

FLY DRAGON LIGHTING EQUIPMENT CO., LTD

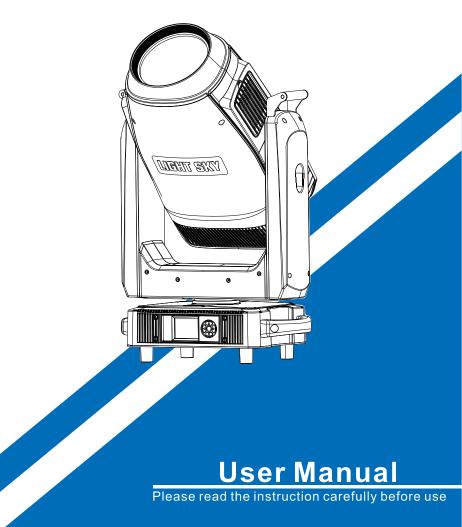
WW.LIGHTSKY.COM.CN

# **SUPER SCOPE PLUS**



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

Please note that this product, as all the others in the rich my company range, has been designed and made with total quality to ensure excellent performance and best meet your expectations and requirements.
Carefully read this user manual in its entirety and keep it safe for future reference. It is essential to know the information and comply with the instructions given in this manual to ensure the fitting is installed, used and serviced correctly and safely.

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

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

## **1.Safety Instructions**

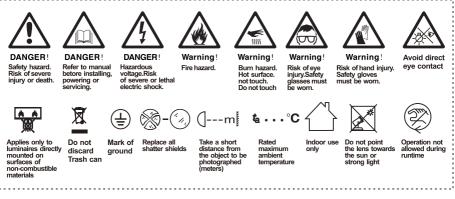


Please read the instruction carefully which includes important information about the installation, usage and maintenance.

# 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 gualified 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 20cm 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: 0°C. Maximum ambient temperature Ta: 40°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 0.5m.
- ▶ Make sure the power cord is not crimped or damaged; replace it immediately if damaged.
- ► Unit's surface temperature may reach up to 80°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: 880W white LED module 1000W white LED module
- Zoom range: 5.5° -52 °
- Optical lens: coated with high anti-reflection film, diameter 180mm
- Color temperature: 6800 K
- Color rendering index: RA≥71 / RA≥90 (cut into high display filter).
- Total light output flux: 

  880W: 40000 Lm 

  1000W: 41000 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 disk A: 7 kinds of glass patterns + white circle, the outer diameter of the gobo is 26.9mm, and the inner diameter of the gobo is 21.5mm.
- Rotary disc B: 7 kinds of glass patterns + white circle, the outer diameter of the gobo is 26.9mm, and the inner diameter of the gobo is 21.5mm.
- 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 ±55°.

## 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: 1000Hz ~ 25KHz

### **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° 8bit/16bit precision scan
- Y-axis: 270° 8bit/16bit precision scan

#### POWER

- Input voltage: AC 100-240V 50/60Hz
- Maximum power:
  - □ 880W light source: 1280W □ 1000W light source: 1400W
- Power factor: 0.996

#### SIZE & WEIGHT

- Lighting Size : 442mm×258mm×788mm
- Box Size : 520mm×370mm×870mm
- N.W.: 37.5kg, G.W.: 42.6kg
- Flycase Size (1 set): 660X520X840mm
- -N.W.: 37.5kg, G.W.: 71.0kg

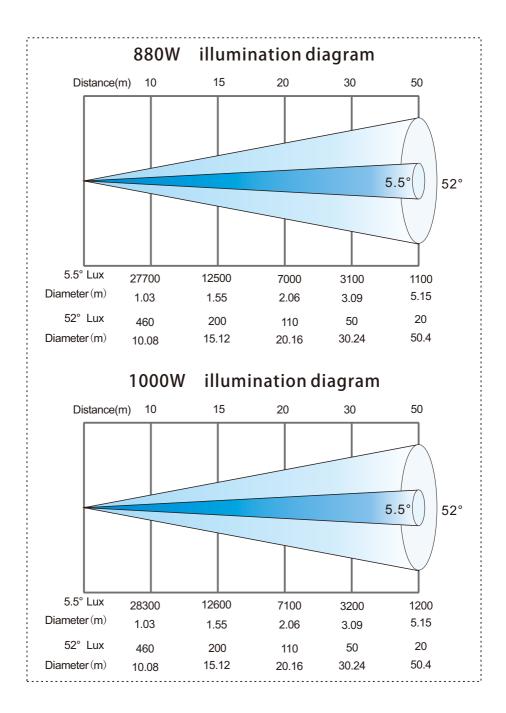
## OTHERS

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

## STANDARDS AND CERTIFICATION

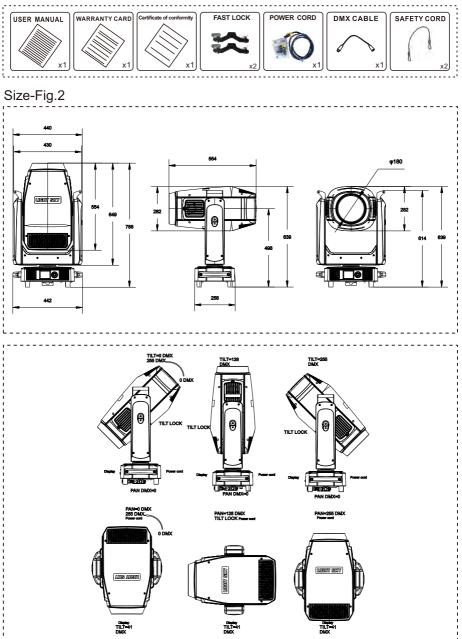
- The product implementation standard: GB 7000.1-2015 GB7000. 217-2008
- Approved certifications: CE 、 RoHs
- The product complies with the following EU directives:

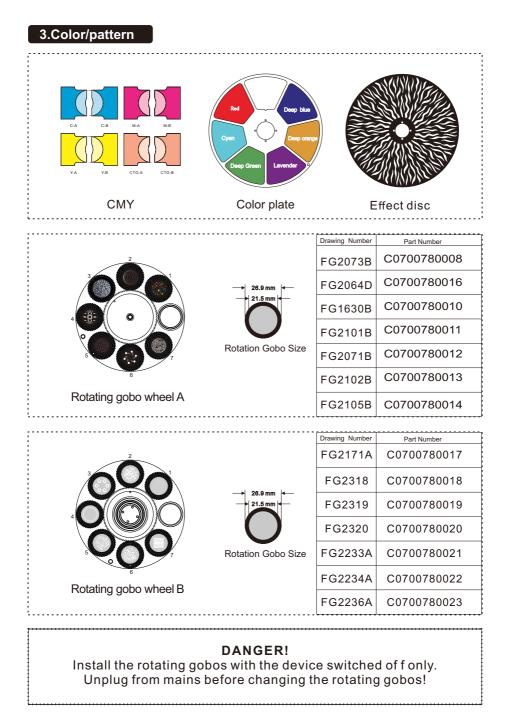
Low Voltage Directive 2014/35/EU . EMC Directive 2014/30/EU



# 2.1.Attachment And Size

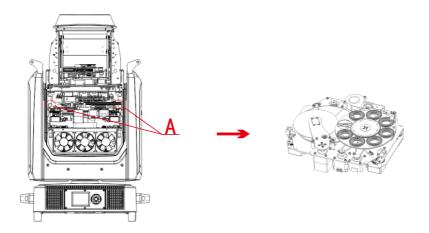
# Attachment contents-Fig.1



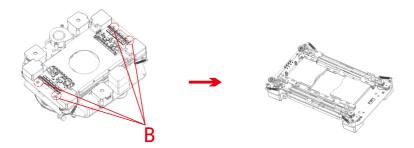


# 3.1.Replacing Rotating Gobos

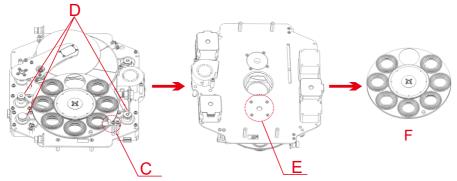
1. Use a screwdriver to unscrew the two screws at **A** to take out the pattern color module assembly;



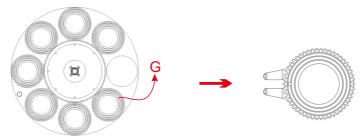
2. Reverse the assembly, and use a screwdriver to unscrew the four screws at **B** to separate the pattern color module from the CMY module;



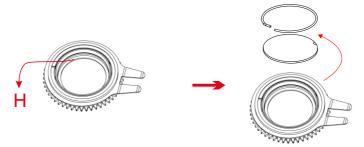
3. Use a screwdriver from the front of the pattern module to unscrew the two screws of the magnetic induction board at C, and remove the magnetic induction board; then half loosen the screws on the three motors at D, move the motor and take off the belt; turn the pattern module back Come here, unscrew the four screws at 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)



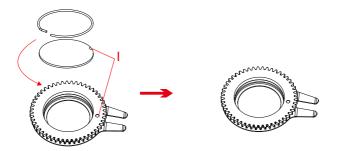
4. As shown in **G**, gently lift the gobo driven wheel from the edge upwards from the back of the gobo wheel and pull it out slowly to take out a single gobo;



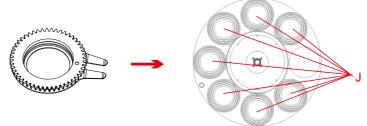
5. Take out the circlip at **H** with tweezers or other small objects that can be held (if the gobo is coated with glass glue for fixing, please use a professional cleaning agent to remove the glass glue and then take out the circlip to avoid damage to the gobo);



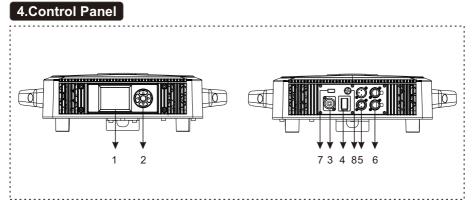
6. When assembling the gobo, avoid touching the gobo directly with your hands, and as shown in I, align the notched part of the gobo with the depression of the driven wheel assembly (the coating surface of the gobo should face the light source);



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.



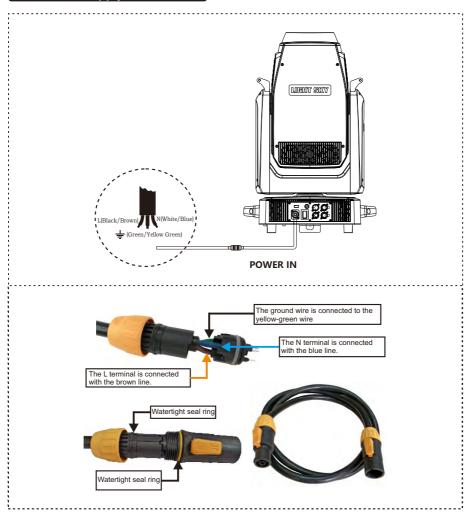
- 1. Display: To show the various menus and the selected function
- 2. Button:

OK confirmation key
UP
DOWN
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.

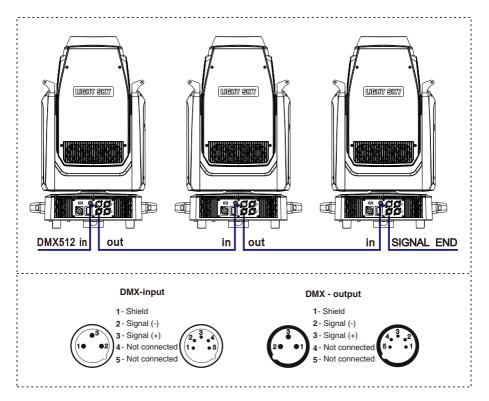
# 5.Connection and control

# 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 DMX cable has to be terminated with a terminator. Solder a 1200hm 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last unit.

2. Connect the unit together in a "daisy chain" by XLR plug cable from the output of the unit to the input of the next unit. The cable cannot be branched or split to a "Y" cable. DMX 512 is a very high-speed signal. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system.

3. The DMX output and input connectors are pass-through to maintain the DMX circuit, when one of the units' power is disconnected.

4. Each lighting unit needs to have a DMX address to receive the data by the controller. The address number is between 1-512.

5. The end of the DMX 512 system should be terminated to reduce signal errors.

6.3 pin XLR connectors are more popular than 5 pins XLR.

3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)

5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+), Pin4, Pin5 not used.

## 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 left/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 left/right 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 XY 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.

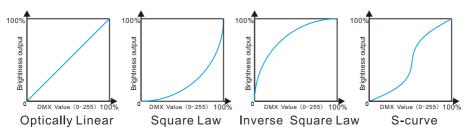
#### Noise pattern:

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° / automatic, press the OK key to confirm and exit; then press the left/right button to return to the previous menu.

# Dimmer Modes



## 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 Hz, 3600 Hz, 7200 Hz, 25000 Hz, press the OK key to confirm, and then press the left/right button to return 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 left/right 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 confirm 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 left/right 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 left/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 left/right 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 left/right 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 1A, cutting 1B, cutting 2A, cutting 2B, cutting 3A, cutting 3B, cutting 4A, cutting 4B, 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 pattern 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 2B 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 4B 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.

Main menu	l menu	II menu	III menu	IV menu
Main menu	Address	→1-512	in mond	IV mond
		Standard (43)		
DMX SETTING	→ Channel mode	Extended (55)		
	Input mode	→ DMX 512		
		Power on time	0 - 99999H	
	Fixture times	$\rightarrow$ LED on time	0 - 99999H	
		All time	0 - 99999H	
	<b>T</b> .	LED TEMP		
	Temperatures	→ Drive TEMP		
	RDM info	→ UID:0x3888XXXXXXXX		
		1.Pan	0 - 255	
	DMX live	→ 2.Pan fine	→0 - 255	
		3	0 - 255	
		Display	VX.XXX	
		Pan/Tilt	VX.XXX	
		CMY module	VX.XXX	
		Gobo module	VX.XXX	
	Version info	→ Profile1	VX.XXX	
		Profile2	VX.XXX	
		Zoom module	VX.XXX	
		Led FanDrv	VX.XXX	
- 4 -				
nfo		In Fan		11
		Out Fan		
		Gobo Fan		
		Profile Fan		
		Focus Fan		
		In Fan1		
		In Fan2		
		In Fan3		
		Out Fan1		
	Fan Info	Out Fan2		
		Out Fan3		
		CMY Fan		
		Gobo Fan		
		Profile Fan		
		Focus Fan1		
		Focus Fan2		
		1 oodo Faniz		
		11	OFF	
		PT swap	ON	
			OFF	
	Pan/Tilt	→ Pan invert	→ ON	
			OFF	
		Tilt invert	ON	
		Super silent		++
	Noise mode	→ Silent		++
	Noise mode	Hight Brightness		++
			Chinese	
		Language	English	
			Always	
		Backlight time	Auto (30S)	
	Display	→ Intensity	0 - 100	
erson	→ <sup>Display</sup>	intensity	Normal	
		Rotation	Rotate 180	
			Auto (30S)	11
		Linear	, 1010 (000)	11
		Square(Default)		11
	Dimmer Curve	I-Square		11
		S Curve		
		1000 Hz		++
		3600 Hz		++
	Led Preq Set	7200 Hz		++
		25000 Hz		++
				++
	Zomm Invert Set	OFF ON		++
			1 1	1 1

Main menu	l menu	II menu		III menu	IV menu
		1.Pan	0 - 1		
	Manual Control	→ 2.Pan fine	→0 -	255	
		3	0 - 0	255	
		Total reset			
lanual		Pan/Tilt reset			
lanual	_,	Gobo reset			
	Reset	→ Color reset			
		Profile reset			
		Focus reset			
		Effect reset			
	Test all	Testing			
est	→ Test pan/tilt	→ Testing			
	Test effects	Testing			
		Memory IC		Reset/Error	
		Angle Sensor		Reset/Error	
		Pan Encodeer		Reset/Error	
		Tilt Encoder		Reset/Error	
		Pan		Reset/Error	
		Tilt		Reset/Error	
	11	Cyan		Reset/Error	
		Magenta		Reset/Error	
		Yellow		Reset/Error	
	Fixture state	СТО		Reset/Error	
		Colorwheel		Reset/Error	
		Gobo1		Reset/Error	
		Gobo1 Rot.		Reset/Error	
		Gobo2		Reset/Error	
		Gobo2 Rot.		Reset/Error	
		Fram Rot.		Reset/Error	
		Zoom		Reset/Error	
		Focus		Reset/Error	
		Prism1		Reset/Error	
		Prism2		Reset/Error	
		Prism Rot.		Reset/Error	
	A. 19 1	Pan	0 -		
	Adjust	→Tilt	→0 -		
			0 -		
		Factory Reset		/ NO	1/50 (1) 0
				et power on timers	YES/NO
		Reset timers		et led timers	→ YES/NO
ervice	$\rightarrow$		Rese	et all timers	YES/NO
					Display
					Pan/Tilt
					CMY module
					Gobo module
			Sim	ple update	Framing module
				ompie apaate	Framing module
					Zoom module
					LEDQD
					ALL
		Update			
	Factory (	opuale			Display
	Factory				Pan/Tilt
	11				CMY module
	11		-		Gobo module
					Framing module
	11		Who	ole update	Framing module
					Zoom module
	11				LEDQD
					ALL
			880	\A/	
	11	Power select	100		┥┝───
	11		100	000	
	11	11			
	11	Logo select			
	1 1	J	1 1		1 1

## 6.2.Channel Setting

Press the OK button to confirm, use the up/down buttons to select the channel mode: standard mode (43CH), extended mode (55CH), 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 receive to 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 Address	Unit <b>2</b> Address	Unit <b>3</b> Address	Unit <b>4</b> 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		Pan	
	•	0255	Pan movement/positioning	
2	2		Pan fine	
-	-	0255	Fine Pan positioning	
3	3		TILT	
•	•	0255	Tilt movement/positioning	
4	4		TILT fine	
-		0255	Fine Tilt movement/positioning	
5	5	0.055	PAN TILT Speed	
		0255	Pan Tilt movement Speed From Fast To Slow Functions	
		010	NO function	
		11 20	All Reset	
		21 30	XY Reset	
		31 40	Color System Reset	
		41 50	Gobo System Reset	
		51 60	Profile System Reset	
		61 70	Focus System Reset	
		71 80	Super silent	
		81 90	Silent	
6	6	91 100	Hight Brightness	
0	o	101 110	Effect Reset	
		111 120	Zoom Invert	
		121 130	Zoom Forward	
		131 140	NO function	
		141 150	NO function	
		151 160	NO function	
		161 170	NO function	
		171 180	NO function	
		181 190	Display Back light is Auto	
		191 200 201 255	function Open NO function	
		201 255	Cyan	
7	7	0255	White→full cyan	
		0200	Cyan Fine	
8	1	0255	Cyan Fine movement/positioning	
		0 200	Magenta	
9	8	0255	White $\rightarrow$ full magenta	
40	,		Magenta Fine	
10	1	0255	Magenta Fine movement/positioning	
11	9		Yellow	
	3	0255	White $\rightarrow$ full yellow	
12	1		Yellow Fine	
12	,	0255	Yellow Fine movement/positioning	
13	10	_	СТО	
		0255	Color Temperature from Deep to mall	
14	1	0.055	CTO Fine	
	-	0255	CTO Fine movement/positioning	
		0 00	Colour wheel 0360°	
		089	OPEN	
		90101		
		102114	COLOR1 COLOR2	
		115127 128140	COLOR2 COLOR3	
15	11	128140	COLORS COLOR4	
		141153	COLOR5	
I	ļ	104 100		I I

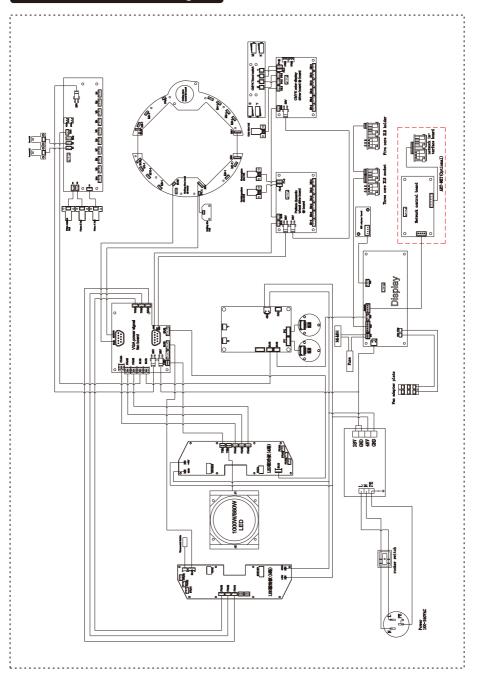
55 Channel	43 Channel	DMX	Function	Note
		167179	COLOR6	
		180214	Forwards Color rotation from slow to fast	
		215249	Backwards Color rotation from fast to slow	
		250255	Random Color	
			Gobo	
		09	Open	
		1019	GOBO1	
		2029	GOBO2	
		3039	GOBO3	
		4049	GOBO4	
		5059	GOBO5	
		6069	GOBO6	
		7079	GOBO7	
16	12	8087	Gobo 1 shake slow to fast	
10	12	8895	Gobo 2 shake slow to fast	
		96103	Gobo 3 shake slow to fast	
		104111	Gobo 4 shake slow to fast	
		112119	Gobo 5 shake slow to fast	
		120127	Gobo 6 shake slow to fast	
		128135	Gobo 7 shake slow to fast	
		136139	OPEN	
		140194	Forwards gobo rotation from slow to fast	
		195249	Backwards gobo rotation from fast to slow	
		250255	Random Gobo	
			Gobo Rotation	
		0127	0°360°	
17	13	128189	Forwards gobo rotation from fast to slow	
		190193	Gobo rotation stop	
		194255	Backwards gobo rotation from slow to fast	
			Gobo2	
		09	Open	
		1019	GOBO1	
		2029	GOBO2	
		3039	GOBO3	
		4049	GOBO4	
		5059	GOBO5	
		6069	GOBO6	
		7079	GOBO7	
18	14	8087	Gobo 1 shake slow to fast	
		8895	Gobo 2 shake slow to fast	
		96103	Gobo 3 shake slow to fast	
		104111	Gobo 4 shake slow to fast	
		112119	Gobo 5 shake slow to fast	
		120127	Gobo 6 shake slow to fast	
		128135	Gobo 7 shake slow to fast	
		136139	OPEN	
		140194	Forwards gobo rotation from slow to fast	
		195249	Backwards gobo rotation from fast to slow	
		250255	Random Gobo	
		_	Gobo2 Rotation	
	<i>i</i> –	0127	0°360°	
19	15	128189	Forwards gobo rotation from fast to slow	
		190193	Gobo rotation stop	
		194255	Backwards gobo rotation from slow to fast	
20	16	a	Blade 1A	
		0255	Blade Out→In	

21         /         Diade 1A         Fine           22         17         0-255         Fine Blade positioning           23         /         0-255         Fine Blade positioning           24         18         0-255         Blade 1B           24         18         0-255         Blade 2A           24         18         0-255         Blade 2A           25         /         0-255         Blade 2A           26         19         0-255         Blade 2B           26         19         0-255         Blade 2B           27         /         0-255         Blade 2B           28         20         0-255         Blade 3A           29         /         0-255         Blade 3A           30         21         0-255         Blade 3B           31         /         0-255         Blade 3B           33         /         0-255         Blade 4F           33         /         0-255         Blade 4A           33         /         0-255         Blade 4B           34         23         0-255         Blade 4B           35         /         0-255 <td< th=""><th>55 Channel</th><th>43 Channel</th><th>DMX</th><th>Function</th><th>Note</th></td<>	55 Channel	43 Channel	DMX	Function	Note
22         17        255         Fine Blade DottIn           23         /        255         Blade OutIn           23         /        255         Fine Blade Dositioning           24         18         0255         Blade 2A           24         18         0-255         Blade 2A           25         /        255         Blade 2A           26         19        255         Blade 2B           26         19        255         Blade 3A           27         /        255         Blade 3A           81ade 2B         Fine Blade positioning	21	1			
22         17         0-255         Blade 0utin           23         /         0-255         Fine Blade positioning           24         18         0-255         Blade 2A           25         /         0-255         Blade 2A           26         19         0-255         Blade 2B           26         19         0-255         Blade 2B           27         /         0-255         Blade 2B           28         20         0-255         Blade 2B           30         21         0-255         Blade 3A           30         21         0-255         Blade 3A           31         /         0-255         Blade 3B           31         /         0-255         Blade 4A           33         /         0-255         Blade 4A           33         /         0-255         Blade 4A           33         /         0-255         Blade 4A           34         23         0-255         Blade 4A           35         /         0-255         Blade 4A           36         24         0-255         Blade 4A           37         0-255         Fine Blade positioning <th>21</th> <th>,</th> <th>0255</th> <th></th> <th></th>	21	,	0255		
23         /         0-255         Blade 0UtIn           23         /         0-255         Fine Blade positioning           24         18         0-255         Blade 0utIn           25         /         0-255         Blade 2A           26         19         0-255         Blade 2A           26         19         0-255         Blade 2B           27         /         0-255         Blade 2B           28         20         0-255         Blade 2A           29         /         0-255         Blade 3A           30         21         0-255         Blade 3A           31         /         0-255         Blade 0utIn           31         /         0-255         Blade 0utIn           31         /         0-255         Blade 0utIn           33         /         0-255         Blade 0utIn           33         /         0-255         Blade 0utIn           33         /         0-255         Blade 0utIn           34         23         0-255         Blade 0utIn           34         23         0-255         Blade 4A           0-255         Fine Bla	22	17			
23         /         0-255         Fine Blade positioning           24         18         0-255         Blade OutIn           25         /         0-255         Blade positioning           26         19         0-255         Blade DutIn           27         /         0-255         Blade DutIn           28         20        255         Blade OutIn           29         /         0-255         Blade OutIn           29         /         0-255         Blade AA           30         21         0-255         Blade SB           31         /         0-255         Blade SB           32         22         5lade AA           33         /         0-255           34d         30         21           0-255         Blade OutIn           33         /         0-255           Blade 4A         Fine           33         /         0-255           Blade 4B         Fine           34         23         0-255           Blade 4B         Fine           36         24         0-255           Fine Blade positioning         1 <th></th> <th></th> <th>0255</th> <th></th> <th></th>			0255		
24         18 $0-255$ Fine Blade QLA           25         / $0-255$ Blade QLA         Fine           26         19 $0-255$ Blade QL         Blade 2A           26         19 $0-255$ Blade QL         Market A           27         / $0-255$ Blade QL         Market A           28         20 $0-255$ Fine Blade positioning         Market A           29         / $0-255$ Blade OutIn         Blade 3A           30         21 $0-255$ Blade DutIn         Blade 3A           31         / $0-255$ Blade OutIn         Blade 3A           31         / $0-255$ Blade OutIn         Blade 3A           31         / $0-255$ Blade OutIn         Blade 3A           32         22 $0-255$ Blade A         Blade 3A           33         / $0-255$ Fine Blade positioning         Market A           34         23 $0-255$ Fine Blade positioning         Market A           35         / $0-255$ Fine Blade positio	23	1			
24         18         0-255         Blade Out-In           25         /         0-255         Fine Blade positioning		-	0255		
25         /         0255 Fine Blade 2A Blade 2B           26         19         0255 0-255         Blade 2L Blade 2B           27         /         0-255 0-255         Blade 2A Fine Blade positioning           28         20         0-255 0-255         Blade 2A Blade 3A 0-255         Blade 2A Blade 3A           30         21         0-255         Blade 0utIn Blade 3B         1           31         /         0-255         Blade 0utIn Blade 3B Fine Blade 3B Fine Blade 3B Fine Blade 4A         1           32         22         0-255         Blade positioning Blade 4A         1           33         /         0-255         Blade 4A Fine Blade positioning         1           34         23         0-255         Blade 4B Fine Blade positioning         1           34         23         0-255         Fine Blade positioning         1           36         24         0-255         Fine Blade positioning         1           36         1         0-255         Fine Blade positioning         1           37         25         Fine Blade positioning         1         1           38         1         0-10         No function         1           37         25	24	18	0.055		
25       1       0-255       Fine Blade positioning         26       19       0-255       Blade 2B       Fine         27       1       Blade 2B       Fine       1         27       1       0-255       Fine Blade positioning       1         28       20       0-255       Blade A Fine       1       1         29       1       0-255       Fine Blade positioning       1       1         30       21       0-255       Blade 3A Fine       1       1       1       0-255       Blade 4A Fine       1       1         31       1       0-255       Fine Blade positioning       1 <td< th=""><th></th><th></th><th>0255</th><th></th><th></th></td<>			0255		
26         19 $0-255$ Blade 2B         Fine           27         / $0-255$ Blade 2B         Fine           28         20 $0-255$ Blade 3A         Blade 3A           28         20 $0-255$ Blade 3A         Blade 3A           29         / $0-255$ Blade 3A Fine         Blade 3B           30         21 $0-255$ Blade 4B         Blade 3B           31         / $0-255$ Blade 4A         Blade 3B           32         22 $0-255$ Blade 4A         Blade 4A           33         / $0-255$ Blade 0utIn         Blade 4A           34         23 $0-255$ Blade 4A         Fine           35         / $0-255$ Blade 4B         Fine           36         24 $0-255$ Fine Blade positioning         Fine           36         1 $0-255$ Fine Blade positioning         Fine           37         25         Fine Blade 10         Fine Blade 10         Fine           36         24 $0-255$ Fine Blade 10         Fine <th>25</th> <th>1</th> <th>0255</th> <th></th> <th></th>	25	1	0255		
26         19         0-255         Blade Dut-In           27         /			0-200		
27         /         0         Bidde 2B         Fine Blade positioning           28         20         0         Bidde 3A         Bidde 3A           29         /         0         0         255         Bidde 3A         Fine           30         21         0         Bidde 3A         Fine         9         1         0         0         255         Bidde 011-1n         1         1         0         0         255         Bidde 011-1n         1         1         0         0         255         Fine Bidde positioning         1         1         0         0         255         Fine Bidde Out-1n         1         1         1         0         255         Fine Bidde Out-1n         1         1         1         1         0         255         Fine Bidde Out-1n         1	26	19	0255		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	07	,			
28         20         Blade 3A Blade 0ut-ln           29         /         0-255         Blade 3A Fine Fine Blade positioning           30         21         0-255         Blade 3B Blade 3B 0-255         Blade 0ut-ln           31         /         0-255         Blade 0ut-ln         Image: 100 minits of the second s	27	1	0255	Fine Blade positioning	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	20	20		Blade 3A	
29         /         0255         Fine Blade positioning           30         21         0255         Blade 3B           31         /         0255         Blade Outin           31         /         0255         Blade Outin           32         22         0255         Blade AA           33         /         0255         Blade 4A           33         /         0255         Blade 4A           34         23         0255         Blade 4A           34         23         0255         Blade 4B           34         23         0255         Fine Blade positioning           35         /         0255         Fine Blade positioning           36         24         0255         0°-10°           7         0         0         0°-10°           8         No function         11 - 20         Square           21 - 30         rectangle         31 - 40         Isosceles triangle           31 - 40         Isosceles triangle         14 - 50         The Fan(Pown)           61 - 70         parallelogram         71 - 80         Right Angle trapezoid           81 - 700         triangle	20	20	0255		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	29	1			
30         21         0-255         Blade 0at -hn           31         /         0-255         Fine Blade positioning           32         22         0-255         Blade 4A           33         /         0-255         Blade 4A           33         /         0-255         Blade 4A           33         /         0-255         Blade 4B           34         23         0-255         Blade 4B           35         /         0-255         Blade 4B           36         24         0-255         Fine Blade positioning           36         24         0-255         Fine Blade positioning           36         24         0-255         0°-120°           Framing Rotation         0'         11 - 20         Square           21 - 30         rectangle         11 - 20         Square           21 - 30         rectangle         11 - 20         Nagle trapezoidal           51 - 60         The Fan(Facing Up)         61 - 70         parallelogram           61 - 70         parallelogram         71 - 80         Right Angle trapezoid           81 - 90         The Fan(Down)         11 - 120         The semicrcle           101 - 110		,	0255		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	30	21	_		
31/ $0-255$ Fine Blade positioning3222 $0-255$ Blade $4A$ 33/ $0-255$ Blade Out→In3423 $0-255$ Fine Blade positioning3423 $0-255$ Blade 4B35/ $0-255$ Blade Dut→In3624 $0-255$ Fine Blade positioning3624 $0-255$ Fine Blade position3725 $0-255$ Fine Blade position3725 $0^{-1}10$ No function11-20Square21-30rectangle3725 $0^{-1}10$ 3624 $0-255$ 3725 $0^{-1}10$ 38 $0-10$ 39 $0-10$ 39 $0-10$ 39 $0-10$ 39 $0-10$ 30 $0-10$ 31 $-40$ 33 $0-255$ 37 $25$ 37 $25$ 37 $25$ 37 $25$ 37 $25$ 37 $25$ 37 $25$ 37 $25$ 37 $25$ 37 $10^{-110}$ 38 $10^{-110}$ 39 $1-100$ 39 $1-100$ 39 $1-100$ 39 $1-100$ 39 $1-100$ 39 $1-100$ 39 $1-100$ 39 $1-100$ 39 $1-100$ 39 $1-100$ 39 $1-100$ 39 $1-100$ <			0255		
32       22       Blade 4A       Blade Vut→In         33       /       0255       Blade 4A       Fine         34       23       0255       Blade 4B       Fine         35       /       0255       Blade 4B       Fine         36       24       0255       Fine Blade positioning       Framing Rotation         36       24       0255       Fine Blade 7B       Framing Nacro         0       -10       No function       Framing Macro       Framing Nacro         11 - 20       Square       Square       Framing Macro         21 - 30       rectangle       Isosceles triangle       Isosceles triangle         31 - 40       Isosceles triangle       Framing Macro       Framing Nacro         71 - 80       Right Angle trapezoid       Fine 60       The Fan(Facing Up)         61 - 70       parallelogram       71 - 80       Right Angle trapezoid         71 - 80       Right Angle trapezoid       111 - 120       The stripes         121 - 130       bar       131 - 40       Upper left quadrant         131 - 140       Upper left quadrant       131 - 140       Upper left quadrant         131 - 100       triangle       131 - 140       Upper le	31	1	0.055		
32       22 $0-255$ Blade $0ut \rightarrow ln$ 33       / $0-255$ Fine Blade $4A$ Fine         34       23 $0-255$ Blade $4B$ 35       / $0-255$ Blade $0ut \rightarrow ln$ 36       24 $0-255$ Fine Blade positioning $0-255$ $0^{\circ}-120^{\circ}$ $0^{\circ}-120^{\circ}$ $0-255$ $0^{\circ}-120^{\circ}$ $0^{\circ}-120^{\circ}$ $0^{\circ}-10$ No function $11 - 20$ Square $21 - 30$ rectangle $31 - 40$ Isosceles triangle $31 - 40$ Isosceles triangle $31 - 40$ Isosceles triangle $51 - 60$ The Fan(Facing Up) $61 - 70$ parallelogram $71 - 80$ Right Angle trapezoid $81 - 90$ The Fan(Down) $111 - 120$ The stripes $121 - 130$ bar $131 - 140$ Upper left quadrant $141 - 150$ semicircle (Up) $151 - 160$ Upper right quadrant $161 - 170$ Right semicircle $121 - 130$ bar $121 -$			0255		
33         /         0255         Blade 4A         Fine         Blade positioning           34         23         0255         Blade 4B         Blade 4B         Blade 4B         Fine         State 4B         Stat	32	22	0 255		
33         1         0255         Fine Blade positioning           34         23         0255         Blade 4B         Fine           35         1         0255         Fine Blade 4B         Fine           36         24         0255         Fine Blade AB         Fine           36         24         0255         Fireming Rotation         Framing Nacro           37         0         0-10         No function         No function           11 - 20         Square         21 - 30         rectangle           31 - 40         Isosceles triangle         151 - 60         The Fan(Facing Up)           61 - 70         parallelogram         71 - 80         Right Angle trapezoid           11 - 120         The San(Down)         triangle         101 - 110           111 - 120         The stripes         121 - 130         bar           121 - 130         bar         131 - 140         Upper left quadrant           161 - 170			0255		
34       23       Blade 4B       Blade 0ut→ln         35       /       0255       Blade 4B Fine         36       24       0255       Fine Blade positioning         36       24       0255       0°-120°         Framing Rotation 0°-120°         36       24       0255         9100       No function No function       11 - 20         11 - 20       Square       21 - 30         21 - 30       rectangle       31 - 40         37       25       framing Rotation         91 - 100       trapezoidal       51 - 60         11 - 20       square       71 - 80         8       25       91 - 100         91 - 100       trapezoidal       11 - 120         101110       prismatic       111 - 120         111 - 120       The Fan(Down)       111 - 120         121130       bar       131 - 140         131-140       Upper left quadrant         131-140       Upper left quadrant         131-140       Upper right quadrant         161-170       Right semicircle         17180       Right lower quadrant         181-190       Semicircle (Up)      <	33	1	0255		
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201255 Left Semicircle Framing Macro Zoom					
Framing Macro Zoom					
30 20 0255 Framing Macro Zoom	20	26			
	38	20	0255	Framing Macro Zoom	

55 Channel	43 Channel	DMX	Function	Note
			Prism	
		010	Prism Out	
39	27	11100	Prism 1	
		101190	Prism 2	
		191255	Prism 1&2	
			Prism Rotation	
		0	No Function	
		163	0360°	
40	28	64127 128191	Forwards rotation from fast to slow Backwards rotation from slow to fast	
40	20	192207	from slow to fast 90°Swing	
		208223	from slow to fast 180°Swing	
		224239	from slow to fast 270°Swing	
		240255	from slow to fast 360°Swing	
		210 200	Effect	
		09	Effect Out	
41	29	10239	Effect In	
		240255	Effect In&Shake	
			Effect Rotation	
42	30	02	No Function	
42	30	3130	Forwards rotation from fast to slow	
		131255	Backwards rotation from fast to slow	
			Frost1	
		0127	Frost From Min To Max	
43	31	128159	No Function	
		160191	No Function	
		192255	No Function	
		0127	Frost2 Frost From Min To Max	
44	32	128159	No Function	
44	32	120139	No Function	
		192255	No Function	
		102-200	Iris	-
		0127	From Max To Min	
45	33	128159	Slow In Fast Out from slow to fast	
		160191	Fast In Slow Out from slow to fast	
		192255	Slow In Slow Out from slow to fast	
46	34		Zoom	
	54	0255	WIDE BEAM HARROW BEAM	
47	35		ZoomFine	
		0255	Fine Zoom positioning	
48	36	0.055	Focus	
		0255	Infinity→near	
49	37		Focus Fine	
		0255	Fine Focus positioning	
			Autofocus Distance	
		09	NO function	
		10 19	7M	
	l I	20 29	10M	
		30 39	15M	
50	38	40 49	20M	
		50 59	25M	
		6069	30M	
		7079	40M	
	l I	80 255	50M	
1	1		1	I I

55 Channel	43 Channel	DMX	Function	Note
54	20		Autofocus Adjustment	
51	39	0255	Auto Focus Fine	
52	40	09 1049 5089 90119 120179 180255	Strobe No Function Closing pulses in sequences from fast to slow Opening pulses in sequences from fast to slow No Function Random strobe,slow → fast Strobe,slow → fast	
53	41	0255	Dimmer Dimmer from Dark To Bright	
54	42	0255	Dimmer Fine Dimmer Fine	
55	43	015 16255	Gobo Macro No Function 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 C color film interfering with its operation and reset.

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

Check the C color chip magnets for looseness, falling off, or damage.

Check whether the C color chip magnetic plate is loose, fallen off or damaged.

Check whether the related circuit of the C color chip motor driver board is damaged.

Check whether the C color chip motor is damaged.

## 8. Magenta:

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

Check whether the connection line connecting the **M** color chip magnetic induction board is in poor contact or disconnected.

Check if the M color chip magnet is loose, dropped or damaged.

Check whether the M color chip magnetic plate is loose, falling off or damaged.

Check whether the related circuit of the M color chip motor driver board is damaged.

Check if the **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 C color film interfering with its operation and reset.

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

Check the C color chip magnets for looseness, falling off, or damage.

Check whether the C color chip magnetic plate is loose, fallen off or damaged.

Check whether the related circuit of the C color chip motor driver board is damaged.

Check whether the C color chip motor is damaged.

## 8. Magenta:

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

Check whether the connection line connecting the **M** color chip magnetic induction board is in poor contact or disconnected.

Check if the M color chip magnet is loose, dropped or damaged.

Check whether the  ${\bf M}$  color chip magnetic plate is loose, falling off or damaged.

Check whether the related circuit of the M color chip motor driver board is damaged.

Check if the **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 Y color chip magnetic induction board is loose, fallen off or damaged.

Check whether the related circuit of the Y color chip motor driver board is damaged.

Check if the Y chip motor is damaged.

## 10. CTO:

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.