User Guide

1 Channel Constant Voltage DMX512 & RDM Decoder

The DMX512 & RDM decoder D1 / D1-L which features full support to the latest DMX512 protocols, is designed with 1 channels 12A 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,PWM output frequency and dimming curve value.
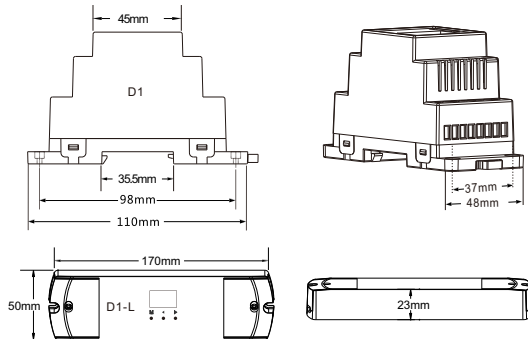
Feature

● DMX512 decoder with 1 channel constant voltage output.
● DMX decode mode / Stand-alone dynamic mode / Stand-alone 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 dynamic mode, built in 3 mode, include jump, flash or gradual change style, adjustable speed.
● Under stand-alone dimmer mode, can adjust brightness independently, and save up to 8 brightness.
● High or low PWM frequency optional.
● Log or linear dimming curve optional.
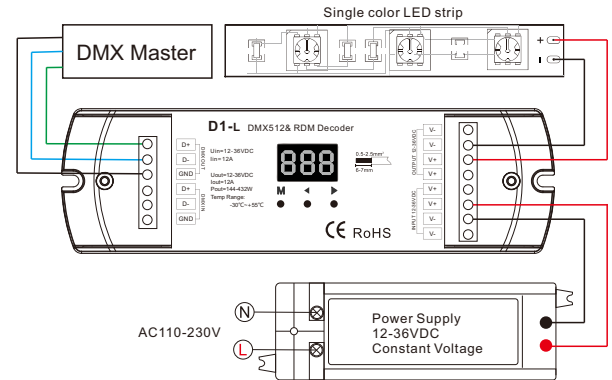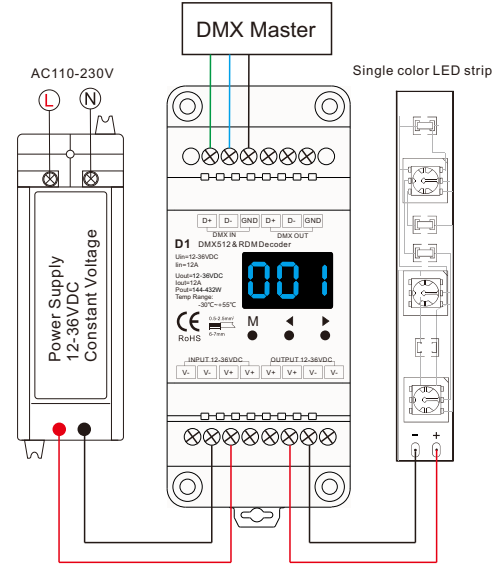● Work with power repeater to expand output unlimitedly.

Technical parameter

Model	Name	Input voltage	Output current	Output power	Size(mm)
D1	1CH CV DMX512 decoder	12-36VDC	12A	144-432W	115x48x67
D1-L	1CH CV DMX512 decoder	12-36VDC	12A	144-432W	170x50x23

Dimension

Wiring diagram

Operation

System parameter setting

● Long press M and ◄ key for 2s, prepare for setup system parameter: output PWM frequence,
output brightness curve, automatic blank screen.
short press M key to switch three item.

● 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("boF")
automatic blank screen.

● Long press M key for 2s or timeout 10s, quit system parameter setting.

DMX mode

● Short press M key, when display 001~999, enter DMX mode.

● Press ◄ or ► key to change DMX decode address(001~999),
long press for fast adjustment.

● If there is a DMX signal input, will enter DMX mode automatically.

DMX mode
(001~999)

Stand-alone dynamic mode

● Short press M key, when display P-1~P-3,
enter stand-alone dynamic mode.

● Press ◄ or ► key to change dynamic mode number(P-1~P-3).

● Each dynamic mode can adjust speed.
Long press M key for 2s, prepare for setup speed.
Press ◄ or ► key to adjust speed value, 1-10 level speed(S-1, S-9, S-F).
Short press M key to quit setting.

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

Stand-alone dynamic mode
(P-1~P-3)

Speed
(8 level)

Dynamic mode list

No.	Name
P-1	white fade in and fade out
P-2	white jump
P-3	white flash

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 brightness independently.
Long press M key for 2s, prepare for setup brightness(b00~bFF).
Press ◄ or ► key to adjust brightness value.
Short press M key, or timeout 10s, quit setting.

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

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

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, high PWM frequence output,
logarithmic brightness curve, dynamic 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. DMX decode address error.	1. Set corrrect 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.