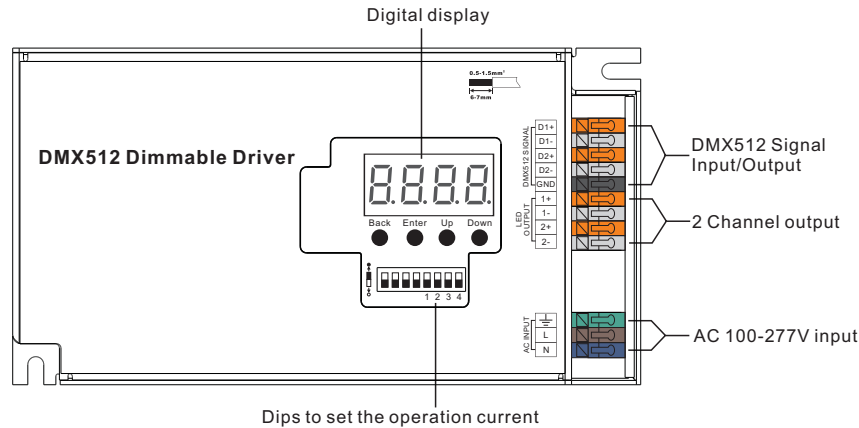# 75W DMX/RDM Dimmable LED Driver (Constant Current) 09.210875CT.04346

Important: Read All Instructions Prior to Installation

Function introduction

Digital display

DMX512 Dimmable Driver

Back Enter Up Down

0.5-1.5mm²
6-7mm

DMX512 SIGNAL: D1+ D1- D2+ D2- GND
LED OUTPUT: 1+ 1- 2+ 2-
AC INPUT: L N

DMX512 Signal Input/Output

2 Channel output

AC 100-277V input

Dips to set the operation current

Product Data

Output	LED Channel	2							
	Selectable Current	250mA	300mA	350mA	400mA	450mA	500mA	600mA	700mA
	DC Voltage Range	8-52V	8-52V	8-52V	8-52V	8-52V	8-52V	8-52V	8-52V
	Selectable Current	800mA	900mA	1000mA	1100mA	1200mA	1300mA	1400mA	1500mA
	DC Voltage Range	8-52V	8-52V	8-52V	8-52V	8-52V	8-52V	8-52V	8-50V
	Current Tolerance	±1%							
	Rated Power	Max. 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							
	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%-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℃ ~ +45℃
	Max. Case Temp.	85℃
	Working Humidity	10% ~ 95% RH non-condensing
	Storage Temp. & Humidity	-40℃ ~ +80℃, 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℃ / 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	193.6K hrs min. @ 230VAC full load and 25℃ ambient temperature
	Dimension	144x78x38.5mm (L*W*H)

Output Current
Select the correct output current before wiring to LED light by DIP Switches .Please make sure the power to the driver is disconnected before selection of the output current.

Dips to set the operation current

Operation current Selection

	1 2 3 4		1 2 3 4
250mA	●●●●	800mA	○●●●
300mA	●●●○	900mA	○●●○
350mA	●●○●	1000mA	○●○●
400mA	●●○○	1100mA	○●○○
450mA	●○●●	1200mA	○○●●
500mA	●○●○	1300mA	○○●○
600mA	●○○●	1400mA	○○○●
700mA	●○○○	1500mA	○○○○

- Metal casing DMX LED driver with RDM enabled
- 2 channels constant current output
- Output current level selectable from 250mA to 1500mA by DIP switches
- Class Ⅱ power supply, full isolated metal case
- Built-in active PFC function
- PF > 0.96, Efficiency > 87%
- Low standby power < 0.5W
- Built-in DMX dimming interface, RDM enabled
- PWM digital dimming, logarithmic or linear dimming curve selectable
- Enable to set DMX address, DMX channel quantity, PWM output resolution (8 bit or 16 bit)
- Enable to set PWM output frequency, GAMMA ray dimming curve value and DMX decoding mode

- DMX512(2008), DMX512-A and RDM V1.0 (E1.20 – 2006 ESTA Standard)
- Compliant with Safety Extra Low Voltage standard
- Short circuit, over load, over temperature protection
- IP20 rating, suitable for indoor LED lighting applications
- 5 years warranty

Safety & Warnings
- DO NOT install with power applied to the device.
- DO NOT set operation current with power applied to the 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 ⊟ turns on red ⊟.XXX .

● Back ● Enter ● Up ● Down
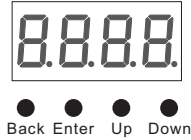
⊟.XXX Means DMX address. fa ctory defaults setting is 001.

⊡⊟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

Press and hold down both buttons Back + Enter simultaneously over 5 seconds until the display go off to restore to factory default settings .

1. DMX address setting:

select menu ⊟ 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 ⊡⊟XX , click button "Enter", display flashes, then click button "Up" / "Down"
to set DMX channel quantity , then click button"Back" to confirm.
For example set 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 is address 001, output 2 is address 002.

3. PWM output resolution Bit setting:

select menu ⊟⊟ 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 ⊡⊟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 ⊟⊟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 ⊟⊡XX , click button "Enter", display
flashes, then click or hold button "Up" / "Down" to choose
the decoding mode, then click button"Back" to confirm.

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.

output
brightness
level

gamma value

1.0
0.8
0.9
3.5
6.5
2.5
1.5
<1
>1

DMX value level
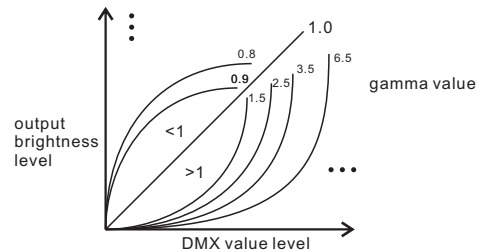
DMX Address is 001, CH01

DMX Console Slider number / DMX channel	dp1.1	dp2.1
1	for all output dimming	for all output dimming
2		for all output fine dimming

DMX Address is 001, CH02

DMX Console Slider number / DMX channel	dp1.1	dp2.1	dp3.2
1	For output 1 dimming	for output 1 dimming	for output 1 dimming
2	for output 2 dimming	for output 1 fine dimming	for output 2 dimming
3		for output 2 dimming	For all output master dimming
4		for output 2 fine dimming	

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

**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

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: ch02, SW1=1:ch01
PWM Resolution Mode: bt16
PWM Frequency: pf01
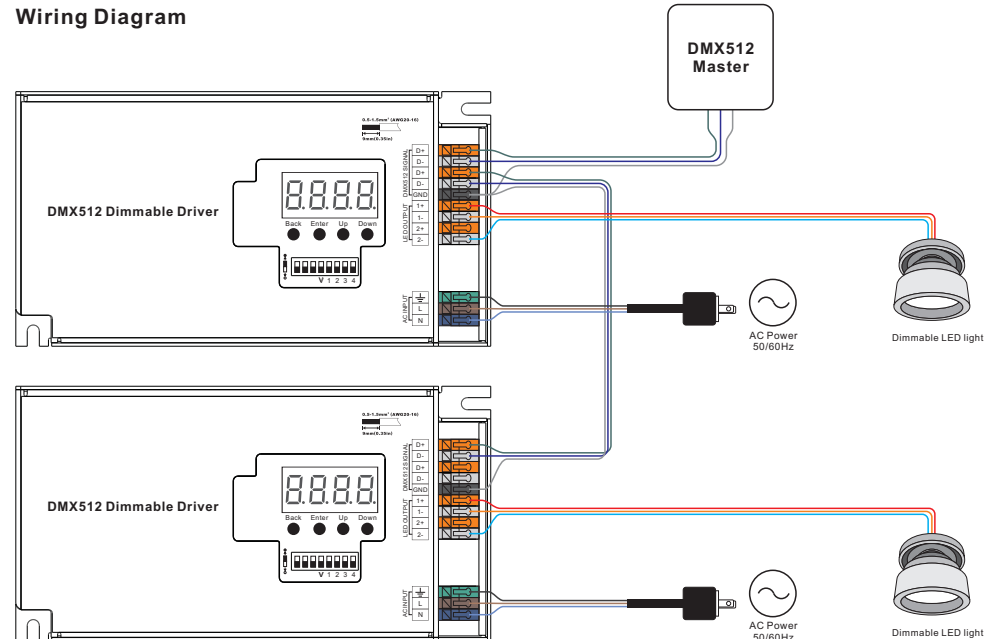Gamma: ga1.5
Decoding Mode: dp1.1

Wiring Diagram

DMX512
Master

0.5-1.5mm² (AWG20-16)
5mm(0.35in)

D+
D-
D+
D-
GND

DMX512 Dimmable Driver

Back Enter Up Down

V 1 2 3 4

DMX512 SIGNAL
LED OUTPUT
1+
1-
2+
2-

AC INPUT
⏚
L
N

AC Power
50/60Hz

Dimmable LED light

0.5-1.5mm² (AWG20-16)
5mm(0.35in)

D+
D-
D+
D-
GND

DMX512 Dimmable Driver

Back Enter Up Down

V 1 2 3 4

DMX512 SIGNAL
LED OUTPUT
1+
1-
2+
2-

AC INPUT
⏚
L
N

AC Power
50/60Hz

Dimmable LED light

Product Dimension

144.00 mm

38.50 mm

78.00 mm