LED DMX & PWM Dimmer - Mono CC - User Manual

Item no.: LC-025-101

1. Product Description

The DMX512 Constant Currect Decoder which is developed only for constant current LED lamps. It adopted advanced micro-computer control technology to transfer standard DMX512/1990 signal to PWM singal. one output channel, the max output is marked baside the terminals. Please choose the correct one as per your lamp. 4096 Grey Scales. It can be used as DMX512 master or as DMX decoder to connect computerized digital output consol with analog silicon case and controls LED lamps of architecture and lighting.

2. Specifications

Input Voltage	12-48VDC
Max. load current	1 Channel 350mA od. 500mA od. 700mA od. 1050mA
Max. output power	15,7W(45V)350mA or 22,5W(45V)500mA or 31,5W(45V)700mA or 47,2W(45V)-1050mA
Grey Scale	4096
Input Signal	DMX512/1990
Output Signal	1xPWM Constant Current
Product Dimensions (L x W x H in mm)	L 176 x W 46 x H 30 mm
Weight	180g

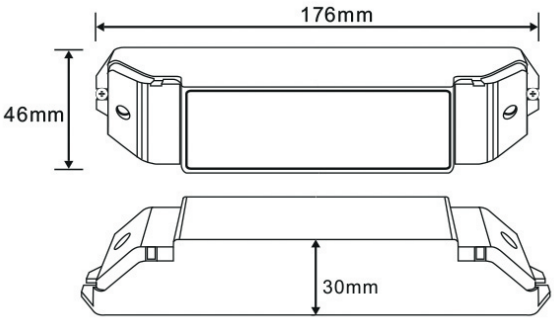
3. Basic Features

1. Automatically adapt input voltage DC12V-48V.
2. Input standard DMX512 signal; 3-digital-display shows DMX address code
3. 1 channsl output, 4096 gray scales each, logarithmic dimming, lamlight soft&stable without strobe flash.
4. DMX Master mode, Slave mode available
5.30 changing modes and 10 speed scales in master mode.
6. indicator of the DMX512 signal receiving status.
7. 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	Menu - change the turns in the 3 display tube
+	increase
-	decrease

Three digital-display indictaes the current setting value; different vlaue indicates different operating status.
Three digital-display goes off without operation for 1 minutes, press any key to turn it on.

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:

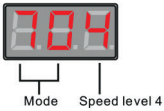
1. DMX Slave Mode: The value is: 001-512, such as: „001“

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.

2. DMX Master Mode preset patterns list:

000	One channel 100% brightness
600-699	Dimming, 0%-99%
700-709	Fading from 0-100%
710-719	Fading from 1-100%
720-729	Fading from 5-100%
730-739	Fading from 10-100%
740-749	Fading from 15-100%
750-759	Fading from 20-100%
760-769	Fading from 30-100%
770-779	Fading from 40-100%
780-789	Fading from 50-100%
790-799	Fading from 60-100%
800-809	strobo with jumping from 0-100%
810-819	strobo with jumping from 1-100%
820-829	strobo with jumping from 5-100%

830-839	strobo with jumping from 10-100%
840-849	strobo with jumping from 15-100%
850-859	strobo with jumping from 20-100%
860-869	strobo with jumping from 30-100%
870-879	strobo with jumping from 40-100%
880-889	strobo with jumping from 50-100%
890-899	strobo with jumping from 60-100%
900-909	fade up from 0% to 100% then it jump to 0%
910-919	fade up from 1% to 100% then it jump to 0%
920-929	fade up from 5% to 100% then it jump to 0%
930-939	fade up from 10% to 100% then it jump to 0%
940-949	fade up from 15% to 100% then it jump to 0%
950-959	fade up from 20% to 100% then it jump to 0%
960-969	fade up from 30% to 100% then it jump to 0%
970-979	fade up from 40% to 100% then it jump to 0%
980-989	fade up from 50% to 100% then it jump to 0%
990-999	fade up from 60% to 100% then it jump to 0%



* 700-999, First two digital indicate the modes, the third one shows the speed. 10 speed levels, from 0-9 speed decreasing. Total: 30 modes.

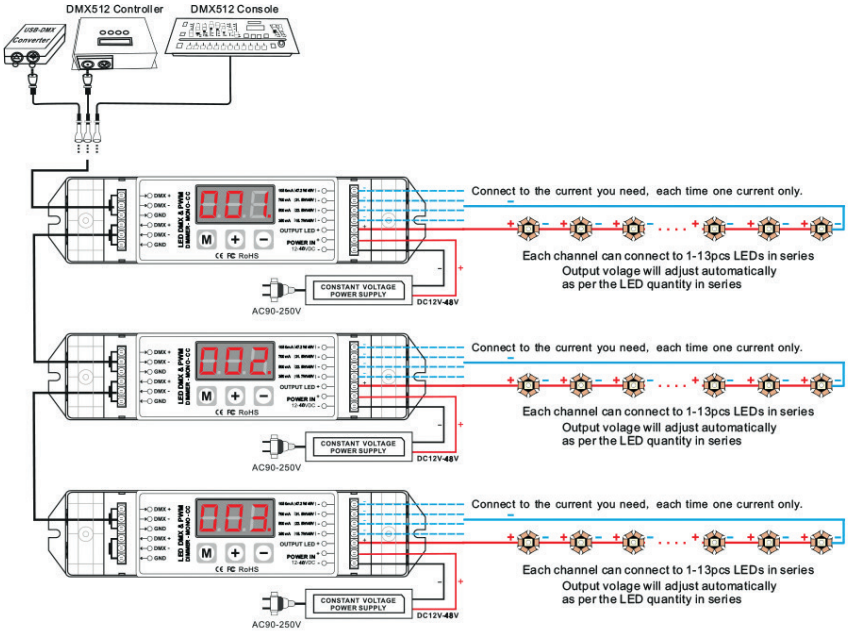
Speed for Program 700-799 and 900-999 (for one step and not for the whole program):
0 = 0,5 sec. / 1 = 1 sec. / 2 = 2 sec. / 3 = 5 sec. / 4 = 10sec. / 5 = 15 sec. / 6 = 20 sec. / 7 = 30 sec. / 8 = 60 sec. / 9 = 90 sec.
Speed for Program 800-899 (for one step and not for the whole program):
0 = 0,02 sec. / 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.

7. 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 conntec-ted or reversed	3. Signal terminal not connected or reversed
	4. Long circuit such as longer than 200m	4.Add signal terminator or amplifier
One or several color(s) alight but no change	5. Signal terminat or wrongly connected or reversed	5. Check the wiring re-wire it properly
	6. Long circuit such as longer than 200m	6. Add signal terminator or amplifier
Abnormal shake during	7. Signal terminator not be properly connected	7. Connect it properly
	8. Long circuit such as longer than 200m	8. Add DMX singal transmitter or splitter

8. Conjunction Diagram

1. DMX Wiring diagram of Slave Mode:



*) DO NOT power on till you finished wiring. After power ON, the digital display on the decoder will flash, and shows the digital stands for each current: 1. is for 1050mA; 2. is for 700mA; 3. is for 500mA; 4. is for 350mA

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.