DIN Rail DMX512 Constant Voltage Decoder
User's Manual

(Please read through this manual carefully before use)

➢ *Brief Introduction*

Welcome to use the Constant Voltage DMX512 Decoder which is developed only for constant voltage LED lamps. It adopted advanced micro-computer control technology to transfer standard DMX512/1990 signal to PWM signal. One channel output, max 10A output each channel, 4096 Grey Scales. It can be used as DMX512 master or as DMX decoder to connect computerized digital output console with analog silicon case and controls LED lamps of architecture and lighting.

➢ *Specifications*

Model	1CH Constant Voltage decoder
Input voltage	DC12V-DC24V
Max load current	1CH×10A
Max Output Power	120W(12V)/240W(24V)
Grey Scale	4096 levels×1
Input Signal	DMX512/1990
Output Signal	Constant Voltage PWM

Decode Channel	1CH
DMX512 socket	RJ45
Dimension	L111×W46×H66(mm)
Weight (G.W)	135g

➢ *Basic Features*

1. Automatically adapts input voltage DC12V-24V.

2. Input standard DMX512 signal; 3-digital-display shows DMX address code.

3. 1 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 facilitates the installation of large-scale projects.

➢ *Safety warnings*

Please don't install this controller in lightening, intense magnetic and high-voltage fields.

1. To reduce the risk of component damage and fire caused by short circuit, make sure correct connection

2. Always be sure to mount this unit in an area that will allow proper ventilation to ensure a fitting temperature.

3. Check if the voltage and power adapter suit the controller
   (please select DC12-24V power supply with constant voltage)

4. Don't connect cables with power on; make sure a correct connection and no short circuit checked with instrument before power on.

5. Please don't open controller cover and operate if problems occur.

The manual is only suitable for this model; any update is subject to change without prior notice.

➢ *Dimensions*
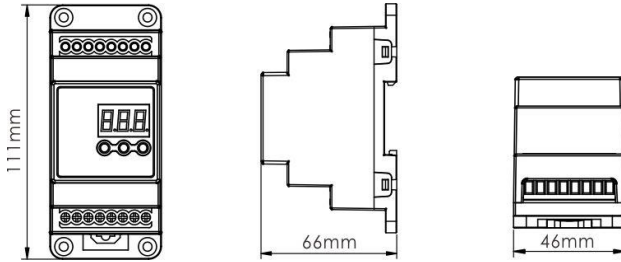
➢ *Operating instructions*

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.

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

*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.
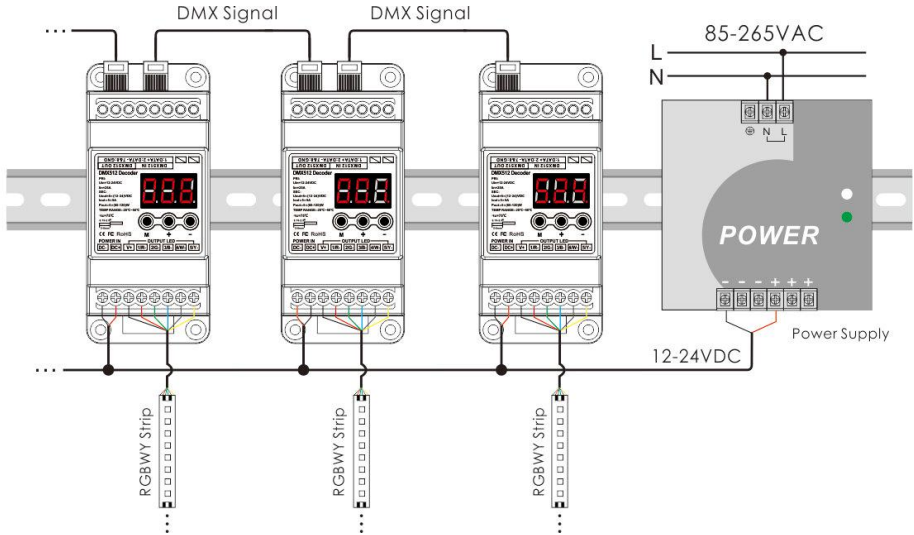
Speed for Program 590 - 599 (one step and not for the whole program):

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.
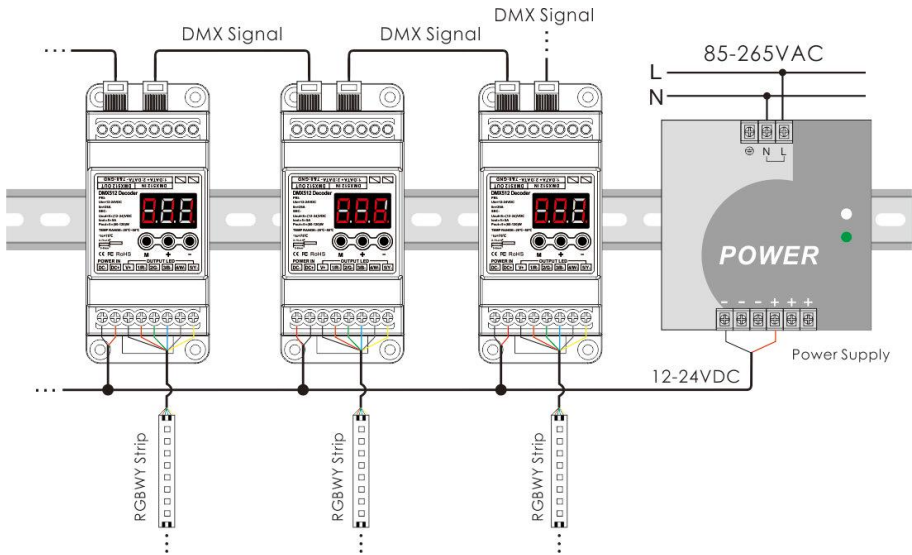
➢ *Wiring Indication*

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

Take RGBWY decoder as example:

2) Wiring diagram of Slave Mode:

Take RGBWY decoder as example:

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.
7. Product has been updated.