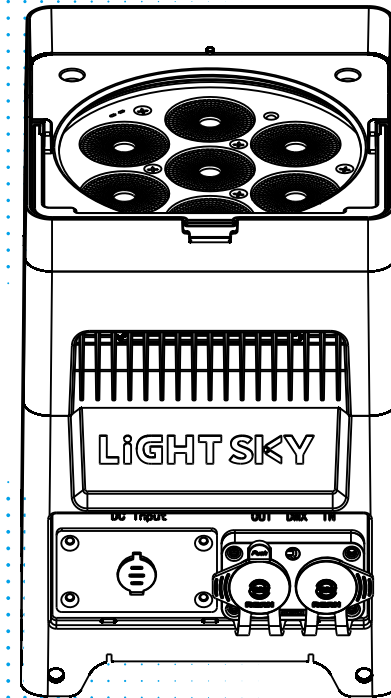


# LIGHT SKY

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## SEA ANGEL-BATT User Manual

Please read the instruction carefully before use

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**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:

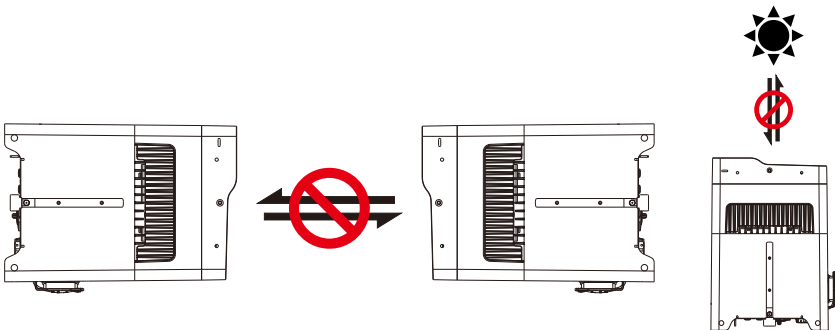
<b>WARNING!</b> Safety hazard. Risk of severe injury or death.	<b>WARNING!</b> Refer to manual before installing, powering or servicing.	<b>WARNING!</b> Hazardous voltage. Risk of severe or lethal electric shock.	<b>WARNING!</b> Fire hazard.	<b>WARNING!</b> Burn hazard. Hot surface, not touch. Do not touch	<b>WARNING!</b> Risk of eye injury. Safety glasses must be worn.	<b>WARNING!</b> Risk of hand injury. Safety gloves must be worn.	<b>WARNING!</b> Avoid direct eye contact
<b>DANGER!</b> Applies only to luminaires directly mounted on surfaces of non-combustible materials	<b>DANGER!</b> Do not discard Trash can	<b>DANGER!</b> Mark of ground	<b>DANGER!</b> Replace all shatter shields	<b>DANGER!</b> Take a short distance from the object to be photographed (meters)	<b>DANGER!</b> Rated maximum ambient temperature	<b>DANGER!</b> Do not point the lens towards the sun or strong light	<b>DANGER!</b> 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 the 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 are 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  $T_a$ :  $-10^{\circ}\text{C}$ . Maximum ambient temperature  $T_a$ :  $40^{\circ}\text{C}$ .
- 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 1 m.
- Make sure the power cord is not crimped or damaged; replace it immediately if damaged.
- Unit's surface temperature may reach up to  $70^{\circ}\text{C}$ . 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 distance between the luminaire and the irradiated surface shall be greater than 3 meters.
- Do not shine light directly into another fixture's lens. Intense beam can damage internal components.
- Direct sunlight or any other strong light beam penetrating the front lens of the luminaire can cause severe internal damage. During unpacking, installation, operation, and extended idle periods outdoors, it is prohibited to expose the front lens of the luminaire to beams of direct sunlight or any other strong light source from any angle.



- 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: 7 × 18W RGBALC LED
- 10 ° lens: beam angle: 14 °, spot angle: 23 °
- 10 ° lens: Illumination: 1023 lx @ 5m
- 10 ° lens: luminous flux: 1962 lm
  
- 25 ° lens: beam angle: 22 °, spot angle: 41 °
- 25 ° lens: Illumination: 384 lx @ 5m
- 25 ° lens: luminous flux: 1905 lm
  
- Lens angle: 10 ° (standard), optional 25 °, 40 °, 15 ° \* 40 °
- Diffuser: LSD20/LSD30/LSD40/LSD601
- Color temperature: 1800K-10000K
- Color rendering index: Ra can reach 95
- Light source lifespan: 20000 hours
- Adopting iCC™ color calibration system

### EFFECT

- Color mixing: RGBALC color mixing system, uniform color mixing without flicker.
- Dimming: 16Bit, 0-100% linear dimming, four dimming curves to choose from, LED refresh rate 1800Hz-25KHz.
- A variety of preset color temperature effects are available for direct use in different scenarios: 1800K-10000 linear color temperature adjustment, and channel control adjusts the saturation of color temperature after selecting any color temperature.
- Preset HSI function: Faster and more accurate linear tone color transition, linear saturation adjustment.
- Preset a variety of color effects: preset 46 foreign color cards and 16 local color cards.
- Strobe: 1-25 times/second.

### CONTROL AND PROGRAMMING

- Channels: 13CH, 5CH, see channel table for details
- Protocol: Standard DMX512 protocol, RDM protocol, wireless, remote control
- Data connection: Three core or five core signal input/output
- Display: OLED LCD screen

## **SOFTWARE**

- Upgrade software through DMX signal interface.
- Intelligent temperature control ensures LED lifespan.

## **POWER AND WATTAGE**

- Charger Input Voltage: AC 100-240V 50/60Hz
- Charger output voltage: DC 33.6V
- Maximum power: 70W
- Special note:
  - ① Actual power consumption of LED beads: 60W.
  - ② The maximum power consumption of the lamp is 70W when charged alone or when the bulb lights up while charging.
- Power factor: 0.97
- Maximum current of the lamp: 0.32A/220V; 0.7A/100V

## **BATTERY**

- Charging environment: 5 °C~ +35 °C
- Special note:
  - ① Battery protection below 5 °C cannot be charged and can only be used.
  - ② The lamp needs to be turned off to fully charge the battery, and charging during use may result in insufficient charging due to current occupation.
- Important Notes:
  - ① The luminaire should be stored in a cool, dry environment, ideally between 0°C and 30°C. For long-term storage, it is recommended to perform a charge-discharge cycle every 3 to 6 months, maintaining the battery at a partial charge level of 60%-80%.
  - ② Recharge the unit promptly after each use. Always use the dedicated charger for charging.

## **SIZE AND WEIGHT**

- Product size: 158 × 141 × 215mm
- N.W.: 4.3 kg
- Carton packaging (single unit - default): 340 × 230 × 345mm
- G.W.: 5.6kg

## **OTHER**

- Protection level: Ip66
- Working environment: -10 °C~40 °C
- Maximum surface temperature of lamp body: 70 °C

## **Optional accessories:**

- Light shield: 1 option available
- Atomizing film: 3 options (to be used with atomizing components).
- Spherical diffusion hood: 1 set (to be used with atomization components).

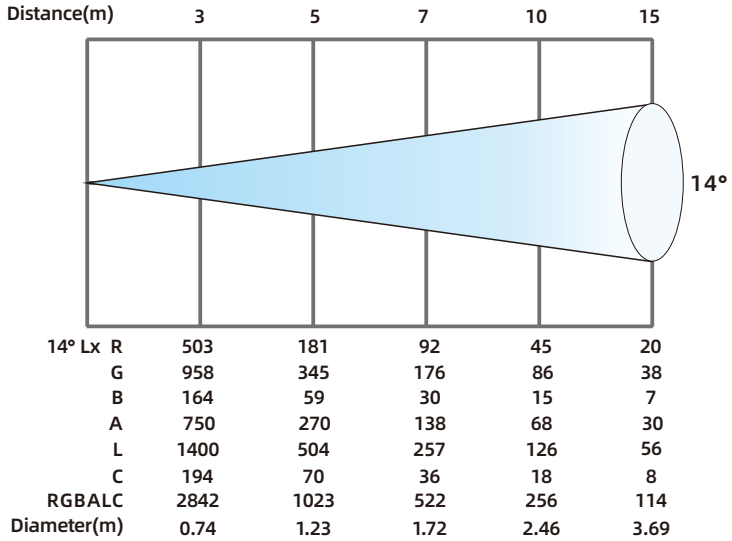
**(Note: Light shields, atomizing sheets, and spherical diffusion covers are only allowed to be installed and used when the lamp is upright. The use of the above accessories is prohibited when the lamp is suspended, side hung, or slanted.)**

- Suspension components: 1 light hook (suitable for pipes with a diameter of 38-52mm)& 1 set of folding bracket components&1 safety rope.
- Decorative shell: 3 colors to choose from.
- Aviation box (can charge lamps)
- Flycase Size: 700 × 550 × 465 mm
- G.W.: 57.8kg (6 units)

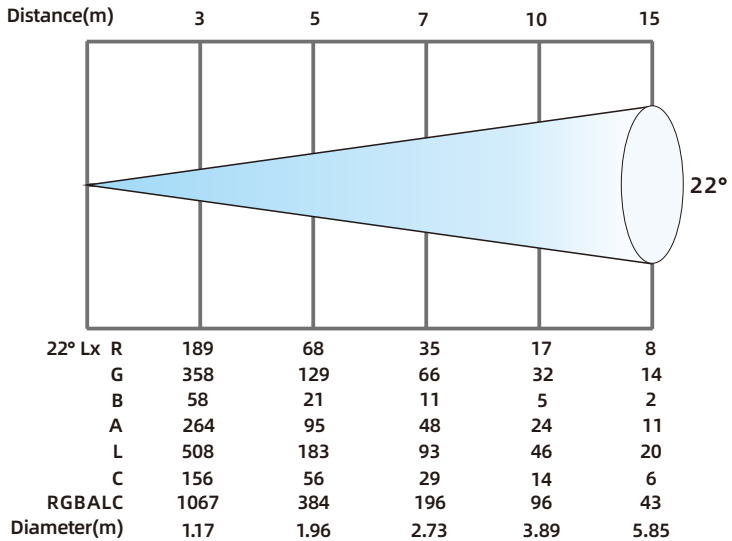
## **APPROVALS**

- 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

### illumination diagram

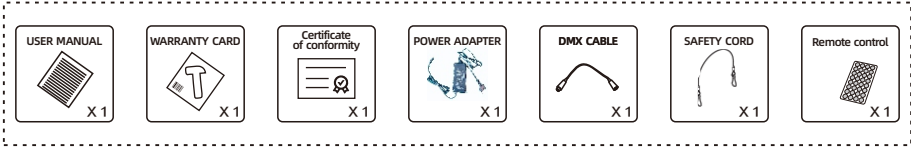


### illumination diagram

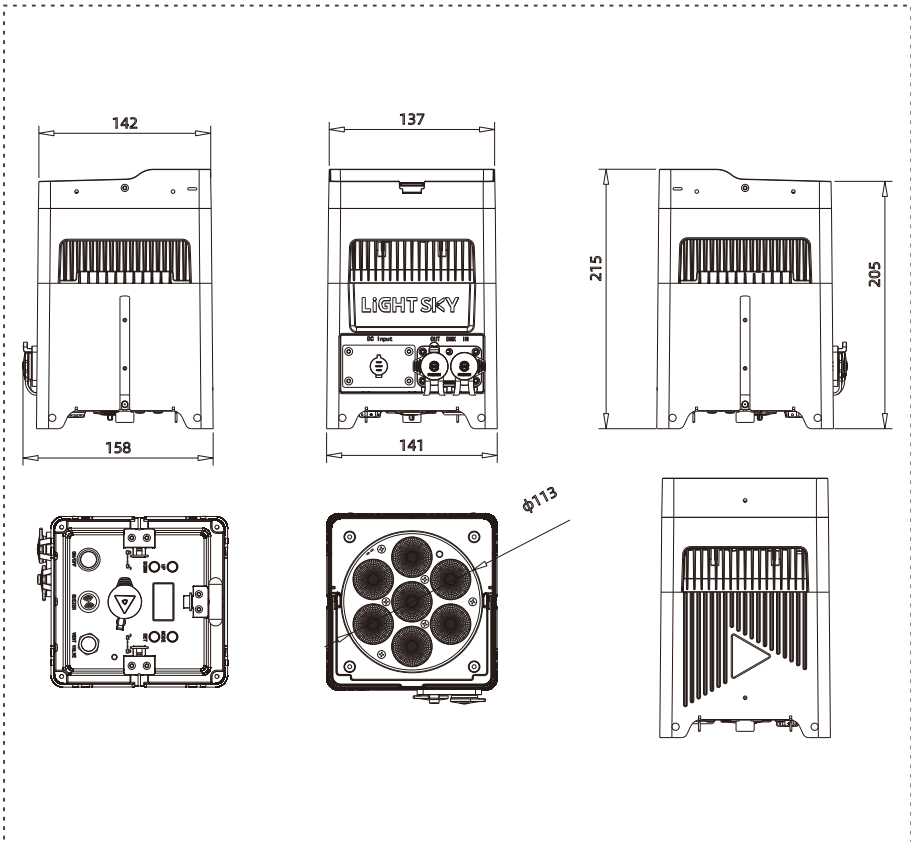


## 2.1.Attachment And Size

Attachment contents-Fig.1

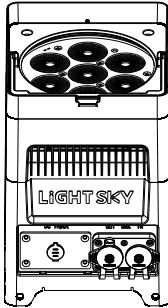


Size-Fig.2 (Unit:mm)



### 3.Connection and control

#### 3.1.Power supply connection

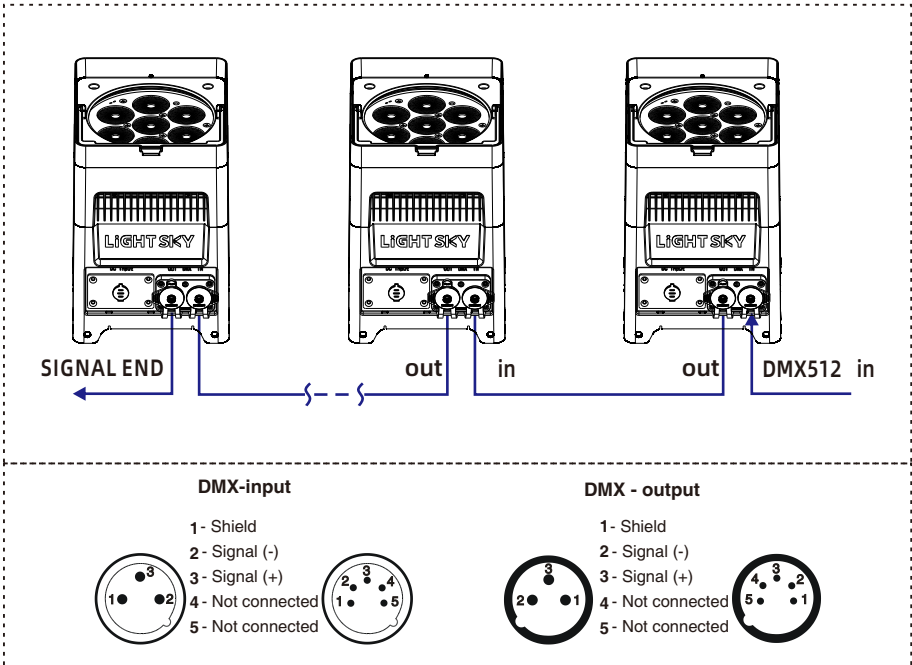


**Warning:**

The pure battery version has no external power input port. It is powered by a built-in lithium-ion battery. Do not charge the device with a non-original charger to avoid damaging the battery.

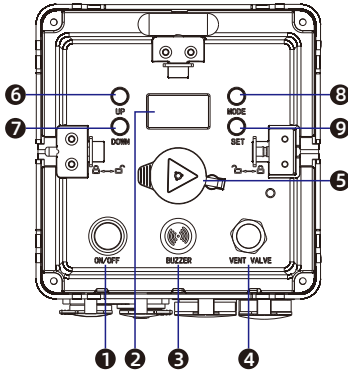
- The bus connecting the power supply must be installed by a qualified professional technician.
- After completing all the above operations and ensuring that it is installed, you can power on the lamp to operate.

### 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



- 1、 Power On/Off Button.
- 2、 Display Screen: Shows various function menus.
- 3、 Buzzer
- 4、 Exhaust Valve.
- 5、 Magnetic Charging Port: Designed specifically for the matching original charging flight case.
- 6、 Up Button.
- 7、 Down Button.
- 8、 Mode Button.
- 9、 Confirm Button.

**Remote Control Function Guide**

Schematic Diagram	NO.	Button Silkscreen	Function
	1#	ON/OFF	on
	2#	WARNING	Warning: Turn on/off
	3#	AUTO	Activate color library 5-23/12 #: automatic on/off
	4#	SPEED	0.20-2s: 1-50. Enable 3 # 12#
	5-23#	COLOR	See color library
	12#	RGBLAC	LED beads with 6 primary colors: 1-6
	16#	FADE	Dimming speed: 1-4. Enable 3 # 12#
	20#	DIM+	DIM+ :1 -100.
	24#	DIM-	DIM- :1 -100.
	25#	Strobe1	Close ->Slow Close Fast Open (from slow to fast) Note: A total of 21 times, the 21st time is off
	26#	Strobe2	Close ->Quick Close Slow Open (from slow to fast) Note: A total of 21 times, the 21st time is off
	27#	Strobe3	Off ->Random flicker (from slow to fast) Note: A total of 21 times, the 21st time is off
	28#	Strobe4	Off ->Sync strobe (from slow to fast) Note: A total of 21 times, the 21st time is off
	29-32#	2H, 4H, 6H, TIMER OFF	2, 4, 6 TIMER OFF

## 4.How To Set The Unit

### 4.1.Main Function

The main functions are as follows:

Main menu	I menu	II menu	III menu
1.DMX Setting	1.Address	1-512	
	2.Channel	13CH (Default)/5CH	
	3.State	Black(Default) Hold	
	4.InputMode	DMX(Default) WDMX	
	5.DMXAddressLock	OFF / ON(Default)	
	6.WDMX Reset	OFF / ON	
2.Information	1.Running time	1.Total Power T. ***	
		2.Power Time ***	
		3.Total Light T. ***	
		4.Light time ***	
		5.TIMERTime *:**	
	2.Temperature	1.Head Temp xx°C 2.Bat. Temp xx°C	
	3.Battery Info.	1.Bat.Voltage *** 2.Bat.Level ***	
		3.Status:Charging 3.Status:C.Finished 3.Status:Working 3.Status:Standby 3.Status:Low Vol. 3.Status:High Vol.	
		1.Head Temp *** 2.Bat. Temp *** 3.Battery *** 4.Waring ***	
	4.Fixture Status	3888: xxxxxxxx	
6.DMX Live	DMX(13CH/5CH)		
7.Software	1.Display Ver. Vxxx		
3.Personality	1.Dimmer Setting	1.Dim.Freq.	1800Hz 3600Hz 7200Hz 25000Hz(Default)
		2.Dim.Curve	Linear
			Square (Default)
			1-Square 5-Curve
		3.Dim.Speed	Normal (Default)
			Fast 1
	Fast 2 Fast 3		
	2.Display Setting	1.Language	EN (Default)/ZH
		2.Dis.Back.	OFF(Default) /ON
		3.Dis.Dir.	Forward (Default)/ Reverse / Auto
3.Other Setting	4.Dis.Blink	OFF / ON (Default)	
	1.iCC	OFF / ON (Default)	
2.TIMERMode	2.TIMERMode	OFF(Default)/2H /4H /6H	
4.Alarm Setting	1.Alarm	Stop(Default) /Open	
	2.Sensitivity	1-5(Default 1)	
5.Manual	1.Channel	1.Dimmer ***	
	2.Test	1.Test1	Running:Step */*
		2.Test2	Running:Step */*
		3.Test3	Running:Step */*

Main menu	I menu	II menu	III menu
6.Service	1.Calibrate	1.Red ***	
		2.Green ***	
		3.Blue ***	
		4.Amber ***	
		5.Lime ***	
		6.Cyan ***	
	2.Factory Reset	NO / YES	Password: 1111
	3.Reset Timers	1.Total Power T.	NO / YES
		2.Total Light T.	NO / YES
		1.Power Time	NO / YES
		2.Light Time	NO / YES
	4.Developer	1.Angle Info.	1.Base Angle X:***
			2.Base Angle Y:***
			3.Base Angle Z:***
		2.Logo Set	
	3.Fixture T.		
	5.Firmware update		

## 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
13 CH	1	14	27	40
5 CH	1	6	11	16

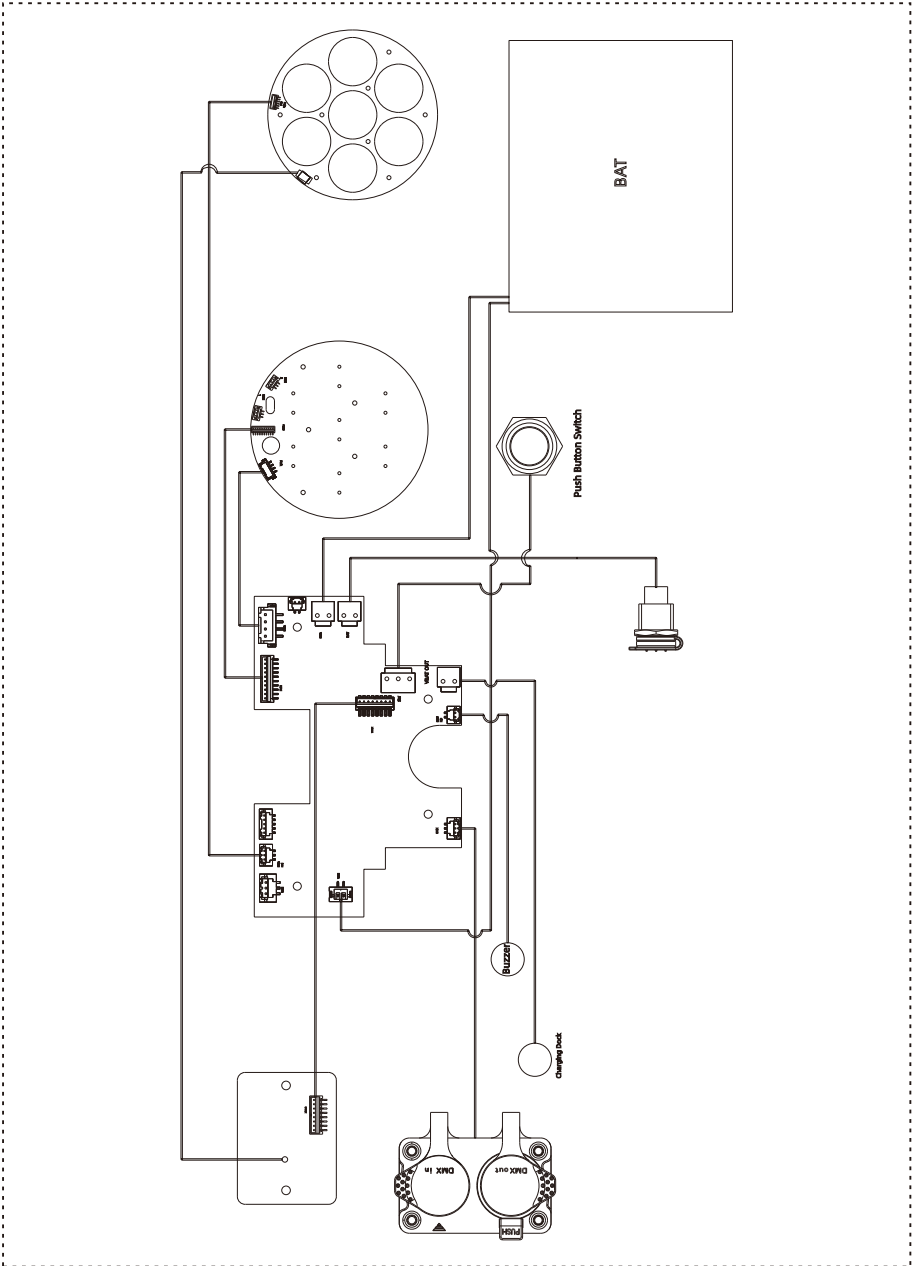
## 4.3.DMX 512 Configuration

13 CHANNEL	5 CHANNEL	DMX	Function	NOTE
1	/	0-255	Dimmer	
2	/	0-255	Dimmer Fine	
/	1	0-255	Hue	
/	2	0-255	Saturation	
/	3	0-255	Identify	
3	4		Strobe	
		0-9	Strobe open	
		10-49	Slow closing , Fast opening , slow → fast	
		50-89	Fast closing , Slow opening , Slow → Fast	
		90-119	Slow closing , Slow open , Slow → Fast	
		120-179	Random strobe,Slow → Fast	
		180-249	Synchronous strobe,slow → fast	
		250-255	Strobe open	
4	/		Macro	
		0-2	No Function	
		3-35	CCT	
			Foreign Color	
		36	Filter 4 (Medium Bastard Amber)	
		37	Filter 19 (Fire)	
		38	Filter 58 (Lavender)	
		39	Filter 68 (Sky Blue)	
		40	Filter 71 (Tokyo Blue)	
		41	Filter 79 (Just Blue)	
		42	Filter 90 (Dark Yellow Green)	
		43	Filter 103 (Straw)	
		44	Filter 111 (Dark Pink)	
		45	Filter 115 (Peacock Blue)	
		46	Filter 116 (Medium Blue-Green)	
		47	Filter 117 (Steel Blue)	
		48	Filter 118 (Light Blue)	
		49	Filter 119 (Dark Blue)	
		50	Filter 128 (Bright Pink)	
		51	Filter 131 (Marine Blue)	
		52	Filter 132 (Medium Blue)	
		53	Filter 137 (Special Lavender)	
		54	Filter 138 (Pale Green)	
		55	Filter 139 (Primary Green)	
		56	Filter 141 (Bright Blue)	
		57	Filter 148 (Bright Rose)	
		58	Filter 152 (Pale Gold)	
		59	Filter 154 (Pale Rose)	
		60	Filter 157 (Pink)	
		61	Filter 162 (Bastard Amber)	
		62	Filter 165 (Daylight Blue)	
63	Filter 169 (Lilac Tint)			
64	Filter 170 (Deep Lavender)			
65	Filter 172 (Lagoon Blue)			
66	Filter 180 (Dark Lavender)			
67	Filter 181 (Congo Blue)			
68	Filter 197 (Alice Blue)			
69	Filter 201 (Full C.T. Blue)			
70	Filter 202 (Half C.T. Blue)			
71	Filter 203 (Quarter C.T. Blue)			
72	Filter 205 (Half C.T. Orange)			
73	Filter 206 (Quarter C.T. Orange)			
74	Filter 247 (Filter Minus Green)			
75	Filter 248 (Half Minus Green)			

13 CHANNEL	5 CHANNEL	DMX	Function	NOTE
		76	Filter 281 (Three Quarter C.T. Blue)	
		77	Filter 285 (Three Quarter C.T. Orange)	
		78	Filter 352 (Glacier Blue)	
		79	Filter 353 (Lighter Blue)	
		80	Filter 715 (Cabana Blue)	
		81	Filter 793 (Vanity Fair)	
			Local Color	
		82	120 Begonia Red	
		83	212 Light Wheat Yellow	
		84	308 Light Yellow	
		85	311 Moon White	
		86	410 Pale Cyan	
		87	508 Grass Green	
		88	517 Cold Blue	
		89	608 Light Green	
		90	715 Cyan Cloud	
		91	803 Dark lavender	
		92	808 Dusk Purple	
		93	812 Light Wind Chime	
		94	909 Plum Sauce Purple	
		95	916 Kao Mauve	
		96	1013 Wild Rose Pink	
		97	1022 Sakura Pink	
		98-192	Reserved	
			Color Effect	
		193-202	Color wheel change speed from fast to slow	
		203-212	Color wheel change speed from fast to slow	
		213-222	Color wheel change speed from fast to slow	
		223-232	Color wheel change speed from fast to slow	
		233-242	Rainbow color speed from slow to fast	
		243-252	Rainbow color speed from slow to fast	
		253-255	Rainbow color speed from slow to fast	
			CCT 10000K-1800K	
		0-2	No function	
		3	10000K	
		18	9500K	
		34	9000K	
		49	8500K	
		58	8200K	
		64	8000K	
		71	7800K	
		80	7500K	
		89	7200K	
		95	7000K	
		101	6800K	
		111	6500K	
		120	6200K	
		126	6000K	
		132	5800K	
		138	5600K	
		144	5400K	
		151	5200K	
		157	5000K	
		163	4800K	
		172	4500K	
		181	4200K	
		187	4000K	
5	/			

13 CHANNEL	5 CHANNEL	DMX	Function	NOTE
		193	3800K	
		200	3600K	
		206	3400K	
		212	3200K	
		218	3000K	
		227	2700K	
		233	2500K	
		242	2200K	
		249	2000K	
		255	1800K	
6	/		Green correction	
		0	Uncorrected white	
		1-127	Minus green --> uncorrected white	
		128	Uncorrected white (128=default)	
		129-254	Uncorrected white --> Plus green	
		255	Uncorrected white	
7	/	0-255	Red	
8	/	0-255	Green	
9	/	0-255	Blue	
10	/	0-255	Amber	
11	/	0-255	Limo	
12	/	0-255	Cyan	
13	5	0-10	No function	
		11-20	Close TIMER (Default)	
		21-30	TIMER 2H	
		31-40	TIMER 4H	
		41-50	TIMER 6H	
		51-60	Dis.Blink off	
		61-70	Dis.Blink on (Default)	
		71-80	Alarm Stop (Default)	
		81-90	Alarm Open	
		91-100	No function	
		101-110	iCC off	
		111-120	iCC on (Default)	
		121-130	No function	
		131-140	LED frequency 1.8kHz	
		141-150	LED frequency 3.6kHz	
		151-160	LED frequency 7.2kHz	
		161-170	LED frequency 25kHz (Default)	
		171-180	No function	
		181-190	Dimmer curve linear	
		191-200	Dimmer curve square (Default)	
		201-210	Dimmer curve inv-square	
		211-220	Dimmer curve "S"	
		221-230	No function	
		231-235	Normal (Default)	
		236-240	Fast 1	
241-245	Fast 2			
246-250	Fast 3			
251-255	No function			

## 5. Electrical Connection Diagram



## 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 light source is not bright
  - Check that a suitable light source is installed for the luminaire.
  - Check whether the power supply connection of the lamp or the control switch is in poor contact.
  - Check whether the light source has reached the end of its service life or is damaged, and replace it with a high-quality light source of the same specification.
  - Measure whether the power supply is insufficient.
  - Check whether the light source has not cooled down completely due to abnormal operation. Let the lamp cool down for more than 15 minutes to allow the light source to cool down. After returning to the normal start-up range, turn the power on again and it can be used normally.
  - Check whether the DMX512 controller sends a command to turn on the light source.
  - Check whether the light source and trigger circuit are disconnected or defective.
  - Check whether the wiring terminals on the internal trigger are in poor contact and tighten the plug.
  - Check the "Fan Speed and Voltage" in the "Basic Information" menu to see if the speed of FAN1/FAN2/FAN3 is above 500RPN. If it is below 500RPM, the light source will not light up. Replace the fan with the same specification.
  - Check whether the over-temperature protection temperature switch inside the lamp is damaged. Go to the menu "Basic Information" and select "Equipment Temperature" to check - whether the temperature measuring plate shows that the temperature is too high or there is no temperature display.
- The beam appears dim and uneven
  - The light source may have reached the end of its service life and does not emit enough light. Replace it with a light source of the same specification.
  - Check whether there is dust accumulated in the optical part and clean it.
  - Measure whether the power supply is insufficient.
  - Finely adjust the screw device used to change the height of the lamp until the ideal light is achieved. Enter the menu "Service Options" and select "Calibration" to enter color and pattern adjustment, which can be adjusted to the center.
- The projected image is blurry
  - Check whether the DMX512 controller channel value corresponding to the electronic focus system is suitable for the current projection distance.
  - Check whether the mechanical part of the focusing system is stuck, remove the dust and add antifreeze and temperature-resistant lubricating oil.
- The light source of the lamp works intermittently
  - Check whether the fan is running normally or is blocked by dust and paper debris.
  - Check whether the inlet and outlet cooling air vents are blocked by dust.
  - Check whether the lamp has reached the end of its service life.

- Check whether the power supply is insufficient, and whether the power switch and wiring are in poor contact or aging.
- Check whether the over-temperature protection temperature switch inside the lamp is damaged.
- Although it emits light, the lamp does not accept instructions from the controller
- Check whether the digital start address value and function options of the lamp are correct.
- Check whether the connection of the communication control line is correct. The communication line is too long or has been interrupted.
- Check whether the control equipment fails and whether the signal amplifier connected in series fails.
- Check whether the communication line is too long or if other devices interfere with each other.
- Optimize wiring, shorten the length of control signal lines, and route high-voltage and low-voltage lines separately
- Add signal amplifier isolator.
- The signal line is made of high-quality shielded twisted pair (impedance characteristic is  $75\Omega$ ), and the signal terminal resistor is connected at the end of the lamp.
- Check that the circuit board communication IC or CPU is burned out because the bulb performs an abnormal operation when it is not completely cooled, causing the instantaneous ultra-high voltage leakage generated by the trigger, and replace the PCB board.
- 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.

## 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.



### **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.
- 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.