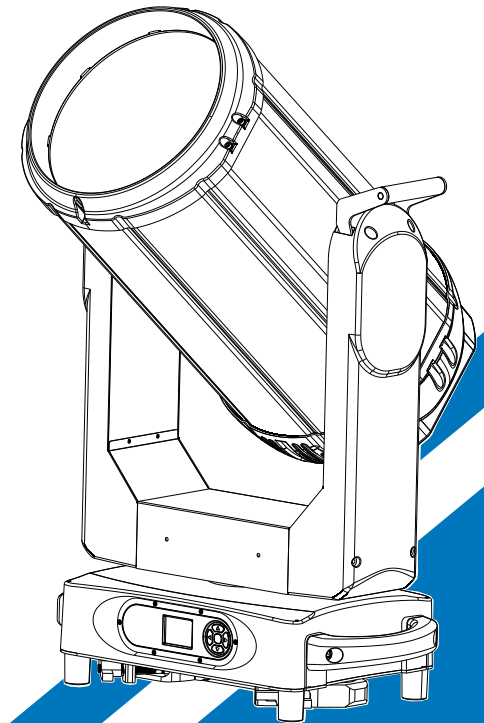# LIGHT SKY®

FLY DRAGON LIGHTING EQUIPMENT CO.,LTD

## SUPER SHARK BEAM

# LIGHT SKY®

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# LIGHT SKY®

## User Manual

Please read the instruction carefully before use

# CONTENTS

**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 theUse 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:

| DANGER! | DANGER! | DANGER! | Warning! | Warning! | Warning! | Warning! | Avoid direct eye contact |
|---|---|---|---|---|---|---|---|
| Safety hazard. Risk of severe injury or death. | Refer to manual before installing, powering or servicing. | Hazardous voltage.Risk of severe or lethal electric shock. | Fire hazard. | Burn hazard. Hot surface. not touch. Do not touch | Risk of eye injury.Safety glasses must be worn. | Risk of hand injury. Safety gloves must be worn. | |

| Applies only to luminaires directly mounted on surfaces of non-combustible materials | Do not discard Trash can | Mark of ground | Replace all shatter shields | Take a short distance from the object to be photographed (meters) | Rated maximum ambient temperature | Do not point the lens towards the sun or strong light | Operation not allowed during runtime |
|---|---|---|---|---|---|---|---|

# 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: −20°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 12 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 fixture should be fixed on the clamp. Always ensure that the unit is firmly fixed to avoid vibration and slipping off during operation. Ensure that the trussing or area of installation must be able to hold 10 times the weight without any deformation. Always install a safety cable that can hold at least 12 times the weight of the fixture when installing.

Do install and operate by qualified operator. It must be installed in a place where there is out of the reach of people.

## 2.Technical Specifications

**OPTICAL**

- Light source: 550W OSRAM bulb
- Beam angle: 1.6°
- Optical lens: diameter 252mm
- Color temperature: 7400K
- Color rendering index: Ra≥76
- Output luminous flux of the whole lamp: 18700 Lm

**EFFECT**

- Color: 14 color chips + white light, can realize two-way color rainbow, two-color
  s tep-by-step gradient (linear movement), two-way rotation of the
  colorwheel,random color mode.
- （Optional) Color mixing system: Independent CMY color mixing system, free color
  mixing.
- Gobo: 1 fixed gobo wheel, 9 gobos + white light, two-way shaking and flowing water
  effect, pluggable and replaceable, gobo outer diameter 14mm gobo inner diameter 8mm.
- Prism: 8 Prisms and 24Prisms, capable of bi-directional rotation and stacking.
- Soft light effect: independent soft light effect
- Dimming: 0-100% linear dimming
- Strobe: 0.5-12 times/second adjustable pulse strobe and random strobe
- Focus: high-precision electric focus

**CONTROL AND PROGRAMMING**

- Control channel: 15CH、18CH(Optional CMY version)
- Protocol: standard DMX512 protocol, RDM protocol，ART-NET(Optional）
- Data connection: three-core signal input/output
- Display: OLED screen

**SOFTWARE**

- Software upgrade via DMX signal

**X/Y AXIS MOVEMENT ANGLE**

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

## POWER

- Input voltage: AC 100-240V 50/60Hz
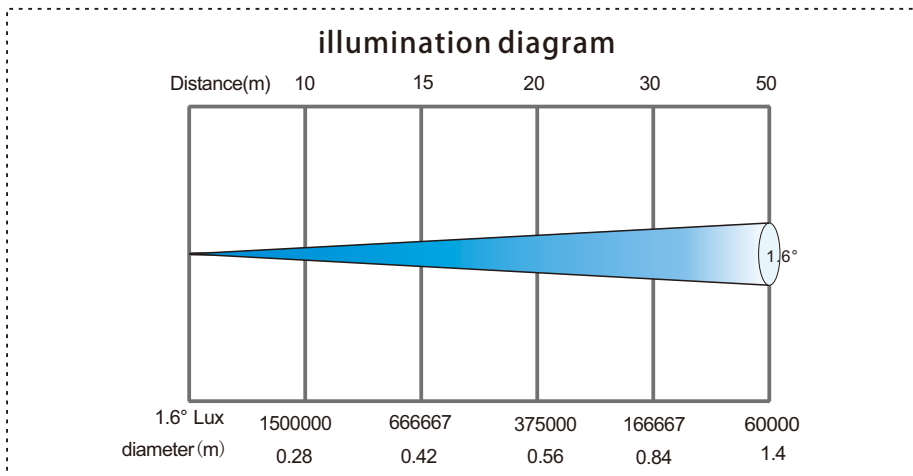- Maximum power: 770W

## SIZE & WEIGHT

- Product size: 486mm×257mm×825mm
- Carton size (single unit): 915mm×565mm×380mm
- N.W.: 41.5 Kg    G.W.: 46.3 Kg
- Flycase (single unit): 700mm×550mm×865mm
- N.W.: 41.5 Kg    G.W.: 77.5 Kg

## OTHER

- IP rate: IP66
- Working environment: -20°C ~ 40°C
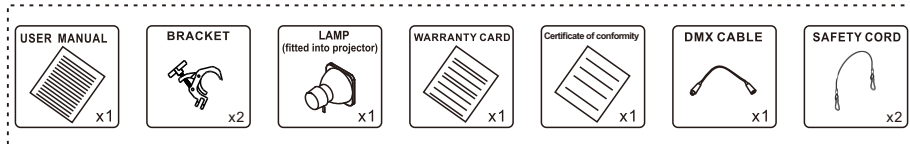- Maximum surface temperature of the lamp body: 80°C

## 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
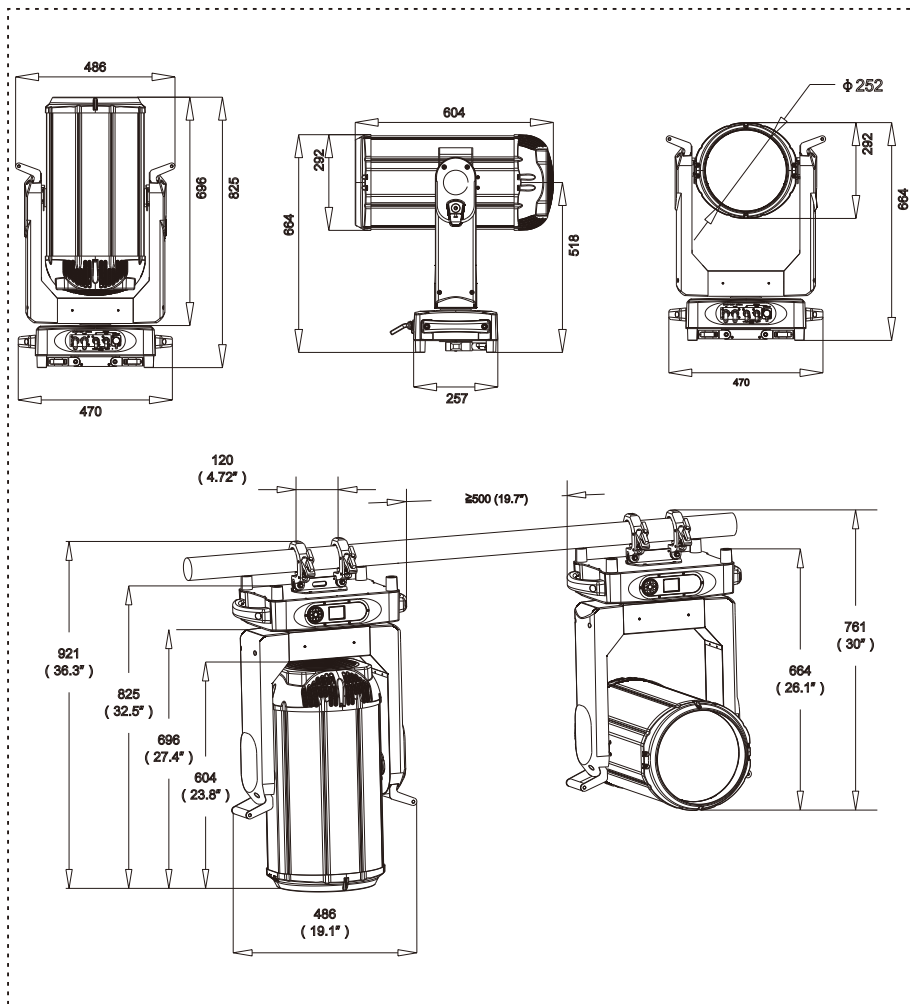
## illumination diagram

| Distance(m) | 10 | 15 | 20 | 30 | 50 |
|---|---|---|---|---|---|

1.6°

| 1.6° Lux | 1500000 | 666667 | 375000 | 166667 | 60000 |
|---|---|---|---|---|---|
| diameter（m) | 0.28 | 0.42 | 0.56 | 0.84 | 1.4 |

## 2.1.Attachment And Size

### Attachment contents-Fig.1

| USER MANUAL | BRACKET | LAMP (fitted into projector) | WARRANTY CARD | Certificate of conformity | DMX CABLE | SAFETY CORD |
|---|---|---|---|---|---|---|
| x1 | x2 | x1 | x1 | x1 | x1 | x2 |

### Size-Fig.2

TILT=0 DMX
255 DMX
0 DMX

TILT=128

TILT=255 DMX

TILT LOCK

TILT LOCK

TILT LOCK

Power cord          Display

Power cord          Display

Power cord          Display

PAN DMX=0

PAN DMX=0

PAN DMX=0

PAN=0 DMX
255 DMX
0 DMX

PAN=128 DMX
TILT LOCK Power cord

PAN=255 DMX
Power cord

Display
TILT=30 DMX

Display

Display
TILT=30 DMX

## 3. Color/Gobo/Prism

**Color disk**



Color disk components:
- 12 CTO1
- 13 CTB
- 14 UV Blue
- White
- 1 Red
- 2 Orange
- 3 Blue
- 4 Dark Green
- 5 Green
- 6 Lavender
- 7 Pink
- 8 Yellow
- 9 Magenta
- 10 Cyan
- 11 CTO2
- Magnet
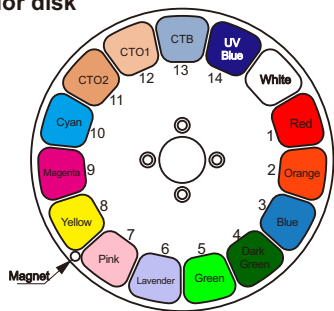
**Color disk**

（**Optional**）**C/M/Y**
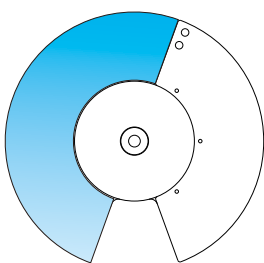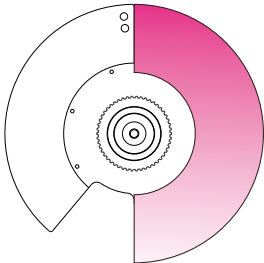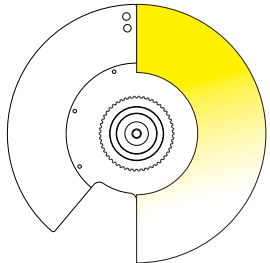


C          M          Y

**Rotating gobo wheel/Prism**
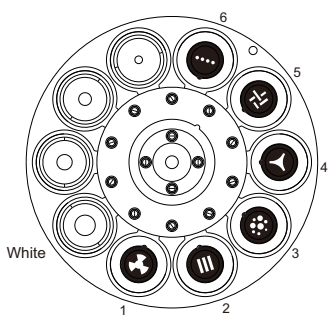


6
5
4
3
2
1
White

**24 Prism**          **8 Prism**

-9-

## PG Version



**POWER IN**    **OUT**          **IN**    **POWER END**
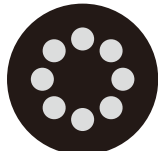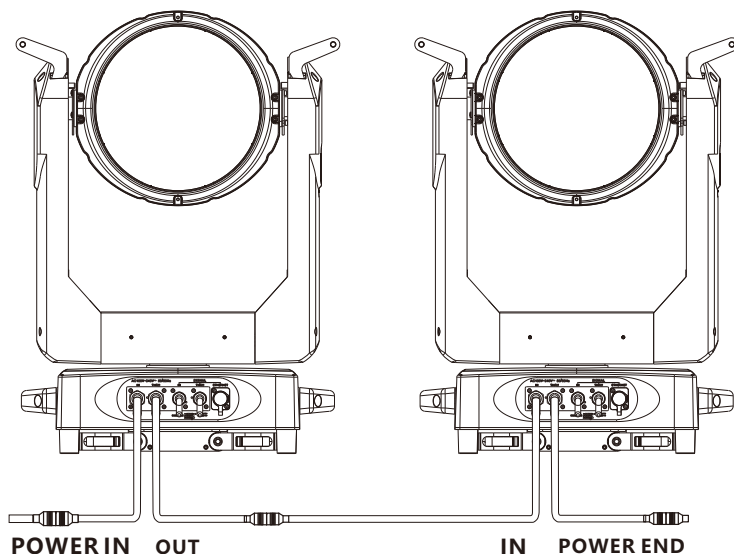
**The color code and power connection of the power cord are as follows:**

| Conductor | Symbol | Wire Color (EU models) | Wire Color (US models) |
|---|---|---|---|
| live | **L** | brown | black |
| neutral | **N** | blue | white |
| ground(earth) | ⏚ or ⏚ | yellow-green | green |

- 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.

# Socket Version
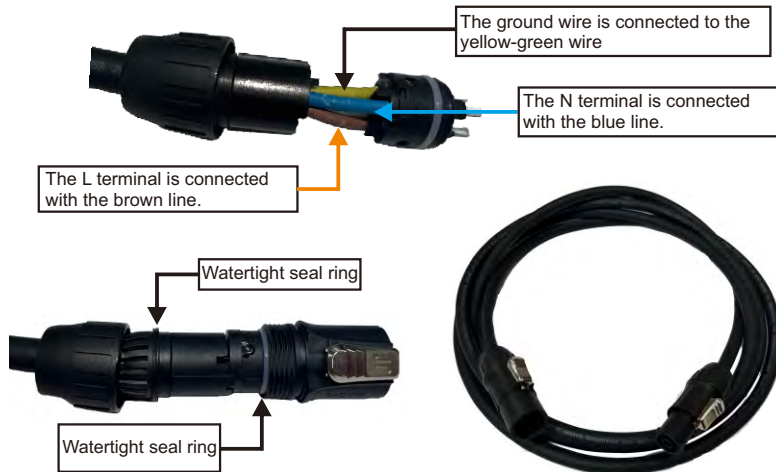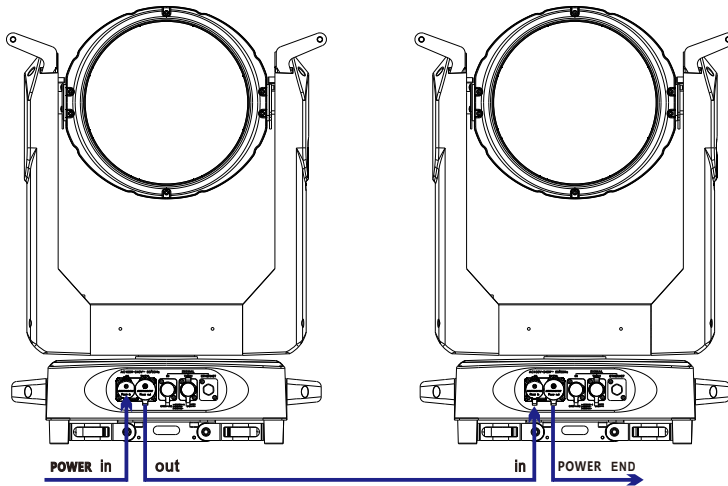


POWER in    out

in    POWER END

The ground wire is connected to the yellow-green wire

The N terminal is connected with the blue line.

The L terminal is connected with the brown line.

Watertight seal ring

Watertight seal ring

- 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.

## 4.2.DMX 512 Connection

**PG Version**



DMX IN    OUT          IN   OUT          IN   OUT

**Socket Version**



DMX IN    OUT          IN   OUT          IN   OUT
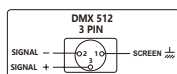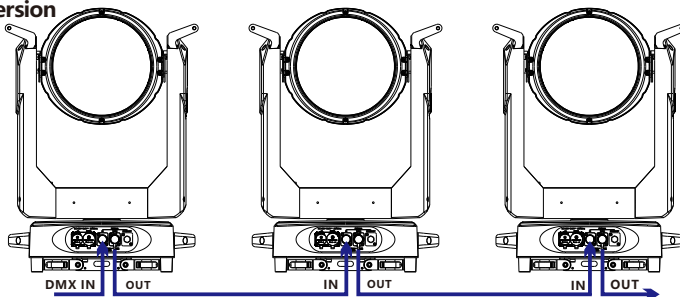


1. At last unit, the DMX cable has to be terminated with a terminator. Solder a 120ohm 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last unit.
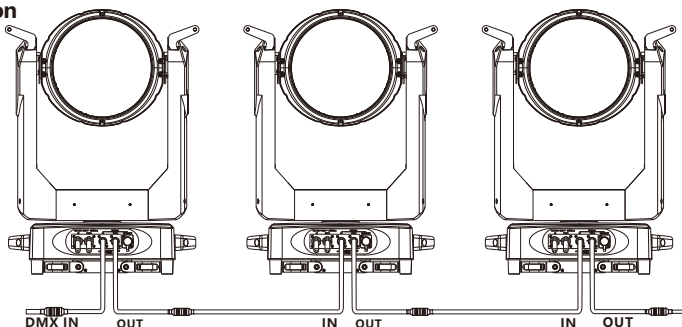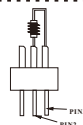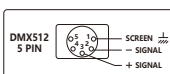
2. Connect the unit together in a "daisy chain" by XLR plug cable from the output of the unit to the input of the next unit. The cable cannot be branched or split to a "Y" cable. DMX 512 is a very high-speed signal. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort 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.

## 4.3.Control Panel
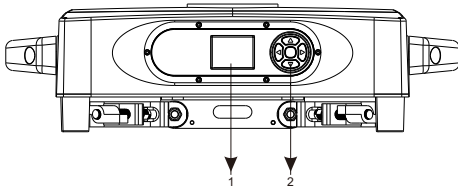


1. Display: To show the various menus and the selected function.
2. Button：

| | |
|---|---|
| ● | OK confirmation key |
| ▲ | UP |
| ▼ | DOWN |
| ◀ | To the left |
| ▶ | To the right |

## 5.How To Set The Unit

## 5.1.Main Function

After turning on the machine, press any key to enter the preset menu interface. Use the up/down/left/right keys to select: DMXsettings, basic information, personalized settings, manual control, service options, test lighting, language, screen rotation. Press the OK key to confirm and enter the lower menu.

① **DMX: 001** – **DMX Address**

Enter the preset menu interface, select **DMX: 001** function, press the OK key to enter the lower level menu, and use the up/down keys to select the second level menu: DMA address, exit.

②DMA address:

Select the DMA address function, press the OK key to enter the lower menu, press the up/down keys to set the address code (001-512) of the lamp according to the current channel mode, and press the left/right keys to fine tune the address code. Press the OK key to confirm the settings and return to the previous menu.

① ![info icon] - **Information**

Enter the preset menu interface, select ![info icon] function, press the OK button to enter the submenu, use the up/down button to select the ② level menu: power-on time, light bulb time, device temperature, fan information, RDM address, device channel, version information ,quit.

② Power-on time

Select the power-on time function, press the OK key to enter the sub-menu, and you can check the device: total power-on (H). Press OK or Left/Right to return to the previous menu.

② Bright bubble time

Select the function of light bulb time, press the OK key to enter the sub-menu, you can check the device: total light time (H). Press OK or Left/Right to return to the previous menu.

② Equipment temperature

Select the device temperature function, press the OK key to enter the lower menu, you can check the temperature of the device: ballast, internal temperature (unit: ℃). Press OK or Left/Right to return to the previous menu.

② Fan information

Select the fan information function, press the OK key to enter the sub-menu, you can choose: bulb blower, tail blower. Press OK key to enter the lower menu or left/right key to return to the upper menu.

③ Bulb blower

Select the Bulb Blower function, press the OK key to enter the sub-menu, you can view the equipment: blower 1 voltage, blower 2 voltage, blower 1 speed, blower 2 speed, big fan 1 speed, big fan 2 speed. Press OK or Left/Right to return to the previous menu.

③ Tail fan

Select Tail Fan function, press OK key to enter the submenu, you can view equipment: Tail fan 1, Tail fan 2, Tail fan 3, Tail fan 4 speed information, press OK key or Left/Right key to return to the upper menu.

② RDM address

Select the RDM address function, press the OK key to enter the submenu, and you can view the device: RDM address information. Press OK or Left/Right to return to the previous menu.

② Device channel

Select the device channel function, press the OK key to enter the lower menu, and you can view the channel information of the device in the current channel mode. Press the up/down keys to view the current DMA numerical information of each channel. Press the OK key or the left/right key to return to the previous menu.

② Version information

Select the version information function and press the OK key to enter the lower menu. You can view the version information of the devices: display board, XY board, color board, fan board 1, and fan board 2. Press the OK key or the left/right keys to return to the previous menu.

①  - **Personal**

Enter the preset menu interface, select  function, press the OK button to enter the lower menu, use the up/down button to select the ② level menu: interface display password, automatically turn on the light bulb, horizontal and vertical reverse, display settings, power mode, exit, press Press the OK key to enter the lower level menu, or press the left/right key to return to the upper level menu.

② The interface displays the password

Select the interface display password function, press the OK key to enter the submenu, you can use the up / down key to select: off (default), on, press the OK key to confirm the selection and return to the previous menu. (Note: After selecting "On", you need to enter the password to enter the preset menu interface for the next operation, password: 2222)

② Automatically turn on the light bulb

Select the function of automatically turning on the lamp, press the OK key to enter the submenu, press the up/down key to select: on, off (default), press the OK key to confirm Select and return to the previous menu.

② Horizontal and vertical reverse

Select the horizontal and vertical reverse function, press the OK key to enter the lower menu, press the up/down key to select: horizontal reverse, vertical reverse, exit, press the OK key to confirm the selection and return to the upper menu, or press the left/right key Return to previous menu.

② Display settings

Select the display setting function, press the OK key to enter the lower menu, press the up/down key to select: backlight, screen rotation, backlight flashing, exit, press the OK key to confirm the selection and return to the upper menu, or press the left/right key to return to the upper level menu.

③ Backlight

Select the backlight function, press the OK key to enter the lower menu, press the up/down keys to select: constant light, automatic off (15S), press the OK key to confirm the selection and return to the upper menu, or press the left/right keys to return to the upper menu.

③ Screen rotation

Select the screen rotation function, press the OK key to enter the lower menu, press the up/down key to select: normal, rotate 180 degrees, press the OK key to confirm the selection and return to the upper menu, or press the left/right key to return to the upper menu.

③ Backlight flashes

Select the backlight flashing function, press the OK key to enter the lower menu, press the up/down keys to select: open, close, press the OK key to confirm the selection and return to the upper menu, or press the left/right key to return to the upper menu.

② Power mode

Select the power mode function, press the OK key to enter the lower menu, press the up/down keys to select: standard mode, reduced power mode, press the OK key to confirm the selection and return to the upper menu, or press the left/right key to return to the upper menu.

①  - **Manual control**

Enter the preset menu interface, select  function, press the OK button to enter the lower menu, you can use the up/down button to select the ② level menu: channel control, reset, test lamps, exit, press the OK button to enter the lower menu, or press the left/ The right key only returns to the previous menu.

② Channel control

Select the channel control function, press the OK key to enter the sub-menu, press the up / down key to select each channel of the current channel mode, press the left / right key to manually adjust the DMX value of each channel from 0 to 255, press the OK key Return to the previous menu, and at the same time, the lamp is reset to the state just turned on.

② Reset

Select the reset function, press the OK key to enter the lower menu, you can use the up/down keys to select: reset the whole machine system, horizontal and vertical reset, lamp head system reset, exit, press the OK key to confirm and execute the selected reset command, and return to the upper menu , or press Left/Right to return to the previous menu only.

② Test lamps

Select the test lamp function, press the OK key to enter the lower menu, you can use the up/down keys to select: test horizontal and vertical, test the head effect, overall test, exit, press the OK key to enter the test interface, and execute the selected test command, Or press Left/Right to return to previous menu only. Press OK key/Left key/Right key to terminate the test.

①  - **Service**

Enter the factory service interface, select function, press the OK key to enter the submenu, you can use the up/down keys to select: fault information, calibration, clear time, factory settings, exit, press the OK key to enter the submenu, or press the left / direction Right-click only returns to the previous menu.

② Fault information

Select the Fault Information function, press the OK key to enter the lower-level menu, you can use the Up/Down keys to select: historical fault information, clear fault information, exit, press the OK key to enter the lower-level menu, or press the Left/Right Key to return to the upper-level menu.

③ Historical fault information

Select the function of historical fault information, press the OK key to enter the lower-level menu, use the up/down keys to view the fault records of the lamp, and press the OK key/left/right key to return to the upper-level menu.

③ Clear fault information

Select the function of clearing the fault information, press the OK key to enter the lower menu, use the up/down key to select: keep (default), clear, you can clear or retain the fault record of the lamp, press the OK key to confirm the selection and return to the upper menu, or press Left/Right to return to the previous menu.

② Calibration

Select the calibration function, press the OK key to enter the lower menu, press the up/down key to select each channel of the current channel mode, press the left/right key to manually fine-tune the DMX value of each channel from 0 to 255 (default 128), press OK key to confirm and return to the previous menu.

② Clear time

Select the clear time function, press the OK key to enter the lower menu, use the up/down keys to select: clear device time, clear bulb time, exit, press the OK key to confirm the selection and return to the upper menu, or press the left/right key to return to the upper menu .

③ Clear device time

Select the function of clearing the device time, press the OK key to enter the lower menu, use the up/down key to select: hold (default), clear, you can clear or the power-on time of the lamp, press the OK key to confirm the selection and return to the upper menu, or press the Left/Arrow keys to return to the previous menu.

③ Clear lamp time

Select the function of clearing lamp time, press OK key to enter the lower menu, use up/down key to select: keep (default), clear, you can clear or light bulb time of lamps, press OK key to confirm the selection and return to the upper menu, or press to Left/Arrow keys to return to the previous menu.

② Factory setting

Select the factory setting function, press the OK key to enter the submenu, you can use the up / down keys to select: factory default, clear total time, clear temperature record, developer, exit, press the OK key to enter the submenu. Note that the functions under this menu require a password to proceed to the next step.

① ![icon] - **Service**

Enter the preset menu interface, select ![icon] function, press the OK key to enter the sub-menu, you can use the up/down key to select: off (default), open, press the OK key to enter to confirm the selection, and the lamp starts to execute the instruction of turning on or off the bulb. Or press Left/Right to return to previous menu only.

① ![icon] - **Language**

Enter the Preset Menu interface, select ![icon] Function, and press OK to switch between Chinese (default) and English.

① ![icon] - **Screen rotation**

Enter the Preset Menu interface, select ![icon] Function, and press OK to switch the screen between: normal and rotated 180 degrees.

| Standby interface | Preset menu interface |
| --- | --- |

| Main menu | I menu | II menu | III menu |
|---|---|---|---|
| DMX Address | DMX address | 1-512 | ESC is -1, ENTER is+1 |
| | | | UP is+current channel count, DOWN is -current channel count |
| | DMX Signal mode (Optional CMY version) | DMX | |
| | | Ethernet | |
| | Ethernet (Optional CMY version) | IP address | |
| | | Mask address | |
| | | Artnet Net ADD | |
| | | Artnet Sub Net ADD | |
| | | Artnet Universe ADD | |
| Information | Power hours | Total Hours | |
| | | Rst Hours | |
| | Lamp hours | Total Hours | |
| | | Rst Hours | |
| | Temperature | PVE_TEM | |
| | | In TEMP | |
| | Fan information | Lamp Fan | |
| | | Big Fan | |
| | RDM UID | RDM UID | |
| | DMX live | DMX | |
| | System version | Version | |
| | Return | | |
| Personal | Display lock | OFF/ON | |
| | Auto lamp on | OFF/ON | |
| | P/T invert | Pan invert | OFF/ON |
| | | Tilt invert | OFF/ON |
| | Display | Backlight | Always on/Auto off |
| | | Totate | Normal/Rotate 180 |
| | | Backligth blink | ON/OFF |
| | Power mode | Standard mode | |
| | | Half mode | |
| | Return | | |
| Manual Control | Channel control | Standard | |
| | Reset | System reset | |
| | | Pan/Tilt reset | |
| | | Head reset | |
| | Test | Test P/T | |
| | | Test effect | |
| | | Test all | |
| | Return | | |
| Service | Error information | Error list | |
| | | Empty list | |
| | Calibration | Pan... | |
| | Reset Timers | Reset Power Hours | |
| | | Reset Lamp Hours | |
| | Factor | Load default | |
| | | Reset Total Timers | Total Power Hours |
| | | | Total Lamp Hours |
| | | Clear logger temp | |
| | | Developer | |
| | Return | | |
| Lamp Control | Off/On | | |
| Language | | | |
| Rotate Display | | | |
| Note: In both the menu and submenu interfaces, ESC/ENTER is the exit button. | | | |

## 5.2.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 1<br>Address | Unit 2<br>Address | Unit 3<br>Address | Unit 4<br>Address |
|---|---|---|---|---|
| 15 CH | 1 | 16 | 31 | 46 |
| 18 CH<br>（Optional CMY version） | 1 | 19 | 37 | 55 |

# 5.3.DMX 512 Configuration

| 15 Channel | 18 Channel | DMX | Percentage | Function | Note |
|---|---|---|---|---|---|
| 1 | 1 | 0-255 | 0-100 | **Pan** | |
| 2 | 2 | 0-255 | 0-100 | **Pan Fine** | |
| 3 | 3 | 0-255 | 0-100 | **TILT** | |
| 4 | 4 | 0-255 | 0-100 | **TILT Fine** | |
| 5 | 5 | | | **Function** | |
| | | 0-25 | 0-9.8 | Unused Range | |
| | | 26-30 | 10.2-11.8 | Effects Reset | |
| | | 31-35 | 12.2-13.7 | PAN/TITL Reset | |
| | | 36-40 | 14.4-15.7 | Complete Reset | |
| | | 41-180 | 16.1-70.6 | Unused Range | |
| | | 181-200 | 71.0-78.4 | Lamp OFF | |
| | | 201-220 | 78.8-86.3 | Unused Range | |
| | | 221-255 | 86.7-100 | Lamp ON | |
| 6 | 6 | 0-255 | 0-100 | **Dimmer** | |
| 7 | 7 | | | **Strobe** | |
| | | 0-3 | 0-1.2 | Closed | |
| | | 4-103 | 1.6-40.4 | Slow-Fast Strobe | |
| | | 104-107 | 40.8-42.0 | Open | |
| | | 108-157 | 42.4-61.6 | Opening pulses in sequences from slow fast | |
| | | 158-207 | 62.0-81.2 | Closing pulses in sequences from fast slow | |
| | | 208-212 | 81.6-83.1 | Open | |
| | | 213-251 | 83.5-98.4 | Random Slow-Fast Strobe | |
| | | 252-255 | 99.8-100 | Open | |
| / | 8 | 0-255 | | **Cyan** | |
| / | 9 | 0-255 | | **Magenta** | |
| / | 10 | 0-255 | | **Yellow** | |
| 8 | 11 | | | **Colour** | |
| | | 0-4 | 0-1.56 | White | |
| | | 5-8 | 1.96-3.14 | White+Red | |
| | | 9-12 | 3.53-4.71 | Red | |
| | | 13-17 | 5.10-6.67 | Red+Orange | |
| | | 18-21 | 7.06-8.24 | Orange | |
| | | 22-25 | 8.63-9.80 | Orange+Aquamarine | |
| | | 26-29 | 10.2-11.4 | Aquamarine | |
| | | 30-34 | 11.8-13.3 | Aquamarine+Green | |
| | | 35-38 | 13.7-14.9 | Green | |
| | | 39-42 | 15.3-16.5 | Green+Light Green | |
| | | 43-46 | 16.9-18.0 | Light Green | |
| | | 47-51 | 18.4-20.0 | Light Green+Lavender | |
| | | 52-55 | 20.4-21.6 | Lavender | |
| | | 56-59 | 22.0-23.1 | Lavender+Pink | |
| | | 60-63 | 23.5-24.7 | Pink | |
| | | 64-68 | 25.1-26.7 | Pink+Yellow | |
| | | 69-72 | 27.0-28.2 | Yellow | |
| | | 73-76 | 28.6-29.8 | Yellow+Magenta | |
| | | 77-81 | 30.2-31.8 | Magenta | |
| | | 82-85 | 32.2-33.3 | Magenta+Cyan | |
| | | 86-89 | 33.7-34.9 | Cyan | |
| | | 90-93 | 35.3-36.5 | Cyan+CT02 | |
| | | 94-98 | 36.9-38.4 | CT02 | |
| | | 99-102 | 38.8-40.0 | CT02+CT01 | |
| | | 103-106 | 40.4-41.6 | CT01 | |
| | | 107-110 | 42.0-43.1 | CT01+CTB | |
| | | 111-115 | 43.5-45.1 | CTB | |
| | | 116-119 | 45.5-46.7 | CTB+Blue | |
| | | 120-123 | 47.1-48.2 | Blue | |
| | | 124-127 | 48.6-49.8 | Blue+White | |
| | | 128-191 | 50.2-74.9 | CCW. Fast→Slow Rotation | |
| | | 192-255 | 75.3-100 | CW. Slow→Fast Rotation | |
| 9 | 12 | | | **Gobo** | |
| | | 0-9 | | White | |
| | | 10-14 | | Gobo1 | |
| | | 15-19 | | Gobo2 | |
| | | 20-24 | | Gobo3 | |
| | | 25-29 | | Gobo4 | |
| | | 30-34 | | Gobo5 | |
| | | 35-39 | | Gobo6 | |
| | | 40-44 | | Gobo7 | |
| | | 45-49 | | Gobo8 | |
| | | 50-54 | | Gobo9 | |
| | | 55-62 | | Gobo1 Shake Slow-Fast Speed | |

| 15 Channel | 18 Channel | DMX | Percentage | Function | Note |
|---|---|---|---|---|---|
| | | 63~69 | | Gobo2 Shake Slow-Fast Speed | |
| | | 71~78 | | Gobo3 Shake Slow-Fast Speed | |
| | | 79~86 | | Gobo4 Shake Slow-Fast Speed | |
| | | 87~94 | | Gobo5 Shake Slow-Fast Speed | |
| | | 95~102 | | Gobo6 Shake Slow-Fast Speed | |
| | | 103~110 | | Gobo7 Shake Slow-Fast Speed | |
| | | 111~118 | | Gobo8 Shake Slow-Fast Speed | |
| | | 119~127 | | Gobo9 Shake Slow-Fast Speed | |
| | | 128~190 | | Fast-Slow Rotation(CW) | |
| | | 191~192 | | Stop | |
| | | 193~255 | | Slow-Fast Rotation(CCW) | |
| 10 | 13 | | | **Prism 1** | |
| | | 0~127 | 0~50 | Unused Range | |
| | | 128~255 | 50~100 | Prism1 | |
| 11 | 14 | | | **Prism Rotation 1** | |
| | | 0 | 0 | Unused Range | |
| | | 1~63 | 0.4~24.7 | Linear angle adjustment | |
| | | 64~127 | 25.1~49.8 | CCW，Fast → Slow | |
| | | 128~191 | 50.2~74.9 | CW，Slow → Fast | |
| | | 192~207 | 75.3~81.2 | Slow →Fast，90° Rotate back and forth | |
| | | 208~223 | 81.6~87.5 | Slow →Fast，180° Rotate back and forth | |
| | | 224~239 | 87.8~93.7 | Slow →Fast，270° Rotate back and forth | |
| | | 240~255 | 94.1~100 | Slow →Fast，360° Rotate back and forth | |
| 12 | 15 | | | **Prism 2** | |
| | | 0~127 | 0~50 | Unused Range | |
| | | 128~255 | 50~100 | Prism2 | |
| 13 | 16 | | | **Prism Rotation 2** | This channel is empty, and the rotation function is used together with prism rotation 1 |
| | | 0 | 0 | Unused Range | |
| | | 1~63 | 0.4~24.7 | Linear angle adjustment | |
| | | 64~127 | 25.1~49.8 | CCW，Fast → Slow | |
| | | 128~191 | 50.2~74.9 | CW，Slow → Fast | |
| | | 192~207 | 75.3~81.2 | Slow →Fast，90° Rotate back and forth | |
| | | 208~223 | 81.6~87.5 | Slow →Fast，180° Rotate back and forth | |
| | | 224~239 | 87.8~93.7 | Slow →Fast，270° Rotate back and forth | |
| | | 240~255 | 94.1~100 | Slow →Fast，360° Rotate back and forth | |
| 14 | 17 | 0~255 | 0~100 | **Frost** | |
| 15 | 18 | 0~255 | 0~100 | **Focus** | |

# 6.Electrical Connection Diagram
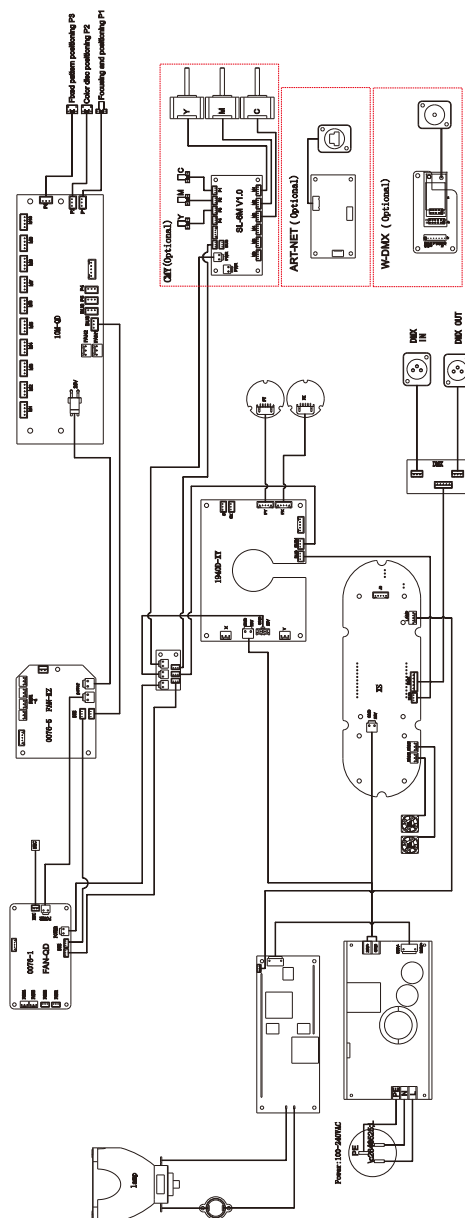
**The position of each fan of the fixture:**
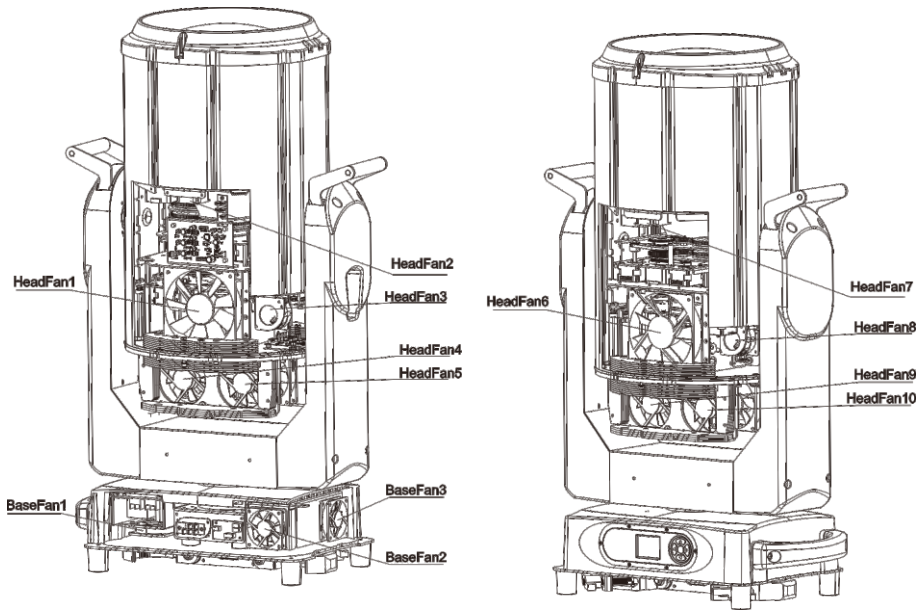


## 7.Troubleshooting

**PAN ERROR:**

- Check whether there are other items interfering with the operation and reset of the X axis within the operation range.
- Check whether the connecting wire of the X-axis magnetic encoder is in bad contact or disconnected.
- Check whether the connecting wire of the X-axis motor is in bad contact or disconnected.
- Check whether the X-axis magnetic sensing plate is loose, detached or damaged.
- Check whether the relevant circuit of the X-axis motor driver board is damaged.
- Check whether the X-axis motor is damaged.
- Check the display board itself for damage.

**PAN ERROR:**

- Check whether there are other items interfering with the operation and reset of the X axis within the operation range.
- Check whether the connecting wire of the X-axis magnetic encoder is in bad contact or disconnected.
- Check whether the connecting wire of the X-axis motor is in bad contact or disconnected.
- Check whether the X-axis magnetic sensing plate is loose, detached or damaged.
- Check whether the relevant circuit of the X-axis motor driver board is damaged.
- Check whether the X-axis motor is damaged.
- Check the display board itself for damage.

**TILT ERROR:**

- Check whether there are other items within the operation range of the Y-axis to interfere with its operation and reset.
- Check whether the connection line of the Y-axis magnetic sensing plate is in bad contact or disconnected.
- Check whether the connecting wire of the Y-axis motor is in bad contact or disconnected.
- Check whether the Y axis magnetic sensing plate is loose, shed or damaged.
- Check whether the relevant circuit of Y-axis motor driver board is damaged.
- Check whether the Y-axis motor is damaged.
- Check the display board itself for damage.

**FIXGOBO ERROR:**

- Check whether there are other items within the operation range of fixed pattern plate to interfere with its operation and reset.
- Check whether the connection line of the magnetic sensing plate of the fixed pattern plate is in bad contact or disconnected.
- Check whether the connection wire of the fixed pattern plate motor is in bad contact or disconnected.
- Check whether the fixed pattern plate magnet is loose, falling off or damaged.
- Check whether the magnetic sensing plate of the fixed pattern plate is loose, shed or damaged.
- Check whether the relevant circuit of the motor driver plate of the fixed pattern plate is damaged.
- Check whether the fixed pattern plate motor is damaged.
- Check the display board itself for damage.

**COLOUR ERROR:**

- Check whether there are other items within the operating range of the color disk to interfere with its operation and reset.
- Check whether the connecting wire of the magnetic sensing plate of the color disk is in bad contact or disconnected.
- Check whether the connecting wire of the color plate motor is in bad contact or disconnected.
- Check whether the color disk magnet is loose, detached or damaged.
- Check whether the magnetic sensing plate of the color plate is loose, shed or damaged.
- Check whether the circuit related to the color disk motor drive board is damaged.
- Check whether the color plate motor is damaged.
- Check the display board itself for damage.

**PRISM ERROR:**

- Check whether there are other items interfering with the operation and reset of the prism within the scope of its rotation.
- Check whether the apron on the rotating belt wheel of the prism is loose, shed or damaged.
- Check whether the prism rotation magnetic sensing plate is loose, falling off or damaged.
- Check whether the relevant circuit of the drive board of the prism revolution motor is damaged.
- Check whether the prism revolution motor is damaged.
- Check the display board itself for damage.

**PRISM 1 ERROR:**

- Check whether there are other items in the operation range of prism 1 to interfere with its operation and reset.
- Check whether the running motor wire of prism 1 is loose or falling off.
- Check whether the relevant circuit of prism 1 motor drive board is damaged.
- Check whether the prism 1 motor is damaged.
- Check the display board itself for damage.

**PRISM 2 ERROR:**

- Check whether there are other items in the operation range of prism 2 to interfere with its operation and reset.
- Check whether the running motor wire of prism 2 is loose or falling off.
- Check whether the relevant circuit of prism 2 motor drive board is damaged.
- Check whether the prism 2 motor is damaged.
- Check the display board itself for damage.

**PRISMROT ERROR:**

- Check whether the prism rotating motor wire is loose or falling off.
- Check whether the relevant circuit of the rotating drive plate of the prism is damaged.
- Check whether the prism rotating motor is damaged.
- Check the display board itself for damage.

**FROST ERROR:**

- Check whether the atomizing motor wire is loose or falling off.
- Check whether the atomization driver board related circuit is damaged.
- Check whether the atomizing rotating motor is damaged.
- Check the display board itself for damage.

**DIMMER ERROR:**

- Check whether the dimming 1 motor wire is loose or falling off.
- Check whether the related circuit of dimming 1 driver board is damaged.
- Check whether the dimming 1 rotating motor is damaged.
- Check the display board itself for damage.

**DIMMER 2 ERROR:**

- Check whether the dimming 2 motor wire is loose or falling off.
- Check whether the related circuit of dimming 2 driver board is damaged.
- Check whether the dimming 2 rotating motor is damaged.
- Check the display board itself for damage.

**LAMP FAN1 ERROR:**

- Check whether the related wires of blower 1 are loose or fall off.
- Check whether the relevant circuit of blower 1 drive board is damaged.
- Check whether blower 1 itself is damaged.
- Check the display board itself for damage.

**LAMP FAN2 ERROR:**

- Check whether the related wires of blower 2 are loose or fall off.
- Check whether the related circuit of blower 2 drive board is damaged.
- Check whether blower 2 itself is damaged.
- Check the display board itself for damage.

**IN FAN ERROR:**

- Check whether the inlet fan related wires are loose or fall off.

- Check whether the relevant circuit of the drive plate of the intake fan is damaged.

- Check whether the intake fan itself is damaged.

- Check the display board itself for damage.

**OUT FAN ERROR:**

- Check whether the wire related to the outlet fan is loose or falling off.

- Check whether the relevant circuit of the drive plate of the outlet fan is damaged.

- Check whether the outlet fan itself is damaged.

- Check the display board itself for damage.

**PVG ERROR :**

For other reasons, please contact the manufacturer after sale.

**PVG UART ERROR:**

- Check whether the ballast communication wire is loose or falling off.

- Check whether the ballast itself is damaged.

- Check the display board itself for damage.

**PVG TEMP HIGHT:**

- Check whether the ballast cooling fan is running normally.

- Check whether the ballast itself is damaged.

- Check the display board itself for damage.

**PVG LOW VOLTAGE:**

- Check whether the ballast input voltage is normal.

- Check whether the ballast itself is damaged.

- Check the display board itself for damage.

## 8.Fixture Cleaning

It is absolutely essential that the fixture is kept clean to ensure the maximum light-output 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.

∗ 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.

∗ Clean the external optical lens at least every 20 days and the internal optical lens every 30 days.

# CAUTION！！！
# Disconnect from mains before starting maintenance operation.

## 9.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.