LCDMXSD-D4-WP

Constant Voltage 4 Channel DMX Decoder IP67

Features

- Weatherproof DMX512 decoder with IP67 rating, suitable for outdoor and damp environments
- In compliance with DMX512 standard protocols
- Digital numeric display, start address can be set by using the buttons on the decoder
- Selectable 1/2/4 DMX channel output
- Selectable 16bit (65536 levels) /8bit (256 levels) grey level
- Selectable PWM frequency 250/500/1000/2000/4000/8000/1600HZ
- Selectable Logarithmic or linear dimming curve
- Stand-alone RGB/RGBW mode and 4 channel dimmer mode option, 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

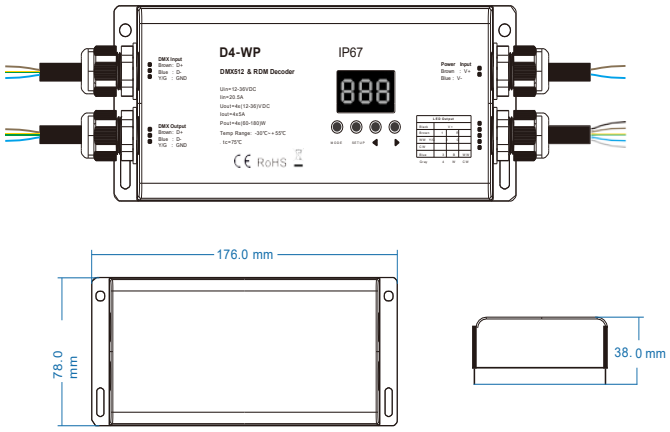
Input and Output	
Input voltage	12-36VDC
Input current	20.5A
Output voltage	4 x (12-36)VDC
Output current	4CH,5A/CH
Ouput power	4 x (60-180)W
Output type	Constant voltage

Warranty and Protection	
Warranty	5 years

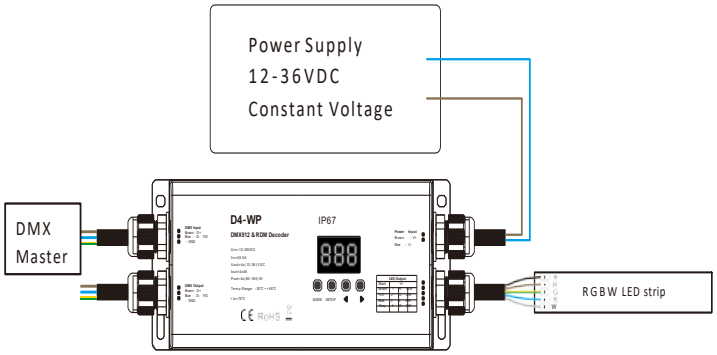
Safety and EMC	
EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4
Safety standard (LVD)	EN 62368-1 :2020+A11 :2020
Certification	CE,EMC,LVD

Environment	
Operation temperature	Ta:-30°C`~ +55°C
Max case temperature	Tc:+85°C
IP rating	IP67

Mechanical Structures and Installations



Wiring Diagram



Operation

System parameter setting

- Long press SETUP key for 2 seconds, prepare for setup system parameter: decode mode, grey level, output PWM frequence, output brightness curve, default output level, automatic blank screen then short press SETUP key to switch six times
- 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 four channel output at the same brightness of this DMX address
- Grey level: short press ◄or► key to switch 8bit("b08") or 16 bit("b16"). Select 16 bit if the DMX master supports this
- Output PWM frequency: short press ◄or► key to switch 250Hz("F02"), 500Hz("F05"), 1000Hz("F10") 2000Hz("F20"), 4000Hz("F40"), 8000Hz("F80") or 16000Hz("F16").
- Higher PWM frequency will cause a lower output current and higher power noise which is suitable for cameras (No flickering with video)
- Output brightness curve: short press ◄or► key to switch linear curve ("C-L") or logarithmic curve("C-E")
- Default output level: press ◄or► key to change default 0-100% level (“d00”to “dFF”) when there is no DMX input signal
- Automatic blank screen: short press ◄or► key to switch enable (“bon”) or disable (“boF”) automatic blank screen
- Long press SETUP key for 2 seconds or timeout after 10 seconds to quit system parameter setting

DMX Mode

- Short press MODE key, when it displays 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, it will enter DMX mode automatically
- DMX Dimming: Each D4-WP 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 mode

(001~512)

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 when DMX signal is disconnected or lost
- Short press MODE 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
- Short press SETUP key to switch between speed, brightness and W channel settings.

  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 SETUP key for 2 seconds, or timeout after 10 seconds to quit setting

Stand-alone RGB/RGBW mode
(P01~P30)

Speed
(8 level)

Brightness
(10 level,100%)

Stand-alone dimmer mode

- Enter stand-alone dimmer mode only when DMX signal is disconnected or lost
- Short press MODE key, when it displays 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 channels brightness independently
- Short press SETUP key to switch between 4 channel (100~1FF, 200~2FF, 300~3FF, 400~4FF)
- Press ◄or► key to setup the brightness value of each channel. Long press SETUP key for 2 seconds or timeout after 10 seconds to quit setting

Stand-alone dimmer mode

(L-1~L-8)

Restore factory default parameter

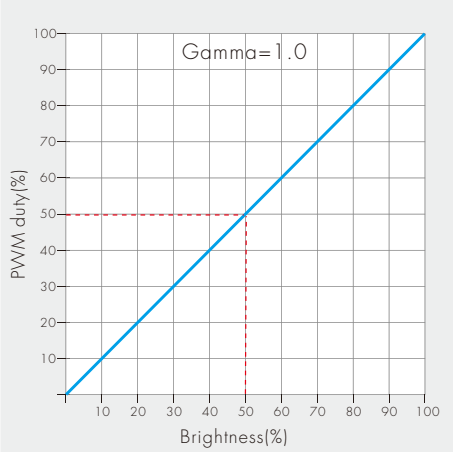
- Long press ◄ and ► key for 2 seconds, restore factory default parameter, display"RES"
- Factory default parameter: DMX decode mode, DMX decode start address is 1, four channel decode, 8 bit grey level, 2000Hz PWM frequence output, logarithmic brightness curve, output 100% level when no DMX input, RGB mode number is 1, dimmer mode number is 1, disable auto blank screen

RGB Change Mode List

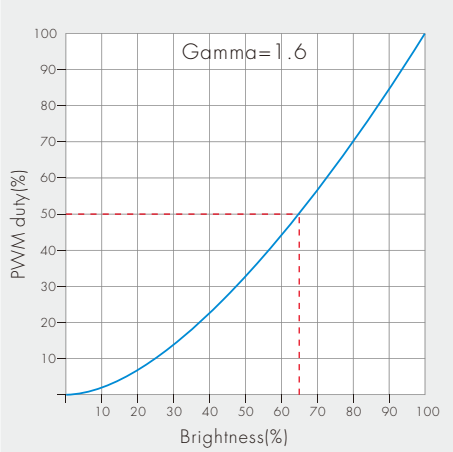
No.	Name	No.	Name	No.	Name
P01	Static Red	P11	Green strobe	P21	Red yellow smooth
P02	Static green	P12	Blue strobe	P22	Green cyan smooth
P03	Static green	P13	White strobe	P23	Blue purple smooth
P04	Static yellow	P14	RGB strobe	P24	Blue white smooth
P05	Static cyan	P15	7 colour strobe	P25	RGB+W smooth
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 color 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	1. No power 2. Wrong or insecure connection	1. Check the power 2. Check the connection
Wrong colour	1. Wrong connection of R/G/B/W wires 2. DMX decode address error	1. Reconnect R/G/B/W wires 2. 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 to a wider wire 3. Replace with a higher power supply 4. Add a data repeater