Ultra-Pro 5CH RDM DMX512 Decoder

TÜV CE FC RoHS COMPLIANT

Important: *Read All Instructions Prior to Installation*

Function introduction

3/5 Pin male & female XLR terminal:
  DMX512 signal input & output

2xRJ45 terminal:
  DMX512 signal input & output

CH 5:W/WW output(-)
CH 4:W/CW output(-)
CH 3:B/WW output(-)
CH 2:G/CW output(-)
CH 1:R/WW output(-)
Common Anode Output(+)

DC power input

2 groups Plug in type terminal:
  DMX512 signal input & output

Digital display
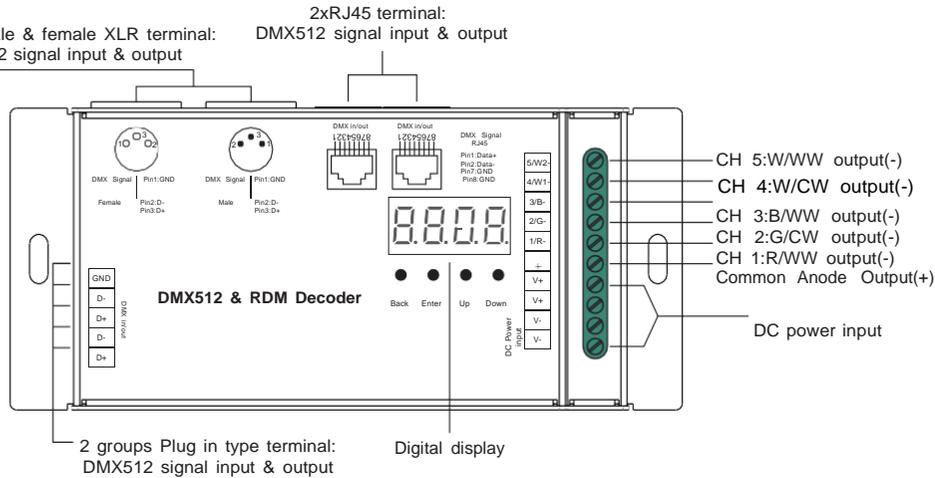
Product Data

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

- DMX512 RDM decoder, RDM function can realize intercommunication between DMX master and decoder.
  for example, you can set DMX decoder's address by DMX master console.
- 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

Safety & Warnings

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

Operation

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 8 turns on red 8.XXX .

8.XXX   Means DMX address. factory defaults setting is 001.
CH XX   Means DMX channels quantity. factory defaults setting is Ch05
bE XX   Means Bit (8bit or 16bit). factory defaults setting is 16bit
PF XX   Means output PWM frequency. factory defaults setting is 1K HZ
gA XX   Means output dimming curve gamma value, factory defaults setting is ga 1.5
dP XX   Means Decoding mode, factory defaults setting is dp1.1

8.8.8.8.

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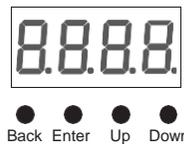
Wiring diagram
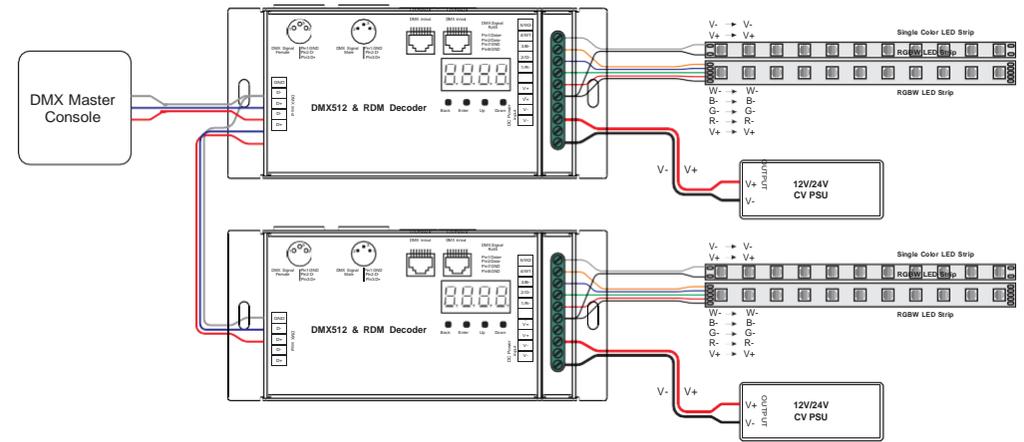
By holding button Back + Enter together at the same time over 5 seconds until the display go off,
it will restore default settings .

1. DMX address setting (factory default is A001):
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 (factory default is CH05):

Select menu CH.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 (factory default is bt16):
select menu bt.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 (factory default is PF01):

select menu PF.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 value setting (factory default is gA1.5):

select menu gA.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.
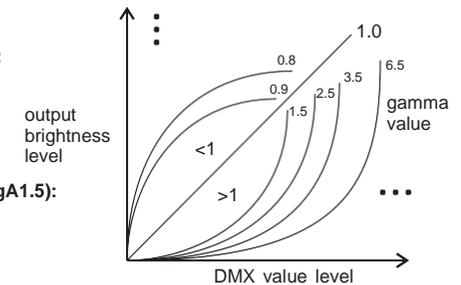
6. DMX decoding mode setting (factory default is dP1.1):
Select menu dP.XX , click button "Enter", display flashes, then click or hold button "Up" / "Down"to choose the

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.

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.

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 (factory default)

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		

Short circuit protection

If short circuit of the connected load is detected, the display will flash to alarm and the load will be forced to open circuit status. Once the fault is removed, the decoder will recover after re-powered on.

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

Product Dimension

38 mm
164 mm
151 mm
73 mm