BSW380

User Instructions

(RDM, Color Display)

Please read the instructions carefully before use.

Parameter

1. Wide voltage range: AC 110V−240V,50−60 Hz
2. Wide-voltage drive power supply: 650 W
3. Light source system: 380(Philips)
4. Color temperature: 7900 ± 500 K
5. Color System: Color palette – 14 colors with haze effect, featuring CMY color mixing and CTO linear dimming
6. Pattern System: Pattern Disk: 15 fixed patterns + 8 rotating wave patterns + 1 white light
7. Focus System: Electronic focusing
8. Nebulization; Features nebulization capability to achieve soft lighting effects
9. Stroboscopic effect; independent strobe effect, 0.5–20 times per second, adjustable speed
10. Dual Prisms: 8-prism + 16-prism configuration. The prism rotation speed is adjustable.
11. Motor: The XY axes employ three-phase motors, ensuring high stability in speed variation and precise positioning angles for the lamp!
12. Dimming curve: Linear dimming from 0% to 100%, smooth without flickering
13. Beam Angle: 0–45°
14. Channels: 26 channels
15. Lens diameter: 140 mm
16. Water Resistance Rating: IP66
17. Control Method 1: DMX 512
18. Display: LCD screen, adaptable to various installation positions, rotatable 180°
19. Horizontal and Vertical Precision: Equipped with a high-precision three-phase motor for accurate positioning, smooth operation, and automatic alignment correction.
20. Resolution: 540° rotation, 8/16-bit resolution, with fine-tuning options
21. Vertical: 270° rotation, resolution of 8/16 bits, with fine adjustment capability.
22. Shell: made entirely of die-cast aluminum.
23. Lamp dimensions: 695*390*326 mm
24. Net weight: 26 kg

Charpter 1 Precautions and Installation

1. Maintenance

- This luminaire should be kept dry and must not be operated in humid environments.
- Intermittent use will effectively extend the lifespan of this lamp.
- To ensure optimal ventilation and lighting performance, regularly clean the fan, its grille, and lenses.
- Do not wipe the lamp housing with alcohol or other organic solvents to avoid damage.

2. statement

Upon delivery from the factory, this product is in perfect working condition with intact packaging. All users must strictly adhere to the aforementioned warnings and operating instructions. Any damage resulting from improper use shall not be covered by our warranty, nor shall any malfunctions or issues arising from failure to follow the operating manual fall within the distributor's liability scope.

Any technical changes to this manual will not be notified separately.

3. Product Notes

- To ensure the service life of the product, it must not be stored in humid or waterlogged environments, and should never be operated in conditions with temperatures exceeding 60°C.
- Do not store this product in locations prone to loosening or vibration.
- To prevent electric shock risks, this product requires professional repair services.
- During operation, the variation in supply voltage should not exceed ±10%. Excessively high voltage will shorten the bulb's lifespan, while excessively low voltage may affect the color of light emitted.
- After a power outage, allow the lighting fixture to cool completely for 20 minutes before reactivating it.
- To ensure proper use of this product, please read these instructions carefully.
- Signal Line Connection (DMX)

Use RS-485 cables that meet the specified requirements: shielded, with a characteristic impedance of 120 ohms, 22−24 AWG gauge, and low capacitance. Do not use microphone cables or cables with non-compliant specifications. Terminal connections must employ 3-pin or 5-pin XLR male/female connectors. Figure 1 shows a schematic diagram of signal line connections (the lighting fixtures depicted are illustrative and do not represent the actual appearance of this product).

Important Note: Wires must not touch each other or come into contact with the metal housing.

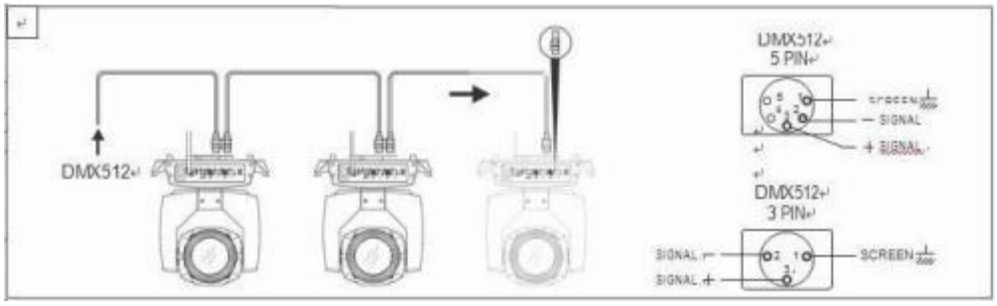


Figure 1: Schematic diagram of DMX signal line connections

4. Lamp Installation

Lamps may be installed horizontally, at an angle, or upside down. Special attention must be paid to the installation methods when installing them at an angle or upside down.

As shown in Figure 2 (the lamp depicted is for illustrative purposes and does not represent the actual appearance of this product), prior to positioning the lamp, ensure the stability of the installation site. When installing it upside down, prevent the lamp from falling off the support frame; use a safety rope passing through both the frame and the lamp's handle to assist in suspension, ensuring safety against dropping or sliding.

During installation and commissioning of the lighting fixtures, pedestrians are prohibited from passing beneath them. Regular inspections shall be conducted to check for wear on safety ropes and loosening of mounting screws.

Our company shall not be liable for any consequences resulting from the falling of lighting fixtures due to unstable suspension installation.

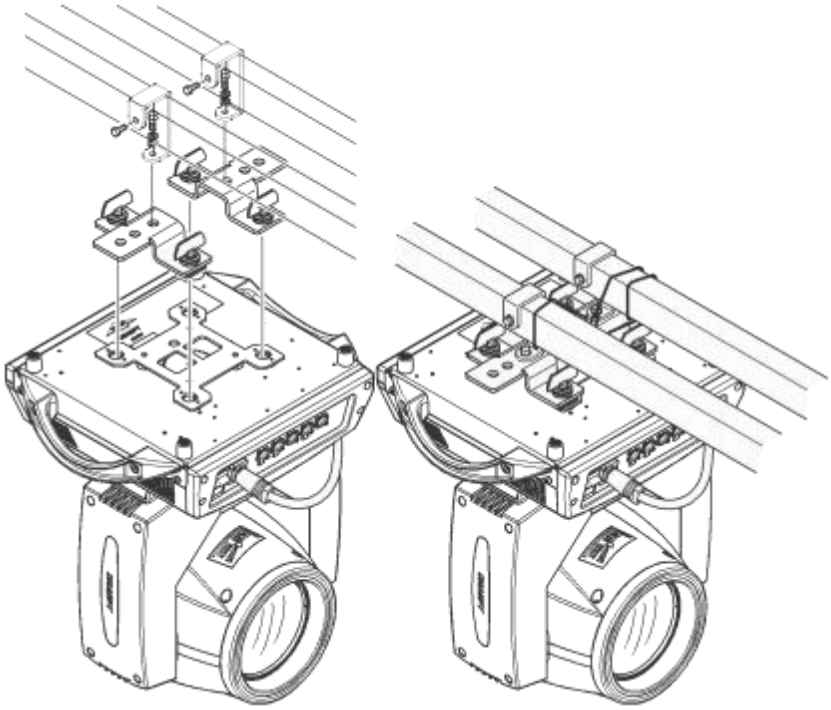


Figure 2: Schematic 1diagram of a pendant lamp

Charpter 2 Panel Operations

1. summary

The schematic diagram of the lamp panel is shown in Figure 3. In the upper left corner of the title section, the number of lamp channels is indicated; the black text in the lower right corner displays the lamp's fault status ("ERR" when no fault information is available, otherwise "NOR"). Below is the status bar, which shows the current signal status, bulb condition, communication status, and other details (the panel shown is an example and does not represent the actual product interface; please refer to a panel of the same type as your device).

This luminaire supports the DMX/RDM protocol. When detected by the RDM host, the panel displays the letters "RDM" indicating proper enumeration of the luminaire.

Note: Do not use sharp objects to tap the display to avoid damage.

Figure 3- 1 Schematic 2diagram of the four-button display panel

Figure 3-2 Schematic diagram of the five-button display panel

Figure 3-3 Schematic diagram of the knob display panel

5. operate

1. Operate the lamp using intuitive touch or assistive input (for touch-enabled products)

- The left area contains the TFT display and touch zone. Tap panel content with your finger or a flat surface to set parameters or check status.
- The right area provides auxiliary input options. If you do not use TFT's built-in touch function, you can use these options to select items to set or view and complete the operation.
- For the knob shown in Figure 3-3, rotating it in different directions moves the cursor up or down. Pressing the knob confirms the change. To return, rotate the knob to position the cursor over the Return key on the display and press it to go back.

2. Parameter Number Input

When a selected parameter requires a numerical value, the window shown in Figure 4 will open:

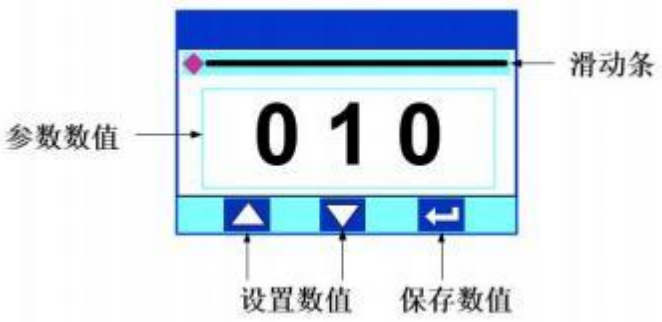


Figure 5: Number Settings Page3

- Set value: You can directly drag the slider to quickly set the desired value, click the "Up" or "Down" buttons on the right to set the exact value, or use the auxiliary input field.

- Save Value: At any time, click the OK button in the bottom-right corner to save the current value to internal storage. The saved value will be applied to the lamp when you power on it again.

3. Set options to enable/disenable

- When the parameter is set to On/Off, simply tap the corresponding item to change its value. Changes will be saved to the internal storage. Pressing the parameter options on the right will make them gray; releasing the button changes and saves the settings.
- Key parameters are set via the confirmation window, as shown in Figure 5:

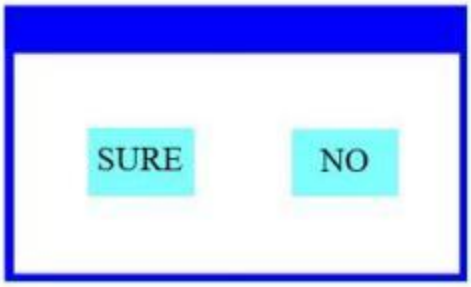


Figure 6: Confirming the Input Window4

4. Subpage (Parameters)

图 6-1地址设置

图 6-2运行设置

图 6-3显示设置

图 6-4场景设置

图 6-5高级设置

图 6-6状态设置

6. Function Operations and Parameter Settings

Enter the settings interface as shown in Figure 6- 1:

- On the main interface, you can select any of the six buttons to access the corresponding parameter settings page.
- In the parameter settings interface, tap the blue option on the left to quickly switch to other settings interfaces.

1. Set DMX Address Code

You can configure the lamp's DMX address, channel mode, and other settings via the page shown in Figure 6- 1.

graph 6-1

The lamp's menu settings optimize address configuration. The steps to set up address codes are as follows:

- Select "Previous" or "Next" to automatically calculate the address code for the next or previous unit based on the current address code and channel data, allowing quick setup.
- Click the address code value to open the editing window, where you can set any valid address code. The lamp automatically determines its current channel count and filters out invalid addresses (from 512 down to the current channel count).
- The lamp supports the RDM protocol and allows remote configuration of its address code via RDM.

Provide two buttons:

- Channel Mode: You can cycle through different channel modes;
- Lamp reset: Reset all motors.

5. Set Lamp Operating Mode

graph 6-2

The page shown in Figure 6-2 allows you to configure the lamp's operating modes and control the bulb. The lamp supports four operating modes (DMX mode, Auto mode, Voice control mode, and Scene mode). For detailed parameter settings, refer to the previous section; specific parameters are listed in the table below:

running mode

DMX pattern	Control Console Mode: Receives DMX and RDM signals

Self-driving Mode	The lamp operates automatically according to the built-in program.	
Voice Control Mode	When the lamp detects a strong sound, it automatically activates a scene according to its built-in program; otherwise, it retains the previous scene.	
Scene Mode 01	Runs in the set scenario mode, supporting custom editing for up to 10 scenarios	
	1~10	Output the specified scenario
	voluntarily	Automatically loop through scenes in the set sequence order (non-zero times); scenes with time 0 are skipped.
Master-Slave Selection	This applies when not in DMX mode. Select the data output mode, and the lamp automatically detects the DMX status to switch output accordingly, preventing data conflicts.	
	main engine	The lamp operates based on built-in settings. If no DMX signal is detected, it outputs data (synchronized); otherwise, it does not output any data.
	slave	The lamp operates internally and does not output data (not synchronized with other lamps).
	voluntarily	If there is no DMX signal, the luminaire operates in built-in mode; otherwise, it operates according to the DMX signal.
Bulb Switch	The bulb light source opens a confirmation dialog. Select "SURE" to confirm the operation and turn the bulb on or off. The switching interval is limited to 30 seconds.	
	close	The current bulb output is turned off
	open	The current light output is on

The Scene mode is suitable for a single or a small number of lights, where you only need to output a fixed scene or run a simple program. You can edit it directly in the Scene page without connecting to a control panel.

If the light source is a bulb, wait 10 minutes after turning it off before turning it back on.

6. Panel Display Settings

graph 6-3

The lamp supports bilingual Chinese-English display and inverted viewing. To configure the settings, refer to Figure 6-3; the detailed menu options are shown in the table below:

Display Settings

language	Set the display language	
	English	English Display
	the Chinese language	Chinese Display
Screen Protection	Set the display content or format when no action is performed on the screen for 30 seconds	
	close	Keep the final operation page on screen
	pattern 1	Screen Off
	pattern 2	Black screen displaying the address code of the current light fixture in the bottom-left corner
	pattern 3	Display trademark information, address code, and operating mode
	pattern 4	Display trademark information, address code, and operating mode. The screen will turn off after 30 seconds
Screen Rotation	Set screen display orientation	
	close	Do not reverse display
	open	Reverse Display
	voluntarily	Automatically detects the hanging direction of the luminaire and switches the display orientation accordingly
DMX indicate	Set the display mode for the DMX signal indicator light	
	pattern 1	Turn on when there is a signal; turn off when there is no signal.
	pattern 2	Off when a signal is present; on when no signal is present.
	pattern 3	Flashes when a signal is present; turns off when there is no signal.
Signal Indication Brightness	Set the brightness of the signal indicator light	
	1~10	10 Levels
Screen backlight	Set the backlight brightness after 10 seconds of inactivity; it will be fully lit when used.	
	1~10	10 Levels
Touch Screen Switch	Select whether to disable touch functionality. This option allows you to turn off touch input for lighting fixtures when the screen is accidentally damaged.	
Touch Correction	When screen touch is inaccurate, you can go to the correction page to adjust it.	

For touch-enabled lamps, if poor touch performance occurs, go to the calibration page to adjust the touchscreen's accuracy. Under normal conditions, do not access this page. If the touch sensor is damaged, disable the touch switch.

7. Scene Mode

You will enter the page shown in Figure 6-4 (the channels displayed are merely illustrative examples; refer to the channel table description in the subsequent section for the product's complete list). The luminaire enters scene editing mode. On this page, when the [Control Console Mode] option is disabled, the luminaire does not receive DMX console data, and edited settings are applied immediately. When enabled, it receives console signals, reads corresponding data, and displays them on the respective channels.

graph 6-4

The page content depends on the selected channel, and the displayed channel content and order match the lighting channel table. This page allows you to edit up to 10 scenes, as shown in the table below:

Scene Mode

Scene Selection	Select the current operation scenario	
	1~10	10 Scene Setting Formats
Scene Time	Set the retention time for the current scene when automatic, with the final duration determined by the scene time multiplier in units of 0.1 seconds	
	0	The current scene does not participate in automatic scene output
	1-255	0. 1 seconds to 25.5 seconds
Control Console Mode	Select whether to use console control settings	
	close	Cannot use console control; set data directly in the current interface
	open	Control using the console; settings prioritize console data. Settings made in the current interface are invalid.
1. X-axis	0-255	Set data for each channel, ensuring the display content and order correspond exactly to the lamp's channel table.
……	0-255	
……	0-255	
N. function	0-255	

If valid reset data is edited in the reset channel within the scene, the light will reset. However, after resetting, the value of the corresponding reset channel will automatically clear to zero to prevent multiple consecutive resets.

View this page to see the current channel table order of the luminaire. For detailed channel information, refer to the comprehensive channel descriptions.

8. Set lighting parameters

graph 6-5

Go to the page shown in Figure 6-5 above and adjust the on-site parameters of the luminaire for easy installation.

advanced setup

Reverse X-axis	Set X-axis rotation direction	
	close	Not Reverse
	open	opposite direction
Reverse Y-axis direction	Set Y-axis rotation direction	
	close	Not Reverse
	open	opposite direction
Optocoupler Calibration	Check if the lighting fixtures detect XY misalignment and correct it	
	close	Do not correct position after losing step
	open	Automatically corrects position after a step loss and records the step-loss error
X-axis Offset	Set the zero point position of the lamp's X-axis	
	4-150	
Y-axis Offset	Set the zero point position of the Y-axis for the light fixture	
	4-48	
data-hold	When the lighting fixture does not have a DMX signal, display its output status	
	close	No signal detected; therefore, the motor and light source have returned to their initial positions and states.
	open	No signal; maintain the last frame of DMX data output
Scene Time Factor	The retention time of the scene is determined in conjunction with its timing.	
	1-255	retention time = scene time * multiplier
Light On Mode	Set how the bulb turns on for the first time after power-on	
	Turn on the light with power supply	When powering on, turn on the bulb first; after 30 seconds, reset the light fixture.
	Turn on the light after	Set the lamp to reset after 3 seconds of power supply; turn on the bulb once reset is complete.

	repositioning	
	Turn on the light manually	After repositioning, manually turn on the bulb via the menu or control panel.
Factory Settings	A confirmation dialog appears; select "SURE" to restore the lamp parameters to factory settings	

When selecting the power-on bulb activation mode, the lamp will wait 30 seconds after power supply to allow the bulb to fully warm up until its internal voltage stabilizes before initiating the reset procedure. If the on-site electrical load remains stable, this mode is recommended.

If the lamp cannot be positioned correctly, first check whether "Optocoupler Correction" is turned off.

If the light does not display as expected after removing the signal, first check the Data Retention settings.

When setting the XY offset, after completing the configuration, first control the XY axis with maximum travel to ensure it does not collide with the positioning rod or housing.

9. Check the current status of the lamp

graph 6-6

Upon entering the page shown in Figure 6-6, you can view the lamp's information and real-time status to determine its operational condition. If after-sales service is required, provide the status information displayed on this page as a reference, as detailed in the table below:

status information

Motor Information	Show the status information of all motors and signals inside the display lamp	
	Hoare	Not displayed indicates no Hall correction for the motor; 0 indicates the motor is away from the calibration position point; 1 indicates the motor is at the calibration position point.
	state	Show the motor reset completion status
	X axle	Show the real-time position value of the optocoupler feedback on the X-axis

	Y axle	Show the real-time position value of the optocoupler feedback on the Y-axis
	optocoupler	Displays the level states of two signals from optocouplers on the X and Y axes in binary format
Fault/Status Record	Display the latest 8 fault records during display lamp reset and operation. Fault records are not saved after power loss and remain valid until the next power cycle.	
	fault data	Total number of faults detected after power-on
	12： :03	Power-on time at the time of failure, in minutes
	Hall fault	The motor did not detect a valid Hall signal during reset.
	Hall short circuit	When the motor is reset, the Hall signal from the motor remains valid throughout the process.
	Optocoupler failure	No valid optocoupler signal was detected during the motor reset.
	Stumble	The corresponding motor loses step during operation.
	Impact Rod	When the motor is reset, it collides with the positioning rod.
	Bulb malfunction	The light bulb accidentally turned off the water flow.
	Sensor malfunction	The temperature sensor signal is abnormal.
	Fan malfunction	The main fan is not functioning properly.
Light Source Status	Show key status data for the current lamp for reference	
	communication	0－100%: Communication quality of the internal data link in the lighting fixture
	Error Count	Total number of error frames detected after power-on: cumulative
	Light source temperature	Show the temperature of the current light source; "---" indicates no detection
	Display Board Temperature	Show the temperature displayed on the panel or the surrounding ambient temperature
	Sensor 1 Temperature	Displays the current motherboard temperature or the ambient temperature at the motherboard installation location
Version Information	Show information and version details of the current lamp for important after-sales maintenance reference	
	equipment	The lamp name matches the RDM device information
	model	The lamp model matches the RDM model information.
	display board	Display Board Firmware Version and Serial Number
	Main Board 1	Firmware version and serial number of Mainboard 1
Light Source Time	Record the total cumulative time the light source has been on, measured in minutes. Users can manually clear this data to use as a reference for regular maintenance of the light source.	
Lamp Duration	Record the total cumulative time the light is on, in minutes. Cannot be cleared	

Charpter 3 Channel Description

2. channel table

Note: Different lighting fixture channel tables may vary. The following table is for reference only.

The sequence of this lighting channel can be viewed in Scene Mode. Channel settings are configured on the Address Settings page, with detailed specifications shown in the table below:

channel	name	value	description
[CH1]	X axle	0-255	0–540 degrees
[CH2]	X-axis Fine	0-255	0–2 degrees
[CH3]	Y axl	0-255	0–270 degrees
[CH4]	Y-axis	0-255	0–1 degree
[CH5]	XY velocity	0-255	From fast to slow
[CH6]	Dimming	0-255	0–100% dimming
[CH7]	strobe	0-255	0-3 : close the light 4-103 : From slow to fast pulse stroboscopy 104-107: opening the light 108-207: A gradual flicker effect that transitions from slow to fast speeds. 208-212: opening the light 213-251: From slow to fast random stroboscopic motion 252-255: opening the light
[CH8]	Cyan	0-255	
[CH9]	Magenta	0-255	
[CH10]	Yellow	0-255	
[CH11]	CTO	0-255	
[CH12]	Color plate 2		
		0-4	White color
		5-9	White color +color 1(red color)
		10-14	Color1 (red color)
		15-19	Color1 (red color)+ color2 （green）
		20-24	color2 （green）
		25-29	color2 （green）+color3 (dark blue)
		30-34	color3 (dark blue)
		35-39	color3 (dark blue)+color 4 (oronge)

		40-44	color 4 (oronge)
		45-49	color 4 (oronge)+color 5 (purple)
		50-54	color 5 (purple)
		55-59	color 5 (purple)+color 6 (Magenta)
		60-64	color 6 (Magenta)
		65-69	color 6 (Magenta)+color 7 (brown)
		70-74	color 7 (brown)
		75-79	color 7 (brown)+color 8 (yellow)
		80-255	From slow to fast, in a continuous flow
[CH13]	Color plate 3	0-4	White color
		5-9	White color +color 1(bule color)
		10-14	Color1 (blue color)
		15-19	Color1 (blue color)+ color2 （yellow）
		20-24	color2 （yellow）
		25-29	color2 （yellow）+color3 (Purplish-red)
		30-34	color3 (Purplish-red)
		35-39	color3 (Purplish-red)+color 4 (Light blue)
		40-44	color 4(Light blue)
		45-49	color 4(Light blue)+color 5 (Cool Color)
		50-54	color 5(Cool Color)
		55-59	color 5(Cool Color)+color 6 (Dark Blue)
		60-64	color 6 Dark Blue)
		65-69	color 6 Dark Blue)+color 7 (Orange Red)
		70-74	color 7 (Orange Red)
		75-79	color 7 (Orange Red)+color 8(blue color)
		80-255	From slow to fast, in a continuous flow

[CH14]	Map Plate	0-4	white light
		5-9	Pattern1
		10-14	Pattern2
		15-19	Pattern3
		20-24	Pattern4
		25-29	Pattern5
		30-34	Pattern6
		35-39	Pattern7
		40-44	Pattern8
		45-49	Pattern9
		50-54	Pattern10
		55-59	Pattern11
		60-64	Pattern12
		65-69	Pattern13
		70-74	Pattern14
		75-79	Pattern15
		80-84	Pattern16
		85-89	Pattern17
		90-94	Jitter pattern 1: from slow to fast
		95-99	Jitter pattern 2: from slow to fast
		100-104	Jitter pattern 3: from slow to fast
		105-109	Jitter pattern 4: from slow to fast
		110-114	Jitter pattern 5: from slow to fast
		115-119	Jitter pattern 6: from slow to fast
		120-124	Jitter pattern 7: from slow to fast
		125-129	Jitter pattern 8: from slow to fast
		130-134	Jitter pattern 9: from slow to fast
		135-139	Jitter pattern 10: from slow to fast

		140-144	Jitter pattern 11: from slow to fast
		145-149	Jitter pattern 12: from slow to fast
		150-154	Jitter pattern 13: from slow to fast
		155-159	Jitter pattern 14: from slow to fast
		160-164	Jitter pattern 15: from slow to fast
		165-169	Jitter pattern 16: from slow to fast
		170-210	Reverse flow from fast to slow
		211-214	Stop
		215-255	From slow to fast, in a continuous flow
[CH15]	Rotationplate	0-9	white
		10-19	Pattern 1
		20-29	Pattern 2
		30-39	Pattern 3
		40-49	Pattern 4
		50-59	Pattern 5
		60-69	Pattern 6
		70-79	Pattern 7
		80-89	Pattern 8
		90-99	Jitter pattern 1: from slow to fast
		100-109	Jitter pattern 2: from slow to fast
		110-119	Jitter pattern 3: from slow to fast
		120-129	Jitter pattern 4: from slow to fast
		130-139	Jitter pattern 5: from slow to fast
		140-149	Jitter pattern 6: from slow to fast
		150-159	Jitter pattern 7: from slow to fast
		160-169	Jitter pattern 8: from slow to fast
		170-210	Reverse flow from fast to slow
		211-214	Stop
		215-255	From slow to fast, in a continuous flow

[CH16]	Rotation plate	0-127	0 – 360 degrees
		128-190	Reverse flow from fast to slow
		191-192	stop
		193-255	From slow to fast, in a continuous flow
[CH17]	Map adjustment	0-255	
[CH18]	Prism 1	0-127	no
		128-255	Insert Prism 1
[CH19]	Prism1 Rotation	0-127	0-360degree
		128-187	From fast to slow, in a continuous flow direction.
		188-195	Stop
		196-255	From slow to fast, in reverse flow direction
[CH20]	Prism 2	0-127	no
		128-255	Insert Prism 2
[CH21]	Prism2 Rotation	0-127	0-360degree
		128-187	From fast to slow, in a continuous flow direction.
		188-195	Stop
		196-255	From slow to fast, in reverse flow direction
[CH22]	atomization	0-127	0-360degree
		128-187	atomization
[CH23]	amplify	0-255	From large to small
[CH24]	Focus	0-255	From far to near
[CH25]	Focus-Adjustment	0-255	
[CH26]	Reduction/Function	0-99	NF
		100-105	Turn off the light bulb in 3 seconds
		106-199	NF
		200-205	Turn on the light bulb in 3 seconds
		206-209	NF
		210-215	Reset the XY motor in 3 seconds

		216-219	NF
		220-235	After 3 seconds, the motor will achieve the desired repositioning effect.
		236-239	NF
		240-255	Reset the entire light in 3 seconds.

Charpter 4 Common Faults and Usage Notes

3. Common Fault Resolution

The luminaire contains specialized components such as a microcomputer circuit board and high-voltage power supply. For your safety and to extend the product's lifespan, non-professionals must not disassemble the luminaire or its accessories without authorization.

1. The bulb does not light up (except for LED sources)

Possible reasons: The bulb is not fully cooled or has reached the end of its life. Handle as follows:

- Due to improper operation, the bulb may not have cooled completely. Allow the lamp body to cool for at least 10 minutes until its internal components return to normal condition before restarting the power supply.
- Check whether the bulb has reached its service life; replace it with a new one.
- Check whether the circuit between the bulb and the light switch has any leakage, detachment, or poor contact.
- Replace the light bulb.

2. The beam appears dim.

Possible causes: prolonged bulb use or contaminated light path. Resolve as follows:

- Check whether the bulb has reached its service life; replace it with a new one.
- Check whether the optical components or bulbs are clean and free from dust accumulation on optical parts such as bulbs. Regular cleaning and maintenance of the bulbs and all components inside the luminaire are required.

3. Pattern projection blur

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

4. The lamps operate intermittently.

Possible reason: Internal circuit has entered protection mode. Handle as follows:

- Check whether the fan is operating properly or has become contaminated, which could cause an increase in internal temperature within the luminaire.
- Check whether the internal temperature control switch is closed.
- Check if the bulb has reached its service life and replace it with a new one.

5. After the lamp is properly reset, it cannot be controlled from the control panel.

Possible cause: Signal line fault or improper lamp parameter settings. Resolution:

- Check the starting address code and verify the connection status of the DMX signal lines (ensure the signal cable is intact and all connectors are securely fastened).
- Add a signal amplifier and a 120-ohm termination resistor;

6. The lamp cannot start.

Possible cause: faulty power supply circuit. Resolve as follows:

- Check whether the fuse on the power input socket has blown; replace it if necessary.
- During long-distance transportation, lamp components may experience poor electrical contact due to vibration.
- Check the power supply, computer board, and other connecting components.

7. Usage Instructions

- Check whether the power supply meets the product's rated voltage requirements, and ensure that devices such as residual current devices (RCDs) and overcurrent protectors are suitable for the connected loads.
- Do not use power cords with damaged insulation, and never connect them to other conductors.
- The luminaire employs strong-air cooling, which readily accumulates dust and requires monthly cleaning, particularly at the air discharge outlets. Failure to do so may lead to dust buildup causing blockage, resulting in poor heat dissipation and subsequent operational abnormalities of the luminaire.
- During installation of luminaires, all fixing screws must be securely tightened, accompanied by safety ropes, and regular inspections shall be performed.
- During installation and positioning, ensure that any point on the lamp surface maintains a minimum distance of 10 meters from all flammable or explosive materials and 2.5 meters from illuminated objects. Do not install lamps directly on surfaces containing combustible materials.
- The continuous operating time of lighting fixtures should not exceed 10 hours, and the interval between consecutive startups must be no less than 10 minutes; otherwise, the thermal protection mechanism may fail to activate properly.
- The closing time of the switch valve should not exceed 5 minutes. For extended shutdown periods, use the control panel (light bulb control channel) to turn off the bulb.
- To ensure multiple lights accurately replicate scene effects, they should not remain in a state unrelated to the current scene until initiating the next scene action. This state should ideally not last more than 3 minutes to guarantee synchronized operation of all lights.
- During use, if any abnormalities occur in the luminaire, its operation should be immediately discontinued to prevent further malfunctions.

8. Precautions for Using RDM

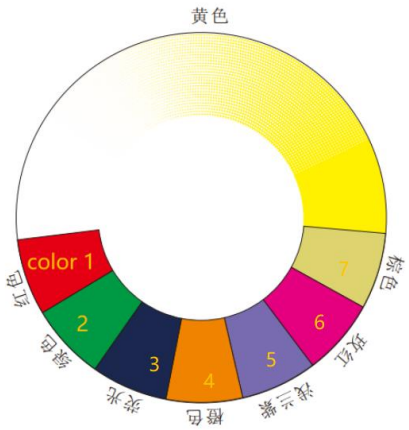
RDM is an extended version of the DMX512-A protocol, serving as a Remote Device Management standard. Unlike the traditional DMX512 protocol's unidirectional communication based on the RS-485 bus—a time-sharing, half-duplex protocol that allows only one port to act as the host output at any given moment — RDM requires careful attention to the following considerations:

- Use a console or host device that supports the RDM protocol.
- Traditional unidirectional signal amplifiers are unsuitable for the RDM protocol when using

bidirectional signal amplifiers, as the protocol requires feedback data; employing a unidirectional amplifier would block this feedback, making it impossible to locate the light fixture.

- All luminaires must be set to DMX mode to ensure only one host device is connected to the signal line.
- A 120-ohm impedance-matching resistor must be inserted between terminals 2 and 3 of the terminal plug. When signal lines are long, using differential signaling helps reduce signal reflection, ensuring greater stability and improved communication quality.
- When a luminaire is controlled via DMX but cannot be located through RDM, first check the signal amplifier, then inspect lines 2 and 3 of the signal cable for poor contact.

Color Palette 2



Color Palette 3