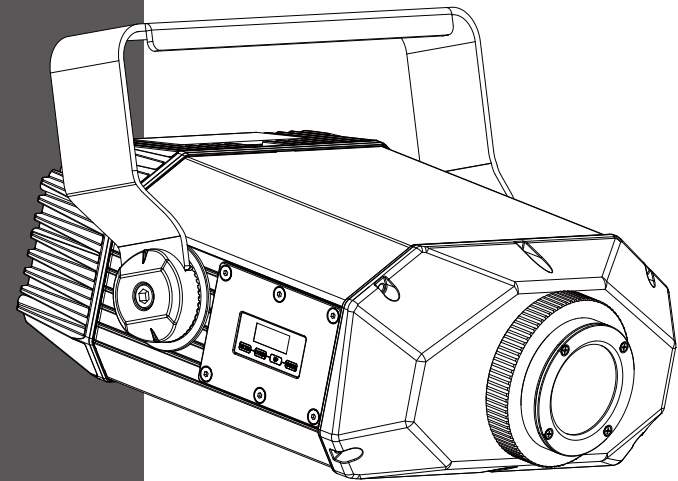


**CKC**

# ***IPH<sub>2</sub>0/100***



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Before carrying out any installation, maintenance, or cleaning of the lighting fixtures, please confirm that the power has been cut off! Before using this fixture, please read this manual. Our company reserves the right to change product design and specifications without prior notice.

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## ★ Statement ★

- This manual contains important information on safe use and installation. Please read it carefully and follow the requirements for operation and installation. Please keep this manual properly;
- The equipment has good performance and complete packaging when it leaves the factory. The operator should strictly follow the warning items and operating instructions stated in the manual. Any malfunction or damage caused by misuse or neglect of the manual is not within the scope of our company's responsibility and warranty;
- The relevant information in this manual is for reference only. All lighting products are subject to the actual product. Any changes will not be notified separately, and our company reserves the right of final interpretation.

### 1. Security Warning Information



#### Attention !

Please read the safety requirements information in this section carefully before installing, powering on, operating, or repairing the lighting fixtures.



- This product is for professional use and is not suitable for other purposes;
- After receiving the lighting fixtures, please check if the packaging is complete and unpack to check if the equipment has been damaged due to transportation. If there is any damage caused by transportation, please do not use this lamp and contact local technicians or manufacturers as soon as possible;
- When transporting again, please use the original packaging materials;
- If there is obvious damage to the machine casing, it should be replaced in a timely manner;
- When hanging lamps, it is necessary to verify that the hanging equipment can withstand more than 6 times the weight of the lamp. After installation, it is necessary to verify that the lamp cover and installation buckle are secure and undamaged. At the same time, a safety rope should be used as an auxiliary safety for the lamp and fixed on the truss;
- The light source inside this luminaire should be replaced by the manufacturer, its service agent, or a similarly qualified person;
- If you have any other questions about how to safely operate the equipment, please contact our technical personnel or call our service hotline;
- This product has a protection level of IP65 and can be used both indoors and outdoors;
- Avoid direct external strong light shining on the lens, which may cause the lens to focus and burn out internal components.



- Lighting fixtures should be kept clean and avoid prolonged use in overheated or dusty environments to prevent contact with chemical liquids;
- When using the product, attention should be paid to avoiding serious or fatal injuries caused by fire, heat, electrical shock, and ultraviolet radiation. Before powering on or installing, read the instruction manual first. Follow the safety precautions for operation and pay attention to the warning signs on the instructions and equipment;
- Only professionals are allowed to install, operate, and maintain lighting fixtures, and strictly follow the procedures stated in the operating instructions.



- The eyes cannot directly look at the luminous object;
- Do not connect this device to any dimmer;
- If visible damage occurs to the protective casing, lens, and display screen on the lighting fixture, it is considered as damage to the point of loss;
- Please do not place any filters or other items at the light outlet, and do not replace non original parts;
- The minimum safe illumination distance of the lamp is 1m.



- Before installation, please confirm that the power supply voltage used matches the voltage indicated on the light fixture. Each lighting fixture should be properly grounded and electrically installed according to relevant standards;
- Please disconnect the power before repairing or cleaning the equipment;
- During the operation of the lighting fixtures, touching the wires is prohibited to prevent electric shock;
- If the external soft cable or wire of this lamp is damaged, the wire should be replaced by the manufacturer, its agent, or a similarly qualified person to avoid danger;
- Avoid flammable liquids, water, or metal conductors from entering the interior of the lamp to prevent electric shock or fire. If any foreign objects enter the lamp, immediately cut off the power supply;
- When multiple lamps are operated in series, the signal lines can be connected in multiple ways, but the power supply must be connected separately.



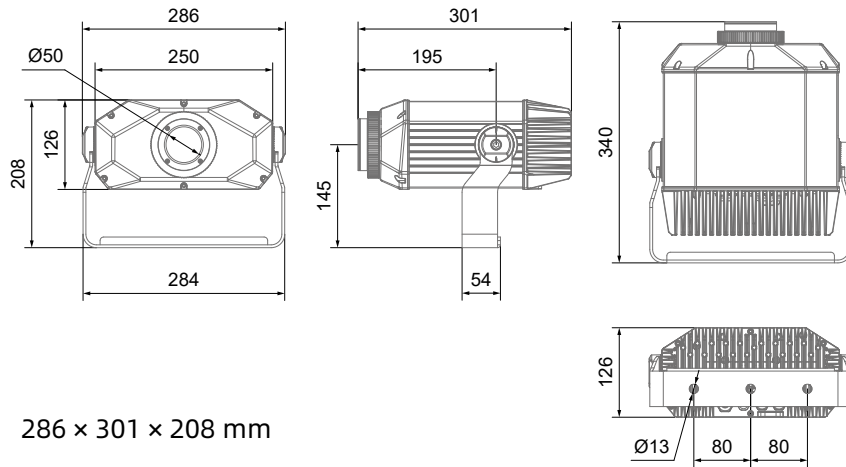
- The lighting fixtures work normally at -20 °C to 45 °C . When replacing any components or accessories in the equipment, ensure that the power is disconnected to prevent electric shock and injury;
- The maximum surface temperature of the lamp during operation can reach 68 °C , please do not touch it with bare hands.



- The lighting fixtures must be installed in a sufficiently ventilated area, at least 0.5m away from adjacent surfaces, to ensure that no ventilation holes are blocked;
- Do not install the lighting fixtures directly on flammable objects;
- The minimum distance between all outer surfaces of the lamp and combustible materials is 0.5m.

## 2. Product Introduction

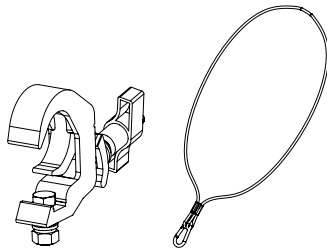
### 2.1 Exterior dimensions of lighting fixtures



286 × 301 × 208 mm

### 2.2 Packaging accessories

Name	QTY
Clamp	1 PCS
Safety cable	1 PCS



## 3. Main technical parameters of the equipment

Product execution standards: GB7000.1-2023,GB7000.217-2023, Q/YF-2017

### ● Electrical parameter

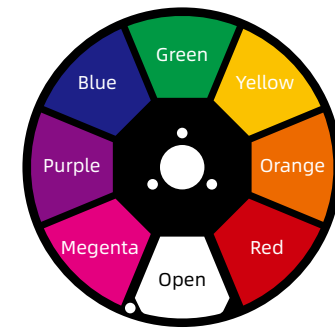
Rated input voltage: AC 100V-240V~ 50Hz/60Hz  
 Rated power of the entire fixture: 90W  
 Power factor: 0.99F  
 Input Current: 0.444A 220V

### ● Source lifespan

>20000 hours

### ● Color system

CCT: 7600K  
 CRI: 81  
 Color wheel: 7+1



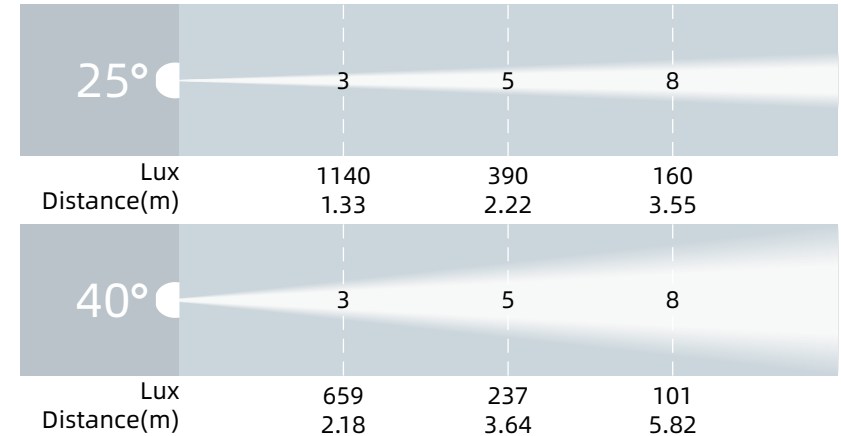
### ● Optical system

Source: 90W CW LED  
 Beam angle: 25° /40° (This product comes standard with two lenses, which can be replaced by loosening them by hand)  
 Output luminous flux: 1900 Lm

### ● Control and programming

Control channel: 5CH  
 Protocol: DMX512, RDM  
 Power input/output: Waterproof gland

### ● Illumination draw



### ● Other effect function


Fast electronic strobe: 1~25Hz  
 Dimmer Mode: 5 kinds  
 LED refresh frequency: 900Hz-25KHz  
 Dimmer Curve: 4 kinds

### ● Other features and functions

Weight: 6.1 KG

#### 4. Packaging and transportation

##### 4.1 Disassemble packaging

 Notice: After receiving the fixture, please unpack and check for any damage caused by transportation. If there is any damage caused by transportation, please do not use this fixture and contact the local technical personnel or manufacturer as soon as possible.

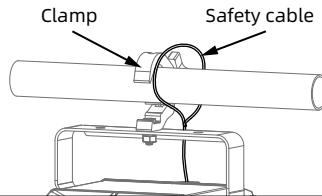
##### 4.2 Equipment packaging


- 1). Disconnect the power supply before packaging the lighting fixtures to allow them to cool completely;
- 2). Flight cases can only be stacked in two layers and are not allowed to be reversed.

#### 5. Installation Requirements Explanation

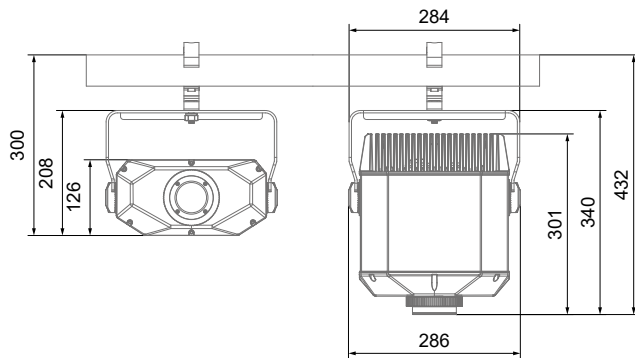
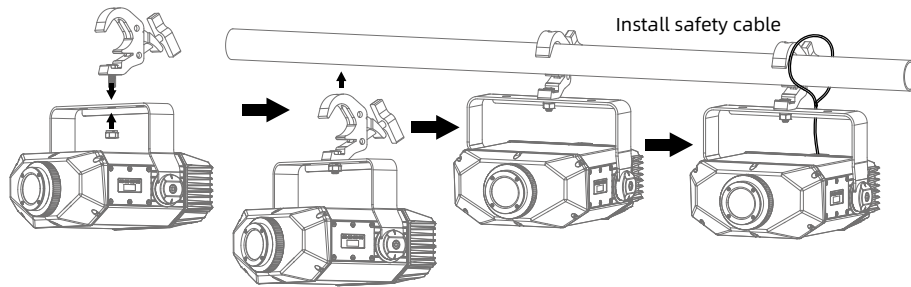
##### 5.1 Clamp install

The lighting fixtures can be installed on the stage or on any direction of the truss, and the clamp can be quickly and easily locked onto the truss.





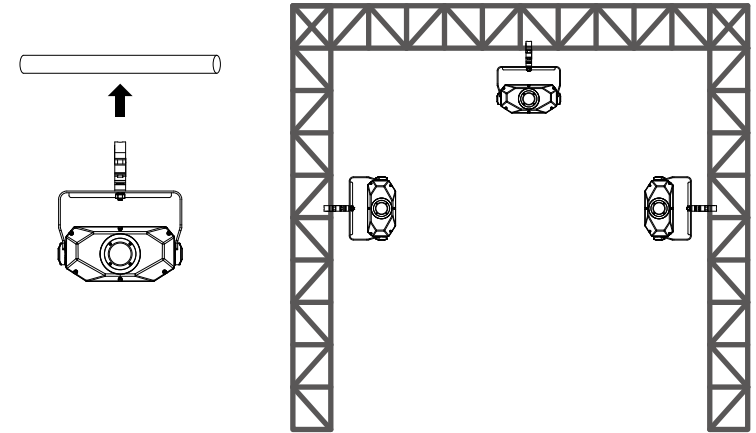
**Warning !**  
The lighting fixture must use one clamp to fix the device, and an additional safety cable must be connected to the safety hanging hole of the lamp body. Be careful not to connect it to the handle.




#### 5.2 Equipment installation

- 1). Before installation, it is necessary to verify that the lamp hook and safety rope are not damaged, and that the installation object can withstand 6 times the total weight of the lamp and cable accessories;
- 2). Install the clamp on the handle, insert the clamp horizontally into the handle mounting hole, and tighten the screw (the shape of the light hook should be based on the actual product).

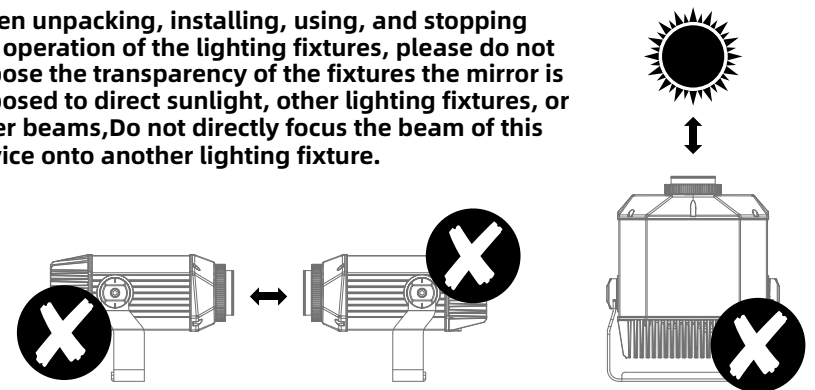
#### 5.3、Hanging Installation Diagram



 **Reminder:** External beam source may damage internal lighting fixtures

External beams from direct sunlight, lighting fixtures, and lasers that are directly focused onto the casing or penetrate the lens to illuminate the interior of the fixture may cause damage to the components. This is a common issue with all lighting fixtures and does not occur alone with CKC products. Although there is no way to completely prevent this problem from occurring, following the following guidelines can prevent potential damage.

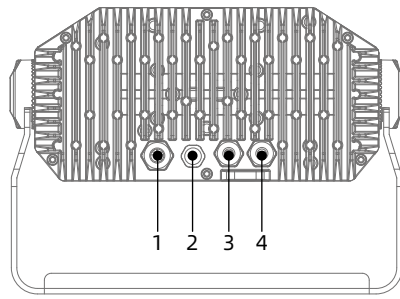
**When unpacking, installing, using, and stopping the operation of the lighting fixtures, please do not expose the transparency of the fixtures the mirror is exposed to direct sunlight, other lighting fixtures, or laser beams, Do not directly focus the beam of this device onto another lighting fixture.**



## 6. Power、Signal connect

### 6.1 Power and signal socket

1. Power input
2. Breathable valve
3. DMX input
4. DMX output



### 6.2 Power connect

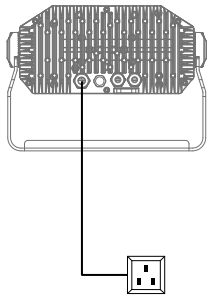
#### Connection method:

**L**(live wire) - brown wire

**E**(Ground wire) - yellow/green dual color line

**N**(Zero Line) - Blue Line

When connecting the power supply, please note that the voltage and frequency of the power supply must match the voltage and frequency marked on the light fixture. When multiple fixtures are used simultaneously, it is recommended to connect the power supply of each fixture separately, so that each fixture can be individually controlled for power on/off.



**⚠ Attention:** When connecting the power supply, the ground wire (yellow/green dual color wire) must be safely grounded and comply with all relevant electrical installation standards.



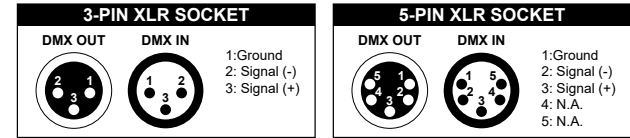
This product uses Powercon In/Out to connect power cords. Due to power limitations, a 2-square 220V power cord can carry up to 1 products.

### Warning !

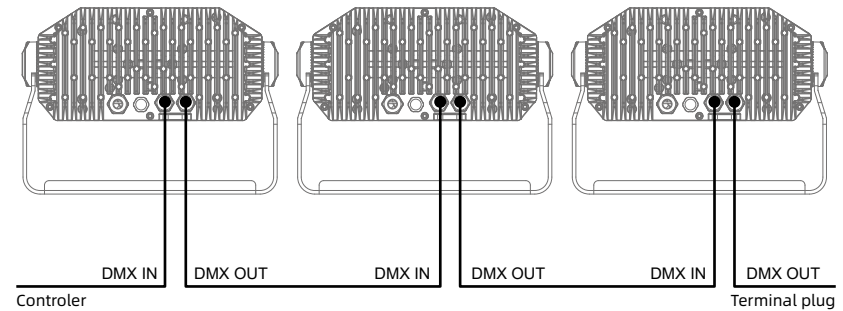
- Do not connect too many fixtures or overload a single power cord;
- Do not use power cords with damaged insulation layers, and do not place power cords on other wires;
- When the fixture is not in use or cleaned, please unplug the power cord; Do not forcefully unplug or drag the power cord directly.



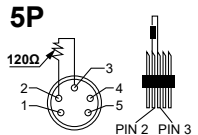
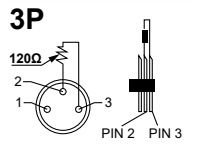
### 6.3 Signal connect



The lighting fixtures are equipped with standard DMX XLR input and output sockets. Please use DMX512 shielded twisted pair signal cables or Category 3/5 or above network twisted pair cables for connection. The typical connection distance for DMX signal lines is 150 meters. When transmitting signals over long distances, a DMX512 signal amplifier must be added.



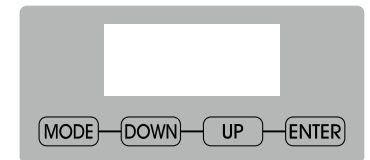
Connect a shielded twisted pair signal cable from the DMX output port of the controller to the DMX input port of the first device, and from the DMX output port of the first device to the DMX input port of the second device, and so on, until all the lamps are connected. Then install a terminal plug on the last 3 pin socket of each connected lamp output. (Weld a 4/1W, 120 Ω resistor between the 2 and 3 pins of a 3 or 5 core pin XLR plug).



## 7. Control panel

### 7.1 Panel Introduction

- Adopting a OLED display screen;
- Press the MODE key to view or modify the lighting function settings, and press the UP and DOWN keys to select the function menu;
- Press the ENTER key to confirm your selected function menu, which will take you to the corresponding sub menu in the menu. Each menu item represents a specific function of the lighting fixture (as shown in the table below);
- Press the ENTER key to save your modifications or enter a submenu, and press the UP or DOWN key to modify values (increase or decrease values); Press the MODE key to return to the previous menu or exit.
- Press the MODE key to return to the previous menu or exit.



## 7.2. System menu

Note: The gray color block is the default setting value

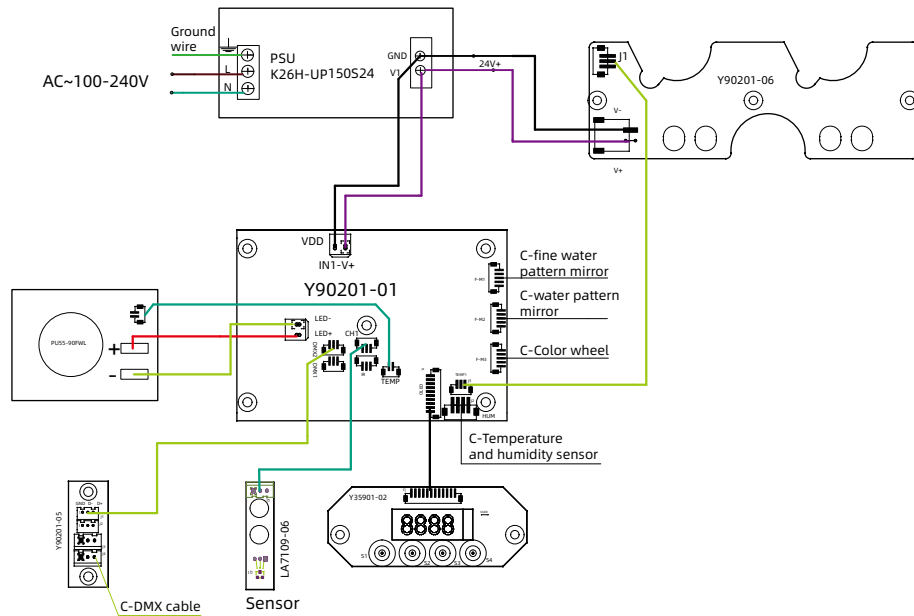
Software Update Please Wait... WELCOME Software V1.06 Motor Reset...		
<b>Menu Set ADDR</b>	Set ADDR 001	001-XXX
<b>Menu User Mode</b>	Set CH 5CH	5CH
<b>Menu Function</b>	Dimmer Mode	Standard Stage TV Architec Theatre
	NO DMX	Hold/Blackout
	DisplaySet	Backlight 05s~60s (30s) Key Lock ON1/ON/OFF DispFlash ON/OFF
	DefaultSet	Reset/No
	Temp.C/F	Fahrenheit Celsius
	Calibrate	Color 000-255
	Frequence	900Hz/1000Hz/1100Hz/1200Hz/1300Hz/1400Hz/ 1500Hz/2500Hz/4000Hz/5000Hz/10KHz/15KHz/ 20KHz/25KHz
	Dimmer Curve	Linear Square I-Square S-Curve
	ResetMotor	On/Off
	<b>Menu Info</b>	Time
Temp		xxx F/C
Humi		xxx%RH
Model		IPH20 100
Software		V1.06
Error		None/color、Temp...
<b>Menu Slave Mode</b>	Slave	

<b>Menu Manual</b>	Dimmer	000-255
	Strobe	000-255
	ColorWheel	000-255
	Wave1	000-255
	Wave2	000-255

## 8. DMX channel table:

5Ch	Function	Values
1	Dimmer	000~255 0%to100%
2	Strobe	000~031 Closed
		032~063 Open
		064~095 Strobe(slow → fast)
		096~127 Open
		128~159 Pulse(slow → fast)
		160~191 Open
		192~223 Random(slow → fast)
224~255 Open		
3	Color Wheel1	000~005 Coloroff(open)
		006~012 Open/Red
		013~019 Red
		020~026 Red/Orange
		027~033 Orange
		034~040 Orange/Yellow
		041~047 Yellow
		048~054 Yellow/Green
		055~061 Green
		062~068 Green/Cyan
		069~075 Cyan
		076~082 Cyan/Lavendel
		083~089 Lavendel
		090~096 Lavendel/Magenta
		097~103 Magenta
		104~110 Magenta/Open
		111~125 Open
		126~128 ColourRunStop
		129~255 ColourRunslow->fast
		4
001~127 EffectWheelRotation,Slow->Fast,CCW		
128~255 EffectWheelRotation,Fast->Slow,CW		
5	Effect Wheel 2 Rotation	000~000 EffectWheel_2Rot.Off
		001~127 EffectWheel_2Rotation,Slow->Fast,CCW
		128~255 EffectWheel_2Rotation,Fast->Slow,CW

## 9. Control circuit diagram



## 10. Regular maintenance

### 10.1 Cleaning and maintenance

Lighting fixtures require daily cleaning and maintenance, and their service life largely depends on the operating environment and standards. If you have any questions, please consult our technical engineers for advice. Maintenance and repair work not included in this book should be entrusted to our qualified technical engineers.

**Attention!** Damage caused by dust, e-liquid, or other reasons, as well as abnormal use, is not covered by the warranty.



### Warning !

Before opening any lid, disconnect the power supply. Cleaning optical components requires gentle wiping as the coating surface is prone to scratching. Do not use damaging liquids or hard objects, as they may damage the plastic or coating surface.


- When the lens is cracked or otherwise damaged, it should be replaced in a timely manner;
- When the brightness significantly decreases, the LED may have reached its

expiration date and should be replaced in a timely manner;

- When the fixture cannot start, please check if the fixture power fuse is blown. If it is blown, a fuse of the same specification must be used for installation;
- The fixture is equipped with a temperature protection device. When the temperature is too high, the protection device will automatically reduce power.
- When this situation occurs, please check whether the fan is running normally, whether the fan and fan mesh are clogged with dust, identify the fault and repair it before starting the fixture. Please note that only qualified technicians are allowed to carry out maintenance work;
- To maintain smooth movement of the focusing lens, it is recommended to lubricate the guide rail of the focusing lens every three months. Excellent and high-temperature resistant lubricating grease should be used, and excessive grease should not be used as it can easily dirty adjacent components.

### 10.2 Fault analysis and handling

Fault description	Analysis	Processing method
No action after power on	Check if the power switch is turned on	Turn on
	Check if the fuse is blown	Replace
	Check if the output of PSU is normal	Detecting voltage
	Check if poor contact in the internal circuit	Reconnect
Uncontrolled lighting fixtures	Check if the DMX signal cable is connected correctly (If there is no signal, the display screen will flash)	Reconnect or replace
	Check if the address code is correct and if the DMX mode of the lighting fixture matches the settings	Reconfirm
	The main control PCB is damaged	Replace
Not bright	LED aging or damage	Replace
	Power PCB malfunction	Check/ Replace
	Loose or poor contact of the circuit	Reconnect
	PSU malfunction	Replace
Automatically turn off or dim the lights	LED aging	Replace
	Check the power output of the fan	Check/ Replace
	The temperature control switch is damaged	Replace

Weak light efficiency and uneven light spot	LED aging	Replace
	LED not centered with the lens	Adjust LED
	The optical mirror has accumulated dust or stains	Clean
	The optical mirror is damaged	Replace
Impure color	Weakening of light efficiency	Replace led PCB
	The color filter has accumulated dust or stains	Clean
	The color filter has been demolded or damaged	Replace
Gobo is unclear	The optical mirror has accumulated dust or stains	Clean
	The optical mirror is damaged	Replace
 <b>Attention!</b> The above analysis is for abnormal reference only. Non professionals are not allowed to disassemble and repair the machine		