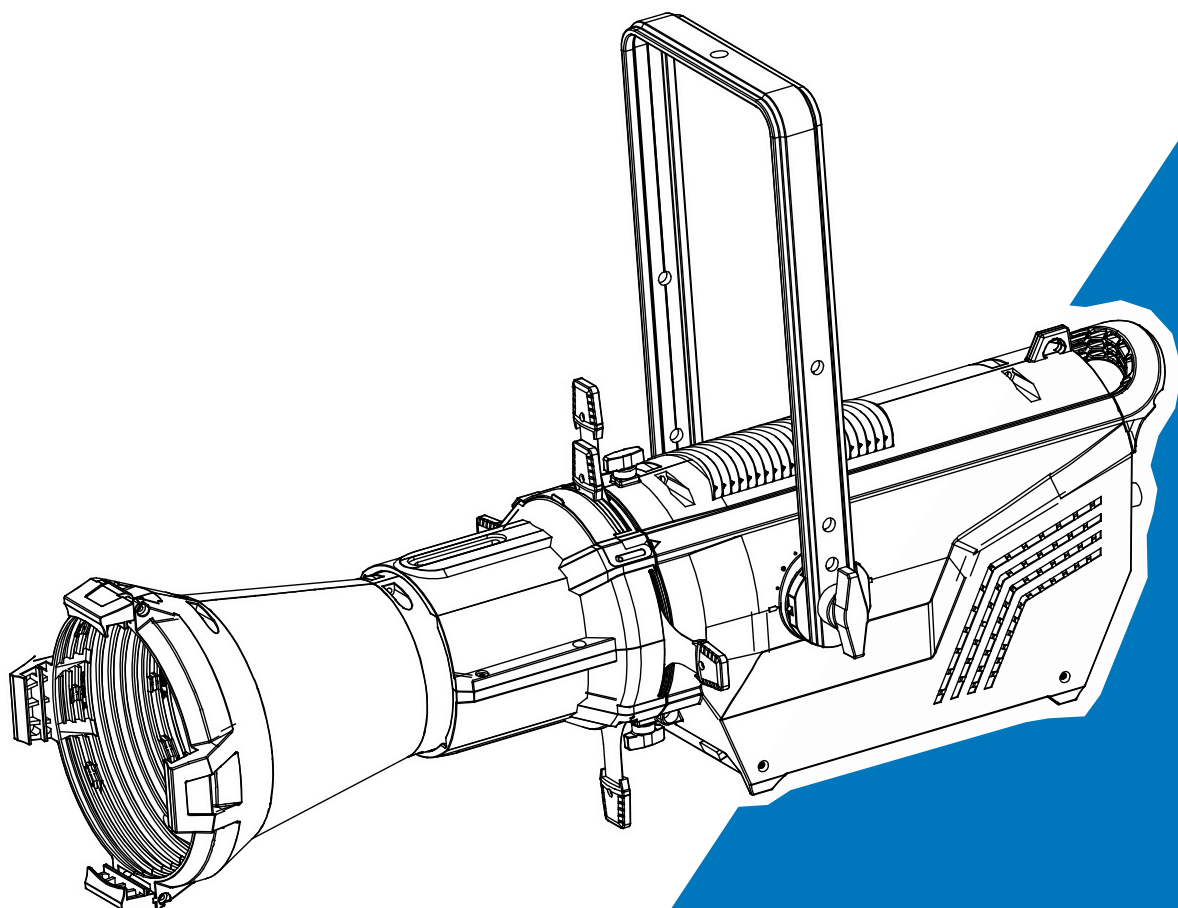




Colour Ellipsoidal



User Manual

Please read the instruction carefully before use

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1. Safety Instructions



Please read the 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 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 for indoor use only. Use only in a dry location.
- 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.
- During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, and it will decrease gradually within 15 minutes.
- 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 12 meters.
- Disconnect mains power before fuse replacement or servicing.
- Replace fuse only with the same type.
- 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 bulb 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

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

Power Voltage: AC 100 ~240V, 50/60Hz

Power Consumption: 190W

Light Sources:

HD190-B (E-200 MB CW)

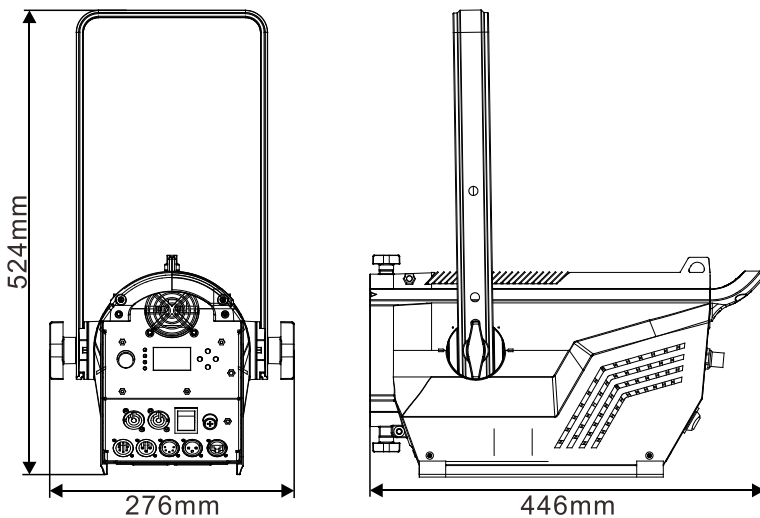
HD190-A (E-200 MB WW)

Protection Rating: IP22

Dimension/Weight:

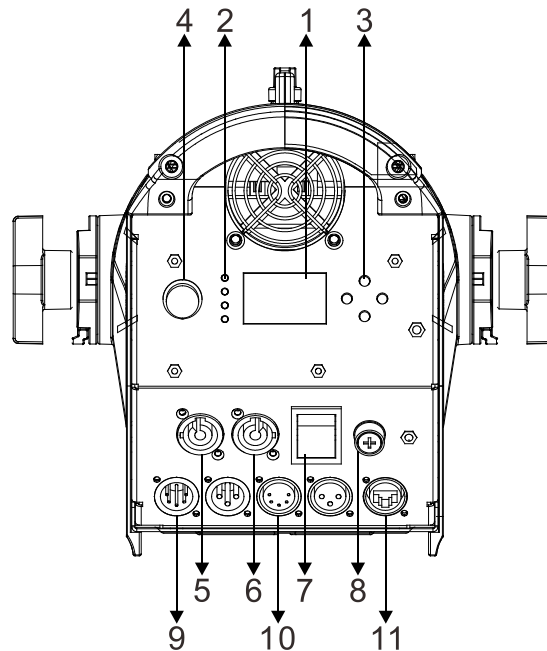
276x446x524mm, 7.6kgs

11"x17.6"x20.6" in, 16.8lbs



3. How To Set The Unit

3.1 Control Panel



1. DISPLAY: To show the various menus and the selected function

2. LED:

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

3. Button:

MENU	To enter into move backward or leave the menu
▲ UP	To go backward to move up in the menu
▼ DOWN	To go forward to move down in the menu
ENTER	To perform the desired functions

4. DIMMER: Manually adjust the dimmer value

5. MAINS IN:

To connect to supply power

6. MAINS OUT:

To connect to the next fixture

7. POWER SWITCH:

Turns on/off the power

8. FUSE(T 5A):

Protects the unit from over-voltage or short circuit

9. DMX IN:

DMX 512 link, use 3/5-pin XLR cable to link the unit and DMX controller

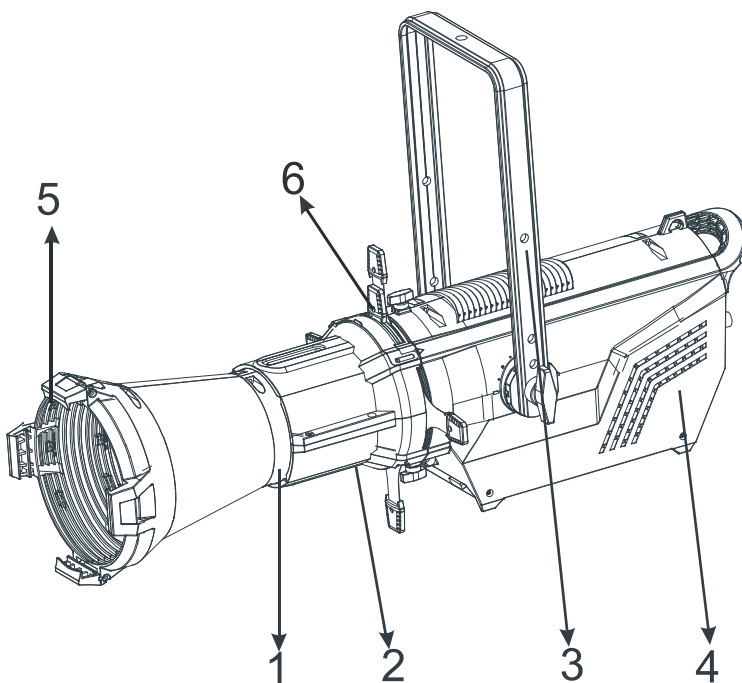
10. DMX OUT:

DMX 512 link, use 3/5-pin XLR cable to link the next units

11. ETHERNET:

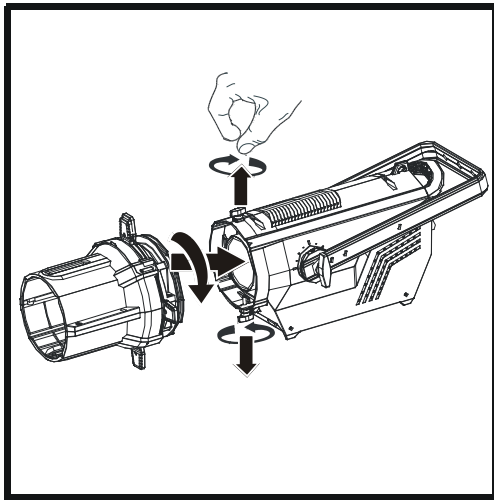
Transfers fixture's information to a main controller

3.2 The Unit Construction

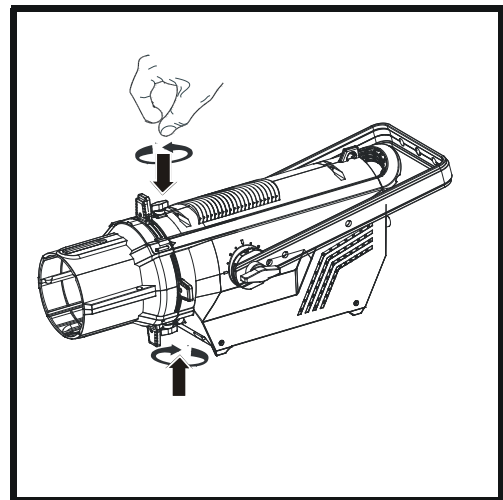


- 1. Lens Module
- 2. Framing System
- 3. Bracket
- 4. Main Body
- 5. Clip for Gel Holder
- 6. Gobo Slot

3.3 Installation

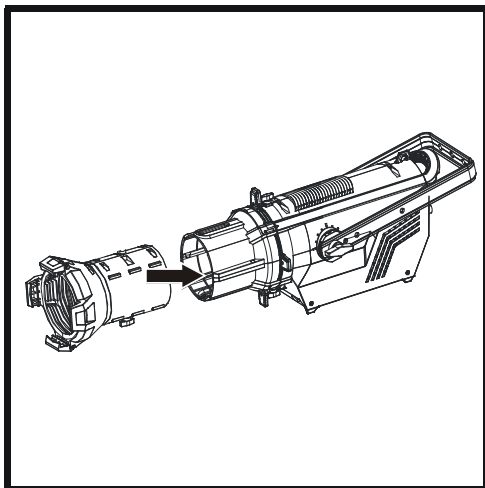


1

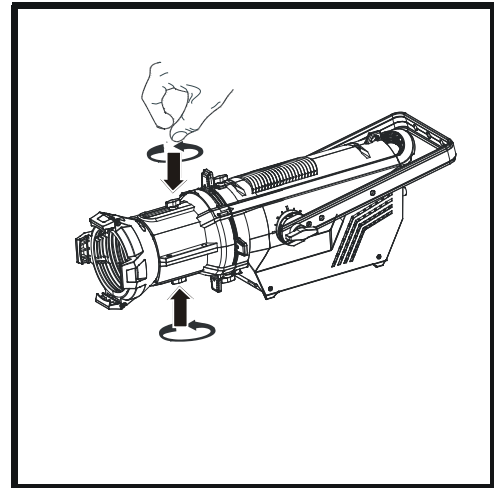


2

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



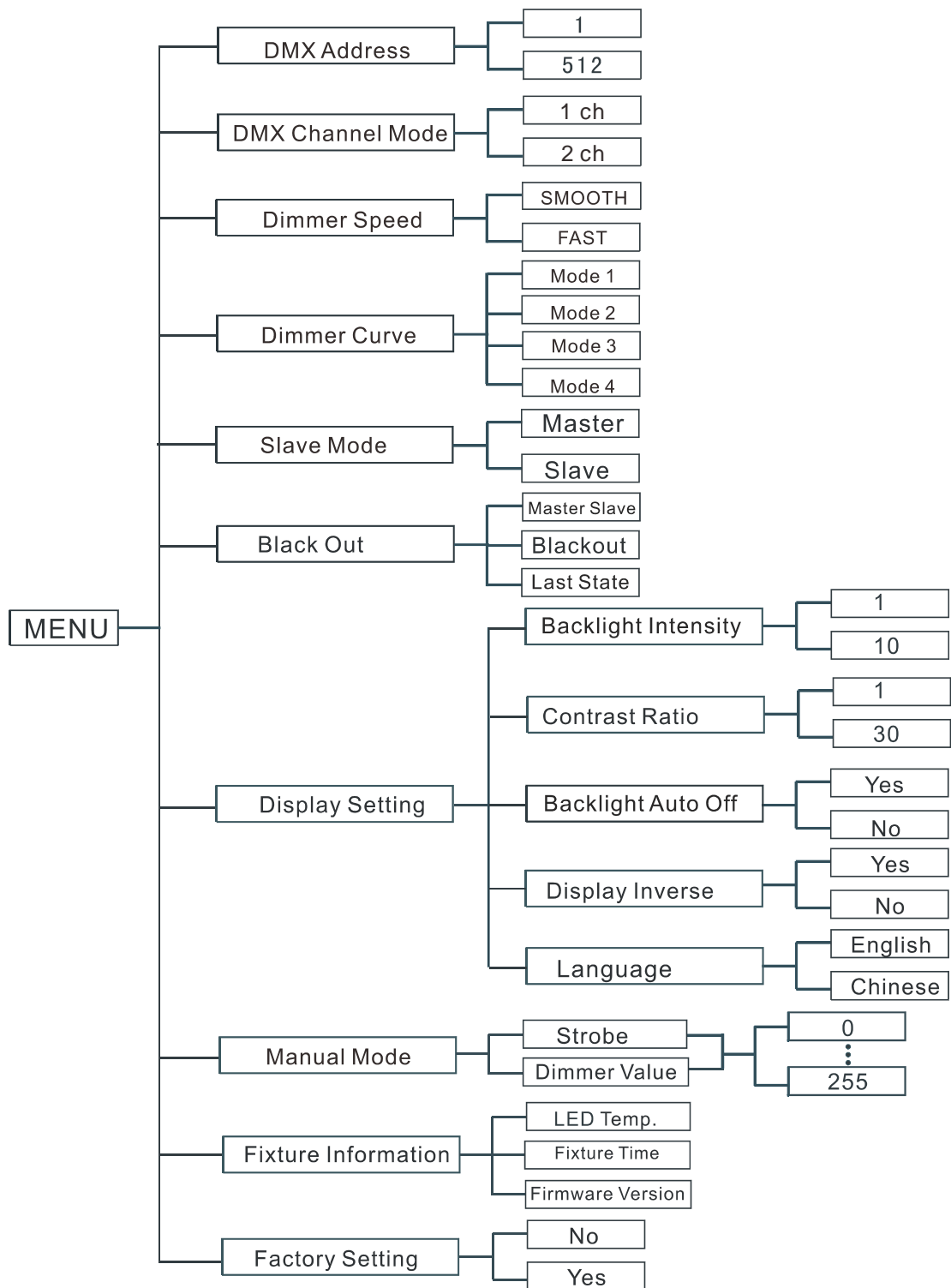
4

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

4. Main Function

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 one minute to exit menu mode.

The main functions are shown below:



DMX Address

To select the **DMX Address**, press the **ENTER** button to confirm. 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 confirm. Use the **DOWN/UP** button to select **1ch** or **2ch**. 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.

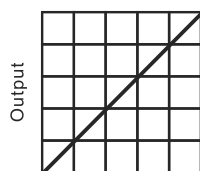
Dimmer Speed

To select **Dimmer Speed**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to select **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 changes, press the **MENU** button again. Press and hold the **MENU** button about one second or wait for one minute to exit the menu mode.

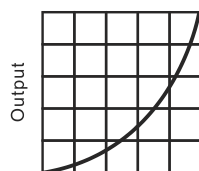
Dimmer Curve

To select **Dimmer Curve**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to select **Mode1**, **Mode 2**, **Mode 3** or **Mode 4**. 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 about one second or wait for one minute to exit the menu mode.

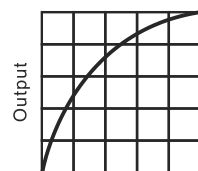
Dimmer Modes



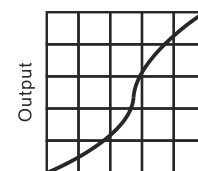
Optically Linear



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-Curve): 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 confirm. Use the **DOWN/UP** button to select **Master** or **Slave**. 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 confirm. Use the **DOWN/UP** button to select **Master Slave, Blackout** or **Last State** mode. 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.

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. Use the **DOWN/UP** 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. Use the **DOWN/UP** button to adjust the contrast 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. Use the **DOWN/UP** 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. Use the **DOWN/UP** 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. Use the **DOWN/UP** 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 confirm. Use the **DOWN/UP** button to select the **Strobe** or **Dimmer Value**. Once selected, press the **ENTER** button to setup, use the **DOWN/UP** button to change the value (0~255). Once 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 Time** or **Firmware version**.

LED Temp.

To select the **LED Temp.**, press the **ENTER** button to confirm, 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 Time

To select the **Fixture Time**, press the **ENTER** button to confirm 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

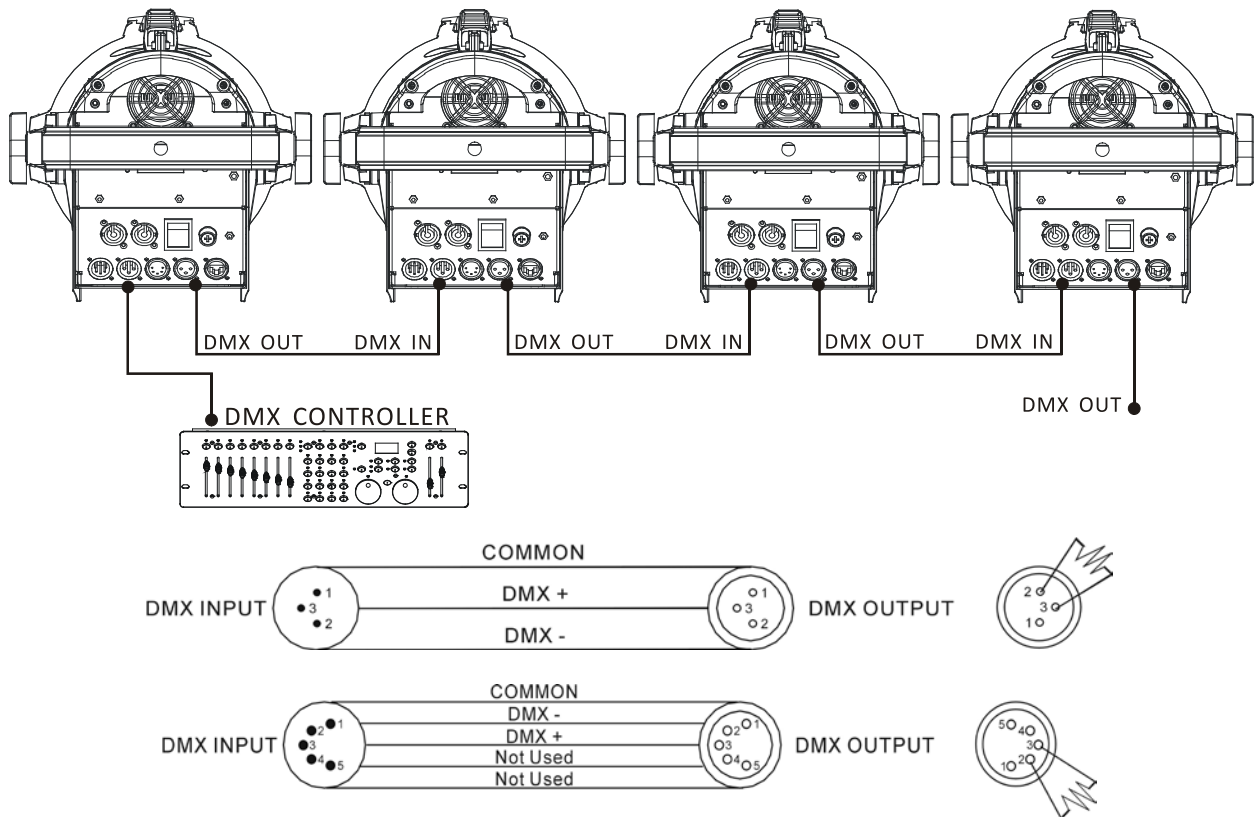
To select the **Firmware Version**, press the **ENTER** button to confirm and the display will show the software version of the unit. To go back to the functions without any changes press the **MENU** button again. Hold and press the **MENU** button for one second or wait for one minute to exit the menu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

Factory Setting

To select the **Factory Setting**, press the **ENTER** button to confirm, 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.

5. Control By Universal DMX Controller

5.1 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 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.

5.2 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 DMX signal.

Press the **MENU** button to enter menu mode, select **DMX Address**, press the **ENTER** button to confirm, the present address will blinking 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 idling let the unit idle one minute 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
1 channels	1	2	3	4
2 channels	1	3	5	7

5.3 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 5 seconds, then the corresponding function will take into effect.

1 Channels (Mode 1):

CHANNEL	VALUE	FUNCTIONS
1	000-255	DIMMER 0→100%

2 Channels (Mode 2):

CHANNEL	VALUE	FUNCTIONS
1	000-255	DIMMER 0→100%
2	000-007 008-015 016-131 132-139 140-181 182-189 190-231	STROBE Off Open Strobe Slow to Fast open Slow Open Fast Close Open Slow Close Fast Open

	232-239	Open
	240-247	Random strobe
	248-255	Open

6. 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 and main fuse.
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. DMX LED should be on. If not, check DMX connectors, cables to see if they are linked 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 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.

7. 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. Clean the internal optics at least every 30/60 days.

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