PAR56 LED
Swimming Pool Lamp User Manual

Plastic

Aluminum

316 (V4A)
Stainless Steel

IP68 C E FC RoHS ERP R&TTE

[CAUTION]

⚠ PAR56 POOL LAMP NEED TO BE USED UNDER WATER.

⚠ PAR56 POOL LAMP REQUIRES TOROIDAL TRANSFORMER, ELECTRONIC TRANSFORMER IS NOT APPLICABLE.
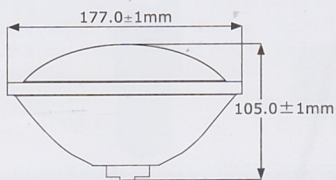
Main parameters:

[CAUTION]

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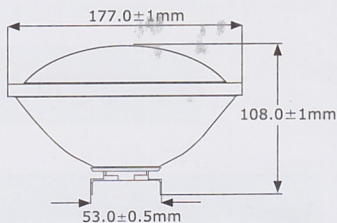| Specification	Parameter			
Model No.	P56B-105S5	P56B-252D5	P56B-315D5	P56B-12X1W
Input Voltage	AC/DC 12V	AC/DC 12V	AC/DC 12V	AC/DC 12V
Input Frequence	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Power	18±1W(white) 17±1W(RGB)	15±1W(white) 14±1W(RGB)	18±1W(white) 17±1W(RGB)	13±1W(white)
Working temperature	-10-60℃	-10-60℃	-10-60℃	-10-60℃

Specification	Parameter			
Model No.	P56B-20X1W SMD5730	P56B-35X1W SMD5730	P56B-20X1W 20W COB	P56B-35X1W 35W COB
Input Voltage	AC/DC 12V	AC/DC 12V	AC/DC 12V	AC/DC 12V
Input Frequence	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Power	21±1W	35±1.5W	21±1W	35±1.5W
Working temperature	-10-60℃	-10-60℃	-10-60℃	-10-60℃

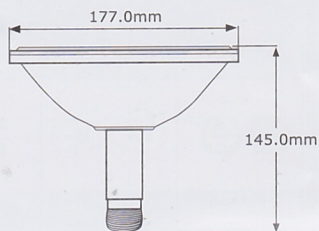| Specification	Parameter		
Model No.	P56B-18X1W	P56B-12X3W	P56B-18X3W
Input Voltage	AC/DC 12V	AC 12V	AC 12V
Input Frequence	50/60 Hz	50/60 Hz	50/60 Hz
Power	19±1W(white) 18±1W(RGB)	21±1W(RGB)	25±1.5 W(RGB)
Working temperature	-10-60℃	-10-60℃	-10-60℃

(1) Screw Terminal dimension

177.0±1mm

105.0±1mm

(2) G53 base dimension

177.0±1mm

108.0±1mm

53.0±0.5mm

(3) GX16D base dimension

177.0±1mm

125.0±1mm

16.0±0.50mm
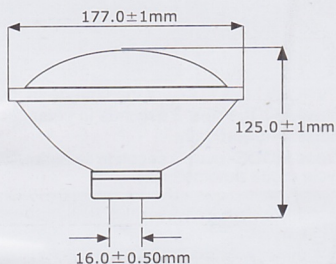
(4) E27 base dimension

177.0mm

145.0mm

Connection Diagram (1): RGB Remote control (with RGB controller)

Simply connect live and neutral wires onto any one of screw terminals on base of the lamp.
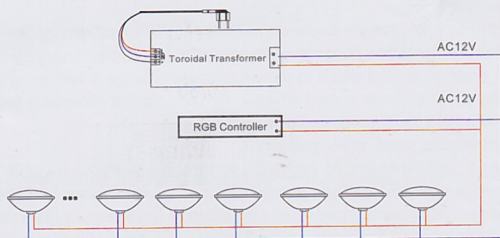**Step 1:** assemble lamp into housing/fixture/niche
Step 2: connect RGB controller to power line as below diagram
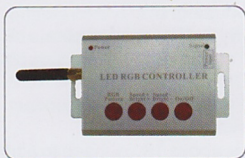**Step 3:** connect lamps to power line as below diagram
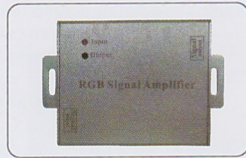
➤➤ **Step 1**

➤➤ **Step 2\3**

Toroidal Transformer

AC12V

AC12V

RGB Controller

RGB Controller

Remote

Amplifier

⚠️ *Turn off the RGB controller before switch off power.*

(A) 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

(B) 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 1 RGB controller could connect 20 pcs lamps, in case above 20 pcs lamps, use Amplifier to enhance the signal, 1 Amplifier could connect 10 pcs lamps, make sure the power wire is big enough to carry enough voltage(12V AC) in order to avoid voltage drop, see connection diagram as below.

》》 **Step 1**

» **Step 2\3**
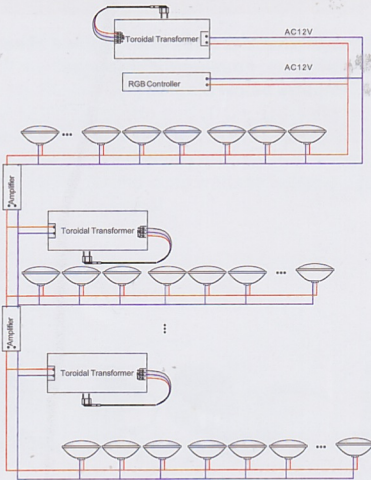
Connection Diagram (2): WiFi control

Step 1: **Assemble lamp to plastic housing or stainless steel housing.**
Connect 4 wires cable of housing respectively to V+, B, G, R screw terminals of lamp, then assemble lamp into housing.
**Step 2:** 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.
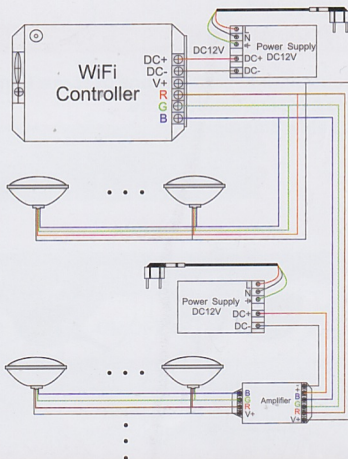
» **Step 1**

» **WiFi CONTROLLER**

WiFi Controller

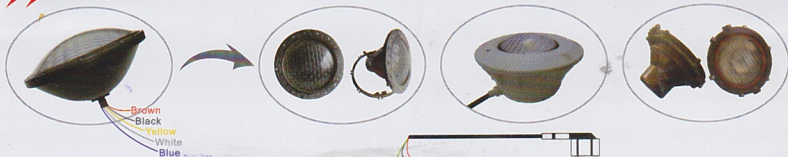Power Supply DC12V

Power Supply DC12V

Amplifier
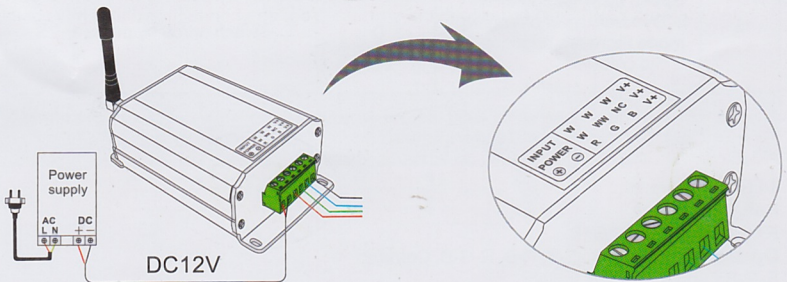
Connection Diagram (3): DMX512 control.
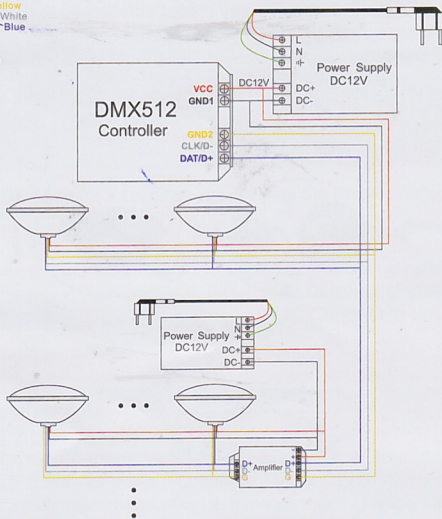
Step 1: assemble lamp into housing/fixture/niche
Step 2: connect DMX controller to power line as below diagram
Step 3: connect lamps to power line and DMX controller as below diagram

» **Step 1**

Brown
Black
Yellow
White
Blue

» **Step 2\3**

DMX512 Controller

VCC
GND1
GND2
CLK/D-
DAT/D+

Power Supply DC12V

Power Supply DC12V

Amplifier

Remark:
DMX controller VCC connect to Power supply DC+, GND1 connect to Power supply DC-
5 Wires: Brown wire connect to DMX controller "VCC"
         Black wire connect to DMX controller "GND1"
         Yellow wire connect to DMX controller "GND2"
         White wire connect to DMX controller "CLK/D-"
         Blue wire connect to DMX controller "DAT/D+"
1 DMX512 controller could connect many lamps, in case signal is not strong enough after connect too many lamps, use Amplifier to enhance the signal.
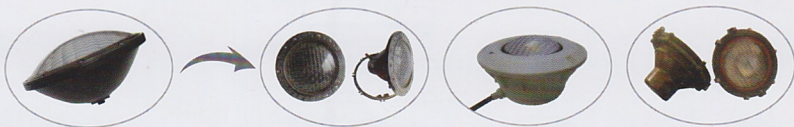
Connection Diagram (4): Single color-white, red, green, blue

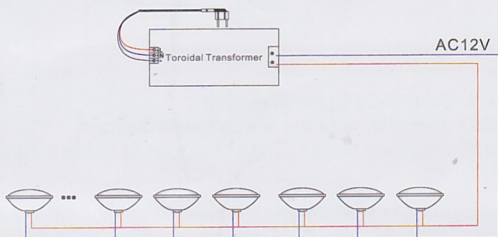Simply connect live and neutral wires onto any one of screw terminals on base of the lamp.
Step 1: assemble lamp into housing/fixture/niche
Step 2: connect lamps as below diagram

》》 Step 1

》》 Step 2

AC12V
Toroidal Transformer

Connection Diagram (5): RGB Automatic control-automatic RGB change

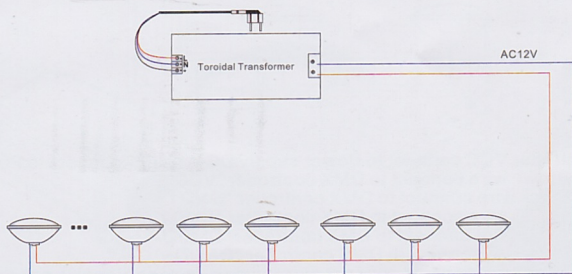Simply connect live and neutral wires onto any one of screw terminals on base of the lamp.
Step 1: assemble lamp into housing/fixture/niche
Step 2: connect lamps as below diagram

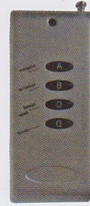**》》 Step 1**

》》 Step 2

AC12V
Toroidal Transformer

Connection Diagram (6): RF remote & switch control

Simply connect live and neutral wires onto any one of screw terminals on base of the lamp.
Step 1: assemble lamp into housing/fixture/niche
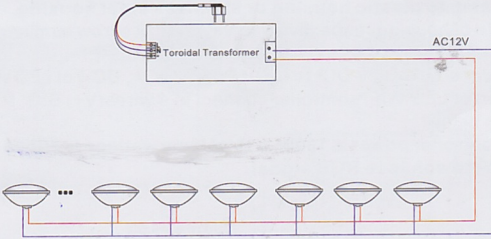**Step 2:** connect lamps as below diagram

P56-remote

>> **Step 1**

>> **Step 2**

Toroidal Transformer

AC12V

	Instructions of The Remote Control Button			
Key	instructions	Key	instructions	
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+B, R+G+B
Dynamic change: R-G, G-B, R-B, R-G-B, Colorful
R-G-B Fading, Colorful fading

Connection Diagram (7): external controller control

Step 1: Assemble lamp to plastic housing or stainless steel housing.
Connect 4 wires cable of housing respectively to V+, B, G, R screw terminals of lamp, then assemble lamp into housing.

Step 2: Connect Power supply(12V DC) to one end (DC+, DC-) of LED external RGB controller, then another end(V+, B, G, R) port of LED external controller connect to 4 wires(V+, B,G, R) of lamp(with housing) as diagram below.
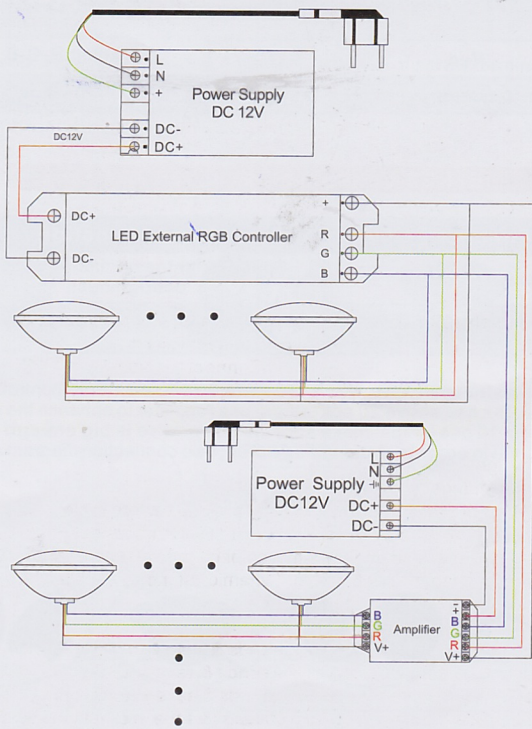
Remark: RGB controller power is 200W, if total lamp wattage is above 180W, need to add Amplifier(150W) to enhance RGB signal.

» **Step 1**

» **Step 2**

External Control Connection Diagram

LED External RGB controller

Sign	RF	Button	Description
⏻	⏻	ON/OFF	**ON/OFF key:** Close or open controller (ON or OFF LED lamps)
PAUSE II	II	PAUSE	**Pause:** Press this button to rest at current color, press it again, it will continue to change. Other function: Press in 3 seconds, the buzzer can be on or off.
MODE+ MODE-	M+ M-	MODE+ MODE-	Press the keys to select the change modes. Press **MODE+** over 3 seconds to enter cycle mode automatically. Press **MODE-** over 3 seconds to enter DIY cycle mode automatically.
SPEED+ SPEED-	S+ S-	SPEED+ SPEED-	Press the keys to quicken or slower speed. Press SPEED+ over 3 seconds , all speed change is restored to Default status. Press SPEED- over 3 seconds , the current change is restored to Default status.
BRT+ BRT-	B+ B-	BRT+ BRT-	Press the keys to increase or decrease brightness. If keep pressing, the brightness will change continually.
	M1 M2 M3 M4	4 DIY keys	Press the keys for 3 seconds, the controller will save the present function mode automatically, which can save 4 modes and save repeately as well. Press "Mode-" in 3 seconds, the controller will play these 4 DIY modes automatically.

Note: Press "MODE-" key for 3 seconds ,merely play the dynamic effects. If the DIY modes

DC+: Connect power supply (12V DC+) **DC-:** Connect power supply (12V DC-)
+: Connect to lamp +   **B:** Connect to lamp B
G: Connect to lamp G   **R:** Connect to lamp R

Remote controller for LED External RGB controller (effective distance: 50 meters)

1: On/off: Turn on/off the light
2: Pause: Pause the color change
3: M+: RGB change mode + or press 3 seconds to enter all RGB pattern cycle
4: M-: RGB change mode – or press 3 seconds to enter DIY RGB memeory cycle
5. S +: Alter the color change speed when in dynamic color change & fading effect
6. S -: Speed down the color change speed when in dynamic color change & fading effect
7. B+: Increase brightness in solid color pattern
8. B-: Decrease brightness in solod color pattern
9. M1: DIY RGB change pattern memory, press 3 seconds & save your favorite RGB pattern.
10. M2: DIY RGB change pattern memory, press 3 seconds & save your favorite RGB pattern.
11. M3: DIY RGB change pattern memory, press 3 seconds & save your favorite RGB pattern.
12. M4: DIY RGB change pattern memory, press 3 seconds & save your favorite RGB pattern.