



**Crusier Laser 200 Beam**

**LH -CL150**

This manual contains important information.  
Please read before operating fixture.

Guangzhou Leahua Lighting Technology Ltd  
[http:// www.leahualighting.com](http://www.leahualighting.com)

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## Accessories

Name	Quantity	Remark
User manual	1pc	
Folding clamp	1set	
Power cable	1pc	
DMX signal cable	1pc	
Safety cord	1pc	Optional

# 1. Safety Instructions

**WARNING!!! To reduce the risk of fire, electric shock, or injury to persons, follow these important safety instructions:**

- Check before use

Before operation, inspect the fixture for transportation damage. Do not use it if damaged. Unauthorized modification or improper use is not covered by warranty.

- Environment

The fixture is IP65-rated, suitable for indoor/outdoor use, and can operate in humid or dusty areas. Keep it away from excessive heat, fire, vibration, electrical surges, and strong light.

- Personnel & operation

Installation and operation must be performed by qualified personnel. Ensure all covers are securely in place, wear protective gear, and do not open the housing or attempt self-maintenance.

- Optical safety

Do not look directly into the light source. Do not use with dimmer packs. Maintain a minimum distance of 20 m from illuminated surfaces, and replace damaged optical components immediately.

- Electrical safety

Ensure correct voltage, proper grounding, and compliant power cords. Do not use damaged cables, and unplug by holding the plug. Avoid operating under heavy rain or extreme humidity, and avoid frequent on/off switching.

- Installation

Use the safety cord through the provided safety holes. Keep at least 50 cm ventilation clearance and do not mount on flammable surfaces or aim the beam at combustible objects (minimum 20 m).

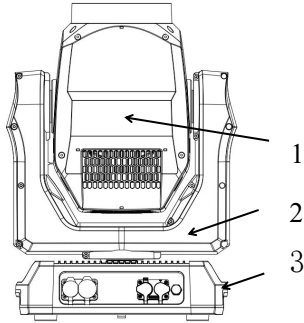
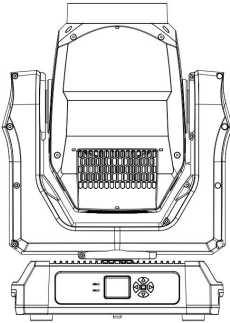
- Temperature & normal conditions

Housing temperature may reach 45 – 75° C during operation. Slight smoke or odor may occur at first ignition and is considered normal.

## 2. Appearance

Front side & back side

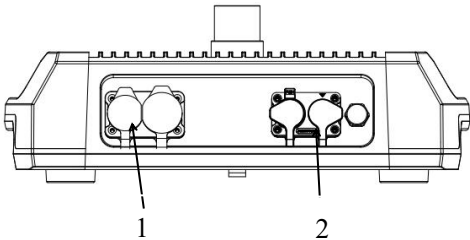
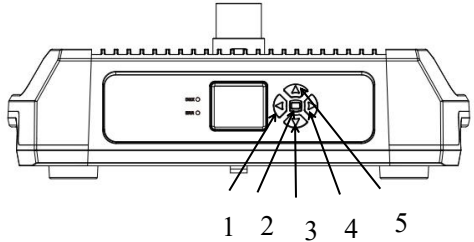
Front panel & rear panel



- 1. Face Cover
- 2. Arm
- 3. Handle

Front Panel of the Base

- 1. Left Key
- 2. Enter Key
- 3. Down Key
- 4. Right Key
- 5. Up Key



Rear Panel of the Base

- 1. Waterproof DMX3-pin in/out
- 2. Waterproof power socket

### 3. Technical Specifications

#### Power

Input Voltage: AC100-240V 50/ 60Hz

Power Consumption: 220W

#### Light source

Light Source: 150W USHIO Laser

CCT: 9000K

Life expectancy: 1200 hours( factory rated)

#### Beam Angle

Beam Angle: 1.1°

#### Control

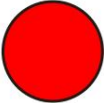



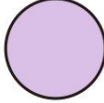
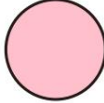
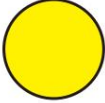
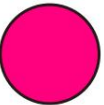

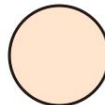
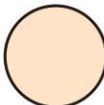
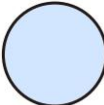
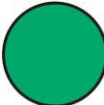
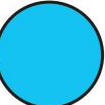
Display: LCD display


Control Mode: DMX512, master-slave, auto, sound, RDM

Control Channel: 16CH

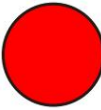
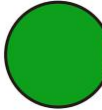

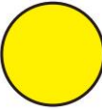


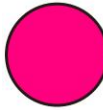
#### Colors

Color Wheel 1: 22 colors+open( including 3 CTO fliters) +open

Red	Orange	Dark -blue	Dark -Green	Lavendr er	Pink	Yellow
						
Rose	Blue	CTO- 3200K	CTO- 5400K	CTO- 9000K	Emeral d green	Blue Green
						





























Light-Blue	Purple	Terracotta	Brownish-Yellow	Light-Yellow	Lime	Orange
						
Fluorescent						
						

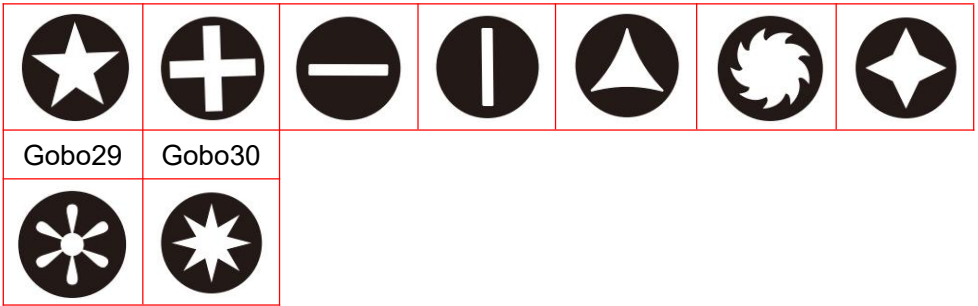
Color Wheel 2: 7 color filter

Red	Green	Blue	Yellow	Indigo	Purple	Rose
						

Static gobo wheel

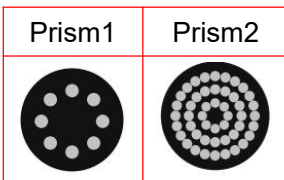
Static gobo wheel :29 gobos+open

Gobo1	Gobo2	Gobo3	Gobo4	Gobo5	Gobo6	Gobo7
						
Gobo8	Gobo9	Gobo10	Gobo11	Gobo12	Gobo13	Gobo14
						
Gobo15	Gobo16	Gobo17	Gobo18	Gobo19	Gobo20	Gobo21
						
Gobo22	Gobo23	Gobo24	Gobo25	Gobo26	Gobo27	Gobo28
						



### Prism/Frost

Prism: 1×8-facet circular prism, 1×48-facet circular prism



Frost: 1 frost filter



### Dimming/Strobe

Dimming: 0-100% linear dimming system

Strobe: 0-20 F.P.S, speed adjustable

### Housing

Housing: Die-casting aluminum, nylon and glass fiber

Protection rate: IP65

### Working temperature

Working temperature: -10°C-45°C

### Connection

Power connection: Powercon in/out

DMX connection: DMX 3-pin in / out

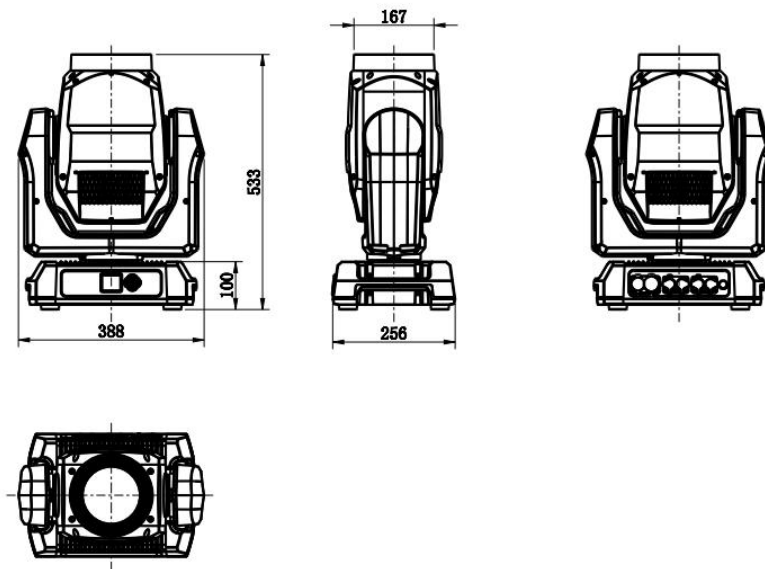
**Product dimensions**

388×256×534mm

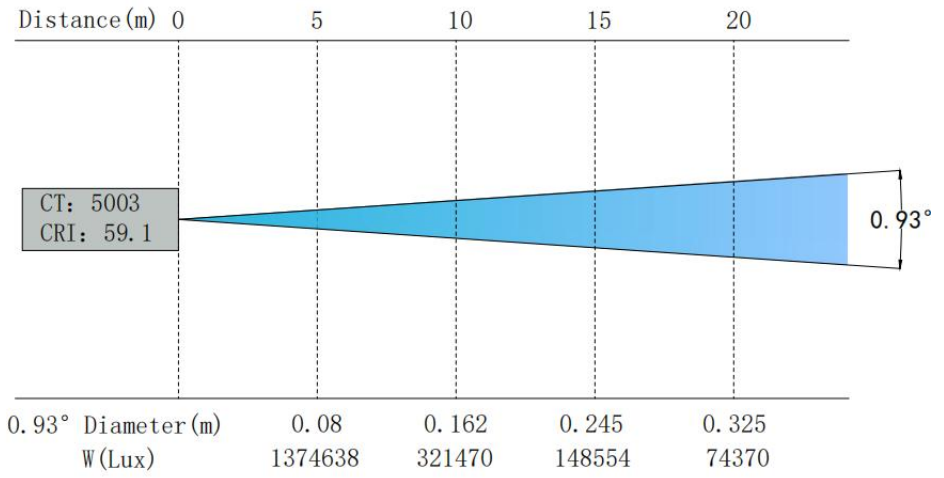
**Net weight**

17kg

**Dimensions:**

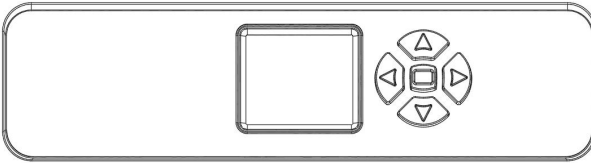


**Light output:**



# 4. Operation

## 4.1 Front panel operation:



Enter	To enter into move backward or leave the menu
UP	To go backward to move up in the menu
DOWN	To go forward to move down in the menu
Left	To go backward to previous level

Pressing any button from the home screen will show the selectable menu items from the menu map. When a menu function is selected, the display will immediately show the first available option for the selected menu function. To select a menu item, press <ENTER>.

Use the <UP> <DOWN> <Left> <Right> buttons to navigate the menu options. Press the <ENTER> button to select the menu function currently displayed, or to enable a menu option.

## 4.2 Board instruction:

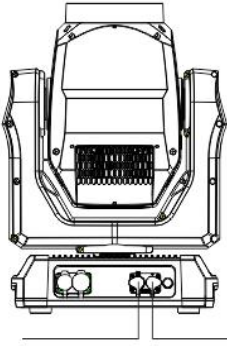
Main	DMX Addr	001-512
	Channel Mode	20
	Run Mode	DMX/Manual/Auto
	Reset Motor	Reset All/Func Motors/Pan/Tilt

DMX Manual	Pan	000-255
	Pan fine	000-255
	Tilt	000-255
	Tilt fine	000-255
	Pan Tilt Speed	000-255
	C	000-255
	M	000-255
	Y	000-255
	CTO	000-255
	Color	000-255
	Gobo Static	000-255
	Prism1	000-255
	Prism2	000-255
	PrismRot1	000-255
	Focus	000-255
	Frost/Colorful	000-255
	Shutter	000-255
	Dimmer	000-255
	Auto Exit	Never/300Sec/180Sec/120Sec/90Sec /60Sec/40Sec/30Sec/20Sec/10Sec
Keep	Yes/No	
Settings	Master/Remote	Master/Slave/Unkno
	Pan Reverse	N/Y
	Tilt Reverse	N/Y
	Pan Range	
	Tilt Range	
	X Degree	540deg/270deg/360deg
	Y Degree	540deg/270deg/360deg
	P/T Speed RLT	N/Y
	Lost Signal	Keep/Dim off
Adv.Settings	Fine Adj	
	Language	Eng/中文
	Display Settings	

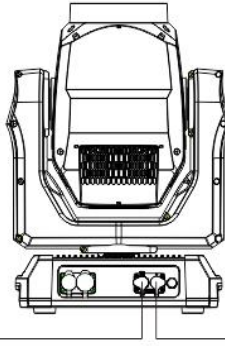
	Fine Adj Assist	
	Recover Settings	
Factory Settings	Info	Product Code
		Error
		Dmx Motor
		Security
		Light Usage Time
	Test	Fan Test
		Ignore Err
		Bus State
		Clear User Prog
		Sensor States
		MT Output
		Motor Lost Step

### 4.3 DMX address setting:

Each fixture must be assigned a unique DMX start address within the 001 – 512 range. The start address represents the first channel the fixture occupies. This product provides one DMX modes 16 channels; therefore, the next fixture’s start address must be calculated according to the number of channels used in the selected mode to avoid overlapping addresses. For example, when operating in 16-channel mode, set Fixture 1 to 001, Fixture 2 to 017, Fixture 3 to 033, Fixture 4 to 049, etc.



Dmx Input



Dmx Output

# 5. DMX Protocol

CH	Channel	DMX value	Description
1	Pan	0-255	Pan movement
2	Pan fine	0-255	Pan fine
3	Tilt	0-255	Tilt movement
4	Tilt fine	0-255	
5	Pan/Tilt speed	0	top speed
		1-255 Speed mode	Speed from fast to slow
		1-255 Time mode	The time period ranged from 0.1s to 25.5 ses
6	CMY-C	0-255	The linear changes from shallow to deep
7	CMY-M	0-255	The linear changes from shallow to deep
8	CMY-Y	0-255	The linear changes from shallow to deep
9	CTO	0-255	The linear changes from shallow to deep
10	Color Wheel	0-2	Color1 (White)
		3-5	Color1+Color2
		6-8	Color2

		9-11	Color2+Color3
		12-14	Color3
		15-17	Color3+Color4
		18-20	Color4
		21-23	Color4+Color5
		24-26	Color5
		27-29	Color5+Color6
		30-32	Color6
		33-35	Color6+Color7
		36-38	Color7
		39-41	Color7+Color8
		42-44	Color8
		45-47	Color8+Color9
		48-50	Color9
		51-53	Color9+Color10
		54-56	Color10

		57-59	Color1+Color2
		60-62	Color2
		63-65	Color2+Color3
		66-68	Color3
		69-71	Color3+Color4
		72-74	Color4
		75-77	Color4+Color5
		78-80	Color5
		81-83	Color5+Color6
		84-86	Color6
		87-89	Color6+Color7
		90-92	Color7
		93-95	Color7+Color8
		96-98	Color8
		99-101	Color8+Color9
		102-104	Color9

		105-107	Color9+Color10
		108-110	Color10
		111-114	Color1+Color2
		115-117	Color2
		118-120	Color2+Color3
		121-123	Color3
		124-126	Color3+Color4
		127-129	Color4
		130-132	Color4+Color5
		133-135	Color5
		136-138	Color5+Color6
		139-190	Rainbow effects from fast to slow
		191-192	Rainbow effects stop
		193-255	Rainbow effects from slow to fast
11	Gobo	0-1	Open
		2-3	Gobo1
		4-5	Gobo2
		6-7	Gobo3
		8-9	Gobo4
		10-11	Gobo5

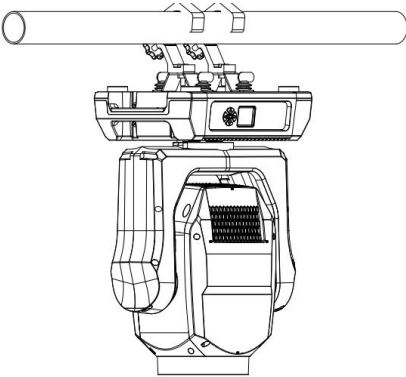
		12-13	Gobo6
		14-15	Gobo7
		16-17	Gobo8
		18-19	Gobo9
		20-21	Gobo10
		22-23	Gobo11
		24-25	Gobo12
		26-27	Gobo13
		28-29	Gobo14
		30-31	Gobo15
		32-33	Gobo16
		34-35	Gobo17
		36-37	Gobo18
		38-39	Gobo19
		40-41	Gobo20
		42-43	Gobo21
		44-45	Gobo22
		46-47	Gobo23
		48-49	Gobo24
		50-51	Gobo25
		52-53	Gobo26
		54-55	Gobo27
		56-57	Gobo28
		58-59	Gobo29
		60-64	Gobo1shaking from slow to fast
		65-69	Gobo2shaking from slow to fast
		70-74	Gobo3shaking from slow to fast
		75-79	Gobo4shaking from slow to fast
		80-84	Gobo5shaking from slow to fast
		85-89	Gobo6shaking from slow to fast
		90-94	Gobo7shaking from slow to fast
		95-99	Gobo8shaking from slow to fast

		100-104	Gobo9shaking from slow to fast
		105-109	Gobo10shaking from slow to fast
		110-114	Gobo11shaking from slow to fast
		115-119	Gobo12shaking from slow to fast
		120-124	Gobo13shaking from slow to fast
		125-129	Gobo14shaking from slow to fast
		130-134	Gobo15shaking from slow to fast
		135-139	Gobo16shaking from slow to fast
		140-144	Gobo17shaking from slow to fast
		145-149	Gobo18shaking from slow to fast
		150-154	Gobo19shaking from slow to fast
		155-159	Gobo20shaking from slow to fast
		160-164	Gobo21shaking from slow to fast
		165-169	Gobo22shaking from slow to fast
		170-174	Gobo23shaking from slow to fast
		175-179	Gobo24shaking from slow to fast
		180-184	Gobo25shaking from slow to fast
		185-189	Gobo26shaking from slow to fast
		190-194	Gobo27shaking from slow to fast
		195-199	Gobo28shaking from slow to fast
		200-204	Gobo29shaking from slow to fast
		205-228	Forwards rotation from fast to slow
		229-231	Stop
		232-255	Backwards rotation from slow to fast
12	Prism 1	0-127	No Prism
		128-255	Prism 1
13	Prism 2	0-127	No Prism
		128-255	Prism 2
14	Prism positioning and rotation	0-127	Prism positioning and rotation
		128-190	Prism rotates backwards, from fast to slow

		191-192	Prism 2 stops the rotation
		193-255	Prism 2 rotates forward, from slow to fast
15	Zoom	0-255	open
16	Effect wheel	0-127	No function
		128-191	Frost
		192-255	Colorful effect
17	Shutter	0-3	Close
		4-103	Shutter effect from slow to fast
		104-107	Open
		108-207	Shutter effect Fast open and slow out, from slow to fast
		208-212	Open
		213-251	
		252-255	Open
18	Dimmer	0-255	Dimmer from dark to brightness
19	Dimmer fine	0-255	
20	Reset	0-49	No function
		50-100	Pan/Tilt reset
		101-200	Effect reset
		201-255	All motor reset

## 6. Installation

### 6.1 Mounting & Rigging



- **Attach Mounting Hardware**

Install the 2 × ¼-turn quick-lock Omega brackets to the base, then secure suitable rated C- or O-clamps to the brackets.

- **Position and Rig the Fixture**

Mount the fixture onto a stable truss or structure using clamps rated to hold at least 10× the fixture's weight.

Always lift the fixture using the handles—not the clamps.

- **Install the Safety Cable**

Run the safety cable through the two safety-cable holes on the base and secure it to an independent safety point.

Ensure the safety cable is rated for 10× the fixture's weight.

- **Ensure Ventilation**

Verify that fans and ventilation openings are unobstructed and that sufficient space is available around the fixture.

- **Lock / Unlock Pan & Tilt**

Lock Pan and Tilt before moving the fixture.

Unlock them before powering on.

Never operate the fixture while Pan/Tilt is locked.

- **Final Stability Check**

Ensure all clamps, screws, and safety cable connections are firmly secured, and confirm the mounting structure can support the fixture’s weight.

## 6.2 Power connection

Please checking the power equipment supported.

Please put the plug of power source wire connect with the main power source .

( EU )Wire	Wire(America)	Direction of wire	General marks
Brown	Black	Live	L
Light blue	White	Neutral	N
Yellow/Green	Green	Earth	

## 6.3 DMX Control Connection

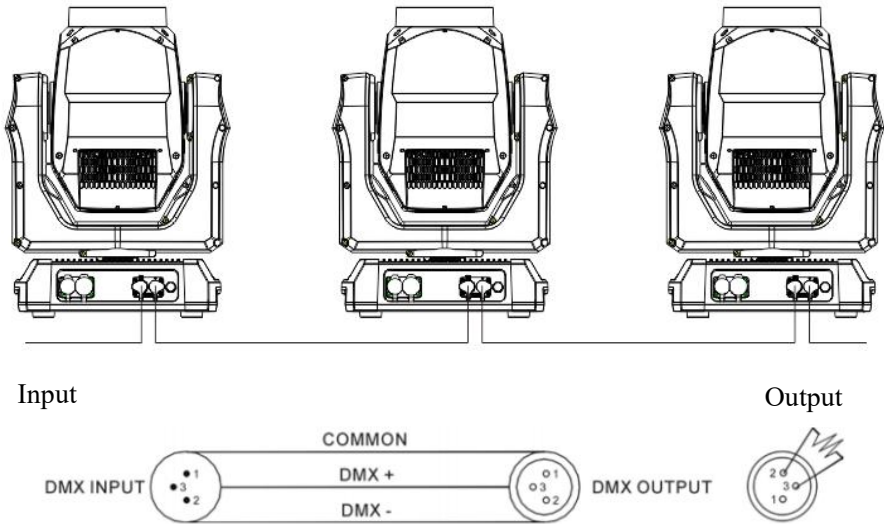
This fixture supports DMX512 (1990) control protocol and is equipped with 3-pin XLR connectors for data input and output. Use a twin-screened DMX cable with conductors of at least 0.5 mm<sup>2</sup> , ensuring correct wiring for the selected connector type.

Connect the controller’s DMX OUT to the first fixture’s DMX IN, then link fixtures DMX OUT → DMX IN in a daisy-chain. For optimal signal integrity, install a **DMX terminator** on the DMX OUT of the final fixture.

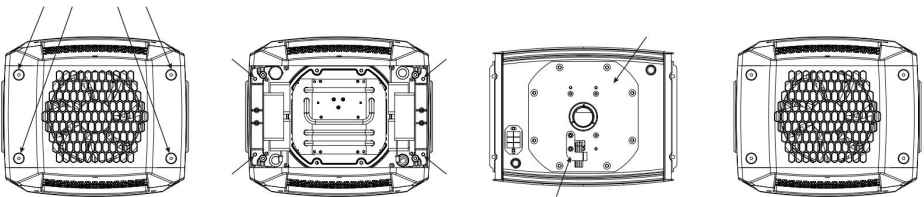
Ensure no pin makes contact with the connector housing or other pins.

Before use, test cables with an ohm meter to verify correct polarity and to ensure no pins or shield are shorted to ground, as this may result in data errors or unstable operation.

For convenience, connect fixtures in the physical order they are installed, rather than by DMX address sequence.



## 6.4 Alignment/ Installation/Replacement of a lamp



**Figure 1:** First, loosen the 4 screws on the lamp head rear plastic housing and remove it.

**Figure 2:** Next, loosen the 4 screws on the radiator module and remove the module.

**Figure 3:** Disconnect the power supply cable of the laser module, loosen the 8 screws on the two pressure plates of the laser module and remove the plates, then take out the laser module for replacement.

**Figure 4:** After replacing the laser module, first ensure the laser module is securely locked before reconnecting the bulb power supply cable. Once adjusted, install the radiator module, fan, and lamp head rear plastic housing.

## **Operational Safety Precautions**

1. **Power-off Operation:** The main power supply of the equipment must be cut off before operation to avoid the risk of electric shock.
2. **Anti-scalding Treatment:** If the equipment has just been used, wait for the lamp body and bulb to cool down before operation to prevent scalding from high temperatures.
3. **Handle with Care:** The bulb is a fragile item; avoid collision and extrusion when taking and placing it. When disassembling and assembling the radiator module, operate steadily to prevent damage to parts.
4. **Wiring Specification:** Align the connectors when plugging in the wires; avoid forced plugging and unplugging, which may cause poor contact or damage to the circuit.

## **7. Maintenance & Cleaning**

Regular maintenance is essential to ensure optimal performance and extend the service life of the fixture.

### **7.1 Cleaning**

Disconnect the unit from power before any cleaning work.

Use a soft, lint-free cloth slightly dampened with mild detergent to clean the exterior surfaces.

Gently remove dust from ventilation slots, optical lenses, and cooling components using compressed air or a soft brush.

Avoid using solvents, alcohol, or abrasive materials that may damage the housing or optical elements.

### **7.2 Lubrication**

This fixture is designed with sealed or maintenance-free moving parts. Under normal operating conditions, no additional lubrication is required.

If abnormal noise or movement resistance is observed, contact qualified service personnel before applying any lubricant.

## **7.3 Troubleshooting**

If the fixture does not power on, verify the power supply, cables, and connectors.

For control issues, check DMX addressing, cable integrity, and ensure proper 3-pin/5-pin XLR connections.

Overheating or unexpected shutdown may indicate blocked ventilation; inspect and clean air inlets and outlets.

If problems persist after basic checks, discontinue use and contact authorized service technicians.



**LEAHUA**

Guangzhou Leahua Lighting Technology Ltd

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Rm 1004, Building A  
Baiyun Lake Future Technology Center  
No.1 Xinghu Street, Shimen, Baiyun district  
Guangzhou 510440, China

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