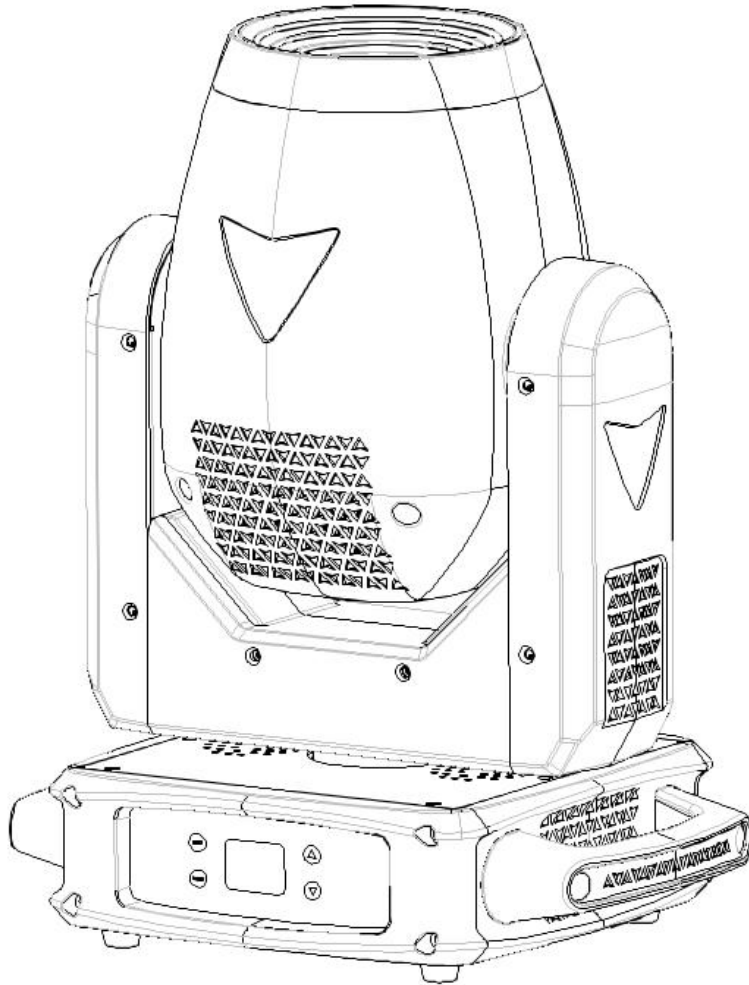


# S718 Elf



User Manual

## 1. Safety Instructions

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

Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction 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.

DO NOT allow children to operate the fixture.

Use safety chain when fixing the unit. Handle the unit by carrying its base instead of head only.

The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.

Be sure that no ventilation slots 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.

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 1 meters.

Disconnect mains power before fuse/lamp replacement or servicing.

Replace fuse/lamp only with the same type.

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 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.

Never touch bulb with bare fingers, as it is very hot after using.

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.INSTALLATIONS**

installations Note: In order to increase protection, please install the lamp on the sidewalk, outside the seating area, or an area where unauthorized persons may touch the lamp

Before installing the fixture on any surface, make sure that the installation area can bear the minimum point load above 10 points of the weight of the equipment. The installation of the fixing device must always be fixed with auxiliary safety accessories (such as a suitable safety rope)

Do not stand directly under the equipment when installing, removing, or servicing fixtures

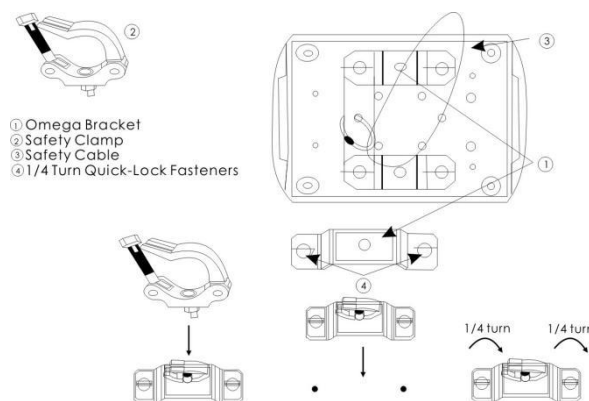
From the ceiling or set on a flat surface (see the picture below). Ensure that this fixture is kept at least 0.5m (1.5 feet) away from any flammable materials (decorations, etc.)

Be sure to use and install the supplied safety rope to ensure safety and prevent accidental damage and/or injury in case the fixture is damaged

Installation point: Overhead installation requires a wealth of experience, including calculation of working load limits, in-depth understanding of the installation materials used, and regular safety inspections of all installation materials and fixtures. If you do not have these qualifications, please do not try to install it yourself. Improper installation can cause personal injury

Before connecting the main power cord to an appropriate wall outlet, make sure to complete all assembly and installation procedures

Lamp installation: LED shaking head provides a unique mounting bracket assembly, which integrates the bottom of the base and the fixing point of the safety cable into one unit (see the figure below). When installing the fixture to the truss, make sure to use the appropriate tools to fix it on the attached bracket, and use the M10 screw that passes through the center hole of the "bracket" to fix it. As an additional safety measure, make sure to use at least one safety cable integrated in the base assembly to connect at least one appropriately rated safety cable to the fixture.

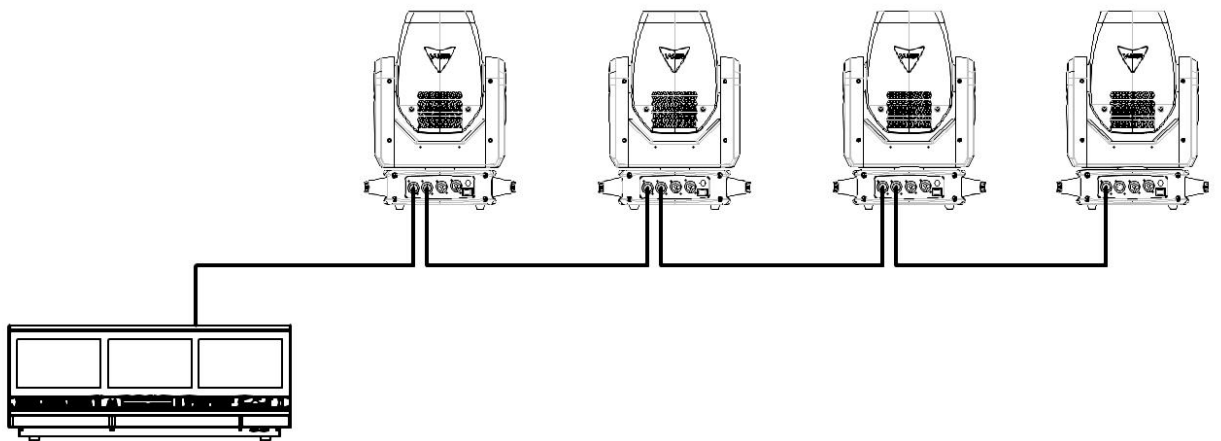
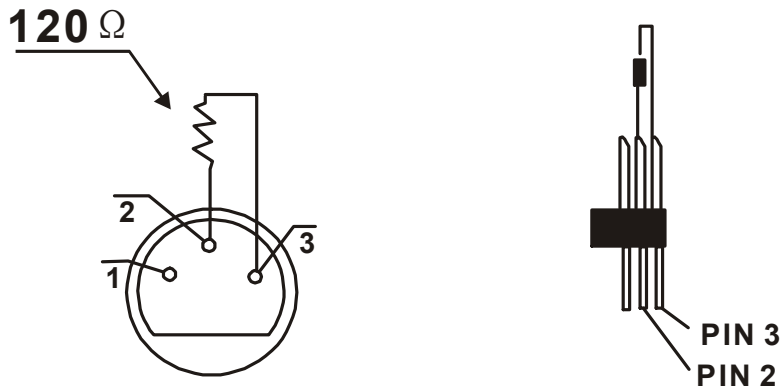
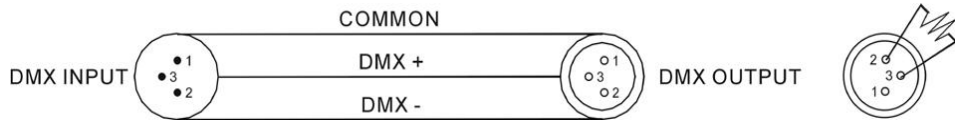


### 3. DMX-512 control connections

Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can chain multiple

Moving heads be connected together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors.

For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120  $\Omega$  resistor connected between pins 2 and 3, which is then plugged into the output XLR socket of the last fixture in the chain. Please see illustrations below



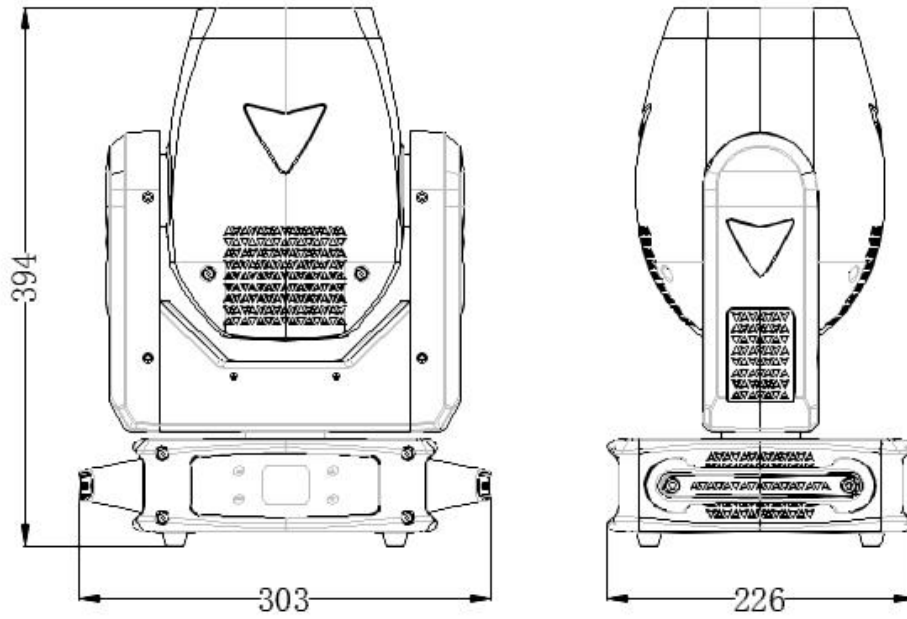
#### 4.Address code setting

If you use a universal DMX controller to control the units, you have to set DMX address from 1 to 512 so that the units can receive DMX signal.

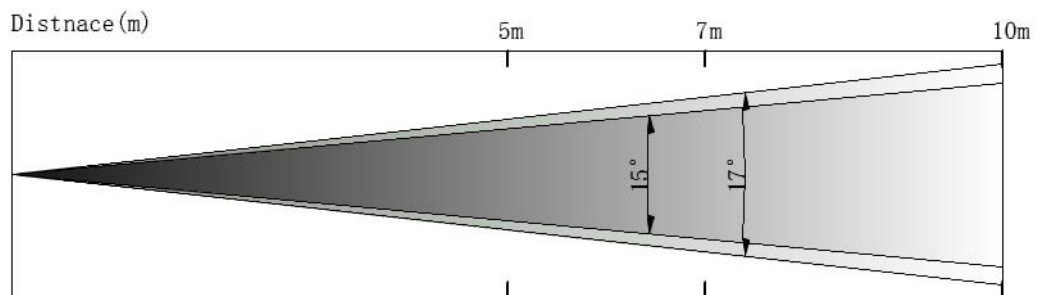
Press the MENU button to enter menu mode, select DMX Settings, press the ENTER button to confirm, use the UP/DOWN button to select DMX Address, press the ENTER button to confirm, the present address will blink in the display, use the UP/DOWN button to adjust the address from 001 to 512, press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle 30 seconds to exit menu mode. Please refer to the following diagram to address your DMX512 channel for the first 4 units.

Channel MODE	UNIT1 ADDERSS	UNIT2 ADDERSS	UNIT3 ADDERSS	UNIT4 ADDERSS
17CH	1	18	35	52

### 5.Fixture size



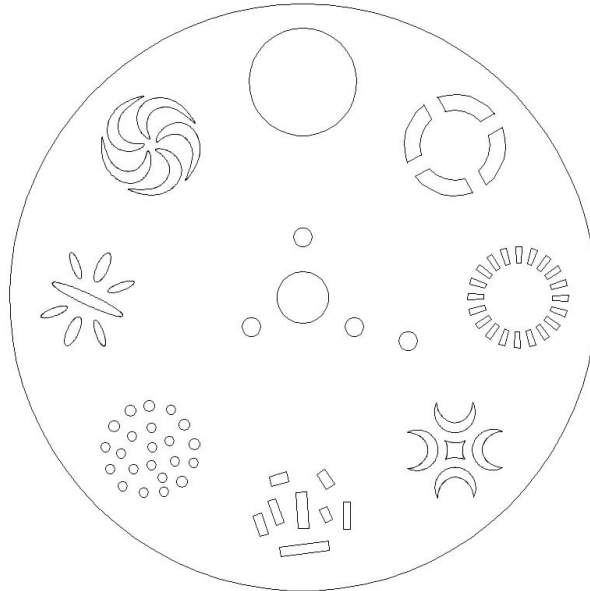
### 6.Illuminance chart:



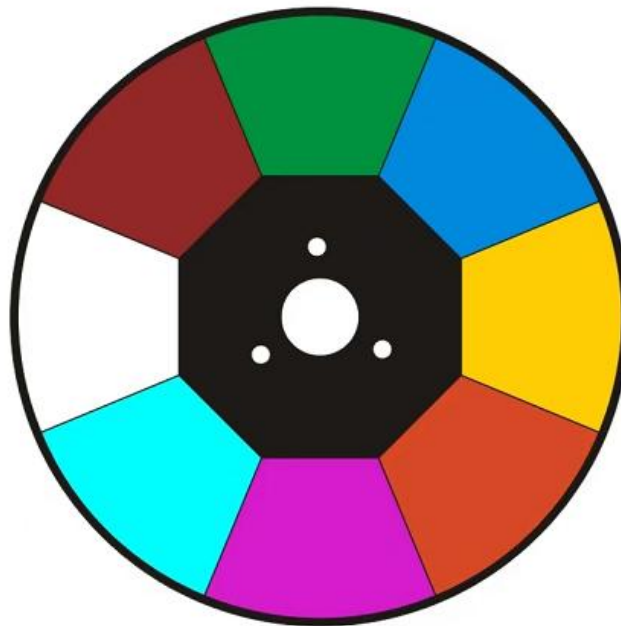
15° LUX	14500	7200	3800
Diameter (m)	0.94	1.57	1.85
17° LUX	9290	4820	2212
Diameter (m)	1.14	1.29	2.23

## 7. Effect Wheels

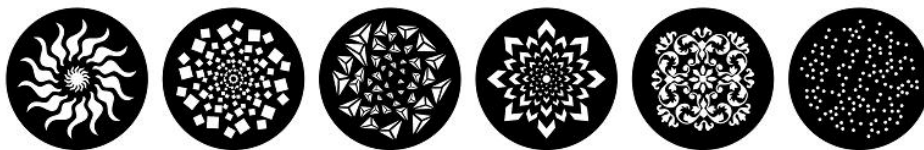
### STATIC GOBO WHEEL



### COLOR WHLLE



### Rotation GOBO



## 8. LED technical parameters

Input Voltage: 100-240V, 50/60Hz

Output Voltage: V1:29V(Master board+LED driver), V2:12V(cooling fan+Display)

Power consumption: 180W

Power supply: 250W

Light source: 150W Osram LED Chip (24-27V,6A)

Color temperature: 8000K

Diameter of optic lens: 65mm

Beam angle: 15-17°

Color wheel: 1 color wheel, 7 fixed colors plus white, two-way rainbow effect

Static gobo: 7 gobos plus 1 white circle

Rotation Gobo: 6 Gobo plus 1 white circle

Prism: 5 prism, can be rotated in both directions

Frost filter: with smooth wash effect

DMX Channel: 17CH

Operate mode: DMX512, self-propelled, master/slave, Sound active, RDM

Fixture size: 303\*226\*394mm

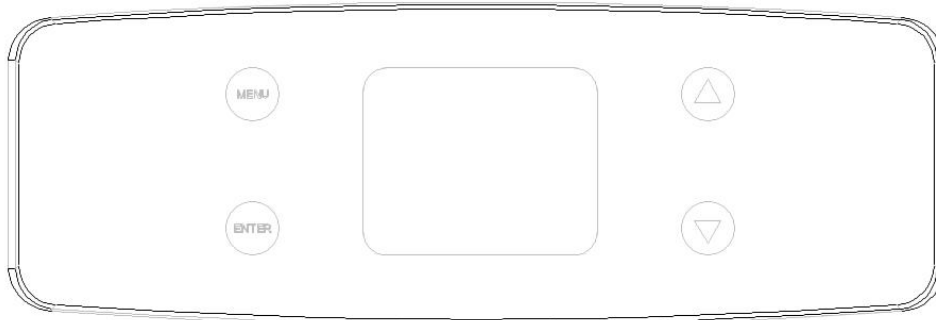
Net weight: 14 KG

Features:

1. Electric focusing system with 0-100% smooth dimming
2. Overheating self-energy protection can extend lamp life
3. Three phase Motor with SY Brand (XY axis magnetic coding positioning is more accurate)
4. With two angle lens 15° and 17° can change the gobo size
5. High quality LCD touch screen
6. Power in & Out connector, 3 or 5pin XLR in & output can be optional
7. Folding clamp can be optional
8. Housing material: PA6 Nylon (Solid, high temperature resistance up to 200° flame retardance)



## 9. Touch key description



**Up and down keys to select edit**

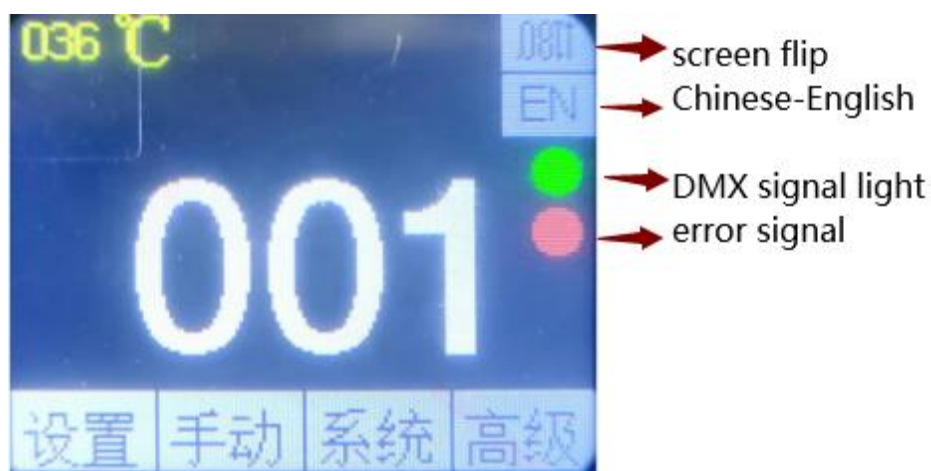
**Confirm key: execute function, start editing, exit editing**

**menu key: return to the previous interface**

The following takes "Modify DMX Address Code" as an example to describe the use of buttons:

1. If it is not the main interface, press the menu key (one or more times) to return to the main interface
2. In the main interface, press the "Up" key or the "Down" key to select the "Settings" button
3. Press the "OK" button to enter the "Settings" interface
4. In the "Settings" interface, press the "Up" key or the "Down" key to select "DMX Address"
5. Press the "OK" key to enter the editing state
6. Press the "Up" key or "Down" key to modify the DMX address code
7. Press "OK" to exit the editing state

## 10. menu description



**Main menu diagram**

## 10.1set up

Option	Description	
operating mode	DMX	Slave state: receive DMX signal from console or host
	AUTO	Master status: self-propelled and send DMX signal to slave
	voice control	
DMX address	1~512	Press the "OK" key to enter the editing state. At this time, the hundreds digit is selected, and the "up" and "down" keys are pressed to change the address code. Press the "OK" key again to select ten edits. Press the "OK" key again to select the one digit editing. Press again to exit the editing state
Motor reset	close	
	open	Lamp reset
channel mode	Standard 17CH	Standard 17-channel mode
X reverse	close	
	open	
Y reversal	close	
	open	
XY swap	close	
	open	Swap the channels of the XY axes (including fine-tuning)
XY encoder	open	Use the encoder (optical coupler) to judge the out-of-step and automatically correct the position
	close	Correct position without encoder (optocoupler)
DMX signal	Keep	Continue to operate as it is
	clear	The motor returns and stops running
restore default settings		Press the "OK" button to see the confirmation dialog box, press the "OK" button again to restore the default settings

## 10.2MANU

Option	Description
1	X
2	X fine-tuning
3	Y
4	Y fine-tuning

5	XY velocity
6	Dimming
7	Strobe
8	color
9	pattern
10	glass pattern
11	glass pattern rotation
12	atomization
13	Prism
14	Prism rotation
15	focusing
16	enlarge
17	reset

### 10.3factory

Sensor detection	X Hall	
	Y Hall	
	color hall	
	Pattern Hall	
	glass pattern hall	
	Focus Hall	
	X-coded step value	
	Y-coded step value	
reset calibration	X axis	After entering the sub-interface, you can adjust the reset position of the X-axis, Y-axis and other motors to make up for the error in the hardware installation. The adjustment range is -128~+127, and +0 means no adjustment.
	Y axis	
	color	
	pattern	
	glass pattern	
	focusing	
	enlarge	
	Prism	
frost		

### 10.4system

Option	Description	
DIS		Dashboard software version
MT		Motor board software version
system error		If the red ERR indicator is on, it means that

		the lamp is running incorrectly, and the details can be viewed from this sub-interface. After viewing, you can press the "Clear" button to clear the error record
total usage time		
This time of use		
temperature		Display the current temperature of the lamp bead

<b>Common error messages</b>	<b>illustrate</b>
MT board connection failed	The motor board is not responding. There is a problem with the serial communication line connecting the display board and the motor board, or there is a problem with the motor board.
X axis reset failed	There is a problem with the X-axis photoelectric switch, or the X-axis motor or motor board
Y axis reset failed	There is a problem with the Y-axis photoelectric switch, or the Y-axis motor or motor board
X axis Hall error	X-axis Hall, or there is a problem with the motor board
Y axis Hall error	Y-axis Hall, or there is a problem with the motor board
Color wheel reset failed	The color wheel Hall, or the color wheel motor has a problem
Pattern disk reset failed	Gobo Hall, or gobo motor is faulty
Focus reset failed	Focusing Hall, or there is a problem with the focusing motor

## 11.Channel

### 17CH

<b>CH</b>	<b>Function</b>	<b>CH Value</b>	<b>Effect</b>
1	X	000-255	Horizontal 540 degree scan
2	X fine	000-255	Horizontal 1.2 degree fine-tuning
3	Y	000-255	Vertical 270 degree scan
4	Y fine	000-255	Vertical 1.2 degree fine-tuning
5	XY speed	000-255	Speed from fast to slow
6	Dimming	000-255	from dark to light
7		000-003 004-103	Shutter open Strobe from slow to fast

	Strobe	104-107 108-207 208-212 213-251 252-255	Shutter open Pulse strobe from slow to fast Shutter open Random strobe from slow to fast Shutter open
8	color	000 - 007 008 - 015 016 - 023 024 - 031 032 - 039 040 - 047 048 - 055 056 - 063 064 - 071 072 - 079 080 - 087 088 - 095 096 - 103 104 - 111 112 - 119 120 - 127 128 - 191 192 - 255	white light white light + color 1 color 1 color 1+color 2 color 2 color 2+color 3 color 3 color 3+color 4 color 4 color 4+color 5 color 5 color 5+color 6 color 6 color 6+color 7 color 7 Color 7+ White Light Reverse flow (from fast to slow) Forward flow (from slow to fast)
9	Static Gobo	000 - 007 008 - 015 016 - 023 024 - 031 032 - 039 040 - 047 048 - 055 056 - 063 064 - 071 072 - 079 080 - 087 088 - 095 096 - 103 104 - 111 112 - 119 120 - 127 128 - 191 192 - 255	Static Gobo1(white light) Static Gobo2 Static Gobo3 Static Gobo4 Static Gobo5 Static Gobo6 Static Gobo7 Static Gobo8 Static Gobo1shock (from slow to fast) Static Gobo2shock (from slow to fast) Static Gobo3shock (from slow to fast) Static Gobo4shock (from slow to fast) Static Gobo5shock (from slow to fast) Static Gobo6shock (from slow to fast) Static Gobo7shock (from slow to fast) Static Gobo8shock (from slow to fast) Forward flow (from fast to slow) Reverse flow (slow to fast)
10		000 - 009 010 - 019 020 - 029	Rotation Gobo1 (white light) Rotation Gobo2 Rotation Gobo3

	Rotation Gobo	030 - 039 040 - 049 050 - 059 060 - 069 070 - 079 080 - 089 090 - 099 100 - 109 110 - 119 120 - 129 130 - 192 193 - 255	Rotation Gobo4 Rotation Gobo5 Rotation Gobo6 Rotation Gobo7 Static Gobo2shock (from slow to fast) Static Gobo3shock (from slow to fast) Static Gobo4shock (from slow to fast) Static Gobo5shock (from slow to fast) Static Gobo6shock (from slow to fast) Static Gobo7shock (from slow to fast) Forward flow (from fast to slow) Reverse flow (slow to fast)
11	Gobo Rotation	000-127 128-191 192-255	gobo angle adjustment gobo forward rotation gobo reverse rotation
12	frost	000-127 128-255	no effect frost cut in
13	Prism	000-127 128-255	Prism pops up Prism cut
14	Prism rotation	000-127 128-191 192-255	Prism angle adjustment Prism rotating forward flow Prism rotation reverse flow
15	focusing	000-255	gobo clarity from far to near
16	enlarge	000-127 128-255	no effect zoom in
17	reset	000-127  128-255	None, there is no action for the area without the specified function Reset all motors

## 11. Common malfunctions

### 1. After the lamp is reset normally, it will not accept the control of the console

- Check whether the digital start address value and function options of the lamps are correct;
- Check whether the connection of the communication control line is correct, the communication line is too long or has been interrupted;
- Check whether the control equipment is invalid, and check whether the signal amplifier connected in series is invalid;
- Check whether the communication line is too long or other devices interfere with each other;
- Optimize wiring, shorten the length of control signal lines, separate high-voltage and low-voltage lines;

- Add a signal amplifier;
- The signal line adopts high-quality shielded twisted pair;
- Connect a signal terminating resistor (120 ohms) at the end of the fixture.

## **2. The lamps cannot be started**

- Check that the lamps have poor contact or fall off due to extrusion deformation, vibration of internal parts, moisture and other reasons during long-distance transportation.
- Please check whether the wires and connectors inside the lamp are detached or loose.
- Check whether the electronic components of lamps (such as electronic transformers, PCB boards, motor control boards, etc.) are loose, short-circuited and burned out.

## **3. When working, the X-axis or Y-axis of the lamp does not move normally**

- Check whether the transmission belt corresponding to the X and Y axis directions in the lamp is off and broken;
- Check whether the data feedback receiver (optical coupler) corresponding to the X and Y directions in the lamp is damaged;
- Reboot to reset once.