# LIGHT SKY 

## FLY DRAGON LIGHTING EQUIPMENT CO.,LTD

## SUPER SCOPE MAX



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- 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 TA: $-10^{\circ} \mathrm{C}$. Maximum ambient temperature 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

## OPTICAL

- Light source: 1000W/1200W/1400W white LED module (optional)
- Zoom angle : $6^{\circ}-50^{\circ}$
- Optical lens: coated with high anti-reflection film, 186 mm diameter
- Color Temperature: 6500 K
- CRI : RA $\geq 70$ / RA $\geq 90$ (cut into the high-display digital filter)
- Total output:1000 w Light source : 43200 Lm;

1200 w Light source : 50700 Lm; 1400 w Light source : 57200 Lm

## COLOR

- CMY infinite color blend
- CTO color temperature linear adjustment (3000K-6500K)
- 5 color pieces + white light, can achieve bidirectional color rainbow, double color step gradient (linear movement), color wheel bidirectional rotation,Random color mode


## GOBO

- 2 rotating pattern plates, 12 glass pattern plates, dynamic stacking effect, can be inserted and replaced, can realize rotation,Flow, jitter effect;
Rotary plate $1: 6$ kinds of glass pattern + white circle, pattern sheet outer diameter 31.9 mm , pattern sheet inner diameter 24 mm

Rotary plate $2: 6$ kinds of glass pattern + white circle, pattern sheet outer diameter 31.9 mm , pattern sheet inner diameter 24 mm

- Dynamic effect disc
- Eight-way cutting: four gratings achieve fast and smooth cutting, and eight cutting directions and angles can be individually controlled.Each piece can achieve complete light closure, the whole cutting module can rotate $\pm 45^{\circ}$


## EFFECT

- Four prism, bidirectional rotation
- Heavy atomization + light atomization, can be independently switched, can be superimposed
- Single channel high finger filter -CRI 90
- With electric aperture, 5-100\% linear adjustment, with macro function and multiple effect changes
- Electronic dimming, 0-100\% linear dimming, uniform spot
- Electron strobe speed is 1-25 times/S
- LED refresh frequency: $1000 \mathrm{~Hz} \sim 25 \mathrm{KHz}$


## CONTROL

- Control channel: 42CH, 56CH, See Channel table for details.
- Protocol: DMX512 protocol, RDM protocol, Art Net (optional)
- Data connection: Three core or five core signal input/output
- RJ45 interface (optional)
- Display: LCD liquid crystal display (LCD)


## SOFTWARE

- Upgrade software via DMX signal or USB interface
- Mute fan, three working modes (highlight/mute/ultra-mute)
- Ntelligent temperature control to ensure LED life


## X/Y ANGLE OF MOTION

- X axis: $540^{\circ}$ or $630^{\circ} 16$ bit precision scan
- Y-axis: 2708bit/16bit precision scan


## POWER

- Input voltage: AC 100-240V 50/60Hz
- Maximum power:

1000W Light source :1200W (110V: maximum current 12A; 220V: Maximum current 6A) PF0.996
1200W Light source :1430W (110V: maximum current 14.3A; 220V: Maximum current 7.15A) PF0.987
1400W Light source :1630W (110V: maximum current 16.3A; 220V: Maximum current 8.15A) PF0.987

## SIZE \& WEIGHT

- Lighting Size : $502 \mathrm{~mm} \times 300 \mathrm{~mm} \times 845 \mathrm{~mm}$
- Box Size : $920 \mathrm{~mm} \times 570 \mathrm{~mm} \times 375 \mathrm{~mm}$ N.W.: 44.0 kg , G.W.: 48.8 kg
- Flycase Size (1 set): 710X560X875mm N.W.: 44.0kg, G.W.: 80.6kg


## OTHERS

- IP rate : IP20
- Working Ambient : $-10^{\circ} \mathrm{C} \sim 40^{\circ} \mathrm{C}$
- Maximum temperature of lamp body surface: $80{ }^{\circ} \mathrm{C}$


## 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

## 1000W HL illumination diagram



1400W HL illumination diagram


### 2.1.Attachment And Size

## Attachment contents-Fig. 1

SSER MANUAL

## Size-Fig. 2



## 3.Control Panel

## PG Version:



## Neutrik Version:



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

|  | OK confirmation key |
| :---: | :--- |
| $\boldsymbol{\sim}$ | UP |
| $\nabla$ | DOWN |
| $\langle$ | To the left |
| $>$ | To the right |

3. PG version power input: connect to the power supply
4. FUSE: 20A
5. FIRMWARE UPGRADE: Used to upgrade the fixture's firmware
6.POWER SWITCH: To turn on/of $f$ the power
7.DMX input/output: used for DMX512 connection, use $3 / 5$ core $\operatorname{XLR}$ signal cable to connect console and lamps,And input/output DMX signal
8.ART-NET: The information of the lamp can be transmitted to the main controller through the network cable, and the lamp can be controlled through RJ45 (optional)
6. 4G network module (optional)
7. Wireless network module (optional)
8. socket version power input: connect the power supply

## 4.Effect Wheels



Rotating gobo wheel B


Rotating gobo wheel A


Effect disc


Rotation Gobo Size

| Serial <br> Number | Drawing <br> Number | Part Number | Serial <br> Number | Drawing <br> Number | Part Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A1 | FG2073A | C0700590002 | B1 | FG2061A | C0700590008 |
| A2 | FG2068A | C0700590003 | B2 | FG2103A | C0700590009 |
| A3 | FG1630A | C0700590004 | B3 | FG2104A | C0700590010 |
| A4 | FG2101A | C0700590005 | B4 | FG2064A | C0700590011 |
| A5 | FG2071A | C0700590006 | B5 | FG2062A | C0700590012 |
| A6 | FG2102A | C0700590007 | B6 | FG2105A | C0700590013 |

## DANGER!

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

### 4.1.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 five screws at $\mathbf{B}$ to separate the pattern color module from the CMY module;

3. From the front of the pattern module, use a screwdriver to unscrew the screws of the two magnetic induction plates at $\mathbf{C}$, and then remove the magnetic induction plates; then half loosen the motors in the four places at $\mathbf{D}$ Screws, remove the belt after moving the motor; turn the pattern module in reverse, and use a screwdriver to unscrew the four screws at $E$ to take out the rotating patternDisc assembly

4. Gently lift the gobo holder from the edge of the rotating gobo wheel (reverse side) as $\mathbf{F}$ shows and slowly pull it out;

5. Remove the spring lock at $\mathbf{G}$ with an appropriate tool like tweezers (if the gobo is coated with glass glue, do remove it with some good glass cleaning fluid before removing the spring lock to avoid damage to the gobo).

6. Do not touch the surface of the gobo with bare fingers. The gobo has a small position point at its edge which has to aim at the position point on the gobo holder as H shows (glossy side towards the light source).

7. Insert the gobo driven wheel into the driving wheel assembly, as shown in I, the gobo driven wheel pit must be positioned towards the center of the driving wheel.

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

## 5.How To Set The Unit

### 5.1.Main Function

Tum on the machine, press the OK button to enter the menu mode, use the left and right buttons to find the menu, when the preset menu is shown on the display,Press the OK button to confirm, use the Up/Down buttons to select a submenu, and press the OK button to save the setting or return to the previous menu.

The main functions are shown below:


## - DMX SETTING

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

## DMX Address

Select the DMX address, press the OK button to confirm, the current DMX address will be shown on the display. Use the leff/right buttons to select001~512 address, press the OK button to save. Press the leff/right button to return to the previous menu.

## Channel Mode

Select Select Channel Mode, press the OK button to confirm, use the Up/Down buttons to select the Channel Mode: Standard Mode (42 channels),Expansion mode (56 channels, press the OK button to save. Press the left/right button to return to the previous menu.

## Input Mode

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

## - Info

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

## Fixture Times

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 go back to Previous menu.

## Temperature

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

## RDM Info

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

## DMX Live

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, cutting fan,Pattern fan, focusing fan, tail inlet fan 1 , tail inlet fan 2 , tail inlet fan 3, tail outlet fan 1, tail outlet fan 2, tail outlet fan 3,Fan operation information such as cutting fan, CMY fan, pattern fan, bottom box fan board, etc. Press the OK button to return to the previous menu.

## Version Info

Select the version information, press the OK button to confirm, use the up and down keys to view the equipment: display board, XY board, CMY module, pattem module,PCB version information of zoom module, cutting board 1 , fan driver board, prism board, cutting board 2 , bottom fan board, etc. Press the left/right button to go back go to previous menu

## Fan Info

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, cutting fan, Pattern fan, focusing fan, tail inlet fan 1 , tail inlet fan 2 , tail inlet fan 3, tail outlet fan 1, tail outlet fan 2, tail outlet fan 3,Fan operation information such as cutting fan, CMY fan, pattern fan, focusing fan board, etc. Press the OK button to return to the previous menu.

## - Person

Enter the MENU mode, select the Personalize function, press the OK button to confirm, use the up/down buttons to select: XY axis, noise mode,Display settings, Art-Net settings, dimming curve, Led frequency settings.

## Pan/Tilt

Select the XY axis, press the OK button to confirm, you can use the up and down keys to select: XY swap, X axis reverse, Y axis reverse, press OK to enterNext menu, select: On/Off, press OK to confirm and exit, then press leffright to return to the previous menu.

## Noise Mode

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(default), highlight mode ,Then press the left/right button to return to the previous menu.

## Display

Select the 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 OK to enter the next menu level. Select language selection, use the up and down keys to select: Chinese/English, press the OK key to confirm and exit; selectBacklight time (the screen backlight time can be adjusted), use the up and down keys to select: always on/auto 30S, press the OK key to confirm and exit; select the backlightAdjustment (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 $180^{\circ}$ /auto, press the OK key to confirm and exit; then press the leff/right button to return to the previous menu.

## Art-Net

Select the XY axis, press the OK button to confirm, you can use the up and down keys to select: IP address, Mask address, Net address, Sub Net address, Universe address, press the OK button to confirm and enter the next menu.

## Dimmer Curve

Select the dimming curve, press the OK button to confirm, you can use the up and down keys to select: square, inverse square, linear or S curve, select the desiredAfter the mode, press the OK button to set and save. Then press the left/right button to return.

## Dimmer Modes



Optically Linear


Square Law


Inverse Square Law


S-curve

Optically Linear: The increase in light intensity appears to be linear as DMX value is increased.
Square Law: Light intensity control is finer at low levels and coarser at high levels.
Inverse Square Law: Light intensity control is coarser at low levels and finger at high levels.
S-Curve: Light intensity control is finger at low levels and high levels and coarser at medium levels.

## Led Preq Set

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 OK button to confirm, then press left/right button to return to the previous menu.

## - Manual

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

## Manual Control

Select manual control, press the OK button to confirm the 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, 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,To reset the cutting system, the focusing system and the effect disc, press the OK key to confirm, and then press the leffright button to return to the previous menu.

## - Test

Enter the MENU mode, select the test equipment function, press the middle square button to confirm, use the up/down buttons to select: all tests, XY test, head test.

## Test All

Select all tests, press OK button to confirm, all functions of the whole machine start automatic test, and then press the left/right button to return to the previous menu.

## Test pan / tilt

Select pan / tilt test, press the OK button to confirm, the XY axis function of the whole machine starts to automatically test, and then press the left/right button to return to the previous menu.

## Test Effects

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

## - Service

Enter the MENU mode, select the service option function, press the OK button to confirm, use the up/down buttons to select: lamp status, calibration,Factory setting.

## Fixture State

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, level encoder,Vertical encoder, horizontal, vertical, cyan, magenta, yellow, down color temperature, color wheel, pattern 1, pattern 1 rotation, pattern 2,Pattern 2 rotation, cutting rotation, zoom, focus, prism, prism rotation and other functions of the running status and error records, and then press the left/rightbutton to return to the previous menu.

## Adjust

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, Down Color Temperature, Color Wheel, Rotation Pattern 1, Pattern 1 Rotation, Rotation Pattern 2, Pattern 2 Rotation,Blade Up 1, Blade Up 2, Blade Down 1, Blade Down 2, Blade Left 1, Blade Left 2, Blade Right 1, Blade Right 2, Cutting Rotation,Prism, Effect Disc, Display Finger, Fog 1, Fog 2, Aperture, Zoom, Focus, Dimming, Focus Pattern 1, Focus Pattern 2, FocusAperture, etc.and then press the left/right button to return to the previous menu.

## Factory

Select the 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, powerAdjustment, power selection and other functions, note that this function is factory set

### 5.2. Home Position Adjustment

Press the OK button to enter the menu mode, press the up and down buttons to select, press the OK button to confirm, you can fine-tune the position of the following functions from 0 to 255 (default 128), then press the left/right button to return to the previous menu.


## Pan

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

## Cyan

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 $0-255$, and 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 $0-255$, and 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 $0-255$, and the default initial position is 128. Perform calibration, press the OK button to save and exit.

## CTO

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

## Gobo1

Enter the initial setting menu, use the up and down keys to select the Gobo1 channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128, calibrate, press the OK button to save and exit.

## Gobo1.rot

Enter the initial setting menu, use the up and down keys to select the Gobo1.rot channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , calibrate, press the OK button to save and exit.

## Gobo2

Enter the initial setting menu, use the up and down keys to select the Gobo2 channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128, calibrate, press the OK button to save and exit.

## Gobo2.rot

Enter the initial setting menu, use the up and down keys to select the Gobo2.rot channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , calibrate, press the OK button to save and exit.

## Blade UP1

Enter the initial setting menu, use the up and down keys to select channel Blade UP1, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, and the default initial position is 128. To calibrate, press the OK button to save and exit.

## Blade UP2

Enter the initial setting menu, use the up and down keys to select the channels Blade UP2, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , calibrate, press the OK button to save and exit.

## Blade DW1

Enter the initial setting menu, use the up and down keys to select the lower channel Blade DW1, 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.

## Blade DW2

Enter the initial setting menu, use the up and down keys to select the lower channels Blade DW2, 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.

## Blade LF1

Enter the initial setting menu, use the up and down keys to select the left channel Blade LF1, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, and the default initial position is 128. Perform calibration, press the OK button to save and exit.

## Blade LF 2

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

## Blade RF1

Enter the initial setting menu, use the up and down keys to select the right channel Blade RF1, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , calibrate, press the OK button to save and exit.

## Blade RF2

Enter the initial setting menu, use the up and down keys to select the right channel Blade RF2, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, and the default initial position is 128. Perform calibration, press the OK button to save and exit.

## Framing Rotat

Enter the initial setting menu, use the up and down keys to select the Framing Rotat 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

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 $0-255$, and the default initial position is 128. Perform calibration, press the OK button to save and exit.

## Effect

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

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

## Frost 1

Enter the initial setting menu, use the up and down keys to select the Frost 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 , calibrate, press the OK button to save and exit.

## Frost 2

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

Iris
Enter the initial setting menu, use the up and down keys to select the 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, calibrate, 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 , calibrate, 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 , calibrate, press the OK button to save and exit.

## Dimmer

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

## FosFor Gobo1

Enter the initial setting menu, use the up and down keys to select FosFor Gobo1 channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , calibrate, press the OK button to save and exit.

## FosFor Gobo2

Enter the initial setting menu, use the up and down keys to select FosFor Gobo2 channel, use the left and right keys to adjust the DMX value, the adjustment range is $0-255$, the default initial position is 128 , calibrate, press the OK button to save and exit.

## FosForlris

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

## 6.Control By Universal DMX Controller

### 6.1.DMX 512 Connection

## PG Version



## Neutrik Version



DMX-input


- Shield


1. At last unit, the DMX 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.

### 6.2.Channel Setting

Press the OK button to confirm, use the up/down buttons to select the channel mode: standard mode (42CH), extended mode (56CH), press the OK button to save.Press the left/right 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 |
| :---: | :---: | :---: | :---: | :---: |
| 42 Channel | 1 | 43 | 85 | 127 |
| 56 Channel | 1 | 57 | 113 | 169 |

### 6.4.DMX 512 Configuration

Please control the fixture by referring to the configurations below

## 42 Channels (Mode1)

| Channel | DMX | Function | Note |
| :---: | :---: | :---: | :---: |
| 1 | 0-255 | Pan <br> Pan movement/positioning |  |
| 2 | $0-255$ | Pan fine <br> Fine Pan positioning |  |
| 3 | 0-255 | TILT Tilt movement/positioning |  |
| 4 | 0-255 | TILT fine Fine Tilt movement/positioning |  |
| 5 | $\begin{array}{r} 0-10 \\ 11-20 \\ 21-30 \\ 31-40 \\ 41-50 \\ 51-60 \\ 61-70 \\ 71-80 \\ 81-90 \\ 91-100 \\ 101-110 \\ 111-120 \\ 121-130 \\ 131-140 \\ 141-150 \\ 151-160 \\ 161-170 \\ 171-180 \\ 181-190 \\ \hline \end{array}$ | ```Functions NO function All Reset XY Reset Color System Reset Gobo System Reset Profile System Reset Focus System Reset Super silent Silent Hight Brightness Effect Reset NO function NO function No function NO function NO function NO function NO function Display Back light is Auto``` |  |
|  | $191-200$ $201-255$ | function Open <br> No function | The console hits this position and waits for about 5 seconds. After the function is turned on, it will be effective after turning on the "silent mode". It is not necessary to turn on this function when performing the reset function. This "open function" will not be stored, it will still be closed after the next boot, and this function needs to be activated again. |
| 6 | 0-255 | $\begin{aligned} & \text { Cyan } \\ & \text { White } \rightarrow \text { full cyan } \end{aligned}$ |  |
| 7 | 0-255 | Magenta <br> White $\rightarrow$ full magenta |  |
| 8 | 0-255 | Yellow <br> White $\rightarrow$ full yellow |  |
| 9 | 0-255 | CTO <br> Color Temperature from Deep to Light |  |
| 10 | $\begin{array}{r} 0-89 \\ 90-104 \\ 105-119 \\ 120-134 \\ 135-149 \\ 150-164 \\ 165-179 \\ 180-214 \\ 215-249 \\ 250-255 \end{array}$ | Colour wheel <br> $0-360^{\circ}$ <br> OPEN <br> COLOR1 <br> COLOR2 <br> COLOR3 <br> COLOR4 <br> COLOR5 <br> Forwards Color rotation from slow to fast <br> Backwards Color rotation from fast to slow <br> Random |  |
| 11 | $\begin{aligned} & 0-9 \\ & 10-19 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \begin{array}{l} \text { Gobol } \\ \text { Open } \\ \text { GOB01 } \end{array} \\ & \hline \end{aligned}$ |  |


| Channe1 | DMX | Function | Note |
| :---: | :---: | :---: | :---: |
| 11 | $\begin{aligned} & \hline 20-29 \\ & 30-39 \\ & 40-49 \\ & 50-59 \\ & 60-69 \\ & 70-79 \\ & 80-89 \\ & 90-99 \\ & 100-109 \\ & 110-119 \\ & 120-129 \\ & 130-139 \\ & 140-193 \\ & 194-249 \\ & 250-255 \\ & \hline \end{aligned}$ | GOB02 <br> G0B03 <br> GOB04 <br> G0B05 <br> GOB06 <br> Gobo 1 shake slow to fast/ GOB01 <br> Gobo 2 shake slow to fast/GOB02 <br> Gobo 3 shake slow to fast/GOB03 <br> Gobo 4 shake slow to fast/GOB04 <br> Gobo 5 shake slow to fast/GOB05 <br> Gobo 6 shake slow to fast/G0B06 <br> OPEN <br> Forwards gobo rotation from slow to fast <br> Backwards gobo rotation from fast to slow <br> Random Gobo |  |
| 12 | $\begin{array}{r} 0-127 \\ 128-189 \\ 190 \end{array}-1930 子 \begin{aligned} & 194 \end{aligned}$ | ```Gobol Rotation \(0^{\circ}-360^{\circ}\) Forwards gobo rotation from fast to slow Gobo rotation stop Backwards gobo rotation from slow to fast``` |  |
| 13 | $\begin{aligned} & 0-9 \\ & 10-19 \\ & 20-29 \\ & 30-39 \\ & 40-49 \\ & 50-59 \\ & 60-69 \\ & 70-79 \\ & 80-89 \\ & 90-99 \\ & 100-109 \\ & 110-119 \\ & 120-129 \\ & 130-139 \\ & 140-193 \\ & 194-249 \\ & 250-255 \\ & \hline \end{aligned}$ | Gobo2 <br> Open <br> GOB01 <br> GOB02 <br> GOB03 <br> GOB04 <br> GOB05 <br> GOB06 <br> Gobo 1 shake slow to fast/ GOBO1 <br> Gobo 2 shake slow to fast/GOB02 <br> Gobo 3 shake slow to fast/GOB03 <br> Gobo 4 shake slow to fast/GOB04 <br> Gobo 5 shake slow to fast/GOB05 <br> Gobo 6 shake slow to fast/GOB06 <br> OPEN <br> Forwards gobo rotation from slow to fast <br> Backwards gobo rotation from fast to slow <br> Random Gobo |  |
| 14 | $\begin{array}{r} 0-127 \\ 128-189 \\ 190-193 \\ 194 \end{array}-255$ | Gobo2 Rotation <br> $0^{\circ}-360^{\circ}$ <br> Forwards gobo rotation from fast to slow <br> Gobo rotation stop <br> Backwards gobo rotation from slow to fast |  |
| 15 | 0-255 | Blade UP1 <br> Blade Out $\rightarrow$ In |  |
| 16 | 0-255 | Blade UP2 <br> Blade Out $\rightarrow$ In |  |
| 17 | 0-255 | Blade DW1 <br> Blade Out $\rightarrow$ In |  |
| 18 | 0-255 | $\begin{array}{\|l\|} \hline \text { Blade DW2 } \\ \text { Blade Out } \rightarrow \text { In } \\ \hline \end{array}$ |  |
| 19 | 0-255 | Blade LF1 <br> Blade 0ut $\rightarrow$ In |  |
| 20 | 0-255 | Blade LF2 <br> Blade Out $\rightarrow$ In |  |
| 21 | 0-255 | Blade RF1 <br> Blade Out $\rightarrow$ In |  |
| 22 | 0-255 | Blade RF2 <br> Blade 0ut $\rightarrow$ In |  |
| 23 | 0-255 | Framing Rotation $0^{\circ}-120^{\circ}$ |  |


| Channel | DMX | Function | Note |
| :---: | :---: | :---: | :---: |
| 24 | $\begin{array}{r} 0-10 \\ 11-20 \\ 21-30 \\ 31-40 \\ 41-50 \\ 51-60 \\ 61-70 \\ 71-80 \\ 81-90 \\ 91-100 \\ 101-110 \\ 111-120 \\ 121-130 \\ 131-140 \\ 141-150 \\ 151-160 \\ 161-170 \\ 171-180 \\ 181-190 \\ 191-200 \\ 201-255 \\ \hline \end{array}$ | ```Framing Macro No function Square rectangle Isosceles triangle trapezoidal The Fan (Facing Up) parallelogram Right Angle trapezoid The Fan (Down) triangle prismatic The stripes bar Upper left quadrant semicircle (Up) Upper right quadrant Right semicircle Right lower quadrant Semicircle (Down) The lower left quadrant Left Semicircle``` |  |
| 25 | 0-255 | Framing Macro Zoom Framing Macro Zoom |  |
| 26 | $\begin{aligned} & 0-10 \\ & 11-255 \\ & \hline \end{aligned}$ | Prism <br> Prism 0ut <br> Prism In |  |
| 27 | $\begin{array}{rl} 0 & 0 \\ 1 & -63 \\ 64 & -127 \\ 128 & -191 \\ 192 & -207 \\ 208 & -223 \\ 224-239 \\ 240 & -255 \\ \hline \end{array}$ | ```Prism Rotation No Function \(0-360^{\circ}\) Forwards rotation from fast to slow Backwards rotation from slow to fast from slow to fast \(90^{\circ}\) Swing from slow to fast \(180^{\circ}\) Swing from slow to fast \(270^{\circ}\) Swing from slow to fast 360 Swing``` |  |
| 28 | $\begin{aligned} & 0-9 \\ & 10-255 \\ & \hline \end{aligned}$ | Effect Effect Out Effect In |  |
| 29 | $\begin{aligned} & 0-2 \\ & 3-130 \\ & 131-255 \\ & \hline \end{aligned}$ | ```Effect Rotation No Function Forwards rotation from fast to slow Backwards rotation from fast to slow``` |  |
| 30 | $\begin{aligned} & 0-9 \\ & 10-255 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { CRI } \\ & \text { CRI } \\ & \text { CRI } \\ & \text { CRI In } \\ & \hline \end{aligned}$ |  |
| 31 | $0-127$ $128-159$ $160-191$ $192-255$ | ```Frost1 Frost From Min To Max No Function No Function No Function``` |  |
| 32 | $0-127$ $128-159$ $160-191$ $192-255$ | Frost2 <br> Frost From Min To Max No Function <br> No Function <br> No Function |  |
| 33 | $\begin{array}{r} 0-127 \\ 128-159 \\ 160-191 \\ 192-255 \\ \hline \end{array}$ | ```Iris From Max To Min Slow In Fast Out from slow to fast Fast In Slow 0ut from slow to fast Slow In Slow Out from slow to fast``` |  |


| Channel | DMX | Function | Note |
| :---: | :---: | :---: | :---: |
| 34 | 0-255 | Zoom <br> WIDE BEAM $\rightarrow$ NARROW BEAM |  |
| 35 | 0-255 | Focus <br> Infinity $\rightarrow$ near |  |
| 36 | 0-255 | Focus Fine <br> Fine Focus positioning |  |
| 37 | $\begin{aligned} & 0-9 \\ & 10-19 \\ & 20-29 \\ & 30-39 \\ & 40-49 \\ & 50-59 \\ & 60-69 \\ & 70-79 \\ & 80-255 \\ & \hline \end{aligned}$ | Autofocus Distance N0 function 7 M 10 M 15 M 20 M 25 M 30 M 40 M 50 M |  |
| 38 | $0-255$ | Autofocus Adjustment Auto Focus Fine |  |
| 39 | $\begin{aligned} & 0-9 \\ & 10-49 \\ & 50-89 \\ & 90-119 \\ & 120-179 \\ & 180-255 \\ & \hline \end{aligned}$ | Strobe <br> No Function <br> From fast to slow, fast off and slow on From fast to slow, fast on and slow off No Function <br> Random strobe, slow $\rightarrow$ fast <br> Strobe, slow $\rightarrow$ fast |  |
| 40 | 0-255 | Dimmer <br> Dimmer from Dark To Bright |  |
| 41 | 0-255 | Dimmer Fine <br> Dimmer Fine |  |
| 42 | $\begin{aligned} & 0-15 \\ & 16-255 \\ & \hline \end{aligned}$ | Gobo Macro <br> No Function <br> Gobo Macro Function |  |

56 Channels (Mode2)

| Channel | DMX | Function | Note |
| :---: | :---: | :---: | :---: |
| 1 | 0-255 | Pan <br> Pan movement/positioning |  |
| 2 | 0-255 | Pan fine Fine Pan positioning |  |
| 3 | 0-255 | TILT Tilt movement/positioning |  |
| 4 | 0-255 | TILT fine <br> Fine Tilt movement/positioning |  |
| 5 | 0-255 | PAN TILT Speed <br> Pan Tilt movement Speed From Fast To Slow |  |
| 6 | $\begin{array}{r} 11-20 \\ 21-30 \\ 31-40 \\ 41-50 \\ 51-60 \\ 61-70 \\ 71-80 \\ 81-90 \\ 91-100 \\ 101-110 \\ 111-120 \\ 121-130 \\ 131-140 \\ 141-150 \\ 151-160 \\ 161-170 \\ 171-180 \\ 181-190 \\ 191-200 \\ 201-255 \end{array}$ | ```Functions \\ All Reset \\ XY Reset Color System Reset Gobo System Reset Profile System Reset Focus System Reset Super silent Silent Hight Brightness Effect Reset NO function NO function \\ NO function \\ NO function \\ NO function \\ NO function \\ NO function \\ Display Back light is Auto function Open \\ NO function``` |  |
| 7 | 0-255 | Cyan <br> White $\rightarrow$ full cyan |  |
| 8 | 0-255 | Cyan Fine <br> Cyan Fine movement/positioning |  |
| 9 | 0-255 | Magenta <br> White $\rightarrow$ full magenta |  |
| 10 | 0-255 | Magenta Fine <br> Magenta Fine movement/positioning |  |
| 11 | 0-255 | $\begin{aligned} & \text { Yellow } \\ & \text { White } \rightarrow \text { full yellow } \end{aligned}$ |  |
| 12 | 0-255 | Yellow Fine <br> Yellow Fine movement/positioning |  |
| 13 | 0-255 | $\begin{aligned} & \text { CT0 } \\ & \text { Color Temperature from Deep to mall } \\ & \hline \end{aligned}$ |  |
| 14 | 0-255 | CT0 Fine <br> CT0 Fine movement/positioning |  |
| 15 | $\begin{aligned} & 0-89 \\ & 90-104 \\ & 105-119 \\ & 120-134 \\ & 135-149 \\ & 150-164 \\ & 165-179 \\ & 180-214 \\ & 215-249 \\ & 250-255 \\ & \hline \end{aligned}$ | Colour wheel $0^{\circ}-360^{\circ}$ OPEN COLOR1 COLOR2 COLOR3 COLOR4 COLOR5 Forwards Color rotation from slow to fast Backwards Color rotation from fast to slow Random |  |
| 16 | $\begin{aligned} & 0-9 \\ & 10-19 \\ & \hline \end{aligned}$ | $\begin{array}{\|l} \hline \text { Gobol } \\ \text { Open } \\ \text { GOB01 } \\ \hline \end{array}$ |  |


| Channel | DMX | Function | Note |
| :---: | :---: | :---: | :---: |
| 16 | $\begin{aligned} & \hline 20-29 \\ & 30-39 \\ & 40-49 \\ & 50-59 \\ & 60-69 \\ & 70-79 \\ & 80-89 \\ & 90-99 \\ & 100-109 \\ & 110-119 \\ & 120-129 \\ & 130-139 \\ & 140-193 \\ & 194-249 \\ & 250-255 \\ & \hline \end{aligned}$ | GOB02 GOB03 GOB04 GOB05 GOB06 Gobo 1 shake slow to fast/ GOB01 Gobo 2 shake slow to fast/GOB02 Gobo 3 shake slow to fast/GOB03 Gobo 4 shake slow to fast/GOB04 Gobo 5 shake slow to fast/GOB05 Gobo 6 shake slow to fast/GOB06 OPEN Forwards gobo rotation from slow to fast Backwards gobo rotation from fast to slow Random Gobo |  |
| 17 | $\begin{aligned} & 0-127 \\ & 128-189 \\ & 190-193 \\ & 194-255 \\ & \hline \end{aligned}$ | ```Gobol Rotation 0 Forwards gobo rotation from fast to slow Gobo rotation stop Backwards gobo rotation from slow to fast``` |  |
| 18 | $\begin{aligned} & 0-9 \\ & 10-19 \\ & 20-29 \\ & 30-39 \\ & 40-49 \\ & 50-59 \\ & 60-69 \\ & 70-79 \\ & 80-89 \\ & 90-99 \\ & 100-109 \\ & 110-119 \\ & 120-129 \\ & 130-139 \\ & 140-193 \\ & 194-249 \\ & 250-255 \\ & \hline \end{aligned}$ | Gobo2 Open GOBO1 GOBO2 GOBO3 GOB04 GOB05 GOB06 Gobo 1 shake slow to fast/ GOB01 Gobo 2 shake slow to fast/GOB02 Gobo 3 shake slow to fast/GOB03 Gobo 4 shake slow to fast/GOB04 Gobo 5 shake slow to fast/GOB05 Gobo 6 shake slow to fast/GOB06 OPEN Forwards gobo rotation from slow to fast Backwards gobo rotation from fast to slow Random Gobo |  |
| 19 | $\begin{array}{r} 0-127 \\ 128-189 \\ 190-193 \\ 194 \end{array}-255$ | ```Gobo2 Rotation 0 Forwards gobo rotation from fast to slow Gobo rotation stop Backwards gobo rotation from slow to fast``` |  |
| 20 | 0-255 | Blade UP1 <br> Blade 0ut $\rightarrow$ In |  |
| 21 | 0-255 | Blade UP1 Fine <br> Fine Blade positioning |  |
| 22 | 0-255 | Blade UP2 <br> Blade Out $\rightarrow$ In |  |
| 23 | 0-255 | Blade UP2 Fine <br> Fine Blade positioning |  |
| 24 | 0-255 | Blade DW1 <br> Blade 0ut $\rightarrow$ In |  |
| 25 | 0-255 | Blade DW1 Fine <br> Fine Blade positioning |  |
| 26 | 0-255 | Blade DW2 <br> Blade 0ut $\rightarrow$ In |  |
| 27 | 0-255 | Blade DW2 Fine <br> Fine Blade positioning |  |


| Channe1 | DMX | Function | Note |
| :---: | :---: | :---: | :---: |
| 28 |  | Blade LF1 |  |
|  | 0-255 | Blade 0ut $\rightarrow$ In |  |
| 29 |  | Blade LF1 Fine |  |
|  | 0-255 | Fine Blade positioning |  |
| 30 | 0-255 | Blade LF2 <br> Blade Out $\rightarrow$ In |  |
| 31 | 0-255 | Blade LF2 Fine Fine Blade positioning |  |
| 32 | 0-255 | Blade RF1 |  |
|  |  | Blade RF1 Fine |  |
| 33 | 0-255 | Fine Blade positioning |  |
| 34 |  | ${ }^{\text {Blade RF2 }}$ |  |
| 34 | 0-255 | Blade Out $\rightarrow$ In |  |
| 35 |  | Blade RF2 Fine |  |
|  | 0-255 | Fine Blade positioning |  |
| 36 | 0-255 | Framing Rotation $0^{\circ}-90^{\circ}$ |  |
|  |  | Framing Macro |  |
|  | 0-10 | No function |  |
|  | 11-20 | Square |  |
|  | 21-30 | rectangle |  |
|  | $31-40$ | Isosceles triangle |  |
|  | 41-50 | trapezoidal |  |
|  | $\begin{aligned} & 51-60 \\ & 61-70 \end{aligned}$ | The Fan (Facing Up) |  |
|  | 71-80 | Right Angle trapezoid |  |
|  | $81-90$ | The Fan (Down) |  |
| 37 | 91-100 | triangle |  |
|  | 101-110 | prismatic |  |
|  | 111-120 | The stripes |  |
|  | $121-130$ $131-140$ | Unper left quadrant |  |
|  | 141-150 | semicircle (Up) |  |
|  | 151-160 | Upper right quadrant |  |
|  | 161-170 | Right semicircle |  |
|  | 171-180 | Right lower quadrant |  |
|  | 181-190 | Semicircle (Down) |  |
|  | 191-200 | The lower left quadran |  |
|  | 201-255 | Framing Macro Zoom |  |
| 38 | 0-255 | Framing Macro Zoom |  |
|  |  | Prism |  |
| 39 | 0-10 | Prism Out |  |
|  | 11-255 | Prism In |  |
|  |  | Prism Rotation |  |
|  | 0 | No Function |  |
|  | 1-63 | $0^{\circ}-360^{\circ}$ |  |
|  | 64-127 | Forwards rotation from fast to slow |  |
| 40 | 128-191 | Backwards rotation from slow to fast |  |
|  | 192-207 | from slow to fast $90^{\circ}$ Swing |  |
|  | 208-223 | from slow to fast $180^{\circ}$ Swing |  |
|  | 224-239 | from slow to fast $270^{\circ}$ Swing |  |
|  | 240-255 | from slow to fast $360^{\circ}$ Swing |  |
|  |  | Effect |  |
| 41 | $\begin{gathered} 0-9 \\ 10-255 \end{gathered}$ | Effect Out |  |
| 42 |  | Effect Rotation |  |
|  | 0-2 | No Function |  |
|  | $\begin{array}{r} 3-130 \\ 131-255 \\ \hline \end{array}$ | Forwards rotation from fast to slow Backwards rotation from fast to slow |  |


| Channel | DMX | Function | Note |
| :---: | :---: | :---: | :---: |
| 43 | $\begin{aligned} & 0-9 \\ & 10-255 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { CRI } \\ & \text { CRI Out } \end{aligned}$ CRI In |  |
| 44 | $\begin{array}{r} 0-127 \\ 128-159 \\ \hline \end{array}$ | Frost1 <br> Frost From Min To Max No Function |  |
|  | $\begin{aligned} & 160-191 \\ & 192-255 \\ & \hline \end{aligned}$ | No Function No Function |  |
| 45 | $\begin{array}{r} 0-127 \\ 128-159 \\ 160-191 \\ 192-255 \\ \hline \end{array}$ | Frost2 <br> Frost From Min To Max <br> No Function <br> No Function <br> No Function |  |
| 46 | $\begin{array}{r} 0-127 \\ 128 \end{array}-159$ | ```Iris From Max To Min Slow In Fast 0ut from slow to fast Fast In Slow 0ut from slow to fast Slow In Slow Out from slow to fast``` |  |
| 47 | 0-255 | Zoom <br> WIDE BEAM $\rightarrow$ NARROW BEAM |  |
| 48 | 0-255 | ZoomFine <br> Fine Zoom positioning |  |
| 49 | 0-255 | Focus <br> Inf inity $\rightarrow$ near |  |
| 50 | 0-255 | Focus Fine <br> Fine Focus positioning |  |
| 51 | $\begin{aligned} & 0-9 \\ & 10-19 \\ & 20-29 \\ & 30-39 \\ & 40-49 \\ & 50-59 \\ & 60-69 \\ & 70-79 \\ & 80-255 \\ & \hline \end{aligned}$ | Autofocus Distance <br> N0 function <br> 7 M <br> 10 M <br> 15 M <br> 20 M <br> 25 M <br> 30 M <br> 40 M <br> 50 M |  |
| 52 | 0-255 | Autofocus Adjustment Auto Focus Fine |  |
| 53 | $\begin{aligned} & 0-9 \\ & 10-49 \\ & 50-89 \\ & 90-119 \\ & 120-179 \\ & 180-255 \\ & \hline \end{aligned}$ | Strobe <br> No Function <br> From fast to slow, fast off and slow on From fast to slow, fast on and slow off No Function <br> Random strobe, slow $\rightarrow$ fast <br> Strobe, slow $\rightarrow$ fast |  |
| 54 | 0-255 | Dimmer <br> Dimmer from Dark To Bright |  |
| 55 | 0-255 | Dimmer Fine <br> Dimmer Fine |  |
| 56 | $\begin{aligned} & 0-15 \\ & 16-255 \\ & \hline \end{aligned}$ | 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.

## 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 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 $\mathbf{Y}$ chip motor is damaged.

## 10. СTO:

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 objects in the operation range of the color wheel interfering with its operation and reset.

Check whether the connection line connecting the color wheel and the magnetic induction board is in poor contact or disconnected.

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

## 12. Gobo1:

Check whether there are other objects in the revolution and operation range of Gobo1 interfering with its operation and reset.

Check whether the connection line of the connection Gobo1 male wheel magnetic induction board is in poor contact or disconnected.

Check if the revolving magnet of Gobo1 is loose, fallen off or damaged.
Check the Gobo1 revolution magnetic induction plate for looseness, falling off or damage.
Check if the circuit related to the Gobo1 revolution motor driver board is damaged.
Check if the Gobo1 revolution motor is damaged.

## 13. Gobo1 Rot.:

Check whether there are other objects in the revolution and operation range of Gobo1 Rot. interfering with its operation and reset.

Check whether the connection line of the connection Gobo1 Rot. male wheel magnetic induction board is in poor contact or disconnected.

Check if the revolving magnet of Gobo1 Rot. is loose, fallen off or damaged.
Check the Gobo1 Rot. revolution magnetic induction plate for looseness, falling off or damage.
Check if the circuit related to the Gobo1 Rot. revolution motor driver board is damaged.
Check if the Gobo1 Rot. revolution motor is damaged.

## 14. Gobo2:

Check whether there are other objects in the revolution and operation range of Gobo2 interfering with its operation and reset.

Check whether the connection line of the connection Gobo2 male wheel magnetic induction board is in poor contact or disconnected.

Check if the revolving magnet of Gobo2 is loose, fallen off or damaged.
Check the Gobo2 revolution magnetic induction plate for looseness, falling off or damage.
Check if the circuit related to the Gobo2 revolution motor driver board is damaged.
Check if the Gobo2 revolution motor is damaged.

## 15. Gobo2 Rot.:

Check whether there are other objects in the revolution and operation range of Gobo2 Rot. interfering with its operation and reset.

Check whether the connection line of the connection Gobo2 Rot. male wheel magnetic induction board is in poor contact or disconnected.

Check if the revolving magnet of Gobo2 Rot. is loose, fallen off or damaged.
Check the Gobo2 Rot. revolution magnetic induction plate for looseness, falling off or damage.
Check if the circuit related to the Gobo2 Rot. revolution motor driver board is damaged.
Check if the Gobo2 Rot. revolution motor is damaged.

## 16. Fram Rot.:

Check whether there are other objects in the revolution and operation range of Fram Rot. interfering with its operation and reset.

Check whether the connection line of the connection Fram Rot. male wheel magnetic induction board is in poor contact or disconnected.

Check if the revolving magnet of Fram Rot. is loose, fallen off or damaged.
Check the Fram Rot. revolution magnetic induction plate for looseness, falling off or damage.
Check if the circuit related to the Fram Rot. revolution motor driver board is damaged.
Check if the Fram Rot. revolution motor is damaged.

## 17. Zoom:

Check whether there are other objects in the revolution and operation range of Zoom interfering with its operation and reset.

Check whether the connection line of the connection Zoom male wheel magnetic induction board is in poor contact or disconnected.

Check if the revolving magnet of Zoom is loose, fallen off or damaged.
Check the Zoom revolution magnetic induction plate for looseness, falling off or damage.
Check if the circuit related to the Zoom revolution motor driver board is damaged.
Check if the Zoom revolution motor is damaged.

## 18. Focus:

Check whether there are other objects in the revolution and operation range of Focus interfering with its operation and reset.

Check whether the connection line of the connection Focus male wheel magnetic induction board is in poor contact or disconnected.

Check if the revolving magnet of Focus is loose, fallen off or damaged.
Check the Focus revolution magnetic induction plate for looseness, falling off or damage.
Check if the circuit related to the Focus revolution motor driver board is damaged.
Check if the Focus revolution motor is damaged.

## 19. Prism:

Check whether there are other objects in the revolution and operation range of Prism interfering with its operation and reset.

Check whether the connection line of the connection Prism male wheel magnetic induction board is in poor contact or disconnected.

Check if the revolving magnet of Prism is loose, fallen off or damaged.
Check the Prism revolution magnetic induction plate for looseness, falling off or damage.
Check if the circuit related to the Prism revolution motor driver board is damaged.
Check if the Prism revolution motor is damaged.

## 20. Prism Rot.:

Check whether there are other objects in the revolution and operation range of Prism Rot. interfering with its operation and reset.

Check whether the connection line of the connection Prism Rot. male wheel magnetic induction board is in poor contact or disconnected.

Check if the revolving magnet of Prism Rot. is loose, fallen off or damaged.
Check the Prism Rot. revolution magnetic induction plate for looseness, falling off or damage.
Check if the circuit related to the Prism Rot. revolution motor driver board is damaged.
Check if the Prism Rot. revolution motor is damaged.

## The position of each fan of the fixture:



## 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.

