NTDMX-SR-2108B-M5-3/-5

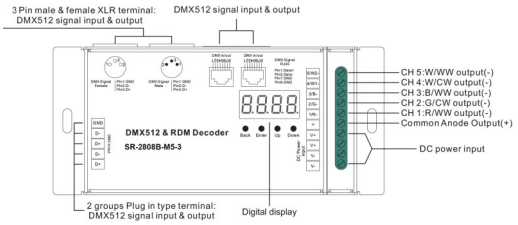
Project :	Date :
Cat. No. :	Type :
Notes :	Volts :

8 OR 16 BITS ULTRA PRO 5 CHANNEL RDM DMX512 MASTER OR DECODER 3 PINS OR 5 PINS

Product Data

Input Voltage	Output Current	Output Power	Remarks	Size(LxWxH)
12-24VDC	5x8A	5x(96-192)W	Constant voltage	164x73x38mm

- Master & decoder mode, RDM function
- Metal housing, digital display to show data directly, easily to set and show DMX address.
- With multiple kinds of DMX in/out ports: RJ 45, XLR , normal screws.
- Total 5 PWM output channels, common anode. DMX channel quantity from 1CH~5CH settable
- 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.
- Galvanic isolation

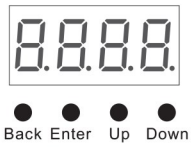


Operation

Before you do other settings, please set the device to be Master or Decoder mode.

run1 = DMX Decoder mode , run2 = DMX Master mode(stand alone).

Keep on clicking Down button, to get run1 or run2, then click Enter, then click Down button to choose 1 or 2, then click Back button.
After choose run1 or run2, please power off and power on again the device.



I. For run2 DMX Master mode: After power on the device, if keep on clicking Up button, you will find below menu on display:

Means brightness for each output PWM channel. First 1 means PWM output channel 1 and it is selectable from 1 to 5 by clicking “UP” or “Down” button. Second 01 means brightness level, click “Enter” button, the display flashes, then click “UP” or “Down” button to select from 00-99-FL, which means 0%-99%-100% brightness, then click “Back” button to confirm.

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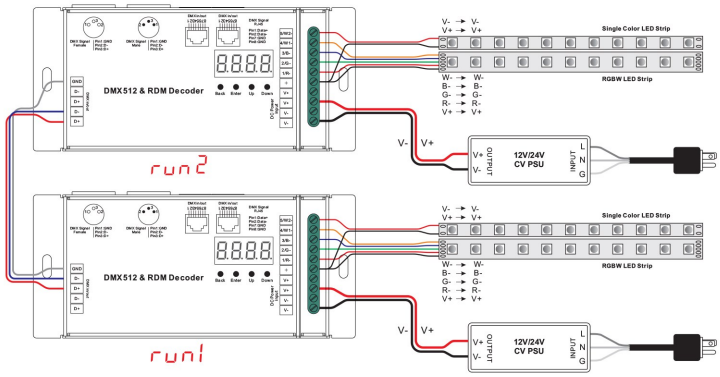
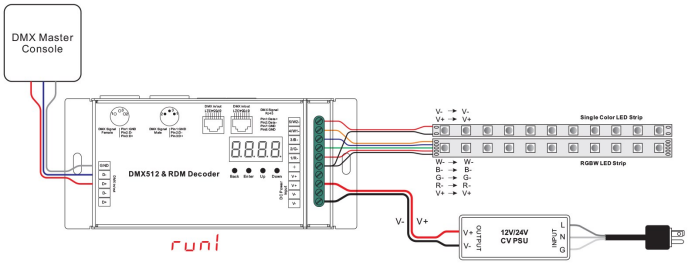
Wiring diagram

1.Work as Master mode



2.Work as Decoder mode



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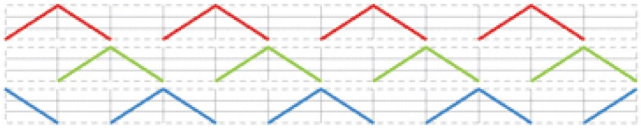
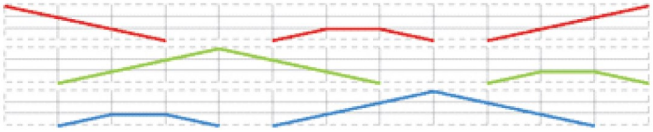
P.XXX Means programs , total 1~31 programs.
B-.XX Means RGB running effect's brightness, total 1~8 levels brightness
SP-X Means effect play speed. total 1~9 levels speed.

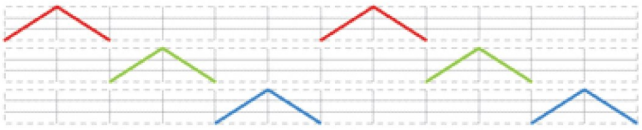
P-XX means RGB color changing modes, total 31 programs:
00- RGB off
01- Static red
02- Static green
03- Static blue
04- Static yellow (50% red+50% green)
05- Static orange (75% red+25% green)
06- Static cyan (50% green+50% blue)
07- Static purple (50% blue+50% red)
08- Static white (100% red+100% green+100% blue)
09- Any two colors of RGB mix fade, changing diagram as follow:



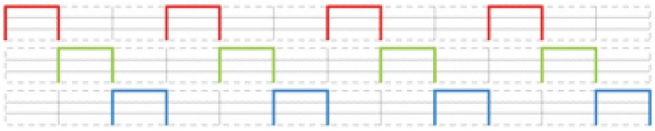
10- RGB colors mix fade, changing diagram as follow:



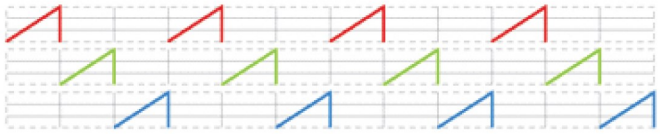
11- RGB FADE OUT & FADE IN, changing diagram as follow:



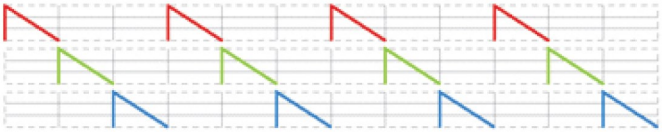
12- RGB jump changing, changing diagram as follow:



13- RGB FADE IN, changing diagram as follow:



14- RGB FADE OUT, changing diagram as follow:



15- RGB 3 colors strobe
16- White color strobe (100% red+100% green+100% blue)
17- 7 colors FADE OUT & FADE IN (red, orange, yellow, green, cyan, blue, purple FADE OUT & FADE IN)
18- 7 colors jump changing (red, orange, yellow, green, cyan, blue, purple jump changing)
19- 7 colors strobe (red, orange, yellow, green, cyan, blue, purple strobe)
20- Red-white (100% red+100% green+100% blue) circle gradual changing
21- Green-white (100% red+100% green+100% blue) circle gradual changing
22- Blue-white (100% red+100% green+100% blue) circle gradual changing
23- Red-orange circle gradual changing
24- Red-purple circle gradual changing
25- Green-yellow circle gradual changing
26- Green-cyan circle gradual changing
27- Blue-purple circle gradual changing
28- Blue-cyan circle gradual changing
29- Red-yellow-green circle gradual changing
30- Red-purple-blue circle gradual changing
31- Green-cyan-blue circle gradual changing

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II. For run1 DMX decoder mode: 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 A turns on red A.XXX .

A.XXX Means DMX address. fa ctory defaults setting is 001.

C.H.XX Means DMX channels quantity. factory defaults setting is Ch05

b.b.XX Means Bit (8bit or 16bit). factory defaults setting is 16bit

P.F.XX Means output PWM frequency. factory defaults setting is 1K HZ

g.A.XX Means output dimming curve gamma value, factory defaults setting is ga 1.5

d.P.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 A.XXX , click button “Enter”, display flashes,then click or hold button “Up” / “Down” to set DMX address (click is slow, hold is fast.), then click button“Back” to confirm.

2. DMX channel quantity setting:

Select menu C.H.XX, click button “Enter”, display flashes, then click button “Up” / “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&5 is address 002
CH03=3 DMX addresses, output 1, 2 is address 001,002, output 3,4&5 is address 003
CH04=4 DMX addresses, output 1,2,3 is address 001,002,003, output 4&5 is address 004
CH05=5 DMX addresses, output 1,2,3,4,5 is address 001,002,003,004,005.

3. PWM output resolution Bit setting:

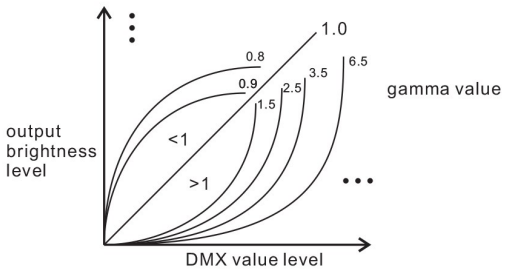
select menu b.b.XX, click button “Enter”,display flashes, then click button “Up” / “Down” to choose 08 or 16 bit, then click button“Back” to confirm.

4. output PWM frequency setting:

select menu P.F.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 g.A.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 menu d.P.XX , click button “Enter”, display flashes, then click or hold button “Up” / “Down”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.

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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 &5 dimming	for output 1&3 micro dimming	for output 2,4 &5 dimming
3		for output 2,4 &5 dimming	for all output dimming
4		for output 2,4&5 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 &5 dimming	for output 2 dimming	for output 3,4&5 dimming	for output 3,4&5 dimming
4		for output 2 micro dimming	for all output master dimming	for all output master dimming
5		for output 3,4 &5 dimming		strobe effects
6		for output 3,4&5 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&5 dimming	for output 2 micro dimming	for output 4&5 dimming	for output 4&5 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 &5 dimming		
8		for output 4&5 micro dimming		

DMX address is 001, CH05

DMX Console Slider number / DMX channel	dp1.1	dp2.1	dp6.5	dp7.5
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 5 dimming	for output 3 dimming	for output 5 dimming	for output 5 dimming
6		for output 3 micro dimming	for all output master dimming	for all output master dimming
7		for output 4 dimming		strobe effects
8		for output 4 micro dimming		
9		for output 5 dimming		
10		for output 5 micro dimming		

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: ch05, SW1=1: ch04
PWM Resolution Mode: bt16
PWM Frequency: pf01
Gamma: ga1.5
Decoding Mode: dp1.1