



**Maris 19**

**LH-M1920**

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

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# Index

1. Safety Instructions .....	2
2. Appearance .....	3
3. Technical Specifications .....	3
4. Operation .....	7
4.1 Front panel operation: .....	7
4.2 Board instruction: .....	7
4.3 DMX address setting: .....	9
5. DMX Protocol .....	11
6. Installation .....	15
6.1 Mounting & Rigging .....	15
6.2 Power connection .....	16
6.3 DMX Control Connection .....	16
7. Maintenance & Cleaning .....	17
7.1 Cleaning .....	17
7.2 Lubrication .....	17
7.3 Troubleshooting .....	18

## 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).

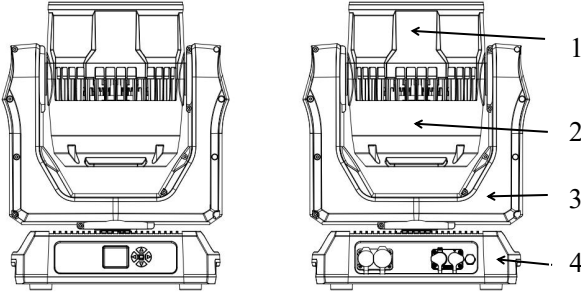
- Temperature & normal conditions

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

## 2. Appearance

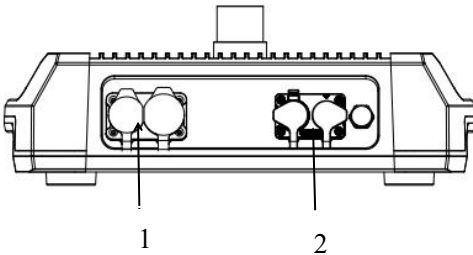
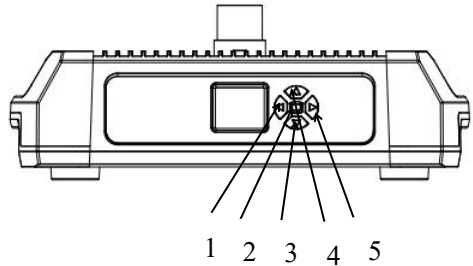
Front side & back side

Front panel & rear panel



- 1. Head Cover
- 2. Rear Cover
- 3. Arm
- 4. Handle

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



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

### 3. Technical Specifications

#### **Power**

Input Voltage: AC90-260V 50/ 60Hz

Power Consumption: 250W

#### **Light source**

Light Source: 19×20W RGBW LED, 72×0.12W RGB LED

Color Temperature Output of Fixture: 6800K

Life expectancy: 20000Hrs( factory rated)

#### **Zoom range**

Zoom range: 8.2°-48.8°

#### **Control**

Display: LCD display

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

Channel: 18/ 24CH

#### **Dimming/Strobe**

Dimming: 0-100% linear dimming system

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

#### **Cooling System**

Cooling System: Low noise and efficient fan cooling system

#### **Head movement**

Pan/ Tilt: 540°/ 270° with auto-correction

#### **Housing**

Housing: Die-casting aluminum, nylon and glass fiber

Protection rate: IP65

## Working temperature

Working temperature: -10°C-45°C

Cooling fan: Silence fan, speed changeable

## Connection

Power connection: Powercon in/out

DMX connection: DMX 3-pin in / out

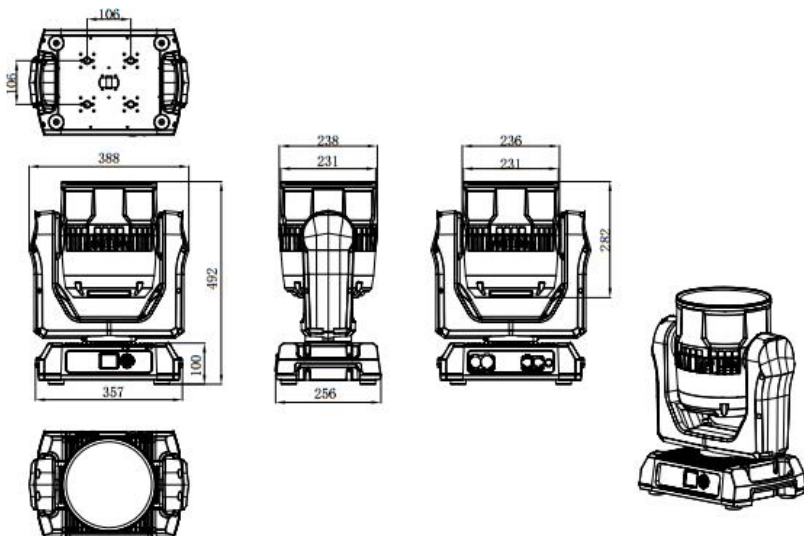
## Product dimensions

388×252×491mm

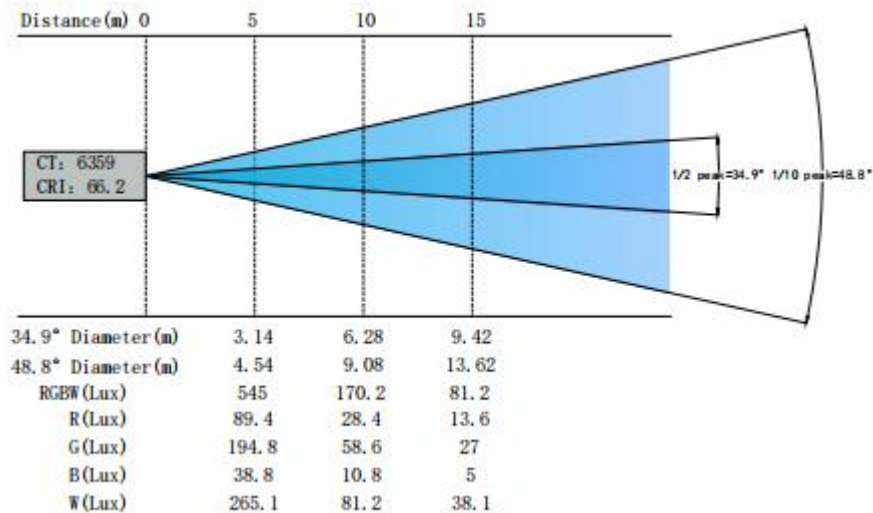
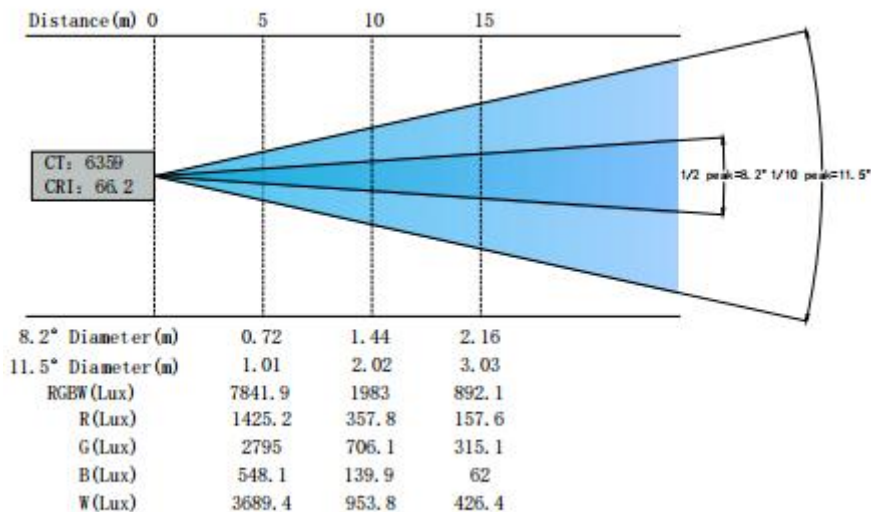
## Net weight

14.5kg

## Dimensions:

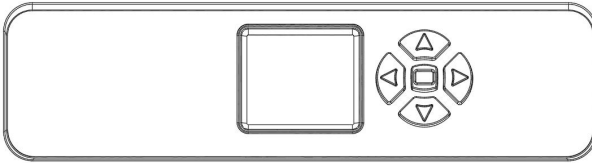


## Light output:



# 4. Operation

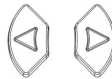
## 4.1 Front panel operation:



Enter



UP / DOWN



Left / Right

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
Right	To go forward to next 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:

ADDR	Chan	001-512
	Next	Next device
	Prev	Previous device

MODE	Mode Select	DMX	
		Auto	
	M/S Mode	Auto/Master/Slave	
	Dimer Mode	Mode/Mode2/Mode3/Off	
	Fan Mode	Auto/High/Low	
DISP	Language	En/中文	
	Screen Rot	Auto/Close/Open	
	Screen Saver	ON/OFF	
	Indicator	Mode1/Mode2	
	Screen Light	01-10	
SCENE	Pan	000-255	
	Pan Fine	000-255	
	Tilt	000-255	
	Tilt Fine	000-255	
	XT Speed	000-255	
	Dimmer	000-255	
	Strobe	000-255	
	R1	000-255	
	G1	000-255	
	B1	000-255	
	W1	000-255	
	R2	000-255	
	G2	000-255	
	B2	000-255	
	W2	000-255	
	R3	000-255	
	G3	000-255	
	B3	000-255	
		W3	000-255
		Zoom	000-255
	LED.EF	000-255	
	LED.SP	000-255	

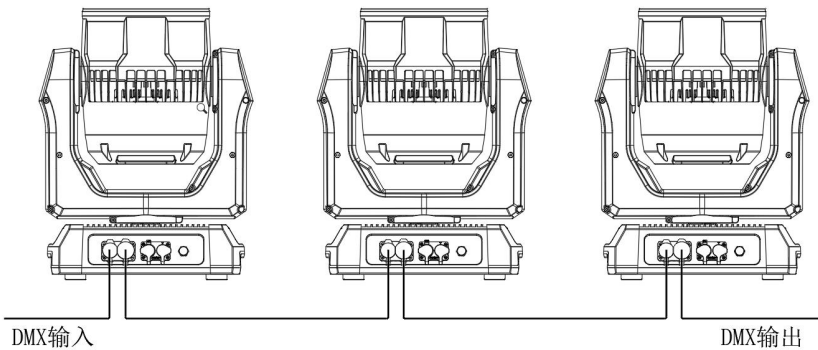
	Effect	000-255
	Effect.spd	000-255
	Eff Dimmer	000-255
	Reset	000-255
SETUP	Channel	18CH/26CH
	Pan Invert	On/Off
	Tilt Invert	On/Off
	P/T Rectify	On/Off
	Data Hold	On/off

### 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 two DMX modes (18/ 24CH 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	...
18CH	001	19	37	55	...
24CH	001	25	49	73	...



# 5. DMX Protocol

18CH	26CH	Function	DMX value	Description
1	1	Pan	0-255	Pan movement range 540°
2	2	Pan fine	0-255	Pan fine 16bit
3	3	Tilt	0-255	Tilt movement range 270°
4	4	Tilt fine	0-255	Tilt fine 16bit
5	5	Pan/Tilt speed	0-255	Pan/Tilt speed from fast to slow
6	6	Dimmer	0-255	0-100% linear dimmer
7	7	Strobe	0-255	Strobe from slow to fast
8	*	R	0-255	Red Linear dimmer 0-100%
9	*	G	0-255	Green Linear dimmer 0-100%
10	*	B	0-255	Blue Linear dimmer 0-100%
11	*	W	0-255	White Linear dimmer 0-100%
*	8	R1	0-255	Red1 Linear dimmer 0-100%
*	9	G1	0-255	Green1 Linear dimmer 0-100%

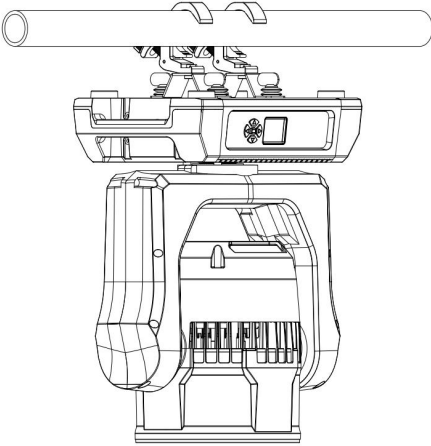
*	10	B1	0-255	Blue1 Linear dimmer 0-100%
*	11	W	0-255	White1 Linear dimmer 0-100%
*	12	R2	0-255	Red2 Linear dimmer 0-100%
*	13	G2	0-255	Green2 Linear dimmer 0-100%
*	14	B2	0-255	Blue2 Linear dimmer 0-100%
*	15	W2	0-255	White2 Linear dimmer 0-100%
*	16	R3	0-255	Red3 Linear dimmer 0-100%
*	17	G3	0-255	Green3 Linear dimmer 0-100%
*	18	B3	0-255	Blue3 Linear dimmer 0-100%
*	19	W3	0-255	White3 Linear dimmer 0-100%
12	20	Zoom	0-255	From small to large
13	21	Macro	0-10	Close
			11月20日	Red
			21-30	Green
			31-40	Blue
			41-50	Orange
			51-60	Cyan

			61-70	Yellow
			71-80	Purple
			81-90	White
			91-100	Macro 1
			101-110	Macro 2
			111-120	Macro 3
			121-130	Macro 4
			131-140	Macro 5
			141-150	Macro 6
			151-160	Macro 7
			161-170	Macro 8
			171-180	Macro 9
			181-190	Macro 10
			191-200	Macro 11
			201-210	Macro 12
			211-220	Macro 13
			221-255	Macro 14
14	22	Macro speed	0-255	From slow to fast
15	23	Ring effect	0-10	Close
			11-20	Red
			21-30	Green
			31-40	Blue
			41-50	Orange

			51-60	Cyan
			61-70	Yellow
			71-80	Purple
			81-90	White
			91-100	Macro 1
			101-110	Macro 2
			111-120	Macro 3
			121-130	Macro 4
			131-140	Macro 5
			141-150	Macro 6
			151-160	Macro 7
			161-170	Macro 8
			171-180	Macro 9
			181-190	Macro 10
			191-200	Macro 11
			201-210	Macro 12
			211-220	Macro 13
			221-255	Macro 14
16	24	Ring effect speed	0-255	From slow to fast
17	25	Eff.Dimmer	0-255	
18	26	Reset	0-129	No function
			130-255	Reset

# 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

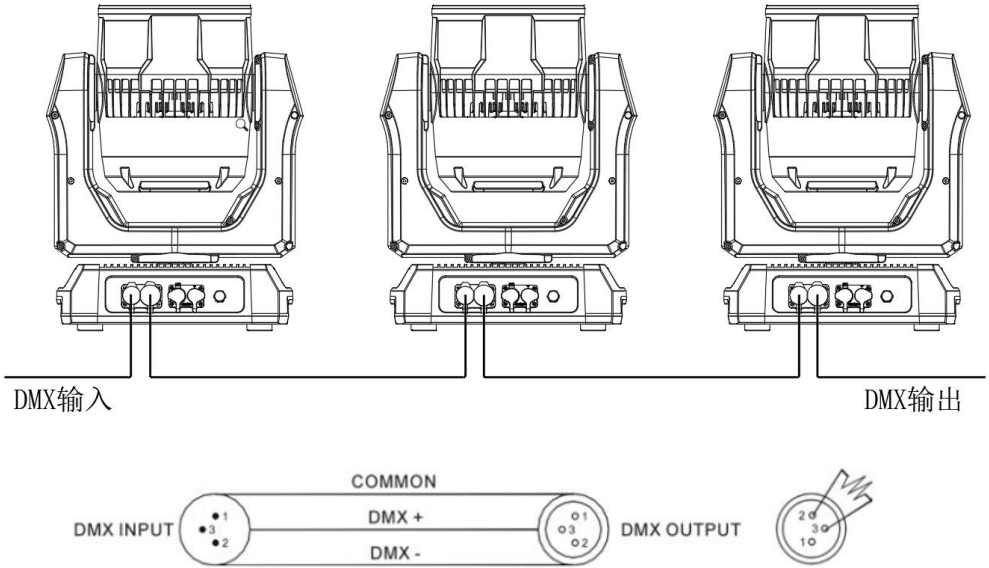
This fixture supports DMX512 (1990) control protocol and is equipped with 3-pin XLR connectors for data input and output. Use a twin-screened DMX cable with conductors of at least 0.5 mm<sup>2</sup> , ensuring correct wiring for the selected connector type.

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.



## 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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