SquareLED SABRE

LED Moving Spot 550W

mit Blendenschieber
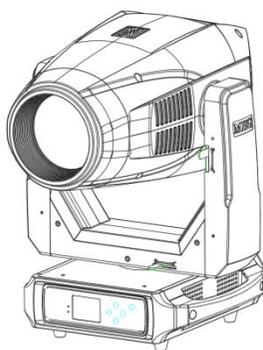
User Manual

Content

1. SAFETY GUIDE

Please read this manual carefully, it includes Important information such as installation, use and maintenance.

PAY ATTENTION
Please save this manual as a basis for future consultation, if you sell this product to other users, please make sure they also get this manual.
Notice：
The equipment is well-packaged when shipped from the factory. Please follow the user manual for operation. Human failures are not covered by the warranty.
●Before using, please open it and check carefully to ensure that there is no damage caused by transportation.
●This fixture is only suitable for indoor dry place.
●The installation and operation of fixtures should be carried out by professionals.
●Do not let children operate the machine.
●Use safety ropes when fixing the device, and hold the bottom when moving the fixture.
●The equipment must be installed in a well-ventilated place, at least 50 cm from the adjacent surface.
●Make sure the ventilation holes are unobstructed to avoid overheating when the fixture is running.
●Before operation, ensure that the power supply voltage matches the equipment.
●Please ground the conductor to prevent electric shock.
●Do not operate the fixture in an environment above 40℃.
●It is forbidden to connect the fixture directly to the dimming equipment.
●A small amount of smoke or odor may appear when the new fixture works, and it will disappear after 15 minutes of operation.

●Do not place combustible objects beside the fixtures during operation.

●Please carefully check whether the power cord is damaged before turning on the fixture, and replace it immediately if it is damaged.

●The surface temperature can reach 85℃ when the fixture is in operation, please do not touch it with bare hands.

●Avoid conductive objects such as flammable liquid, water or metal to enter the fixture to avoid electric shock or fire. If some objects enter the fixture, please cut off the power immediately

●Avoid operating in dirty and dusty environments. and clean , maintain the fixtures regularly.

●It is forbidden to touch the wire when the fixture is running to prevent electric shock.

●Avoid entanglement of the power cord and other wires.

●The distance between the fixture and the illuminated surface should be greater than 5 meters.

●Disconnect the power before replacing the fuse or bulb.

●Use the same model when replacing fuses or bulbs.

●There is a serious operation failure, please stop using it immediately.

●Please do not turn on the fixture frequently, and turn on the fixture at least every 30 seconds.

●Please replace the fixture housing, lens or ultraviolet filter in time when there is obvious damage.

●There are no available parts inside the fixture, please do not open the fixture shell without permission.

●Do not operate the machine by yourself. Operation by non-professionals will cause damage to the device or malfunction of the device. For repairs, please contact the nearest authorized service center.

●Please cut off the power when the fixture is not used for a long time or maintenance.

●When you need to transport again, please use the original packaging material.

●To avoid fire or electric shock, do not expose the fixture to rain or wet areas.

●Do not look directly when the fixture is running .
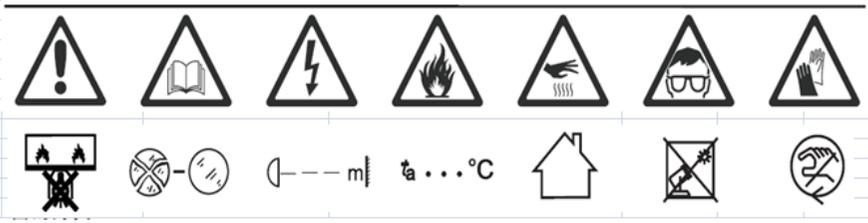
2. TECHNICAL SPECIFICATION

2.1 LIGHT SOURCE
LED type: High Power 550W White LED

CCT: 8000K / 6000K

LED life span: 20,000hrs

CRI: Standard≥70 / Hi CRI≥90

2.2 XY MOVEMENT
Horizontal scan: 540° (16 bit Precision scan)

Vertical scan: 270° (16 bit Precision scan)

Extremely accurate positioning;

Moving head operated via either 8 or 16 bit resolution
High-resolution stepper motors operated via microprocessors
ensure extreme accuracy and smooth movements;

PAN and TILT automatic repositioning (FEEDBACK)

2.3 COLOR
Smooth and sophisticated color mix system providing CYM color
mixing;

Variable CTO color temperature correction (2700K-7000K/5600K)

Fixed color wheel with six saturated color filters+ open, Rainbow

effect with bi-directional and variable speeds.

2.4 GOBOS

1 Rotating gobo wheel: 7 interchangeable gobos +Open.

1 Static gobo wheel: 7 gobos + Open.

1 effect wheel: Graphic animation effect wheel with continuous rotation in both directions; stunning dynamic effects such as moving flames, gurgling water, etc.

2.5 SPECIFICATION

Channel mode: 29/34/37 Standard DMX512 Channel;

OPTICS:

    11:1 zoom high resolution optic system;

    Beam aperture: 4.5° to 53.°;

    Fast motorized linear zoom & focus;

    Tempered anti-reflective coated lenses;

FRAMING SYSTEM:

    4 individually position-able shutter blades;

    Rotation of the framing system module: +/- 45°;

Prism: 4-facet rotating and index-able prism, Bi-directional rotating at variable speeds;

Iris: 5%~100% open, smooth adjustment;

2 frost filters: soft edge & hard edge, 0~100% linear frost effects;

Strobe: The frequency can reach up to 25Hz, random strobe and pulse strobe effect ;

Dimming: Linear 0-100%, 4 dimming curve;

2.6 DISPLAY

Touch the color LCD display: with rechargeable battery, you can enter the menu to set the address code and make other settings without powering on; when power is off, press the "BAT SW" key on the display panel for 3 seconds to enter setting DMX address and Other menu functions, automatically cut off in 5 seconds when not in operation. Automatically charge the battery when power on.

2.7 SOFTWARE

Can change DMX address code, fixture reset, voice control mode conversion and other functions from the console; display the fixture usage time, convenient for customers to understand the fixture usage in time.

2.8 OTHER FUNCTIONS

Input signal isolation protection function to ensure stable signal transmission without interference.

2.8.1 RDM FUNCTION

DMX Signal input/output: XLR3/5pin RJ45 and USB connector socket3

2.8.2 Wireless function (optional)

2.9 COOLING System

Advanced cooling system based on heat-pipe technology;
Fan models: Silent mode, Auto mode, Strong mode;

Safety protection against over-heating;

2.10 POWER SUPPLY

AC100~240v,50/60Hz

Power 820 W max

2.11 SIZE&WEIGHT

Body Size: 374*355 *736 mm

Net Weight: 32.5kg
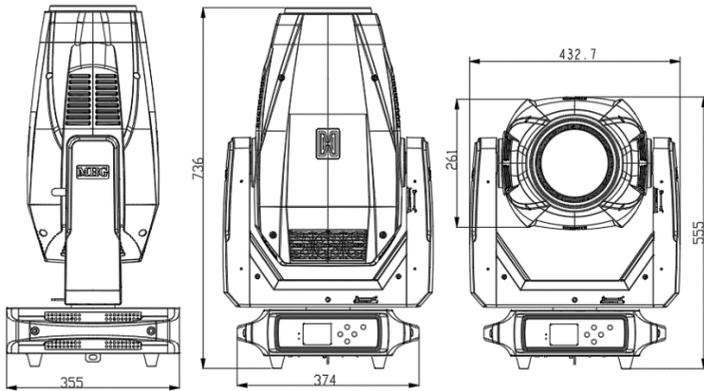
2.12 Photometric Diagram

| Center (53°) (lux) | 1485 | 783 | 481 |
| Center (4.5°) (lux) | 66950 | 30560 | 17290 |

Distance (m)	5	7.5	10
Diameter (4.5°) (m)	0.38	0.56	0.75
Diameter (53°) (m)	4.99	7.49	9.99

Data with the standard version LED source

| Center (53°) (lux) | 834 | 376 | 210 |
| Center (4.5°) (lux) | 44229 | 19675 | 11025 |

Distance (m)	5	7.5	10
Diameter (4.5°) (m)	0.38	0.56	0.75
Diameter (53°) (m)	4.99	7.49	9.99

Data with the high CRI version LED source
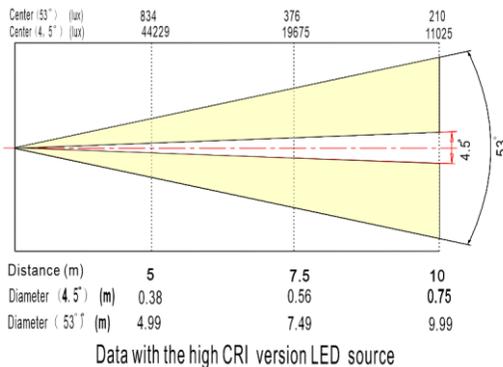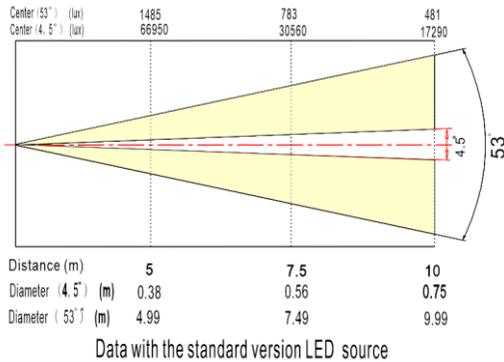
3. HOW TO SET FIXTURE

3.1 CONTROL PANEL
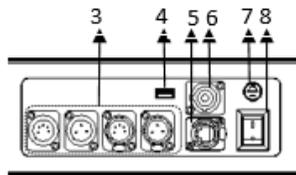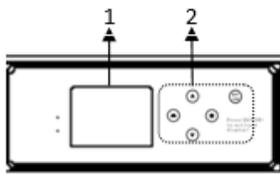
1. LCD display: Function menu；

2. Operate Button：

⬤ MENU	MENU: choose the Function
⬛ ENTER	ENTER: confirm the Function
▲ UP	UP: back to previous Options
▼ DOWN	DOWN: next Options
BAT/SW	Battery button

3.DMX In/Out

4. USB connector

5. RJ45

6. Connect main power

7. Fuse(T 15A)

8. Power switch: power On/Off

3.2 MAIN FUNCTION

Press **MENU** with 3s (3 seconds) into Menu choose mode to choose what you want, press **ENTER** to confirm the function, the LCD display will flash.Then press **UP/DOWN** to choose the function，press **ENTER** to confirm it. Press **MENU** for going back to previous menu, or wait for 1 minute for going back to main menu.

Main Functions：

DMX	DMX Address	1-512
	DMX Channel Mode	Mode1(29)
		Mode2(34)
		Mode3(37)
	DMX State	Blackout

		Hold
	View DMX Value	---
SET.	Pan Inverse	Yes/No
	Tilt Inverse	Yes/No
	P/T Feedback	Yes/No
	Dimmer Curve	Liner
		Square law
		Inv SQ law
		S Curve
	Dimmer Speed	Fast
		Smooth
	Set Dimmer Frequency	1000
		1200(default)
		1500
		2500
		4000
		5000
		10000
		15000
		20000
		25000
	Focus Compensate	Disable
		Near
		Medium
		Far
	Fan Mode	Silent Mode

		Auto Mode
		Strength Mode
DISP	Display Inverse	Yes/No
	Backlight Switch	On/Off
	Backlight Intensity	1-10
	Temperature Unit	℃/℉
	Language	English/Chinese
TEST	Auto Test	-
	Manual Test	-
INFO.	Fixture use time	-
	Temperature	-
	Fixture Name	
	Firmware Version	-
RSET	Pan/Tilt	Yes/No
	Effect	Yes/No
	All Motor	Yes/No
SPEC.	Factory Setting	Yes/No

3.2.1 DMX Function

Press **MENU**, choose **DMX function**，press **ENTER** to confirm it. press **UP/DOWN** to choose: **DMX add, Channel Mode, DMX state** and **Channel Value.**

3.2.1.1 DMX Address

Press **DMX Address**，press **ENTER** to confirm it. **DMX** add shows on the LCD. Press **UP/DOWN** to choose 001~512. Press **ENTER** to reserve. Press **MENU** for going back to previous menu, or wait for 1 minutes for going back to main menu.

3.2.1.2 Channel Mode

Press **Channel Mode**，press **ENTER** to confirm it. **Channel Mode** shows on the LCD. Press **UP/DOWN** to choose：29CH,34CH,37CH; Press **ENTER** to reserve. Press **MENU** for going back to previous menu, or wait for 1 minute for going back to main menu.

3.2.1.3 DMX State

Press **DMX State**，press **ENTER** to confirm it. **DMX State Blackout /Hold** show on the LCD. Press **MENU** for going back to previous menu, or wait for 1 minute for going back to main menu.

3.2.1.4 View DMX Value

Press **View DMX Value**, press **ENTER** to confirm it. **DMX Value** shows on the LCD. Press **UP/DOWN** to choose **View DMX Value**. Press **ENTER** to reserve. Press **MENU** for going back to previous menu, or wait for 1 minute for going back to main menu.

3.2.2 SET

Press **MENU** to choose **SET** Press **ENTER** to confirm it. Press **UP/DOWN** to choose：**Pan Inverse**, **Tilt Inverse, P/T Feedback, Dimmer Curve, Dimmer Speed, Fan Mode.**

3.2.2.1 Pan Inverse

Press **Pan Inverse,** press **ENTER** to confirm it. **Pan Inverse** shows on the LCD. Press UP/DOWN to choose：No(**Normal**) or Yes(**Pan Inverse**), Press **ENTER** to reserve. Press **MENU** for going back to previous menu, or wait for 1 minute for going back to main menu.

3.2.2.2 Tilt Inverse

Press **Tilt Inverse,** press **ENTER** to confirm it. **Tilt Inverse**

shows on the LCD. Press **UP/DOWN** to choose：No(**Normal**) or
Yes(**Tilt Inverse**), Press **ENTER** to reserve. Press **MENU** for going
back to previous menu, or wait for 1 minutes for going back to main
menu.

3.2.2.3 X/Y P/T Feedback

Press **P/T Feedback, p**ress **ENTER** to confirm it. **P/T
Feedback** shows on the LCD. Press **UP/DOWN** to choose：No(**P/T
Forever** or Yes(**P/T Feedback**). Press **ENTER** to reserve. Press
MENU for going back to previous menu, or wait for 1 minute for
going back to main menu.

3.2.2.4 Dimmer Curve

Press **Dimmer Curve,** press **ENTER** to confirm it. Press
UP/DOWN to choose：**Liner**, **Square law**, **Inv SQ law** or **S Curve**.
Press **ENTER** to reserve. Press **MENU** for going back to previous
menu, or wait for 1 minute for going back to main menu.

Dimmer Modes
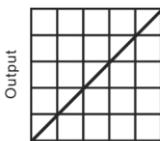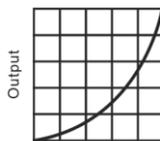
Optically Linear   Square Law   Inverse Square Law   S-curve

Mode1(**Liner):** As the DMX value increases, the light intensity
tends to be linear;

Mode2(**Square law):** The light intensity is controlled to be
finer at low values and thicker at high values;

Mode3(**Inv SQ law):** The light intensity is controlled to be thicker

at low values and thinner at high values;

Mode4(**S Curve):** The light intensity is controlled to be finer at low and high values, and thicker at intermediate values.

3.2.2.5 Dimmer Speed

Press **Dimmer Speed,** press **ENTER** to confirm it. **Dimmer Speed** shows on the LCD. Press **UP/DOWN** to choose: **Fast** or **Smooth**. Press **ENTER** to reserve. Press **MENU** for going back to previous menu, or wait for 1 minute for going back to main menu.

3.2.2.6 Set Dimmer Frequency

Press **Set Dimmer Frequency,** press **ENTER** to confirm it. **P/T Feedback** shows on the LCD. Press **UP/DOWN** to choose: 1000 /1200(default)/1500/2500/4000/5000/10000/15000/20000/25000. Press **ENTER** to reserve. Press **MENU** for going back to previous menu, or wait for 1 minute for going back to main menu.
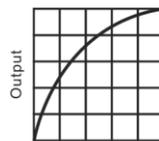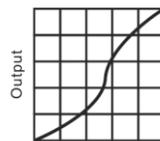
3.2.2.7 Fan Mode

Press **Fan Mode,** press **ENTER** to confirm it. **Fan Mode** shows on the LCD. Press **UP/DOWN** to choose：**Silent Mode, Auto Mode, Strength Mode**. Press **ENTER** to reserve. Press **MENU** for going back to previous menu, or wait for 1 minute for going back to main menu.

3.2.3 DISP

Press **MENU** to choose **DISP,** press ENTER to confirm it. Press UP/DOWN to choose: **Display Inverse, Backlight Intensity, Temperature Unit** or **Language.**

3.2.3.1 Display Inverse

Press **Display Inverse,** press **ENTER** to confirm it. **Display Inverse** shows on the LCD. Press **UP/DOWN** to choose ：

No(Normal) or **Yes(Display Inverse)**. Press **ENTER** to reserve. Press **MENU** for going back to previous menu, or wait for 1 minute for going back to main menu.

3.2.3.2 Backlight Intensity

Press **Backlight Intensity,** press **ENTER** to confirm it. **Backlight Intensity** shows on the LCD. Press **UP/DOWN** to choose：**1(Black)** to **10(Lightness)**. Press **ENTER** to reserve. Press **MENU** for going back to previous menu, or wait for 1 minute for going back to main menu.

3.2.3.3 Temperature Unit

Press **Temperature Unit,** press **ENTER** to confirm it. **Temperature Unit** shows on the LCD. Press **UP/DOWN** to choose：℃ or ℉. Press **ENTER** to reserve. Press **MENU** for going back to previous menu, or wait for 1 minute for going back to main menu.

3.2.3.4 Language

Select **Language**, press **ENTER** button to confirm. Use **UP/DOWN** button to select: **Chinese** or **English**, press **ENTER** button to save. Press **MENU** button to return to the previous menu or wait 1 minute to exit automatically.

3.2.4 Test

Enter **MENU**, select **Test**, press **ENTER** button to confirm, use **UP/DOWN** button to select: **Auto test**, **Manual test.**

3.2.4.1 Auto test

Select **Auto test**, press **ENTER** button to confirm. The program will run to test pan, tilt, color, color wheel, color wheel auto-rotation, strobe, dimming, prism wheel, prism wheel auto-rotation, frost, focus, etc. Press **MENU** button to return to the previous menu or

return to the menu mode after the test.

3.2.4.2 Manual test

Select **Manual test**, press **ENTER** button to confirm. Use **UP/DOWN** button to select the channel: press **ENTER** button to confirm, then use **UP/DOWN** button to adjust the value, press **ENTER** button to save. The program will run according to the channel value. Press **MENU** button to return to the previous menu or wait 1 minute to exit the menu mode automatically. (After exiting the manual test menu, all channel values will become "0").

3.2.5 Information

Enter **MENU**, select **Information**, press **ENTER** button to confirm, use **UP/DOWN** button to select: **Fixture usage time**, **Temperature** , **Fixture name** and **CPU version**.

3.2.5.1 Fixture usage time

Select **Fixture usage time**, press **ENTER** button to confirm. The screen will show the fixture running time. Press **MENU** button to exit.

3.2.5.2 Temperature

Select **Temperature**, press **ENTER** button to confirm. You can read the temperature on the screen. Press **MENU** button to exit.

3.2.5.3 CPU version

Select **CPU version**, press **ENTER** button to confirm. The firmware version of the device will appear on the screen. Press **MENU** button to exit.

3.2.6 Reset

Enter **MENU**, select **RSET**, press **ENTER** button to confirm, use **UP/DOWN** buttons to select: **Pan/Tilt**, **Effect** or **All**.

3.2.6.1 Pan/Tilt

Select **Pan/Tilt**, press **ENTER** button to confirm. Use **UP/DOWN** button to select: **No** or **Yes** (The light will back to the initial position of **Pan/Tilt**), press **ENTER** button to save. Press **MENU** button to exit.

3.2.6.2 Effect

Select the **Effect**, press **ENTER** button to confirm, use **UP/DOWN** buttons to select: **No** or **YES** (The effect will be back to its initial position). Press **ENTER** button to save. Press **MENU** button to exit.

3.2.6.3 All

Select **All**, press **ENTER** button to confirm, use **UP/DOWN** buttons to select: **No** or **Yes** (All will back to the initial position). Press **ENTER** button to save. Press **MENU** button to exit.

3.2.7 SPEC

Enter the menu, select the **SPEC**, press **ENTER** button to confirm, select: **Factory settings**.

3.2.7.1 Factory settings

Select **Factory settings**, press **ENTER** button to confirm, use **UP/DOWN** buttons to select **No** (keep current settings) or **Yes** (restore factory settings). Once selected, press **ENTER** button to save. Press **MENU** button to exit.

3.3 Motor offset adjustment

PAN	
Tilt	
Cyan	
Magenta	
Yellow	
CTO	
Color	
Gobo 1	
RGobo 1	
Gobo 2	
Animation	
Prism 1	
RPrism 1	127
Iris-	0
Framing	128
Blade-UP 1	
Blade-UP 2	
Blade-LF 1	
Blade-LF 2	
Blade-DN 1	
Blade-DN 2	
Blade-RG 1	
Blade-RG 2	
Frost 1	
Frost 2	
Focus	
Zoom	

Fine-tune menu

Press **MENU** button to enter the menu, and then press **ENTER** button for about 3 seconds to enter the **Motor Offset** to adjust each initial position. Press **ENTER** button to confirm. Use **UP/DOWN**

button to select the submenu, press **ENTER** button to save and return to the previous menu automatically. Press **MENU** button to exit.

Pan

Enter **Motor offset**, select **Pan**, press **ENTER** button to confirm, the current position will be shown on the screen. Use **UP/DOWN** button to adjust the **Pan** initial position (-128 to 127), and press **ENTER** button to save. Press **MENU** button to exit.

Titl

Enter **Motor offset**, select **Tilt**, press **ENTER** button to confirm, the current position will be shown on the screen. Use **UP/DOWN** buttons to adjust the **Tilt** initial position (-128 to 127), and press **ENTER** button to save. Press **MENU** button to exit.

Cyan

Enter **Motor offset**, select **Cyan**, press **ENTER** button to confirm, the current position will be shown on the screen. Use **UP/DOWN** button to adjust **Cyan** initial position (-128 to 127), and press **ENTER** button to save. Press **MENU** button to exit.

Magenta

Enter **Motor offset**, select **Magenta**, press **ENTER** button to confirm, the current position will be shown on the screen. Use **UP/DOWN** button to adjust **Magenta** initial position (-128 to 127), and press **ENTER** button to save. Press **MENU** button to exit.

Yellow

Enter **Motor offset**, select **Yellow**, press **ENTER** button to confirm, the current position will be shown on the screen, use **UP/DOWN** button to adjust **Yellow** initial position (-128 to 127),

press **ENTER** button to save. Press **MENU** button to exit.

CTO

Enter **Motor offset**, select **CTO**, press **ENTER** button to confirm, the current position will be shown on the screen. Use **UP/DOWN** button to adjust **CTO** initial position (-128 to 127), and press **ENTER** button to save. Press **MENU** button to exit.

Color

Enter **Motor offset**, select **Color**, press **ENTER** button to confirm, the current position will be shown on the screen. Use **UP/DOWN** button to adjust **Color** initial position (-128 to 127), and press **ENTER** button to save. Press MENU button to exit.

Gobo 1

Enter **Motor offset**, select **Gobo 1**, press **ENTER** button to confirm, the current position will be shown on the screen. Use **UP/DOWN** buttons to adjust **Gobo 1** initial position (-128 to 127), and press **ENTER** button to save. Press **MENU** button to exit.

RGobo 1

Enter **Motor offset**, select **RGobo 1**, press **ENTER** button to confirm, the current position will be shown on the screen. Use **UP/DOWN** button to adjust **RGobo 1** initial position (-128 to 127), and press **ENTER** button to save. Press **MENU** button to exit.

Gobo 2

Enter **Motor offset**, select **Gobo 2**, press **ENTER** button to confirm, the current position will be shown on the screen. Use **UP/DOWN** button to adjust **Gobo 2** (-128 to 127), and press **ENTER** button to save. Press **MENU** button to exit.

Animation

Enter **Motor offset**, select **Animation**, press **ENTER** button to confirm, the current position will be shown on the screen. Use the **UP/DOWN** button to adjust **Animation** initial position (-128 to 127), and press **ENTER** button to save. Press **MENU** button to exit.

Prism 1

Enter **Motor offset**, select **Prism**, press **ENTER** button to confirm, the current position will be shown on the screen. Use **UP/DOWN** button to adjust **Prism** initial position of the prism (-128 to 127), and press **ENTER** button to save. Press **MENU** button to exit.

RPrism 1

Enter **Motor offset**, select **RPrism 1**, press **ENTER** button to confirm, the current position will be shown on the screen. Use **UP/DOWN** button to adjust **RPrism 1** initial position (-128 to 127), and press the **ENTER** button to save. Press **MENU** button to exit.

Iris

Enter **Motor offset**, select **Iris**, press **ENTER** to confirm. The current position will be shown on the screen. Press **UP/DOWN** to adjust the position (-128 to 127). Press **ENTER** to save, Press **MENU** to exist.

Framing

Enter **Motor offset**, select **Framing,** press **ENTER** to confirm. The current position will be shown on the screen. Press **UP/DOWN** to adjust the position (-128 to 127). Press **ENTER** to save. Press **MENU** to exist.

Blade-UP1

Enter **Motor offset**, select **Blade-UP1**, press **ENTER** to confirm. The current position will be shown on the screen. Press **UP/DOWN** to adjust the position (0 - 255). Press **ENTER** to save. Press **MENU** to exist.

Blade-UP2

Enter **Motor offset**, select **Blade-UP2**, press **ENTER** to confirm. The current position will be shown on the screen. Press **UP/DOWN** to adjust the position (0 - 255). Press **ENTER** to save. Press **MENU** to exist.

Blade-LF1

Enter **Motor offset,** select **Blade-LF1**, press **ENTER** to confirm. The current position will be shown on the screen. Press **UP/DOWN** to adjust the position (0 - 255). Press **ENTER** to save. Press **MENU** to exist.

Blade-LF2

Enter **Motor offset**, select **Blade-LF2**, press **ENTER** to confirm. The current position will be shown on the screen. Press **UP/DOWN** to adjust the position (0 - 255). Press **ENTER** to save. Press **MENU** to exist.

Blade-DN1

Enter **Motor offset**, select **Blade-DN1**, press **ENTER** to confirm. The current position will be shown on the screen. Press **UP/DOWN** to adjust the position (0 - 255). Press **ENTER** to save. Press **MENU** to exist.

Blade-DN2

Enter **Motor offset**, select **Blade-DN2**, press **ENTER** to confirm. The current position will be shown on the screen. Press

UP/DOWN to adjust the position (0 - 255). Press **ENTER** to save. Press **MENU** to exist.

Blade-RG1

Enter **Motor offset,** select **Blade-RG1**, press **ENTER** to confirm. The current position will be shown on the screen. Press **UP/DOWN** to adjust the position (0 - 255). Press **ENTER** to save. Press **MENU** to exist.

Blade-RG2

Enter **Motor offset**, select **Blade-RG2**, press **ENTER** to confirm. The current position will be shown on the screen. Press **UP/DOWN** to adjust the location (0 - 255). Press **ENTER** to save. Press **MENU** to exist.

Frost-1

Enter **Motor offset**, select **Frost-1,** press **ENTER** to confirm. The current position will be shown on the screen. Press **UP/DOWN** to adjust the position (-128 to 127). Press **ENTER** to save. Press **MENU** to exist.

Frost-2

Enter **Motor offset**, select **Frost-2**, press **ENTER** to confirm. The current will be shown on the screen. Press **UP/DOWN** to adjust the position (-128 to 127). Press **ENTER** to save. Press **MENU** to exist.

Focus

Enter **Motor offset**, select Focus, press **ENTER** to confirm. The current position will be shown on the screen. Press **UP/DOWN** to adjust the position (-128-127). Press **ENTER** to save. Press **MENU** to exist.

Zoom

　　Enter **Motor offset**, select Zoom, press **ENTER** to confirm. The current position will be shown on the screen. Press **UP/DOWN** to adjust the position (-128 to 127). Press **ENTER** to save. Press **MENU** to exist.

4.Gobos and LED

4.1 Rotating Gobo Wheel：

PM431　　　PM930　　　JT036　　　PM450　　　PM323　　　PM573　　　T2.5MM
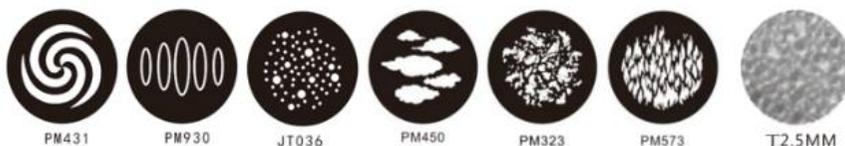
4.2 Static Gobo Wheel：
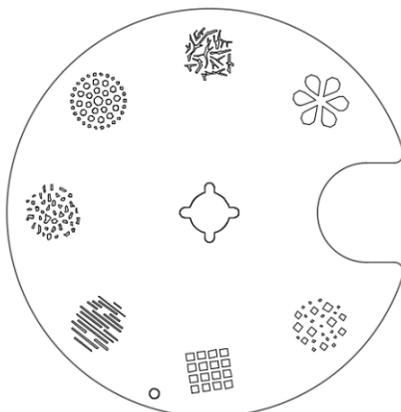
4.3 Animation Wheel：
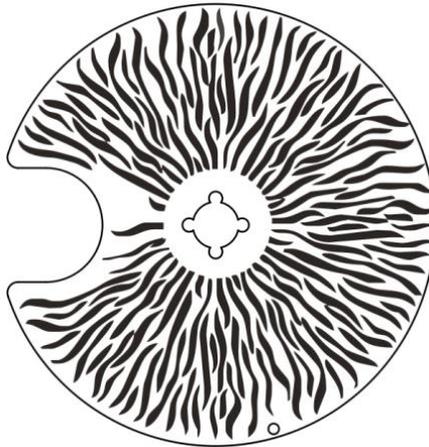
4.4 LED

- Light sou
- Color Te
- /6000K(High CRI)
- Work life: 20,000HLED
- CRI:Standard≥70;High CRI ≥90
- Spot uniform:≥90%
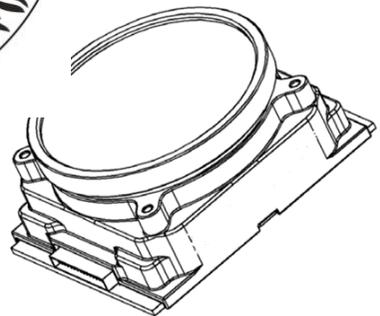
5.DMX Setting

5.1 DMX Connection
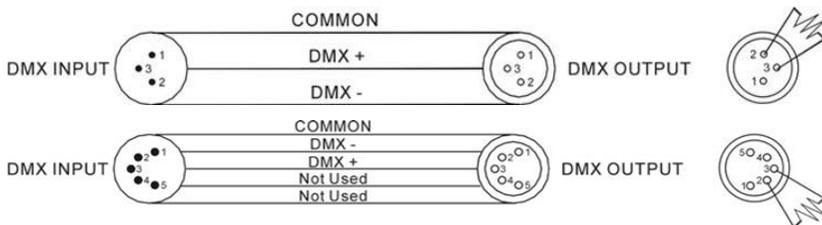
1) In order to reduce signal errors and avoid signal weakening

and interference during transmission, a 120OHM 1/4W resistor can be added between the 2 and 3 cores of the DMX output terminal of the last machine.

2) Connect the fixture with XLR cable, one end is connected to the output port of the fixture, and the other end is connected to the input port of the next fixture. XLR signal lines can only be used in series, not in parallel. DMX512 signal transmission speed is very fast. Damage to the signal line, weak welding, poor contact, etc., will affect the signal transmission and cause the system to shut down

3) When power supply of a certain unit is disconnected, the connection of DMX output and input is bypassed in order to maintain the connection of DMX line.

4) Each fixture must have an address code, which can receive the information sent by the console, and the range is between 0-511 (usually 0&1 and 1 are the same).

5) The terminal of the DMX512 system needs to be equipped with a terminator to reduce signal transmission errors.

6) 3-pin XLR connectors are more common than 5-pin XLR:

7) 3-pin XLR: PIN 1: GND, PIN 2: negative signal, PIN 3: positive signal.

8) 5-pin XLR: PIN 1: GND, PIN 2: negative signal, PIN 3: positive signal, PIN4/PIN5: not used;

5.2 Address code setting

When using a general DMX controller to control the fixture, you need to set the starting address (1-512) for the fixture, so that it can

receive the DMX signal. Press the menu button to enter the menu mode, select the DMX function, press the ENTER button to confirm, the current address will flash on the display, then use the UP/DOWN buttons to select the address code (1-512), press the ENTER button to save. Press the MENU button to return to the previous menu or wait one minute to automatically exit the menu mode. Please refer to the chart below to set the address codes of the first 4 fixtures

Channel Mode	Light 1 Address code	Light 2 Address code	Light 3 Address code	Light 4 Address code
30 channel	1	31	61	91
32 channel	1	33	65	97

5.3 DMX 512 Channels

DMX PROTOCOL				
29ch	34ch	37ch	Value	Function
27	29	1	(0-255)	Pan
	30	2	(0-255)	Fine-tuning for Pan
28	31	3	(0-255)	Tilt
	32	4	(0-255)	Fine-tuning for Tilt
	33	5	(0-255)	Pan/Tilt speed:

				fast ➞ slow
29	34	6		Special function
			(0-29)	None
			(30-39)	Dimming curve square
			(40-49)	Dimming curve inverse square
			(50-59)	Dimming curve linear
			(60-69)	Dimming curve S shape
			(70-79)	Scan with shading
			(80-89)	Scanning without shading
			(90-99)	Color wheel positioning whit shading
			(100-109)	Color wheel positioning without shading
			(110-119)	Gobo plate positioning with shading
			(120-129)	Gobo plate positioning without shading
			(130-139)	Focus compensation invalid
			(140-149)	Focus compensation Short range
				Focus compensation Mid-range
			(150-159)	Focus compensation Long range
			(160-169)	Dimming speed built-in
			(170-179)	Fast dimming speed
			(180-189)	Smooth dimming speed
			(190-199)	All reset
			(200-209)	fixture head reset

			(210-219)	X/Y reset
			(220-229)	None
			(230-255)	
1	6	7		Strobe
			(0-15)	Strobe off
			(16-30)	Strobe on
			(31-135)	Strobe: slow → fast
			(136-145)	Strobe on
			(146-175)	Strobe fast closing slow opening: slow → fast
			(176-185)	Strobe on
			(186-215)	Strobe fast closing slow opening: slow → fast
			(216-225)	Strobe on
			(226-245)	Random strobe: slow → fast
			(246-255)	Strobe on
2	7	8	(0-255)	Dimming 0-100%
	8	9	(0-255)	Dimming fine-tuning
3	1	10	(0-255)	Cyan
4	2	11	(0-255)	Magenta
5	3	12	(0-255)	Yellow
6	4	13	(0-255)	CTO
7	5	14		Color wheel
			(0-131)	Color moves linearly
			(132-141)	Color-1
			(142-151)	Color-2

			(152-161)	Color-3
			(162-171)	Color-4
			(172-181)	Color-5
			(182-191)	Color-6
			(192-222)	Clockwise rotation: fast → slow
			(223-224)	Stop
			(225-255)	Counterclockwise rotation: fast → slow
8	9	15		Rotating gobo
			(0-7)	Open/white
			(8-15)	Rotating gobo 1
			(16-23)	Rotating gobo 2
			(24-31)	Rotating gobo 3
			(32-39)	Rotating gobo 4
			(40-47)	Rotating gobo 5
			(48-55)	Rotating gobo 6
			(56-63)	Rotating gobo 7
			(64-95)	Clockwise rotation: fast → slow
			(96-97)	Stop
			(98-129)	Counterclockwise rotation: slow → fast
			(130-147)	Rotating gobo 1 Shaking: slow → fast
			(148-165)	Rotating gobo 2 Shaking: slow →

				fast
			(166-183)	Rotating gobo 3 Shaking: slow → fast
			(184-201)	Rotating gobo 4 Shaking: slow → fast
			(202-219)	Rotating gobo 5 Shaking: slow → fast
			(220-237)	Rotating gobo 6 Shaking: slow → fast
			(238-255)	Rotating gobo 7 Shaking: slow → fast
9	10	16		Rotating gobo Rotation
			(0-127)	Autorotation
			(128-190)	Clockwise rotation: fast → slow
			(191-192)	Stop
			(193-255)	Counterclockwise rotation: slow → fast
	11	17	(0-255)	Gobo rotation fine-tuning
10	12	18		Static gobo
			(0-7)	Open/White
			(8-15)	Static gobo-1
			(16-23)	Static gobo-2
			(24-31)	Static gobo-3
			(32-39)	Static gobo-4
			(40-47)	Static gobo-5

			(48-55)	Static gobo-6
			(56-63)	Static gobo-7
			(64-95)	Clockwise rotation: fast → slow
			(96-97)	Stop
			(98-129)	Counterclockwise rotation: slow → fast
			(130-147)	Static gobo-1 Shaking: slow → fast
			(148-165)	Static gobo-2 Shaking: slow → fast
			(166-183)	Static gobo-3 Shaking: slow → fast
			(184-201)	Static gobo-4 Shaking: slow → fast
			(202-219)	Static gobo-5 Shaking: slow → fast
			(220-237)	Static gobo-6 Shaking: slow → fast
			(238-255)	Static gobo-7 Shaking: slow → fast
21	19	19	(0-255)	Iris: big → small
11	13	20		Animation wheel
			（0-15)	None
			(16-135)	Clockwise rotation: fast → slow

			(136-255)	Counterclockwise rotation: slow → fast
22	14	21	(0-15) (16-255)	Prism wheel None Prism
23	15	22	(0-127) (128-191) (192-255)	Prism rotation Prism Autorotation Clockwise rotation: fast → slow Counterclockwise rotation: slow → fast
		23	(0-255)	Prism rotation fine tuning
24	16	24	(0-99) (100-127) (128-227) (228-255)	Frost Frost 1 Linear Frost 1 Frost 2 Linear Frost 2
25	17	25	(0-255)	Zoom
		26	(0-255)	Zoom fine tuning
26	18	27	(0-255)	Focus
		28	(0-255)	Focus fine tuning
12	20	29	(0-255)	Framing rotation 0° -90°
13	21	30	(0-255)	Upper Framing 1 0% -100%
14	22	31	(0-255)	Upper Framing 2 0% -100%
15	23	32	(0-255)	Left Framing 1 0% -100%
16	24	33	(0-255)	Left Framing 2 0% -100%

17	25	34	(0-255)	Below Framing 1 0% -100%
18	26	35	(0-255)	Below Framing 2 0% -100%
19	27	36	(0-255)	Right Framing 1 0% -100%
20	28	37	(0-255)	Right Framing 2 0% -100%

6. Troubleshooting

The following are some of the problems that often occur in operation. There are some suggestions for troubleshooting.

A. The fixture cannot run, there is no light, and the fan is damaged.

1) Check the power connection and whether the fuse is intact. Check the voltage.

2) Check the indicator light of the switching power supply.

B. Uncontrolled by the console.

1) The indicator light must be red, if not, check the DMX signal connector and signal line to see if the connection is correct.

2) If the DMX indicator is red, but there is no response to the control channel, check whether the address code is set correctly.

3) If the DMX signal transmission is intermittent, check whether the XLR socket and the signal line are well connected.

4) 4) Try to use another controller.

5) Check if the distance between the DMX signal line and the high-voltage line is too close, otherwise it will damage or interfere with the signal circuit.

C. A channel fails

1) The stepping motor may be damaged, and the motor lead may be broken.

2) The drive circuit of the motor may be faulty.

7. Equipment cleaning

The inside and outside of the lens must be wiped frequently to make the lighting effect better. The frequency of wiping depends on the environment. Humid, smoky, and particularly dirty environments

are likely to accumulate dust on the lens. □

Use soft linen cloth and special glass wiper. □

Dry the parts carefully.

Wipe the outside of the lens at least every 30 days.

8. Spare parts
1) 1pcs power cable

2) 1pcs signal connection line

3) 1pcs insurance rope

4) 1pcs user manual

5) 2pcs fast -lock omega fixture