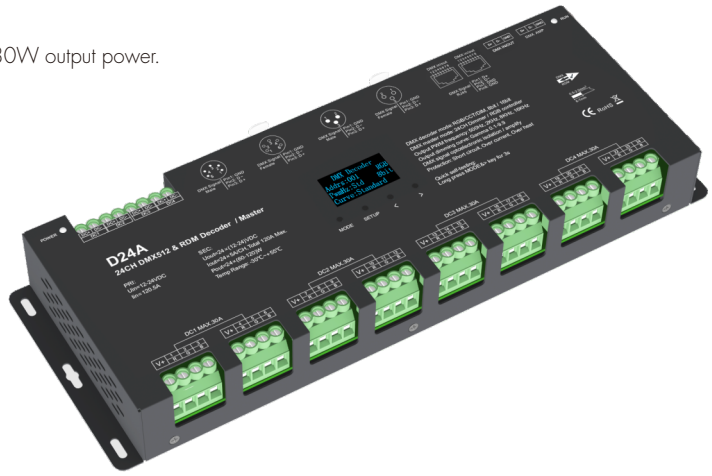# 24 Channel Constant Voltage DMX512 & RDM Decoder / Master

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 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 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.
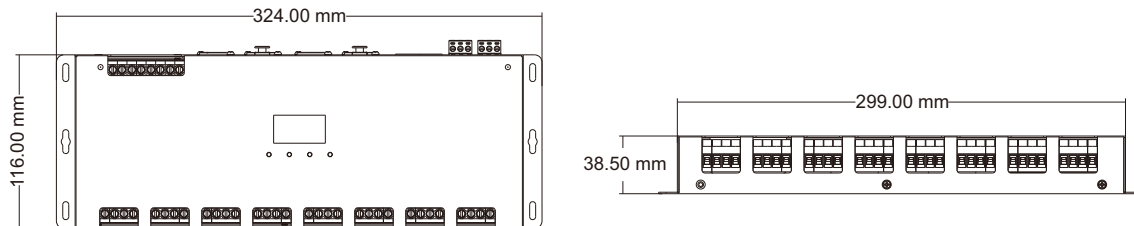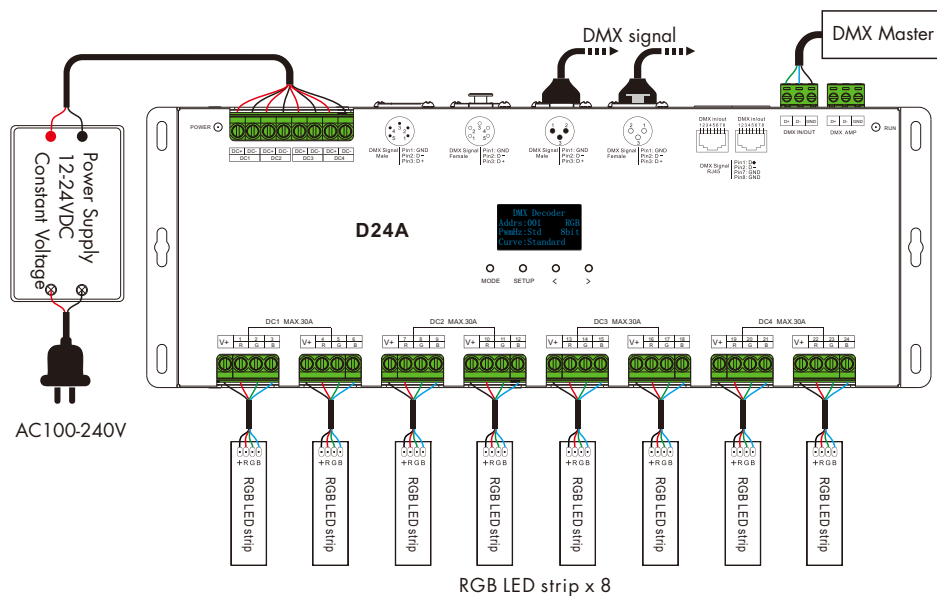- With fast self-testing function.

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

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	
Warranty	5 years

Environment	
Operation temperature	Ta: -30℃ ~ +55℃
Case temperature (Max.)	T c:+85℃
IP rating	IP20
Package	
Size	L335 x W135 x H46mm
Gross weight	1.289kg

Mechanical Structures and Installations

Wiring Diagram

RGB LED strip x 8

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.

3. When the 24-way load is too large and the input power of one constant voltage power supply is insufficient, multiple constant voltage power supplies can be used.
Up to 4 constant voltage power supplies can be connected as power inputs, each power supply can be used to supply 8 loads respectively.

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 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
Addrs:001      RGB
PwmHz:Std    8bit
Curve:Standard
```

DMX decode start address: 001~512
DMX decode mode: DIM (1CH single color)
CCT (2CH color temperature)
RGB (3CH)

Output PWM frequency:

Std (2KHz)
High (8KHz)
Mid (500Hz)
Supr (16KHz)

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

DMX master mode as 24 channel dimmer

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

Each channel brightness setting: Range: 0-255 (0-100%)
<<&>>: 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%
```
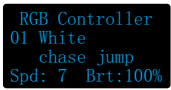
Dynamic RGB mode: 10 kinds
Mode speed: 1-10 level, Level 10 fastest speed
Mode brightness: 10%-100%

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	001
	2	001	002	002
	3	001	002	003
	4	002	003	004
	5	002	004	005
	6	002	004	006
	7	003	005	007
	8	003	006	008
	9	003	006	009
	10	004	007	010
	11	004	008	011
	12	004	008	012
	13	005	009	013
	14	005	010	014
	15	005	010	015
	16	006	011	016
	17	006	012	017
	18	006	012	018
	19	007	013	019
	20	007	014	020
	21	007	014	021
	22	008	015	022
	23	008	016	023
	24	008	016	024

16bit:

Mode		DIM	CCT	RGB
Address Quantity		16	32	48
Channel	1	001 002	001 002	001 002
	2	001 002	003 004	003 004
	3	001 002	003 004	005 006
	4	003 004	005 006	007 008
	5	003 004	007 008	009 010
	6	003 004	007 008	011 012
	7	005 006	009 010	013 014
	8	005 006	011 012	015 016
	9	005 006	011 012	017 018
	10	007 008	013 014	019 020
	11	007 008	015 016	021 022
	12	007 008	015 016	023 024
	13	009 010	017 018	025 026
	14	009 010	019 020	027 028
	15	009 010	019 020	029 030
	16	011 012	021 022	031 032
	17	011 012	023 024	033 034
	18	011 012	023 024	035 036
	19	013 014	025 026	037 038
	20	013 014	027 028	039 040
	21	013 014	027 028	041 042
	22	015 016	029 030	043 044
	23	015 016	031 032	045 046
	24	015 016	031 032	047 048

Note: even channel for micro dimming.