

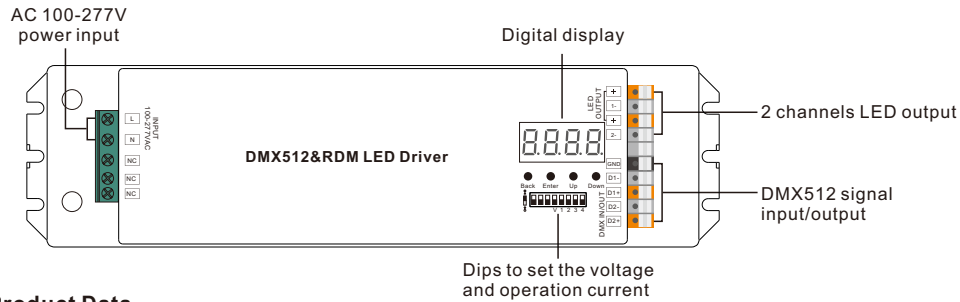
75W DMX & RDM LED Driver (Constant Current)

70230036



Important: Read All Instructions Prior to Installation

Function introduction

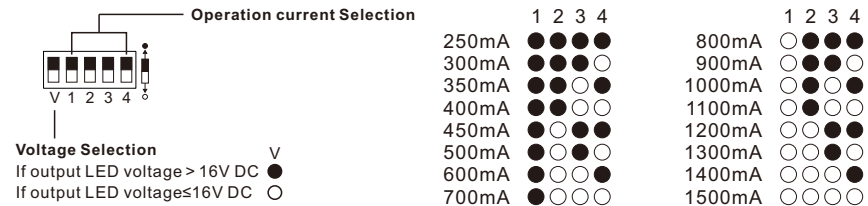


Product Data

Output	LED Channel	2							
	Selectable Current	250mA	300mA	350mA	400mA	450mA	500mA	600mA	700mA
	DC Voltage Range	6-48V	6-48V	6-48V	6-48V	6-48V	6-48V	6-48V	6-48V
	Selectable Current	800mA	900mA	1000mA	1100mA	1200mA	1300mA	1400mA	1500mA
	DC Voltage Range	6-48V	6-48V	6-48V	6-48V	6-48V	6-48V	6-48V	6-48V
	Current Tolerance	±3%							
	Rated Power	Max. 72W/CH, CH1+CH2 ≤ 75W							
Input	Voltage Range	100-277V AC							
	Frequency Range	50/60Hz							
	Power Factor (Typ.)	> 0.99 @ 100VAC, > 0.96 @ 230VAC							
	Total Harmonic Distortion	THD ≤ 15% (@ full load / 230VAC)							
	Efficiency (Typ.)	87% @ 230VAC full load							
	AC Current (Typ.)	0.9A @ 100VAC, 0.39A @ 230VAC, 0.33A@277VAC							
	Inrush Current (Typ.)	COLD START Max. 2A at 230VAC							
	Leakage Current	< 0.5mA /230VAC							
	Standby Power Consumption	< 0.5W							
	Control	Dimming Interface	DMX/RDM						
Dimming Range		0.1%-100%							
Dimming Method		Pulse Width Modulation							
Dimming Curve		Logarithmic, Linear							

Protection	Short Circuit	Yes, recovers automatically after fault condition is removed
	Over Voltage	Yes, recovers automatically after fault condition is removed
	Over Temperature	Yes, recovers automatically after fault condition is removed
Environment	Working Temp.	-25°C ~ +45°C
	Max. Case Temp.	80°C (Ta= "45°C")
	Working Humidity	10% ~ 95% RH non-condensing
	Storage Temp. & Humidity	-40°C ~ +80°C, 10% ~ 95% RH
Safety & EMC	Safety Standards	UL8750, CAN/CSA C22.2 No. 250.13-14, ENEC EN61347-1, EN61347-2-13 approved
	Withstand Voltage	I/P-O/P: 3.75KVAC
	Isolation Resistance	I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH
	EMC Emission	EN55015, EN61000-3-2, EN61000-3-3
	EMC Immunity	EN61547, EN61000-4-2,3,4,5,6,8,11, surge immunity Line-Line 1KV
Others	MTBF	190500H, MIL-HDBK-217F @ 230VAC at full load and 25 ambient temperature
	Dimension	244*64*32mm (L*W*H)

Dips to set the voltage and operation current



- Dimmable LED driver, max. output power 75W total
- 2 channels constant current output, 250mA-1500mA output current optional, dips to set the operation current
- PWM output resolution ratio 8bit, 16bit settable.
- Output PWM frequency from 500HZ ~ 30KHZ settable.
- Output dimming curve gamma value from 0.1 ~ 9.9 settable.
- Class II power supply, full isolated plastic case, high power factor and efficiency
- To control single color, dual color LED lighting
- Built-in DMX512 interface, support RDM bi-directional communication
- Compatible with universal DMX512 master controllers
- IP20 rating, suitable for indoor LED lighting applications
- 5 years warranty

Safety & Warnings

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

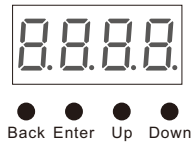
Operation

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:

8.8.0.1 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.

0.0.0.1 means chasing effects, total 4 effects selectable from 01-04. Click "Up" or "Down" button to select the menu, then click "Enter" button to enter into the effect, then click "Up" or "Down" button to select from 01-04.

CA01: Fade-up (0%-100%) and fade-down (100%-0%) of output 1, then output 2, output 3,, output 5, then simultaneously fade-up and fade-down of output 1, 2, 3, 4, 5, then output 1,, cycling chase

CA02: Fade-up (0%-100%) of output 1, then simultaneous fade-down (100%-0%) of output 1 and fade-up (0%-100%) of output 2, simultaneous down of output 2 and up of output 3,, simultaneous down of output 4 and up of output 5, simultaneous down of output 5 and up of output 1,, cycling chasing

CA03: Fade-up (0%-100%) of output 1, then output 2, output 3,, output 5, output 1,, cycling chasing

CA04: Fade-down (100%-0%) of output 1, then output 2, output 3,, output 5, output 1,, cycling chasing

8.8.8.8 means chasing speed, it is selectable from 01-09, 01 is the slowest, 09 is the fastest.

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 **8** turns on red **8.XXX** .

8.XXX Means DMX address. factory defaults setting is 001.

8HXX Means DMX channels quantity. factory defaults setting is Ch05

88XX Means Bit (8bit or 16bit). factory defaults setting is 16bit

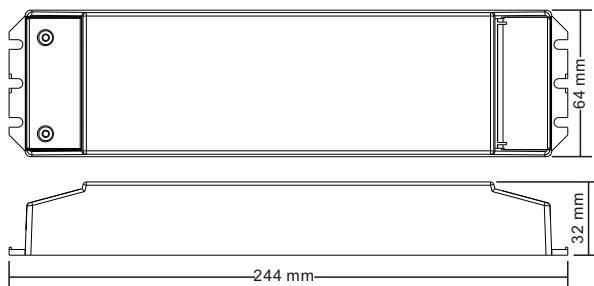
8FXX Means output PWM frequency. factory defaults setting is 30K HZ

8GXX Means output dimming curve gamma value, factory defaults setting is ga 1.5

8PXX Means Decoding mode, factory defaults setting is dp1.1

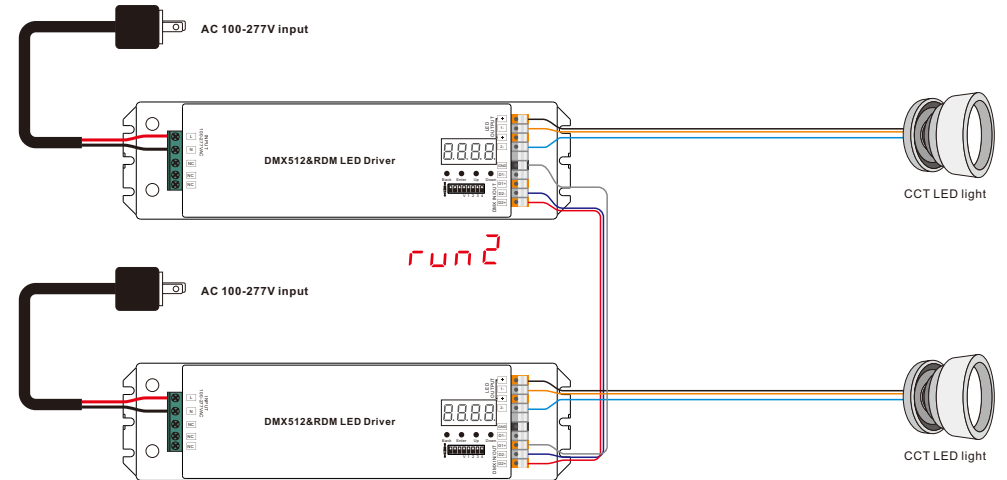
By holding button Back + Enter together at the same time over 5 seconds until the display go off, it will restore default settings .

Product Dimension (mm)

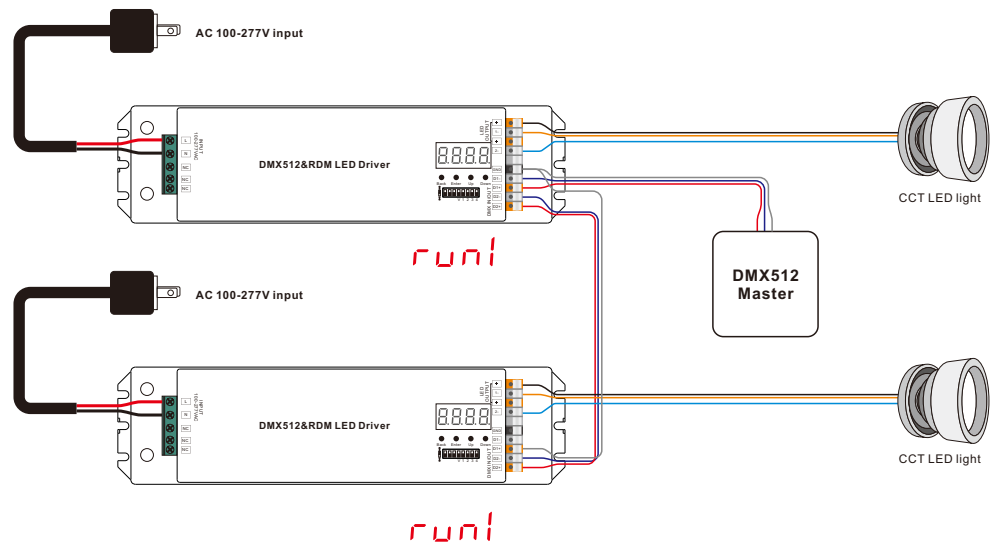


Wiring diagram

1. Work as Master



2. Work as Decoder



1. DMX address setting:

select menu **8XXX**, 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 **88XX**, 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.

CH05=5 DMX addresses, output 1,2,3,4,5 (if any) is address 001,002,003,004,005 (if any).

3. PWM output resolution Bit setting:

select menu **88XX**, 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 **88XX**, 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.

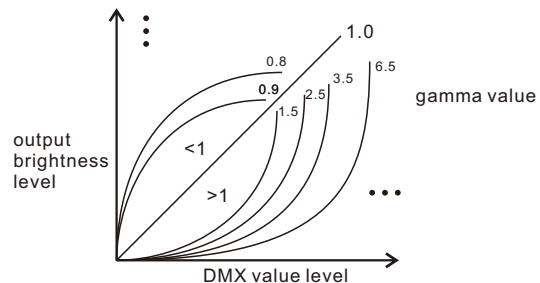
5. DMX decoding mode setting:

Select menu **88XX**, click button "Enter", display flashes, then click or hold button "Up" / "Down" to choose the decoding mode, then click button "Back" to confirm. "dPx" 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.

Fine dimming: the fine 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 fine dimming effect will be.

6. output dimming curve gamma value setting:

select menu **88XX**, click button "Enter", display flashes, then click or hold button "Up" / "Down" to choose 0.1~9.9, then click button "Back" to confirm.



DMX address is 001, CH01

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

DMX address is 001, CH05

DMX Console Slider number	dp1.1	dp2.1	dp2.2	dp3.1	dp3.2	dp4.1	dp4.2	dp6.5	dp7.5
DMX channel									
1	For output 1 dimming	For output 1 dimming	For output 1,2,3,4 master dimming	For output 1,2,3,4 master dimming	For output 1&2 master dimming	For output 1&2&3 master dimming	For output 1&2 master dimming	For output 1,2,3,4,5 master dimming	For output 1,2,3,4,5 master dimming
2	For output 2 dimming	For output 1 fine dimming	For output 1+2 color tuning and 3+4 color tuning simultaneously	For output 1&3 dimming	For output 1 dimming	For output 1 dimming	For output 1+2 color tuning	For output 1 dimming	For output 1 dimming
3	For output 3 dimming	For output 2 dimming		For output 2&4 dimming	For output 2 dimming	For output 2 dimming	For output 3&4 master dimming	For output 2 dimming	For output 2 dimming
4	For output 4 dimming	For output 2 fine dimming			For output 3&4 master dimming	For output 3 dimming	For output 3+4 color tuning	For output 3 dimming	For output 3 dimming
5	For output 5 dimming	For output 3 dimming			For output 3 dimming			For output 4 dimming	For output 4 dimming
6		For output 3 fine dimming			For output 4 dimming			For output 5 dimming	For output 5 dimming
7		For output 4 dimming							Strobe effects
8		For output 4 fine dimming							
9		For output 5 dimming							
10		For output 5 fine 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: ch01
 PWM Resolution Mode: bt16
 PWM Frequency: pf30
 Gamma: ga1.5
 Decoding Mode: dp1.1