

1 Channel Constant Voltage DMX512 & RDM Decoder

Features

- Comply with the DMX512 standard protocols.
- Digital numeric display, set DMX decode start address by buttons.
- RDM function can realize intercommunication between DMX master and decoder.
For example, DMX decoder address can be set by DMX master console.
- 16bit (65536 levels) / 8bit (256 levels) grey level selectable.
- PWM frequency
250/500/1000/2000/4000/8000/16000/32000Hz selectable.
- Logarithmic or linear dimming curve selectable.
- Stand-alone dynamic mode and dimmer mode selectable,
which be controlled by buttons with built-in programs, instead of DMX signal.
- Over-heat / Overload / Short circuit protection, recover automatically

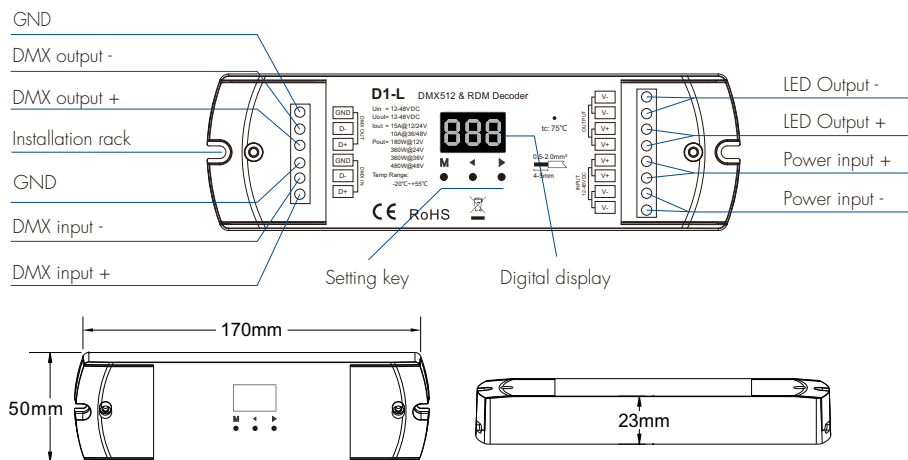


CE RoHS

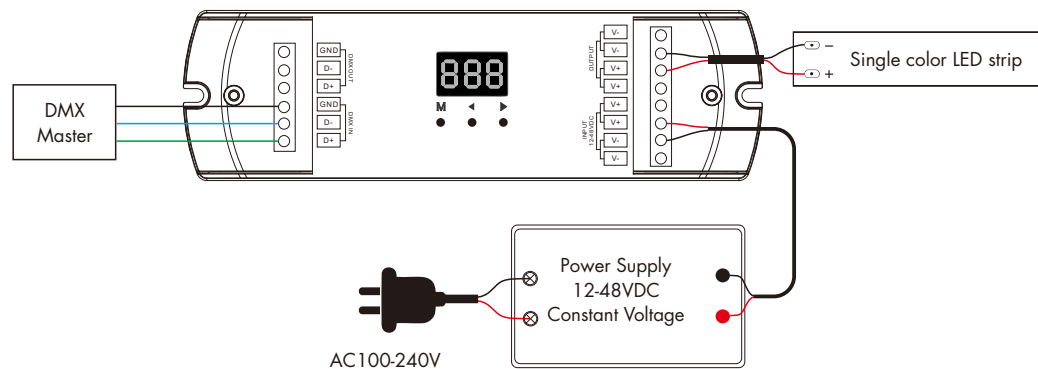
Technical Parameters

Input and Output		Warranty and Protection		Safety and EMC	
Input voltage	12-48VDC	Warranty	5 years	EMC standard	EN IEC 55015/ EN IEC 61547
Input current	15.5A	Protection	Reverse Polarity,Over-heat Overload ,Short circuit	Safety standard	EN 61347-1/-2 EN 62493
Output voltage	12-48VDC	Environment	Operation temperature Ta: -20℃ ~ +55℃ Case temperature (Max.) Tc: +75℃	Certification	CE RoHS
Output current	15A@12/24V 10A@36/48V 180W@12V 360W@24V 360W@36V 480W@48V			Package	
Output power				Size	L175 x W54 x H27mm
Output type	Constant voltage	IP rating	IP20	Gross weight	0.129kg

Technical Parameters



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.

Operation

System parameter setting

- Long press M and ◀ key in the same time for 2s, prepare for setup system parameter: output PWM frequency, output brightness curve, grey level, default output level, automatic blank screen. short press M key to switch five item.
- Output PWM frequency: short press ◀ or ▶ key to switch 250Hz("F02"), 500Hz("F05"), 1000Hz("F10"), 2000Hz("F20"), 4000Hz("F40"), 8000Hz("F80"), 16000Hz("F16") or 32000Hz("F32").
Higher PWM frequency, will cause lower output current, higher power noise, but more suitable for camera(No flickers for video).
- Output brightness curve: short press ◀ or ▶ key to switch linear curve("L") or logarithmic curve("C").
- Grey level: short press ◀ or ▶ key to switch 8bit("b08") or 16 bit("b16"). choose 16 bit if the DMX master support 16 bit.
- Default output level: set output level when no DMX input signal. short press ◀ or ▶ key to switch maintain DMX output("d-") or output default level ("d00" to "dFF", 0-100%), long press ◀ or ▶ key to change output default level.
- 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.

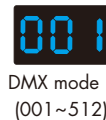
Note: In addition to manual button settings, the above system parameters can also be configured via the RDM function.

PWM frequency and output current mapping:

U _{in} \ Load PWM	250Hz	500Hz	1KHz	2KHz	4KHz	8KHz	16KHz	32KHz
12/24V	15A	15A	15A	12A	10A	10A	10A	10A
36/48V	10A	10A	10A	8A	6A	6A	6A	6A

DMX mode

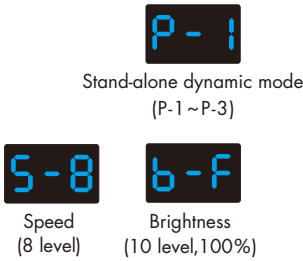
- Short press M key, when display 001~512, enter DMX mode.
- Press ◀ or ▶ key to change DMX decode start address(001~512), long press for fast adjustment.
- If there is a DMX signal input, will enter DMX mode automatically.
- DMX Dimming: Each D1-L DMX decoder occupy 1 DMX address when connecting the DMX console.



DMX mode
(001~512)

Stand-alone dynamic mode

- Enter stand-alone dynamic mode only when DMX signal is disconnected or lost.
- 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 mode can adjust speed and brightness.
Long press M key for 2s, prepare for setup mode speed and brightness.
Short press M key to switch two item.
Press ◀ or ▶ key to setup value of each item.
Mode speed: 1-10 level speed(S-1, S-9, S-F).
Mode brightness: 1-10 level brightness(b-1, b-9, b-F).
Long press M key for 2s, or timeout 10s, quit setting.



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

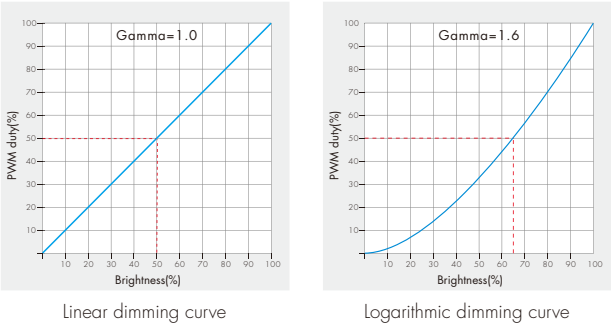
- Enter stand-alone dimmer mode only when DMX signal is disconnected or lost.
- Short press M key, when display L-1~L-8, enter stand-alone dimmer mode.
- Press ◀ or ▶ key to change dimmer mode number(L-1~L-8).
- Each dimmer mode can adjust brightness independently.
Long press M key for 2s, prepare for setup brightness(b00~bFF).
Press ◀ or ▶ key to adjust brightness value.
Short press M key, or timeout 10s, quit setting.



Restore factory default parameter

- Long press ◀ and ▶ key for 2s, restore factory default parameter, display"RES".
- Factory default parameter: DMX decode mode, DMX decode start address is 1, 8 bit grey level, 2000Hz PWM frequency output, logarithmic brightness curve, output 100% level when no DMX input, dimmer mode number is 1, disable automatic blank screen.

Dimming Curve Setting



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 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.