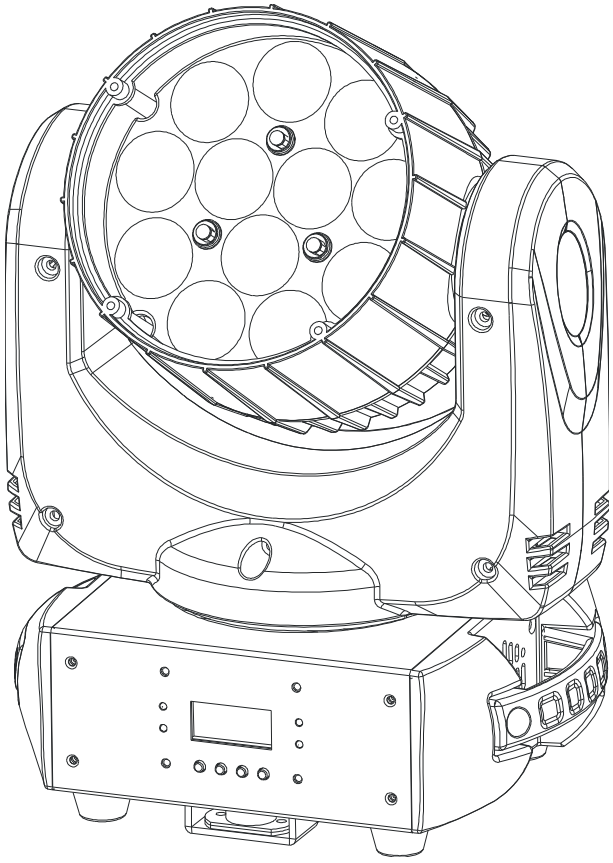
Kudos 200ZS



Order code: ELUM038

User Manual

www.prolight.co.uk

CONTENTS

1. Safety Instructions.....2

2. Technical Specifications.....4

3. How To Set The Unit.....4

3.1 Control panel.....4

3.2 Main Function 6

4. Control By Universal DMX Controller.....11

4.1 DMX 512 Connection.....11

4.2 Address Setting.....12

4.3 DMX 512 Configuration.....13

5. Troubleshooting 15

6. Fixture Cleaning.....16

1. Safety Instructions

WARNING

Please read carefully the instruction, which includes important information about the installation, usage and maintenance.

DANGER! Safety hazard. Risk of severe injury or death.

DANGER! Hazardous voltage. Risk of lethal or severe electric shock

WARNING! Fire hazard.

WARNING! LED light emission. Risk of eye injury.

WARNING! Burn hazard. Hot surface. Do not touch.

WARNING! Refer to user manual.

- Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.
- Please 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.
- Please disconnect main power before replacement or servicing.
- Please make sure there are no flammable materials close to the unit while operating as it is fire hazard.
- Please use a safety cable when fixing this unit. DO NOT handle the unit by the head only. Always handle using the base.
- Maximum ambient temperature is Ta: 40□. DO NOT operate it where the temperature is higher than this.
- Unit surface temperature may reach up to 85□. DO NOT touch the housing with bare-hands during operation. Turn off the power and allow 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 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, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.

For 230V 50Hz power supply chain, the maximum amount of fixtures that can be connected on one power chain is 8;
For 120V 60Hz power supply chain, the maximum amount of fixtures that can be connected on one power chain is 4;

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

2. Technical Specifications

□ Compact design, fast and powerful LED moving beam wash

□ DMX512 Control: 8/14 channels mode

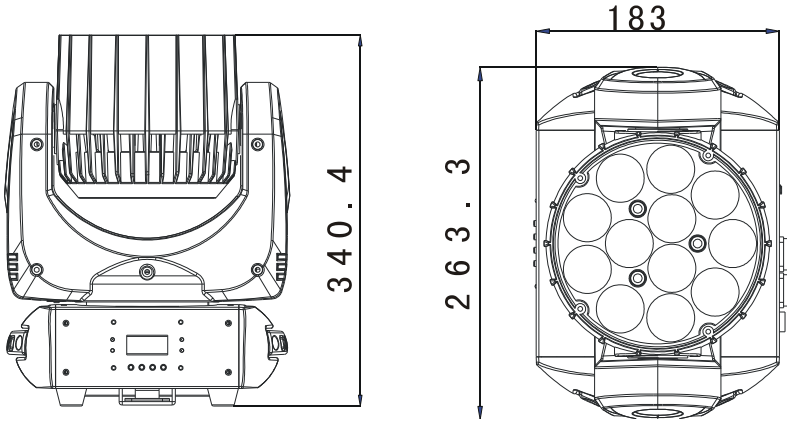
□ Strobe with smooth dimming 0~100%

□ Color macro effect

□ Blue LCD display for easy navigation

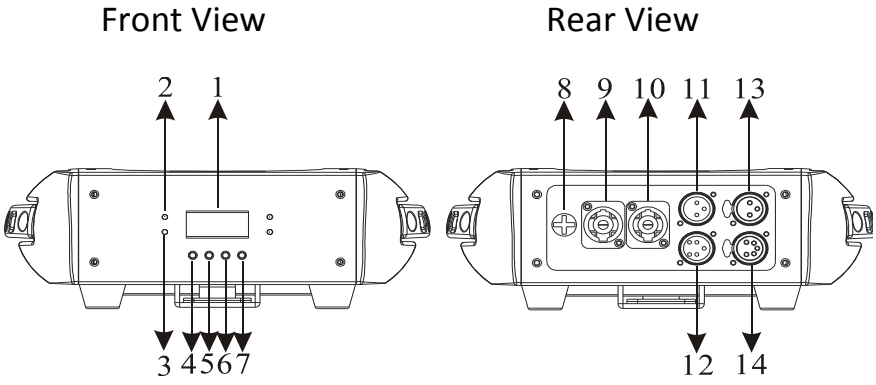
□Ideal for stage, theatre, TV studio, rental and discotheques

Input Voltage: AC 100V~240V, 50/60Hz
Power Consumption: 198W
LED Sources: OSRAM OSTAR RGBW 12 × 10W LED
Beam Angel: 10°~60°
Dimension: 263.3×183×340.4mm
Weight: 7.5Kgs



3. How To Set The Unit

3.1 Control panel



1. Display:

To show the various menus and the selected functions

LED:

2. POWER	On	Power On
3. DMX	On	DMX input present

Button:

4.MENU	To select the programming functions
5.DOWN	To go backward in the selected functions
6. UP	To go forward in the selected functions
7. ENTER	To confirm the selected functions

8. Fuse(T 6.3A**):**

Protects the unit from electrical damage.

9. POWERCON IN:

Connect to a socket (AC 100~240V, 50/60Hz) via the supplied mains cable.

10. POWERCON OUT:

Connect to supply power to the next unit.

11 DMX IN (3-pin XLR):

For DMX512 link, use 3-pin XLR cable to link the unit together.

12 DMX IN (5-pin XLR):

For DMX512 link, use 5-pin XLR cable to link the unit together.

13. DMX OUT (3-pin XLR):

For DMX512 link, use 3-pin XLR cable to link the next unit.

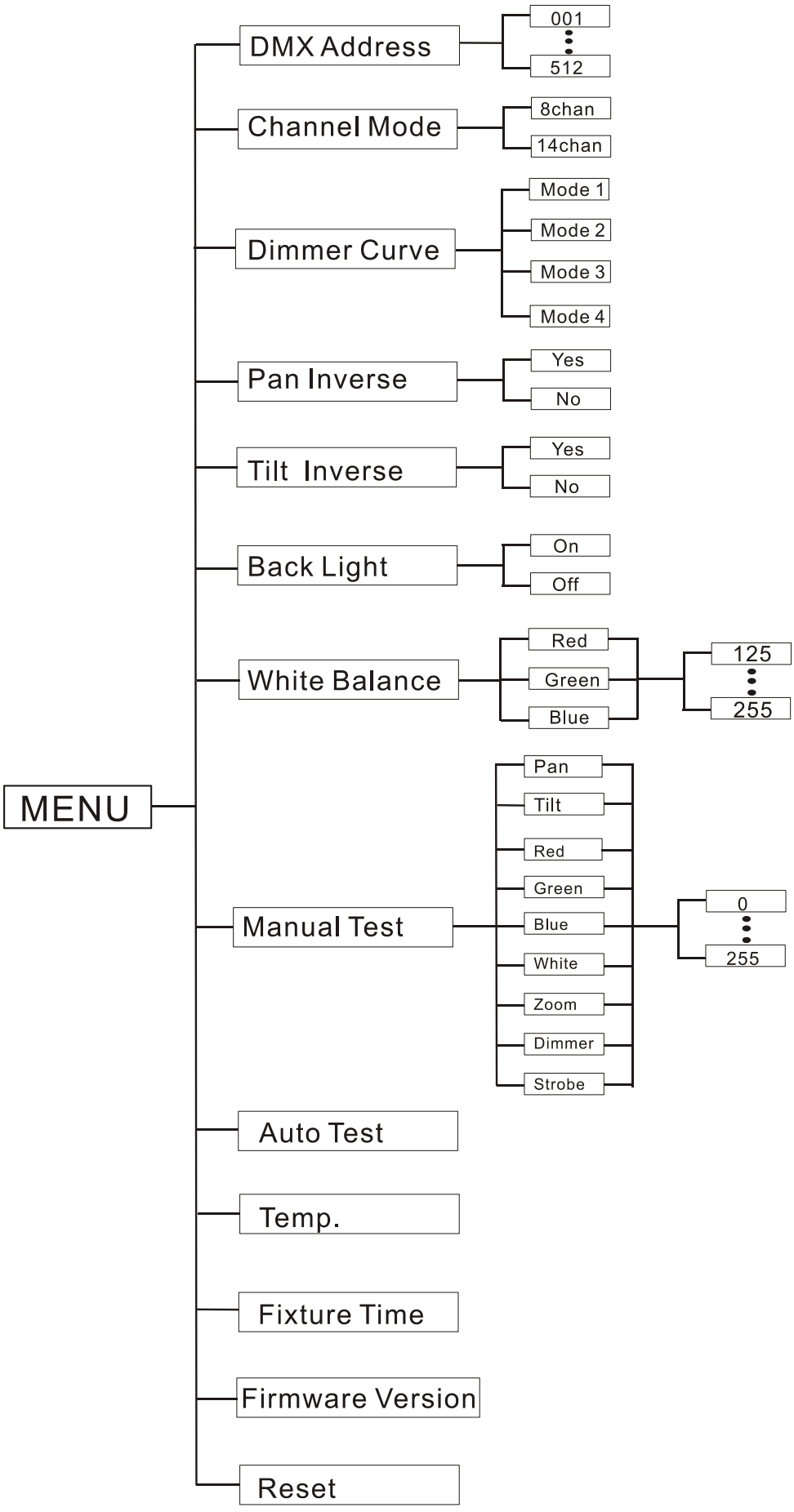
14. DMX OUT (5-pin XLR):

For DMX512 link, use 5-pin XLR cable to link the next unit.

3.2 Main Function

To select any of the given functions, press the **MENU** up button to where the required setting is showing on the display. Select the function with the **ENTER** button and the display will blink. Use the **DOWN** and **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. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

The main functions are shown overleaf:


MENU
DMX Address
001
512
Channel Mode
8chan
14chan
Dimmer Curve
Mode 1
Mode 2
Mode 3
Mode 4
Pan Inverse
Yes
No
Tilt Inverse
Yes
No
Back Light
On
Off
White Balance
Red
Green
Blue
125
255
Manual Test
Pan
Tilt
Red
Green
Blue
White
Zoom
Dimmer
Strobe
0
255
Auto Test
Temp.
Fixture Time
Firmware Version
Reset

DMX Address

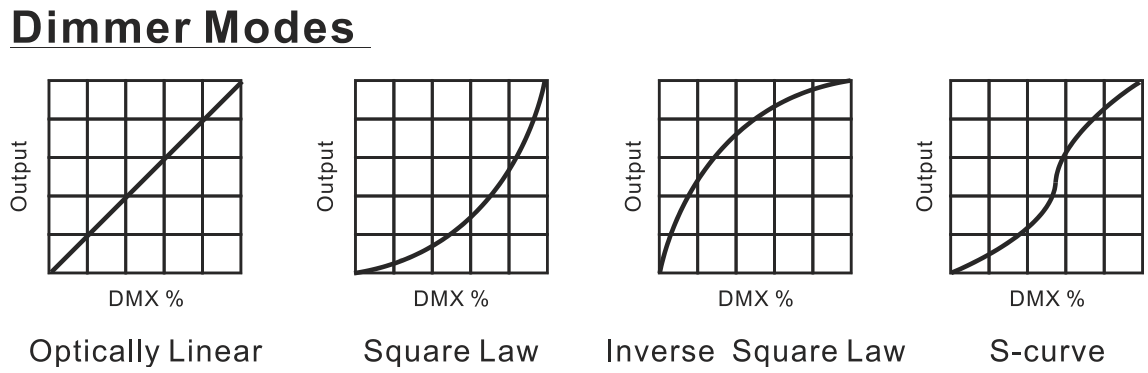
To select the **DMX Address**, press the **ENTER** button to confirm. Use the **UP** and **DOWN** buttons to adjust the address from **1** to **512**. Once the address has been selected, press the **ENTER** button to setup, to go back to the functions without any change press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

Channel Mode

To select the **Channel Mode**, press the **ENTER** button to confirm. Use the **UP** and **DOWN** buttons to select the **8chan** or **14chan**. Once selected, press the **ENTER** button to setup, to go back to the functions without any change press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

Dimmer curve

To select the **Dimmer curve**, press the **ENTER** button to confirm. Use the **DOWN** and **UP** buttons to select the **Mode1**, **Mode 2**, **Mode 3** or **Mode 4** mode. Once the mode has been selected, press the **ENTER** button to setup, to go back to the functions without any change press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.



Mode 1(Optically Linear): The increase in light intensity appears to be linear as DMX value is increased.

Mode 2(Square Law): Light intensity control is finer at low levels and coarser at high levels.

Mode 3(Inverse Square Law): Light intensity control is coarser at low levels and finer at high levels.

Mode 4(S-cure): Light intensity control is finer at low levels and high levels and coarser at medium levels.

Pan Inverse

To select the **Pan Inverse**, press the **ENTER** button to confirm. Use the **DOWN** and **UP** buttons to select the **Yes** (pan inversion) or **No** (normal) mode. Once the mode has been selected, press the **ENTER** button to setup, to go back to the functions without any change press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

Tilt Inverse

To select the **Tilt Inverse**, press the **ENTER** button to confirm. Use the **DOWN** and **UP** buttons to select the **Yes** (tilt inversion) or **No** (normal) mode. Once the mode has been selected, press the **ENTER** button to setup, to go back to the functions without any change press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

Back Light

To select the **Back Light**, press the **ENTER** button to confirm. Use the **DOWN** and **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 change press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

White Balance

To select the **White Balance**, press the **ENTER** button to confirm. Use the **DOWN** and **UP** buttons to select the **Red** or **Green**, **Blue**. Once the mode has been selected, press the **ENTER** button to setup, use the **DOWN** and **UP** buttons to adjust the value (125~255). Once selected, press the **ENTER** button to setup, go back to the functions without any change press the **MENU** button

again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

Manual Test

To Select the **Manual Test**, press the **ENTER** button to confirm. Use the **DOWN** and **UP** buttons to select the **Pan / Tilt** / **Red** / **Green** / **Blue / White /Zoom / Dimmer** or **Strobe**. Once you find a function or a color you wish to test, press the **ENTER** button, use the **DOWN** and **UP** buttons to adjust the values (0~255). Once testing is finished press the **ENTER** button to save. To go back to the functions without any change press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

Auto Test

To select the **Auto Test**, press the **ENTER** button and the unit will run a self-test using its built-in programs. To go back to the functions 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.

To select the **Temp.**, press the **ENTER** button and the display will show the temperature of the unit. To go back to the functions press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

Fixture Time

To select the **Fixture Time**, press the **ENTER** button and the display will show the number of working hours of the unit. To go back to the functions press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

Firmware Version

To select the **Firmware Version**, press the **ENTER** button and the display will show the version of

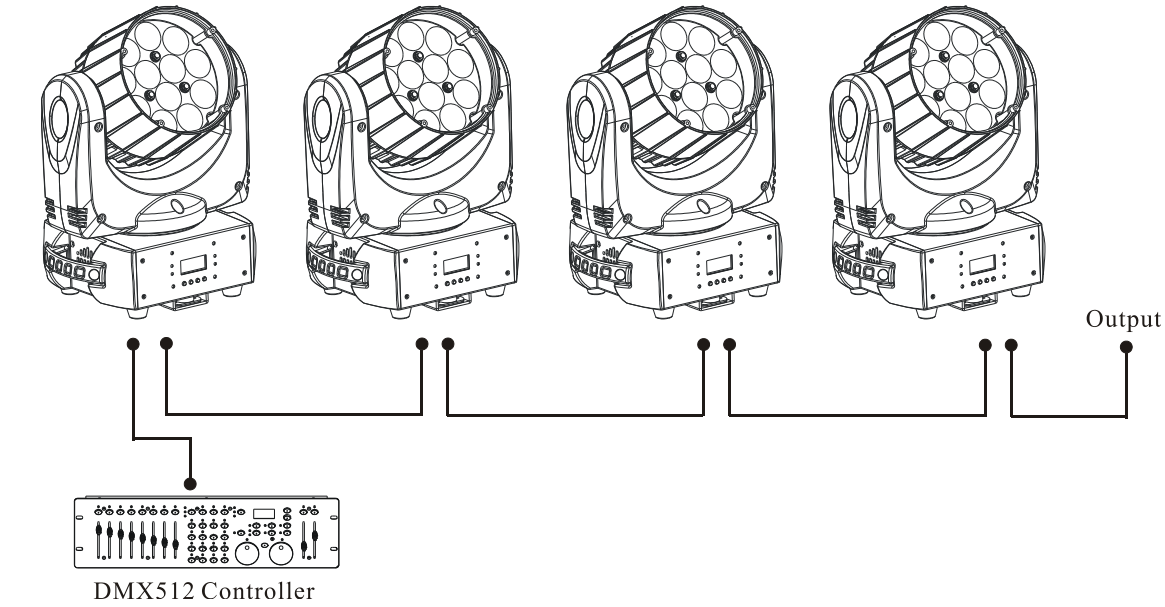
software of the unit. To go back to the functions press the **MENU** button again. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

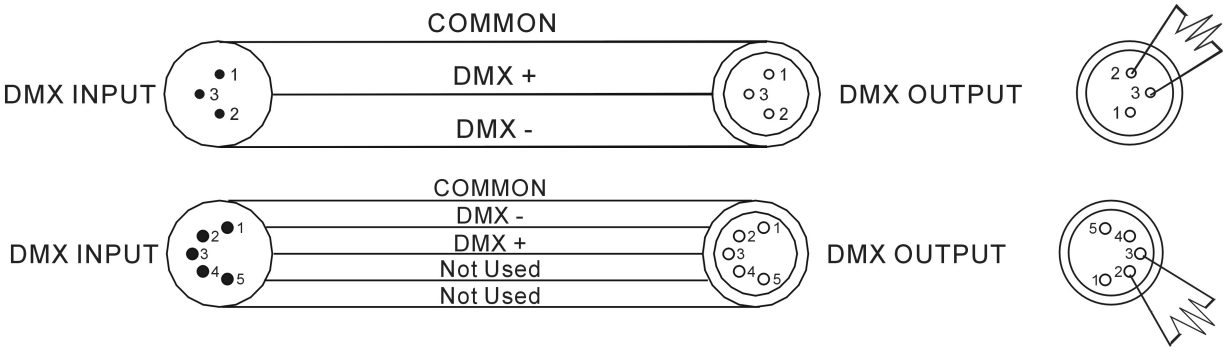
Reset

To select the **Reset**, press the **ENTER** button and all channels of the unit will return to their standard position.

4. Control By Universal DMX Controller

4.1 DMX 512 Connection





1. The last unit in the DMX chain 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. Alternatively you can purchase a ready- made termination plug.

2. Connect the units together in a `daisy chain` by using the XLR plug from the output of one 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, badly soldered joints or corroded connectors can easily distort the signal and even shut down the system.
3. The DMX output and input connectors are of pass-through type to maintain the DMX circuit, when one of the units' power is disconnected.
4. Each 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/Pin 5: 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 the DMX signal.

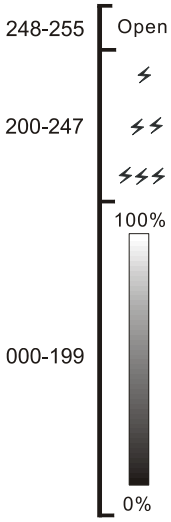
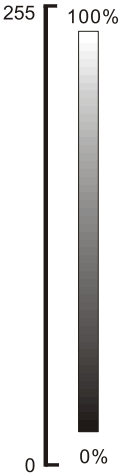
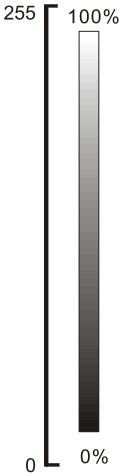
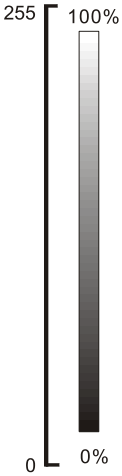
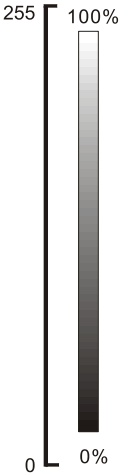
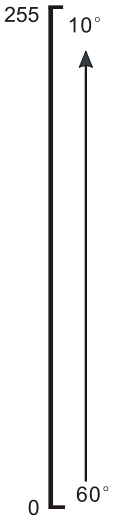
Press the **MENU** button to enter menu mode, select the ***DMX Address***, press the **ENTER** button to confirm, the present address will blink on the display, use the **UP** and **DOWN** button to adjust the address from 001 to 512, press the **ENTER** button to save. Press the **MENU** button to return back to the last menu or leave the unit idle for 7 seconds to exit the 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
8 channels	1	9	17	25
14 channels	1	15	29	43

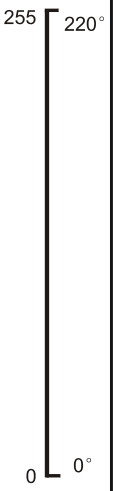
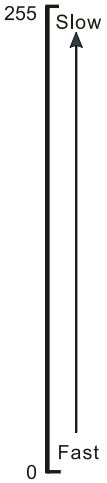
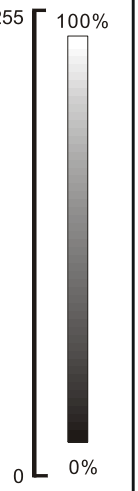
4.3 DMX 512 Configuration

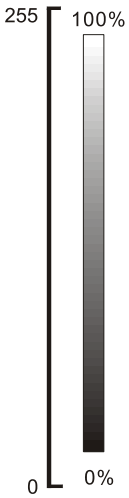
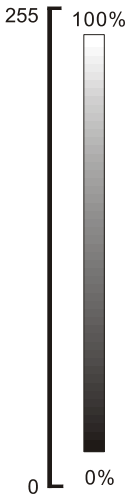
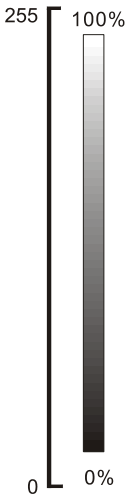
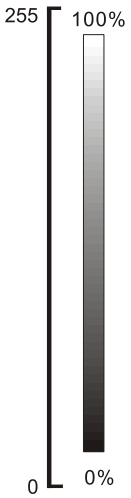
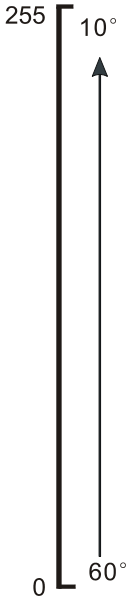
8 Channels Mode:

8 Channels Mode							
Ch 1	Ch 2	Ch 3	Ch 4	Ch 5	Ch 6	Ch 7	Ch 8
Pan	Tilt	Dimmer/Strobe	Red	Green	Blue	White	Zoom
							

14 Channels Mode:

14 Channels Mode

Ch 1	Ch 2	Ch 3	Ch 4	Ch 5	Ch 6	Ch 7	Ch 8
Pan	Pan Fine	Tilt	Tilt Fine	P/T Speed	Reset	Dimmer	Shutter
					015-255 No Function 010-014 Reset All 000-009 No Function		245-255 open 230-244 burst 225-229 open 210-224 sine wave 205-209 open 190-204 random burst pulse 185-189 open 170-184 burst pulse 165-169 open 150-164 random closing pulse 145-149 open 130-144 random opening pulse 125-129 open 110-124 random strobe 105-109 open 090-104 closing pulse 085-089 open 070-084 opening pulse 065-069 open 025-064 strobe 1 020-024 open 000-019 closed

Ch 9	Ch 10	Ch 11	Ch 12	Ch 13	Ch 14
Red	Green	Blue	White	Color Macro	Zoom
				250-255 Open 245-249 Slow 240-244 Medium 235-239 Fast (Random Color) 230-234 Open 208-229 Counter-clockwise, slow to fast 202-207 Stop 180-201 Clockwise, fast to slow (Color wheel rotation effect) 175-179 Open 170-174 LEE164 - Flame Red 165-169 LEE135 - Deep Gold Amber 160-164 LEE778 - Millennium Gold 155-159 LEE021 - Gold Amber 150-154 LEE105 - Orange 145-149 LEE179 - Chrome Orange 140-144 LEE104 - Deep Amber 135-139 LEE100 - Spring Yellow 130-134 LEE088 - Lime Green 125-129 LEE738 - JAS Green 120-124 LEE122 - Fern Green 115-119 LEE089 - Moss Green 110-114 LEE139 - Primary Green 105-109 LEE124 - Dark Green 100-104 LEE116 - Medium Blue Green 095-099 LEE118 - Light Blue 090-094 LEE353 - Lighter Blue 085-089 LEE117 - Steel Blue 080-084 LEE202 - Half CT Blue 075-079 LEE201 - Full CT Blue 070-074 LEE161 - State Blue 065-069 LEE200 - Double CT Blue 060-064 LEE132 - Medium Blue 055-059 LEE079 - Just Blue 050-054 LEE120 - Deep Blue 045-049 LEE071 - Tokyo Blue 040-044 LEE181 - Congo Blue 035-039 LEE194 - Surprise pink 030-034 LEE345 - Fuchsia pink 025-029 LEE328 - Follies pink 020-024 LEE332 - Special rose pink 015-019 LEE157 - Pink 010-014 LEE790 - Moroccan pink 000-009 Open	

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 connection of power and main fuse.
2. Check for mains voltage on the main input.
3. Check the power on LED.

B. Not responding to DMX controller

1. DMX LED should be on. If not, check the DMX connectors or cables to see if linked properly.
2. If the DMX LED is on but no response from the channels, check the address settings and DMX polarity.
3. If you have intermittent DMX signal problems, check the cables or connectors of the unit 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 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 proper address.

6. 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

English

Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with seperate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please seperate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

Innovation, Quality, Performance