



Specification of LED Fountain Light

1. General Introduction:

LED Fountain Underwater Lighting is ideal for architectural & event illumination & Commercial & Residential fountain projects;

The Fountain Light is widely used in the garden, hotel, square, lake, waterfalls etc. LED Fountain Light is with low power consumption, longer working life. Our LED underwater lights are equipped with super bright LEDs And installed in stainless steel light housing, the LED lights are filled with high quality waterproof material and covered with a clear Glass lens for underwater application; it gives great lighting effect for using in indoor or outdoor fountain, pond, lake, waterfalls or garden.

LED underwater pond light with light color controller Comparing to regular halogen light, The spot fountain light can be used under water or above water, LED light is not a hot light source while halogen light generates much heat when it is in operation.

Our Fountain light/Pond Light are with high bright LEDs, 316 stainless steel as light body for good heat dissipation.

Item: GNH-UW-

Power: 9X1W; 9X3W; 12X1W; 12X3W

Date: Jan. 7th, 2016





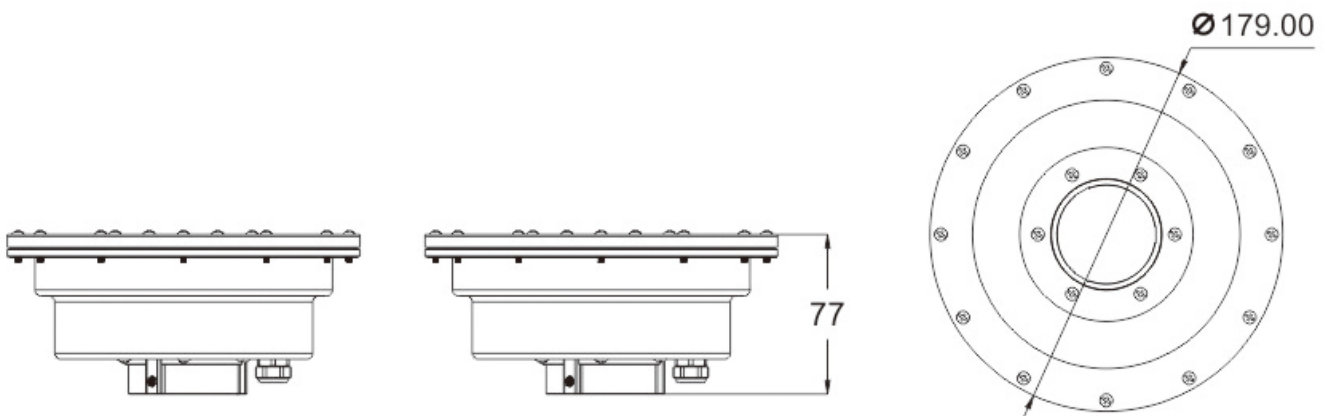
2. Product Introduction

Characteristics

- 2.1 Super Bright LED.
- 2.2 50mm Nozzle hole, adjustable with screws to fit different nozzles.
- 2.3 IP rating: IP68 Water-proof.
- 2.4 High quality 316(V4A) stainless steel lamp body with good heat dissipation
- 2.5 Applicable in chlorine (fresh) or Salt (sea) water.
- 2.6 RGB DMX512 control or other external control etc.
- 2.7 Single color is available: pure white, warm white, cool white, red, green, blue, etc.
- 2.8 Input voltage in AC/DC12V 50-60Hz, safe to use in underwater.

3. Specifications, parameters

3.1 Dimensional Drawing:





3.2 LED lighting technical parameters (***) Note: working temperature is -10-45°C)

Model No.	LED No.	Voltage (AC)	Power	Color	LED style	Flux(LM)	Beam angle	IP Rate
GNH-UW-9*1W	9Pcs	12V AC/DC	9W	Single/RG B	High Power	650Lm	25°/30°/ 45°/60°	IP68
GNH-UW-9*3W	9Pcs	12V AC/DC	15W	Single/RG B	High Power	500Lm	25°/30°/ 45°/60°	IP68
GNH-UW-12*1W	12Pcs	12V AC/DC	12W	Single/RG B	High Power	880Lm	25°/30°/ 45°/60°	IP68
GNH-UW-12*3W	12Pcs	12V AC/DC	18W	Single/RG B	High Power	600LM	25°/30°/ 45°/60°	IP68

3.3 Color control way:

Single color: White (Pure white, warm white, cool white), red, Green, Blue, Yellow

RGB Control way: 5 Kinds of RGB color Change control methods

We have two types of controller for DMX

(1) DMX 512 Control-first type

Input Voltage: 12-24VDC

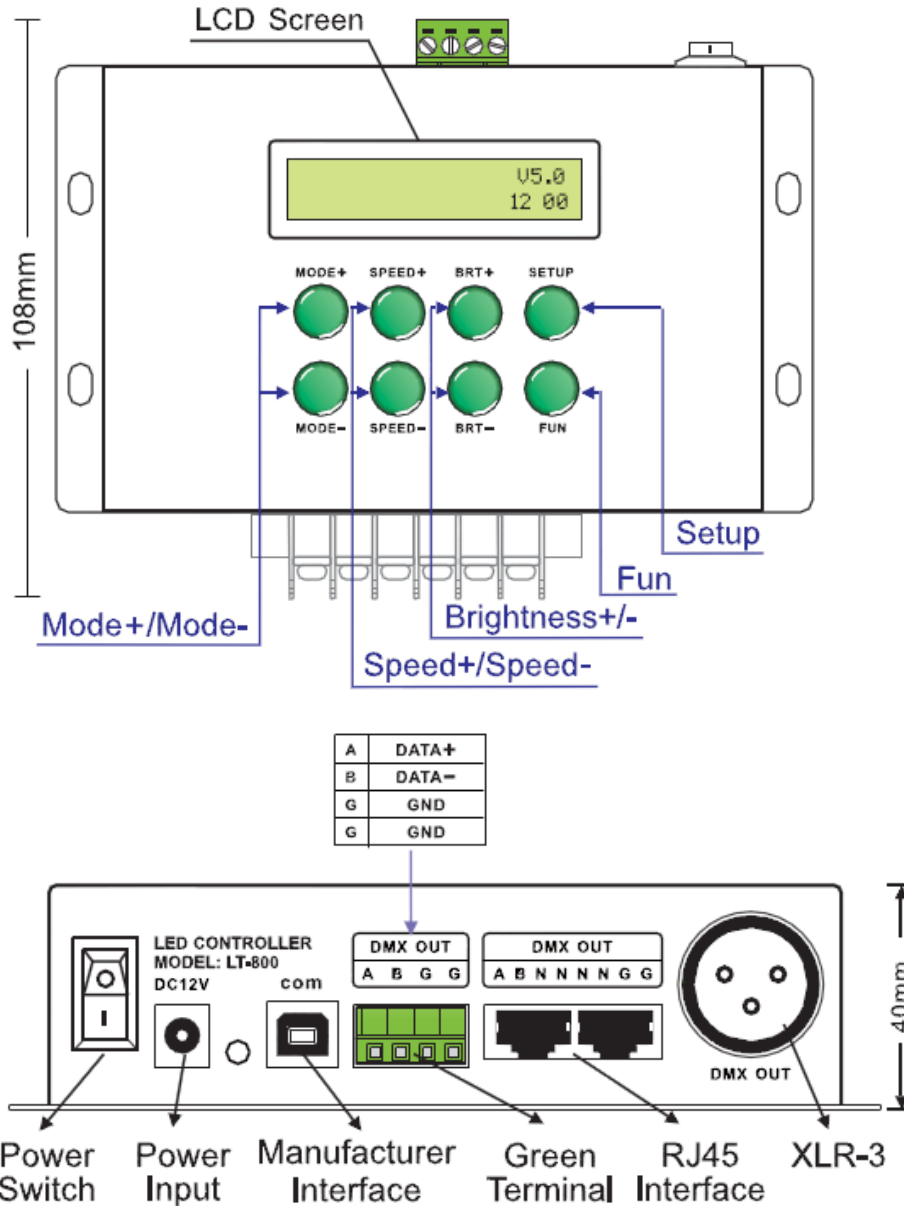
Output Signal: DMX512

Output Loop: 1 Port





Structure Drawing:



SETUP: Short press to adjust movement direction of effect; long press to enter the menu setting interface.

FUN: Short press to switch mode type;

Long press to enter the DMX addressing, meanwhile start learning ID process of RF remote.



Controller:

Setting Key

Short press to switch 8 mode types;
Long press to switch 4 mode directions.

On/Off

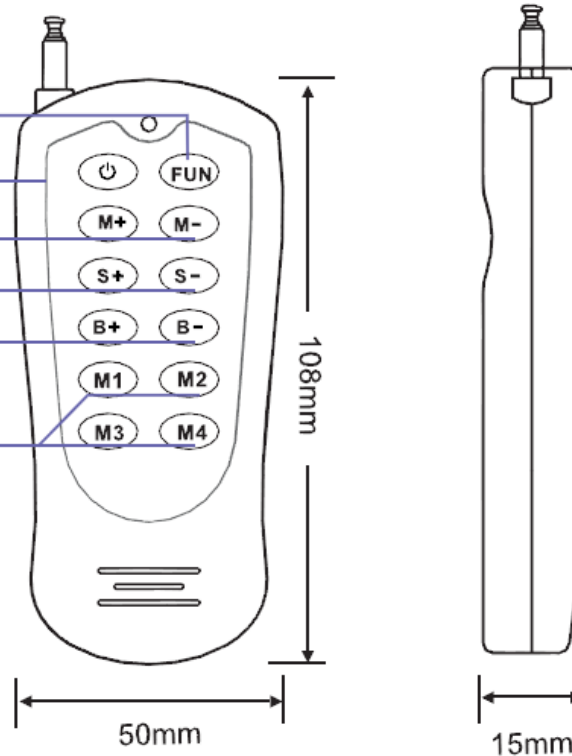
Mode+/Mode-

Speed+/Speed-

BRT+/BRT-

Scene-save keys

Press 2s to save



RF Remote Control

Buzzer on/off: Long press "On/Off" button on the remote.

ID Learning Method:



Long press **FUN** button on the controller for 2 seconds, there is a buzzer beep, keep pressing:

Learning ID: Press any key on the remote in 3 seconds.

Cancelling ID: Press any key on the remote over 3 seconds.



(2) DMX 512 Control-second type



DMX Controller VCC connect to power supply DC+, GND1 connect to power supply DC-

5Wires: Brown wire connects to DMX controller"VCC"

Black wire connects to DMX controller"GND1"

Yellow wire connects to DMX controller"GND2"

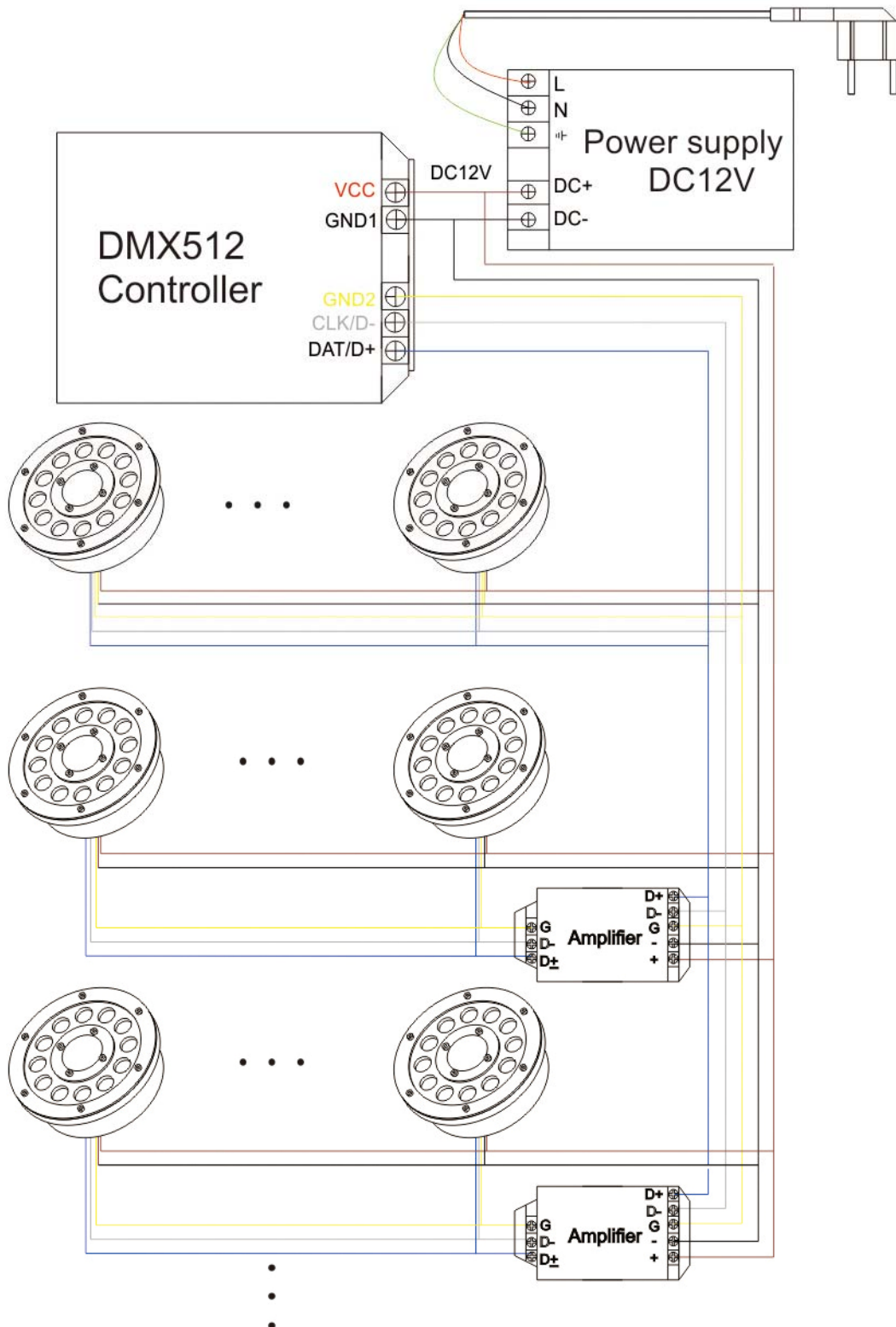
White wire connects to DMX controller"CLK/D-"

Green wire connect to DMX controller"DAT/D+"

1DMX512 controller could connect many lamps, in case of the signal is not strong enough after connect too many lights; you can use the amplifier to enhance the signal.



Diagram of DMX512 control way:





(3) Remote control

RGB Controller



Remote



Amplifier



Input Voltage:12-24VDC

RF Remote Distance:50M

Radio Frequency:433.92MHz

Remote controller Instruction:

Button no.	Function	Button no.	Function
1	On/off	7	Blue
2	Reset/(RGB=white)	8	R+G/G+B/R+B
3	Speed/Brightness+	9	Dynamic change: (R-G) /(G-B)/ (R-B)
4	Speed/Brightness-	10	Dynamic change: (R-G-B/Colorful Change
5	Red	11	Fading: R-G-B
6	Green	12	Colorful Fading

RGB Controller Instruction:

Button	Function	Button	Function
On/Off:	Switch on/off	Speed/Brightness+:	increase speed or brightness
Speed/Brightness-:	decrease speed or brightness	RGB Pattern:	change RGB pattern

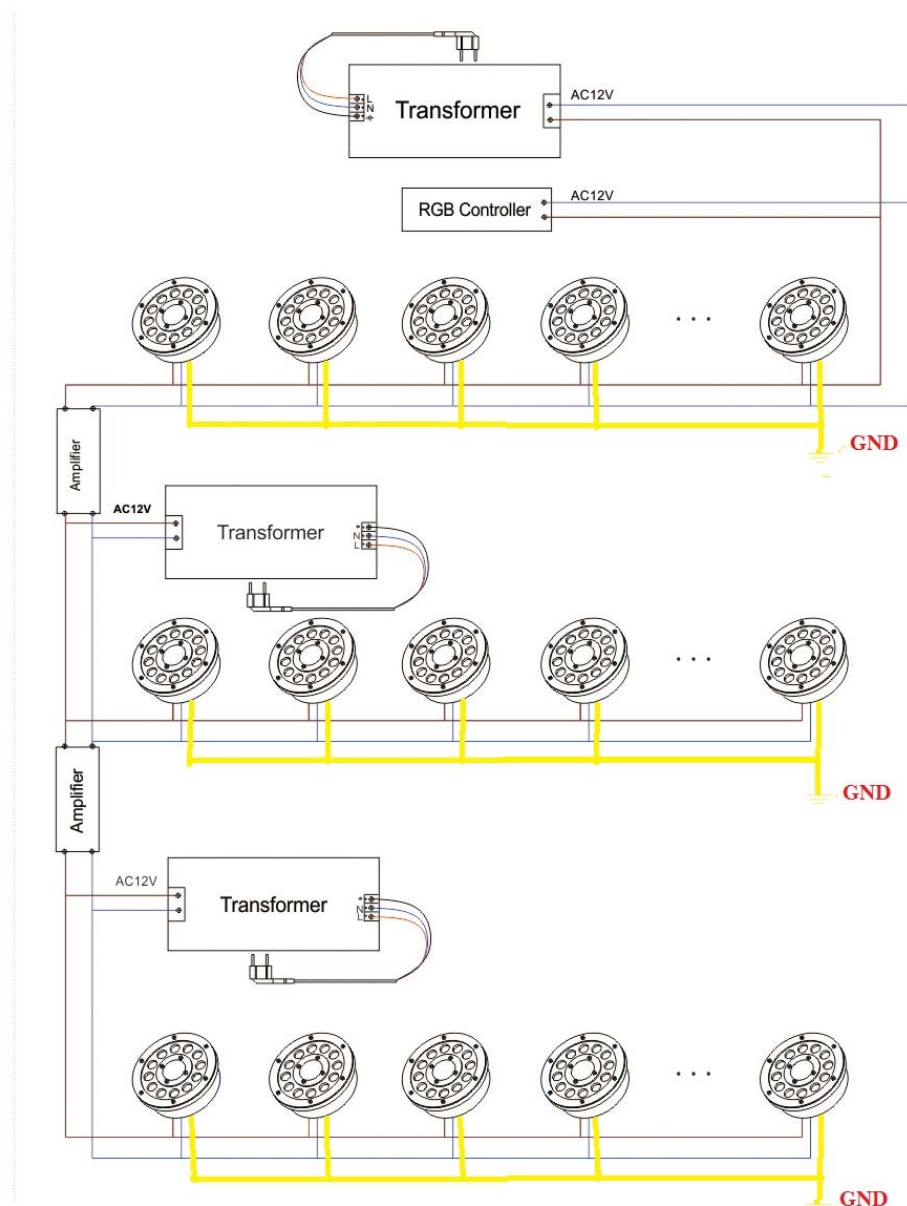


Simply connect live and neutral wires onto any one of wires of the lamp.

Step 1: Connect RGB controller to power line as below diagram

Step 2: Connect lamps to power line as below diagram

Remark: RGB signal is strong enough within 100 meters wire and 1RGB controller could connect 20pcs lamps, in case above 20pcs lamps, use Amplifier to enhance the signal, 1 Amplifier could connect 10pcs lamps, make sure the power wire is big enough to carry enough voltage(12V AC) in order to avoid voltage drop, see connection diagram of remote control way as below.





(4) External Control

This control method means external control by LED RGB controller, it is 4 wires cable connection, could control RGB change pattern both by RGB controller manually and remote.



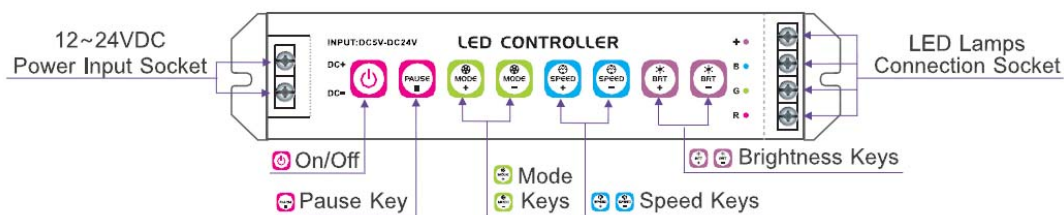
Input Voltage: 12-24VDC

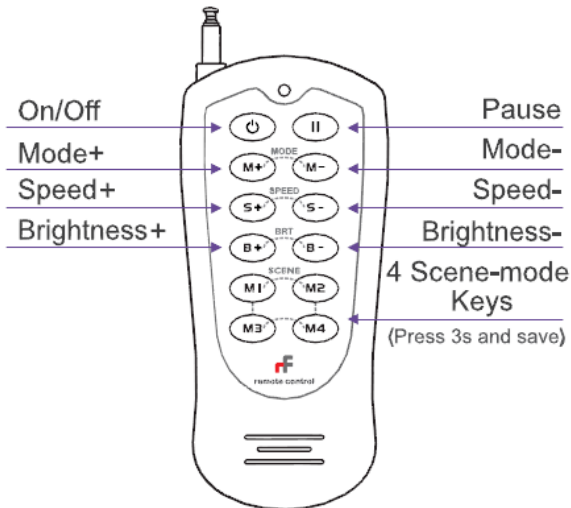
RF Remote Distance: 100M

Radio Frequency: 433.92MHz

Detail for function Key:

8 function keys on the receiver, which is corresponding to the first 8 buttons on the RF remote: namely **ON/OFF**, **PAUSE**, **MODE+**, **MODE-**, **SPEED+**, **SPEED-**, **BRT+**, **BRT-**.





Other Functions:

- Press PAUSE in 3S, the buzzer can be on or off.
- Press MODE+ for 3S to auto loop play all the modes.
- Press MODE- for 3S to 4 scene modes. Merely play the changing modes, the static color will be skipped.
- Press SPEED+ for 3S, all speed change is restored to default status.
- Press SPEED- for 3S, the current change is restored to default status.

ID Learning Method:

Learning ID: Press "On/Off" key on the receiver for 3S, the buzzer long beep and the green light will be on, release the key, press any button on the remote, when the green light turns off means activated.

Cancelling ID: Press "On/off" Key on the receiver for 5Sm the buzzer long beep, the green light will be on and flash once, meanwhile press any button on the remote, when the green light flashes several times means ID canceled (do not release the "On/Off" key during the process).

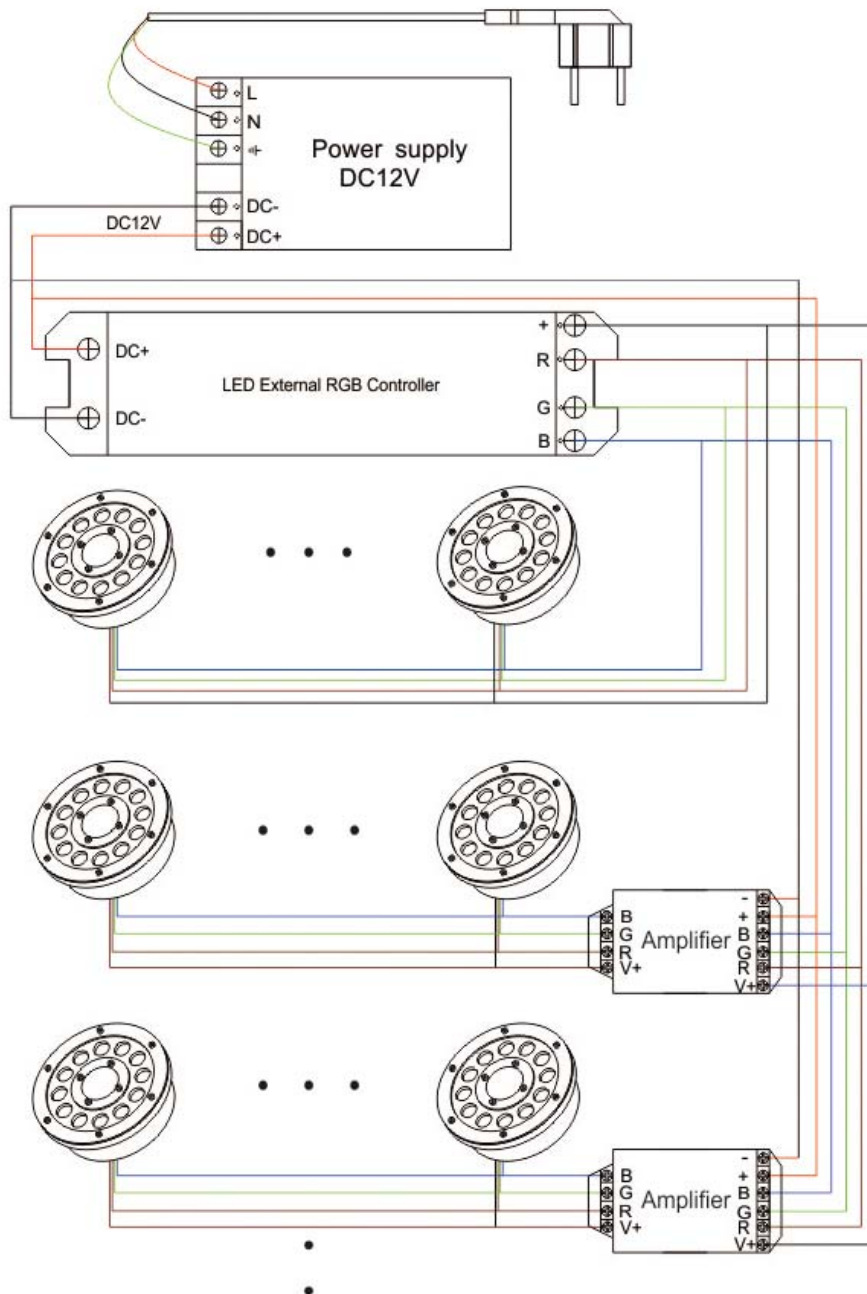
Connection:

Connect Power supply(12VDC) to one end(DC+, DC-) of LED RGB wire controller, then another end(+, G,G,R port) of LED RGB wire controller connect to 4 wires(V,B,G,R) of lamp as diagram below.

RGB Controller power is 200W, if total lamp wattage is over 180W, need to add Amplifier to enhance RGB signal.



Diagram of external control way:





(5) WIFI Control

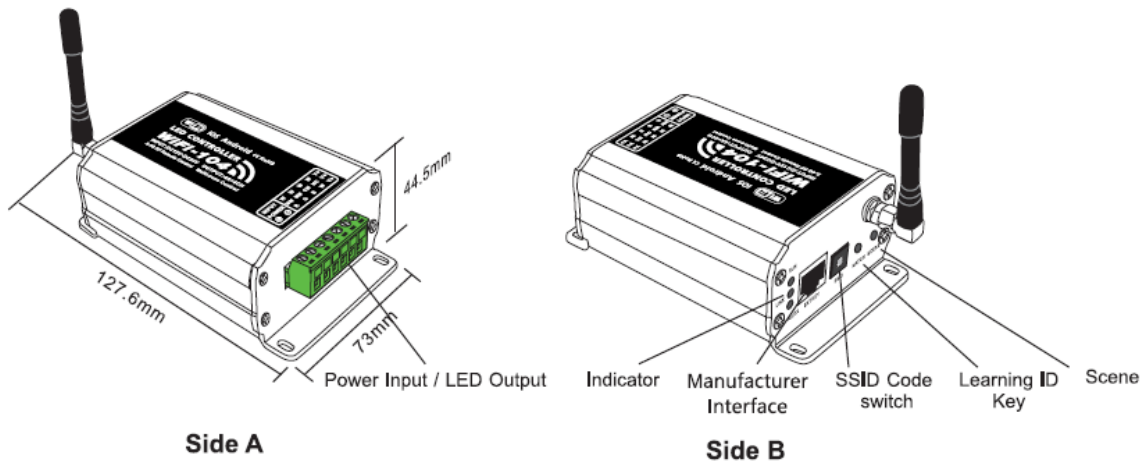


Input Voltage: 12-24VDC

Communication Standard: 2.4GHz, 802, 11b/g/m Protocol

WIFI Control Distance: 100M (Distance of cross-eyed)

1. Configuration Diagram

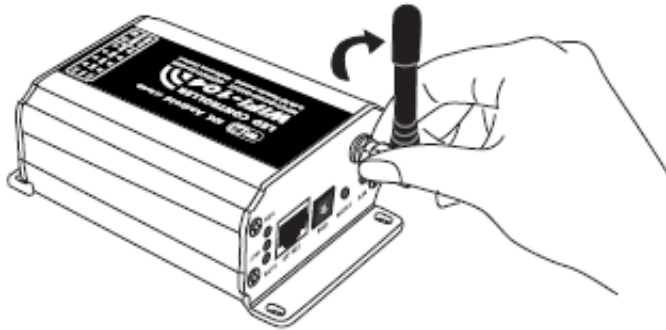




2. Controller Operating Instructions

Install/Uninstall ANT

Clockwise to install the WIFI ANT, counter clockwise to take off.



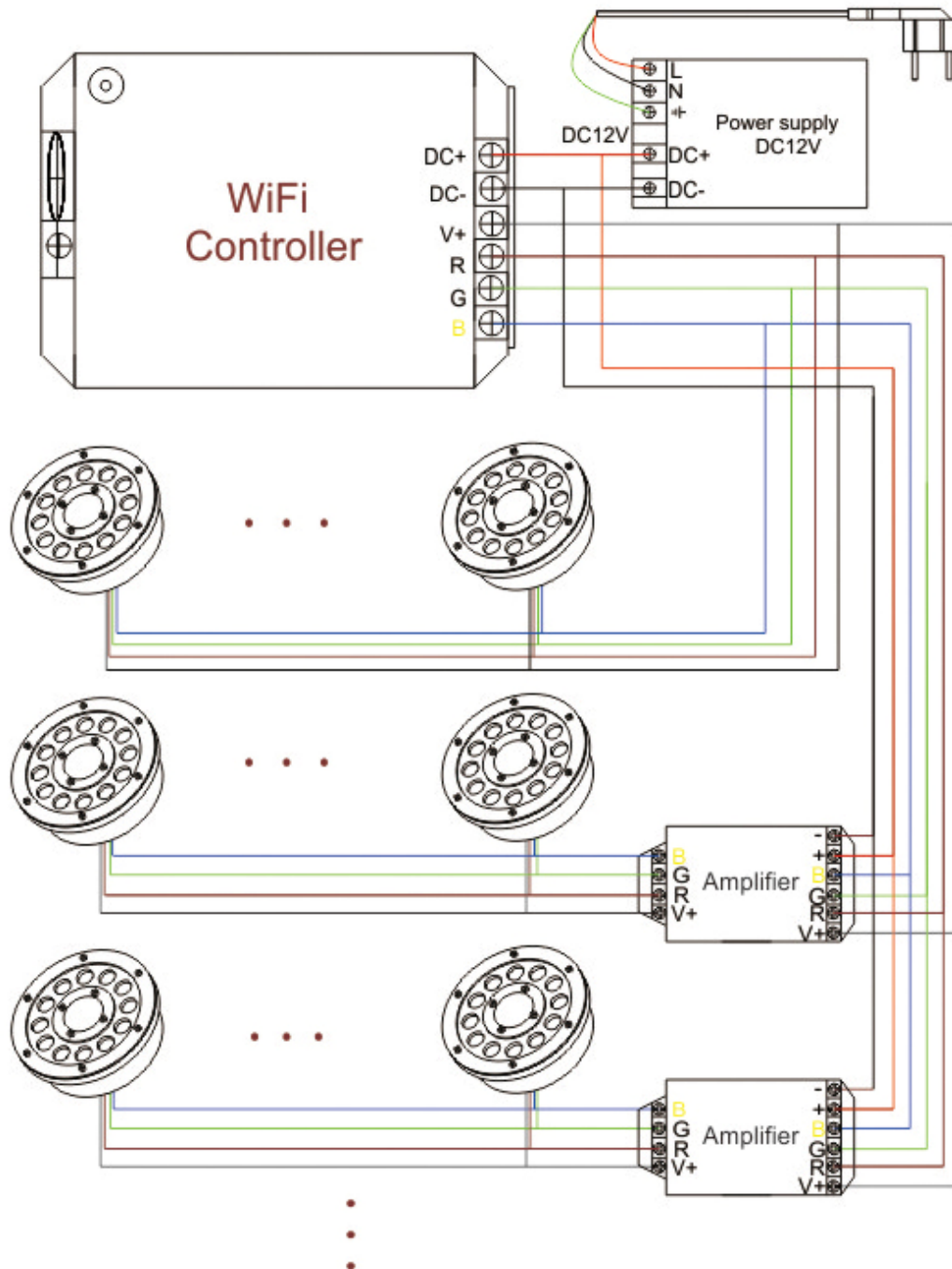
ANT installation instruction

Indicator Light Instructions:

Indicator Light	Instructions
Run	It flashes quickly about 25S during the electric initialization, Flashes once per second after initialization
Link	It keeps on when the mobile device connects to WIFI-104, and turns off when disconnected.
RX/TX	It turns on when the controller receives or transmits the WIFI data. Turns off in the free time.



Diagram of WiFi control way:

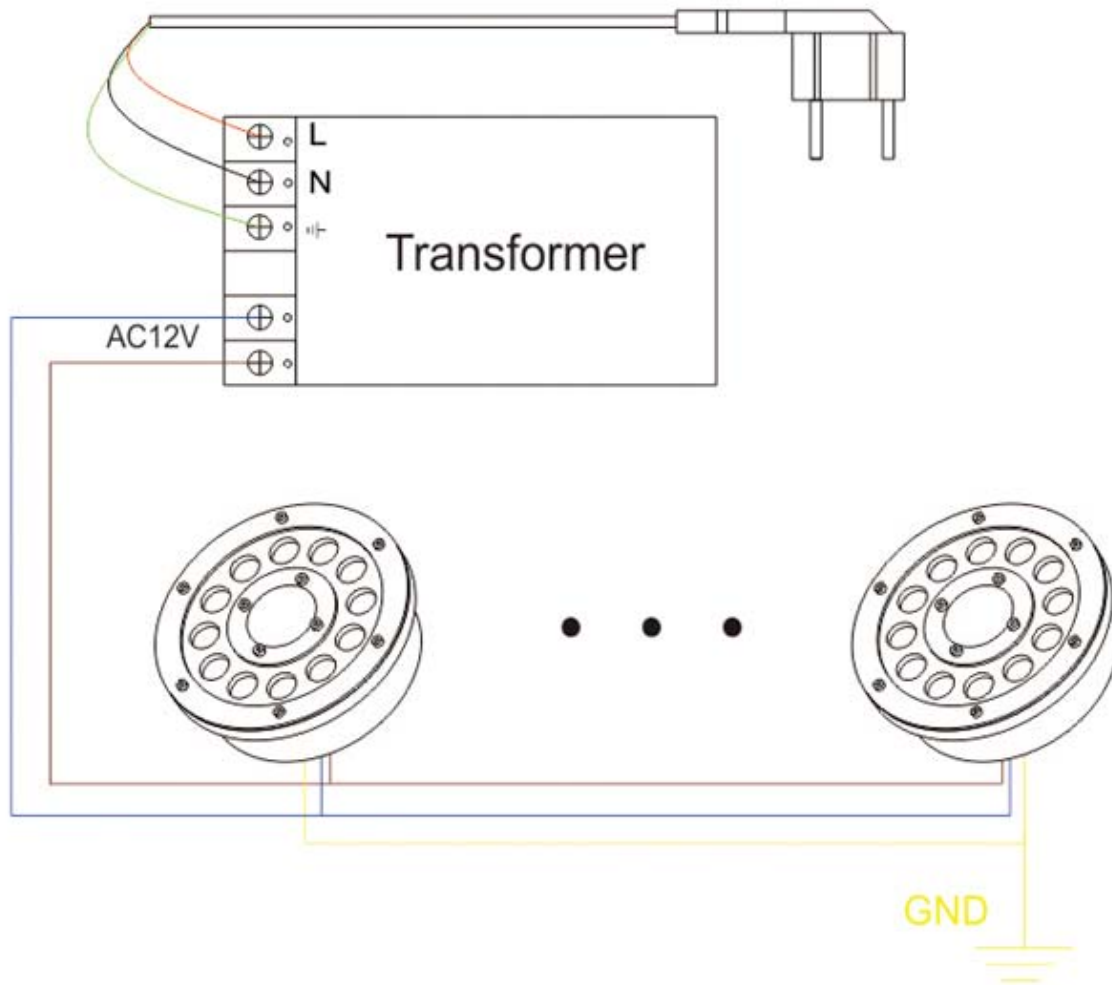




(6) Automatic Control & Single color

Simply connect live and neutral wires onto any one of wires of the lamp.

Diagram:

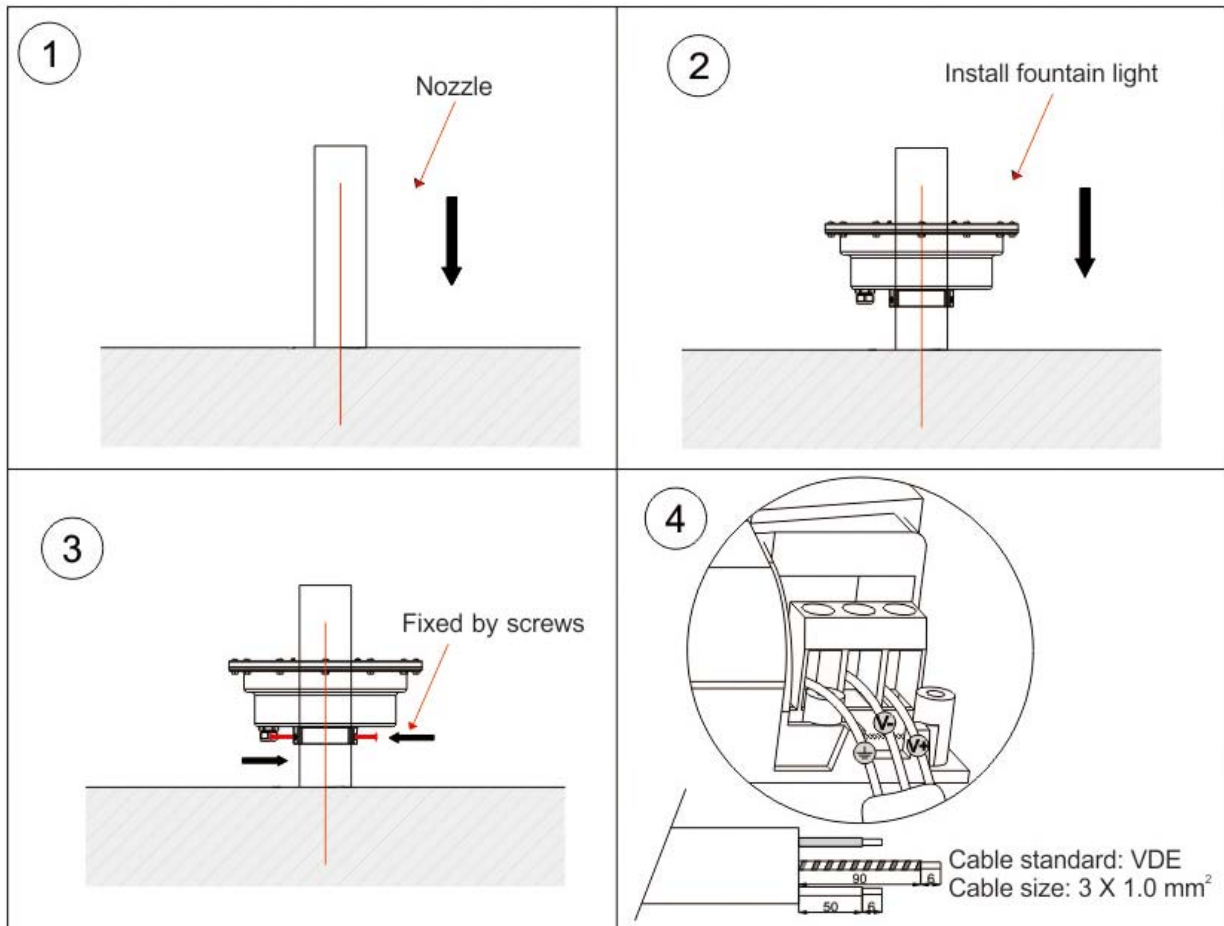


4.Packing way:

Part No.	Package dimension
GNH-UW-9*3W	1pc in a white box, 20 pcs in master carton(65x45x42cm) ; N.W.: 31 kgs



5. Installation Instruction:



Caution:

Fountain light need to be used in underwater.

Fountain light requires toroidal transformer, electronic transformer is not applicable.



Greenough

Greenough Enterprises Co., Ltd.

LED luminaries Manufacturer and Exporter

6.Applications:

The Fountain Light and the Pond light are widely used in Fountains, Swimming Pools, Ponds & Gardens. Ideal for architectural or event illumination.

