

Instruction Manual for LED Underwater Light HT202/ HT302



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 AC/DC (Range: 12~18VAC or DC)

Standard input watt:

RGB / White	
18W/21W	30W/33W

Use life: 60,000 hours

16 programs with Synchronization capability

Dimensions

Models HT202

Models HT302

Packing Contents

The following items are included inside the box:

Models HT202	Models HT302
Lamp Assembly x 1	Lamp Assembly x 1
Stainless steel screws x 2	Stainless steel screws x 2
Dilated rubber plug x 2	Dilated rubber plug x 2

Instruction & Use

This is a high technology electronic controlled light based on LED's in three colors: red, green and blue.

These three base colors together can produce many other colors to create the perfect atmosphere in the pool. Any of the 16 pre-programmed effects can be selected with the on/off switch of your pool lights. We can also make single color Led as you want, such as White Color, Warm White, Blue, etc. The LED's are driven by constant current. The technology of True PWM is adopted on the lights. High temperature protection makes the LED's be protected while the internal temperature reaches a high level. All these technologies guarantee long working life of the LED lamps. Filled fully with resin, the lights are completely waterproof, and they must be used / operated while fully submerged underwater only.

- This lamp is designed to be fixed in new pools and/or pools with existing surface mounted lamps that need replacement.
- This lamp is designed to be used only once. Should it become defective, repair is impossible, and replacement is necessary.
- The manufacturer is not responsible in any circumstances for assembly, installation or start-up of any electric components which have been inserted or handled at locations other than its own premises.

16 Programs of RGB LED Bulbs

1. White: sun white
2. Red: one color red
3. Green: one color green
4. Blue: one color blue
5. Green-blue: fixed color green/blue
6. Red-green: fixed color red/green
7. Blue-red: fixed color blue-red
8. Evening sea: slow animation red/blue
9. Evening rivers: slow animation red/green

10. Riviera: slow animation green/blue
11. White: neutral white
12. Rainbow: slow animation blue/red/green
13. River of colors: program 12, followed by program 15
14. Disco: fast animation
15. Four seasons: slow animation in red/blue/green/violet
16. Party: fast animation

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.

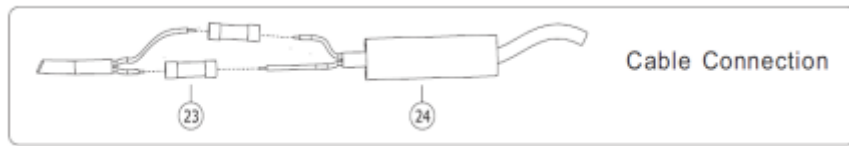
- It is highly recommended to use the underwater cable gland
- All lamps should be installed on the same transformer and switch.
- The lamp is supplied with cable of 2m, 4m, 6m, 10m, 16m or 20m according to the need of the user, making it possible to install multiple lamps connected to a single junction box.

Disassemble the bracket from the back of the lamp. Place the bracket over the desired location, mark the holes, drill the holes, insert the roll plugs, and fasten the bracket on the pool wall using the stainless steel screws provided. Wind the cable behind the lamp, and then fasten the lamp on the bracket.

I. Models HT202 /HT302 Wall mounted only

II. Connect the cable from the lamp to the power source

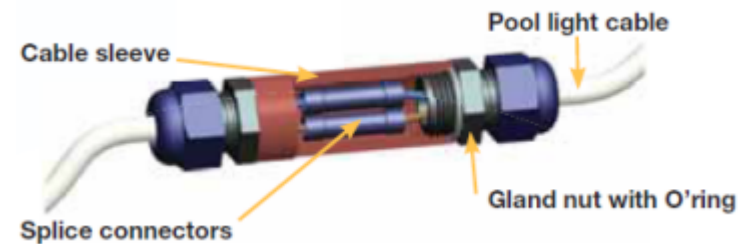
The below drawing shows how to connect the cable from the lamp to the power source.



Maintenance & Replacement

There is no maintenance required for this lamp – it is designed to be used only once, meaning that replacement is necessary if it becomes defective (repairing is impossible). Before any handling, ensure that there is NO voltage supplied to the lamp. To replace, unfasten the lamp from the bracket. Ensure the new lamp is of the same model and characteristics as the one being replaced.

If the cable pipes you use has inner diameter 26mm or more, you can use the retrofit connector to connect the cable easily. Simply crimp both connections with the splice connectors, slide the cable sleeve over the connection and hand tighten the gland nuts. Then hide the retrofit connector in the pipe. The retrofit connector is ordered separately.



The part with * is not included and needs to buy separately. The part with ** is not included.

Start-up

- The lamp should only operate underwater while secured to the vertical walls of the pool. Never switch on the lamp if it is not underwater.
- In case of colored lamps, 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 2 seconds.
- If the light is powered off for more than 20 seconds, it will keep the latest program when it is turned on again.
- 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 three times, and then finally turn them on again. They will all go to program 5. Now you can select a program for them by switch off and on within 8 seconds.
- Alternatively, we recommend using our optional controller (with in-built safety transformer) which comes with (a) remote control for easy operation and (b) auxiliary connection of 24V for operation of any other electrical item.

Safety Warnings

The persons who are in charge of installation should have the required qualifications for this type of work.

- Avoid making contact with the electric voltage.
- Comply with the current standards regarding accident prevention.
- IEC 364-7-702 standards must be observed: WIRING IN BUILDINGS, SPECIAL WIRING, SWIMMING POOLS.
- Replacement must be performed with the lamp disconnected from the electric power system.

Warranty

The manufacturer warrants this resin filled LED underwater lights against defects in materials and workmanship for a period of three 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 or consequential damages. Defects in materials and workmanship are exclusive of the following:

- The light has small air bulbs inside the resin on the back side.