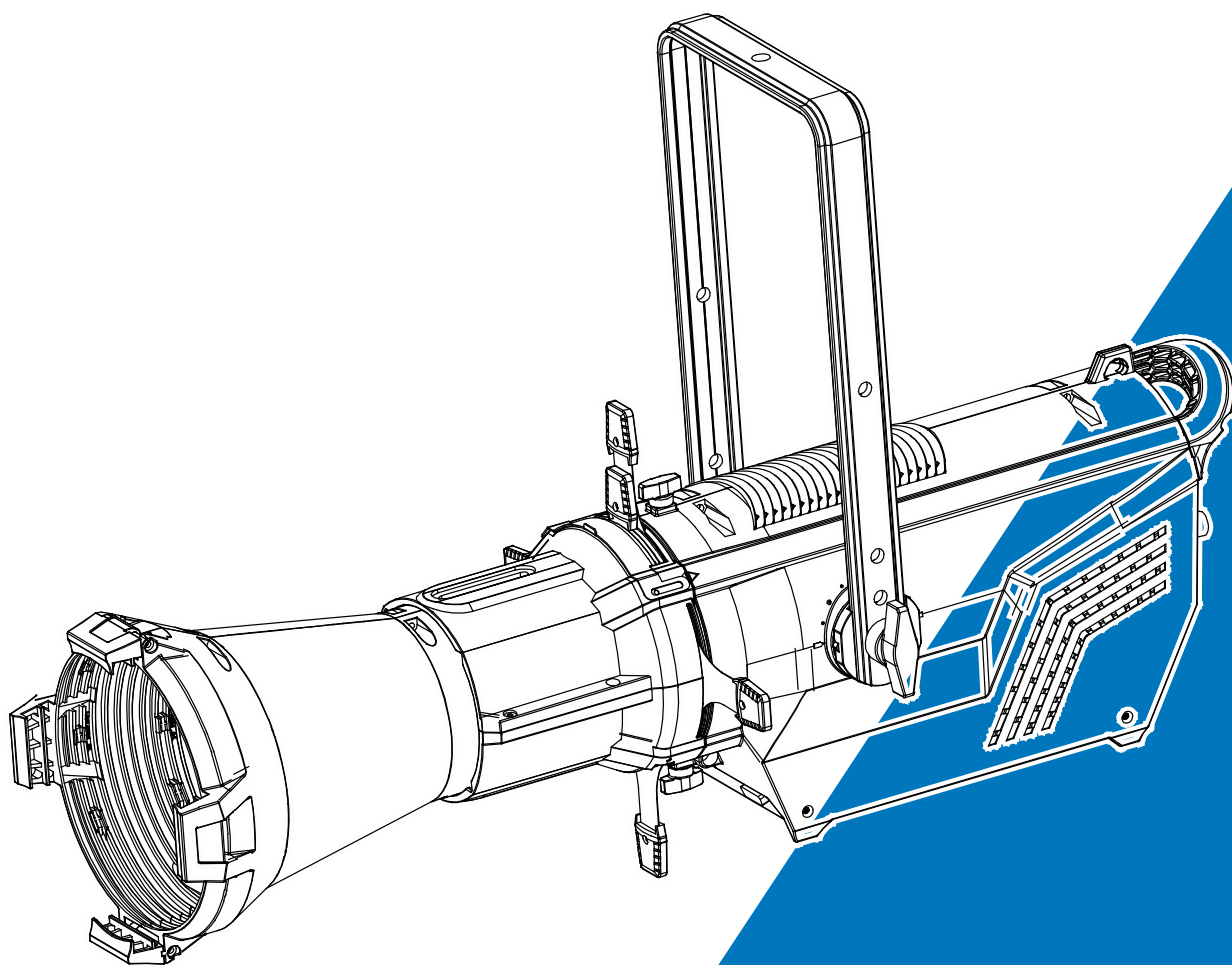




E-200 MB MC



User Manual

Please read the instruction carefully before use

Contents

1. Safety Instruction	2
2. Technical Specifications	3
3. The Unit Construction	6
4. Installation	6
5. Control Panel	7
6. Main Function.....	8
7. How to Control the Unit.....	14
7.1 DMX Connection	14
7.2 DMX Address Setting.....	15
7.3 DMX Configuration	16
8. Troubleshooting.....	17
9. Fixture Cleaning.....	18

1. Safety Instruction



Please read this 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 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 cable when fixes this unit. DO NOT handle the unit by taking its head only, but always by taking its base.
- Maximum ambient temperature is $T_a: 40^{\circ}\text{C}$. DO NOT operate it where the temperature is higher than this.
- Unit surface temperature may reach up to 85°C . DO NOT touch the housing bare-hand 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 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 might be causing electric shock.

Warning:

- To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture.
- DO NOT open the unit within five minutes after switching off.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.

◆ **Note:** Use only the color gel that can resist high temperature. (>300 °C)

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. 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 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 the professionals. And it must be fixed at a place where is out of the touch of people and has no one pass by or under it.

2. Technical Specifications

- ◇ DMX Control: 2 Channel Mode (Dimming, Strobe)
- ◇ Control Modes: DMX, Master/Slave
- ◇ Lens Options: 5° , 11° , 14° , 19° , 26° , 36° , 50° or 70°
- ◇ 0% ~ 100% linear dimming
- ◇ Variable Strobe Effects

◇ **Input Voltage:** AC 100 ~240V, 50/60Hz

◇ **Power Consumption:** 210W

◇ **Light Sources:** 1 x 200W (5 in 1) LED

◇ **IP Grade:** IP22

◇ **Weight:**

5° : 10.8kgs (23. 8lbs)

11° , 14° , 19° : 10.6kgs (23. 4lbs)

26° , 36° : 10.2kgs (22. 5lbs)

50° , 70° : 8.5kgs (18. 7lbs)

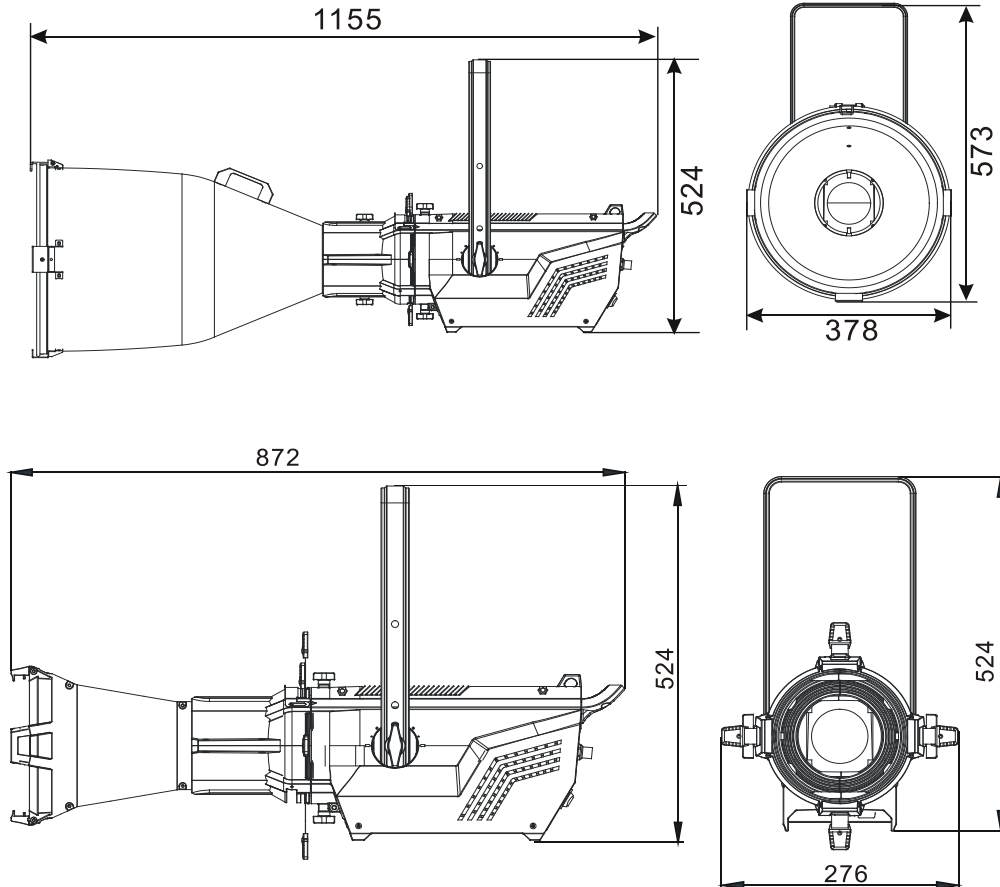
◇ **Dimension:**

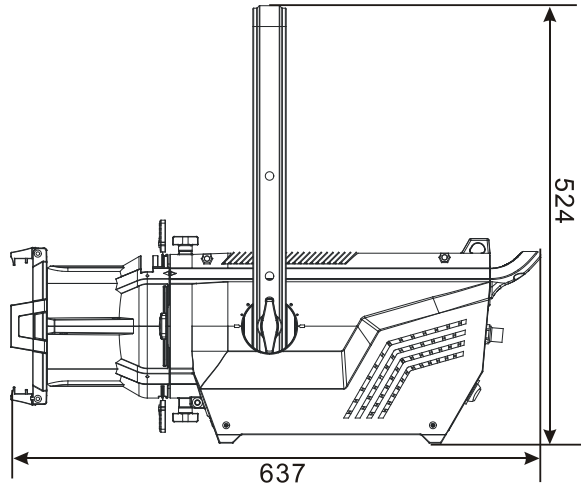
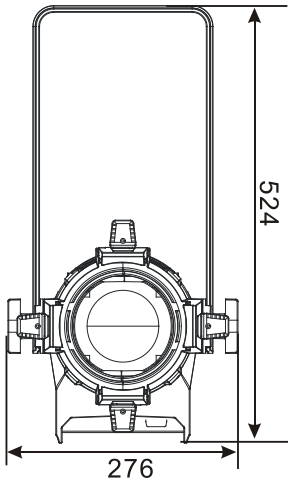
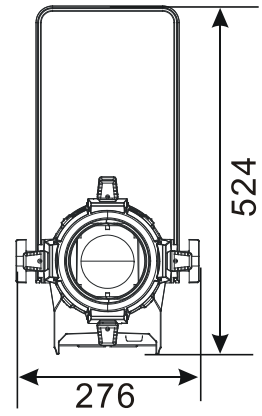
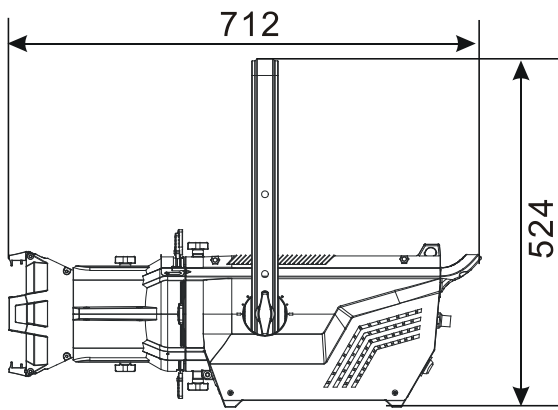
5° : 1155 ×378 × 524mm(45.5"x14.9"x20.6")

11° , 14° , 19° : 872 ×276 × 524mm(34.3"x10.9"x20.6")

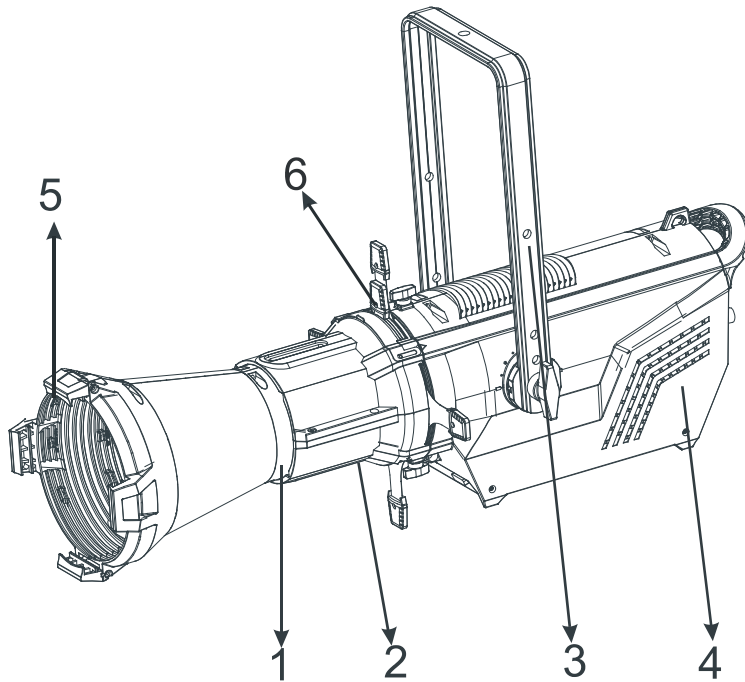
26° , 36° : 712 ×276 × 524mm(28.0"x10.9"x20.6")

50° , 70° : 637 ×276 × 524mm(25.1"x10.9"x20.6")



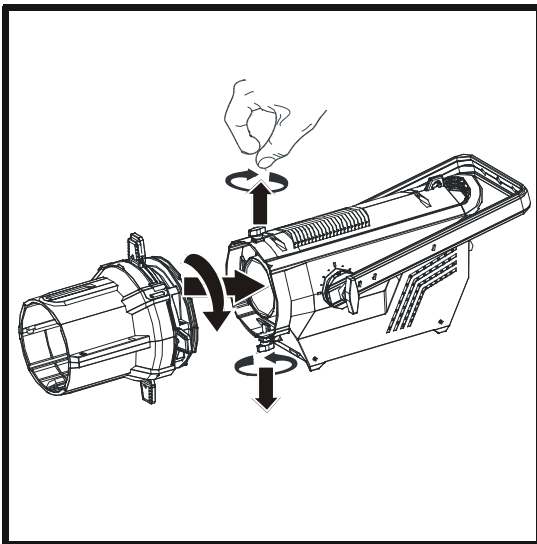


3. The Unit Construction

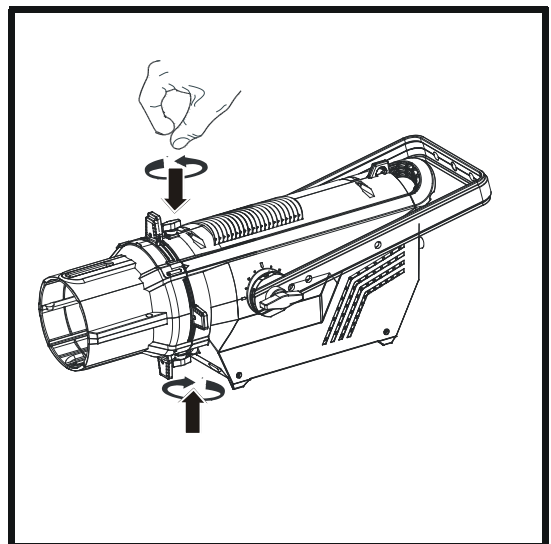


- 1. Lens Module;
- 2. Framing System;
- 3. Bracket;
- 4. Main Body;
- 5. Clip for Gel Holder
- 6. Gobo Slot

4. Installation

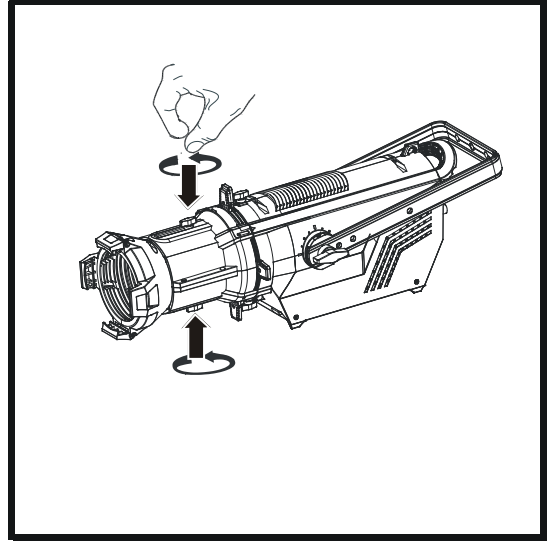
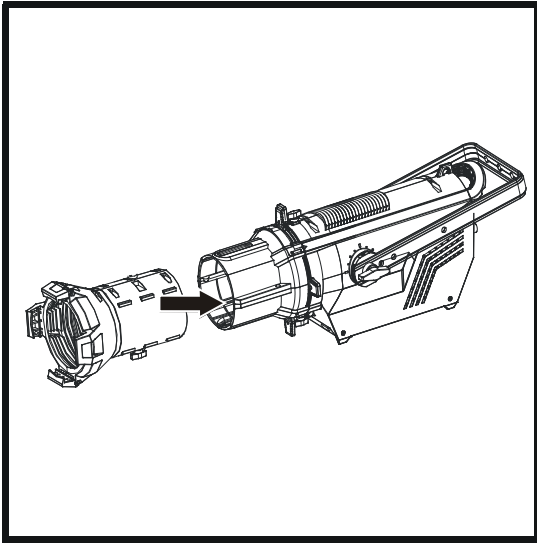


1



2

Loosen the two screws on the Main Body (MB) and put the Framing System into the MB, then turn the Framing System right .Tighten the two screws to fix the Framing System.

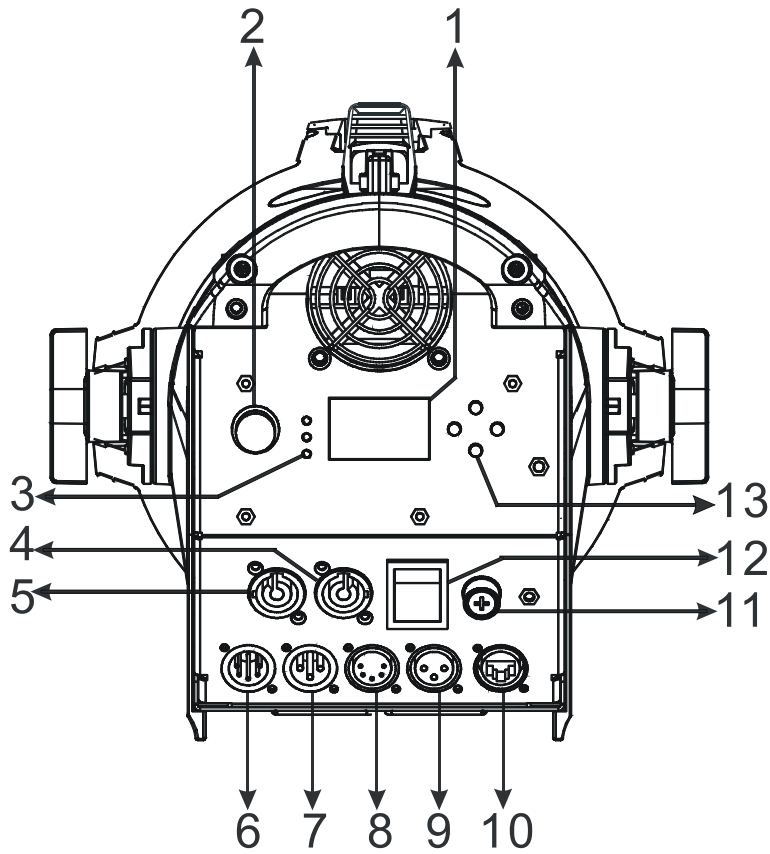


3

4

Put the Lens Module into the Framing System and tighten the Lens Module into the Framing System with two screws.

5. Control Panel



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

2. **Dimmer Adjust Knob:** Adjust the lightness for the unit;

3. **LED:**

MASTER	On	Master Mode
SLAVE	On	Slave Mode
DMX	On	DMX input present

4. **MAINS OUT:** PowerCon loop connection for main power supply to the next unit;

5. **MAINS IN:** PowerCon connection from main power supply;

6. **DMX IN:** For DMX512 link, use 5-pin XLR cable to link the unit and the DMX controller;

7. **DMX IN:** For DMX512 link, use 3-pin XLR cable to link the unit and the DMX controller;

8. **DMX OUT:** For DMX512 link, use 5-pin XLR cable to link the next unit and output DMX signal;

9. **DMX OUT:** For DMX512 link, use 3-pin XLR cable to link the next unit and output DMX signal;

10. **RJ 45 Socket:** No function at the moment. Reserve for Art-net in the future.

11. **Fuse (T 5A):** To protect the unit from damage of over current;

12. **POWER SWITCH:** Turns On/off the power;

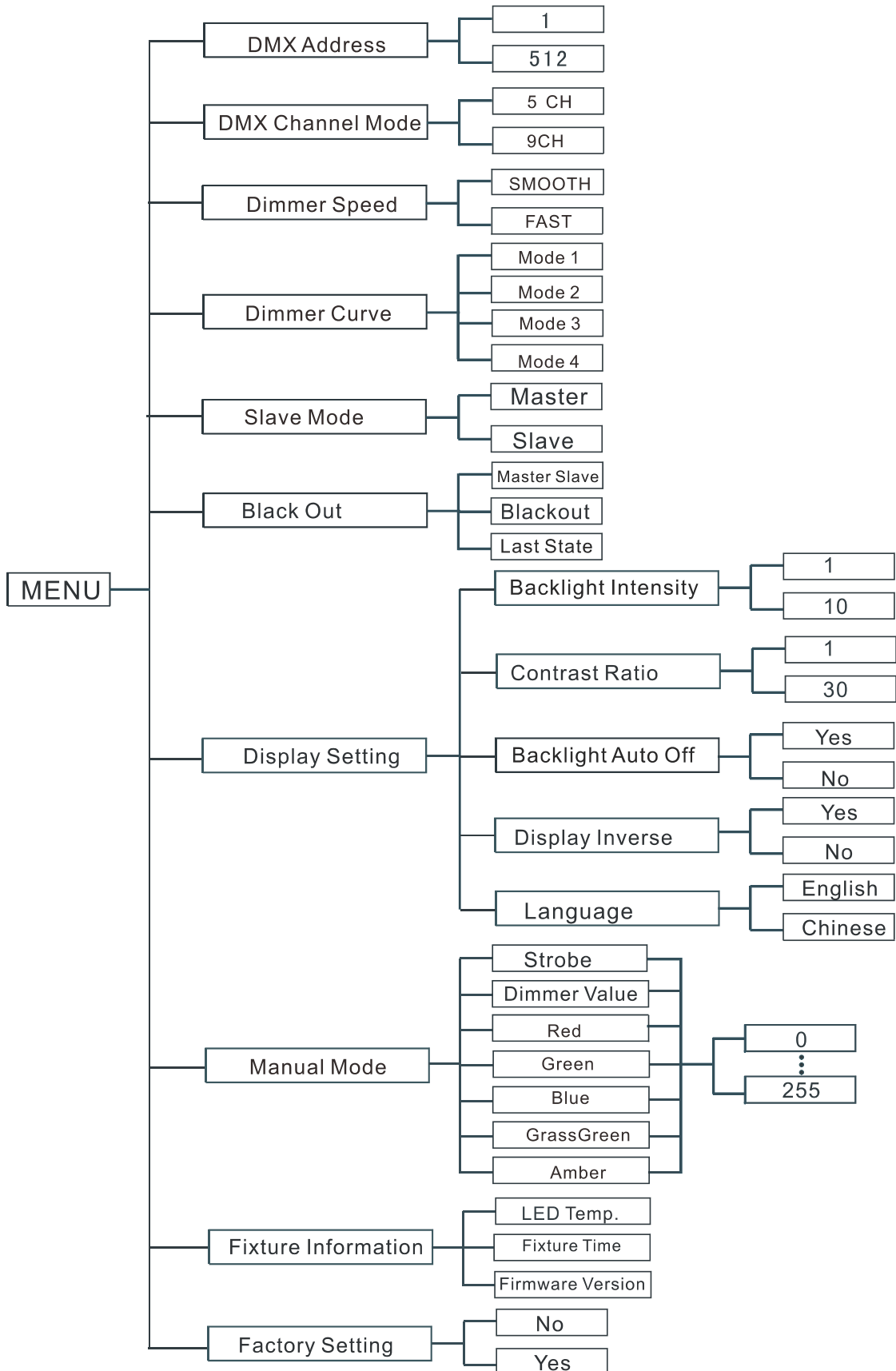
13. **Button:**

MENU	To select the programming functions
▼ DOWN	To go backward in the selected functions
▲ UP	To go forward in the selected functions
ENTER	To confirm the selected functions

6. Main Function

To select any functions, press the **MENU** button until the required function is showing on the display. Select the function by pressing 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 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.

The main functions are shown below:



DMX Address

To select the **DMX Address**, press the **ENTER** button to show **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.

DMX Channel Mode

To select the **DMX Channel Mode**, press the **ENTER** button to show **DMX CHANNEL MODE** on the display. Use the **DOWN/UP** button to select the **5Ch** or **9Ch** 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. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

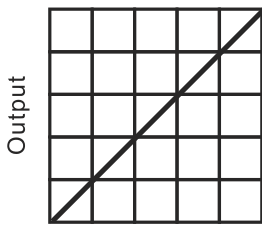
Dimmer Speed

To select **Dimmer Speed**, press the **ENTER** button to show the **DIMMER SPEED** on the display. Use the **DOWN/UP** button to select the **FAST** (dimmer open fast) or **SMOOTH** (dimmer open smooth). Once 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 one minute to exit the menu mode.

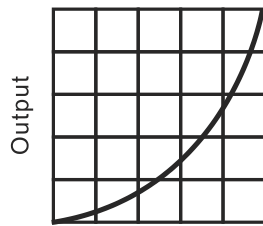
Dimmer Curve

To select **Dimmer Curve**, press the **ENTER** button to show the **DIMMER CURVE** on the display. Use the **DOWN/UP** button to select the **Mode1** or **Mode 2** or **Mode 3** or **Mode 4**. 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. Press and hold the **MENU** button about one second or wait for one minute to exit the menu mode.

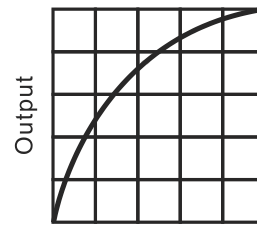
Dimmer Modes



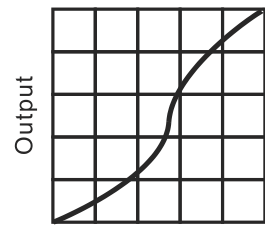
Optically Linear



Square Law



Inverse Square Law



S-curve

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.

Slave Mode

To select the **Slave Mode**, press the **ENTER** button to show **SLAVE MODE** on the display. Use the **DOWN/UP** button to select the **Master** or **Slave** 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. Hold and press the **MENU** button for one second or wait for one minute to exit the menu mode.

Black Out

To select the **Black Out**, press the **ENTER** button to show **BALCKOUT** on the display. Use the **DOWN/UP** button to select the **Master Slave**, **Blackout** or **Last State** 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.

Display Setting

To select the **Display Setting**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to select **Backlight Intensity** , **Contrast Ratio**, **Backlight Auto Off**, **Display Inverse** or **Language**.

Backlight Intensity

Select **Backlight Intensity**, press ENTER button to confirm, present mode will blink on the display, use UP and DOWN button to adjust backlight intensity from **1** (dark) to **10** (bright), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Contrast Ratio

Select **Contrast Ratio**, press ENTER button to confirm, present mode will blink on the display, use UP and DOWN button to adjust the intensity ratio from **1** (dark) to **30** (bright), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Backlight Auto Off

Select **Backlight Auto Off**, press ENTER button to confirm, present mode will blink on the display, use UP and DOWN button to select **No** (display always on) or **Yes** (display goes off one minute after exiting menu mode), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Display Inverse

Select **Display Inverse**, press ENTER button to confirm, present mode will blink on the display, use UP and DOWN button to select **No** (normal display) or **Yes** (inverse display), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Language

Select Language, press ENTER button to confirm, present mode will blink on the display, use UP and DOWN button to select English or Chinese, press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Manual Mode

To select the **Manual Mode**, press the **ENTER** button to show the **MANUAL Mode** on the display. Use the **DOWN/UP** button to select the **Strobe/Dimmer Value/Red/Green/ Blue/ Grass Green/ or Amber**. Once the function or color has been selected, press the **ENTER** button to setup, use the **DOWN** and **UP** button to change the value (0~255). Once the mode has been selected, press the **ENTER** button to setup, 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 one minute to exit the menu mode.

Fixture Information

To select **Fixture Information**, press the **ENTER** button to confirm, Use the **DOWN/UP** button to select the **LED Temp.**、**Fixture Hours** or **Firmware version**。

LED Temp.

To select the **LED Temp.**, press the **ENTER** button to show **LED TEMP.** on the display, and the display will show the temperature of the fixture. 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.

Fixture Hours

To select the **Fixture Hours**, press the **ENTER** button to show **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.

Firmware Version

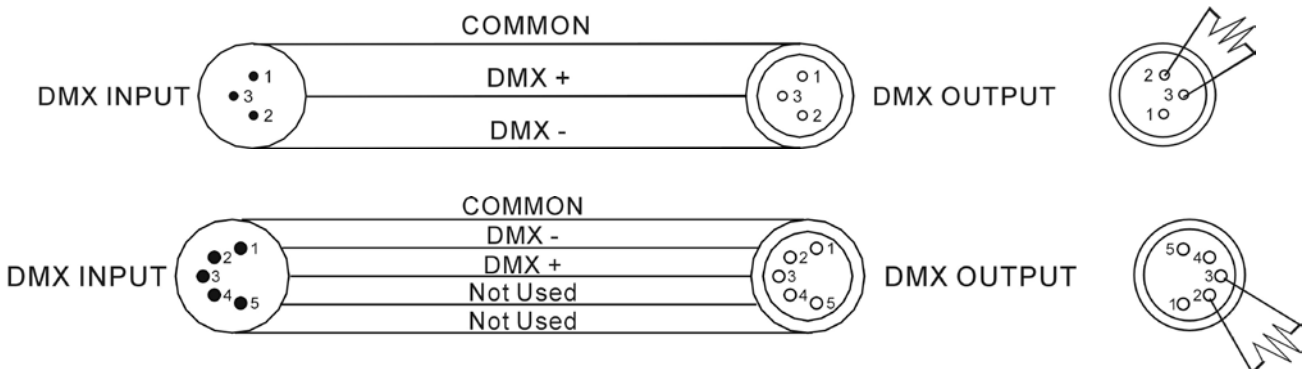
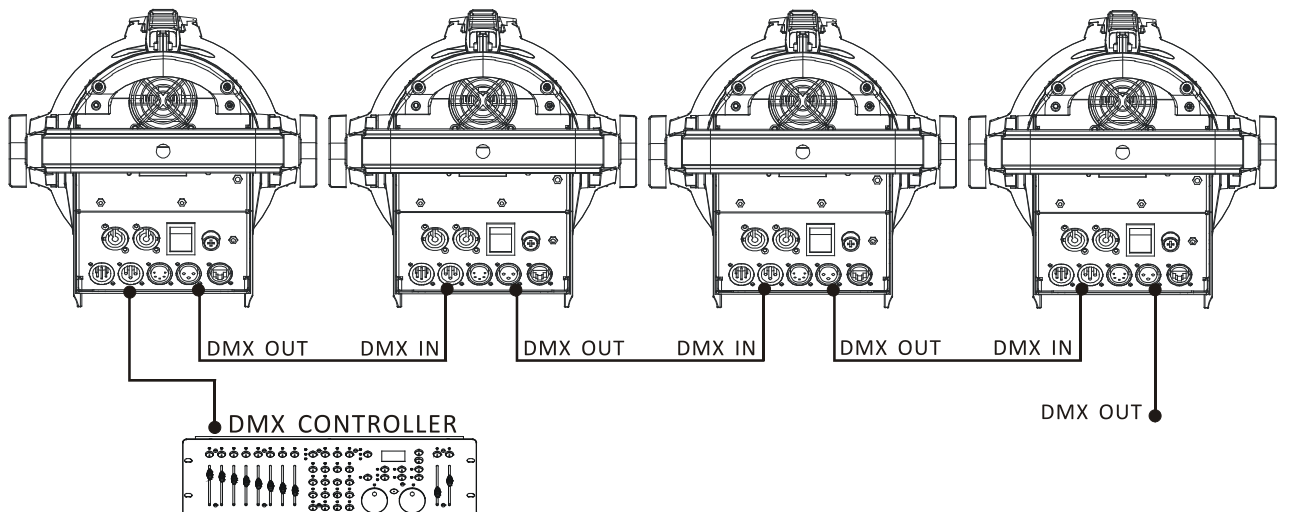
To select the **Firmware Version**, press the **ENTER** button to show **FIRMWARE VERSION** on the display and the display will show the version of software of the unit. To go back to the functions without any changes press the **MENU** button again. Hold and press the **MENU** button for one second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

Factory Setting

To select the **Factory Setting**, press the **ENTER** button to show **FACTORY SETTING** on the display, use the **DOWN/UP** button to select **No** (keep the present setting) or **Yes** (the fixture will reset to factory settings and exit menu mode). 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.

7. How to Control the Unit

7.1 DMX 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.

7.2 DMX 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 blink on the display, use the **UP/DOWN** button to adjust the address from 001 to 512, and press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 7 seconds to exit menu mode.

Please refer to the following diagram to set the DMX address for the first 4 units:

Channel Mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
5Channel	1	6	11	16
9Channel	1	10	19	28

7.3 DMX Configuration

5 Channel Mode:

CHANNEL	VALUE	FUNCTION
1	0 – 255	RED 0% ~ 100%
2	0 – 255	GREEN 0% ~ 100%
3	0 – 255	BLUE 0% ~ 100%
4	0 – 255	GRASSGREEN 0% ~ 100%
5	0 – 255	AMBER 0% ~ 100%

9 Channel Mode:

CHANNEL	VALUE	FUNCTION
1	000-007 008-015 016-131 132-139 140-181 182-189 190-231 232-239 240-247 248-255	STROBE: Off Open Strobe slow to fast open Slow open Fast close Open Slow close Fast open Open Random strobe open
2	0 – 255	DIMMER Close → Open (0% ~ 100%)
3	0 – 255	RED 0% ~ 100%
4	0 – 255	GREEN 0% ~ 100%
5	0 – 255	BLUE

		0% ~ 100%
6	0 – 255	GRASSGREEN 0% ~ 100%
7	0 – 255	AMBER 0% ~ 100%
8	0 – 255	COLOR 32 Color
9	000-007 008-255	CTC No Function CTO

8. 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 connectors and cables to see if link properly.
2. If the DMX LED is on but no response check the address settings and DMX polarity.
3. If you have intermittent DMX signal problems check the cables on 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 to DMX circuits.

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 to see if it is good by tapping it.
3. Make sure the fixture is not set into Blackout mode

9. Fixture Cleaning

The cleaning of external 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 fixture'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+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