

5 Channel Constant Voltage DMX512 & RDM Decoder / Master

Model No.: D5

RDM/Stand-alone function/8 bit or 16bit decode/Four PWM frequency/Multiple dimming curve/OLED display

Features

- 5 channels constant voltage output, Max. 6A current per channel, up to 720W output power.
- Master & decoder mode, RDM function.
- Easy operation with OLED display and 3 buttons.
- 1/2/3/4/5 channel decoding mode selectable.
- PWM frequency 250/500/2000/8000Hz selectable.
- 16bit (65536 levels) /8bit (256 levels) grey level selectable.
- Output dimming curve gamma value 0.1-9.9 selectable.
- Stand-alone RGB mode and 5 channel dimmer mode selectable, work as DMX master(8 bit) to control other decoders.
- Built-in 25 RGB programs, speed and brightness adjustable.
- Support 3 kinds of DMX ports: Green terminal(amplify output), XLR3 and RJ45 port.
- Comply with the DMX512 standard protocols.
- Over-heat / Over-load / Short circuit protection, recover automatically.
- With fast self-testing function.



CE RoHS EMC LVD

Technical Parameters

| Input and Output | |
|------------------|------------------|
| Input voltage | 12-24VDC |
| Input current | 30.5A |
| Output voltage | 5 x (12-24)VDC |
| Output current | 5CH,6A/CH |
| Output power | 5 x (72-144)W |
| Output type | Constant voltage |

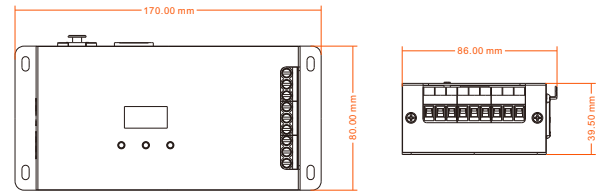
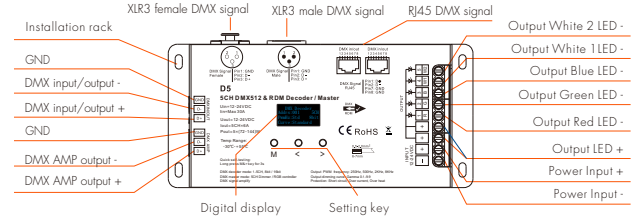
| Safety and EMC | |
|----------------------|-------------------------------------------------------------------------|
| EMC standard (EMC) | EN55032:2015, EN61000-3-2:2014, EN61000-3-2:2013, EN55024 :2010/A1:2015 |
| Safety standard(VDI) | EN 61347-1:2015 EN 61347-2-11:2015 |
| Certification | CE,EMC,LVD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

| Environment | |
|-------------------------|-------------------|
| Operation temperature | Ta: -30°C ~ +55°C |
| Case temperature (Max.) | Tc: +75°C |
| IP rating | IP20 |

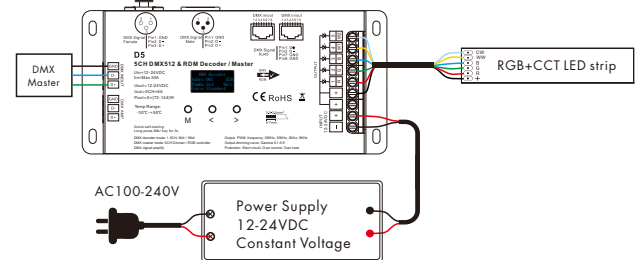
| Warranty and Protection | |
|-------------------------|-------------------------------------------------------------|
| Warranty | 5 years |
| Protection | Reverse polarity Over-heat Over-load Short circuit |

| Weight | |
|--------------|---------|
| Net weight | 0.444kg |
| Gross weight | 0.480kg |

Mechanical Structures and Installations



Wiring Diagram



Note:

1. Connecting with green terminal (DMX AMP) or an extra amplifier will be needed when 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.

OLED screen interface



Short press M key, switch between DMX decoder mode, Dimmer mode and RGB controller mode.
 Long press M key or short press < or > key, enter parameter setting state.
 When in parameter setting state, short press M key to switch between multiple parameter item, press < or > key for parameter adjustment.
 long press M key or wait 30s to quit parameter setting state.
 Long press M & > key for 2s, enter fast self-testing.
 Long press < & > key for 2s, restore factory default parameter.

DMX decoder mode

```
DMX Decoder
Addr:001 5CH
PwMlz:Std 8bit
Curve:Standard
```

DMX decode start address:

Range: 001~999

DMX decode mode:

1CH (DIM) 2CH (CCT) 3CH (RGB) 4CH (RGBW) 5CH (RGB+CCT)

Output PWM frequency:

Std (2KHz)

High (8KHz)

Mid (500Hz)

Low (250Hz)

Higher PWM frequency, will cause lower output current,
 higher power noise, but more suitable for camera(No flickers for video).

Grey level:

8bit

16bit (choose it if the DMX master support 16 bit)

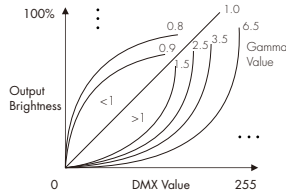
Output dimming curve(Only valid for 8bit Grey level):

Standard (Gamma 1.6)

Linear

Gamma0.1~9.9

It is recommended to use standard,
 0.1~9.9 is for special requirements.



DMX master mode as 5 channel dimmer

```
Dimmer
Ch1:255 Ch2:255
Ch3:255 Ch4:255
Ch5:255 All:255
```

Each or all channel brightness setting:

Range: 0-255

DMX master mode as RGB controller

```
RGB Controller
0# RGB jump
Spd: 7 Btt:100%
Ch4:255 Ch5:255
```

Dynamic RGB mode list:

| No. | Name | No. | Name | No. | Name |
|-----|---------------------|-----|-------------------|-----|----------------------|
| 01 | Static Red+strobe | 09 | R/G/B gradual | 17 | Green/White gradual |
| 02 | Static Green+strobe | 10 | Color gradual | 18 | Blue/White gradual |
| 03 | Static Blue+strobe | 11 | R/G/B fade | 19 | Red/Yellow gradual |
| 04 | Static White+strobe | 12 | Red fade | 20 | Red/Purple gradual |
| 05 | R/G/B jump | 13 | Green fade | 21 | Green/Yellow gradual |
| 06 | 7 Color jump | 14 | Blue fade | 22 | Green/Cyan gradual |
| 07 | R/G/B strobe | 15 | White fade | 23 | Blue/Purple gradual |
| 08 | 7 Color strobe | 16 | Red/White gradual | 24 | Blue/Cyan gradual |
| | | | | 25 | All loop play |

Dynamic RGB mode:
 25 kinds

Mode speed:

Range: 1-10 level

Mode brightness:

Range: 10%-100%

Ch4 brightness:

Range: 0-255

Ch5 brightness:

Range: 0-255

Address setting table

8bit:

| Decode Mode | 1CH DIM | 2CH CCT | 3CH RGB | 4CH RGBW | 5CH RGB+CCT |
|------------------|---------|---------|---------|----------|-------------|
| Address Quantity | 1 | 2 | 3 | 4 | 5 |
| Channel | 1 | 001 | 001 | 001 | 001 |
| | 2 | 001 | 002 | 002 | 002 |
| | 3 | 001 | 001 | 003 | 003 |
| | 4 | 001 | 002 | 003 | 004 |
| | 5 | 001 | 002 | 003 | 004 |

16bit:

| Decode Mode | 1CH DIM | 2CH CCT | 3CH RGB | 4CH RGBW | 5CH RGB+CCT |
|------------------|---------|------------|------------|------------|-------------|
| Address Quantity | 2 | 4 | 6 | 8 | 10 |
| Channel | 1 | 001 002 | 001 002 | 001 002 | 001 002 |
| | 2 | 001 002 | 003 004 | 003 004 | 003 004 |
| | 3 | 001 002 | 001 002 | 005 006 | 005 006 |
| | 4 | 001 002 | 003 004 | 005 006 | 007 008 |
| | 5 | 001 002 | 003 004 | 005 006 | 007 008 |

Note: even channel for micro dimming.

Malfuncons analysis & troubleshooting

| Malfuncons | 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 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. |