

# Instruction Manual

## Pool Underwater Light



#70744000/70744100

**Read the instruction manual carefully before installation and use.  
Please also save it for future reference.**

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## 1.Products Introduction

Each swimming pool needs to be equipped with a pool underwater light, which can illuminate the pool bottom and make it easier for swimmers to see the pool bottom. Underwater light is mainly used for underwater decoration and lighting of swimming pool, landscape water, fountain, etc. It should has features like waterproof, low-voltage, stable, safe and reliable. Here are the highlights of our underwater light:

1. Long duration, 10 times longer than the current incandescent or halogen light and Spa lamp.
2. It has multi-color program function, which allows you to select any one of 17 different programs, 10 fixed colors and 7 color displays in independent mode.
3. Provide spectacular light and low power consumption. It consumes 86% less energy than the common pool light.

Model	Input(Volts Amp Watts)
70744000	12Vac,60Hz,6.2A,75W
70744100	12Vac,60Hz,1.2A,15W

## 2. Warning and Cautions

Warning - Do not open, there are no user serviceable parts in the light. Improper installation may result in death or serious injury to swimmers, service personnel or others due to electric shock. Disconnect the power supply before installing or servicing this device. Read and follow all instructions, local code and ordinances. A licensed or certified electrician must install the electrical system to meet or exceed those requirements before the underwater light is installed.

Precautions:

1. Use a safe swimming pool / spa isolation transformer to provide 14 volts to the light
2. Make sure the output wiring from transformer is tightened or short-circuited to ground.
3. The extension or splicing of wires can only be carried out in a safe swimming pool / spa junction box or junction box transformer system.
4. The light shall be firmly fixed on the pool wall and cannot be removed without using tools.
5. The lamps are installed by qualified personnel in accordance with the National Electrical Code (NEC) or Canadian Electrical Code (CE Code) and any applicable local codes and / or regulations.
6. If you want to replace the existing light, please disconnect the panel light power before

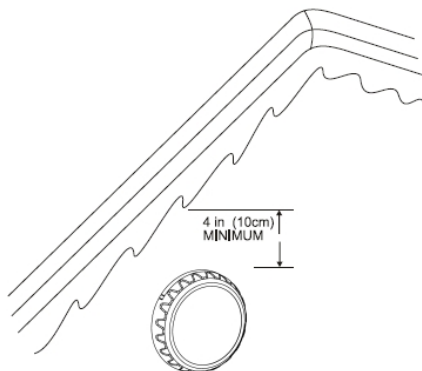
starting the installation. All instructions, local codes and ordinances must be followed in the installation.

### 3、 Installation Instruction

The light performance will be affected,if the minimum required voltage can not be fulfilled due to the length of the power cord . To prevent performance problems, verify that the transformer provides the required minimum voltage according to the following table. To check this voltage, measure the voltage on the transformer when the light is "on" and working in "white" mode. In some cases, a voltage greater than 12 volts is required due to the long distance delivery of the power cord. Some transformers offer higher voltage taps for this; for more information, check the transformer manufacturer ' s installation instructions. For an overview of installation, please refer to the figure below for an overview of the installation of LED lights. Be sure to read all the following chapters before installation.

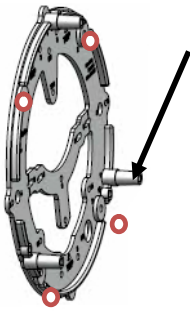
Products	The distance from the light to the controller	Minimum voltage for the controller
12V colorful and white light	30ft	12-14 volts
	50ft	13-14 volts
	100ft	14 volts

The light must be installed on the wall or floor of the swimming pool or spa. The top of the lens is not less than 4 inches (10 cm) below the normal water level of the swimming pool, unless the light is installed in an area where not used for swimming. Choose the installation location of the light to provide the best light dispersion effect for the swimming pool or spa design. Be sure to consider the direction of light emission, and pay attention not to direct the light to the house or outdoor living space.



Remarks:

1. The rigid PVC conduit (minimum diameter 20 mm) shall extend from the pool wall to the machine room where the transformer is located. Conduit should be installed to prevent water from siphoning in the pool. Leave enough cable length behind the pool light for future maintenance. Choose a good location to minimize shadows from the beam.
2. The universal mounting bracket is installed on the pool wall or directly screwed on the top of the pool interior to ensure the bracket is correctly positioned. The "top" logo has been engraved on the bracket.



Install to the pool surface: a circular groove with the same diameter as the mounting bracket is opened on the pool surface, with the groove depth of 5mm. After the circular bracket is installed, the marking lines on the three mounting columns are horizontal with the pool. After installation, only 3 mounting columns are visible above the pool surface.

Install to the pool wall: drill 4 holes on the pool wall, and align with the four screw holes marked in red in the figure. Using the screw set we provided, note: shorten the three mounting columns by 5mm, so that the lamp can be installed tightly on the pool surface.

#### 4. Specifications

Power requirements for color and white LEDs: 12V ~ 14V AC 50 / 60Hz.

Protection level of swimming pool lighting: ipx8 to 2.0m deep

Temperature range: 0 ° C to + 40 ° C pool water temperature

Installation position: at least 100mm below water level

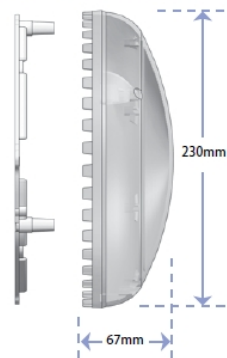
Power consumption (white LED): 15W maximum at all voltages 12V ~ 14V

Power consumption (colorful LED): 75W maximum at all voltages 12V ~ 14V

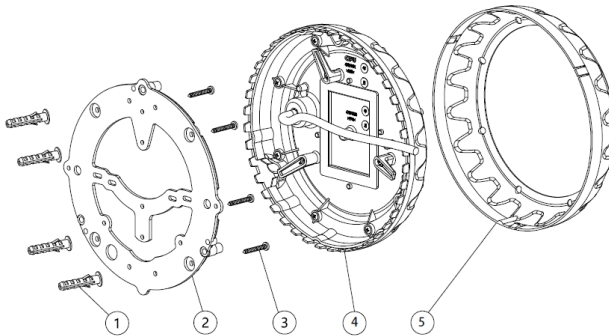
Lamp color: white = > 5000K, blue = 475nm, green = 525nm

Light output: white = 1050 lumens, blue = 300 lumens, green = 650 lumens

Mounted Pool Light Dimensions



## 5、 Product Explosion Diagram and List of Accessories



Mounting screw kit

1. Plastic expansion screw
2. Universal mounting bracket
3. Mounting screw
4. LED light
5. Decorative ring

## 6、 Light Programs and Colors

The colorful light can display 17 different programs: 10 fixed colors and 7 changing color displays. These programs use a power cycle (fast on, off, and then on) to switch between. The colors are as follows:

- |                          |                       |
|--------------------------|-----------------------|
| 1. Fixed-Voodoo Lounge   | 11. Fixed-Sangria     |
| 2. Fixed-Deep Blue Sea   | 12. Show-Twilight     |
| 3. Fixed-Royal Blue      | 13. Show-Tranquility  |
| 4. Fixed-Afternoon Skies | 14. Show-Gemstone     |
| 5. Fixed-Aqua Green      | 15. Show-USA          |
| 6. Fixed-Emerald         | 16. Show-Mardi Gras   |
| 7. Fixed-Cloud White     | 17. Show-Cool Cabaret |
| 8. Fixed-Warm Red        |                       |
| 9. Fixed-Flamingo        |                       |
| 10. Fixed-Vivid Violet   |                       |

