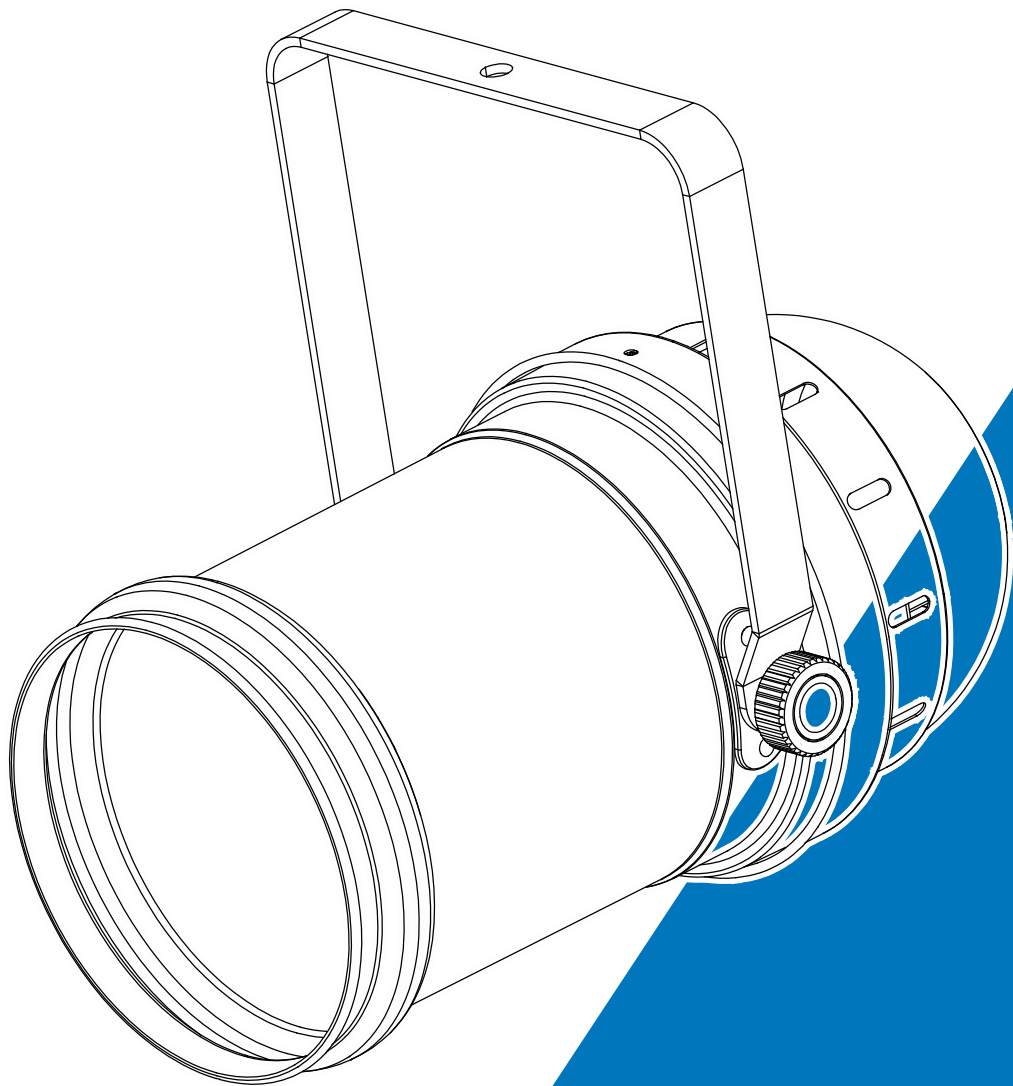




CP-54S



## 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 Manual 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 cables when fixing this unit. DO NOT handle the unit by its head only, always carry by its base.
- Maximum ambient temperature is Ta: 40 degrees C. DO NOT operate it where the temperature is higher than this.
- Unit surface temperature may reach up to 75 degrees C. DO NOT touch the housing with bare-hands 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 a 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 may cause electric shock.

### Warning:

- To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or

moisture.

- The housing and lenses 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:**

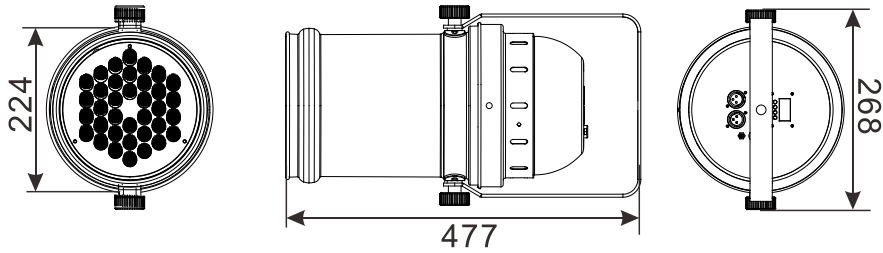
The fixture should be mounted via its Omega Quick Release Clamp bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating and make sure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the fixtures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

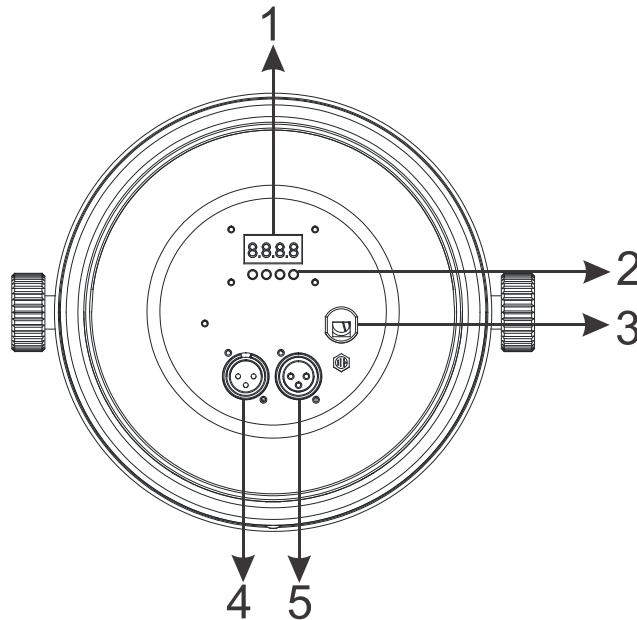
- DMX Channels: 3/5/6 channels mode
- 3 operation modes: DMX, Master/Slave, and Sound Activation
- Manual DMX addressing by LED display
- Great built-in programs under master/slave operation triggered by music.
- 0 ~ 100% Smooth dimming and various strobe effects
- Perfect for stage, theatre, TV studio, rental and discotheques
  
- **Input Voltage:** AC 100~240V, 50/60Hz
- **Power Consumption:** 156W
- **LED Source:** 54 x 3W RGB LEDs
- **Beam Angle:** 24°

- **Weight:** 2.6kgs
- **Dimension:** 477 x 224 x 268mm



### 3. How To Set The Unit

#### 3.1 Control Panel



**1. Display:** Shows the various menus and the selected functions.

**2. Button:**

<b>6. MENU</b>	To select the programming functions
<b>7. ▼ DOWN</b>	To go backward in the selected functions
<b>8. ▲ UP</b>	To go forward in the selected functions
<b>9. ENTER</b>	To confirm the selected functions

**3. Mains input:** Connects to power supply.

**4. DMX output:** DMX512 link, use 3-pin XLR cable to link the next unit.

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

### **3.2 Main Function**

To select any of the given functions, press the **MENU** button up to when the required selection as shown on the display. Select the function by the **ENTER** button and the display will blink. Use the **DOWN/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. Press and hold the **MENU** button for about one second or wait for one minute to exit the menu mode.

The main functions are shown below:



## **Addr** ( DMX 512 Address )

To select the **Addr**, press the **ENTER** button to show the **DMX ADDRESS** on the display. Use the **DOWN/UP** button to adjust the address from **1** to **512**. Once the address has been selected, press the **ENTER** button to setup, to go back to the functions without any changes press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

## **Chnd** ( DMX Channel Mode )

To select the **Chnd**, press the **ENTER** button to show the **DMX CHANNEL MODE** on the display. Use the **DOWN/UP** button to select the **3 CH**, **5 CH** or **6 CH** mode. Once the mode has been selected, press the **ENTER** button to setup, to go back to the functions without any changes press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

## **Shnd** ( Show Mode )

To select the **Shnd**, press the **ENTER** button to show the **SHOW MODE** on the display. Use the **DOWN/UP** button to select the **Sh 1** (Show 1), **Sh 2** (Show 2), **Sh 3** (Show 3), **Sh 4** (Show 4), **Sh 5** (show 5), **Color** (color) or **FADE** (fade) mode, when you select color or fade mode, press **ENTER** to confirm, use **UP/DOWN** button to select 1-10 or adjust fade speed (speed 1: slow, speed 2: medium, speed 3: fast). Once the mode has been selected, press the **ENTER** button to setup, to go back to the functions without any changes press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

## **SLnd** ( Slave Mode )

To select the **SLnd**, press the **ENTER** button to show the **SLAVE MODE** on the display. Use the **DOWN/UP** button to select the **MAST** (master), **SL 1** (normal) or **SL 2** (2 light show) mode.



Once the mode has been selected, press the **ENTER** button to setup, to go back to the functions without any changes press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

### **dINS** ( Dimmer Speed )

To select the **dINS**, press the **ENTER** button to show the **DIMMER SPEED** on the display. Use the **DOWN/UP** button to select the **SnOO** (smooth) or **SnOO** (fast) mode. Once the mode has been selected, press the **ENTER** button to setup, to go back to the functions without any changes press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

### **SOUn** ( Sound Mode )

To select the **SOUn**, press the **ENTER** button to show the **SOUND MODE** on the display. Use the **DOWN/UP** button to select the **On** (sound mode on) or **OFF** (sound mode off). Once the mode has been selected, press the **ENTER** button to setup, to go back to the functions without any changes press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

### **SEnS** ( Sound Sense )

To select the **SOSE**, press the **ENTER** button to show the **SOUND SENSE** on the display. Use the **DOWN/UP** button to adjust the sound sensitivity from **0** to **100**. Once selected, press the **ENTER** button to setup, to go back to the functions without any changes press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

### **dNSE** ( DMX State )

To select the **dNSE**, press the **ENTER** button to show the **DMX STATE** on the display. Use the

**DOWN/UP** button to select the **MSL** (master slave mode) or **BLND** (blackout mode). Once the mode has been selected, press the **ENTER** button to setup, to go back to the functions without any changes press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

### **LED** (LED Display)

To select the **LED**, press the **ENTER** button to show the **LED DISPLAY** on the display. Use the **DOWN/UP** button to select the **ON** (LED display on) or **OFF** (LED display off) mode. Once the mode has been selected, press the **ENTER** button to setup, to go back to the functions without any changes press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

### **DISP** (Display)

To select the **DISP**, press the **ENTER** button to show the **DISPLAY** on the display. Use the **DOWN/UP** button to select the **DISP** (normal) or **DISP** (display inversion). To go back to the functions without any changes press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode:

**DISP** Display normal mode for the fixture putting on the floor;

**DISP** Display inversion mode for the fixture fixing under ceiling.

### **BALA** (White Balance)

To select the **BALA**, press the **ENTER** button to show the **DIMMER SPEED** on the display. Use the **DOWN/UP** button to select the **RED** (red) , **GREEN** (green) or **BLUE** (blue) mode. Once the mode has been selected, press the **ENTER** button to setup, use **UP/DOWN** button to adjust the value 125-255, to go back to the functions without any changes press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

## **MANU** (Manual Setting)

To select the **MANU**, press the **ENTER** button to show the **MANUAL SETTING** on the display. Use the **DOWN/UP** button to select the **RED** (red), **GREEN** (green) **BLUE** (blue) **DIMM** (dimmer) or **STRO** (strobe) mode. Once the mode has been selected, press the **ENTER** button to setup, use **UP/DOWN** button to adjust the value 0-255, to go back to the functions without any changes press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

## **TEST** (Test)

To select the **TEST**, press the **ENTER** button to show the **TEST** on the display and the unit will run a self-test. To go back to the functions without any changes press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

## **TEMP** (Temperature)

To select the **TEMP**, press the **ENTER** button to show the **TEMPERATURE** on the display and the display will show the temperature of the unit. To go back to the functions without any changes press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

## **FHRS** (Fixture Hours)

To select the **FHRS**, press the **ENTER** button to show the **FIXTURE HOURS** on the display and the display will show the number of working hours of the unit. To go back to the functions without any changes press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

## **VER** (Software Version)

To select the `VER`, press the **ENTER** button to show the **SOFTWARE VERSION** on the display and the display will show the version of software of the unit . To go back to the functions without any changes press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

## 4. How To Control The Unit

You can operate the unit in three ways:

1. Master/slave built-in preprogram function
2. Universal DMX controller

You do not need to turn the unit off when you change the DMX address, the new DMX address setting will take effect immediately. Power the unit on, move all the motors to their 'home' position and you may hear some noises for about 20 seconds. After that the unit will be ready to receive DMX signal or run the built in programs.

### 4.1 Master/Slave Built In Preprogrammed Function

By linking the units in master/slave connection, the first unit will control the other units to give an automatic, sound activated, synchronized light show. This function is good when you want an instant show. You have to set the first unit in master mode `SH0d` and select `Sh 1` (show 1), `Sh 2` (Show 2), `Sh 3` (Show 3), `Sh 4` (show 4) or `Sh 5` (show 5) mode. Its DMX input jack will have nothing plugged into it, and its master LED will be constantly on and sound LED will flash to the music. The other units will have to set in slave mode and select `SL 1` (normal) or `SL 2` (2 light show) mode. Their DMX cables plugged into the DMX input jacks (daisy chain) and the slave LED lights will be constantly on.

#### 2-light show

In slave mode, `SL 1` means the unit works normally and `SL 2` means 2-light show. In order to create a great light show, you can set `SL 2` on the second unit to get contrast movement to each

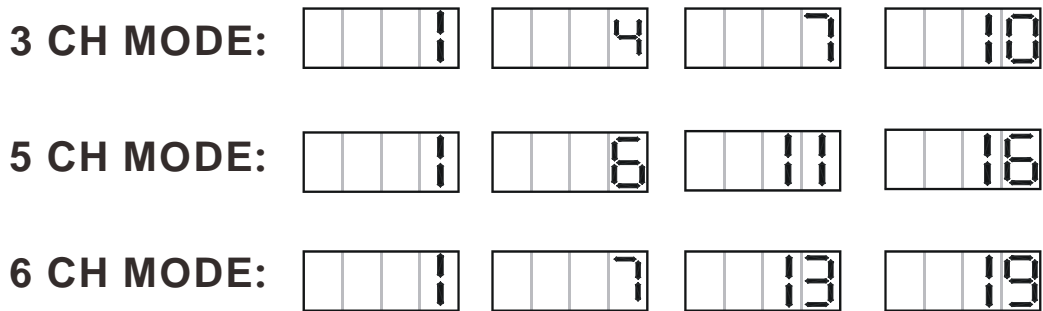
other, even if you have two units only.

## 4.2 DMX Controller

Using a universal DMX controller to control the units, you have to set DMX address from 1 to 512 channel so that the units can receive DMX signal.

Press the **MENU** button up to when the **Addr** is showing on the display. Press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** button to change the DMX512 address. Once the address has been selected, press and keep the **ENTER** button pressed up to when the display stops blinking or storing automatically 7 seconds later. To go back to the functions without any change press the **MENU** button again.

Please refer to the following diagram to address your DMX512 channel for the first 4 units.



## 5. DMX512 Configuration

### 3 Channel Mode (MODE 1)

Channel	Value	Function
1	000 – 255	Red: 0% - 100%
2	000 – 255	Green: 0% - 100%
3	000 – 255	Blue: 0% - 100%

### 5 Channel Mode (MODE 2)

Channel	Value	Function
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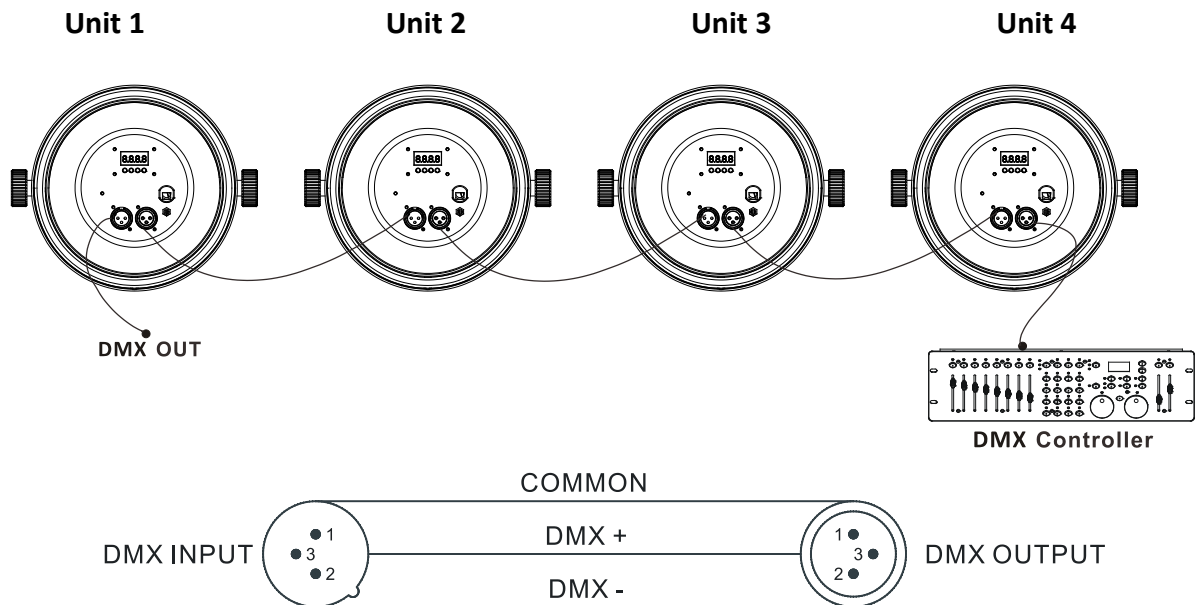
<b>1</b>	000 – 255	<b>Red:</b> 0% - 100%
<b>2</b>	000 – 255	<b>Green:</b> 0% - 100%
<b>3</b>	000 – 255	<b>Blue:</b> 0% - 100%
<b>4</b>		<b>Strobe:</b>
	000 – 007	Closed
	008 – 015	Open
	016 – 131	Strobe: Slow → Fast
	132 – 139	Open
	140 – 181	Slow Open Fast Close
	182 – 189	Open
	190 – 231	Slow Close Fast Open
	232 – 239	Open
	240 – 247	Random Strobe
	248 - 255	Open
<b>5</b>	000 – 255	<b>Dimmer:</b> 0% - 100%

#### 6 Channel Mode (MODE 3)

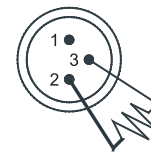
<b>Channel</b>	<b>Value</b>	<b>Function</b>
<b>1</b>	000 – 255	<b>Red</b> - 100%
<b>2</b>	000 – 255	<b>Green</b> 100%
<b>3</b>	000 – 255	<b>Blue</b> - 100%
<b>4</b>		<b>Color</b>
	000 - 007	Closed
	008 – 015	Color 1
	016 – 023	Color 2
	024 – 030	Color 3
	031 – 038	Color 4
	039 - 046	Color 5
	047 – 054	Color 6
	055 – 061	Color 7
	062 – 069	Color 8
	070 – 077	Color 9
	078 – 085	Color 10
	086 – 092	Color 11
	093 – 100	Color 12
101 – 108	Color 13	

	109 – 116	Color 14
	117 - 123	Color 15
	124 – 131	Color 16
	132 – 139	Color 17
	140 - 147	Color 18
	148 - 154	Color 19
	155 - 162	Color 20
	163 – 170	Color 21
	171 - 178	Color 22
	179 – 185	Color 23
	186 - 193	Color 24
	194 – 201	Color 25
	202 – 209	Color 26
	210 – 216	Color 27
	217 - 224	Color 28
	225 – 232	Color 29
	233 - 240	Color 30
	241 - 247	Color 31
	248 - 250	Fade Speed 1
	251 - 253	Fade Speed 2
	254 - 255	Fade Speed 3
		<b>Strobe:</b>
	000 – 007	Closed
	008 – 015	Open
	016 – 131	Strobe: Slow → Fast
	132 – 139	Open
5	140 – 181	Slow Open Fast Close
	182 – 189	Open
	190 – 231	Slow Close Fast Open
	232 – 239	Open
	240 – 247	Random Strobe
	248 - 255	Open
6	0 – 255	<b>Dimmer: 100%</b>

## 6. DMX Connection



Termination reduces signal errors and to avoid signal transmission problems and interference. It is always advisable to connect a DMX terminal. (Resistance 120 ohm 1/4W) between pin2(DMX-) and pin3(DMX+) of the last fixture.



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 from the output of the unit to the input of the next unit. The cable can not 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 power is disconnected to the unit.
4. Each lighting unit 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. The end of the DMX 512 system should be terminated to reduce signal errors.
6. 3 pin XLR connectors are more popular than 5 pin 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 (+)



Pin 4/5: Not used.

## **7. Troubleshooting**

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

### **A. The fixture does not work, no light**

1. Check the connection of power and main fuse.
2. Measure the mains voltage on the main connector.

### **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 fixture 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. Some fixtures don't respond to the easy controller**

1. You may have a break in the DMX cabling.
2. Check the LED for the response of the master/ slave mode signal.

### **D. No response to the sound**

1. Make sure the fixture does not receive DMX signal.
2. Check microphone to see if it is good by tapping the microphone.

### **E. 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.

## **8. Fixture Cleaning**

The cleaning must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: moist, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the fixture.

- Clean with soft cloth using normal glass cleaning fluid.
- Always dry the parts carefully.
- Clean the external optics at least every 30 days.

## **Declaration of Conformity**

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