



LEAHUA



Polar light 18

LH-PL18

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	
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.

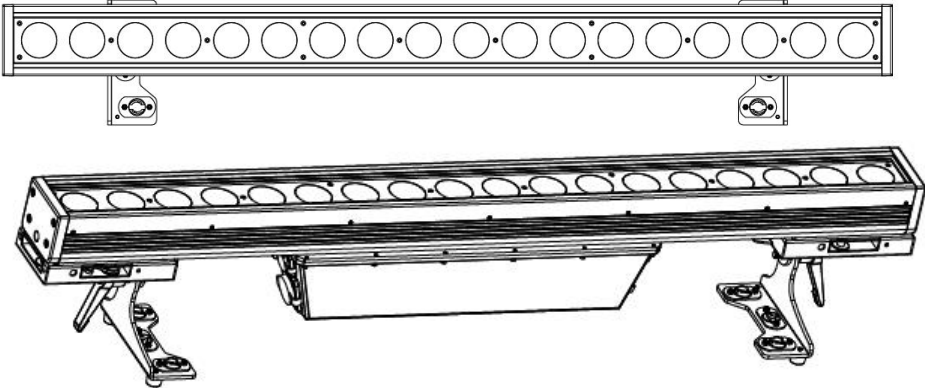
- Installation

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: AC 100-240V/ 50-60Hz

Power Consumption: 160W

Light source

Light Source: 18×10W RGBWY LED

Color Temperature Output of Fixture: 5500K

Life expectancy: 50000Hrs(factory rated)

Beam Angle

Beam Angle: 13.4°

Field Angle: 31.3°

Control

Display: OLED display

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

Channel: 1/ 5/ 8/ 90/ 93CH

Dimming/Strobe

Dimming: 0-100% linear dimming system

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

Other Function

Each LED individual control

Housing

Housing: Aluminum alloy

Protection rate: IP65

Working temperature

Working temperature: -10°C - 45°C

Connection

Power connection: Powercon in/out

DMX connection: DMX 3-pin in/ out

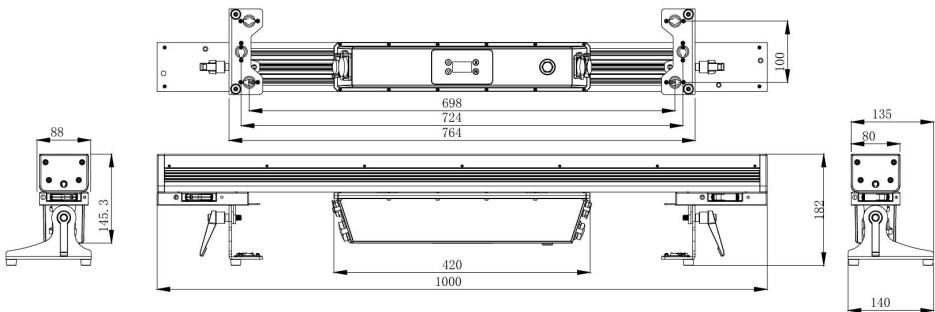
Product dimensions

1000×140×182mm

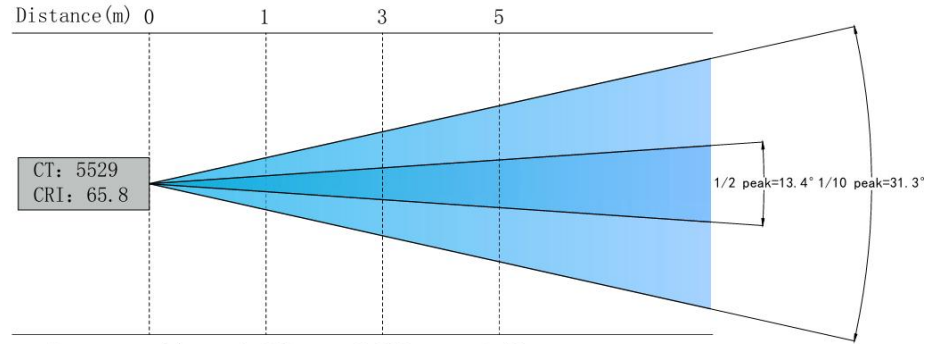
Net weight

9.2kg

Dimensions:



Light output:



13.4° Diameter (m)	0.234	0.702	1.17
31.3° Diameter (m)	0.56	1.68	2.8
RGBWY (Lux)	9302	2018.4	680.6
R (Lux)	1878.5	580.7	179.9
G (Lux)	3372.4	982.7	317.2
B (Lux)	510.1	143.9	47.6
W (Lux)	4284.9	1242	404.2
Y (Lux)	864.8	251.9	79.1

4. Operation

4.1 Key instruction:

Button	Meaning
M	Menu/back
E	Enter/confirm
▲	up
▼	down

Operation Description: Press the function key “M” will cycle out Ten different functional effects, the first two digits of the digital tube represents the current function (refer to the function table). The last two digits represent the address of the function, the address code, or the speed, the parameters. Press “▲” or “▼” to change its parameter value. Press the “E” key to confirm

LED display window function table, (all the features selected by pressing the “E” key to confirm)

4.2 Board instruction:

Menu	Item1	Item2	Item3
DMX Address	DMX Address	001--512	
MODE	DMX mode	Yes	DMX 1CH / 5CH / 8CH / 90CH / 93CH
	Slave		
	Auto	Auto	01-30
			speed
Static	Dimmer	000-255	

		strobe	00-20
		Red	000-255
		Green	000-255
		Blue	000-255
		White	000-255
		Amber	000-255
	Colour	colour	01-52
		strobe	00-20
Setting	Set display	Reverse	on/off
		Lock time	15s/30s/60s /off
		Contrast	001-255
	Dimmer Curve	Linear/Exponential/ Logarithmic/S-curve	
	Dimmer response	LED/Halogen	
	Factory reset	YES/NO	
Systeminfo	Firmware	Version xxx	
	Temperature	Temp Unit	LED pad xx°C
	Time information	Current time & Total time	

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 (1/ 5/ 8/ 90/ 93 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 49-channel mode, set Fixture 1 to 001, Fixture 2 to 050, Fixture 3 to 099, Fixture 4 to 148, etc.

DMX Mode	Fixture1	Fixture2	Fixture3	Fixture4	...
1CH	001	002	003	004	...
5CH	001	006	011	016	...
8CH	001	009	017	025	...
90CH	001	091	181	271	...
93CH	001	094	187	280	...

5. DMX Protocol

1CH

1CH	Value	Function
1	0-4	Null
	5-9	Color 1
	10-14	Color 2

	255-255	Color 51

5CH;8CH

5CH	8CH	Value	Function
	1	0-255	Dimmer
	2	0-255	Auto
	3	0-255	Auto speed/Led strobe
1	4	0-255	Red 0%-100%
2	5	0-255	Green 0%-100%
3	6	0-255	Blue 0%-100%
4	7	0-255	White 0%-100%
5	8	0-255	Amber 0%-100%

90CH;93CH

90CH	93CH	DMX Value	Function
	1	0-255	Master Dimmer
	2	0-255	Auto
	3	0-255	Auto speed/Led strobe
1	4	0-255	Red1 0%-100%
2	5	0-255	Green1 0%-100%
3	6	0-255	Blue1 0%-100%
4	7	0-255	White1 0%-100%

5	8	0-255	Amber1 0-100%
...
86	89	0-255	Red18 0%-100%
87	90	0-255	Green18 0%-100%
88	91	0-255	Blue18 0%-100%
89	92	0-255	White18 0%-100%
90	93	0-255	Amber18 0-100%

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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