Specification of Concrete Pool Light

1. General Introduction:

Surface mounted pool lights are widely used for concrete, fiberglass and vinyl pools.

The underwater pool and pond lights usually comes in 12V IP68 waterproof. The RGB pool lights are widely used in pools, spas, and commercial underwater areas or other high end residential pools. .

Waterproof wall mounted pool lights can be in single color or RGB color or RGBW colors with remote control.

Usually the pool lights or resin pool lights is with DIP chips or Cree high powers, also with PC housing.

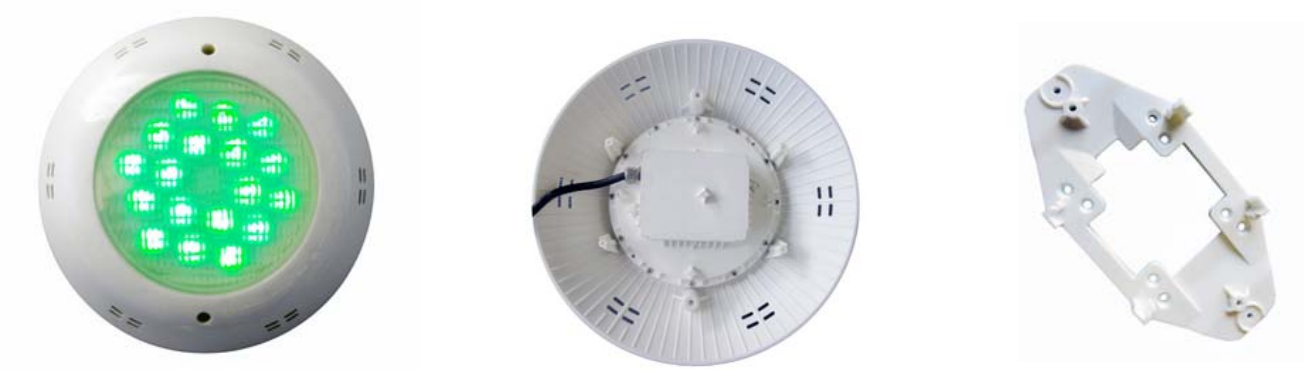
The RGB pool light can be connected with many lights together, with WIFI control or remote control, you can change the color by I phone, IPAD or other controllers.

The wall mounted pool light is widely used for concrete pools.

Item: GNH-Par56-

Power:25W; 19W; 18W;15W;21W;12W;13W;

Date: Jan. 7th, 2016



Concrete wall mounted pool light

2. Product Introduction

Characteristics

2.1 Super Bright LED.

2.2 Easy to install..

2.3 IP rating: IP68 Water-proof.

2.4 Full PC steel lamp body with good heat dissipation

2.5 Applicable in chlorine (fresh) or Salt (sea) water.

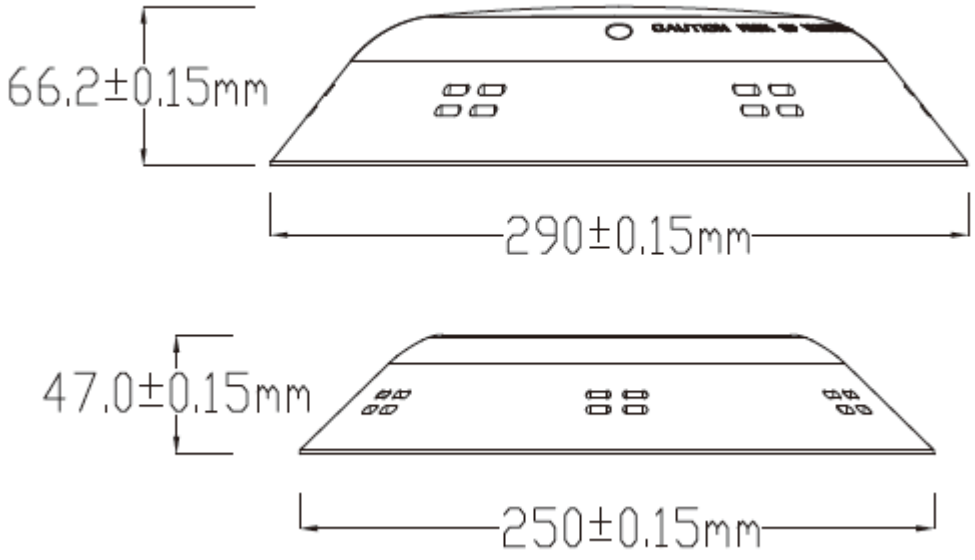
2.6 RGB DMX512 control or other external control etc.

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

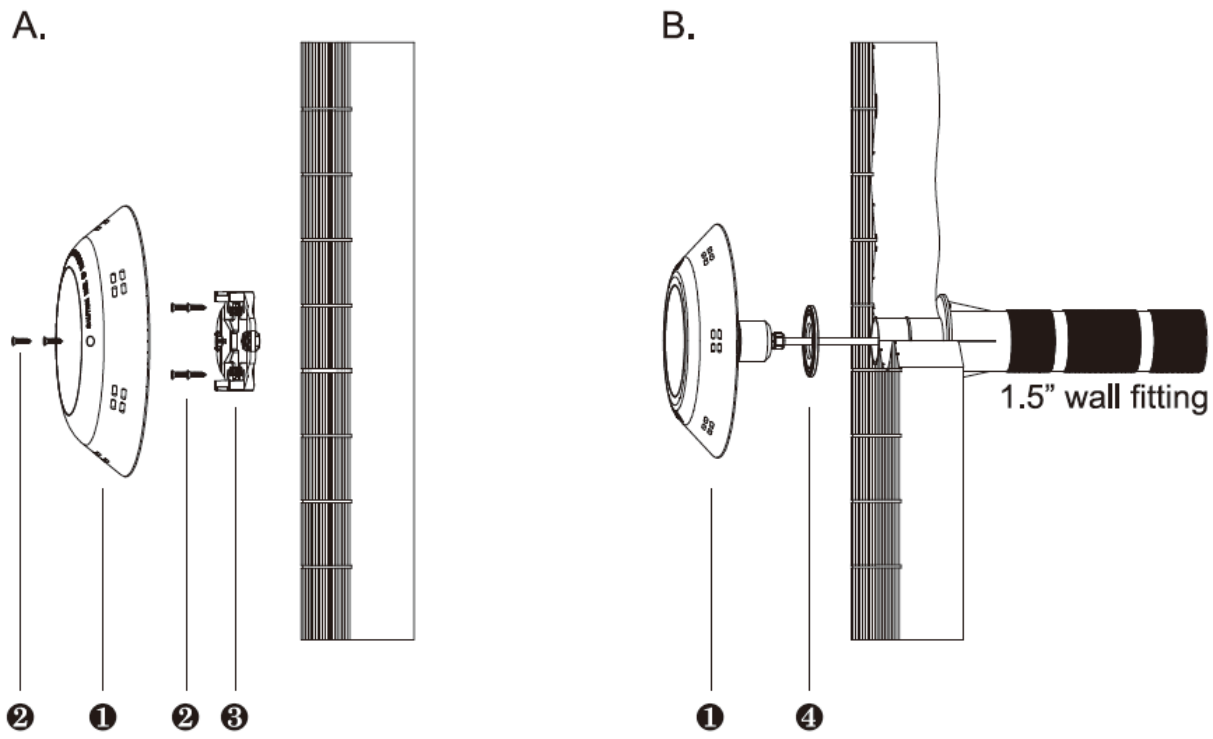
3.1 Dimensional Drawing:

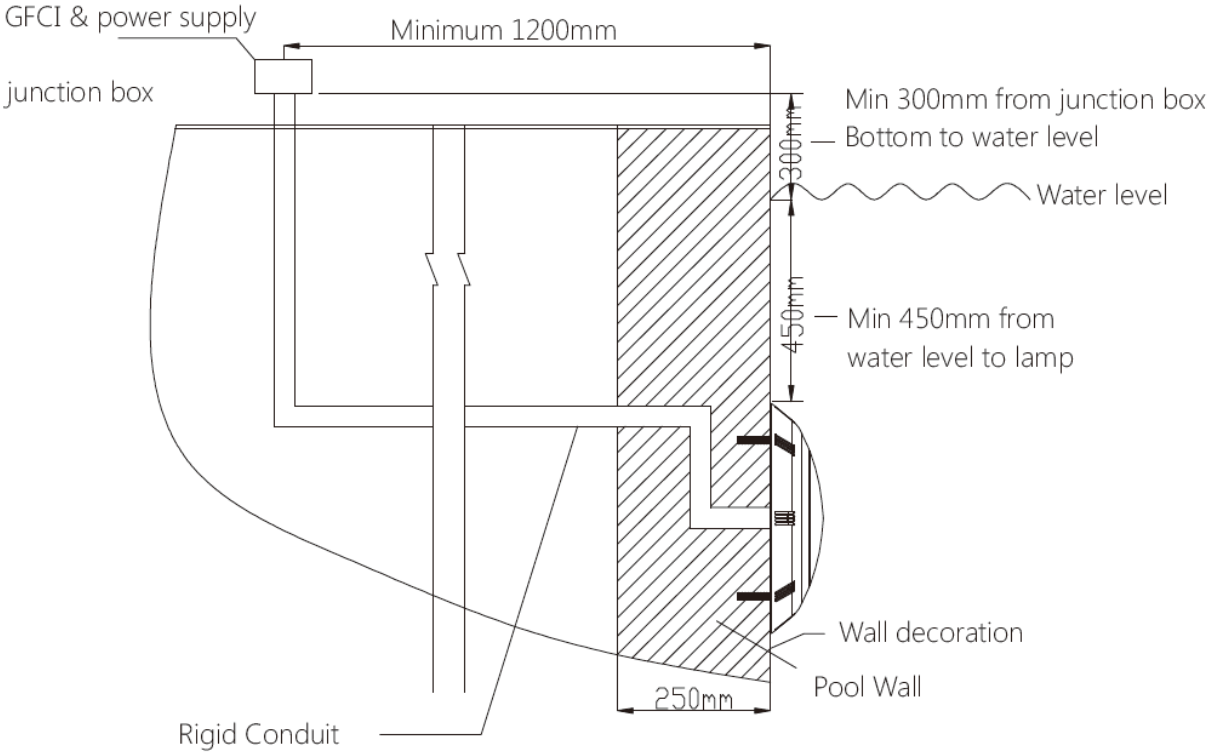


3.2 LED lighting technical parameters (*** Note: working temperature is -10-45℃)

Model No.	LED No.	Voltage(AC/DC)	Power	Color	LED style	Flux(LM)	Beam angle	IP Rate
GNH-P56B-18*3W-V1	18Pcs	12V	25W	Single/RGB	High Power	1600Lm	15° /25° /30° /45° /60°	IP68
GNH-P56B-P56M-18*1W-V1	18Pcs	12V	19W	Single/RGB	High Power	1200Lm	15° /25° /30° /45° /60°	IP68
GNH-P56M-105S5-V1	105Pcs	12V	18W	Single/RGB	5050SMD	1200Lm	120°	IP68
GNH-P56M-252D5-V1	252Pcs	12V	15W	Single/RGB	3528SMD	900Lm	120°	IP68
GNH-P56M-315D5-V1	315Pcs	12V	18W	Single/RGB	3258SMD/ DIP	1200Lm	120°	IP68
GNH--P56M-20*1W-V1	48Pcs	12V	21W	Single	5730SMD	1550Lm	25° /120°	IP68
GNH-P56M-12*1W-V1(SMD5730)	24Pcs	12V	12W	Single	5730SMD	850Lm	120°	IP68
GNH-P56M-12*1W-V1(SMD5050)	72Pcs	12V	26W	Single	5050SMD	820Lm	120°	IP68

3.3. Installation Way:





4. Color control way:

(1)DMX RGB controller

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

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

Step 2:Connect lamps to power line and DMX controller as below diagram

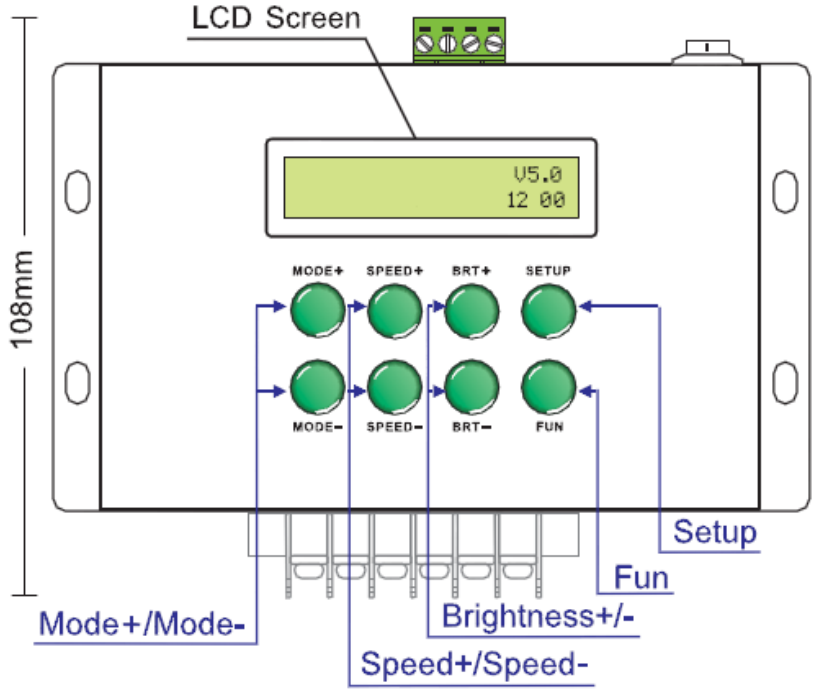
1-1 DMX 512 Control-first type

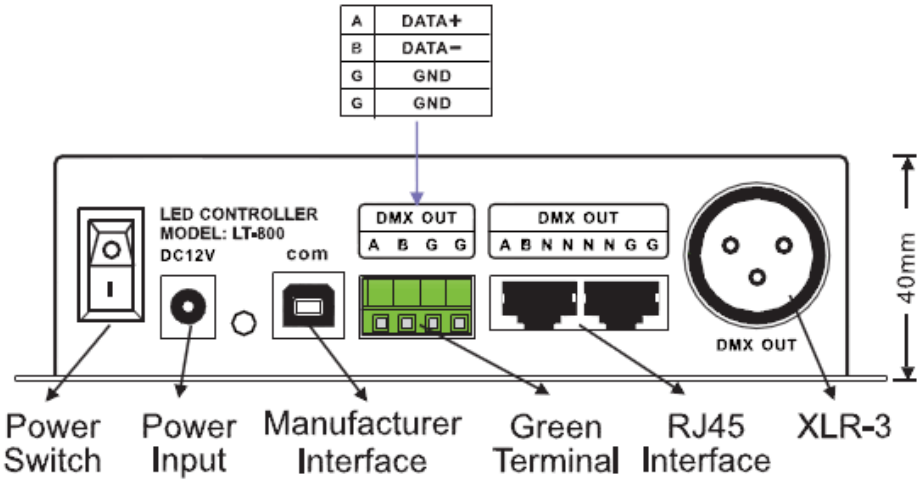
Input Voltage: 12-24VDC

Output Signal: DMX512

Output Loop: 1 Port

Structure Drawing:



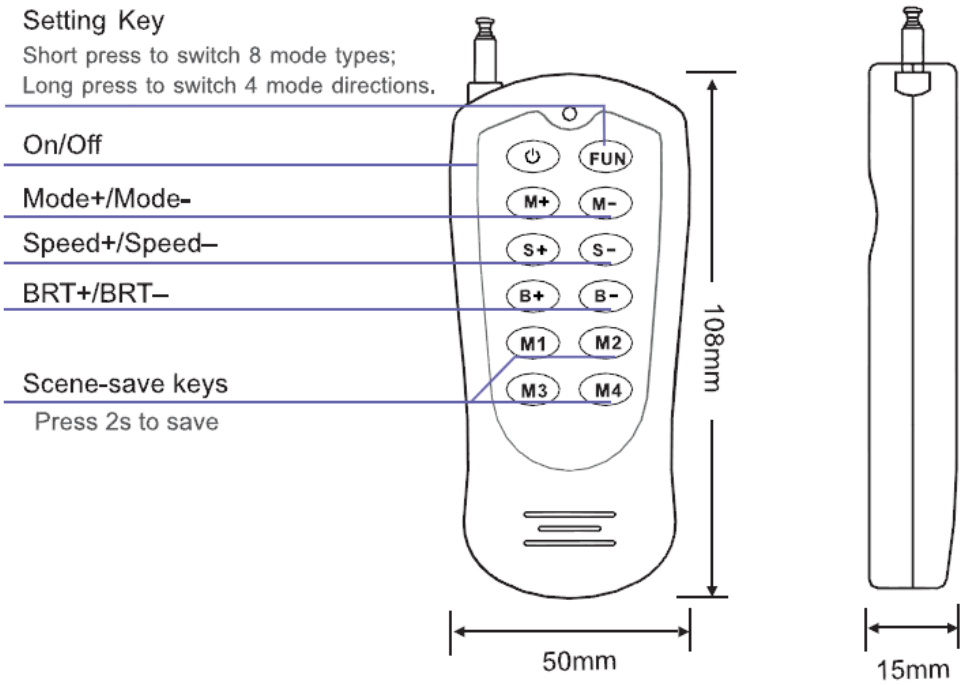


SETUP: Short press to adjust movement direction of effect; long press to enter the menu setting interface.

FUN: Short press to switch mode type;

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

Controller:



RF Remote Control

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

ID Learning Method:

Long press 

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.

1-2: 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”

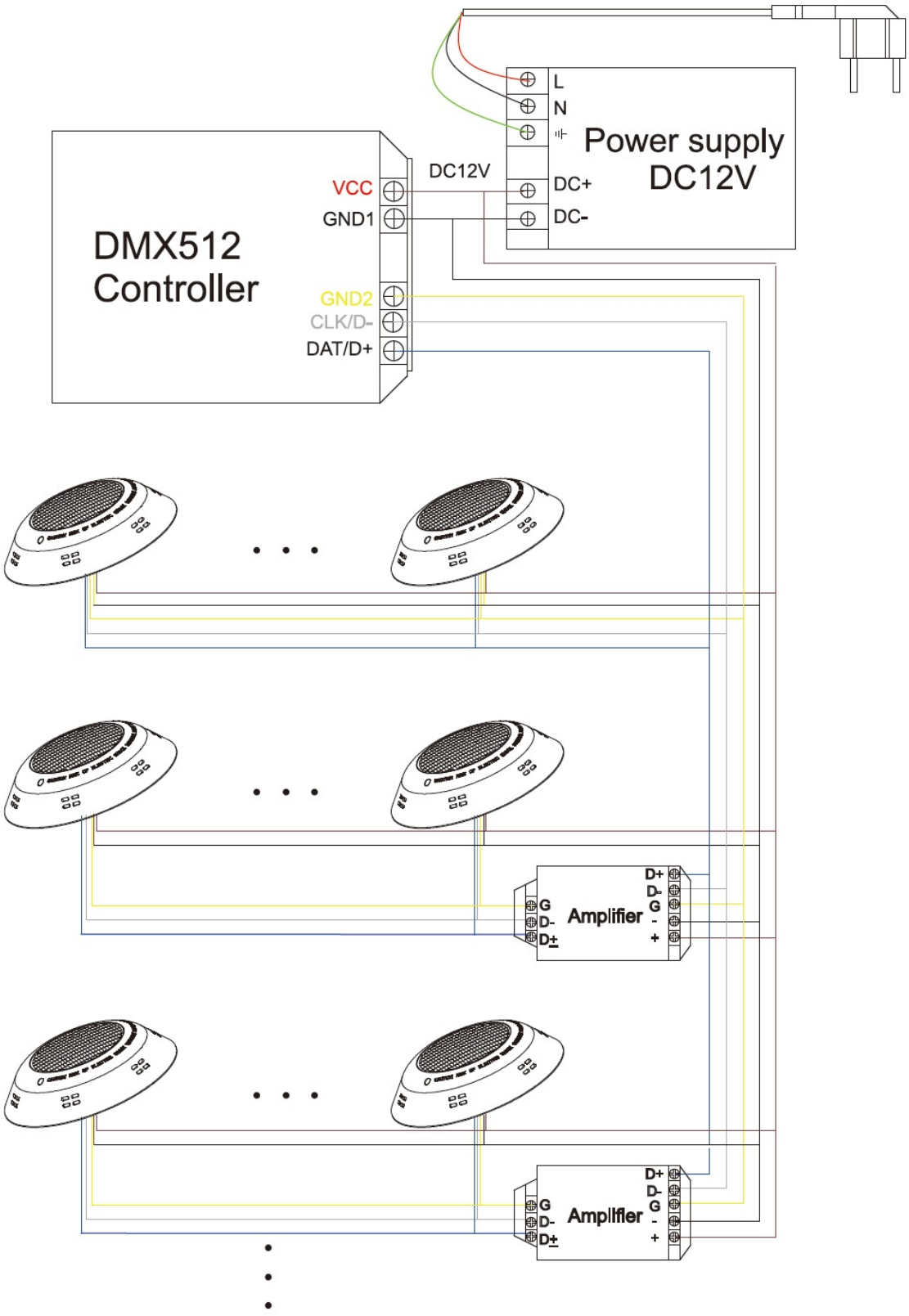
Yellow wire connects to DMX controller”GND2”

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:



(2)Remote control

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

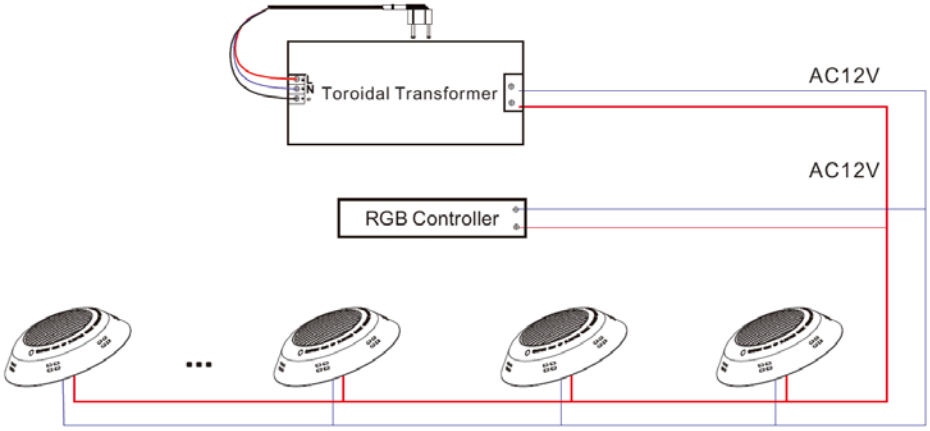
RGB Controller Instruction:

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

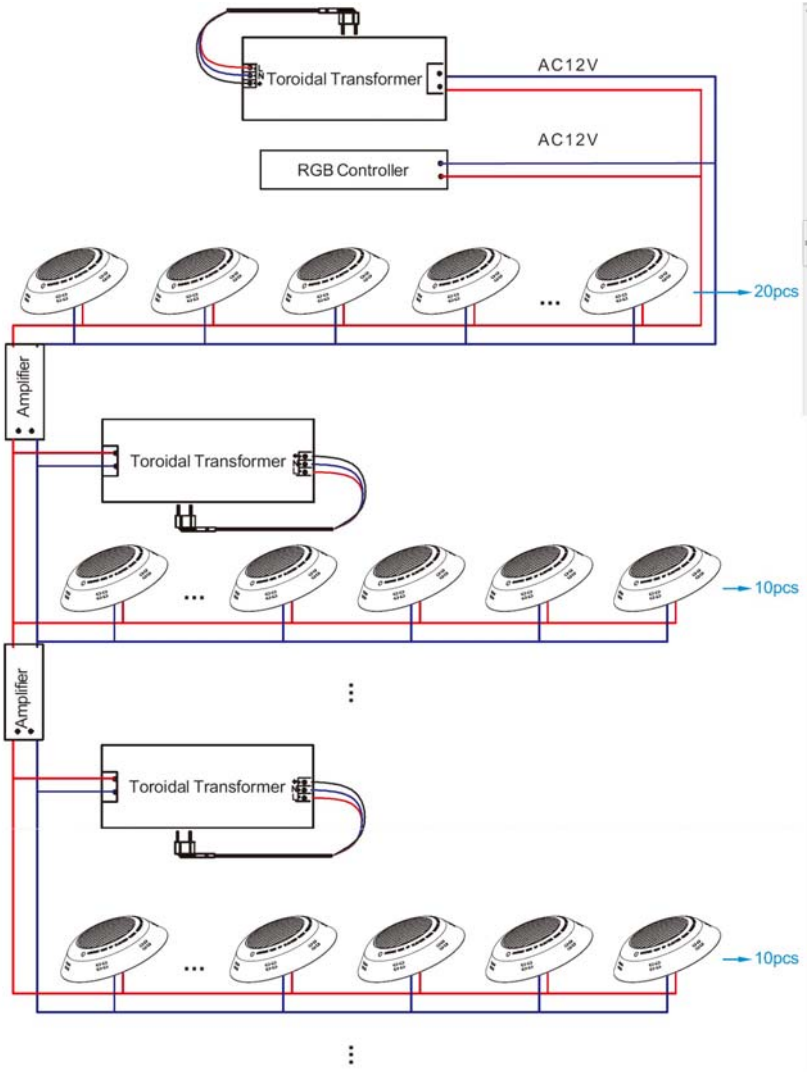
Remark: RGB signal is strong enough within 100 meters wire and 1RGB controller could connect 20pcs lamps, in case above 20pcs lamps, use Amplifier to enhance the signal, 1 Amplifier could connect 10pcs lamps, make sure the power wire is big enough to carry enough voltage (12V AC) in order to avoid voltage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

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



(3)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.

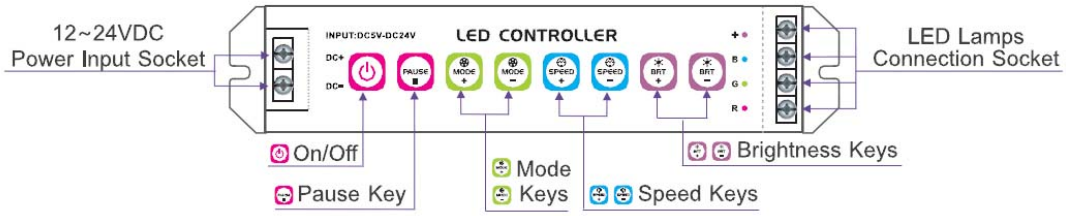
Input Voltage: 12-24VDC

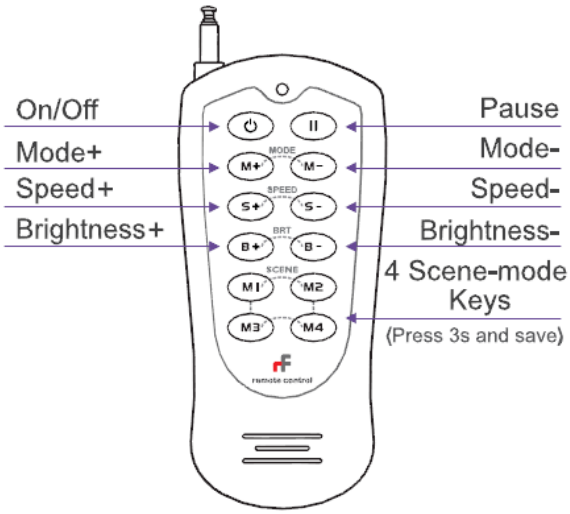
RF Remote Distance: 100M

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:

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

ID Learning Method:

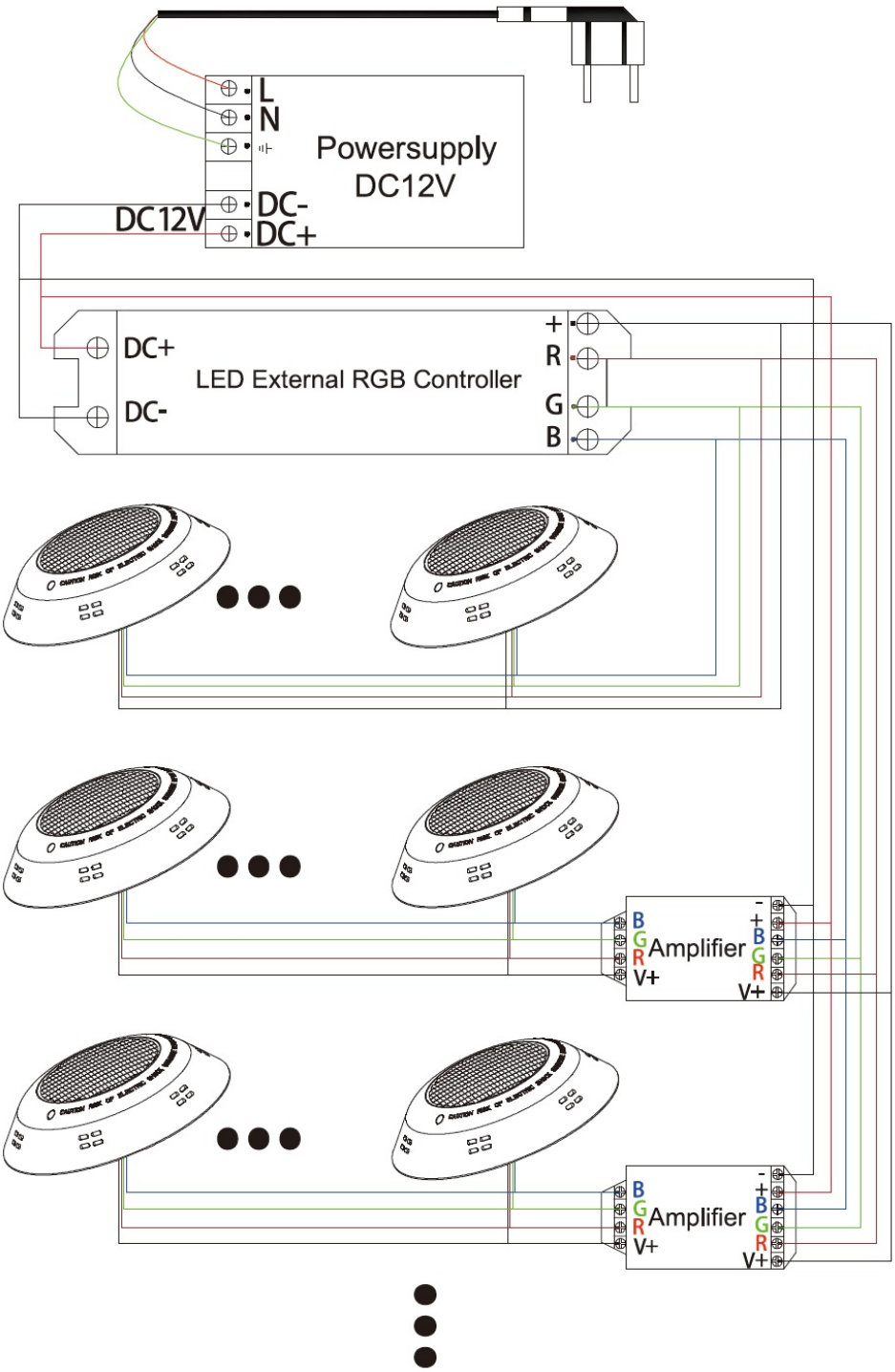
Learning ID: Press “0n/Off” key on the receiver for 3S, the buzzer long beep and the green light will be on, release the key, press any button on the remote, when the green light turns off means activated.

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).

Step 1: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.

Remark: 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:



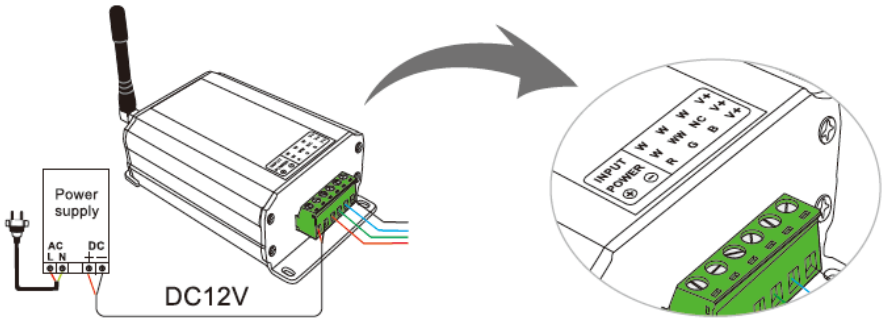
(4)WIFI Control

Input Voltage: 12DC

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

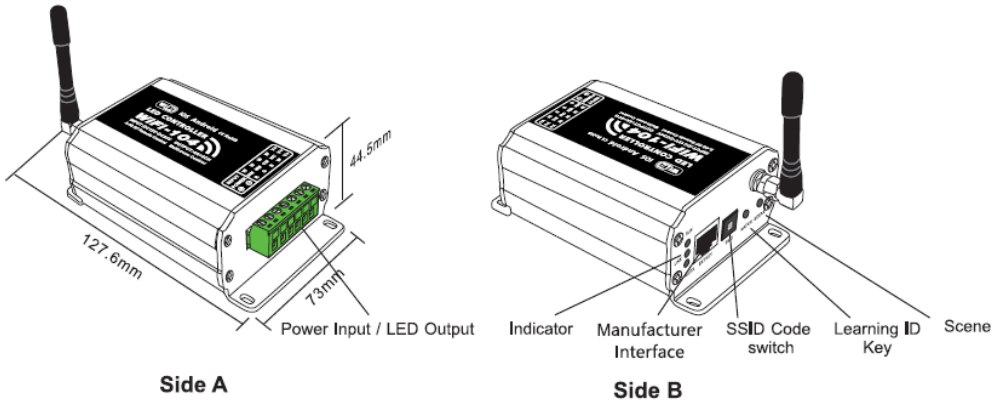
WIFI Control Distance: 100M (Distance of cross-eyed)

Step 1: Connect Power supply(12V DC) to Input Power(DC+,DC-) of LED WIFI controller, then(V+,B,G,R) port of LED WIFI controller connect to 4 wires(V+,B,G,R) of lamp (with housing) as diagram below.



Remark: WIFI RGB controller power is 100W, if total lamp wattage is above 100W, need to add Amplifier(150W) to enhance RGB signal.

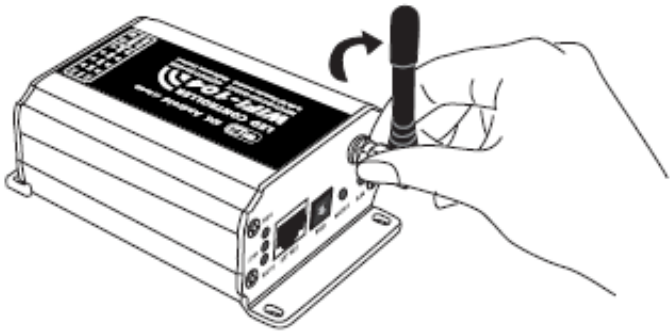
1. Configuration Diagram



2. Controller Operating Instructions

Install/Uninstall ANT

Clockwise to install the WIFI ANT, conter clock wise to take off.

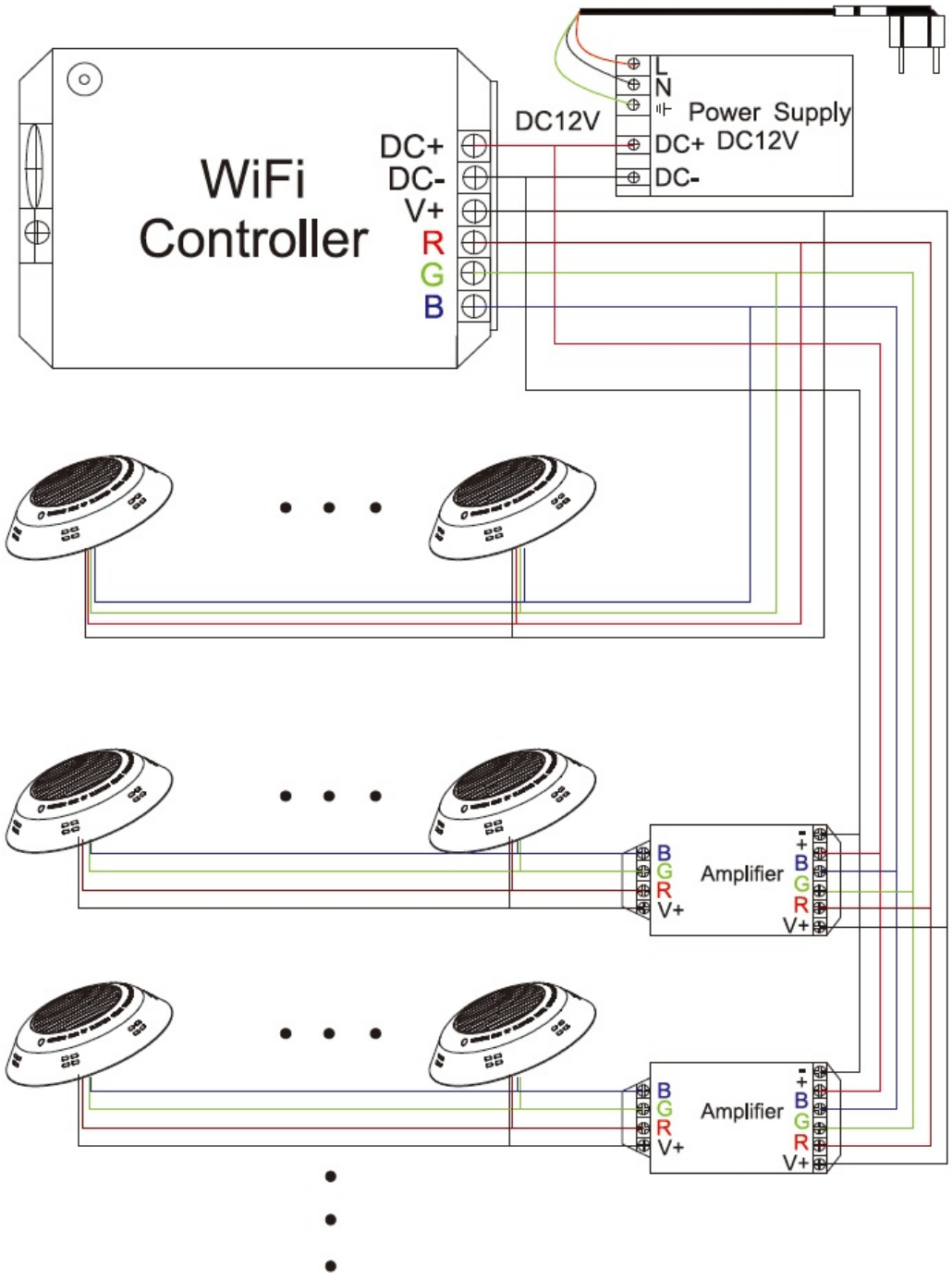


ANT installation instruction

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.

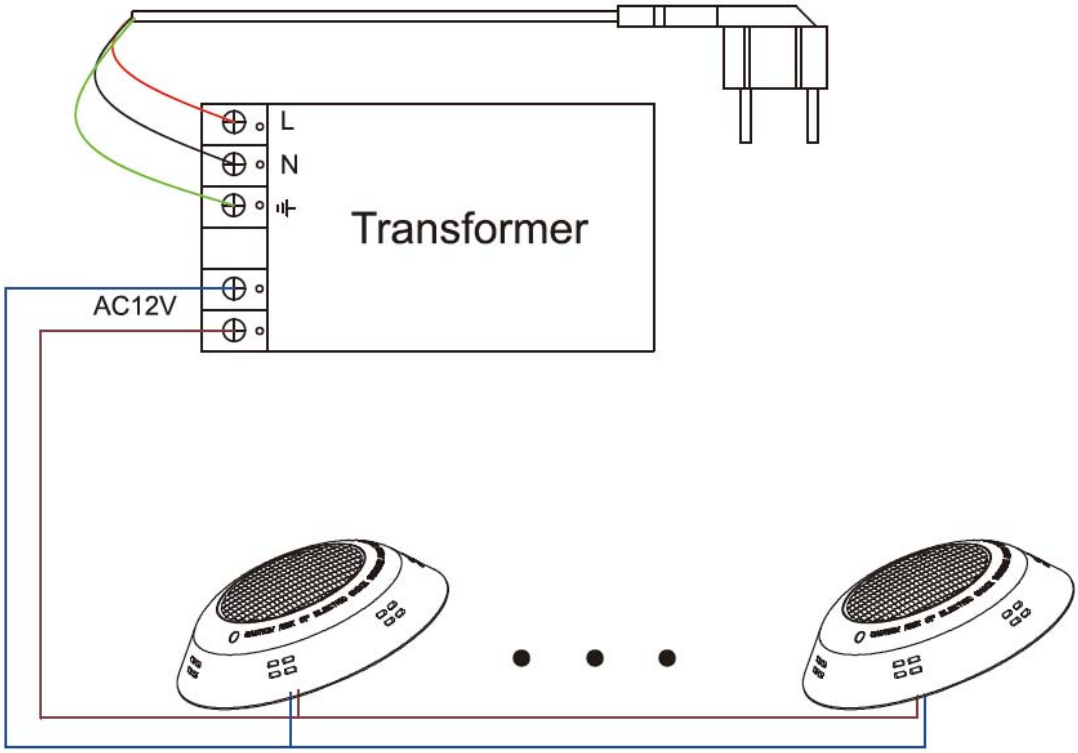
Diagram of WiFi control way:



(5)Automatic Control & Single color

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

Step 1: connect lamps as below diagram:



(6) RF remot & switch control

Simply connect live and neutral wires onto any one of scrrew terminals on base of the lamp.

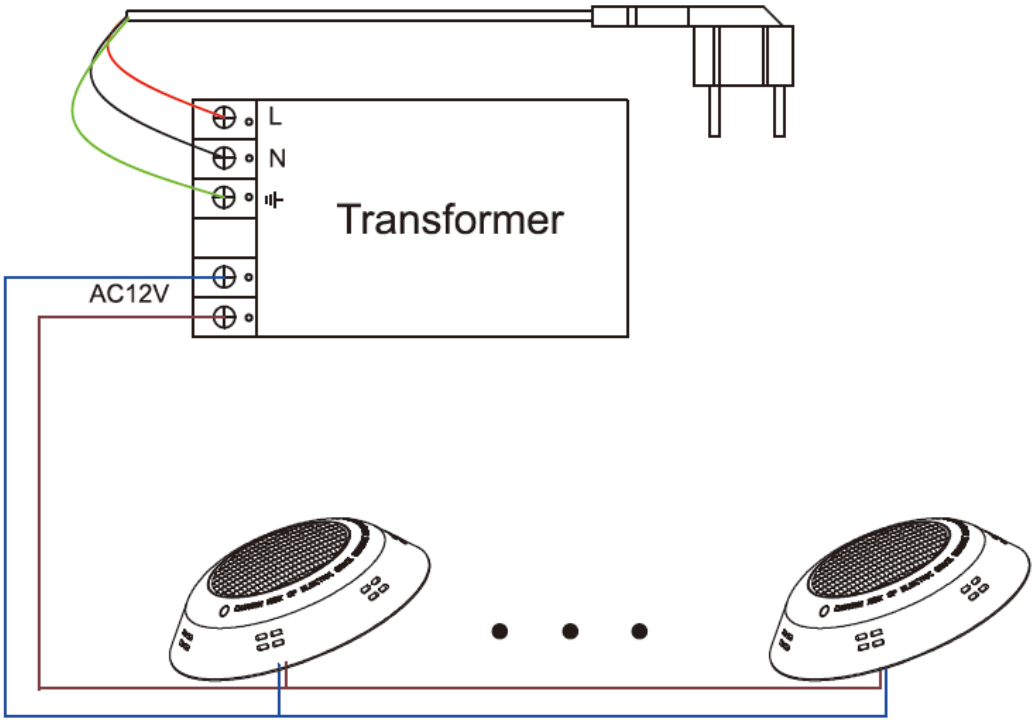
Input Voltage:12-24VDC

RF Remote Distance:50M

Radio Frequency:433.92MHz

Instructions of The Remote Control Button			
Key	Instruction	Key	Instruction
A	Mode change(14 programs)	C	Slow down in"fading effect" &"Dynamic color changing" mode-Reset the lamp by press 5S+decrease brightness in solid color
B	Speed up in "fading effect" &"Dynamic color changing" mode, increase brightness in solid color	D	Switch on/off by press 1-2S
Note: Remote effective distance is 50 meters, to control lamps in distance of more than 50 meters, use switch control instead of remote control. Change mode by switch on/off.			
14 RGB Programs: Red; Green; Blue; R+G; G+B; R+G+B; Dynamic change; R-G; G-B; R-B; R-G-B; Colorful R-G-B Fading; Colorful fading;			

Step 1:connect lamps as below diagram



5.Packing way:

Part No.	Package dimension
GNH-PAR56-	20 Pcs/Ctn ,Carton Size:64.5x40.5x40.5Cm ; G.W:25.00Kgs

6.Applications:

Application for concrete LED Swimming Pool Light:

Exterior structure; fountain; Pool, Spa space etc