Manuals+ — User Manuals Simplified.

SUNRICHER 4CH DMX512 RJ45 DIN Rail Mountable DMX Decoder Installation Guide

SUNRICHER

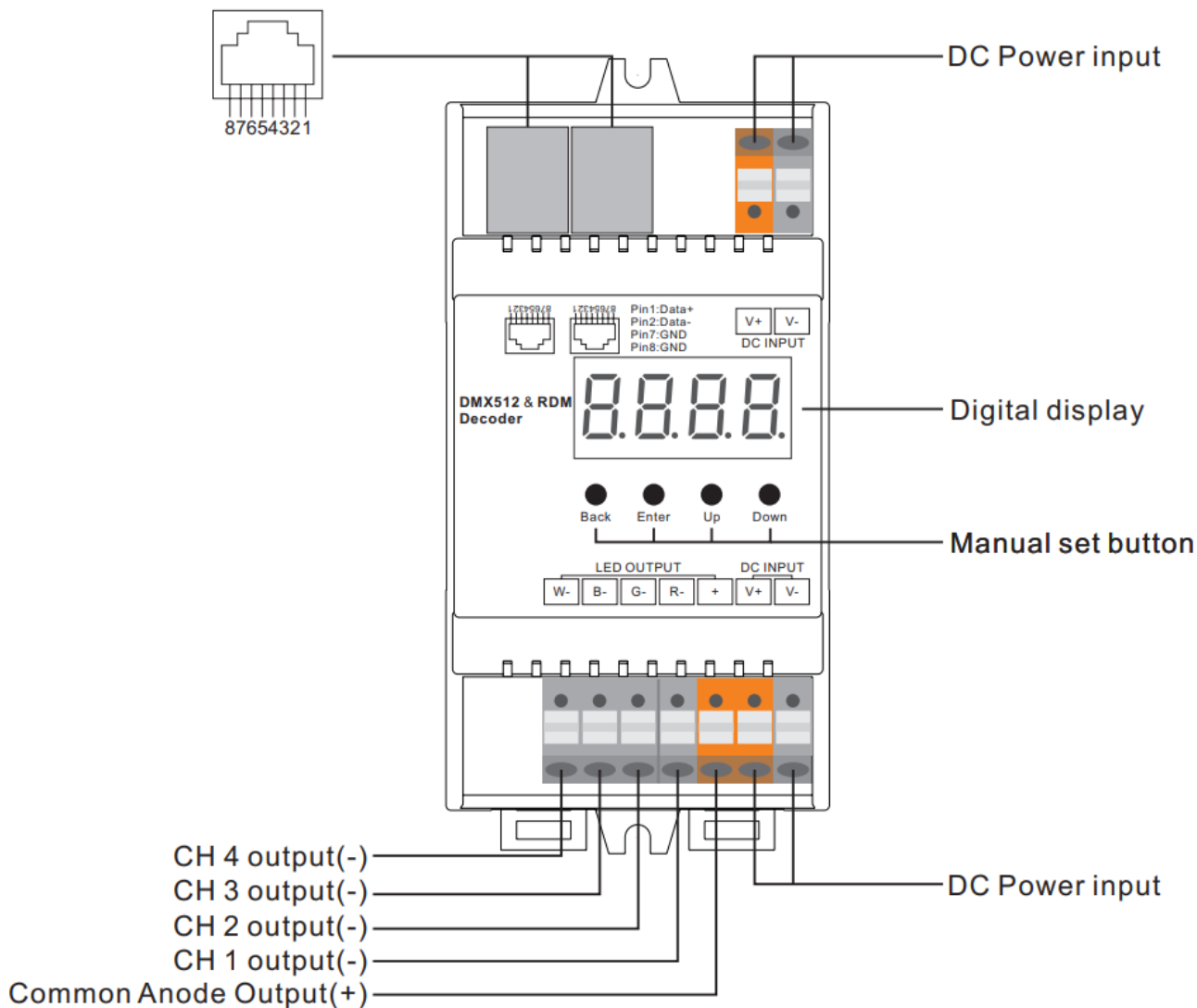4 CH DMX512 RJ45 DIN Rail Mountable DMX Decoder
Installation Guide

Contents

4CH DMX512 RJ45 DIN Rail Mountable DMX Decoder

Important: Read All Instructions Prior to Installation

Function introduction

RJ45 terminal
DMX512 input & output
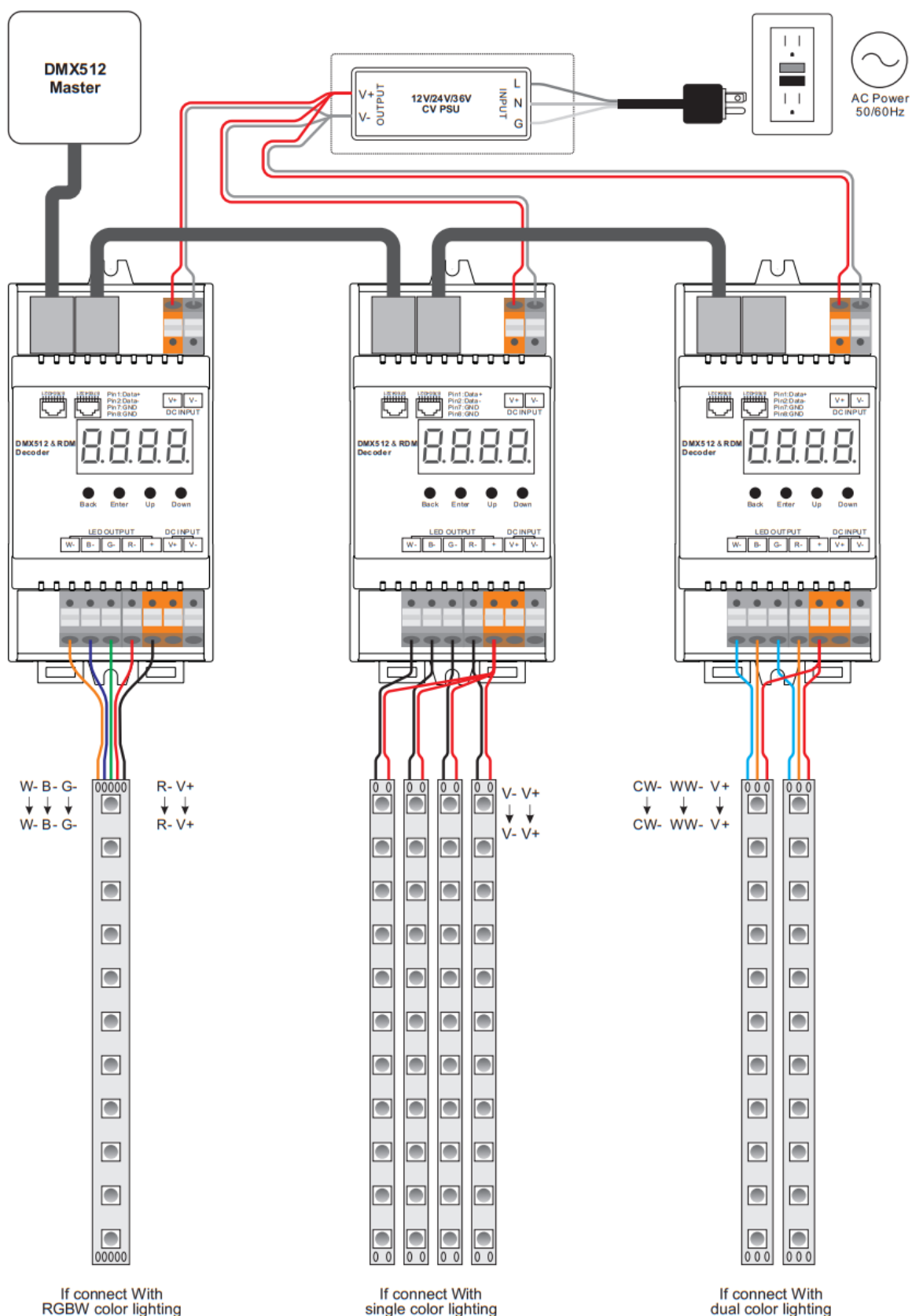Pin1:Data+ / Pin2:Data- / Pin7:GND / Pin8:GND

DC Power input

Digital display

Manual set button

DMX512 & RDM Decoder

Pin1:Data+
Pin2:Data-
Pin7:GND
Pin8:GND
DC INPUT

V+ V-

Back Enter Up Down

LED OUTPUT   DC INPUT
W- B- G- R- + V+ V-

CH 4 output(-)
CH 3 output(-)
CH 2 output(-)
CH 1 output(-)
Common Anode Output(+)

DC Power input

Product Data

No.	Input Voltage	Output Current	Output Power	Remarks	Size(LxWxH)
1	12-36VDC	4x5A	4x(60-180)W	Constant voltage	110x53x65mm

- RDM function enabled DMX decoder
- Digital display to show data directly, easily to set and show DMX address and DMX channel
- PWM output resolution ratio 8bit , 16bit settable
- Output PWM frequency from 500HZ – 30K HZ settable
- Output dimming curve gamma value from 0.1 – 9.9 settable
- Decoding mode settable
- DIN rail controller

Safety & Warnings

- DO NOT install with power applied to device.
- DO NOT expose the device to moisture.

Waring Diagram

DMX512 Master

12V/24V/36V CV PSU
V+ OUTPUT
V-
L N G INPUT

AC Power 50/60Hz

DMX512 & RDM Decoder

Pin1:Data+
Pin2:Data-
Pin7:GND
Pin8:GND

V+ V-
DC INPUT

Back Enter Up Down

LED OUTPUT   DC INPUT
W- B- G- R- +   V+ V-

W- B- G-   00000   R- V+
↓ ↓ ↓   ↓ ↓
W- B- G-   00000   R- V+

If connect With
RGBW color lighting

V- V+
↓ ↓
V- V+

If connect With
single color lighting

CW- WW- V+
↓   ↓   ↓
CW- WW- V+

If connect With
dual color lighting

Button introduction

Up, Down button is for menu selection. After power on the decoder, if keep on clicking Up button, you will find below menu on display:

DMX signal indicator ● ∴ When DMX signal input is detected, the indicator on the display following after

turns on red ⬛.XXX.

Back Enter Up Down

⬛.XXX	Means DMX address. fa ctory defaults setting is 001.
⬛⬛.XX	Means DMX channels quantity.
⬛⬛.XX	Means Bit (8bit or 16bit). factory defaults setting is 16bit
⬛⬛.XX	Means output PWM frequency. factory defaults setting is 1K HZ
⬛⬛.XX	Means output dimming curve gamma value, factory defaults setting is ga 1.5
⬛⬛.XX	Means Decoding mode, factory defaults setting is dp1.1

By holding button Back + Enter together at the same time over 5 seconds until the display go off, it will restore default settings .

1. **DMX address setting:**

   select menu ⬛.XXX, click button "Enter", display flashes,then click or hold button "Up" I "Down" to set DMX address (click is slow, hold is fast.), then click button"Back" to confirm.

   2. DMX channel quantity setting:

   Select menu ⬛⬛.XX, click button "Enter", display flashes, then click button "Up" I "Down" to set DMX channel quantity , then click button"Back" to confirm.

   For example the DMX address is already set 001.

   CH01=1 DMX address for all the output channels, which are all address 001.

   CH02=2 DMX addresses , output 1 &3 is address 001, output 2,4 is address 002

   CH03=3 DMX addresses, output 1, 2 is address 001,002, output 3,4 is address 003

   CH04=4 DMX addresses, output 1,2,3,4 is address 001,002,003,004

DMX address is 001, CH01

DMX Console Slider number DMX channel	dp1.1	dp2.1
1	for all output dimming	for all output dimming
2	No use	for all output micro dimming

DMX address is 001, CH02

DMX Console Slider number DMX channel	dp1.1	dp2.1	dp3.2
1	for output 1&3 dimming	for output 1&3 dimming	for output 1 &3 dimming
2	for output 2,4 dimming	for output 1 &3 micro dimming	for output 2,4 dimming
3		for output 2,4 dimming	for all output dimming
4		for output 2,4 micro dimming	

DMX address is 001, CH03

DMX Console Slider number DMX channel	dp1.1	dp2.1	dp4.3	dp5.3
1	for output 1 dimming	for output 1 dimming	for output 1 dimming	for output 1 dimming
2	for output 2 dimming	for output 1 micro dimming	for output 2 dimming	for output 2 dimming
3	for output 3,4 dimming	for output 2 dimming	for output 3,4 dimming	for output 3,4 dimming
4		for output 2 micro dimming	for all output master dimming	for all output master dimming
5		for output 3,4 dimming		strobe effects
6		for output 3,4 micro dimming		

DMX address is 001, CH04

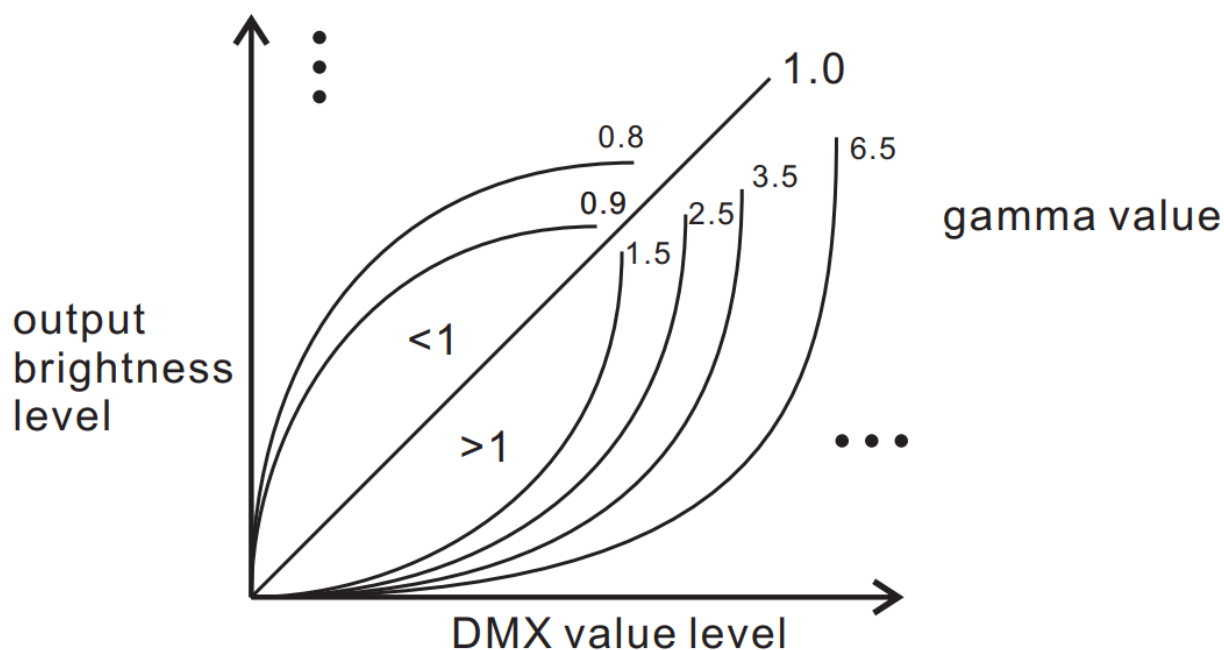| DMX Console Slider number / DMX channel	dp1.1	dp2.1	dp5.4	dp6.4
1	for output 1 dimming	for output 1 dimming	for output 1 dimming	for output 1 dimming
2	for output 2 dimming	for output 1 micro dimming	for output 2 dimming	for output 2 dimming
3	for output 3 dimming	for output 2 dimming	for output 3 dimming	for output 3 dimming
4	for output 4 dimming	for output 2 micro dimming	for output 4 dimming	for output 4 dimming
5		for output 3 dimming	for all output master dimming	for all output master dimming
6		for output 3 micro dimming		strobe effects
7		for output 4 dimming		
8		for output 4 micro dimming		

3. PWM output resolution Bit setting:

select menu $6.8.$XX, click button "Enter",display flashes, then click button "Up" / "Down" to choose 08 or 16 bit, then click button"Back" to confirm.

4. output PWM frequency setting:

select menu $7.8.$XX, click button "Enter", display flashes,then click button "Up" / "Down"to choose 00-30, then click button"Back" to confirm. 00=500HZ, 01=1kHZ, 02=2kHZ 30=30kHZ.

5. output dimming curve gamma value setting:

select menu $9.8.$XX, click button "Enter", display flashes, then click or hold button "Up" / "Down" to choose 0.1-9.9, then click button"Back" to confirm.

6. DMX decoding mode setting:

Select menud **8.8.**XX , click button "Enter", display flashes, then click or hold button "Up" /town" to choose the decoding mode, then click button"Back" to confirm. -dPxx" means the DMX address quantity used for control of corresponding PWM output channel quantity. 1st "x" is DMX address quantity, 2nd "x" is PWM channel quantity.
Micro dimming: the micro dimming effect can only be visible when the dimming curve gamma value is set lower than 1.4, and the lower the value is, the more visible the micro dimming effect will be.

The data definitions for strobe channel are as follows:

{0, 7})/undefined

{8, 65},//slow strobe–>fast strobe

{66, 71},//undefined

{72, 127},//slow push fast close

{128, 133},//undefined

{134, 189},//slow close fast push

{190, 195},//undefined

{196, 250},//random strobe

{251, 255},//undefined

The supported RDM PIDs are as follows:

DISC_UNIQUE_BRANCH

DISC_MUTE DISC_UN_MUTE

DEVICE INFO

DMX_START_ADDRESS

IDENTIFY_DEVICE

SOFTWARE_VERSION_LABEL

DMX_PERSONALITY

DMX_PERSONALITY_DESCRIPTION

SLOT _INFO SLOT_DESCRIPTION

MANUFACTURER_LABEL

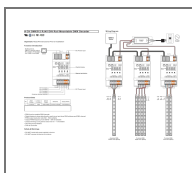SUPPORTED_PARAMETERS

Restore to Factory Default Setting

Press and hold down both "Back" and "Enter" keys until the digital display turns off, then release the keys, system will reset and the digital display will turn on again, all settings will be restored to factory default.

Default settings are as follows:

DMX Address Code: a001

DMX Address Quantity: SW1=0: ch04, SW1=1: ch03

PWM Resolution Mode: bt16

PWM Frequency: pf01

Gamma: ga1.5

Decoding Mode: dp1.1

Documents / Resources