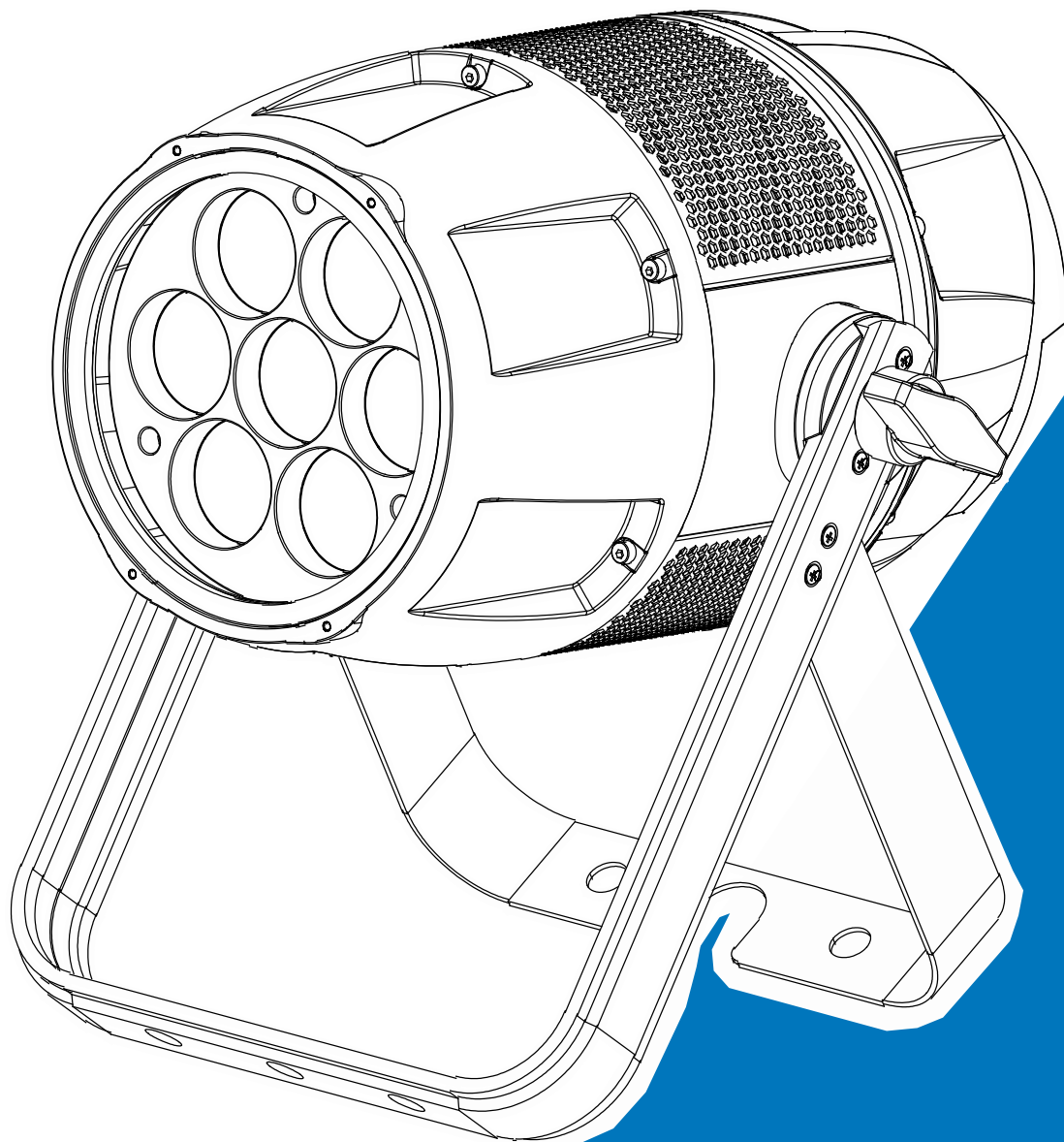




# *STAGE PAR 400 ZOOM IP*



**User Manual**

Please read the instruction carefully before use

## CONTENTS

1. Safety Instructions .....	2
2. Technical Specifications .....	4
3. How To Set The Fixture .....	5
3.1 Control Panel .....	5
3.2 Main Functions .....	6
4. How To Control The Unit .....	13
4.1 DMX512 Controller .....	14
4.2 DMX512 Configuration.....	14
4.3 DMX512 Connection .....	18
5. Troubleshooting.....	19
6. Fixture Cleaning.....	19

## 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 that there is no transportation damage before using the unit.
- This product is suitable for indoor use and wet locations. Do not immerse in water.
- 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.
- 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 0.5 meters.
- 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:**

250W

### **Light Source:**

7x40W RGBW LED

### **Zoom Range:**

Beam Angle: 6°~40°

Spot Angle: 10°-60°

### **Dimmer/Shutter:**

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

### **Control:**

DMX Channel: 5/7/9 channels

Control Mode: DMX512, RDM

Firmware Upgrade via DMX link

### **Construction:**

Display: OLED display

Data In/Out: 5-pin IP XLR

Power In/Out: Waterproof Power Connector in/out

Protection Rating: IP66

### **Features:**

Built-in programs for selection

Can change the DMX address code, machine reset, voice mode conversion and other functions from the console

Uniform RGBW color mixing and rainbow effect

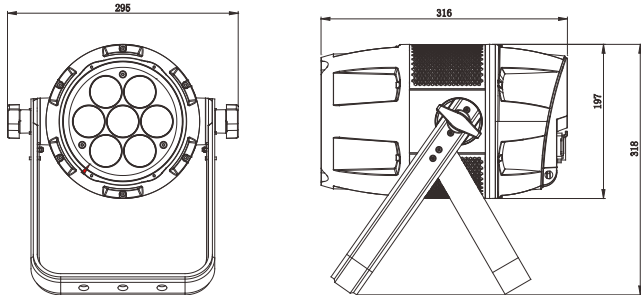
Advanced RDM function

IP66 protection rating, can be used outdoors all year round

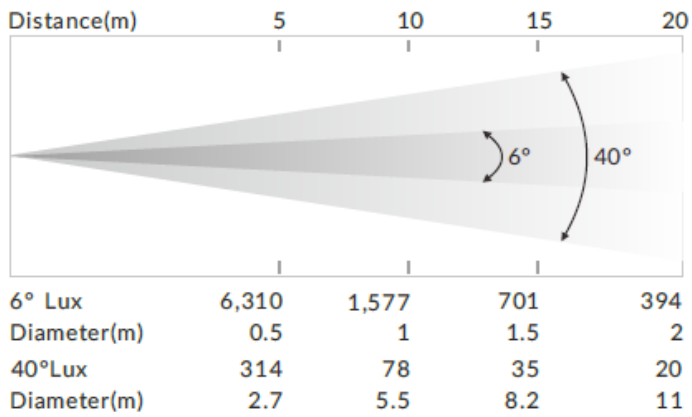
### Dimensions/Weight:

295x316x318mm, 8.5kgs

11.6"x12.4"x12.5" in, 18.7lbs

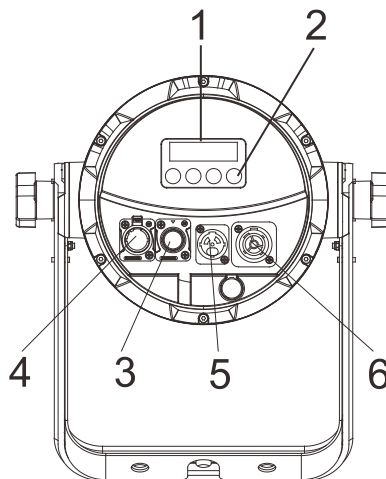


### Photometrics Diagram:



## 3. How To Set The Fixture

### 3.1 Control Panel



**1. Display:** To show the menu and the selected functions

**2. Button:**

<b>MENU</b>	To select the programming functions
<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

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

**4. DMX OUT:** For DMX512 operation, use 5-pin XLR cable to link the next unit

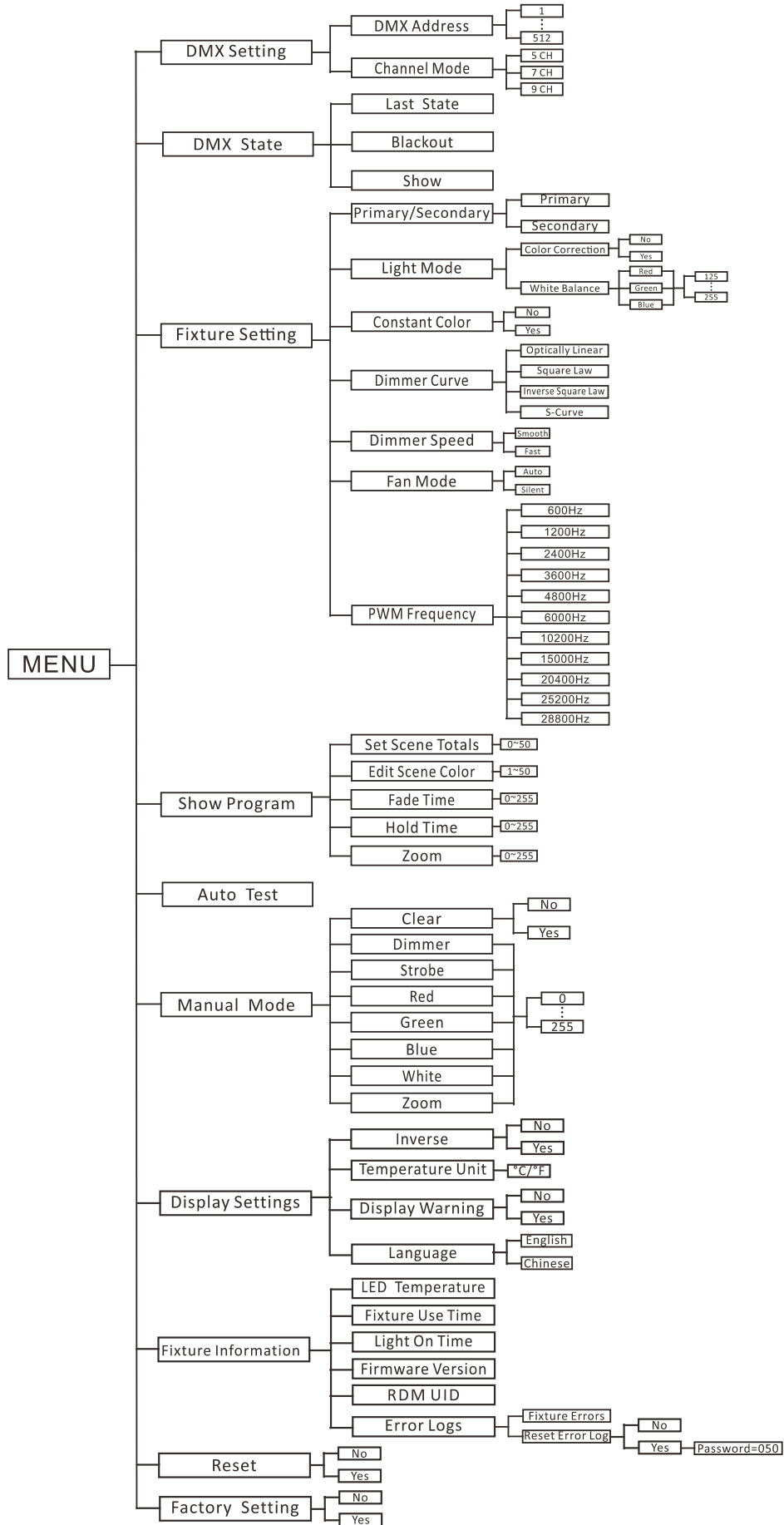
**5. POWER IN:** Connects to supply power

**6. POWER OUT:** Connects to the next fixture

## **3.2 Main Functions**

Turn on the unit, press the **MENU** button into menu mode, and press the **UP/DOWN** button until the required function is shown on the monitor. Select the function by the **ENTER** button. Use the **UP/DOWN** button to choose the submenu, press the **ENTER** button to store and automatically return to the last menu. Press the **MENU** button or let the unit idle 30 seconds to exit menu mode. The screen will be automatically locked if there is no operation for a long time, and can be unlocked by long-pressing the **MENU** button.

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** or **Channel Mode**.

### **DMX Address**

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 30 seconds to exit menu mode.

### **Channel Mode**

To select **Channel Mode**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **5 CH**, **7 CH** or **9 CH**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

## ***DMX State***

To select **DMX State**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **Last State**, **Blackout** or **Show**.

## ***Fixture Setting***

To select **Fixture Setting**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **Primary/Secondary**, **Light Mode**, **Constant Color**, **Dimmer Curve**, **Dimmer Speed**, **Fan Mode** or **PWM Frequency**.

### **Primary/Secondary**

To select **Primary/Secondary**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Primary** or **Secondary**, 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.

### **Light Mode**

To select **Light Mode**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Color Correction** or **White Balance**, 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.

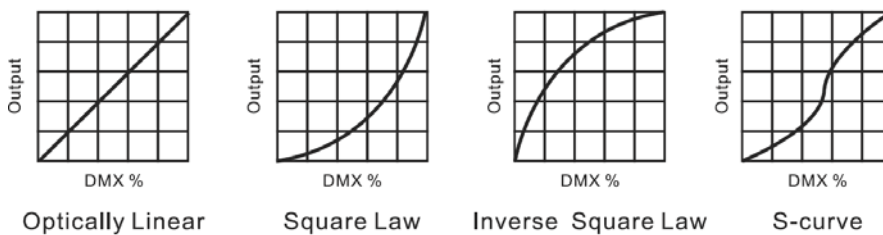
### Constant Color

To select **Constant Color**, press the **ENTER** button to confirm. 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 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 **Optically Linear**, **Square Law**, **Inverse Square Law** or **S-Curve**, 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



**Optically 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 **Smooth** or **Fast**, 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.

### Fan Mode

To select **Fan Mode**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Auto** or **Silent**, 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.

### PWM Frequency

To select **PWM Frequency**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **600Hz**, **1200Hz**, **2400Hz**, **3600Hz**, **4800Hz**, **6000Hz**, **10200Hz**, **15000Hz**, **20400Hz**, **25200Hz** or **28800Hz**, 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.

## ***Show Program***

To select **Show Program**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **Set Scene Totals, Edit Scene Color, Fade Time, Hold Time** or **Zoom**.

### **Set Scene Totals**

To select **Set Scene Totals**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to adjust the value from **0** to **50**. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

### **Edit Scene Color**

To select **Edit Scene Color**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to adjust the value from **1** to **50**. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

### **Fade Time**

To select **Fade Time**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to adjust the value from **0** to **255**. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

### **Hold Time**

To select **Hold Time**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to adjust the value from **0** to **255**. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

### **Zoom**

To select **Zoom**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to adjust the value from **0** to **255**. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

## ***Auto Test***

Select **Auto Test**, press the **ENTER** button to confirm, the unit will run built-in programs to automatically test. Press the **MENU** button back to the last menu or exit menu mode after auto test.

## ***Manual Mode***

Select **Manual Mode**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **Clear, Dimmer, Strobe, Red, Green, Blue, White** or **Zoom**. Use the **UP/DOWN** button to adjust the value from **0** to **255**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

## ***Display Settings***

Select **Display Settings**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **Inverse, Temperature Unit, Display Warning** or **Language**.

### **Inverse**

Select **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 30 seconds 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 30 seconds to exit menu mode.

### **Display Warning**

Select **Display Warning**, 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 30 seconds to exit menu mode.

### **Language**

Select **Language**, press the **ENTER** button to confirm, present mode will blink on the display, 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 Information***

Select **Fixture Information**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **LED Temperature, Fixture Use Time, Light On Time, Firmware Version, RDM UID** or **Error Logs**.

### **LED Temperature**

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

### **Fixture Use Time**

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

### **Light On Time**

Select **Light On time**, press the **ENTER** button to confirm, light on time 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.

### **RDM UID**

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

### **Error Logs**

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

## ***Reset***

Select **Reset**, 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 30 seconds to exit menu mode.

## ***Factory Setting***

Select **Factory Setting**, 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 30 seconds to 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 (5/7/9 channel).

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

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

Select the 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.

## **4. How To Control The Unit**

You can operate the unit in two ways:

1. By primary/secondary built-in preprogram function
2. By DMX controller

## 4.1 DMX512 Controller

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 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 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 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
5 channels	1	6	11	16
7 channels	1	8	15	22
9 channels	1	10	19	28

## 4.2 DMX512 Configuration

Please refer to below configurations to control the fixtures

### Attentions:

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

### 5 Channels mode:

CHANNEL	VALUE	FUNCTION
1	000-255	<b>RED</b> 0%→100%
2	000-255	<b>GREEN</b> 0%→100%
3	000-255	<b>BLUE</b> 0%→100%

<b>4</b>	000-255	<b>WHITE</b> 0%→100%
<b>5</b>	000-255	<b>ZOOM</b> 40°→6°

**7 Channels mode:**

<b>CHANNEL</b>	<b>VALUE</b>	<b>FUNCTION</b>
<b>1</b>	000-255	<b>RED</b> 0%→100%
<b>2</b>	000-255	<b>GREEN</b> 0%→100%
<b>3</b>	000-255	<b>BLUE</b> 0%→100%
<b>4</b>	000-255	<b>WHITE</b> 0%→100%
<b>5</b>	000-255	<b>DIMMER</b> 0%→100%
<b>6</b>	000-014 015-042 043-070 071-078 079-106 107-114 115-142 143-150 151-178 179-186 187-214 215-222 223-250 251-255	<b>STROBE</b> Open Strobe from fast to slow Pulse from fast to slow Random Strobe Burst from fast to slow Random burst Burst pulse from fast to slow Random burst pulse Slow open Fast close Random slow open fast close Fast open Slow close Random fast open slow close Slow open slow close Open
<b>7</b>	000-255	<b>ZOOM</b> 40°→6°

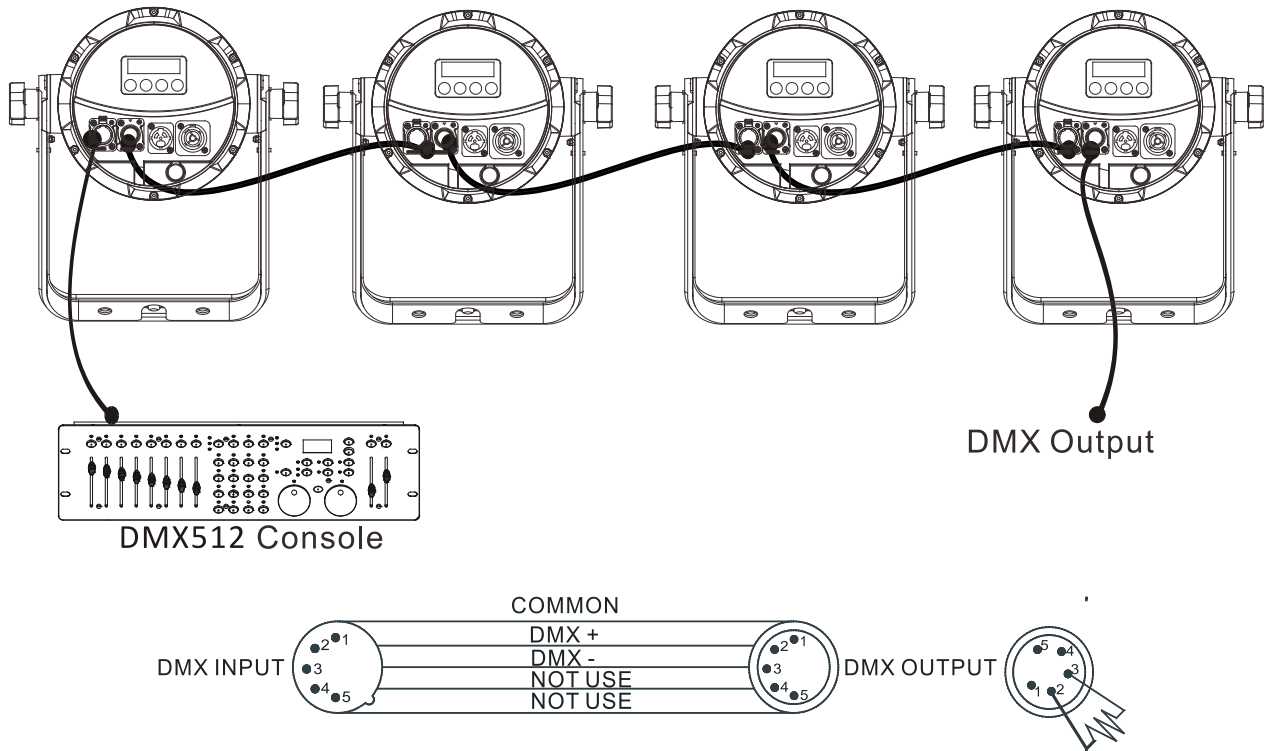


9 Channels mode:

CHANNEL	VALUE	FUNCTION
1	000-255	<b>RED</b> 0%→100%
2	000-255	<b>GREEN</b> 0%→100%
3	000-255	<b>BLUE</b> 0%→100%
4	000-255	<b>WHITE</b> 0%→100%
5	000-255	<b>DIMMER</b> 0%→100%
6	000-255	<b>DIMMER FINE</b>
7	000-014 015-042 043-070 071-078 079-106 107-114 115-142 143-150 151-178 179-186 187-214 215-222 223-250 251-255	<b>STROBE</b> Open Strobe from fast to slow Pulse from fast to slow Random Strobe Burst from fast to slow Random burst Burst pulse from fast to slow Random burst pulse Slow open Fast close Random slow open fast close Fast open Slow close Random fast open slow close Slow open slow close Open
8	000-255	<b>ZOOM</b> 40°→6°
9	000-009 010-014 015-019 020-024 025-029 030-034 035-039 040-044 045-049 050-054 055-059	<b>Macro Color For All LED</b> Open (RGBW color mixing enabled) 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

060-064	LEE 132 – Medium Blue
065-069	LEE 200 – Double CT Blue
070-074	LEE 161 – Slate Blue
075-079	LEE 201 – Full CT Blue
080-084	LEE 202 – Half CT Blue
085-089	LEE 117 – Steel Blue
090-094	LEE 353 – Lighter Blue
095-099	LEE 118 – Light Blue
100-104	LEE 116 – Medium Blue Green
105-109	LEE 124 – Dark Green
110-114	LEE 139 – Primary Green
115-119	LEE 089 – Moss Green
120-124	LEE 122 – Fem Green
125-129	LEE 738 – JAS Green
130-134	LEE 088 – Lime Green
135-139	LEE 100 – Spring Yellow
140-144	LEE 104 – Deep Amber
145-149	LEE 179 – Chrome Orange
150-154	LEE 105 – Orange
155-159	LEE 021 – Gold Amber
160-164	LEE 778 – Millennium Gold
165-169	LEE 135 – Deep Golden Amber
170-173	LEE 164 – Flame Red
174-179	White 3200K
180-201	White 4000K
202-207	White 6000K
208-229	White 8000K
230-234	White 10000K
235-239	Random Color – Fast
240-244	Random Color – Medium speed
245-249	Random Color – Slow
250-255	Open

## 4.3 DMX512 Connection



1. At last unit, the DMX cable has to be terminated with a terminator. Solder a 120-ohm 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last unit.
2. Connect the unit together in a “daisy chain” by XLR plug cable from the output of the unit to the input of the next unit. The cable cannot be branched or split to a “Y” cable. DMX 512 is a very high-speed signal. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system.
3. The DMX output and input connectors are pass-through to maintain the DMX circuit, when one of the units’ power is disconnected.
4. Each lighting unit needs to have a DMX address to receive the data by the controller. The address number is between 1-512.
5. The end of the DMX 512 system should be terminated to reduce signal errors.
6. 3 pin XLR connectors are more popular than 5 pins XLR.
  - 3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)
  - 5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+), Pin4, Pin5 not used.

## **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.
2. Measure the mains voltage on the main connector.
3. Check the power on LED to see if it can be light up or not.

### **B. Not responding to DMX controller**

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

### **C. One of the channels is not working well**

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

## **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.





## **Declaration of Conformity**

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

EN 55032: 2015; EN 61000-3-2: 2014;  
EN 61000-3-3: 2013; EN 55103-2: 2009.

**&**

## **Harmonized Standard**

EN 60598-2-17: 1989+A2: 1991; EN 60598-1: 2015

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

**Innovation, Quality, Performance**