LED DMX512 DECODER CONTROLLER
PRODUCT SERIES DATASHEET

www.88Light.com

LED DMX512 DECODER CONTROLLER

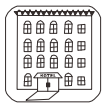
88Light DMX512 Decoder Controller adopts an advanced computer control chip specially designed to control a variety of LED light sources, such as single lamp, flexible strips, wall washer lamp, curtain wall light and so other design lights.


Shopping Mall


Cafe


Living Room

Backlight


Hotel

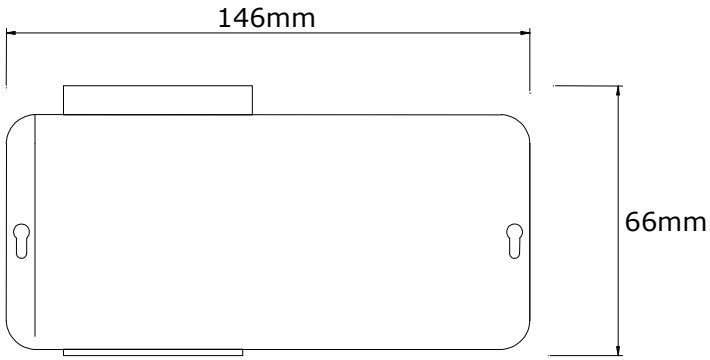
Advertising

PRODUCT FEATURES

- Easy to install and operate.
- Covert digital signal to analog circuit lively.
- Compatible with multiple LED ligthing sources such as Flexible strips, modules, wall washer, curtain wall ligthing, etc.
- It Can be controlled directly by different console.
- Users can define their own device address with the switch.

PRODUCT DIAGRAM

External dimension



TECHNICAL DATA

Technical characteristics

Item	Value	Units
Power consumption	< 0.8	Watts
Output Channel	3/4	---
Working Temperature	-20 to 60	ºC
Input voltage	12-24	Vdc
Output Voltage	0-24V(max voltage according to the input voltage)	PWM Voltage
Max output current	4	A/channel
Ports	4/5	---
Channel style	digital	---
Connector	4/5	2xRJ45, 2xCanon
Address Qty	255(For Standard DMX512)	---
External dimesions	L166xW67×H41	Millimeters

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TECHNICAL DATA

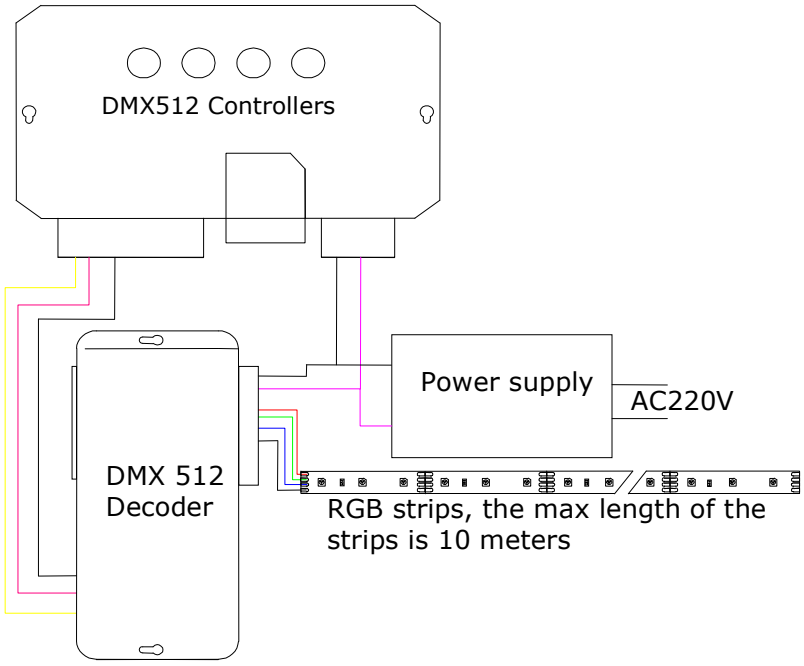
Supported Model

Product Name	Channel Qty	Support Model	Function	Cascadable Qty
88L-DMX-512D-3C	3	DMX512	DMX to Analog circuit	170
88L-DMX-512D-4C	4	DMX512	DMX to Analog circuit	128

Note 1: Always Model 3C is for 3 colors, used for RGB LED lights. Device address should be set with 3 step.
Note 2: Always Model 4C is for 4 colors, used for RGBW LED lights. Device address should be set with 4 step.

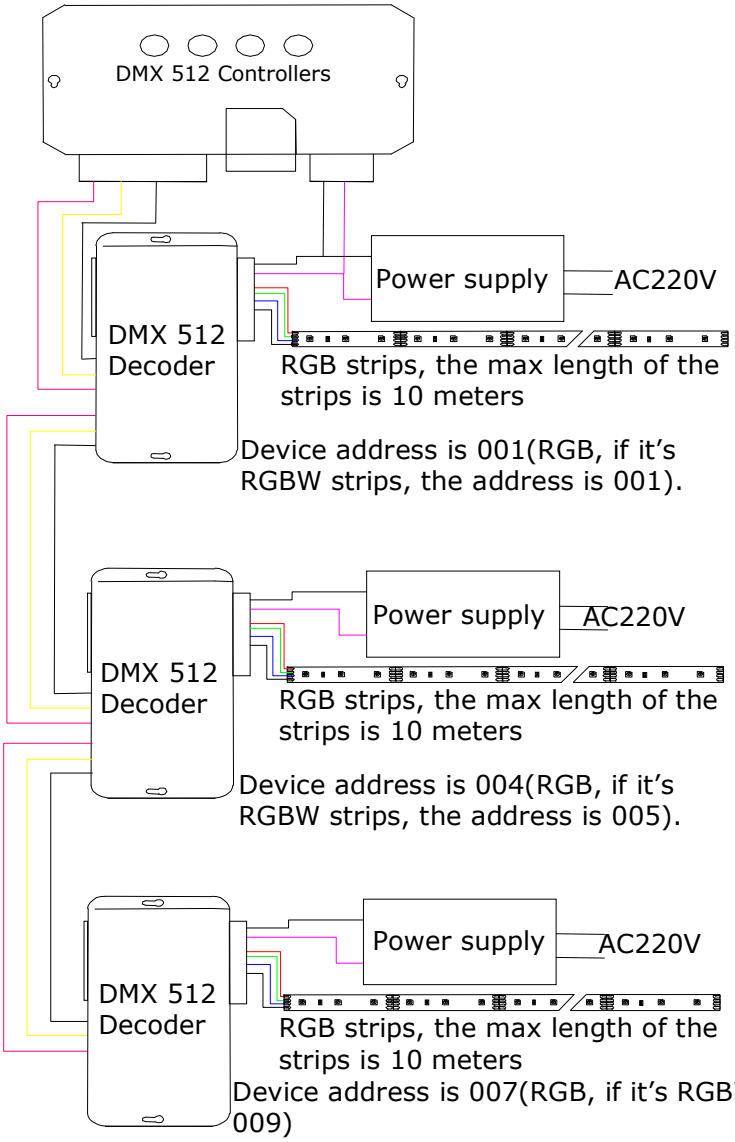
PRODUCT INSTALLATION

Single device installation:



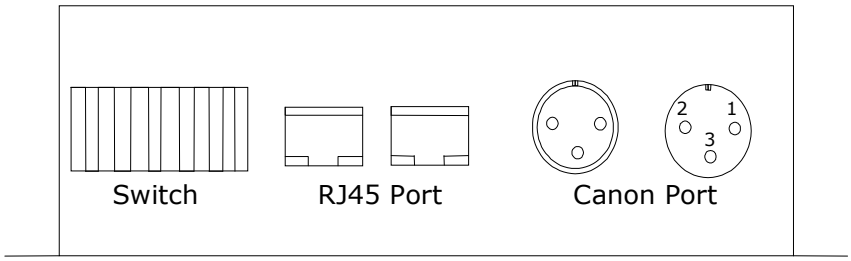
PRODUCT INSTALLATION

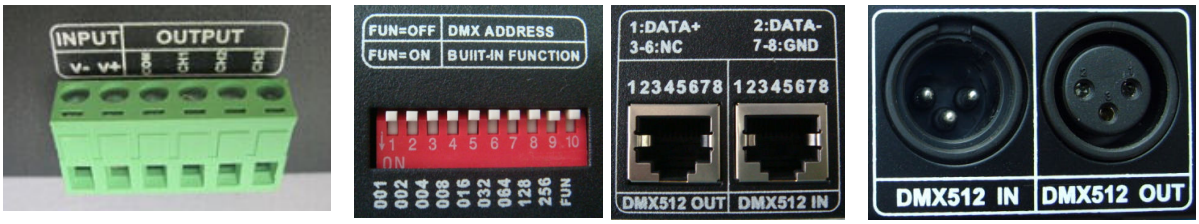
Multiple Device installation:



Notice:
1. Connect the load wire at first, following by the power wire; Please make sure short circuit will not occur between wires before turning the power on;
2. Power supply voltage range is DC5~24V, a higher voltage might burn the controller; a lower voltage might not drive the controller normally.
3. Adjust the switch to set the device address.

PRODUCT OPERATION





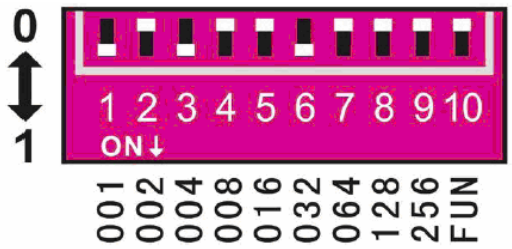
Port and indicator instructions

INPUT: Power input, input voltage is DC 5~24V.
OUTPUT: Channel output, COM is VCC, connected to the V+ of the lamp, CH1, CH2, CH3 connected to the lamp channel; usually it's R, G, and B channel.
SWITH: the adjust switch to set the device address and mode.
RJ45 Port: the digital signal input and output.
Canon Port: 1 Gnd, 2 DMX-, 3 DMX+. (For 88Light-DMX-T1000S DMX- to B, DMX+ to A, GND to GND).

Key instructions

Switch: Set the device address. As below bit table

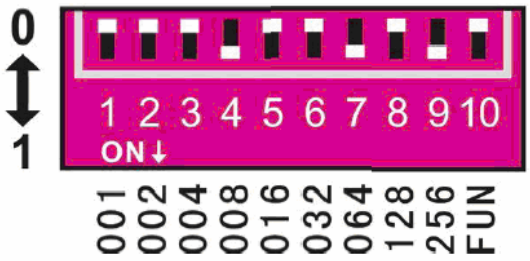
Bit	1	2	3	4	5	6	7	8	9	10
Value	1	2	4	8	16	32	64	128	256	FUN



Picture Bit 1

PRODUCT OPERATION

This controller use standard DMX512-250Kbps .It can search an address automatically or Manually set the device address by the switch.
Automatically address search: All of the switch will be set "off".
Manual address set up: Set No. 10 "off", the Bit quantity increase from 1 to 9 with a 511 total address possibilities. The device address is the sum value of the switch from 1Bit to 9Bit as above Bit table.
For example: As the "picture Bit 1" above, the device is 32+4+1=37.

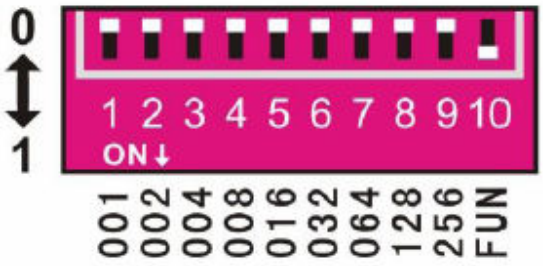


Picture Bit 2

For example: "Picture Bit 2", the address is 256+64+8=328.

Key instructions

Testing Function



Picture Bit 3

As Picture Bit 3 shows, the tenth Bit is FUN. When FUN is "OFF", then the device will decode the DMX signal, when FUN is "ON", the testing function is ON.
If 1-9 bit is off, then it's black.
1=ON, red; 2=ON, green; 3=ON, blue; 4=ON, yellow
5=ON, purple; 6=ON, cyan; 7=ON, white; 8=ON, Jump (8 class speed)
9=ON, Full color fade (8 class speed).

When 8=ON and 9=ON.
1-7 Bit =OFF: the speed is 0;
1=ON, speed 1; 2=ON, speed 2; 3=ON, speed 3 4=ON, speed 4;
5=ON, speed 5; 6=ON, speed 6; 7=ON, speed 7 (the fastest).

SAFETY

1. **Always** consult a qualified, licensed electrician prior to the installation of this product.
2. **Always** pre-test your LED light assembly by connecting it to a power supply and ensure that all components are joined properly before installing.
3. It is recommended that adequate airflow and heat sink be taken into account in the application and installation of this product. Improper thermal management may lead to premature failure.
4. Exceeding the operating temperature values may damage or reduce the product life.
5. Avoid voltage drop by using a dedicated line for each maximum power consumption line.
6. "Voltage drop" is a gradual lessening of power through a wire over a long distance. The farther the light is away from the power source, the more voltage drop will occur. Voltage drop becomes a significant factor in any LED light application when the distance between the lights and the power source exceed the maximum LED light recommendation. Consult a licensed electrician and an online voltage drop calculator to learn what gauge wire will work best for your configuration.
7. The manufacturer rates each power supply for maximum power output at optimum thermal and voltage conditions. As with any power supply, true actual maximum continuous current output depends upon various environmental factors such as ambient temperature, line voltage fluctuations, and orientation that may affect heat dissipation. For optimum performance, make sure the load is between 50% and 80% of the total capacity of the power supply.

PACKING

Product Name	Qty Pcs/box	Carton dimension [Cm]	Box dimensions [mm]	Gross Weight [Kg]
88L-DMX-512D-3C	12	25×25×20	L170×W95×H50	5.9
88L-DMX-512D-4C	12	25×25×20	L170×W95×H50	5.9

OTHER 88Light PRODUCTS:

For more information about 88Light products, or to use our online energy saving calculation software please visit our website

www.88light.com

DISCLAIMER:

88Light reserves the right to modify the design of our products as part of the company's program of continuous improvement. 88Light cannot guarantee to match existing installed product for subsequent orders or replace the product exactly to match the product you are replacing in product appearance, color, or brightness. Specifications are subject to change without notice.