D5

DMX512

5 Channel Constant Voltage DMX512 & RDM Decoder / Master

Features

- 5 channels constant voltage output, Max. 6A current per channel, up to 960W 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 250/500/2000/8000/16000Hz 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

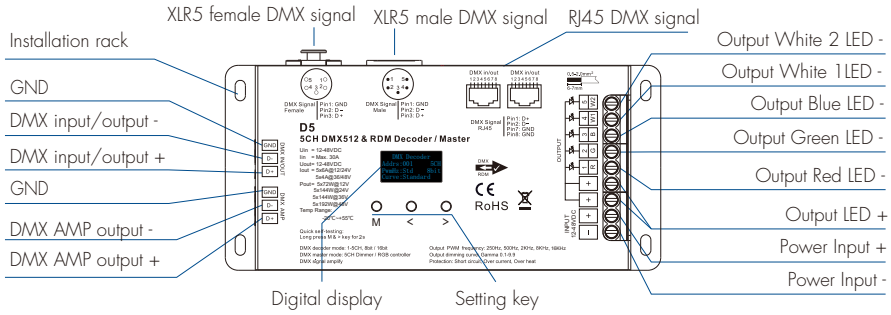
Technical Parameters

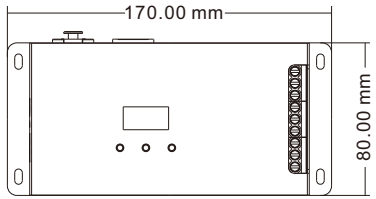
Input and Output	
Input voltage	12-48VDC
Input current	30.5A
Output voltage	5 x (12-48)VDC
Output current	5 x 6A@12/24 5 x 4A@36/48
Output power	5x72W@12V 5x144W@24V 5x144W@36V 5x192W@48V
Output type	Constant voltage

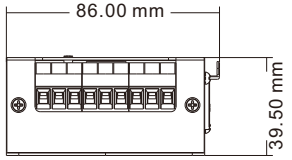
Environment	
Operation temperature	Ta: -20℃ ~ +55℃
Case temperature (Max.)	Tc: +75℃
IP rating	IP20
Package	
Size	L170 x W87 x H45mm
Gross weight	0.49kg

Safety and EMC	
EMC standard	EN IEC 55015/ EN IEC 61547
Safety standard	EN 61347-1/-2 EN 62493
Certification	CE RoHS
Warranty	
Warranty	5 years

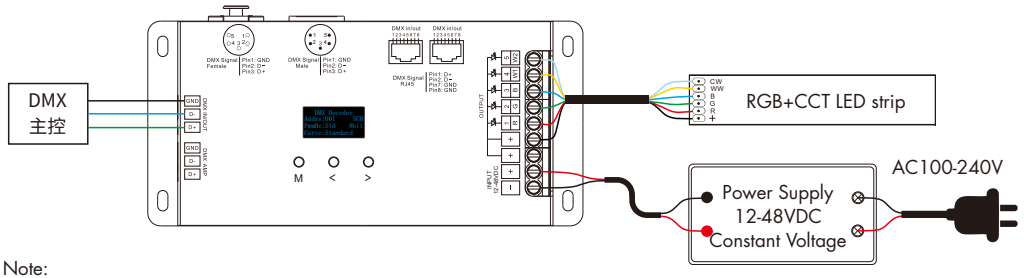
Mechanical Structures and Installations







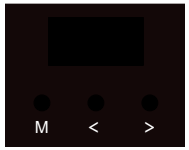
Wiring Diagram



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.
Note: In addition to manual button settings,
the above system parameters can also be configured via the RDM function.
Long press M & > key for 2s, enter fast self-testing.
Long press < & > key for 2s, restore factory default parameter.

DMX decoder mode

DMX decode start address: 001~512

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)
Supr (16KHz)

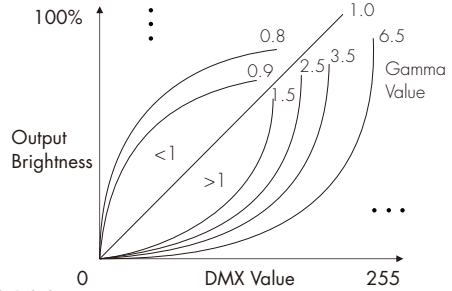
Higher PWM frequency, will cause lower output current, higher power noise, but more suitable for camera(No flickers for video).

PWM frequency and output current mapping:

Iout / Uin \ PWM	250Hz	500Hz	2KHz	8KHz	16KHz
12/24V	6A	6A	6A	5A	3A
36/48V	4A	4A	4A	3A	2A

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, long press < or > key to change 0.1-9.9.

Output when no DMX signal input:

No DMX: Set to keep lastest DMX data output (Freeze) or output default brightness (Def out) when no DMX signal is input.

DefOut: Set the default output brightness (0-255).

DMX master mode as 5 channel dimmer

Each or all channel brightness setting:
0-255 (0-100%)

DMX master mode as RGB+CCT controller

Dynamic RGB mode: 25 kinds

Mode speed: 1-10 level, level 10 fastest speed

Mode brightness: 10%-100%

Ch4 brightness: 0-255 (0-100%)

Ch5 brightness: 0-255 (0-100%)

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

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	001
	2	001	002	002	002	002
	3	001	001	003	003	003
	4	001	002	003	004	004
	5	001	002	003	004	005

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	001 002
	2	001 002	003 004	003 004	003 004	003 004
	3	001 002	001 002	005 006	005 006	005 006
	4	001 002	003 004	005 006	007 008	007 008
	5	001 002	003 004	005 006	007 008	009 010

Note: even channel for micro dimming.

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.