DIMON
T E C H N O L O G Y
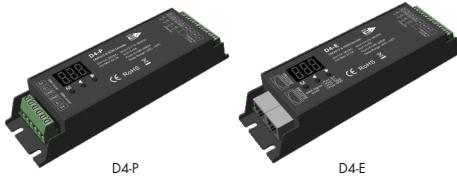
Technical Datasheet

4 Channel Constant Voltage DMX512 & RDM Decoder

Model No.: D4-P / D4-E

RDM/Numeric display/Logarithmic dimming/Multiple protection

D4-P   D4-E

CE RoHS emc LVD C

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.
● Over-heat / Over-load / Short circuit protection, recover automatically.
● D4-P have Green terminal DMX signal ports, D4-E have RJ-45 DMX signal ports.

Technical Parameters

Input and Output

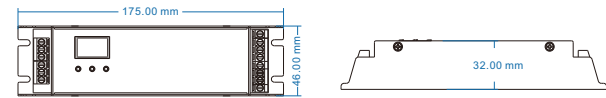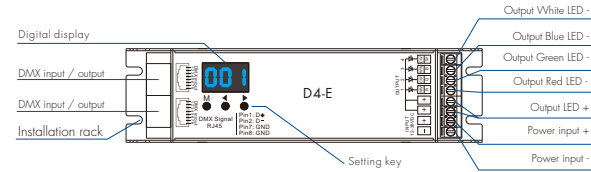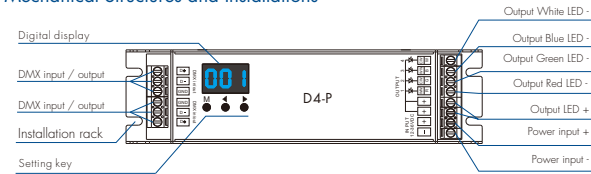| Input voltage	12-48VDC
Input current	32.5A
Output voltage	4 x (12-48)VDC
Output current	4CH, 8A/CH
Output power	4 x (96-288)W
Output type	Constant voltage

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 Over-load Short circuit

Weight

Weight	D4-E	D4-P
Net weight	0.276kg	0.276kg
Gross weight	0.295kg	0.295kg

Mechanical Structures and Installations

D4-P

- Digital display
- DMX input / output
- DMX input / output
- Installation rack
- Setting key
- Output White LED -
- Output Blue LED -
- Output Green LED -
- Output Red LED -
- Output LED +
- Power input +
- Power input -

D4-E

- Digital display
- DMX input / output
- DMX input / output
- Installation rack
- Setting key
- DMX Signal RJ45   Pin1:D+ Pin2:D- Pin7:GND Pin8:GND
- Output White LED -
- Output Blue LED -
- Output Green LED -
- Output Red LED -
- Output LED +
- Power input +
- Power input -

175.00 mm   46.00 mm   32.00 mm

Wiring Diagram

DMX Master — D4-P — RGBW LED strip

AC100-240V — Power Supply 12-48VDC Constant Voltage

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.

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Operation

DMX mode

- Short press M key, when display 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, will enter DMX mode automatically.
- DMX Dimming: Each D4-P/D4-E DMX decoder occupy 4 DMX address when connecting the DMX console.
  For example, the defaulted start address is 1,
  their corresponding relationship in the form:

001

DMX mode
(001~999)

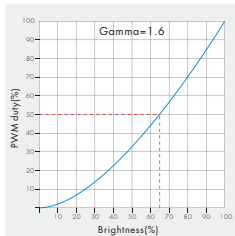| DMX Console	DMX Decoder Output
CH1 0-255	CH1 PWM 0-100% (LED R)
CH2 0-255	CH2 PWM 0-100% (LED G)
CH3 0-255	CH3 PWM 0-100% (LED B)
CH4 0-255	CH4 PWM 0-100% (LED W)

Self-test mode

- Enter self-test mode only when DMX signal is disconnected or lost.
- Short press M key, when display L-1~L-5, enter self-test mode.
- Press ◄ or ► key to change mode number(L-1L-5).
- Self-test mode include four channel light up separately or synchronously.

L-1

Self-test mode
(L-1~L-5)

Dimming curve

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/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 wider wire. 3. Replace higher power supply. 4. Add power repeater.