



**LEAHUA**



**Crusier Arc LED 700**

**LH -CA500**

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

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## Accessories

Name	Quantity	Remark
User manual	1pc	
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

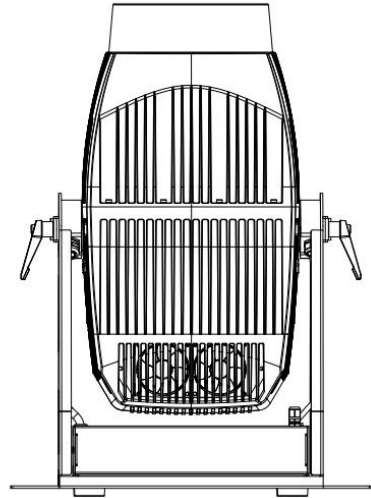
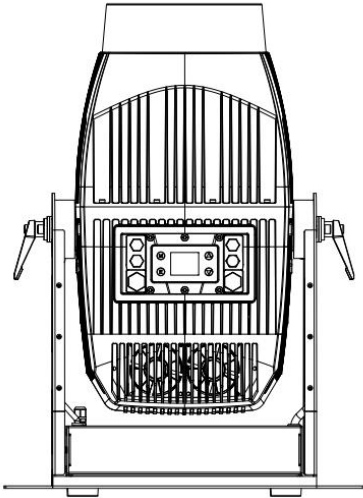
Use the safety cord through the provided safety holes. Keep at least 50 cm ventilation clearance and do not mount on flammable surfaces or aim the beam at combustible objects (minimum 20 m).

- Temperature & normal conditions

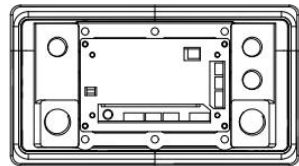
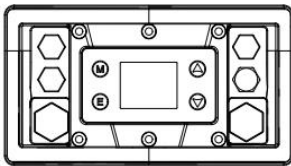
Housing temperature may reach 45 – 75° C during operation. Slight smoke or odor may occur at first ignition and is considered normal.

## 2. Appearance

Front side & back side



Front panel & rear panel



### 3. Technical Specifications

#### Power

Input Voltage: AC100-240V 50/ 60Hz

Power Consumption: 620W

#### Light source

Light Source: 500W LED module

CCT: 9000K

Life expectancy: 20000 hours (factory rated)

#### Zoom range

Zoom range: 3° -45°

#### Control



Display: LCD display

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

Channel: 12CH

#### Static gobo wheel

Static gobo wheel : 7 gobos+ open

Gobo1	Gobo2	Gobo3	Gobo4	Gobo5	Gobo6	Gobo7
						

#### Rotating gobo wheel

Rotating gobo wheel : 7 gobos+ open

Outside diameter:

Image diameter:

Gobo1	Gobo2	Gobo3	Gobo4	Gobo5	Gobo6	Gobo7
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### **Dimming/Strobe**

Dimming: 0-100% linear dimming system

Strobe: 1-20 F.P.S, speed adjustable

### **Housing**

Housing: Magnesium alloy body

Protection rate: IP65

### **Working temperature**

Working temperature: -10°C-45°C

### **Other Function**

Focus: Electronic focus function

Cooling System: Low noise and efficient fan cooling system

### **Connection**

Power connection: Powercon in/out

DMX connection: DMX 3-pin + 5-pin in/out

### **Product dimensions**

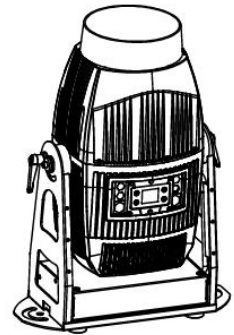
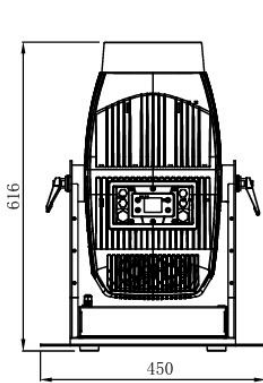
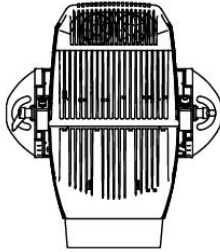
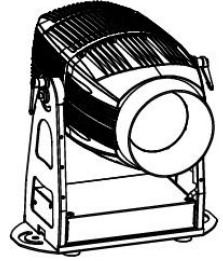
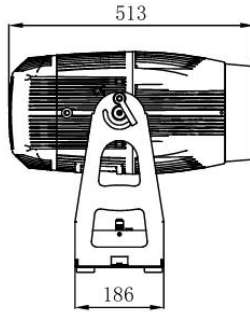
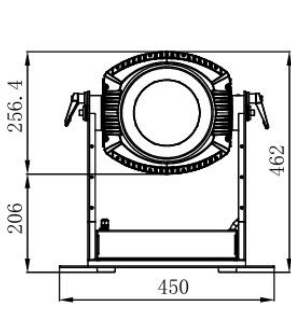
450×256×616mm

### **Net weight**

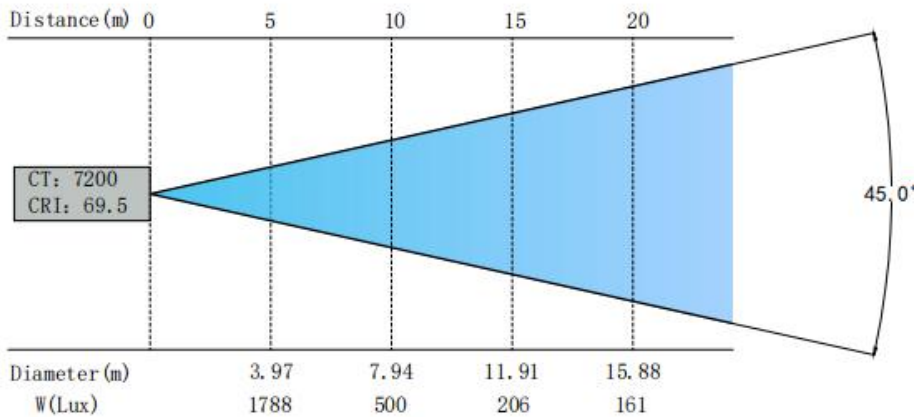
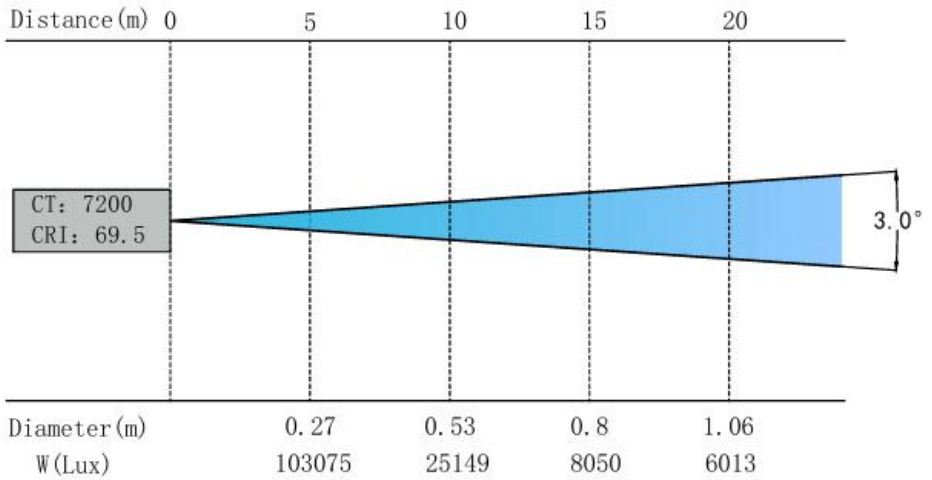
23.4kg

### **Dimensions:**

Cruiser Arc LED 700

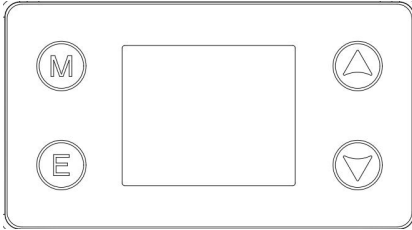


**Light output:**



# 4. Operation

## 4.1 Front panel operation:



MENU	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
ENTER	To perform the desired functions

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> and <DOWN> buttons to navigate the menu options. Press the <ENTER> button to select the menu function currently displayed, or to enable a menu option. To return to the previous option or menu without changing the value, press the <MENU> button.

## 4.2 Board instruction:

Level 1	Level 2	Level 3	Level 4
DMX Addr	000 - 512		
Channel Mode	11		

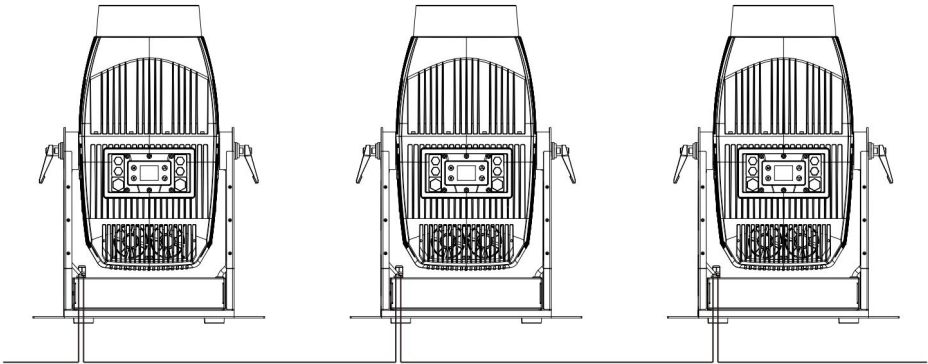
Run Mode	Auto/DMX/User		
Reset Motor	Reset All		
DMX Manual	Dimmer	000-255	
	Shutter	000-255	
	Gobo Wheel	000-255	
	Gobo Wheel Rot	000-255	
	Zoom	000-255	
	Focus	000-255	
	Auto Exit	Never/300Sec/180Sec/120Sec/90Sec/60Sec/40Sec/30Sec/20Sec/10Sec	
	Keep	No/Yes	
Settings	Master/Remote	Slave/Unkno./Master	
	DimCurve	Linear/SquareRoot/S-curve/Square	
	DimCurve	Linear/Log/S-curve/SquareRoot/Square	
	User Prog	Time(Global)	000-255
		Step01-Step20	
	Lost Signal	Keep/Dim Off	
	Auto Master	None/User/Auto	
Adv. Settings	Fine Adj.		

	Language	Eng/中文	
	Display Settings	Sleep	Never/300Sec/180Sec/120Sec/90Sec/60Sec/40Sec/30Sec/20Sec/10Sec
		Invert	N/Y
		Brightness	00-10
		Display Lock	Off/On
		Display	On/Off
	Fine Adj Assist	Recover	
		Show Backup	Dim-001
			GoboRotWheel-001
			GoboRot-001
			Zoom-001
	Focus-001		
Confirm action	No/Yes		
Factory Settings			
Info	Product Code		
	Error.		

	Dmx Monitor	DmxValue(Raw)	CHN01-CHN11 000	
		FPS	000	
		Total Chns	512	
	Security			
	LED UsageTime	Current		
		Total		
		Clear		
	Device UsageTime	Current		
		Total		
		Power-On Times		
		Clear		
	Test	LampPowerTest	000-101	
		Fan Test	Fan01	000-101% 0000rpm
Fan02			000-101% 0000rpm	
Fan03			000-101% 0000rpm	
Fan04			000-101% 0000rpm	
Bus State				
Clear User Prog		Confirm action	No/Yes	
SensorStates		Init Sensor		
MT Output		-1-64		
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 five DMX modes 12 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 12-channel mode, set Fixture 1 to 001, Fixture 2 to 13, Fixture 3 to 25, Fixture 4 to 37, etc.



DMX Input

DMX Output

## 5. DMX Protocol

Channel	Function	DMX Value	Functional Description
1	Strobe	0~3	OFF
		4-103	Slow to fast
		104-107	Open
		108-157	Fast on and slow out, from slow to fast
		158-207	Fast out and slow on, from fast to slow
		208-212	Open
		213-251	Random strobe from slow to fast
		252-255	Open
2	Dimming	0~255	Linear dimming from off to bright
3	Dimming fine	000-255	
4	Gobo wheel	0~5	Open
		6~15	Gobo 1
		16~25	Gobo 2
		26~35	Gobo 3
		36~45	Gobo 4

		46~55	Gobo 5
		56~65	Gobo 6
		66~75	Gobo 7
		76~92	Gobo 1 shaking from slow to fast
		93~109	Gobo 2 shaking from slow to fast
		110~126	Gobo 3 shaking from slow to fast
		127~143	Gobo 4 shaking from slow to fast
		144~160	Gobo 5 shaking from slow to fast
		161~177	Gobo 6 shaking from slow to fast
		178~199	Gobo 7 shaking from slow to fast
		200~201	Stop
		202~227	Forward flow from fast to slow
		228~255	Reverse flow from slow to fast
5	Gobo Wheel Rot	0-5	Open
		6-15	Gobo1
		16-25	Gobo2

		26-35	Gobo3
		36-45	Gobo4
		46-55	Gobo5
		56-65	Gobo6
		66-75	Gobo7
		76~199	Forward rotation-speed from fast to slow
		200~201	Stop
		202~227	Forward flow from fast to slow
		228~255	Reverse flow from slow to fast
6	Rot Gobo Translation and Rotation	0	No function
		1~127	Rotating gobo Shift
		128~191	Forward gobo rotation: From fast to slow
		192~255	Reverse gobo rotation: From slow to fast
7	Rot Gobo Fine-Tuning Rotation	0~255	Rotation and Spin Fine-Tuning

8	Zoom	0~255	Beam angle from narrow to wide
9	Zoom fine	0~255	Beam angle from small to large
10	Focus	0~255	From far to near
11	Focus fine	0~255	Fine-tuning: From far to near
12	Reset		To achieve the following effects, push the DMX value to the corresponding position and keep it still for at least 4 seconds.
		000~20 9	No function
		210~21 9	Effect reset
		220~22 9	Reset all
		230~25 5	No function

# 6. Installation

## 6.1 Mounting & Rigging

- Prepare the fixture

Ensure the fixture is in good condition and the ventilation openings are unobstructed.

- Mount using the built-in folding clamp

Hang the fixture directly onto the truss or mounting structure using the integrated folding clamp.

Always lift or carry the fixture using the handles—not the clamp.

- Install the safety cable

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

The safety cable must be rated to withstand 10× the fixture's weight.

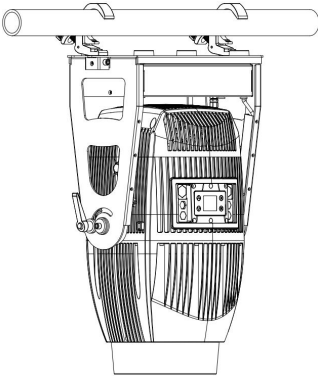
- Lock / Unlock Pan & Tilt

Lock Pan and Tilt before moving the fixture; unlock them before powering on.

Do not operate the fixture while Pan/Tilt is locked.

- Final Safety Check

Confirm the hook is fully engaged, the safety cable is properly secured, and the mounting structure can safely 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 both 5-pin and 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.

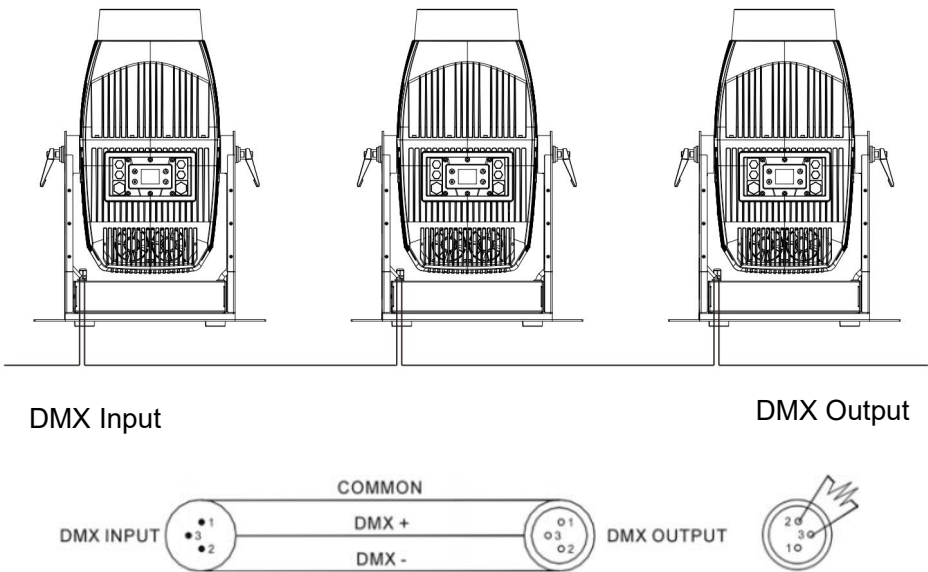
Connect the controller’s DMX OUT to the first fixture’s DMX IN, then link fixtures DMX OUT → DMX IN in a daisy-chain. For optimal signal integrity, install a **DMX terminator** on the DMX OUT of the final fixture.

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

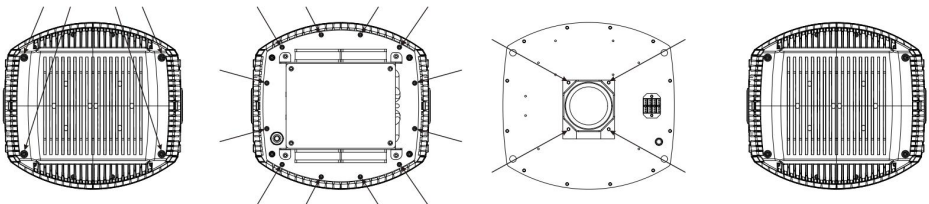
Before use, test cables with an ohm meter to verify correct polarity and to ensure no pins or shield are shorted to ground, as this may result in data errors or unstable operation.

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 front fan cover and remove the cover.

**Figure 2:** Next, loosen the 12 screws on the radiator module, disconnect the fan cable, and remove the module.

**Figure 3:** Disconnect the power cable of the light source module, loosen the 4 screws on the light source module, then remove the module for replacement.

**Figure 4:** After installing the new light source module, first ensure it is securely locked in place before reconnecting its power cable and the fan cable. Once adjusted, reinstall the radiator module and fan cover.

### **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.



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