

### **Technical Datasheet**

## D24 -DMX512 Decoder

24 CH Constant Voltage DMX512 Decoder















- Din rail mounted DMX512 constant voltage decoder, 24 channel output, 3A per channel.
- With standard DMX512 compliant interface, DMX address can be set easily and shown on the digital numeric display.
- It also can work as stand-alone 24ch RGB controller, have 4 kinds dynamic mode.
- It also can work as stand-alone 24ch dimming controller, each channel adjust brightness independently, and save up to 8 groups brightness.
- $\bullet$  Work with power repeater to expand output unlimitedly.

# D24 -DMX512 Decoder



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## **Technical Data**

Input voltage	5-24VDC	
Input signal	DMX512	
Output type	PWM constant voltage	
Output current	24CH,3A/CH	
Output power	24 x (15-72)W	
Decode number	1/3/6/24 DMX Channel	
Grey levels	16 Bit	
Dimming range	0-100%	
Working temperature	-30 °C~55 °C	
Dimension	L160×W88×H60mm	
Weight	306g	
Certification	IP20 PMX RDM	

roject Fixture#	Fixture#	Date
		Firm



## **Ordering Information**

Choose the option that suits your need and write its corresponding code on the appropriate line to form the product code.

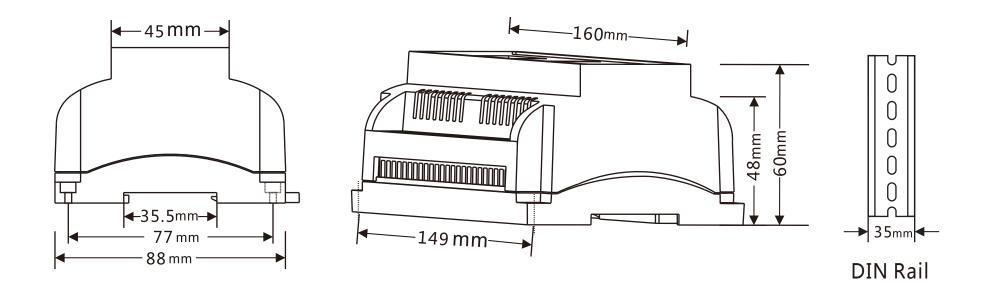
Example product code:

D24-DMX512-DECODER -

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# Technical Drawing 24 CH Constant Voltage DMX512 Decoder D24





Unit: mm

#### **User Guide**

#### 24 Channel DMX512 Decoder

The DMX512 & RDM decoder D24 which features full support to the latest DMX512 protocols, is designed with 24 channels output. RDM bi-direction communication function enables the DMX512 master console to detect and display decoder information and set DMX address. A variety of features can be set via the numeric digital display and the buttons such as DMX address, DMX decoding mode, PWM output frequency and dimming curve value.

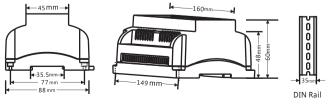
#### **Feature**

- Din rail mounted DMX512 decoder with 24 channel constant voltage output.
- DMX decode mode / Stand-alone RGB mode / Stand-alone 24 channel dimmer mode.
- Standard DMX512 compliant interface, DMX address display, set DMX address freely.
- Comply with the latest DMX512, DMX512(1990), DMX512-A, RDM V1.0 (E1.20 2006 ESTA Standard) standard protocols.
- RDM bi-directional communication function, can realize intercommunication between DMX master and decoder, for example, you can set DMX decoder address by DMX master console.
- Compatial with our DMX master and any high quality DMX master from other supplier.
- Under stand-alone 24ch RGB controller mode, have 4 kinds dynamic mode.
- Under stand-alone 24ch dimmer mode, each channel adjust brightness independently, and save up to 8 groups brightness.
- High or low PWM frequency optional.
- . Log or linear dimming curve optional.
- . Work with power repeater to expand output unlimitedly.
- . Din rail or screw mounted optional.

#### **Technical parameter**

M	odel	Name	Input voltage	Output current	Output power	Output type
D2	24	24CH CV DMX512 decoder	5-24VDC	24CH,3A/CH	24 x (15-72)W	Constant voltage

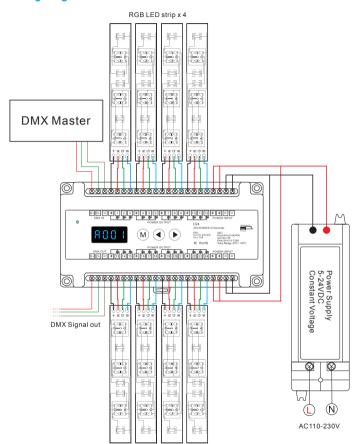
#### **Dimension**



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#### Wiring diagram



RGB LED strip x 4

#### LED power supply voltage and power select:

- 12V lamp, Input 12V power supply, can load 0~864W,
- 24V lamp, Input 24V power supply, can load 0~1728W,
   The power supply power must larger than load power 20%

#### Operation

#### System parameter setting

- Long press M and ◀ key for 2s, prepare for setup system parameter: decode mode, output PWM frequence, output brightness curve, automatic blank screen. short press M key to switch four item.
- Decode mode: short press ◄ or ► key to switch 1-channel decode("d--1"), 3-channeldecode("d--3"), 6-channel decode("d--6") or 24-channel decode("d-24").
- Output PWM frequence: short press ◄ or ► key to switch 500Hz("F--L") or 2KHz("F--H").
- Output brightness curve: short press 

  or 

  key to switch linear curve("C--L") or logarithmic curve("C--E").
- Automatic blank screen; short press ◄ or ► key to switch enable ("bon") or disable("boFF") automatic blank screen.
- Long press M key for 2s or timeout 10s, guit system parameter setting.

- Short press M key, when display A001~2048, enter DMX mode.
- Press ◀ or ► key to change DMX decode address(001~2048). long press for fast adjustment.
- If there is a DMX signal input, will enter DMX mode automatically.





(P--1~P--4)

#### Stand-alone RGB mode

- Short press M key, when display P--1~P--4, enter stand-alone RGB mode.
- · Each mode can adjust speed and brightness.

Long press M key for 2s, prepare for setup mode speed, brightness. Short press M key to switch two item.

Mode speed: 1-10 level speed(SP-1, SP-9, SP-F).

Mode brightness: 1-10 level brightness(br-1, br-9, br-F).

Long press M key for 2s, or timeout 10s, guit setting.

Speed (8 level)

Brightness (10 level, 100%)

• Enter stand-alone RGB mode only when DMX signal is disconnected or lost.

#### RGB change mode list

No.	Name
P1	White forward jump chase
P2	White forward smooth float
P3	Red,yellow, green,cyan,blue,purple forward jump chase
P4	Red, yellow, green, cyan, blue, purple forward smooth float

#### Stand-alone dimmer mode

- Short press M key, when display L--1~L--8, enter stand-alone dimmer mode.
- Press 

  or 

  key to change dimmer mode number(L--1~L--8).
- Each dimmer mode can adjust each channel brightness independently. Long press M key for 2s, prepare for setup four channel brightness. Short press M key to switch 24 channel(0100~01FF, 0200~02FF, 0300~03FF, ..., 2400~24FF),.

Press ◀ or ▶ key to setup brightness value of each channel. Long press M key for 2s, or timeout 10s, quit setting.

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Stand-alone dimmer mode (L--1~L--8)

Enter stand-alone dimmer mode only when DMX signal is disconnected or lost.

## DIMON TECHNOLOGY

#### Restore factory default parameter

- Long press 

  and 

  key for 2s, restore factory default parameter, display "RES".
- Factory default parameter: DMX decode mode. DMX first address is 1, 24 channel decode. low PWM frequence output, logarithmic brightness curve, RGB mode number is 1. dimmer mode number is 1, disable automatic blank screen.

#### Malfunctions analysis & troubleshooting

Malfunctions	Causes	Troubleshooting
No light	<ol> <li>No power.</li> <li>Wrong connection or insecure.</li> </ol>	Check the power.     Check the connection.
Wrong color	Wrong connection of R/G/B wires.     DMX decode address error.	Reconnect R/G/B wires.     Set corrrect decode address.
Uneven intensity between front and rear, with voltage drop	Output cable is too long.     Wire diameter is too small.     Overload beyond power supply capability.     Overload beyond controller capability.	Reduce cable or loop supply.     Change wider wire.     Replace higher power supply.     Add power repeater.

#### Safety information

- 1. The product shall be installed and serviced by a qualified person.
- 2. The product is non-waterproof. Please avoid the sun and rain.
- 3. Good heat dissipation will prolong the working life of the controller. Please ensure good ventilation.
- 4. Please check if the output voltage of any power supplies used complywith the working voltage of the product.
- 5. Ensure all wire connections and polarities are correct and secure before applying power to avoid any damages to the LED lights.
- 6. If a fault occurs please return the product to your supplier. Do not attempt to fix this product by yourself.