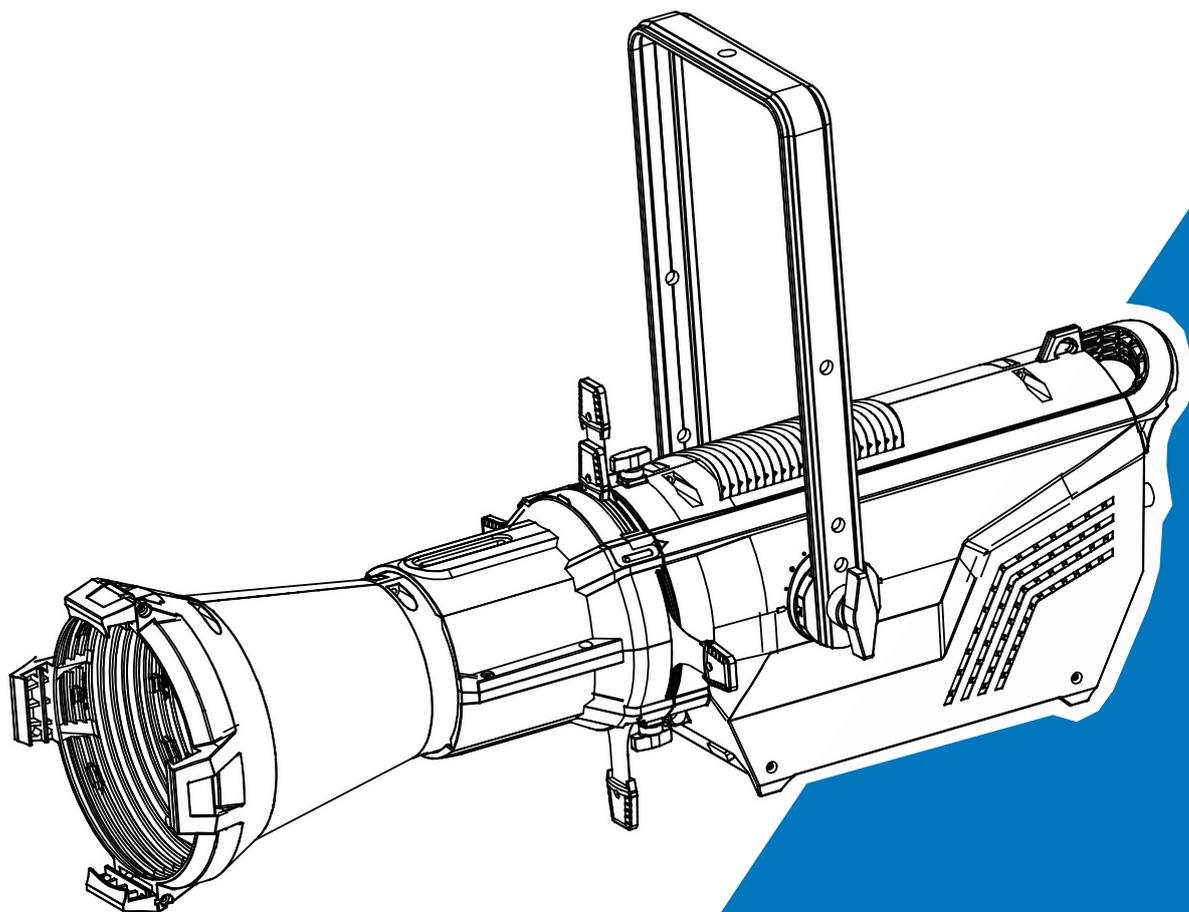


Acme®

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.
- 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.
- 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:

335W

Light Sources:

HD320-B (E-300 MB CW)

HD320-A (E-300 MB WW)

HD320 (E-300 MB NW)

Color Temperature:

5600±200K/3100±150K/4000K±150

Optical:

CRI: WW≥90, CW≥85

CQS: WW≥91, CW≥88

TLCI: WW≥94, CW≥90

Control:

DMX Channel: 1/2D/2 Channels

Protocols: DMX, Primary/Secondary, manual dimmer

Firmware Upgrade via DMX link

Construction:

Display: LCD display

Data In/Out: 3-pin & 5-pin XLR

Power In/Out: Power connector in/out

Protection Rating: IP20

Features:

Lens Options: 5°/11°/14°/19°/26°/36°/50°/70°

Super smooth and uniform flat light

Clear image and sharp edge

Smooth dimmer from 0% to 100%; Strobe effect and gradients effect

High-efficient cooling system to expand LED lifespan

Low noise under 25dB @1m

Dimension/Weight:

5°: 378x1155x524mm, 9.6kgs

14.9"x45.5"x20.6" in, 21.2lbs

11°/14°/19°: 276x872x524mm, 9.6kgs

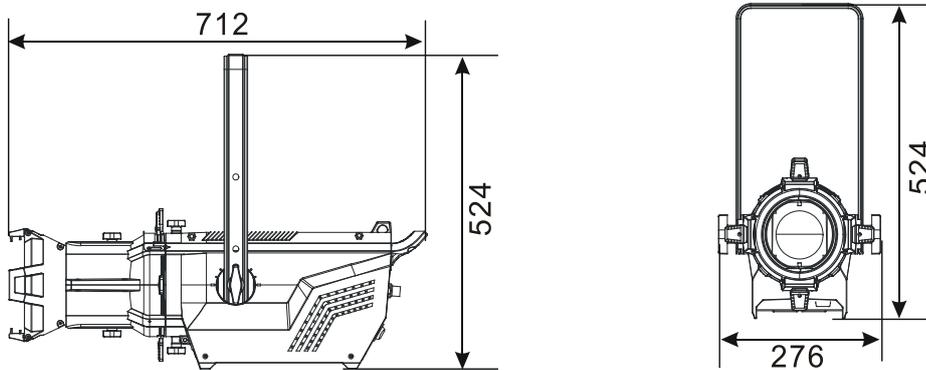
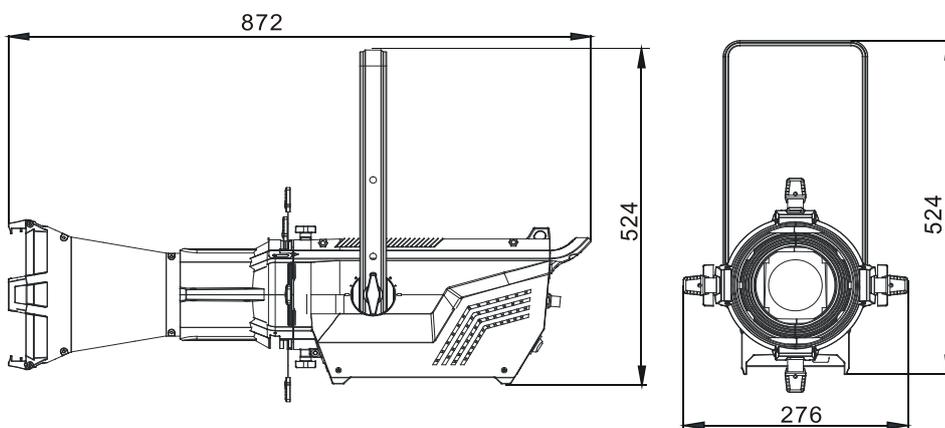
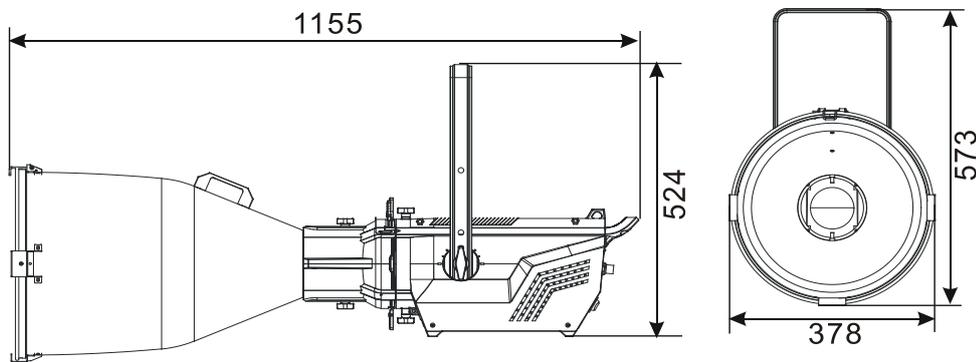
10.9"x34.3"x20.6" in, 21.2lbs

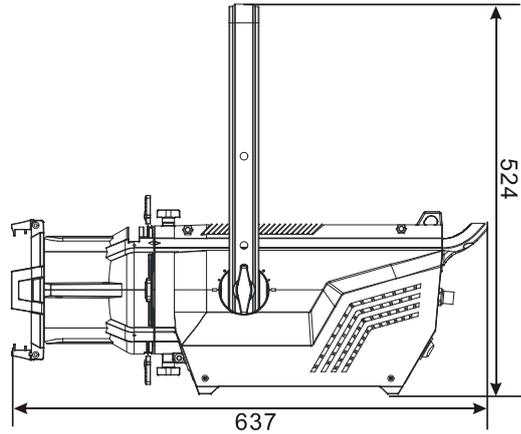
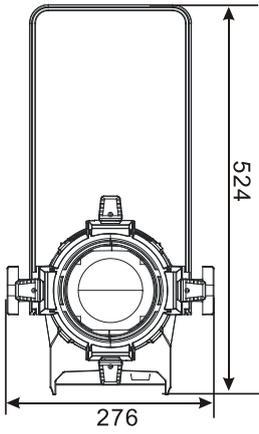
26°/36°: 276x712x524mm, 9.1kgs

10.9"x28"x20.6" in, 20.1lbs

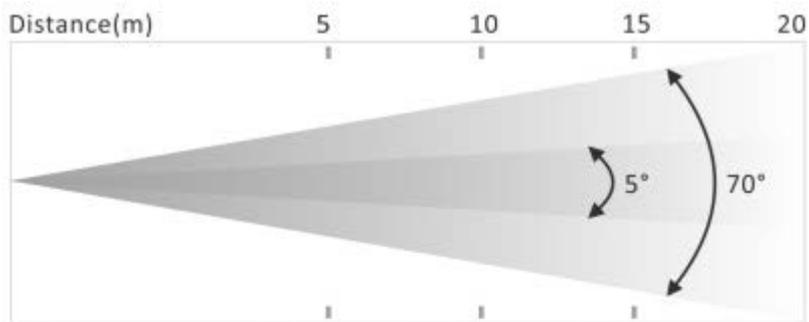
50°/70°: 276x637x524mm, 9.1kgs

10.9"x25"x20.6" in, 20.1lbs





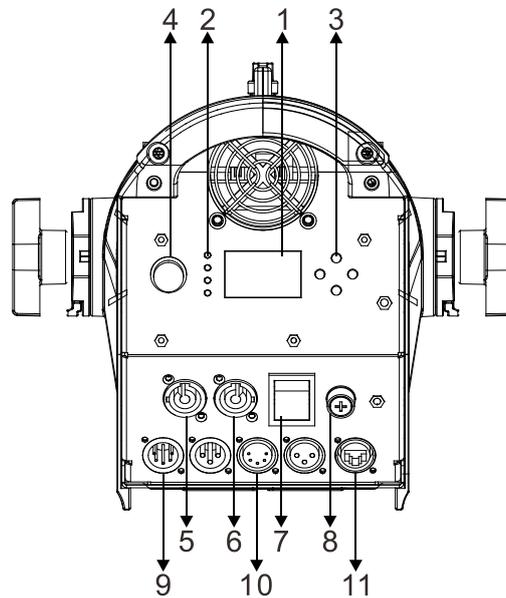
Photometrics Diagram:



Distance(m)	5	10	15	20
5° Lux	42000	11000	4600	2625
11° Lux	12600	3200	1400	780
14° Lux	8000	2000	880	500
19° Lux	4400	1100	480	275
26° Lux	2240	560	240	140
36° Lux	1440	360	160	90
50° Lux	720	180	80	45
70° Lux	390	98	40	24

3. How To Set The Unit

3.1 Control Panel



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

2. LED:

PRIMARY	On	Primary Mode
SECONDARY	On	Secondary 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

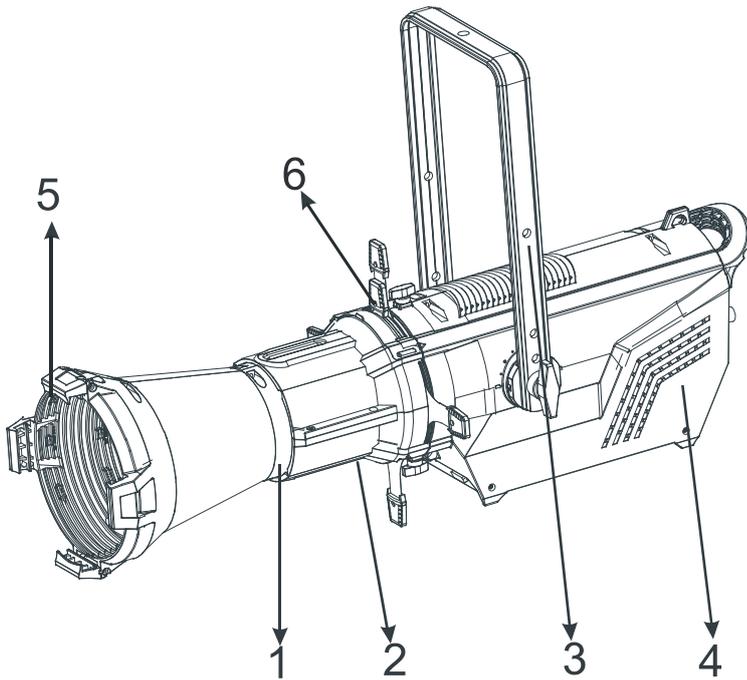
8. FUSE(T 6.3A): Protects the unit from over-voltage or short circuit

9. DMX IN: For DMX512 link, use 3/5-pin XLR cable to link the unit and DMX controller

10. DMX OUT: For DMX512 link, use 3/5-pin XLR cable to link the next units

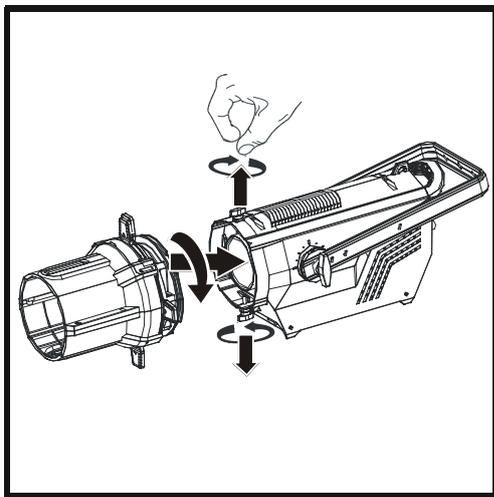
11. ETHERNET: Transfers fixture's information to a main controller

3.2 The Unit Construction

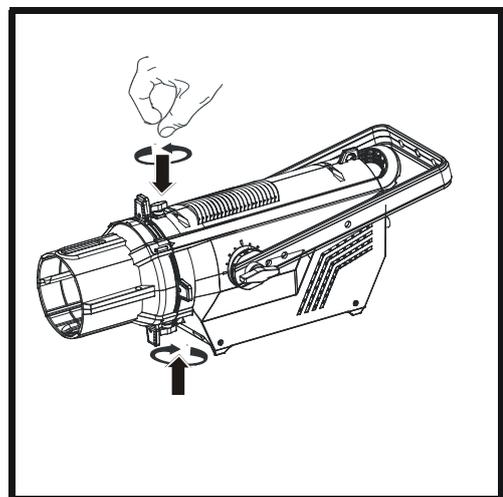


- 1. Lens Module
- 2. Framing System
- 3. Bracket
- 4. Main Body
- 5. Clip for Gel Holder
(Standard/Optional)
- 6. Gobo Slot

3.3 Installation

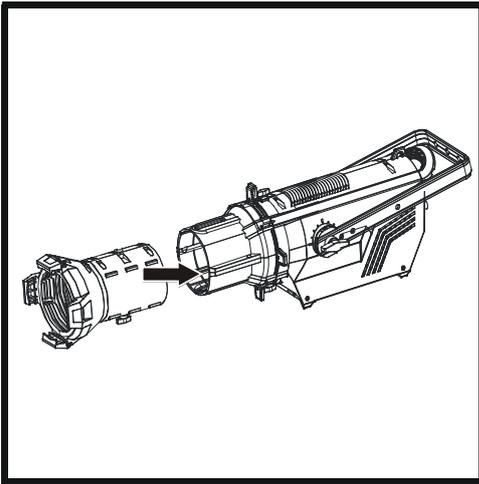


1

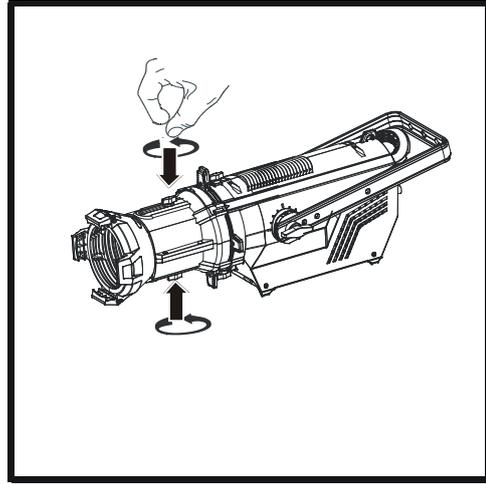


2

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



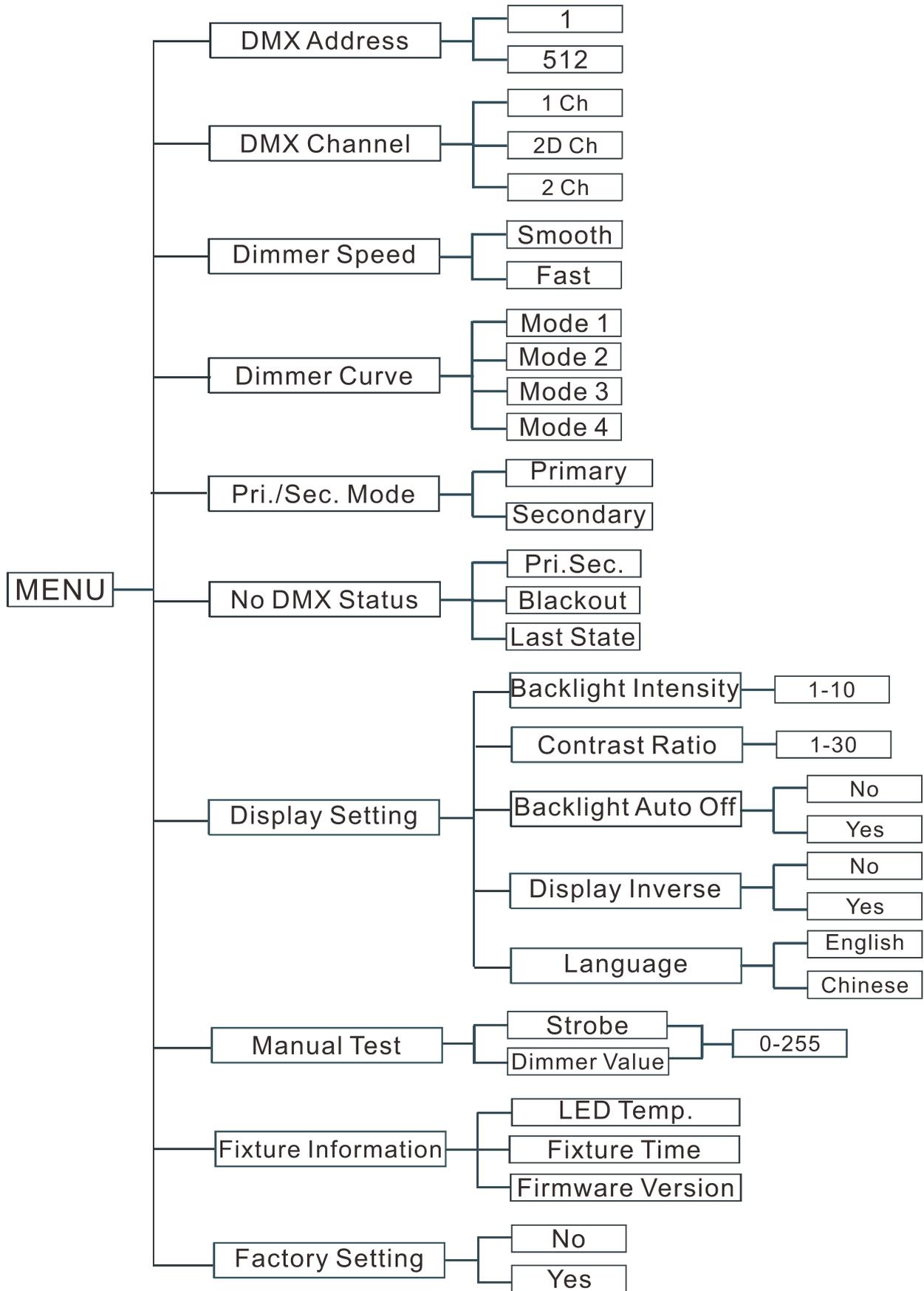
4

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 30 seconds 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 30 seconds to exit the menu mode.

DMX Channel

To select the **DMX Channel**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to select **1 Ch**, **2D Ch** or **2 Ch**. 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 30 seconds to exit the menu mode.

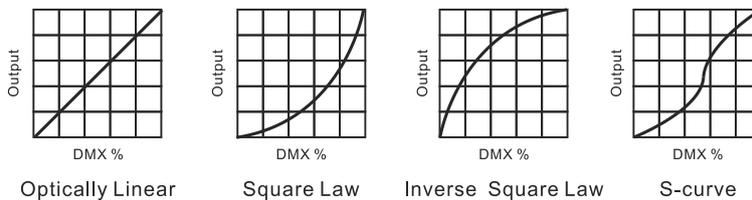
Dimmer Speed

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 30 seconds 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 30 seconds to exit the menu mode.

Dimmer Modes



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

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.

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

Pri./Sec. Mode

To select the **Pri./Sec. Mode**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to select **Primary** or **Secondary**. 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 30 seconds to exit the menu mode.

No DMX Status

To select the **No DMX Status**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to select **Pri.Sec.**, **Blackout** or **Last State**. 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 30 seconds 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 30 seconds 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** to **30**, press **ENTER** button to store. Press **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 **ENTER** button to confirm. Use the **DOWN/UP** button to select **No** (display always on) or **Yes** (display goes off 30 seconds after exiting menu mode), press **ENTER** button to store. Press **MENU** button back to the last menu or let the unit idle 30 seconds 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 30 seconds 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 30 seconds 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 30 seconds 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 30 seconds 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 30 seconds to exit the menu mode.

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 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 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
1 channels	1	2	3	4
2D channels	1	3	5	7
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 3 seconds, then the corresponding function will take into effect.

1 Channel (Mode 1):

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

2D Channels (Mode 2):

CHANNEL	VALUE	FUNCTIONS
1	000-255	DIMMER 0%→100%
2	000-255	DIMMER FINE

2 Channels (Mode 3):

CHANNEL	VALUE	FUNCTIONS
1	000-255	DIMMER 0%→100%
2	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

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.

Innovation, Quality, Performance