

User Manual

Please read the instruction carefully before use

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01/ 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.

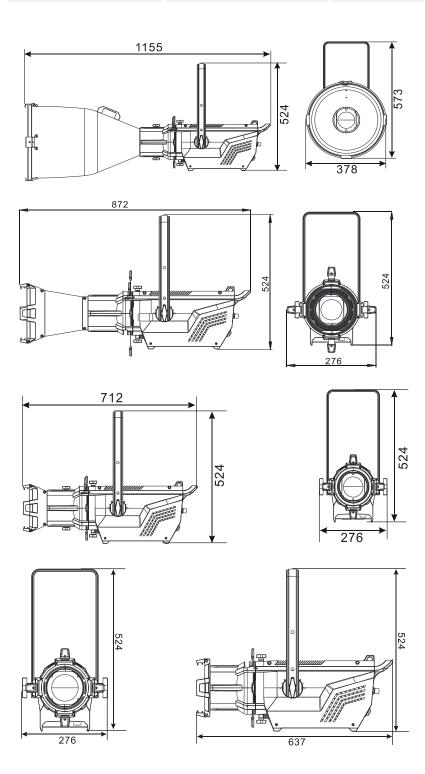
- Unpack and check carefully to ensure that there is no transportation damage before using the unit.
- This product is for indoor use only. Use only in a dry location.
- DO install and operate by qualified operator.
- DO NOT allow children to operate the fixture.
- Use safety chain when fixing the unit. 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 is blocked, otherwise the unit will be overheated.
- Before operation, ensure that you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.
- 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 operate this product at a lower or higher temperature.
- DO NOT connect the device to any dimmer pack.
- Keep flammable materials away from the fixture while operating to avoid fire hazard.
- Make sure the power cord is not crimped or damaged; replace it immediately if damaged.
- Avoid any flammable liquids, water or metal from entering the unit. Once it happens, cut off the mains power immediately.
- DO NOT operate in a dirty or dusty environment. DO clean the fixture regularly.

- DO NOT touch any wire during operation as there might be a hazard of electric shock.
- Avoid entanglement of the power cord with other wires.
- 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 housing as there are no user serviceable parts inside.
- DO NOT attempt to operate this unit if it becomes damaged. DO NOT attempt any
 repairs yourself. Repairs carried out by unskilled people can lead to damage or
 malfunction. Please contact the nearest authorized technical assistance center if needed.
- Disconnect this product from its power source before servicing.
- DO use the original packaging if the device is to be transported.
- Avoid direct eye exposure to the light source while the product is on.
- DO NOT operate this product if you see damage on the housing, shields, or cables. Have the damaged parts replaced by an authorized technician at once.

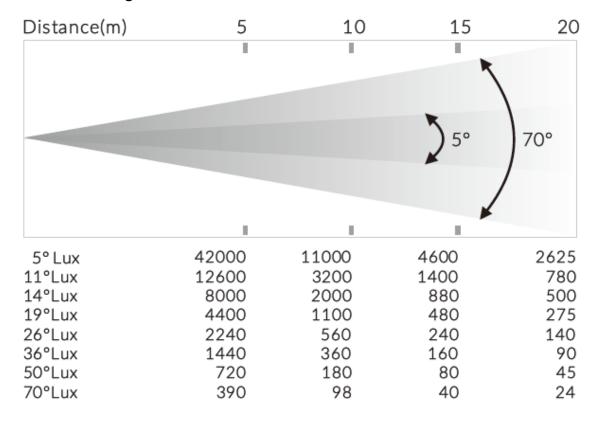
02/ Technical Specifications

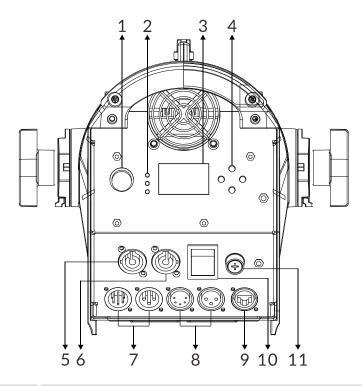
Power Voltage	100-240V~ 50/60Hz				
Power Consumption	335W				
	HD320-B (E-300 MB CW)				
Light Source	HD320-A (E-300 MB WW)				
	HD320 (E-300 MB NW)				
	5600±200K (E-300 MB CW)				
Color Temperature	3100±150K (E-300 MB WW)				
	4000±150K (E-300 MB NV	/)			
	CRI≥85 (CW); CRI≥90 (WW	()			
Optical	CQS≥88 (CW); CQS≥91 (W	W)			
	TLCI≥90 (CW); TLCI≥94 (W	W)			
Dimmer/Strobe	0-100% smooth dimming; speed	outstanding strobe effect with variable			
	DMX Channel	1/2D/2 Channels			
		DMX512			
Control	Control Mode	RDM			
Control		Primary/Secondary Mode			
		Manually Dimmer Control			
	Firmware Upgrade	Firmware Upgrade via DMX link			
	Display	LCD display			
	Data In /Out	3/5-pin XLR			
Construction	Data In/Out	RJ45 Connector			
	Power In/Out	Power Connector in/out			
	Protection Rating	IP20			
	Super smooth and uniform flat light				
Conturns	Clear image and sharp edge				
Features	Lens Options: 5°/11°/14°/19°/26°/36°/50°/70°				
	High-efficient cooling system to expand LED lifespan				

	5°	378x1155x524mm	14.9"x45.5"x20.6"in
Dimanaiana	11°/14°/19°	276x872x524mm	10.9"x34.3"x20.6"in
Dimensions	26°/36°	276x712x524mm	10.9"x28"x20.6"in
	50°/70°	276x637x524mm	10.9"x25"x20.6"in
\\/-:-h+	5°/11°/14°/19°/26°	9.6kgs	21.2lbs
Weight	36°/50°/70°	9.1kgs	20.1lbs



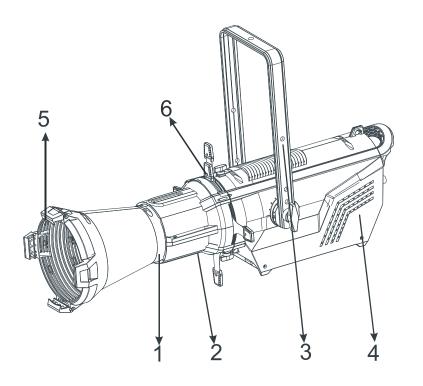
Photometric Diagram:





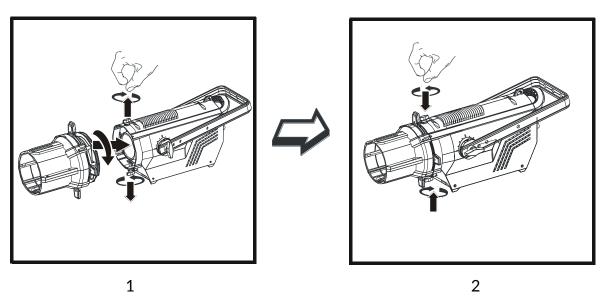
1. DIMMER	Manually adjust the dimmer value			
	PRIMARY	On	Primary Mode	
2. LED	SECONDARY	On	Secondary Mode	
	DMX	On	DMX input present	
3. Display	To show the va	To show the various menus and the selected function		
	MENU	To enter into move backward or leave the menu		
4 Duttons	▲ UP	To go backward to move up in the menu		
4. Buttons	→ DOWN	To go forward to move down in the menu		
	ENTER	To perform the desired functions		
5. MAINS IN	To connect to supply power			
6. MAINS OUT	To connect to the next fixture			
7. DMX IN	For DMX512 link, use 3/5-pin XLR cable to link the unit and DMX controller to input DMX signal			
8. DMX OUT	For DMX512 link, use 3/5-pin XLR cable to link the next units to output DMX signal			
9. ETHERNET	Transfers fixture's information to a main controller			
10. POWER SWITCH	Turns on/off the power			
11. FUSE (T 6.3A)	Protects the unit from damage of over-voltage or short circuit			

4.1 The Unit Construction

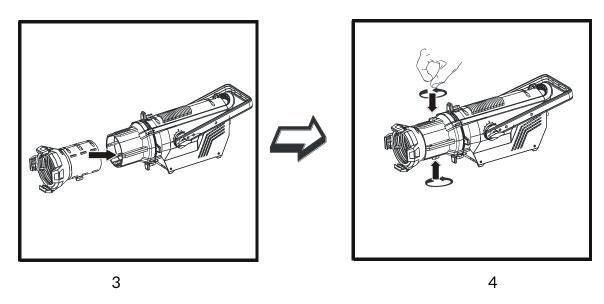


- 1. Lens Module
- 2. Framing System
- 3. Bracket
- 4. Main Body
- Clip for Gel Holder(Standard/Optional)
- 6. Gobo Slot

4.2 Lens Installation



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.



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

05/ How To Set The Unit

5.1 Main Functions

- ▶ To access the control menus, press the [MENU] button.
- ▶ Navigate the menu structure, using the [ENTER], [▲ UP] and [▼ DOWN] buttons.
- ▶ To select a menu option or to confirm a selection, press the [ENTER] button.
- ► To return to a higher level in the menu structure without making a change, press the [MENU] button, or wait 30 seconds.

The main functions are shown below:

MENU	SUBMENU	OPTIONS		
DMX Address	1-512	(Default=1)		
	1 Ch			
DMX Channel	2D Ch			
	2 Ch			
Dimmor Spood	Fast			
Dimmer Speed	Smooth			
	Mode 1			
Diameter Comme	Mode 2			
Dimmer Curve	Mode 3			
	Mode 4			

MENU	SUBMENU	OPTI	ONS
Pri./Sec. Mode	Primary		
Pri./Sec. Mode	Secondary		
	Pri. Sec.		
No DMX Status	Blackout		
	Last State		
	Backlight Intensity	1-10	(Default=10)
	Contrast Ratio	1-30	(Default=15)
	Packlight Auto Off	No	
Dicplay Sotting	Backlight Auto Off	Yes	
Display Setting	Display Inverse	No	
		Yes	
	Language	English	
		Chinese	
Manual Test	Strobe	0-255	
Ivianuai iest	Dimmer Value	0-255	
	LED Temp.		
Fixture Information	Fixture Time		
	Firmware Version		
Factory Sotting	No		
Factory Setting	Yes		

DMX Address

Select **DMX Address**, press ENTER.

Use UP/DOWN button to select an address, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

DMX Channel

Select **DMX Channel**, press ENTER.

Use UP/DOWN button to select between **1 Ch, 2D Ch** and **2 Ch**, confirm your selection with ENTER.

Dimmer Speed

Select Dimmer Speed, press ENTER.

Use UP/DOWN button to select **Fast** or **Smooth**, confirm your selection with ENTER.

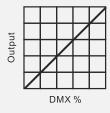
To exit the menu, press MENU, or wait 30 seconds.

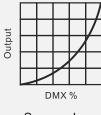
Dimmer Curve

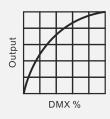
Select **Dimmer Curve**, press ENTER.

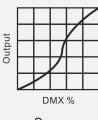
Use UP/DOWN button to select **Mode 1, Mode 2, Mode 3** or **Mode 4**, confirm your selection with ENTER.

Dimmer Modes









Optically Linear

Square Law Inverse Square Law

S-curve

To exit the menu, press MENU, or wait 30 seconds.

Pri./Sec. Mode

Select **Pri./Sec. Mode**, press ENTER.

Use UP/DOWN button to select **Primary** or **Secondary**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

No DMX Status

Select **No DMX Status**, press ENTER.

Use UP/DOWN button to select one of the following status:

Pri. Sec. (Primary/secondary mode)

Blackout (Fixture blacks out if DMX signal stops)

Last State (The device continues to operate in the current mode with the last active DMX values until the signal returns)

Confirm your selection with ENTER.

Display Setting

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

Backlight Intensity

Select Backlight Intensity, press ENTER.

Use UP/DOWN button to select a value between **1** (dark) and **10** (bright), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Contrast Ratio

Select Contrast Ratio, press ENTER.

Use UP/DOWN button to select a value between **1** and **30**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Backlight Auto Off

Select Backlight Auto Off, press ENTER.

Use UP/DOWN button to select **No** or **Yes**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Display Inverse

Select **Display Inverse**, press ENTER.

Use UP/DOWN button to select **No** (display normal) or **Yes** (display inverted), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Language

Select Language, press ENTER.

Use UP/DOWN button to select **English** or **Chinese**, confirm your selection with ENTER.

Manual Test

Select Manual Test, press ENTER.

Use UP/DOWN button to select **Strobe** or **Dimmer Value**, confirm your selection with ENTER.

Use UP/DOWN button to select a value between **0** and **255**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Fixture Information

Enter the control menu and select **Fixture Information**, press ENTER. Use the UP/DOWN button to select **LED Temp.**, **Fixture Time** or **Firmware Version**.

LED Temp.

Select LED Temp., press ENTER.

The LED temperature is displayed.

To exit the menu, press MENU, or wait 30 seconds.

Fixture Time

Select **Fixture Time**, press ENTER.

The operating hours is displayed.

To exit the menu, press MENU, or wait 30 seconds.

Firmware Version

Select **Firmware Version**, press ENTER.

The firmware version is displayed.

To exit the menu, press MENU, or wait 30 seconds.

Factory Setting

Select Factory Setting, press ENTER.

If you wish to reset the device to the factory settings, select **Yes**. If you do not wish to reset anything, select **No**. Confirm your selection with ENTER.

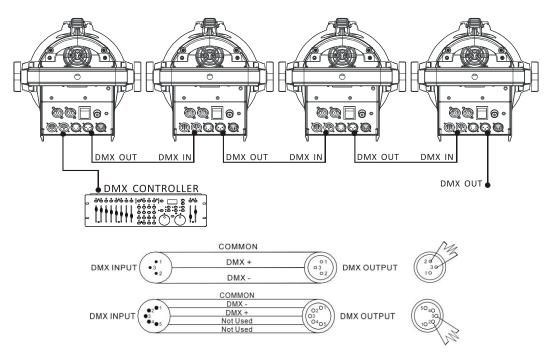
RDM functions: Certain menus of the device and functions can be called up via the RDM protocol.

The parameter IDs are implemented as follows for different commands:

Parameter ID	Command 'Discovery'	Command 'Set'	Command 'Get'
DISC_UNIQUE_BRANCH	√		
DISC_MUTE	√		
DISC_UN_MUTE	√		
DEVICE_INFO			√
SUPPORTED_PARAMETERS			√
SOFTWARE_VERSION_LABEL			√
DMX_START_ADDRESS		√	√
IDENTIFY_DEVICE		√	√
DEVICE_MODEL_DESCRIPTION			√
PARAMETER_DESCRIPTION			√
MANUFACTURER_LABEL			√
DEVICE_LABEL		√	√
FACTORY_DEFAULTS		√	√
BOOT_SOFTWARE_VERSION_ID			√
BOOT_SOFTWARE_VERSION_LABEL			✓
DMX_PERSONALITY		√	✓
DMX_PERSONALITY_DESCRIPTION			✓
SLOT_INFO			✓
SLOT_DESCRIPTION			✓
SENSOR_DEFINITION			✓
SENSOR_VALUE			✓
DEVICE_HOURS			✓
LAMP_HOURS			✓
RESET_DEVICE		√	
CURVE		√	√
PRIMARY_SECONDARY		√	√
DIMMER_SPEED		√	√

 \checkmark -Command implemented for the respective parameter ID

6.1 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 can only be used in series and cannot be connected in parallel. 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.
- 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.

6.2 Address Setting

If you use a universal DMX controller to control the units, you have to set DMX address between 1 and 512 so that the units can receive DMX signal.

Press the MENU button to access the control menus, select DMX Address, press the ENTER button to confirm, the present address will show on the display. Use the UP/DOWN button to adjust the address between 001 and 512, press the ENTER button to store. To exit the menu, press MENU, or wait 30 seconds.

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

6.3 DMX512 Configuration

Please control the fixture by referring to the configurations below.

Attentions:

- ▶ The unit will maintain the last condition until reset if you cut-off the DMX signal.
- For the channel Function, keep the value for about 3 seconds, then the corresponding function will take into effect.

1 Channels (Mode 1):

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

2D Channels (Mode 2):

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

2 Channels (Mode 3):

CHANNEL	VALUE	FUNCTION
1		DIMMER
1	000-255	0%→100%
		STROBE
	000-007	Close
	008-015	Open
	016-131	Strobe from Slow to Fast
	132-139	Open
2	140-181	Slow Open Fast Close from Slow to Fast
	182-189	Open
	190-231	Fast Open Slow Close from Slow to Fast
	232-239	Open
	240-247	Random Strobe
	248-255	Open

07/ Troubleshooting

Following are a few common problems that may occur during operation. Here are some suggestions for troubleshooting:

A. The unit does not work and no light

- ▶ Check the connected power and main fuse.
- Measure the voltage.
- Check the power indicator to see whether it can be lit up or not.

B. Not responding to the DMX controller

- ▶ Check whether the DMX connectors and the DMX cables are connected correctly.
- ▶ Check whether the DMX address is correctly set.
- If the intermittent DMX signal problem occurs, check whether the XLR socket and the signal cable are well connected.
- Try it with another DMX controller.
- Check whether the DMX cables run near or alongside to the high-voltage cables, which may damage or interfere with the signal circuit.

08/ Fixture Cleaning

It is absolutely essential that the fixture is kept clean to ensure the maximum light-output and allow the fixture to function reliably throughout its life. The fixture must be cleaned regularly to avoid dust, dirt and smoke-fluid residues building up on or within the fixture. The cleaning frequency depends on the application environment. Clean the fixture immediately if the dust enters it to avoid damage to the optical lens due to excessive dust.

- A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should solvents be used.
- Always dry the parts carefully.
- Clean the external optical lens at least every 20 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 2014/30/EU.

EN 55032: 2015+A1: 2020; EN 55035: 2017+A11: 2020; EN IEC 61000-3-2: 2019+A1: 2021; EN 61000-3-3: 2013+A1: 2019+A2: 2021.

& Harmonized Standard

EN IEC 60598-2-17: 2018; EN IEC 60598-1: 2021+A11: 2022. Safety of household and similar electrical appliances Part 1: General requirements and tests

