



**LEAHUA**



**Stellar 300**

**LH -ST300**

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

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## Accessories

Name	Quantity	Remark
User manual	1pc	
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.

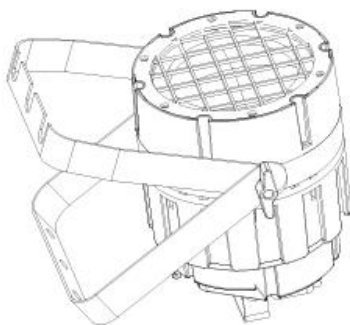
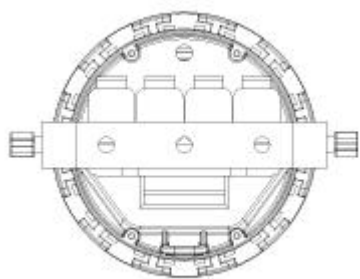
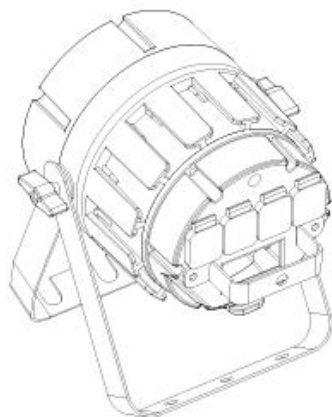
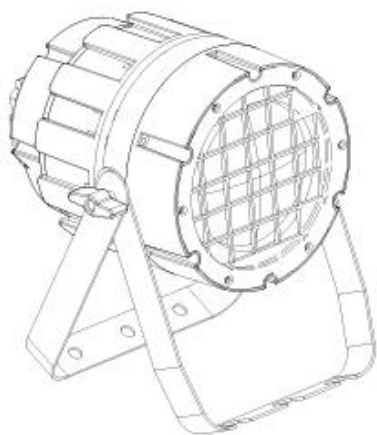
- Installation

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



## 3. Technical Specifications

### Power

Input Voltage:AC100-240V 50/ 60Hz

Power Consumption:300W

### Light source

Light Source:300W RGBWA LED

CRI>90

Life Expectancy: 20000 hours ( factory rated )

### Beam Angle

Beam Angle: 45°

Field Angle: 60°

### Control

Display:OLED display

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

Channel:1/ 2/ 3/ 4/ 5/ 7/ 8/ 12/ 19/ 28/ RGB10/ RGB15/ CMY10/ CMY15CH

### Dimming/Strobe

Dimming: 0-100% linear dimming system

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

### Housing

Housing: Aluminum alloy

Protection rate: IP65

### Working temperature

Working temperature: -10℃-45℃

### Connection

Power connection: Powercon in/out

DMX connection: DMX 3-pin in/ out

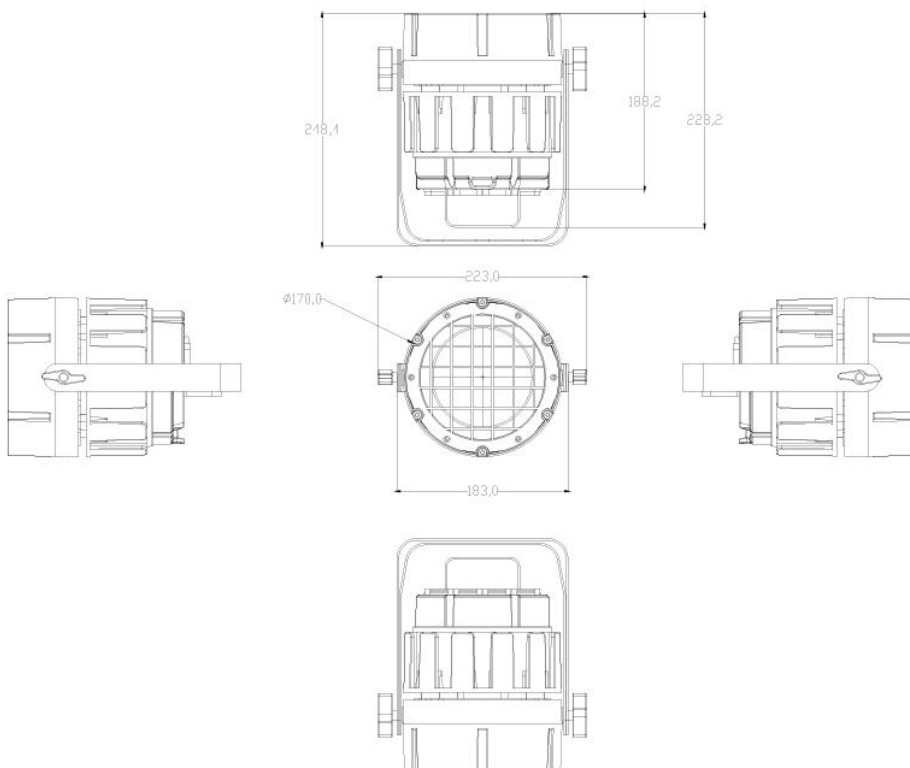
**Product dimensions**

223×170×248.4mm

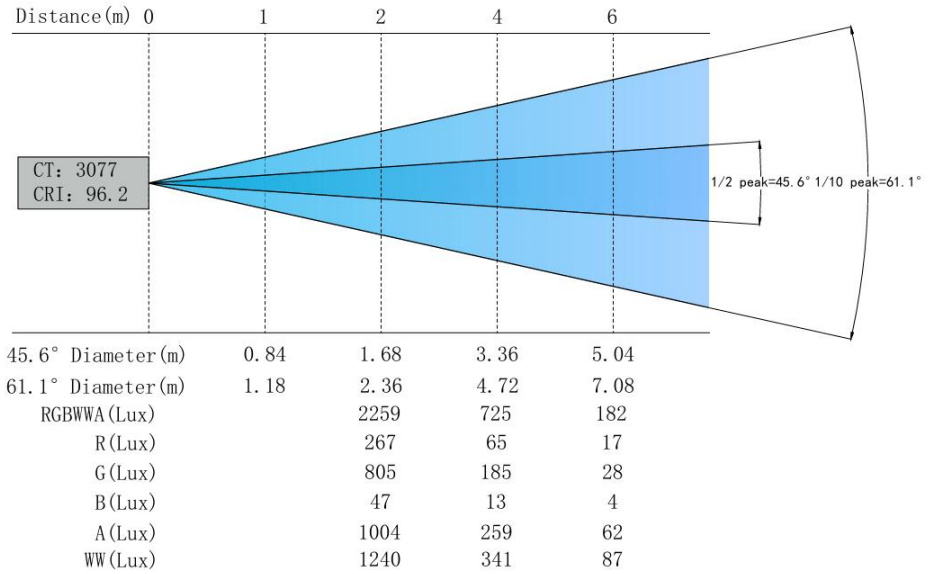
**Net weight**

2.8kg

**Dimensions:**



**Light output:**



## 4. Operation

### 4.1 Board instruction:

main window	First level menu	Secondary Menu	range	illustrate
	DMX Mode	Channel	1CH/2CH/3CH/4CH/5CH/7CH/12CH/19CH/RGB10CH/RGB15CH/CMY10CH/CMY15CH/8CH/ <b>28CH</b>	
		Address	<b>001</b> -512	
	Auto	Dimmer	000- <b>255</b>	
		effect	<b>00</b> -4	
		Speed	<b>000</b> -100	
		S effect	<b>00</b> -20	
		S Speed	000-100 (default 90)	
		S Color	00-07 (default 1)	
		S BG Color	<b>000</b> -255	
	Manual	Dimmer	000- <b>255</b>	
		Red	<b>000</b> -255	
		Green	<b>000</b> -255	
		Blue	<b>000</b> -255	
		Amber	<b>000</b> -255	
		White	<b>000</b> -255	
		S Red	<b>000</b> -255	
		S Green	<b>000</b> -255	
		S Blue	<b>000</b> -255	
	CCT	Dimmer	000- <b>255</b>	
		CCT	<b>1800K</b> -8500K	
	Color Card	Dimmer	000- <b>255</b>	<b>White balance: Correct the RGB combination to white (around 6500K), and do not</b>
		Color	<b>01</b> -60 (See the table below)	
		WB R	000-255	

		WB G	000-255	<b>change the values arbitrarily afterwards, otherwise it will affect the output of the color card, RGB, and CMY channels</b>
		WB B	000-255	
	Setting	Signal status	<b>Clear/</b> Hold	
		MS switch	<b>Shut down/</b> Turn on	Shut down: Do not send host data to slave Turn on: Send host data to slave
		Fan mode	fan high <b>/fan auto</b>	Automatic fan: The temperature control is normal, the fan is rotating at 45 °C, and the fan is stationary below 40 °C, Temperature control short circuit or open circuit: When the light bulb is on, the fan rotates, and when the light bulb is off, the fan remains stationary for about 20 seconds
		Lamp Order	<b>Positive/</b> reverse	Only applicable to auxiliary lighting
		Dim Curve	<b>Linear/</b> Square/Anti-Square/S-Line	

		Dim Mode	Standard/ <b>Stage</b> /TV /Architectural/Theatre /Stage2	Standard: Fast dimming  Stage/TV/Architecture/T heater: Smooth Dimming  Stage 2: Fast light up, smooth light off
		Card Fade	<b>000</b> -255	Only applicable to color card fading speed
		Bulb Effect	<b>Shut down</b> /Turn on	
		Dim Freq	2K/4K/7K/9K/11K/ <b>14K</b> /16K/18K/21K/23K	
		Output Mode	<b>Full power</b> /Low power	
		Output balance	Bright/ <b>uniform</b>	<b>Bright:</b> Maintain original color output <b>uniform:</b> Reduce the intensity of certain primary colors (through white balance in the color chart) to achieve tone balance
		Screen Saver	Shut down/ <b>Turn on</b>	Turn on: Enter screensaver after 30 seconds
		Lock	Shut down/ <b>Turn on</b>	
		Language	<b>中文</b> /English	
		Rotation	<b>Shut down</b> /Turn on	
		Restore	<b>Shut down</b> /Turn on	
	Lamp Info	Use Time	00	
		Current Temp	xx℃	
		Max Temp	xx℃	
		Fan Status	Stop/Run	
		VER		

ROOT	R Current	20-255 (default <b>220</b> )	(When the first level menu cursor is on the DMX, press and hold the menu key for 4-5 seconds to enter ROOT mode)
	G Current	20-255 (default <b>220</b> )	
	B Current	20-255 (default <b>220</b> )	
	A Current	20-255 (default <b>220</b> )	
	W Current	20-255 (default <b>220</b> )	
	Power	50-255 (default <b>195</b> )	
	S R Current	20-255 (default <b>235</b> )	
	S G Current	20-255 (default <b>235</b> )	
	S B Current	20-255 (default <b>235</b> )	
	S Power	50-255 (default <b>255</b> )	
	Temp Limit	40-80 (default <b>55</b> )	
	Fan Type	<b>2 Line</b> /3 Line	
	Push	<b>Shut down</b> /Turn on (Push device related settings to the slave)	

## 4.2 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 fifteen DMX modes (1/ 2/ 3/ 4/ 5/ 7/ 8/ 12/ 19/ 28/ RGB10/ RGB15/ CMY10/ CMY15CH ) 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 4 channel mode, set Fixture 1 to 001, Fixture 2 to 005 Fixture 3 to 009, Fixture 4 to 013, etc.

DMX Mode	Fixture1	Fixture2	Fixture3	Fixture4	...
1CH	001	002	003	004	...
2CH	001	003	005	007	...
3CH	001	004	007	010	...

4CH	001	005	009	013	...
5CH	001	006	011	016	...
6CH	001	007	013	019	...
7CH	001	008	015	022	...
8CH	001	009	017	025	...
12CH	001	013	025	037	...
19CH	001	020	039	058	...
28CH	001	029	057	086	...
RGB10CH	001	011	021	031	...
RGB15CH	001	016	031	046	...
CMY10CH	001	011	021	031	...
CMY15CH	001	016	031	046	...

## 5. DMX Protocol

1 C H	2 C H	3 C H	4 C H	5 C H	7 C H	12 C H	19 C H	R G B 10 C H	R G B 15 C H	C M Y 10 C H	C M Y 15 C H	8 C H	28 C H	function
1	1	1	1		1	1	1	1	1	1	1		1	Total dimming
					2	2	2	2	2	2	2		2	Main light adjustment
														<b>Main light flicker</b>
														0-31: Lamp beads turn off
														32-63: Always on
														64-95: Normal strobe
		2			3	3	3	3	3	3	3		3	96-127: Always on
														128-159: Pulse strobe
														160-191: Always on
														192-223: Random strobe
														224-255: Always on
			2	1		4	4	4	4			1	4	Red dimming
							5		5				5	Red fine-tuning
			3	2		5	6	5	6			2	6	Green dimming

						7		7				7	Green fine-tuning	
			4	3		6	8	6	8			3	8	Blue dimming
							9		9				9	Blue fine-tuning
				4		7	10					4	10	Amber dimming
							11						11	Amber fine-tuning
				5		8	12					5	12	White dimming
							13						13	White fine-tuning
										4	4			Cyan dimming
											5			Cyan fine-tuning
										5	6			Magenta dimming
											7			Magenta fine-tuning
										6	8			Yellow dimming
											9			Yellow fine-tuning
	2	3			4	9		7		7				<b>CCT preset</b>
														0-17: empty
														18-85:1800K-850K
														(See table below)
														86-255:8500K
														<b>CCT</b>
							14		10		10		14	0-17:Empty
														18-255:1800K-8500K
							15		11		11		15	Color temperature fine-tuning
					5	10	16	8	12	8	12		16	<b>Red green ratio</b>















## **6. Maintenance & Cleaning**

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

### **6.1 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.

### **6.2 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.

### **6.3 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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