

24 Channel Constant Voltage DMX512 & RDM Decoder / Master



Model No.: D24A

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

Features

- 24 channels constant voltage output, Max. 5A current per channel, up to 2880W output power.
- Master & decoder mode, RDM function.
- Easy operation with OLED display and 4 buttons.
- DIM/CCT/RGB 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 24 channel dimmer mode selectable, work as DMX master(8 bit) to control other decoders.
- Built-in 10 RGB programs, speed and brightness adjustable.
- Comply with the DMX512 standard protocols.
- DMX signal optoelectronic isolation / amplify.
- Over-heat / Over-load / Short circuit protection, recover automatically.
- With fast self-testing function.

CE RoHS EMC LVD

Technical Parameters

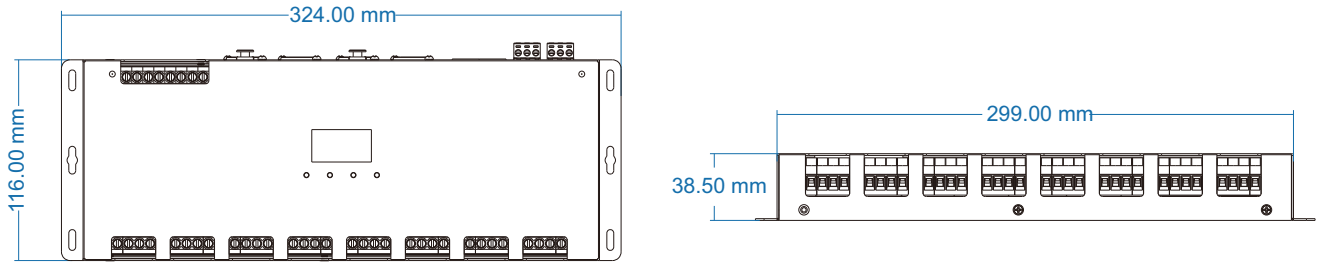
Input and Output	
Input voltage	12-24VDC
Input current	120.5A
Output voltage	24 x (12-24)VDC
Output current	24CH,5A/CH
Output power	24 x (60-120)W
Output type	Constant voltage

Environment	
Operation temperature	Ta: -30°C ~ +55°C
Case temperature (Max.)	Tc: +85°C
IP rating	IP20

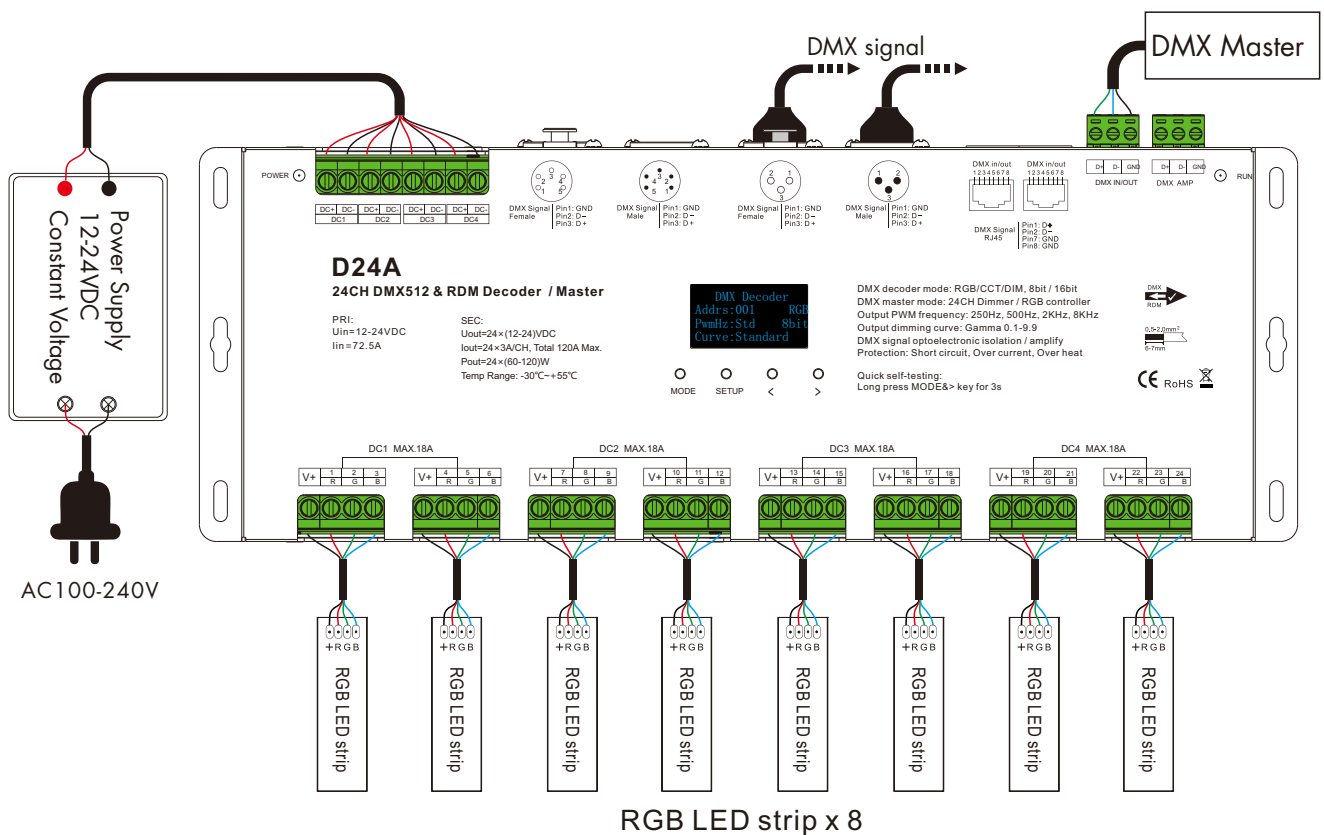
Safety and EMC	
EMC standard (EMC)	EN55032:2015, EN61000-3-2:2014, EN61000-3-2:2013, EN55024 :2010/A1:2015
Safety standard(LVD)	EN 61347-1:2015 EN 61347-2-11:2015
Certification	CE,EMC,LVD

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

Mechanical Structures and Installations



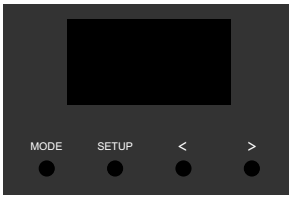
Wiring Diagram



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 MODE key, switch between DMX decoder mode, Dimmer mode and RGB controller mode.
 Short press SETUP key, enter parameter setting state, and switch between multiple parameter item.
 press < or > key for parameter adjustment.
 long press SETUP key or wait 30 seconds to quit parameter setting state.
 Long press M & > key for 3s, enter fast self-testing.
 Long press < & > key for 3s, restore factory default parameter.

DMX decoder mode

```
DMX Decoder
Addr:001  RGB
PwmHz:Std 8bit
Curve:Standard
```

DMX decode start address:
 Range: 001~999

DMX decode mode:
 DIM (1CH single color) CCT (2CH color temperature) RGB (3CH)

Output PWM frequency:

- Std (2KHz)
- High (8KHz) Higher PWM frequency, will cause lower output current,
- Mid (500Hz) higher power noise, but more suitable for camera(No flickers for video).
- Low (250Hz)

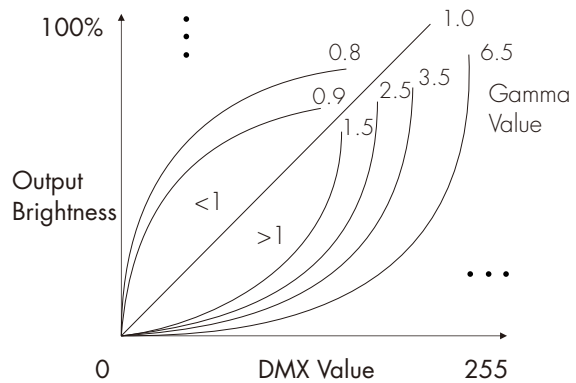
Grey level:

- 8bit
- 16bit (choose it if the DMX master support 16 bit)

Output dimming curve:

- 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 12 channel dimmer

```
Dimmer
Ch01:255
Ch02:255
Ch03:255 <&>
```

Each channel brightness setting:
 Range: 0-255

<&>:
 press < or > key to switch between previous or next page, each page 3 channel.

DMX master mode as RGB controller

```
RGB Controller
01 White
chase jump
Spd: 7 Brt:100%
```

Dynamic RGB mode list:

No.	Name
01	White chase jump
02	White synchronous fade
03	White chase fade
04	Color synchronous jump (Red,Orange,Yellow,Green,Cyan,Blue,Purple,White)
05	Color chase jump (Red,Orange,Yellow,Green,Cyan,Blue,Purple,White)
06	Color synchronous gradual
07	Color jump gradual
08	R/G/B/W synchronous fade
09	R/G/B/W chase fade
10	All mode loop play

Address setting table

8bit:

Mode	DIM	CCT	RGB
Address Quantity	8	16	24
Channel	1	001	001
	2	001	002
	3	001	002
	4	002	003
	5	002	004
	6	002	004
	7	003	005
	8	003	006
	9	003	006
	10	004	007
	11	004	008
	12	004	008
	13	005	009
	14	005	010
	15	005	010
	16	006	011
	17	006	012
	18	006	012
	19	007	013
	20	007	014
	21	007	014
	22	008	015
	23	008	016
	24	008	016

16bit:

Mode	DIM	CCT	RGB
Address Quantity	16	32	48
Channel	1	001 002	001 002
	2	001 002	003 004
	3	001 002	003 004
	4	003 004	005 006
	5	003 004	007 008
	6	003 004	007 008
	7	005 006	009 010
	8	005 006	011 012
	9	005 006	011 012
	10	007 008	013 014
	11	007 008	015 016
	12	007 008	015 016
	13	009 010	017 018
	14	009 010	019 020
	15	009 010	019 020
	16	011 012	021 022
	17	011 012	023 024
	18	011 012	023 024
	19	013 014	025 026
	20	013 014	027 028
	21	013 014	027 028
	22	015 016	029 030
	23	015 016	031 032
	24	015 016	031 032

Note: even channel for micro dimming.