Plug-in Type RDM Enabled DMX512 Control Module for 4 Channels LED Drivers

09.0921084CH.04735

Important: Read All Instructions Prior to Installation

Function introduction

- Digital Segment Display
- Configuration Buttons
    - Back Enter Up Down
    - **DMX512 & RDM Control Module**
- DMX512 SIGNAL: D+, D-, NC, GND
- +, 1-, 2-, 3-, 4-
- NC, NC, NC, NC
- DMX signal input
- 4 channels LED output, common anode
- 16 pin male connector to connect with LED driver
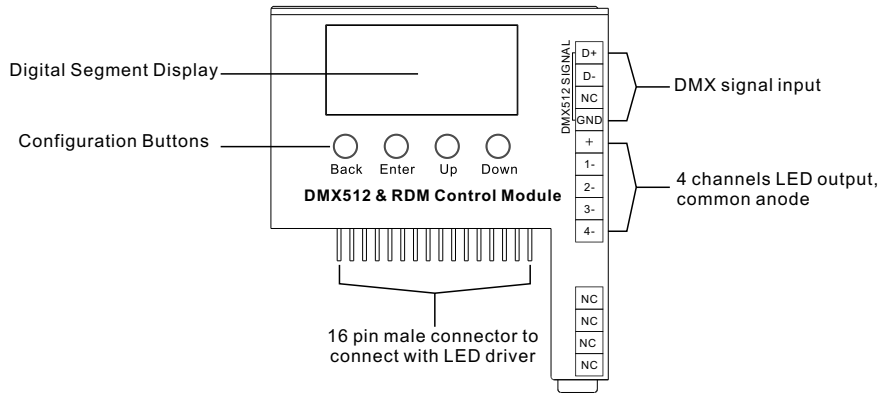
Features

- Works with plug-in control module 4 channels output LED drivers
- Enables to control single color, CCT, RGB/RGBW LED lighting
- Built-in DMX dimming interface
- RDM function enabled
- Enable to set DMX address, DMX channel quantity, PWM output resolution (8 bit or 16 bit)
- 16 bit PWM output resolution enables fine dimming
- Enable to set PWM output frequency, GAMMA ray dimming curve value and DMX decoding mode
- PWM output frequency up to 30KHz for professional photograph and studio lighting
- DMX512(2008), DMX512-A and RDM V1.0 (E1.20 – 2006 ESTA Standard)

Safety & Warnings

- DO NOT assembly the control module with power applied to the LED driver.
- DO NOT expose the module to moisture.
- DO NOT change the control module within 1 minute after powering off the driver to avoid burning-out.

Operation

1.Assemble the control module
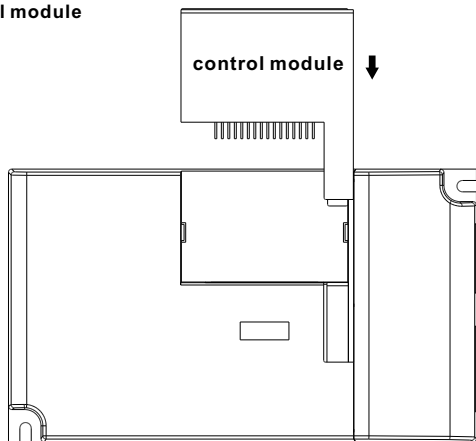
control module

2.LED Driver Wiring:

Once the control module is assembled to the LED driver, do wiring of LED driver according to the wiring diagram.
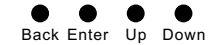
Button introduction

Up, Down button is for menu selection. After power on the decoder, if keep on clicking **Up** button, you will find below menu on display:

DMX signal indicator ● : When DMX signal input is detected, the indicator on the display following after **A** turns on red **A**.XXX

Back Enter Up Down

A.XXX   Means DMX address. fa ctory defaults setting is 001.

CH.XX   Means DMX channels quantity.

bt.XX   Means Bit (8bit or 16bit). factory defaults setting is 16bit

PF.XX   Means output PWM frequency. factory defaults setting is 1K HZ

GA.XX   Means output dimming curve gamma value, factory defaults setting is ga 1.5

dP.XX   Means Decoding mode, factory defaults setting is dp1.1

By holding button Back + Enter together at the same time over 5 seconds until the display go off, it will restore default settings .

1. DMX address setting:

select menu **A**.XXX , click button "Enter", display flashes,then click or hold button "Up" / "Down" to set DMX address (click is slow, hold is fast.), then click button"Back" to confirm.

2. DMX channel quantity setting:

Select menu **CH**.XX , click button "Enter", display flashes, then click button "Up" / "Down" to set DMX channel quantity , then click button"Back" to confirm.
For example the DMX address is already set 001.
CH01=1 DMX address for all the output channels, which are all address 001.
CH02=2 DMX addresses , output 1&3 is address 001, output 2,4 is address 002
CH03=3 DMX addresses, output 1, 2 is address 001,002, output 3,4 is address 003
CH04=4 DMX addresses, output 1,2,3,4 is address 001,002,003,004

DMX address is 001, CH01

DMX Console Slider number / DMX channel	dp1.1	dp2.1
1	for all output dimming	for all output dimming
2	No use	for all output Fine dimming

DMX address is 001, CH02

DMX Console Slider number / DMX channel	dp1.1	dp2.1	dp3.2
1	for output 1&3 dimming	for output 1&3 dimming	for output 1&3 dimming
2	for output 2,4 dimming	for output 1&3 Fine dimming	for output 2,4 dimming
3		for output 2,4 dimming	for all output dimming
4		for output 2,4 Fine dimming	

DMX address is 001, CH03

DMX Console Slider number / DMX channel	dp1.1	dp2.1	dp4.3	dp5.3
1	for output 1 dimming	for output 1 dimming	for output 1 dimming	for output 1 dimming
2	for output 2 dimming	for output 1 Fine dimming	for output 2 dimming	for output 2 dimming
3	for output 3,4 dimming	for output 2 dimming	for output 3,4 dimming	for output 3,4 dimming
4		for output 2 Fine dimming	for all output master dimming	for all output master dimming
5		for output 3,4 dimming		strobe effects
6		for output 3,4 Fine dimming		

DMX address is 001, CH04

| DMX Console Slider number / DMX channel	dp1.1	dp2.1	dp5.4	dp6.4
1	for output 1 dimming	for output 1 dimming	for output 1 dimming	for output 1 dimming
2	for output 2 dimming	for output 1 Fine dimming	for output 2 dimming	for output 2 dimming
3	for output 3 dimming	for output 2 dimming	for output 3 dimming	for output 3 dimming
4	for output 4 dimming	for output 2 Fine dimming	for output 4 dimming	for output 4 dimming
5		for output 3 dimming	for all output master dimming	for all output master dimming
6		for output 3 Fine dimming		strobe effects
7		for output 4 dimming		
8		for output 4 Fine dimming		

3. PWM output resolution Bit setting:

select menu $\boxed{8.8}$.XX , click button "Enter",display flashes, then click button "Up" / "Down" to choose 08 or 16 bit, then click button"Back" to confirm.

4. output PWM frequency setting:

select menu $\boxed{P.F}$.XX , click button "Enter", display flashes,then click button "Up" / "Down"to choose 00~30, then click button"Back" to confirm. 00=500HZ, 01=1kHZ, 02=2kHZ.....30=30kHZ.

5. output dimming curve gamma value setting:

select menu $\boxed{9.8}$.XX , click button "Enter", display flashes, then click or hold button "Up" / "Down" to choose 0.1~9.9, then click button"Back" to confirm.
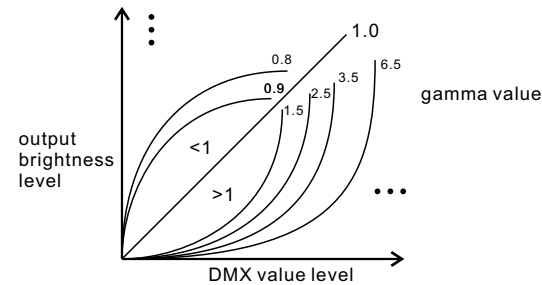
6. DMX decoding mode setting:

Select menu $\boxed{8.P}$.XX , click button "Enter", display flashes, then click or hold button "Up" / "Down" to choose the decoding mode, then click button"Back" to confirm. "dPxx" means the DMX address quantity used for control of corresponding PWM output channel quantity. 1st "x" is DMX address quantity, 2nd "x" is PWM channel quantity.

Fine dimming: the micro dimming effect can only be visible when the dimming curve gamma value is set lower than 1.4, and the lower the value is, the more visible the micro dimming effect will be.

The supported RDM PIDs are as follows:

DISC_UNIQUE_BRANCH
DISC_MUTE
DISC_UN_MUTE
DEVICE_INFO
DMX_START_ADDRESS
IDENTIFY_DEVICE
SOFTWARE_VERSION_LABEL
DMX_PERSONALITY

DMX_PERSONALITY_DESCRIPTION
SLOT_INFO
SLOT_DESCRIPTION
MANUFACTURER_LABEL
SUPPORTED_PARAMETERS

Restore to Factory Default Setting

Press and hold down both "Back" and "Enter" keys until the digital display turns off, then release the keys, system will reset and the digital display will turn on again, all settings will be restored to factory default.
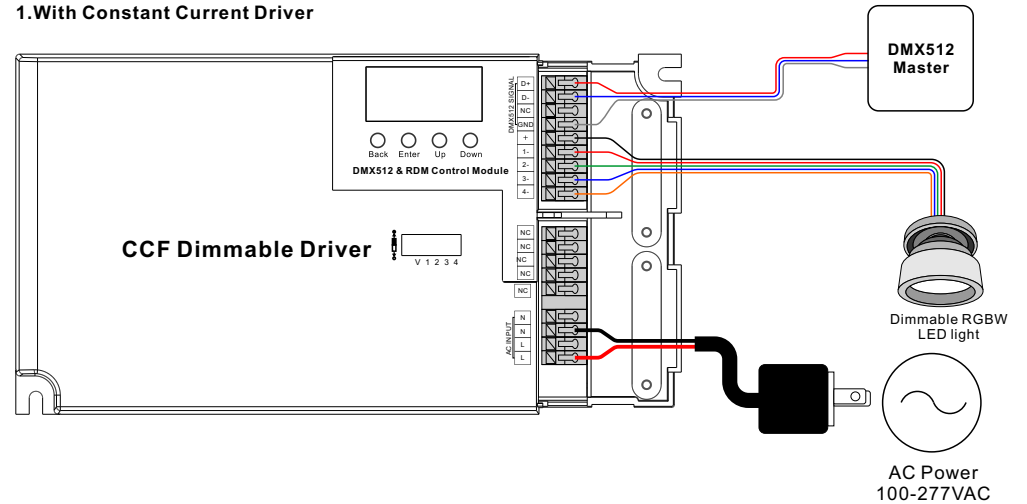Default settings are as follows:
DMX Address Code: a001
DMX Address Quantity: SW1=0: ch04, SW1=1:ch03
PWM Resolution Mode: bt16
PWM Frequency: pf01
Gamma: ga1.5
Decoding Mode: dp1.1

Wiring diagram
1.With Constant Current Driver

2.With Constant Voltage Driver

The data definitions for strobe channel are as follows:
{0, 7},//undefined
{8, 65},//slow strobe-->fast strobe
{66, 71},//undefined
{72, 127},//slow push fast close
{128, 133},//undefined
{134, 189},//slow close fast push
{190, 195},//undefined
{196, 250},//random strobe
{251, 255},//undefined