LED DMX & PWM Dimmer DW (Dynamic White)- User Manual

Item no.: LC-025-002

1. Product Introduction

The DMX512 Constant Voltage 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. User can choose 1-2 output channesl, max 8A output each channel, 4096 Gray Scales. It can be used as DMX512 master or as DMX decoder to connect computerized digital output consol with analog sililconcase and controls LED lamps of architecture and lighting.

2. Specifications

Input Voltage	12-24VDC
Max. load current	2 Channels x 8A
Max. output power	2x96W (12V) oder 2x192W (24V)
Grey Scale	4096
Input Signal	DMX512/1990
Output Signal	2xPWM Constant Voltage
DMX512 socket	Terminal block with max. 2,5mm^2
Product Dimensions (L x W x H in mm)	176 x 46 x 30mm
Weight	170g

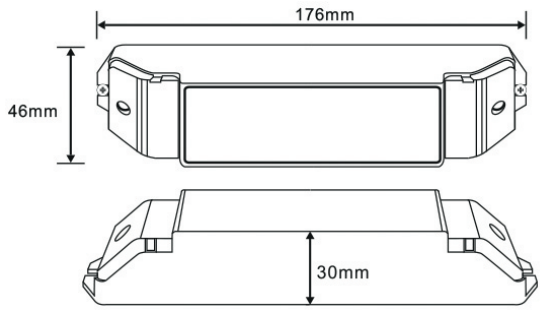
3. Basic Features

1. Automatically adapt input voltage DC12V-24V.
2. Input standard DMX512 signal; 3-digital-display shows DMX address code.
3. 2 channels output; 4096 grey scales each; logarithmic dimming; lamplight soft & stable without strobe flash.
4. DMX Master moder, Slave mode available.
5. 4 color changing modes and 10 speed scales in master mode.
6. Indicator of the DMX512 signal receiving status.
7. Wrong wiring protection at DMX port. Over current protection and short circuit protection.
8. Power loss memory function.

4. Safety Warnings

4.1. Please don't install this controller in lightening, intense magnetic and high-voltage fields.
4.2. To reduce the risk of component damage and fire caused by short circuit, make sure correct connection
4.3. Always be sure to mount this unit in an area that will allow proper ventilation to ensure a fitting temperature.
4.4. Check if the voltage and power adapter suit the controller
4.5. Don't connect cables with power on, make sure a correct connection and no short circuit checked with instrument before power on.
4.6. 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.

5. Dimensions



6. Operating Instructions

Three touch buttons: M, +, -

M	change the turns in the 3 display tube
+	increase
-	decrease

The Three-digital-display indicates the current setting value; different value indicates different operating stauts. The Three-digital-display goes off without operation after 1 minute. press any key to turn it on. When it is overload or short-circuits, 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 acctivated after approximately 15 seconds automatically. Pressing M button for aobut 2 seconds to deactivated.

Subsequently, the decoder can be set:

1. DMX Slave Mode: The value is: 001-512

The decimal point of last digital of the display tube will twinkle regulary when receives DMX 512 signals normally. When no signal is received, the decimal pint does not twinkle, and showing current DMX address.

2. DMX master mode preset patterns list:

000	All channels 100% brightness
0-512	2 channel DMX Decoder
520	Fading from cold white to warm white
530	cold white fading
540	warm white fading
550	2 channel fading
600-699	1st channel dimming from 0-99%
700-799	2nd channel dimming from 0-99%
others	all channels 100% brightness

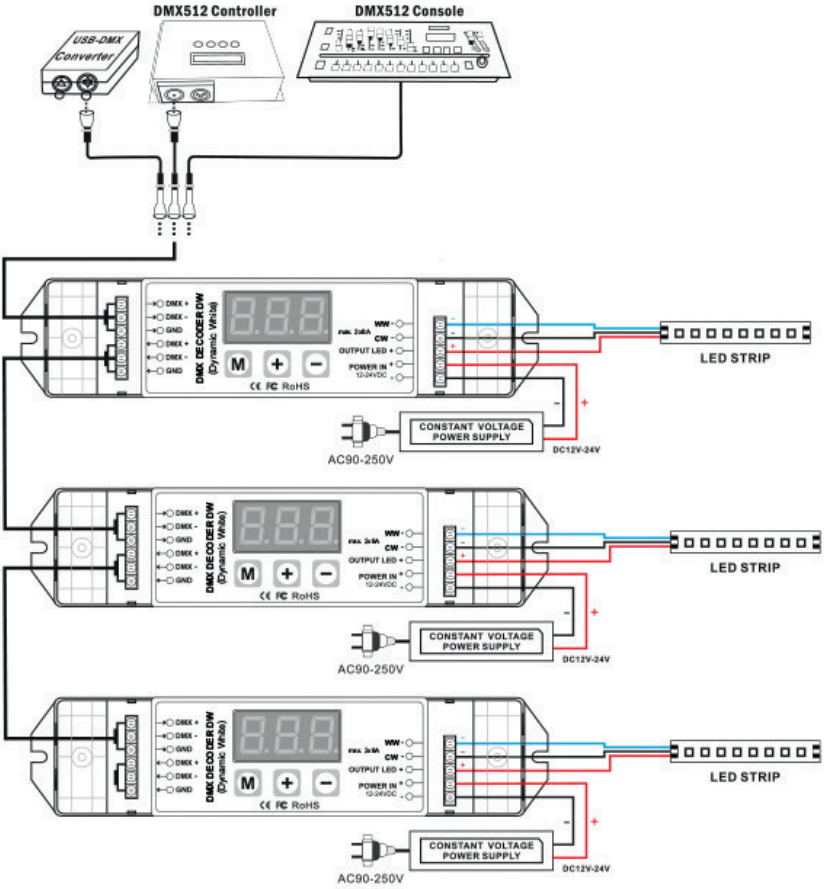
* 520-559, First two digital indicate the modes, the third one shows the speed. 10 speed levels, from 0-9 speed decreasing. Total: 8 modes, such as:

Speed for Program 520-559 (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.

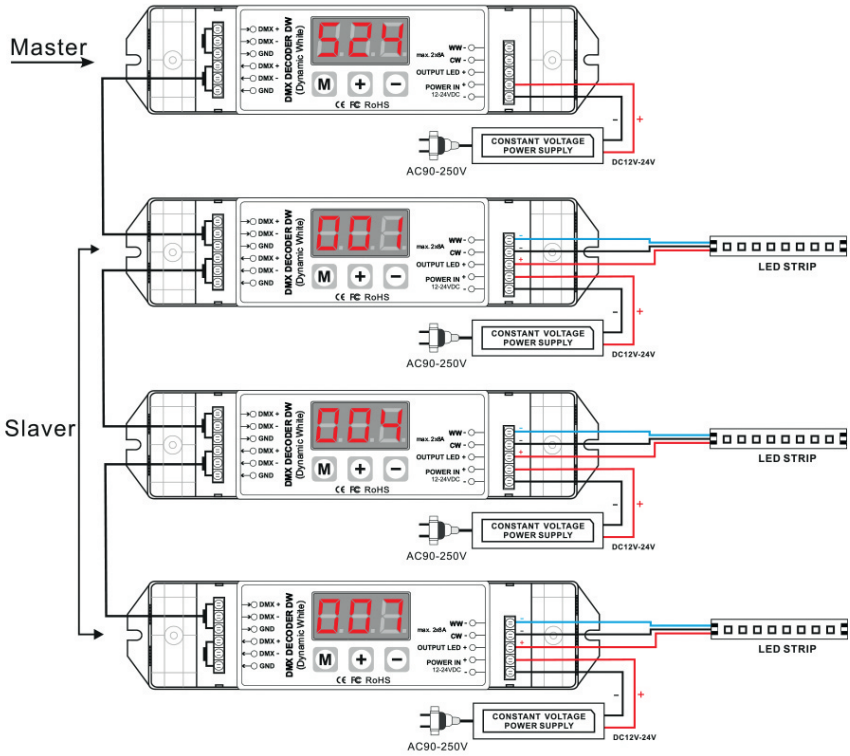
7. Conjunction Diagram

1. Wiring Diagram of Slave Mode:



2. Wiring diagram of Master Mode: (only one decoder is allowed to work as a master):

At high speeds the program, it may happen that the slave controller slightly delayed relative to the master controller to react, because the master controller send commands
and the slave controller must first receive! To counter the whole, it is advisable in such an application the LEDs purely only connected to the slave controllers and use the master controller only purely as a signal generator! This ensures that all LEDs the same run simultaneously without any delay.



8. Exception Handles

Malfunction	Reasons	Solutions
No light	1. no power supply	1. Check power supply
	2. Reversed polarity	2. Reverse it
	3. Signal terminal not connected or reversed	3. Signal terminal not connected or reversed
	4. Long circuit such as longer than 200m	4. Add signal terminator or amplifier
Wrong color	5. RGB wrong wiring	5. Re-wire RGB
	6. Wrong input of decoder address	6. Re-input
One or several color(s) alight but no change	7. Signal terminator wrongly connected or reversed	7. Check the wiring re-wire it properly
	8. Long circuit such as longer than 200m	8. Add signal terminator or amplifier
Abnormal shake during	9. Signal terminator not be properly connected	9. Connect it properly
	10. Long circuit such as longer than 200m	10. Add DMX signal transmitter or splitter