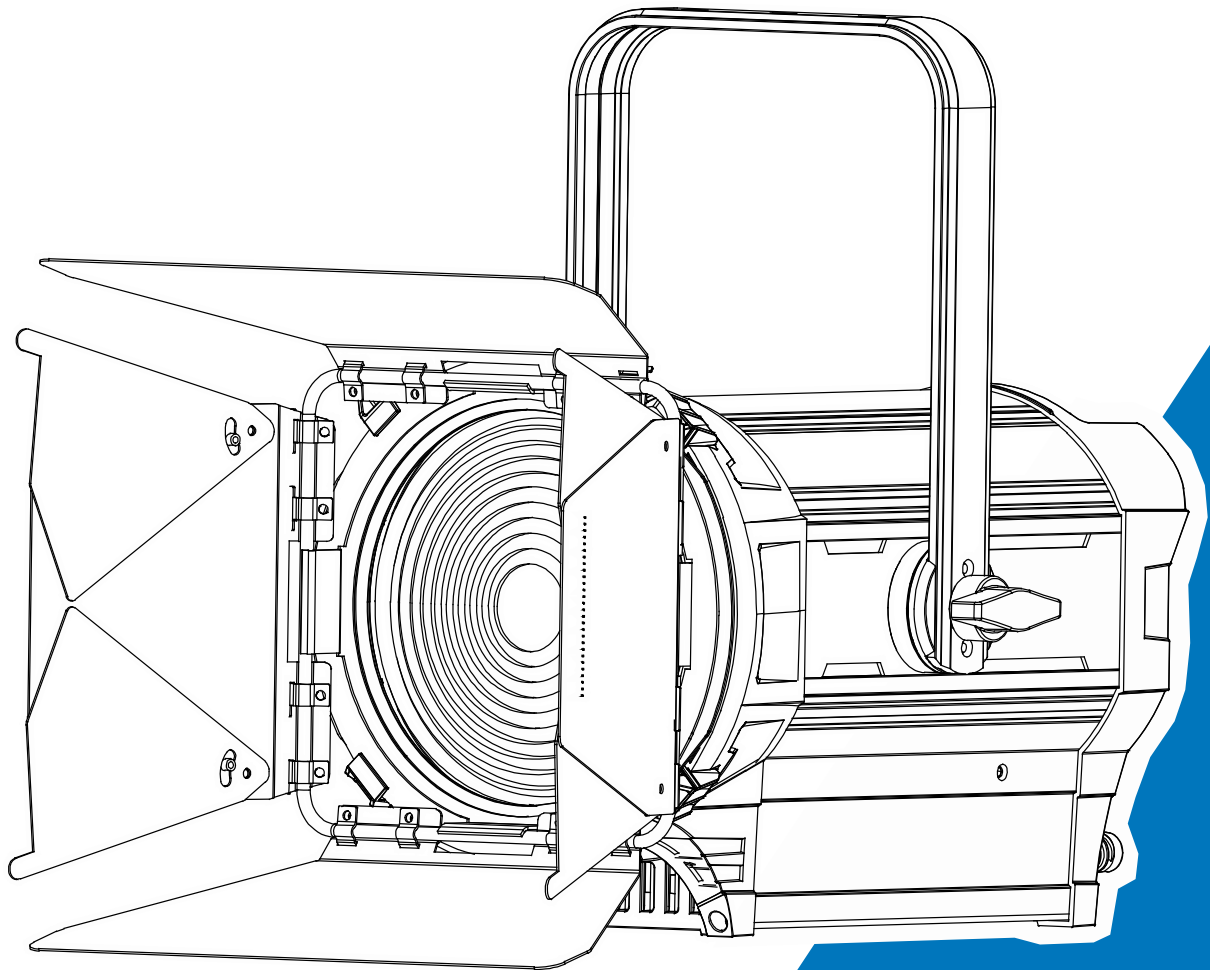




Theatre Spot 150M



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.
- The unit 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.
- Maximum ambient temperature TA: 40°C , maximum ambient temperature TA: 0°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 85°C. DO NOT touch the housing bare-handed during its operation, and allow about 15 minutes for cooling the unit down before replacing bulb or maintenance as it could be very hot.
- 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.
- To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture.
- DO NOT look directly at the light while the LED is on.

2. Technical Specifications

◆ **Power Voltage:**

AC 100~240V, 50/60Hz

◆ **Power Consumption:**

190W

◆ **Light Source:**

TS-150 CW/TS-1504 CW: C117C1222-150-011

TS-150 WW/TS-1504 WW: C117W1222-150-011

◆ **Color Temperature:**

3150±150K, 5600±150K(optional)

◆ **Optical:**

CRI: WW≥94, CW≥90

CQS: WW≥94, CW≥91

TLCI: WW≥96, CW≥96

◆ **Control:**

DMX Channel: 1/2 Channels Mode

Control Mode: DMX, Art-Net, Master/Slave, Manual

Firmware Upgrade: Update via DMX link

◆ **Construction:**

Display: LCD display

Data In/Out: 5-pin XLR socket

Power In/Out: Power Connector in/out

Protection Rating: IP20

◆ **Features:**

Manual dimming and zoom system, zoom range: 14°~55°

0~100% smooth dimming

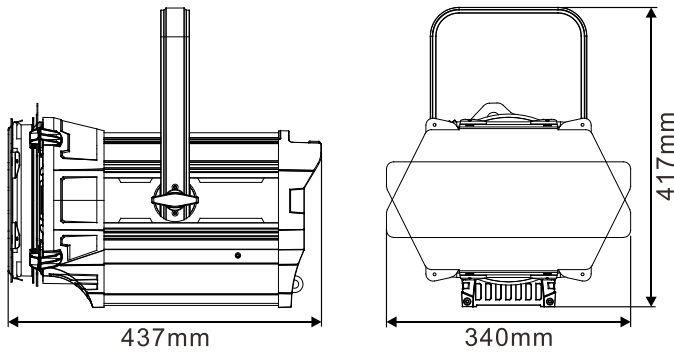
Low noise under 25dB within 1m

Rotating barn door and hanger

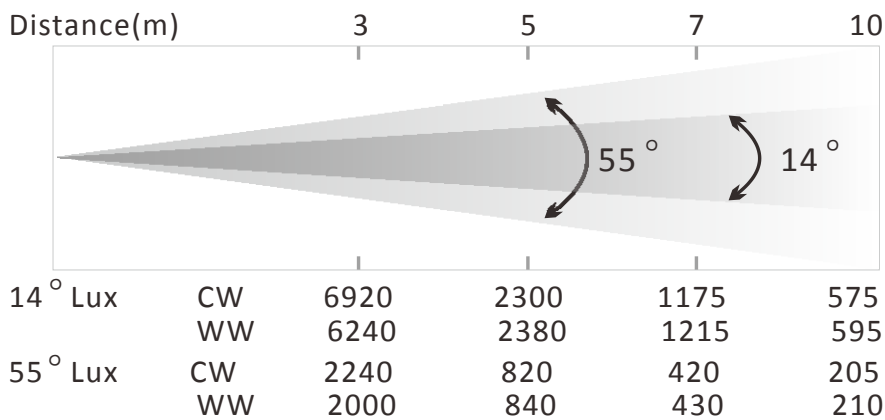
◆ **Dimensions/Weight:**

437×340×417mm, 8.6kgs

17"x13"x16" in, 19lbs



◆ **Photometric Diagram:**



3. The Plate for Color Filter & Barn Door Installation

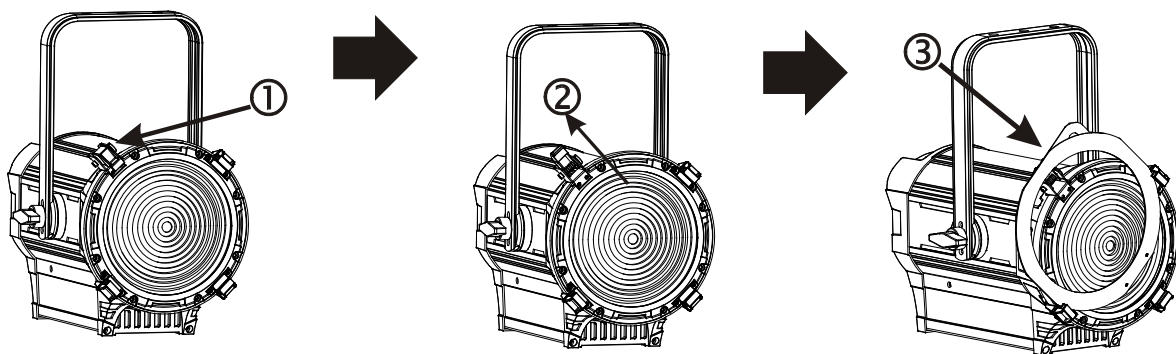


Fig. 1

At first, please push the Lock Cap button by hand as the arrow ①, and move away the Lock as the arrow ②; Then insert the Plate for Color Filter into the inside slot from topside ③;

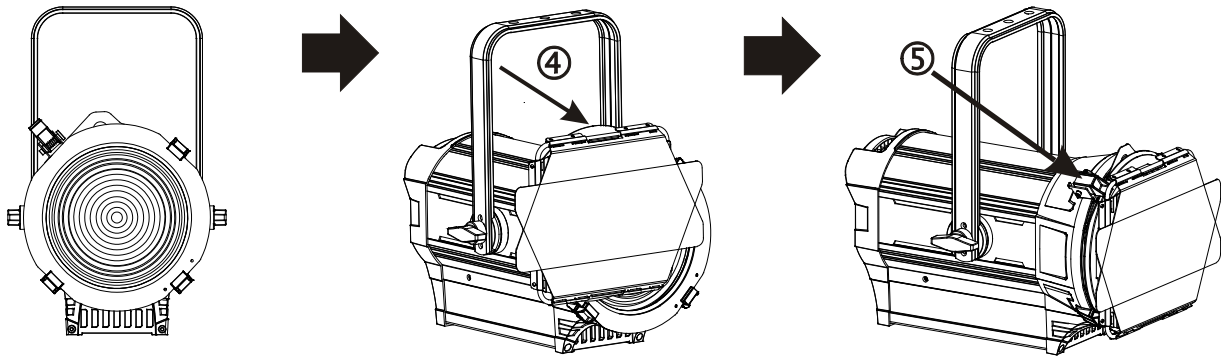
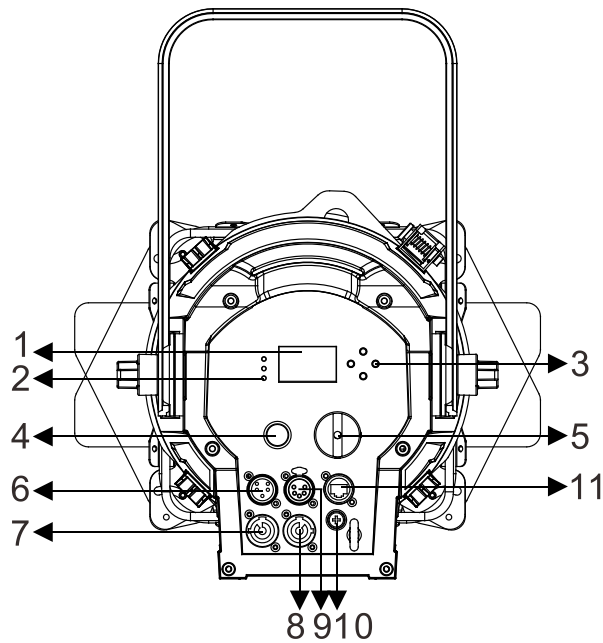


Fig. 2

Secondly, please insert the Barn Door into the outside slot from topside as arrow ④, and fasten the lock (**Note:** the Barn Door must be fastened into the inside of the lock's hook); then flip down the lock cap again as arrow ⑤.

4. How To Set The Unit

4.1 Control panel



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

2. LED:

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

3. Button:

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

4. Dimmer:

Manual adjust the dimmer value

5. Zoom:

Manual adjust the zoom value

6. DMX IN:

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

7. POWER IN:

Connects to supply power

8. POWER OUT:

Connects to the next unit

9. DMX OUT:

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

10. Fuse (T 5A):

Used to protect the unit from damage of the over-current

11. ETHERNET:

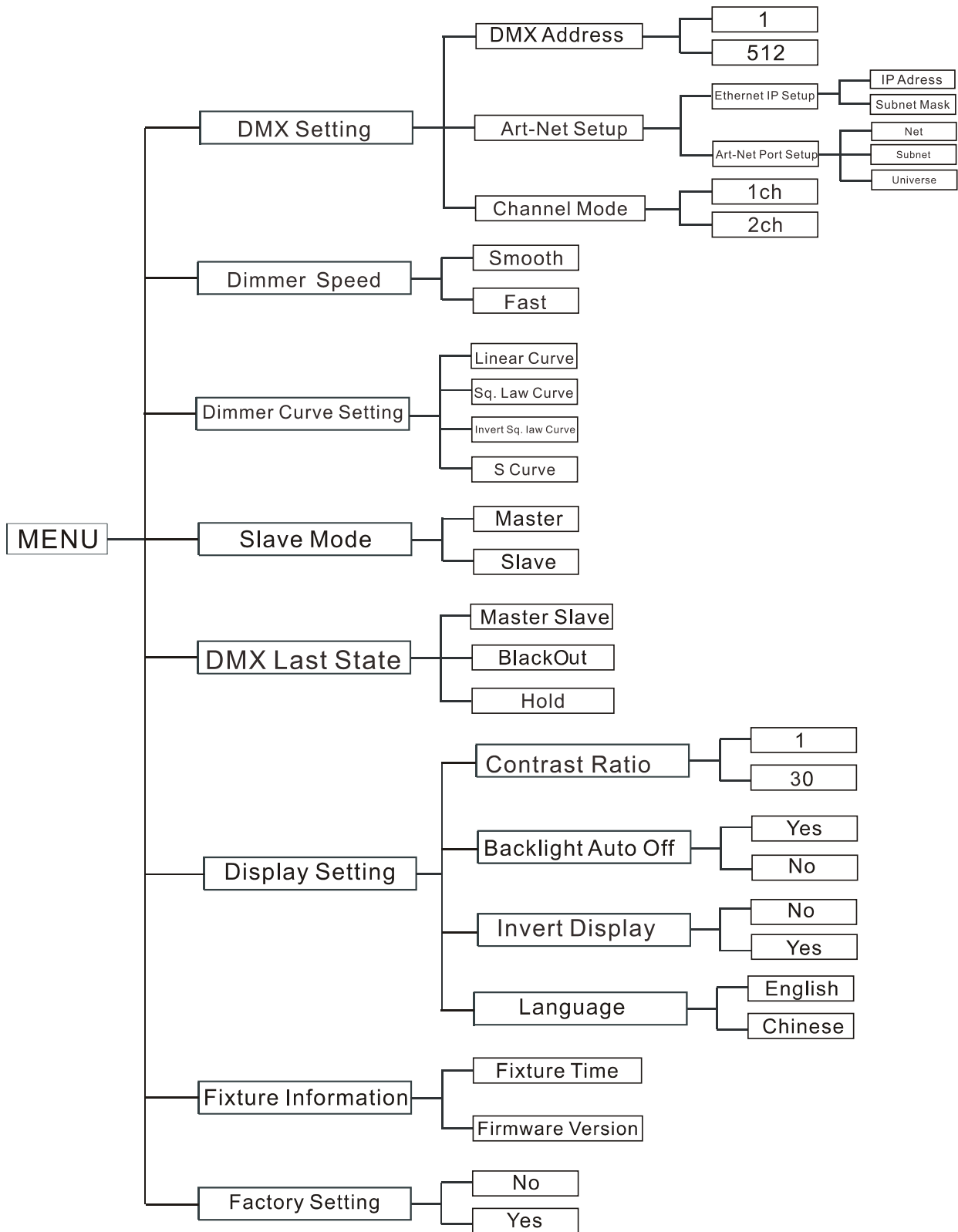
Connect with the multimedia and use software to control the units via ArtNet

4.2 Main Functions

To select any functions, press the **MENU** button until the required one is shown on the display.

Select the function by **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 or it will automatically return to the main functions without any change after idling one minute. Back to the functions without any change press the **MENU** button.

The main functions are shown below:



DMX Setting

Enter menu mode, select **DMX Setting**, press **ENTER** button to confirm, use **UP/DOWN** button to select **DMX Address**, **Art-Net Setup** or **Channel Mode**.

DMX Address

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 DMX address from **1** to **512**. Once the address has been selected, press the **ENTER** button to save. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

Art-Net Setup

Select **Art-Net Setup**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Ethernet IP Setup** or **Art-Net Port Setup**. Once selected, press the **ENTER** button to save. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

Channel Mode

Select **Channel Mode**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select the **1 CH** or **2 CH**. Once selected, press the **ENTER** button to save. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

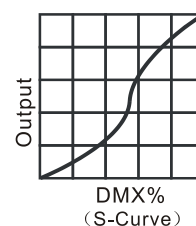
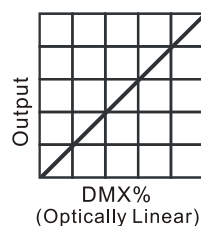
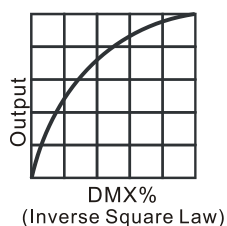
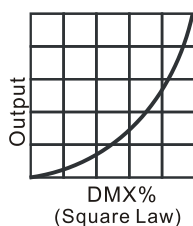
Dimmer Speed

Select **Dimmer Speed**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Smooth**(dimmer speed smooth) or **Fast**(dimmer speed fast). Once selected, press the **ENTER** button to save. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

Dimmer Curve Setting

Select **Dimmer Curve Setting**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Linear Curve**, **Sq.Law Curve**, **Invert Sq. Law Curve** or **S Curve**. Once selected, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode.

Dimmer Modes:



Square Law: Light intensity control is finer at low levels and coarser at high levels.

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

Linear: The increase in light intensity appears to be linear as DMX value is increased.

S-curve: Light intensity control is finer at low levels and high levels and coarser at medium levels.

Slave Mode

Select **Slave Mode**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Master** or **Slave**. Once selected, press the **ENTER** button to save. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

DMX Last State

Select **DMX Last State**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Master Slave**, **Blackout** or **Hold**. Once selected, press the **ENTER** button to save. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

Display Setting

Enter menu mode, select **Display Setting**, press **ENTER** button to confirm. Use the **UP/DOWN** button to select **Contrast Ratio**, **Backlight Auto Off**, **Invert Display** or **Language**.

Contrast Ratio

Select **Contrast Ratio**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to adjust value from **1** to **30**, press the **ENTER** button to save. Press the **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 the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Yes**(display goes off one minute after exiting menu mode) or **No**(display always on), press the **ENTER** button to save. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode.

Invert Display

Select **Invert Display**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select the **No**(normal display) or **Yes**(inverse display), press the **ENTER** button to save. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode.

Language

Select **Language**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select the **English** or **Chinese**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode.

Fixture Information

Enter menu mode, select **Fixture Information**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **Fixture Time** or **Firmware Version**.

Fixture Time

Select **Fixture Time**, press the **ENTER** button to confirm, and the running time of the fixture will show on the display. Press the **MENU** button back to exit.

Firmware Version

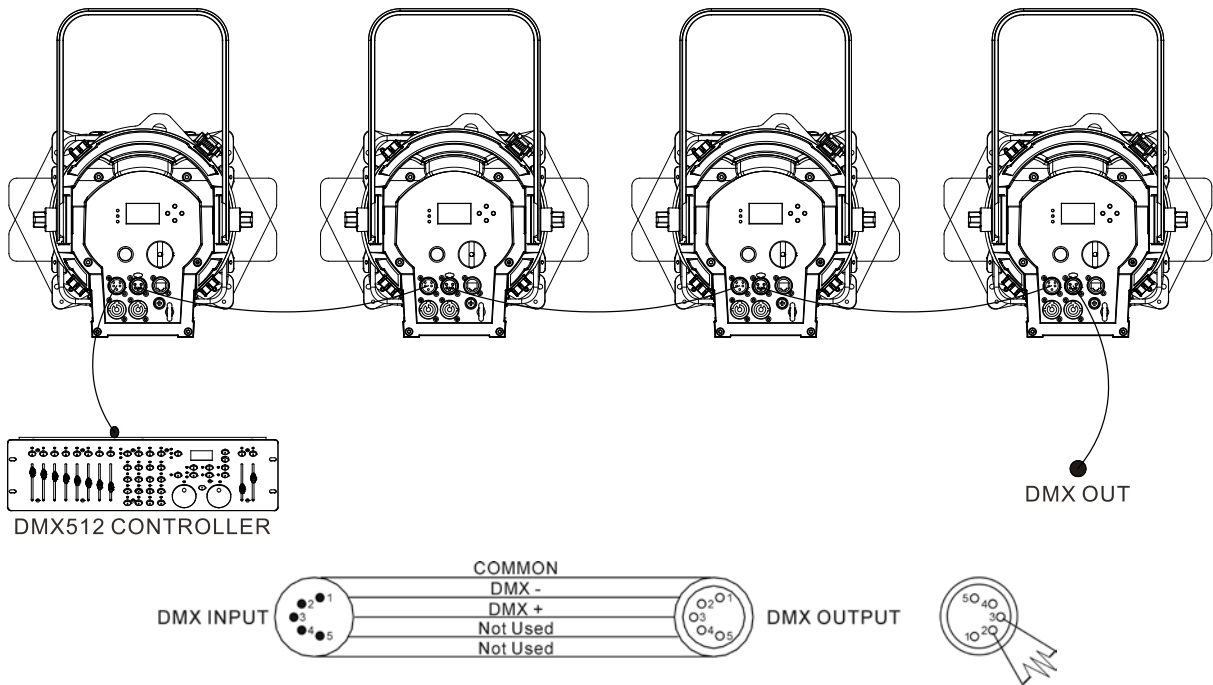
Select **Firmware Version**, press the **ENTER** button to confirm, the software version will show on the display. Press the **MENU** button back to exit.

Factory Setting

Select **Factory Setting**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **No** or **Yes**(Switch back to default settings). Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

5. Control By Universal DMX Controller

5.1 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 Setting**, 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 be blinking on 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	FUNCTION
1	0-255	DIMMER 0 → 100%

2 Channels (Mode 2):

CHANNEL	VALUE	FUNCTION
1	0-255	DIMMER 0 → 100%
2	0-255	DIMMER FINE 0 → 100%

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

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 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. 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 using normal glass cleaning fluid.
- 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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