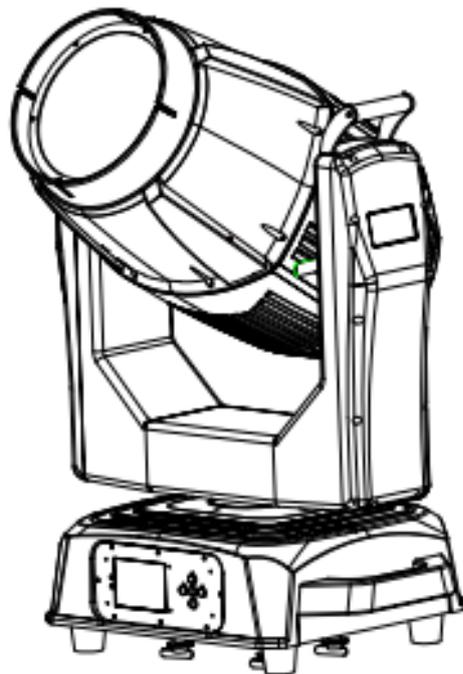


Instruction Manual

PROFESSIONAL SHOW LIGHT

IP5000-BEAM

IP3000-BEAM



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1. Precautions and Installation Precautions and installation

1.1 The statement

Thank you for choosing our products!When this product leaves the factory, the performance is intact, the package is complete.In order to use this product safely and effectively, please read this instruction manual carefully and completely before using this product.This manual contains important installation and use information, please install and operate according to the requirements of the manual, at the same time, please keep this manual properly for use at any time.Our company does not assume any responsibility for the damage of the lighting or other performance caused by the failure of the individual to operate according to the instructions during installation, use and maintenance.

Please note:

All outdoor waterproof beam lamp customized products, please do not exceed 2 desk lamps when a group of lamp string power line, such as a current overload operation, the accessories in the lamp will be damaged, the long time slowly accessories will be aging problem.(a drag of 2 desk lamps is always the safest and most reliable range!

Note: If you find any problems, please contact us in time to avoid unnecessary losses in the future.

Please use the equipment carefully. Thank you for your cooperation

Precautions!Lighting equipment must be connected with ground, some lights without ground wire electrical cabinet ground also to receive the lamp pole, not grounding wire is easy to burn light circuit board, ground can light positive and negative pole triggered current flow to the earth, play a protective role in equipment.Is ground wire qualified ? The multimeter hit 700 or 1000 zero line 220 or so, grounding and fireline 220 or so so grounding can play a role to qualify

This manual is subject to technical changes without prior notice.

1.2 maintenance

- Disconnect the power supply before performing maintenance.
- The lamp should be kept dry, avoid working in damp environment.
- Intermittent use will effectively prolong the life of the lamps.
- For good ventilation and lighting, take care to clean fans and fan nets and lenses frequently.
- Do not use alcohol and other organic solvents to wipe the lamp shell, so as not to cause damage.

1.3 Product Precautions

- This lamp is for professional use only.
- Before operation, ensure that the power supply voltage is consistent with equipment requirements.
- Do not place the product in places where it is easy to loose or shake.
- In the process of use, if the lamp is abnormal, stop using the lamp in time.

- To ensure the service life of the product, do not put the product in the damp or leaking place, and do not work in the environment where the temperature is above 60 degrees.
- When the bulb is used, the voltage change of the power supply should not exceed $\pm 10\%$. If the voltage is too high, the life of the bulb will be shortened. If the voltage is too low, the light color of the bulb will be affected.
- After power off, it is necessary to use the lamp to cool down fully after 20 minutes before power on again.
- Rotating parts of lamps and lanterns and sticking accessories must be checked regularly, loose, shaking timely reinforcement, in case of accidents.
- To ensure the normal use of this product, please read this instruction carefully.

1.4 Product introduction

- Light source power: IP5000: OSRAM 461W
IP3000: OSRAM 371W
- Voltage: AC 200V~240V/50~60Hz;
- Color plate: each color plate is composed of 14 color + white light;
- Pattern plate: 18 pattern ;
- 540 degrees translation, 270 degrees tilt.
- Overheating protection;
- Control mode: DMX512/ master slave/automatic;
- IP65 protection level

1.5 Signal line connection

Lamps feature standard DMX input and output 3-core or 5-core XLR sockets. Please use shielded twisted-pair signal cable specially for DMX 512; The signal line is generally connected at a distance of 150 meters. When long-distance signal is transmitted, DMX512 signal amplifier must be added.

A shielded twisted-pair signal line is used to connect the DMX output port of the controller to the DMX input port of the first device, and from the DMX output port of the first device to the DMX input port of the second device, and so on, until all lamps are connected. Then install a terminal plug on the 3-core jack of the last connecting lamp output in each circuit. (Weld a 4/1W, 120 ω resistor between the 2 and 3 pins of the 3-core card plug with a needle).

Important: Wires should not touch each other or metal enclosures.

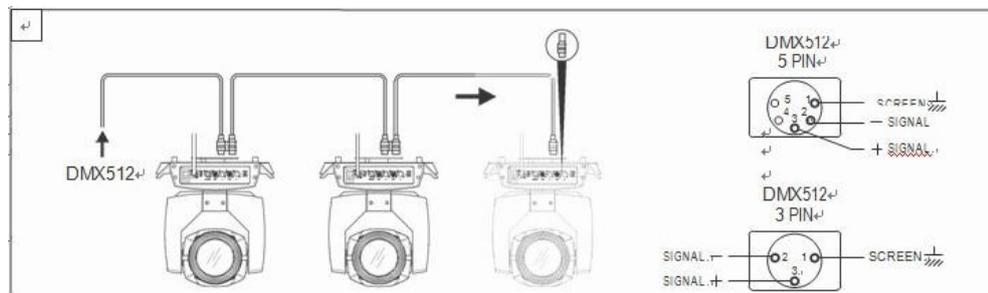


Figure 1 Schematic diagram of DMX signal cable connection

➤ Calculation method of initial address code of lamps:

The start address code of the current lamp is equal to (the start address code of the previous lamp)+(the number of channels of the lamp)

1: the start address of the first lamp is A001.

2: the basic number of channels of the controller should be greater than or equal to the total number of channels used by the lamp.

3: Note: when using any controller, each lamp should have its own start address code, if the start address code of the first lamp is set to A001, the number of lamps is 16CH;The starting address code of the second lamp is set to A017.The starting address code of the third lamp is set to A033;And so on,(this setting method also needs to be determined according to different console)

1.6 Installation of lamps and lanterns

Lamps can be placed horizontally, diagonally or upside down.Pay attention to the installation method when slant and upside down.

As shown in Figure 2, it is necessary to ensure the stability of the installation site before positioning the lamp. During the installation of the inverted hanging, it is necessary to ensure that the lamp does not fall off from the support frame, and the safety rope should be used to pass through the support frame and the handle of the lamp for auxiliary hanging to ensure safety. Prevent lamp from falling and sliding.FIG. 2 Schematic diagram of upside-down lamps1

During the installation and debugging of the lamps, pedestrians are not allowed to pass under the lamps. Check regularly whether the safety ropes are worn or the hook screws are loose.

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

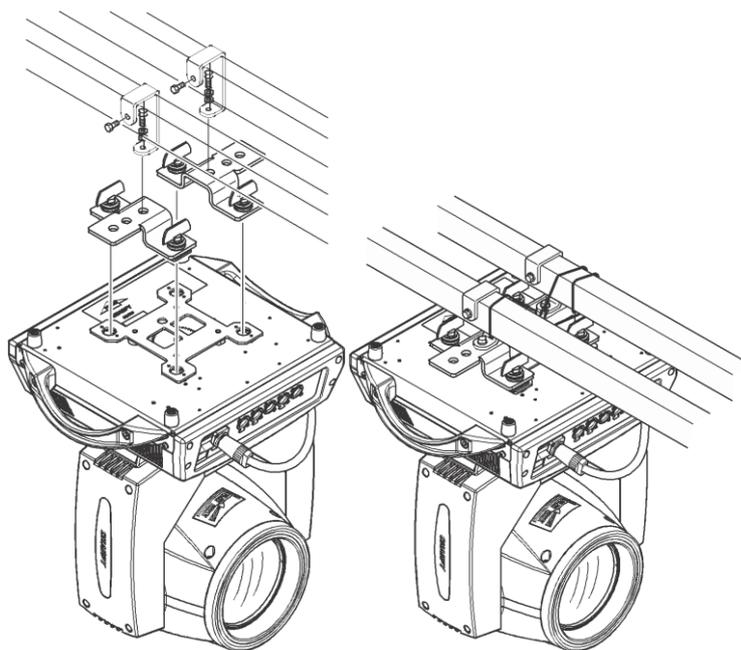


FIG. 2 Schematic diagram of upside-down lamps1

2. The control panel

2.1 Key Description

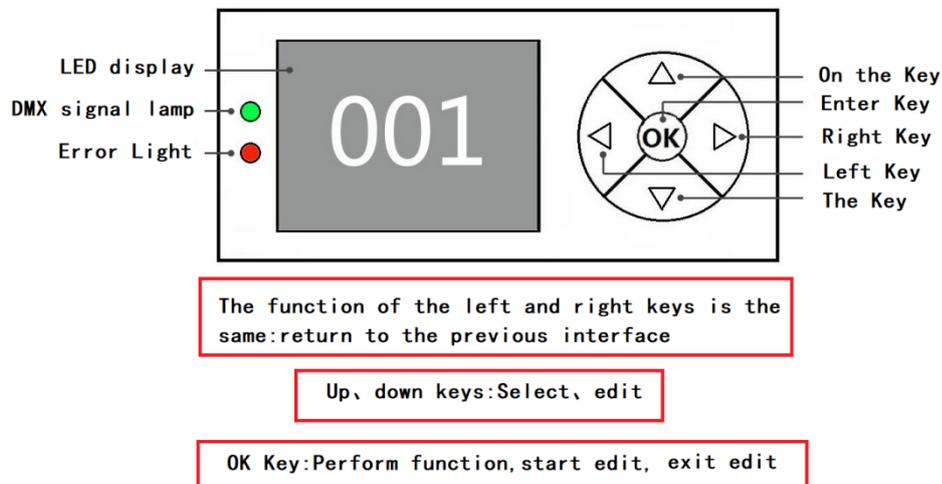


FIG. 3 Schematic diagram of panel keys

The following takes "modify DMX address code" as an example to describe the use of keys:

1. If the current screen is not the main screen, press the "Left" key (one or more times) to return to the main screen
2. On the home screen, press the Up or Down key to select the Settings button
3. Press "OK" to enter the "Settings" interface
4. In the "Settings" interface, press "Up" or "Down" to select "DMX Address".
5. Press "OK" to enter editing mode
6. Press the "Up" or "Down" key to modify DMX address code
7. Press OK to exit the editing mode
8. **Press the right button on the main interface to enter the calibration menu shortcut key.**
9. **Note: The dot bubble at the bottom of the main interface is in Chinese/English, and the screen flip and reset shortcut keys can only be manually pressed.**

2.2 Menu Description

2.1 Screen saver interface



2.1.1 main interface

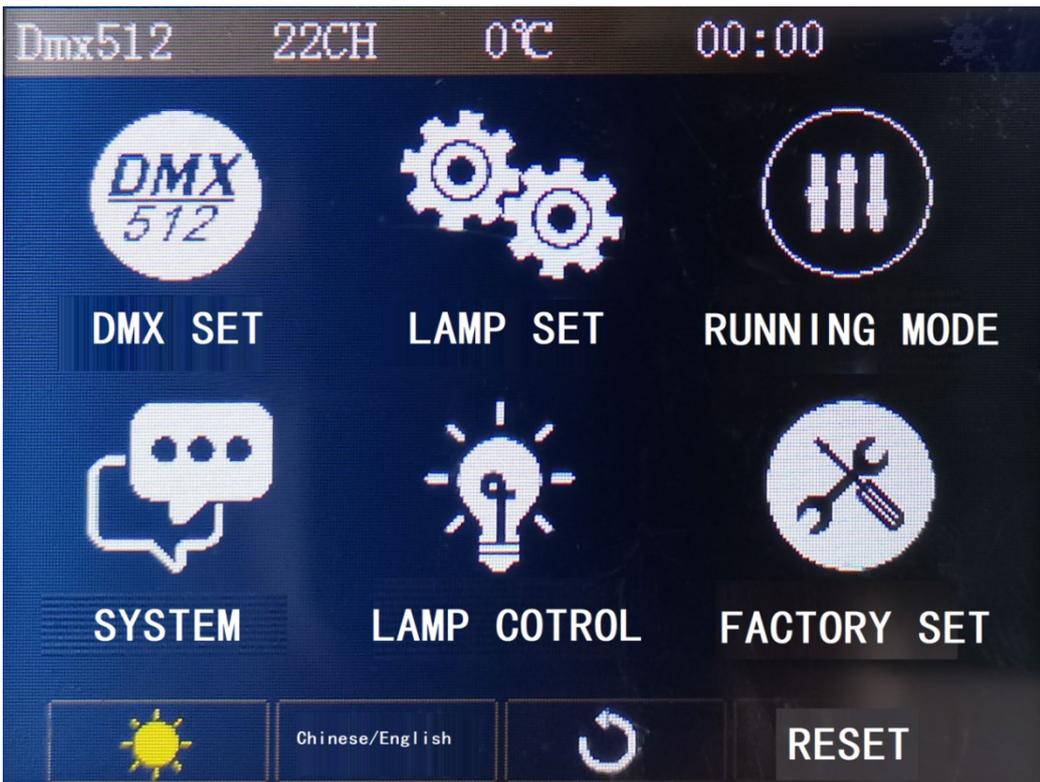


FIG. 4 Schematic diagram of main menu

2.2.1 DMX Settings

Key description: press up or down is +1 or -1 mode; Press the left and right keys to go up or go down, which is collectively referred to as the quick adjust address code mode. Press ok to return

Manual description: first input hundreds, then tens, and finally a bit.(For example, to enter 286, press 2, then 8, then 6)

2.2.2 Lighting Settings

options	instructions	
The operation mode	DMX	Slave state: receiving DMX signal from console or host
	Since the go	Host state: self-powered and sends DMX signal to slave
	Voice control	
DMX address	1-512	Press "OK" to enter editing mode.At this time, select hundreds and press the "up" and "Down" keys to change the address code.Press OK again to select the ten place edit.Press "OK" again to select the bits to edit.Press again to exit the edit mode
The light bulb	guan	Close the bubble
	open	Bright bubble
The motor is reset	guan	
	open	Lamps and lanterns is reset
The channel model	Standard 16 ch	Standard 16-channel mode
	Extended 20 ch	Expand the 20 channel mode
language	Chinese	Set the interface to Chinese
	English	Set the interface to English
Screen rotation	guan	Positive display
	open	The screen is displayed inversely
X inversion	guan	
	open	
Y inversion	guan	
	open	
XY exchange	guan	
	open	Channels for exchanging XY axis (including fine tuning)
XY encoder	open	Use an encoder (optocoupler) to determine out-of-step and automatically correct position
	guan	No encoder (optocoupler) is used to correct position
DMX signal	keep	Continue running as before
	reset	Motor back, stop running
Low wind speed close bubble	open	If the speed of the blower is too low, it automatically debubbles
	guan	If the speed of the blower is too low, it will not automatically debubble
Switch on light bubble	guan	Directly reset after power on, no light bulb (need to use menu or console to manually light bubbles)
	open	After the bulb is powered on, it will automatically light up and reset until the bulb successfully lights up
Color wheel changes linearly	open	Color wheel changes linearly
	guan	Color wheel nonlinear change, half-color change

Restore default Settings		Press OK to see the confirmation dialog box. Press OK again to restore the default Settings
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2.2.3 Operating Mode

Available DMX mode, self-walk mode, voice mode.

A. Manual control (Click the Operation mode menu on the main interface, select manual control, and press "confirm" to enter manual control)

This interface is used to control the current lamps and lanterns, and automatically enter the host state (do not receive DMX signal, send DMX signal to the bus to the slave).

The manual menu will display 16 channels or 20 channels according to the standard 16 channel or extended 20 channel mode set in the Settings menu.

options	instructions	
1 ch. Color plate	0 ~ 255	Press "OK" to enter editing mode. At this time, select the hundreds and press the "up" and "down" keys to change the channel value. Press OK again to select the ten place edit. Press "OK" again to select the bits to edit. Press again to exit the edit mode
...	0 ~ 255	
15 ch. XY speed	0 ~ 255	
16CH. Bulb control & reset	open	
	guan	
	reset	Press "OK" to see the confirmation dialog box. Press "OK" again to enter the reset interface and reset all the motors
17 ch. Keep	0 ~ 255	This parameter is displayed when the channel mode is Extended CH20
18CH. Color wheel speed	0 ~ 255	This parameter is displayed when the channel mode is Extended CH20
19CH. Dimming - Prism - atomization speed	0 ~ 255	This parameter is displayed when the channel mode is Extended CH20
20CH. Pattern disc speed	0 ~ 255	This parameter is displayed when the channel mode is Extended CH20

2.2.4 System Information

options	instructions	
DIS		Display board software version
MT		Motor board software version
System error		If the red ERR indicator lights up, it indicates that the lamp is running wrong. Details can be viewed in the sub-interface. After viewing, you can press the "Clear" button to clear error records
Blower speed		Display current blower speed
Hall state	0000000	0 when magnetic is detected, 1 otherwise
X-axis	0000	In the positive direction, the step value should

encoding disk step value		increase, in the opposite direction, the step value should decrease.The same value is normal every time you turn to the same point
Y-axis encoding disk step value	0000	In the positive direction, the step value should increase, in the opposite direction, the step value should decrease.The same value is normal every time you turn to the same point
The access time	9999	9999 means no encryption and can be used for a long time. Other values indicate the remaining use time, with encryption;

Common error messages	instructions	
MT board connection failed. Procedure	Motor board is not responding.The serial communication line connecting the display board to the motor board is faulty, or the motor board is faulty.	
The X-axis reset fails	X-axis photoelectric switch, or X-axis motor or motor board problem	
The Y-axis reset fails	Y photoelectric switch, or Y motor or motor board problem	
X-axis Hall error	X axis Hall, or motor plate problem	
Y-axis Hall error	Y axis Hall, or motor plate problem	
The color disk failed to reset. Procedure	Color plate Hall, or color plate motor problem	
Failed to reset the pattern disk	Pattern plate Hall, or pattern plate motor problem	
The focus reset failed	There is a problem with the focusing hall or the focusing motor	
Bulb control failure	Failed to light or extinguish the bubble. The light lighter or bulb is faulty	

2.2.5 Bulb control

Set booting bubble;Control the opening and closing of bubbles.

2.2.6 Factory Settings

The calibration	The X axis	After entering the sub-interface, you can adjust the reset position of the X axis, Y axis and other motors to compensate for errors in hardware installation. The adjustment range is -128~+127, +0 means no adjustment.
	Y	
	color	
	pattern	
	focusing	

	The dimmer	
	Prism 1 zero	
	Prismatic 1 stroke	
	Prism 2 zero	
	Prismatic 2 stroke	
	Spray the white light	
	atomization	
	7 colour	

3. Channel function

3.1 The channel table

channel	The channel model	
	16	20
1	Color plate	Color plate
2	Light cutting/stroboscopic	Light cutting/stroboscopic
3	The dimmer	The dimmer
4	Pattern plate	Pattern plate
5	Prism 1	Prism 1
6	Prism 1 rotation	Prism 1 rotation
7	Prism 2	Prism 2
8	Prism 2 rotation	Prism 2 rotation
9	Atomization & colorful	Atomization & colorful
10	focusing	focusing
11	X	X
12	X fine-tuning	X fine-tuning
13	Y	Y
14	Y fine-tuning	Y fine-tuning
15	XY speed	XY speed
16	Reset & light	Reset & light
17		There is no
18		Color speed
19		Adjustable speed of light
20		Design speed

Channel parameter values (full version) :

1	Color plate	000-004.	The white light
		005-009.	White light + color 1
		010-014.	Color 1
		015-019.	Color 1 plus color 2
		020-024.	2 colors
		025-029.	Color 2 plus color 3

		030-034. 035-039. 040-044. 045-049. 050-054. 055-059. 060-064. 065-069. 070-074. 075-079. 080-084. 085-089. 090-094. 095-099. 100-104. 105-109. 110-114. 115-119. 120-124. 125-129. 130-134. 135-139. 140-144. 145-149. 150-200. 201-255.	The color of 3 Color 3 plus color 4 4 color Color 4 plus color 5 Color 5 Color 5 plus color 6 Color 6 Color 6 plus color 7 Seven colors Color 7 plus color 8 Color 8 Color 8 plus color 9 Color 9 Color 9 plus color 10 Color 10 Color 10 plus color 11 Color 11 Color 11 plus color 12 Color 12 Color 12 plus color 13 The color of 13 Color 13 plus color 14 The color of 14 Color 14+ white light Forward flow (from fast to slow) Reverse flow (from slow to fast)
2	stroboscopic	000-003. 004-103. 104-107. 108-207. 208-212. 213-251. 254-255.	Brake light off Stroboscopic from slow to fast Light switch open → (controlled by dimming channel) Pulse stroboscopic Light switch open → (controlled by dimming channel) Random stroboscopic Light switch open → (controlled by dimming channel)
3	The dimmer	000-255.	From dark to bright
4	Pattern plate	000-004. 005-009. 010-014. 015-019. 020-024. 025-029. 030-034. 035-039. 040-044. 045-049.	In figure 1 In figure 2 In figure 3 In figure 4 In figure 5 In figure 6 In figure 7 In figure 8 In figure 9 Solid figure 10.

		050-054. 055-059. 060-064. 065-069. 070-074. 075-079. 080-084. 085-089. 090-094. 095-099. 100-104. 105-109. 110-114. 115-119. 120-124. 125-129. 130-134. 135-139. 140-144. 145-149. 150-154. 155-159. 160-164. 165-169. 170-174. 175-215. 216-255.	In figure 11. In figure 12 In figure 13 In figure 14 In figure 15 In figure 16 Solid figure 17 Solid figure 18 Solid figure 2 Jitter (from slow to fast) Solid figure 3 Jitter (from slow to fast) Solid Figure 4 Jitter (from slow to fast) Figure 5 Jitter (from slow to fast) Figure 6 Jitter (from slow to fast) Figure 7 Jitter (from slow to fast) Figure 8 Jitter (from slow to fast) Solid figure 9 Jitter (from slow to fast) Solid figure 10 Jitter (from slow to fast) Solid figure 11 Jitter (from slow to fast) Solid figure 12 Jitter (from slow to fast) Figure 13 Jitter (from slow to fast) Figure 14 Jitter (from slow to fast) Solid figure 15 Jitter (from slow to fast) Figure 16 Jitter (from slow to fast) Figure 17 Jitter (from slow to fast) Figure 18 Jitter (from slow to fast) Forward flow (from slow to fast) Reverse flow (from slow to fast)
5	Prism 1	000-127. 128-255.	The prism pop-up Prism cut
6	Prism 1 rotation	000-127. 128-191. 192-255.	Prism Angle adjustment Reverse rotation (from fast to slow) Forward rotation (from slow to fast)
7	Prism 2	000-127. 128-255.	The prism pop-up Prism cut
8	Prism 2 rotation	000-127. 128-191. 192-255.	Prism Angle adjustment Reverse rotation (from fast to slow) Forward rotation (from slow to fast)
9	atomization	000-127. 128-191. 192-255.	There is no effect Atomizing blade cut Multicolored cut
10	focusing	000-255.	Design clarity from far to near
11	The X axis	000-255.	Horizontal scan 540 degrees
12	The X axis fine-tuning	000-255.	Level 1.2 degrees fine tuning

13	Y	000-255.	Vertical 270 degree scan
14	Y fine-tuning	000-255.	1.2 degrees vertical fine tuning
15	XY speed	000-255.	The speed goes from fast to slow
16	Reset & bulb control	000-025. 026-050. 061-085. 100-105. 200-205. 250-255.	invalid Small motor reset XY motor reset Destroy the bubble A bubble Reset of all motor
17	keep	000-255.	The speed goes from fast to slow
18	Color wheel speed		
19	Dimming - Prism - atomization speed		
20	Pattern disc speed		

4. Common faults

In view of some common faults, the corresponding solutions are put forward. Any problems that can't be solved should be dealt with by professionals. Disconnect the power supply before servicing the lamp.

1. The light bulb not bright

- Check whether the voltage matching the lamps and lanterns is installed;
- Check whether the lamp power supply connection or control switch is in bad contact;
- Check whether electricity supply is insufficient;
- Check whether the DMX512 controller is sending instructions.

2. The lamp does not accept the control of the console after normal reset

- Check the luminaire digital start address value and function options are correct;
- Check whether the connection of communication control line is correct, communication line is too long or has been interrupted;
- Check whether the control equipment fails, check whether the serial access signal amplifier fails;
- 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 signal amplifier;
- High quality shielded twisted-pair cable is used for signal cable;
- Connect the signal terminal resistor (120 ohms) at the end of the lamp.

3. Luminaire does not start

- Check whether the power supply parameters are consistent with the lamps;
- Check the lamps in the long-distance transportation process due to extrusion deformation, internal parts vibration, moisture and other reasons, resulting in poor contact

Or fall off.

- Please check whether the inner conductor connector of the lamp falls off or loosens.
- Check the electronic components of the lamp (such as electronic transformer, PCB board, motor control board, etc.) for loosening, short circuit and burning.

4. When working, the action of X or Y axis of the lamp is abnormal

- Check one by one according to the previous step;
- Check whether the transmission belt corresponding to X and Y axis direction in the lamp falls off and breaks;
- Check whether the data feedback receiver (photocoupler) corresponding to X and Y directions in the lamp is damaged;
- Reboot and reset once.

PLEASE Note: All information is subject to change without prior notice