

# 600W/1000W ERA 600 PERFORMANCE **Manual**

(RDM, color display, touch operation)



Please read the instructions carefully before use

## Contents

Chapter 1 Precautions and Installation.....	1
1. maintenance.....	1
2. statement.....	1
3. Product precautions.....	1
4. Lamp installation.....	1
Chapter 2 Panel Operation.....	3
1. outline.....	3
2. operating.....	3
1. Use intuitive touch or encoder to operate lamps.....	3
2. Parameter value input.....	3
3. Set boolean parameters.....	4
4. Subpage (parameter).....	4
3. Function operation and parameter setting.....	4
1. Set DMX address code.....	5
2. Set the lamp working mode.....	5
3. Panel display settings.....	6
4. Scene mode.....	7
4. Set lamp working parameters.....	8
5. View the current status of the fixture.....	9
Chapter 3 Channel Description.....	11
1. Channel table.....	11
Chapter 4 Common Faults and Usage Notes.....	15
1. Common troubleshooting.....	15
2. Precautions for use.....	15
3. RDM usage precautions.....	16

## Chapter 1 Precautions and Installation

### 1. Maintenance

- The lamp should be kept dry and avoid working in a humid environment.
- Intermittent use will effectively extend the life of the lamp.
- In order to obtain good ventilation and lighting effects, it is necessary to clean the fan, fan net and lens frequently.
- Do not wipe the lamp housing with organic solvents such as alcohol to avoid damage.

### 2. Statement

This product has good performance and complete packaging when it comes into the factory. All users should strictly abide by the warnings and operating instructions stated above. Any damage caused by misuse is not covered by our company's guarantee. Failures and problems caused by ignoring the operating manual are not within the scope of the dealer's responsibility. .

This manual is subject to technical changes without notice.

### 3. Product precautions

- In order to ensure the service life of the product, do not place this product in a humid or leaking place, let alone at a temperature exceeding 60 Environmental work above
- Do not place this product in a place subject to looseness or vibration.
- In order to avoid the risk of electric shock, the maintenance of this product requires professional maintenance.
- When the bulb is in use, the power supply voltage should not change more than  $\pm 10\%$ . Too high voltage will shorten the life of the bulb, and too low voltage will affect the light color of the bulb.
- After the power is cut off, it takes 20 minutes to use the lamp to fully cool down before it can be powered on again.

To ensure the normal use of this product, please read this manual carefully. Signal line connection (DMX)

Use RS-485 cables that meet the specifications: shielded, 120ohm characteristic impedance, 22-24 AWG, low capacitive reactance. Do not use microphone cables or cables with different specified characteristics. The terminal connection must use a 3 or 5 pin XLR type male/female connector. (Minimum 1/4 W).

Important note: The wires cannot touch each other or the metal shell.

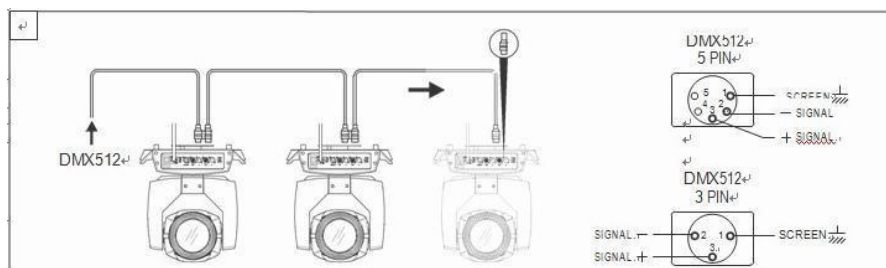


图 1 DMX Signal line connection diagram

### 4. Lamp installation

The lamps can be placed horizontally, hung diagonally and upside down. Pay

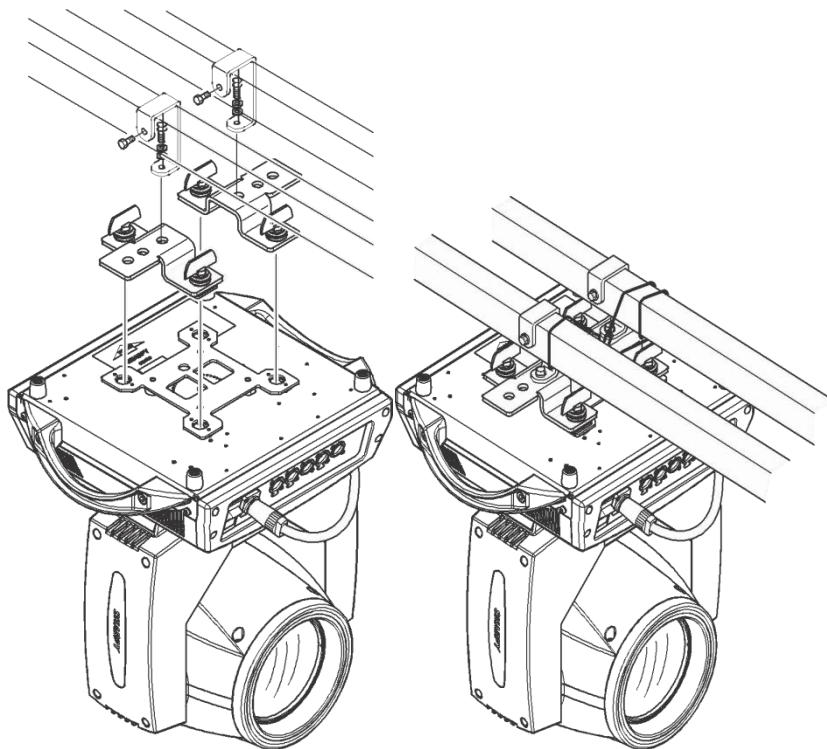
attention to the installation method when hanging diagonally and upside down.

As shown in Figure 2, before locating the lamp, ensure the stability of the installation site. When installing inverted and hanging, you must ensure that the lamp does not fall down on the support frame. A safety rope needs to pass through the support frame and the lamp lift. Hand assist hanging to ensure safety and prevent the lamp from falling and sliding.

When the lamps are installed and debugged, pedestrians are prohibited from passing underneath. Regularly check whether the safety ropes are worn and the hook screws are loose.

Our company will not bear any responsibility for all the consequences caused by the lamp falling due to unstable hanging installation.

Figure 2 Upside down



## Chapter 2 Panel Operation

### 1. Outline

The schematic diagram of the lamp panel is shown in Figure 3. The upper title displays the name of the lamp, and the lower is the status bar, which displays the current lamp signal, bulb status, and fault (when there is no fault information, it will display "ERR", otherwise it will display "NOR") Wait.

This lamp supports the DMX/RDM protocol. When the lamp is searched by the RDM host, the three letters "RDM" will appear on the panel, indicating that the lamp is enumerated normally.

The display and operation are similar to the "Android operating system", and you can click the corresponding item with your fingertip or a blunt object to operate. Note: Do not use pointed or sharp objects to click on the display to prevent damage.



Figure 3 Display panel diagram

### 1. Operation

#### 2. Use intuitive touch or encoder to operate lamps

- The left area is the TFT display area and touch area. Click the content of the panel with your finger or blunt-faced hardware to complete parameter setting or viewing status.
- The area on the right is the auxiliary input. If you do not use the touch function that comes with TFT, you can use the auxiliary input to select the items that need to be set or viewed to complete the operation.

#### 3. Parameter value input

When the selected parameter item needs to enter a value, the window shown in Figure 4 will open:



Figure 4 Value setting page

- **Set the value:** you can directly drag the slide bar to quickly set the required value, or click the "up" or "down" button on the right to precisely set the required value for setting;
- **Applied value:** When the data is set by the "up" or "down" button, and then press the "apply" application button in the lower left corner, the value will be sent to the fixture immediately, but the value has not been saved;
- **Save the value:** At any time, click the "OK" button in the lower right corner to save the current value to the internal memory, and the saved value will be applied to the fixture at the next start up.

#### 4. Set boolean parameters

- When the set parameter is a Boolean value (such as ON or OFF), you can directly click the corresponding item to switch the parameter value, and this type of parameter will be saved to the internal memory after modification. Press the parameter option on the right, the corresponding option will be grayed out. When you let go, the corresponding parameters will be changed and saved. If pressing the parameter option is not the parameter you want to change, you can move your finger to another place on the screen at this time, and the corresponding parameter will not change.
- The important Boolean parameters will be confirmed through the confirmation window to set, as shown in Figure 5 below:

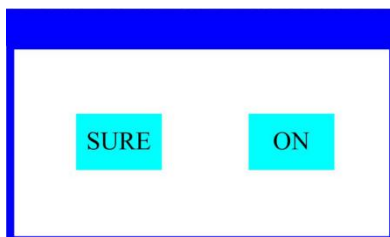


Figure 5 Confirm input window

#### 5. Sub page (parameter)

Figure 6 Function page



图6 功能页面

## 2. Function operation and parameter setting

Enter the setting interface, as shown in Figure 6:

- In the interface, you can enter the corresponding parameter setting interface by selecting six buttons.
- In the parameter setting interface, you can press the blue option on the left to quickly switch to other setting interfaces.

### 1. Set DMX address code

The DMX address and channel mode of the fixture can be set through the page shown in Figure 6-1.

The menu setting of the lamp optimizes the address setting, and the operations of several setting address codes are as follows:



Figure 6-1.

- Select "Last" or "Next", the fixture will automatically calculate the address code of the next or previous unit based on the current address code and channel data, which can be quickly set;
- Click the value of the address code to enter the value editing window, where any valid address code can be used, and the fixture will automatically obtain the current channel number of the fixture, and automatically filter the unusable address code (512-current channel number).
- The lamp supports the RDM protocol, and the lamp address code can be set remotely through RDM.

#### Two buttons are provided:

- Channel mode: different channel modes can be selected cyclically;
- Lamp reset: reset all motors.

### 2. Set the lamp working mode

Through the page shown in Figure 6-2, the operating mode of the lamp can be set. The lamp supports four operating modes (DMX mode, self-propelled mode, sound control mode and scene mode). For detailed parameter value settings, please refer to the previous section. Specific parameters The description is shown in the following table:



Figure 6-2

地址设置	DMX模式	✓
运行设置	自走模式	
显示设置	声控模式	
场景设置	场景模式	自动
高级信息	主从选择	自动
状态信息		
退出		

## Operating mode

<b>DMX mode</b>	Console mode, receiving DMX signal, RDM signal	
<b>Self-propelled mode</b>	The lamp will run automatically according to the built-in program	
<b>Voice control mode</b>	When the lamp detects a strong sound, the lamp will automatically run a scene according to the built-in program, otherwise it will keep the last one. Second scene	
<b>Scene mode 01</b>	Run in the set scene mode, support custom editing of up to 10 scenes	
	1~10	Output specified scene
	automatic	Automatically output the scenes in the sequence of the set scene time (not 0), and the scene with the time of 0 will automatically skip ignore
<b>Master-slave selection</b>	It takes effect when the mode is not DMX, select the data output mode, the lamp will automatically detect the DMX status and automatically switch the output To prevent data conflicts	
	Slave	Lamps run as built-in, no data output (not synchronized with other lamps)
	main engine	The lamp runs as built-in, if DMX has no signal, then output data (synchronization), otherwise no data output
	automatic	If there is no DMX signal, the lamp will operate as built-in, otherwise, the lamp will operate according to the DMX signal

The scene mode is suitable for a single or a small number of lamps, only a fixed scene is output, or a simple program needs to be run, you can edit it in the scene page without connecting to the console

If the light source of the lamp is a bulb, after turning off the bulb, please wait 10 minutes before turning on the bulb.



地址设置	Language	中文
运行设置	屏幕保护	模式3
显示设置	屏幕旋转	自动
场景设置	DMX指示	模式3
高级信息	信号指示亮度	005
状态信息	屏幕背光	005
退出	触屏开关	开启
	触屏校正	

### 3. Panel display settings

Figure 6-3

The lamp supports Chinese and English bilingual, upside down display, etc., enter the corresponding parameter setting as shown in Figure 6-3, the specific menu content is shown in the following table:

display setting

<b>Language</b>	Set the displayed language	
	English	English display
	Chinese	Chinese display
<b>screen protector</b>	Set the screen display content or method after no operation within 30 seconds	
	shut down	Keep the last operation page, bright screen
	Mode 1	Screen off
	Mode 2	Black screen, display the address code of the current fixture in the lower left corner
Mode 3	Display brand information, address code and operating mode	
<b>Screen rotation</b>	Set the display direction of the screen	
	Reverse	Reverse display
	Positive	Do not reverse the display
automatic	Automatically detect the direction of the lamp hanging lamp, automatically switch the display direction	
<b>DMX instructions</b>	Set the indication mode of DMX signal indicator	
	Mode 1	On when there is a signal, off when there is no signal
	Mode 2	Off when there is a signal, on when there is no signal
	Mode 3	Flashing when there is a signal, and off when there is no signal
<b>Signal brightness</b>	Set the brightness of the signal indicator	
	1~10	10 levels
<b>Screen backlight</b>	Set the brightness of the screen backlight after 10 seconds of no operation, and it will be all on during operation	
	1~10	10 levels
<b>Touch screen switch</b>	Choose whether to disable the touch screen. When the screen touch is accidentally damaged, you can disable the touch function and use auxiliary input to set the lamps	
<b>Touch correction</b>	When the screen touch is not accurate, you can enter the correction page to correct the screen	

For lamps that support touch operation, if there is a bad touch, you can enter the calibration page to re-calibrate the touch accuracy of the touch screen. Under normal circumstances, please do not enter this page. If the touch is damaged, select to disable the touch function.

#### 4. Scene mode



Figure 6-4

Entering the page shown in Figure 6-4, the fixture enters the scene editing mode. On this page, the fixture does not receive DMX console data, and the edited data is reflected on the fixture immediately.

The content of the page depends on the currently selected channel, and the displayed channel content and sequence are consistent with the fixture channel table. Through this page, 10 scenes can be edited, as shown in the following table:

##### Scene mode

Scene selection	Select the current operating scene	
	1~10	10 scene settings
Scene time	Set the retention time of the current scene in automatic mode, the unit is 0.1 second	
	0	The current scene does not participate in automatic scene output
	1-255	0: 1 second to 25.5 seconds
1.Strobe	0-255	Set the data of each channel, the display content and sequence correspond to the channel table of the lamp one by one
.....	0-255	
.....	0-255	
N.Reset/function	0-255	

If the effective reset data is edited in the reset channel in the scene, the lamp will be reset, but after reset, the value of the corresponding reset channel will be automatically cleared to prevent multiple consecutive resets.

View this page, you can get the current channel table sequence of the fixture. For specific channel data, please refer to the detailed channel description.

## 5. Set lamp working parameters

地址设置	X轴反向	关闭
运行设置	Y轴反向	关闭
显示设置	光耦校正	开启
场景设置	X轴偏移量	010
	Y轴偏移量	010
高级信息	数据保持	关闭
状态信息	出厂设置	
退出		

Figure 6-5

Enter the page shown in Figure 6-5 to adjust the on-site parameters of the lamp to facilitate the on-site installation of the lamp, etc.:

### advanced settings

<b>Pan Reverse</b>	Set Pan rotation direction	
	off	Not reverse
	on	Reverse
<b>Tilt Reverse</b>	Set Tilt rotation direction	
	off	Not reverse
	on	Reverse
<b>Optocoupler correction</b>	Set whether the lamp detects XY out of step and corrects it	
	off	Position is not corrected after out of step
	on	Automatically correct the position after losing step
<b>Pan Offset</b>	Set the position of the zero point of the X axis of the fixture	
	4-150	
<b>Tilt Offset</b>	Set the position of the Y-axis zero point of the fixture	
	4-48	
<b>Data retention</b>	Set the output state of the lamp when there is no DMX signal	
	off	No signal, so the motor and light source return to the position and state when the reset is completed
	on	No signal, keep the last frame of DMX data output
<b>Factory settings</b>	A confirmation box pops up, after selecting "SURE", the lamp parameters return to the factory settings	

When the position of the lamp cannot be corrected, please check whether the "photocoupler correction" is turned off first.

After unplugging the signal, if the position of the lamp is not output as expected, please check the "data hold" setting first.

When setting the XY offset, after completing the setting, please control XY with the maximum stroke first to check that after setting, X Y will not hit the positioning rod or the housing.

## 6. View the current status of the fixture



Figure 6-6

Entering the page shown in Figure 6-6, you can view the information and real-time status of the lamp to get the status of the lamp. If the lamp needs after-sales service, please provide the status information displayed on this page as a basis for judgment, as shown in the following table:

### status information

<b>Motor information</b>	Display the information status of all motors and signals in the lamp	
	Hall	No display, it means that the motor has no Hall calibration, 0 means the motor has left the calibration position, 1 means the motor is at the calibration position
	mode	Display motor reset completion status
	Pan	Display real-time position value of X-axis optocoupler feedback
	Tilt	Display the real-time position value of Y-axis optocoupler feedback
	Optocoupler	Display the level status of the two signals of the X and Y axis optocoupler, binary
<b>Fault/status record</b>	Display the latest 8 fault records when the lamp is reset and running	
	Failure data	Total number of faults detected after power-on
	12: :03	Power-on time when the fault occurs, in minutes
	Hall failure	Corresponding to the motor did not detect a valid Hall signal when the motor was reset
	Hall short circuit	Corresponding to the motor's Hall signal detected when the motor is reset, it is always valid
	Optocoupler failure	No valid optocoupler signal is detected when the corresponding motor is reset
	Out of step	The corresponding motor loses step during operation
	Bump	Corresponding to hit the positioning rod when the motor is reset
	Lamp failure	The bulb is accidentally blown out
	Sensor failure	The temperature sensor signal is abnormal,
Fan failure	The main fan is not working properly	
<b>Lamp status</b>	Display the key status data of the current lamps for reference	
	correspondence	0~100%, The communication quality of the data link inside the lamp

	Communication error count	The number of error frames detected after power-on, cumulative
	Light source temperature	Display the current temperature of the light source, "---" means no detection
	Display board temperature	Display the temperature of the current display board or the ambient temperature nearby
	Sensor 1 temperature	Display the current motherboard temperature
	Sensor 2 temperature	Display the ambient temperature of the current motherboard installation location
<b>version</b>	Display the current lamp information and version, an important reference for after-sales maintenance	
	Vendor	Manufacturer
	equipment	The name of the fixture, same as the device information of RDM
	model	Lamp model, same as RDM model information
	display board	Display the firmware version and serial number of the board
	Main board 1	Firmware version and serial number of motherboard 1
<b>Light source time</b>	Record the total cumulative time when the light source is turned on, the unit is minute, and the user can manually clear it as a time reference for regular maintenance of the light source	
<b>Lamp time</b>	Record the total cumulative time the lamps are turned on, in minutes, cannot be cleared	

## Chapter 3 Channel Description

### 1. Channel table

The order of this lamp channel can be viewed in the scene mode. The channel mode is set in the "Address Setting" page. The specific details are shown in the table below:

Channel table

Channel 1	name	Value	description
CH1	Strobe	0-19	Close the light
		20-24	Open the light
		25-64	Strobe from slow to fast
		65-69	Open the light
		70-84	Gradual strobe from slow to fast 1
		85-89	Open the light
		90-104	Slow to fast gradual strobe 2
		105-109	Open the light
		110-124	Slow to fast gradual strobe 3
		125-129	Open the light
		130-144	Random strobe from slow to fast
145-255	Open the light		
CH2	Dimmer	0-255	0-100% dimmmer
CH3	Dimming	0-255	
CH4	C	0-255	
CH5	Fine-tuning	0-255	
CH6	M	0-255	
CH7	Fine-tuning	0-255	
CH8	Y	0-255	
CH9	Fine-tuning	0-255	
CH10	CTO	0-255	
CH11	Fine-tuning	0-255	
CH12	Color	0-5	White light
		6-11	Color 1
		12-17	Color 2
		18-23	Color 3
		24-29	Color 4
		30-35	Color 5
		36-41	Color 6
		42-47	Color 7
		48-127	Linear color
		128-190	Positive flow from fast to slow

		191-192	STOP
		193-255	Reverse flow from slow to fast
<b>CH13</b>	<b>Rotating Gobo Change</b>	0-6	White light
		7-13	Gobo 1
		14-20	Gobo 2
		21-27	Gobo 3
		28-34	Gobo 4
		35-41	Gobo 5
		42-55	Gobo 6
		56-62	Dithering pattern from slow to fast 1
		63-69	Dithering pattern from slow to fast 2
		70-76	Dithering pattern from slow to fast 3
		77-83	Dithering pattern from slow to fast 4
		84-90	Dithering pattern from slow to fast 5
		91-104	Dithering pattern from slow to fast 6
		105-179	Positive flow from fast to slow
		180-191	STOP
<b>CH14</b>	<b>Gobo Rot</b>	0-127	0-400 degrees
		128-190	Positive flow from fast to slow
		191-192	STOP
		193-255	Reverse flow from slow to fast
<b>CH15</b>	<b>Dimmer rot</b>	0-255	
<b>CH16</b>	<b>Gobo</b>	0-6	White light
		7-13	Gobo 1
		14-20	Gobo 2
		21-27	Gobo 3
		28-34	Gobo 4
		35-41	Gobo 5
		42-48	Gobo 6
		49-55	Gobo 7
		56-62	Gobo 8
		63-69	Dithering pattern from slow to fast 1
		70-76	Dithering pattern from slow to fast 2
		77-83	Dithering pattern from slow to fast 3
		84-90	Dithering pattern from slow to fast 4
		91-97	Dithering pattern from slow to fast 5
98-104	Dithering pattern from slow to fast 6		
		105-111	Dithering pattern from slow to fast 7
		112-118	Dithering pattern from slow to fast 8



		119-185	Positive flow from fast to slow
		186-188	STOP
		189-255	Reverse flow from slow to fast
<b>CH17</b>	<b>Effect Wheel</b>	0-4	no
		5-127	0-400 degrees
		128	Slow reverse flow
		129-192	STOP
		193-255	Slow reverse flow
<b>CH18</b>	<b>Frost</b>	0-255	
<b>CH19</b>	<b>Prism 1</b>	0-10	Remove the prism
		11-255	Prism 1
<b>CH20</b>	<b>Prism 1 rot</b>	0-127	0-400 degree
		128-190	Positive flow from fast to slow
		191-192	STOP
		193-255	Reverse flow from slow to fast
<b>CH21</b>	<b>Prism 2</b>	0-10	Remove the prism
		11-255	Prism 2
<b>CH22</b>	<b>Prism2 rot</b>	0-127	0-400 degree
		128-190	Reverse flow from fast to slow
		191-192	STOP
		193-255	Positive flow from slow to fast
<b>CH23</b>	<b>aperture</b>	0-255	From big to small
<b>CH24</b>	<b>enlarge</b>	0-255	From small to large
<b>CH25</b>	<b>auto focus</b>	0-10	None (CH27 fine-tuning for auto focus)
		11-63	5 meter
		64-127	7.5 meter
		128-191	10 meter
		192-255	15 meter
<b>CH26</b>	<b>Focus</b>	0-255	From far to near
<b>CH27</b>	<b>Focus Fine</b>	0-255	
<b>CH28</b>	<b>Slice 1</b>	0-255	Line change
<b>CH29</b>	<b>Slice 2</b>	0-255	Line change
<b>CH30</b>	<b>Slice 3</b>	0-255	Line change
<b>CH31</b>	<b>Slice 4</b>	0-255	Line change
<b>CH32</b>	<b>Slice 5</b>	0-255	Line change
<b>CH33</b>	<b>Slice 6</b>	0-255	Line change
<b>CH34</b>	<b>Slice 7</b>	0-255	Line change
<b>CH35</b>	<b>Slice 8</b>	0-255	Line change
<b>CH36</b>	<b>Cut</b>	0-255	Slice angle

<b>CH37</b>	<b>Pan</b>	0-255	0-540 degree
<b>CH38</b>	<b>Pan Fine</b>	0-255	0-2 degree
<b>CH39</b>	<b>Tilt</b>	0-255	0-270 degree
<b>CH40</b>	<b>Tilt Fine</b>	0-255	0-1 degree
<b>CH41</b>	<b>Function</b>	18	Reset XY in more than 6 seconds
		16-17	Reset the effect motor in more than 6 seconds
		10-14	Reset all over 6 seconds

## Chapter 4 Common Faults and Usage Notes

### 1. Common troubleshooting

The lamp contains professional components such as microcomputer circuit board and high-voltage power supply. For your safety and product life, non-professionals should not disassemble the lamp and related accessories without authorization.

#### 1. Bulb does not light up (except LED light source)

Possible cause: The bulb is not completely cooled, or the bulb has reached the end of its life, the treatment is as follows:

- Due to abnormal operation, the bulb has not been completely cooled, so let the lamp body cool down for more than 10 minutes to make the interior completely return to normal state, and then turn on the power again.
- Check whether the bulb has reached the end of its service life and replace it with a new one;
- Check whether the bulb and the lighter circuit are leaking, falling off or having poor contact;
- Replace with a new lighter.

#### 2. Light beam appears dim

Possible cause: The lamp has been used for a long time or the light path is not clean. The treatment is as follows:

- Check whether the bulb has reached the end of its service life and replace it with a new one;
- Check whether the optical components or bulbs are clean, and whether there is dust on the bulbs and other optical components, you need to clean and maintain the bulbs and various components in the lamps regularly.

#### 3. Blurred pattern projection

- Check whether the electronic focus channel value is suitable for the current projection distance.

#### 4. Lamp works intermittently

Possible cause: The internal circuit enters the protection state, and the treatment is as follows:

- Check whether the fan is operating normally or whether it is dirty, causing the internal temperature of the lamp to rise;
- Check whether the internal temperature control switch is in the closed state;
- Check whether the lamp has reached the end of its life, and replace it with a new one.

#### 5. After the lamp is reset normally, it does not accept the control of the console

Possible cause: The signal line is faulty or the lamp parameter setting is not normal, the treatment is as follows:

- Check the start address code and check the connection of the DMX signal line (whether the signal line cable is intact and whether the connection of the DMX connector is loose);
- Add signal amplifier and 120 ohm terminal resistance;

#### 6. The lamp cannot be started

Possible cause: The power line is bad, the treatment is as follows:

- Check whether the fuse on the power input socket is blown, replace the fuse;
- The lamp has poor line contact due to vibration during long-distance transportation
- Check the input power, computer board and other plug-in devices.

### 2. Precautions for use

Check whether the local power supply meets the product's rated voltage requirements, and the leakage protector and overcurrent protector meet the requirements of the load.

begging;

- Do not use power cords with damaged insulation, and do not overlap power cords with other wires;
- The lamp adopts strong air cooling, which is easy to accumulate dust. It must be cleaned once a month, especially the heat dissipation vent, otherwise it will be blocked by the accumulation of dust, resulting in poor heat dissipation and abnormality of the lamp.
- When installing the lamp, the fixing screws must be fastened, with safety cables, and regular inspections;

When installing and positioning the luminaire, keep a minimum distance of 10 meters between any point on the surface of the luminaire and any flammable and explosive objects, and a distance of 2.5 meters from the irradiated object. Please do not install the luminaire directly on the surface of combustible materials;;

- It is recommended that the continuous working time of the lamp should not exceed 10 hours, and the interval between continuous starting of the lamp should not be less than 10 minutes, otherwise it will not be triggered normally due to the lamp overheating protection;
- The closing time using the on-off valve should not exceed 5 minutes. If you need to close the light for a long time, you should use the console (light bulb control channel) to turn off the light bulb;
- In order to ensure that multiple lamp better comply with the scene effect, the lamp should not be in the unfinished current scene all the time, that is, start the next scene action. It is best not to exceed 3 minutes in this state to ensure that multiple lamps can run simultaneously;
- During use, if the lamp is abnormal, stop using the lamp in time to prevent other malfunctions.

### **3. RDM usage precautions**

RDM is an extended version of the DMX512-A protocol, a remote device management (Remote Device Management) protocol, the traditional DMX512 protocol communication is one-way communication, the protocol is based on the RS-485 bus, and RS-485 is a time-sharing multipoint, half-duplex protocol , Only one port is allowed to output from the host at the same time, so, pay attention to the following points when using RDM:

- To use a console or host device that supports RDM protocol host;
- To use a two-way signal amplifier, the traditional one-way signal amplifier is not suitable for the RDM protocol, because the RMD protocol requires feedback data, and the use of a one-way amplifier will block the returned data, resulting in not being able to search for lamps;
- The lamp must be set to DMX mode to ensure that there is only one host on the signal line;
- A 120ohm impedance matching resistor must be inserted between the terminals 2 and 3 of the terminal plug. When the signal line is relatively long, the differential signal will be used to be more stable and beneficial to the quality of communication;
- When it appears that the lamp accepts DMX control, but cannot search for the lamp by RDM, first check the signal amplifier, and then check whether there is a bad connection between the 2 and 3 lines of the signal line.