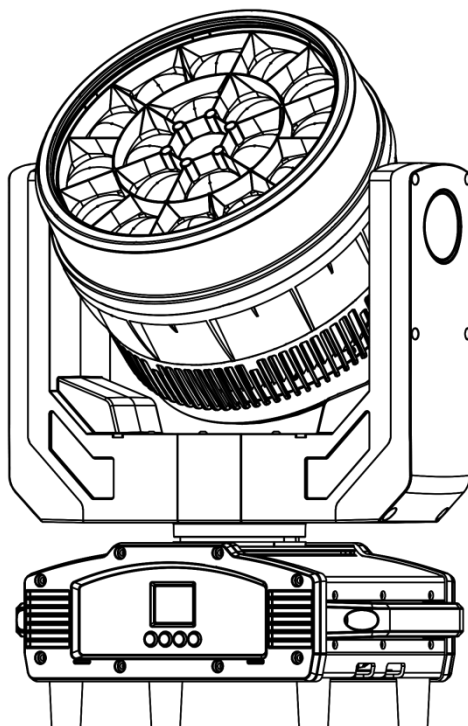


**1940ZW**

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# **IP65 19x40W Wash Zoom**



**USER MANUAL**

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Please read manual carefully before use

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Thank you for choosing our LED lights. Each facility has been rigorously tested. Please check whether the facility has been damaged during transportation. If you find any parts are missing or broken, please contact the manufacturer immediately. Please do not return the product without any notice!

# 1.Safety Instructions



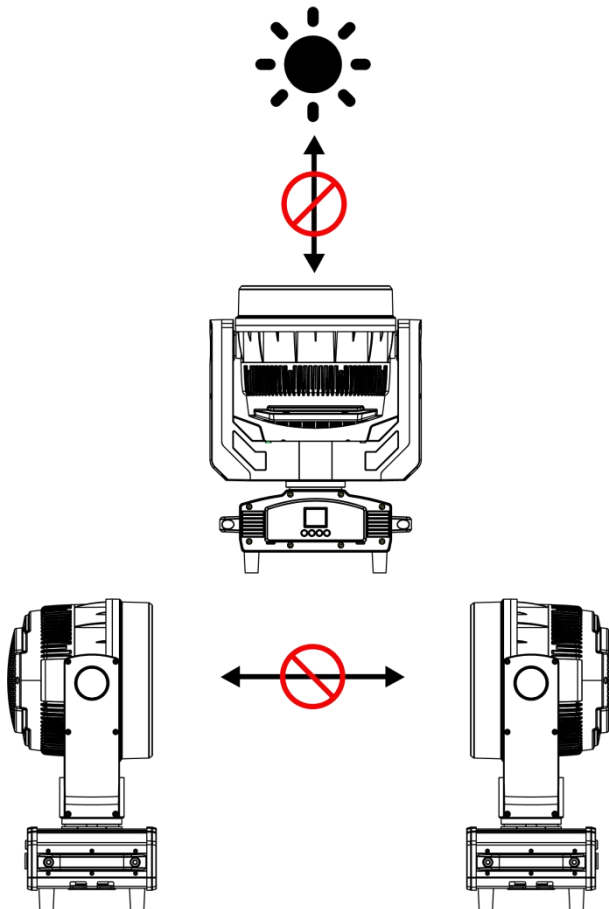
Please read this manual carefully, which includes important information on installation, use and maintenance.

## Attention

- Please keep this USER MANUAL for future consultation. If you sell the facility to another user, be sure that they also receive this USER MANUAL.
- Please open and check in details and make sure there is no transportation damage.
- Before operating, ensure that the voltage and frequency of power supply match the power requirements of the facility.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- The facility must be installed in a location with adequate ventilation, at least 50 cm from adjacent surfaces. Be sure that no ventilation slots are blocked.
- Make sure the power is disconnected before removing the facility.
- Make sure there are no flammable materials close to the unit while operating as it is fire hazard.
- Use safety cable when fixes this facility. Do not handle the facility by taking its head only, but always by taking its base.
- Maximum ambient temperature is 40 °C . Do not operate it where the temperature is higher than this.
- Please stop using the facility for serious operating problems. Stop using the facility immediately. Never try to repair the facility by yourself, but be a professional technician. Please contact the supplier's service department

for technical support.

- Do not touch any wire during operation as high voltage might be causing electric shock.
- When the housing or lens is damaged, it must be replaced.
- Direct sunlight or any other strong light source penetrating the lens of the light will cause serious internal damage to the facility. During unpacking, installation, use and long-term outdoor idleness, it is forbidden to expose the lens of the facility to direct sunlight or any other strong light source at any angle. It is forbidden to aim the beam of one light directly at another light.



## Caution

There are no accessories available, do not open the housing and try to repair the facilities yourself. Please contact our company for after service.

## Installation

The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. And make sure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight. Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.

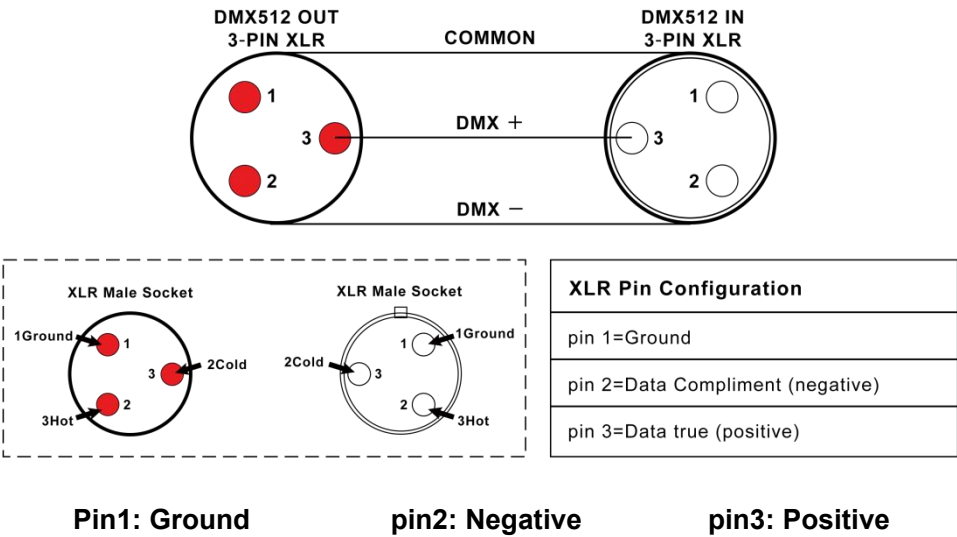
The facility must be installed by professionals, and keep it far away from fire, walking road, and easy touched place.

## 2. Technical Specification

Light Source	19 x 40W 4in1 RGBW LED
LED Lifetime	≥ 50000H
Power Voltage	AC100-240V , 50-60Hz
Power Consumption	630W
Beam Angle	4°~45°
Control Modes	DMX512/ Auto/ Sound/ Master/ Manual/ RDM
DMX Channel	19/ 27 Channel
Protection Rating	IP65
Display	1.8°TFT Color Display,Can be rotated 180°,Chinese and English can be switched
Data In/Out Socket	IP65 3-pin & 5-pin XLR sockets
Power Socket	IP65 Power-Con in/ out
Housing Material	Aluminum

Work temperature	-10℃～45℃		
Pan	540°accuracy 2.11°/step, fine-tuning accuracy: 0.008°		
Tilt	270°accuracy 0.86°/step, fine-tuning accuracy: 0.0034°		
Pan/Tilt Resolution	Automatically correct pan/tilt position		
MAX. Connection	4 units (240V, 50Hz)	2.5mm <sup>2</sup>	power cable
	2 units (100V, 60Hz)	2.5mm <sup>2</sup>	power cable
Dimension	393*298*534mm		
Net Weight	22kg		
Carton Package	530*410*625mm	1in1	GW: 24.5kg
Flight Case	810*500*720mm	2in1	GW: 74kg
Features	Circle control effect, large zoom range, wide wash area, RGBW color mixing system, full light range dimming; smooth and uniform, low noise and high efficiency fan cooling system; fast strobe 1~25Hz; preset multiple color macro functions; preset multiple effect macro functions		
Configuration	Signal cable	1pc	
	Power cable	1pc	
	Manual	1pc	

3. DMX Set Up



## DMX Connection

To ensure optimal transmission of DMX data, please connect facilities in the shortest way. The connection order won't affect the DMX address code. For example, if the address code is set to 1, no matter where the facility is connected, its address code will not change. This is determined by the principle of the DMX controller.

## Operation method

You can operate in the following three modes:

- Auto mode - the light can automatically complete all color changes
- DMX control mode - each light can be individually controlled by a standard DMX512 console
- Master mode - any light can work as a host in any of the above modes, and the other lights will work synchronously as slaves

## 4. Display

There are four buttons on the LED panel: MENU, UP, DOWN, and ENTER.



**MENU**



**UP**



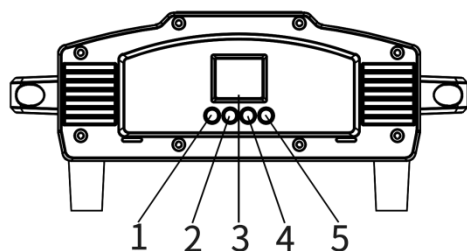
**DOWN**



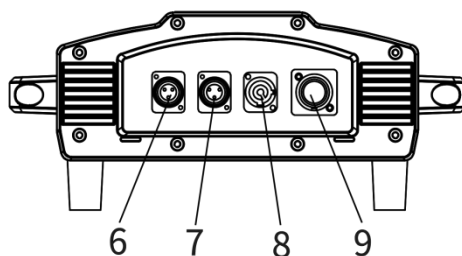
**ENTER**

Please press the "MENU" to exit or return to the previous menu, press "UP" or "DOWN" to select the upper and lower menus or adjust the values, and press "ENTER" to confirm.

**FRONT VIEW**



**REAR VIEW**



After powering on, the facility will automatically return to the last operation when it was powered off, then get into standby status. For more details, please refer to the information below↓

## 5. Menu

1-MENU 2-UP 3-DOWN 4-ENTER			
Menu	1.Pan Degree	1.540 2.360	Pan running angle selection
	2.Mic Sense	001--100	Sound sensitivity
	3.Language	1.English	Select Display Language
		2.Chinese	
	4.No Signal	1.Blackout 2.Hold	
	5.Fan Set	1.Auto 2.Low 3.High	Setting fan speed
	6.Reset	1.Yes	Reset
		2.No	
	7.Default	1.Yes	Factory setting
		2.No	



	8.Adjust		Pass Word: ****	Change the value of Pan/Tilt/Focus/Rota to correct the angle; change the value of R/G/B/W to adjust the white balance.
			1.Pan: 0-255	
			2.Tilt: 0-255	
			3.Focus: 0-255	
			4.Rota: 0-255	
			4.Red: 0-255	
			5.Greed: 0-255	
			6.Blue: 0-255	
			7.White: 0-255	
Address			001-512	Setting the address from 001-512
Rever	1.Pan		1.YES 2.NO	Pan/Tilt/Display
	2.Tilt		1.YES 2.NO	Font Forward and Reverse Switching
	3.Display		1.YES 2.NO	
Information			1.CH Value	Show all channel information
			2.Tem**°C	Show the temperature of LED board
			3.Soft V1.1	Program version number
Mode	1.DMX512			Setting control mode
	2.Auto		1.Master	
			2.Alone	
	3.Sound		1.Master	
			2.Alone	
	4.Manual	1.Master	1.Pan:0-255	Manual control
			2.Tilt:0-255	

			3.Focus:0-255	
			4.Red:0-255	
		2.Alone	5.Green: 0-255	
			6.Blue: 0-255	
			7.White: 0-255	
			8.Strobe: 0-255	
Channel	1.19 CH		1.19Channels	Select channel mode
	2.27 CH		2.27Channels	

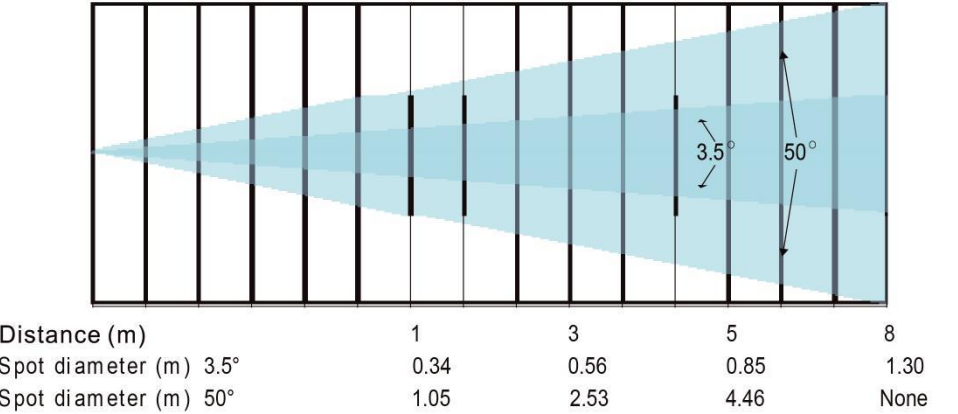
## 6. LUX Data

Beam Angle = 3.5°

R lux	116600	8820	4490	1890
G lux	45000	23600	11500	4820
B lux	7990	4080	1910	791
W lux	55400	29800	14900	12600
4in1 lux	11700	62300	29100	6020

Beam Angle = 50°

R lux	6220	895	321	131
G lux	16400	2240	800	330
B lux	2830	384	137	55.9
W lux	20400	2820	1010	413
4in1 lux	43000	5900	2120	872



7. DMX Channel List

► 19CH Mode

CH	Function	DMX Value	Description
1	Pan	0-255	Pan adjustment
2	Pan adjustment	0-255	Pan fine adjustment
3	Tilt	0-255	Tilt adjustment
4	Tilt adjustment	0-255	Tilt fine adjustment
5	Pan/Tilt speed	0-255	From fast to slow
6	Strobe	0-15	No function
		16-214	Synchronous strobe speed from slow to fast (1Hz-25Hz)
		215-255	Random strobe
7	Dimmer	0-255	From dark to bright
8	Dimming Model	0-49	Model -1
		50-99	Model -2
		100-149	Model -3
		150-255	Model -4
9	Zoom	0-255	From narrow to wide
10	R	0-255	From dark to bright
11	G	0-255	From dark to bright
12	B	0-255	From dark to bright
13	W	0-255	From dark to bright
14	Static color	0-15	No function

CH	Function	DMX Value	Description
		16-35	R 100%, G up, B0%
		36-55	R down, G 100%, B0%
		56-75	R 0%, G 100%, B up
		76-95	R 0%, G100%, B up
		96-115	R up, G0%, B100%
		116-135	R 100%, G0%, B down
		136-155	R 100%, G up, B up
		156-175	R 100%, G down, B 100%
		176-195	R 100%, G 100%, B 100%, W 100%
		196-200	2800K
		201-205	3200K
		206-210	3500K
		211-215	4000K
		216-220	4500K
		221-225	5000K
		226-230	5500K
		231-235	6000K
		236-240	6500K
		241-245	7000K

CH	Function	DMX Value	Description
		246-250	7500K
		251-255	8000K
15	Effects	0-9	No function
		10-99	3 numbers 1 effect
		100-149	Jump
		150-255	Gradual change
16	Gobo	0-19	No function
		20-39	Gobo-1
		40-59	Gobo-2
		60-79	Gobo-3
		80-99	Gobo-4
		100-119	Gobo-5
		120-139	Gobo-6
		140-159	Gobo-7
		160-179	Gobo-8
		180-199	Gobo-9
		200-219	Gobo-10
		220-255	Gobo-11
17	Gobo change speed	0-255	Gobo 7- Gobo 11

CH	Function	DMX Value	Description
18	Gobo change fade	0-255	Gobo 7- Gobo 11
19	Reset	0-79	No function
		80-99	Reset
		100-255	No function

## ► 27CH Mode

CH	Function	DMX Value	Description
1	Pan	0-255	Pan adjustment
2	Pan adjustment	0-255	Pan fine adjustment
3	Tilt	0-255	Tilt adjustment
4	Tilt adjustment	0-255	Tilt fine adjustment
5	Pan/Tilt speed	0-255	from fast to slow
6	Strobe	0-15	No function
		16-214	Synchronous strobe speed from slow to fast (1Hz-25Hz)
		215-255	Random strobe
7	Dimmer	0-255	From dark to bright

CH	Function	DMX Value	Description
8	Dimming Mode	0-49	Model -1
		50-99	Model -2
		100-149	Model -3
		150-255	Model -4
9	Zoom	0-255	From narrow to wide
10	R1	0-255	From dark to bright
11	G1	0-255	From dark to bright
12	B1	0-255	From dark to bright
13	W1	0-255	From dark to bright
14	R2	0-255	From dark to bright
15	G2	0-255	From dark to bright
16	B2	0-255	From dark to bright
17	W2	0-255	From dark to bright
18	R3	0-255	From dark to bright
19	G3	0-255	From dark to bright
20	B3	0-255	From dark to bright
21	W3	0-255	From dark to bright
22	Static color	0-15	No function
		16-35	R 100%, G up, B0%



CH	Function	DMX Value	Description
		36-55	R down, G 100%, B0%
		56-75	R 0%, G 100%, B up
		76-95	R 0%, G100%, B up
		96-115	R up, G0%, B100%
		116-135	R 100%, G0%, B down
		136-155	R 100%, G up, B up
		156-175	R 100%, G down, B 100%
		176-195	R 100%, G 100%, B 100%, W 100%
		196-200	2800K
		201-205	3200K
		206-210	3500K
		211-215	4000K
		216-220	4500K
		221-225	5000K
		226-230	5500K
		231-235	6000K
		236-240	6500K
		241-245	7000K
		246-250	7500K

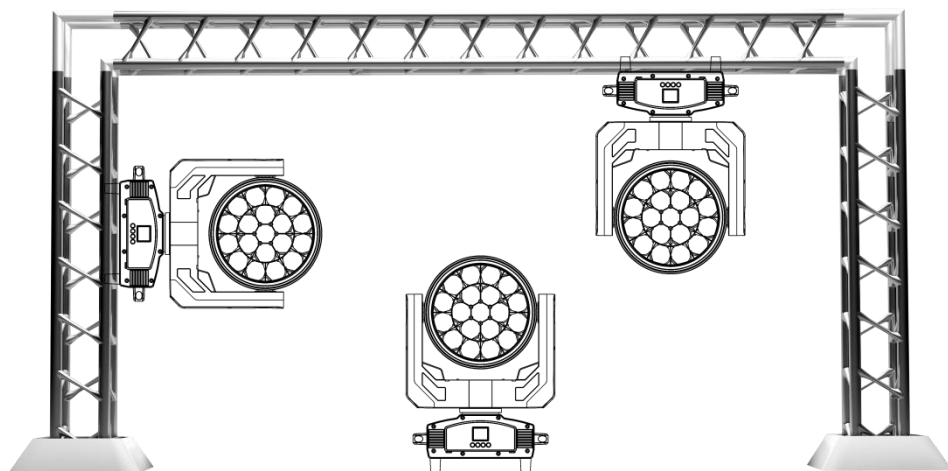
CH	Function	DMX Value	Description
		251-255	8000K
23	Effects	0 - 9	No function
		10 - 99	3 numbers 1 effect
		100 - 149	Jump
		150 - 255	Gradual change
24	Ring control	0-19	No function
		20-39	Ring control -1
		40-59	Ring control -2
		60-79	Ring control -3
		80-99	Ring control -4
		100-119	Ring control -5
		120-139	Ring control -6
		140-159	Ring control -7
		160-179	Ring control -8
		180-199	Ring control -9
		200-219	Ring control -10
		220-255	Ring control -11
25	Ring control change speed	0-255	Ring control 7 - Ring control 11
26	Ring control change fade	0-255	Ring control 7 - Ring control 11

CH	Function	DMX Value	Description
27	Reset	0-79	No function
		80-99	Reset
		100-255	No function

## 8. Mounting

When installing the unit, the trussing or area of installation must be able to hold 10 times the weight without any deformation. When installing the unit must be secured with a secondary safety attachment, e.g. an appropriate safety cable. Never stand directly under the facility while mounting, uninstalling or repairing facilities.

High-altitude mounting requires for extensive experience, including working load limits calculating , installation material, and periodic safety check of installation materials and facilities. If you're lack of mentioned qualifications, do not attempt the installation yourself. These installation should be checked by a skilled person annually.

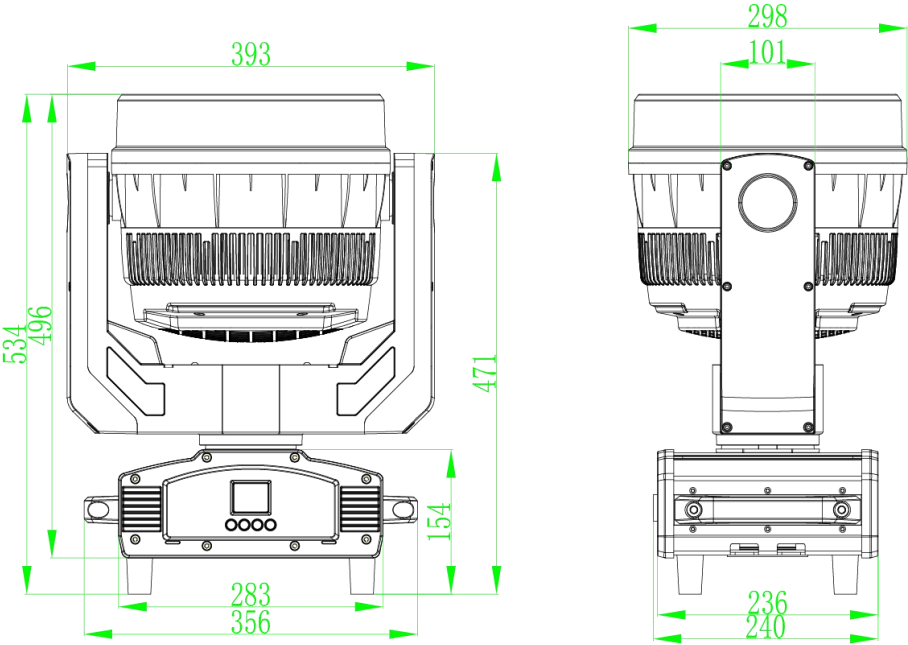


1940ZW works properly in above different mounting, hanging upside-down from a ceiling, sideways on trussing, or set on smooth horizontal surface. Be sure this facility is at least 12m (40ft) away from flammable materials (decoration etc.). Always use and install the safety cable to prevent accidental

damage or injury from the facility failure. Never use handles for secondary attachment.

**NOTICE:** The suitable environment temperature of the facility is from -25° C to 45° C. Do not place this facility in an environment where the temperatures are under or above the temperatures stated. This will help the fixture run at its best and extend the lifetime.

9. Product Size



## 10. Attention

1. When the facility is powered on, please avoid looking directly at the facility.
2. When assembling/ replacing LED, be sure to cut off the main power of facilities before opening the cover upon the LED board.

## 11. Trouble Shooting

Following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

### **A. The unit does not work, no light and the fan does not work**

1. Check the status of power connection and fuse.
2. Check the voltage.
3. Check the power indicator.

### **B. No response to DMX controller**

1. If the display screen flashes, check the DMX signal connector and signal line whether the connection is correct.
1. If the display screen does not flash, but no response to channel control, check whether the address code or channel setting is correct.
1. If the DMX signal transmission is intermittent, check if the XLR and DMX cables are in good condition.
2. Try using another controller.
3. Check if the DMX cables is too close to the high-voltage wire, which may damage or interfere with the signal circuit.
6. The facility has not completed the self-check.

## C. One of the channels is not working well

1. The stepper motor might be damaged or the cable connected to the PCB is broken.
2. The motor's drive IC on the PCB might be out of condition.

## 12. Fixture Cleaning

The lens and diffuser should be clean frequently to get better light effect. Wipe frequency according to the environment. Humidity, excessive smoke, and dirty environment will make lens dusty.

- Use soft cloth and special glass cleaner.
- Wipe lens surface at least every 30 days.
- Use vacuum cleaners or air guns to clean the interior structure of the facility, at least twice a year.



Warning:

To avoid the danger of lighting strikes and fire, please do not place the facility in a humid environment. Do not disassemble it without permission, otherwise, the manufacturer will not provide warranty. If the facility fails, please contact the manufacturer first.

## Product Warranty Card

Product: IP65 19x40W Wash Zoom

Model NO.: 1940ZW

Manufacture Date:

User:

Purchase Date:

Manufacturer:

Sales Store:

Address:

ATTN.:

ATTN.:

Phone:

Phone:

Note: The above blank must be filled in and sealed by the end user or sales point, otherwise no warranty will be provided. (Below please check the warranty period and terms)

Warranty Period: This facility is warranted for 2 years from the date of purchase.

Warranty Terms:

1. Except for man-made damage and natural disasters
2. If the facility fails to function properly during the warranty period, please contact our after service department or our local distributor directly.
  - 1) Fail to present a valid warranty card.
  - 2) Omissions, alterations, and trade sales names on the warranty card.
  - 3) Failures and damage caused by force majeure.
  - 4) Failures and damage caused during transportation and handling.
  - 5) Failures and damage caused by failure to follow the instructions for use.
  - 6) Failures and damage caused by disassembly, repair, and modification of the product without the manufacturer's authorization or by non-professionals.
  - 7) Failures caused by the use of accessories not approved by the factory or not matched by the factory.

▲ Thank you for reading this manual. Please keep it for future reference.