## SUPER SCOPE PLUS

## LIGHT SKY ${ }^{\circ}$

Tel:0086-20-61828288
Fax:0086-20-61828188 Pc:510800
Web:www.lightsky.com.cn
E-mail: flydragon@lightsky.com.cn
asia@lightsky.com.cn asia01@lightsky.com.cn india@lightsky.com.cn europe@lightsky.com.cn latinamerica@lightsky.com.cn middle-east@lightsky.com.cn american@lightsky.com.cn

Address: No. 43, Yunfeng Road, Xiuquan Street, Huadu District, Guangzhou, China


## CONTENTS

1, Safety Instructions .....  2
2, Technical Specifications ..... 5
2.1, Attachment And Size ..... 9
3, Color/pattern ..... 10
3.1, Replacing Rotating Gobos ..... 11
4, Control Panel. ..... 14
5, Connection and control ..... 15
5.1, Power supply connection ..... 15
5.2, DMX 512 Connection ..... 16
6, How To Set The Unit ..... 17
6.1, Main Function ..... 17
6.2, Channel Setting ..... 25
6.3, Address Setting ..... 25
6.4, DMX 512 Configuration ..... 26
7, Electrical Connection Diagram ..... 31
8, Error Information ..... 32
9, Troubleshooting ..... 38
10, Fixture Cleaning ..... 39
11, Duty exonerative and copyright protectio ..... 39

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.


## 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.
- This product is for indoor use only. Use only in a dry location.
- 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 20 cm 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 $\mathrm{Ta}: 0^{\circ} \mathrm{C}$. Maximum ambient temperature $\mathrm{Ta}: 40^{\circ} \mathrm{C}$. 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 0.5 m .
- Make sure the power cord is not crimped or damaged; replace it immediately if damaged.
- Unit's surface temperature may reach up to $80^{\circ} \mathrm{C}$. 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 fixture should be fixed on the clamp. Always ensure that the unit is firmly fixed to avoid vibration and slipping off during operation. Ensure that the trussing or area of installation must be able to hold 10 times the weight without any deformation. Always install a safety cable that can hold at least 12 times the weight of the fixture when installing.

Do install and operate by qualified operator. It must be installed in a place where there is out of the reach of people.

## 2.Technical Specifications

## OPTICS

- Light source: $\square 880 \mathrm{~W}$ white LED module $\square 1000 \mathrm{~W}$ white LED module
- Zoom range: $5.5^{\circ}-52^{\circ}$
- Optical lens: coated with high anti-reflection film, diameter 180 mm
- Color temperature: 6800 K
- Color rendering index: $R A \geq 71$ / $R A \geq 90$ (cut into high display filter).
- Total light output flux: $\square 880 \mathrm{~W}: 40000 \mathrm{Lm} \square 1000 \mathrm{~W}: 41000 \mathrm{Lm}$


## COLOR

- CMY infinite color mixing
- CTO color temperature linear adjustment (2800K-6800K).
- 6 color chips+white light, can achieve bidirectional color rainbow, dual color step gradient (linear movement), color wheel bidirectional rotation, random color mode


## PATTERN

-2 rotating gobo wheels, 14 glass gobo pieces, the overlay effect is full of dynamics, pluggable and replaceable, and can realize the effects of rotation, flowing water and shaking.

- Rotary diskA: 7 kinds of glass patterns + white circle, the outer diameter of the gobo is 26.9 mm , and the inner diameter of the gobo is 21.5 mm .
- Rotary disc B: 7 kinds of glass patterns + white circle, the outer diameter of the gobo is 26.9 mm , and the inner diameter of the gobo is 21.5 mm .
- Dynamic effect plate
- Eight-way cutting: 4 gratings to achieve fast and smooth cutting, eight cutting directions and angles can be controlled separately, each single piece can achieve complete light closure, The whole cutting module can be rotated by $\pm 55^{\circ}$.


## EFFECT

- Four prisms + four rows of mirrors, can rotate in two directions, can be switched independently, can be superimposed
- Heavy atomization + light atomization, can be switched independently, can be superimposed
- With electric aperture, 5-100\% linear adjustment, with macro function multi effect change
- Electronic dimming, 0-100\% linear dimming, uniform spot
- Electronic strobe speed is 1-25 times/S
- LED refresh frequency: $1000 \mathrm{~Hz} \sim 25 \mathrm{KHz}$


## CONTROL AND PROGRAMMING

- Control channels: 43CH, 55CH
- Protocol: Standard DMX512 protocol, RDM protocol, Art-Net (optional)
- Data connection: three or five core signal input/output
- RJ45 interface (optional)
- Display: LCD screen


## SOFTWARE

- Upgrade software via DMX signal or USB interface
- Silent fan, three operating modes (highlight/mute/super mute)
- Intelligent temperature control to ensure LED life


## X/Y ANGLE OF MOTION

- X-axis: $540^{\circ}$ 8bit/16bit precision scan
- Y-axis: $270^{\circ}$ 8bit/16bit precision scan


## POWER

- Input voltage: AC $100-240 \mathrm{~V} 50 / 60 \mathrm{~Hz}$
- Maximum power:
$\square$ 880W light source: 1280W1000W light source: 1400W
- Power factor: 0.996


## SIZE \& WEIGHT

- Lighting Size : $442 \mathrm{~mm} \times 258 \mathrm{~mm} \times 788 \mathrm{~mm}$
- Box Size : $520 \mathrm{~mm} \times 370 \mathrm{~mm} \times 870 \mathrm{~mm}$
-N.W.: 37.5kg, G.W.: 42.6kg
- Flycase Size (1 set): 660X520X840mm
-N.W.: 37.5kg, G.W.: 71.0kg


## OTHERS

- IP rate : IP20
- Working Ambient: $0^{\circ} \mathrm{C} \sim 40^{\circ} \mathrm{C}$
- Maximum temperature of lamp body surface: $80{ }^{\circ} \mathrm{C}$
- Maximum current of luminaire:
$\square$ 800W light source: 6.4A/220V; 12.8A/110V
$\square$ 1000W light source:7A/220V; 14A/ 110 V


## STANDARDS AND CERTIFICATION

- The product implementation standard: GB 7000.1-2015 GB7000. 217-2008
-Approved certifications: CE, RoHs
- The product complies with the following EU directives:

Low Voltage Directive 2014/35/EU . EMC Directive 2014/30/EU

## 880W illumination diagram



## 1000W illumination diagram



### 2.1.Attachment And Size

## Attachment contents-Fig. 1

USER MANUAL

Size-Fig. 2


## 3.Color/pattern



| Drawing Number | Part Number |
| :--- | :---: |
| FG2073B | C0700780008 |
| FG2064D | C0700780016 |
| FG1630B | C0700780010 |
| FG2101B | C0700780011 |
| FG2071B | C0700780012 |
| FG2102B | C0700780013 |
| FG2105B | C0700780014 |



## DANGER!

Install the rotating gobos with the device switched of $f$ only. Unplug from mains before changing the rotating gobos!

### 3.1.Replacing Rotating Gobos

1. Use a screwdriver to unscrew the two screws at $\mathbf{A}$ to take out the pattern color module assembly;

2. Reverse the assembly, and use a screwdriver to unscrew the four screws at $\mathbf{B}$ to separate the pattern color module from the CMY module;

3. Use a screwdriver from the front of the pattern module to unscrew the two screws of the magnetic induction board at $\mathbf{C}$, and remove the magnetic induction board; then half loosen the screws on the three motors at $\mathbf{D}$, move the motor and take off the belt; turn the pattern module back Come here, unscrew the four screws at $\mathbf{E}$ with a screwdriver, and you can take out the rotating gobo and fixed gobo assembly (as shown in Figure F, the front is the rotating gobo, and the back is the fixed gobo)

4. As shown in $\mathbf{G}$, gently lift the gobo driven wheel from the edge upwards from the back of the gobo wheel and pull it out slowly to take out a single gobo;

5. Take out the circlip at $\mathbf{H}$ with tweezers or other small objects that can be held (if the gobo is coated with glass glue for fixing, please use a professional cleaning agent to remove the glass glue and then take out the circlip to avoid damage to the gobo);

6. When assembling the gobo, avoid touching the gobo directly with your hands, and as shown in I, align the notched part of the gobo with the depression of the driven wheel assembly (the coating surface of the gobo should face the light source);

7. Insert the gobo driven wheel into the driving wheel assembly, as shown in J, the concave point of the gobo driven wheel must be positioned towards the center of the driving wheel;

8.After installation, put the component back to the fixture.

## 4.Control Panel



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

|  | OK confirmation key |
| :---: | :--- |
| $\Delta$ | UP |
| $\nabla$ | DOWN |
| $\langle$ | To the left |
| $>$ | To the right |

3. Socket version power input: connect the power supply.
4. Power switch: To turn on/of $f$ the power.
5.DMX inputloutput: Used for DMX512 connection, use $3 / 5$ core XLR signal cable toconnect console and lamps,And input/output DMX signal.
6.Art-net: The information of the lamp can be transmitted to the main controllerthrough the network cable, and the lamp can be controlled through RJ45(optional).
7.Firmware upgrade: Used to upgrade the fixture's firmware.
8.FUSE:6A.

## 5.Connection and control

### 5.1.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.


### 5.2.DMX 512 Connection



1. At last unit, the $D M X$ cable has to be terminated with a terminator. Solder a $1200 \mathrm{hm} 1 / 4 \mathrm{~W}$ 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.

## 6.How To Set The Unit

### 6.1.Main Function

## SETTINGS

Enter the MENU mode, select the setting function, press the OK button to confirm, use the up/down button to select: address code, channel mode, input mode.

Address code:
Select the DMX address, press the OK button to confirm, and the current DMX address will be displayed on the display. Use the left/right button to select 001~512 address, press the OK button to save. Press the left/right button to return to the previous menu.

## Channel mode:

Select channel mode, press OK button to confirm, use up/down button to select channel mode: standard mode, extended mode, press OK button to save. Press the left/right button to return to the previous menu.

## Input mode:

Select input mode, press OK button to confirm, use up/down button to select input mode: DMX512, press OK button to save. Press the left/right button to return to the previous menu.

## - DEVICE INFORMATION

Enter the MENU mode, select the device information function, press the OK button to confirm, use the up/down button to select: device time, device temperature, RDM information, device channel, version information, fan information.

## Device time:

Select the device time, press the OK button to confirm, you can view the device: power-on time, lighting time, total time. Press the left/right button to return to the previous menu.

## Device temperature:

Select the device temperature, press the OK button to confirm, you can view the device: LED temperature, driver board temperature. Press the leff/right button to return to the previous menu.

## RDM information:

Select RDM information, press the OK button to confirm, and you can view the device: UID. Press the left/right button to return to the previous menu.

## Device channel:

Select the device channel, press the OK button to confirm, use the up and down keys to view the channel in the current channel mode of the device, and press the leftright button to return to the previous menu.

## Version Information:

Select the version information, press the OK button to confirm, and use the up and down keys to view the PCB version of the device: display board, XY board, CMY module, pattern module, cutting board 1, cutting board 2, scaling module, light source fan driver board, bottom fan board, etc. information. Press the left/right button to return to the previous menu

## Fan information:

Select the fan information, press the OK button to confirm, use the up and down keys to view the equipment: tail inlet fan, tail outlet fan, pattern fan, cutting fan, focus fan, bottom box fan 1, bottom box fan 2, tail inlet fan 1, tail fan Inlet fan 2, tail inlet fan 3, tail outlet fan 1, tail outlet fan 2, tail outlet fan 3 , cutting fan, CMY fan, pattern fan, focusing fan 1 , focusing fan 2 and other fan operation information. Press the OK button to return to the previous menu.

## - PERSONALIZATION

Enter the MENU mode, select the Personality setting function, press the OK button to confirm, use the up/down button to select: XY axis, noise mode, display setting, dimming curve, Led frequency setting, zoom reverse setting.

## XY axis:

Select the $X Y$ axis, press the OK button to confirm, you can use the up and down keys to select: XY exchange, X axis reverse, Y axis reverse, press the OK key to enter the next menu, select: on/off, press the OK key to confirm and exit, Then press the left/right button to return to the previous menu.

## Noise pattern:

Select the noise mode, press the OK button to confirm, you can use the up and down keys to select: ultra-quiet mode, silent mode, highlight mode (default), and then press the left/right button to return to the previous menu.

## Display setting:

Select display settings, press the OK button to confirm, you can use the up and down keys to select: language selection, backlight time, backlight adjustment, screen rotation, press the OK button to enter the next menu. Select language selection, use the up and down keys to select:

Chinese/English, press the OK key to confirm and exit; select the backlight time (the screen backlight time can be adjusted), use the up and down keys to select: constant light/automatic 30S, press the OK key to confirm and exit; select Backlight adjustment (screen brightness can be adjusted): Press the left and right keys to select any value between 0 and 100, press the OK key to confirm and exit; select screen rotation, use the up and down keys to select: normal / rotate $180^{\circ}$ / automatic, press the OK key to confirm and exit; then press the left/right button to return to the previous menu.

## Dimmer Modes



Optically Linear


Square Law


Inverse Square Law


S-curve

## LED frequency setting:

Select the Led frequency setting, press the OK button to confirm, you can use the up and down keys to select: $1000 \mathrm{~Hz}, 3600 \mathrm{~Hz}, 7200 \mathrm{~Hz}, 25000 \mathrm{~Hz}$, press the OK key to confirm, and then press the leffright button to retum to the previous menu.

## Zoom inverse settings:

Select zoom reverse setting, press the OK button to confirm, you can use the up and down keys to select: off, on, press the OK key to confirm, and then press the leffright button to return to the previous menu.

## - MANUAL

Enter the MENU mode, select the manual function, press the middle square button to confirm, use the up/down button to select: manual control, reset.

## Manual control:

Select manual control, press the OK button to confim entry, you can use the up and down keys to select each channel, press the left and right keys to adjust the value of the selected channel, and then press the OK button to return to the previous menu.

## Reset:

Select reset, press the OK button to confirm, you can use the up and down keys to select: machine reset, XY reset, pattern reset, color reset, cutting reset, focus reset, effect disk reset, press the OK button to confirm, then press the leffright button to return Go to the previous menu.

## Test equipment

Enter the MENU mode, select the Test Equipment function, press the middle square button to confirm, use the up/down button to select: All Test, XY Test, Head Test.

## All tests:

Select all tests, press the OK button to confirm, each function of the whole machine will start automatic testing, then press the leff/right button to return to the previous menu.

## XY test:

Select XY test, press the OK button to confirm, the XY axis function of the whole machine will start automatic testing, then press the leftright button to return to the previous menu.

## Head test:

Select the head test, press the OK button to confirm, each function of the lamp head of the whole machine will start an automatic test, and then press the left/right button to return to the previous menu.

## - SERVICE OPTIONS

Enter the MENU mode, select the service option function, press the OK button to confirm, use the up/down button to select: light status, calibration, factory settings.

## Lamp status:

Select the lamp status, press the up and down keys to select, press the OK button to confirm, you can see: memory chip, angle sensor, horizontal encoder, vertical encoder, horizontal, vertical, cyan, magenta, yellow, color temperature reduction, color wheel, pattern 1. Pattern 1 rotation, pattern 2, pattern 2 rotation, prism 1, prism 2, prism rotation, cutting rotation, scaling, focusing and other functions running status and error records, then press the leftright button to return to the previous menu .

## Calibration:

Select calibration, press the up and down keys to select, press the OK button to confirm, you can fine-tune the position of the following functions from 0 to 255 (default 128): horizontal, vertical, cyan, magenta, yellow, color temperature drop, color wheel, pattern 1, pattern 1 rotation, pattern 2, pattern 2 rotation, cutting 1 A , cutting 1 B , cutting 2 A , cutting 2 B , cutting 3 A , cutting 3 B , cutting 4 A , cutting 4 B , cutting rotation, prism 1, prism 2, effect disc, atomization 1, Fog 2, aperture, zoom, focus, dimming, focus-gobo 1 , focus-gobo 2 , focus-iris, etc., then press the left/right button to return to the previous menu.

## - FACTORY SETTINGS

Select factory settings, press the up and down keys to select, press the OK button to confirm, you can choose: factory reset, clear time, software upgrade, power adjustment, power selection, Logo selection and other functions, note that this function is factory settings

## Pan:

Enter the initial setting menu, use the up and down keys to select the horizontal channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Tilt:

Enter the initial setting menu, use the up and down keys to select the vertical channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

Blue:
Enter the initial setting menu, use the up and down keys to select the cyan channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Magenta:

Enter the initial setting menu, use the up and down keys to select the magenta channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Yellow:

Enter the initial setting menu, use the up and down keys to select the yellow channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Lower color temperature:

Enter the initial setting menu, use the up and down keys to select the color temperature channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Color wheel:

Enter the initial setting menu, use the up and down keys to select the color wheel channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Pattern 1:

Enter the initial setting menu, use the up and down keys to select pattern 1 channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Pattern 1 rotation:

Enter the initial setting menu, use the up and down keys to select the pattern 1 rotation channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Pattern 2:

Enter the initial setting menu, use the up and down keys to select the pattern 2 channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Pattern 2 rotation:

Enter the initial setting menu, use the up and down keys to select the patter 2 rotation channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128, perform calibration, press the OK button to save and exit.

## Cut 1A:

Enter the initial setting menu, use the up and down keys to select the cutting 1A channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Cut 1B:

Enter the initial setting menu, use the up and down keys to select the cutting 1B channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Cut 2A:

Enter the initial setting menu, use the up and down keys to select the cutting 2A channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Cut 2B:

Enter the initial setting menu, use the up and down keys to select the cutting 2 B channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Cut 3A:

Enter the initial setting menu, use the up and down keys to select the cutting 3A channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Cut 3B:

Enter the initial setting menu, use the up and down keys to select the cutting 3B channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Cut 4A:

Enter the initial setting menu, use the up and down keys to select the cutting 4A channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Cut 4B:

Enter the initial setting menu, use the up and down keys to select the cutting 4 B channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Cutting rotation:

Enter the initial setting menu, use the up and down keys to select the cutting rotation channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128, perform calibration, press the OK button to save and exit.

## Prism 1:

Enter the initial setting menu, use the up and down keys to select the prism channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Prism 2:

Enter the initial setting menu, use the up and down keys to select the prism 2 channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Effect plate:

Enter the initial setting menu, use the up and down keys to select the effect panel channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Atomization 1:

Enter the initial setting menu, use the up and down keys to select the atomization channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Atomization 2:

Enter the initial setting menu, use the up and down keys to select the atomization channel 2 , use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128, perform calibration, press the OK button to save and exit.

## Aperture:

Enter the initial setting menu, use the up and down keys to select the aperture channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Zoom:

Enter the initial setting menu, use the up and down keys to select the zoom channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Focusing:

Enter the initial setting menu, use the up and down keys to select the focusing channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Dimming:

Enter the initial setting menu, use the up and down keys to select the dimming channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Focus-Pattern 1:

Enter the initial setting menu, use the up and down keys to select the focus-pattern channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Focus - pattern 2:

Enter the initial setting menu, use the up and down keys to select the focus-pattern 2 channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.

## Focus-aperture:

Enter the initial setting menu, use the up and down keys to select the focus-iris channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , perform calibration, press the OK button to save and exit.



### 6.2.Channel Setting

Press the OK button to confirm, use the up/down buttons to select the channel mode: standard mode $(43 \mathrm{CH})$, extended mode $(55 \mathrm{CH})$, press the OK button to save.Press the leftright button to return to the previous menu.

### 6.3.Address Setting

When using a universal DMX controller to control the fixture, you need to set the starting address (1-512) for the fixture so that the machine can receiveto the DMX signal.Select the DMX address, press the OK button to confirm, the current DMX address will be shown on the display. Use the left/right buttons to select 001~512 address, press the OK button to save. Press the left/right 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 <br> Address | Unit 2 <br> Address | Unit 3 <br> Address | Unit 4 <br> Address |
| :---: | :---: | :---: | :---: | :---: |
| 43 Channel | 1 | 44 | 87 | 130 |
| 55 Channel | 1 | 56 | 111 | 166 |

### 6.4.DMX 512 Configuration

| 55 Channel | 43 Channel | DMX | Function | Note |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 1 | 0--255 | Pan <br> Pan movement/positioning |  |
| 2 | 2 | 0--255 | Pan fine <br> Fine Pan positioning |  |
| 3 | 3 | 0--255 | TILT <br> Tilt movement/positioning |  |
| 4 | 4 | 0--255 | TILT fine Fine Tilt movement/positioning |  |
| 5 | 5 | 0--255 | PAN TILT Speed Pan Tilt movement Speed From Fast To Slow |  |
| 6 | 6 | $\begin{gathered} 0--10 \\ 11--20 \\ 21--30 \\ 31--40 \\ 41--50 \\ 51--60 \\ 61--70 \\ 71--80 \\ 81--90 \\ 91--100 \\ 101--110 \\ 111--120 \\ 121--130 \\ 131--140 \\ 141--150 \\ 151--160 \\ 161--170 \\ 171--180 \\ 181--190 \\ 191--200 \\ 201--255 \\ \hline \end{gathered}$ | Functions <br> NO function <br> All Reset <br> XY Reset <br> Color System Reset <br> Gobo System Reset <br> Profile System Reset <br> Focus System Reset <br> Super silent <br> Silent <br> Hight Brightness <br> Effect Reset <br> Zoom Invert <br> Zoom Forward <br> NO function <br> NO function <br> NO function <br> NO function <br> NO function <br> Display Back light is Auto <br> function Open <br> NO function |  |
| 7 | 7 | 0--255 | Cyan White $\rightarrow$ full cyan |  |
| 8 | I | 0--255 | Cyan Fine Cyan Fine movement/positioning |  |
| 9 | 8 | 0--255 | Magenta White $\rightarrow$ full magenta |  |
| 10 | I | 0--255 | Magenta Fine Magenta Fine movement/positioning |  |
| 11 | 9 | 0--255 | Yellow <br> White $\rightarrow$ full yellow |  |
| 12 | I | 0--255 | Yellow Fine <br> Yellow Fine movement/positioning |  |
| 13 | 10 | 0--255 | CTO <br> Color Temperature from Deep to mall |  |
| 14 | I | 0--255 | CTO Fine <br> CTO Fine movement/positioning |  |
| 15 | 11 | $\begin{gathered} 0--89 \\ 90--101 \\ 102--114 \\ 115--127 \\ 128--140 \\ 141--153 \\ 154--166 \end{gathered}$ | $\begin{aligned} & \text { Colour wheel } \\ & 0--360^{\circ} \\ & \text { OPEN } \\ & \text { COLOR1 } \\ & \text { COLOR2 } \\ & \text { COLOR3 } \\ & \text { COLOR4 } \\ & \text { COLOR5 } \end{aligned}$ |  |


| 55 Channel | 43 Channel | DMX | Function | Note |
| :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & 167--179 \\ & 180--214 \\ & 215--249 \\ & 250--255 \\ & \hline \end{aligned}$ | COLOR6 <br> Forwards Color rotation from slow to fast Backwards Color rotation from fast to slow Random Color |  |
| 16 | 12 | $\begin{gathered} 0--9 \\ 10--19 \\ 20--29 \\ 30--39 \\ 40--49 \\ 50--59 \\ 60--69 \\ 70--79 \\ 80--87 \\ 88--95 \\ 96--103 \\ 104--111 \\ 112--119 \\ 120--127 \\ 128--135 \\ 136--139 \\ 140--194 \\ 195--249 \\ 250--255 \\ \hline \end{gathered}$ | Gobo <br> Open <br> GOBO1 <br> GOBO2 <br> GOBO3 <br> GOBO4 <br> GOBO5 <br> GOBO6 <br> GOBO7 <br> Gobo 1 shake slow to fast Gobo 2 shake slow to fast Gobo 3 shake slow to fast Gobo 4 shake slow to fast Gobo 5 shake slow to fast Gobo 6 shake slow to fast Gobo 7 shake slow to fast OPEN <br> Forwards gobo rotation from slow to fast Backwards gobo rotation from fast to slow Random Gobo |  |
| 17 | 13 | $\begin{gathered} 0--127 \\ 128--189 \\ 190--193 \\ 194--255 \\ \hline \end{gathered}$ | Gobo Rotation $0^{\circ}--360^{\circ}$ <br> Forwards gobo rotation from fast to slow Gobo rotation stop <br> Backwards gobo rotation from slow to fast |  |
| 18 | 14 | $\begin{gathered} 0--9 \\ 10--19 \\ 20--29 \\ 30--39 \\ 40--49 \\ 50--59 \\ 60--69 \\ 70--79 \\ 80--87 \\ 88--95 \\ 96--103 \\ 104--111 \\ 112--119 \\ 120--127 \\ 128--135 \\ 136--139 \\ 140--194 \\ 195--249 \\ 250--255 \\ \hline \end{gathered}$ | Gobo2 <br> Open <br> GOBO1 <br> GOBO2 <br> GOBO3 <br> GOBO4 <br> GOBO5 <br> GOBO6 <br> GOBO7 <br> Gobo 1 shake slow to fast <br> Gobo 2 shake slow to fast <br> Gobo 3 shake slow to fast <br> Gobo 4 shake slow to fast <br> Gobo 5 shake slow to fast <br> Gobo 6 shake slow to fast <br> Gobo 7 shake slow to fast <br> OPEN <br> Forwards gobo rotation from slow to fast Backwards gobo rotation from fast to slow Random Gobo |  |
| 19 | 15 | $\begin{gathered} 0--127 \\ 128--189 \\ 190--193 \\ 194--255 \\ \hline \end{gathered}$ | Gobo2 Rotation $0^{\circ}--360^{\circ}$ <br> Forwards gobo rotation from fast to slow <br> Gobo rotation stop <br> Backwards gobo rotation from slow to fast |  |
| 20 | 16 | 0--255 | Blade 1A <br> Blade Out $\rightarrow$ In |  |


| 55 Channel | 43 Channel | DMX | Function | Note |
| :---: | :---: | :---: | :---: | :---: |
| 21 | I | 0--255 | Blade 1A Fine Fine Blade positioning |  |
| 22 | 17 | 0--255 | Blade 1B <br> Blade Out $\rightarrow$ In |  |
| 23 | I | 0--255 | Blade 1B Fine Fine Blade positioning |  |
| 24 | 18 | 0--255 | Blade 2A <br> Blade Out $\rightarrow$ In |  |
| 25 | I | 0--255 | Blade 2A Fine <br> Fine Blade positioning |  |
| 26 | 19 | 0--255 | Blade 2B <br> Blade Out $\rightarrow$ In |  |
| 27 | I | 0--255 | Blade 2B Fine <br> Fine Blade positioning |  |
| 28 | 20 | 0--255 | Blade 3A Blade Out $\rightarrow$ In |  |
| 29 | I | 0--255 | Blade 3A Fine <br> Fine Blade positioning |  |
| 30 | 21 | 0--255 | Blade 3B <br> Blade Out $\rightarrow$ In |  |
| 31 | I | 0--255 | Blade 3B Fine Fine Blade positioning |  |
| 32 | 22 | 0--255 | Blade 4A Blade Out $\rightarrow$ In |  |
| 33 | I | 0--255 | Blade 4A Fine Fine Blade positioning |  |
| 34 | 23 | 0--255 | Blade 4B <br> Blade Out $\rightarrow$ In |  |
| 35 | I | 0--255 | Blade 4B Fine <br> Fine Blade positioning |  |
| 36 | 24 | 0--255 | Framing Rotation $0^{\circ}--120^{\circ}$ |  |
| 37 | 25 | $\begin{gathered} 0-10 \\ 11--20 \\ 21--30 \\ 31--40 \\ 41--50 \\ 51--60 \\ 61--70 \\ 71--80 \\ 81--90 \\ 91--100 \\ 101--110 \\ 111--120 \\ 121--130 \\ 131--140 \\ 141--150 \\ 151--160 \\ 161--170 \\ 171--180 \\ 181--190 \\ 191--200 \\ 201--255 \\ \hline \end{gathered}$ | Framing Macro <br> No function <br> Square <br> rectangle <br> Isosceles triangle <br> trapezoidal <br> The Fan(Facing Up) <br> parallelogram <br> Right Angle trapezoid <br> The Fan(Down) <br> triangle <br> prismatic <br> The stripes <br> bar <br> Upper left quadrant semicircle (Up) <br> Upper right quadrant <br> Right semicircle <br> Right lower quadrant <br> Semicircle (Down) <br> The lower left quadrant <br> Left Semicircle |  |
| 38 | 26 | 0--255 | Framing Macro Zoom Framing Macro Zoom |  |


| 55 Channel | 43 Channel | DMX | Function | Note |
| :---: | :---: | :---: | :---: | :---: |
| 39 | 27 | $\begin{gathered} 0--10 \\ 11--100 \\ 101--190 \\ 191--255 \\ \hline \end{gathered}$ | Prism <br> Prism Out <br> Prism 1 <br> Prism 2 <br> Prism 1\&2 |  |
| 40 | 28 | $\begin{gathered} 0 \\ 1--63 \\ 64--127 \\ 128--191 \\ 192--207 \\ 208--223 \\ 224--239 \\ 240--255 \\ \hline \end{gathered}$ | Prism Rotation <br> No Function <br> $0-360^{\circ}$ <br> Forwards rotation from fast to slow <br> Backwards rotation from slow to fast <br> from slow to fast $90^{\circ}$ Swing <br> from slow to fast $180^{\circ}$ Swing <br> from slow to fast $270^{\circ}$ Swing <br> from slow to fast $360^{\circ}$ Swing |  |
| 41 | 29 | $\begin{gathered} 0--9 \\ 10--239 \\ 240--255 \end{gathered}$ | Effect <br> Effect Out <br> Effect In <br> Effect In\&Shake |  |
| 42 | 30 | $\begin{gathered} 0--2 \\ 3--130 \\ 131--255 \end{gathered}$ | Effect Rotation <br> No Function <br> Forwards rotation from fast to slow <br> Backwards rotation from fast to slow |  |
| 43 | 31 | $\begin{gathered} 0--127 \\ 128--159 \\ 160--191 \\ 192--255 \\ \hline \end{gathered}$ | Frost1 <br> Frost From Min To Max <br> No Function <br> No Function <br> No Function |  |
| 44 | 32 | $\begin{gathered} 0--127 \\ 128--159 \\ 160-191 \\ 192--255 \end{gathered}$ | Frost2 <br> Frost From Min To Max <br> No Function <br> No Function <br> No Function |  |
| 45 | 33 | $\begin{gathered} 0--127 \\ 128--159 \\ 160--191 \\ 192--255 \\ \hline \end{gathered}$ | Iris <br> From Max To Min <br> Slow In Fast Out from slow to fast <br> Fast In Slow Out from slow to fast <br> Slow In Slow Out from slow to fast |  |
| 46 | 34 | 0--255 | Zoom <br> WIDE BEAM $\rightarrow$ NARROW BEAM |  |
| 47 | 35 | 0--255 | ZoomFine <br> Fine Zoom positioning |  |
| 48 | 36 | 0--255 | Focus <br> Infinity $\rightarrow$ near |  |
| 49 | 37 | 0--255 | Focus Fine <br> Fine Focus positioning |  |
| 50 | 38 | $\begin{gathered} 0--9 \\ 10--19 \\ 20--29 \\ 30--39 \\ 40--49 \\ 50--59 \\ 60--69 \\ 70--79 \\ 80--255 \end{gathered}$ | Autofocus Distance NO function <br> 7M <br> 10M <br> 15M <br> 20M <br> 25M <br> 30M <br> 40M <br> 50M |  |


| 55 Channel | 43 Channel | DMX | Function | Note |
| :---: | :---: | :---: | :---: | :---: |
| 51 | 39 | 0--255 | Autofocus Adjustment Auto Focus Fine |  |
| 52 | 40 | $\begin{gathered} 0--9 \\ 10--49 \\ 50--89 \\ 90--119 \\ 120-179 \\ 180--255 \end{gathered}$ | Strobe <br> No Function <br> Closing pulses in sequences from fast to slow Opening pulses in sequences from fast to slow No Function <br> Random strobe,slow $\rightarrow$ fast <br> Strobe,slow $\rightarrow$ fast |  |
| 53 | 41 | 0--255 | Dimmer Dimmer from Dark To Bright |  |
| 54 | 42 | 0--255 | Dimmer Fine Dimmer Fine |  |
| 55 | 43 | $\begin{gathered} 0--15 \\ 16--255 \end{gathered}$ | Gobo Macro <br> No Function <br> Gobo Macro Function |  |

## 7.Electrical Connection Diagram



## 8.Error Information

Error messages will be displayed under the Fixture state status menu when the fixture fails and they will not disappear until the fixture is repaired.

## 1. Memory IC:

Check whether the Memory IC is damaged.
Check whether the related circuit of the Memory IC is damaged.

## 2. Angle sensor:

Check the Angle sensor chip for damage.
Check whether the related circuit of the Angle sensor chip is damaged.

## 3. Pan Encodeer:

Check whether the connection wire connecting the X -axis magnetic induction board is in poor contact or disconnected.
Check whether the related circuit of the X -axis motor driver board is damaged.
Check the X -axis magnetic plate for looseness, falling off or damage.

## 4. Tilt Encoder:

Check whether the connecting wire connecting the Y -axis magnetic induction board is in poor contact or disconnected.

Check whether the related circuit of the Y -axis motor driver board is damaged.
Check whether the Y-axis magnetic induction plate is loose, dropped or damaged.

## 5. Pan:

Check whether there are other objects in the X -axis running range interfering with its running and reset.

Check whether the connection wire connecting the X -axis magnetic induction board is in poor contact or disconnected.

Check the X -axis magnetic plate for looseness, falling off or damage.
Check whether the related circuit of the X -axis motor driver board is damaged.
Check if the X -axis motor is damaged.

## 6. Tilt:

Check whether there are other objects in the Y -axis running range interfering with its running and reset.

Check whether the connecting wire connecting the Y -axis magnetic induction board is in poor contact or is disconnected.

Check the Y -axis magnetic induction plate for looseness, falling off or damage.
Check whether the related circuit of the Y -axis motor driver board is damaged.
Check if the Y -axis motor is damaged.

## 7. Cyan:

Check whether there are other objects in the operation range of the $\mathbf{C}$ color film interfering with its operation and reset.

Check whether the connection line connecting the $\mathbf{C}$ color chip and the magnetic induction board is in poor contact or disconnected.

Check the $\mathbf{C}$ color chip magnets for looseness, falling off, or damage.
Check whether the $\mathbf{C}$ color chip magnetic plate is loose, fallen off or damaged.
Check whether the related circuit of the Color chip motor driver board is damaged.
Check whether the $\mathbf{C}$ color chip motor is damaged.

## 8. Magenta:

Check whether there are other objects in the operating range of the $\mathbf{M}$ color film interfering with its operation and reset.

Check whether the connection line connecting the $\mathbf{M}$ color chip magnetic induction board is in poor contact or disconnected.

Check if the $\mathbf{M}$ color chip magnet is loose, dropped or damaged.
Check whether the $\mathbf{M}$ color chip magnetic plate is loose, falling off or damaged.
Check whether the related circuit of the $\mathbf{M}$ color chip motor driver board is damaged.
Check if the $\mathbf{M}$ color chip motor is damaged.

## 6. Tilt:

Check whether there are other objects in the Y -axis running range interfering with its running and reset.

Check whether the connecting wire connecting the Y -axis magnetic induction board is in poor contact or is disconnected.

Check the Y -axis magnetic induction plate for looseness, falling off or damage.
Check whether the related circuit of the Y -axis motor driver board is damaged.
Check if the Y -axis motor is damaged.

## 7. Cyan:

Check whether there are other objects in the operation range of the $\mathbf{C}$ color film interfering with its operation and reset.

Check whether the connection line connecting the $\mathbf{C}$ color chip and the magnetic induction board is in poor contact or disconnected.

Check the $\mathbf{C}$ color chip magnets for looseness, falling off, or damage.
Check whether the $\mathbf{C}$ color chip magnetic plate is loose, fallen off or damaged.
Check whether the related circuit of the Color chip motor driver board is damaged.
Check whether the $\mathbf{C}$ color chip motor is damaged.

## 8. Magenta:

Check whether there are other objects in the operating range of the $\mathbf{M}$ color film interfering with its operation and reset.

Check whether the connection line connecting the $\mathbf{M}$ color chip magnetic induction board is in poor contact or disconnected.

Check if the $\mathbf{M}$ color chip magnet is loose, dropped or damaged.
Check whether the $\mathbf{M}$ color chip magnetic plate is loose, falling off or damaged.
Check whether the related circuit of the $\mathbf{M}$ color chip motor driver board is damaged.
Check if the $\mathbf{M}$ color chip motor is damaged.

## 9. Yellow:

Check whether there are other objects in the operation range of the Y color film interfering with its operation and reset.

Check whether the connecting wire connecting the $\mathbf{Y}$-color chip magnetic induction board is in poor contact or disconnected.

Check the Y-chip magnets for looseness, falling off, or damage.
Check whether the $\mathbf{Y}$ color chip magnetic induction board is loose, fallen off or damaged.
Check whether the related circuit of the $\mathbf{Y}$ color chip motor driver board is damaged.
Check if the Y chip motor is damaged.

## 10. СТО:

Check whether there are other objects in the operation range of the CTO color film interfering with its operation and reset.

Check whether the connecting wire connecting the CTO color chip magnetic induction board is in poor contact or disconnected.

Check the CTO chip magnets for looseness, falling off, or damage.
Check the CTO color chip magnetic plate for looseness, falling off or damage.
Check whether the related circuit of the CTO color chip motor driver board is damaged.
Check the CTO chip motor for damage.

## 11. Color wheel:

Check whether there are other items in the color wheel operation range that interfere with its operation, reset

Check whether the connection wires connecting the color wheel and the magnetic sensor board are in poor contact or disconnected

Check if the color wheel magnet is loose, falling off or damaged
Check whether the color wheel or the magnetic sensor board is loose, falling off or damaged Check whether the circuit related to the color wheel and the motor drive board is damaged Check whether the color wheel motor is damaged

## 12. Pattern 1:

Check whether there are other objects in the pattern 1 revolution range that interfere with its operation and reset

Check whether the connecting wires connected to the magnetic sensor board of the pattern 1 male wheel are in poor contact or disconnected

Check whether the pattern 1 revolution magnet is loose, falling off or damaged Check whether the pattern 1 revolution magnetic induction plate is loose, falling off or damaged Check whether the circuit related to the pattern 1 revolution motor drive board is damaged Check whether the pattern 1 revolution motor is damaged

## 13. Pattern 1 rotation:

Check whether there are other items in the range of the pattern 1 self-rotating gear interfering with its operation and reset

Check whether the connecting wires of the pattern 1 self-rotating gear and the magnetic induction board are in poor contact or disconnected

Check if the gobo self-rotating gear magnet is loose, falling off or damaged
Check whether the pattern 1 self-rotating gear and the magnetic induction plate are loose, falling off or damaged

Check whether the related circuits of the pattern 1 self-rotating gear and the motor drive board are damaged

Check whether the pattern 1 self-rotating gear motor is damaged

## 14. Pattern 2:

Check whether there are other objects in the pattern 2 revolution range that interfere with its operation and reset

Check whether the connecting wires connected to the magnetic sensor board of the pattern 2 male wheel are in poor contact or disconnected

Check whether the pattern 2 revolution magnet is loose, falling off or damaged Check whether the pattern 2 revolution magnetic induction plate is loose, falling off or damaged Check whether the circuit related to the pattern 2 revolution motor drive board is damaged Check whether the pattern 2 revolution motor is damaged

## 15. Pattern 2 rotation:

Check whether there are other items in the range of the pattern 2 self-rotating gear interfering with its operation and reset

Check whether the connecting wires of the pattern 2 self-rotating gear and the magnetic induction
board are in poor contact or disconnected
Check if the gobo self-rotating gear magnet is loose, falling off or damaged
Check whether the pattern 2 self-rotating gear and the magnetic induction plate are loose, falling off or damaged

Check whether the related circuits of the pattern 2 self-rotating gear and the motor drive board are damaged

Check whether the pattern 2 self-rotating gear motor is damaged 14 .

## 16.Prism 1:

Check whether there are other objects in the range of prism 1 revolution and operation that interfere with its operation and reset

Check whether the connecting wires of the prism 1 revolution and the magnetic sensor board are in poor contact or disconnected

Check whether the prism 1 revolution magnet is loose, falling off or damaged
Check if the prism 1 revolves and the magnetic induction board is loose, falling off or damaged Check whether the circuit related to the prism 1 revolution motor drive board is damaged Check whether the prism 1 rotation gear motor is damaged

## 17.Prism 2:

Check whether there are other objects in the range of prism 2 revolution and operation that interfere with its operation and reset

Check whether the connecting wires of the prism 2 revolution and the magnetic sensor board are in poor contact or disconnected

Check whether the prism 2 revolution magnet is loose, falling off or damaged Check if the prism 2 revolves and the magnetic induction board is loose, falling off or damaged Check whether the circuit related to the prism 2 revolution motor drive board is damaged Check whether the prism 2 rotation gear motor is damaged

## 18. Prism rotation

Check whether there are other items in the operating range of the prism self-rotating gear that interfere with its operation and reset
Check whether the connection wires of the prism self-rotating gear and the magnetic induction board are in poor contact or disconnected

Check whether the prism rotation gear magnet is loose, falling off or damaged
Check whether the prism self-rotating gear and the magnetic induction plate are loose, falling off or damaged

Check whether the prism self-rotating gear and the related circuit of the motor drive board are damaged

Check whether the prism rotation gear motor is damaged

## 19. Cutting rotation:

Check whether there are other objects in the operating range of the cutting disc assembly that interfere with its operation, reset

Check whether the connection wires of the cutting disc assembly and the magnetic sensor board are in poor contact or disconnected

Check Cutting Disc Assembly Magnet for loose, dislodged or damaged
Check whether the cutting disc assembly and the magnetic induction plate are loose, falling off or damaged

Check whether the cutting disc assembly and the related circuit of the motor drive board are damaged

Check the cutting disc assembly motor for damage

## 20.Zoom:

Check whether there are other items in the operating range of the zoom lens that interfere with its operation and reset

Check whether the cable connected to the zoom lens or the magnetic sensor board is poorly connected or disconnected

Check if the zoom lens magnet is loose, dislodged or damaged
Check whether the zoom lens magnetic plate is loose, falling off or damaged
Check whether the related circuits of zoom lens and motor drive board are damaged Check the zoom lens motor for damage

## 21. Focusing:

Check whether there are other objects in the operating range of the focusing lens that interfere with its operation and reset

Check whether the connecting wires of the focusing lens and the magnetic sensor board are in poor contact or disconnected

Check if the focusing lens magnet is loose, falling off or damaged
Check whether the focusing lens or the magnetic sensor board is loose, falling off or damaged Check whether the related circuits of the focusing lens and the motor drive board are damaged Check whether the focusing lens motor is damaged

## 9.Troubleshooting

Following are a few common problems that may occur during operation. Here are some suggestions for troubleshooting:
A. The unit does not work, no light and the fan does not work

- Check the connected power.
- Measure the voltage.
- Check the power indicator to see whether it can be lit up or not.
B. Not responding to the DMX controller
- Check whether the DMX connectors and the DMX cables are connected correctly.
- Check whether the DMX address is correctly set.
- If the intermittent DMX signal problem occurs, check whether the XLR socket and the signal cable are well connected.
- Try it with another DMX controller.
- Check whether the DMX cables run near or alongside to the high-voltage cables, which may damage or interfere with the signal circuit.
C. One of the channels is not working well
- The stepper motor might be damaged or the cable connected to the PCB might be broken.
- The motor's drive IC on the PCB might be out of condition.


## 10.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.

## 11.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.

