



Manual Please read this manual carefully before use

1. Safety Guidance



Please read this instruction carefully, It includes important information such as installation, use and maintenance.

Warning

Before using this product, Please read the instructions carefully.

Please keep this instruction. As a basis for future advice. If you sell this product to other users. Please make sure they also get this manual.

Please use it correctly on the basis of understanding the content.

Note:

The equipment is well packed when it leaves the factory, Please follow the user

Manual to operate, human causes of machine failure is not covered by warranty.

- No Before using the product, Please open and check carefully to ensure that the lamps are not damaged by transportation.
- **10** The lamp is suitable for indoor drying only.
- Installation and operation of lamps and lanterns should be carried out by professionals.
- **Don't let children operate machines.**
- **10** Use a safety cord when fixing equipment, lift the bottom while moving the lamp.
- Equipment must be installed in good ventilation at least 50 cm from adjacent plane.
- Make sure the ventilation hole is unobstructed so as not to overheat the lamp during operation.
- Ensure that the power supply voltage is in line with the required power supply voltage before operation.
- ® Please ground the conductive body to prevent electric shock.
- \bowtie Ambient temperature: do not run lamps below-25 $^{\circ}$ C or above 45 $^{\circ}$ C.
- **10** It is forbidden to connect lamps directly to dimming equipment.
- Do not place combustible items within 1 meter next to the lamp to prevent fire.
- Please check carefully whether the power cord is damaged before opening the lamp. If there is any damage, please replace it immediately.
- $\upolesymbol{\mathfrak{D}}$ Lamp operation surface temperature can reach 55 $^{\circ}$ C, do not touch with bare hands.
- Avoid flammable liquids, water or metal conductors entering the interior of the lamp to avoid electric shock or fire. If any foreign body enters the lamp, please cut off the power immediately.
- ® Avoid operating in dirty, dusty environment, and regularly clean and maintain lamps.
- Do not touch the wire when the lamp is running to prevent electric shock.
- Note: Avoid winding power cord with other wire.
- **Distance** between lamp and irradiation surface is greater than 15 M.
- Disconnect the power before replacing the fuse or bulb.
- w Use the same model to replace fuse or bulb.
- ® Serious Operation Failure Occurred, please stop using it immediately.
- **b** Do not repeat opening.

- Deliver Please replace the case, lens or UV filter visible damage.
- No spare parts inside the lamp, do not open the lamp shell without authorization.
- Do not operate the machine on your own, non-professional operation will cause damage to the equipment or functional failure. For maintenance, please contact the nearest authorized service center.
- Please cut off the power supply when the lamp is not used or repaired for a long time.
- ® For re-transportation, please use the original package.
- 🔊 To avoid fire or electric shock, do not expose lamps to rain or wet areas.
- 🕲 High temperature light bulb is in danger of explosion, do not turn on the lamp within 15 minutes of power failure
- 🔊 Light bulb damage, thermal deformation or beyond service life please replace in time.
- Do not look directly at the lamp in operation.
- **v** Do not look directly at the lamp in operation.
- **v** The plug must be grounded in operation.
- Do not operate the machine when the lamp has no shield or shell damage

2. Technical specifications

Optical system

Light Source: Philip MSD Silver 380W

Color temperature: 7650K Light source life: ≥1500hours

Scan

X:540° (16 bit precision scan) Y:270° (16 bit precision scan)

Automatic error correction reset function

Color system

1 color wheel: 13 color + white), Any half-color effect with two-way rotation.

Gobo system

1 fixed gobo wheel: 11 pattern pieces + white 1 rotating gobo wheel: 7 gobos + white , Pattern jitter and pattern arbitrary positioning function.

Prism system

Prism 1: 8 prisms. Prism2: 6 prism.

2 prisms can be stacked

Effect

Atomization: Independent atomization Dimming: 0-100% linear dimming.

Strobe: up to 25Hz, can choose random strobe or pulse strobe.

Environment

IP20 -10°C-45°C

Display

Display: Rechargeable battery, Chinese and English languages can be switched, the display can be reversed 180°

Reset detection: With out DMX signal, manual detection and automatic detection can be selected to facilitate inspection and maintenance.

Zoom angle

2.6°~21° (beam mode), 5°~42° (gobo mode), 30°~48° (wash mode)

Software

9 built-in programs to choose from upgrade via DMX data cable

Can change the DMX address code from the console, remote control switch bulb, machine reset and other Functions

Display lamp and light source usage time

2 channel modes: 24/20 channels

Control

High temperature automatic protection Standard DMX512 protocol DMX shortcut interface RDM function

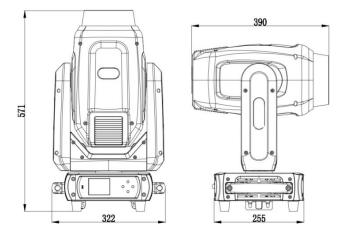
Electrical parameters

Voltage: AC90-264V, 50/60Hz

Power: 490W (90V) **Size and weight**

Product Size: 559*322*314mm

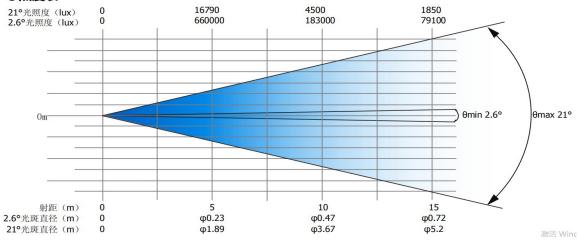
Net weight: 16.5kgs



Product Illumination Chart

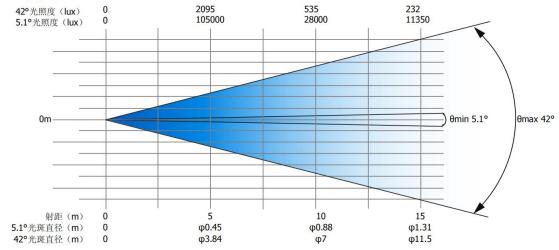
BEAM model:

●照度表



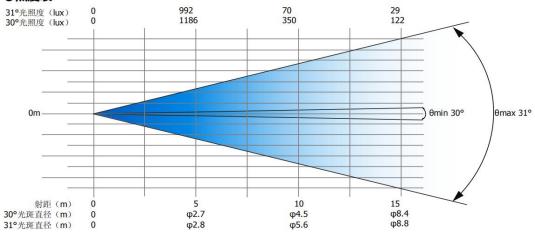
SPOT model:

●照度表

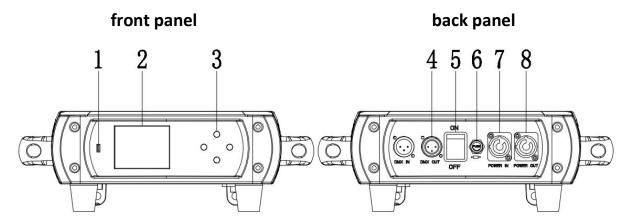


Wash model:

●照度表



3. Description



- 1. USB socket: USB connection data.
- **2. Display screen:** Display various functional menus. After 30 seconds of standby, the key is automatically locked to prevent misoperation.

Activate the **MENU** button after 2 seconds;

3. Button:

MENU	return			
▲ DOWN	To the latter option			
▼ UP	To the previous option			
ENTER	Enter menu selection function\confirm selected function			

4. DMX Input and Output:

For DMX 512 connection, Use 3 core XLR signal line to connect lamp to DMX control table and input DMX signal.

- **5. Protective tube :** Overcurrent protection.
- 6. Power Input Block:

Power supply.

7. Power output seat:

Connected Power Transmission

(110V power supply can connect up to 3 lamps, 220 V power supply can connect up to 6 lamps).

4. Lamp

Philips 380W bulb

There is high pressure inside the lamp and there is a risk of cracking during operation. The ultraviolet light emitted by the lamp is harmful to the eyes and skin. Do not look directly when the lamp is running.

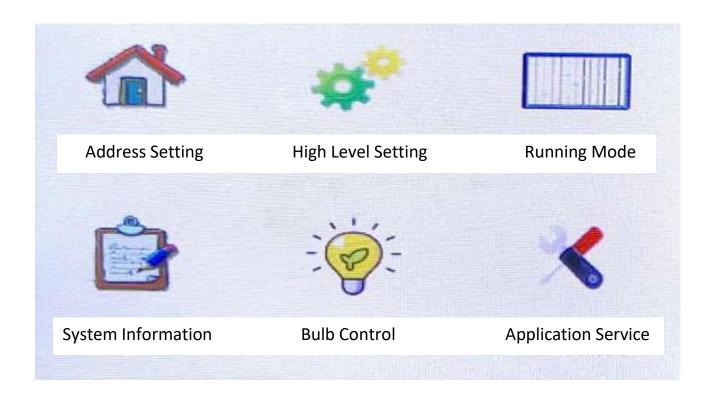
1 In order to protect the lamp,please turn off the lamp first and run for at least 5 minutes before disconnecting the power.

- 2 Do not touch the lamp with bare hands. Once in hand contact, scrub with alcohol and dry with a soft linen cloth.
- 3 When the light is on, the lamp runs under high pressure, so there is a risk of rupture. The degree of risk is related to the length of service time, temperature and unreasonable operation. Therefore, please do not use lamps that exceed the service life.
- 4 Make sure the lamp is installed in the center to ensure the best lights effects.

5.Lighting fixtures

Go to menu mode by pressing the ENTER button. Use UP and DOWN buttons to find menus. Click the ENTER button to confirm when the preset menu is displayed on the display screen. Use the UP and DOWN buttons to select the submenu, press the ENTER button to save the settings or automatically return to the upper menu. Press the **MENU** button to return, or wait 30 seconds to automatically exit menu mode.

Click the **MENU** button for 3 seconds to enter menu mode without power connection. After setting, press the **ENTER** button for 1 second or wait 40 seconds to automatically exit the setting function. **The main features are shown below**



Menu features				
Level 1 menu	second-level menu	Three-level menu	Four-level menu	Five-level menu
Address	001-512			
	X axis reverse	On/off		(Default closed)
	Y axis reverse	On/off		(Default closed)
	Screen rotation	Forward/reverse/automatic		(default positive)
	The screen is always on	On/off		(Default closed)
Advanced	Optocoupler Correction	On/off		(Default on)
setup	language	Chinese/English		(factory default Chinese)
	Error	On/off		(Default on)
	Touch screen calibration	Yes/No		
	Factory setting			
	Drop out			
	Select Channel Mode	(CH)		(factory default)
		Streamlining Mode20(CH)		
	View the severe telescond	x-axis	0.255	
	View the current channel		0-255	
		Functional channels		
		DMX mode		
		Self-propelled Mode		
		Sound Control Mode		
Running mode		Scene mode	Automatic /1-10	
		Master-slave mode	Automatic/ host/ slave	
	Manual control lamps		Scene selection	01-10
			Scene time	0.00S
			Drop out	
		Scenario settings	01X axis	0-255
				0-255
			24 Reset function	0-255
Running	Manual control lamps	Lamp reset	X axis Y axis	Yes/No

mode			Dyestuff	Yes/No
			Wheel	Yes/No
			strobe	Yes/No
			Focus and Prism	Yes/No
			Whole	Yes/No
			Drop out	
		Drop out		
	Drop out			
	Equipment Version Number			
	Device status			
System	Error recording			
information	Light source time			
	Equipment running time			
	Drop out			
	Bright bubbles	On/off		(Default closed)
	Turn on the light lamp	On/off		(Default closed)
	Control of Bright Bubbles	On/off		(Default closed)
	Bubble opening delay	0-535		
Light lamp control	Half power delay	0-535		
Control	Reset lamp time	Yes/No		
	Light lamp timing	Internal use	0-255	
	maintenance	Remaining maintenance time	Heavy/No	
	Drop out			
Application	Service contact information			
	Equipment maintenance			
	Equipment fine calibration			
service	Equipment data removal			
	Equipment usage records			
	Drop out			

5.2 Error message

Temperature error

The temperature board may be damaged

Fan error

The fan and its control may be broken

Magnetic error

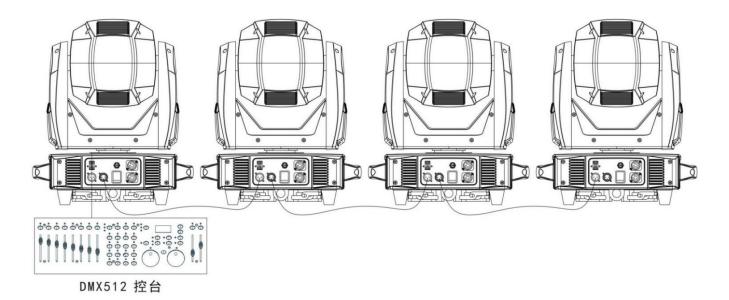
For the magnetic sensing function part may be broken.

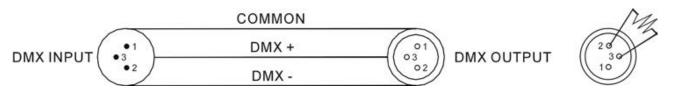
Optical Coupling Error

The optocoupler and its control may be broken.

The above conditions may occur when the machine is turned on or reset, possibly some parts are damaged. Please contact the authorized maintenance centre.

6. General DMX Controller Control





- 1 In order to reduce signal errors and avoid signal weakening and interference during transmission. The resistance of 90-120 Ω (0.25W) can be added between 2 cores and 3 cores at the DMX output of the last machine.
- 2 Connect the lamp with a XLR signal line, one end to the outlet of the lamp, the other end is connected to the input port of the next lamp.XLR signal lines can only be used in series, not in parallel. DMX512 signal transmission is fast. Signal lines are damaged, welding is not secure, contact is not good. Will affect signal transmission, causing the system to shut down

- 3 When the machine power supply of a unit is broken, the connection between DMX output and input is bypassed in order to maintain the connection of the DMX line. Each lamp should have an address code that can receive messages from the console, ranging from 0-512, usually 0&1 and 1 Same).
- 4 A terminal DMX512 the system needs to be assembled to reduce signal transmission errors.
- 5 3 core XLR connector:

Three cores XLR: PIN 1: GND, PIN 2: negative, PIN 3: positive.

6.2 Channel settings

Press the ENTER button to enter the menu mode, **Run Mode** → **Select Channel Mode**, press the ENTER button to confirm, the current channel mode will flash on the display, use the UP and DOWN buttons to select the full mode 24 (CH), press the ENTER button to save. Press the **MENU** button to return to the previous menu or wait 30 seconds and automatically exit the menu mode.

6.3 Address code settings

When applying universal DMX controllers to control lamps, you need to set the starting address (1-512) for the lamps so that the machine can receive DMX signals.

Press **ENTER** button to enter menu mode, select DMX function, press **ENTER** button to confirm. The current address flashes on the display screen, then the **UP/DOWN** button is used to select the address code (1-512), and the **ENTER** button is pressed to save it. Click the **MENU** button to return to the next menu or exit menu mode after waiting 30 seconds.

Please refer to the chart below to set the address code for the first 4 fixtures

Channel Wheel	Lamps 1 Address code	Lamps 2 Address code	Lamps 3 Address code	Lamps 4 Address code
24 channels	1	25	49	73
20 channels	1	21	41	61

6.4 DMX 512 channels

Please refer to the following channel diagram to control the lamp

Notice:

1. If the DMX signal is cut off, the lamp will remain in the state before the disconnect signal unless reset.

Channel table:

	Streamlinin g model 20 (CH)		Channel value	Function
1	1	Horizontal	000-255	0-540 degrees
2		Horizontal fine- tuning	000-255	16 bit Adjustable
3	3	Vertical	000-255	0-270 degrees
4	4	Vertical fine	000-255	16 bit Adjustable
5	5	XY speed	000-255	From fast to slow
6	6	Aiming	000-255	Light from dark to bright
7		Trim adjustment	000-255	16 bit Adjustable
			0-7	Nonfunction
			8-15	Opening the light
		Sstrobe	16-131	Synchronous stroboscopic from slow to fast
8	7		132-167	Turn it off, turn it off
			168-203	Turn it off quickly, from slow to fast
			204-239	Pulse stroboscopic from slow to fast
			240-247	Random strobe, from slow to fast
			248-255	Opening the light
		8 Colour wheel	0-4	White light
			5-9	Red
			10-14	Blue
			15-19	Green
			20-24	Orange
			25-29	Purple
9	0		30-34	Light yellow
9	0		35-39	Plum red
			40-44	Pale blue purple
			45-49	Cold colour
			50-54	Blue Green
			55-59	Yellow green
			60-64	CTO5600K
			65-69	Fluorescence

			70-76	White light → red
			77-83	Red → blue
			84-90	Blue → green
			91-97	Green → orange
			98-104	Orange → purple
			105-111	Fuchsia → light yellow
			112-118	Light yellow → plum red
			119-125	Plum red → light blue purple
			126-132	Light blue purple → cool color
			133-139	Cool color → blue green
			140-146	Blue-green → yellow-green
			147-152	Yellow-green → CTO5600K
			153-159	CTO5600K→ Fluorescence
			160-219	Positive rainbow, from fast to slow
			220-223	Stop
			224-255	Reverse rainbow, from slow to fast
			0-3	White light
			4-7	Pattern 1
			8-11	Pattern 2
	9		12-15	Pattern 3
			16-19	Pattern 4
			20-23	Pattern 5
			24-27	Pattern 6
			28-31	Pattern 7
			32-35	Pattern 8
		Fixed wheel	36-39	Pattern 9
10			40-43	Pattern 10
10			44-47	Pattern 11
			48-51	Pattern 11 Jitter effect from slow to fast
			52-55	Pattern 10 Jitter effect from slow to fast
			56-59	Pattern 9 Jitter effect from slow to fast
			60-63	Pattern 8 Jitter effect from slow to fast
			64-67	Pattern 7 Jitter effect from slow to fast
			68-71	Pattern 6 Jitter effect from slow to fast
			72-75	Pattern 5 Jitter effect from slow to fast
			76-79	Pattern 4 Jitter effect from slow to fast
			80-83	Pattern 3 Jitter effect from slow to fast
			84-87	Pattern 2 Jitter effect from slow to fast
			0 - 0 /	Tatter 2 sitter effect from slow to last

			88-91	Pattern 1 Jitter effect from slow to fast
			92-95	White light
			96-173	The dynamic wheel rotates forward, from slow to fast
			174-177	Stopping
			178-255	The dynamic wheel rotates in reverse, from slow to fast
			0-3	White light
			4-6	Cut into the even film while cutting into the fixing plate through the hole
			7-13	Pattern 1
			14-20	Pattern 2
			21-27	Pattern 3
			28-34	Pattern 4
			35-41	Pattern 5
			42-48	Pattern 6
			49-55	Pattern 7
			56-62	Pattern 1 Jitter effect from slow to fast
11	10	Rotating gobo	63-69	Pattern 2 Jitter effect from slow to fast
			70-76	Pattern 3 Jitter effect from slow to fast
			77-83	Pattern 4 Jitter effect from slow to fast
			84-90	Pattern 5 Jitter effect from slow to fast
			91-97	Pattern 6 Jitter effect from slow to fast
			98-104	Pattern 7 Jitter effect from slow to fast
			105-109	White light
			110-180	The dynamic wheel rotates in a positive direction from slow to fast
			181-184	Stop
			185-255	Dynamic wheel reverse rotation from slow to fast
			0-63	Forward rotation, from slow to fast
	11		64-145	Rotating pattern hovering position
12		Rotation pattern	146-150	Stop
		rotation	151-231	Rotate forward and backward from slow to fast
			232-255	Reverse rotation, from slow to fast
13		Rotation pattern rotation fine-tuning	000-255	16 bit Adjustable

14 12	Duious 1	0-15	No functioning	
14	12	Prism 1	16-255	Eight prisms
			0-127	Eight prism rotation position
15	12	Duiana 1 matation	128-189	Forward rotation, from fast to slow
15	13	Prism 1 rotation	190-193	Stop
			194-255	Reverse rotation, from slow to fast
16	1.4	Prism 2	0-15	No functioning
10	14	Prism 2	16-255	Eight prisms
			0-127	Six-row mirror rotation position
17	15	Prism 2 rotation	128-189	Forward rotation, from fast to slow
17	15	Prism 2 rotation	190-193	Stop
			194-255	Reverse rotation, from slow to fast
		16 Atomization	0-15	No functioning
18	18 16		16-255	Atomization
19	17	Focusing	0-255	Adjust the focus
20		Focus fine adjustment	0-255	16 bit Adjustable
21	18	Enlarge	0-255	From big to small
22		Zoom in and fine- tune	0-255	16 bit Adjustable
23	19	Effect	0-255	No
			0-129	Nonfunction
			130-139	Bubble
			140-199	Nonfunction
24	20	20 Function channel	200-209	Full reset
	20		210-219	Nonfunction
			220-229	Nonfunction
			230-239	Closed bubble
			240-255	Nonfunction

7. Fault treatment

The following are some of the problems that often occur in operation, with some suggestions for troubleshooting:

- A. Lamps do not work, no lights, Fan does not rotate
- 1. Check for electrical contact and fuse integrity.
- 2. Detection voltage.

3. Check the power switch indicator.

B. Control of uncontrolled stations

- 1 Check DMX signal connectors and signal lines to see if they are connected correctly.
- 2 Check that the address code is set correctly.
- 3 If DMX signal is intermittent, check that the Canon is connected to the signal line.
- 4 Try the other controllers.
- 5 Check that DMX signal lines and high voltage wires are too close to each other, which can damage or interfere with signal circuits.

C. One channel failed

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

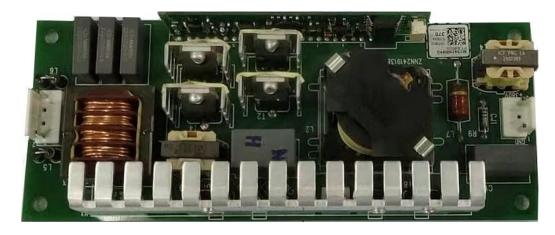
D. Light lamps are good and bad

- 1. The light lamp can not be lit normally. See if the voltage is too high or too low.
- 2. The internal temperature may be too high. If necessary, replace the cooling fan.

8. Maintenance and cleaning

Maintenance:

Ballast resistor



- A. When the color of each pin of the ballast is yellow, please consider replacing it in time.
- B. Be sure to maintain the machine every 2 months and ensure that all parts of the screws and terminals shown above are locked and not loosened. To ensure performance. Poor maintenance may cause malfunction of the machine.

cleaning:

The inside and outside of the lens and the reflector must be cleaned regularly so that the lighting

can be better. The wiping frequency depends on the environment. Wet, smoky, especially dirty environment easy to dust the lens.

- * Soft linen and special glass scrub.
- * Carefully wipe the cadres.
- * Wipe the outside of the lens at least every 20 days. Clean the interior at least every 30 days. Clean the dust-proof sponge on the bottom cover at least every 30 days (depending on the actual environment