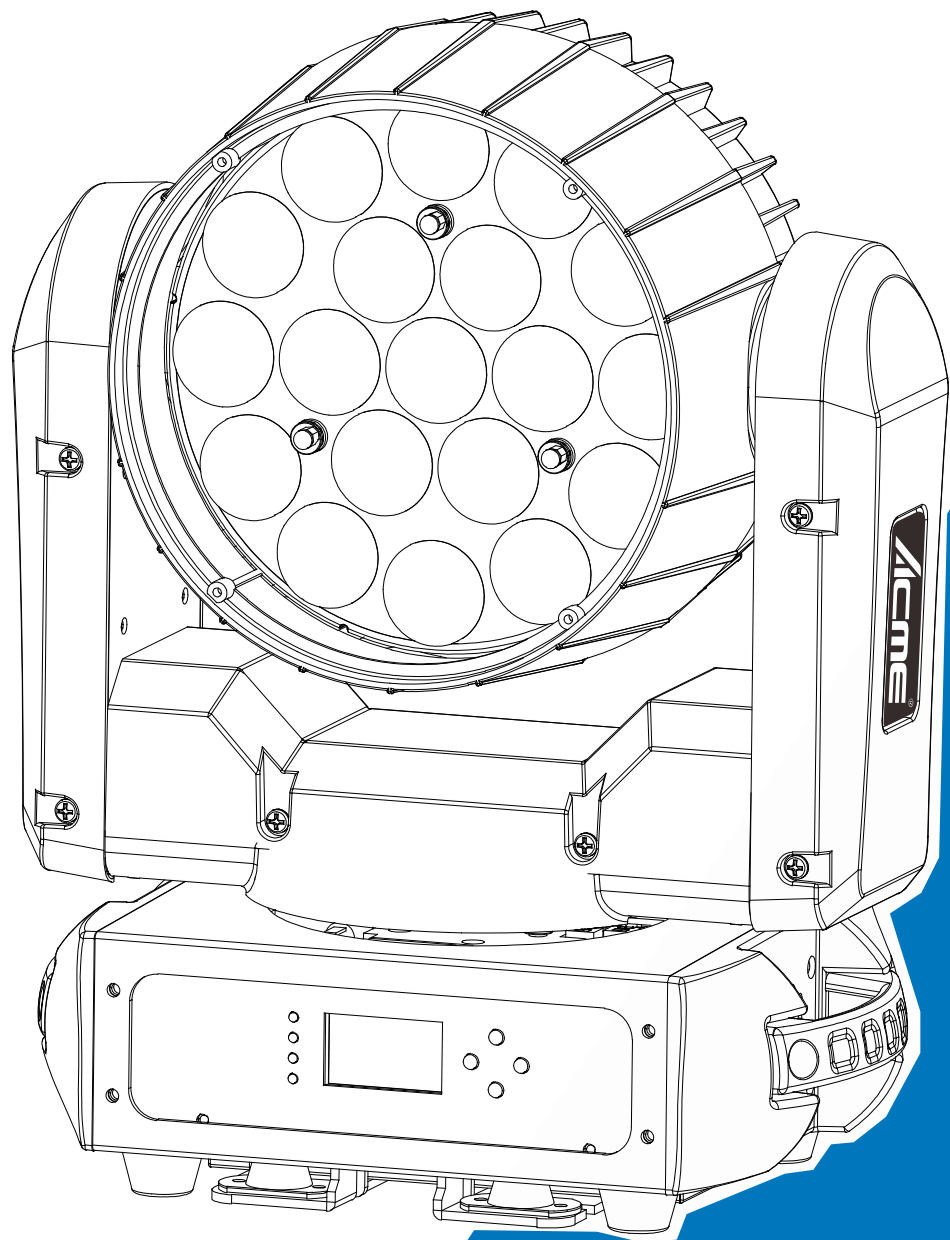


# Acme®

## **ICARUS 320**



## User Manual

Please read the instruction carefully before use

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## 1. Safety Instructions



### WARNING

Please read the instruction carefully 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 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.
- 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 52°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 0.5 meters.
- Disconnect mains power before fuse replacement or servicing.
- Replace fuse 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.
- Avoid direct eye exposure to the light source while the product is on.
- 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:**

The fixture should be fixed on the clamp. 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 install a safety cable that can hold at least 12 times the weight of the fixture when installing.

DO install and operate by qualified operator. It must be installed in a place where there is out of the reach of people.

## 2. Technical Specifications

### **Power Voltage:**

100-240V~ 50/60Hz

### **Power Consumption:**

255W

### **Light Source:**

19x20W RGBW LED

### **Zoom Range:**

10°~60°

### **Movement:**

Pan: 540°

Tilt: 270°

Pan/Tilt Resolution: 16bit

### **Dimmer/Shutter:**

0~100% smooth dimming, various strobe speeds

### **Control:**

DMX Channel: 14/26/30 channels

Control Mode: DMX512

Firmware Upgrade: Update via DMX link

### **Construction:**

Display: LCD display

Data In/Out: 3-pin & 5-pin XLR

Power In/Out: Power Connector in/out

Protection Rating: IP20

### **Features:**

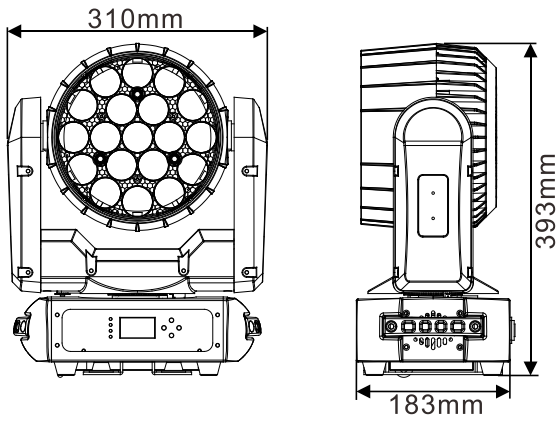
Motorized linear zoom system

Ring control, outstanding color macro effect

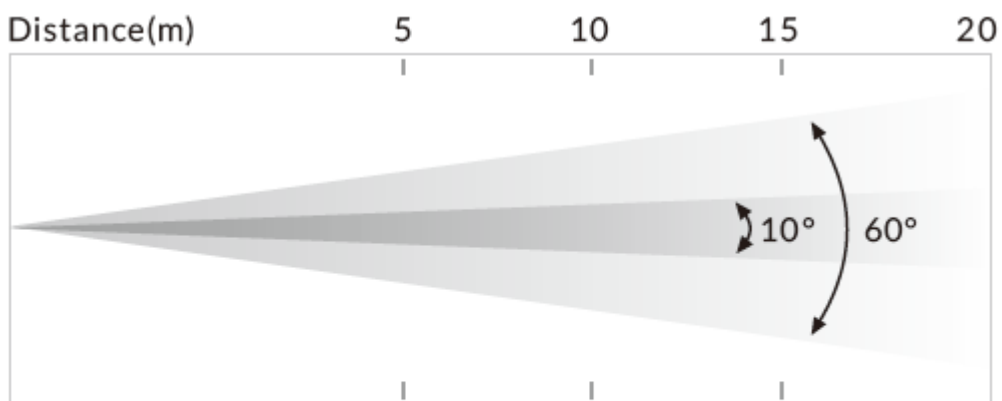
**Dimensions/Weight:**

310x183x393mm, 9kgs

12.2"x7.2"x15.4" in, 19.8lbs



**Photometric Diagram**

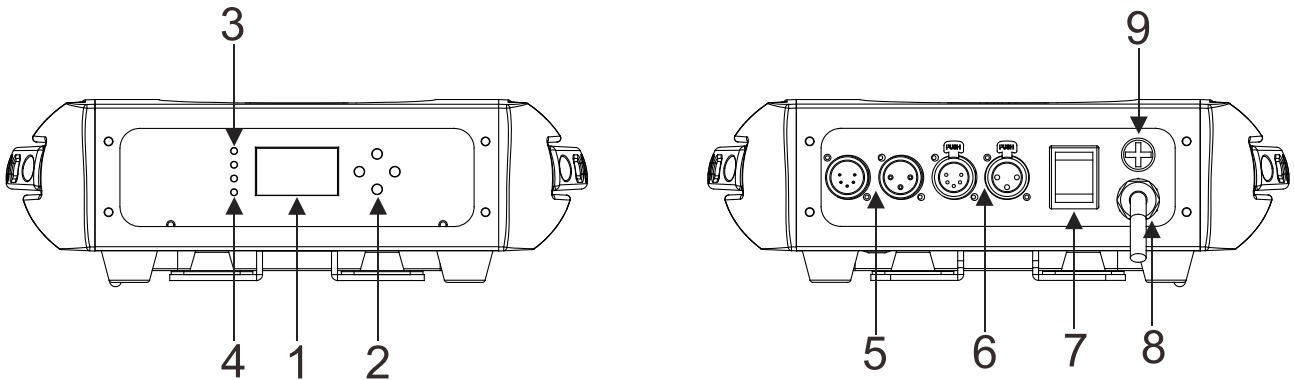


Distance(m)	5	10	15	20
10° Lux	8,850	2,413	1,023	660
Diameter(m)	0.87	1.75	2.63	3.51
60° Lux	710	225	120	79
Diameter(m)	3.2	6.4	9.6	12.8

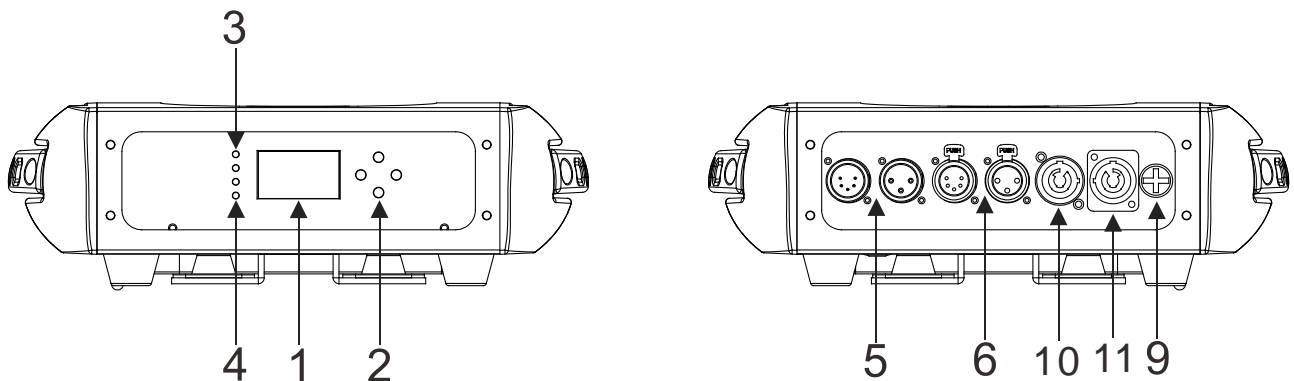
### 3. How To Set The Unit

#### 3.1 Control Panel

Power Cord Version:



POWERCON Version:



**1. Display:** To show the various menus and the selected functions

**2. Button:**

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

**LED:**

<b>3. POWER</b>	ON	Power On
<b>4. DMX</b>	ON	DMX input present

**5. DMX IN:** For DMX512 link, use 3/5-pin XLR cable to link the unit and DMX controller

**6. DMX OUT:** For DMX512 link, use 3/5-pin XLR cable to link the next unit

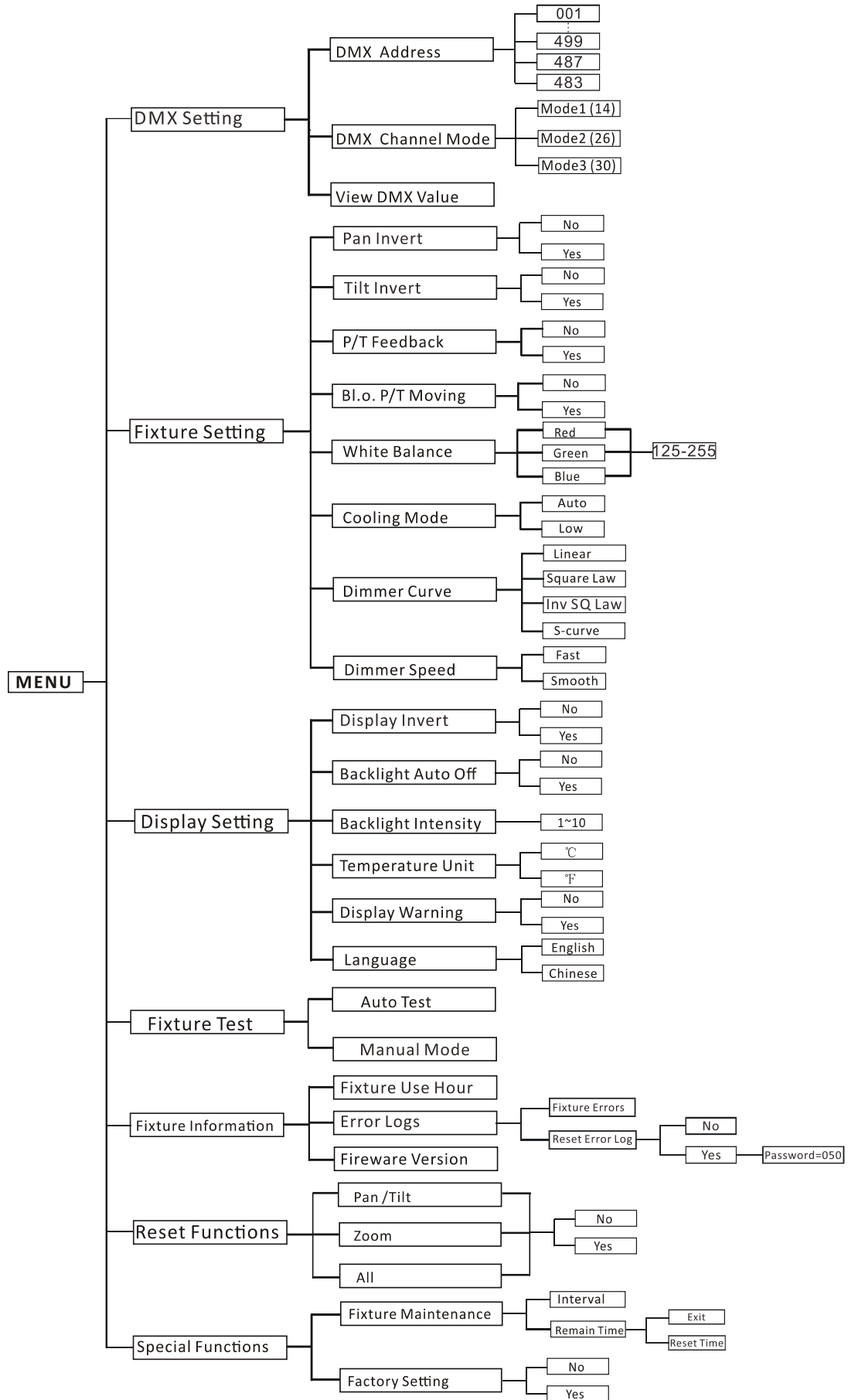
- 7. **POWER SWITCH(Power Cord Version):** Turn on/off the power
- 8. **POWER(Power Cord Version):** Used to connect to supply power
- 9. **FUSE(T 6.3A):** To protect the unit from over-voltage or short circuit
- 10. **MAINS IN(POWERCON Version):** Used to connect to the main power supply
- 11. **MAINS OUT(POWERCON Version):** Used to connect to the next unit

## **3.2 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 pressing 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:





## ***DMX Setting***

To select **DMX Setting**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **DMX Address**, **DMX Channel Mode** 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 **499/487/483**, press the **ENTER** button to setup. 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 (14)**, **Mode2 (26)** or **Mode (30)**, and press the **ENTER** button to setup. 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 values. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

## ***Fixture Setting***

To select **Fixture Setting**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **Pan Invert**, **Tile Invert**, **P/T Feedback**, **BL.O. P/T Moving**, **White Balance**, **Cooling Mode**, **Dimmer Curve** or **Dimmer Speed**.

### **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 setup. 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 setup. 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 setup. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

### BL.O. P/T 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 setup. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

### White Balance

To select **White Balance**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Red**, **Green** or **Blue**. Once selected, press the **ENTER** button to confirm, and use the **UP/DOWN** button to adjust the value from **125** to **255**, press the **ENTER** button to setup. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

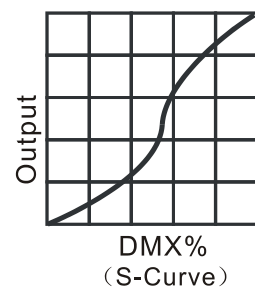
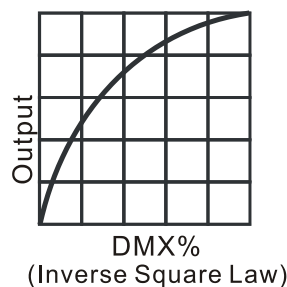
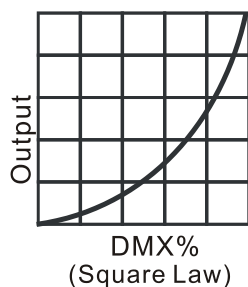
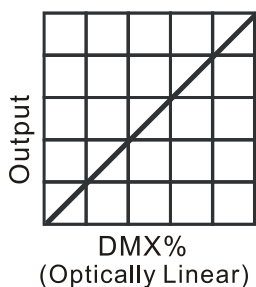
### Cooling Mode

To select **Cooling Mode**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Auto** (Normal) or **Low** (Low speed). Once selected, press the **ENTER** button to setup. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

### Dimmer Curve

To select **Dimmer Curve**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Linear**, **Square Law**, **Inv SQ Law** or **S-Curve**. Once selected, 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.

Dimmer Modes:



**Linear:** The increase in light intensity appears to be linear as DMX value is increased.

**Square Law:** Light intensity control is finer at low levels and coarser at high levels.

**Inverse Square Law:** Light intensity control is coarser at low levels and finer at high levels.

**S-Curve:** Light intensity control is finer at low levels and high levels and coarser at medium levels.

### **Dimmer Speed**

To select **Dimmer Speed**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Fast** or **Smooth**. Once selected, press the **ENTER** button to setup. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

## ***Display Setting***

To select **Display Setting**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **Display Invert**, **Backlight Auto Off**, **Backlight Intensity**, **Temperature unit**, **Display Warning** or **Language**.

### **Display Invert**

To select **Display Invert**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **No** (normal) or **Yes** (display invert). Once selected, 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 Auto Off**

To select **Backlight Auto Off**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **No** (display always on) or **Yes** (display goes off one minute after exiting menu mode). Once selected, press the **ENTER** button to confirm and 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 the intensity from **1** (dark) to **10** (bright). Once selected, press the **ENTER** button to setup and 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 °C or °F, 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 Warning**

To select **Display Warning**, press the **ENTER** button to confirm. 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 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 Mode**.

#### **Auto Test**

To select **Auto Test**, press the **ENTER** button, the unit will run built-in programs to automatically test pan, tilt and zoom. Press the **MENU** button back to the last menu or exit menu mode after auto test.

#### **Manual Mode**

To select **Manual Mode**, press the **ENTER** button, and then use the **UP/DOWN** button to select channel, and adjust the channel value. Once selected, press the **ENTER** button to setup, the fixture will run as the channel value indicates. Press the **MENU** button back to the last menu or exit menu mode let the unit idle 30 seconds.

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

## ***Fixture Information***

To select **Fixture Information**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **Fixture Use Hour**, **Error Logs** or **Firmware Version**.

### **Fixture Use Hour**

To select **Fixture Use Hour**, press the **ENTER** button, the fixture working hours will show on the display. Press the **MENU** button 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.

### **Firmware Version**

To select **Firmware Version**, press the **ENTER** button and the fixture software version will show on the display. Press the **MENU** button to exit.

## ***Reset Functions***

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

### **Pan/Tilt**

To Select **Pan/Tilt**, 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 pan and tilt to their home positions), press the **ENTER** button to store. Press the **MENU** button to exit menu mode.

### **Zoom**

To select **Zoom**, 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 zoom to its home positions), press the **ENTER** button to store. Press the **MENU** button to exit menu mode.

## **All**

To 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 **MENU** button to exit menu mode.

## ***Special Functions***

To select **Special Functions**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **Fixture Maintenance** or **Factory Setting**.

### **Fixture Maintenance**

To select **Fixture Maintenance**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Interval** or **Remain Time**.

#### **Interval**

To select **Interval**, press the **ENTER** button to confirm, the interval time will be shown on the display. Press the **MENU** button to exit.

#### **Remain Time**

To select **Remain Time**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Exit** or **Reset Time**, press **ENTER** button to store. Press **MENU** button to exit menu mode.

### **Factory Setting**

To select **Factory Setting**, press the **ENTER** button to confirm. Press the **ENTER** button to confirm, use the **UP/DOWN** button to select **No** or **Yes** (the fixture will reset to factory settings and exit menu mode).

### 3.3 Home Position Adjustment

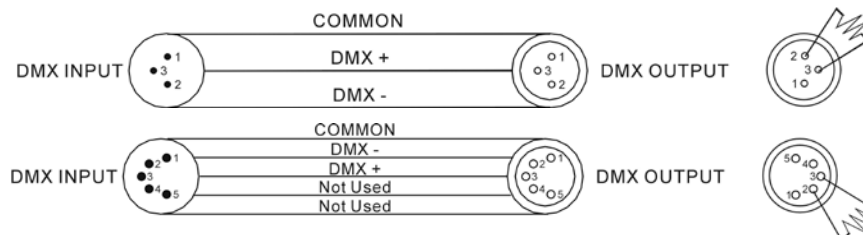
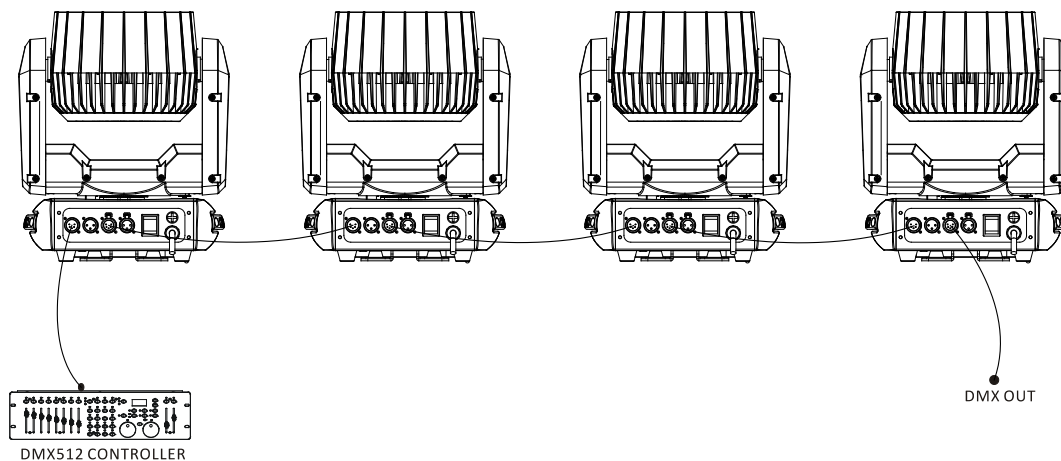
Press the MENU button into menu mode, then press the ENTER button for about 3 seconds into offset mode to adjust the home position. Select the function by pressing the ENTER button. Use the UP/DOWN button to choose the submenu, press the ENTER button to store and automatically return to the last menu.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



Enter offset mode, select **Pan**, **Tilt** or **Zoom**, press the **ENTER** button to confirm, the present position will blink on the display. Use the **DOWN/UP** button to adjust the home position of the Pan, Tilt or Zoom, press the **ENTER** button to store. Press the **MENU** button to exit.

## 4. Control By Universal DMX Controller

### 4.1 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.

## 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 MENU button to enter menu mode, select DMX Setting, 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 in the display, use the UP/DOWN button to adjust the address from 001 to 512, and 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
14 channels	1	15	29	43
26 channels	1	27	53	79
30 channels	1	31	61	91

## 4.3 DMX512 Configuration

Please control the fixture by referring to the configurations below

### 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.

### 14 Channels Mode(Mode 1):

CHANNEL	VALUE	FUNCTION
1	000-255	<b>PAN</b> 0°→540°
2	000-255	<b>PAN FINE</b>
3	000-255	<b>TILT</b> 0°→270°
4	000-255	<b>TILT FINE</b>
5	000-255	<b>PAN/TILT SPEED</b> Fast to Slow
6	000-009 010-014 015-255	<b>SPECIAL FUNCTIONS</b> No function Reset all No function
7	000-255	<b>DIMMER</b> 0%→100%
8	000-019 020-024 025-064 065-069 070-084 085-089 090-104 105-109 110-124 125-129 130-144 145-149 150-164 165-169 170-184 185-189	<b>STROBE</b> No function Open Strobe 1: fast → slow Open Strobe 2: slow open fast close, fast → slow Open Strobe 3: fast open slow close, fast → slow Open Strobe 4: random strobe, fast → slow Open Strobe 5: random slow open fast close, fast → slow Open Strobe 6: random fast open slow close, fast → slow Open Strobe 7: burst pulse, fast → slow Open

	190-204 205-209 210-224 225-229 230-244 245-255	Strobe 8: random burst pulse, fast → slow Open Strobe 9: sine wave, fast → slow Open Strobe 10: burst, fast → slow Open
<b>9</b>	000-255	<b>RED (0%→100%)</b>
<b>10</b>	000-255	<b>GREEN (0%→100%)</b>
<b>11</b>	000-255	<b>BLUE (0%→100%)</b>
<b>12</b>	000-255	<b>WHITE (0%→100%)</b>
<b>13</b>	000-009 010-014 015-019 020-024 025-029 030-034 035-039 040-044 045-049 050-054 055-059 060-064 065-069 070-074 075-079 080-084 085-089 090-094 095-099 100-104 105-109 110-114 115-119 120-124 125-129 130-134 135-139 140-144 145-149 150-154 155-159 160-164	<b>COLOR PRESET</b> Open Color 1 Color 2 Color 3 Color 4 Color 5 Color 6 Color 7 Color 8 Color 9 Color 10 Color 11 Color 12 Color 13 Color 14 Color 15 Color 16 Color 17 Color 18 Color 19 Color 20 Color 21 Color 22 Color 23 Color 24 Color 25 Color 26 Color 27 Color 28 Color 29 Color 30 Color 31

	165-169 170-174 175-179 180-201 202-207 208-229 230-234 235-239 240-244 245-249 250-255	Color 32 Color 33 Open Color change, fast → slow Stop Color change, slow → fast Open Color change: fast Color change: standard Color change: slow Open
<b>14</b>	000-255	<b>ZOOM</b> 60°→10°

**26 Channels Mode(Mode 2):**

<b>CHANNEL</b>	<b>VALUE</b>	<b>FUNCTION</b>
<b>1</b>	000-255	<b>PAN</b> 0°→540°
<b>2</b>	000-255	<b>PAN FINE</b>
<b>3</b>	000-255	<b>TILT</b> 0°→270°
<b>4</b>	000-255	<b>TILT FINE</b>
<b>5</b>	000-255	<b>PAN/TILT SPEED</b> Fast to Slow
<b>6</b>	000-255	<b>ZOOM</b> 60°→10°
<b>7</b>	000-009 010-014 015-255	<b>SPECIAL FUNCTIONS</b> No function Reset all No function
<b>8</b>	000-255	<b>DIMMER</b> 0%→100%
<b>9</b>	000-019 020-024 025-064 065-069 070-084 085-089 090-104	<b>STROBE</b> No function Open Strobe 1: fast → slow Open Strobe 2: slow open fast close, fast → slow Open Strobe 3: fast open slow close, fast → slow

	105-109 110-124 125-129 130-144 145-149 150-164 165-169 170-184 185-189 190-204 205-209 210-224 225-229 230-244 245-255	Open Strobe 4: random strobe, fast → slow Open Strobe 5: random slow open fast close, fast → slow Open Strobe 6: random fast open slow close, fast → slow Open Strobe 7: burst pulse, fast → slow Open Strobe 8: random burst pulse, fast → slow Open Strobe 9: sine wave, fast → slow Open Strobe 10: burst, fast → slow Open
<b>10</b>	000-255	<b>RING 1 RED (0%→100%)</b>
<b>11</b>	000-255	<b>RING 1 GREEN (0%→100%)</b>
<b>12</b>	000-255	<b>RING 1 BLUE (0%→100%)</b>
<b>13</b>	000-255	<b>RING 1 WHITE (0%→100%)</b>
		<b>RING 1 COLOR PRESET</b>
<b>14</b>	000-009	Open
	010-017	Color1
	018-024	Color2
	025-032	Color3
	033-039	Color4
	040-047	Color5
	048-054	Color6
	055-061	Color7
	062-069	Color8
	070-076	Color9
	077-084	Color10
	085-091	Color11
	092-099	Color12
	100-106	Color13
	107-113	Color14
	114-121	Color15
	122-128	Color16
	129-136	Color17
137-143	Color18	
144-151	Color19	
152-158	Color20	
159-165	Color21	
166-173	Color22	

	174-180 181-188 189-195 196-203 204-210 211-217 218-225 226-232 233-240 241-247 248-255	Color23 Color24 Color25 Color26 Color27 Color28 Color29 Color30 Color31 Color32 Color33
<b>15</b>	000-255	<b>RING 2 RED (0%→100%)</b>
<b>16</b>	000-255	<b>RING 2 GREEN (0%→100%)</b>
<b>17</b>	000-255	<b>RING 2 BLUE (0%→100%)</b>
<b>18</b>	000-255	<b>RING 2 WHITE (0%→100%)</b>
<b>19</b>	000-255	<b>RING 2 COLOR PRESET</b> (The same as CH14: RING 1 COLOR PRESET)
<b>20</b>	000-255	<b>RING 3 RED (0%→100%)</b>
<b>21</b>	000-255	<b>RING 3 GREEN (0%→100%)</b>
<b>22</b>	000-255	<b>RING 3 BLUE (0%→100%)</b>
<b>23</b>	000-255	<b>RING 3 WHITE (0%→100%)</b>
<b>24</b>	000-255	<b>RING 3 COLOR PRESET</b> (The same as CH14: RING 1 COLOR PRESET)
<b>25</b>	000-007 008-022 023-037 038-052 053-067 068-082 083-097 098-112 113-127 128-142 143-157 158-172 173-187 188-202 203-217 218-232 233-247 248-255	<b>COLOR MACRO</b> Blackout Macro 1 Macro 2 Macro 3 Macro 4 Macro 5 Macro 6 Macro 7 Macro 8 Macro 9 Macro 10 Macro 11 Macro 12 Macro 13 Macro 14 Macro 15 Macro 16 Macro 17

26	000-255	<b>COLOR MACRO SPEED</b> Slow→Fast
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**30 Channels Mode(Mode 3):**

CHANNEL	VALUE	FUNCTION
1	000-255	<b>PAN</b> 0°→540°
2	000-255	<b>PAN FINE</b>
3	000-255	<b>TILT</b> 0°→270°
4	000-255	<b>TILT FINE</b>
5	000-255	<b>PAN/TILT SPEED</b> Fast to Slow
6	000-255	<b>ZOOM</b> 60°→10°
7	000-009 010-014 015-255	<b>SPECIAL FUNCTIONS</b> No function Reset all No function
8	000-255	<b>DIMMER</b> 0%→100%
9	000-019 020-024 025-064 065-069 070-084 085-089 090-104 105-109 110-124 125-129 130-144 145-149 150-164 165-169 170-184 185-189 190-204 205-209	<b>STROBE</b> No function Open Strobe 1: fast → slow Open Strobe 2: slow open fast close, fast → slow Open Strobe 3: fast open slow close, fast → slow Open Strobe 4: random strobe, fast → slow Open Strobe 5: random slow open fast close, fast → slow Open Strobe 6: random fast open slow close, fast → slow Open Strobe 7: burst pulse, fast → slow Open Strobe 8: random burst pulse, fast → slow Open

	210-224 225-229 230-244 245-255	Strobe 9: sine wave, fast → slow Open Strobe 10: burst, fast → slow Open
<b>10</b>	000-255	<b>RING 1 RED (0%→100%)</b>
<b>11</b>	000-255	<b>RING 1 GREEN (0%→100%)</b>
<b>12</b>	000-255	<b>RING 1 BLUE (0%→100%)</b>
<b>13</b>	000-255	<b>RING 1 WHITE (0%→100%)</b>
<b>14</b>	000-009 010-017 018-024 025-032 033-039 040-047 048-054 055-061 062-069 070-076 077-084 085-091 092-099 100-106 107-113 114-121 122-128 129-136 137-143 144-151 152-158 159-165 166-173 174-180 181-188 189-195 196-203 204-210 211-217 218-225 226-232 233-240 241-247 248-255	<b>RING 1 COLOR PRESET</b> Open Color1 Color2 Color3 Color4 Color5 Color6 Color7 Color8 Color9 Color10 Color11 Color12 Color13 Color14 Color15 Color16 Color17 Color18 Color19 Color20 Color21 Color22 Color23 Color24 Color25 Color26 Color27 Color28 Color29 Color30 Color31 Color32 Color33



<b>15</b>	000-255	<b>RING 2 RED (0%→100%)</b>
<b>16</b>	000-255	<b>RING 2 GREEN (0%→100%)</b>
<b>17</b>	000-255	<b>RING 2 BLUE (0%→100%)</b>
<b>18</b>	000-255	<b>RING 2 WHITE (0%→100%)</b>
<b>19</b>	000-255	<b>RING 2 COLOR PRESET</b> (The same as CH14: RING 1 COLOR PRESET)
<b>20</b>	000-255	<b>RING 3 RED (0%→100%)</b>
<b>21</b>	000-255	<b>RING 3 GREEN (0%→100%)</b>
<b>22</b>	000-255	<b>RING 3 BLUE (0%→100%)</b>
<b>23</b>	000-255	<b>RING 3 WHITE (0%→100%)</b>
<b>24</b>	000-255	<b>RING 3 COLOR PRESET</b> (The same as CH14: RING 1 COLOR PRESET)
<b>25</b>	000-007 008-022 023-037 038-052 053-067 068-082 083-097 098-112 113-127 128-142 143-157 158-172 173-187 188-202 203-217 218-232 233-247 248-255	<b>COLOR MACRO</b> Blackout Macro 1 Macro 2 Macro 3 Macro 4 Macro 5 Macro 6 Macro 7 Macro 8 Macro 9 Macro 10 Macro 11 Macro 12 Macro 13 Macro 14 Macro 15 Macro 16 Macro 17
<b>26</b>	000-255	<b>COLOR MACRO SPEED 1</b> Slow→Fast
<b>27</b>	000-009 010-031 032-063 064-095 096-127 128-159 160-191 192-223	<b>RING COLOR MACRO 1</b> No Function Macro 1 Macro 2 Macro 3 Macro 4 Macro 5 Macro 6 Macro 7

	224-255	Macro 8
<b>28</b>	000-015 016-039 040-063 064-087 088-111 112-135 136-159 160-183 184-207 208-231 232-255	<b>RING COLOR MACRO 2</b> No Function Macro 1 Macro 2 Macro 3 Macro 4 Macro 5 Macro 6 Macro 7 Macro 8 Macro 9 Macro 10
<b>29</b>	000-015 016-027 028-039 040-051 052-063 064-075 076-087 088-099 100-111 112-123 124-135 136-147 148-159 160-171 172-183 184-195 196-207 208-219 220-231 232-243 244-255	<b>RING COLOR MACRO 3</b> Macro 1 Macro 2 Macro 3 Macro 4 Macro 5 Macro 6 Macro 7 Macro 8 Macro 9 Macro 10 Macro 11 Macro 12 Macro 13 Macro 14 Macro 15 Macro 16 Macro 17 Macro 18 Macro 19 Macro 20 Macro 21
<b>30</b>	000-127 128-255	<b>COLOR MACRO SPEED 2</b> Jump: slow→fast Fade: slow→fast

## 5. 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

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

### B. Not responding to the DMX controller

1. Check whether the DMX connectors and the DMX cables are connected correctly.
2. Check whether the DMX address is correctly set.
3. If the intermittent DMX signal problem occurs, check whether the XLR socket and the signal cable are well connected.
4. Try it with another DMX controller.
5. 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

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

## 6. 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.

## **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+A11:2020; EN 55035: 2017+A11: 2020;  
EN IEC 61000-3-2: 2019; EN 61000-3-3: 2013+A1: 2019.

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## **Harmonized Standard**

EN 60598-2-17: 2018; EN 60598-1: 2015+A1: 2018.

Safety of household and similar electrical appliances  
Part 1: General requirements and tests

**Innovation, Quality, Performance**