Instruction Manual for Resin Filled LED Underwater Light

IMPORTANT: This manual includes essential information on the safety measures to be implemented for installation and start-up. Therefore, the installer, as well as the user, must read these instructions before beginning installation and start-up.

Technical Specification

Standard input voltage: 12V ;   Standard input watt:

SMD2835 LED			
252 LED 18~20W	333 LED 22~24W	450 LED 33~35W	630 LED 40~42W

Use life: 30,000 hours

Single color : Cool White ,Pure White , Warm White ,Blue, Red, Green

RGB & RGBW : Switch control , Remote control , External control modes.

To Operate the lights:

1. White only, Warm White only, or other single color only lights (12AC/DC ,2 wires out)

Note: To prevent risk of fire which could result in property damage and to ensure optimum performance , do not exceed the load factor specified in the instruction provided by the transformer manufacture .

These lights are not dimmable, and are not compatible with dimmer switches or dimmer relays .

They can be wired into a switch or manually turn ON/OFF the lights.

2.1. RGB Switch control mode. (12VAC ,2 wires out)

See the below of **16 color modes sequence.**

1. Evening sea: slow animation blue/purple   2. Evening rivers: slow animation green/yellow

3. Riviera: slow animation blue/cyan   4. White: neutral white

5. Rainbow: slow animation in green/blue/green+blue/red+blue/green+blue/RGB/red

6. River of colors: slow animation in red/green/blue/green+blue/red+blue/green+blue/RGB, followed by program 8

7. Disco: fast animation, (fast-slow) followed by program 5

8. Four seasons: slow animation in red+green/green/green+blue/blue/violet/red

9. Party: fast animation, (fast-slow) followed by program 6

10. White: sun white. 11. Red: fixed color red   12. Green: fixed color green

13. Blue: fixed color blue .14. Green-blue: fixed color green/blue(cyan)

15. Red-green: fixed color red/green(yellow)   16. Blue-red: fixed color blue-red(purple)

2.2. RGBW Switch control mode. (12VAC ,2 wires out)

See the below of **15 color modes sequence.**

1. Evening sea: slow animation blue/purple   2. Evening rivers: slow animation green/yellow

3. Riviera: slow animation blue/cyan   4. White: sun white

5. Rainbow : R→G→B→W→RW→RG→GW→BW→GB→RB→RGB→RGW→RBW→GBW→RGBW color gradual changing

6.Disco: R→G→B→W→RW→RG→GW→BW→GB→RB→RGB→RGW→RBW→GBW→RGBW color flashing

7. Four seasons: RGBW→RG↓B↓ W↓→ R↓G↑→G↓B↑ →B↓W↑ →R↑G↑B↑W auto changing

8.Party: R→G→B→W→RW→RG→GW→BW→GB→RB→RGB→RGW→RBW→GBW→RGBW color jump changing

9. White: **pure white** 10. Red: fixed color red   11. Green: fixed color green

12. Blue: fixed color blue 13. Green-blue: fixed color green/blue(cyan)

14. Red-green: fixed color red/green(yellow) 15. Blue-red: fixed color blue-red(purple)

To Operate these RGB/RGBW lights:

• The 15/16 pre-programmed effects and combinations may be selected using the on/off switch of your pool lights. Just switch off and switch on within 3 second. **(Switch control)**

• If the light is powered off for more than 20 seconds, it will keep the latest program when it is turned on again.**(Memory Function)**

 • To achieve synchronization, confirm all lamps are installed correctly on the same switch, after they are powered off for more than 20 seconds, switch on and switch off continuously 3 times, and then finally turn them on again. They will all go to program 1. Now you can select a program for them by switch off and on within 3 seconds .**(Re-set Function)**
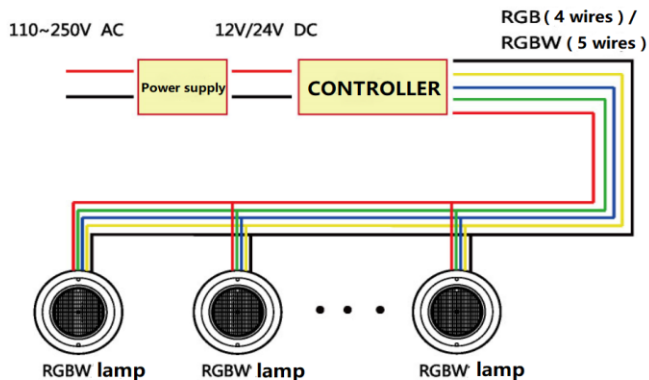
3,RGB/RGBW Remote control mode (12VAC ,2 wires out) (with memory function)

	ON key: Power On OFF key: Power off
	BRI+ KEY: brightness +,10 grade in total
	BRI- KEY: /brightness -,10 grade in total
	B/PU key: slow animation blue/purple
	G/YE key: slow animation green/yellow
	B/CY key: slow animation blue/cyan
	R key: static red color G key: static green color
	B key: static blue color WHT key: static white color
	YE key: static yellow color (R+G)
	CY key: static cyan color (G+B)
	PU key: static purple color (R+B)
	Rainbow key: multiple colors gradual changing
	Four seasons key: multiple colors fade changing
	DISCO key: multiple colors flash changing
	PARTY key: multiple colors jump changing

4.RGBW / RGB External control mode (12V/24VDC ,5 / 4 wires out)

IMPORTANT: This section only applies to the RGBW/RGB lights with 5/4 wires out ,12VDC or
   24VDC. pool operators can choose to install controllers to build a fine control system .
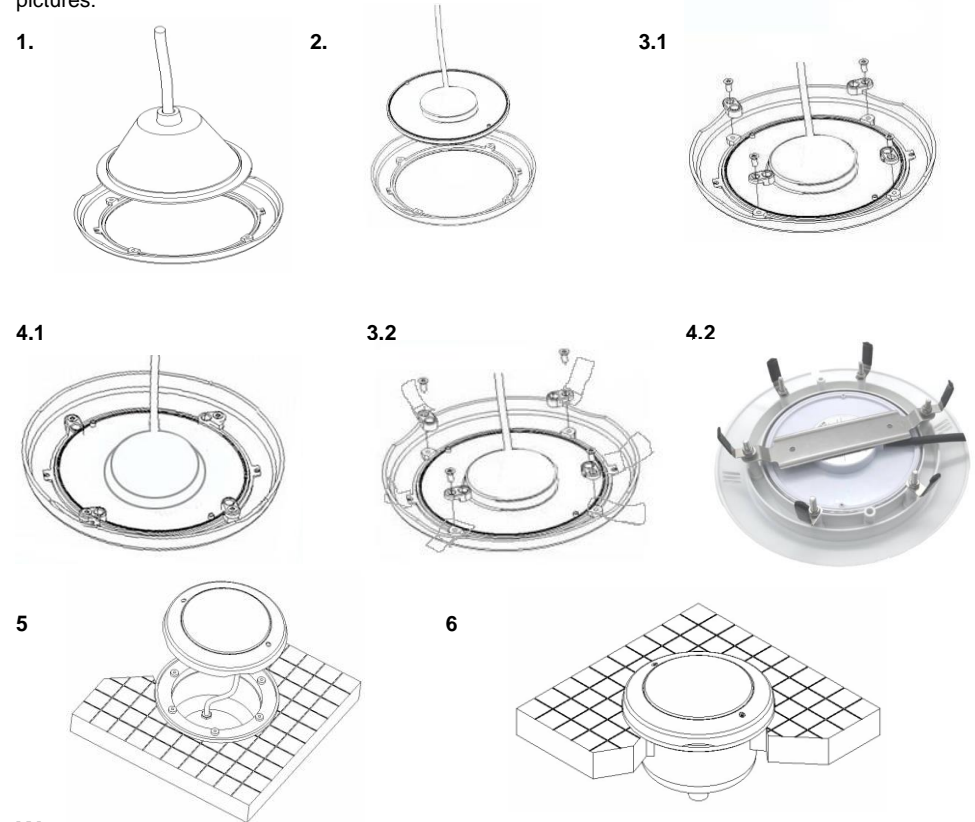The specification of the controller and the power supply , especially the input voltage ,must be
well known by the users and installers before installation .Failure to do so may cause the   injury
to person and damage to the lights system .

Installation

All lamps should be placed on the wall of the pool at approximately 700mm below the water
surface, in areas that are easily accessible from the upper edge of the pool.

This LED bulb is fitting to PAR56 niches and for replacing the PAR56 directly. Refer to the below
pictures:

1.   **2.**   **3.1**

4.1   **3.2**   **4.2**

5   **6**

Warranty

The manufacturer warrants this resin filled LED underwater lights against defects in materials
and workmanship for a period of two years from the date of purchase. This warranty does not
cover the fixture becoming damaged due to misuse, accidental damaged, improper handling
and/or installation and specifically excludes liability for direct, incidental damages.

WARNING: Frequent voltage fluctuations can irreparably damage the lamp.

If the installation must take place in areas where these changes may be frequent, a system to
protect the lamps must be installed on the electric system of the pool.

  Don't use electronic transformers which may damage the light. You should use

  industrial frequency transformer , such as toroidal transformer and square transformer .