



3 Channels Constant Voltage Diven

DMX controller

Part Number: DMX-VD301-5

DMX-VD301-10



Brief Introduction

3-Channel RGB DMX controller is specially designed with constant voltage driven for LED lightings. This controller is equipped with DMX Decoding Module and Constant Voltage Circuit System(up to 5A/10A). This controller is compatible with DMX512/1990 agreements. Suitable for any common anode LED lightings, such as LED modules, LED strips, LED ribbons, LED decorative lightings etc.

Features and Benefits

- Compatible with DMX512/1990 agreements
- RGB, three channel output, 0~100% full range dimming, 256 gray levels
- DMX signal controlled and built-in programmes options
- Input voltage: DC9~40V。
- R/G/B, each channel up to 5A/10A, power consumption up to 120W/240W each channel
- With input and output RJ45 port for DMX connection purpose, easy to use

Technical Specifications

Size: 98×57×29mm

DMX channel: 3-CH

Color Range: $256 \times 256 \times 256 = 16777216$ colors

Input Voltage: DC 9~40V

Input Signal: DMX512/1990, 250KHz

DMX Port Capability: 256 scale levels

Drive Capability: Up to 170pcs DMX-VD301 devices.

Output Signal: R/G/B, 3 Channel PWM Signal,

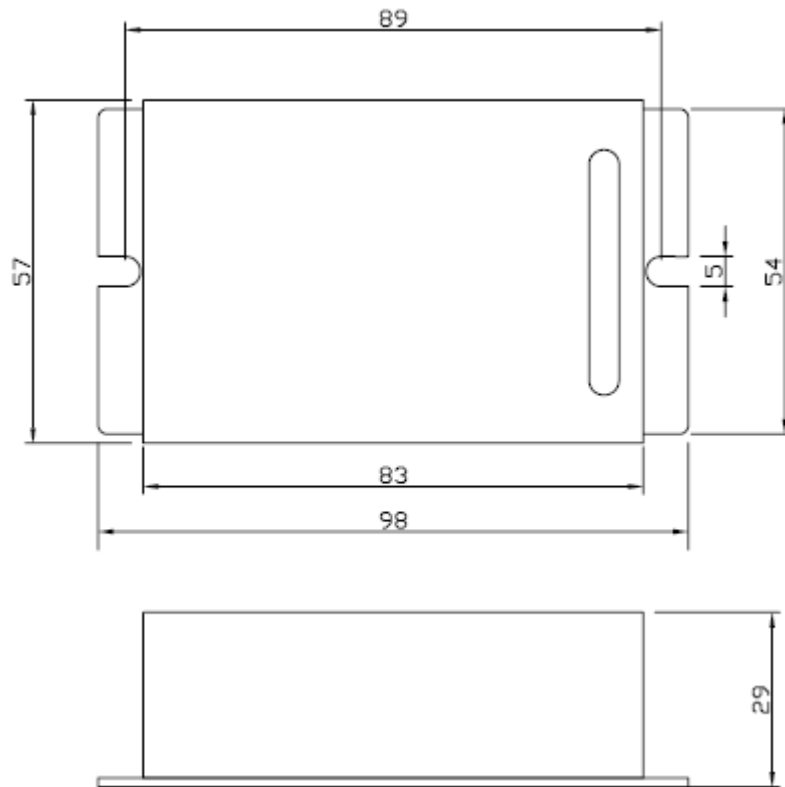
Output Signal Frequency: 400Hz

Max. Driven Current: DMX-VD301-5: 5A, DMX-VD301-10: 10A

Output Voltage: 9-40V

Max. output power: DMX-VD301-5: 360W, DMX-VD301-10: 720W

Size Diagram



Power Input and Signal Output Introduction



Top View



Side View

- “1” and “2” is assigned as power input, V_{in+} and V_{in-} respectively, Input DC 9V-40V
- “3”~“6” are assigned as signal outputs, driven up to 5A/10A respectively
- “3” is V_{out} . Common Anode, positive data output($V+$), output DC 9V-40V
- “4” is LED R. R- data output, linked to R input of LED lightings

- “5” is LED G. G- data output, linked to G input of LED lightings
- “6” is LED B. B- data output, linked to B input of LED lightings



Jumping Wire at the end of the right

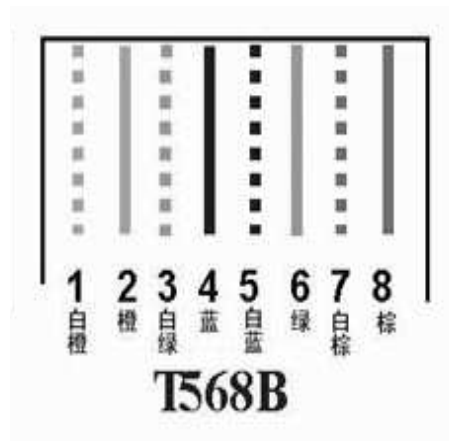
- Jumping wire is designed for modes: DMX-controlled and Running Built-in programmes. When jumping wire is short circuit, under running built-in programmes, 7 color fading, fading in and fading out; When jumping wire switch off, under DMX-controlled, receiving DMX signals

DMX signal input and output Introduction



Side View

- The left is DMX IN and the right one is DMX OUT
- RJ45 junction port, compatible with EIA/TIA568B
- Signal Sequences: 1~8 is white/orange, orange, white/green, blue, white/blue, green, white/brown, brown respectively as below.



RJ45 Port Definitios:

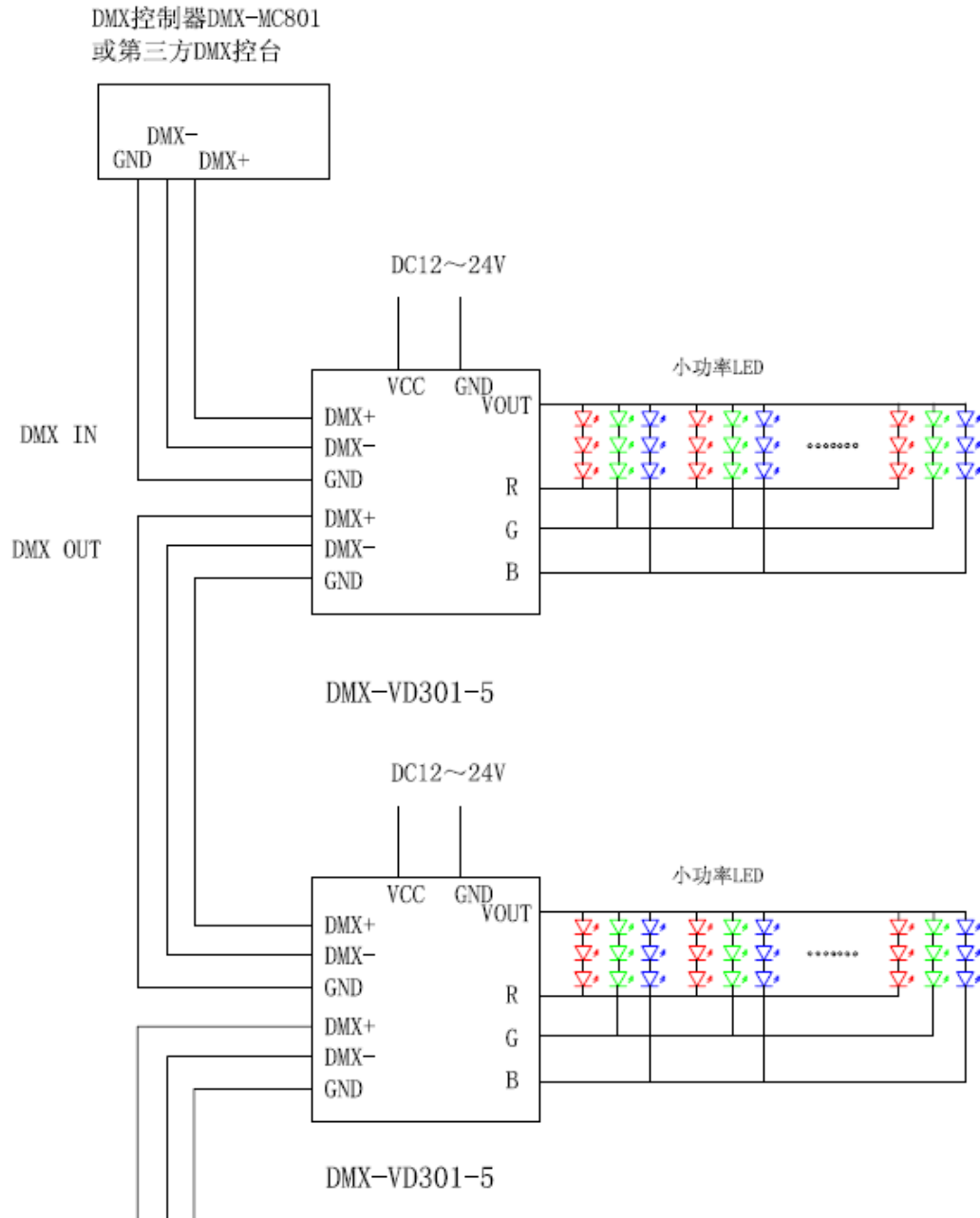
Leg	1	2	3	4	5	6	7	8
WireColor	W/O	O	W/G	B	W/B	G	W/B	B
Definition	DMX+	DMX-	NG	NG	NG	NG	GND	GND

Application Introduction

DMX-VD301-5/ DMX-VD302-10: Input DC 12-24V, Output Signal is PWM, Max. Power Output 360W/720W.

Connection diagrams as below:

DMX console or DMX-MC801



Notice: This DMX decoder is equipped with RS485-Drive IC design(DMX signal). Its Drive Capability is up to 256 (Min. is 32). Connection in Chain should be recommended.

Star connection Scheme and Tree Connection Scheme are not recommended. All connections should be with CAT5E cables and It will be better to solder a 120 ohm resistance the end of the loop to ensure signal smooth and reliable

Setup DMX address.

DMX address is stored in the FLASH Storer. All DMX decoders in our factory are regarded as DMX 1, 2, 3 (acknowledgement). 3CH, R/G/B respectively. With MC101 DMX controller below read and write can be performed through the 12 small buttons.



MC101 DMX controller, for more information please contact ledlenser@vip.163.com

In addition, LED lighting consists of RGB which is worked as a pixel, so each pixel contains 3 DMX address (R/G/B's address respectively).

The relation between Pixle DMX address and pixel is:

- **DMX Red=(PixelRed-1)*3+1,**
- **DMX Green= (PixleGreen-1)*3+2,**
- **DMX Blue=(PixelBlue-1)*3+3.**

Warnings!!!

- (1) Near the DMX lighting control system as close as possible. Avoid signal decay.
- (2) CAT5e cable recommended.
- (3) Controllers are recommended to use in series connections.
- (4) Soldered with a 120Ω resistor at the end of signal cable
- (5) Controllers and LED lighting systems should be kept as far away as possible from wires with strong signal.

For anything else unclear please feel free to contact sales@ledii.com .

Thank you for your time and attention.