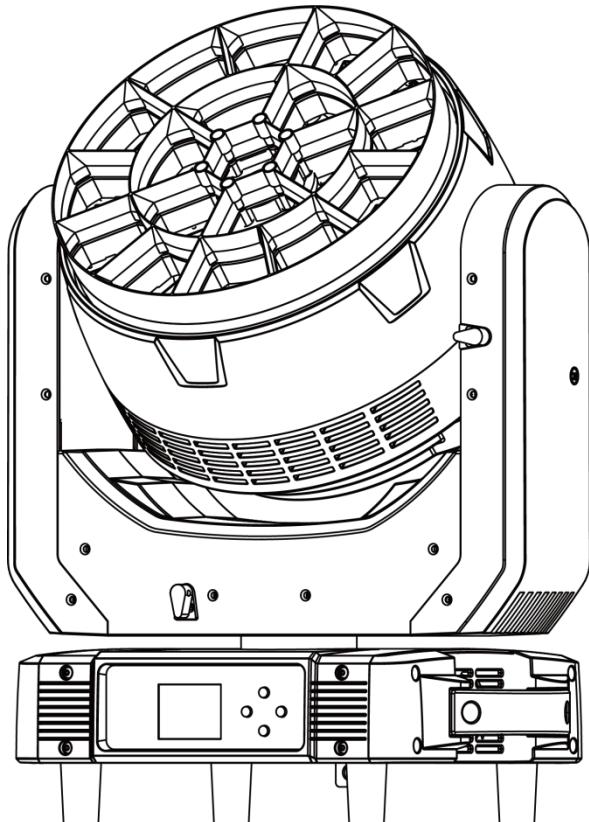


1960Z-7

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# 19×60W RGBLACP Wash Zoom



**USER MANUAL**

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Please read manual carefully before use

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Thank you for choosing our LED lights. Each facility has been rigorously tested. Please check whether the facility has been damaged during transportation. If you find any parts are missing or broken, please contact the manufacturer immediately. Please do not return the product without any notice!

# 1. Safety Instructions



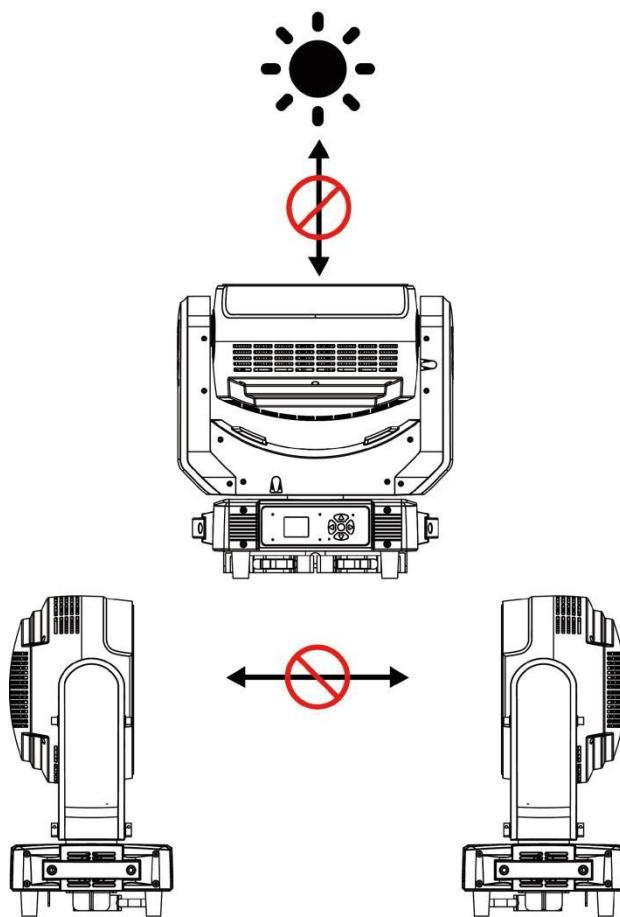
Please read this manual carefully, which includes important information on installation, use and maintenance.

## Attention

- Please keep this USER MANUAL for future consultation. If you sell the facility to another user, be sure that they also receive this USER MANUAL.
- Please open and check in details and make sure there is no transportation damage.
- Before operating, ensure that the voltage and frequency of power supply match the power requirements of the facility.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- The facility must be installed in a location with adequate ventilation, at least 50 cm from adjacent surfaces. Be sure that no ventilation slots are blocked.
- Make sure the power is disconnected before removing the facility.
- Make sure there are no flammable materials close to the unit while operating as it is fire hazard.
- Use safety cable when fixes this facility. Do not handle the facility by taking its head only, but always by taking its base.
- Maximum ambient temperature is 40 °C. Do not operate it where the temperature is higher than this.
- Please stop using the facility for serious operating problems. Stop using the facility immediately. Never try to repair the facility by yourself, but be a professional technician. Please contact the supplier's service department

for technical support.

- Do not touch any wire during operation as high voltage might be causing electric shock.
- When the housing or lens is damaged, it must be replaced.
- Direct sunlight or any other strong light source penetrating the lens of the light will cause serious internal damage to the facility. During unpacking, installation, use and long-term outdoor idleness, it is forbidden to expose the lens of the facility to direct sunlight or any other strong light source at any angle. It is forbidden to aim the beam of one light directly at another light.



## Caution

There are no accessories available, do not open the housing and try to repair the facilities yourself. Please contact our company for after service.

## Installation

The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. And make sure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight. Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.

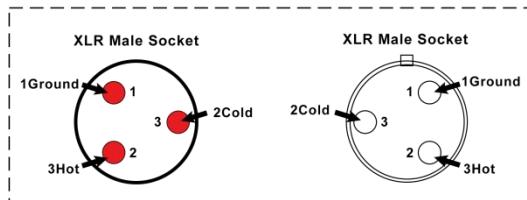
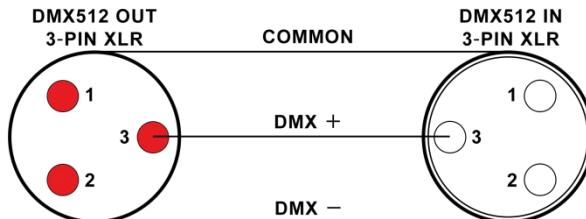
The facility must be installed by professionals, and keep it far away from fire, walking road, and easy touched place.

## 2. Technical Specification

|                    |   |
|--------------------|---|
| Light Source       | 19 x 60W 7in1 RGBLACP LED   |
| LED Lifetime       | ≥ 50000H  |
| Power Voltage      | AC100-240V , 50-60Hz  |
| Power Consumption  | 950W±5%, Power factor PF ≥ 0.95   |
| Beam Angle         | 4.5°~43° ; Glass light guider + PMMA high quality optical lens                    |
| Control Modes      | DMX512/ Auto/ Sound/ Master/ Manual/ RDM/ ArtNet(optional)                        |
| DMX Channel        | 20/ 28/ 30/ 38/ 39/ 11+21 Channel   |
| Protection Rating  | IP20  |
| Display            | 1.8° TFT Color Display, Can be rotated 180° , Chinese and English can be switched |
| Data In/Out Socket | 3-pin XLR sockets   |
| Power Socket       | Power-Con in/ out   |

|                     |   |      |              |
|---------------------|---|------|--------------|
| Housing Material    | ABS High temperature resistant plastics   |      |              |
| Pan                 | 540°accuracy 2.11°/step, fine-tuning accuracy: 0.008°   |      |              |
| Tilt                | 270°accuracy 0.86°/step, fine-tuning accuracy: 0.0034°  |      |              |
| Pan/Tilt Resolution | Automatically correct pan/tilt position   |      |              |
| MAX. Connection     | 4 units (230V, 50Hz) 2.5mm <sup>2</sup> power cable   |      |              |
|                     | 2 units (110V, 60Hz) 2.5mm <sup>2</sup> power cable   |      |              |
| Dimension           | 421*315*464mm   |      |              |
| Net Weight          | 21.2kg  |      |              |
| Carton Package      | 550*415*530mm   | 1in1 | GW: 24.35 kg |
| Flight Case         | 865*480*770mm   | 2in1 | GW: 75.1 kg  |
| Features            | Full range dimming, 65536 dimming levels; 4 dimming curves to choose. Fast strobe 1~25Hz; LED are divided into 3 circles for control; Integrating WASH and beam effect; Preset multiple color macro function; Preset multiple effect macro function; CTO: 2200K--10000K selection |      |              |
| Configuration       | Signal cable 1pc  |      |              |
|                     | Power cable 1pc   |      |              |
|                     | Manual 1pc  |      |              |

### 3. DMX Set Up



#### XLR Pin Configuration

pin 1=Ground

pin 2=Data Compliment (negative)

pin 3=Data true (positive)

**Pin1: Ground**

**pin2: Negative**

**pin3: Positive**

### DMX Connection

To ensure optimal transmission of DMX data, please connect facilities in the shortest way. The connection order won't affect the DMX address code. For example, if the address code is set to 1, no matter where the facility is connected, its address code will not change. This is determined by the principle of the DMX controller.

### Operation method

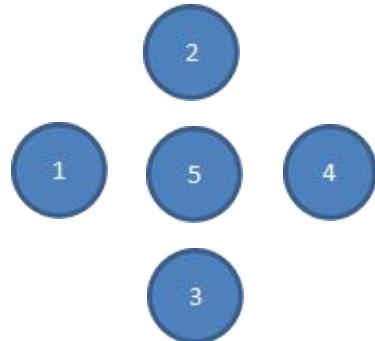
You can operate in the following three modes:

- Auto mode - the light can automatically complete all color changes
- DMX control mode - each light can be individually controlled by a standard DMX512 console
- Master mode - any light can work as a host in any of the above modes, and the other lights will work synchronously as slaves

## 4. Display

There are five buttons on the LED panel: ESC, UP, DOWN, ENTER and SAVE.

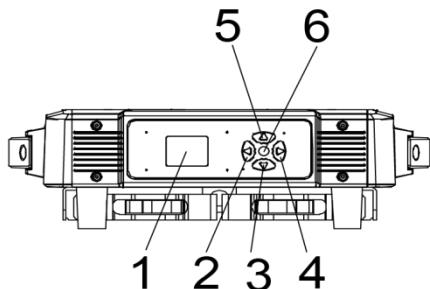
显示板



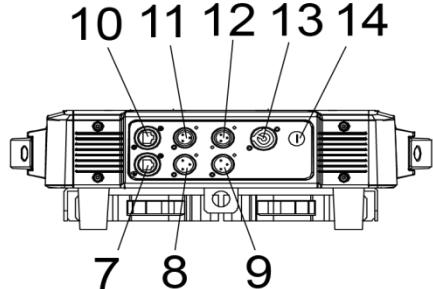
1-ESC 2-UP 3-DOWN 4-ENTER 5-SAVE

Please press the "ESC" to exit or return to the previous menu, press "UP" or "DOWN" to select the upper and lower menus or adjust the values, and press "ENTER" to confirm.

### FRONT VIEW



### REAR VIEW



After powering on, the facility will automatically return to the last operation when it was powered off, then get into standby status. For more details, please refer to the information below↓

## 5. Menu

| 1 previous-MENU 2 UP 3 DOWN 4 Lower-MENU 5 ENTER |              |  |                                |                             |  |
|--|--------------|--|--------------------------------|-----------------------------|--|
| Menu   | 1.Pan Degree | 1.540  | 2.360                          | Pan running angle selection |  |
|  | 2.Mic Sense  | 001-100  |                                | Sound sensitivity           |  |
|  | 3.Language   | 1.English  | 2.Chinese                      | Choose language             |  |
|  | 4.No Signal  | 1.BlackOut   | 2.Hold                         |                             |  |
|  | 5.Fan Set    | 1.Auto   | 2.Low                          |                             |  |
|  | 6.ArtNet Set | 3.High   | 1.ArtNet Enable: 1.ON<br>2.OFF | ArtNet function             |  |
|  |              | 2.Universe:0-255                                     |                                |                             |  |
|  |              | 3. Mode: A.2.X.X.XAuto<br>B.10.X.X.XAuto<br>C.Custom |                                |                             |  |
|  |              | 4.Custom<br>IP:192.168.000.001                       |                                |                             |  |
|  |              | 5.SubNetMask:<br>255.000.000.000                     |                                |                             |  |
|  | 7.Reset      | 1.Yes  |                                | Reset                       |  |
|  |              | 2.No   |                                |                             |  |
|  | 8.Default    | 1.Yes  |                                | Factory setting             |  |
|  |              | 2.No   |                                |                             |  |

|          |                   |                  |   |
|----------|-------------------|------------------|---|
|          |                   | Pass Word: ****  |   |
| 9.Adjust | 9.Adjust          | 1.Pan: 0-255     | Change the value of Pan/Tilt/Focus to correct the angle; change the value of R/G/B/W to adjust the white balance. |
|          |                   | 2.Tilt: 0-255    |   |
|          |                   | 3.Focus: 0-255   |   |
|          |                   | 4.Red1: 0-255    |   |
|          |                   | 5.Green1: 0-255  |   |
|          |                   | 6.Blue1: 0-255   |   |
|          |                   | 7.Lemon: 0-255   |   |
|          |                   | 8.Amber: 0-255   |   |
|          |                   | 9.Cyan: 0-255    |   |
|          |                   | 10.Purple: 0-255 |   |
| Addr     | 001-512           |                  | Setting the address from 001-512  |
| Rever    | 1.Pan Invert      | 1.YES    2.NO    | Pan clockwise and counterclockwise setting  |
|          | 2.Tilt Invert     | 1.YES    2.NO    | Tilt clockwise and counterclockwise setting   |
|          | 3.Display Invert  | 1.YES    2.NO    | Display counterclockwise setting  |
| Inform   | 1.CH Value        |                  | Shown all channel information   |
|          | 2.Tem**°C         |                  | Show the temperature of LED board   |
|          | 3.Version:****    |                  | Program version number  |
|          | 4.IP address:**** |                  | ArtNet function   |
|          | 5.Mask:****       |                  | ArtNet function   |

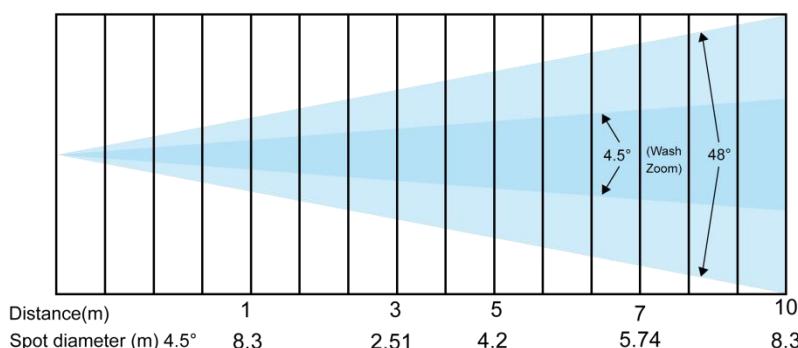
|      |                |                   |                      |
|------|----------------|-------------------|----------------------|
|      | 6.Use Time**** |                   |                      |
|      | 7.Clear Time   |                   |                      |
|      | 1.DMX512       |                   |                      |
|      | 2.Auto         |                   | Setting control mode |
|      | 3.Sound        |                   |                      |
| Mode | 4.Manual       | Master/Alone      | Master/Alone         |
|      |                | 1.Pan: 0-255      |                      |
|      |                | 2.Tilt: 0-255     |                      |
|      |                | 3.Focus: 0-255    |                      |
|      |                | 4.Red1: 0-255     |                      |
|      |                | 5.Green1: 0-255   |                      |
|      |                | 6.Blue1: 0-255    | Manual control       |
|      |                | 7.Lemon1: 0-255   |                      |
|      |                | 8.Amber: 0-255    |                      |
|      |                | 9.Cyan: 0-255     |                      |
|      |                | 10.Purple: 0-255  |                      |
|      |                | 11.Strobe1: 0-255 |                      |

|         |               |                    |                     |
|---------|---------------|--------------------|---------------------|
| Channel | 20 CH         | 20 Channel         | Select channel mode |
|         | 28 CH         | 28 Channel         |                     |
|         | 30 CH         | 30 Channel         |                     |
|         | 38 CH         | 38 Channel         |                     |
|         | 39 CH         | 39 Channel         |                     |
|         | 21 CH(ArtNet) | 21 Channel(ArtNet) |                     |

## 6. LUX Data

**Beam Angle = 4.5°**

|          |        |       |       |       |       |
|----------|--------|-------|-------|-------|-------|
| R lux    | 95000  | 10556 | 3800  | 1939  | 950   |
| G lux    | 226750 | 25194 | 9070  | 4628  | 2268  |
| B lux    | 46000  | 5111  | 1840  | 939   | 460   |
| L lux    | 255000 | 28333 | 10200 | 5204  | 2550  |
| A lux    | 133750 | 14861 | 5350  | 2730  | 1338  |
| C lux    | 237750 | 26417 | 9510  | 4852  | 2378  |
| P lux    | 2150   | 239   | 86    | 44    | 22    |
| 7in1 lux | 6080   | 18240 | 30400 | 42560 | 60800 |



## 7. DMX Channel List

### ► 20CH Mode

| CH | Function          | DMX Value | Description   |
|----|-------------------|-----------|---|
| 1  | Pan               | 0-255     | Pan adjustment  |
| 2  | Pan adjustment    | 0-255     | Pan fine adjustment                                   |
| 3  | Tilt              | 0-255     | Tilt adjustment                                       |
| 4  | Tilt adjustment   | 0-255     | Tilt fine adjustment                                  |
| 5  | Pan/Tilt speed    | 0-255     | From fast to slow                                     |
| 6  | Zoom              | 0-255     | From narrow to wide                                   |
| 7  | Dimmer            | 0-255     | From dark to bright                                   |
| 8  | Dimmer adjustment | 0-255     | From dark to bright                                   |
| 9  | Strobe            | 0-3       | Strobe dimming  |
|    |                   | 4-203     | Synchronous strobe speed from slow to fast (1Hz-25Hz) |
|    |                   | 204-255   | Random strobe   |
| 10 | R dimming         | 0-255     | From dark to bright                                   |
| 11 | G dimming         | 0-255     | From dark to bright                                   |
| 12 | B dimming         | 0-255     | From dark to bright                                   |
| 13 | L dimming         | 0-255     | From dark to bright                                   |
| 14 | A dimming         | 0-255     | From dark to bright                                   |
| 15 | C dimming         | 0-255     | From dark to bright                                   |

| CH | Function          | DMX Value | Description                  |
|----|-------------------|-----------|------------------------------|
| 16 | P dimming         | 0-255     | From dark to bright          |
| 17 | Color temperature | 0-7       | No function                  |
|    |                   | 8-25      | R100%, G UP, B0%             |
|    |                   | 26-43     | R DOWN, G100%, B0%           |
|    |                   | 44-61     | R0%, G100%, B UP             |
|    |                   | 62-79     | R0%, G DOWN, B100%           |
|    |                   | 80-97     | R UP, G0%, B100%             |
|    |                   | 98-115    | R100%, G0%, B DOWN           |
|    |                   | 116-133   | R100%, G UP, B UP            |
|    |                   | 134-152   | R DOWN, G DOWN, B100%        |
|    |                   | 152-170   | R 100%, G 100%, B100%, W100% |
|    |                   | 171-175   | 2300K                        |
|    |                   | 176-180   | 2800K                        |
|    |                   | 181-185   | 3200K                        |
|    |                   | 186-190   | 3700K                        |
|    |                   | 191-195   | 4000K                        |
|    |                   | 196-200   | 4500K                        |
|    |                   | 201-205   | 5000K                        |
|    |                   | 206-210   | 5500K                        |

| CH | Function | DMX Value                        | Description        |
|----|----------|----------------------------------|--------------------|
| 18 | Pattern  | 211-215                          | 6000K              |
|    |          | 216-220                          | 6500K              |
|    |          | 221-225                          | 7000K              |
|    |          | 226-230                          | 7500K              |
|    |          | 231-235                          | 8000K              |
|    |          | 236-240                          | 8500K              |
|    |          | 241-245                          | 9000K              |
|    |          | 246-250                          | 9500K              |
|    |          | 251-255                          | 10000K             |
|    |          | 0-9                              | No function        |
| 18 | Pattern  | 10-19                            | Static pattern 1   |
|    |          | 20-29                            | Static pattern 2   |
|    |          | ..... (10 numbers and 1 pattern) | .....              |
|    |          | 60-69                            | Static pattern 6   |
|    |          | 70-79                            | Dynamic pattern 1  |
|    |          | 80-89                            | Dynamic pattern 2  |
|    |          | ..... (10 numbers and 1 pattern) | .....              |
|    |          | 190-199                          | Dynamic pattern 13 |
|    |          | 200-255                          | Dynamic pattern 14 |

| CH | Function                              | DMX Value | Description   |
|----|---------------------------------------|-----------|---|
| 19 | Dynamic pattern speed<br>(With 18 CH) | 0-127     | Clockwise, from fast to slow  |
|    |                                       | 128-255   | Counterclockwise, from slow to fast   |
| 20 | Reset                                 | 0-137     | No function   |
|    |                                       | 138-149   | PWM output frequency 1K-64K<br>( stay for 3s)<br>1K,2K,4K,6K,8K,10K,16K,20K,<br>24K,32K,48K,64K |
|    |                                       | 150-159   | Fast dimming  |
|    |                                       | 160-169   | Slow dimming(from fast to slow)   |
|    |                                       | 170-250   | No function   |
|    |                                       | 251-255   | Light reset (stay for 3s)   |

## ►28CH Mode

| CH | Function          | DMX Value | Description          |
|----|-------------------|-----------|----------------------|
| 1  | Pan               | 0-255     | Pan adjustment       |
| 2  | Pan adjustment    | 0-255     | Pan fine adjustment  |
| 3  | Tilt              | 0-255     | Tilt adjustment      |
| 4  | Tilt adjustment   | 0-255     | Tilt fine adjustment |
| 5  | Pan/Tilt speed    | 0-255     | From fast to slow    |
| 6  | Zoom              | 0-255     | From narrow to wide  |
| 7  | Dimmer            | 0-255     | From dark to bright  |
| 8  | Dimmer adjustment | 0-255     | From dark to bright  |

| CH | Function          | DMX Value | Description   |
|----|-------------------|-----------|---|
| 9  | Strobe            | 0-3       | Strobe dimming  |
|    |                   | 4-203     | Synchronous strobe speed from slow to fast (1Hz-25Hz) |
|    |                   | 204-255   | Random strobe   |
| 10 | R dimming         | 0-255     | From dark to bright                                   |
| 11 | G dimming         | 0-255     | From dark to bright                                   |
| 12 | B dimming         | 0-255     | From dark to bright                                   |
| 13 | L dimming         | 0-255     | From dark to bright                                   |
| 14 | A dimming         | 0-255     | From dark to bright                                   |
| 15 | C dimming         | 0-255     | From dark to bright                                   |
| 16 | P dimming         | 0-255     | From dark to bright                                   |
| 17 | Color temperature | 0-7       | No function   |
|    |                   | 8-25      | R100%, G UP, B0%                                      |
|    |                   | 26-43     | R DOWN, G100%, B0%                                    |
|    |                   | 44-61     | R0%, G100%, B UP                                      |
|    |                   | 62-79     | R0%, G DOWN, B100%                                    |
|    |                   | 80-97     | R UP, G0%, B100%                                      |
|    |                   | 98-115    | R100%, G0%, B DOWN                                    |
|    |                   | 116-133   | R100%, G UP, B UP                                     |
|    |                   | 134-152   | R DOWN, G DOWN, B100%                                 |

| CH | Function    | DMX Value | Description                  |
|----|-------------|-----------|------------------------------|
|    |             | 152-170   | R 100%, G 100%, B100%, W100% |
|    |             | 171-175   | 2300K                        |
|    |             | 176-180   | 2800K                        |
|    |             | 181-185   | 3200K                        |
|    |             | 186-190   | 3700K                        |
|    |             | 191-195   | 4000K                        |
|    |             | 196-200   | 4500K                        |
|    |             | 201-205   | 5000K                        |
|    |             | 206-210   | 5500K                        |
|    |             | 211-215   | 6000K                        |
|    |             | 216-220   | 6500K                        |
|    |             | 221-225   | 7000K                        |
|    |             | 226-230   | 7500K                        |
|    |             | 231-235   | 8000K                        |
|    |             | 236-240   | 8500K                        |
|    |             | 241-245   | 9000K                        |
|    |             | 246-250   | 9500K                        |
|    |             | 251-255   | 10000K                       |
| 18 | Macro color | 0-9       | No function                  |

| CH | Function                              | DMX Value                            | Description                         |
|----|---------------------------------------|--------------------------------------|-------------------------------------|
| 19 | Pattern                               | 10-19                                | Macro color 1                       |
|    |                                       | 20-29                                | Macro color 2                       |
|    |                                       | ..... (10 numbers and 1 macro color) | .....                               |
|    |                                       | 190-199                              | Macro color 19                      |
|    |                                       | 200-255                              | Macro color 20                      |
| 19 | Pattern                               | 0-9                                  | No function                         |
|    |                                       | 10-19                                | Static pattern 1                    |
|    |                                       | 20-29                                | Static pattern 2                    |
|    |                                       | ..... (10 numbers and 1 pattern)     | .....                               |
|    |                                       | 60-69                                | Static pattern 6                    |
|    |                                       | 70-79                                | Dynamic pattern 1                   |
|    |                                       | 80-89                                | Dynamic pattern 2                   |
|    |                                       | ..... (10 numbers and 1 pattern)     | .....                               |
|    |                                       | 190-199                              | Dynamic pattern 13                  |
|    |                                       | 200-255                              | Dynamic pattern 14                  |
| 20 | Dynamic pattern speed<br>(With 19 CH) | 0-127                                | Clockwise, from fast to slow        |
|    |                                       | 128-255                              | Counterclockwise, from slow to fast |
| 21 | Background R                          | 0-255                                | Pattern effect red                  |
| 22 | Background G                          | 0-255                                | Pattern effect green                |

| CH | Function     | DMX Value | Description   |
|----|--------------|-----------|---|
| 23 | Background B | 0-255     | Pattern effect blue   |
| 24 | Background L | 0-255     | Pattern effect lemon  |
| 25 | Background A | 0-255     | Pattern effect amber  |
| 26 | Background C | 0-255     | Pattern effect cyan   |
| 27 | Background P | 0-255     | Pattern effect purple   |
| 28 | Function     | 0-137     | No function   |
|    |              | 138-149   | PWM output frequency 1K-64K<br>( stay for 3s)<br>1K,2K,4K,6K,8K,10K,16K,20K,<br>24K,32K,48K,64K |
|    |              | 150-159   | Fast dimming  |
|    |              | 160-169   | Slow dimming(from fast to slow)   |
|    |              | 170-250   | No function   |
|    |              | 251-255   | Light reset (stay for 3s)   |

## ► 30CH Mode

| CH | Function        | DMX Value | Description          |
|----|-----------------|-----------|----------------------|
| 1  | Pan             | 0-255     | Pan adjustment       |
| 2  | Pan adjustment  | 0-255     | Pan fine adjustment  |
| 3  | Tilt            | 0-255     | Tilt adjustment      |
| 4  | Tilt adjustment | 0-255     | Tilt fine adjustment |
| 5  | Pan/Tilt speed  | 0-255     | From fast to slow    |

| CH | Function       | DMX Value | Description   |
|----|----------------|-----------|---|
| 6  | Zoom           | 0-255     | From narrow to wide   |
| 7  | Function       | 0-137     | No function   |
|    |                | 138-149   | PWM output frequency 1K-64K<br>( stay for 3s)<br>1K,2K,4K,6K,8K,10K,16K,20K,<br>24K,32K,48K,64K |
|    |                | 150-159   | Fast dimming  |
|    |                | 160-169   | Slow dimming(from fast to slow)   |
|    |                | 170-250   | No function   |
|    |                | 251-255   | Light reset (stay for 3s)   |
| 8  | Dimmer         | 0-255     | From dark to bright   |
| 9  | Strobe         | 0-3       | Strobe dimming  |
|    |                | 4-203     | Synchronous strobe speed<br>from slow to fast (1Hz-25Hz)  |
|    |                | 204-255   | Random strobe   |
| 10 | R1 LED dimming | 0-255     | R1 LED dimming  |
| 11 | G1 LED dimming | 0-255     | G1 LED dimming  |
| 12 | B1 LED dimming | 0-255     | B1 LED dimming  |
| 13 | L1 LED dimming | 0-255     | L1 LED dimming  |
| 14 | A1 LED dimming | 0-255     | A1 LED dimming  |
| 15 | C1 LED dimming | 0-255     | C1 LED dimming  |
| 16 | P1 LED dimming | 0-255     | P1 LED dimming  |
| 17 | R2 LED dimming | 0-255     | R2 LED dimming  |

| CH | Function       | DMX Value | Description    |
|----|----------------|-----------|----------------|
| 18 | G2 LED dimming | 0-255     | G2 LED dimming |
| 19 | B2 LED dimming | 0-255     | B2 LED dimming |
| 20 | L2 LED dimming | 0-255     | L2 LED dimming |
| 21 | A2 LED dimming | 0-255     | A2 LED dimming |
| 22 | C2 LED dimming | 0-255     | C2 LED dimming |
| 23 | P2 LED dimming | 0-255     | P2 LED dimming |
| 24 | R3 LED dimming | 0-255     | R3 LED dimming |
| 25 | G3 LED dimming | 0-255     | G3 LED dimming |
| 26 | B3 LED dimming | 0-255     | B3 LED dimming |
| 27 | L3 LED dimming | 0-255     | L3 LED dimming |
| 28 | A3 LED dimming | 0-255     | A3 LED dimming |
| 29 | C3 LED dimming | 0-255     | C3 LED dimming |
| 30 | P3 LED dimming | 0-255     | P3 LED dimming |

## ► 38CH Mode

| CH | Function        | DMX Value | Description          |
|----|-----------------|-----------|----------------------|
| 1  | Pan             | 0-255     | Pan adjustment       |
| 2  | Pan adjustment  | 0-255     | Pan fine adjustment  |
| 3  | Tilt            | 0-255     | Tilt adjustment      |
| 4  | Tilt adjustment | 0-255     | Tilt fine adjustment |

| CH | Function       | DMX Value | Description   |
|----|----------------|-----------|---|
| 5  | Pan/Tilt speed | 0-255     | From fast to slow   |
| 6  | Zoom           | 0-255     | From narrow to wide   |
| 7  | Function       | 0-137     | No function   |
|    |                | 138-149   | PWM output frequency 1K-64K<br>( stay for 3s)<br>1K,2K,4K,6K,8K,10K,16K,20K,<br>24K,32K,48K,64K |
|    |                | 150-159   | Fast dimming  |
|    |                | 160-169   | Slow dimming(from fast to slow)   |
|    |                | 170-250   | No function   |
|    |                | 251-255   | Light reset (stay for 3s)   |
| 8  | Dimmer         | 0-255     | From dark to bright   |
| 9  | Dimmer adjust  | 0-255     | Dimmer adjustment control   |
| 10 | Strobe         | 0-3       | Strobe dimming  |
|    |                | 4-203     | Synchronous strobe speed<br>from slow to fast (1Hz-25Hz)  |
|    |                | 204-255   | Random strobe   |
| 11 | R dimming      | 0-255     | From dark to bright   |
| 12 | G dimming      | 0-255     | From dark to bright   |
| 13 | B dimming      | 0-255     | From dark to bright   |
| 14 | L dimming      | 0-255     | From dark to bright   |
| 15 | A dimming      | 0-255     | From dark to bright   |
| 16 | C dimming      | 0-255     | From dark to bright   |

| CH | Function       | DMX Value | Description         |
|----|----------------|-----------|---------------------|
| 17 | P dimming      | 0-255     | From dark to bright |
| 18 | R1 LED dimming | 0-255     | R1 LED dimming      |
| 19 | G1 LED dimming | 0-255     | G1 LED dimming      |
| 20 | B1 LED dimming | 0-255     | B1 LED dimming      |
| 21 | L1 LED dimming | 0-255     | L1 LED dimming      |
| 22 | A1 LED dimming | 0-255     | A1 LED dimming      |
| 23 | C1 LED dimming | 0-255     | C1 LED dimming      |
| 24 | P1 LED dimming | 0-255     | P1 LED dimming      |
| 25 | R2 LED dimming | 0-255     | R2 LED dimming      |
| 26 | G2 LED dimming | 0-255     | G2 LED dimming      |
| 27 | B2 LED dimming | 0-255     | B2 LED dimming      |
| 28 | L2 LED dimming | 0-255     | L2 LED dimming      |
| 29 | A2 LED dimming | 0-255     | A2 LED dimming      |
| 30 | C2 LED dimming | 0-255     | C2 LED dimming      |
| 31 | P2 LED dimming | 0-255     | P2 LED dimming      |
| 32 | R3 LED dimming | 0-255     | R3 LED dimming      |
| 33 | G3 LED dimming | 0-255     | G3 LED dimming      |
| 34 | B3 LED dimming | 0-255     | B3 LED dimming      |
| 35 | L3 LED dimming | 0-255     | L3 LED dimming      |

| CH | Function       | DMX Value | Description    |
|----|----------------|-----------|----------------|
| 36 | A3 LED dimming | 0-255     | A3 LED dimming |
| 37 | C3 LED dimming | 0-255     | C3 LED dimming |
| 38 | P3 LED dimming | 0-255     | P3 LED dimming |

## ►39CH Mode

| CH | Function        | DMX Value | Description   |
|----|-----------------|-----------|---|
| 1  | Pan             | 0-255     | Pan adjustment  |
| 2  | Pan adjustment  | 0-255     | Pan fine adjustment                                   |
| 3  | Tilt            | 0-255     | Tilt adjustment                                       |
| 4  | Tilt adjustment | 0-255     | Tilt fine adjustment                                  |
| 5  | Pan/Tilt speed  | 0-255     | From fast to slow                                     |
| 6  | Zoom            | 0-255     | From narrow to wide                                   |
| 7  | Dimming curve   | 0-49      | Linear dimming  |
|    |                 | 50-99     | Square-Law dimming                                    |
|    |                 | 100-149   | Inverse Square-Law dimming                            |
|    |                 | 150-255   | S-curve dimming                                       |
| 8  | Dimmer          | 0-255     | From dark to bright                                   |
| 9  | Dimmer adjust   | 0-255     | Dimmer adjustment control                             |
| 10 | Strobe          | 0-3       | Strobe dimming  |
|    |                 | 4-203     | Synchronous strobe speed from slow to fast (1Hz-25Hz) |

| CH | Function          | DMX Value | Description        |
|----|-------------------|-----------|--------------------|
|    |                   | 204-255   | Random strobe      |
| 11 | R                 | 0-255     | Red dimming        |
| 12 | Red adjust        | 0-255     | Red adjust         |
| 13 | G                 | 0-255     | Green dimming      |
| 14 | Green adjust      | 0-255     | Green adjust       |
| 15 | B                 | 0-255     | Blue dimming       |
| 16 | Blue adjust       | 0-255     | Blue adjust        |
| 17 | L                 | 0-255     | lemon dimming      |
| 18 | lemon adjust      | 0-255     | lemon adjust       |
| 19 | A                 | 0-255     | Amber dimming      |
| 20 | Amber adjust      | 0-255     | Amber adjust       |
| 21 | C                 | 0-255     | Cyan dimming       |
| 22 | Cyan adjust       | 0-255     | Cyan adjust        |
| 23 | P                 | 0-255     | Purple dimming     |
| 24 | Purple adjust     | 0-255     | Purple adjust      |
| 25 | Color temperature | 0-7       | No function        |
|    |                   | 8-25      | R100%, G UP, B0%   |
|    |                   | 26-43     | R DOWN, G100%, B0% |
|    |                   | 44-61     | R0%, G100%, B UP   |

| CH | Function | DMX Value | Description                  |
|----|----------|-----------|------------------------------|
|    |          | 62-79     | R0%, G DOWN, B100%           |
|    |          | 80-97     | R UP, G0%, B100%             |
|    |          | 98-115    | R100%, G0%, B DOWN           |
|    |          | 116-133   | R100%, G UP, B UP            |
|    |          | 134-152   | R DOWN, G DOWN, B100%        |
|    |          | 152-170   | R 100%, G 100%, B100%, W100% |
|    |          | 171-175   | 2300K                        |
|    |          | 176-180   | 2800K                        |
|    |          | 181-185   | 3200K                        |
|    |          | 186-190   | 3700K                        |
|    |          | 191-195   | 4000K                        |
|    |          | 196-200   | 4500K                        |
|    |          | 201-205   | 5000K                        |
|    |          | 206-210   | 5500K                        |
|    |          | 211-215   | 6000K                        |
|    |          | 216-220   | 6500K                        |
|    |          | 221-225   | 7000K                        |
|    |          | 226-230   | 7500K                        |
|    |          | 231-235   | 8000K                        |

| CH | Function    | DMX Value                            | Description       |
|----|-------------|--------------------------------------|-------------------|
|    |             | 236-240                              | 8500K             |
|    |             | 241-245                              | 9000K             |
|    |             | 246-250                              | 9500K             |
|    |             | 251-255                              | 10000K            |
|    |             | 0-9                                  | No function       |
| 26 | Macro color | 10-19                                | Macro color 1     |
|    |             | 20-29                                | Macro color 2     |
|    |             | ..... (10 numbers and 1 macro color) | .....             |
|    |             | 190-199                              | Macro color 19    |
|    |             | 200-255                              | Macro color 20    |
|    |             | 0-9                                  | No function       |
|    | Pattern     | 10-19                                | Static pattern 1  |
|    |             | 20-29                                | Static pattern 2  |
|    |             | ..... (10 numbers and 1 pattern)     | .....             |
| 27 |             | 60-69                                | Static pattern 6  |
|    |             | 70-79                                | Dynamic pattern 1 |
|    |             | 80-89                                | Dynamic pattern 2 |
|    |             | ..... (10 numbers and 1 pattern)     | .....             |

| CH | Function                              | DMX Value | Description   |
|----|---------------------------------------|-----------|---|
|    |                                       | 190-199   | Dynamic pattern 13  |
|    |                                       | 200-255   | Dynamic pattern 14  |
| 28 | Dynamic pattern speed<br>(With 19 CH) | 0-127     | Clockwise, from fast to slow  |
|    |                                       | 128-255   | Counterclockwise, from slow to fast   |
| 29 | Pattern fade                          | 0-255     | Pattern effect fade   |
| 30 | Background dimming                    | 0-255     | Background 0~100% dimming   |
| 31 | Background strobe                     | 0-255     | Background strobe   |
| 32 | Background R                          | 0-255     | Pattern effect red  |
| 33 | Background G                          | 0-255     | Pattern effect green  |
| 34 | Background B                          | 0-255     | Pattern effect blue   |
| 35 | Background L                          | 0-255     | Pattern effect lemon  |
| 36 | Background A                          | 0-255     | Pattern effect amber  |
| 37 | Background C                          | 0-255     | Pattern effect cyan   |
| 38 | Background P                          | 0-255     | Pattern effect purple   |
| 39 | Function                              | 0-137     | No function   |
|    |                                       | 138-149   | PWM output frequency 1K-64K<br>( stay for 3s)<br>1K,2K,4K,6K,8K,10K,16K,20K,<br>24K,32K,48K,64K |
|    |                                       | 150-159   | Fast dimming  |
|    |                                       | 160-169   | Slow dimming(from fast to slow)   |
|    |                                       | 170-250   | No function   |

| CH | Function | DMX Value | Description               |
|----|----------|-----------|---------------------------|
|    |          | 251-255   | Light reset (stay for 3s) |

## ►21CH Mode

| CH | Function        | DMX Value | Description   |
|----|-----------------|-----------|---|
| 1  | Pan             | 0-255     | Pan adjustment  |
| 2  | Pan adjustment  | 0-255     | Pan fine adjustment   |
| 3  | Tilt            | 0-255     | Tilt adjustment   |
| 4  | Tilt adjustment | 0-255     | Tilt fine adjustment  |
| 5  | Pan/Tilt speed  | 0-255     | From fast to slow   |
| 6  | Zoom            | 0-255     | From narrow to wide   |
| 7  | Function        | 0-137     | No function   |
|    |                 | 138-149   | PWM output frequency 1K-64K<br>( stay for 3s)<br>1K,2K,4K,6K,8K,10K,16K,20K,<br>24K,32K,48K,64K |
|    |                 | 150-159   | Fast dimming  |
|    |                 | 160-169   | Slow dimming(from fast to slow)   |
|    |                 | 170-250   | No function   |
|    |                 | 251-255   | Light reset (stay for 3s)   |
| 8  | Dimming curve   | 0-49      | Linear dimming  |
|    |                 | 50-99     | Square-Law dimming  |
|    |                 | 100-149   | Inverse Square-Law dimming  |

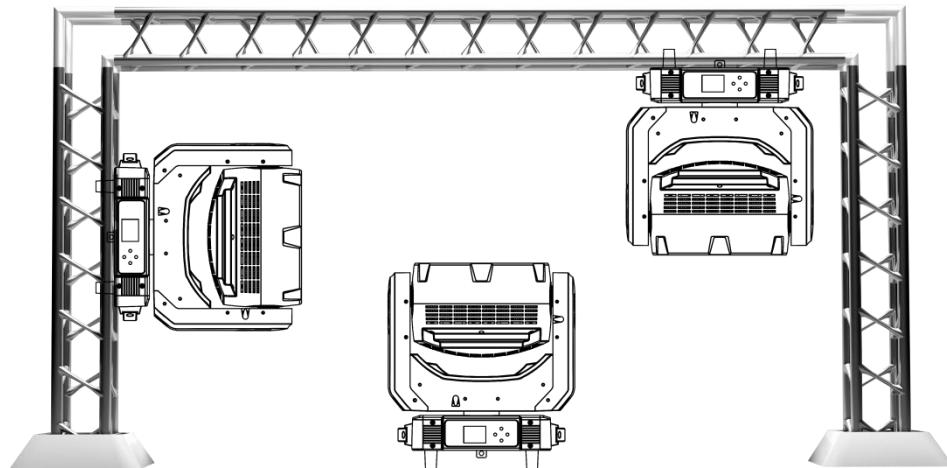
| CH             | Function       | DMX Value | Description   |
|----------------|----------------|-----------|---|
|                |                | 150-255   | S-curve dimming                                       |
| 9              | Dimmer         | 0-255     | From dark to bright                                   |
| 10             | Dimmer adjust  | 0-255     | Dimmer adjustment control                             |
| 11             | Strobe         | 0-3       | Strobe dimming  |
|                |                | 4-203     | Synchronous strobe speed from slow to fast (1Hz-25Hz) |
|                |                | 204-255   | Random strobe   |
| ArtNet Control |                |           |   |
| 1              | R1 LED dimming | 0-255     | R1 LED dimming  |
| 2              | G1 LED dimming | 0-255     | G1 LED dimming  |
| 3              | B1 LED dimming | 0-255     | B1 LED dimming  |
| 4              | L1 LED dimming | 0-255     | L1 LED dimming  |
| 5              | A1 LED dimming | 0-255     | A1 LED dimming  |
| 6              | C1 LED dimming | 0-255     | C1 LED dimming  |
| 7              | P1 LED dimming | 0-255     | P1 LED dimming  |
| 8              | R2 LED dimming | 0-255     | R2 LED dimming  |
| 9              | G2 LED dimming | 0-255     | G2 LED dimming  |
| 10             | B2 LED dimming | 0-255     | B2 LED dimming  |
| 11             | L2 LED dimming | 0-255     | L2 LED dimming  |
| 12             | A2 LED dimming | 0-255     | A2 LED dimming  |

| <b>CH</b> | <b>Function</b> | <b>DMX Value</b> | <b>Description</b> |
|-----------|-----------------|------------------|--------------------|
| 13        | C2 LED dimming  | 0-255            | C2 LED dimming     |
| 14        | P2 LED dimming  | 0-255            | P2 LED dimming     |
| 15        | R3 LED dimming  | 0-255            | R3 LED dimming     |
| 16        | G3 LED dimming  | 0-255            | G3 LED dimming     |
| 17        | B3 LED dimming  | 0-255            | B3 LED dimming     |
| 18        | L3 LED dimming  | 0-255            | L3 LED dimming     |
| 19        | A3 LED dimming  | 0-255            | A3 LED dimming     |
| 20        | C3 LED dimming  | 0-255            | C3 LED dimming     |
| 21        | P3 LED dimming  | 0-255            | P3 LED dimming     |

## 8. Mounting

When installing the unit, the trussing or area of installation must be able to hold 10 times the weight without any deformation. When installing the unit must be secured with a secondary safety attachment, e.g. an appropriate safety cable. Never stand directly under the facility while mounting, uninstalling or repairing facilities.

High-altitude mounting requires for extensive experience, including working load limits calculating, installation material, and periodic safety check of installation materials and facilities. If you're lack of mentioned qualifications, do not attempt the installation yourself. These installation should be checked by a skilled person annually.

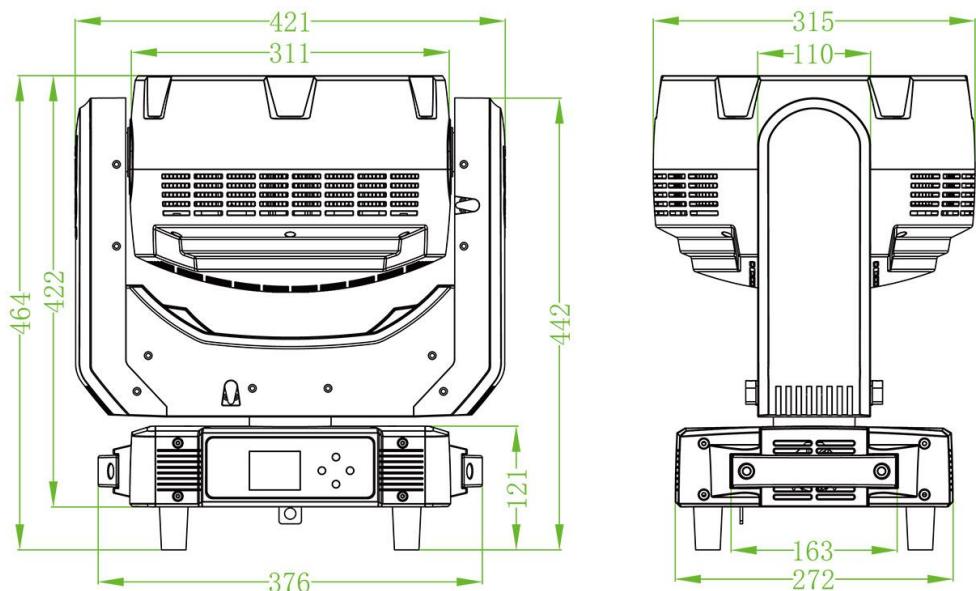


1960Z-7 works properly in above different mounting, hanging upside-down from a ceiling, sideways on trussing, or set on smooth horizontal surface. Be sure this facility is at least 12m (40ft) away from flammable materials (decoration etc.). Always use and install the safety cable to prevent accidental

damage or injury from the facility failure. Never use handles for secondary attachment.

**NOTICE:** The suitable environment temperature of the facility is from -25° C to 45° C. Do not place this facility in an environment where the temperatures are under or above the temperatures stated. This will help the fixture run at its best and extend the lifetime.

## 9. Product Size



## 10. Attention

1. When the facility is powered on, please avoid looking directly at the facility.
2. When assembling/ replacing LED, be sure to cut off the main power of facilities before opening the cover upon the LED board.

## 11. Trouble Shooting

Following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

### **A. The unit does not work, no light and the fan does not work**

1. Check the status of power connection and fuse.
2. Check the voltage.
3. Check the power indicator.

### **B. No response to DMX controller**

1. If the display screen flashes, check the DMX signal connector and signal line whether the connection is correct.
  1. If the display screen does not flash, but no response to channel control, check whether the address code or channel setting is correct.
  1. If the DMX signal transmission is intermittent, check if the XLR and DMX cables are in good condition.
  2. Try using another controller.
  3. Check if the DMX cables is too close to the high-voltage wire, which may damage or interfere with the signal circuit.
6. The facility has not completed the self-check.

## C. One of the channels is not working well

1. The stepper motor might be damaged or the cable connected to the PCB is broken.
2. The motor's drive IC on the PCB might be out of condition.

## 12. Fixture Cleaning

The lens and diffuser should be clean frequently to get better light effect. Wipe frequency according to the environment. Humidity, excessive smoke, and dirty environment will make lens dusty.

- Use soft cloth and special glass cleaner.
- Wipe lens surface at least every 30 days.
- Use vacuum cleaners or air guns to clean the interior structure of the facility, at least twice a year.



### Warning:

To avoid the danger of lighting strikes and fire, please do not place the facility in a humid environment. Do not disassemble it without permission, otherwise, the manufacturer will not provide warranty. If the facility fails, please contact the manufacturer first.

# Product Warranty Card

Product: 19x60W RGBLACP Wash Zoom

Model NO.: 1960Z-7

Manufacture Date:

User:

Purchase Date:

Manufacturer:

Sales Store:

Address:

ATTN.:

ATTN.:

Phone:

Phone:

Note: The above blank must be filled in and sealed by the end user or sales point, otherwise no warranty will be provided. (Below please check the warranty period and terms)

Warranty Period: This facility is warranted for 2 years from the date of purchase.

Warranty Terms:

1. Except for man-made damage and natural disasters
2. If the facility fails to function properly during the warranty period, please contact our after service department or our local distributor directly.
  - 1) Fail to present a valid warranty card.
  - 2) Omissions, alterations, and trade sales names on the warranty card.
  - 3) Failures and damage caused by force majeure.
  - 4) Failures and damage caused during transportation and handling.
  - 5) Failures and damage caused by failure to follow the instructions for use.
  - 6) Failures and damage caused by disassembly, repair, and modification of the product without the manufacturer's authorization or by non-professionals.
  - 7) Failures caused by the use of accessories not approved by the factory or not matched by the factory.

▲ Thank you for reading this manual. Please keep it for future reference.