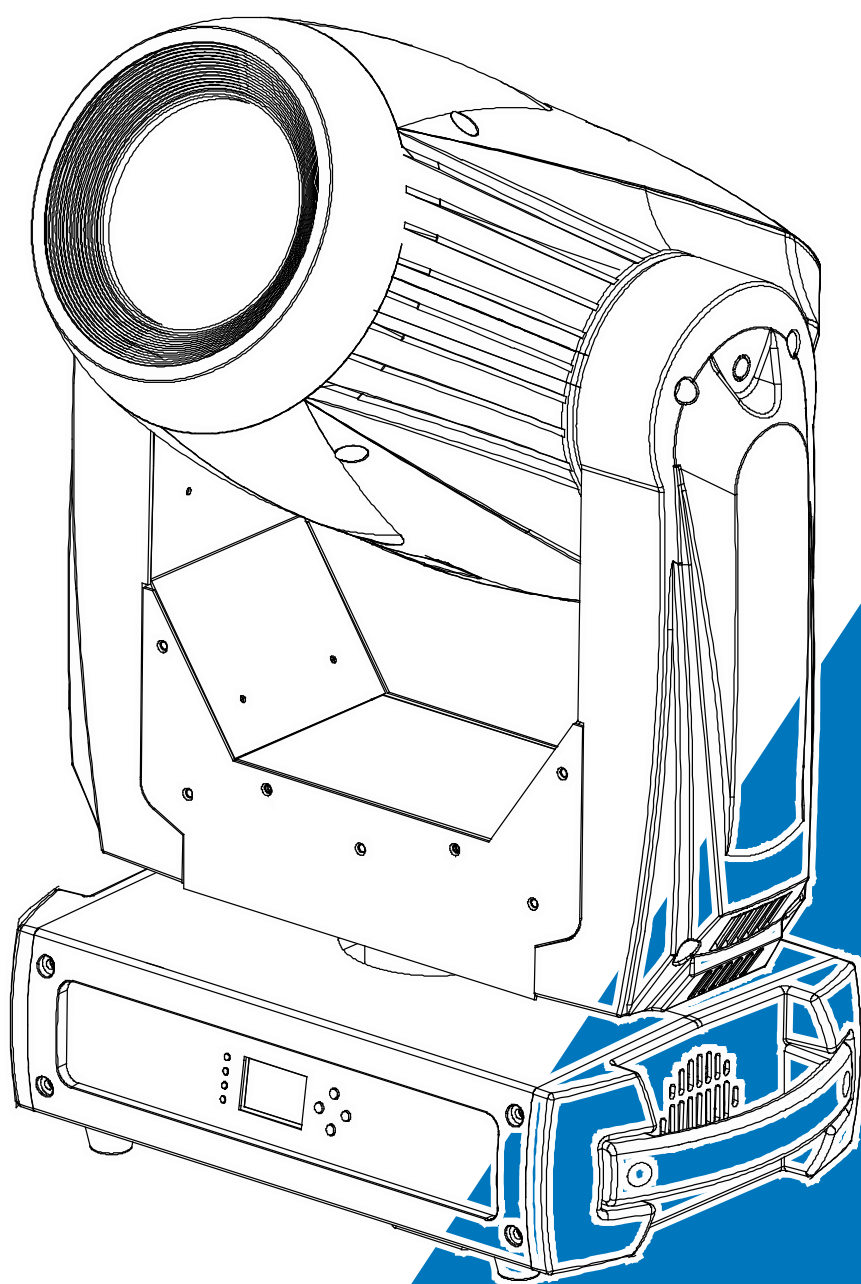




ENERGY SPOT

XA-400 SPOT



User Manual

Please read the instruction carefully before use

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1. Safety Instructions



WARNING

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

- Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.
- Unpack and check carefully there is no transportation damage before using the unit.
- 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.
- The unit is for indoor use only. Use only in a dry location.
- 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.
- Disconnect main power before replacement or servicing.
- Make sure there are no flammable materials close to the unit while operating as it is fire hazard.
- Use safety cable when fixes this unit. DO NOT handle the unit by taking its head only, but always by taking its base.
- Maximum ambient temperature is $T_a: 40^{\circ}\text{C}$. DO NOT operate it where the temperature is higher than this.
- Unit surface temperature may reach up to 75°C . DO NOT touch the housing bare-hand during its operation. Turn off the power and allow about 15 minutes for the unit to cool down before replacing or serving.
- In the event of serious operating problem, stop using the unit immediately. 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. Always use the same type spare parts.
- DO NOT touch any wire during operation as high voltage might be causing electric shock.

Warning:

- To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture.
- DO NOT open the unit within five minutes after switching off.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.

Caution:

There are no user serviceable parts inside the unit. DO NOT open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact your nearest dealer.

Installation:

The unit should be mounted via its screw holes on the 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 unit's weight. Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.

The equipment must be fixed by professionals. And it must be fixed at a place where is out of the touch of people and has no one pass by or under it.

2. Technical Specifications

Power Voltage:

AC 100~240V, 50/60Hz

Power Consumption:

400W

Light Source:

300W LED

Color Temperature:

8000K

Zoom Angle:

7°~31°

Movement:

Pan: 540°

Tilt: 260°

Pan/Tilt Resolution: 16 bit

Color Wheel:

2 color wheels, both of them have 7 colors plus open

Gobo Wheel:

1 static gobo wheel with 10 gobos plus open

1 rotating gobo wheel with 7 gobos plus open, easy to replace

Prism:

8 facet prism, rotating in both directions

Construction:

Display: LCD display

Data In/Out: 5-pin XLR

Power In/Out: Wire; PowerCon in

Protection Rating: IP20

Control:

DMX Channel: 19/22 channels

Control Mode: DMX512, RDM

Firmware Upgrade: Update via DMX link

Features:

Motorized linear zoom system with wash effect

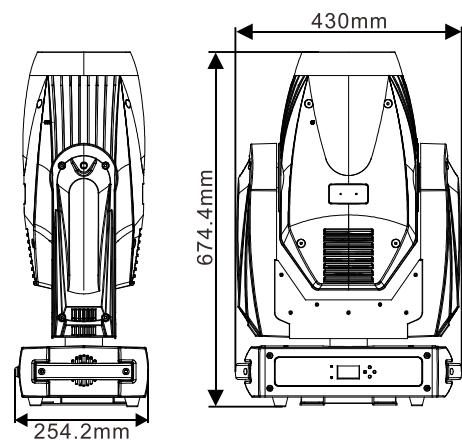
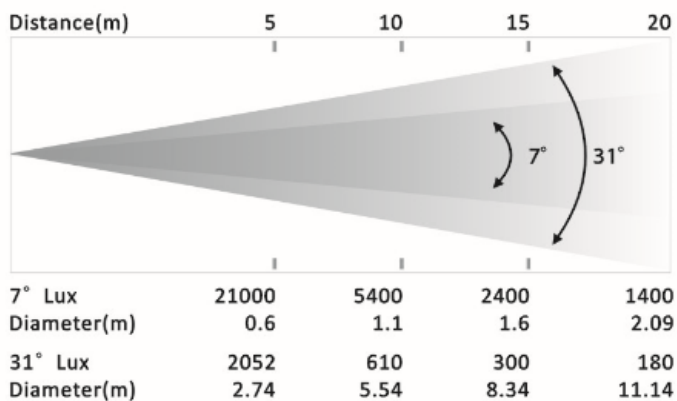
1 linear iris

Various strobe speeds

Dimensions/Weight:

430x254x674mm, 22.7kgs

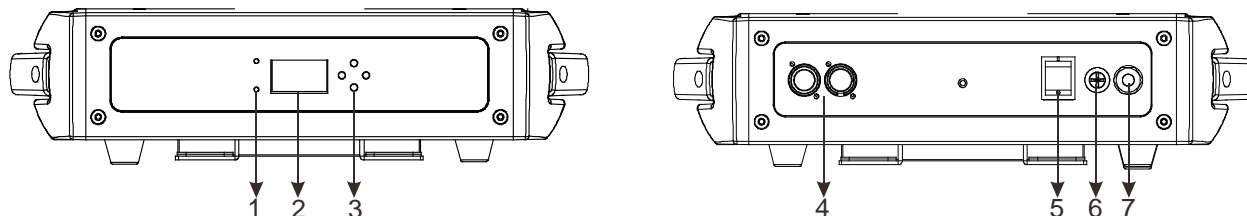
16.9"x10"x26.5" in, 50lbs

Photometric Diagram:

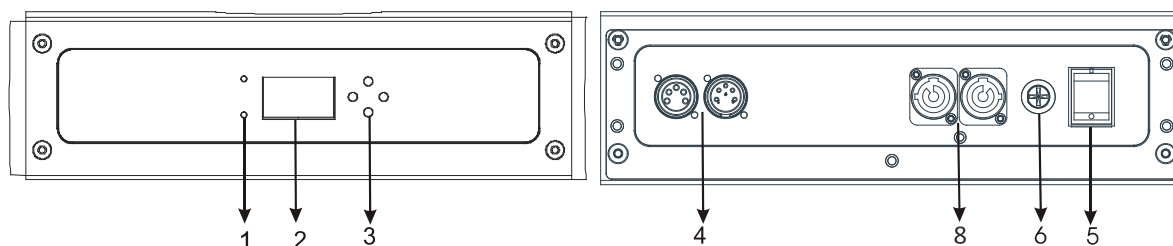
3. How To Set The Unit

3.1 Control panel

Wire Version:



POWERCON Version:



1. LED:

POWER	On	Power On
DMX	On	DMX input present

2. **Display:** Used to show the various menus and the selected function

3. Button:

MENU	To select the programming functions
▲ DOWN	To go forward in the selected functions
▼ UP	To go backward in the selected functions
ENTER	To confirm the selected functions

4. **DMX IN/OUT:** DMX 512 link, use XLR cable to link the unit and DMX controller to input/output the DMX signal

5. **POWER WITCH:** Turn on/off the power

6. **FUSE (T 6.3A):** Protect the unit from damage of the overcurrent

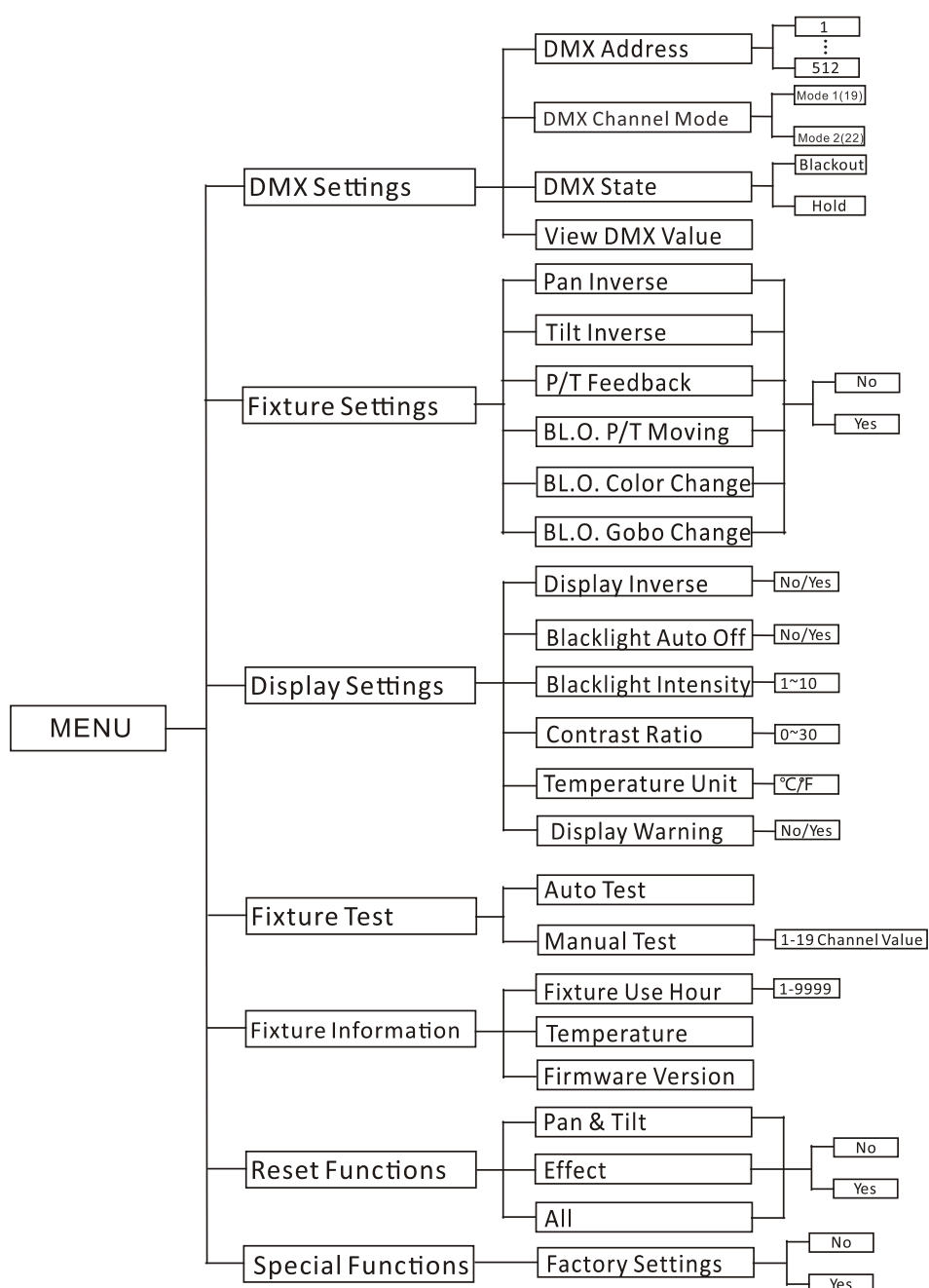
7. **POWER(Wire Version):** To connect to supply power

8. **POWER IN/POWER OUT(POWERCON Version):** To connect to supply power/ To connect to the next fixture

3.2 Main Function

To select any of the given functions, press the **MENU** button up to when the required one is showing on the display. Select the function by the **ENTER** button and the display will blink. Use the **DOWN** and **UP** button to change the mode. Once the required mode has been selected, press the **ENTER** button to setup, to go back to the functions without any change press the **MENU** button again. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

The main functions are showing below:



DMX Settings

To select ***DMX Settings***, press the **ENTER** button to confirm, use the **UP/DOWN** button to select ***DMX Address, DMX Channel Mode, DMX State*** or ***View DMX Value***.

DMX Address —DMX512 address setting

To select **DMX Address**, press the **ENTER** button to confirm. 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 one minute 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 **Mode 1(19)** or **Mode 2(22)**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode

DMX State — fixture state while DMX single stops

To select **DMX State**, 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 one minute 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 one minute to exit menu mode.

Fixture Settings

To select ***Fixture Settings***, press the **ENTER** button to confirm, use the **UP/DOWN** button to select ***Pan Inverse, Tile Inverse, P/T Feedback, B.L.O. P/T Moving, B.L.O. Color Change, B.L.O. Gobo Change***.

Pan Inverse

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

Tilt Inverse

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

BL.O. P/T Moving — Blackout while pan/tilt moving

To select **BL.O. P/T Moving**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **No** (normal while pan/tilt moving) or **Yes** (blackout while pan/tilt moving), press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode.

BL.O. Color Change — Blackout while change color

To select **BL.O. Color Change**, press the **ENTER** button to confirm. Use **UP/DOWN** button to select **No** (normal while changing color) or **Yes** (blackout while change color), press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode.

BL.O. Gobo Change — Blackout while change gobo

To select **BL.O. Gobo Change**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **No** (normal while changing gobo) or **Yes** (blackout while changing gobo), press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode.

Display Settings

Enter menu mode, select ***Display Settings***, press the **ENTER** button to confirm, use the **UP/DOWN** button to select ***Display Inverse, Backlight Auto Off, Backlight Intensity, Contrast Ratio, Temperature Unit*** or ***Display Warning***.

Display Inverse

Select **Display Inverse**, press the **ENTER** button to confirm, present mode will blink on the display, use the **UP/DOWN** button to select **No** (normal display) or **Yes** (inverse display), press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode.

Backlight Auto Off

Select **Backlight Auto Off**, press the **ENTER** button to confirm, present mode will blink on the display, use the **UP/DOWN** button to select **No** or **Yes**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode.

Backlight Intensity

Select **Backlight Intensity**, press the **ENTER** button to confirm, present mode will blink on the display, use the **UP/DOWN** button to adjust backlight intensity from **1** (dark) to **10** (bright), press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode.

Contrast Ratio

Select **Contrast Ratio**, press the **ENTER** button to confirm, present mode will blink on the display, use the **UP/DOWN** button to adjust value from **0** to **30**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode.

Temperature Unit

Select **Temperature Unit**, press the **ENTER** button to confirm, present mode will blink on the display, use the **UP/DOWN** button to select **°C** or **°F**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode.

Display Warning

To select **Display Warning**, press the **ENTER** button to show the **DISPLAY WARNING** on the display. Use the **UP/DOWN** button to select **No** (Normal) or **Yes** (display will show the error warning when the unit went wrong), press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode.

Fixture Test

Enter menu mode, select ***Fixture Test***, press the **ENTER** button to confirm, use the **UP/DOWN** button to select ***Auto Test*** or ***Manual Test***

Auto Test

Select **Auto Test**, press the **ENTER** button to confirm, the unit will run built-in programs to automatically test pan, tilt, shutter, color, CMY, gobo, gobo rotation, prism, prism rotation, iris, frost, zoom, focus, dimmer and lamp on/off. Press the **MENU** button back to the last menu or exit menu mode after auto test.

Manual Test

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** and **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 one minute.

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

Fixture Information

Enter menu mode, select ***Fixture Information***, press the **ENTER** button to confirm, use the **UP/DOWN** button to select ***Fixture Use Hour***, ***Temperature*** or ***Firmware Version***.

Fixture Use Hour

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

Temperature

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

Firmware Version

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

Reset Functions

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

Pan & Tilt —Reset Pan/Tilt

Select **Pan & Tilt**, 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 back to the last menu or let the unit idle one minute to exit menu mode.

Effect —Reset Effect

Select **Effect**, 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 back to the last menu or let the unit idle one minute to exit menu mode

All — Reset All

Select **All**, 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.

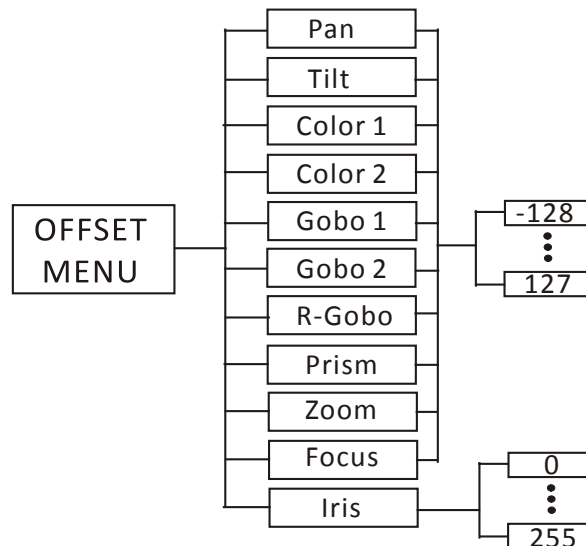
Special Functions

Factory Settings

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.

3.3 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—pan home position adjustment

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—Tilt home position adjustment

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.

Color 1—Color 1 home position adjustment

Enter offset mode, Select **Color 1**, 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.

Color 2—Color 2 home position adjustment

Enter offset mode, Select **Color 2**, 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 1—Gobo 1 home position adjustment

Enter offset mode, Select **Gobo 1**, 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 2—Gobo 2 home position adjustment

Enter offset mode, Select **Gobo 2**, 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.

R-Gobo—R-Gobo home position adjustment

Enter offset mode, Select **R-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—Prism home position adjustment

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.

Zoom—Zoom home position adjustment

Enter offset mode, Select **Zoom**, 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.

Focus—Focus home position adjustment

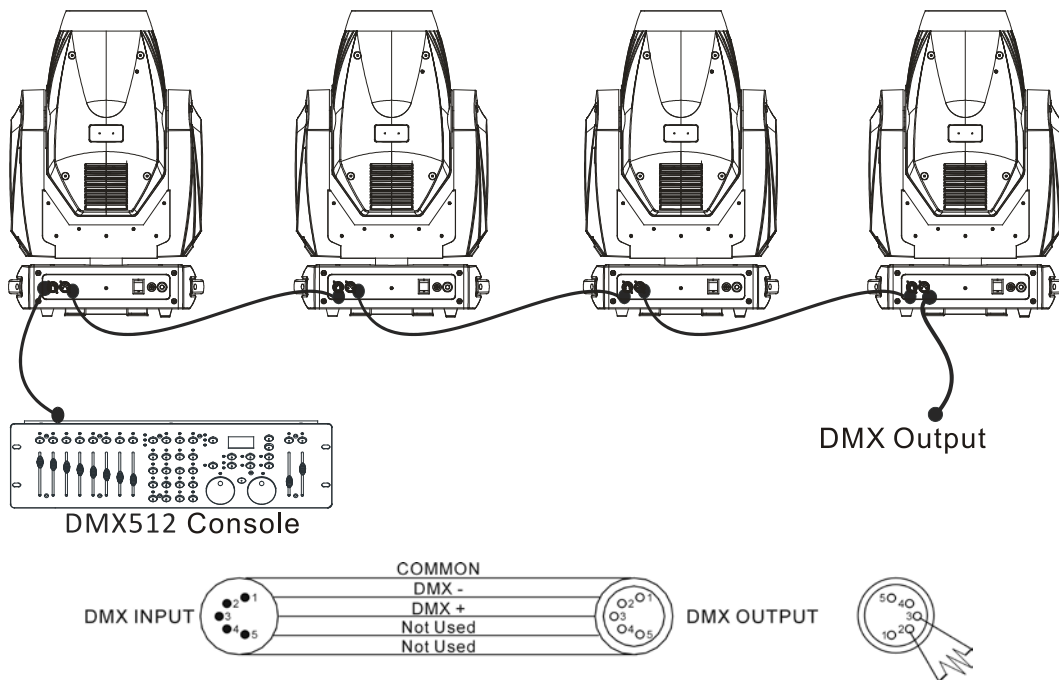
Enter offset mode, Select **Focus**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP/DOWN** button to offset the value from -128 to 127, press the **ENTER** button to store. Press the **MENU** button to exit.

Iris—Iris home position adjustment

Enter offset mode, Select **Iris**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP/DOWN** button to offset the value from 0 to 255, press the **ENTER** button to store. Press the **MENU** button to exit.

4. Control By Universal DMX Controller

4.1 DMX Connection



1. Connect the fixture together in a “daisy chain” by XLR plug cable from the output of the fixture to the input of the next fixture. The cable cannot be branched or split to a “Y” cable. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system
2. The DMX output and input connectors are pass-through to maintain the DMX circuit when one of the units’ power is disconnected.
3. At last fixture, the DMX cable has to be terminated with a terminator to reduce signal errors. 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 fixture.
4. Each lighting fixture needs to have an address set to receive the data sent by the controller. The address number is between 0-511 (usually 0 & 1 are equal to 1).
5. 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 (+)

4.2 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 the **DMX Functions**, press the **ENTER** button to confirm, use the **UP** and **DOWN** button to select the **DMX Address**, press the **ENTER** button to confirm, the present address will blink on the display, use the **UP** and **DOWN** button to adjust the address from 0 to 512, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 7 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
19 Channels	1	20	39	58
22 Channels	1	23	45	67

4.3 DMX 512 Configuration

19 Channels Mode (Mode 1):

Channel	Value	Function
1	000-255	Pan Pan movement 0°-540°
2	000-255	Tilt Tilt movement 0°-270°
3	000-255	Pan/Tilt speed Fast to slow
4	000-007 008-015 016-023 024-031 032-039 040-047 048-055 056-063 064-071 072-079 080-087	Pan/Tilt Macro No Function Macro 1 Macro 2 Macro 3 Macro 4 Macro 5 Macro 6 Macro 7 Macro 8 Macro 9 Macro 10

	088-095 096-103 104-111 112-119 120-127 128-135 136-143 144-151 152-159 160-167 168-175 176-183 184-191 192-199 200-207 208-215 216-223 224-231 232-239 240-247 248-255	Macro 11 Macro 12 Macro 13 Macro 14 Macro 15 Macro 16 Macro 17 Macro 18 Macro 19 Macro 20 Macro 21 Macro 22 Macro 23 Macro 24 Macro 25 Macro 26 Macro 27 Macro 28 Macro 29 Macro 30 Macro 31
5	000-255	Pan/Tilt Marco speed Fast to slow
6	000-007 008-015 016-023 024-031 032-039 040-047 048-055 056-064 065-127 128-189 190-193 194-255	Color 1 Open Color 1 Color 2 Color 3 Color 4 Color 5 Color 6 Color 7 Index Clockwise rotation from fast to slow Stop Clockwise rotation from slow to fast
7	000-007 008-015 016-023 024-031 032-039 040-047 048-055	Color 2 Open Color 1 Color 2 Color 3 Color 4 Color 5 Color 6

	056-064 065-127 128-189 190-193 194-255	Color 7 Index Clockwise rotation from fast to slow Stop Clockwise rotation from slow to fast
8	000-005 006-0011 012-017 018-023 024-029 030-035 036-041 042-047 048-053 054-059 060-065 066-076 077-126 127 128-189 190-193 194-255	Gobo Open Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 8 Gobo 9 Gobo 10 Open Gobo shaking Open Clockwise rotation from fast to slow Stop Clockwise rotation from slow to fast
9	000-010 011-021 022-032 033-043 044-054 055-065 066-076 077-088 089-127 128-189 190-193 194-255	Gobo 2 Open Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo shaking Clockwise rotation from fast to slow Stop Clockwise rotation from slow to fast
10	000-127 128-189 190-193 194-255	R-gobo2 Index Clockwise rotation from fast to slow Stop Clockwise rotation from slow to fast
11	000-255	Frost 0-100%
12		Iris

	000-255	0-100%
13	000-007 008-255	Prism No effect Prism effect
14	000-127 128-189 190-193 194-255	R-prism Index Clockwise rotation from fast to slow Stop Clockwise rotation from slow to fast
15	000-255	Zoom 0-100%
16	000-255	Focus 0-100%
17	000-007 008-015 016-131 132-139 140-181 182-189 190-231 232-239 240-247 248-255	Shutter Off On Strobe, from slow to fast Open Slow open fast close Open Slow close fast open Open Random strobe Open
18	000-255	Dimmer 0-100%
19	000-069 070-079 080-089 090-099 100-109 110-119 120-129 130-139 140-149 150-189 190-199 200-209 210-219 220-229 230-255	Function No Function Enable blackout while Pan/Tilt moving Disable blackout while Pan/Tilt moving Enable blackout while color changing Disable blackout while color changing Enable blackout while gobo changing Disable blackout while gobo changing No function Pan/Tilt reset Effect reset No function All reset Enable blackout while Pan/Tilt Color gobo moving Disable blackout while Pan/Tilt Color gobo moving No function

22 Channels Mode (Mode 2):

Channel	Value	Function
1	000-255	Pan Pan movement 0°-540°
2	000-255	Pan Fine
3	000-255	Tilt Tilt movement 0°-270°
4	000-255	Tilt Fine
5	000-255	Pan/Tilt speed Fast to slow
6		Pan/Tilt Macro
	000-007	No Function
	008-015	Macro 1
	016-023	Macro 2
	024-031	Macro 3
	032-039	Macro 4
	040-047	Macro 5
	048-055	Macro 6
	056-063	Macro 7
	064-071	Macro 8
	072-079	Macro 9
	080-087	Macro 10
	088-095	Macro 11
	096-103	Macro 12
	104-111	Macro 13
	112-119	Macro 14
	120-127	Macro 15
	128-135	Macro 16
	136-143	Macro 17
	144-151	Macro 18
	152-159	Macro 19
	160-167	Macro 20
	168-175	Macro 21
	176-183	Macro 22
	184-191	Macro 23
	192-199	Macro 24
	200-207	Macro 25
	208-215	Macro 26
	216-223	Macro 27
	224-231	Macro 28
	232-239	Macro 29
	240-247	Macro 30
	248-255	Macro 31

7	000-255	Pan/Tilt Marco speed Fast to slow
8	000-007 008-015 016-023 024-031 032-039 040-047 048-055 056-064 065-127 128-189 190-193 194-255	Color 1 Open Color 1 Color 2 Color 3 Color 4 Color 5 Color 6 Color 7 Index Clockwise rotation from fast to slow Stop Clockwise rotation from slow to fast
9	000-007 008-015 016-023 024-031 032-039 040-047 048-055 056-064 065-127 128-189 190-193 194-255	Color 2 Open Color 1 Color 2 Color 3 Color 4 Color 5 Color 6 Color 7 Index Clockwise rotation from fast to slow Stop Clockwise rotation from slow to fast
10	000-005 006-0011 012-017 018-023 024-029 030-035 036-041 042-047 048-053 054-059 060-065 066-076 077-126 127 128-189	Gobo Open Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 8 Gobo 9 Gobo 10 Open Gobo shaking Open Clockwise rotation from fast to slow

	190-193 194-255	Stop Clockwise rotation from slow to fast
11	000-010 011-021 022-032 033-043 044-054 055-065 066-076 077-088 089-127 128-189 190-193 194-255	Gobo 2 Open Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo shaking Clockwise rotation from fast to slow Stop Clockwise rotation from slow to fast
12	000-127 128-189 190-193 194-255	R-gobo2 Index Clockwise rotation from fast to slow Stop Clockwise rotation from slow to fast
13	000-255	Frost 0-100%
14	000-255	Iris 0-100%
15	000-007 008-255	Prism No effect Prism effect
16	000-127 128-189 190-193 194-255	R-prism Index Clockwise rotation from fast to slow Stop Clockwise rotation from slow to fast
17	000-255	Zoom 0-100%
18	000-255	Focus 0-100%
19	000-007 008-015 016-131 132-139 140-181 182-189 190-231	Shutter Off On Strobe, from slow to fast Open Slow open fast close Open Slow close fast open

	232-239 240-247 248-255	Open Random strobe Open
20	000-255	Dimmer 0-100%
21	000-255	Dimmer Fine
22	000-069 070-079 080-089 090-099 100-109 110-119 120-129 130-139 140-149 150-189 190-199 200-209 210-219 220-229 230-255	Function No Function Enable blackout while Pan/Tilt moving Disable blackout while Pan/Tilt moving Enable blackout while color changing Disable blackout while color changing Enable blackout while gobo changing Disable blackout while gobo changing No function Pan/Tilt reset Effect reset No function All reset Enable blackout while Pan/Tilt Color gobo moving Disable blackout while Pan/Tilt Color gobo moving No function

5. 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 connection of power and main fuse.
2. Measure the mains voltage on the main connector.
3. Check the power on LED.

B. Not responding to DMX controller

1. DMX LED should be on. If not, check DMX connectors, cables to see if link properly.
2. If the DMX LED is on and no response to the channel, 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 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.

6. 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 using normal glass cleaning fluid.
- Always dry the parts carefully.
- Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 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 89/336/EEC.

EN55103-1: 2009+A1:2012; EN55103-2: 2009;
EN61000-3-2: 2014; EN61000-3-3: 2013.

&

Harmonized Standard

EN 60598-1:2015; EN 60598-2-17:1989 + A2:1991;
EN 62471:2008; EN 62493: 2010
Safety of household and similar electrical appliances
Part 1: General requirements

Innovation, Quality, Performance