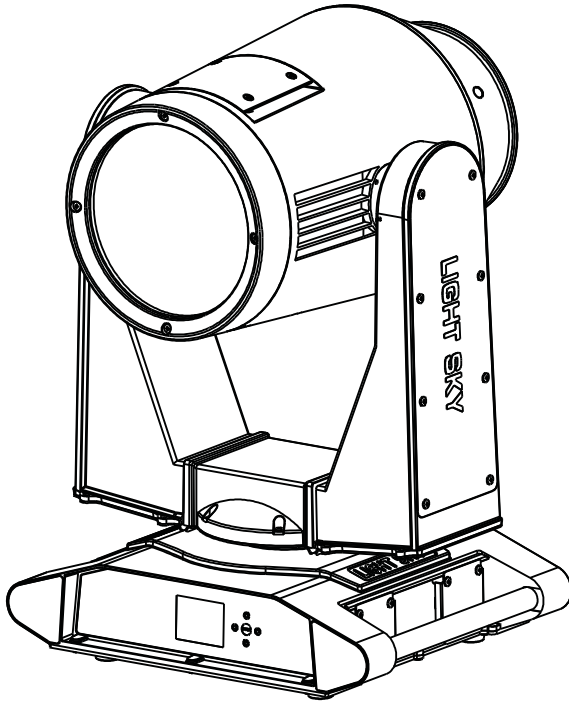


# LIGHT SKY<sup>®</sup>

# Aquabeam



 **USER MANUAL**



Please read these user manual carefully before use

[www.lightsky.com.cn](http://www.lightsky.com.cn)

[www.lightsky.de](http://www.lightsky.de)

— FLY DRAGON LIGHTING EQUIPMENT CO., LTD —

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

◆Please note that this product, as all the others in the rich my company range, has been designed and made with total quality to ensure excellent performance and best meet your expectations and requirements.

◆Carefully read this user manual in its entirety and keep it safe for future reference. It is essential to know the information and comply with the instructions given in this manual to ensure the fitting is installed, used and serviced correctly and safely.

◆My company disclaims all liability for damage to the fitting or to other property or persons deriving from installation, use and maintenance that have not been carried out in conformity with this user manual, which must always accompany the fitting.

◆My company reserves the right to modify the characteristics stated in this user manual at any time and without prior notice.



## SAFETY INFORMATION

### • Installation

Make sure all parts for fixing the projector are in a good state of repair.  
Make sure the point of anchorage is stable before positioning the projector.  
The safety chain must be properly hooked onto the fitting and secured to the framework, so that, if the primary support system fails, the fitting falls as little as possible.  
If the safety chain gets used, it needs to be replaced with a genuine spare.

### • MINIMUM DISTANCE OF ILLUMINATED OBJECTS

The projector needs to be positioned so that the objects hit by the beam of light are at least 12 metres from the lens of the projector.

### • Minimum distance from flammable materials

The projector must be positioned so that any flammable materials are at least 0.2 metres from every point on the surface of the fitting.

### • Mounting surfaces

It is permissible to mount the fitting on normally flammable surfaces.

### • Maximum ambient temperature

Do not operate the fixture if the ambient temperature ( $T_a$ ) exceeds 38°C.

### • Protection against electrical shock

Connection must be made to a power supply system fitted with efficient earthing (Class I appliance according to standard EN 60598-1).

It is, moreover, recommended to protect the supply lines of the projectors from indirect contact and/or shorting to earth by using appropriately sized residual current devices.

### • Connection to mains supply

Connection to the electricity mains must be carried out by a qualified electrical installer.  
Check that the mains frequency and voltage correspond to those for which the projector is designed as given on the electrical data label.

This label also gives the input power to which you need to refer to evaluate the maximum number of fittings to connect to the electricity line, in order to avoid overloading.

Don't use the power cable when the insulation is damaged.

It must be the manufacturer or distributor or the professional person to change the damaged power cable in order to avoid any dangerous.

### • Temperature of the external surface

The maximum temperature that can be reached on the external surface of the fitting, in a thermally steady state, is 100°C.

### • Maintenance

Before starting any maintenance work or cleaning the projector, cut off power from the mains supply.  
After switching off, do not remove any parts of the fitting, to avoid getting burnt for at least 30 minutes.  
After this time the likelihood of the lamp exploding is virtually nil.

The fitting is designed to hold in any splinters produced by a lamp exploding. The lenses must be mounted and, if visibly Damaged, they have to be replaced with genuine spares.

### • Lamp

The fitting mounts a high-pressure lamp that needs an external igniter. This igniter is fitted onto the apparatus.

-Carefully read the "operating instructions" provided by the lamp manufacturer.

-Immediately replace the lamp if damaged or deformed by heat.

### • Moisture-resistant

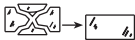
Be Caution, Before turn ON the lamp, please make sure the power is ON at least 15 minute to clean the moisture insider of the equipment when the equipment is put in the outside and has not used for a couples day ☞



t, 38°C



t, 100°C



The products referred to in this manual conform to the European Community Directives to which they are subject:

- Low Voltage 2014/35/EU
- Electromagnetic Compatibility 2014/30/EU

## TECHNICAL INFORMATION

### ●Power supplies available

AC100-240V/50-60Hz

### ●Power

628W

### ●Lamp(330W)

- Brand:SIRIUS HRI 330W XL OSRAM
- Colour temperature:3200K~7800K
- Average life 1500h

### ●Lamp(440W)

- Brand:SIRIUS HRI 440W S
- Colour temperature:3200K~7800K
- Average life 1200h

### ●Motors

14PCS mute sound motor.

### ●Channels

20/24 control channels

### ●Beam angle

Beam:2°

### ●Soft light

45° (default), 6° (option)

### ●DMX 512

### ●Strobe

lens strobe(0.5-20 times/second)

### ●Dimmer

0-100% linear adjustment

### ●Prism

Linear prism + circular prism

### ●Lens

High precision optical lens

### ●Travel

- PAN = 540°
- TILT = 240°

### ●Maximum speeds

- PAN = 2.9s/540°
- TILT = 1.5s/240°

### ●Resolution

- PAN = 2.11°
- PAN FINE = 0.008°
- TILT = 0.94°
- TILT FINE = 0.004°

### ●Features

Remote control lamp's switch function, display light and lamp's using time, automatically adjust cooling-fan's speed, Drop 100W power when strobe lens.

### ●IP54 protection rating

- Anti-Dust,can not prevent the dust completely, but the dust quantity would not influence the function of fixture.
- Anti the intrusion of splashed water from every direction .

### ●Equipment safety

- Bipolar circuit breaker with thermal protection.
- Automatic break in power supply in case of overheating or failed operation of cooling system.

### ●Cooling

Forced ventilation with axial fans.

### ●Structure

Material PA66,Anti--UV,Anti--high temperature, Anti--aging.

### ●CE Marking

- In conformity with the European Union Low Voltage.
- Directive 2014/35/EU and Electromagnetic compatibility Directive 2014/30/EU.

### ●Two side handles for transportation.

- Device locking PAN and TILT mechanisms for transportation and maintenance.

### ●Weights and size

#### Flycase Size:

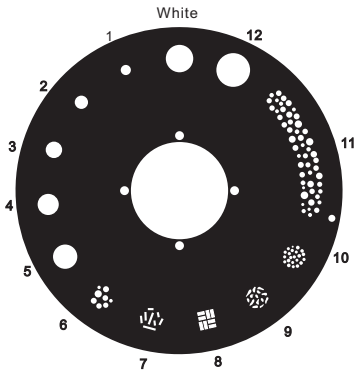
2PCS:940x635x815(mm)

N.W.:46kg G.W.:94kg

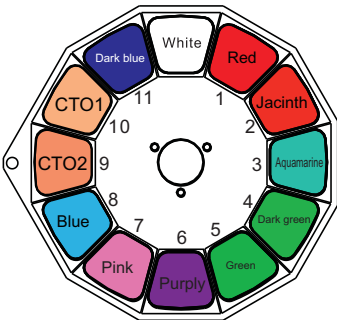
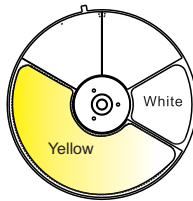
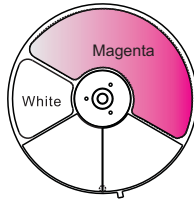
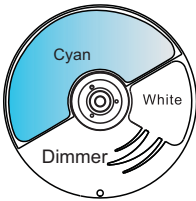
**Box Size:**450x430x730(mm)

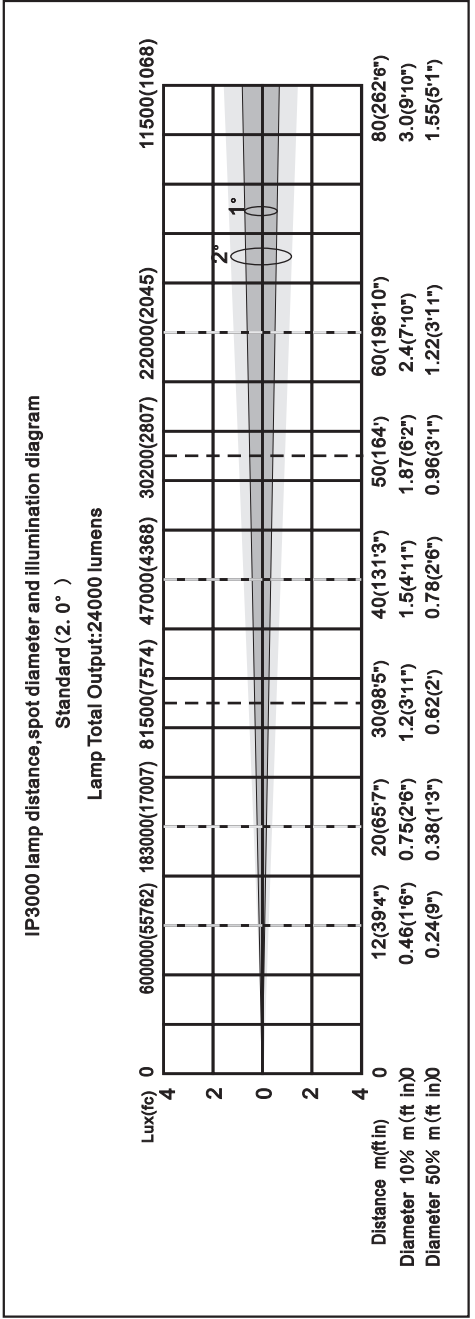
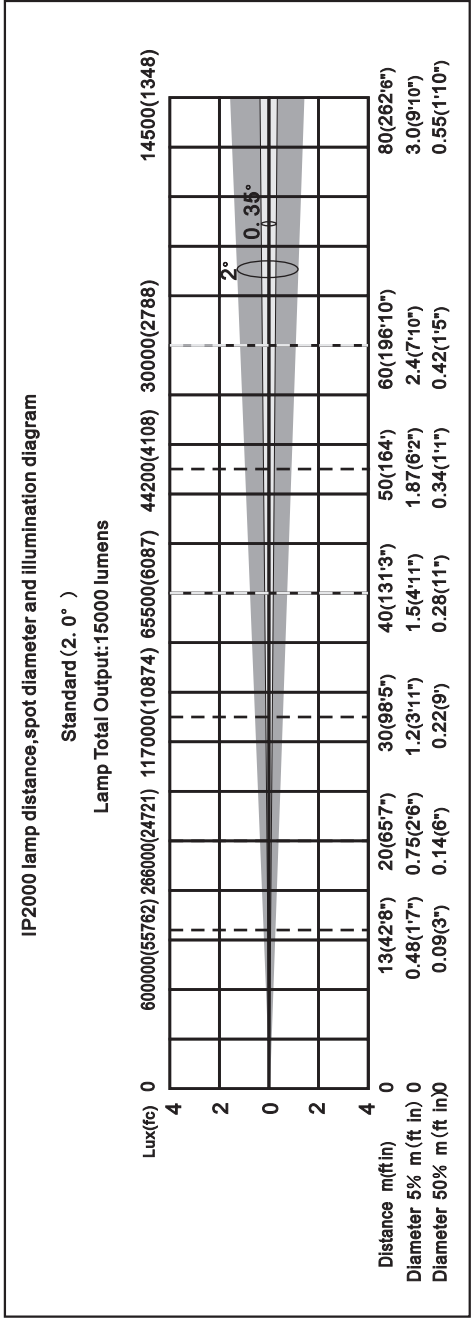
N.W.:23kg G.W.:29.2kg

**Static wheel(1 white + 12 gobo)**  
(please refer to the actual material)

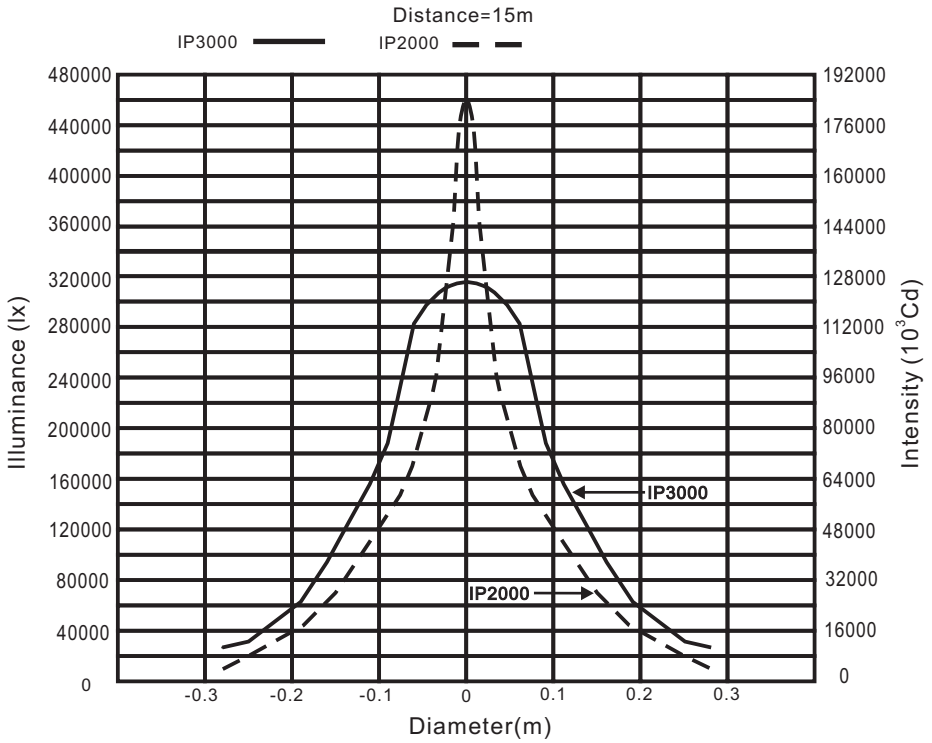


**Color Wheel:(please refer to the actual material)**

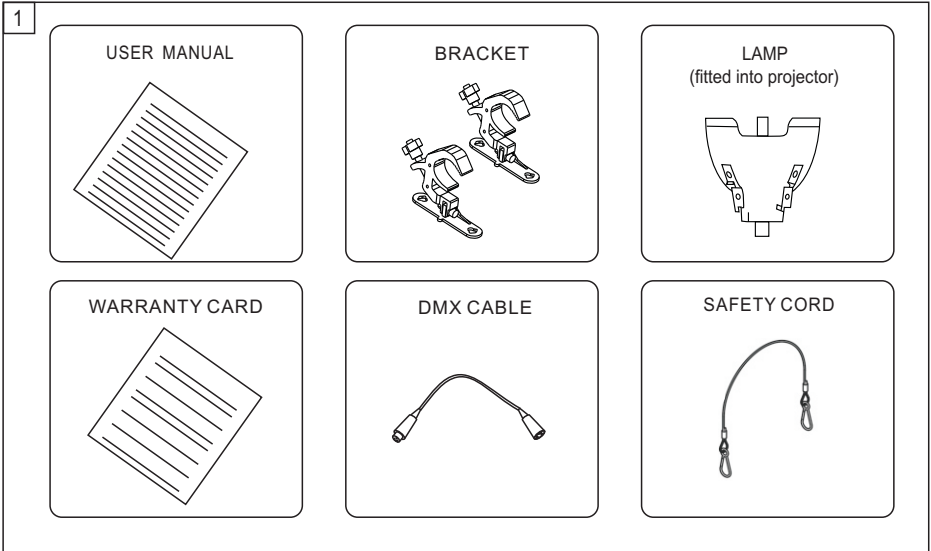




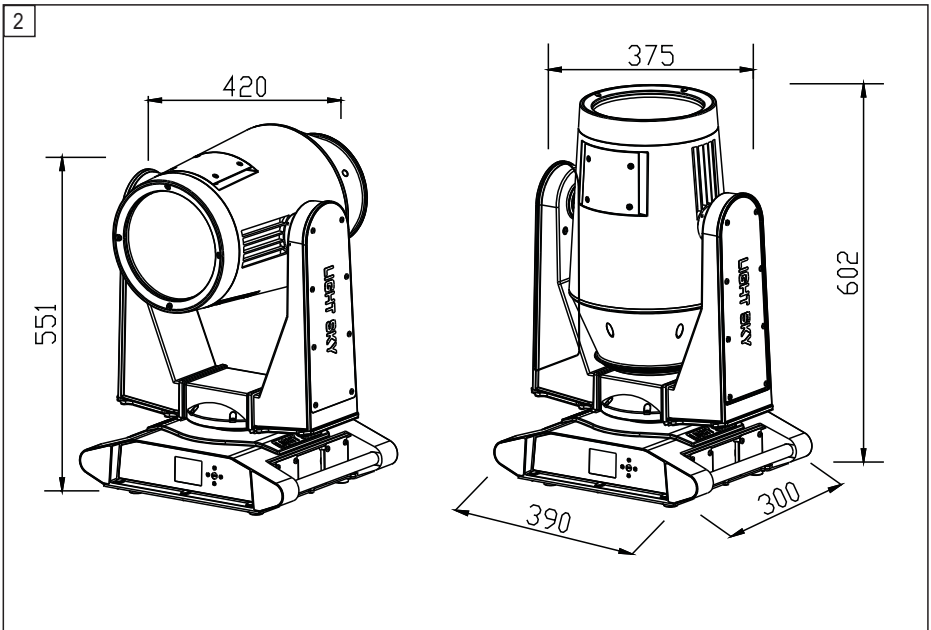
### illumination and intensity distribution curve comparison chart



**ATTACHMENT AND BODY SIZE**



Attachment contents- Fig. 1

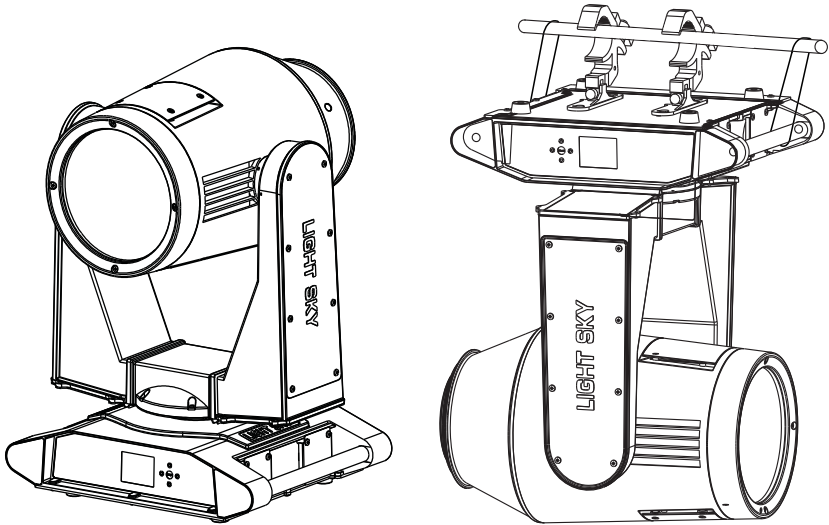


Body Size---Fig 2



### INSTALLATION AND CONNECTING

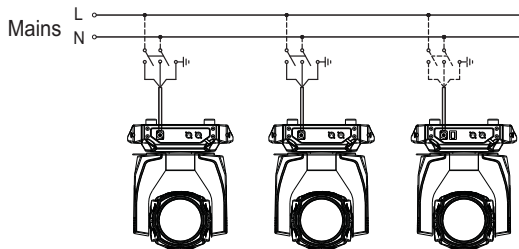
3



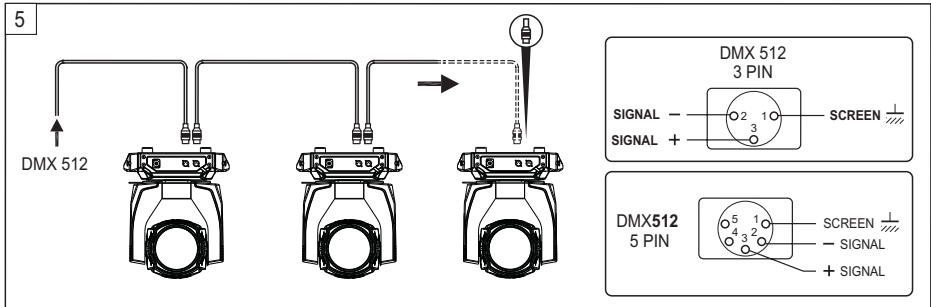
Installing the projector- Fig. 3

The projector can be installed on the floor resting on special rubber feet, on a truss or on the ceiling or wall.  
**WARNING:**with the exception of when the projector is positioned on the floor, the safety cable must be fitted. This must be securely fixed to the support structure of the projector and then connected to the fixing point at the centre of the base.

4



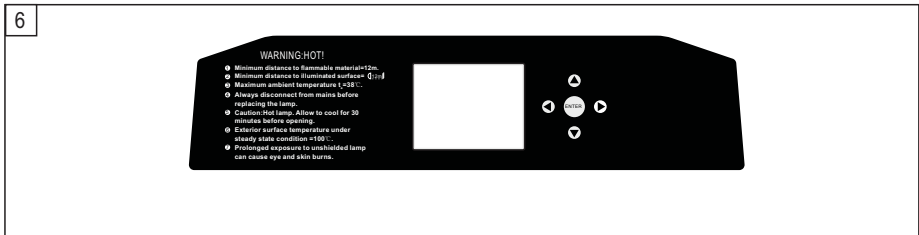
Connecting to the mains supply ---Fig 4



Connecting to the control signal line (DMX) - Fig. 5

- ◎ Please use the round 3 or 5-pin XLR plugs & sockets offered by menu factory to connect the first projector's output to the second projector's input and connect the second projector's output to the third projector's input. And in the same way for the rest, eventually connect the last projector's output, all the projectors are together.
- ◎ The projectors's control signal output or input by using the 3 or 5-pin XLR plug and socket. If need to lengthen the communication cable, please make sure the both side of 3 or 5-pin plug is one to one (one to one, two to two, three to three). Otherwise, the communication cable will be interrupted. The communication cable is 2-core screened cable 75Ω resistance with each core is at least a 0.5mm diameter. (**Caution:** All the inside leading wire of 3 or 5-pin XLR plug couldn't touch each other or plinth).
- ◎ Recommend to use the DMX signal terminator for the installation to avoid the electronic noise damage the digital control signal. Simply speaking, DMX terminator is an XLR connector with a 120Ω 1/2W resistor connected across pin 2 and 3. Which is then plugged into the output socket on the last projector in the chain. Refer to the connection.

## CONTROL PANEL

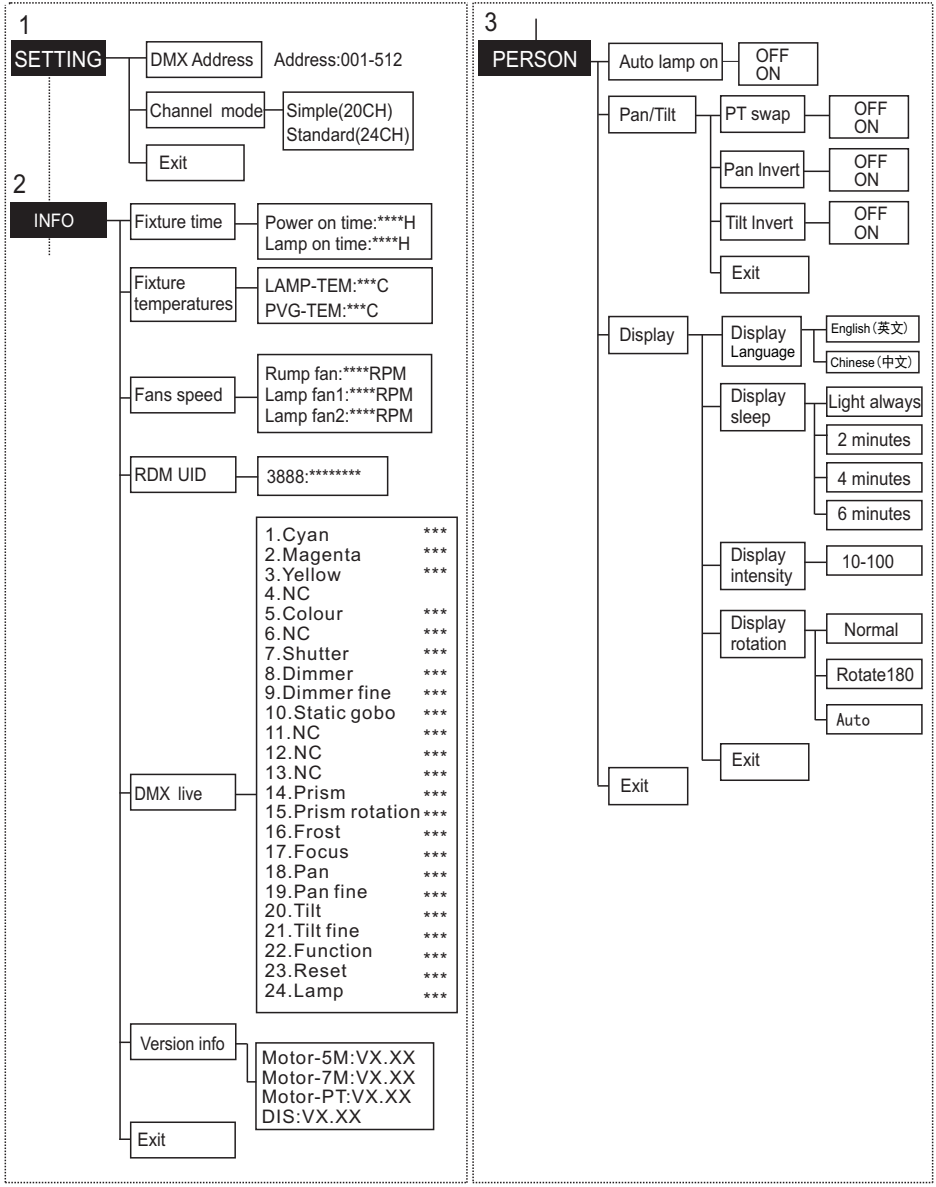


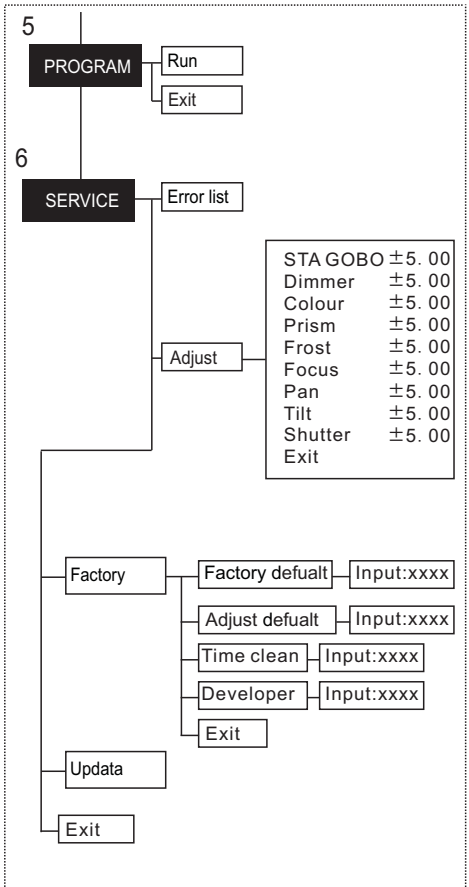
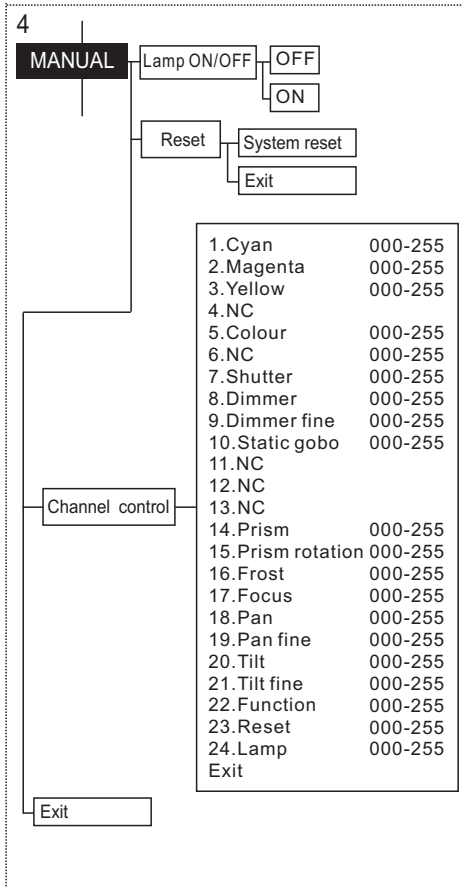
Press the switch. The projector starts resetting the effects. At the same time, the following information scrolls on the display:



**UP ARROWHEAD:** Page up or increase;  
**DOWN ARROWHEAD:** Page down or reduce;  
**ENTER:** OK Function  
**Exit:** In the choice screen

## MENU SETTING(V1.0)





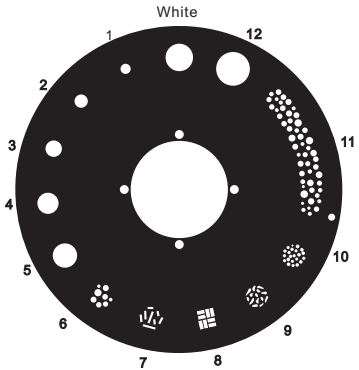
## CHANNEL FUNCTION

CHANNEL

CHANNEL		FUNCTION
20CH	24CH	
1	1	Cyan
2	2	Magenta
3	3	Yellow
4	4	NC
5	5	Colour
—	6	NC
6	7	Shutter
7	8	Dimmer
8	9	Dimmer fine
9	10	Static gobo
—	11	NC
—	12	NC
—	13	NC
10	14	Prism
11	15	Prism rotation
12	16	Frost
13	17	Focus
14	18	Pan
15	19	Pan fine
16	20	Tilt
17	21	Tilt fine
18	22	Function
19	23	Reset
20	24	Lamp

20CH	24CH	DMX Value	Percent	Function
1	1	0-255	0-100	<u>Cyan</u> Cyan(0-white,255-full cyan)
2	2	0-255	0-100	<u>Magenta</u> Magenta(0-white,255-full magenta)
3	3	0-255	0-100	<u>Yellow</u> Yellow(0-white,255-full yellow)
4	4			NC
5	5	0-5 6-11 12-17 18-23 24-29 30-35 36-41 42-47 48-53 54-59 60-65 66-71 72-77 78-83 84-89 90-95 96-101 102-107 108-113 114-119 120-125 126-131 132-137 138-143 144-255	0-1 2-4 5-6 7-9 10-11 12-13 14-16 17-18 19-20 21-23 24-25 26-27 28-30 31-32 33-34 35-37 38-39 40-41 42-44 45-46 47-49 50-51 52-53 54-56 57-100	<u>COLOUR</u> White White+Red Red Red+Jacinth Jacinth Jacinth+Aquamarine Aquamarine Aquamarine+Dark green Dark green Dark green+Green Green Green+Purply Purply Purply+Pink Pink Pink+Blue Blue Blue+CTO2 CTO2 CTO2+CTO1 CTO1 CTO1+Dark blue Dark blue Dark blue+White Slow-fast rotation
-	6			NC

20CH	24CH	DMX Value	Percent	Function
6	7	0-3	0-1	<u>Stopper/Strobe</u> Light off
		4-103	2-40	Strobe,slow → fast
		104-107	41-42	Light on
		108-207	43-81	Pulsation Strobe,slow → fast
		208-212	82-79	Light on
		213-225	80-88	Random Strobe at low frequency
		226-238	89-93	Random Strobe at medium frequency
		239-251	94-98	Random Strobe at high frequency
		252-255	99-100	Light on
		7	8	0-255
<u>Dimmer fine</u> Fine dimmer positioning				
9	10	0-5	0-2	<u>Static gobo change</u> White
		6-11	3-4	Gobo1
		12-17	5-6	Gobo2
		18-23	7-9	Gobo3
		24-29	10-11	Gobo4
		30-35	12-13	Gobo5
		36-41	14-16	Gobo6
		42-47	17-18	Gobo7
		48-53	19-20	Gobo8
		54-59	21-23	Gobo9
		60-65	24-25	Gobo10
		66-71	26-28	Gobo11
		72-77	29-30	Gobo12
		78-118	31-46	Fast-slow rotation
		119-137	47-54	Stop
		138-178	55-69	Slow-fast rotation
		179-185	70-72	Gobo1 shake slow-fast speed
		186-192	73-75	Gobo2 shake slow-fast speed
		193-199	76-78	Gobo3 shake slow-fast speed
		200-206	79-80	Gobo4 shake slow-fast speed
207-213	81-83	Gobo5 shake slow-fast speed		
214-220	84-86	Gobo6 shake slow-fast speed		
221-227	87-89	Gobo7shake slow-fast speed		
228-234	90-92	Gobo8 shake slow-fast speed		
235-241	93-94	Gobo9 shake slow-fast speed		
242-248	95-97	Gobo10 shake slow-fast speed		
249-255	98-100	Gobo11 shake slow-fast speed		

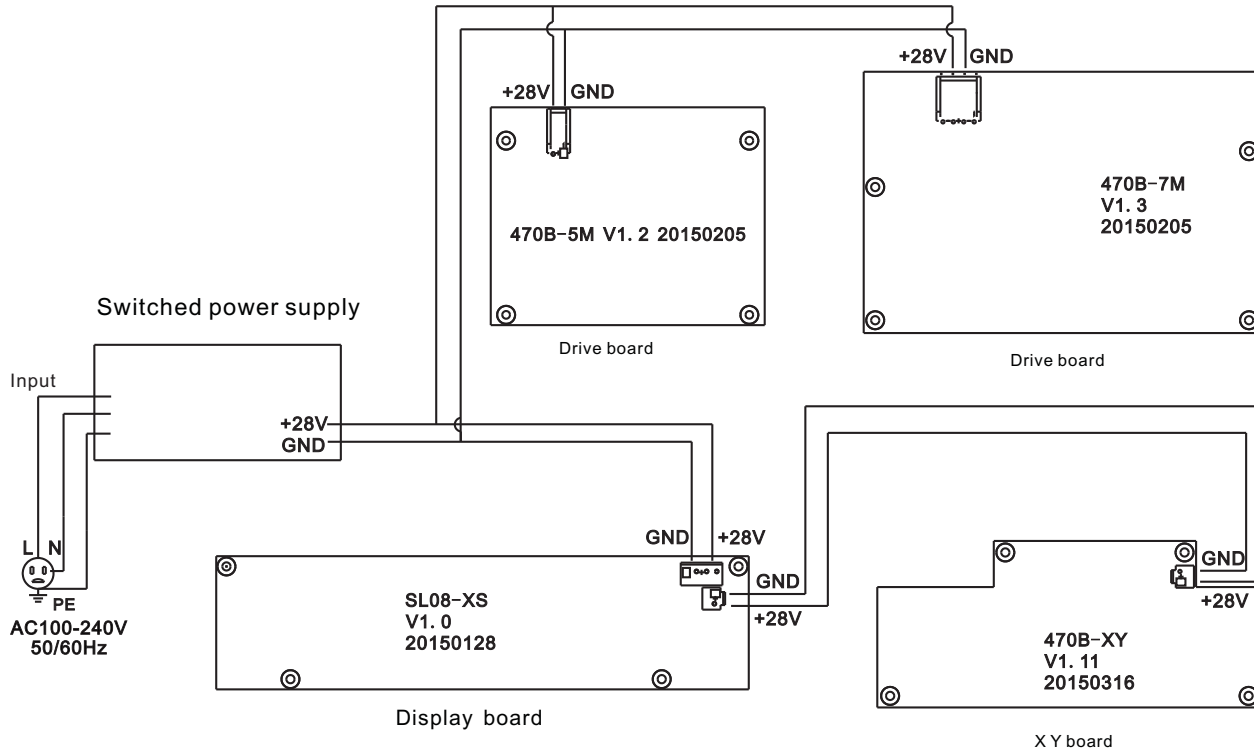


20CH	24CH	DMX Value	Percent	Function
—	11			NC
—	12			NC
—	13			NC
10	14	0-5 6-128 129-255	0-2 3-50 51-100	<u>Prism insertion</u> No prism Linear prism Circular prism
11	15	0-21 21-42 42-63 63-84 84-105 105-127 128-190 191-192 193-255	0-8 8-16 16-24 24-32 32-41 41-50 50-74 74-75 76-100	<u>Prism rotation</u> Prism indexing: 0° to 90° range Prism indexing: 90° to 180° range Prism indexing: 180° to 270° range Prism indexing: 270° to 360° range Prism indexing: 360° to 450° range Prism indexing: 450° to 540° range Prism rotation, fast→ slow Stop rotation Prism rotation, slow→fast
12	16	0-255	0-100	<u>Frost</u> No frost→full frost
13	17	0-255	0-100	<u>Focus</u> Infinity→near
14	18	0-255	0-100	<u>Pan</u> Pan movement/positioning from 0°to 540°
15	19	0-255	0-100	<u>Fine pan</u> Fine Pan positioning
16	20	0-255	0-100	<u>Tilt</u> Tilt movement/positioning from 0°to 240 °
17	21	0-255	0-100	<u>Fine tilt</u> Fine Tilt positioning



20CH	24CH	DMX Value	Percent	Function
18	22	0-11 12-24 25-37 38-50 51-56 57-62 63-255	0-4 5-9 10-14 15-19 20-21 22-24 25-100	<u>Function</u> Unused range Unused range Normal pan / tilt speed Conventional dimmer curve Fast switch, light is invalid Fast switch, light is effective Unused range
19	23	0-25 26-76 77-127 128-255	0-9 10-29 30-50 51-100	<u>Reset</u> Unused range Focus Reset Pan / Tilt Reset Complete Reset
20	24	0-25 26-100 101-255	0-9 10-39 40-100	<u>Lamp control</u> Unused range Lamp off Lamp on

# Circuit connecting diagram



## CLEANING AND MAINTENANCES

- In order to ensure the projector could work normally. It should be kept clean always. It is recommended that the fans and ventilation in let should be cleaned every 15 days. The lens and dichroic colour filters should also be regularly cleaned to maintain an optimum light output. Do not use any type of solvent on dichroic colour filters. It will damage the projector.
- Suggestion: The continue usage of the light don't exceed 4 hours. Or it will shorter the usage of the lamp. Please use the alternative operation to solve this problems.
- Please disconnect the power supply when begin to maintenance or takedown the light. Please let the parts cool down 10 minute at least then begin to install. If need to replace the lamp, please wait 10 minute again at least to let the lamp cool down completely or which maybe burned down.
- Please inspect the lens or other moving parts timing and keep them clear and static. If find anything damaged or looseness, must change a lamp or fix the lamp in order to avoid the accident.
- The light use the strong cool system. It is easy for the dirty to be collected. Please do clear the hot-sak one time two week at least.
- After you use the light, please check the intake place whether there are some wastepaper, please clean it up, or the windmill will break down and causing fire.

## TROUBLESHOOTING

It is recommended some solution for some normal trouble shooting. Any unsolved problems should always be handle by the professional person. Disconnect the power supply before maintenance the light.

### ■ Lamp off:

- Please check if install the suitable lamp.
- Please check the connection of the power supply or switch is ok.
- Please check whether the lamp will reach the end of their life can explode, please replace a same description lamp.
- Please measure if the power supply is enough.
- Please check if the operation is correct. Please wait 30 minutes at least till the lamp cool down enough, then could the connect the power supply, which could be normal work.
- Please check whether the DMX 512 controller pass the "turn on" order.
- Please check the connection of the trigger circuit is loose contact.
- Please check whether the connected point of the trigger point is loose contact, faster the connect cable.
  - Please check if the switch of the temperature is damaged.
- Check the bottom box driver board "WK" socket if the resistance 0 between the two line.

### ■ The light beam is dark, not inhomogeneous:

- When the lamp is to the usage life, the light is not enough, please change a new one for the same description.
- Please check the reflector parts is dirty. Keep them clear.
- Please measure if the power supply is enough.
- Small adjusting is suitable for change height or screw system till get a ideal light beam.

**■The light shadow is fogging:**

- ⊙Please check the data on the DMX 512 controller is suitable for the electric focus.
- ⊙Please check the mechanical parts is jamming. After cleaning, please add some temperature -durable juice.

**■The light works interruptly:**

- ⊙Please check if the fan works normally or mote clogging.
- ⊙Please check whether the abstract heat have the mote clogging.
- ⊙Please check if the lamp is to the usage life.
- ⊙Please check if the power supply is enough, the connection of the power supply or the circuit are good.
- ⊙Please check if the switch of the sup-temperature is good.

**■Though the light is lighting, but it 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.
- ⊙When the lamp don't cool down enough but do the incorrect operation will let the trigger up to super-high voltage leak. It will damage the electric circuit and communicate IC or CPU. Under this condition, please change the PCB board.

**■the light can't move:**

- ⊙Please check if the power supply is suitable for the light voltage data.
- ⊙Please check the fuse of input voltage is defective.
- ⊙Please check the light if they are deformatting, inside parts is broken, become wet...etc will lead the loose contact.
- ⊙Please check if the inside lead wire and the connector is loose.
- ⊙Please check the electric parts (such as the switch, transformer, ballast, electric capacity, piezoresistor, filter, PCB board, controller to motor) is short-circuit or burn down.

**■Part of the projector couldn't be responsled to the controlling order:**

- ⊙Please check the order is correct to the moving.
- ⊙Please check the mechanical part is deformation or loose.
- ⊙Please check the function to the motor socket is loose or drive chip is burn down.
- ⊙Please check the wire of the motor is cut at zig point.
- ⊙Please check these function to the motor is damaged.

**■On working, the pan & tilt couldn't work normally:**

- ⊙Please check according to the above step by step.
- ⊙Please check the belt of the X.Y is broken.
- ⊙Please check the X/Y direction data to the receiver is damage.
- ⊙Re-projector reset.

## DUTY EXONERATIVE AND COPYRIGHT PROTECTION

- ◇The lamp belongs to consumption products that is not guarantee to keep it in good repair.
- ◇Any products broken that didn't according to the instruction is not guarantee to keep it in good repair.
- ◇The commentary for all the instruction belongs to the supplier in final.
- ◇No authorize can't copy.
- ◇The information in this manual may be changed in the future, the company reserve the right to change the data without any advise.

# **LIGHT SKY<sup>®</sup>**

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