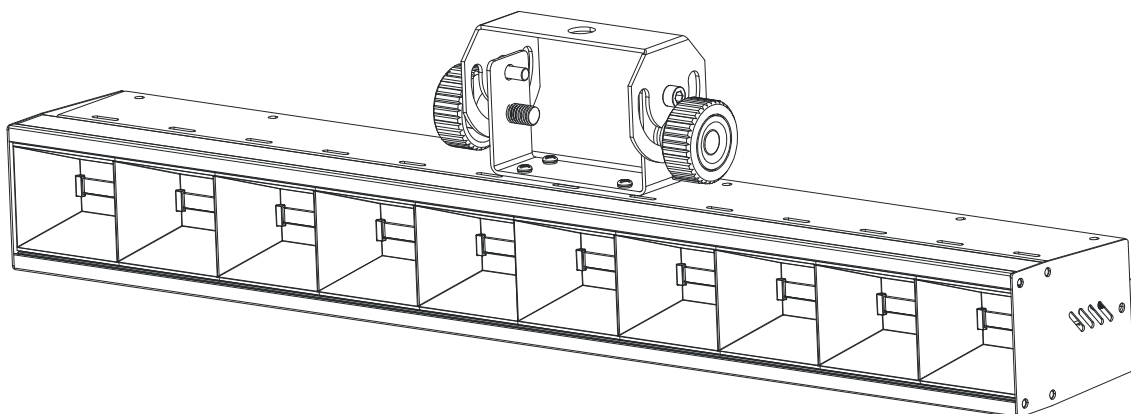




# LED STROBE 50



**LED-ST50**

**User Manual**

Please read the instruction carefully before use

## CONTENTS

1. Safety Instructions.....	2
2. Technical Specifications.....	3
3. How To Set The Unit.....	4
3.1 Control panel.....	4
3.2 Main Functions.....	5
4. How To Control The Unit.....	9
4.1 Master/Slave Built In Pre-programmed Function .....	10
4.2 Easy Controller CA-8.....	10
4.3 DMX Controller.....	11
5. DMX 512 Configuration .....	11
6. DMX 512 Connection.....	14
7. Troubleshooting .....	14
8 · Fixture Cleaning.....	15

## 1. Safety Instructions



### WARNING

Please read carefully the instruction, 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 installing this unit. DO NOT handle the unit by taking its head only, but always carry by its base.
- Maximum ambient temperature is  $T_a$ : 40 degrees C. DO NOT operate it where the temperature is higher than this.
- 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 cables 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:

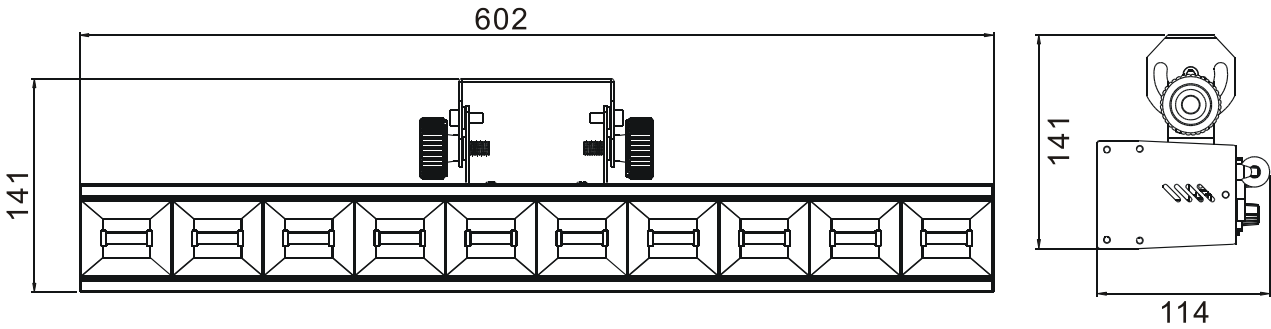
The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. Make sure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight. Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.

The equipment must be installed by professionals. It must be fixed in a place where it is out of the reach of people and no one can pass by or under it.

## 2. Technical Specifications

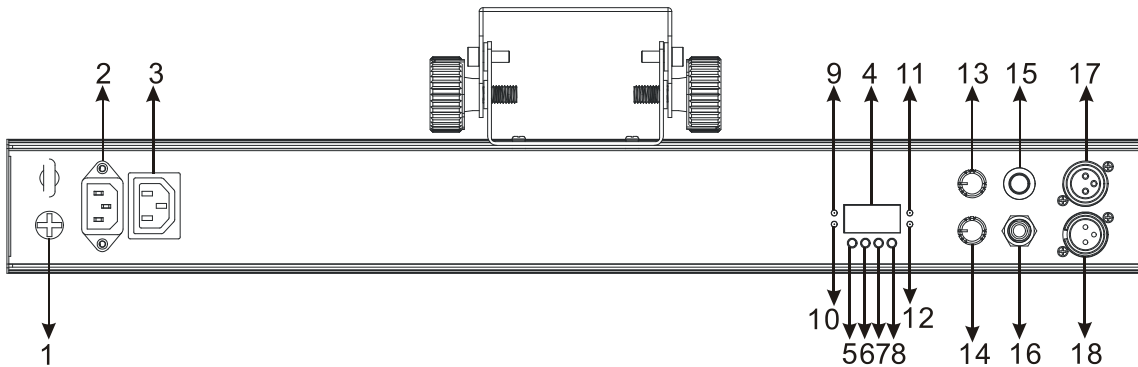
- ◇ 5 DMX Channel Modes: 1/2/10/12
- ◇ 3 Operation modes: DMX, Master/Slave mode, Sound Activation
- ◇ Variable strobe speed and intensity.
- ◇ Built-in programs in master/slave operation triggered by the music
- ◇ Optional easy controller CA-8 for instant lighting show
- ◇ Smooth 0~100% dimming and variable strobe speeds.
  
- ◇ **Power Voltage:** AC 100V~240V, 50/60Hz
- ◇ **Power Consumption:** 60W
- ◇ **Power Cable Daisy Chains:** 10 Fixtures Max. (230V, 50Hz)  
6 Fixtures Max. (120V, 60Hz)
  
- ◇ **LED Sources:** 10pcs × 5W White LEDs
- ◇ **Fuse:** T 2A
- ◇ **Weight:** 2.8Kgs

◇ **Dimension:** 602 × 114 × 141mm



### 3. How To Set The Unit

#### 3.1 Control panel



- 1. **FUSE (T 2A):** To protect the unit from short circuit or over current;
- 2. **POWER IN:** Connection to power supply;
- 3. **POWER OUT:** Connect to supply power to the next fixture;
- 4. **DISPLAY:** To show the various menus and the selected functions.

**BUTTON:**

<b>5. MENU</b>	To select the programming functions
<b>6. ▼ DOWN</b>	To go backward in the selected functions
<b>7. ▲ UP</b>	To go forward in the selected functions
<b>8. ENTER</b>	To confirm the selected functions

**LED:**

<b>9. DMX</b>	On	DMX input present
<b>10. MASTER</b>	On	Master Mode

<b>11. SLAVE</b>	On	Slave Mode
<b>12. SOUND</b>	Flashing	Sound activation

**13. SPEED:** Manually adjusts strobe speed. (Left to right, the speed is from slow to fast)

**Note:** To activate the manual **DIMMER** and **SPEED** controls, scroll through the MENU and ENTER **SND** mode then select **MAN** (Manual), the manual controls will function only in this mode.

**14. DIMMER:** Manually adjusts dimmer. (Left to right, the brightness is from min to max)

**15. MICROPHONE:** Receives music signal for sound active mode.

**16. ONLY FOR REMOTE CONTROL:** Connects to the optional CA-8 to control the unit in Stand-by, Function and Mode

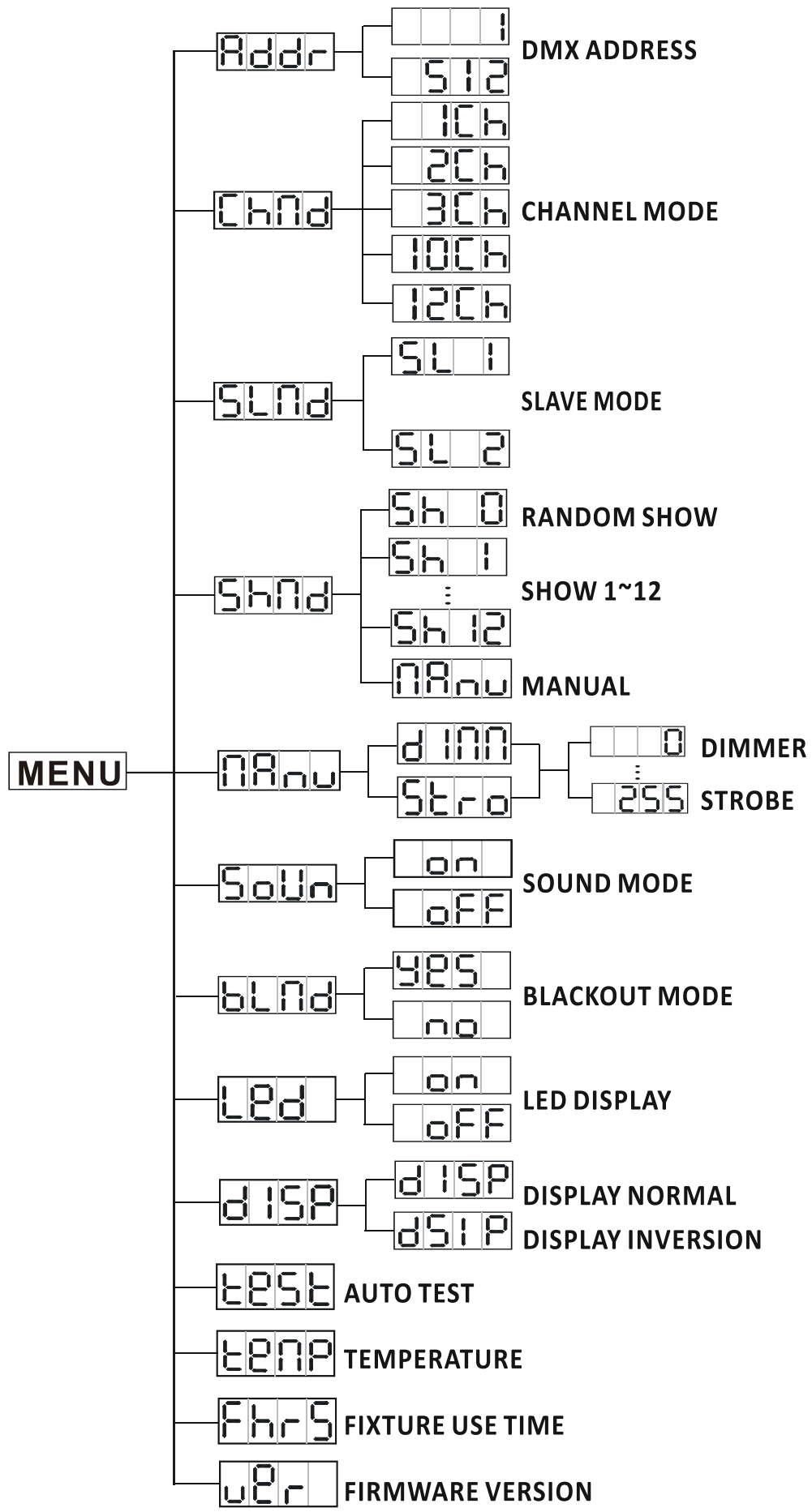
**17. DMX INPUT:** DMX 512 link, use a 3-pin XLR cable to link the unit and DMX controller,

**18. DMX OUTPUT:** DMX 512 link, use a 3-pin XLR cable to link to the next unit.

### **3.2 Main Functions**

To select any of the given functions, press the **MENU** button up to the required selection as shown on the display. Select the function by pressing the **ENTER** button and the display will blink. Use the **DOWN/UP** buttons to change the mode. Once the required mode has been selected, press the **ENTER** button to confirm. To go back to the main functions without any changes press the **MENU** button again. Press and hold the **MENU** button for about one second or wait for 7 seconds to exit the current mode.

The main functions are shown overleaf:



## **Addr** DMX 512 ADDRESS

To select **Addr**, press the **ENTER** button to show **DMX ADDRESS** on the display. Use the **DOWN/UP** buttons 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. Press and hold the MENU button for about one second or wait for one minute to exit the menu mode.

## **Chnd** CHANNEL MODE

To select **Chnd**, press the **ENTER** button to show **CHANNEL MODE** on the display. Use the **DOWN/UP** buttons to select the **1, 2, 10, 12** channel modes. 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. Press and hold the MENU button for about one second or wait for one minute to exit the menu mode.

## **SLnd** SLAVE MODE

To select **SLnd**, press the **ENTER** button to show the **SLAVE MODE** on the display. Use the **DOWN/UP** buttons to select the **SL1** (**SLAVE 1**), **SL2** (**SLAVE 2**) modes. 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. Press and hold the MENU button for about one second or wait for one minute to exit the menu mode.

## **Shnd** SHOW MODE

To select **Shnd**, press the **ENTER** button to show **SHOW MODE** on the display. Use the **DOWN/UP** buttons to select the **Sh0** (Random show), **Sh1** (Show 1) or ... or **Sh12** (Show 12) mode and **MANU** (Manual show). 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. Press and hold the MENU button for about one second or wait for one minute to exit the menu mode.



## **MANU** MANUAL MODE

To select **MANU**, press the **ENTER** button to show **MANUAL MODE** on the display. Use the **DOWN/UP** buttons to select the **DIMM** (Dimmer) or **STRO** (Strobe). Once the mode has been selected, press the **ENTER** button, and use the **DOWN** and **UP** button to adjust the value (0-255). Once selected, press the **ENTER** button to setup. To go back to the functions without any changes 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.

## **SOUN** SOUND MODE

To select **SOUN**, press the **ENTER** button to show **SOUND MODE** on the display. Use the **DOWN/UP** buttons to select the **ON** (sound on) or **OFF** (sound 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. Press and hold the MENU button for about one second or wait for one minute to exit the menu mode.

## **BLND** BLACKOUT MODE

To select **BLND**, press the **ENTER** button to show **BLACKOUT MODE** on the display. Use the **DOWN/UP** buttons to select the **YES** (blackout) or **NO** (normal) 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. Press and hold the MENU button for about one second or wait for one minute to exit the menu mode.

## **LED** LED DISPLAY

To select **LED**, press the **ENTER** button to show **LED DISPLAY** on the display. Use the **DOWN/UP** buttons to select the **ON** (LED on) or **OFF** (LED 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. Press and hold the MENU button for about one second or wait for one minute to exit the menu mode.

## **dISP** DISPLAY INVERSE

To select **dISP**, press the **ENTER** button to show **DISPLAY** on the display. Use the **DOWN/UP** buttons to select the **dISP** (normal) or **dSIP** (inversion). To go back to the functions without any changes press the **MENU** button.

## **TEST** AUTO TEST

To select **TEST**, press the **ENTER** button to show **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. Press and hold the **MENU** button for about one second or wait for one minute to exit the menu mode.

## **TEMP** TEMP.

To select **TEMP**, press the **ENTER** button to show **TEMP.** 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. Press and hold the **MENU** button for about one second or wait for one minute to exit the menu mode.

## **FHRS** FIXTURE USE HOURS

To select **FHRS**, press the **ENTER** button to show the **FIXTURE USE 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. Press and hold the **MENU** button for about one second or wait for one minute to exit the menu mode.

## **VER** SOFTWARE VERSION

To select **VER**, press the **ENTER** button to show the **SOFTWARE VERSION** on the display and the display will show the version of software in the unit . To go back to the functions without any changes 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.

## 4. How To Control The Unit

You can operate the unit in three ways:

1. Master/slave built-in preprogram function
2. Easy controller (optional CA-8)
3. Universal DMX controller

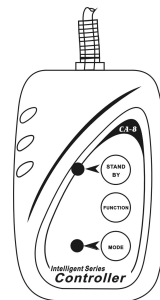
You do not need to turn the unit off when you change the DMX address, the new DMX address setting will take effect immediately.

### 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 and select **Sh 0** (random show) or **Sh 1** (show 1) or... or **Sh 12** (show 12) mode. Any other units will have to be set in slave mode **SLnd** and select **SL 1** (normal) or **SL 2** (2-light show) mode.

#### 2-light show

In **SLnd** (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.



### 4.2 Easy Controller CA-8

The CA-8 remote control is used only in master/slave mode. By connecting to the 1/4" jack socket of the first unit. You will find that the remote control in the first unit will control all the other units for Stand by, Function and Mode selection.

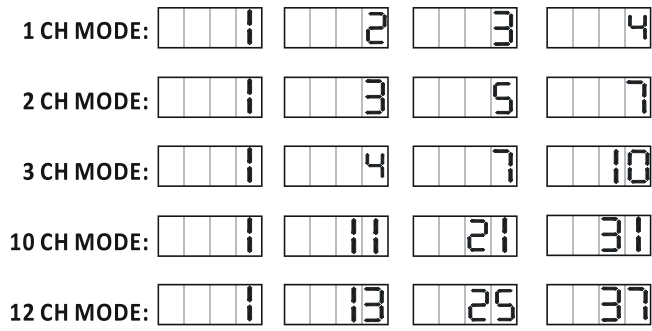
<b>Blackout</b>	Blackout the unit	
<b>Function</b>	Synchronous Strobe by auto Synchronous Strobe by sound (press and hold the button)	Select Show 1 – 12 Manual mode
<b>Mode</b>	Sound (LED OFF)	Show (LED ON)

## 4.3 DMX Controller

When using a universal DMX controller to control the units, you must set a DMX address from 1 to 512.

Press the **MENU** button up to where **Addr** is showing on the display. Press the **ENTER** button and the display will blink. Use the **DOWN/UP** buttons to change the DMX 512 address. Once the address has been selected, press and hold the **ENTER** button until the display stops blinking or it will store automatically after 7 seconds. To go back to the functions without any changes press the **MENU** button again.

Please refer to the following diagram to address your DMX 512 channel for the first 4 units:



## 5. DMX 512 Configuration

### 1/2 Channels Mode:

DMX512 CONFIGURATIONS		
1 Channel (Mode 1)	2 Channels (Mode 2)	
Ch 1	Ch 1	Ch 2
SHOW	DIMMER	STROBE
248-255 Sound Active Show1~12		
228-247 Show 12		
208-227 Show 11		
188-207 Show 10		
168-187 Show 9		
148-167 Show 8		
128-147 Show 7		
108-127 Show 6		
088-107 Show 5		
068-087 Show 4		
048-067 Show 3		
028-047 Show 2		
008-027 Show 1		
000-007 No Function		

**3 Channels Mode:**

3 Channels (Mode 3)				
Ch 1	Ch 2	Ch 3		
SHOW	DIMMER	STROBE		
248-255 Sound Active Show1~12				
228-247 Show 12				⚡⚡⚡
208-227 Show 11				
188-207 Show 10				
168-187 Show 9				⚡⚡
148-167 Show 8				
128-147 Show 7				
108-127 Show 6				⚡
088-107 Show 5				
068-087 Show 4				
048-067 Show 3				
028-047 Show 2				
008-027 Show 1				
000-007 No Function				000-008 No Function

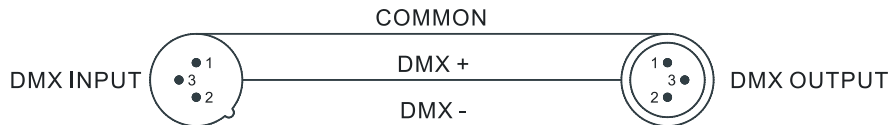
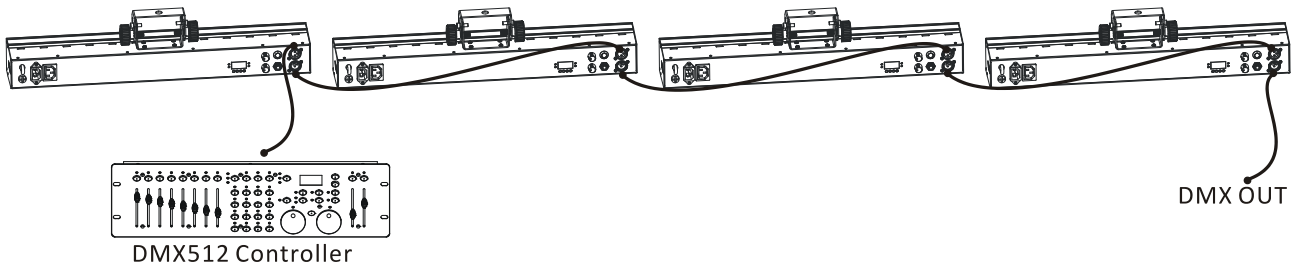
**10 Channels Mode:**

10 Channels (Mode4)					
Ch 1	Ch 2	Ch 3	...	Ch 9	Ch 10
DIMMER LED 1	DIMMER LED 2	DIMMER LED 3		DIMMER LED 9	DIMMER LED 10
			<p>...</p>		

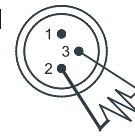
**12 Channels Mode:**

12 Channels (Mode 5)					
Ch 1	Ch 2	...	Ch 10	Ch 11	Ch 12
DIMMER LED 1	DIMMER LED 2		DIMMER LED 10	DIMMER LED 1~10	STROBE
		<p>...</p>			<p>248-255 [ Open</p> <p>240-247 [ Sound Strobe</p> <p>232-239 [ Open</p> <p>190-231 [ Fast Open</p> <p>          [ Slow Close</p> <p>182-189 [ Open</p> <p>140-181 [ Slow Open</p> <p>          [ Fast Close</p> <p>132-139 [ Open</p> <p>009-131 [ ⚡⚡⚡</p> <p>          [ ⚡⚡</p> <p>          [ ⚡</p> <p>000-008 [ Open</p>

## 6. DMX512 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. The last units DMX cable has to be terminated with a 120 ohm 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) of a 3-pin XLR-plug and plug it in the DMX-output of the last unit.
2. Connect the units together in a `daisy chain` by using an 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. The DMX output and input connectors are pass-through type to maintain the DMX circuit, when one of the units' power is disconnected.
3. Each fixture unit needs to have an address set to receive the data sent by the controller. The address number is between 0-512 (usually 0 & 1 are equal to 1).
4. The end of the DMX 512 system should be terminated to reduce signal errors.

## 7. Troubleshooting

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

### A. The unit does not work, no light and the fan does not work

1. Check the connection of power and main fuse.

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

1. DMX LED should be on. If not, check DMX cables to see if linked correctly.
2. If the DMX LED is on but no response check the DMX address settings and polarity.
3. If you have intermittent DMX signal problems check the cables and connectors.
4. Try to another DMX controller.
5. Check if the DMX cables run near or run alongside high voltage cables that may cause interference.

### **C. Some units don't respond to the easy controller**

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

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

1. Make sure the unit is set into the correct mode.
2. Check the microphone by tapping it.
3. Make sure the fixture is not set into Blackout mode

## **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: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the unit's optics.

- Clean with soft cloth using normal glass cleaning fluid.
- Always dry the parts carefully.
- Clean the external optics at least every 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 ; EN55103-2: 2009; EN62471: 2008;  
EN61000-3-2: 2006 + A1:2009 + A2:2009; EN61000-3-3: 2008.

**&**

## **Harmonized Standard**

EN 60598-1:2008 + All:2009; 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**