BSW 480(CMY+CTO)

User Manual

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TECHNICAL PARAMETERS

Light source

Power supply :AC100V-240V
Frequency :50Hz-60Hz
Power :650W
Fuse :7A
Ballast: Electronic ballast
Light Source: Philips MSD Platinum 420WLL
Lamp power: 420W
Lamp life: 3000H

Optical

Color temperature: 6700K

Controls

Control channel: 29CH channel
Control signal:DMX512、RDM

Effect

Dimming: 0-100% linear adjustment.
Color System:CMY+10 Color
CTO: 2700K-7800K
Static pattern plate: 6 white lights +9 patterns
Dynamic effect pattern plate: white light + aperture +3 circular arc dynamic effect pattern
Metal rotating pattern plate: White light +6 glass patterns
Atomization: 1 individual atomization sheet
Prisms: 8 prisms, 16 prisms (double prisms can be stacked 24, can be two-way independent rotation)

Construction

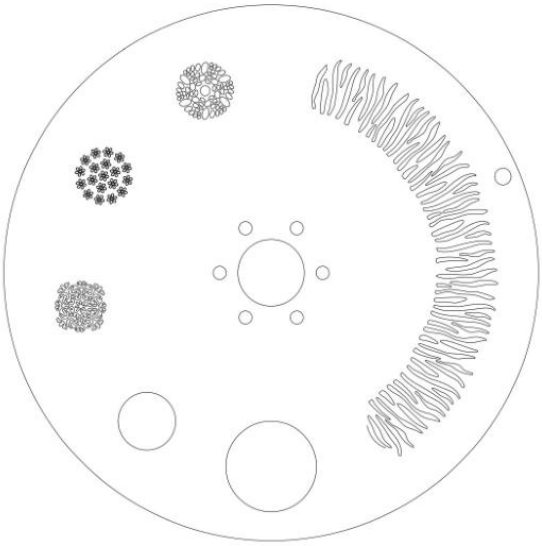
Motor quantity: 15 silent motors, XY three-phase motors
Appearance: high temperature resistant plastic
Light body color: black
Protection level: IP20

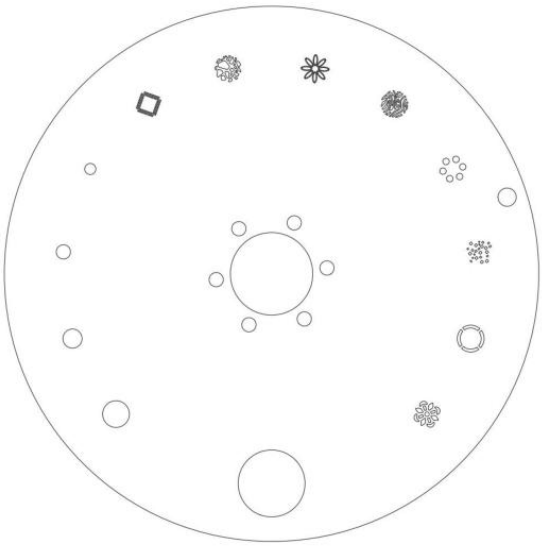
Weight&Dimension

Dimensions: 395*293*700mm (l * W * H)
Net weight: 20.8 kg

 T794				 T1334	 T1513
1	2	3	4	5	6

NIMATION&FIXED GOBO WHEEL





1.Precautions and installation Precautions and installation

1.1 Statement

Thank you for choosing our products! 734 This product is in good condition and the package is complete when it leaves the factory. For your safe and effective use of this product, please read this instruction carefully and completely before you use this product. This instruction manual contains important information for installation and use. Please install and operate in accordance with the instructions. At the same time, please keep this instruction manual properly for use at any time. Our company does not assume all responsibility for damage to luminaires or other performance due to individuals not following the instructions during installation, use or maintenance.

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 and avoid working in wet environment.
- Intermittent use will effectively extend the life of the luminaire.
- For good ventilation and lighting, take care to clean the fan and fan net as well as the lens frequently.
- Do not rub the light fixture housing with organic solvents such as alcohol to avoid damage.

1.3 Product Precautions

- This lamp is for professional use only.
- Ensure that the power supply voltage is consistent with the equipment requirements before running.
- Do not place this product in a place that is easy to loosen or shake.
- In the process of use, if the lamp appears abnormal, it should stop using the lamp in time.
- In order to ensure the service life of the product, the product should not be placed in damp or leaking places, but also should not work in the environment where the temperature exceeds 60 degrees.
- When the bulb is used, the voltage change of the power supply should not exceed ±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 the power off, it takes 20 minutes to use the lamp to cool down fully before it can be used again.

- The rotating parts of the lamps and pasting accessories must be checked regularly. If they are loose and shake, they should be reinforced in time to prevent accidents.
- In order to ensure the normal use of this product, please read the instructions carefully.

1.4 Signal cable connection

Light fixtures feature standard DMX input and output 3-core or 5-core XLR sockets. Use a shielded twisted-pair signal cable designed for DMX 512; The signal line is generally connected at 150 meters, and the DMX512 signal amplifier must be added for long distance signal transmission.
Connect a shielded twisted-pair signal line from the DMX outlet of the controller to the DMX input of the first device, and from the DMX outlet of the first device to the DMX input of the second device, and so on, until all lights have been connected. Then install a terminal plug on the last connected light outlet 3-core jack on each circuit. (Weld a 4/1W, 120Ω resistor between the 2 and 3 pins of the 3-core pin cannon plug).

Important: The wires should not touch each other or the metal housing.

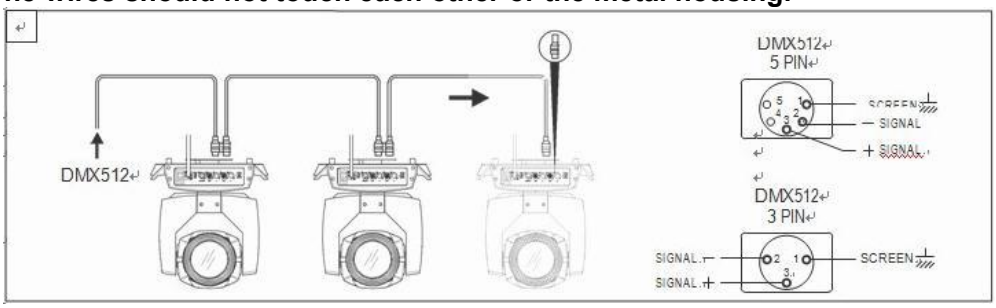


Figure 1 Schematic diagram of DMX signal cable connection

➢ Calculation method of starting address code of luminaire:
The initial address code of the current luminaire is equal to (the initial address code of the previous luminaire)+(the number of channels of the luminaire)
1: Start address code value A001 of the first luminaire.
2: The basic channel number 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 initial address code, if the initial address code of the first lamp is set A001, the number of lamp channel pass is 16CH; Then the start of the second lamp address code is set to A017; The initial address code of the third lamp is set to A033; And so on,(this setting also needs to be determined according to different control platforms)

1.5 Luminaire installation

Light fixtures can be placed horizontally, slanted, and hung upside down. Be sure to pay attention to the installation method when hanging diagonally and upside down.

As shown in Figure 2, before positioning the lamp, it is necessary to ensure the stability of the installation site. When installing the reverse hanging, it is necessary to ensure that the lamp does not fall down on the support frame. It is necessary to use the safety rope through the support frame and the lamp handle for auxiliary hanging to ensure safety. Prevent the luminaire from falling and sliding.

When installing and debugging the lamps, it is forbidden for pedestrians to pass under them. Regularly check whether the safety rope is worn and whether the hook screws are loose.

Our company does not assume any responsibility for all the consequences caused by the fall of the lamp due to the unstable installation of the hanging.

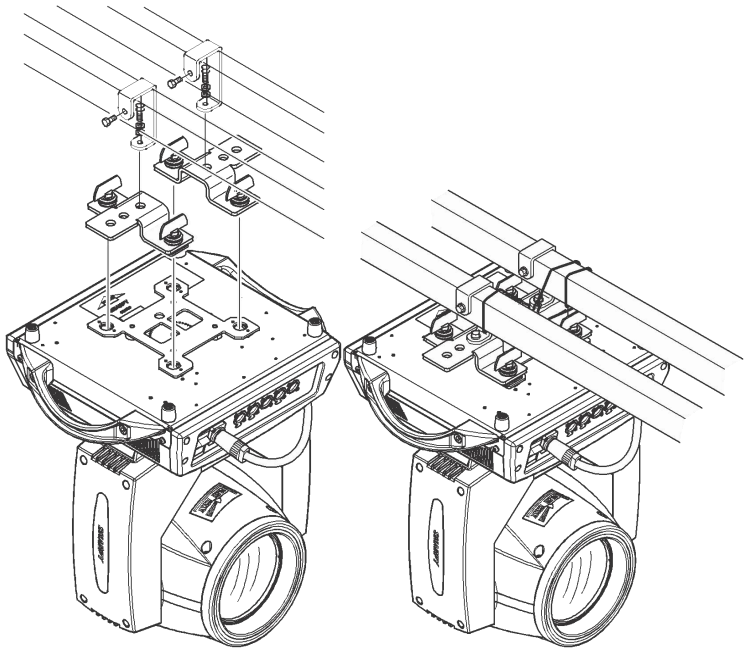


Figure 2. Schematic diagram of the lamp hanging upside down

2. Control panel

2.1 Key Instructions

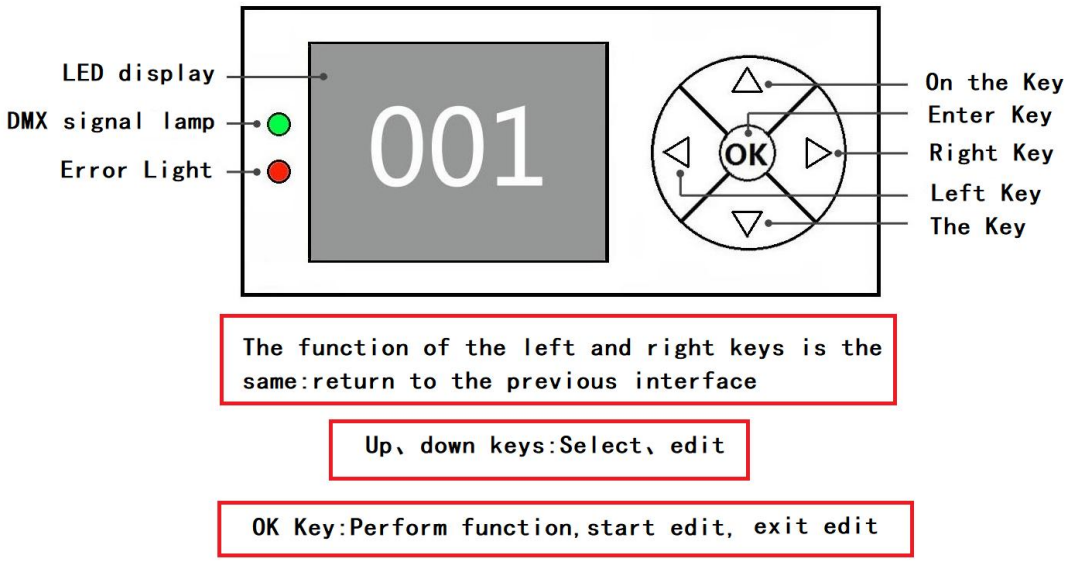


Figure 3 Schematic diagram of key description on the panel

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

1, if the current is not the main interface, press the "left" key (one or more times) to return to the main interface

2, in the home screen, press the "up" key or "down" key to select the "Settings" button

3. Press the "OK" key to enter the "Settings" interface

4, in the "Settings" interface, press the "up" key or "down" key to select "DMX address"

5, press the "OK" key to enter the editing state

6, press the "up" key or "down" key to modify the DMX address code

7, press the "OK" key to exit the editing state

2.2 Menu Description

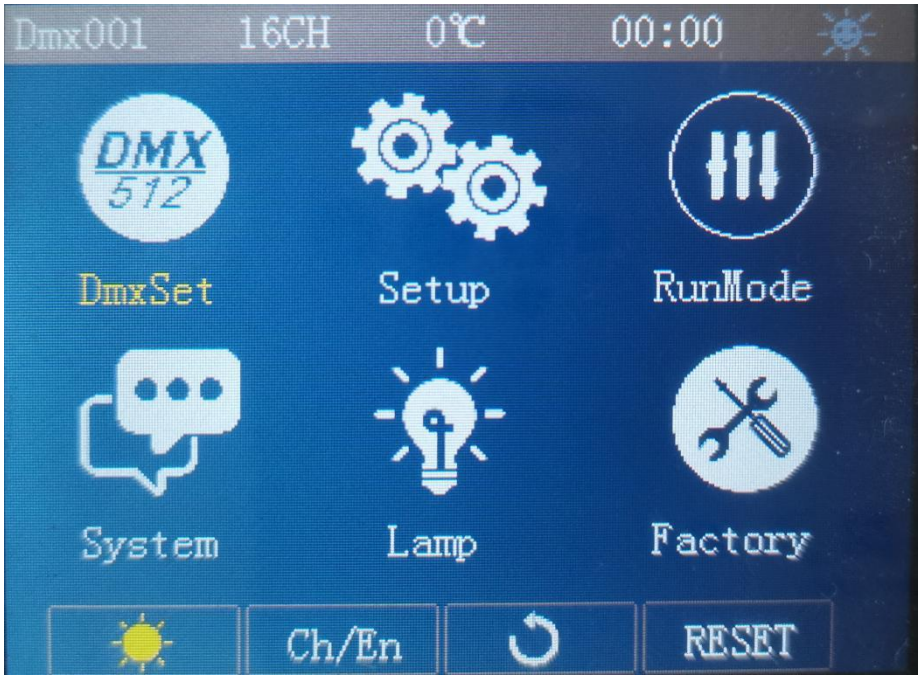


Figure 4 Schematic of the main menu

2.2.1 DMX Settings

DMX address	1-512	Press "OK" to enter editing mode. At this point, the hundreds digit is selected, and press the "up" and "down" keys to change the address code. Press the "OK" key again to select the tens edit. Press "OK" once more to select the ones edit. Press again to exit the editing state

2.2.2 Light Fixture Settings

DMX channel	Standard 16CH Extended 20CH	Standard 16-channel model Expand the 20-channel model
RDM features	On	Have RDM function
	Off	No RDM function
Language	Chinese	Set the interface to Chinese
	English	Set to the English interface
Screen flip	Off	Front display
	On	Screen reverse display
DMX signal	Hold	Disconnect the console signal and the lamp will keep the data from the original console
	Clear	Disconnect console signal and clear console data to zero
Screen Saver	On	Have a screensaver
	Off	No screensaver
X Reversal	Off	
	On	
Y-reverse	Off	
	On	
XY swap	Off	

	On	Channel for switching XY axes (including trims)
XY encoder	On	Use an encoder (optocoupler) to judge out of step and automatically correct the position
	Off	No encoder (photocoupler) is used to correct the position
The color wheel changes linearly	On	The color wheel changes linearly
	Off	Color wheel nonlinear change, half color change
Restore default Settings		When you see the confirmation dialog after pressing "OK", press "OK" again to restore the default Settings

2.2.3 Run Mode

Options	Instructions	
Self-walking pattern	DMX	Slave state: Receives DMX signals from the console or mainframe
	Bootstrapping	Host state: Self-actuated and sends DMX signal to slave
	Voice control	
Manual control		Corresponding channel table function
Luminaire reset		All motor reset
XY reset		XY motor reset
MT reset		Small motor reset

2.2.4 System Information

Options	Instructions	
System version	DIS	Display board software version
	MT	Motor board software version
Temperature information		Display current lamp temperature
Fan information		Display blower speed
System time	Displays total brightening bubble time	
	Display the time of this brightening bubble	
	Displays total usage time	
	Displays the current usage time	
	Permission duration	9999 means no encryption and can be used for a long time; Other values represent the remaining use time, with encryption;
System error		Shows which function of the light fixture is faulty
DMX monitoring		Check console data

2.2.5 Bulb control

Options	Instructions	
Light bulb	On	Bubble opening

	Off	Quench the bubbles
Turn on brightening bubbles	On	Reset complete, auto brightening bubble
	Off	Reset complete, will not automatically brighten the bubble
Spacing	0-20	Bubble interval (unit minute)
Wind speed low turn off bubble	On	The blower will deflate the bubble when it detects that the speed is too low
	Off	The blower will not deflate when too low a speed is detected

2.2.6 Factory Settings

Motor calibration	X-axis	After entering the sub-interface, you can adjust the reset position of the motor such as X axis and Y axis to make up for the error on the hardware installation. The adjustment range is -128~+127, and +0 indicates no adjustment.
	Y-axis	
	Color	
	Gobo	
	Focus	
	Dimming	
	Prism 1 zero	
	Prism 1 stroke	
	Prism 2 zeros	
	Prism 2 stroke	
	Frost calibration	
	Colorful mirror	
Error Tips	X-axis Hall error	On, when Hall has a problem, an error will be reported Off, when Hall has a problem, no error will be reported
	Y-axis Hall error	
	Focus Hall error	
Fan adjustment	Fan conditioning	000-255.
	Blower speed	Show the blower speed
Stroke regulation	X-axis stroke	000-255.
	Y-axis stroke	000-255.
	Focusing stroke	000-255.
	Dimming stroke	000-255.
XY Speed adjustment	X axis speed	000-255.
	Y-axis speed	000-255.

Common Error messages	Instructions
Failed to connect the MT board	The motor board is not responding. There is a problem with the serial communication line connecting the display board to the motor board, or there is a problem with the motor board.
X-axis reset failed	There is a problem with the X-axis photoelectric switch, or with the X-axis motor or motor board
Y-axis reset failed	Y-axis photoelectric switch, or Y-axis motor or motor board has a problem
X axis Hall error	X-axis Hall, or there is a problem with the motor board
Y-axis Hall error	Y-axis Hall, or a problem with the motor board
Color plate reset failed	Color disk Hall, or there is a problem with the color disk motor
Pattern disk reset failed	Pattern plate Hall, or pattern plate motor has a problem
The focus reset failed	Focus Hall, or there is a problem with the focusing motor
Bulb control failure	Failure to light or extinguish bubbles, faulty laminator or bulb

3.Channel function

3.1 Channel Table

Channels	29 channel mode	
1	X	
2	X fine adjustment	
3	Y	
4	Y fine adjustment	
5	XY speed	
6	Dimmer	
7	Dimmer Fine	
8	Strobe	
9	Cyan	
10	Magenta	
11	Yellow	
12	CTO	
13	Color1	
14	Color2	
15	Metal pattern gobo	
16	Metal pattern effect gobo	
17	Glass gobo	
18	Glass gobo rotation	
19	Prism 1	
20	Prisim 1 rotation	
21	Prisim 2	
22	Prism 2 rotation	
23	Frost	
24	Zoom	
25	Focus	
26	Focus Fine	
27	Mode	
28	Reset	
29	Lamp	

Channel parameter values (full version) :

channel	Features	Channel value	Effects
1	Pan	000-255	Pan movement/positioning CCW
2	Pan Fine	000-255	Fine Pan positioning CCW
3	Tilt	000-255	Tilt movement/positioning CCW
4	Tilt Fine	000-255	Fine Tilt positioning
5	XY Speed	000-255	Pan/ Tilt fast to slow
6	Dimmer	000-255	Dimmer 0-100%
7	Dimmer Fine	000-255	Dimmer Fine
8	Strobe	000-003 004-103 104-107 108-207 208-212 213-251 252-255	Light off Strobe slow to fast Light on Open and close by arrive slow to fast Light on Random Strobe Light on
9	Cyan	000-255	Linear Cyan movement
10	Magenta	000-255	Linear Magenta movement
11	Yellow	000-255	Linear Yellow movement
12	CTO	000-255	Linear CTO movement
13	Color 1	000-255	Linear Color 1 movement
14	Color 2	000-255	Linear Color 2 movement
15	Gobo	000 – 009 010 – 014 015 – 019 020 – 024 025 – 029 030 – 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 – 190 191 – 255	Open Gobo1 Gobo2 Gobo3 Gobo4 Gobo5 Gobo6 Gobo7 Gobo8 Gobo9 Gobo10 Gobo11 Gobo2 Shaking Slow to Fast Gobo3 Shaking Slow to Fast Gobo4 Shaking Slow to Fast Gobo5 Shaking Slow to Fast Gobo6 Shaking Slow to Fast Gobo7 Shaking Slow to Fast Gobo8 Shaking Slow to Fast Gobo9 Shaking Slow to Fast Gobo10 Shaking Slow to Fast Gobo11 Shaking Slow to Fast Gobo12 Shaking Slow to Fast Gobo13 Shaking Slow to Fast Fast to Slow(Revers Spin) Slow to Fast(Forward Spin)
16	Effect Gobo	000 - 004 005 - 009 010 - 019 020 - 029 030 - 039 040 - 049 050 - 079	Open Gobo1 Gobo2 Gobo3 Gobo4 Gobo5 Pattern selection

		080 - 089 090 - 099 100 - 109 110 - 119 120 - 149 150 - 199 200 - 255	Gobo1 Shaking Slow to Fast Gobo2 Shaking Slow to Fast Gobo3 Shaking Slow to Fast Gobo4 Shaking Slow to Fast Patterned flow Fast to Slow(Revers Spin) Slow to Fast(Forward Spin)
17	Glass Gobo	000-004 005 - 009 010 - 019 020 -029 030 -039 040 - 049 050 -059 060 - 079 080 - 089 090 - 099 100 - 109 110 - 119 120 - 129 130 - 139 140 - 200 201 - 255	Open Gobo1 Gobo2 Gobo3 Gobo4 Gobo5 Gobo6 Gobo7 Gobo2 Shaking Slow to Fast Gobo3 Shaking Slow to Fast Gobo4 Shaking Slow to Fast Gobo5 Shaking Slow to Fast Gobo6 Shaking Slow to Fast Gobo7 Shaking Slow to Fast Fast to Slow(Revers Spin) Slow to Fast(Forward Spin)
18	Gobo Rotation	000-127 128-190 191-192 193-255	Gobo indexing CW：0°to 540°range Fast to Slow(Revers Spin) Stop Slow to Fast(Forward Spin)
19	Prism 1	000-127 128-255	None Prism 1 cut in
20	Prism 1 Rotate	000-127 128-190 191-192 193-255	Prism Angle adjustment Reverse rotation (from fast to slow) Stop Forward rotation (from slow to fast)
21	Prism 2	000-127 128-255	None Prism 2 cut in
22	Prism 2 Rotate	000-127 128-190 191-192 193-255	Prism Angle adjustment Reverse rotation (from fast to slow) Stop Forward rotation (from slow to fast)
23	Frost	000-127 128-255	Free Frost
24	Zoom	000-255	Zoom linearly moves from narrow to wide beam
25	Focus	000-255	Focus moves linearly from far to near position
26	Focus Fine	000-255	Fine Focus position
27	Model	000-127 128-255	Spot model Beam model
28	Reset	000-025 026-076 077-127 128-255	Free Reset Head Reset P/T All Reset
29	Lamp	000-099 100-105 251-255	Free Lamp off Lamp on

4.Common faults

According to some common faults, the corresponding solutions are put forward. Any unsolvable problems should be dealt with by professionals. Disconnect the light fixture before maintaining it.

Light bulb is not on

- Check that the voltage that matches the light fixture is installed;
- Check whether the lamp supply power connection or control switch is in bad contact;
- Check if the power supply is insufficient;
- Check that the DMX512 controller is sending instructions.

The lamp will not be controlled by the console after normal reset

- Check luminaire digital start address value and function options are correct;
- Check whether the connection of communication control line is correct, the communication line is too long or has been interrupted;
- Check whether the control equipment is invalid, check whether the serial access signal amplifier is invalid;
- Check whether the communication line is too long or other equipment interferes with each other;
- Optimize wiring, shorten the length of control signal lines, high voltage and low voltage lines separate wiring;
- Add signal amplifiers;
- Signal line using high-quality shielded twisted pair wire;
- Connect the signal terminal resistor (120 ohm) at the end of the lamp.

Luminaire does not start

- Check that the power supply parameters are consistent with the lamp;
- Check the poor contact caused by extrusion deformation, vibration and moisture of internal parts in the long distance transportation process

  Or fall off.
- Please check whether the internal wire integration connector of the lamp has fallen off or loosened.
- Check whether the electronic components of the lamp (such as electronic transformer, PCB board, motor control board, etc.) are loose, short circuit and burned out.

When working, the action of the X or Y axis of the lamp is not normal

- Follow the previous step to check one by one;
- Check whether the transmission belt corresponding to the X and Y axis directions in the lamp falls off and breaks;
- Check whether the data feedback receiver (optocoupler) corresponding to the X and Y directions in the lamp is damaged;
- Restart the machine and reset it once.

REMARK

The product has perfect performance and intergrity packing.

All users should be strictly comply with the warning and operating instructions as stated.

Or we aren ’t in charge of any result by misusing.

Any damage resulting by misuse is not within the Company ’s warranty.

Any fault or problem caused by neglecting the manual is also not in the charge of dealers.

Errors and omissions for every information given in this manual excepted.

All information is subject to change without prior notice.