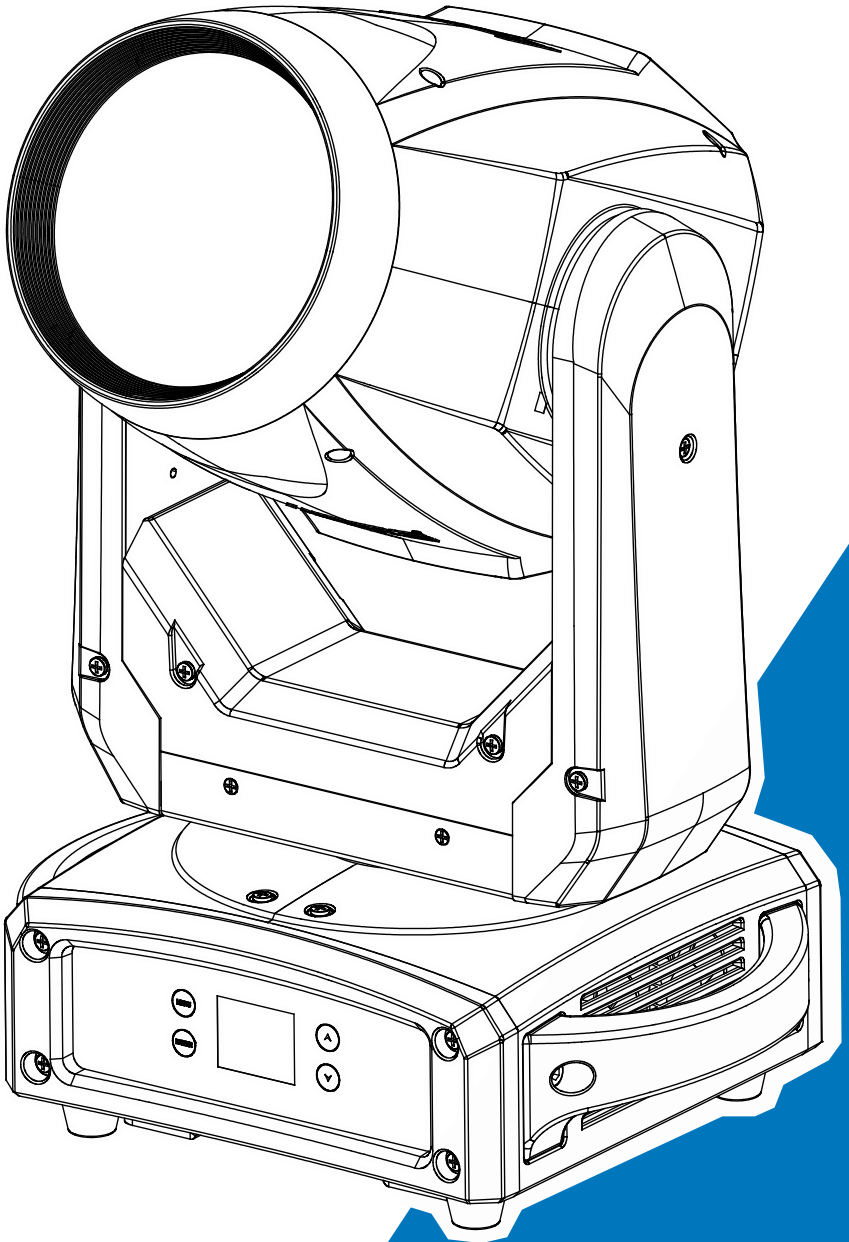
ACME®

ORION



User Manual

Please read the instruction carefully before use

CONTENTS

1. 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 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 are blocked, otherwise the unit will be overheated.
- Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Minimum ambient temperature TA: 0℃. Maximum ambient temperature TA: 40℃.
- 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.
- Make sure there are no flammable materials close to the unit while operating to avoid fire hazard.
- Examine the power wires carefully; replace them immediately if there is any damage.
- Unit's surface temperature may reach up to 90℃. DO NOT touch the housing bare-handed during its operation.
- Avoid any inflammable liquids, water or metal objects entering the unit. Once it happens, cut

off the mains power immediately.

- DO NOT operate in dirty or dusty environment, do clean fixtures regularly.
- DO NOT touch any wire during operation as there might be a hazard of electric shock.
- Avoid power wires together twist other cables.
- The minimum distance between light output and the illuminated surface must be more than 12 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 unit as there are no user serviceable parts inside.
- Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center if needed.
- Disconnect the mains power if the fixture is has not been used for a long time.
- DO use the original packing materials before transporting it again.
- 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.
- DO NOT look directly at the light while the bulb is on.
- Never touch bulb with bare fingers, as it is very hot after using.
- DO NOT start on the unit without bulb enclosure or when housing is damaged.

Installation:

The fixture should be mounted via its Omega Quick Release Clamp bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating and make sure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the fixtures weight. Always use a safety cable that can hold 12 times of the weight of the fixture when installing.

The equipment must be installed by professionals. It must be installed in a place where is out of the reach of people and no one can pass by or under it.

2. Technical Specifications

Power Voltage:

AC 100~240V, 50/60Hz

Power Consumption:

375W

Light Source:

PHILIPS MSD Platinum 12 R LL

Color Temperature:

7800K

Beam Angle:

2°

Movement:

Pan: 540°

Tilt: 270°

Pan/Tilt Resolution: 16-bit

Dimmer/Shutter:

Smooth dimming from 0-100%; outstanding strobe effect with variable speed

Color wheel:

1 color wheel with 14 colors plus white and rainbow effect

Gobo wheel:

1 static gobo wheel with 16 gobos plus open

Control:

DMX Channel: 13/16 Channels

Protocols: DMX512, RDM

Firmware Upgrade via DMX link or USB disk

Construction:

Display: Color display

Data In/Out: 3-pin (5-pin XLR is optional)

Power In/Out: Powercord; Power Connector in/out

Protection Rating: IP20

Features:

Motorized focus

2 x prisms: 8 facets Prism+24 facets Prism, rotation in both directions and overlay each other

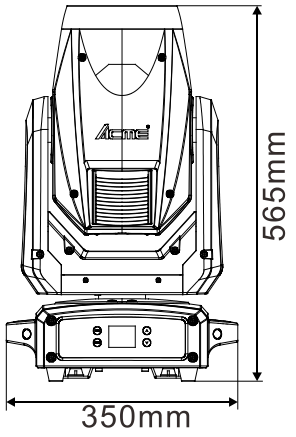
Outstanding color macro effect

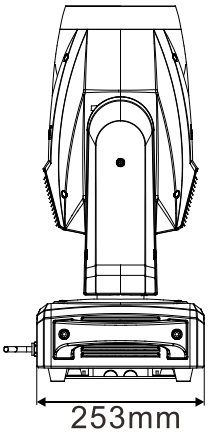
Independent frost effect

Dimension/Weight:

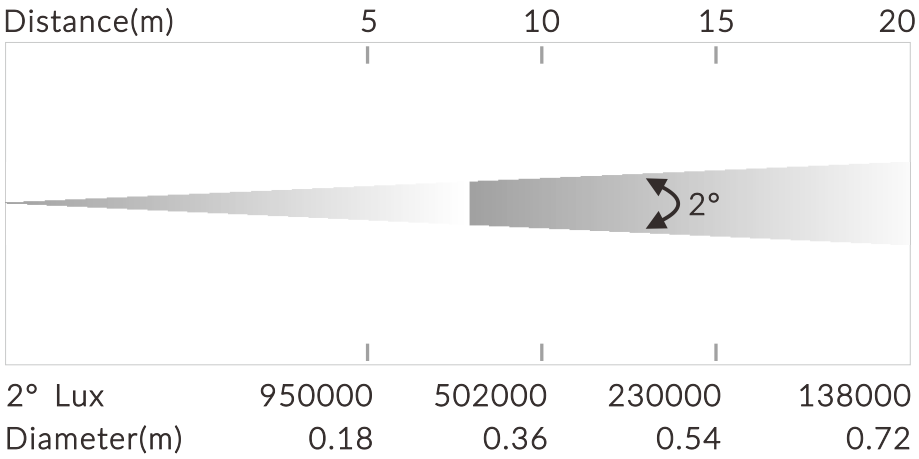
350x253x565mm, 18kgs

13.8"x10"x22.2"in, 39.7lbs



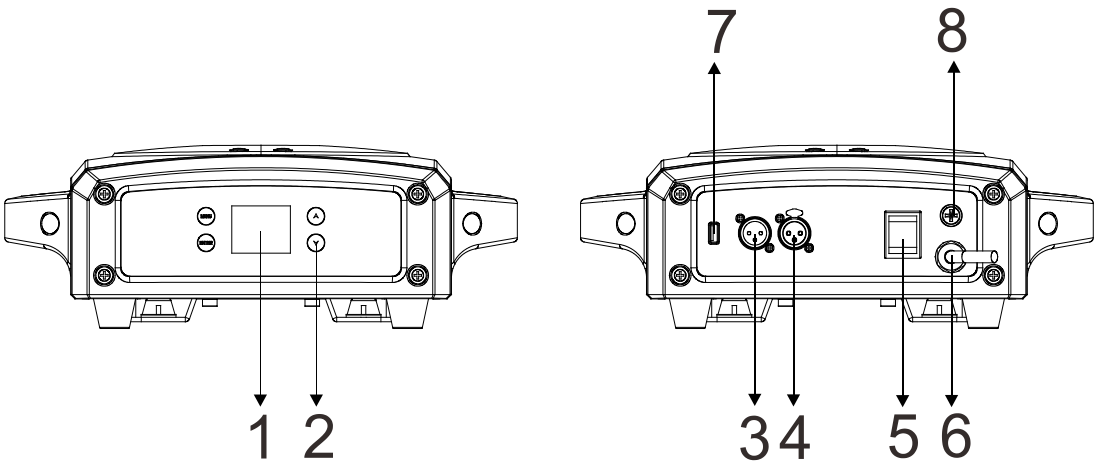


Photometrics Diagram:

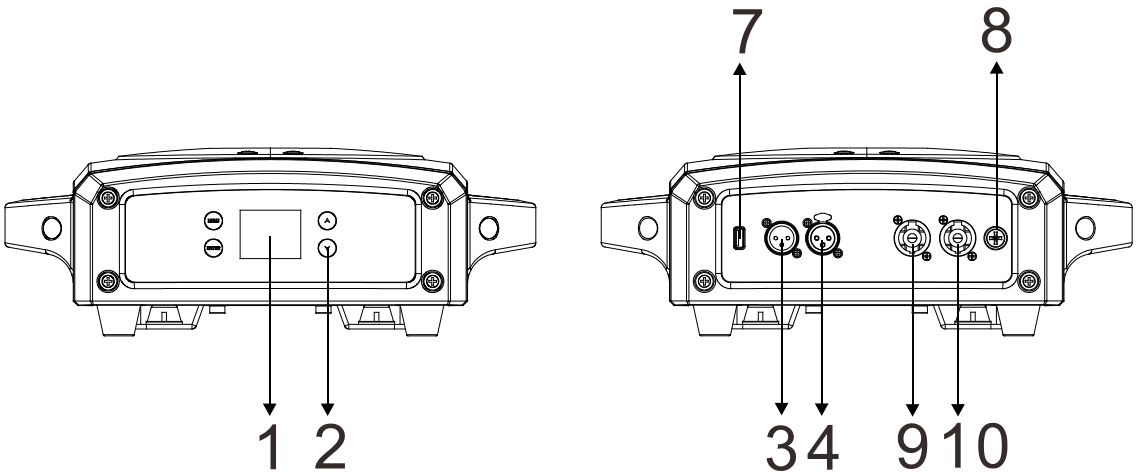


3. Control Panel

Wire Version:



POWERCON Version:



1. DISPLAY: To show the various menus and the selected function

2. Button:

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. DMX IN:

DMX512 link, use 3-pin XLR cable to link the unit and DMX controller (5-pin XLR is optional)

4. DMX OUT:

DMX 512 operation, use 3-pin XLR cable to link the next units (5-pin XLR is optional)

5. POWER SWITCH:

Turns on/ off the power

6. POWER(Wire Version):

To connect to supply power

7. FIRMWARE UPGRADE:

Used to upgrade fixture's firmware

8. FUSE(T 6.3A):

Protect the unit from damage of over current

9. POWER IN(POWERCON Version):

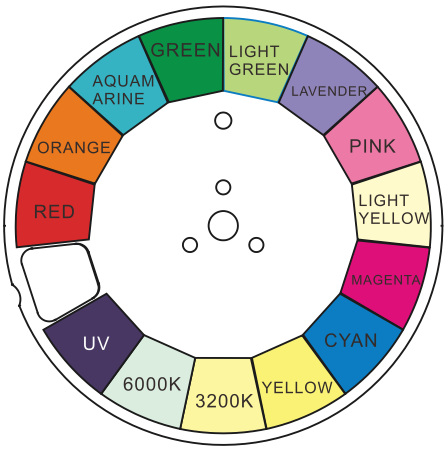
To connect to supply power

10. POWER OUT(POWERCON Version):

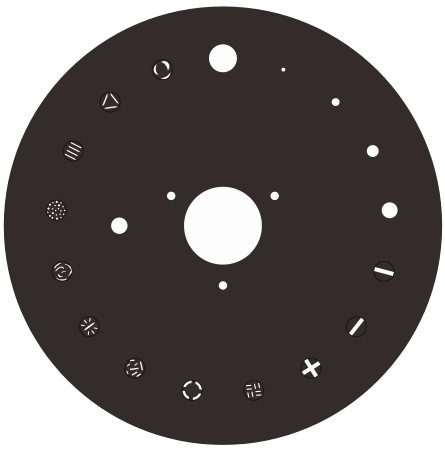
To connect to the next fixture

4. Color/Gobo and Lamp

4.1 Color/Gobo



COLOR



GOBO

DANGER!
Install the color wheel/gobo wheel with the device switched off only.
Unplug from mains before changing the color wheel/gobo wheel!

4.2 Light Source

PHILIPS MSD Platinum 12 R LL

- 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 luminary 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.

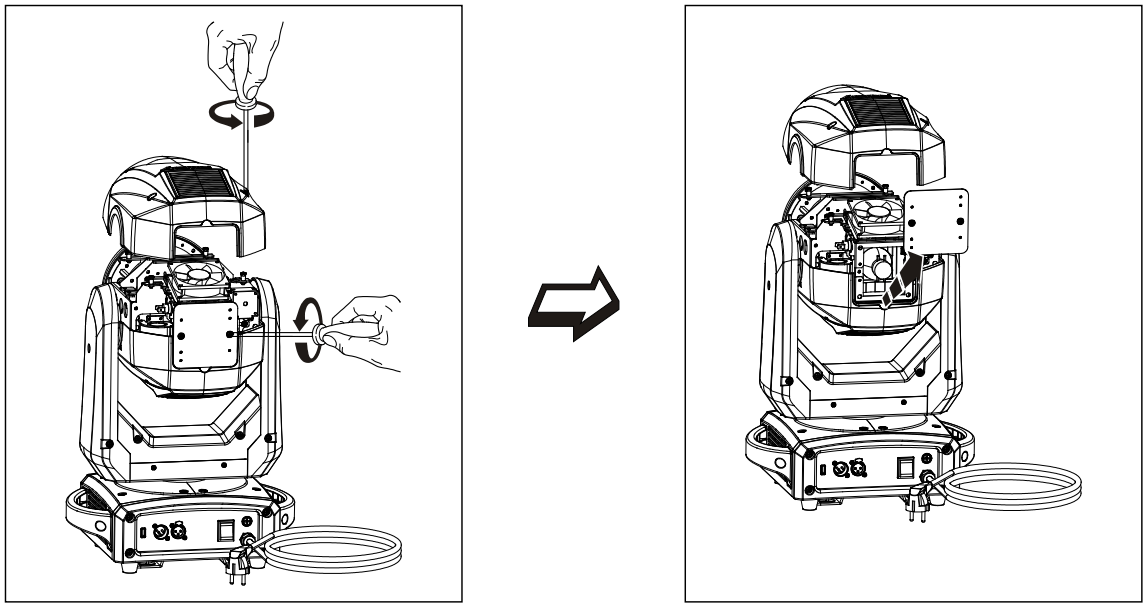
4.3 Changing the Lamp

Attention: The entire light path and lens of the luminaire must be thoroughly cleaned before changing the bulb.

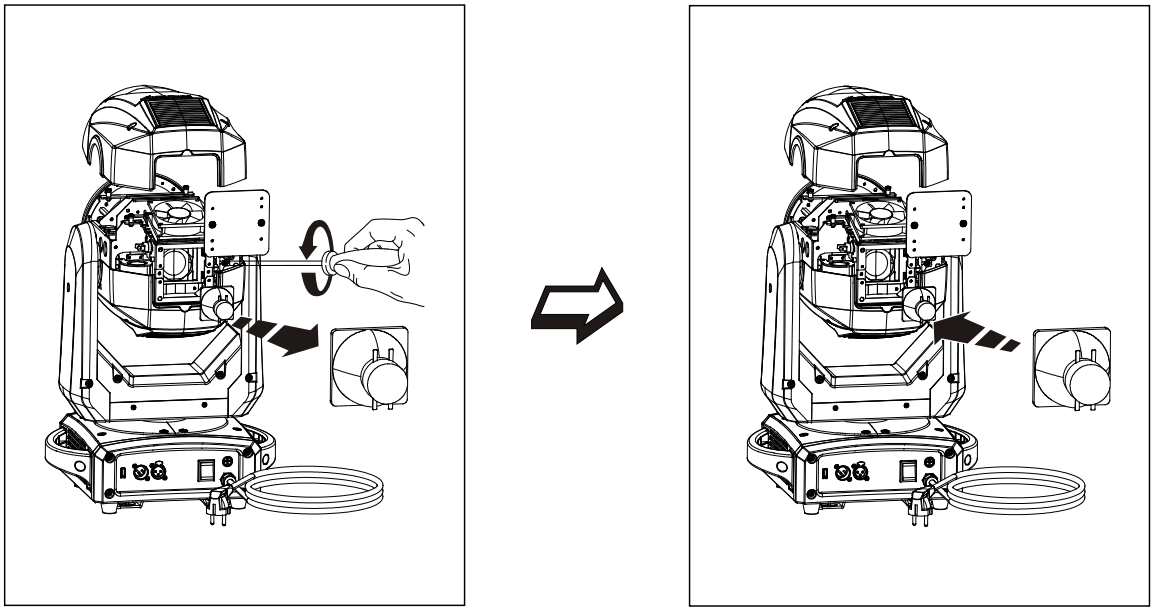
In the Work Mode, the lamp life is 1500 hours; when the Work Mode and the Sleep Mode are used alternately, the lamp life is between 1500 and 6000 hours according to the ratio of lamp use time; in the Sleep Mode, the lamp life is 6000 hours. Do not use the bulb beyond its lifetime, otherwise it may damage the luminaire. Check the Lamp Use Time regularly. When the lamp replacement warning appears, we strongly recommend that you replace the bulb. After replacing the bulb, the use hours of the bulb must be cleared and reset.

To replace the lamp:

1. 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 10 minutes after the lamp has been turned off, so that the cooling fans have time to works.
2. Loosen the screws on the head of the fixture and open the fixture head covers.



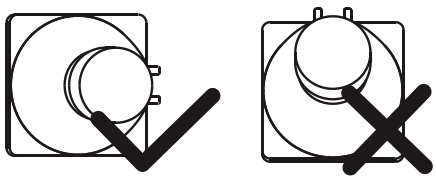
3. Loosen the screw that holds the lamp in place. Unplug the leads of the lamp and lift the lamp out of its recess, disconnect the lamp and connect a new lamp that must be the same type with the old one. And then place the new lamp into the lamp recess.



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

Warning:

The installing direction of lamp:



4.4 Lamp Replacement Warning

- When the lamp reaches 300 hours before its service time, the display will flash the message “Replace Lamp Soon” for up to 5 minutes. During this period, the fixture will still work normally.
- When the lamp reaches its service time, the display will flash the message “Replace Lamp Now” for up to 10 minutes. After 10 minutes, the fixture will return to normal operation.
- When the lamp is continuously used overtime, the display will flash the message “Lamp Timeout Use, Replace Lamp Now” for up to 10 minutes. After 10 minutes, the fixture will return to normal operation.

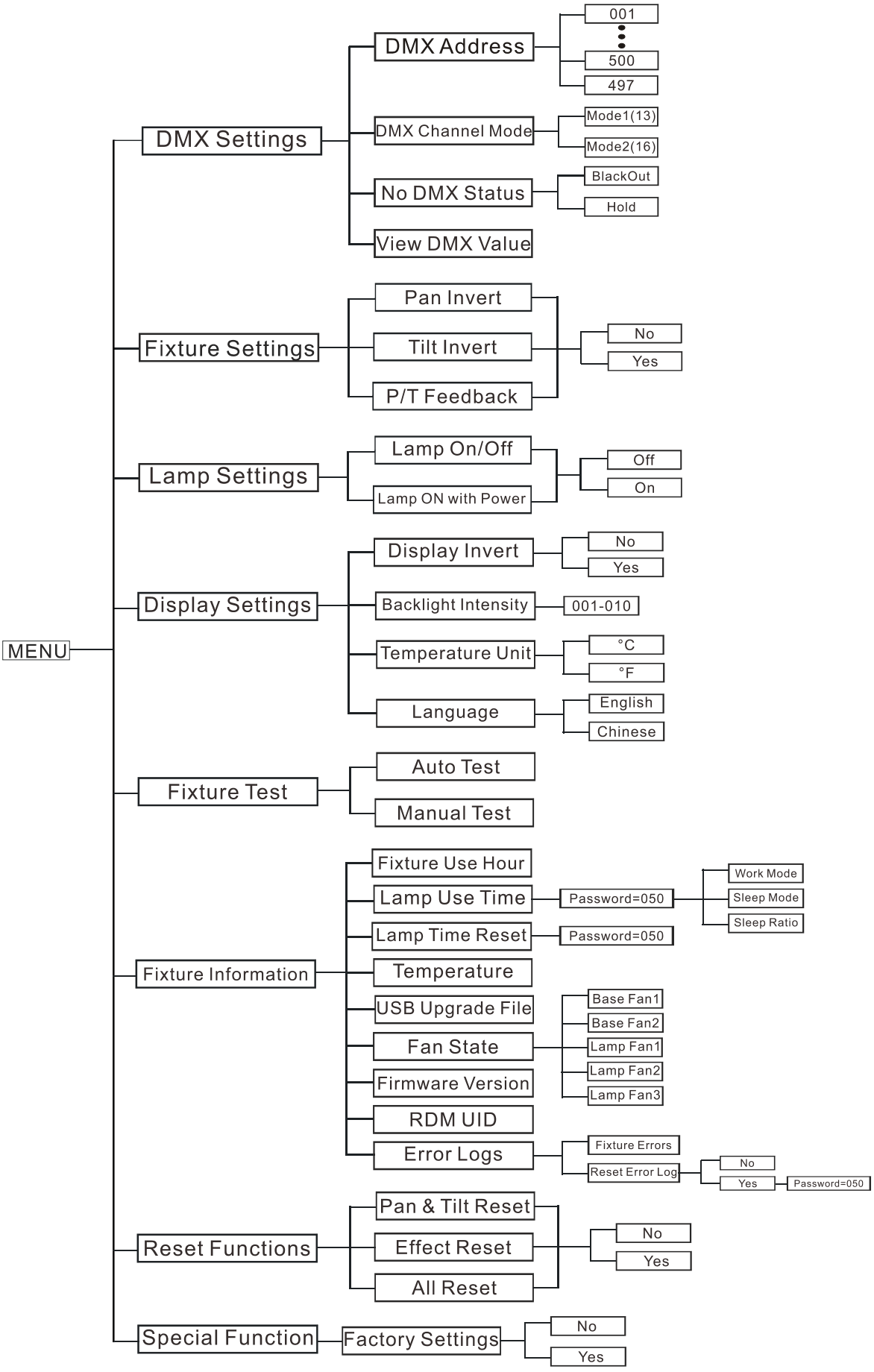
Attention: Damages caused by the failure to replace the bulb in time are not subject to warranty.

5. How To Set The Unit

5.1 Main Function

Turn on the unit, press the MENU button into menu mode, and press the UP/DOWN button until the required function is shown on the monitor. Select the function by the ENTER button. Use the UP/DOWN button to choose the submenu, press the ENTER button to store and automatically return to the last menu. Press the MENU button or let the unit idle 30 seconds to exit menu mode.

The main functions are shown below:


MENU
DMX Settings
DMX Address
001
500
497
DMX Channel Mode
Mode1(13)
Mode2(16)
No DMX Status
BlackOut
Hold
View DMX Value
Fixture Settings
Pan Invert
Tilt Invert
P/T Feedback
No
Yes
Lamp Settings
Lamp On/Off
Lamp ON with Power
Off
On
Display Settings
Display Invert
No
Yes
Backlight Intensity
001-010
Temperature Unit
°C
°F
Language
English
Chinese
Fixture Test
Auto Test
Manual Test
Fixture Information
Fixture Use Hour
Lamp Use Time
Password=050
Work Mode
Sleep Mode
Sleep Ratio
Lamp Time Reset
Password=050
Temperature
USB Upgrade File
Fan State
Base Fan1
Base Fan2
Lamp Fan1
Lamp Fan2
Lamp Fan3
Firmware Version
RDM UID
Error Logs
Fixture Errors
Reset Error Log
No
Yes
Password=050
Reset Functions
Pan & Tilt Reset
Effect Reset
All Reset
No
Yes
Special Function
Factory Settings
No
Yes

DMX Settings

To select **DMX Settings,** press the **ENTER** button to confirm, use the **UP**/**DOWN** button to select **DMX Address, DMX Channel Mode, No DMX Status** or **View DMX Value.**

DMX Address

To select **DMX Address**, press the **ENTER** button to confirm. Use the **UP**/**DOWN** button to adjust the address from **001** to **500/497**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

DMX Channel Mode

To select **DMX Channel Mode**, press the **ENTER** button to confirm. Use the **UP**/**DOWN** button to select **Mode1 (13)** or **Mode2 (16)**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

No DMX Status

To select **No DMX Status**, press the **ENTER** button to confirm. Use the **UP**/**DOWN** button to select **BlackOut**(fixture blacks out if DMX signal stops) or **Hold**(fixture continues to obey the last command it received Via DMX if DMX signal stops), press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

View DMX Value

To select **View DMX Value**, press the **ENTER** button to confirm. Use the **UP**/**DOWN** button to view the DMX channel value. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Fixture Settings

To select **Fixture Settings**, press the **ENTER** button to confirm, use the **UP**/**DOWN** button to select **Pan Invert, Tilt Invert** or **P/T Feedback**.

Pan Invert

To select **Pan Invert**, press the **ENTER** button to confirm. Use the **UP**/**DOWN** button to select **No**(normal) or **Yes**(pan invert), press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Tilt Invert

To select **Tilt Invert**, press the **ENTER** button to confirm. Use the **UP**/**DOWN** button to select **No**(normal) or **Yes**(tilt invert), press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

P/T Feedback

To select **P/T Feedback**, press the **ENTER** button to confirm. Use the **UP**/**DOWN** button to select **No**(Pan or tilt's position will not feedback while out of step) or **Yes**(Feedback while pan/tilt out of step), press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Lamp Settings

To select **Lamp Settings**, press the **ENTER** button to confirm, use the **UP**/**DOWN** button to select **Lamp On/Off** or **Lamp ON with Power.**

Lamp On/Off

To select **Lamp On/Off**, press the **ENTER** button to confirm. Use the **UP**/**DOWN** button to select **Off**(lamp off) or **On**(lamp on), press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Lamp ON with Power

To select **Lamp ON with Power**, press the **ENTER** button to confirm. Use the **UP**/**DOWN** button to select **Off**(Lamp off while power on) or **On**(Lamp on while power on), press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Display Settings

To select **Display Settings**, press the **ENTER** button to confirm, use the **UP**/**DOWN** button to select **Display Invert, Backlight Intensity, Temperature Unit** or **Language.**

Display Invert

To select **Display Invert**, press the **ENTER** button to confirm. Use the **UP**/**DOWN** button to select **No**(normal display) or **Yes**(invert display), press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Backlight Intensity

To select **Backlight Intensity**, press the **ENTER** button to confirm. Use the **UP**/**DOWN** button to adjust backlight intensity from **001**(dark) to **010**(bright), press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Temperature Unit

To select **Temperature Unit**, press the **ENTER** button to confirm. Use the **UP**/**DOWN** button to select ℃ or ℉, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Language

To select **Language**, press the **ENTER** button to confirm. Use the **UP**/**DOWN** button to select **English** or **Chinese**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Fixture Test

To select **Fixture Test**, press the **ENTER** button to confirm, use the **UP**/**DOWN** button to select **Auto Test** or **Manual Test.**

Auto Test

To select **Auto Test**, press the **ENTER** button to confirm, the unit will run built-in programs to automatically test pan, tilt, P/T speed, color, gobo, prism, prism2, rprism, shutter, dimmer, focus, frost and spe. func. Press the **MENU** button back to the last menu or exit menu mode after auto test.

Manual Test

To select **Manual Test**, press the **ENTER** button to confirm, the present channel will show on the display, use the **UP**/**DOWN** button to select channel, press the **ENTER** button to confirm, then use the **UP**/**DOWN** button to adjust the value, press the **ENTER** button to store, the fixture will run as the channel value indicates. Press the **MENU** button back to the last menu or exit menu mode idling 30 seconds.

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

Fixture Information

To select **Fixture Information**, press the **ENTER** button to confirm, use the **UP**/**DOWN** button to select **Fixture Use Hour, Lamp Use Time, Lamp Time Reset, Temperature, USB Updrade File, Fan State, Firmware Version, RDM UID** or **Error Logs.**

Fixture Use Hour

To select **Fixture Use Hour**, press the **ENTER** button to confirm, fixture use hour will show on the display, press the **MENU** button to exit.

Lamp Use Time

To select **Lamp Use Time**, press the **ENTER** button to confirm. Use the **UP**/**DOWN** button to set the password **050**, press the **ENTER** button to confirm and lamp use time in **Work Mode, Sleep Mode** or **Sleep Ratio** can be viewed, press the **ENTER** button to confirm. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Lamp Time Reset

To select **Lamp Time Reset**, press the **ENTER** button to confirm. Use the **UP**/**DOWN** button to set the password **050**, press the **ENTER** button to reset the lamp time, press the **MENU** button to exit.

Temperature

To select **Temperature**, press the **ENTER** button to confirm, fixture temperature will show on the display, press the **MENU** button to exit.

USB Upgrade File

To select **USB Upgrade File,** press the **ENTER** button to confirm, USB upgrade file will show on the display, press the **MENU** button to exit.

Fan State

To select **Fan State**, press the **ENTER** button to confirm, fan state will show on the display, press the **MENU** button to exit.

Firmware Version

To select **Firmware Version**, press the **ENTER** button to confirm, firmware version will show on the display, press the **MENU** button back to exit.

RDM UID

To select **RDM UID**, press the **ENTER** button to confirm, RDM UID will show on the display, press the **MENU** button back to exit.

Error Logs

To select **Error Logs**, press the **ENTER** button to confirm. Use the **UP**/**DOWN** button to select **Fixture Errors** or **Reset Error Log**, press the **ENTER** button to store. To select **Reset Error Log**, press the **ENTER** button to confirm, use the **UP**/**DOWN** button to select **No** or **Yes**, press the **ENTER** button to store. To select **Yes**, press the **ENTER** button to confirm, use the **UP**/**DOWN** button to set the password **050**, press the **ENTER** button to reset error log. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Reset Functions

To select **Reset Functions**, press the **ENTER** button to confirm, use the **UP**/**DOWN** button to select **Pan & Tilt Reset, Effect Reset** or **All Reset.**

Pan & Tilt Reset

To select **Pan & Tilt Reset**, press the **ENTER** button to confirm, use the **UP**/**DOWN** button to select **No**(normal) or **Yes** (the unit will run built-in program to reset pan and tilt to their home positions), press the **ENTER** button to store. Press the **MENU** button to exit.

Effect Reset

To select **Effect Reset,** press the **ENTER** button to confirm, use the **UP**/**DOWN** button to select **No** or **Yes**(the unit will run built-in program to reset effect to their home positions), press the **ENTER** button to store. Press the **MENU** button to exit.

All Reset

To select **All Reset,** press the **ENTER** button to confirm, use the **UP**/**DOWN** button to select **No** or **Yes**(the unit will run built-in program to reset all motors to their home positions), press **ENTER** button to store. Press the **MENU** button to exit.

Special Function

Factory Settings

To select **Factory Settings,** press the **ENTER** button to confirm, use the **UP**/**DOWN** button to select **No**(normal) or **Yes**(the fixture will reset to factory settings), press **ENTER** button to store. Press the **MENU** button to exit.

RDM FUNCTIONS

Select the MANUFACTURER menu to display the manufacturer of the fixture.

Select the SOFTWARE VERSION menu and the program version number of the fixture will be displayed.

Select the DMX START ADDRESS menu to change the DMX 512 address (001-512).

Select the DEVICE MODEL DESCRIPTION menu to display the model of the fixture.

Select the DEVICE LABEL menu to change the model of the fixture.

Select the DMX PERSONALITY menu to set the channel mode of the fixture (13/16 channel).

Select the DMX PERSONALITY DESCRIPTION menu to display the current channel mode of the fixture.

Select the DEVICE HOURS menu to display the running time of the fixture.

Select the LAMP HOURS menu to display the running time of the lamp.

Select the LAMP STATE menu to turn on/off the lamp.

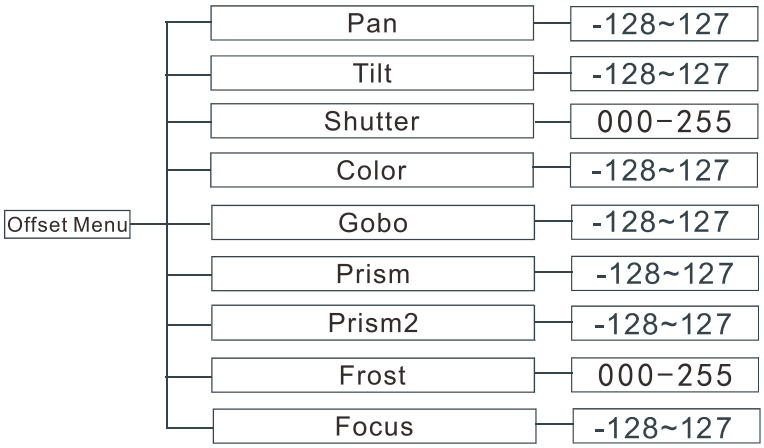
Select the PAN INVERT menu and the fixture will run the pan invert mode.

Select the TILT INVERT menu and the fixture will run the tilt invert mode.

Select the RESET DEVICE menu, the WARM RESET/COLD RESET option will be displayed. When WARM RESET is selected, the fixture will start a warm reset, and exit when COLD RESET is selected.

5.2 Home Position Adjustment

Press the MENU button into menu mode, then press the ENTER button for about 3 seconds into offset mode to adjust the home position. Select the function by the ENTER button. Use the UP/DOWN button to choose the submenu, press the ENTER button to store and automatically return to the last menu. Press MENU button to exit.



Pan

Enter offset mode, select **Pan**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP**/**DOWN** button to offset the value from -128 to 127, press the **ENTER** button to store. Press the **MENU** button to exit.

Tilt

Enter offset mode, select **Tilt**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP**/**DOWN** button to offset the value from -128 to 127, press the **ENTER** button to store. Press the **MENU** button to exit.

Shutter

Enter offset mode, select **Shutter**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP**/**DOWN** button to offset the value from 000 to 255, press the **ENTER** button to store. Press the **MENU** button to exit.

Color

Enter offset mode, select **Color**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP**/**DOWN** button to offset the value from -128 to 127, press the **ENTER** button to store. Press the **MENU** button to exit.

Gobo

Enter offset mode, select **Gobo**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP**/**DOWN** button to offset the value from -128 to 127, press the **ENTER** button to store. Press the **MENU** button to exit.

Prism

Enter offset mode, select **Prism**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP**/**DOWN** button to offset the value from -128 to 127, press the **ENTER** button to store. Press the **MENU** button to exit.

Prism2

Enter offset mode, select **Prism2**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP**/**DOWN** button to offset the value from -128 to 127, press the **ENTER** button to store. Press the **MENU** button to exit.

Frost

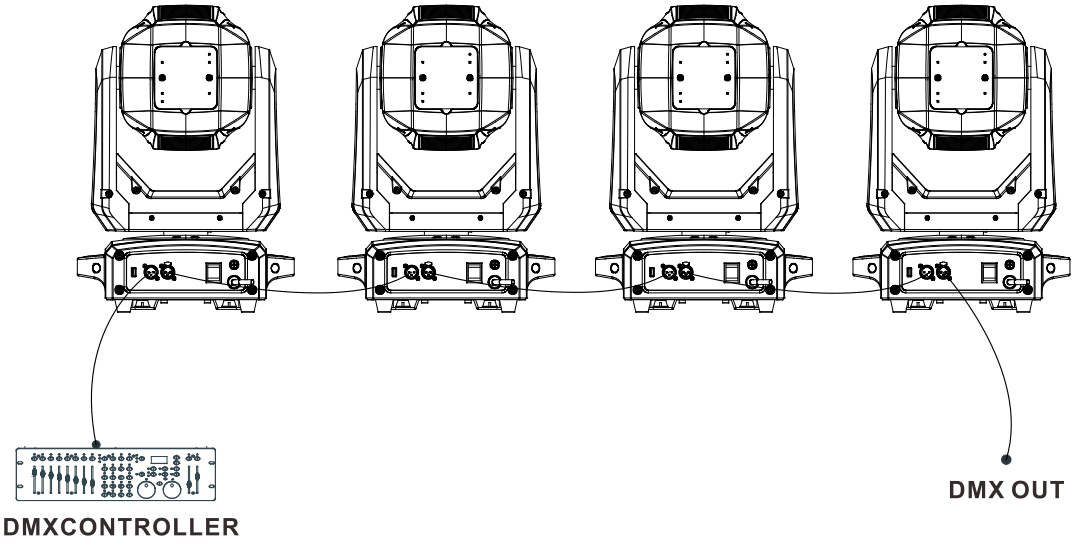
Enter offset mode, select **Frost**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP**/**DOWN** button to offset the value from 000 to 255, press the **ENTER** button to store. Press the **MENU** button to exit.

Focus

Enter offset mode, select **Focus**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP**/**DOWN** button to offset the value from -128 to 127, press the **ENTER** button to store. Press the **MENU** button to exit.

6. Control By Universal DMX Controller

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 cannot be branched or split to a “Y” cable. 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 from 1 to 512 so that the units can receive DMX signal.

Press the MENU button to enter menu mode, 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 blink on the display, use the UP/DOWN button to adjust the address from 001 to 512, press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle 30 seconds to exit menu mode.

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
13 channels	1	14	27	40
16 channels	1	17	33	49

6.3 DMX512 Configuration

Please refer to below configurations to control the fixtures

Attentions:

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

13 Channels (Mode 1):

CHANNEL	VALUE	FUNCTION
1	000-255	**PAN** 0°→540°
2	000-255	**TILT** 0°→270°
3	000-255	**PAN/TILT SPEED** Fast to slow

4		**COLOR**
	000-003	White
	004-007	Color 1
	008-011	Color 2
	012-015	Color 3
	016-019	Color 4
	020-023	Color 5
	024-027	Color 6
	028-031	Color 7
	032-035	Color 8
	036-039	Color 9
	040-043	Color 10
	044-047	Color 11
	048-051	Color 12
	052-055	Color 13
	056-059	Color 14
	060-127	Color wheel indexing
	128-189	Clockwise rotation, fast to slow
	190-193	Stop
	194-255	Counter-Clockwise rotation, slow to fast
5		**STATIC GOBO**
	000-007	Open
	008-010	Gobo 1
	011-013	Gobo 2
	014-016	Gobo 3
	017-019	Gobo 4
	020-022	Gobo 5
	023-025	Gobo 6
	026-028	Gobo 7
	029-031	Gobo 8
	032-034	Gobo 9
	035-037	Gobo 10
	038-040	Gobo 11
	041-043	Gobo 12
	044-046	Gobo 13
	047-049	Gobo 14
	050-052	Gobo 15
	053-055	Gobo 16
	056-127	Gobo shaking, slow to fast
	128-189	Clockwise rotation, fast to slow
	190-193	Stop
	194-255	Counter-Clockwise rotation, slow to fast
6		**PRISM 1**
	000-007	Close
	008-255	Open
7		**PRISM 2**

	000-007 008-255	Close Open
8	 000-127 128-189 190-193 194-255	**R-PRISM** 0%→100% Clockwise rotation, fast to slow Stop Counter-Clockwise rotation, slow to fast
9	 000-007 008-015 016-131 132-167 168-203 204-239 240-247 248-255	**STROBE** Close Open Strobe from slow to fast Fast close slow open Fast open slow close Pulsation from slow to fast Random Strobe Open
10	 000-255	**DIMMER** 0%→100%
11	 000-255	**FOCUS** 0%→100%
12	 000-007 008-255	**FROST** Close Open
13	 000-129 130-139 140-149 150-159 160-199 200-209 210-229 230-239 240-255	**SPECIAL FUNCTION** No Function Lamp On Reset XY Reset Effect No Function Reset All No Function Lamp Off No Function

16 Channels (Mode 2):

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		**PAN/TILT SPEED**
	000-255	Fast to slow
6		**COLOR**
	000-003	White
	004-007	Color 1
	008-011	Color 2
	012-015	Color 3
	016-019	Color 4
	020-023	Color 5
	024-027	Color 6
	028-031	Color 7
	032-035	Color 8
	036-039	Color 9
	040-043	Color 10
	044-047	Color 11
	048-051	Color 12
	052-055	Color 13
	056-059	Color 14
	060-127	Color wheel indexing
	128-189	Clockwise rotation, fast to slow
	190-193	Stop
	194-255	Counter-Clockwise rotation, slow to fast
7		**STATIC GOBO**
	000-007	Open
	008-010	Gobo 1
	011-013	Gobo 2
	014-016	Gobo 3
	017-019	Gobo 4
	020-022	Gobo 5
	023-025	Gobo 6
	026-028	Gobo 7
	029-031	Gobo 8
	032-034	Gobo 9
	035-037	Gobo 10
	038-040	Gobo 11
	041-043	Gobo 12
	044-046	Gobo 13
	047-049	Gobo 14
	050-052	Gobo 15
	053-055	Gobo 16
	056-127	Gobo shaking, slow to fast
	128-189	Clockwise rotation, fast to slow
	190-193	Stop
	194-255	Counter-Clockwise rotation, slow to fast

8		**PRISM 1**
	000-007	Close
	008-255	Open
9		**PRISM 2**
	000-007	Close
	008-255	Open
10		**R-PRISM**
	000-127	0%→100%
	128-189	Clockwise rotation, fast to slow
	190-193	Stop
	194-255	Counter-Clockwise rotation, slow to fast
11		**STROBE**
	000-007	Close
	008-015	Open
	016-131	Strobe from slow to fast
	132-167	Fast close slow open
	168-203	Fast open slow close
	204-239	Pulsation from slow to fast
	240-247	Random Strobe
	248-255	Open
12		**DIMMER**
	000-255	0%→100%
13		**FOCUS**
	000-255	0%→100%
14	000-255	**FOCUS FINE**
15		**FROST**
	000-007	Close
	008-255	Open
16		**SPECIAL FUNCTION**
	000-129	No Function
	130-139	Lamp On
	140-149	Reset XY
	150-159	Reset Effect
	160-199	No Function
	200-209	Reset All
	210-229	No Function
	230-239	Lamp Off
	240-255	No Function

7. Error Information

1. CPU-B/C/D Error

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

Check whether the 485 (DATA) lead is disconnected.

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

2. Pan Reset Error

Check if the position of the pan mounting magnetic steel falls off or is damaged.

Check if there are other interference items in the pan operating range.

Check if the pan Hall elements is damaged.

Check if the pan Hall elements is in poor contact with the lead of the PCB board or disconnected.

Check if the pan motor is damaged.

Check if there is any damage to the circuit of the pan motor drive board.

3. Pan Encode Error

Check if the pan encoder is damaged.

Check if the pan encoder is in poor contact with the lead of the PCB board or disconnected.

4. Tilt Reset Error

Check if the position of the tilt mounting magnetic steel falls off or is damaged.

Check if there are other interference items in the tilt operating range.

Check if the tilt Hall elements is damaged.

Check if the tilt Hall elements is in poor contact with the lead of the PCB board or disconnected.

Check if the tilt motor is damaged.

Check if there is any damage to the circuit of the tilt motor drive board.

5. Tilt Encode Error

Check if the tilt encoder is damaged.

Check if the tilt encoder is in poor contact with the lead of the PCB board or disconnected.

6. Shutter Reset Fail

Check if the position of the shutter mounting magnetic steel falls off or is damaged.

Check if there are other interference items in the shutter operating range.

Check if the shutter Hall elements is damaged.

Check if the shutter Hall elements is in poor contact with the lead of the PCB board or disconnected.

Check if the shutter motor is damaged.

Check if there is any damage to the circuit of the shutter motor drive board.

7. Color Reset Fail

Check if the position of the color wheel mounting magnetic steel falls off or is damaged.

Check if there are other interference items in the color wheel operating range.

Check if the color wheel Hall elements is damaged.

Check if the color wheel Hall elements is in poor contact with the lead of the PCB board or disconnected.

Check if the color wheel motor is damaged.

Check if there is any damage to the circuit of the color wheel motor drive board.

8. Gobo Reset Fail

Check if the position of the gobo wheel mounting magnetic steel falls off or is damaged.

Check if there are other interference items in the gobo wheel operating range.

Check if the gobo wheel Hall elements is damaged.

Check if the gobo wheel Hall elements is in poor contact with the lead of the PCB board or disconnected.

Check if the gobo wheel motor is damaged.

Check if there is any damage to the circuit of the gobo wheel motor drive board.

9. Prism1/2 Reset Fail

Check if the position of the prism1/2 mounting magnetic steel falls off or is damaged.

Check if there are other interference items in the prism1/2 operating range.

Check if the prism1/2 Hall elements is damaged.

Check if the prism1/2 Hall elements is in poor contact with the lead of the PCB board or disconnected.

Check if the prism1/2 motor is damaged.

Check if there is any damage to the circuit of the prism1/2 motor drive board.

10. Focus Reset Fail

Check if the position of the focus mounting magnetic steel falls off or is damaged.

Check if there are other interference items in the focus operating range.

Check if the focus Hall elements is damaged.

Check if the focus Hall elements is in poor contact with the lead of the PCB board or disconnected.

Check if the focus motor is damaged.

Check if there is any damage to the circuit of the focus motor drive board.

11. Lamp Hot Power Off

Check if the temperature switch of the lamp is off.

Check if the fans are still running properly.

12. LampFan1/2/3 can't start

Check if the fan is not running.

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

Check if the fan is damaged.

Check if there are other interference items in the fan operating range.

12. LampFan1/2/3 can't stop

Check if the fan circuit on the motherboard breaks down.

Check if the component is damaged.

13. BaseFan1/2 can't start

Check if the fan is not running.

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

Check if the fan is damaged.

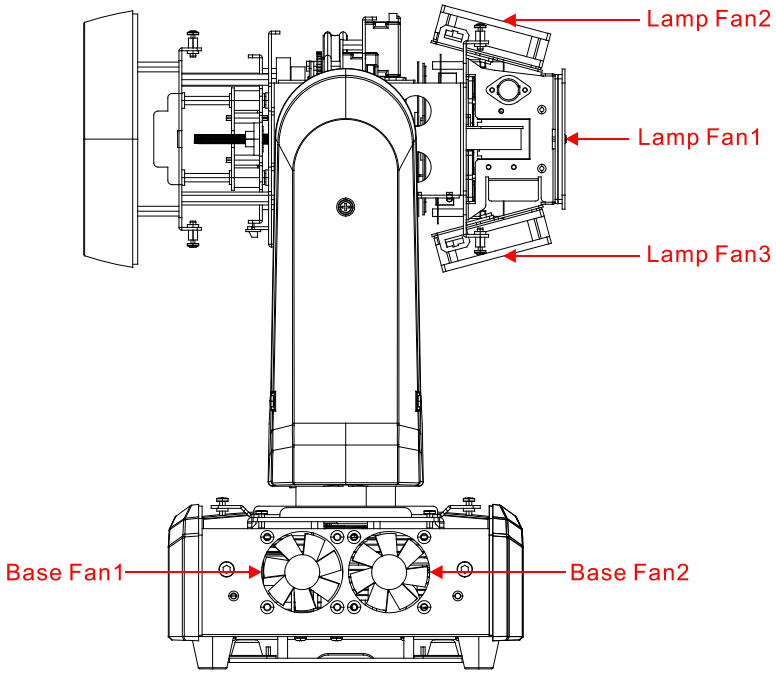
Check if there are other interference items in the fan operating range.

14. BaseFan1/2 can't stop

Check if the fan circuit on the motherboard breaks down.

Check if the component is damaged.

The position of each fan of the fixture:



8. Troubleshooting

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

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

1. Check the connect power and main fuse.
2. Measure the mains voltage on the main connector.
3. Check the power on LED to see if it can be light up or not.

B. Not responding to DMX controller

1. Check DMX connectors, cables to see if they are linked properly.
2. Check the address settings and DMX polarity.
3. If you have intermittent DMX signal problems, check the pins on connectors or on PCB of the unit or the previous one.
4. Try to use another DMX controller.
5. Check to see if the DMX cables run near or run alongside to high voltage cables that may cause damage or interference to DMX interface circuit.

C. One of the channels is not working well

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

D. The lamp is cutting out intermittently

1. The lamp is not working well. Check the mains voltage either too high or too low.
2. Internal temperature may be too high. Check if replacement of fan is needed on the head.

9. Fixture Cleaning

The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the unit's optics.

- Clean with soft cloth and use normal glass to clean liquid.
- Always dry the parts carefully.
- Clean the external optics at least every 20 days. Clean the internal optics at least every 30 days.

Declaration of Conformity

We declare that our products (lighting equipments) comply with the following specification and bears CE mark in accordance with the provision of the Electromagnetic Compatibility (EMC) Directive 2014/30/EU.

EN 55032: 2015; EN 61000-3-2: 2019;
EN 61000-3-3: 2013; EN 55035: 2017

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Harmonized Standard

EN 60598-1:2015+A1: 2018; EN 60598-2-17: 2018;
EN 62493: 2015
Safety of household and similar electrical appliances
Part 1: General requirements

Innovation, Quality, Performance