

# 32CH DMX512 Constant Voltage Decoder User Manual



(Please read through this manual carefully before use)  
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## 1、Brief Introduction

Welcome to use the DMX512 Constant Voltage Decoder, designed for Hi-power multiple channels application, which is developed only for constant voltage LED lamps. It adopts advanced micro-computer control technology to transfer DMX512/1990 signal to PWM signal. 32 channels output, Max. 3A each channel, up to 2304W output power, 65536 gray scales, workable for single color, color temperature, RGB and RGBW led lamp.

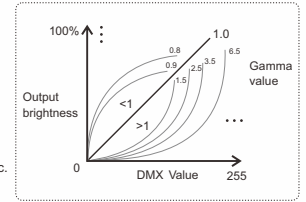
## 2、Specifications

Model	32CH DMX512 Decoder
Input voltage	DC5V-24V
Max load current	3A×32CH , Max 96A
Max output power	480W(5V)/1152W(12V)/2304W(24V)
Output scale level	256 levels(8bit)/65536 levels(16bit)
Input signal	DMX512/RDM
Output DMX channel	Constant Voltage PWM×32CH
Output frequency	1K、2K、4K、8K selectable
Decode channel	32CH
DMX512 socket	XLR-3R/ RJ45/ Terminal block
Control mode	DIM /CT /RGB /RGBW 4 modes switch
Dimension	L195 X W145 X H38(mm)
Weight (G.W)	810g

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## 3、Basic Features

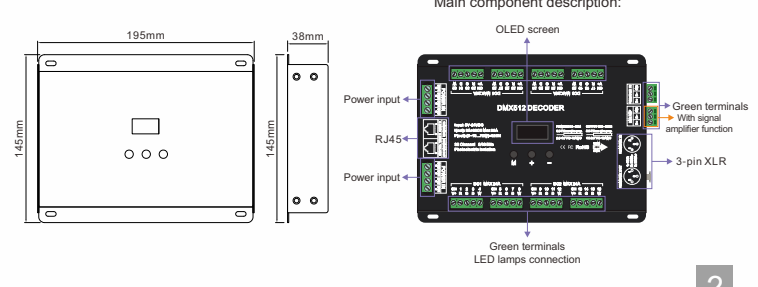
- Easy operation with OLED screen and touch buttons.
- 8bit (256 levels)/16bit (65536 levels) grey level optional.
- Support 3 kinds of DMX ports with signal isolation function: 3-pin XLR, RJ45 and 3000V optoelectronic isolation, green terminal (with signal amplifier function).
- With RDM remote management protocol, the operations can be completed via the RDM master console, such as parameters browsing & setting, DMX address setting, equipment recognition, etc.
- Optional for standard, linear, LOG or custom 0.1-9.9 dimming curve.
- Power-off data saved function.



## 4、Safety warnings

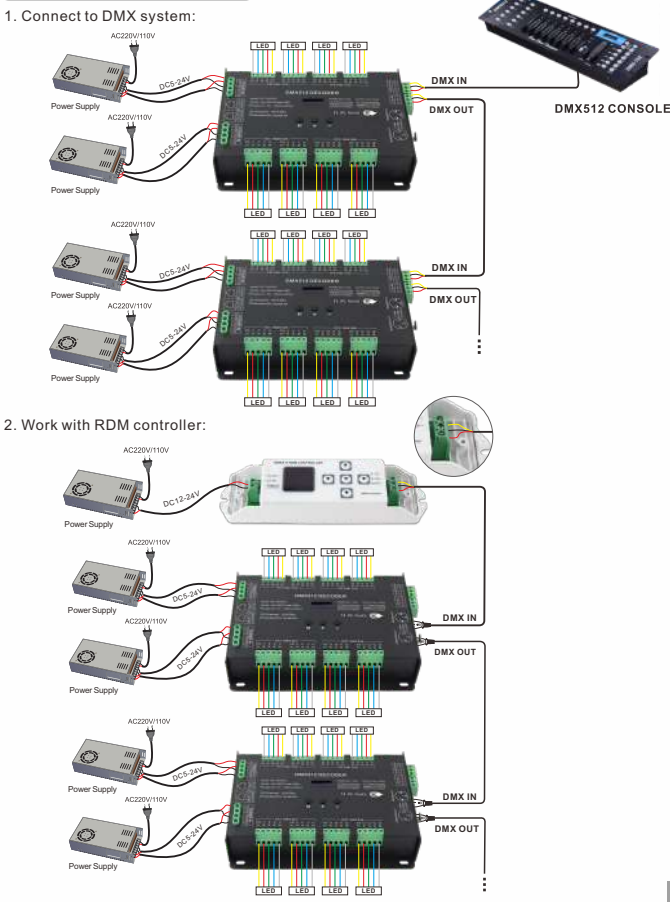
- Please don't install this controller in lightning, intense magnetic and high-voltage fields.
- To reduce the risk of component damage and fire caused by short circuit, make sure correct connection.
  - Always be sure to mount this unit in an area that will allow proper ventilation to ensure a fitting temperature.
  - Check if the voltage and power adapter suit the controller (please select DC12-24V power supply with constant voltage)
  - Don't connect cables with power on; make sure a correct connection and no short circuit checked with instrument before power on.
  - 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.
- When the signal line is long or the wire quality causes the signal recoil effect to affect the use of product, you can try to connect 0.25W 90-120Ω terminating resistor at the end of each signal line to solve.

## 5、Interfaces



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## 6、Conjunction Diagram



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## 7、Operating instructions

- OLED screen interface:**  
Press "M" key, switch entries. Press "+" or "-" key, parameter adjustment. Exit: back to previous page. Long press three buttons in case of power off. Restart to restore the factory settings.
- 1. Lock screen interface:**  
A: 001 B: 8 F: 1.0 M: RGBW C: 1.8 \* Decode Mode. Long press M unlock. After 10 seconds of no operation, enter the screen lock interface, only the parameters that have been set are displayed. Press the M key for 2 seconds to unlock. When DMX signal input, a star symbol flashing.
- 2. DMX address setting**  
Main page Press "+" or "-" key to set DMX address. Range: 001-512  
DMX Addr: 001 DMX Bit: 8 Output Freq: 1.0K Output Mode: RGBW
- 3. PWM frequency**  
DMX Addr: 001 DMX Bit: 8 Output Freq: 1.0K Output Mode: RGBW  
Press "+" or "-" key to choose. Optional: 8K, 4K, 2K, 1K. It is recommended to use 1K.
- 4. Mode**  
DMX Addr: 001 DMX Bit: 8 Output Freq: 1.0K Output Mode: RGBW  
Press "+" or "-" key to choose. Optional: DIM, CT, RGB, RGBW
- 5. Grey scale**  
DMX Addr: 001 DMX Bit: 8 Output Freq: 1.0K Output Mode: RGBW  
Press "+" or "-" key to choose. Optional: 8bit 16bit (can be used when the master supports this feature)
- 6. Dimming curve**  
Output Curve: 1.0 Enter Test Mode  
Press "+" or "-" key to choose. Optional: 0.1-9.9 (only 8bit can be set) It is recommended to use 1.8 0.1-9.9 is for special requirements.
- 7. Built-in test**  
Mode: M0 8 bit R: 000 G: 000 B: 000 W: 000 Curve: 1.8 Exit  
Press "+" or "-" key to choose. Optional: Mode M0-10 Digits 8bit or 16bit Grey scale 0-255 or 0-65536 Gamma value 0.1-9.9 (only 8bit can be set)
- 6. Instruction:**  
a) 8 outputs controlled synchronously when in test mode.  
b) Test mode as below:

NO	Modes	Description
M0	RGBW can be dimmed separately in static mode	Brightness adjustable
M1	3 color skipping	Brightness, speed adjustable
M2	7 color skipping	Brightness, speed adjustable
M3	White color strobe	Brightness, speed adjustable
M4	3 color smooth	Brightness, speed adjustable
M5	Full color smooth	Brightness, speed adjustable
M6	RG color smooth	Brightness, speed adjustable
M7	R B color smooth	Brightness, speed adjustable
M8	GB color smooth	Brightness, speed adjustable
M9	White color fade & change	Brightness, speed adjustable
M10	Great cycle	All mode cycle

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## Address setting table

Mode	DIM	CT	RGB	RGBW
Address Quantity	8	16	24	32
Resolution	8bit	8bit	8bit	8bit
Channel	1	001	001	001
	2	001	002	002
	3	001	001	003
	4	001	002	001
	5	002	003	004
	6	002	004	005
	7	002	003	006
	8	002	004	004
	9	003	005	007
	10	003	006	008
	11	003	005	009
	12	003	006	007
	13	004	007	010
	14	004	008	011
	15	004	007	012
	16	004	008	010
	17	005	009	013
	18	005	010	014
	19	005	009	015
	20	005	010	013
	21	006	011	016
	22	006	012	017
	23	006	011	018
	24	006	012	016
	25	007	013	019
	26	007	014	020
	27	007	013	021
	28	007	014	019
	29	008	015	022
	30	008	016	023
	31	008	015	024
	32	008	016	022

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## 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:
- Any defects caused by wrong operations.
  - Any damages caused by inappropriate power supply or abnormal voltage.
  - Any damages caused by unauthorized removal, maintenance, modifying circuit, incorrect connections and replacing chips.
  - Any damages due to transportation, breaking, flooded water after the purchase.
  - Any damages caused by earthquake, fire, flood, lightning strike etc force majeure of natural disasters.
  - Any damages caused by negligence, inappropriate storing at high temperature and humidity environment or near harmful chemicals.
  - Product has been updated.

## 9、Kindly Reminder

**Power Source Selection:**  
Power source must be DC constant voltage type of power supply. Due to the efficient output in some power supplies are only 80% of total, so please select at least 20% higher output power supply than the consumption of LED lights.

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