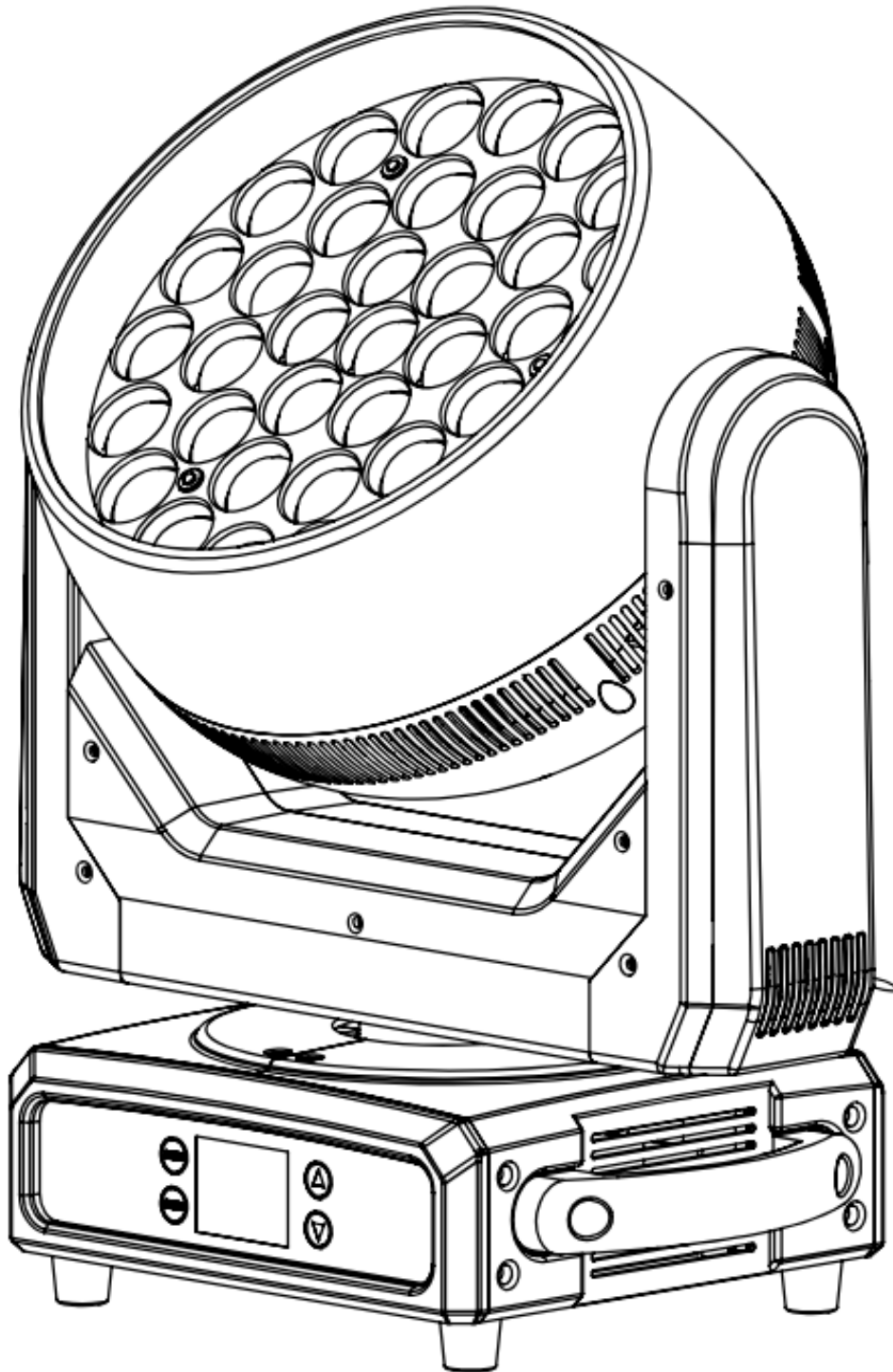


# LED ZOOM MOVING HEAD

## 37PCS\*25W



User Manual

Please read the insturction carefully before use

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## 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°C. Maximum ambient temperature TA: 40°C.
- 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 75°C. 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 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 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.
- DO NOT look directly at the light while the LED is on.
- DO NOT start on the unit without LED 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:**

800W

### **Light Source:**

37x25W RGBW 4 in 1 LED

### **Zoom Range:**

10°~60°

### **Movement:**

Pan: 540°

Tilt: 270°

Pan/Tilt Resolution: 16bit

### **Dimming/Strobe:**

0~100% smooth dimming, variable strobe speeds

### **Control:**

DMX Channel: 15/31/35 Channels

Control Mode: DMX, RDM, Master/Slave, Wireless control(Optional)

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:**

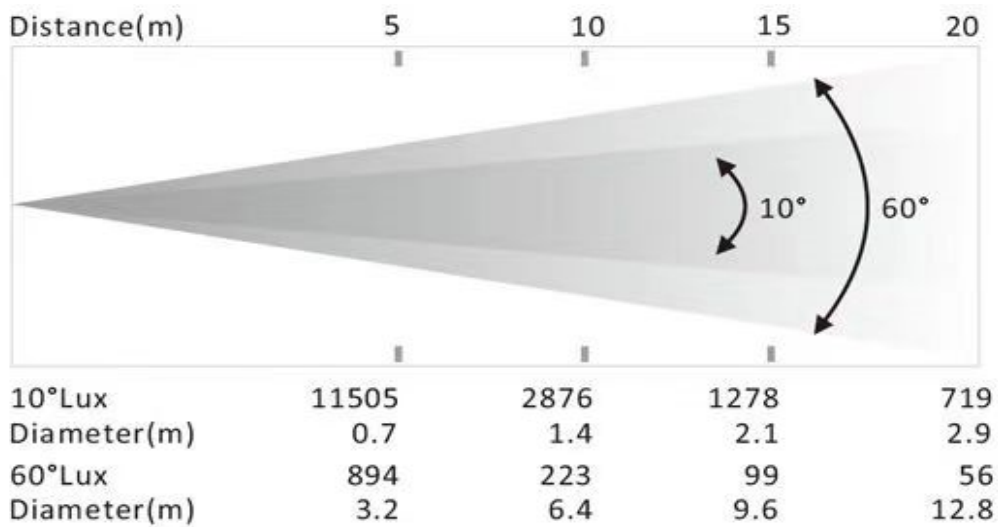
Electronic linear zoom system

Ring control, outstanding color macro effect

Dimension:430×246×512mm,

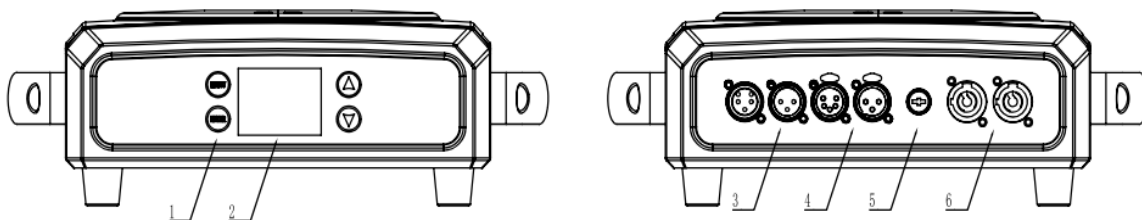
Weight:19.5Kgs

**Photometric Diagram:**



**3. How To Set The Unit**

**3.1 Control Panel**



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

**2. LED:**

<b>POWER</b>	ON	Power On
<b>DMX</b>	ON	DMX input present

### 3. Button:

<b>MENU</b>	To enter into menu or leave the menu
<b>▼ DOWN</b>	To go forward in the selected functions
<b>▲ UP</b>	To go backward in the selected functions
<b>ENTER</b>	To confirm the selected functions

### 4. DMX IN:

DMX512 link, use 3/5-pin XLR cable to link the unit and the DMX controller

### 5. DMX OUT:

DMX512 link, use 3/5-pin XLR cable to link the next unit and output DMX signal

### 6. MAINS IN:

To connect to the mains supply

### 7. MAINS OUT:

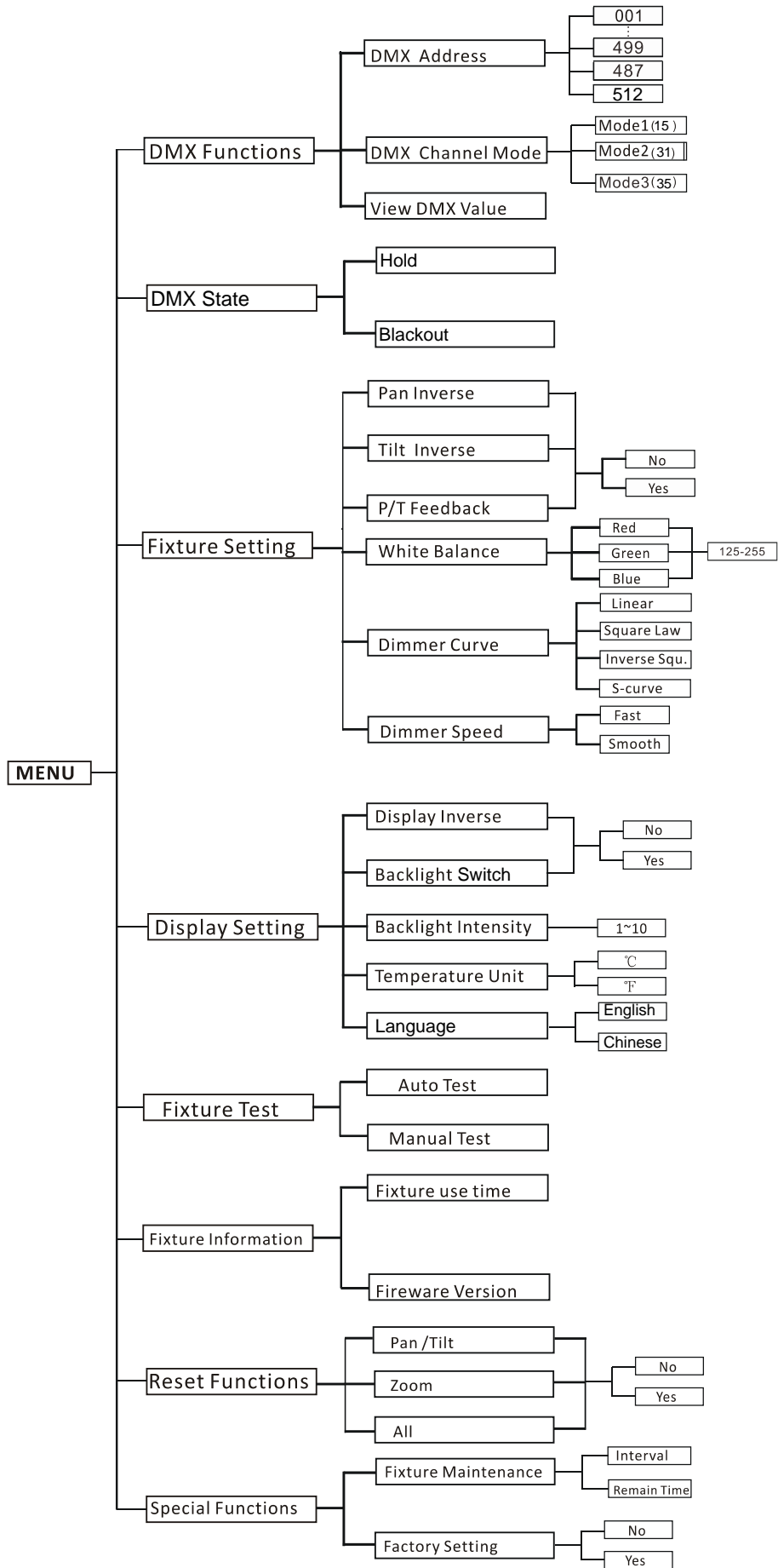
To connect to the next unit

### 8. Fuse(T 10A):

Protects the unit from over-voltage or short circuit

## 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 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 one minute to exit menu mode. The main functions are shown below:





## ***DMX Functions***

Enter MENU mode, select **DMX Functions**, 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 499/487/512, press the **ENTER** button to setup. 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 **Mode1 (15)**, **Mode2 (31)** or **Mode3 (35)**, press the **ENTER** button to setup. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode.

### **DMX State**

To select **DMX State Mode**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Hold** or **Blackout**, press the **ENTER** button to setup. 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 values. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode.

## ***Fixture Setting***

Enter MENU mode, select **Fixture Setting**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **Pan Inverse**, **Tilt Inverse**, **P/T Feedback**, **BL.O. P/T Moving**, **White Balance**, **Cooling Mode**, **Dimmer Curve** or **Dimmer Speed**.

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

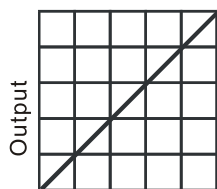
### White Balance

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 one minute to exit menu mode.

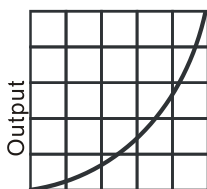
### Dimmer Curve

To select **Dimmer Curve**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Linear**, **Square Law**, **Inverse Squ.** 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 one minute to exit menu mode.

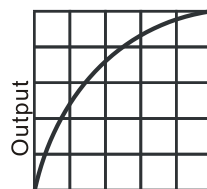
Dimmer Modes:



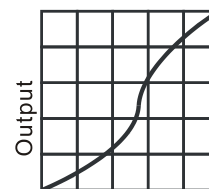
DMX%  
(Optically Linear)



DMX%  
(Square Law)



DMX%  
(Inverse Square Law)



DMX%  
(S-Curve)

**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-cure:** Light intensity control is finger 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 one minute to exit menu mode.

### **Display Setting**

Enter **MENU** mode, select **Display Setting**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **Display Inverse**, **Backlight Auto Off**, **Backlight Intensity**, **Temperature unit** or **Display Warning**.

#### **Display Inverse**

To select **Display Inverse**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **No** (normal) or **Yes** (display inverse). Once selected, 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 Switch**

To select **Backlight Switch** , 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 one minute 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 one minute 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 one minute to exit menu mode.

#### **Language**

To select **Language** , press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **English** or **Chinese** (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**

To select **Auto Test**, press the **ENTER** button to confirm, the unit will run built-in programs to automatically test pan, tilt, dimmer, shutter, spe.fun and etc. 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. 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 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 time**, **LED On tme** or **Firmware Version**.

#### **Fixture use time**

To select **Fixture use time**, press the **ENTER** button to confirm, the fixture working hours will show on the display. Press the **MENU** button to exit.

#### **Firmware Version**

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

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

### **Factory Setting**

To select **Factory Setting**, 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).

## **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 (14/26/15 channel).

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

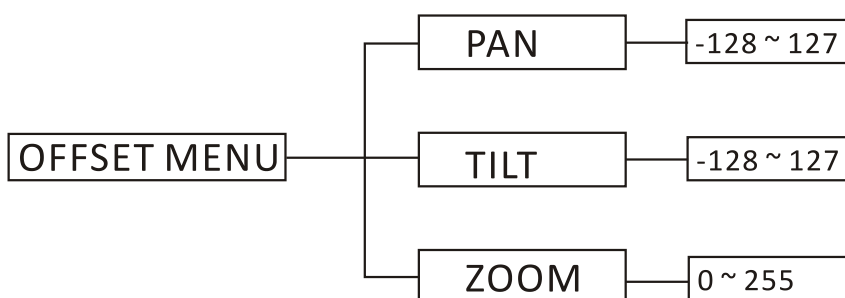
Select the PAN INVERT menu and the fixture will run the pan invert mode.

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.

### **3.3 Home Position Adjustment**

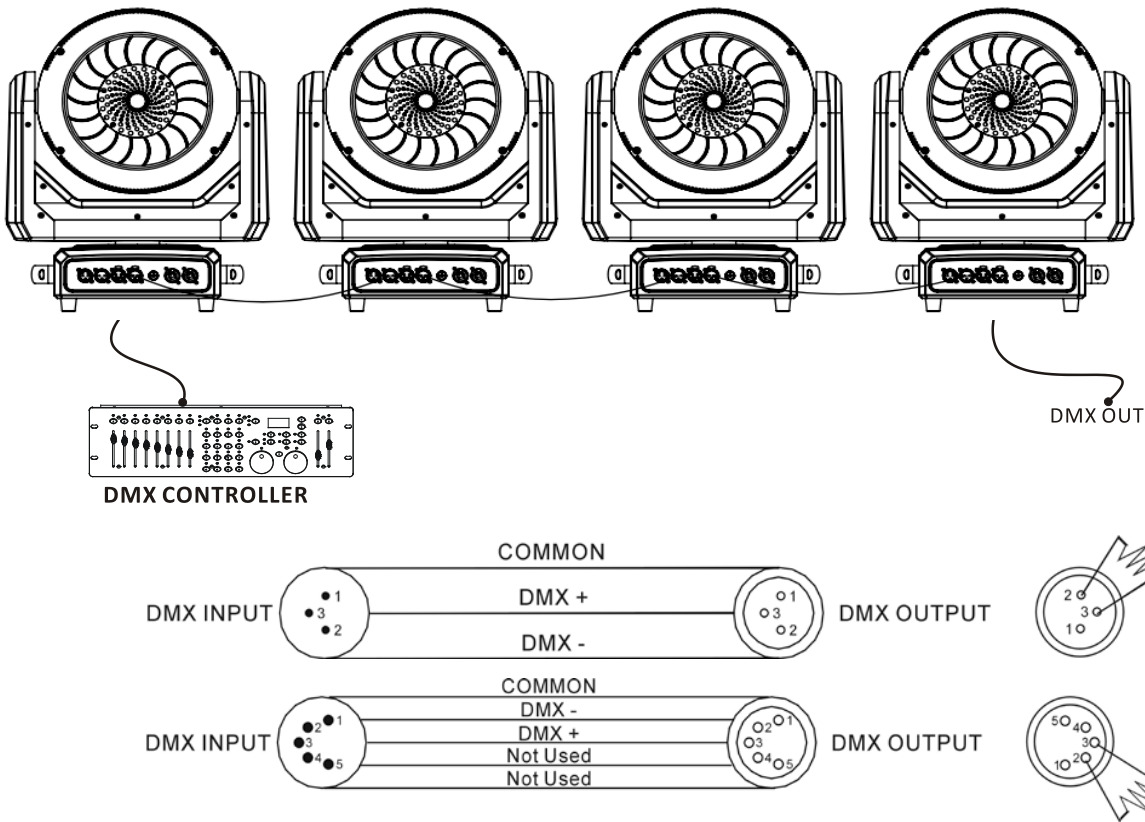
Press the **MENU** button into menu mode, then press the **ENTER** button for about 3 seconds into offset mode to adjust the home position. Select the function by the **ENTER** button. Use the **UP/DOWN** button to choose the submenu, press the **ENTER** button to store and automatically return to the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



In the main functions, hold the **ENTER** button for at least 3 seconds into offset mode, use the **DOWN/UP** button up to select **Pan**, **Tilt** or **Zoom**, and press the **ENTER** button to confirm. Use the **DOWN/UP** button to adjust the home position of the Pan, Tilt or Zoom, once the position has been selected, press the **ENTER** button to setup, to go back to the functions without any change press the **MENU** button again. Press and hold the **MENU** button about one second or wait for about one minute to exit the menu mode.

## 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 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 0-511 (usually 0 & 1 are equal to 1).
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 the **MENU** button to enter menu mode, select **DMX Functions**, 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 be blinking 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 idling let the unit idle one minute 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
15 channels	1	16	31	46
31 channels	1	32	63	94
35 channels	1	36	71	106

## 4.3 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 5 seconds, then the corresponding function will take into effect.

### 15 Channels Mode:

CHANNEL	VALUE	FUNCTION
1	000-255	PAN 0%→100%
2	000-255	PAN FINE
3	000-255	TILT 0%→100%
4	000-255	TILT FINE
5	000-255	PAN/TILT SPEED fast→slow



<b>6</b>	000-009 010-014 015-255	<b>SPECIAL FUNCTIONS</b> No function Reset No function
<b>7</b>	000-255	<b>DIMMER</b> 0%→100%
<b>8</b>	000-019 020-024 025-064 065-069 070-084 085-089 090-104 105-109 110-124 125-129 130-144 145-149 150-164 165-169 170-184 185-189 190-204 205-209 210-224 225-229 230-244 245-255	<b>SHUTTER</b> Blackout Open Strobe 1: fast to slow Open Strobe 2: opening pulse, fast to slow Open Strobe 3: closing pulse, fast to slow Open Strobe 4: random strobe, fast to slow Open Strobe 5: random opening pulse, fast to slow Open Strobe 6: random closing pulse, fast to slow Open Strobe 7: burst pulse, fast to slow Open Strobe 8: random burst pulse, fast to slow Open Strobe 9: sine wave, fast to slow Open Strobe 10: burst, fast to 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>	000-255	<b>CTO 2500-8000</b>

15	000-009 010-014 015-019 020-024 025-029 030-034 035-039 040-044 045-049 050-054 055-059 060-064 065-069 070-074 075-079 080-084 085-089 090-094 095-099 100-104 105-109 110-114 115-119 120-124 125-129 130-134 135-139 140-144 145-149 150-154 155-159 160-164 165-169 170-174 175-179 180-201 202-207 208-229 230-234 235-239 240-244 245-249 250-255	<p style="text-align: center;"><b>COLOR MACRO</b></p> Open LEE 790 – Moroccan Pink LEE 157 – Pink LEE 332 – Special Rose Pink LEE 328 – Follies Pink LEE 345 – Fuchsia Pink LEE 194 – Surprise Pink LEE 181 – Congo Blue LEE 071 – Tokyo Blue LEE 120 – Deep Blue LEE 079 – Just Blue LEE 132 – Medium Blue LEE 200 – Double CT Blue LEE 161 – State Blue LEE 201 – Full CT Blue LEE 202 – Half CT Blue LEE 117 – Steel Blue LEE 353 – Lighter Blue LEE 118 – Light Blue LEE 116 – Medium Blue Green LEE 124 – Dark Green LEE 139 – Primary Green LEE 089 – Moss Green LEE 122 – Fern Green LEE 738 – JAS Green LEE 088 – Lime Green LEE 100 – Spring Yellow LEE 104 – Deep Amber LEE 179 – Chrome Orange LEE 105 – Orange LEE 021 – Gold Amber LEE 778 – Millennium Gold LEE 135 – Deep Gold Amber LEE 164 – Flame Red Open Color Wheel Clockwise Rotation, fast to slow Stop (this will stop wherever the color is at the time) Color Wheel Counter-Clockwise Rotation, slow to fast Open Random Color, Fast Random Color, Medium Random Color, Slow Open
	15	000-255

31 Channels Mode:

CHANNEL	VALUE	FUNCTION
1	000-255	<b>PAN</b> 0%→100%
2	000-255	<b>PAN FINE</b>
3	000-255	<b>TILT</b> 0%→100%
4	000-255	<b>TILT FINE</b>
5	000-255	<b>PAN/TILT SPEED</b> fast→slow
6	000-255	<b>ZOOM</b> 60°→10°
7	000-009 010-014 015-255	<b>SPECIAL FUNCTIONS</b> No function Reset No function
8	000-255	<b>DIMMER</b> 0%~100%
9	000-019 020-024 025-064 065-069 070-084 085-089 090-104 105-109 110-124 125-129 130-144 145-149 150-164 165-169 170-184 185-189 190-204 205-209 210-224 225-229 230-244 245-255	<b>SHUTTER</b> Blackout Open Strobe 1: fast to slow Open Strobe 2: opening pulse, fast to slow Open Strobe 3: closing pulse, fast to slow Open Strobe 4: random strobe, fast to slow Open Strobe 5: random opening pulse, fast to slow Open Strobe 6: random closing pulse, fast to slow Open Strobe 7: burst pulse, fast to slow Open Strobe 8: random burst pulse, fast to slow Open Strobe 9: sine wave, fast to slow Open Strobe 10: burst, fast to slow Open
10	000-255	<b>RING 1 RED (0%→100%)</b>
11	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	<b>RING 1 COLOR PRESET</b> Open
	010-019	Color1
	020-024	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	Color23	
181-188	Color24	
189-195	Color25	
196-203	Color26	
204-210	Color27	
211-217	Color28	
218-225	Color29	
226-232	Color30	
233-240	Color31	
241-247	Color32	
248-255	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)

20	000-255	RING 3 RED (0%→100%)
21	000-255	RING 3 GREEN (0%→100%)
22	000-255	RING 3 BLUE (0%→100%)
23	000-255	RING 3 WHITE (0%→100%)
24	000-255	RING 3 COLOR PRESET (The same as CH14: RING 1 COLOR PRESET)
25	000-255	RING 4 RED (0%→100%)
26	000-255	RING 4 GREEN (0%→100%)
27	000-255	RING 4 BLUE (0%→100%)
28	000-255	RING 4 WHITE (0%→100%)
29	000-255	RING 4 COLOR PRESET (The same as CH14: RING 1 COLOR PRESET)
30	000-007	Blackout
	008-022	Macro1
	023-037	Macro2
	038-052	Macro3
	053-067	Macro4
	068-082	Macro5
	083-097	Macro6
	098-112	Macro7
	113-127	Macro8
	128-142	Macro9
	143-157	Macro10
	158-172	Macro11
	173-187	Macro12
	188-202	Macro13
203-217	Macro14	
218-232	Macro15	
233-247	Macro16	
248-255	Macro17	
31	000-255	COLOR MACRO SPEED slow→fast

**35 Channels Mode:**

CHANNEL	VALUE	FUNCTION
1	000-255	PAN 0%→100%
2	000-255	PAN FINE
3	000-255	TILT 0%→100%
4	000-255	TILT FINE
5	000-255	PAN/TILT SPEED fast→slow
6	000-255	ZOOM 60°→10°

<b>7</b>	000-009 010-014 015-255	<b>SPECIAL FUNCTIONS</b> No function Reset No function
<b>8</b>	000-255	<b>DIMMER</b> 0%→100%
<b>9</b>	000-019 020-024 025-064 065-069 070-084 085-089 090-104 105-109 110-124 125-129 130-144 145-149 150-164 165-169 170-184 185-189 190-204 205-209 210-224 225-229 230-244 245-255	<b>SHUTTER</b> Blackout Open Strobe 1: fast to slow Open Strobe 2: opening pulse, fast to slow Open Strobe 3: closing pulse, fast to slow Open Strobe 4: random strobe, fast to slow Open Strobe 5: random opening pulse, fast to slow Open Strobe 6: random closing pulse, fast to slow Open Strobe 7: burst pulse, fast to slow Open Strobe 8: random burst pulse, fast to slow Open Strobe 9: sine wave, fast to slow Open Strobe 10: burst, fast to slow Open
<b>10</b>	000-255	<b>RED 1 (0%→100%)</b>
<b>11</b>	000-255	<b>GREEN 1 (0%→100%)</b>
<b>12</b>	000-255	<b>BLUE 1(0%→100%)</b>
<b>13</b>	000-255	<b>WHITE 1(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	<b>Color</b> Open Color1 Color2 Color3 Color4 Color5 Color6 Color7 Color8 Color9 Color10

	085-091 092-106 107-113 114-121 122-128 129-136 137-143 144-151 152-158 159-165 166-173 174-180 181-188 189-195 196-203 204-210 211-217 218-225 226-232 233-240 241-247 248-255	Color11 Color12 Color13 Color14 Color15 Color16 Color17 Color18 Color19 Color20 Color21 Color22 Color23 Color24 Color25 Color26 Color27 Color28 Color29 Color30 Color31 Color32
<b>15</b>	000-255	<b>RED 2 (0%→100%)</b>
<b>16</b>	000-255	<b>GREEN 2(0%→100%)</b>
<b>17</b>	000-255	<b>BLUE 2 (0%→100%)</b>
<b>18</b>	000-255	<b>WHITE 2 (0%→100%)</b>
<b>19</b>	000-009 010-017 018-024 025-032 033-039 040-047 048-054 055-061 062-069 070-076 077-084	<b>Color</b> Open Color1 Color2 Color3 Color4 Color5 Color6 Color7 Color8 Color9 Color10

<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>	000-255	<b>RING 4 RED (0%→100%)</b>
<b>26</b>	000-255	<b>RING 4 GREEN (0%→100%)</b>
<b>27</b>	000-255	<b>RING 4 BLUE (0%→100%)</b>
<b>28</b>	000-255	<b>RING 4 WHITE (0%→100%)</b>
<b>29</b>	000-255	<b>RING 4 COLOR PRESET</b> (The same as CH14: RING 1 COLOR PRESET)
<b>30</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>RING COLOR MACRO</b> Blackout Macro1 Macro2 Macro3 Macro4 Macro5 Macro6 Macro7 Macro8 Macro9 Macro10 Macro11 Macro12 Macro13 Macro14 Macro15 Macro16 Macro17
<b>31</b>	000-255	<b>COLOR MACRO SPEED</b>
<b>32</b>	000-255	<b>Ring Color Macro2</b>
<b>33</b>	000-255	<b>Ring Color Macro3</b>
<b>34</b>	000-255	<b>Ring Color Macro4</b>
<b>35</b>	000-255	<b>Color Macro Speed 2</b>



## 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 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. DMX LED should be on. If not, check DMX connectors, cables to see if they are linked 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 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.

## 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 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 30/60 days.

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