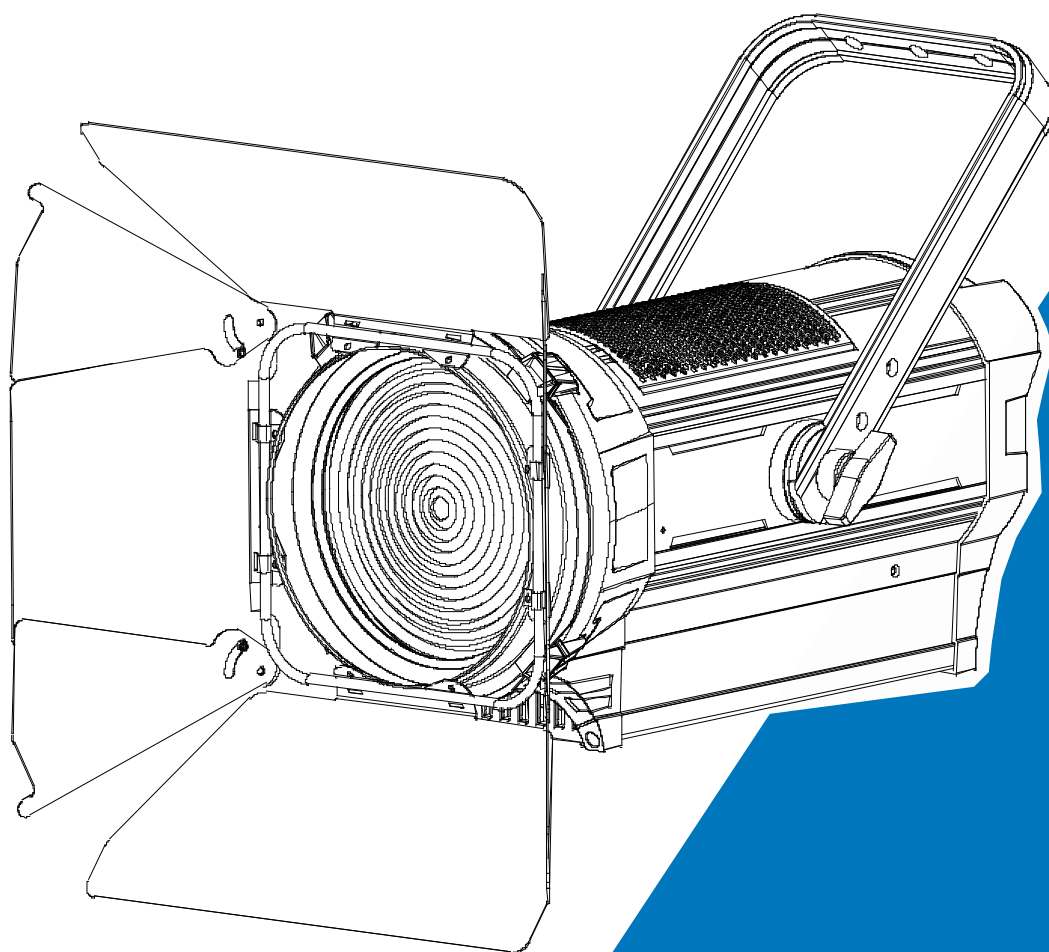




# Theatre Spot 300



## 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.
- 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.
- 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.
- 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 LED 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

### Power Voltage:

AC 100~240V, 50/60Hz

### Power Consumption:

360W

### Light Source:

TS-300 CW: C117C1916-300-006

TS-300 WW: C117W1916-300-006

### Color Temperature:

3200±200K, 5500±200K(optional)

### Optical:

CRI: WW≥95, CW≥95

CQS: WW≥94, CW≥93

TLCI: WW≥95, CW≥95

### Control:

DMX Channel: 2/3 Channels Mode

Control Mode: DMX, Primary/Secondary, Manual, Art-Net

Firmware Upgrade: Update via DMX link

### Construction:

Display: LCD display

Data In/Out: 5-pin XLR

Power In/Out: Power Connector in/out

Protection Rating: IP20

### Features:

Motorized focus

Manual linear dimming

4 dimming curves, 2 optional dimming speed

0~100% smooth dimming

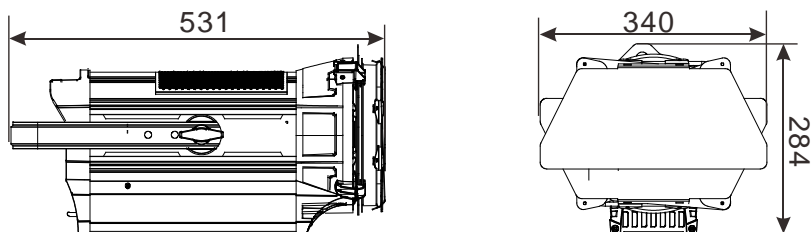
Low noise under 35dB within 1m

Rotating barn door and hanger

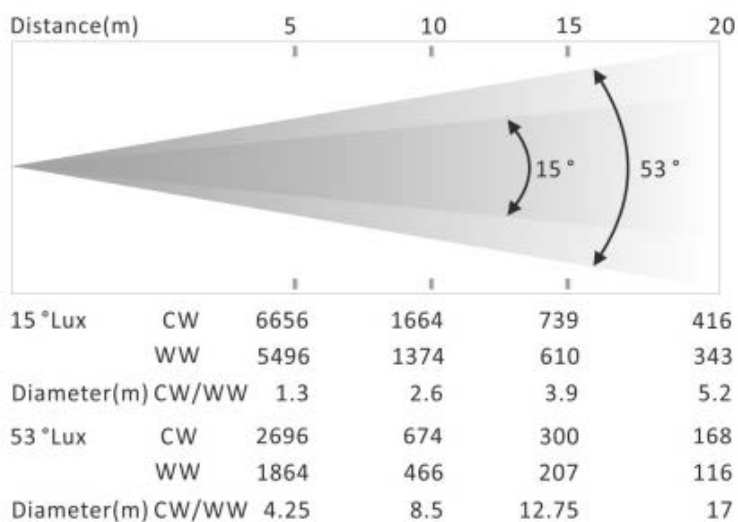
**Dimensions/Weight:**

531x340x284mm, 10.5kgs

21"x13"x11" in, 23.2lbs



**Photometric Diagram:**



### 3. The Plate for Color Filter & Barn Door Installation

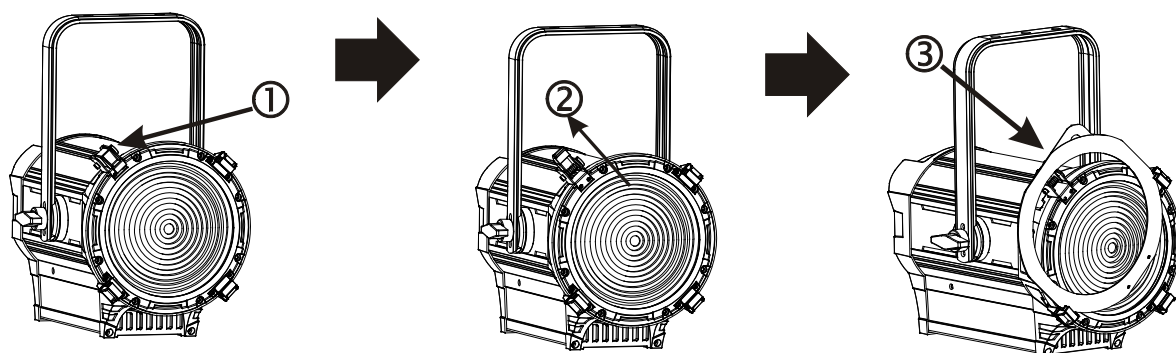


Fig. 1

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;

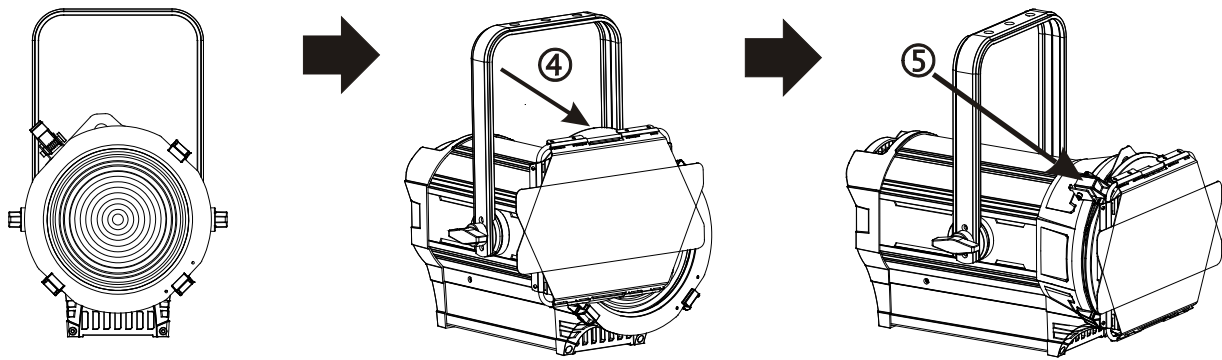
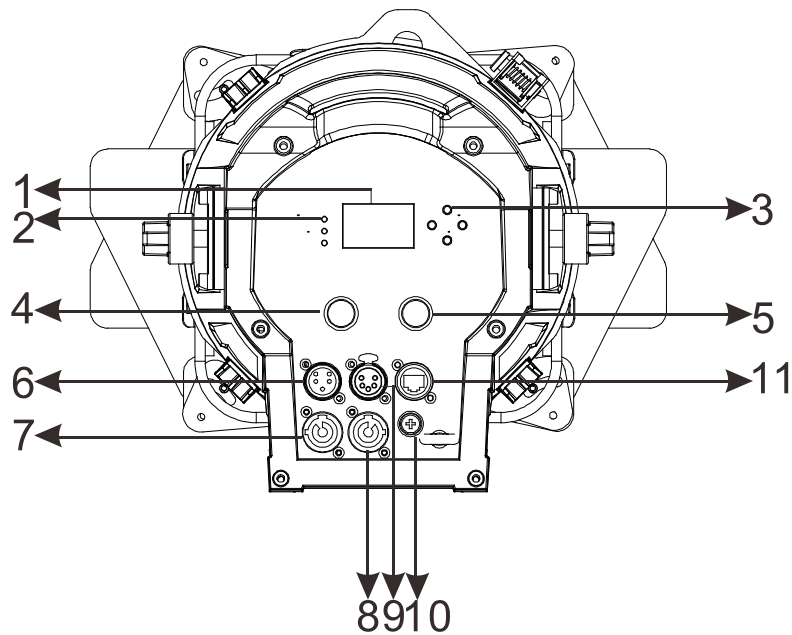


Fig. 2

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 arrow⑤.

## 4. How To Set The Unit

### 4.1 Control Panel



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

**2. LED:**

<b>PRIMARY</b>	On	Primary Mode
<b>SECONDARY</b>	On	Secondary Mode
<b>DMX</b>	On	DMX input present

### 3. Button:

<b>MENU</b>	To select the programming functions
<b>DOWN</b>	To go forward in the selected functions
<b>UP</b>	To go backward in the selected functions
<b>ENTER</b>	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

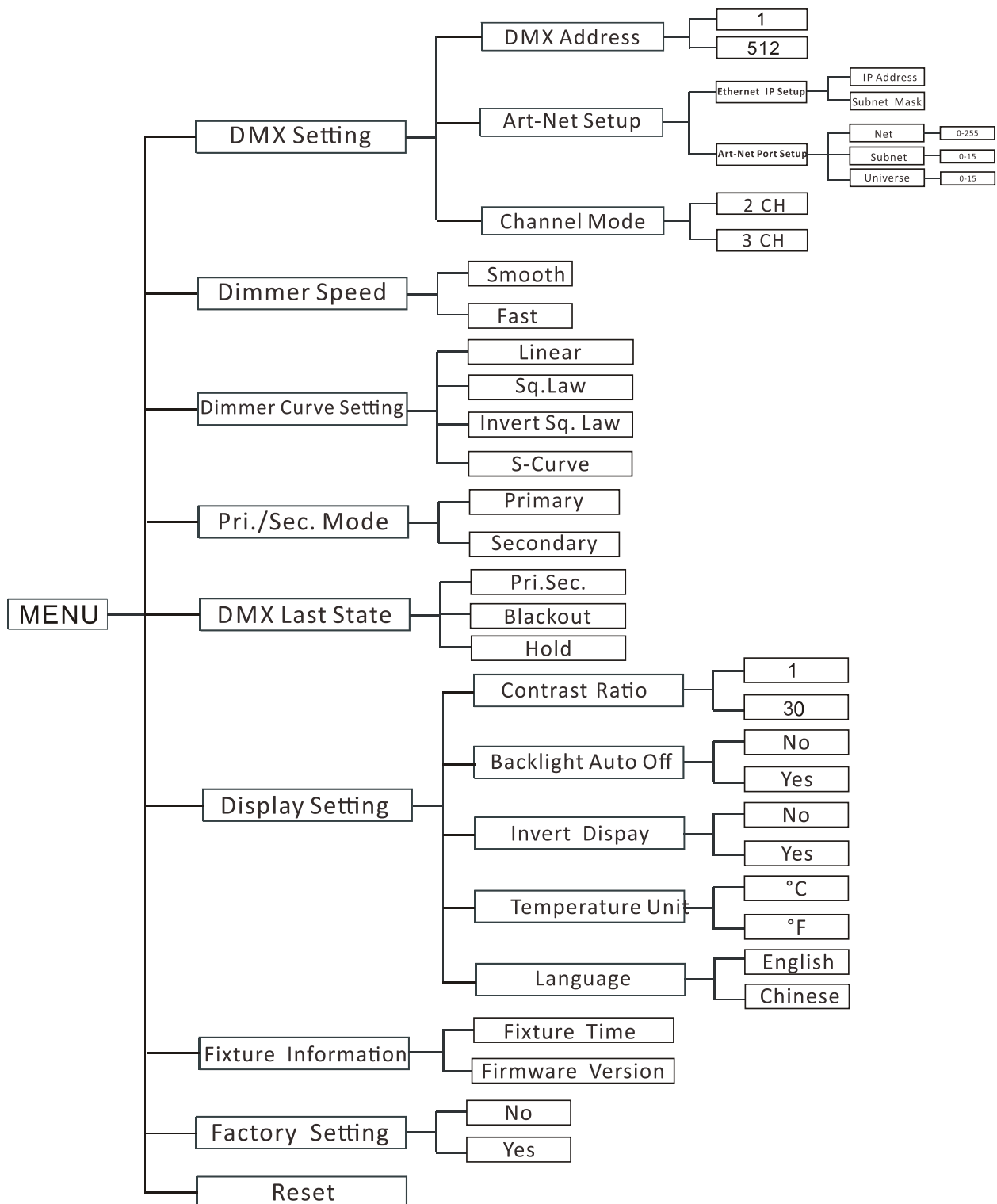
**10. FUSE(T 10A):** Used to protect the unit from damage of the over-current

**11. ETHERNET:** Connect with the multimedia and use software to control the units via ArtNet

## 4.2 Main Functions

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 30 seconds to exit menu mode. The main functions are shown below:





## ***DMX Setting***

Enter menu mode, select **DMX Setting**, press **ENTER** button to confirm. Use the **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 30 seconds 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. Select **Ethernet IP Setup**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **IP Address** or **Subnet Mask**. Once selected, press the **ENTER** button to save. Select **Art-Net Port Setup**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Net**, **Subnet** or **Universe**. Once selected, press the **ENTER** button to save. Hold and press the **MENU** button about one second or wait for 30 seconds to exit the menu mode.

### **Channel Mode**

Select **Channel Mode**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select the **2 CH** or **3 CH**. Once selected, press the **ENTER** button to save. Hold and press the **MENU** button about one second or wait for 30 seconds to exit the menu mode.

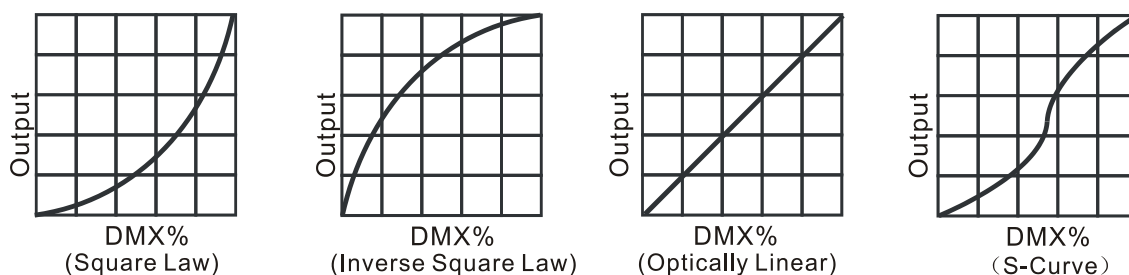
## ***Dimmer Speed***

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 30 seconds 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**, **Sq.Law**, **Invert Sq. Law** 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 30 seconds 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.

## ***Pri./Sec. Mode***

Select **Pri./Sec. Mode**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Primary** or **Secondary**. Once selected, press the **ENTER** button to save. Hold and press the **MENU** button about one second or wait for 30 seconds 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 **Pri.Sec.**, **Blackout** or **Hold**. Once selected, press the **ENTER** button to save. Hold and press the **MENU** button about one second or wait for 30 seconds 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**, **Temperature Unit** 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 30 seconds to exit menu mode.

### **Backlight Auto Off**

Select **Backlight Auto Off**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **No**(display always on) or **Yes**(display goes off 30 seconds after exiting menu mode), press the **ENTER** button to save. Press the **MENU** button back to the last menu or let the unit idle 30 seconds 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**(invert display), press the **ENTER** button to save. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

### **Temperature Unit**

Select **Temperature Unit**, press the **ENTER** button to confirm, present mode will blink on the display, use the **UP/DOWN** button to select °C or °F, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds 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 30 seconds 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

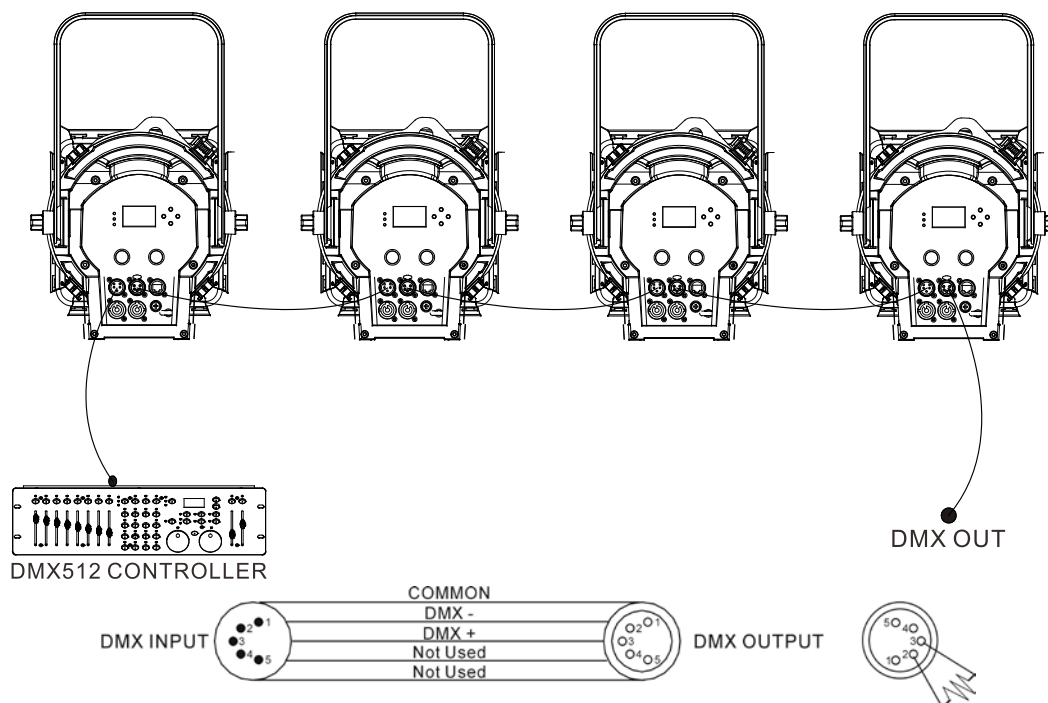
Select **Factory Setting**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **No** or **Yes**(Switch back to default settings). Hold and press the **MENU** button about one second or wait for 30 seconds to exit the menu mode.

## Reset

Select **Reset**, press the **ENTER** button and the fixture will now reset.

## 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 1-512.
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, 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 30 seconds 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
2 channels	1	3	5	7
3 channels	1	4	7	10

## 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 3 seconds, then the corresponding function will take into effect.

### 2 Channels (Mode 1):

CHANNEL	VALUE	FUNCTION
1	000-255	<b>DIMMER</b> 0%→100%
2	000-255	<b>ZOOM</b> 0%→100%

### 3 Channels (Mode 2):

CHANNEL	VALUE	FUNCTION
1	000-255	<b>DIMMER</b> 0%→100%
2	000-255	<b>DIMMER FINE</b>
3	000-255	<b>ZOOM</b> 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 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.









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