3/4 Channel Constant Voltage DMX512 & RDM Decoder

Model No.: D3-M / D4-M

RDM/DIP switch/XLR3 input/Logarithmic dimming

D3-M

D4-M

CE RoHS emc LVD

Features

- Comply with the DMX512 standard protocols.
- Set DMX decode start address via DIP switch.
- RDM function can realize intercommunication between DMX master and decoder.
  For example, DMX decoder address can be set by DMX master console.
- 3-pin XLR and Green terminal DMX signal input & output.

Technical Parameters

Input and Output	D3-M	D4-M
Input voltage	12-24VDC	12-24VDC
Input current	24A	24A
Output voltage	3 x (12-24)VDC	4 x (12-24)VDC
Output current	3CH,8A/CH	4CH,6A/CH
Output power	3 x (96-192)W	4 x (72-144)W
Output type	Constant voltage	Constant voltage

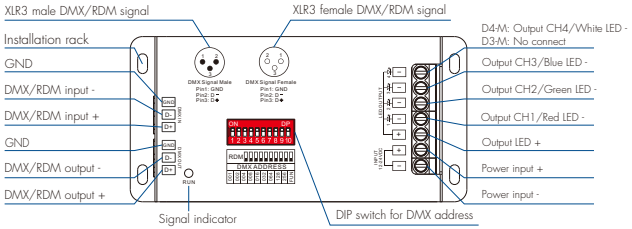
Safety and EMC	
EMC standard (EMC)	EN55032:2015, EN61000-3-2:2014, EN61000-3-2:2013, EN55024 :2010/A1:2015
Safety standard(LVD)	EN 61347-1:2015 EN 61347-2-11:2015
Certification	CE,EMC,LVD

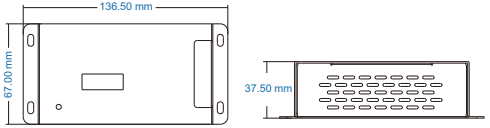
Environment	
Operation temperature	Ta: -30°C ~ +55°C
Case temperature (Max.)	Tc: +85°C
IP rating	IP20

Warranty and Protection	
Warranty	5 years
Protection	Reverse Polarity

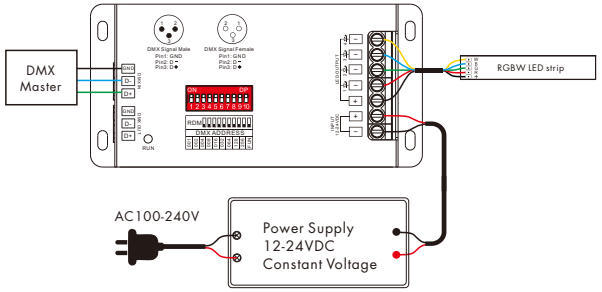
Weight	D3-M	D4-M
Net weight	0.328kg	0.328kg
Gross weight	0.349kg	0.349kg

Mechanical Structures and Installations





Wiring Diagram



Note:

1. An DMX signal amplifier is needed if more than 32 decoders are connected, or use overlong signal line, signal amplification should not be more than 5 times continuously.
2. If the recoil effect occurs because of longer signal line or bad line quality, please try to connect 0.25W 90-120Ω terminal resistor at the end of each DMX signal line.

DIP Switch

RDM Mode: The DIP switch 1-10 are all OFF.

DMX Mode: FUN=OFF (the 10th DIP switch = OFF)
Setting DMX addresses with DIP switch 1-9.

Self-testing Mode: FUN=ON (the 10th DIP switch = ON)
Setting self-testing mode with DIP switch 1-9.

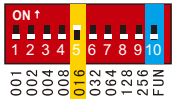
RDM Mode

When change DIP switch 1-10 to OFF, the defaulted DMX start decode address become 1. then DMX start decode address can be set by DMX/RDM console.

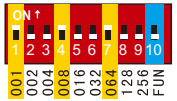
DMX Mode

DMX strart decode address value = the total value of (1-9), to get the place value when in "on"position, otherwise will be 0.

E.g.1: Set start address to 16.

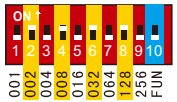


E.g.2: Set start address to 73.



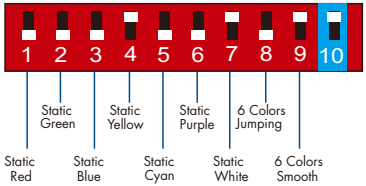
001+008+064=73

E.g.3: Set start address to 170.



002+008+032+128=170

Self-testing Mode



1. For dynamic effects (DIP Switch 8,9 = on) : DIP switch 1-7 is used to get 7 speed levels. (7=on, the fastest level)
2. When several DIP switches are on, subjected to the highest switch value.
   As the figure above shows, the effect will be 6 colors smooth at 7 speed level.

DMX Dimming

1. Each D3-M DMX decoder occupy 3 DMX address when connecting the DMX console.
   For example, the defaulted start address is 1, their corresponding relationship in the form:

DMX Console	DMX Decoder Output
CH1 0-255	CH1 PWM 0-100% (LED R)
CH2 0-255	CH2 PWM 0-100% (LED G)
CH3 0-255	CH3 PWM 0-100% (LED B)

2. Each D4-M DMX decoder occupy 4 DMX address when connecting the DMX console.
   For example, the defaulted start address is 1, their corresponding relationship in the form:

DMX Console	DMX Decoder Output
CH1 0-255	CH1 PWM 0-100% (LED R)
CH2 0-255	CH2 PWM 0-100% (LED G)
CH3 0-255	CH3 PWM 0-100% (LED B)
CH4 0-255	CH4 PWM 0-100% (LED W)

Dimming curve