

### **Tectonic RGB High Power LED Underwater Light**

### **Specification Parameter:**

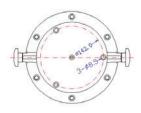
- Part No. TUW1003
- Size: L262\*W208\*H155MM
- Net Weight: 2.6kg
- LED Quantity: high power LED(R6 G6 B6)
- Beam angle: 50degree
- Shell Material: Aluminum alloy
- IP Rank: IP68
- Connector: 4-pin rubber naked wire
- Rate power:19W
- Rate voltage: DC24V



### **External dimension**

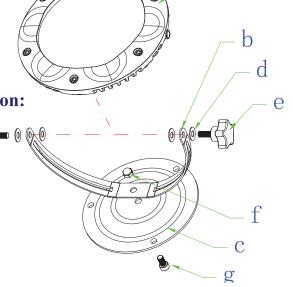








- a LED body
- b Bracket
- c Round type base
- d Φ8 flat washer
- e Screw handwheel
- f M8 nut
- g M8 Hexagon screw



The high power LED underwater light is one of the lighting fixture used in water and is composed of high power LED. It is widely used in fountain pool, theme park and the underwater lighting. Its brightness and colorful lighting effect mixed by R G B beautify the environment and ornament the city.

LED underwater light adopts aluminum alloy shell, the seal of the light is reliable. The body of light and round type base is connected by the bracket that the light angle and light position spot light can be 360° adjustment. So it will easy to get the best spot location and get the most satisfy lighting effects.

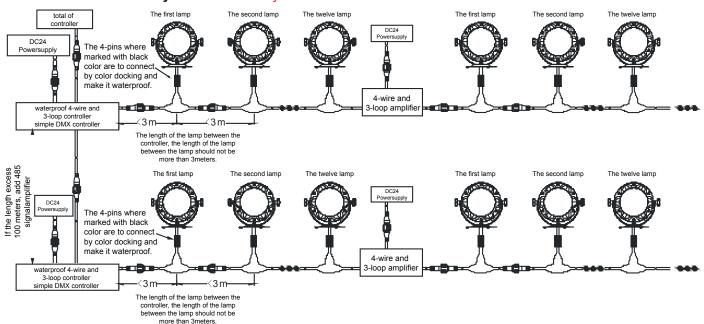
The underwater light adopts 4-pin connectors which connect to 4-wire and 3-loop controller to realize many pcs lights' colour changing such as chasing, gradually changing, holistic changing etc..(More details in Function Instruction).



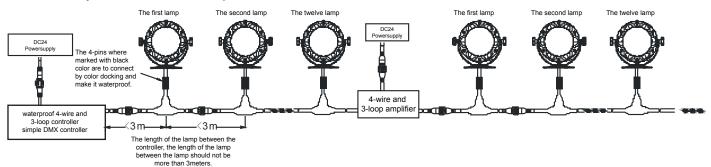
# **Installation step:**

- Connect the bracket and round type base to the M8 nut through M8 hexagon screw, tighten the screw by 6MM wrench.
- 2. Tighten the body of the lamp with bracket by screw handwhell andΦ8 flat washer.(showed as drawing) Adjust the spot view to the right position.

#### The first Connection way: main control by DMX Controller.



#### The second way connection: Control by remote controller



### Control of the underwater light:

Underwater light can be matched with our company's DMX controller or 4-wire and 3-loop controller (More details refer to the instructions) The 4-wire and 3-loop controller with remote which can be used to select the light pattern in the stand alone mode, total 13 patterns. They also can be set coding address to receive



three-channel DMX signal and adjust the brightness of R .G. B

Noted: The drive capability of the controller is limited. For example, 24V 10 RGB controller can max control 240W (=24V\*10A) underwater lamp. For max power 19W RGB underwater lamp, the controller can max control 12pcs (240/19≈12). If you want to control more underwater lamps, you should add RGB amplifier before connecting more underwater lamps.

# The optional of power supply

The total output of underwater lamps multiplied by the safety coefficient 1.35 is equal to the total output of switch power supply. (If the result is not a normal output, please choose a close power of switching power supply)

### Photometric performance

Standard light output (Testing base on 28°C of the environment )

Color	Voltage (V)	Power (W)	Luminous (Lm)	Lighting efficiency
				(Lm/W)
White color	24V	19	451.1	18.4
Red color	24V	6.4	160.4	24.3
Green color	24V	7.3	244.8	33.5
Blue color	24V	7.3	62.8	8.6

#### **ILLUMINATION**

distance color Lx	1M	2M	3M	4M	5M
White color	1820	540	200	130	90
Red color	530	156	62	40	27
Green color	1310	365	130	82	55
Blue color	100	26	12	7.1	4.5

#### **Installation:**

- 1. Make sure the body of the lamp must be connected to the earth.
- 2. Make sure the controller and power supply work in a well ventilated and dry environment.
- Make sure the input and output line without short-circuit before use the lamp. If connect the power under the short-circuit, it maybe damage the internal parts of the controller.

#### Mark:

- 1. The power must be off before install or removing the lamp.
- 2. Please replace with a new one if the body of lamp has been damaged.



## Solution for common fault

- 1. If the light can not light, pls check whether power on or switch on
- 2. If the light is on or off continuously, pls check whether power supply is loose or not touch well; whether the light's connector not touch well.

Note: If all above points still can not make the light work regularly, pls contact with professional person.







#### Indoor or outdoor use available

### Warning

- Please do not connect power supply when the light is still in a box.
- Don't connect high voltage before the installation, and make sure that the fixture connect the earth.
- Change the protection cover completely if it's broken.
- Pay attention to anti-fire, anti-electricity and anti-shake

# Notice points /



- Caustic or dissolvent chemicals may damage the protection crust.
- Normally working temperature:-20 C  $\sim$  + 45 C , humidity : 0 $\sim$ 95%. If overrun the range, it will effect the lifespan of the lamp.
- Please be noted that we are not responsible for the effect when the components are not adopted from TECTONIC.
- \*Please contact the supplier about the related product information, like maintenance, use and some other need to pay attention, if there has a change, sorry we do not make further notice.
- \* Anything are not clear about this manual, please consult with the engineer who has credentials