



LEAHUA



Maris Pro

LH-M1980

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

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[http:// www.leahualighting.com](http://www.leahualighting.com)

Index

1. Safety Instructions	2
2. Appearance	3
3. Technical Specifications	4
4. Operation	7
4.1 Front panel operation	7
4.2 Board instruction:	7
4.3 DMX address setting	8
5. DMX Protocol	10
6. Installation	18
6.1 Mounting & Rigging	18
6.2 Power connection	19
6.3 DMX Control Connection	19
7. Maintenance & Cleaning	21
7.1 Cleaning	21
7.2 Lubrication	21
7.3 Troubleshooting	21

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.

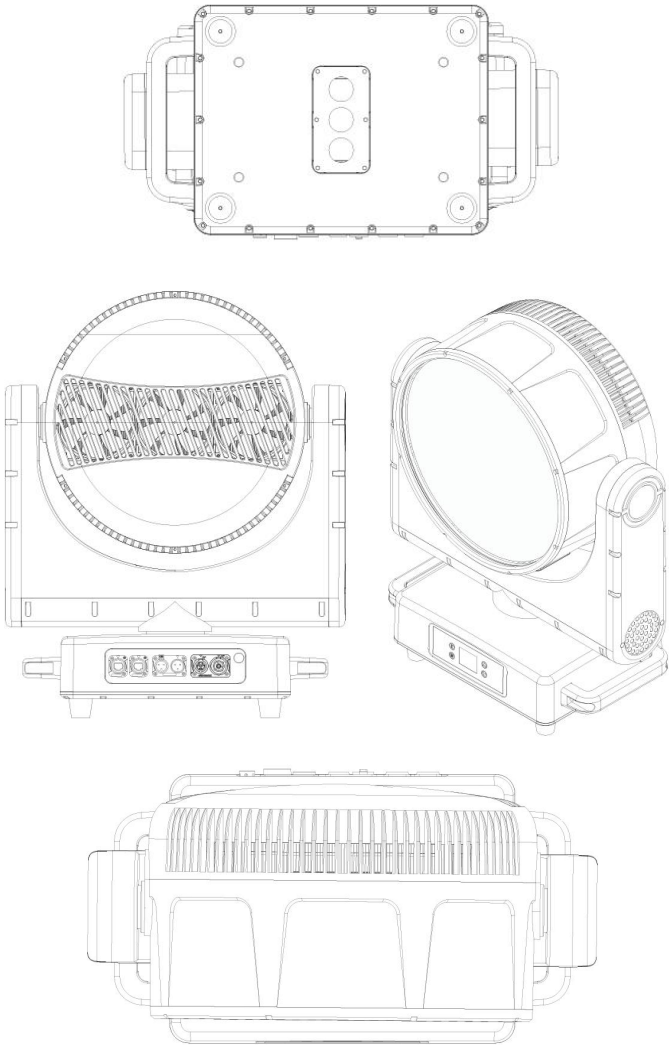
- Installation

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



3. Technical Specifications

Power

Input Voltage: AC90-260V 50/ 60Hz

Power Consumption:1600W

Light source

Light Source: 19 × 80W RGBW LED,303 × 0.2W RGB LED

Color Temperature Output of Fixture:10000K

Life expectancy: 20000Hrs(factory rated)

Zoom range

Zoom range: 7.5°- 39°

Control

Display: LCD display

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

Channel: Basic (27CH), Standard (41CH), Pixel Engine: RGB 27+57 (84)CH, RGBW 27+76 (103)CH, RGB 41+57 (98)CH, RGBW 41+76 (117)CH

Effect

Beam,wash,FX (Kaleidoscope effects),bi-directional rotating front lens

Dimming/Strobe

Dimming: 0-100% linear dimming system

Strobe: 1-25 F.P.S, speed adjustable

Head movement

Pan/ Tilt: 540°/ 205° with auto-correction

Housing

Housing: Die-cast aluminum

Maris Pro

Protection rate: IP65

Working temperature

Working temperature: 0°C-40°C

Connection

Power connection: Powercon in/out

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

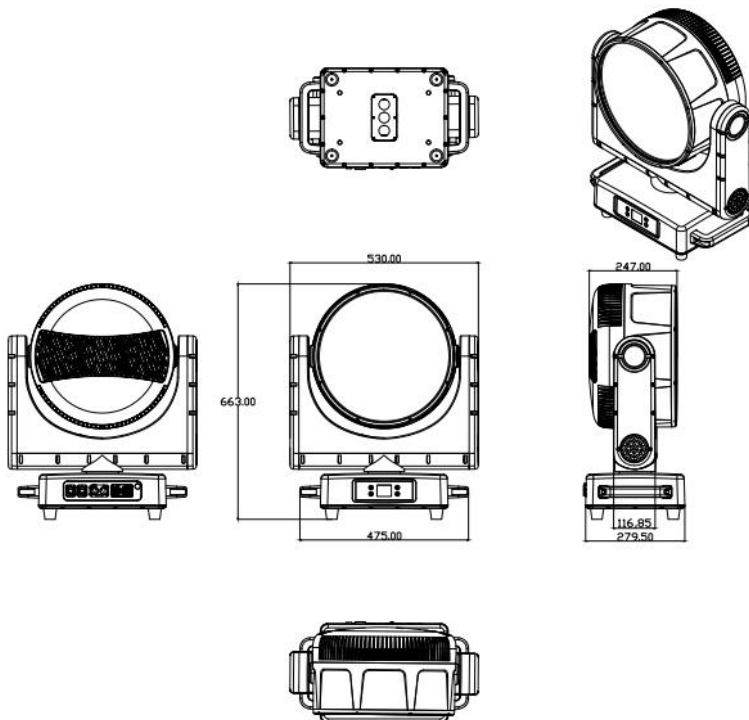
Product dimensions

530×279.5×663 mm

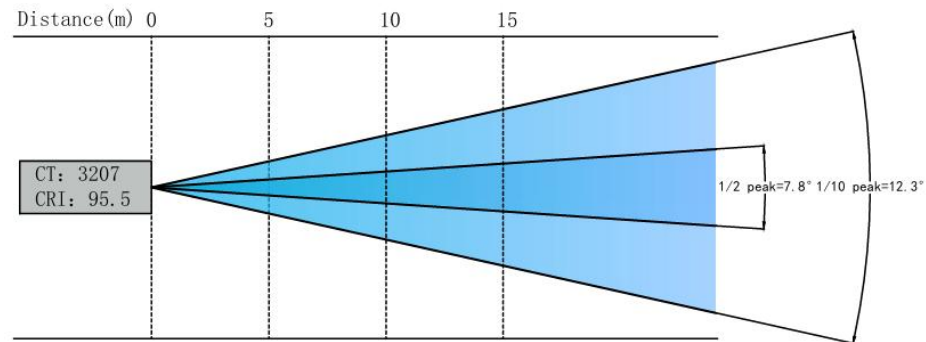
Net weight

31KG

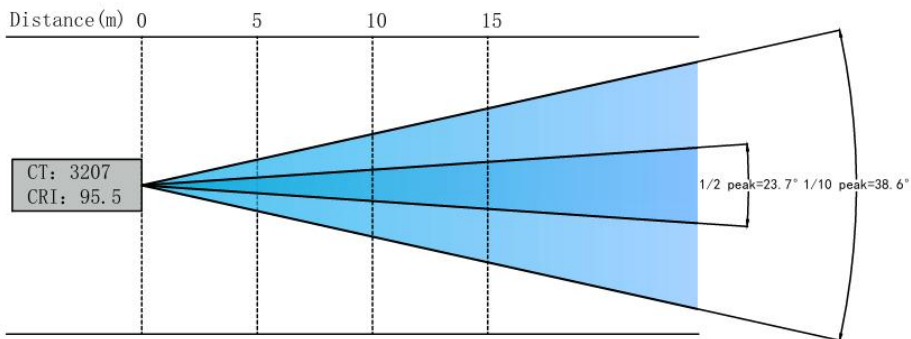
Dimensions:



Light output:



	0	5	10	15
7.8° Diameter (m)		0.68	1.36	2.04
12.3° Diameter (m)		1.08	2.16	3.24
RGBW (Lux)		31243	8017	3793
R (Lux)		5738	1398	623
G (Lux)		14692	3861	1797
B (Lux)		2751	763	391
W (Lux)		11821	3190	1489



	0	5	10	15
23.7° Diameter (m)		2.1	4.2	6.3
38.6° Diameter (m)		3.5	7	10.5
RGBW (Lux)		3900	1049	480
R (Lux)		685	188	70
G (Lux)		1789	477	220
B (Lux)		323	87	40
W (Lux)		1629	429	180

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:

Main menu	Secondary menu	Third menu/parameters
Address	001-512	DMX address setting
Set	Run mode	DMX/Sound/Auto1/Auto2
	Channel	27CH/41CH/84CH/103CH/98CH/117CH
	Invert Pan	On/Off
	Invert Tilt	On/Off
	Hall Crct	On/Off

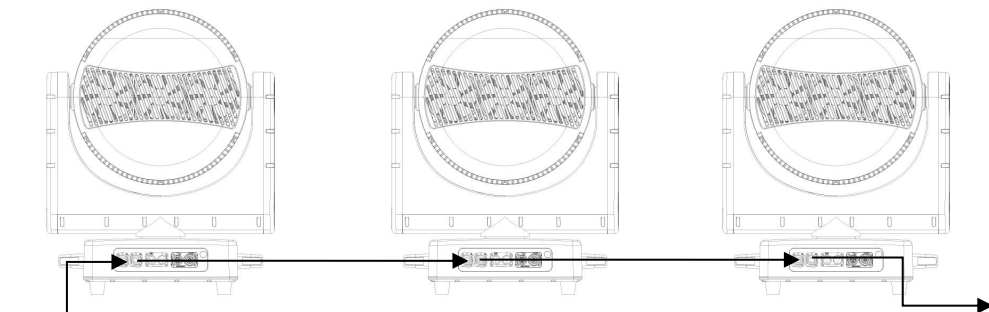
	Encoder Crct	On/Off
	Signal keep	On/Off
	Screen saver	On/Off
	Invert screen	Auto/On/Off
	Update slave	On/Off
	Language	中文/English
	Screen lock	On/Off
	Speed mode	Normal/Fast
	Load Default	OK/Cancel
Manual	Current channel mode channel	0-255
Calibration	Password	Lamp Calibration
Reset	Reset Effect	
	Reset Scan	
	Reset All	
Note	Reset Info	Display reset error information
	DMX Data	Receive the channel value of the console
	Sensor Info	Hall
		X Enco
		Y Enco
	Hardware	10.10.01.0
Software	04.13.14.0	

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 seven DMX modes (27/ 41/ 84/ 84/ 103/ 117CH 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 18-channel mode, set Fixture 1 to 001, Fixture 2 to 019, Fixture 3 to 037, Fixture 4 to 055, etc.

DMX Mode	Fixture1	Fixture2	Fixture3	Fixture4	...
27CH	001	19	37	55	...
41CH	001	25	49	73	...
RGB 27+57 (84)CH	001	85	169	253	...
RGB 41+57 (98)CH	001	99	297	395	...
RGBW 27+76 (103)CH	001	104	207	310	...
RGBW 41+76 (117)CH	001	118	235	352	...



5. DMX Protocol

27 CH	41 CH	84 CH	98 CH	103 CH	117 CH	Function	DMX value	Description
1	1	1	1	1	1	Red	0-255	R dimmer : from dark to bright
2	2	2	2	2	2	Red Fine	0-255	R dimmer fine : from dark to bright
3	3	3	3	3	3	Green	0-255	G dimmer : from dark to bright
4	4	4	4	4	4	Green Fine	0-255	G dimmer fine : from dark to bright
5	5	5	5	5	5	Blue	0-255	B dimmer : from dark to bright
6	6	6	6	6	6	Blue Fine	0-255	B dimmer fine : from dark to bright
7	7	7	7	7	7	White	0-255	W dimmer: from dark to bright
8	8	8	8	8	8	White Fine	0-255	W dimmer fine: from dark to bright
9	9	9	9	9	9	Color Temperat ure	0-255	Linearly adjustable color temperature
10	10	10	10	10	10	Color Wash	0-255	Built in color gradient
11	11	11	11	11	11	Strobe	0-3	Light Off
							4-103	Strobe Linear from slow to fast (1HZ-25HZ)
							104-107	Light ON
							108-207	Pulsation Linear from slow to fast (1HZ-25HZ)
							208-212	Light ON
							213-225	Random Strobe at low frequency
							226-2	Random Strobe at medium

							38	frequency
							239-2 51	Random Strobe at high frequency
							252-2 55	Light ON
12	12	12	12	12	12	Dimmer	0-255	Dimmer from dark to bright
13	13	13	13	13	13	Dimmer fine	0-255	Dimmer fine
14	14	14	14	14	14	Pan	0-255	0-540°
15	15	15	15	15	15	Pan fine	0-255	16bit fine
16	16	16	16	16	16	Tilt	0-255	0-205°
17	17	17	17	17	17	Tilt fine	0-255	16bit fine
18	18	18	18	18	18	Function	0-255	Reserve
19	19	19	19	19	19	Reset	0-25	Not Function
							26-76	Fixture reset is active 5 seconds
							77-127	Pan/Tilt reset is active 5 seconds
							128-255	Full reset is active 5 seconds
20	20	20	20	20	20	Zoom	0-255	Linear adjustment from narrow to wide angle
*	21	*	21	*	21	Animation Effects (Coordinated Effect Colors)	0-7	None
							8	Static Effect 1
							9	Static Effect 2
							10	Static Effect 3
							11	None
							12	Static Effect 4
							13	Static Effect 5
							14	None
							15	Dynamic Effect 1
16	Dynamic Effect 2							

						17	Dynamic Effect 3
						18	Dynamic Effect 4
						19	Monochrome Random
						20	Full Color Random
						21	Rainbow Effect 1
						22	Rainbow Effect 2
						23	Dynamic Effect 5
						24	Dynamic Effect 6
						25	Dynamic Effect 7
						26	Dynamic Effect 8
						27	Dynamic Effect 9
						28	Dynamic Effect 10
						29	Dynamic Effect 11
						30	Dynamic Effect 12
						31	Dynamic Effect 13
						32	Dynamic Effect 14
						33	None
						34	None
						35	Dynamic Effect 15
						36	Dynamic Effect 16
						37	Dynamic Effect 17
						38	Dynamic Effect 18
						39	Dynamic Effect 19
						40	Dynamic Effect 20
						41	None
						42	Dynamic Effect 21
						43	None
						44	Dynamic Effect 22
						45	Dynamic Effect 23
						46	Dynamic Effect 24
						47	Dynamic Effect 25
						48	Dynamic Effect 26

							49	Dynamic Effect 27
							50	Dynamic Effect 28
							51	Dynamic Effect 29
							52	Dynamic Effect 30
							53	Dynamic Effect 31
							54	Dynamic Effect 32
							55	Dynamic Effect 33
							56	Dynamic Effect 34
							57	Dynamic Effect 35
							58	Dynamic Effect 36
							59	Dynamic Effect 37
							60	Dynamic Effect 38
							61	Random Position 1
							62	Random Position 2
							63	Random Position 3
							64	None
							65	Random Position 4
							66	Random Position 5
							67	Dynamic Effect 39
							68	Dynamic Effect 40
							69	None
							70	Dynamic Effect 41
							71-255	None
21	*	21	*	21	*	Liquid Effect Dimmer	0-255	0-100%Liquid Effect Dimmer
*	22	*	22	*	22	Dynamic Effect Speed	0-63	Static Effect
							64-158	Forward from fast to slow
							159-60	Static

							161-255	Reverse from slow to fast
22	*	22	*	22	*	Liquid Effect Strobe	0-4	Open
							5-255	Strobe from Fast to slow
*	23	*	23	*	23	Effect Fade	0-255	Dynamic Fade Effect
23	*	23	*	23	*	Liquid Effect Red Colour	0-255	Liquid Effect Red Colour : Red (0-Black , 255-100% Red)
*	24	*	24	*	24	Liquid Effect Red Colour	0-255	Liquid Effect Red Colour : Red (0-Black , 255-100% Red)
24	*	24	*	24	*	Liquid Effect Green Colour	0-255	Liquid Effect Green Colour : Green (0-Black , 255-100% Green)
*	25	*	25	*	25	Liquid Effect Green Colour	0-255	Liquid Effect Green Colour : Green (0-Black , 255-100% Green)
*	25	*	25	8	25	Liquid Effect Green Colour	0-255	Liquid Effect Green Colour : Green (0-Black , 255-100% Green)
25	*	25	*	25	*	Liquid Effect Blue Colour	0-255	Liquid Effect Blue Colour : Blue (0-Black , 255-100% Blue)
*	26	*	26	*	26	Liquid Effect	0-255	Liquid Effect Blue Colour : Blue (0-Black , 255-100%

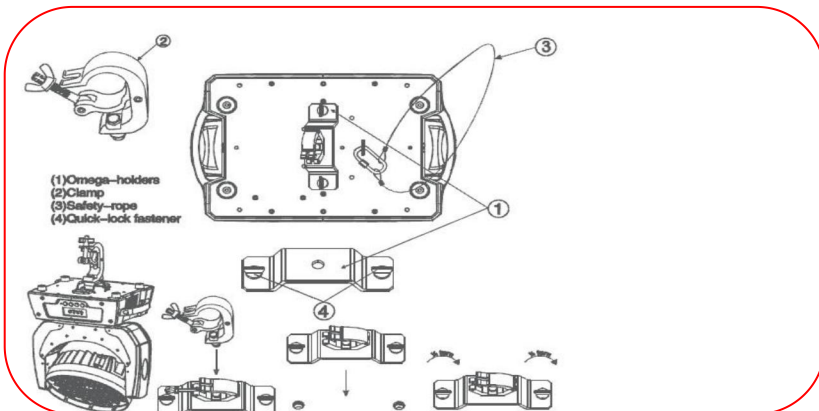
						Blue Colour		Blue)
26	*	26	*	26	*	Liquid Effect	0-15	Not Function
							16-103	Liquid individual Effect(This function is only active when 23/24/25CH are at a value
							104-255	Liquid Whole Effect
	27		27		27	Effect White	0-255	Dynamic Effect White
27	*	27	*	27	*	Liquid Effect Speed	0-127	Liquid Effect Forward speed from fast to slow
							128-255	Liquid Effect Reverse speed from slow to fast
*	28		28		28	Effect Dimming	0-255	Pattern 0-100% Dimming
		28		28		R1 LED dimmer	0-255	R1 LED dimmer
	29		29		29	Background Dimming	0-255	Background 0-100% Dimming
		29		29		G1 LED dimmer	0-255	G1 LED dimmer
	30		30		30	Effect Transition	0-255	Pattern Transition Control
		30		30		B1 LED dimmer	0-255	B1 LED dimmer
	31		31		31	Effect Offset	0-255	Dynamic Effect Pan
		31		31		W1 LED dimmer	0-255	W1 LED dimmer

			
32	32	32	32	Foreground d Strobe	0-255	Foreground Strobe (Same as Channel 11)
33	33	33	33	Backgrou nd Strobe	0-255	Background Strobe (Same as Channel 11)
34	34	34	34	Backgrou nd Selection	0-255	Background Selection
35	35	35	35	Liquid Effect Dimmer	0-255	0-100%Liquid Effect Dimmer
36	36	36	3.6	Liquid Effect Strobe	0-4	Open
					5-255	Strobe from Fast to slow
37	37	37	37	Liquid Effect Red Colour	0-255	Liquid Effect Red Colour : Red (0-Black , 255-100% Red)
38	38	38	38	Liquid Effect Green Colour	0-255	Liquid Effect Green Colour : Green (0-Black , 255-100% Green)
39	39	39	39	Liquid Effect Blue Colour	0-255	Liquid Effect Blue Colour : Blue (0-Black , 255-100% Blue)
40	40	40	40	Liquid Effect	0-2	Not Function
					3-128	Liquid individual Effect(This function is only active when 23/24/25CH are at a value
					129-2 55	Liquid Whole Effect
41	41	41	41	Liquid	0-127	Liquid Effect

					Effect Speed		Forward speed from fast to slow
						128-255	Liquid Effect Reverse speed from slow to fast
	42		42		42	R1 LED dimmer	0-255 R1 LED dimmer
	43		43		43	G1 LED dimmer	0-255 G1 LED dimmer
	44		44		44	B1 LED dimmer	0-255 B1 LED dimmer
	45		45		45	W1 LED dimmer	0-255 W1 LED dimmer
				
		82	96	100	114	R19 LED dimmer	0-255 R19 LED dimmer
	*	83	97	101	115	G19 LED dimmer	0-255 G19 LED dimmer
		84	98	102	116	B19 LED dimmer	0-255 B19 LED dimmer
		*	*	103	117	W19 LED dimmer	0-255 W19 LED dimmer

6. Installation

6.1 Mounting & Rigging



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

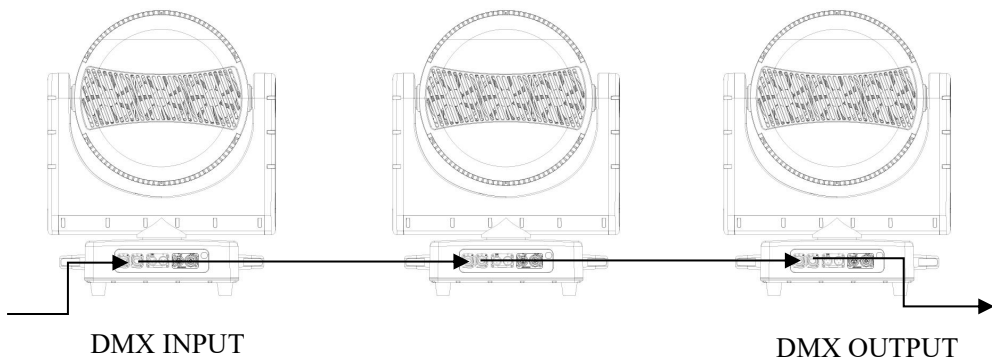
This fixture supports DMX512 (1990) control protocol and is equipped with 3-pin XLR connectors for data input and output. Use a twin-screened DMX cable with conductors of at least 0.5 mm² , ensuring correct wiring for the selected connector type.

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.



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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