

# **SEAL**User Manual

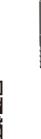
Web:www.lightsky.com.cn

Tel: 0086-20-61828288

Fax:0086-20-61828188 Pc:510820

E-mail: flydragon@lightsky.com.cn

Address: No. 4, Jingneng Road 1, Huadu District, Guangzhou, China







#### **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	13
4.3. DMX 512 Configuration	14
5. Electrical Connection Diagram	16
6. Troubleshooting	17
7. Fixture Cleaning	18
8. Duty exonerative and copyright protectio	18

#### 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 the Use 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

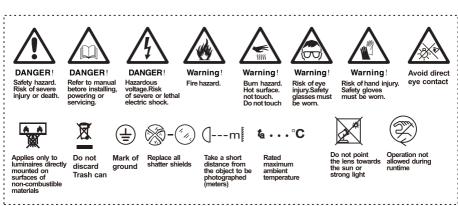


Please read the instruction carefully which includes important information about the installation, usage and maintenance.

#### WARNING

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:



# 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.
- Use safety chain when fixing the unit. Handle the unit by carrying its base instead of head only.

- The unit must be installed in a location with adequate ventilation, at least 50cm 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 1m.
- Make sure the power cord is not crimped or damaged; replace it immediately if damaged.
- Unit's surface temperature may reach up to 65<sup>°</sup>C. Do not touch the housing bare-handedduring 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 meters.
- 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

- Light source: 2×230W WRA COB

Beam angle: 53 °Spot angle: 83.5 °

Color rendering index: Ra≥95Color temperature: 2648K ± 250K

- Luminous flux: 23690 Lm

- Illuminance: 1334 lux @ 5 meters

- Average lifespan of light source: 20000H

#### **EFFECT**

- Dimming: Electronic dimming, providing four dimming curves

- Dimming effect: Simulate the response of traditional tungsten filament lamps

- Strobe: 1-30Hz electronic strobe and random strobe

#### CONTROL AND PROGRAMMING

- Control channels: Standard modes 1CH . 2CH . 8CH . 14CH , See channel table for details

Control protocols: Standard DMX512 protocol, RDM protocol ART-NET protocol(Optional)

- Data connection: Three core or five core signal input/output

- Display: LCD screen

#### SOFTWARE

- Upgrade software through DMX signal interface

- Intelligent temperature control ensures LED lifespan

#### POWER SUPPLY AND POWER

- Rated voltage: AC 100-240V 50/60Hz

- Maximum power: 505W

- Power factor: 0.97

- Maximum current of the lamp: 5.1A/100V 2.29A/220V

#### SIZE AND WEIGHT

- Product size:442 x 322 x 248mm

- Net weight: 11.3 kg

- Carton packaging (default): 510×320×360mm

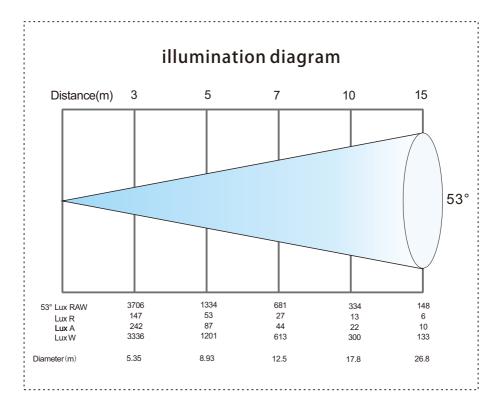
- Gross weight:14.1

#### **OTHER**

- Protection level: IP66
- Working environment: -20°C~45°C
- Maximum surface temperature of lamp body: 65 °C

#### **APPROVALS**

- The product implementation standard: GB/T 7000.1-2023  $\,$  GB/T 7000.217-2023
- 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







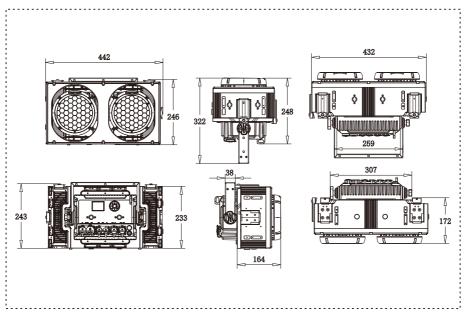






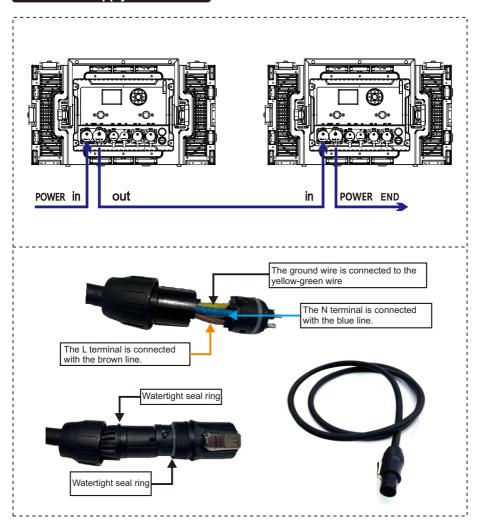


# Size-Fig.2 (Unit:mm)



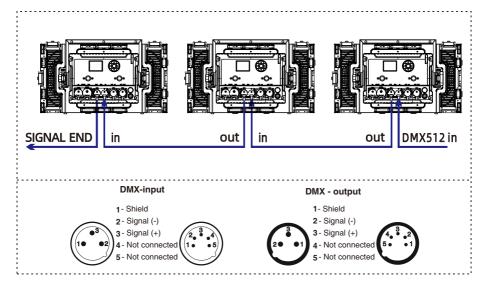
# 3.Connection and control

## 3.1. Power supply connection



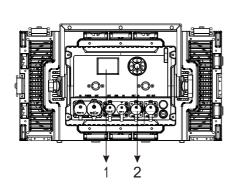
- The bus connecting the power supply must be installed by a qualified professional technician.
- After completing all the above operations and ensuring that it is installed, you can power on the lamp to operate.

## 3.2.DMX 512 Connection



- 1. At last unit, the DMX cable has to be terminated with a terminator. Solder a 120  $\Omega$  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



- 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

When the lamp is powered on and the standby interface is displayed on the screen, press the OK key to enter the preset menu interface, and use the up/down/left/right keys to select the menu. The main functions are as follows:

Main menu	I menu	II menu	III menu	Note
	1.Address	1-512		
DMX Address	2.Channel	1CH/2CH/8CH(Default)/14CH		
	2.54-4-	Black		
	3.State	Hold		
		DMX		
	4.InputMode	ARTNET		This menu can only be displayed when the artnet module is connected.
		SACN		and artifet module is connected.
		1.Total Power Time ***		
	1 Ti	2.Power Time ***		
	1.Time	3.Total Light Time ***		
		4.Light time ***		
		1.Head1 Temp xx°C		
	2.Temperature	2.Head2 Temp xx℃		
		3.Base Temp xx℃		
		1.Temp records of Head1	1.Temp Max. xx°C Clear/Retain 2.Temp Min. xx°C Clear/Retain	
	3.Historical Temp records		1.Temp Max. xx°C Clear/Retain 2.Temp Min. xx°C Clear/Retain	
		3.Temp records of Base	1.Temp Max. xx°C Clear/Retain 2.Temp Min. xx°C Clear/Retain	
		1.Lamp1FanVol ***	2.1emp Min. xx C Clear/Retain	
		2.Lamp1FanSp ***		
Information	4.Fan Info.	3.Lamp2FanVol ***		
		4.Lamp2FanSp ***		
		5.BaseFanVol ***		
		6.BaseFanSp ***		
		1.MCU(LED) ***		
		2.Lamp1Fan ***		
		3.Lamp2Fan ***		
	5.Fixture state	4.BaseFan ***		
		5.Head1 Temp ***		
		6.Head2 Temp ***		
		7.Base Temp ***		
	6.RDM UID	3888: xxxxxxxx		
	7.DMX Live	DMX		
		1.Display Ver. Vxxx		
	8.Software	2.LED Ver. Vxxx		
		3.ETH Ver. Vxxx		
			1800Hz	
			3600Hz	Default
		1.Led Hz	7200Hz	
			25000Hz	
			Linear	Default
		2.Dimmer Curve		
	1.Dimmer&Fan Setting			
	1.Dimmer&Fan Setting	2.Dimmer Curve	Square I-Square Scurve	

Main menu	l menu	II menu	III menu	Note	
			Normal	Default	
Personality		3 Di Cd	Smooth 1		
		3.Dimmer Speed	Smooth 2		
			Smooth 3		
			HighOutput		
		4.Fan Mode	Standard	Default	
			Silent		
	2.Lamp No. Setting	1.Lamp No. Invert	OFF / ON	Default OFF	
		1.Language	EN /ZH		
	201 1 6 11	2.Disp. Backlight	OFF / ON		
	3.Display Setting	3.Disp. Direction	Forward / Reverse		
		4.Dis.Blink	OFF / ON		
		IP Address	*** *** ***		
		Mask Address	***.***.***		
		Net Address	0-127	This menu can only be displayed	
	4.Artnet Setting	Sub Net Address	0-15	when the artnet module is	
		Universe Address	0-15	connected.	
		sACN Universe Address	1-63999		
		DHCP	OFF / ON		
Manual Control	1.Channel control	1.Dimmer ***			
		1.L.Warm1 ***			
		2.L.Warm2 ***			
		3.L.Amber ***			
		4.L.Red ***			
	1.Calibrate	5.R.Warm1 ***			
		6.R.Warm2 ***			
		7.R.Amber ***			
Service		8.R.Red ***			
	2.Factory Reset	NO / YES		Password: 1111	
		1.Total Power Time	NO / YES		
		2.Total Light Time	NO / YES		
	3.Reset Timers	1.Power Time	NO / YES		
		2.Light Time	NO / YES		
	4.Developer	Lieight mile	110 / 123		
	5.Firmware update				
Language	EN /ZH				
	1.Test Lamp1	Running:Step*/*			
Test	2.Test Lamp2	Running:Step*/*			
	3.Test All	Running:Step*/*			
Display		J			

# 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.

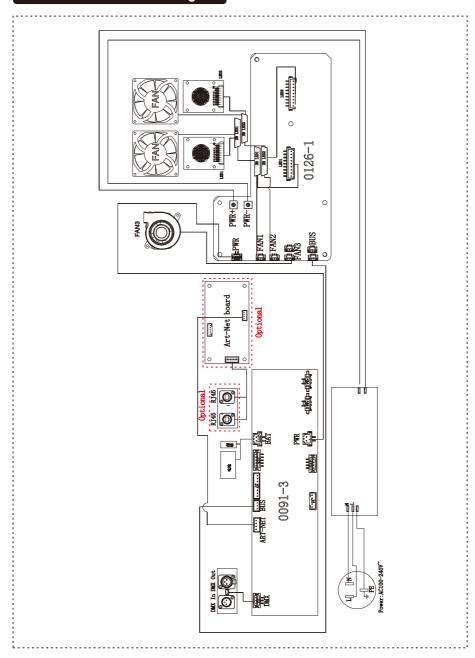
Channel mode	Unit 1 Address	Unit <b>2</b> Address	Unit 3 Address	Unit <b>4</b> Address
1CH	1	2	3	4
2CH	1	3	5	7
8CH	1	9	17	25
14CH	1	15	29	43

# 4.3.DMX 512 Configuration

Channel	Channel	Channel	Channel			
				DMX VALUE	Function	NOTE
1CH	2CH	8CH	14CH	0.255	U-l	
1	/	1	/	0-255	Halogen	
/	2	-	/	0-255	Halogen1	
/	/	/	/	0-255	Halogen2	
/		2	1	0-255	Dimmer	
1	/	2	2	0-255	DimmerFine	
				0.0	Strobe	
				0-9	Strobe close	
				10-49	Slow closing, Fast opening, slow → Fast	
1	1	3	3	50-89	Fast closing, Slow opening, Slow → Fast	
				90-119	Slow closing, Slow open, Slow → Fast	
				120-179	Random strobe,Slow → Fast	1-25HZ
				180-249	Synchronous strobe,Slow → Fast	1-25HZ
				250-255	Strobe open	
/	1	4	1	0-255	Warm	
1	/	5	1	0-255	Amber	
/	1	6	1	0-255	Red	
					Halogen	
1	1	7	1	0-4	No function	
				5-255	Open	
1	1	1	4	0-255	L.Dimmer	
1	1	1	5	0-255	L.Warm	
1	1	1	6	0-255	L.Amber	
1	1	1	7	0-255	L.Red	
					L.Halogen	
1	1	1	8	0-4	No function	
				5-255	Open	
1	1	1	9	0-255	R.Dimmer	
1	1	1	10	0-255	R.Warm	
1	1	1	11	0-255	R.Amber	
1	1	1	12	0-255	R.Red	
					R.Halogen	
1	1	1	13	0-4	No function	
				5-255	Open	
					Function(Hold 3s)	
				0-10	No function	
				11-20	Fan HighOutput mode	
				21-30	Fan Standard mode	Default
				31-40	Fan Silent mode	
				41-50	No function	
				51-60	Dis.Blink off	
				61-70	Dis.Blink on	Default
		l	l	0.70		

Channel	Channel	Channel	Channel			
1CH	2CH	8СН	14CH	DMX VALUE	Function	NOTE
				71-80	No function	
				81-90	Lamp No. invert off	Default
				91-100	Lamp No. invert on	
				101-110	No function	
				111-120	LED frequency 1.8kHz	
1	1	8	14	121-130	LED frequency 3.6kHz	Default
				131-140	LED frequency 7.2kHz	
				141-150	LED frequency 25kHz	
				151-160	No function	
				161-170	Dimmer curve linear	
				171-180	Dimmer curve square	Default
				181-190	Dimmer curve inv-square	
				191-200	Dimmer curve "S"	
				201-210	No function	
				211-220	Dimmer Smooth 0 /Fast	Default
				221-230	Dimmer Smooth 1 /Medium	
				231-240	Dimmer Smooth 2 /slow	
				241-250	Dimmer Smooth 3 /Halogen(So slow)	
				251-255	No function	

# 5.Electrical Connection Diagram



## 6.Troubleshooting

The following are common faults of lighting fixtures and corresponding solutions. Malfunctions that cannot be repaired by oneself should be handled by personnel with professional qualifications. Before maintaining the lamp, please disconnect the power supply first.

#### ■ LED off:

- Please check if install the suitable voltage
- Please check whether the led will reach the end of their life can explode; please replace a same description led.
- Please check if the power supply is enough.
- Please check whether the DMX 512 controller pass the "turn on" order.

## ■ The light couldn't accept the control order:

- Please check the start code address and the function option are correct.
- Please check whether the communicate control cable is on good connection or the cable is too long or interrupt.
- Please check the control system is not valid, check the signal amplifier of chain connected is valid.
- Please check whether the communicate cable is too long or the other equipment is mutually conjugate.
- Please arrange the wire well, shorter the signal cable, put the high voltage cable and low voltage cable separately.
- Add the signal amplify isolator.
- Signal cable is used the excellent screening doublet (Resistance 75 Ω)
- The end of the light end and the end resistance.

## ■ The light can't move:

- Please check if the power supply is suitable for the light voltage data.
- Please check the light if they are deformation, inside parts is broken, become wet etc will lead the loose contact.
- Please check the if the iniside lead wire and the connector is loose.
- Please check the electric parts(such as the transformer, PCB board, contrller) is short-circuit or burn down.

## 7. Fixture Cleaning

It is absolutely essential that the fixture is kept clean to ensure the maximum lightoutput 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.

- \* Before maintenance and disassembly of lighting fixtures, the power supply must be disconnected and live operation is not allowed.
- \* 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.
- \* You need to wipe the outside of the lens at least once every 20 days.
- \* After the colored paper performance of the lighting fixtures, it is necessary to check whether there are any paper scraps stuck or sucked in at the air inlet and outlet, and clean them thoroughly, otherwise it may damage the fan or cause a fire hazard

## CAUTION ! ! !

Disconnect from mains before starting maintenance operation.

## 8. Duty exonerative and copyright protectio

- \* 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.
- \* All the information in this manual shall be interpreted by the manufacturer.
- \* 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.