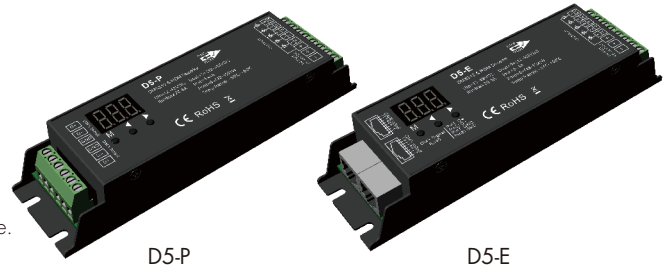


# D5-P, D5-E

## 5 Channel Constant Voltage DMX512 & RDM Decoder

- 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.
- Over-heat / Over-load / Short circuit protection, recover automatically.
- D5-P have Green terminal DMX signal ports, D5-E have RJ-45 DMX signal ports.

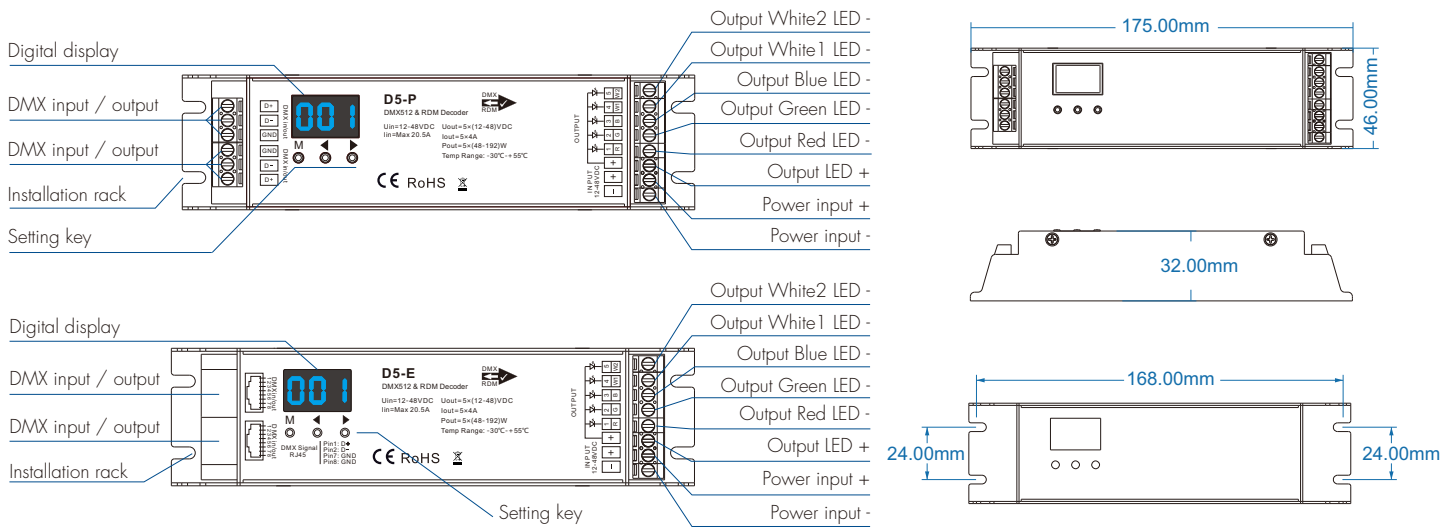


CE RoHS

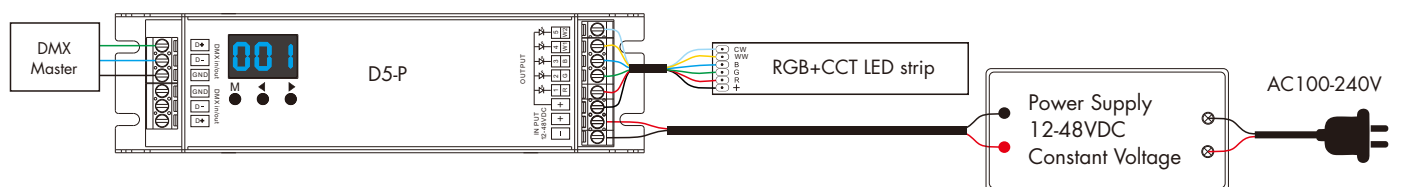
### Technical Parameters

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	20.5A	Protection	Reverse polarity, Over-heat Overload, Short circuit	Safety standard	EN 61347-1/-2 EN 62493
Output voltage	5x(12-48)VDC	Environment		Certification	CE RoHS
Output current	5CH, 4A/CH	Operation temperature	Ta: -30°C ~ +55°C	Package	
Output power	5x(48-192)W	Case temperature (Max.)	Tc: +75°C	Size	L178 x W50 x H38mm
Output type	Constant voltage	IP rating	IP20	Gross weight	0.295kg

### Mechanical Structures and Installations



### 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.
3. When display OLA, overload alarm. When display OHA, overheat alarm.

**System parameter setting**

- Long press M and ◀ key in the same time for 2s, prepare for setup system parameter: grey level, output PWM frequency, output brightness curve, default output level, automatic blank screen. short press M key to switch five item.
- Grey level: short press ◀ or ▶ key to switch 8bit("b08") or 16 bit("b16"). choose 16 bit if the DMX master support 16 bit.
- 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).  
When setting the PWM frequency > 8000Hz, the output current per channel needs to be reduced (5x3A@12-48V at 16000Hz or 32000Hz).
- Output brightness curve: short press ◀ or ▶ key to switch linear curve("C-L") or logarithmic curve("C-E").
- 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.

**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 D5-P/D5-E DMX decoder occupy 5 DMX address 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 W1)
CH5 0-255	CH5 PWM 0-100% (LED W2)

**Self-test mode**

- Enter self-test mode only when DMX signal is disconnected or lost.
- Short press M key, when display L-1~L-6, enter self-test mode.
- Press ◀ or ▶ key to change mode number(L-1~L-6).
- Self-test mode include five channels light up separately or synchronously.

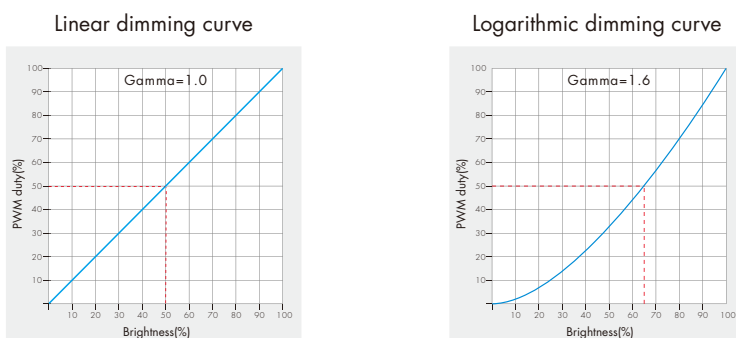


Self-test mode (L-1~L-6)

**Restore factory default setting**

- 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.Wrong connection of R/G/B/W1/W2 wires. 2.DMX decode address error.	1.Reconnect R/G/B/W1/W2 wires. 2.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.