

3 Channel High Voltage LED Strip DMX512 & RDM Decoder



Model No.: S3-DX

RDM/Stand-alone function/Two PWM frequency/Linear or logarithmic dimming/Numeric display

Features

- 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.
- 1/3 DMX channel output selectable.
- PWM frequency 2000/500Hz selectable.
- Logarithmic or linear dimming curve selectable.
- Stand-alone RGB mode and RF mode selectable, which be controlled by buttons with built-in programs, instead of DMX signal.
- Also match with Skydance's 2.4G RGB remote control.
- Green terminal, XLR3 and RJ45 port DMX signal input.



CE RoHS EMC LVD

Technical Parameters

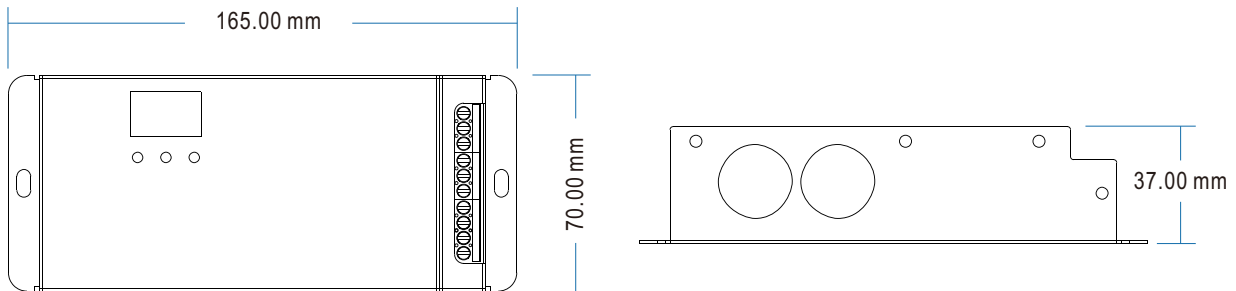
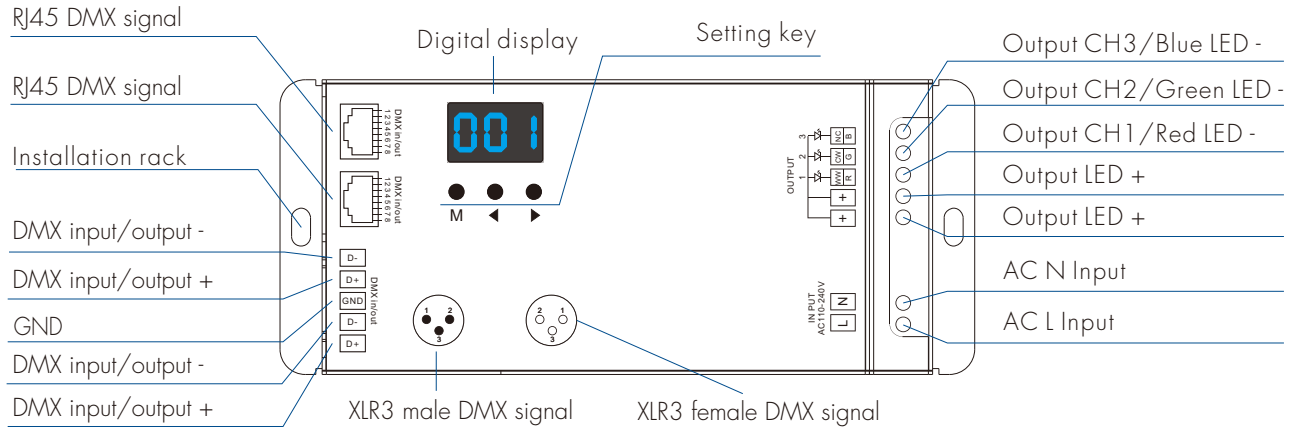
Input and Output	
Input voltage	110-240VAC
Input current	4.6A
Output voltage	3 x (110-240)VDC
Output current	3CH, 1.5A/CH
Output power	3 x (165-360)W

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

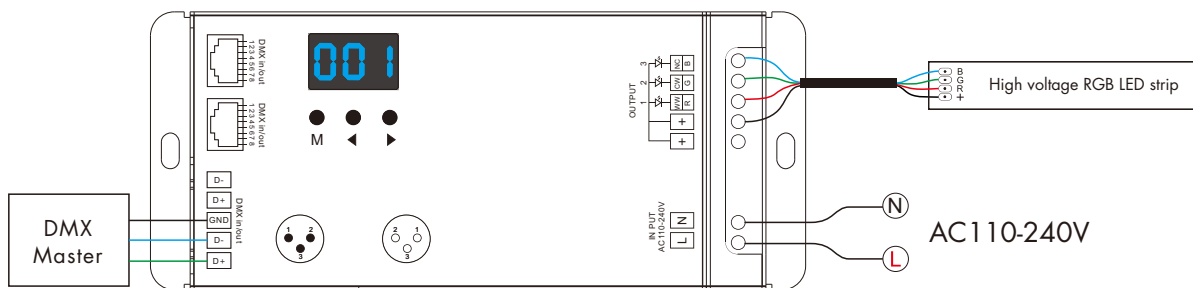
Safety and EMC	
EMC standard (EMC)	EN55032:2015, EN61000-3-2:2014, EN61000-3-2:2013, EN55024 :2010/A1:2015
Safety standard(LVD)	EN 61347-1:2015 EN 61347-2-11:2015
Certification	CE,EMC,LVD

Warranty and Protection	
Warranty	5 years
Protection	Over load

Mechanical Structures and Installations



Wiring Diagram



Caution:

This controller apply for high voltage LED strip, please carefully ensure all wire connections and polarities are correct and secure before applying power, otherwise this controller or high voltage LED strip will be damaged.

Operation

System parameter setting

- Long press M and ◀ key in the same time for 2s, prepare for setup system parameter: decode mode, output PWM frequency, output brightness curve, automatic blank screen. short press M key to switch four item.
- Decode mode: short press ◀ or ▶ key to switch 1/3 channel decode mode("d-1" or "d-3").
When set as 1 channel decode, the decoder occupy only 1 DMX address, and three channel output the same brightness of this DMX address.
- Output PWM frequency: short press ◀ or ▶ key to switch 500Hz("F-L") or 2KHz("F-H").
Higher PWM frequency, will cause lower output current, but more suitable for camera.
- Output brightness curve: short press ◀ or ▶ key to switch linear curve("C-L") or logarithmic curve("C-E").
- 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.

DMX mode

- Short press M key, when display 001~999, enter DMX mode.
- Press ◀ or ▶ key to change DMX decode start address(001~999), long press for fast adjustment.
- If there is a DMX signal input, will enter DMX mode automatically.
- DMX Dimming: Each S3-DX DMX decoder occupy 3 DMX address when connecting the DMX console.

For example, the defaulted start address is 1, their corresponding relationship in the form:

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)



DMX mode
(001~999)

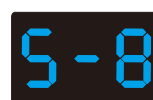
Stand-alone RGB mode

- Enter stand-alone RGB mode only when DMX signal is disconnected or lost.
- Short press M key, when display P-H or P01~P30, enter stand-alone RGB mode.
- Press ◀ or ▶ key to change static adjustable mode(P-H) and dynamic mode(P01~P-30).
- When run static adjustable mode, can adjust three channel brightness respectively.
Long press M key for 2s, prepare for setup three channel brightness.
Short press M key switch three channel dimming(100~1FF, 200~2FF, 300~3FF), press ◀ or ▶ key adjust each channel brightness.

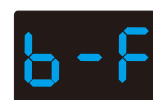


Stand-alone dynamic mode
(P-1~P-4)

- When run 30 dynamic mode, can adjust each mode speed and brightness.
Long press M key for 2s, prepare for setup speed or brightness.
Short press M key to switch two item.
Press ◀ or ▶ key to setup value of each item.
Mode speed: 1-10 level speed(S-1, S-9, S-F).
Mode brightness: 1-10 level brightness(b-1, b-9, b-F).
Long press M key for 2s, or timeout 10s, quit setting.



Speed
(8 level)



Brightness
(10 level, 100%)

RGB change mode list

No.	Name	No.	Name	No.	Name
P01	Static red	P11	Green strobe	P21	Red yellow smooth
P02	Static green	P12	Blue strobe	P22	Green cyan smooth
P03	Static blue	P13	White strobe	P23	Blue purple smooth
P04	Static yellow	P14	RGB strobe	P24	Blue white smooth
P05	Static cyan	P15	7 color strobe	P25	RGB+W smooth
P06	Static purple	P16	Red fade in and out	P26	RGBW smooth
P07	Static white	P17	Green fade in and out	P27	RGBY smooth
P08	RGB jump	P18	Blue fade in and out	P28	Yellow cyan purple smooth
P09	7 color jump	P19	White fade in and out	P29	RGB smooth
P10	Red strobe	P20	RGBW fade in and out	P30	6 color smooth

RF mode

Match: Long press M and ▶ key for 2s, display "RLS",
 within 5s, press on/off key of the RGB remote, display "RLO", match is successful,
 then use the RF remote to change mode number, adjust speed or brightness.

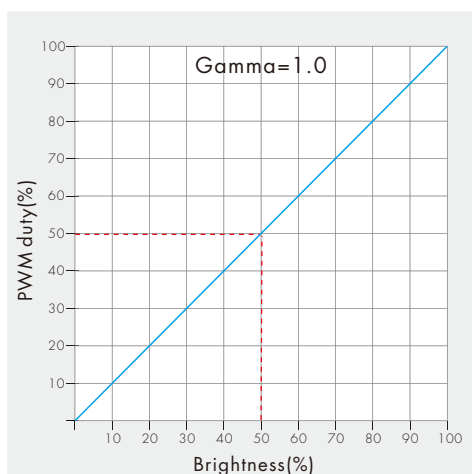
Delete: Long press M and ▶ key for 5s, until display "RLE", delete all matched RF remote.

Restore factory default parameter

- Long press ◀ and ▶ key for 2s, restore factory default parameter, display "RES".
- Factory default parameter: DMX decode mode, DMX decode start address is 1, 3 channel decode, high PWM frequency output, logarithmic brightness curve, RGB mode number is 1, dimmer mode number is 1, disable automatic blank screen.

Dimming curve setting

Linear dimming curve



Logarithmic dimming curve

