

# LCDMXSD-D4-L

## Constant Voltage 4 Channel DMX Decoder



### Features

- In compliance with DMX512 standard protocols
- Digital numeric display, start address can be set by using the buttons on the decoder
- RDM function can recognise communication between the DMX master and the decoder  
For example, the DMX decoder address can be set by the DMX master console
- 1/2/4 DMX channel output selectable
- PWM frequency 500/2000Hz selectable
- Logarithmic or linear dimming curve selectable
- Stand-alone RGB/RGBW mode and 4 channel dimmer mode selectable, this can be controlled by using the buttons with the built-in programs, instead of the DMX signal
- Over-heat / short circuit protection

### Technical Parameters

Input and Output	
Input voltage	12-24VDC
Input current	20.5A
Output voltage	4 x (12-24)VDC
Output current	4CH,5A/CH
Output power	4 x (60-120)W
Output type	Constant voltage

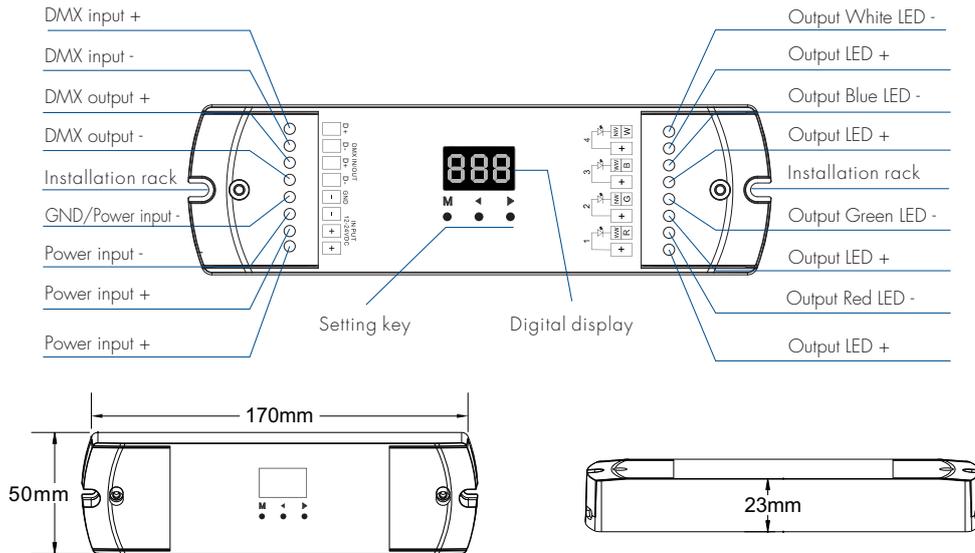
Safety and EMC	
EMC standard (EMC)	EN55032:2015, EN61000-3-2:2014, EN61000-3-2:2013, EN55024 :2010/A1:2015
Safety standard(LVD)	EN 61347-1:2015 EN 61347-2-11:2015
Certification	CE,EMC,LVD

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

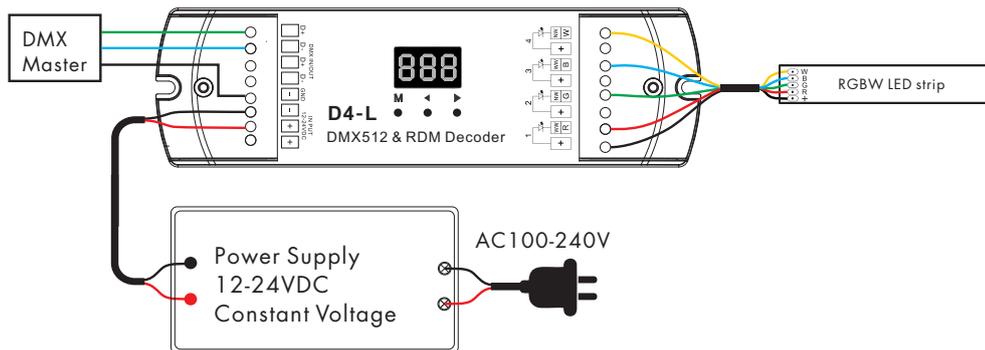
Warranty and Protection	
Warranty	5 years
Protection	Reverse polarity Over-heat Short circuit

Weight	
Net weight	0.113kg
Gross weight	0.130kg

## Mechanical Structures and Installations



## Wiring Diagram



## Operation

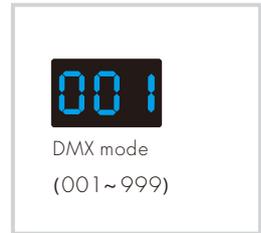
### System Parameter Setting

- Long press M and ◀ key in the same time 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 modes
- Decode mode: short press ◀ or ▶ key to switch 1/2/4 channel decode mode (“d-1,” “d-2” or “d-4”). When set as 1 channel decode, the decoder occupies only 1 DMX address, and a four channel output is the same brightness of this DMX address
- Output PWM frequency: short press ◀ or ▶ key to switch 500Hz (“F-L”) or 2KHz (“F-H”) Higher PWM frequency, will cause a lower output current, higher power noise, which is more suitable for when using a camera (also no flickering with video)
- 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 the M key, when it displays 001-999, enter DMX mode
- Press ◀ or ▶ key to change DMX decode start address(001-999), long press for fast adjustment
- If there is a DMX signal input, this will enter DMX mode automatically
- DMX Dimming: Each D4-L DMX decoder occupies 4 DMX addresses 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)



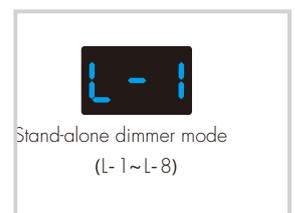
## Stand-alone RGB/RGBW Mode

- Enter stand-alone RGB/RGBW mode only when DMX signal is disconnected or lost
- Short press the M key, when it displays P01-P30, enter stand-alone RGB/RGBW mode
- Press ◀ or ▶ key to change dynamic mode number (P01~P30)
- Each mode can adjust the speed and brightness. Long press M key for 2s, prepare for setup mode speed, brightness, W channel brightness. Short press M key to switch three modes. 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). W channel brightness: 0-255 level brightness (400-4FF). Long press M key for 2s, or timeout 10s, quit setting



## 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 each channel brightness independently. Long press M key for 2s, prepare for setup four channel brightness. Short press M key to switch four channel(100~1FF, 200~2FF, 300~3FF, 400~4FF). Press ◀ or ▶ key to setup brightness value of each channel. Long press M key for 2s, or timeout 10s, quit setting.



## Restore Factory Default Parameter

Long press ◀ and ▶ key for 2s, restore factory default parameter, display"RES".

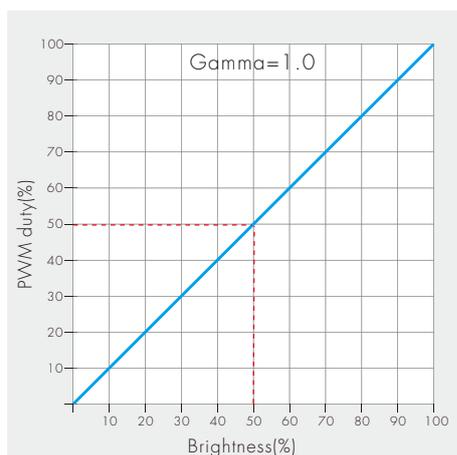
Factory default parameter: DMX decode mode, DMX decode start address is 1, four channel decode, high PWM frequency output, logarithmic brightness curve, RGB mode number is 1, dimmer mode number is 1, disable automatic blank screen.

## RGB Change Mode List

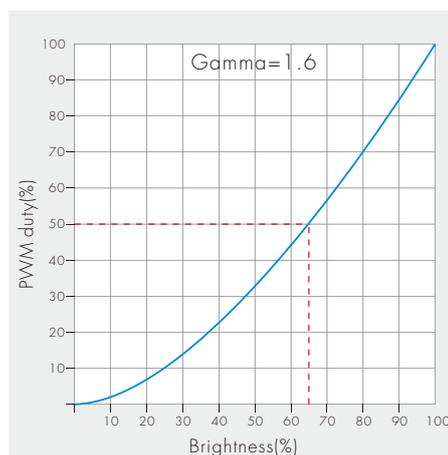
No.	Name	No.	Name	No.	Name
P01	Static red	P11	Green strobe	P21	Red yellow smooth
P02	Static green	P12	Blue strobe	P22	Green cyan smooth
P03	Static blue	P13	White strobe	P23	Blue purple smooth
P04	Static yellow	P14	RGB strobe	P24	Blue white smooth
P05	Static cyan	P15	7 colour strobe	P25	RGB+W smooth
P06	Static purple	P16	Red fade in and out	P26	RGBW smooth
P07	Static white	P17	Green fade in and out	P27	RGBY smooth
P08	RGB jump	P18	Blue fade in and out	P28	Yellow cyan purple smooth
P09	7 colour jump	P19	White fade in and out	P29	RGB smooth
P10	Red strobe	P20	RGBW fade in and out	P30	6 colour smooth

## Dimming Curve Setting

Linear dimming curve



Logarithmic dimming curve



## Malfunctions Analysis & Troubleshooting

Malfunctions	Causes	Troubleshooting
No light	<ol style="list-style-type: none"> <li>1. No power</li> <li>2. Wrong connection or insecure</li> </ol>	<ol style="list-style-type: none"> <li>1. Check the power</li> <li>2. Check the connection</li> </ol>
Wrong colour	<ol style="list-style-type: none"> <li>1. Wrong connection of R/G/B/W wires</li> <li>2. DMX decode address error</li> </ol>	<ol style="list-style-type: none"> <li>1. Reconnect R/G/B/W wires</li> <li>2. Set correct decode address</li> </ol>
Uneven intensity between front and rear, with voltage drop	<ol style="list-style-type: none"> <li>1. Output cable is too long</li> <li>2. Wire diameter is too small</li> <li>3. Overload beyond power supply capability</li> <li>4. Overload beyond controller capability</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce cable or loop supply</li> <li>2. Change wider wire</li> <li>3. Replace higher power supply</li> <li>4. Add power repeater</li> </ol>

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