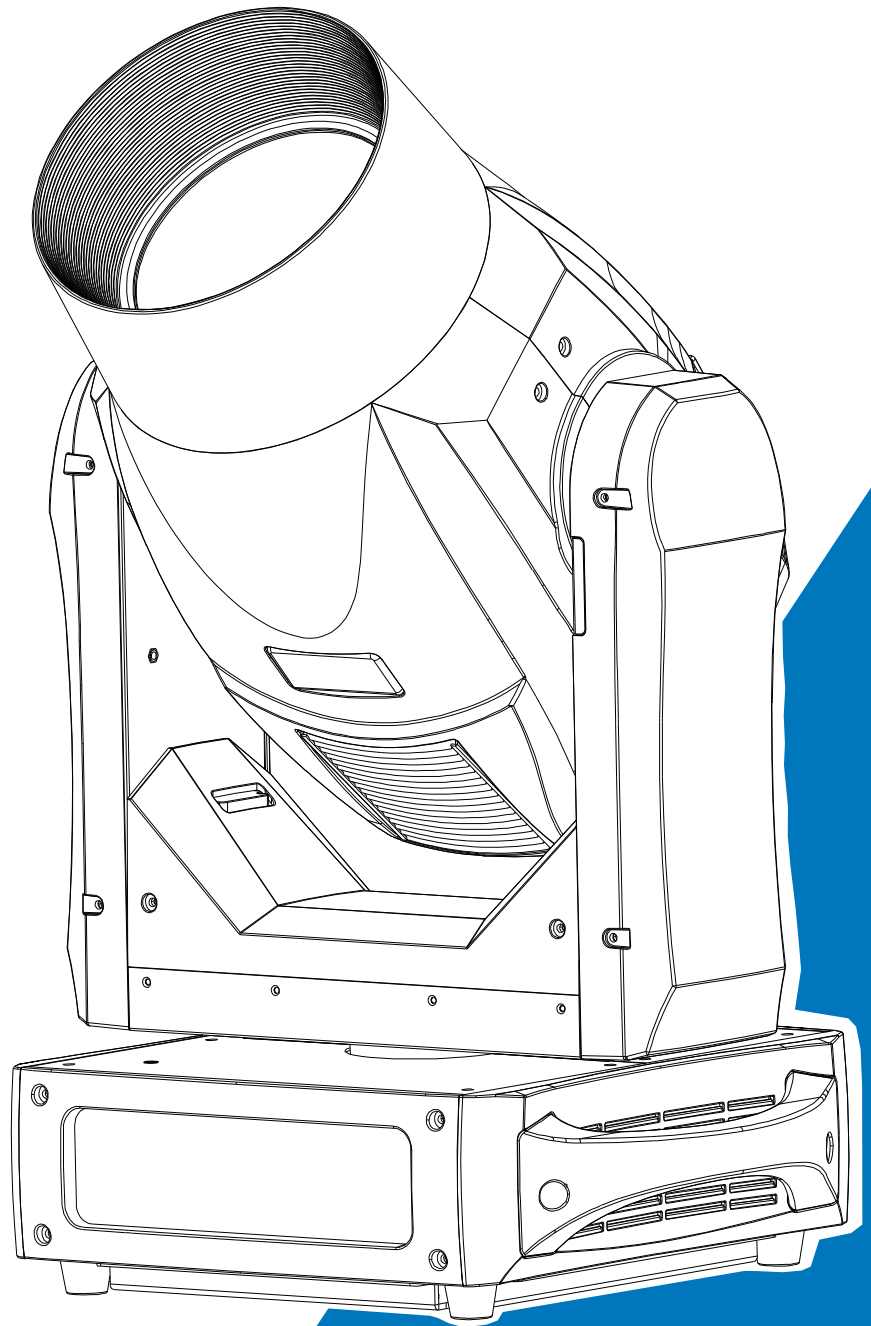




SPARTAN HYBRID



User Manual

Please read the instruction carefully before use

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01/ Safety Instructions



Please read the instruction carefully which includes important information about the installation, usage and maintenance.

WARNING

Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction manual.

Important:

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

- Unpack and check carefully to ensure that there is no transportation damage before using the unit.
- This product is for indoor use only. Use only in a dry location.
- DO install and operate by qualified operator.
- DO NOT allow children to operate the fixture.
- Use safety chain when fixing the unit. Handle the unit by carrying its base instead of head only.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.
- Be sure that no ventilation slots is blocked, otherwise the unit will be overheated.
- Before operation, ensure that you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Minimum ambient temperature TA: 0°C. Maximum ambient temperature TA: 40°C. Do not operate this product at a lower or higher temperature.
- DO NOT connect the device to any dimmer pack.
- During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, and it will decrease gradually within 15 minutes.
- Keep flammable materials away from the fixture while operating to avoid fire hazard.
- Make sure the power cord is not crimped or damaged; replace it immediately if damaged.

- Unit's surface temperature may reach up to 90°C. DO NOT touch the housing bare-handed during its operation.
- Avoid any flammable liquids, water or metal from entering the unit. Once it happens, cut off the mains power immediately.
- DO NOT operate in a dirty or dusty environment. DO clean the fixture regularly.
- DO NOT touch any wire during operation as there might be a hazard of electric shock.
- Avoid entanglement of the power cord with other wires.
- The minimum distance to objects/surface must be more than 18 meters.
- Disconnect mains power before fuse/lamp replacement or servicing.
- Replace fuse/lamp only with the same type.
- In the event of serious operating problem, stop using the unit immediately.
- Never turn on and off the unit time after time.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.
- DO NOT open the housing as there are no user serviceable parts inside.
- DO NOT attempt to operate this unit if it becomes damaged. DO NOT attempt any repairs yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center if needed.
- Disconnect this product from its power source before servicing.
- DO use the original packaging if the device is to be transported.
- Hot lamp explosion hazard. DO NOT open the unit within 15 minutes after switching off.
- DO replace the bulb once it is damaged, deformed or life-expired.
- Avoid direct eye exposure to the light source while the product is on.
- Never touch bulb with bare fingers, as it is very hot after using.
- DO NOT operate this product if you see damage on the housing, shields, or cables. Have the damaged parts replaced by an authorized technician at once.

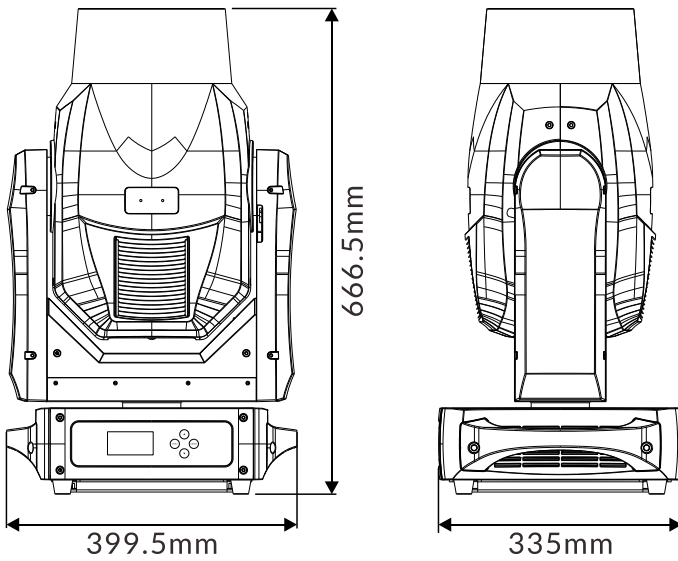
Installation:

- ▶ DO install and operate by qualified operator. Fixture(s) should be installed in areas outside walking paths, seating areas, or away from areas where unauthorized personnel might reach the fixture by hand. NEVER stand directly below the fixture(s) when rigging, removing or servicing.
- ▶ Always ensure that the unit is firmly fixed to avoid vibration and slipping off during operation. Ensure that the trussing or area of installation must be able to hold 10 times the weight without any deformation. Always attach a safety cable that can hold at least 12 times the weight of the fixture whenever installing this fixture in a suspended environment to ensure that the fixture will not fall if the clamp fails.

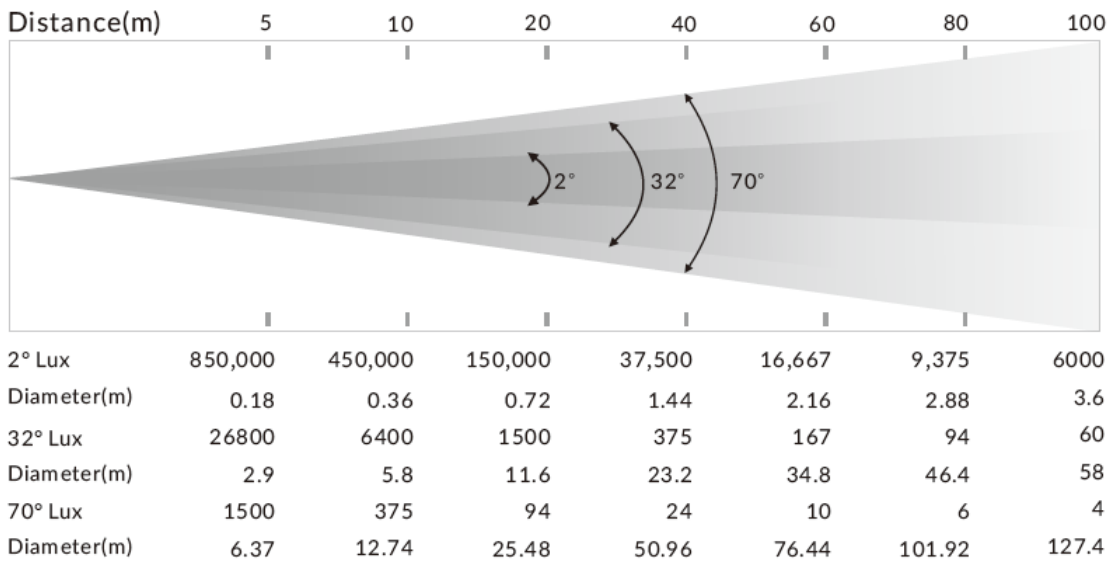
02/ Technical Specifications

Power Voltage	100-240V~ 50/60Hz	
Power Consumption	660W	
Light Source	Philips MSD Platinum 20 R	
Color Temperature	7800K	
Zoom Range	2°-7° (Beam Mode)	
	5°-32° (Spot Mode)	
	8°-70° (Wash Mode)	
Dimmer/Strobe	0-100% smooth dimming; outstanding strobe effect with variable speed	
Color Wheel	3 color wheels, each wheel has 5 colors plus open, with rainbow effect	
Gobo Wheel	Static Gobo Wheel	18 gobos plus open
	Rotating Gobo Wheel	7 gobos plus open, convenient replacement
Movement	Pan	540°
	Tilt	270°
	Pan/Tilt Resolution	16 bit
	Automatic pan/tilt position correction	
	Fixation	Tilt lock
Control	DMX Channel	34/30/27/24 Channels
	Control Mode	DMX512
		RDM
		Wireless Control (optional)
Firmware Upgrade	Firmware Upgrade via DMX link	
Construction	Display	LCD display
	Battery backup for user setup without mains connection	
	Data In/Out	3-pin/5-pin XLR
	Power In/Out	Power Cord in
	Protection Rating	IP20

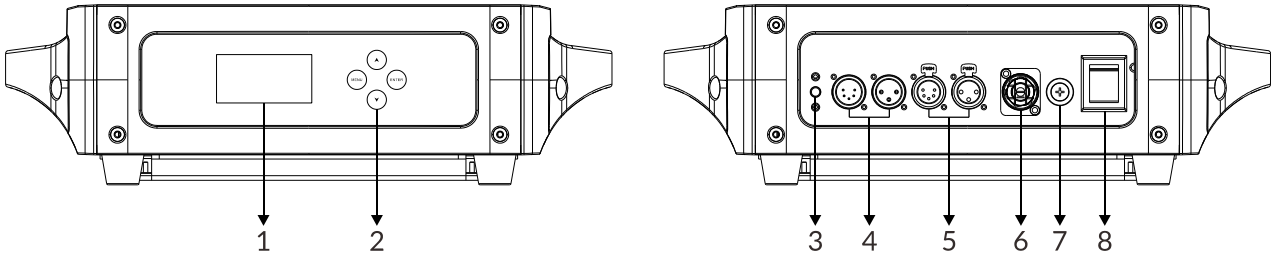
Features	Linear CMY color mixing	
	Motorized focus	
	Independent frost effect	
	2 x prisms: 6-facets prism + 8-facets prism, capable of bidirectional rotation and superposition	
Dimensions	399.5x335x666.5mm	15.7"x13.2"x26.2" in
Weight	27kgs	59.5lbs



Photometric Diagram:

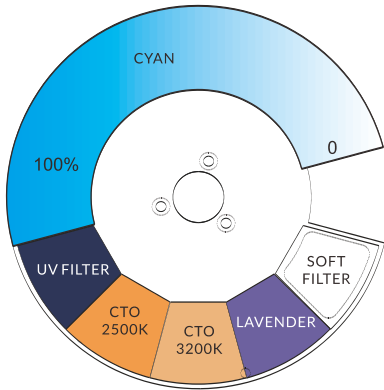


03/ Control Panel

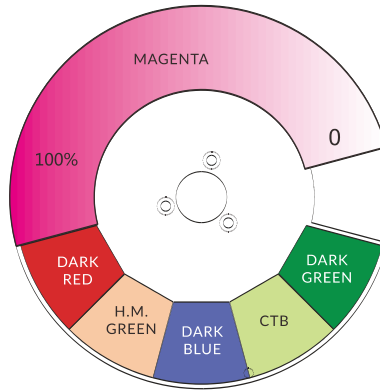


1. Display	To show the various menus and the selected function	
2. Buttons	MENU	To enter into move backward or leave the menu
	▲ UP	To go backward to move up in the menu
	▼ DOWN	To go forward to move down in the menu
	ENTER	To perform the desired functions
3. BATTERY DISPLAY		
4. DMX IN	For DMX512 link, use 3/5-pin XLR cable to link the unit and DMX controller to input DMX signal	
5. DMX OUT	For DMX512 link, use 3/5-pin XLR cable to link the next units to output DMX signal	
6. POWER	To connect to supply power	
7. FUSE(T 10A)	Protects the unit from damage of over-voltage or short circuit	
8. POWER SWITCH	Turns on/off the power	

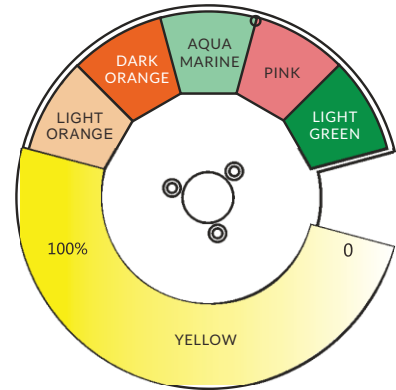
4.1 Effect Wheels



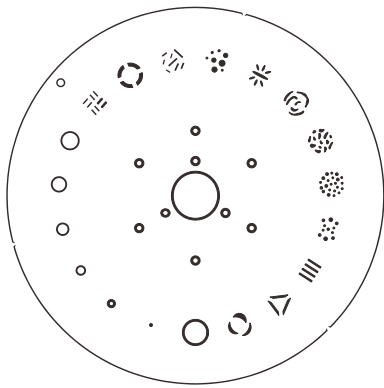
COLOR WHEEL 1



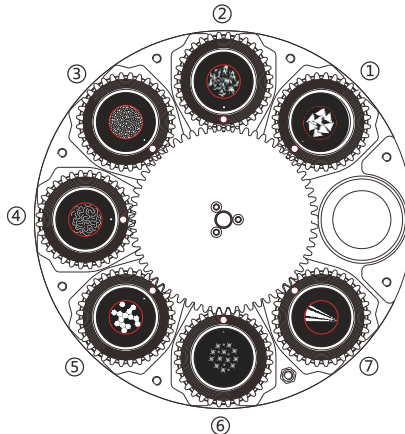
COLOR WHEEL 2



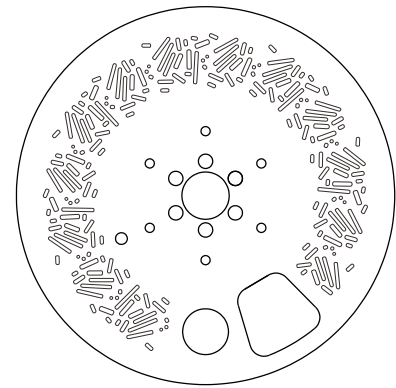
COLOR WHEEL 3



STATIC GOBO WHEEL



ROTATING GOBO WHEEL



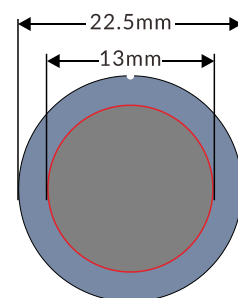
ANIMATION WHEEL

DANGER!

Install the rotating gobos with the device switched off only.

Unplug from mains before changing the rotating gobos!

R-Gobos	Part Number
① Gobo1	3011000675
② Gobo2	3011000678
③ Gobo3	3011000834
④ Gobo4	3011000673
⑤ Gobo5	3011000672
⑥ Gobo6	3011000726
⑦ Gobo7	3011000674



Rotating Gobos Dimensions

4.2 Light Source

Philips MSD Platinum 20 R

Because of its high internal pressure, there might be a risk that the discharge lamp would explode during operation. The lamp emits intense UV radiation which is harmful to the eyes and skin. The high luminance of the arc can cause severe damage to the retina if you take a close look at the lamp.

- ▶ To protect the lamp, always turn off the lamp first (via control panel or DMX controller) and let the unit run at least five minutes to cool down before switching off the mains supply. Never handle the lamp or luminaire when it is hot.
- ▶ Do not touch the bulb with bare hands. If this happens, clean the lamp with denatured alcohol and wipe it with a lint free cloth before installation.
- ▶ The lamp generates UV radiation. Never operate the lamp without appropriate shielding.
- ▶ When lighting up, the lamp operates at high pressure and there is a slight risk of arc tube rupture. The risk increases with age, temperature and improper handling of the lamp. Do not use the lamp longer than its lifespan.
- ▶ Make sure the lamp is located in the center of the reflector for the best projection.

4.3 Lamp Replacement

ATTENTION

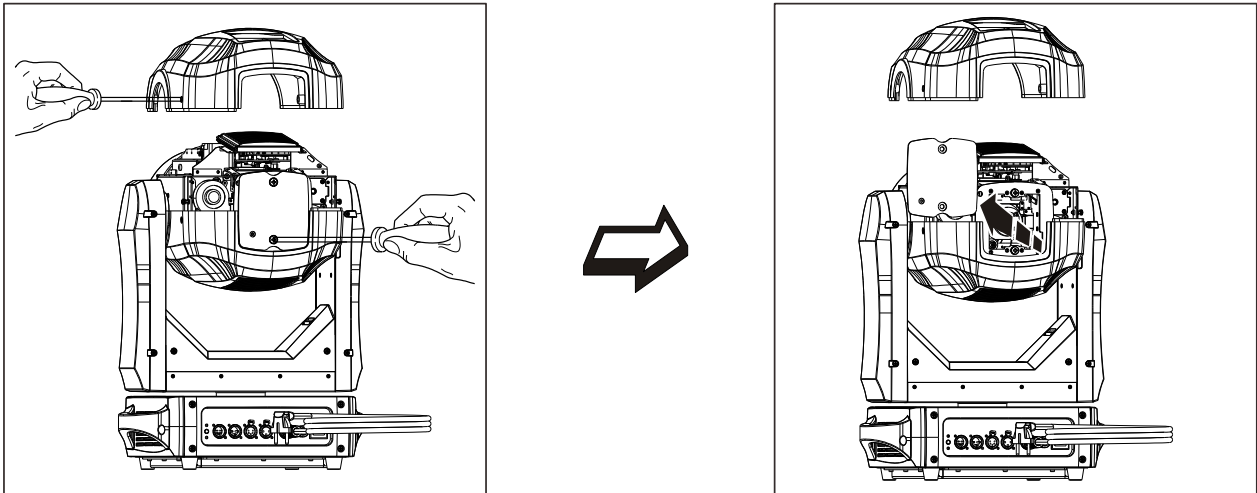
The entire light path and lens of the luminaire must be thoroughly cleaned before replacing the lamp.

Do not use this lamp more than 1500 hours, using the lamp any longer than its set life could seriously damage the fixture. Periodically checking the lamp running time, when the lamp reaches the 1500 hour mark, or close to it, we strongly suggest you switch the lamp out. Reset the lamp time after you have replaced the lamp.

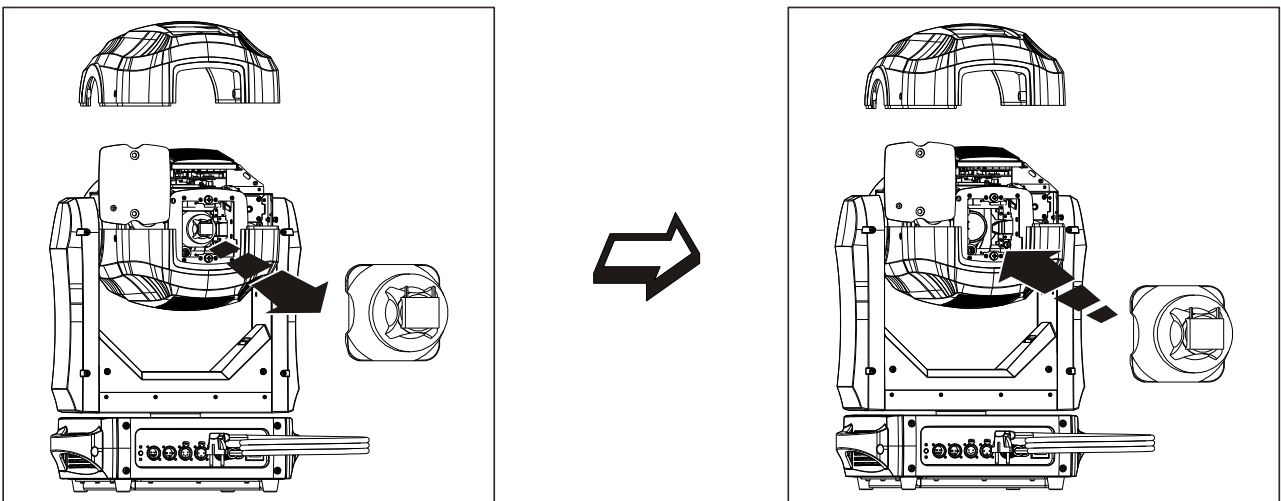
To replace the lamp:

Ensure that the fixture is detached from power and has cooled down completely. It is a good idea to allow the fixture to run for 15 minutes after the lamp has been turned off, so that the cooling fans have time to work.

Loosen the screws on the head of the fixture and open the fixture head covers.

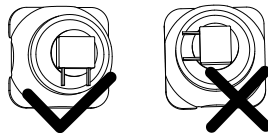


Unplug the leads of the lamp and lift the lamp out of its recess, disconnect the lamp and connect a new lamp that must be the same type with the old one. And then place the new lamp into the lamp recess.



Finally reinstall the head cover, fastening it securely before reapplying power.

The installing direction of lamp:



ATTENTION

Damages caused by the failure to replace the bulb in time are not subject to warranty.

05/ How To Set The Unit

5.1 Main Functions

- ▶ To access the control menus, press the [MENU] button.
- ▶ Navigate the menu structure, using the [ENTER], [▲ UP] and [▼ DOWN] buttons.
- ▶ To select a menu option or to confirm a selection, press the [ENTER] button.
- ▶ To return to a higher level in the menu structure without making a change, press the [MENU] button, or wait 30 seconds.

The main functions are shown below:

MENU	SUBMENU	OPTIONS		
DMX Settings	DMX Address	1-479 (34 CH)	(Default=1)	
		1-483 (30 CH)		
		1-486 (27 CH)		
		1-489 (24 CH)		
	Channel Mode	Mode 1 (34)		
		Mode 2 (30)		
		Mode 3 (27)		
		Mode 4 (24)		
View DMX Value				
Fixture Settings	Pan Inverse	No		
		Yes		
	Tilt Inverse	No		
		Yes		
	P/T Feedback	No		
		Yes		
	P/T Speed	Fast		
		Slow		
	Focus Compensate	Disable		
		Near		
		Medium		
		Far		
	Bl.o. P/T Moving	No		
		Yes		
Bl.o. Color Change	No			
	Yes			

MENU	SUBMENU	OPTIONS		
	Bl.o. Gobo Change	No		
		Yes		
	Dimmer Curve	Square Law		
		Inv SQ Law		
		Linear		
		S Curve		
	Soft Filter	Auto		
		Disable		
		Enable		
Lamp Settings	Lamp On/Off	Off		
		On		
	State/Power On	Off		
		On		
Display Settings	Display Inverse	No		
		Yes		
	Backlight Auto Off	No		
		Yes		
	Backlight Intensity	1-10	(Default=10)	
	Temperature Unit	°C		
		°F		
Language	English			
	Chinese			
Fixture Test	Auto Test			
	Manual Test			
Fixture Information	Fixture Use Hour			
	Lamp Use Hour	Exit		
		Reset Time		
	Temperature			
	Lamp State			
	Fan State			
	Firmware Version			
	Error Logs	Fixture Errors		
Reset Error Log		No		
		Yes	Password=050	

MENU	SUBMENU	OPTIONS
Reset Functions	Pan & Tilt	No
		Yes
	Effect	No
		Yes
	All	No
		Yes
Special Functions	Factory Settings	No
		Yes

DMX Settings

Enter the control menu and select **DMX Settings**, press ENTER. Use the UP/DOWN button to select **DMX Address**, **Channel Mode** or **View DMX Value**.

DMX Address

Select **DMX Address**, press ENTER.

Use UP/DOWN button to select an address, confirm your selection with ENTER.

CHANNEL MODE	DMX ADDRESS
Mode 1 (34)	1-479
Mode 2 (30)	1-483
Mode 3 (27)	1-486
Mode 4 (24)	1-489

To exit the menu, press MENU, or wait 30 seconds.

Channel Mode

Select **Channel Mode**, press ENTER.

Use UP/DOWN button to select between **Mode 1 (34)**, **Mode 2 (30)**, **Mode 3 (27)** and **Mode 4 (24)**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

View DMX Value

Select **View DMX Value**, press ENTER.

Use UP/DOWN button to select the desired DMX channel, for which the value is to be displayed.

To exit the menu, press MENU, or wait 30 seconds.

Fixture Settings

Enter the control menu and select **Fixture Settings**, press ENTER. Use the UP/DOWN button to select **Pan Inverse**, **Tilt Inverse**, **P/T Feedback**, **P/T Speed**, **Focus Compensate**, **Bl.o. P/T Moving**, **Bl.o. Color Change**, **Bl.o. Gobo Change**, **Dimmer Curve** or **Soft Filter**.

Pan Inverse

Select **Pan Inverse**, press ENTER.

Use UP/DOWN button to select **No** (pan invert deactivated) or **Yes** (pan invert activated), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Tilt Inverse

Select **Tilt Inverse**, press ENTER.

Use UP/DOWN button to select **No** (tilt invert deactivated) or **Yes** (tilt invert activated), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

P/T Feedback

Select **P/T Feedback**, press ENTER.

Use UP/DOWN button to select **No** (pan/tilt feedback deactivated) or **Yes** (pan/tilt feedback activated), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

P/T Speed

Select **P/T Speed**, press ENTER.

Use UP/DOWN button to select **Fast** or **Slow**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Focus Compensate

Select **Focus Compensate**, press ENTER.

Use UP/DOWN button to select **Disable**, **Near**, **Medium** or **Far**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Bl.o. P/T Moving

Select **Bl.o. P/T Moving**, press ENTER.

Use UP/DOWN button to select **No** (blackout when pan/tilt moving deactivated) or **Yes** (blackout when pan/tilt moving activated), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Bl.o. Color Change

Select **Bl.o. Color Change**, press ENTER.

Use UP/DOWN button to select **No** (blackout when color changing deactivated) or **Yes** (blackout when color changing activated), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Bl.o. Gobo Change

Select **Bl.o. Gobo Change**, press ENTER.

Use UP/DOWN button to select **No** (blackout when gobo changing deactivated) or **Yes** (blackout when gobo changing activated), confirm your selection with ENTER.

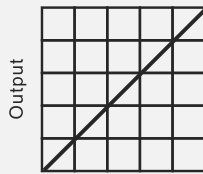
To exit the menu, press MENU, or wait 30 seconds.

Dimmer Curve

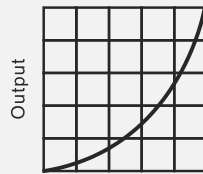
Select **Dimmer Curve**, press ENTER.

Use UP/DOWN button to select **Square Law**, **Inv SQ Law**, **Linear** or **S Curve**, confirm your selection with ENTER.

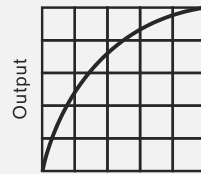
Dimmer Modes



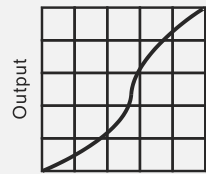
Optically Linear



Square Law



Inverse Square Law



S-curve

To exit the menu, press MENU, or wait 30 seconds.

Soft Filter

Select **Soft Filter**, press ENTER.

Use UP/DOWN button to select **Auto**, **Disable** or **Enable**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Lamp Settings

Enter the control menu and select **Lamp Settings**, press ENTER. Use the UP/DOWN button to select **Lamp On/Off** or **State/Power On**.

Lamp On/Off

Select **Lamp On/Off**, press ENTER.

Use UP/DOWN button to select **Off** (lamp off) or **On** (lamp on), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

State/Power On

Select **State/Power On**, press ENTER.

Use UP/DOWN button to select **Off** (lamp off while power on) or **On** (lamp on while power on), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Display Settings

Enter the control menu and select **Display Settings**, press ENTER. Use the UP/DOWN button to select **Display Inverse**, **Backlight Auto Off**, **Backlight Intensity**, **Temperature Unit** or **Language**.

Display Inverse

Select **Display Inverse**, press ENTER.

Use UP/DOWN button to select **No** (display normal) or **Yes** (display inverted), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Backlight Auto Off

Select **Backlight Auto Off**, press ENTER.

Use UP/DOWN button to select **No** or **Yes**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Backlight Intensity

Select **Backlight Intensity**, press ENTER.

Use UP/DOWN button to select a value between **1** (dark) and **10** (bright), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Temperature Unit

Select **Temperature Unit**, press ENTER.

Use UP/DOWN button to select **°C** or **°F**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Language

Select **Language**, press ENTER.

Use UP/DOWN button to select **English** or **Chinese**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Fixture Test

Enter the control menu and select **Fixture Test**, press ENTER. Use the UP/DOWN button to select **Auto Test** or **Manual Test**.

Auto Test

Select **Auto Test**, press ENTER.

The device immediately performs an automatic self-test.

To end the automatic self-test and exit the menu, press MENU, or wait 30 seconds.

Manual Test

Select **Manual Test**, press ENTER.

Use UP/DOWN button to select the channel for which the manual test is to be performed, confirm your selection with ENTER.

Use UP/DOWN button to select a value, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

(All channels value will become 0 after exiting Manual Test menu)

Fixture Information

Enter the control menu and select **Fixture Information**, press ENTER. Use the UP/DOWN button to select **Fixture Use Hour**, **Lamp Use Hour**, **Temperature**, **Lamp State**, **Fan State**, **Firmware Version** or **Error Logs**.

Fixture Use Hour

Select **Fixture Use Hour**, press ENTER.

The operating hours is displayed.

To exit the menu, press MENU, or wait 30 seconds.

Lamp Use Hour

Select **Lamp Use Hour**, press ENTER.

The lamp operating hours is displayed.

Press ENTER.

If you wish to reset the lamp time, select **Reset Time**. If you do not wish to reset anything, select **Exit**. Confirm your selection with ENTER.

If you select **Reset Time**, confirm your selection with ENTER. The lamp time is reset.

To exit the menu, press MENU, or wait 30 seconds.

Temperature

Select **Temperature**, press ENTER.

The device temperature is displayed.

To exit the menu, press MENU, or wait 30 seconds.

Lamp State

Select **Lamp State**, press ENTER.

The lamp status is displayed.

To exit the menu, press MENU, or wait 30 seconds.

Fan State

Select **Fan State**, press ENTER.

The fan status is displayed.

To exit the menu, press MENU, or wait 30 seconds.

Firmware Version

Select **Firmware Version**, press ENTER.

The firmware version is displayed.

To exit the menu, press MENU, or wait 30 seconds.

Error Logs

Select **Error Logs**, press ENTER.

Use UP/DOWN button to select **Fixture Errors**, confirm your selection with ENTER.

The error list is displayed.

Use UP/DOWN button to select **Reset Error Log**, confirm your selection with ENTER.

If you wish to reset the relevant error logs, select **Yes**. If you do not wish to reset anything, select **No**. Confirm your selection with ENTER.

If you select **Yes**, use UP/DOWN button to set the password 050, confirm your selection with ENTER. The relevant error logs are reset.

To exit the menu, press MENU, or wait 30 seconds.

Reset Functions

Enter the control menu and select **Reset Functions**, press ENTER. Use the UP/DOWN button to select **Pan &Tilt**, **Effect** or **All**.

Pan & Tilt

Select **Pan & Tilt**, press ENTER.

Use UP/DOWN button to select **No** or **Yes** (the device will run built-in program to reset pan/tilt to their home positions), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Effect

Select **Effect**, press ENTER.

Use UP/DOWN button to select **No** or **Yes** (the device will run built-in program to reset effect to their home positions), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

All

Select **All**, press ENTER.

Use UP/DOWN button to select **No** or **Yes** (the device will run built-in program to reset all to their home positions), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Special Functions

Enter the control menu and select **Special Functions**, press ENTER. Use the UP/DOWN button to select **Factory Settings**.

Factory Settings

Select **Factory Settings**, press ENTER.

If you wish to reset the device to the factory settings, select **Yes**. If you do not wish to reset anything, select **No**. Confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

5.2 Home Position Adjustment

- ▶ To access the control menus, press the [MENU] button.
- ▶ To access the offset menus, long-press the [ENTER] button.
- ▶ Navigate the offset menus, using the [ENTER], [▲ UP] and [▼ DOWN] buttons.
- ▶ To select a menu option or to confirm a selection, press the [ENTER] button.
- ▶ To return to a higher level in the menu structure without making a change, press the [MENU] button, or wait 30 seconds.

OFFSET MENU	VALUES
Pan	-128~127
Tilt	-128~127
Shutter	-128~127
Color 1	-128~127
Color 2	-128~127
Color 3	-128~127
Rotating Gobo	-128~127
R-Gobo	-128~127
Static Gobo	-128~127
Prism 1	-128~127
R-Prism 1	-128~127
Prism 2	-128~127
R-Prism 2	-128~127
Frost	-128~127
Focus	-128~127
Zoom	-128~127
Animation	-128~127

Pan

Select **Pan**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Tilt

Select **Tilt**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Shutter

Select **Shutter**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Color 1

Select **Color 1**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Color 2

Select **Color 2**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Color 3

Select **Color 3**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Rotating Gobo

Select **Rotating Gobo**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

R-Gobo

Select **R-Gobo**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Static Gobo

Select **Static Gobo**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Prism 1

Select **Prism 1**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

R-Prism 1

Select **R-Prism 1**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Prism 2

Select **Prism 2**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

R-Prism 2

Select **R-Prism 2**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Frost

Select **Frost**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Focus

Select **Focus**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Zoom

Select **Zoom**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

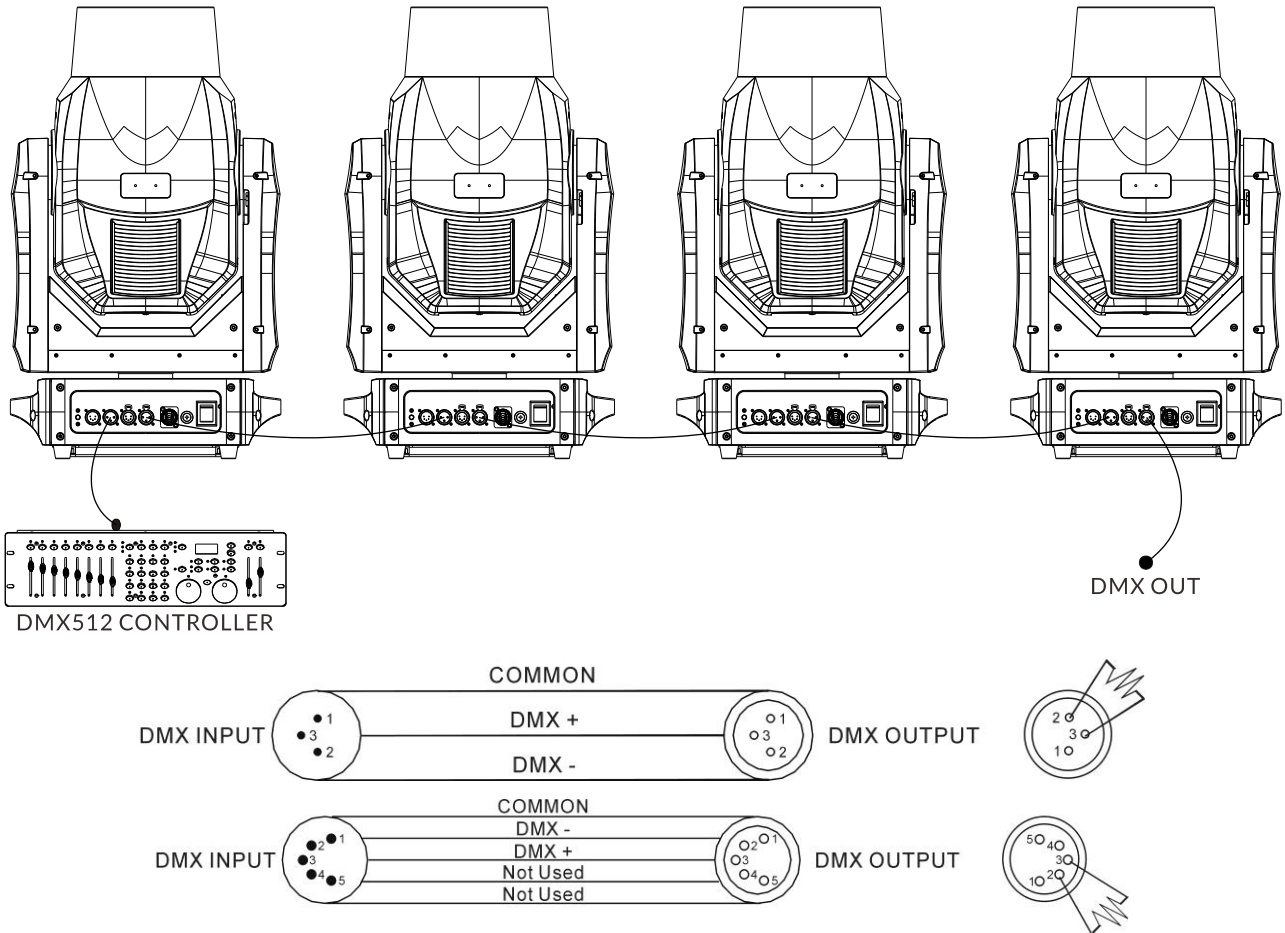
Animation

Select **Animation**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

6.1 DMX512 Connection



1. At last unit, the DMX cable has to be terminated with a terminator. Solder a 120-ohm 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last unit.
2. Connect the unit together in a “daisy chain” by XLR plug cable from the output of the unit to the input of the next unit. The cable can only be used in series and cannot be connected in parallel. DMX 512 is a very high-speed signal. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system.
3. The DMX output and input connectors are pass-through to maintain the DMX circuit, when one of the units' power is disconnected.
4. Each lighting unit needs to have a DMX address to receive the data by the controller. The address number is between 1-512.

5. The end of the DMX 512 system should be terminated to reduce signal errors.
6. 3 pin XLR connectors are more popular than 5 pins XLR.
 - 3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)
 - 5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+), Pin4, Pin5 not used.

6.2 Address Setting

If you use a universal DMX controller to control the units, you have to set DMX address between 1 and 512 so that the units can receive DMX signal.

Press the MENU button to access the control menus, select DMX Settings, press the ENTER button to confirm. Use the UP/DOWN button to select DMX Address, press the ENTER button to confirm, the present address will show on the display. Use the UP/DOWN button to adjust the address between 001 and 512, press the ENTER button to store. To exit the menu, press MENU, or wait 30 seconds.

Please refer to the following diagram to address your DMX512 channel for the first 4 units.

Channel Mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
34 channels	1	35	69	103
30 channels	1	31	61	91
27 channels	1	28	55	82
24 channels	1	25	49	73

6.3 DMX512 Configuration

Please control the fixture by referring to the configurations below.

Attentions:

- ▶ The unit will maintain the last condition until reset if you cut-off the DMX signal.
- ▶ For the channel Function, keep the value for about 3 seconds, then the corresponding function will take into effect.

34 Channels (Mode 1):

CHANNEL	VALUE	FUNCTION
1	000-255	CYAN 0%→100%
2	000-255	MAGENTA 0%→100%
3	000-255	YELLOW 0%→100%
4	000-027 028-049 050-079 080-099 100-128 129-149 150-180 181-203 204-234 235-254 255	COLOR WHEEL 1 Open Open→Soft Filter Soft Filter Soft Filter→Lavender Lavender Lavender→CTO 3200K CTO 3200K CTO 3200K→CTO 2500K CTO 2500K CTO 2500K→UV Filter UV Filter
5	000-027 028-049 050-074 075-099 100-128 129-149 150-177 178-199 200-234 235-254 255	COLOR WHEEL 2 Open Open→Dark Green Dark Green Dark Green→CTB CTB CTB→Dark Blue Dark Blue Dark Blue→H.M. Green H.M. Green H.M. Green→Dark Red Dark Red
6	000-027 028-049 050-076 077-099 100-128 129-149 150-180 181-199 200-230 231-254 255	COLOR WHEEL 3 Open Open→Light Green Light Green Light Green→Pink Pink Pink→Aquamarine Aquamarine Aquamarine→Dark Orange Dark Orange Dark Orange→Light Orange Light Orange
7		STROBE

	000-003 004-103 104-107 108-207 208-212 213-225 226-238 239-251 252-255	Close Strobe from Slow to Fast Open Pulsation from Slow to Fast Open Random Strobe: Slow Random Strobe: Medium Random Strobe: Fast Open
8	000-255	DIMMER 0%→100%
9	000-255	DIMMER FINE
10	000-003 004-007 008-011 012-015 016-018 019-022 023-026 027-030 031-034 035-037 038-041 042-045 046-049 050-053 054-056 057-060 061-064 065-068 069-071 072-113 114-117 118-159 160-165 166-170 171-175 176-181 182-186 187-191 192-197 198-202 203-207 208-213 214-218 219-223	STATIC GOBO WHEEL Null Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 8 Gobo 9 Gobo 10 Gobo 11 Gobo 12 Gobo 13 Gobo 14 Gobo 15 Gobo 16 Gobo 17 Gobo 18 Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast Gobo 1 Shaking, Slow to Fast Gobo 2 Shaking, Slow to Fast Gobo 3 Shaking, Slow to Fast Gobo 4 Shaking, Slow to Fast Gobo 5 Shaking, Slow to Fast Gobo 6 Shaking, Slow to Fast Gobo 7 Shaking, Slow to Fast Gobo 8 Shaking, Slow to Fast Gobo 9 Shaking, Slow to Fast Gobo 10 Shaking, Slow to Fast Gobo 11 Shaking, Slow to Fast Gobo 12 Shaking, Slow to Fast

	224-229 230-234 235-239 240-245 246-250 251-255	Gobo 13 Shaking, Slow to Fast Gobo 14 Shaking, Slow to Fast Gobo 15 Shaking, Slow to Fast Gobo 16 Shaking, Slow to Fast Gobo 17 Shaking, Slow to Fast Gobo 18 Shaking, Slow to Fast
11	000-063 064-127 128-255	ANIMATION WHEEL Open Frost Animation Wheel Rotates Back and Forth
12	000-124 125-130 131-255	ANIMATION WHEEL ROTATION Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
13	000-018 019-037 038-055 056-074 075-092 093-111 112-129 130-150 151-171 172-192 193-213 214-234 235-255	ROTATING GOBO WHEEL Open Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 1 Shaking, Slow to Fast Gobo 2 Shaking, Slow to Fast Gobo 3 Shaking, Slow to Fast Gobo 4 Shaking, Slow to Fast Gobo 5 Shaking, Slow to Fast Gobo 6 Shaking, Slow to Fast
14	000-021 022-042 043-063 064-084 085-105 106-127 128-190 191-192 193-255	ROTATING GOBO WHEEL ROTATION Index: 0°→90° Index: 90°→180° Index: 180°→270° Index: 270°→360° Index: 360°→450° Index: 450°→540° Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
15	000-255	ROTATING GOBO WHEEL ROTATION FINE
16	000-010 011-132 133-223 224-255	PRISM Null Prism 1 Prism 2 Prism 1 + Prism 2 Mixing
17	000-021	PRISM ROTATION Index: 0°→90°

	022-042 043-063 064-084 085-105 106-127 128-190 191-192 193-255	Index: 90°→180° Index: 180°→270° Index: 270°→360° Index: 360°→450° Index: 450°→540° Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
18	000-255	FROST 0%→100%
19	000-255	ZOOM 0%→100%
20	000-255	FOCUS 0%→100%
21	000-255	FOCUS FINE
22	000-127 128-191 192-255	BEAM MODE Zoom / Focus Mode Beam Mode Wash Mode
23	000-255	PAN 0°→540°
24	000-255	PAN FINE
25	000-255	TILT 0°→270°
26	000-255	TILT FINE
27	000-011 012-024 025-037 038-114 115-127 128-140 141-153 154-166 167-179 180-192 193-205 206-255	SPECIAL FUNCTION Null Pan/Tilt Speed: Fast Pan/Tilt Speed: Slow Null Soft Filter: Auto Soft Filter: Disable Soft Filter: Enable Focus Compensate: Disable Focus Compensate: Near Focus Compensate: Medium Focus Compensate: Far Null
28	000-025 026-076 077-127 128-255	RESET Null Zoom Reset Pan/Tilt Reset All Reset
29		LAMP CONTROL

	000-025 026-100 101-255	Null Lamp Off Lamp On
30	000-007 008-015 016-035 036-055 056-075 076-095 096-115 116-135 136-155 156-175 176-195 196-215 216-225 226-255	MACRO EFFECTS Null Standby Zoom in fade (black) Zoom out fade (black) Zoom in fade out fade (no black) Zoom in fade (no black) Zoom out fade (no black) Standby Zoom in fade Zoom out fade Zoom in fade out fade (no black) Zoom in fade (no black) Zoom out fade (no black) Standby
31	000-255	PAN/TILT TIME
32	000-255	COLOR TIME
33	000-255	BEAM TIME
34	000-255	GOBO TIME

30 Channels (Mode 2):

CHANNEL	VALUE	FUNCTION
1	000-255	CYAN 0%→100%
2	000-255	MAGENTA 0%→100%
3	000-255	YELLOW 0%→100%
4	000-027 028-049 050-079 080-099 100-128 129-149 150-180 181-203 204-234 235-254 255	COLOR WHEEL 1 Open Open→Soft Filter Soft Filter Soft Filter→Lavender Lavender Lavender→CTO 3200K CTO 3200K CTO 3200K→CTO 2500K CTO 2500K CTO 2500K→UV Filter UV Filter
5	000-027 028-049 050-074 075-099 100-128 129-149 150-177 178-199 200-234 235-254 255	COLOR WHEEL 2 Open Open→Dark Green Dark Green Dark Green→CTB CTB CTB→Dark Blue Dark Blue Dark Blue→H.M. Green H.M. Green H.M. Green→Dark Red Dark Red
6	000-027 028-049 050-076 077-099 100-128 129-149 150-180 181-199 200-230 231-254 255	COLOR WHEEL 3 Open Open→Light Green Light Green Light Green→Pink Pink Pink→Aquamarine Aquamarine Aquamarine→Dark Orange Dark Orange Dark Orange→Light Orange Light Orange
7		STROBE

	000-003 004-103 104-107 108-207 208-212 213-225 226-238 239-251 252-255	Close Strobe from Slow to Fast Open Pulsation from Slow to Fast Open Random Strobe: Slow Random Strobe: Medium Random Strobe: Fast Open
8	000-255	DIMMER 0%→100%
9	000-255	DIMMER FINE
10	000-003 004-007 008-011 012-015 016-018 019-022 023-026 027-030 031-034 035-037 038-041 042-045 046-049 050-053 054-056 057-060 061-064 065-068 069-071 072-113 114-117 118-159 160-165 166-170 171-175 176-181 182-186 187-191 192-197 198-202 203-207 208-213 214-218 219-223	STATIC GOBO WHEEL Null Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 8 Gobo 9 Gobo 10 Gobo 11 Gobo 12 Gobo 13 Gobo 14 Gobo 15 Gobo 16 Gobo 17 Gobo 18 Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast Gobo 1 Shaking, Slow to Fast Gobo 2 Shaking, Slow to Fast Gobo 3 Shaking, Slow to Fast Gobo 4 Shaking, Slow to Fast Gobo 5 Shaking, Slow to Fast Gobo 6 Shaking, Slow to Fast Gobo 7 Shaking, Slow to Fast Gobo 8 Shaking, Slow to Fast Gobo 9 Shaking, Slow to Fast Gobo 10 Shaking, Slow to Fast Gobo 11 Shaking, Slow to Fast Gobo 12 Shaking, Slow to Fast

	224-229 230-234 235-239 240-245 246-250 251-255	Gobo 13 Shaking, Slow to Fast Gobo 14 Shaking, Slow to Fast Gobo 15 Shaking, Slow to Fast Gobo 16 Shaking, Slow to Fast Gobo 17 Shaking, Slow to Fast Gobo 18 Shaking, Slow to Fast
11	000-063 064-127 128-255	ANIMATION WHEEL Open Frost Animation Wheel Rotates Back and Forth
12	000-124 125-130 131-255	ANIMATION WHEEL ROTATION Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
13	000-018 019-037 038-055 056-074 075-092 093-111 112-129 130-150 151-171 172-192 193-213 214-234 235-255	ROTATING GOBO WHEEL Open Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 1 Shaking, Slow to Fast Gobo 2 Shaking, Slow to Fast Gobo 3 Shaking, Slow to Fast Gobo 4 Shaking, Slow to Fast Gobo 5 Shaking, Slow to Fast Gobo 6 Shaking, Slow to Fast
14	000-021 022-042 043-063 064-084 085-105 106-127 128-190 191-192 193-255	ROTATING GOBO WHEEL ROTATION Index: 0°→90° Index: 90°→180° Index: 180°→270° Index: 270°→360° Index: 360°→450° Index: 450°→540° Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
15	000-255	ROTATING GOBO WHEEL ROTATION FINE
16	000-010 011-132 133-223 224-255	PRISM Null Prism 1 Prism 2 Prism 1 + Prism 2 Mixing
17	000-021	PRISM ROTATION Index: 0°→90°

	022-042 043-063 064-084 085-105 106-127 128-190 191-192 193-255	Index: 90°→180° Index: 180°→270° Index: 270°→360° Index: 360°→450° Index: 450°→540° Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
18	000-255	FROST 0%→100%
19	000-255	ZOOM 0%→100%
20	000-255	FOCUS 0%→100%
21	000-255	FOCUS FINE
22	000-127 128-191 192-255	BEAM MODE Zoom / Focus Mode Beam Mode Wash Mode
23	000-255	PAN 0°→540°
24	000-255	PAN FINE
25	000-255	TILT 0°→270°
26	000-255	TILT FINE
27	000-011 012-024 025-037 038-114 115-127 128-140 141-153 154-166 167-179 180-192 193-205 206-255	SPECIAL FUNCTION Null Pan/Tilt Speed: Fast Pan/Tilt Speed: Slow Null Soft Filter: Auto Soft Filter: Disable Soft Filter: Enable Focus Compensate: Disable Focus Compensate: Near Focus Compensate: Medium Focus Compensate: Far Null
28	000-025 026-076 077-127 128-255	RESET Null Zoom Reset Pan/Tilt Reset All Reset
29		LAMP CONTROL

	000-025 026-100 101-255	Null Lamp Off Lamp On
30	000-007 008-015 016-035 036-055 056-075 076-095 096-115 116-135 136-155 156-175 176-195 196-215 216-225 226-255	MACRO EFFECTS Null Standby Zoom in fade (black) Zoom out fade (black) Zoom in fade out fade (no black) Zoom in fade (no black) Zoom out fade (no black) Standby Zoom in fade Zoom out fade Zoom in fade out fade (no black) Zoom in fade (no black) Zoom out fade (no black) Standby

27 Channels (Mode 3):

CHANNEL	VALUE	FUNCTION
1	000-255	PAN 0°→540°
2	000-255	PAN FINE
3	000-255	TILT 0°→270°
4	000-255	TILT FINE
5	000-254 255	PAN/TILT SPEED Fast to Slow Fast
6	000-009 010-014 015-029 030-034 035-039 040-044 045-049 050-059 060-064 065-069 070-074 075-079 080-084	SPECIAL FUNCTION Null All Reset Effect Reset Pan/Tilt Reset Null Lamp On Lamp Off Null Dimmer Curve: Square Law Dimmer Curve: Inv SQ Law Dimmer Curve: Linear Dimmer Curve: S Curve Pan/Tilt Speed: Fast

	085-089 090-104 105-109 110-114 115-119 120-124 125-129 130-134 135-139 140-255	Pan/Tilt Speed: Slow Null Focus Compensate: Disable Focus Compensate: Near Focus Compensate: Medium Focus Compensate: Far Soft Filter: Auto Soft Filter: Disable Soft Filter: Enable Null
7	000-255	CYAN 0%→100%
8	000-255	MAGENTA 0%→100%
9	000-255	YELLOW 0%→100%
10	000-027 028-049 050-079 080-099 100-128 129-149 150-180 181-203 204-234 235-254 255	COLOR WHEEL 1 Open Open→Soft Filter Soft Filter Soft Filter→Lavender Lavender Lavender→CTO 3200K CTO 3200K CTO 3200K→CTO 2500K CTO 2500K CTO 2500K→UV Filter UV Filter
11	000-027 028-049 050-074 075-099 100-128 129-149 150-177 178-199 200-234 235-254 255	COLOR WHEEL 2 Open Open→Dark Green Dark Green Dark Green→CTB CTB CTB→Dark Blue Dark Blue Dark Blue→H.M. Green H.M. Green H.M. Green→Dark Red Dark Red
12	000-027 028-049 050-076 077-099 100-128 129-149	COLOR WHEEL 3 Open Open→Light Green Light Green Light Green→Pink Pink Pink→Aquamarine

	150-180 181-199 200-230 231-254 255	Aquamarine Aquamarine→Dark Orange Dark Orange Dark Orange→Light Orange Light Orange
13	000-007 008-015 016-023 024-031 032-039 040-047 048-055 056-063 064-094 095-098 099-129 130-147 148-165 166-183 184-201 202-219 220-237 238-255	ROTATING GOBO WHEEL Open Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast Gobo 1 Shaking, Slow to Fast Gobo 2 Shaking, Slow to Fast Gobo 3 Shaking, Slow to Fast Gobo 4 Shaking, Slow to Fast Gobo 5 Shaking, Slow to Fast Gobo 6 Shaking, Slow to Fast Gobo 7 Shaking, Slow to Fast
14	000-021 021-042 042-063 063-084 084-105 105-127 128-190 191-192 193-255	ROTATING GOBO WHEEL ROTATION Index: 0°→90° Index: 90°→180° Index: 180°→270° Index: 270°→360° Index: 360°→450° Index: 450°→540° Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
15	000-255	ROTATING GOBO WHEEL ROTATION FINE
16	000-003 004-007 008-011 012-015 016-018 019-022 023-026 027-030 031-034 035-037 038-041	STATIC GOBO WHEEL Null Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 8 Gobo 9 Gobo 10

	042-045 046-049 050-053 054-056 057-060 061-064 065-068 069-071 072-113 114-117 118-159 160-165 166-170 171-175 176-181 182-186 187-191 192-197 198-202 203-207 208-214 215-218 219-223 224-229 230-234 235-239 240-245 246-250 251-255	Gobo 11 Gobo 12 Gobo 13 Gobo 14 Gobo 15 Gobo 16 Gobo 17 Gobo 18 Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast Gobo 1 Shaking, Slow to Fast Gobo 2 Shaking, Slow to Fast Gobo 3 Shaking, Slow to Fast Gobo 4 Shaking, Slow to Fast Gobo 5 Shaking, Slow to Fast Gobo 6 Shaking, Slow to Fast Gobo 7 Shaking, Slow to Fast Gobo 8 Shaking, Slow to Fast Gobo 9 Shaking, Slow to Fast Gobo 10 Shaking, Slow to Fast Gobo 11 Shaking, Slow to Fast Gobo 12 Shaking, Slow to Fast Gobo 13 Shaking, Slow to Fast Gobo 14 Shaking, Slow to Fast Gobo 15 Shaking, Slow to Fast Gobo 16 Shaking, Slow to Fast Gobo 17 Shaking, Slow to Fast Gobo 18 Shaking, Slow to Fast
17	000-010 011-132 133-223 224-255	PRISM Null Prism 1 Prism 2 Prism 1 + Prism 2 Mixing
18	000-021 022-042 043-063 064-084 085-105 106-127 128-190 191-192 193-255	PRISM 1 ROTATION Index: 0°→90° Index: 90°→180° Index: 180°→270° Index: 270°→360° Index: 360°→450° Index: 450°→540° Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
19	000-021 022-042	PRISM 2 ROTATION Index: 0°→90° Index: 90°→180°

	043-063 064-084 085-105 106-127 128-190 191-192 193-255	Index: 180°→270° Index: 270°→360° Index: 360°→450° Index: 450°→540° Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
20	000-255	ZOOM 0%→100%
21	000-255	FOCUS 0%→100%
22	000-255	FROST 0%→100%
23	000-063 064-127 128-255	ANIMATION WHEEL Open Frost Animation Wheel Rotates Back and Forth
24	000-124 125-130 131-255	ANIMATION WHEEL ROTATION Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
25	000-127 128-191 192-255	BEAM MODE Zoom / Focus Mode Beam Mode Wash Mode
26	000-003 004-103 104-107 108-207 208-212 213-225 226-238 239-251 252-255	STROBE Close Strobe from Slow to Fast Open Pulsation from Slow to Fast Open Random Strobe: Slow Random Strobe: Medium Random Strobe: Fast Open
27	000-255	DIMMER 0%→100%

24 Channels (Mode 4):

CHANNEL	VALUE	FUNCTION
1	000-255	CYAN 0%→100%
2	000-255	MAGENTA 0%→100%
3	000-255	YELLOW 0%→100%
4	000-027 028-049 050-079 080-099 100-128 129-149 150-180 181-203 204-234 235-254 255	COLOR WHEEL 1 Open Open→Soft Filter Soft Filter Soft Filter→Lavender Lavender Lavender→CTO 3200K CTO 3200K CTO 3200K→CTO 2500K CTO 2500K CTO 2500K→UV Filter UV Filter
5	000-027 028-049 050-074 075-099 100-128 129-149 150-177 178-199 200-234 235-254 255	COLOR WHEEL 2 Open Open→Dark Green Dark Green Dark Green→CTB CTB CTB→Dark Blue Dark Blue Dark Blue→H.M. Green H.M. Green H.M. Green→Dark Red Dark Red
6	000-027 028-049 050-076 077-099 100-128 129-149 150-180 181-199 200-230 231-254 255	COLOR WHEEL 3 Open Open→Light Green Light Green Light Green→Pink Pink Pink→Aquamarine Aquamarine Aquamarine→Dark Orange Dark Orange Dark Orange→Light Orange Light Orange
7		STROBE

	000-003 004-103 104-107 108-207 208-212 213-225 226-238 239-251 252-255	Close Strobe from Slow to Fast Open Pulsation from Slow to Fast Open Random Strobe: Slow Random Strobe: Medium Random Strobe: Fast Open
8	000-255	DIMMER 0%→100%
9	000-255	DIMMER FINE
10	000-003 004-007 008-011 012-015 016-018 019-022 023-026 027-030 031-034 035-037 038-041 042-045 046-049 050-053 054-056 057-060 061-064 065-068 069-071 072-113 114-117 118-159 160-165 166-170 171-175 176-181 182-186 187-191 192-197 198-202 203-207 208-214 215-218 219-223	STATIC GOBO WHEEL Null Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 8 Gobo 9 Gobo 10 Gobo 11 Gobo 12 Gobo 13 Gobo 14 Gobo 15 Gobo 16 Gobo 17 Gobo 18 Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast Gobo 1 Shaking, Slow to Fast Gobo 2 Shaking, Slow to Fast Gobo 3 Shaking, Slow to Fast Gobo 4 Shaking, Slow to Fast Gobo 5 Shaking, Slow to Fast Gobo 6 Shaking, Slow to Fast Gobo 7 Shaking, Slow to Fast Gobo 8 Shaking, Slow to Fast Gobo 9 Shaking, Slow to Fast Gobo 10 Shaking, Slow to Fast Gobo 11 Shaking, Slow to Fast Gobo 12 Shaking, Slow to Fast

	224-229 230-234 235-239 240-245 246-250 251-255	Gobo 13 Shaking, Slow to Fast Gobo 14 Shaking, Slow to Fast Gobo 15 Shaking, Slow to Fast Gobo 16 Shaking, Slow to Fast Gobo 17 Shaking, Slow to Fast Gobo 18 Shaking, Slow to Fast
11	000-016 017-032 033-048 049-064 065-081 082-097 098-113 114-129 130-147 148-165 166-183 184-201 202-219 220-237 238-255	ROTATING GOBO WHEEL Open Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 1 Shaking, Slow to Fast Gobo 2 Shaking, Slow to Fast Gobo 3 Shaking, Slow to Fast Gobo 4 Shaking, Slow to Fast Gobo 5 Shaking, Slow to Fast Gobo 6 Shaking, Slow to Fast Gobo 7 Shaking, Slow to Fast
12	000-021 021-042 042-063 063-084 084-105 105-127 128-190 191-192 193-255	ROTATING GOBO WHEEL ROTATION Index: 0°→90° Index: 90°→180° Index: 180°→270° Index: 270°→360° Index: 360°→450° Index: 450°→540° Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
13	000-255	ROTATING GOBO WHEEL ROTATION FINE
14	000-010 011-132 133-223 224-255	PRISM Null Prism 1 Prism 2 Prism 1 + Prism 2 Mixing
15	000-021 022-042 043-063 064-084 085-105 106-127 128-190	PRISM ROTATION Index: 0°→90° Index: 90°→180° Index: 180°→270° Index: 270°→360° Index: 360°→450° Index: 450°→540° Clockwise Rotation, Fast to Slow

	191-192 193-255	Stop Counter-Clockwise Rotation, Slow to Fast
16	000-255	FROST 0%→100%
17	000-255	FOCUS 0%→100%
18	000-255	PAN 0°→540°
19	000-255	PAN FINE
20	000-255	TILT 0°→270°
21	000-255	TILT FINE
22	000-011 012-024 025-037 038-255	SPECIAL FUNCTION Null Pan/Tilt Speed: Fast Pan/Tilt Speed: Slow Null
23	000-025 026-076 077-127 128-255	RESET Null Zoom Reset Pan/Tilt Reset All Reset
24	000-025 026-100 101-255	LAMP CONTROL Null Lamp Off Lamp On

07/ Error Information

Error codes are shown continuously in the display when the fixture fails and they will not disappear until the fixture is repaired.

CPU- B/C/D/E Error

Check whether the 485 (DATA) leads on the PCB board are installed in place or disconnected.

Check whether the related 485 (DATA) signal circuit on the PCB board is damaged.

Pan Reset Error

Check whether the position of the pan where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the pan operating range.

Check whether the Hall element on the pan is damaged.

Check whether the lead connecting the Hall element on the pan and the PCB board is in poor contact or disconnected.

Check whether the motor on the pan is damaged.

Check whether the related circuit of the motor drive board on the pan is damaged.

Pan Encode Error

Check whether the encoder on the pan is damaged.

Check whether the lead connecting the encoder on the pan and the PCB board is in poor contact or disconnected.

Tilt Reset Error

Check whether the position of the tilt where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the tilt operating range.

Check whether the Hall element on the tilt is damaged.

Check whether the lead connecting the Hall element on the tilt and the PCB board is in poor contact or disconnected.

Check whether the motor on the tilt is damaged.

Check whether the related circuit of the motor drive board on the tilt is damage.

Tilt Encode Error

Check whether the encoder on the tilt is damaged.

Check whether the lead connecting the encoder on the tilt and the PCB board is in poor contact or disconnected.

Color 1/2/3 Error

Check whether the position of the color wheel where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the color wheel operating range.

Check whether the Hall element on the color wheel is damaged.

Check whether the lead connecting the Hall element on the color wheel and the PCB board is in poor contact or disconnected.

Check whether the motor on the color wheel is damaged.

Check whether the related circuit of the motor drive board on the color wheel is damage.

Rotating Gobo Error

Check whether the position of the rotating gobo wheel where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the rotating gobo wheel operating range.

Check whether the Hall element on the rotating gobo wheel is damaged.

Check whether the lead connecting the Hall element on the rotating gobo wheel and the PCB board is in poor contact or disconnected.

Check whether the motor on the rotating gobo wheel is damaged.

Check whether the related circuit of the motor drive board on the rotating gobo wheel is damage.

R-Gobo Error

Check whether the position of the rotating gobo wheel where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the rotating gobo wheel operating range.

Check whether the Hall element on the rotating gobo wheel is damaged.

Check whether the lead connecting the Hall element on the rotating gobo wheel and the PCB board is in poor contact or disconnected.

Check whether the motor on the rotating gobo wheel is damaged.

Check whether the related circuit of the motor drive board on the rotating gobo wheel is damage.

Static Gobo Error

Check whether the position of the static gobo wheel where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the static gobo wheel operating range.

Check whether the Hall element on the static gobo wheel is damaged.

Check whether the lead connecting the Hall element on the static gobo wheel and the PCB board is in poor contact or disconnected.

Check whether the motor on the static gobo wheel is damaged.

Check whether the related circuit of the motor drive board on the static gobo wheel is damage.

Animation Error

Check whether the position of the animation wheel where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the animation wheel operating range.

Check whether the Hall element on the animation wheel is damaged.

Check whether the lead connecting the Hall element on the animation wheel and the PCB board is in poor contact or disconnected.

Check whether the motor on the animation wheel is damaged.

Check whether the related circuit of the motor drive board on the animation wheel is damage.

Focus Error

Check whether the position of the focus where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the focus operating range.

Check whether the Hall element on the focus is damaged.

Check whether the lead connecting the Hall element on the focus and the PCB board is in poor contact or disconnected.

Check whether the motor on the focus is damaged.

Check whether the related circuit of the motor drive board on the focus is damage.

Zoom Error

Check whether the position of the zoom where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the zoom operating range.

Check whether the Hall element on the zoom is damaged.

Check whether the lead connecting the Hall element on the zoom and the PCB board is in poor contact or disconnected.

Check whether the motor on the zoom is damaged.

Check whether the related circuit of the motor drive board on the zoom is damage.

Frost Error

Check whether the position of the frost where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the frost operating range.

Check whether the Hall element on the frost is damaged.

Check whether the lead connecting the Hall element on the frost and the PCB board is in poor contact or disconnected.

Check whether the motor on the frost is damaged.

Check whether the related circuit of the motor drive board on the frost is damage.

Prism 1/2 Error

Check whether the position of the prism where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the prism operating range.

Check whether the Hall element on the prism is damaged.

Check whether the lead connecting the Hall element on the prism and the PCB board is in poor contact or disconnected.

Check whether the motor on the prism is damaged.

Check whether the related circuit of the motor drive board on the prism is damage.

R-Prism1/2 Error

Check whether the position of the prism where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the prism operating range.

Check whether the Hall element on the prism is damaged.

Check whether the lead connecting the Hall element on the prism and the PCB board is in poor contact or disconnected.

Check whether the motor on the prism is damaged.

Check whether the related circuit of the motor drive board on the prism is damaged.

Head Fan 1/2 Start Error

Check whether the fan is not running.

Check whether the fan leads are installed in place or disconnected.

Check whether the fan is damaged.

Check whether there are obstacles in the fan operating range.

Head Fan 1/2 Stop Error

Check whether the fan circuit on the motherboard breaks down.

Check whether the component is damaged.

Lamp Fan 1/2/3/4/5 Start Error

Check whether the fan is not running.

Check whether the fan leads are installed in place or disconnected.

Check whether the fan is damaged.

Check whether there are obstacles in the fan operating range.

Lamp Fan 1/2/3/4/5 Stop Error

Check whether the fan circuit on the motherboard breaks down.

Check whether the component is damaged.

Base Fan 1/2/3 Start Error

Check whether the fan is not running.
Check whether the fan leads are installed in place or disconnected.
Check whether the fan is damaged.
Check whether there are obstacles in the fan operating range.

Base Fan 1/2/3 Stop Error

Check whether the fan circuit on the motherboard breaks down.
Check whether the component is damaged.

Lamp Too Hot Off

Check whether the temperature switch of the lamp is off.
Check whether the fans are still running properly.

Lamp Maintenance

Check lamp use time and replace the lamp in time.

Gravity Sensor Error

Check whether the gravity sensor on board E is damaged.

08/ Troubleshooting

Following are a few common problems that may occur during operation. Here are some suggestions for troubleshooting:

A. The unit does not work, no light and the fan does not work

- ▶ Check the connected power and main fuse.
- ▶ Measure the voltage.
- ▶ Check the power indicator to see whether it can be lit up or not.

B. Not responding to the DMX controller

- ▶ Check whether the DMX connectors and the DMX cables are connected correctly.
- ▶ Check whether the DMX address is correctly set.
- ▶ If the intermittent DMX signal problem occurs, check whether the XLR socket and the signal cable are well connected.
- ▶ Try it with another DMX controller.
- ▶ Check whether the DMX cables run near or alongside to the high-voltage cables, which may damage or interfere with the signal circuit.

C. One of the channels is not working well

- ▶ The stepper motor might be damaged or the cable connected to the PCB might be broken.
- ▶ The motor's drive IC on the PCB might be out of condition.

D. The lamp is cutting out intermittently

- ▶ The lamp is not working well. Check whether the voltage is too high or too low.
- ▶ The internal temperature may be too high. Replace the cooling fan if necessary.

09/ Fixture Cleaning

It is absolutely essential that the fixture is kept clean to ensure the maximum light-output and allow the fixture to function reliably throughout its life. The fixture must be cleaned regularly to avoid dust, dirt and smoke-fluid residues building up on or within the fixture. The cleaning frequency depends on the application environment. Clean the fixture immediately if the dust enters it to avoid damage to the optical lens due to excessive dust.

- ▶ A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should solvents be used.
- ▶ Always dry the parts carefully.
- ▶ Clean the external optical lens at least every 20 days and the internal optical lens every 30 days.



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