

# AQUAPEARL-MINI User Manual

Web:www.lightsky.com.cn

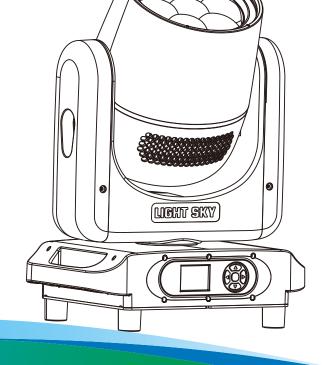
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#### Congratulations on choosing our company product! We thank you for your custom.

- Please keep in mind that this product, like other products of the company, adheres to the concept of people-oriented design and manufacture, and takes product quality as the foundation.
- ◆ We put the interests of customers first, and do our best to meet customer requirements.
- Please read this instruction manual carefully and keep it for future reference. In the case of fully understanding the product information, strictly abide by the Use the instruction manual to ensure that the product is installed, used and serviced correctly and safely.
- Our company is not responsible for any damage to lamps or other performance due to personal failure to follow the instructions during installation, use and maintenance.responsibility.
- Our company reserves the right to modify the manual at any time and without prior notice.

### 1.Safety Instructions

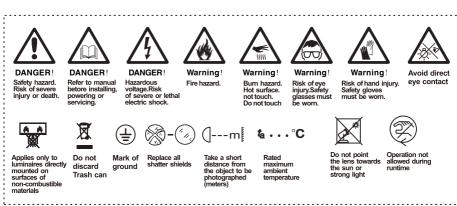


Please read the instruction carefully which includes important information about the installation, usage and maintenance.

#### WARNING

Please keep this User Manual for future consultation. If you sell the unit to another user, be sure that they also receive this manual.

The following symbols are used to identify important safety information on the product and in this manual:



# Important:

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

- Unpack and check carefully to ensure that there is no transportation damage before
  using the unit.
- Do install and operate by qualified operator.
- The light source in this luminaire should be replaced by the manufacturer or its service agent or a similarly qualified person, always cut off the power supply before replacing he light source.
- Do not allow children to operate the fixture.
- Use safety chain when fixing the unit. Handle the unit by carrying its base instead of head only.

- The unit must be installed in a location with adequate ventilation, at least 20cm from adjacent surfaces.
- Be sure that no ventilation slots is blocked, otherwise the unit will be overheated.
- Before operation, ensure that you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Minimum ambient temperature TA: -10°C. Maximum ambient temperature TA: 40°C.
   Do not operate this product at a lower or higher temperature.
- Do not connect the device to any dimmer pack.
- When the lamp is running, do not place combustible objects next to it. The shortest distance between the device and inflammable and explosive objects or materials is 0.5m.
- Make sure the power cord is not crimped or damaged; replace it immediately if damaged.
- Unit's surface temperature may reach up to 80°C. Do not touch the housing bare-handedduring its operation.
- Avoid any flammable liquids, water or metal from entering the unit. Once it happens, cut off the mains power immediately.
- Do not operate in a dirty or dusty environment. do clean the fixture regularly.
- Do not touch any wire during operation as there might be a hazard of electric shock.
- Avoid entanglement of the power cord with other wires.
- The minimum distance to objects/surface must be more than 3 meters.
- In the event of serious operating problem, stop using the unit immediately.
- Never turn on and off the unit time after time.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.
- Do not open the housing as there are no user serviceable parts inside.
- Do not attempt to operate this unit if it becomes damaged. Do not attempt any
  repairs yourself. Repairs carried out by unskilled people can lead to damage or
  malfunction. Please contact the nearest authorized technical assistance center if needed.
- Disconnect this product from its power source before servicing.
- Do use the original packaging if the device is to be transported.
- Avoid direct eye exposure to the light source while the product is on.

• Do not operate this product if you see damage on the housing, shields, or cables. Have the damaged parts replaced by an authorized technician at once.

### Installation:

The lighting fixture should be fixed on the quick lock light hook with screws, ensuring a secure installation to prevent vibration and slipping during operation. Also ensure that the structure connecting the lighting fixtures can support 10 times the weight of the fixtures. At the same time as installing the lighting fixtures, two safety ropes that can support 12 times the weight of the fixtures should also be installed. The installation of the equipment should be carried out by professionals, and it should also be installed in places that are not easily accessible to people or where no one passes by without permission.

### 2. Technical Specifications

#### **OPTICS**

- Light source: 7\*60W RGBW four-in-one LEDs

Beam angle: 4°~32°Spot angle: 5°~50°

- Luminous flux:7100 Lm

- Color temperature: 2500K-10000K

- Whole lamp output illumination: 23500 lux@ 5 meters

#### **EFFECT**

- Color mixing system: Uniform RGBW color mixing system and rainbow effect.
- -Zoom system: linear electric zoom.
- Single point control: The light source supports independent control of a single light source and has outstanding transformation effects.
- Front aperture: The front aperture can be controlled by a single point, and you can chase the flowing color effect at will.
- Effect macro: static effect macro and dynamic effect macro function.
- Dimming: Electronic dimming, providing four dimming curves+four dimming frequencies+four dimming speeds.
- Strobe: 1-30Hz electronic strobe and random strobe.

#### **CONTROL AND PROGRAMMING**

- Control channel: 31CH, 55CH, 21CH, 35CH, please see the channel table for details
- Control protocol: standard DMX512 protocol, RDM protocol, Art-Net protocol
- Data connection: three-core or five-core signal input/output
- Display: LCD screen

#### **SOFTWARE**

- Upgrade software through the DMX signal interface or USB interface (optional)
- Intelligent temperature control to ensure LED life

### X/Y AXIS MOVEMENT ANGLE

- X-axis: 540° 8bit/16bit precision scanning
- Y-axis: 250° 8bit/16bit precision scanning

#### **POWER AND POWER**

- Input voltage: AC 100-240V 50/60Hz

- Maximum power: 480W

- Power factor: 0.9

#### SIZE AND WEIGHT

- Product size: 329mm×245mm×454mm

- Carton packaging (Default): 410mm×290mm×625mm

- N.W.: 12.3 kg G.W.: 15.7 kg

- Flycase (4 sets): 850mm×660mm×725mm

- N.W.: 49.2 kg G.W.: 100.4 kg

#### **OTHERS**

- IP rate: IP66

- Working environment: -10°C~40°C

- Maximum surface temperature of the lamp body: 80°C

- Maximum lamp current: 2.4A/220V; 4.8A/110V

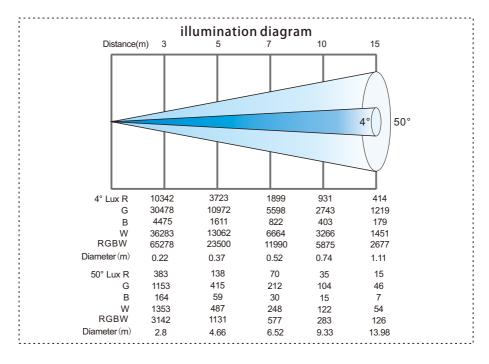
### **APPROVALS**

- The product implementation standard: GB 7000.1-2015 GB7000. 217-2008

- Approved certifications: CE . RoHs

- The product complies with the following EU directives:

Low Voltage Directive 2014/35/EU . EMC Directive 2014/30/EU



# 2.1.Attachment And Size

### Attachment contents-Fig.1







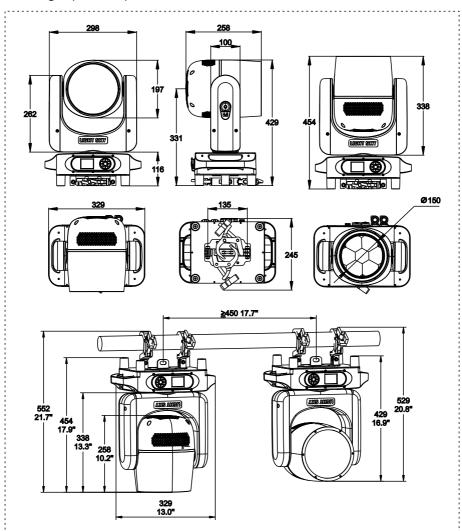


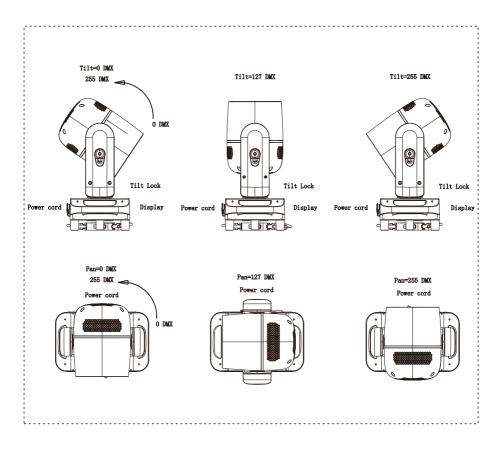






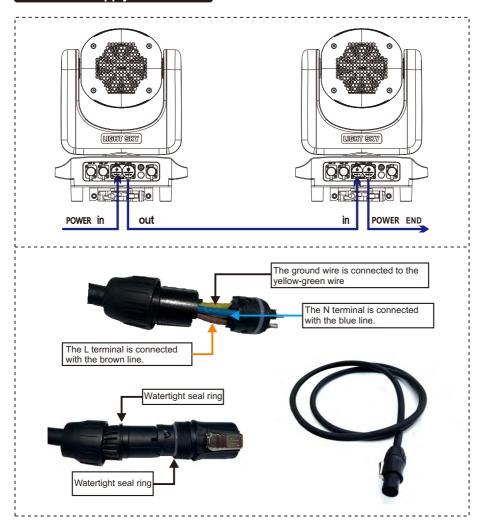
# Size-Fig.2 (Unit:mm)





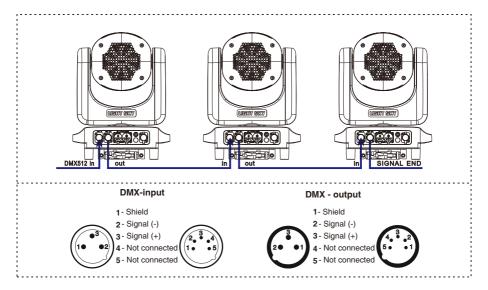
# 3.Connection and control

# 3.1. Power supply connection



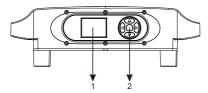
- The bus connecting the power supply must be installed by a qualified professional technician.
- After completing all the above operations and ensuring that it is installed, you can power on the lamp to operate.

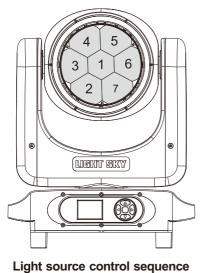
# 3.2.DMX 512 Connection



- 1. At last unit, the DMX cable has to be terminated with a terminator. Solder a 1200hm 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last unit.
- 2. Connect the unit together in a "daisy chain" by XLR plug cable from the output of the unit to the input of the next unit. The cable cannot be branched or split to a "Y" cable. DMX 512 is a very high-speed signal. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system.
- 3. The DMX output and input connectors are pass-through to maintain the DMX circuit, when one of the units' power is disconnected.
- 4. Each lighting unit needs to have a DMX address to receive the data by the controller. The address number is between 1-512.
- 5. The end of the DMX 512 system should be terminated to reduce signal errors.
- 6. 3 pin XLR connectors are more popular than 5 pins XLR.
- 3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)
- 5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+), Pin4, Pin5 not used.

# 3.3.Control Panel





- Display: To show the various menus and the selected function.
- 2. Button:

| OK | OK confirmation key |  |
|----|---------------------|--|
|    | UP                  |  |
| _  | DOWN                |  |
| •  | To the left         |  |
|    | To the right        |  |

# 4.How To Set The Unit

# 4.1.Main Function

The lamp is powered on. When the system initialization and lamp reset are completed, and the standby interface is displayed on the display screen, press OK to enter the preset menu interface. The main functions are as follows:

| Main menu   | I menu            | II menu             | III menu                                | Note  |
|-------------|-------------------|---------------------|---|---|
|             | Address           | 1-512               |   |   |
|             |                   | 31CH ( Default )    |   |   |
|             |                   | 55CH                |   |   |
|             | Channel           | 21CH                |   |   |
| DMXAddress  |                   | 35CH                |   |   |
|             |                   | Black ( Default )   |   |   |
|             | State             | Hold                |   |   |
|             |                   | DMX ( Default )     |   | This menucan only be                              |
|             | InputMode         | ARTNET              |   | displayed when the artnet<br>module is connected. |
|             |                   | Total PowerTime     |   | module is connected.                              |
|             |                   | Power Time          |   |   |
|             | Time              | Total Light Time    |   |   |
|             |                   | Light time          |   |   |
|             | Temperature       | Head Temp           |   |   |
|             |                   | HeadFan1Vol         |   |   |
|             | Fan Info.         | HeadFan2Vol         |   |   |
|             |                   | HeadFan1Sp          |   |   |
|             |                   | 1.MCU(XY)***        |   |   |
|             |                   | 2.MCU(ZOOM)*        |   |   |
|             |                   | 3.MCU(LED1)***      |   |   |
|             |                   | 4.MCU(LED2)***      |   |   |
| Information |                   | 5.Pan ***           |   |   |
| miomicuon   | Fixture state     | 6.Tilt ***          |   |   |
|             |                   | 7.Zoom***           |   |   |
|             |                   | 8.ZoomRot***        |   |   |
|             |                   | 9.HeadFan1***       |   |   |
|             |                   | 10.BaseFan1***      |   |   |
|             | RDMJID            | 388Ω xxxxxxxx       |   |   |
|             | DMXLive           | DMX                 |   |   |
|             |                   | 1.Display Ver. Vxxx |   |   |
|             |                   | 2.XY Ver. Vxxx      |   |   |
|             | Software          | 3.Zoom Ver. Vxxx    |   |   |
|             |                   | 4.LED1 Ver. Vxxx    |   |   |
|             |                   | 5.LED2 Ver. Vxxx    |   |   |
|             |                   |                     | Linear ( Default )                      |   |
|             |                   |                     | Square                                  |   |
|             |                   | DimmerCurve         | I - Square                              |   |
|             | 1                 |                     | Scurve                                  |   |
|             |                   | Led Hz              | 1800Hz/3600Hz/7200Hz (Default) /25000Hz |   |
|             | 1                 |                     | Normal ( Default )                      |   |
|             | Dimmer&FarSetting |                     | Smooth1                                 |   |
|             | 1                 | DimmerSpeed         | Smooth2                                 |   |
|             |                   |                     | Smooth3                                 |   |
|             |                   |                     | HighOutput                              |   |
|             |                   | Fan Mode            | Standard ( Default )                    |   |
|             |                   |                     | Silent                                  |   |
|             |                   | Pan Invert          | OFF( Default )/ON                       |   |
| Personal    | PanTilt Setting   | Tilt Invert         | OFF( Default )/ON                       |   |
| I           | I arrait Setting  | THE MINOR           | OTT ( Delault )/OTT                     | <u> </u>  |

| Main menu      | I menu          | II menu            | III menu                     | Note   |
|----------------|-----------------|--------------------|------------------------------|--|
|                |                 | P/T Rectify        | OFF/ON ( Default )           |  |
|                |                 | Language           | EN( Default ) /ZH            |  |
|                | Display Setting | Disp. Backlight    | OFF/ ON ( Default )          |  |
|                |                 | Disp. Direction    | Forward ( Default )/ Reverse |  |
|                |                 | Dis.Blink          | OFF/ ON                      |  |
|                |                 | Beam ( Default )   |                              |  |
|                | ZoomMod&etting  | Standard           |                              |  |
|                |                 | IP Address         | *** *** ***                  |  |
|                |                 | Mask Address       | *** *** ***                  |  |
|                | Artnet Setting  | Net Address        | 0-127                        | <ul> <li>This menucan only be<br/>displayed when the artnet</li> </ul> |
|                | g               | Sub Net Address    | 0- 15                        | module is connected.   |
|                |                 | Universe Address   | 0-15                         |  |
|                | Channel control | 1.Pan ***          |                              |  |
|                | Chamier control | PanTilt            |                              |  |
| Manual Control | Reset           | Head Module        |                              |  |
|                | reser           | All                |                              |  |
|                |                 | 1.Pan ***          |                              |  |
|                |                 | 2.Tilt ***         |                              |  |
|                |                 | 3.Zoom***          |                              |  |
|                |                 | 4.Zoom Rot ***     |                              |  |
|                |                 | 5.Red1 ***         |                              |  |
|                |                 | 6.Green1 ***       |                              |  |
|                |                 | 7.Blue1 ***        |                              |  |
|                |                 | 8.White1 ***       |                              |  |
|                | Calibration     | 9.Red2 ***         |                              |  |
|                | Calibration     | 10.Green2 ***      |                              |  |
|                |                 | 11.Blue2 ***       |                              |  |
|                |                 | 12.White2 ***      |                              |  |
| Service        |                 |                    | +                            |  |
|                |                 |                    |                              |  |
|                |                 | 29.Red7 ***        |                              |  |
|                |                 | 30.Green7 ***      |                              |  |
|                |                 | 31.Blue7 ***       |                              |  |
|                |                 | 32.White7 ***      |                              |  |
|                | Factory Reset   | NO/ YES            | 1100/50                      |  |
|                |                 | 1.Total PowerTime  | NO/YES                       |  |
|                | Reset Timers    | 2.Total Light Time | NO/YES                       |  |
|                |                 | 1.Power Time       | NO/YES                       |  |
|                |                 | 2.Light Time       | NO/YES                       |  |
|                | Developer       |                    |                              |  |
|                | Firmware update |                    |                              |  |
| Language       | EN/ZH           |                    |                              |  |
|                | Test PanTilt    |                    |                              |  |
| Test           |                 |                    |                              |  |
|                | Test All        |                    |                              |  |
| Rotate Display |                 |                    |                              |  |

# 4.2.Address Setting

Enter MENU, select the DMX setting function, select the address code setting, press the OK button to confirm, the current DMX address will be displayed on the display. Use the up/down buttons to select addresses 001~512, and press the OK button to save. Press the OK button to return to the previous menu.

### Please refer to the following diagram to address your DMX512 channel for the first 4 units.

| Channel mode | Unit <b>1</b><br>Address | Unit <b>2</b><br>Address | Unit 3<br>Address | Unit <b>4</b><br>Address |
|--------------|--------------------------|--------------------------|-------------------|--------------------------|
| 31 CH        | 1                        | 32                       | 63                | 94                       |
| 55 CH        | 1                        | 56                       | 111               | 166                      |
| 21 CH        | 1                        | 22                       | 43                | 64                       |
| 35 CH        | 1                        | 36                       | 71                | 106                      |

# 4.3.DMX 512 Configuration

| 31 Channel | 55 Channel | DMX     | Function                                | Note |
|------------|------------|---------|---|------|
| 1          | 1          | 0-255   | Pan positioning                         |      |
| 2          | 2          | 0-255   | Fine Pan positioning                    |      |
| 3          | 3          | 0-255   | Tilt positioning                        |      |
| 4          | 4          | 0-255   | Fine Tilt positioning                   |      |
|            |            |         | Function(Hold 3s)                       |      |
|            |            | 0-25    | No function                             |      |
|            |            | 26-30   | Reset Head                              |      |
|            |            | 31-35   | Reset Pan&Tilt                          |      |
|            |            | 36-40   | Reset All                               |      |
|            |            | 41-49   | No function                             |      |
|            |            | 50-59   | Fan HighOutput mode                     |      |
|            |            | 60-69   | Fan Standard mode                       |      |
|            |            | 70-79   | Fan Silent mode                         |      |
|            |            | 80-84   | Dis. Blink off                          |      |
|            |            | 85-89   | Dis. Blink on                           |      |
|            |            | 90-94   | Zoom Beam mode                          |      |
|            |            | 95-99   | Zoom Standard mode                      |      |
|            |            | 100-129 | No function                             |      |
|            |            | 130-139 | Pan invert on                           |      |
| 5          | 5          | 140-149 | Pan invert off                          |      |
| _          | _          | 150-159 | Tilt invert on                          |      |
|            |            | 160-169 | Tilt invert off                         |      |
|            |            | 170-177 | LED frequency 1.8kHz                    |      |
|            |            | 178-185 | LED frequency 3.6kHz                    |      |
|            |            | 186-193 | LED frequency 7. 2kHz                   |      |
|            |            | 194-199 | LED frequency 25kHz                     |      |
|            |            | 200-204 | Dimmer curve linear                     |      |
|            |            | 205-209 | Dimmer curve square                     |      |
|            |            | 210-214 | Dimmer curve inv-square                 |      |
|            |            | 215-219 | Dimmer curve "S"                        |      |
|            |            | 220-224 | Dimmer Normal                           |      |
|            |            | 225-229 | Dimmer Smooth 1                         |      |
|            |            | 230-234 | Dimmer Smooth 2                         |      |
|            |            | 235-239 | Dimmer Smooth 3                         |      |
|            |            | 240-255 | No function                             |      |
| 6          | 6          | 0-255   | Zoom                                    |      |
|            | -          |         | ZoomRot                                 |      |
|            |            | 0-127   | ZoomRot indexing                        |      |
| 7          | 7          | 128-190 | ZoomRot CW fast to slow                 |      |
|            |            | 191-192 | Stop                                    |      |
| 1          |            | 193-255 | ZoomRot CCW slow to fast                |      |
| 8          | 8          | 0-255   | Dimmer                                  |      |
| 9          | 9          | 0-255   | Dimmer Fine                             |      |
|            |            |         | Strobe                                  |      |
| 1          |            | 0-9     | Strobe open                             |      |
|            |            | 10-49   | Slow closing, Fast opening, slow → fast |      |
|            | ]          | 50-89   | Fast closing, Slow opening, Slow → Fast |      |
| 10         | 10         | 90-119  | Slow closing, Slow open, Slow → Fast    |      |
|            |            | 120-179 | Random strobe, Slow → Fast              |      |
|            |            | 180-249 | Synchronous strobe, slow → fast         |      |
|            |            | 250-255 | Strobe open                             |      |
| L          |            |         | * *                                     | 1    |

| 31 Channel | 55 Channel | DMX     | Function                                | Note |
|------------|------------|---------|---|------|
| 11         | \          | 0-255   | Red 0 to 100%                           |      |
| 12         | Ì          | 0-255   | Green 0 to 100%                         |      |
| 13         | Ì          | 0-255   | Blue 0 to 100%                          |      |
| 14         | ì          | 0-255   | White 0 to 100%                         |      |
| \          | 11         | 0-255   | Red1                                    |      |
| \          | 12         | 0-255   | Green1                                  |      |
| \          | 13         | 0-255   | Bluel                                   |      |
| \          | 14         | 0-255   | Whitel                                  |      |
| \          | 15         | 0-255   | Red2                                    |      |
| \          | 16         | 0-255   | Green2                                  |      |
| \          | 17         | 0-255   | Blue2                                   |      |
| \          | 18         | 0-255   | White2                                  |      |
| \          | 19         | 0-255   | Red3                                    |      |
| \          | 20         | 0-255   | Green3                                  |      |
| \          | 21         | 0-255   | Blue3                                   |      |
| \          | 22         | 0-255   | White3                                  |      |
| \          | 23         | 0-255   | Red4                                    |      |
| \          | 24         | 0-255   | Green4                                  |      |
| \          | 25         | 0-255   | Blue4                                   |      |
| \          | 26         | 0-255   | White4                                  |      |
| \          | 27         | 0-255   | Red5                                    |      |
| \          | 28         | 0-255   | Green5                                  |      |
| \          | 29         | 0-255   | Blue5                                   |      |
| \          | 30         | 0-255   | White5                                  |      |
| \          | 31         | 0-255   | Red6                                    |      |
| \          | 32         | 0-255   | Green6                                  |      |
| \          | 33         | 0-255   | Blue6                                   |      |
| \          | 34         | 0-255   | White6                                  |      |
| \          | 35         | 0-255   | Red7                                    |      |
| ١          | 36         | 0-255   | Green7                                  |      |
| ١          | 37         | 0-255   | Blue7                                   |      |
| ١          | 38         | 0-255   | White7                                  |      |
|            |            |         | CCT 10000k - 2500k                      |      |
| 15         | 39         | 0-2     | No function                             |      |
|            |            | 3-255   | 10000k - 2500k                          |      |
|            |            |         | EffectMacro                             |      |
|            |            | 0-9     | No function                             |      |
| 16         | 40         | 10-99   | Static Effect                           |      |
|            |            | 100-199 | Chase Effect                            |      |
|            |            | 200-255 | No function                             |      |
|            |            |         | EffectSpeed                             |      |
| 17         | 41         | 0-125   | CW fast to slow                         |      |
| =*         |            | 126-129 | Stop                                    |      |
|            |            | 130-255 | CCW slow to fast                        |      |
| 18         | 42         | _       | EffectFade                              |      |
| -          | -          | 0-255   | Fade                                    |      |
| 19         | 43         |         | DimmerBack                              |      |
|            |            | 0-255   |   |      |
|            |            |         | StrobeBack                              |      |
|            |            | 0-9     | Strobe closed                           |      |
|            | I          | 10-49   | Slow closing, Fast opening, slow → fast | 1    |

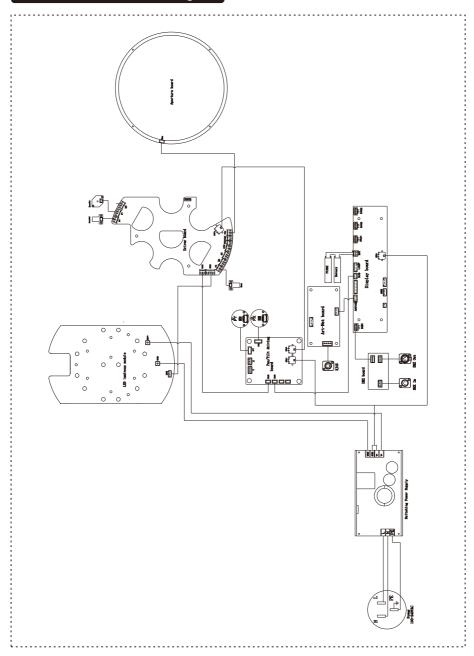
| 31 Channel | 55 Channel | DMX     | Function                                | Note |
|------------|------------|---------|---|------|
| 20         | 44         | 50-89   | Fast closing, Slow opening, Slow → Fast |      |
| 20         | 44         | 90-119  | Slow closing, Slow open, Slow → Fast    |      |
|            |            | 120-179 | Random strobe,Slow → Fast               |      |
|            |            | 180-249 | Synchronous strobe, slow → fast         |      |
|            |            | 250-255 | Strobe open                             |      |
| 21         | 45         | 0-255   | Red of Back Color(for Program)          |      |
| 22         | 46         | 0-255   | Green of Back Color(for Program)        |      |
| 23         | 47         | 0-255   | Blue of Back Color(for Program)         |      |
| 24         | 48         | 0-255   | White of Back Color(for Program)        |      |
| 25         | 49         | 0-255   | RingDimmer                              |      |
|            |            | 0-255   | RingStrobe                              |      |
|            |            | 0-9     | Strobe closed                           |      |
|            |            | 10-49   | Slow closing, Fast opening, slow → fast |      |
| 26         | 50         | 50-89   | Fast closing, Slow opening, Slow → Fast |      |
| 20         | 50         | 90-119  | Slow closing, Slow open, Slow → Fast    |      |
|            |            | 120-179 | Random strobe,Slow → Fast               |      |
|            |            | 180-249 | Synchronous strobe, slow → fast         |      |
|            |            | 250-255 | Strobe open                             |      |
| 27         | 51         | 0-255   | RingRed 0 to 100%                       |      |
| 28         | 52         | 0-255   | RingGreen 0 to 100%                     |      |
| 29         | 53         | 0-255   | RingBlue 0 to 100%                      |      |
|            |            |         | RingEffect                              |      |
| 30         | 54         | 0-9     | No function                             |      |
|            |            | 0-255   | RingEffect                              |      |
|            |            |         | RingSpeed                               |      |
| 31         | 55         | 0-125   | CW fast to slow                         |      |
|            |            | 126-129 | Stop                                    |      |
|            |            | 130-255 | CCW slow to fast                        |      |

| 21 Channel | DMX     | Function                                | Note   |
|------------|---------|---|--|
| 1          | 0-255   | Red 0 to 100%                           |  |
| 2          | 0-255   | Red Fine 0 to 100%                      |  |
| 3          | 0-255   | Green 0 to 100%                         |  |
| 4          | 0-255   | Green Fine 0 to 100%                    |  |
| 5          | 0-255   | Blue 0 to 100%                          |  |
| 6          | 0-255   | Blue Fine 0 to 100%                     |  |
| 7          | 0-255   | White 0 to 100%                         |  |
| 8          | 0-255   | White Fine 0 to 100%                    |  |
|            |         | CCT 10000k - 2500k                      |  |
| 9          | 0-2     | No function                             |  |
|            | 3-255   | 10000k - 2500k                          |  |
|            |         | Macro Color                             |  |
| 10         | 0-19    | No function                             |  |
| 10         | 20-192  | Macro Color                             |  |
|            | 192-255 | No function                             |  |
|            |         | Strobe                                  |  |
|            | 0-9     | Strobe open                             |  |
|            | 10-49   | Slow closing, Fast opening, slow → fast |  |
| 11         | 50-89   | Fast closing, Slow opening, Slow → Fast |  |
| 11         | 90-119  | Slow closing, Slow open, Slow → Fast    |  |
|            | 120-179 | Random strobe, Slow → Fast              |  |
|            | 180-249 | Synchronous strobe, slow → fast         |  |
|            | 250-255 | Strobe open                             |  |
| 12         | 0-255   | Dimmer                                  |  |
| 13         | 0-255   | Dimmer Fine                             |  |
| 14         | 0-255   | Pan positioning                         |  |
| 15         | 0-255   | Fine Pan positioning                    |  |
| 16         | 0-255   | Tilt positioning                        |  |
| 17         | 0-255   | Fine Tilt positioning                   |  |
| 18         | 0-255   | Zoom                                    |  |
| 19         | 0-255   | Color Crossfade                         | Channel compatibility, currently without functionality |
|            |         | Function(Hold 3s)                       |  |
|            | 0-1     | No function                             |  |
|            | 2-3     | Fan HighOutput mode                     |  |
|            | 4-7     | Fan Standard mode                       |  |
|            | 8-9     | Fan Silent mode                         |  |
|            | 10-102  | No function                             |  |
|            | 103-105 | No function                             |  |
| 20         | 106-120 | No function                             |  |
|            | 121-130 | No function                             |  |
|            | 131-140 | LED frequency 25kHz                     |  |
|            | 141-150 | No function                             |  |
|            | 151-160 | LED frequency 7.2kHz                    |  |
|            | 161-170 | LED frequency 3.6kHz                    |  |
|            | 171-180 | LED frequency 1.8kHz                    |  |
|            | 181-255 | No function                             |  |
|            |         | Reste                                   |  |
|            | 0-25    | No function                             |  |
| 21         | 26-70   | Reset Head                              |  |
|            | 77-127  | Reset Pan&Tilt                          |  |
|            | 128-255 | Reset All                               |  |

| 35 Channel | DMX     | Function                                | Note |
|------------|---------|---|------|
| 1          | 0-255   | Red 0 to 100%                           |      |
| 2          | 0-255   | Red Fine 0 to 100%                      |      |
| 3          | 0-255   | Green 0 to 100%                         |      |
| 4          | 0-255   | Green Fine 0 to 100%                    |      |
| 5          | 0-255   | Blue 0 to 100%                          |      |
| 6          | 0-255   | Blue Fine 0 to 100%                     |      |
| 7          | 0-255   | White 0 to 100%                         |      |
| 8          | 0-255   | White Fine 0 to 100%                    |      |
|            |         | CCT 10000k - 2500k                      |      |
| 9          | 0-2     | No function                             |      |
|            | 3-255   | 10000k - 2500k                          |      |
|            |         | Macro Color                             |      |
|            | 0-19    | No function                             |      |
| 10         | 20-192  | Macro Color                             |      |
|            | 192-255 | No function                             |      |
|            |         | Strobe                                  |      |
|            | 0-9     | Strobe open                             |      |
|            | 10-49   | Slow closing, Fast opening, slow → fast |      |
|            | 50-89   | Fast closing, Slow opening, Slow → Fast |      |
| 11         | 90-119  | Slow closing, Slow open, Slow → Fast    |      |
|            | 120-179 | Random strobe, Slow → Fast              |      |
|            | 180-249 | Synchronous strobe, slow → fast         |      |
|            | 250-255 | Strobe open                             |      |
| 12         | 0-255   | Dimmer                                  |      |
| 13         | 0-255   | Dimmer Fine                             |      |
| 14         | 0-255   | Pan positioning                         |      |
| 15         | 0-255   | Fine Pan positioning                    |      |
| 16         | 0-255   | Tilt positioning                        |      |
| 17         | 0-255   | Fine Tilt positioning                   |      |
|            |         | Function (Hold 3s)                      |      |
|            | 0-1     | No function                             |      |
|            | 2-3     | Fan HighOutput mode                     |      |
|            | 4-7     | Fan Standard mode                       |      |
|            | 8-9     | Fan Silent mode                         |      |
|            | 10-102  | No function                             |      |
|            | 103-105 | No function                             |      |
| 18         | 106-120 | No function                             |      |
|            | 121-130 | No function                             |      |
|            | 131-140 | LED frequency 25kHz                     |      |
|            | 141-150 | No function                             |      |
|            | 151-160 | LED frequency 7.2kHz                    |      |
|            | 161-170 | LED frequency 3.6kHz                    |      |
| 1          | 171-180 | LED frequency 1.8kHz                    |      |
| 1          | 181-255 | No function                             |      |
|            |         | Reste                                   |      |
| 1          | 0-25    | No function                             |      |
| 19         | 26-70   | Reset Head                              |      |
|            | 77-127  | Reset Pan&Tilt                          |      |
|            | 128-255 | Reset All                               |      |
| 20         | 0-255   | Zoom                                    |      |
|            |         | ZoomRot                                 |      |
|            | 0-127   | ZoomRot indexing                        |      |
| 21         | 128-190 | ZoomRot CW fast to slow                 |      |
| 1          | 191-192 | Stop                                    |      |
| 1          | 193-255 | ZoomRot CCW slow to fast                |      |
|            |         | •                                       |      |

| 35 Channel | DMX   | Function          | Note                             |
|------------|-------|-------------------|----------------------------------|
| 22         | 0-255 | Shape Seletion    |                                  |
| 23         | 0-255 | Shape Speed       | ]                                |
| 24         | 0-255 | Shape Fade        |                                  |
| 25         | 0-255 | Shape R           | ]                                |
| 26         | 0-255 | Shape G           | ]                                |
| 27         | 0-255 | Shape B           | Channel compatibility, currently |
| 28         | 0-255 | Shape W           | without functionality.           |
| 29         | 0-255 | Shape Dimmer      |                                  |
| 30         | 0-255 | Background Dimmer |                                  |
| 31         | 0-255 | Shape Transition  |                                  |
| 32         | 0-255 | Shape Offset      |                                  |
| 33         | 0-255 | Foreground Strobe |                                  |
| 34         | 0-255 | Background Strobe |                                  |
| 35         | 0-255 | Background Select |                                  |

# 5.Electrical Connection Diagram



### 6.Troubleshooting

The following are common faults of lighting fixtures and corresponding solutions. Malfunctions that cannot be repaired by oneself should be handled by personnel with professional qualifications. Before maintaining the lamp, please disconnect the power supply first.

#### ■ LED off:

- Please check if install the suitable voltage
- Please check whether the led will reach the end of their life can explode; please replace a same description led.
- Please check if the power supply is enough.
- Please check whether the DMX 512 controller pass the "turn on" order.

### ■ The light couldn't accept the control order:

- Please check the start code address and the function option are correct.
- Please check whether the communicate control cable is on good connection or the cable is too long or interrupt.
- Please check the control system is not valid, check the signal amplifier of chain connected is valid.
- Please check whether the communicate cable is too long or the other equipment is mutually conjugate.
- Please arrange the wire well, shorter the signal cable, put the high voltage cable and low voltage cable separately.
- Add the signal amplify isolator.
- Signal cable is used the excellent screening doublet (Resistance 75 OHM)
- The end of the light end and the end resistance.

#### ■ The light can't move:

- Please check if the power supply is suitable for the light voltage data.
- Please check the light if they are deformation, inside parts is broken, become wet etc will lead the loose contact.
- Please check the if the iniside lead wire and the connector is loose.
- Please check the electric parts(such as the transformer, PCB board, contrller) is short-circuit or burn down.

### ■ On working,the pan &tilt couldn't work normally:

- Please check according to the above step by step,
- Please check the belt of the X.Yis broken.
- Please check the X/Y direction data to the receiver is damage.
- Re-projector reset.

### 7. Fixture Cleaning

It is absolutely essential that the fixture is kept clean to ensure the maximum lightoutput and allow the fixture to function reliably throughout its life. The fixture must be cleaned regularly to avoid dust, dirt and smoke-fluid residues building up on or within the fixture. The cleaning frequency depends on the application environment. Clean the fixture immediately if the dust enters it to avoid damage to the optical lens due to excessive dust.

- \* Before maintenance and disassembly of lighting fixtures, the power supply must be disconnected and live operation is not allowed.
- \* A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should solvents be used.
- \* Always dry the parts carefully.
- \* You need to wipe the outside of the lens at least once every 20 days.
- \* After the colored paper performance of the lighting fixtures, it is necessary to check whether there are any paper scraps stuck or sucked in at the air inlet and outlet, and clean them thoroughly, otherwise it may damage the fan or cause a fire hazard

### CAUTION ! ! !

Disconnect from mains before starting maintenance operation.

### 8. Duty exonerative and copyright protectio

- \* Light source belongs to consumption products, not within the scope of warranty.
- \* The manufacturer shall not bear any responsibility for any damage caused by failure to operate in accordance with this instruction.
- \* All the information in this manual shall be interpreted by the manufacturer.
- \* All the information in this manual shall not be copied without permission.
- \* The data contained in this statement are subject to change in the future without prior notice.