

User Guide

12/24 Channel DMX512 Decoder

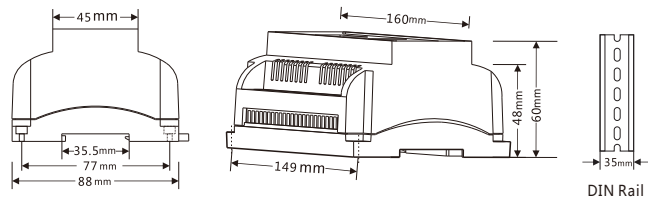
Summary

- Din rail mounted DMX512 decoder with 12/24 channel constant voltage or constant current output.
- DMX decode mode / Stand-alone RGB mode / Stand-alone 12/24 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 address by DMX master console.
- Compatial with our DMX master and any high quality DMX master from other supplier.
- Under stand-alone 12/24ch RGB controller mode, have 4 kinds dynamic mode.
- Under stand-alone 12/24ch 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

Model	Name	Input voltage	Output current	Output power	Output type
D12	12CH CV DMX512 decoder	5-24VDC	12CH,5A/CH	12 x (25-120)W	Constant voltage
D12C	12CH CC DMX512 decoder	12-48VDC	12CH,200-1000mA (customized)/CH	12 x (2.4-48)W	Constant current
D24	24CH CV DMX512 decoder	5-24VDC	24CH,3A/CH	24 x (15-72)W	Constant voltage

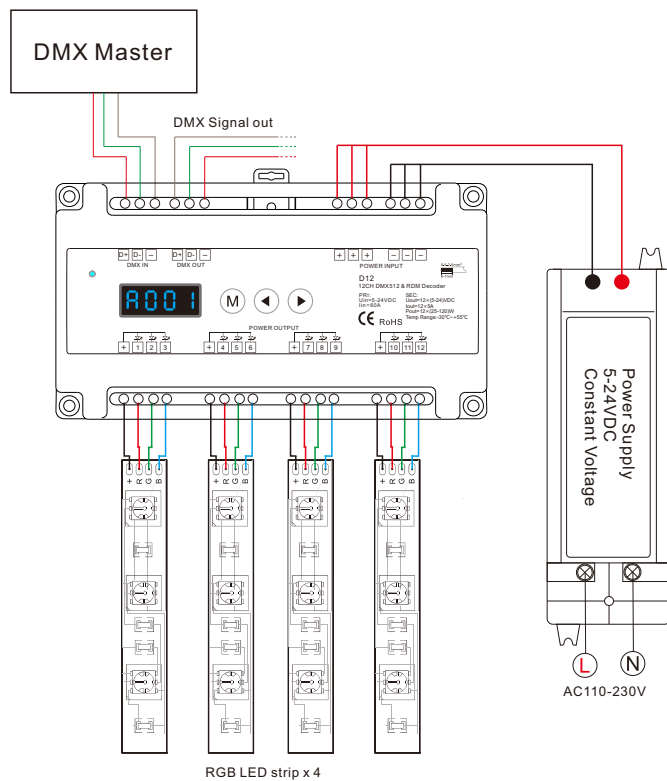
Dimension



DIN Rail

Wiring diagram

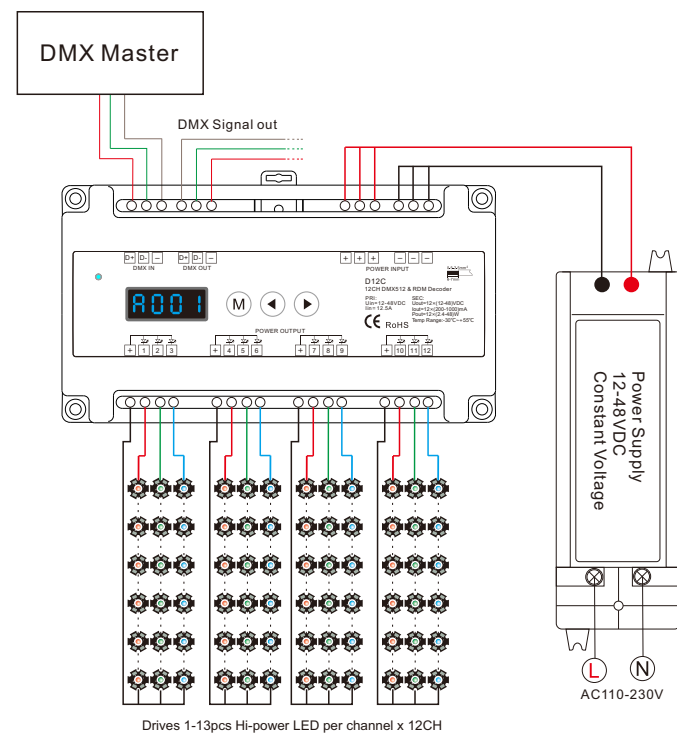
D12 connect with DMX master



LED power supply voltage and power select:

- 12V lamp, Input 12V power supply, can load 0~720W,
 - 24V lamp, Input 24V power supply, can load 0~1440W,
- The power supply power must larger than load power 20%.

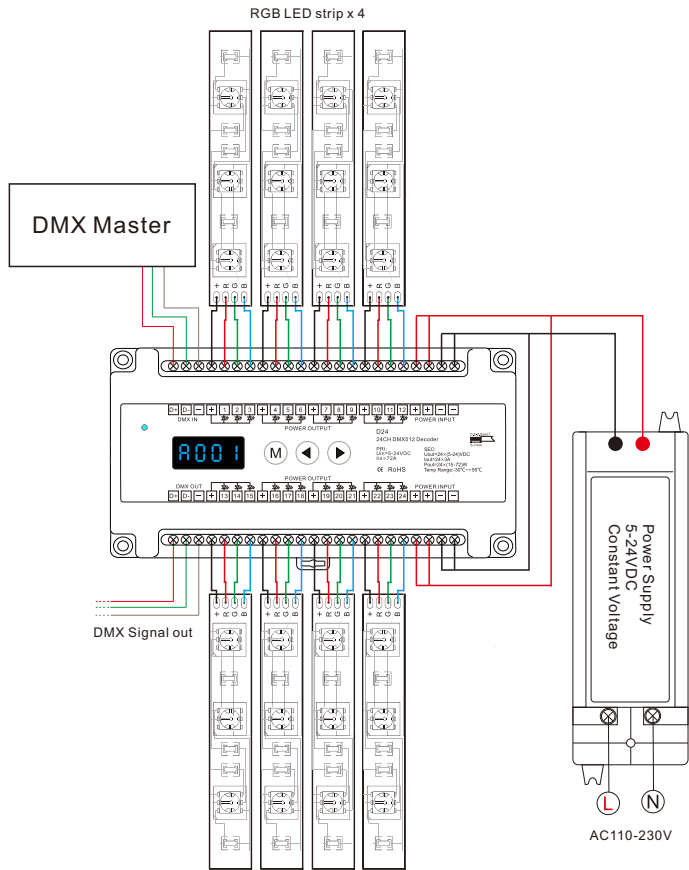
D12C connect with DMX master



LED power supply voltage select:

- Input 48V power supply, can series connect 1~13pcs LED,
- Input 36V power supply, can series connect 1~10pcs LED,
- Input 24V power supply, can series connect 1~6pcs LED,
- Input 12V power supply, can series connect 1~3pcs LED.

D24 connect with DMX master



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%.

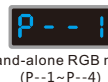
Operation

System parameter setting

- Long press M and ◀ key for 2s, prepare for setup system parameter: decode mode, output PWM frequency, output brightness curve, automatic blank screen. short press M key to switch four item.
- Decode mode: for 12ch decoder, short press ◀ or ▶ key to switch 1-channel decode("d--1"), 3-channel decode("d--3"), 6-channel decode("d--6") or 12-channel decode("d--12"). for 24ch decoder, short press ◀ or ▶ key to switch 1-channel decode("d--1"), 3-channel decode("d--3"), 6-channel decode("d--6") or 24-channel decode("d--24").
- Output PWM frequency: 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, quit system parameter setting.

DMX mode

- 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.



Stand-alone RGB mode

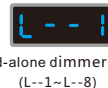
- Short press M key, when display P--1~P--4, enter stand-alone RGB mode.
 - Press ◀ or ▶ key to change dynamic mode number(P--1~P--4).
 - Each mode can adjust speed and brightness.
- Long press M key for 2s, prepare for setup mode speed, brightness. Short press M key to switch two item.
- Press ◀ or ▶ key to setup value of each 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, quit setting.

RGB change mode list

No.	Name
P--1	White forward jump chase
P--2	White forward smooth float
P--3	for 12ch decoder: Red, green, blue, white forward jump chase for 24ch decoder: Red, yellow, green, cyan, blue, purple forward jump chase
P--4	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 12/24 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.
- Another way to setup channel brightness: Enter DMX mode, long press M key for 2s will save current decode value.



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, 12/24 channel decode, low PWM frequency 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	1. No power. 2. Wrong connection or insecure.	1. Check the power. 2. Check the connection.
Wrong color	1. Wrong connection of R/G/B wires. 2. DMX decode address error.	1. Reconnect R/G/B wires. 2. Set correct decode address.
Uneven intensity between front and rear, with voltage drop	1. Output cable is too long. 2. Wire diameter is too small. 3. Overload beyond power supply capability. 4. Overload beyond controller capability.	1. Reduce cable or loop supply. 2. Change wider wire. 3. Replace higher power supply. 4. 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 comply with 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.