

## AQUA

**General Description:**

Aqua is a high intensity, water submersible LED lighting fixture. Stylish and compact, the Aqua 220 is designed for both indoor and outdoor water feature lighting applications where controlled, dynamic and stunning enhancement from a full 16 Bit RGB color mixing capability is desirable such as prestige fountains, pools, theme parks, exhibition features, commercial and architectural illumination.

LED Aqua (Ultra Bright LED RGB) is an energy savings underwater LED lighting fixture which utilizes ultra bright (RGB) LEDs as the light source. The LED Aqua I offers high brightness RGB full color mixing LED illumination for applications such as fountain, pond, water feature illumination, and any application with direct or indirect constant water immersion.

**Specification:**

Construction Stainless Steel

Output Wattage 25W

Height 9.7"

Width 6"

Depth 9.6"

Beam Angle 25°

Colour Range 256 Grey Scale

Light Source High Brightness LED's

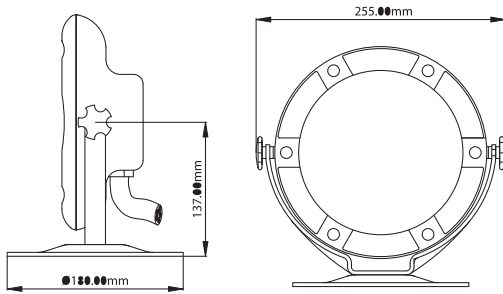
Connectors 3-Pin Signal Connector

Controlling System Pre-Programmed /  
DMX Console

IP Rating IP68

Voltage 12V DC

**AQUA**



**Detailed Specifications:**

|                     | (RGB)  | (white)     |
|---------------------|--|-------------|
| LED color range     | 16.7 million colors at 24 bit RGB additive color mixing  | white color |
| Light source        | 360 pcs LED  | 270pcs LED  |
| Beam angle          | 45°  |             |
| Data interface      | Standard DMX protocol (RS485 terminal)   |             |
| DMX Channels        | 3  |             |
| Control             | DMX-512 or Simple Controller SRC-AI-100  |             |
| Control system      | DMX console + switching power supply (or SRC-AI-100 Address Writer), synchronization controller + switching power supply |             |
| DMX Address Setting | SRC-AI-100 Address Writer  |             |
| Fixture housing     | Stainless steel  |             |
| Connector           | 3-pin power & signal connector   |             |
| Dimensions          | L255xW180xH245.4mm   |             |

**Electrical Specifications**

|                   |        |        |
|-------------------|--------|--------|
| Operating Voltage | 12V DC | 24V DC |
| Power Consumption | 25W    | 25W    |

**Environmental Specifications**

|                       |                                 |  |
|-----------------------|---------------------------------|--|
| Operating Temperature | -20°C - 55°C                    |  |
| IP Rating             | IP68                            |  |
| Submersion Depth      | -400-2000mm Below Water Surface |  |
| Sustainable Pressure  | 0.0533T/mm <sup>2</sup>         |  |

## AQUA

### Detailed Specifications:

#### Illuminance Distribution

|       |       |       |        |        |        |        |       |       |       |      |
|-------|-------|-------|--------|--------|--------|--------|-------|-------|-------|------|
| 70.5  | 80.4  | 92.6  | 116.3  | 129.4  | 137.4  | 118.7  | 102.5 | 84.3  | 75.5  | 0.5M |
| 81.1  | 104.3 | 167.2 | 258.1  | 324.1  | 314.4  | 248.1  | 162.4 | 137.1 | 85.3  |      |
| 112.4 | 173.1 | 334.1 | 601.1  | 762.5  | 694.1  | 581.6  | 272.3 | 157.2 | 102.2 |      |
| 142.8 | 272.3 | 634.7 | 1057.3 | 1263.0 | 1157.9 | 839.1  | 782.5 | 234.7 | 124.6 |      |
| 162.3 | 380.4 | 812.4 | 1265.5 | 1626.6 | 1547.5 | 1125.0 | 643.1 | 292.3 | 151.3 | 0M   |
| 157.7 | 338.9 | 753.2 | 1243.2 | 1301.1 | 1534.1 | 1141.2 | 692.1 | 299.1 | 153.1 |      |
| 137.7 | 246.9 | 535.2 | 937.8  | 1214.0 | 1224.3 | 952.6  | 552.1 | 257.9 | 133.1 |      |
| 112.0 | 167.2 | 298.6 | 561.3  | 761.3  | 772.7  | 573.3  | 319.5 | 152.1 | 102.3 |      |
| 94.3  | 123.0 | 162.1 | 263.2  | 317.8  | 321.0  | 224.3  | 141.5 | 103.5 | 81.0  |      |
| 82.9  | 93.9  | 112.3 | 123.7  | 132.6  | 134.5  | 112.5  | 95.0  | 78.2  | 70.6  | 0.5M |

Units: Lux  
 Color: White  
 Direction: On axis  
 Multipliers: 0.115 Red, 0.378 Green, 0.506 Blue

#### Illuminance

LA-DIA220-12V-PI (RGB color change)

| Distance(m) \ Color | 1      | 2     | 3     | 4     | 5    |
|---------------------|--------|-------|-------|-------|------|
| White               | 1943.5 | 486.1 | 250.4 | 135.1 | 75.6 |
| Red                 | 258.3  | 67.0  | 30.5  | 20.2  | 12.3 |
| Green               | 805.5  | 205.5 | 96.9  | 52.3  | 37.8 |
| Blue                | 885.5  | 250.3 | 135.3 | 70.5  | 46   |

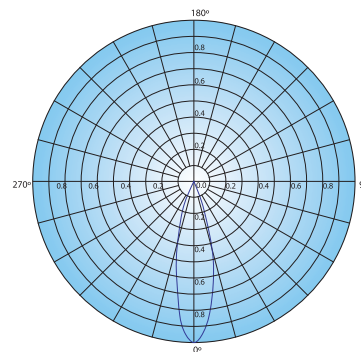
Unit: Lux  
 Direction: On axis

LA-UB-DIA220-12V-PI-W (white color)

| Distance(m) \ Color | 1      | 2     | 3     | 4     | 5    |
|---------------------|--------|-------|-------|-------|------|
| White               | 1724.3 | 456.1 | 208.4 | 118.1 | 74.6 |

Unit: Lux  
 Direction: On axis

#### Candle Power Distribution



LA-DIA220-12V-PI (RGB)

#### Testing Circumstance

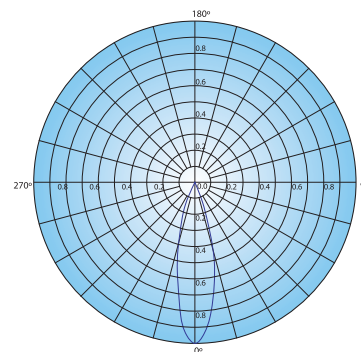
Installation position: Horizontal  
 Testing surface: A-A surface

#### Electrical Parameters

Current: 0.253 A  
 Voltage: 220V  
 Power consumption: 35W

#### Testing Result

Max. luminous intensity: 1022.806cd  
 Luminous flux: 370.7Lm  
 Efficacy: 11.029lm/w  
 Beam angle: 28°  
 Remark: Standard voltage 220V



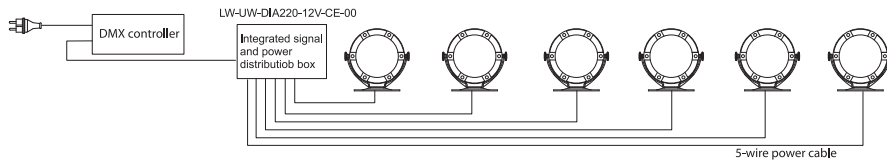
LA-UB-DIA220-12V-PI-W (white)

## AQUA

### Wiring Diagram:

#### Connection Examples (LED Aqua I DMX Control 1 Drive 1)

Aqua with a 1-output power supply



#### 2. LED Aqua I DMX Control 1 Drive 4

