S4-DX

4 Channel High Voltage LED Strip DMX512 & RDM Decoder

- 4 channel output, compatible with single color, CCT, RGB/RGBW high voltage LED strip control.
- 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.
- 1/2/4 DMX channel output selectable.
- PWM frequency 1000/2000/4000/8000Hz selectable.
- Logarithmic or linear dimming curve selectable.
- Stand-alone dynamic mode and 4 channel dimmer mode selectable,
  which be controlled by buttons with built-in programs, instead of DMX signal.
- Match with RF 2.4G single zone or multiple zone single color, CCT, RGB/RGBW
  remote control optional.
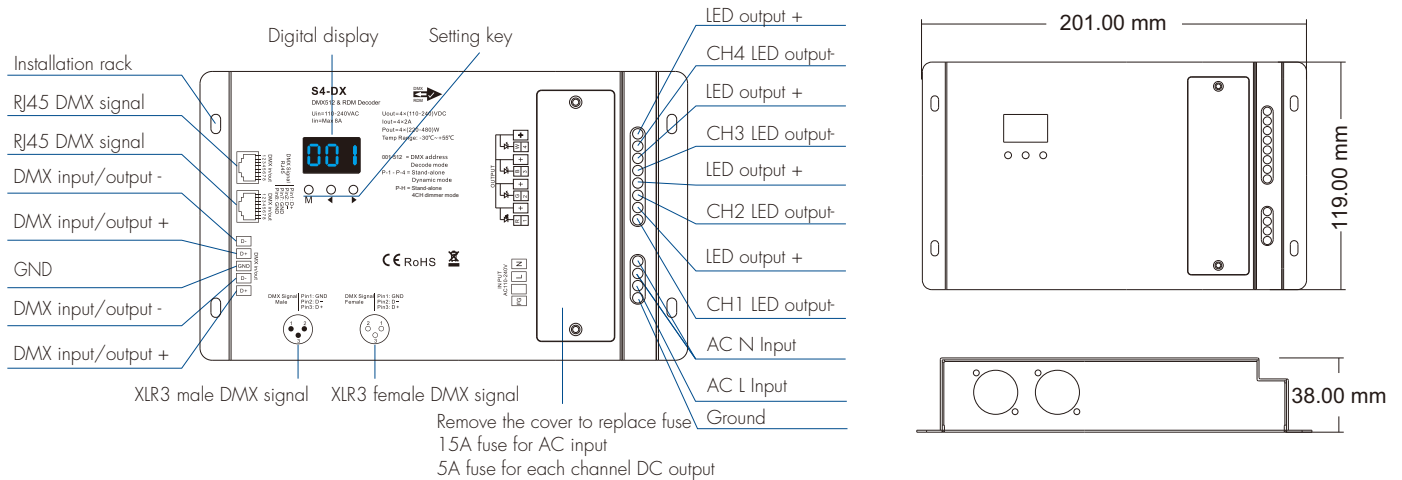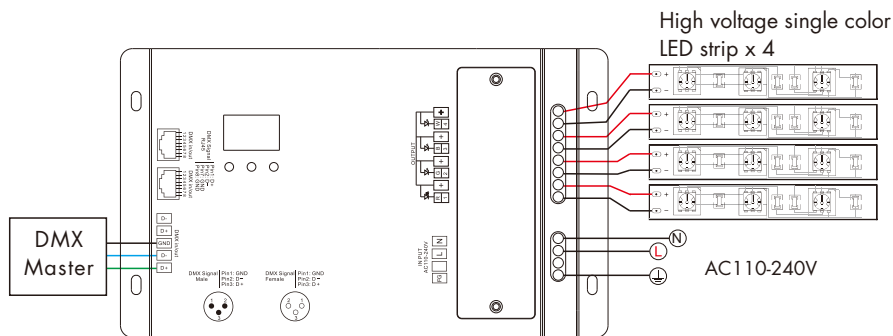- Green terminal, XLR3 and RJ45 port DMX signal input.

CE RoHS RED

Technical Parameters

Input and Output		Environment		Safety and EMC	
Input voltage	110-240VAC	Operation temperature	Ta: -30℃ ~ +55℃	EMC standard	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4
Input current	8A	Case temperature (Max.)	Tc: +85℃		
Output voltage	4 x (110-240)VDC	IP rating	IP20	Safety standard	EN 61347-1:2015+A1:2021 EN 61347-2-13:2014+A1:2017
Output current	4CH,2A/CH	**Package**		Radio Equipment	ETSI EN 300 328 V2.2.2
Output power	4 x (220-480)W	Size	L205 x W130 x H45mm	Certification	CE RED
		Gross weight	0.47kg	Warranty	5 years

Mechanical Structures and Installations

- Digital display
- Setting key
- LED output +
- CH4 LED output-
- LED output +
- CH3 LED output-
- LED output +
- CH2 LED output-
- LED output +
- CH1 LED output-
- AC N Input
- AC L Input
- Ground

- Installation rack
- RJ45 DMX signal
- RJ45 DMX signal
- DMX input/output -
- DMX input/output +
- GND
- DMX input/output -
- DMX input/output +

S4-DX
DMX512 & RDM Decoder
Uin=110-240VAC
Iin=Max 8A
Uout=4x(110-240)VDC
Iout=4x2A
Pout=4x(220-480)W
Temp Range: -30℃~+55℃

001

DMX512 + DMX address
Decode mode
P-1 - P-4 = Stand alone
Dynamic mode
P-H = Stand-alone
4CH dimmer mode

CE RoHS

- XLR3 male DMX signal
- XLR3 female DMX signal
- Remove the cover to replace fuse
- 15A fuse for AC input
- 5A fuse for each channel DC output

201.00 mm

119.00 mm

38.00 mm

Wiring Diagram

High voltage single color
LED strip x 4

DMX
Master

AC110-240V
N
L

⚠ 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 frequence, output brightness curve, default output level, automatic blank screen. short press M key to switch five item.
- Decode mode: short press ◀ or ▶ key to switch 1/2/4 channel decode mode("d-1","d-2" or "d-4").
  When set as 1 channel decode, the decoder occupy only 1 DMX address, and four channel output the same brightness of this DMX address.
- Output PWM frequence: short press ◀ or ▶ key to switch 1000Hz("F10"), 2000Hz("F20"), 4000Hz("F40") or 8000Hz("F80").
  Higher PWM frequency, will cause lower output current, but more suitable for camera(No flickers for video).
- Output brightness curve: short press ◀ or ▶ key to switch linear curve("C-L") or logarithmic curve("C-E").
- Default output level: set output level when no DMX input signal. short press ◀ or ▶ key to switch maintain DMX output("d- -")
  or output default level ("d00" to "dFF", 0-100%), long press ◀ or ▶ key to change output default level.
- 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.

001

DMX mode
(001~512)

DMX mode

- Short press M key, when display 001~512, enter DMX mode.
- Press ◀ or ▶ key to change DMX decode start address(001~512), long press for fast adjustment.
- If there is a DMX signal input, will enter DMX mode automatically.
- DMX Dimming: Each S4-DX DMX decoder occupy 4 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)
CH4 0-255	CH4 PWM 0-100% (LED W)

Stand-alone dynamic mode

- Enter stand-alone dynamic mode only when DMX signal is disconnected or lost.
- Short press M key, when display P-1~P-4,
  enter stand-alone dynamic mode.
- Press ◀ or ▶ key to change dynamic mode number(P-1~P-4).
- Each mode can adjust 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).
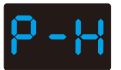 Long press M key for 2s, or timeout 10s, quit setting.

P-1

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

S-8   **b-F**

Speed   Brightness
(8 level) (10 level,100%)

Dynamic mode list

No.	Name
P-1	4ch single light on/off in sequence
P-2	4ch single light chase in sequence
P-3	4ch light fadein and fadeout synchronously
P-4	4ch light fadein and fadeout in sequence

Stand-alone dimmer mode

- Enter stand-alone dimmer mode only when DMX signal is disconnected or lost.
- Short press M key, when display P-H, enter stand-alone dimmer mode.
- Dimmer mode can adjust each channel brightness independently.
  Long press M key for 2s, prepare for setup four channel brightness.
  Short press M key to switch four channel(100~1FF, 200~2FF, 300~3FF, 400~4FF).
  Press ◀ or ▶ key to setup brightness value of each channel.
  Long press M key for 2s, or timeout 10s, quit setting.

P-H
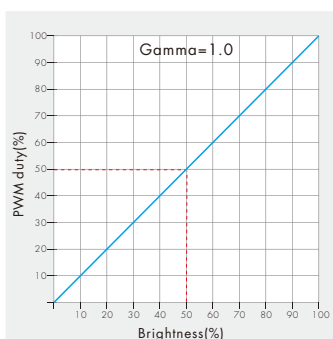
Stand-alone dimmer mode

RF mode

  Match: Long press M and ▶ key for 2s, display "RLS",
          within 5s, press on/off key of the RF remote, display "RLO", match is successful,
          then use the RF remote to on/off, adjust brightness, color temperature or static color, change dynamic mode, adjust mode 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, 4 channel decode, 2000Hz PWM frequence output, logarithmic brightness curve, output 100% level when no DMX input, dymamic mode number is 1, dimmer mode number is 1, disable automatic blank screen.

Dimming Curve Setting

Linear dimming curve

Logarithmic dimming curve