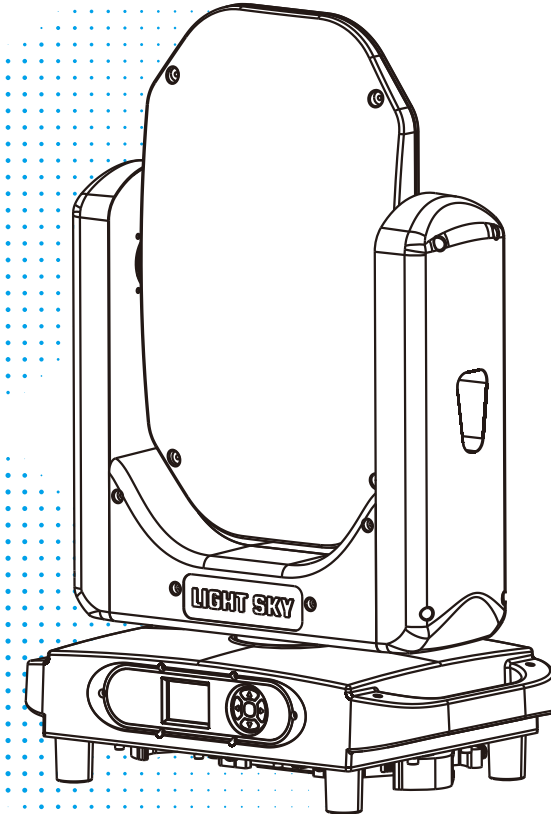


LIGHT SKY

www.lightsky.com.cn

Fly Dragon Lighting Equipment Co., Ltd.

Add : NO.4 JINGNENG ROAD 1, HUADU DISTRICT, GUANGZHOU, CHINA.
Tel : 020-61828288 Fax : 020-61828188 Postal Code : 510820
Email : flydragon@lightsky.com.cn



AQUA MIRROR User Manual

Please read the instruction carefully before use

CONTENTS

1. Safety Instructions	2
2. Technical Specifications	5
2.1. Attachment And Size	7
3. Connection and control	8
3.1. Power supply connection	8
3.2. DMX 512 Connection	9
3.3. Control Panel	10
4. How To Set The Unit	11
4.1. Main Function	11
4.2. Address Setting	12
4.3. DMX 512 Configuration	13
5. Electrical Connection Diagram	14
6. Troubleshooting	15
7. Fixture Cleaning	16
8. Duty exonerative and copyright protectio	16

Congratulations on choosing our company product! We thank you for your custom.

- Please keep in mind that this product, like other products of the company, adheres to the concept of people-oriented design and manufacture, and takes product quality as the foundation.
- We put the interests of customers first, and do our best to meet customer requirements.
- Please read this instruction manual carefully and keep it for future reference. In the case of fully understanding the product information, strictly abide by theUse the instruction manual to ensure that the product is installed, used and serviced correctly and safely.
- Our company is not responsible for any damage to lamps or other performance due to personal failure to follow the instructions during installation, use and maintenance.responsibility.
- Our company reserves the right to modify the manual at any time and without prior notice.

1. Safety Instructions



WARNING

Please read the instruction carefully which includes important information about the installation, usage and maintenance.

Please keep this User Manual for future consultation. If you sell the unit to another user, be sure that they also receive this manual.

The following symbols are used to identify important safety information on the product and in this manual:

WARNING! Safety hazard. Risk of severe injury or death.	WARNING! Refer to manual before installing, powering or servicing.	WARNING! Hazardous voltage. Risk of severe or lethal electric shock.	WARNING! Fire hazard.	WARNING! Burn hazard. Hot surface. not touch. Do not touch	WARNING! Risk of eye injury. Safety glasses must be worn.	WARNING! Risk of hand injury. Safety gloves must be worn.	WARNING! Avoid direct eye contact
DANGER! Applies only to luminaires directly mounted on surfaces of non-combustible materials	DANGER! Do not discard Trash can	DANGER! Mark of ground	DANGER! Replace all shatter shields	DANGER! Take a short distance from the object to be photographed (meters)	DANGER! Rated maximum ambient temperature	DANGER! Do not point the lens towards the sun or strong light	DANGER! Operation not allowed during runtime

Important:

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

- Unpack and check carefully to ensure that there is no transportation damage before using the unit.
- Do install and operate by qualified operator.
- The light source in this luminaire should be replaced by the manufacturer or its service agent or a similarly qualified person, always cut off the power supply before replacing he light source.
- Do not allow children to operate the fixture.
- The unit must be installed in a location with adequate ventilation, at least 20cm from adjacent surfaces.
- Be sure that no ventilation slots is blocked, otherwise the unit will be overheated.

- Before operation, ensure that you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Minimum ambient temperature Ta: -20°C. Maximum ambient temperature Ta: 45°C.
- Do not operate this product at a lower or higher temperature.
- Do not connect the device to any dimmer pack.
- When the lamp is running, do not place combustible objects next to it. The shortest distance between the device and inflammable and explosive objects or materials is 0.5m.
- Make sure the power cord is not crimped or damaged; replace it immediately if damaged.
- Unit's surface temperature may reach up to $\leq 55^{\circ}\text{C}$. Do not touch the housing bare-handed during its operation.
- Avoid any flammable liquids, water or metal from entering the unit. Once it happens, cut off the mains power immediately.
- Do not operate in a dirty or dusty environment. Do clean the fixture regularly.
- Do not touch any wire during operation as there might be a hazard of electric shock.
- Avoid entanglement of the power cord with other wires.
- The minimum distance to objects/surface must be more than 3 m.
- In the event of serious operating problem, stop using the unit immediately.
- Never turn on and off the unit time after time.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.
- Do not open the housing as there are no user serviceable parts inside.
- Do not attempt to operate this unit if it becomes damaged. Do not attempt any repairs yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center if needed.
- Disconnect this product from its power source before servicing.
- Do use the original packaging if the device is to be transported.
- Avoid direct eye exposure to the light source while the product is on.
- Do not operate this product if you see damage on the housing, shields, or cables. Have the damaged parts replaced by an authorized technician at once.

Installation:

The luminaire must be securely fastened to the quick-lock hook with screws to prevent vibration or slipping during operation. The supporting structure must be able to withstand 6 times the weight of the luminaire. Additionally, a safety cable must be installed that can endure 30 free-fall drops from 300mm without failure. Installation should only be performed by qualified professionals, and the luminaire must be mounted in an area inaccessible to unauthorized personnel or away from pedestrian traffic.

2. Technical Specifications

OPTICS

- Optical reflector: composed of one large reflector (407mm x 232mm) and 24 small reflectors (55.5mm x 55.5mm), with a reflectivity of over 92%.

CONTROL AND PROGRAMMING

- Control channel: 8CH, please refer to the channel table for details.
- Protocol: Standard DMX512 protocol and RDM protocol.
- Art-Net protocol
- Data connection: Three core or five core signal input/output.
- RJ45 interface
- Display: LCD screen
- Upgrade software through DMX signal

X/Y AXIS MOTION ANGLE

- X-axis: 540 ° 8bit/16bit precision scanning
- Y-axis: 360 ° infinite rotation
- Reset function with automatic error correction
- Fixed lock: Vertical lock

POWER SUPPLY AND POWER

- Input voltage: AC 100-240V 50/60Hz
- Maximum power: 42W
- Power factor: ≥ 0.9
- Maximum current of the lamp: 0.2A/220V, 0.5A/100V

DIMENSIONS & WEIGHT

- Product size: 397 × 262 × 623mm
- N.W.: 13.7kg
- Carton packaging (Default): 475 × 325 × 750mm
- G.W.: 17.6kg
- Flycase Size(2 units): 720 × 520 × 845mm
- G.W.: 63.4kg

OTHER

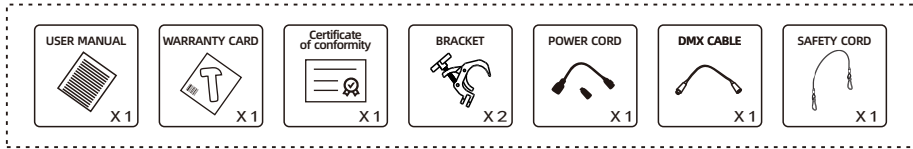
- Protection level: Ip66
- Working environment: -20 °C~45 °C
- Maximum surface temperature of lamp body: ≤ 55 °C
- Hook: Suitable for pipes with a diameter of 40-60 mm.

APPROVALS

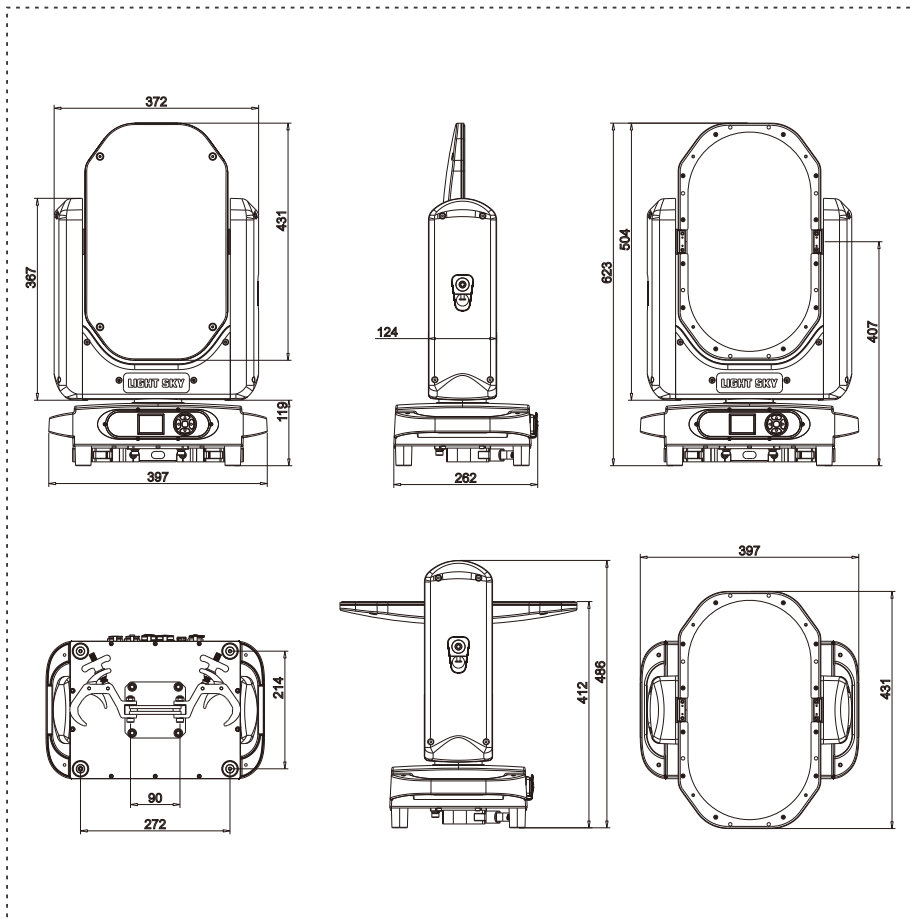
- The product implementation standard: IEC 60598-1、IEC 60598-2-17
- Approved certifications: CE、RoHs
- The product complies with the following EU directives:
Low Voltage Directive 2014/35/EU . EMC Directive 2014/30/EU

2.1.Attachment And Size

Attachment contents-Fig.1

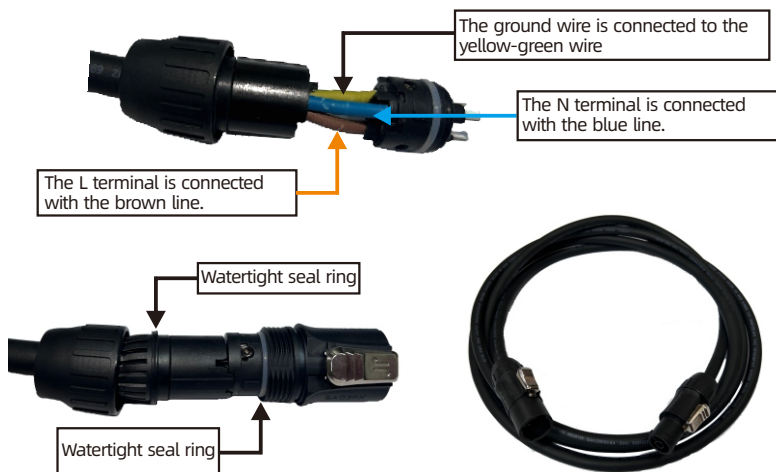
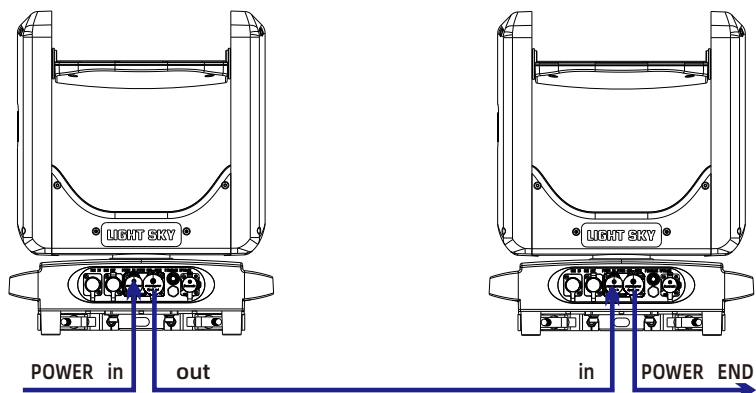


Size-Fig.2 (Unit:mm)



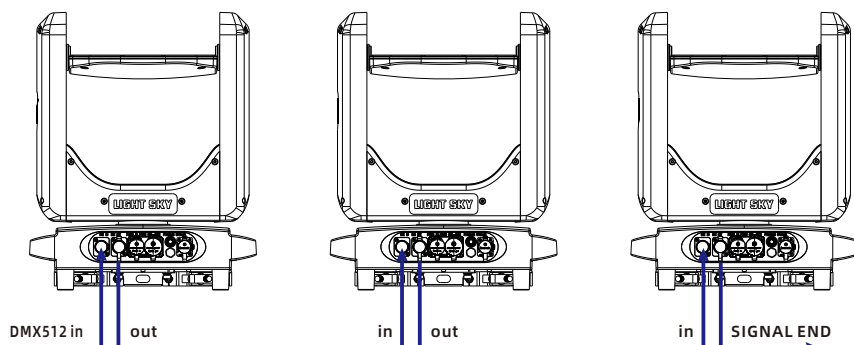
3.Connection and control

3.1.Power supply connection

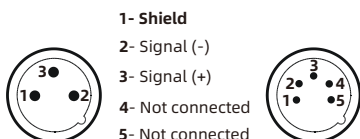


- The bus connecting the power supply must be installed by a qualified professional technician.
- After completing all the above operations and ensuring that it is installed, you can power on the lamp to operate.

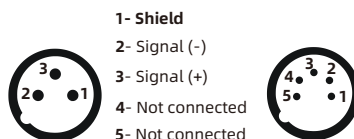
3.2.DMX 512 Connection



DMX-input

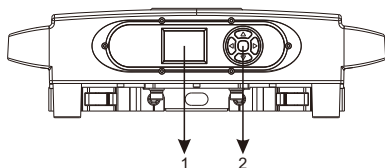


DMX - output



1. At last unit, the DMX cable has to be terminated with a terminator. Solder a 120 Ω 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last unit.
2. Connect the unit together in a "daisy chain" by XLR plug cable from the output of the unit to the input of the next unit. The cable cannot be branched or split to a "Y" cable. DMX 512 is a very high-speed signal. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system.
3. The DMX output and input connectors are pass-through to maintain the DMX circuit, when one of the units' power is disconnected.
4. Each lighting unit needs to have a DMX address to receive the data by the controller. The address number is between 1-512.
5. The end of the DMX 512 system should be terminated to reduce signal errors.
6. 3 pin XLR connectors are more popular than 5 pins XLR.
 - 3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)
 - 5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+), Pin4, Pin5 not used.

3.3.Control Panel



1.Display: To show the various menus and the selected function.

2.Button :

OK	OK confirmation key
▲	UP
▼	DOWN
◀	To the left
▶	To the right

4.How To Set The Unit

4.1.Main Function

Main menu	I menu	II menu	III menu	Note
DMX Address	Address	1-512		
	Channel	8CH		
	State	Hold		
	Input Mode	DMX		This menu can only be displayed when the artnet module is connected.
		ARTNET sACN		
Information	Time	Total Power Time		
		Power Time		
	Fixture state	1.MCU(XY) ***		
		2.Pan ***		
		3.Tilt ***		
	RDM UID	3888: xxxxxxxx		
	DMX Live	DMX		
Personal	Software	1.Display Ver. Vxxx		
		2.XY Ver. Vxxx		
	PanTilt Setting	Pan Invert	OFF (Default) ON	
		Tilt Invert	OFF (Default) ON	
		P/T Rectify	OFF ON (Default) Normal (Default)	
		P/T Mode	Fast Precise	
	Display Setting	Language	EN (Default) ZH	
		Dis.Backlight	OFF (Default) ON	
		Dis.Direction	Forward (Default) Reverse	
		Dis.Blink	OFF ON (Default)	
	Ethernet Setting	IP Address	*** **	This menu can only be displayed when the artnet module is connected.
		Mask Address	*** **	
		Net Address	0-127	
		Sub Net Address	0-15	
		Universe Address	0-15	
		sACN Universe Address	1-63999	
		DHCP	OFF (Default) ON	
Manual Control	Channel control	1.Pan ***		
	Reset	PanTilt		
Service	Calibration	1.Pan ***		
		2.Tilt ***		
	Factory Reset	NO / YES	Password: 1111	
	Reset Timers	1.Total Power Time	NO / YES	
		1.Power Time	NO / YES	
	Developer			
Language	Firmware update			
Language	EN/CH			
Test	Test All			
Rotate Display				

4.2.Address Setting

Enter MENU, select the DMX setting function, select the address code setting, press the OK button to confirm, the current DMX address will be displayed on the display. Use the up/down buttons to select addresses 001~512, and press the OK button to save. Press the OK button to return to the previous menu.

Please refer to the following diagram to address your DMX512 channel for the first 4 units.

Channel mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
8 CH	1	9	17	25

4.3.DMX 512 Configuration

8 Channel	DMX	Function	Note
1	0-255	Pan	Angle: 0-540°
2	0-255	Pan Fine	Maximal Speed: 2.455
3	0-255	TILT	Angle: 0-270°
4	0-255	TILT Fine	Maximal Speed: 1.75
5	0-255	TILT Rotation	57->0.4 RPM 0.4->57 RPM
	0	No Function	
	1-127	Fast-Slow Rotation(CW)	
	128	Stop	
	129-255	Slow-Fast Rotation(CCW)	
6	0-9	Pan shake	6->0.1s
	10-255	No Function	
7	0-9	Tilt shake	6->0.1s
	10-255	No Function	
8		Function	
	0-29	Unused Range	
	30-50	Reset	
	51-55	XY Normal mode	
	56-60	XY Fast mode	
	61-65	XY Precise mode	
	66-79	Unused Range	
	80-84	Dis.Blink off	
	85-89	Dis.Blink on	
	90-129	No function	
	130-139	Pan invert on	
	140-149	Pan invert off	
	150-159	Tilt invert on	
	160-169	Tilt invert off	
	170-255	Unused Range	

6.Troubleshooting

The following are common faults of lamps and corresponding solutions. Faults that cannot be repaired by yourself should be handled by professionally qualified personnel. Disconnect the power supply to the lamp during maintenance!

- The lamp cannot be started
 - Check whether the power supply parameters match the lamps.
 - Check whether the fuse at the light fixture's power input is blown.
 - Check that the lamp has poor contact or falls off due to extrusion deformation, vibration of internal parts, moisture, etc. during long-distance transportation.
 - Check whether the internal wires and connectors of the lamp are desoldered or loose.
 - Check whether the electrical components of the lamp (such as power switch, transformer, ballast, capacitor, varistor, filter, power supply PCB board, motor control PCB board, etc.) are loose, short-circuited, burned out, etc.
- Some functions of the lamp cannot accept controller instructions
 - Check whether the control device sends correct action instructions for these functions.
 - Check whether the mechanical parts corresponding to these functions are loose or deformed.
 - Check whether the motor sockets corresponding to these functions are loose or the corresponding driver chips are burned out.
 - Check whether the motor wires corresponding to these functions are broken at the corners.
 - Check whether the motors corresponding to these functions are damaged.
- During operation, the x or Y direction of the lamp does not move normally
 - Click the previous step to check one by one.
 - Check whether the corresponding drive belts in the X and Y directions of the lamp are detached or broken.
 - Check whether the data feedback receiver (photoelectric sensor) corresponding to the X and Y directions in the lamp is damaged.
 - Restart the computer and reset it once.

7. Fixture Cleaning

It is absolutely essential that the fixture is kept clean to ensure the maximum light-output and allow the fixture to function reliably throughout its life. The fixture must be cleaned regularly to avoid dust, dirt and smoke-fluid residues building up on or within the fixture. The cleaning frequency depends on the application environment. Clean the fixture immediately if the dust enters it to avoid damage to the optical lens due to excessive dust.

- A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should solvents be used.
- Always dry the parts carefully.
- Clean the external optical lens at least every 20 days and the internal optical lens every 30 days.



CAUTION ! ! !

Disconnect from mains before starting maintenance operation.

8. Duty exonerative and copyright protection

- Light source belongs to consumption products, not within the scope of warranty.
- The manufacturer shall not bear any responsibility for any damage caused by failure to operate in accordance with this instruction.
- The manufacturer reserves the right of final interpretation for all information in this manual.
For any questions, please refer to the official website.
- All the information in this manual shall not be copied without permission.
- The data contained in this statement are subject to change in the future without prior notice.