise PWM signals. With the flexibility to select between 1 to 4 output channels and an impressive range of 4096 Grey Scales, this device is the perfect fit for your lighting needs.

**2. Specifications**

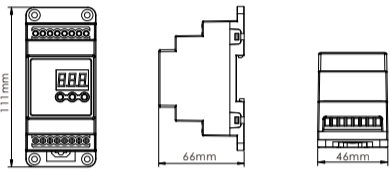
**4CH Constant Voltage Decoder/RJ45**

- Input Voltage: DC12V-24V
- Output Current: 6Ax4CH
- Output Power: 288W/576W(12V/24V)
- Grey Scale: 4096 x 4
- Input Signal: DMX512/1990
- Output Signal: Constant Voltage PWM
- Decode Channel: 4CH
- DMX512 Socket: Terminal Block/RJ45
- Dimension: L111 x W46 x H66(mm)
- Weight(G.W): 138g/133g



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**5. Dimensions**



**6. Operating Instructions**

The decoder has 3 keys, respectively M, +, -; long press "M" for 2 seconds to enter.

M	Change order in 3 digital display
+	Increase value
-	Decrease value

Three-digital-display indicates the current setting value; different value indicates different operating status. Three-digital-display goes off without operation for 30 seconds, press any key to turn it on. When it is overload or short-circuit, the decoder will automatically stop output, LED display shows: "ERR", as below:



The decoder has an automatic key lock. If no settings are made to the decoder, the key lock function is activated after approximately 15 seconds automatically. Pressing M button for about 2 seconds to deactivated. Subsequently, the decoder can be set.

1. DMX Slave Mode: The value is: 001-512, such as: "001"



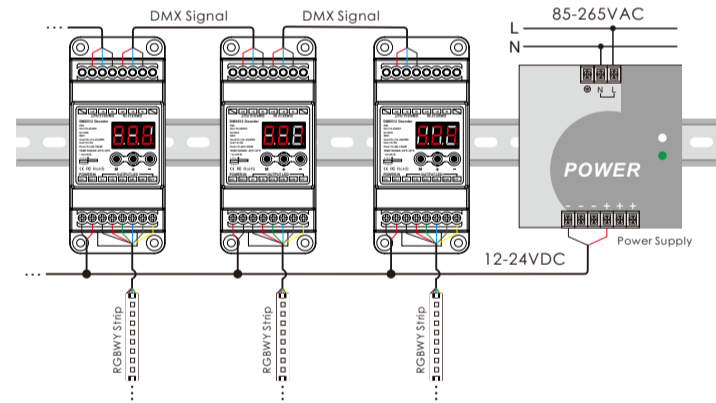
The decimal point of last digital of the display tube will twinkle regularly when receives DMX512 signal normally. When no signal is received, the decimal point does not twinkle, and showing current DMX address.

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**7. Wiring Indication**

Use terminal block:

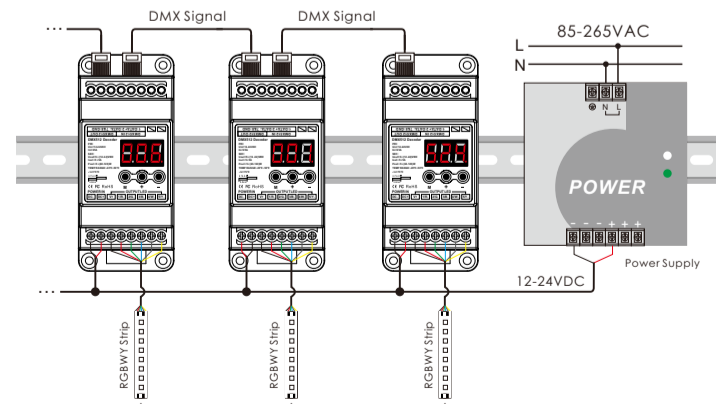
1) Wiring diagram of Master Mode: (Only one decoder is allowed to work as a master)



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Use RJ45:

1) Wiring diagram of Master Mode: (Only one decoder is allowed to work as a master)



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**3. Basic Features**

1. Automatically adapts input voltage DC12V-24V.
2. Input standard DMX512 signal; 3-digital-display shows DMX address code.
3. 4 channels output; 4096 grey scales each; logarithmic dimming; lamplight soft & stable without strobe flash.
4. DMX Master mode, slave mode available.
5. Built-in 8 color changing modes and 10 speed scales.
6. Indicator of the DMX512 signal receiving status.
7. Power loss memory function.
8. Wrong wiring protection at DMX port, over current protection and short circuit protection.
9. The DIN rail style design facilitates the installation of large-scale projects.

**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. Do not connect the wire with the power on. 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 Step 1 Dezigns at sales@step1dezigns.com.

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DMX master mode preset patterns list :

000	All channels to 100%
513	RED
514	GREEN
515	BLUE
516	MAGENTA
517	CYAN
518	YELLOW
519	ORANGE
520-529	Red, orange, yellow, green, cyan, blue, magenta (Fading mode)
530-539	White, magenta, red, orange, yellow, green, cyan, blue (Fading mode)
540-549	Yellow/orange, red (Fading mode)
550-559	Magenta blue (Fading mode)
560-569	Cyan, blue (Fading mode)
570-579	Green, yellow, (Fading mode)
580-589	All 4 channels make a pulsating move from 1% to 100% (Fading mode)
590-599	Strobo for all 4 channels 0% to 100% (Jumping mode)
1.00-1.99	Red from 0 to 99%
2.00-2.99	Green from 0 to 99%
3.00-3.99	Blue from 0 to 99%
4.00-4.99	White from 0 to 99%
5.00-5.99	CW from 0 to 99%

Independent dimming for each channel, automatically memorizing the current dimming value of each channel.

\*520-599, First two digital indicate the modes, the third one shows the speed. 10 speed levels, from 0-9 speed decreasing. Total: 8 modes, such as :



Mode Speed level 4

Speed for Program 520 - 589 (Color Changing Fading Mode) for one step and not for the whole program:

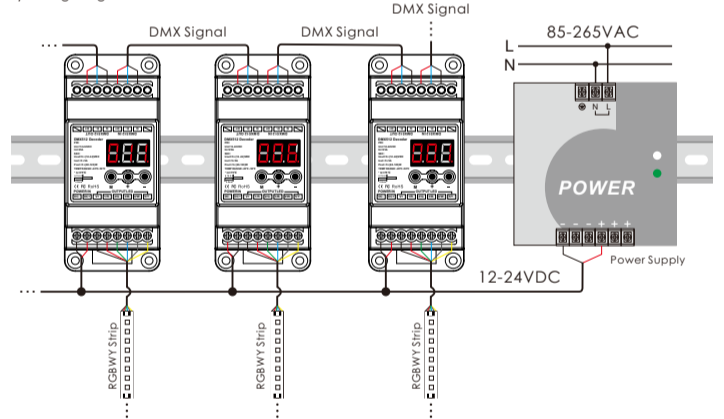
0=0.5 sec. | 1=1 sec. | 2=2 sec. | 3=3 sec. | 4=5 sec. | 5=10 sec. | 6=15 sec. | 7=30 sec. | 8=60 sec. | 9=120 sec.

Speed for Program 590 - 599 (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.

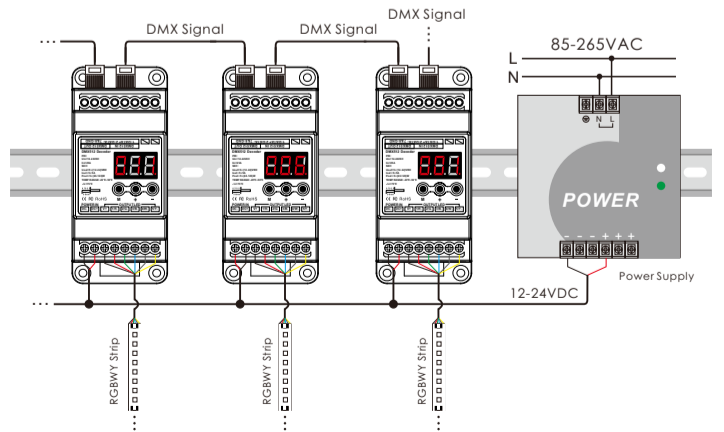
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2) Wiring diagram of Slave Mode:



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2) Wiring diagram of Slave Mode:



**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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