



# AMOS PLUS



## User Manual

KEEP THIS MANUAL FOR FUTURE NEEDS

[www.moxlite.com](http://www.moxlite.com)

## 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.

During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, and it will decrease gradually within 15 minutes.

Keep flammable materials away from the fixture while operating to avoid fire hazard. Make sure the power cord is not crimped or damaged; replace it immediately if damaged.

Unit's surface temperature may reach up to 85°C. DO NOT touch the housing bare-handed during 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 12 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 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.

Hot lamp explosion hazard. DO NOT open the unit within 15 minutes after switching off.

DO replace the bulb once it is damaged, deformed or life-expired.

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)

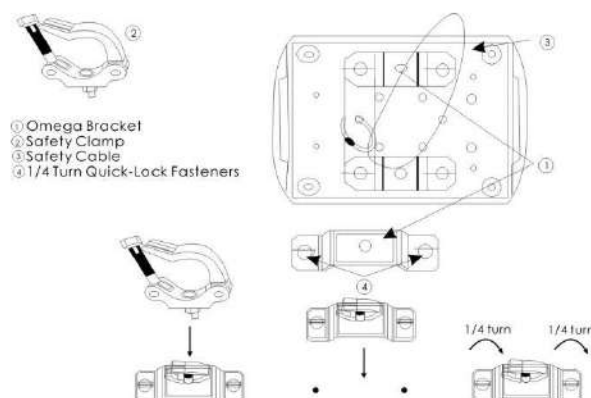
Do not stand directly under the equipment when installing, removing, or servicing fixtures

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.

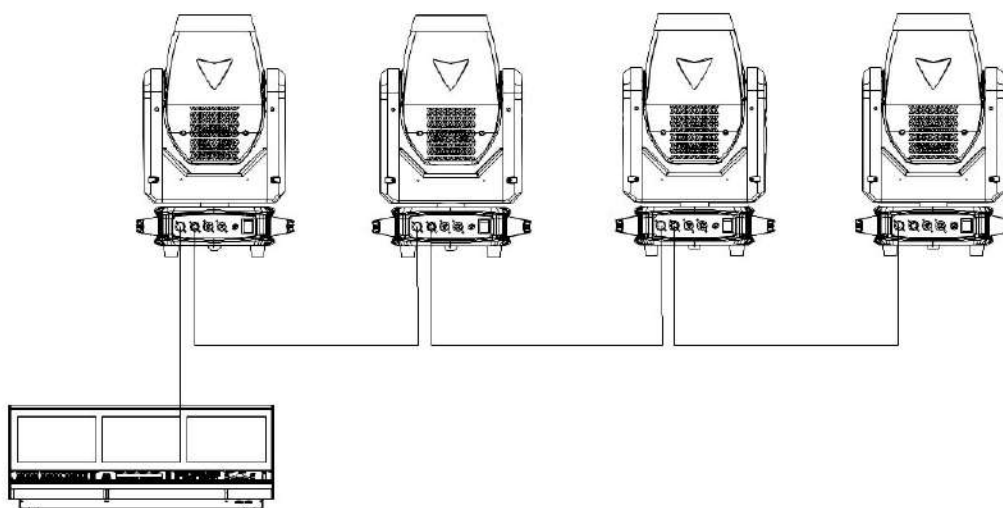
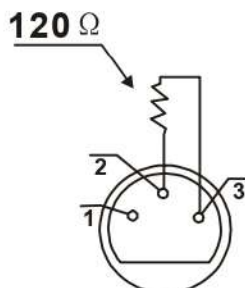
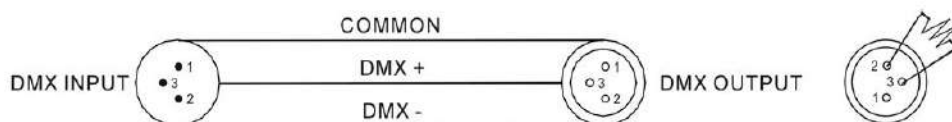


### 3. DMX-512 control connections

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



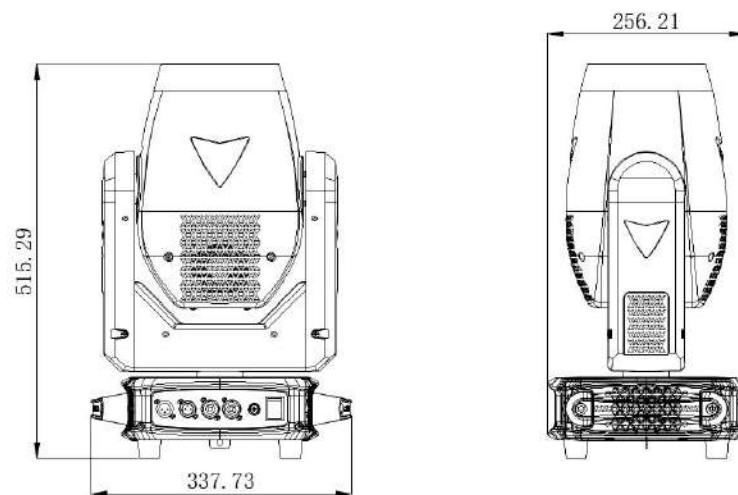
## 4.Address code setting

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.

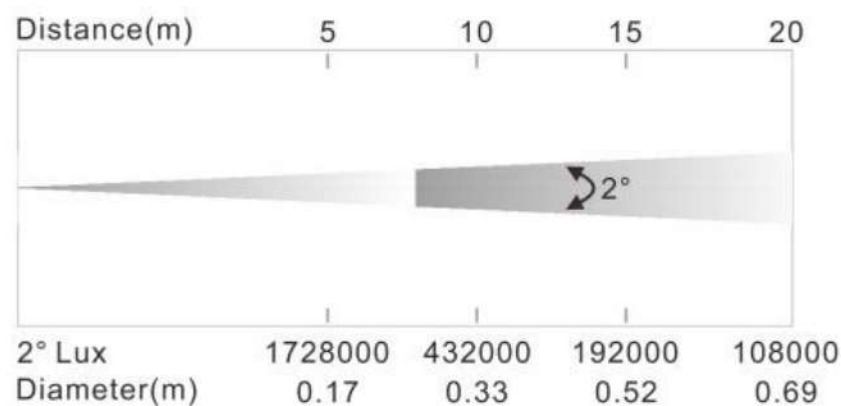
Press the MENU button to enter menu mode, select DMX Settings, press the ENTER button to confirm, use the UP/DOWN button to select DMX Address, press the ENTER button to confirm, the present address will blink in the display, use the UP/DOWN button to adjust the address from 001 to 512, press the ENTER 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	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
18 channels	1	19	37	55

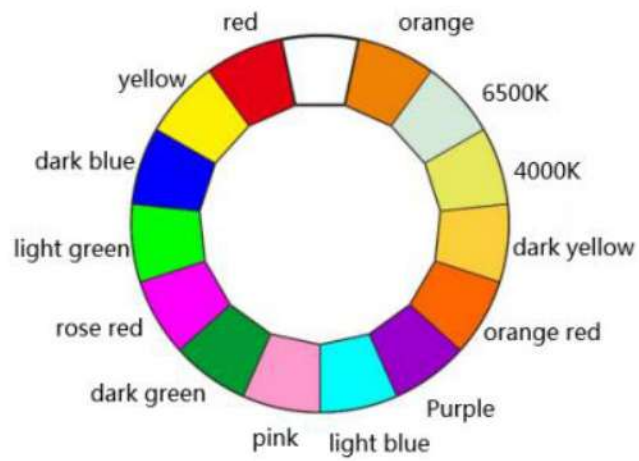
## 5.Fixture size



## 6.Illuminance chart:



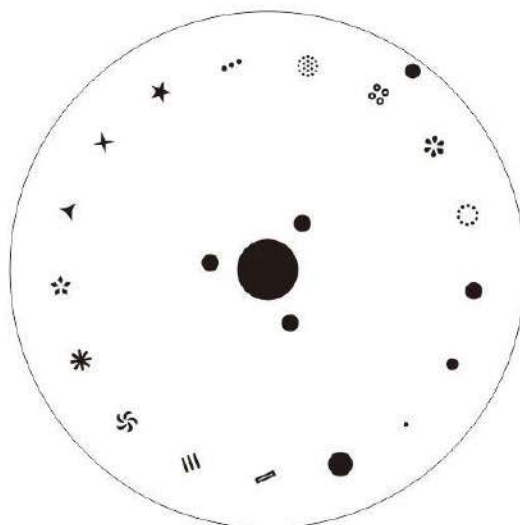
## 7. Effect Wheels



**COLOR WHLLE**



**colorful colors WHLLE**



**STATIC GOBO WHEEL**

## 8.Light Source

### PHILIPS MSD Silver 300 LL

Because of its high internal pressure, there might be a risk that the Discharge lamp would explode during operation. The lamp emits intense UV radiation which is harmful to the eyes and skin. The high luminance of the arc can cause severe damage to the retina if you take a close look at the lamp.

To protect the lamp, always turn off the lamp first (via control panel or DMX controller) and let the unit run at least five minutes to cool down before switching off the mains supply. Never handle the lamp or luminary when it is hot.

Do not touch the bulb with bare hands. If this happens, clean the lamp with denatured alcohol and wipe it with a lint free cloth before installation.

The lamp generates UV radiation. Never operate the lamp without appropriate shielding.

When lighting up, the lamp operates at high pressure and there is a slight risk of arc tube rupture. The risk increases with age, temperature and improper handling of the lamp. Do not use the lamp longer than its lifespan.

Make sure the lamp is located in the center of the reflector for the best projection.

## 9.Lamp technical parameters

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

Output Voltage: V1:36V(Master board), V2:12V(cooling fan) , V3:380V(lamp)

Power consumption: 365 W

Power supply: 550W

Light source: PHILIPS MSD Silver 300 LL (3000 hours)

Color temperature: 7800K

Diameter of optic lens: 145mm

Beam angle: 0.6° -2°

When the beam angle is 2° , the illuminance at 10 meters can reach 432,000 LUX

Color wheel: 1 color wheel, 14 fixed colors plus white, two-way rainbow effect

Static gobo: 16 gobos plus 1 white circle

With fog and colorful effects

Prism: Equipped with 18 prism, and 8+16+24 honeycomb prism, the two prisms

can be stacked and rotated in both directions

DMX Channel: 18CH

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

Electric focusing system

Outstanding strobe effect with variable speed

0-100% smooth dimming

Control panel: LCD Touch screen  
Overheating self-energy protection bulbs, extending lamp life

X-axis rotation angle: 540°

Y-axis rotation angle: 270°

Three phase motor with SY Brand

XY axis magnetic coding positioning is more accurate

Power Outlet: Power Connector Input/Output

Signal Outlet: standard 3 Pin XLR socket(can customized 5 pin XLR socket)

Installation: 2x fast lock (folding clamp can optional)

Fixture size: 338x256x512mm

Net weight: 14KG

### Features:

T911BEAM adopts imported light source, which has the characteristics of small size and high light efficiency. The 2° beam angle can release sharp, bright, full, strong penetrating power, forming a strong visual impact effect. The rich color wheel and gobo wheel provide excellent color macro and dynamic effects. Built-in 8 prisms and 8+16+24 honeycomb prisms can be rotated and superimposed in both directions, the lines are clear and sharp, and the area is wide, which can create a brilliant and changeable beam effect, dual-chip strobe, variable strobe speed, and linear dimming, light body Lightweight design, the net weight is tight 14KG, the shell is resistant to high temperature and flame retardant materials, to meet the needs of various places

## 10.LCD Homepage Instructions

2		
1		3
		4
		5
6	11	7
8	9	10

1 — Displays the current DMX address in large font

2 — Logo display area

3 — DMX signal frame rate (FPS)

4 — Current channel mode, the displayed number indicates the current channel number

5 — Fan speed display (select whether to display according to the lighting conditions)

6 — Current Mode (Master, Slave)

- 7 — Current running mode (DMX512, Auto, User)
- 8 — Error message. If a red band "x" is displayed, the self-test found an error.  
(Press down to view specific error message)
- 9 - temperature display or other content (depending on lamp configuration)
- 10 — SN term display
- 11. Display the address code of the next fixture

## 11. menu operation:

**1. DMX address:** set the DMX address

**2. Channel mode:** Set the channel mode, the number of the menu option indicates the number of channels.

**3. Reset operation: reset the motor**

**Motor power off:**

Select "On", all motors are powered off; select "Off", all motors are powered on and reset. Using this menu, it is possible to plug and unplug the motor and power-on reset without turning off the main switch.

**XY Axis:** Reset Pan and Tilt Motors

.....

**4.Run:** Set the run mode

The description of each menu option is as follows (Note: "Automatic" mode options may vary according to different product models):

DMX: controlled and run by DMX512 console.

Self-propelled (factory test): run the program set by the manufacturer, this program is mainly used for factory test.

User program: run user self-programming program. The editing scene can be set in the [Run Settings] - [Self-Programming] menu.

**5.lamp:** Switch the light bulb. After changing the value, it takes about 3 seconds to work, you can switch the value back within 3 seconds to cancel the operation. After turning off the light bulb, you must wait 1~2 minutes before turning it on again. If you operate the menu to turn on the light bulb within two minutes, the light bulb will not be lit. After the waiting time is up, it will light up by itself.

If this menu item is "on", the system will first try to light the bulb when powered on, and wait for the light board to return.

**6.Manual:** Manually set the value of the channel

**7.Operation settings:** Operation parameter settings.

**Running Cnfg:** configuration of Running.

**M/S Mode:** Slave mode is for receiving external DMX signals and Master mode is for sending DMX signals to external slave fixtures

**XY axis general settings:**

**X-axis reverse:** Select "Yes" to reverse the rotation direction of the Pan motor, select "No", and follow the rotation direction at the factory.

**Y-axis reverse:** select "Yes" to reverse the rotation direction of the Pan motor, select "No", and follow the rotation direction at the factory.

## DMX512

**When no signal:** select the operation mode if no DMX512 signal is detected

**When powering on:** Only when powering on, if no DMX signal is detected, the above operation mode will be executed, Otherwise, the last DMX action will be held

**Centered:** Except for Pan and Tilt, all other channels are cleared to zero.

**Self-propelled (factory test/pattern/color):** Run the program set by the factory.

**User program:** run user self-programming program.

**Runtime:** At any time, as long as the DMX signal is lost, the action performed

**Hold:** Hold the DMX value of the last frame.

**Shut off:** close the shutter

**Turn on the light bulb:** Select "No", the light will not light after the power-on reset is completed, select "Yes", the light bulb will be automatically turned on after the power-on reset is completed.

## 8. Advanced settings:

**Fine-tuning:** Factory debugging function, which requires password authentication to enter.

**Display:** Menu screen flip setting

**Language:** Set the system language

**Ignore errors:** Some error reports may not affect the final use effect, or for the general purpose of the product, you can choose to turn off some meaningless error reports

**Trim Recovery:** After replacing the display board, use this menu to restore the trim data saved by the motor board to the display board.

## 9. Information:

**DMX value:** Display the current received DMX signal value

**Channel:** Displays the DMX value of the selected channel that needs to be observed

**Error:** Display error message (if any item in this menu is wrong, an exclamation mark will be displayed in the upper right corner of the menu cover)

**Storage:** Indicates whether the storage is functioning normally. If the memory is abnormal, the menu information cannot be recorded or read, and the lamp time record and self-programming data may also be lost.

**RAM Error:** Chip memory allocation failed, if this error occurs, please contact the manufacturer.

**Bus communication:** If there is an error, the motors of various functions will not operate normally. If this error occurs, please check whether the communication cables between the boards are in poor contact.

**Bulb:** The communication between the bulb and the lighting board. If the communication is wrong, the main control chip cannot correctly judge whether the light bulb is normally turned off or on, which may cause some

functions to not work properly.

**Lighting board:** Communication with the light bulb lighting board.  
X-axis reset: X-axis reset failed, check whether the magnetic code or motor is normal.

**Y-axis reset:** Y-axis reset failed, check whether the magnetic coding or motor is normal.

**Color reset:** Color wheel reset failed

**Fixed pattern reset:** Fixed pattern disk reset failed

**Fan stop:** The blower stops rotating, and the light bulb will be automatically turned off after a certain time.

**Bulb:** Displays the usage time of the bulb

**Usage time:** Displays the total time the lamp has been on since the lamp time was reset to zero

**Time reset:** The total time the bulb is on is reset to 0.

**Test Mode:** For product testing and temporary use only.

**Product Code:** The internal code of the product is only for reference in product production and maintenance.

## 12.DMX512

CH	DMX Value	Description
1	0-255	Pan
2	0-255	Pan fine
3	0-255	Tilt
4	0-255	Tilt fine
5		Pan/Tilt speed
	0	Maximum speed
		in speed mode
	1-255	speed from fast to slow
		in time mode
	1-255	Time from 0.1s to 25.5s
6	0-255	dimmer
7		strobe
	0-3	closure
	4-103	Strobe from slow to fast
	104-107	Open
	108-207	Fast off and slow on, from fast to slow
	208-212	Open
	213-251	Random strobe, from slow to fast
	252-255	Open
8		color wheel

	0-127	Choose a color (see also table)
	128-190	Rainbow effect from fast to slow
	191-192	rainbow effect stopped
	193-255	Rainbow effect from slow to fast
9		Gobo
	0-3	Open
	4-51	Select gobo (see also table)
	52-190	Choose a gobo and dither, from slow to fast (see also table)
	191-201	Open
	202-227	The gobo is scrolling forward, from fast to slow
	228-229	stop scrolling
	230-255	gobo scrolls in reverse, from slow to fast
10		Atomization and colorful
	0-19	null
	20-137	atomization
	138-255	colorful
11		Prism1
	0-127	no prism
	128-255	Prism 1 Insert
12		Prism 1 Positioning and Rotation
	0-127	Prism 1 Positioning and Rotation
	128-190	Prism 1 rotates in reverse, from fast to slow
	191-192	Prism 1 stops rotating
	193-255	Prism 1 rotates forward, from slow to fast
13		Prism2
	0-127	no prism
	128-255	Prism 2 Insert
14	0-255	focus
15		no function
16		no function
17		reset To achieve the following effects, push the DMX value to the corresponding position and stand still for at least 4 seconds
	0-25	null
	26-76	effect reset
	77-127	Pan/Tilt reset
	128-255	reset all
18		reset

		Lamp To achieve the following effects, push the DMX value to the corresponding position and stand still for at least 4 seconds
	0-25	no effect
	26-100	Lamp Off
	101-255	Lamp ON

### The 8th channel selection color 0-127 value details table

DMX value	Effect
0-4	Color 1 (white light)
5-8	color 1+color 2
9-12	color 2
13-17	color 2+color 3
18-21	color 3
22-25	color 3+color 4
26-29	color 4
30-34	color 4+color 5
35-38	color 5
39-42	color 5+color 6
43-46	color 6
47-51	color 6+color 7
52-55	color 7
56-59	color 7+color 8
60-63	color 8
64-68	color 8+color 9
69-72	color 9
73-76	color 9+color 10
77-81	color 10
82-85	Color 10 + Color 11
86-89	color 11
90-93	Color 11+Color 12
94-98	color 12
99-102	Color 12+Color 13
103-106	color 13
107-110	Color 13+Color 14
111-115	color 14
116-119	Color 14+Color 15
120-123	color 15
124-127	Color 15+Color 1

The 9th channel selects a fixed pattern 0-190. The effect value is obvious.

DMX value	Effect
0-3	Open (white light hole)
4-6	Gobo 1
7-9	Gobo 2
10-12	Gobo 3
13-15	Gobo 4
16-18	Gobo 5
19-21	Gobo 6
22-24	Gobo 7
25-27	Gobo 8
28-30	Gobo 9
31-33	Gobo 10
34-36	Gobo 11
37-39	Gobo 12
40-42	Gobo 13
43-45	Gobo 14
46-48	Gobo 15
49-54	Gobo 16
55-62	Pattern 1 shaking from slow to fast
63-70	Pattern 2 shaking from slow to fast
71-78	Pattern 3 shaking from slow to fast
79-86	Pattern 4 shaking from slow to fast
87-94	Pattern 5 shaking from slow to fast
95-102	Pattern 6 shaking from slow to fast
103-110	Pattern 7 shaking from slow to fast
111-118	Pattern 8 shaking from slow to fast
119-126	Pattern 9 shaking from slow to fast
137-134	Pattern 10 shaking from slow to fast
135-142	Pattern 11 shaking from slow to fast
143-150	Pattern 12 shaking from slow to fast
151-159	Pattern 13 shaking from slow to fast
159-166	Pattern 14 shaking from slow to fast
167-174	Pattern 15 shaking from slow to fast
175-190	Pattern 16 shaking from slow to fast

## 13. Troubleshooting

The following are some of the problems that often occur when the device is running, along with some suggestions for troubleshooting:

A. The lamps do not work, there is no light, and the fan does not run

1. Check the power contacts and the fuses are in good condition.
2. Check the voltage.
3. Check the indicator light of the power switch.

B. Not under the control of the console

1. Check whether the DMX signal connector and signal cable are connected correctly.
2. Check whether the address code is set correctly.
3. If the DMX signal transmission is intermittent, check whether the XLR socket and the signal cable are well connected.
4. Try it with another controller.
5. Check whether the DMX signal line and the high-voltage line are too close, which will damage or interfere with the signal circuit.

C. A channel fails

1. The stepper motor or motor leads may be damaged.
2. The drive circuit of the motor may be damaged.

D. Light bulbs come and go

1. The bulb does not light properly. See if the voltage is too high or too low.
2. The internal temperature may be too high. If necessary, replace the cooling fan

## **14. Equipment cleaning**

Keeping the luminaire clean is absolutely necessary to maintain the best performance of the luminaire and ensure the best light effect. Lamps must be cleaned regularly to avoid

Dust, dirt and fume residues accumulate on or inside the luminaire, and the frequency of cleaning depends on the application environment. If due to installation and construction

The environment causes dust to enter the lamp, please clean it immediately to avoid damage to the optical part of the lamp due to excessive dust.

\* A soft, lint-free cloth and a good quality glass cleaning solution are recommended, no solvents should be used under any circumstances.

\* Dry the parts carefully.

\* Wipe the outside of the lens at least every 20 days. Wipe the inside at least every 30 days.



#### Contact

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