

KL FRESNEL 4™

user manual

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DOCUMENT VERSION

Due to additional product features and/or enhancements, an updated version of this document may be available online.

Please check Elation Service for the latest revision/update of this manual, before beginning installation and/or programming.

Date	Document Version	Software Version ≥	DMX Channel Modes	Notes
11/30/17	1	1.02	1 / 2 / 3 / 4	Initial release.
01/31/18	1.2	N/C	NO CHANGE	Added Manual Dimming Control instructions.

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GENERAL INFORMATION

INTRODUCTION

This fixture has been designed to perform reliably for years when the guidelines in this manual are followed. Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this unit. These instructions contain important information regarding safety during use and maintenance.

UNPACKING

Every fixture has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your unit for damage and be sure all accessories necessary to operate the unit have arrived intact. In the event damage has been found or parts are missing, please contact our customer support team for further instructions. Please do not return this unit to your dealer without first contacting customer support at the number listed below. Please do not discard the shipping carton in the trash. Please recycle whenever possible.

BOX CONTENTS

Barn Door

Gel Frame

powerCON TRUE1 Cable

Fixture Safety Cable

Barn Door Safety Cable

CUSTOMER SUPPORT

Elation Professional® provides a customer support line, to provide set up help and to answer any question should you encounter problems during your set up or initial operation. You may also visit us on the web at www.elationlighting.com for any comments or suggestions. For service related issue please contact Elation Professional®.

ELATION SERVICE USA - Monday - Friday 8:00am to 5:00pm PST

Voice: 323-582-3322

Fax: 323-832-9142

E-mail: support@elationlighting.com

ELATION SERVICE EUROPE - Monday - Friday 08:30 to 17:00 CET

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WARRANTY RETURNS

All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. Items returned without a R.A. number clearly marked on the outside of the package will be refused and returned at customer's expense. You may obtain a R.A. number by contacting customer support.



IMPORTANT NOTICE!

There are no user serviceable parts inside this unit. Do not attempt any repairs yourself; doing so will void your manufactures warranty. Damages resulting from modifications to this fixture and/or the disregard of safety and general user instructions found in this user manual void the manufactures warranty and are not subject to any warranty claims and/or repairs.

LIMITED WARRANTY

A. Elation Professional® hereby warrants, to the original purchaser, Elation Professional® products to be free of manufacturing defects in material and workmanship for a period of two years (730 days), and Elation Professional® product rechargeable batteries to be free of manufacturing defects in material and workmanship for a period of six months (180 days), from the original date of purchase. This warranty excludes discharge lamps and all product accessories. This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.

B. For warranty service, send the product only to the Elation Professional® factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, Elation Professional® will pay return shipping charges only to a designated point within the United States. If any product is sent, it must be shipped in its original package and packaging material. No accessories should be shipped with the product. If any accessories are shipped with the product, Elation Professional® shall have no liability what so ever for loss and/or or damage to any such accessories, nor for the safe return thereof.

C. This warranty is void if the product serial number and/or labels are altered or removed; if the product is modified in any manner which Elation Professional® concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the Elation Professional® factory unless prior written authorization was issued to purchaser by Elation Professional®; if the product is damaged because not properly maintained as set forth in the product instructions, guidelines and/or user manual.

D. This is not a service contract, and this warranty does not include any maintenance, cleaning or periodic check-up. During the periods as specified above, Elation Professional® will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of Elation Professional® under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Elation Professional®. All products covered by this warranty were manufactured after January 1, 1990, and bare identifying marks to that effect.

E. Elation Professional® reserves the right to make changes in design and/or performance improvements upon its products without any obligation to include these changes in any products theretofore manufactured.

F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with the products described above. Except to the extent prohibited by applicable law, all implied warranties made by Elation Professional® in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty periods set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said periods have expired. The consumer's and/or dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall Elation Professional® be liable for any loss and/or damage, direct and/or consequential, arising out of the use of, and/or the inability to use, this product.

G. This warranty is the only written warranty applicable to Elation Professional® products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

SAFETY INSTRUCTIONS AND GUIDELINES

This fixture is an extremely sophisticated piece of electronic equipment. To guarantee a smooth operation, it is important to follow all instructions and guidelines in this manual. The manufacturer of this device is not responsible for injury and/or damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual. Only qualified and/or certified personnel should perform installation of this fixture and only the original rigging parts (omega brackets) included with this fixture should be used for installation. Any modifications to the fixture and/or the mounting hardware included will void the original manufactures warranty and increase the risk of damage and/or personal injury.



PROTECTION CLASS 1 - FIXTURE MUST BE PROPERLY GROUNDED



DO NOT PLUG FIXTURE INTO A DIMMER PACK!

NEVER OPEN THIS FIXTURE WHILE IN USE!

UNPLUG POWER BEFORE SERVICING FIXTURE!

NEVER TOUCH FIXTURE DURING OPERATION, AS IT MAY BE HOT!

KEEP FLAMMABLE MATERIALS AWAY FROM FIXTURE!



INDOOR / DRY LOCATIONS USE ONLY!

DO NOT EXPOSE FIXTURE TO RAIN AND MOISTURE!



LOOK DIRECTLY INTO THE LIGHT SOURCE!

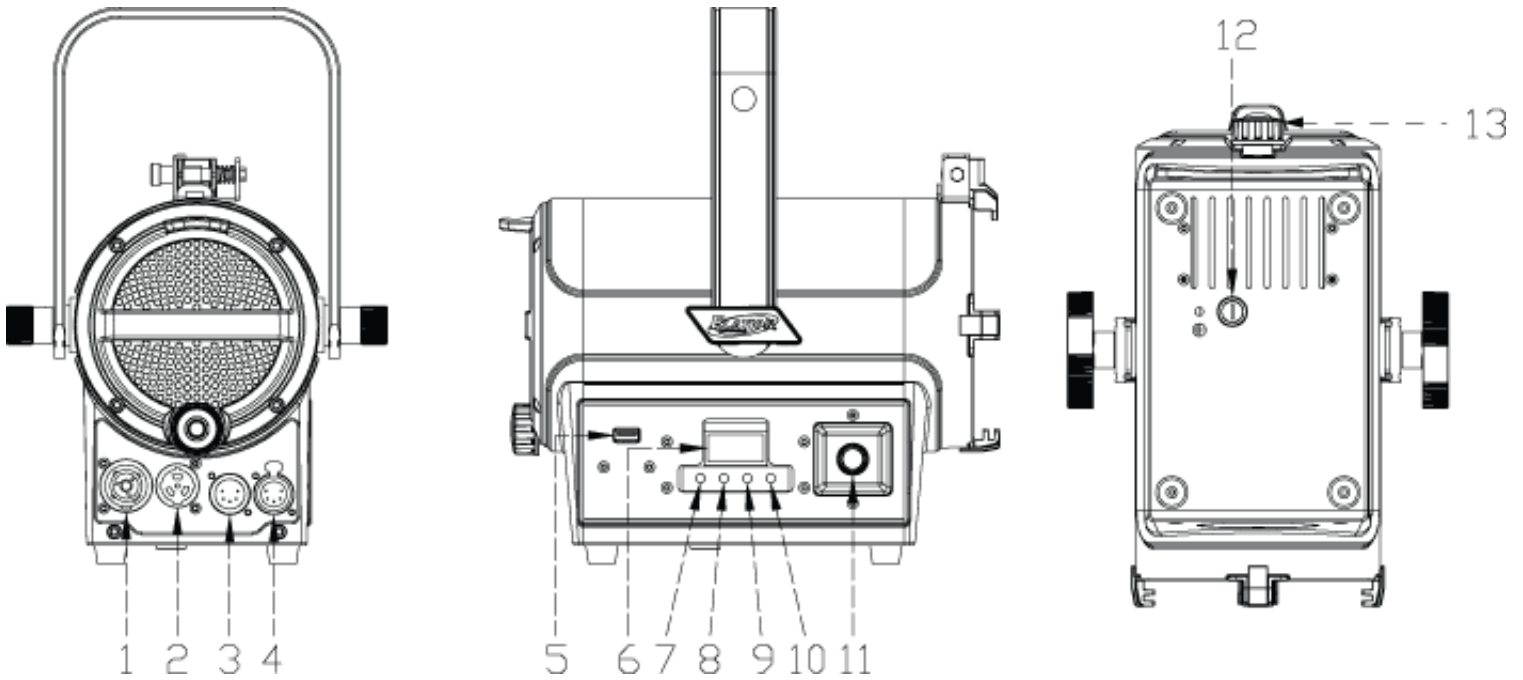
RETINA INJURY RISK - MAY INDUCE BLINDNESS!

SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK!

SAFETY INSTRUCTIONS AND GUIDELINES

- **DO NOT TOUCH** the fixture housing during operation. Turn OFF the power and allow approximately 15 minutes for the fixture to cool down before serving.
- **DO NOT** shake fixture, avoid brute force when installing and/or operating fixture.
- **DO NOT** operate fixture if the power cord has become frayed, crimped, damaged and/or if any of the power cord connectors are damaged and do not insert into the fixture securely with ease. **NEVER** force a power cord connector into the fixture. If the power cord or any of its connectors are damaged, replace it immediately with a new one of similar power rating.
- **DO NOT** block any air ventilation slots. All fan and air inlets must remain clean and never blocked. Allow approx. 6" (15cm) between fixture and other devices or a wall for proper cooling.
- When installing fixture in a suspended environment, always use mounting hardware that is no less than M10 x 25 mm, and always install fixture with an appropriately rated safety cable.
- Always disconnect fixture from main power source before performing any type of service and/or cleaning procedure. Only handle the power cord by the plug end, never pull out the plug by tugging the wire portion of the cord.
- During the initial operation of this fixture, a light smoke or smell may emit from the interior of the fixture. This is a normal process and is caused by excess paint in the interior of the casing burning off from the heat associated with the lamp and will decrease gradually over time.
- Consistent operational breaks will ensure fixture will function properly for many years.
- **ONLY** use the original packaging and materials to transport fixture in for service.

OVERVIEW



1. powerCON TRUE1 Out
2. powerCON TRUE1 In
3. 5pin DMX In
4. 5pin DMX Out
5. USB Software Update Port
6. OLED Control Menu Display
7. MODE Button
8. UP Button
9. DOWN Button
10. ENTER Button
11. Manual Dimming Control Knob
12. Fuse
13. Manual Zoom Control Knob

INSTALLATION



FLAMMABLE MATERIAL WARNING

Keep fixture at least 5.0 feet (1.5m) away from any flammable materials, decorations, pyrotechnics, etc.



ELECTRICAL CONNECTIONS

A qualified electrician should be used for all electrical connections and/or installations.

DO NOT INSTALL THE FIXTURE IF YOU ARE NOT QUALIFIED TO DO SO!

Fixture MUST be installed following all local, national, and country commercial electrical and construction codes and regulations.

Before rigging/mounting the fixture to any metal truss/structure or placing the fixture on any surface, a professional equipment installer MUST be consulted to determine if the metal truss/structure or surface is properly certified to safely hold the combined weight of the fixture, clamps, cables, and accessories.

Fixture ambient operating temperature range is **14° to 113°F. (-10° to 45°C)**

Do not use the fixture under or above this temperature.

Fixture should be installed in areas outside walking paths, seating areas, or away from areas where unauthorized personnel might reach the fixture by hand.

NEVER stand directly below the fixture when rigging, removing or servicing.

Overhead fixture installation must always be secured with a secondary safety attachment, such as an appropriately rated safety cable that can hold 10 times the weight of the fixture.

Allow approximately 15 minutes for the fixture to cool down before serving.

POWER LINKING

Max number of fixtures power linked together: **13 units @120V | 23 units @240V**

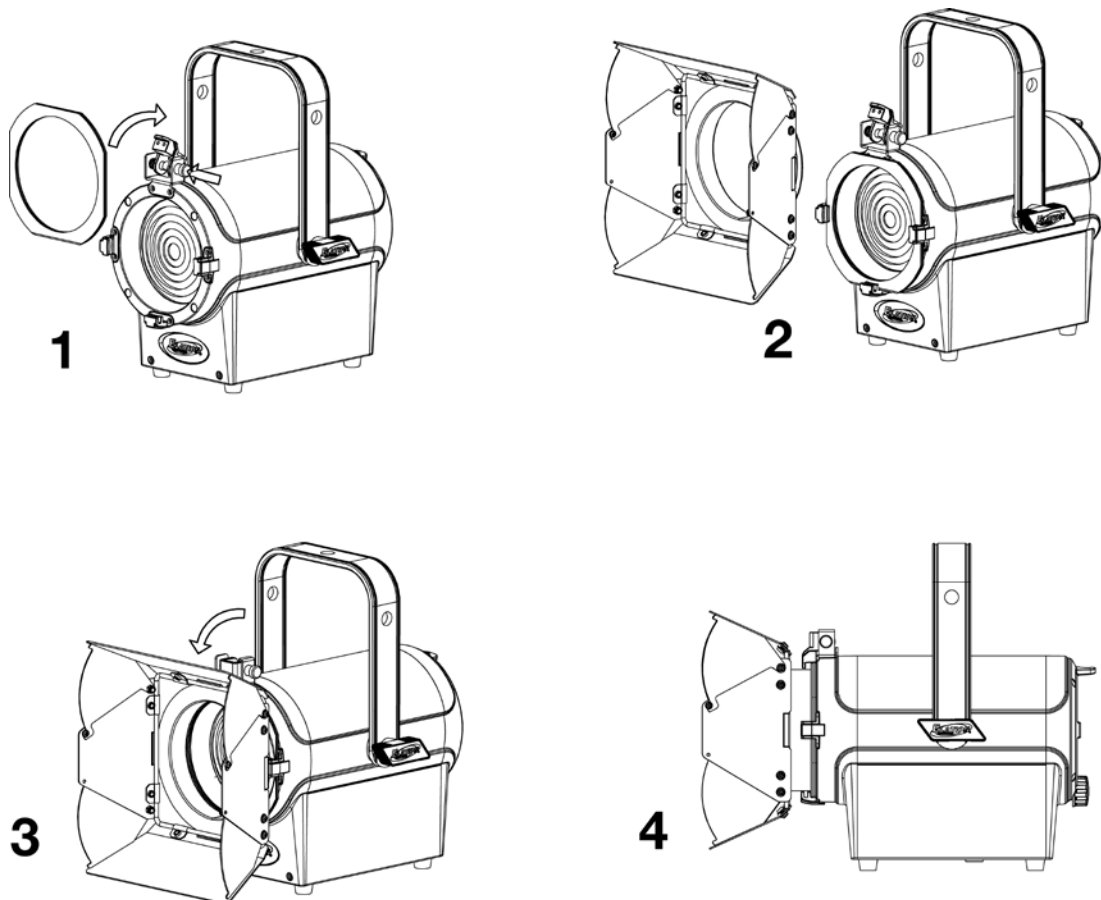
- ▶ **USE CAUTION WHEN POWER LINKING OTHER FIXTURES TO KL FRESNEL 4 AS THE POWER CONSUMPTION OF OTHER LIGHTING FIXTURES WILL VARY!**

GEL FRAME AND BARN DOOR INSTALLATION

The fixture has 2 slots on the front to hold the **GEL FRAME** and **BARN DOOR**. The first slot is for the **GEL FRAME** and the second slot is for the **BARN DOOR**. The fixture also has a top lock that secures these accessories to the fixture.



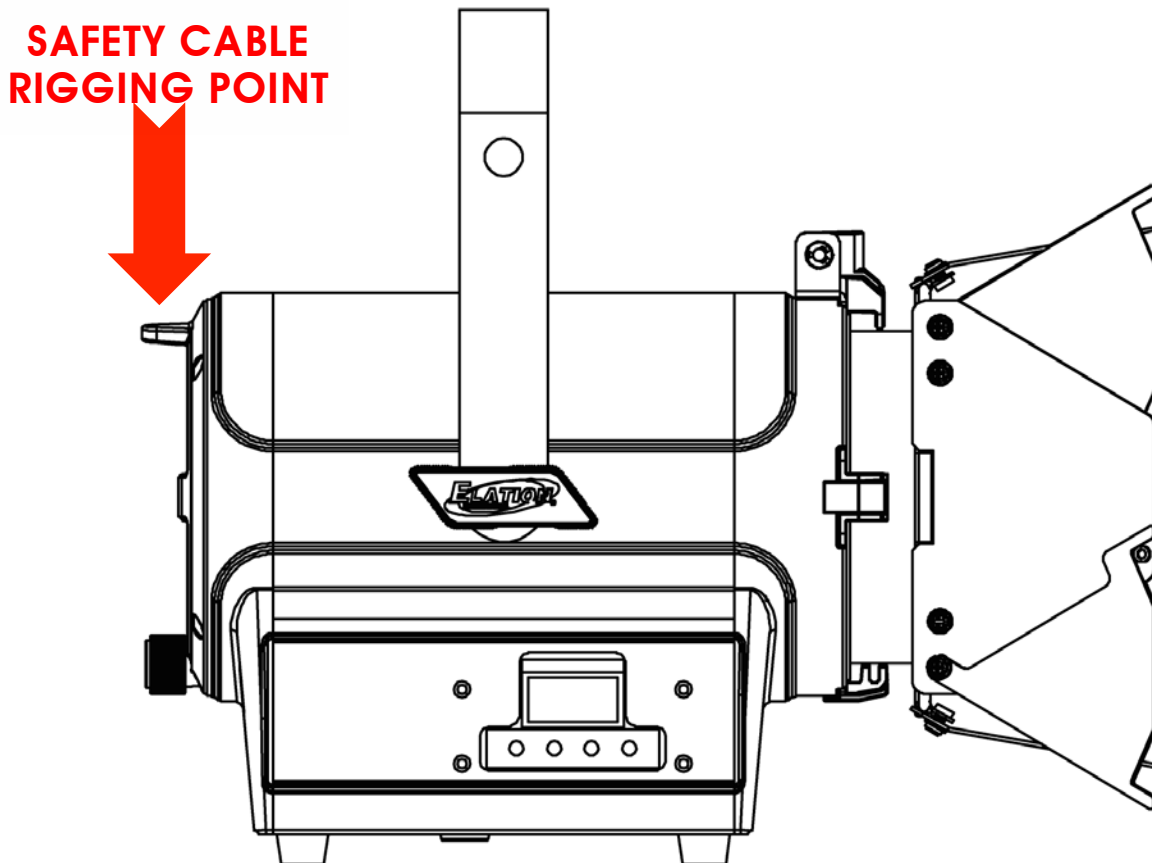
Secure the included mini SAFETY CABLE to the BARN DOOR and the top lock.



1. Lift up lock on top of fixture and insert **GEL FRAME** into the first slot closest to fixture.
2. Insert **BARN DOOR** into the second slot.
3. Lower the lock on top of the fixture to secure both the **GEL FRAME** and **BARN DOOR**.
4. Secure the included mini **SAFETY CABLE** to the **BARN DOOR** and top lock.

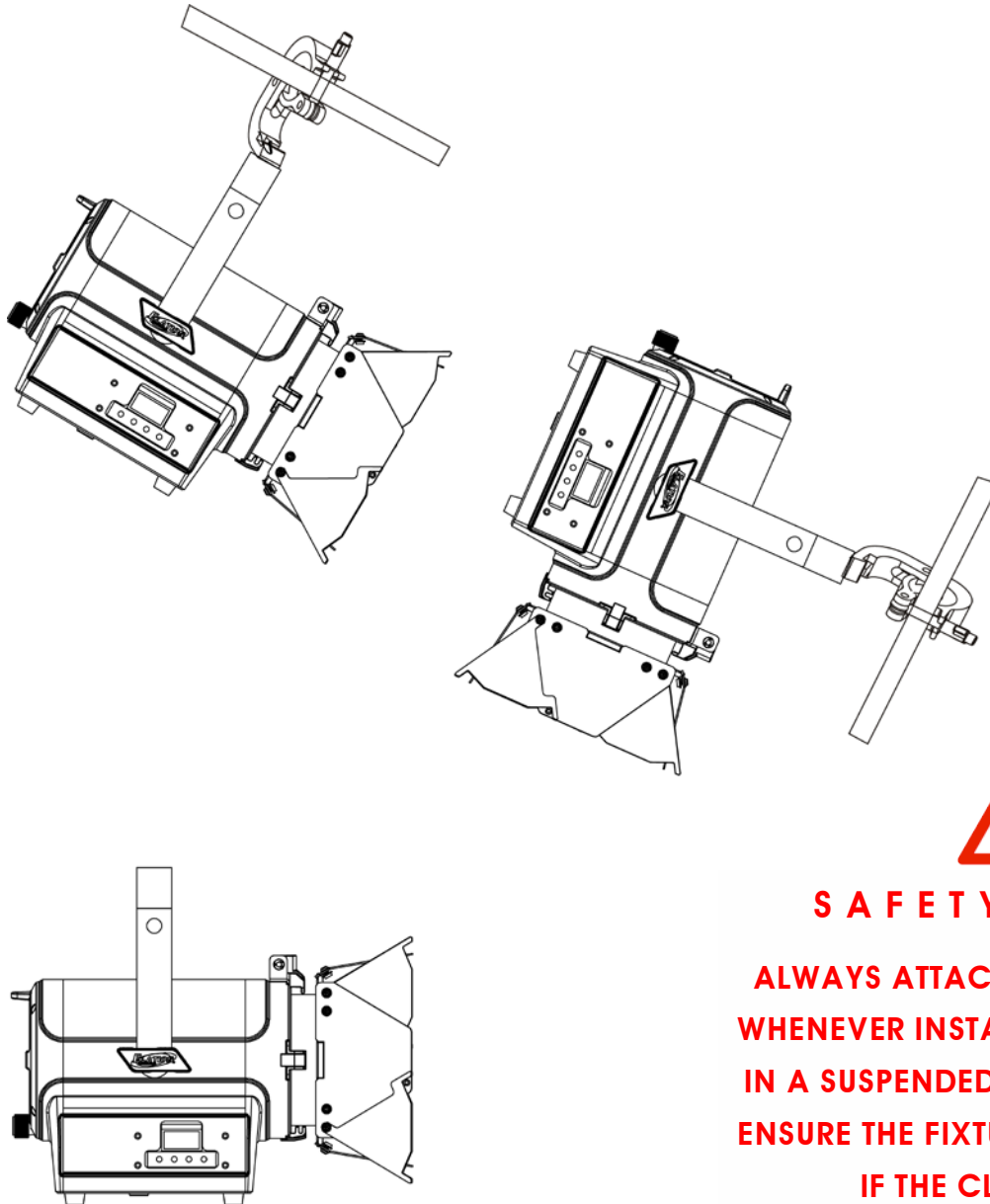
CLAMP INSTALLATION

When mounting the fixture to truss, be sure to secure an appropriately rated professional grade rigging clamp to the fixture using an M10 screw fitted through one of the 3 holes of the yoke bracket. The fixture provides a built-in rigging point for a **SAFETY CABLE**. Be sure to only use the designated rigging point for the safety cable and never secure a safety cable to a carrying handle.



RIGGING

Overhead rigging requires extensive experience, including amongst others calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury. Fixture is fully operational in the specific mounting positions illustrated below.



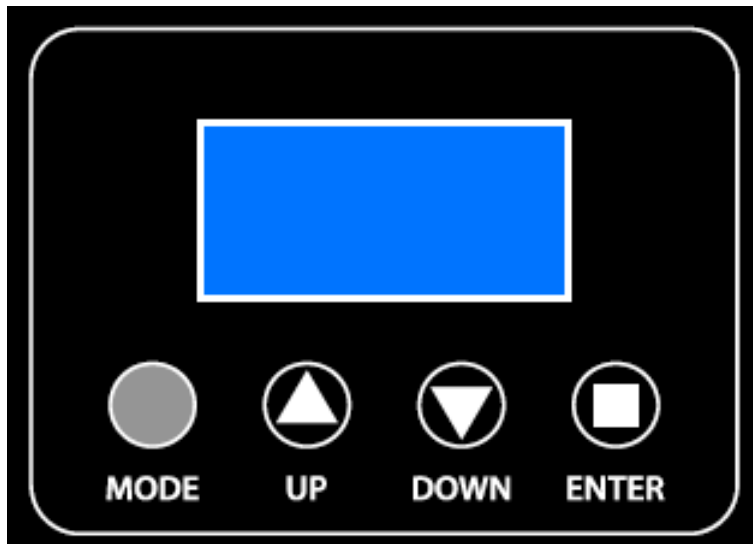
S A F E T Y C A B L E

**ALWAYS ATTACH A SAFETY CABLE
WHENEVER INSTALLING THIS FIXTURE
IN A SUSPENDED ENVIRONMENT TO
ENSURE THE FIXTURE WILL NOT DROP
IF THE CLAMP FAILS.**

SYSTEM MENU

The fixture includes an easy to navigate system menu. The control panel (see image below) located on the side of the fixture provides access to the main system menu and is where all necessary system adjustments are made to the fixture. During normal operation, pressing **MODE** button once will access the fixture's main menu. Once in the main menu you can navigate through the different functions and access the sub-menus with the **UP** and **DOWN** buttons. Once you reach a field that requires adjusting, press the **ENTER** button to activate that field and use the **UP** and **DOWN** buttons to adjust the field. Pressing the **ENTER** button once more will confirm your setting. You may exit the main menu at any time without making any adjustments by pressing the **MODE** button.

- ▶ **NOTE:** To access the LCD Menu Control Display when locked, press and hold the **MODE** button for 3 seconds. The LCD Menu Control Display will shut **OFF** automatically about 1 minute from the last button press.



INFORMATION DISPLAYED DURING INITIAL POWER ON

When the fixture is initially powered ON, the display shows the following information:



ELATION® KL FRESNEL 4™ SYSTEM MENU

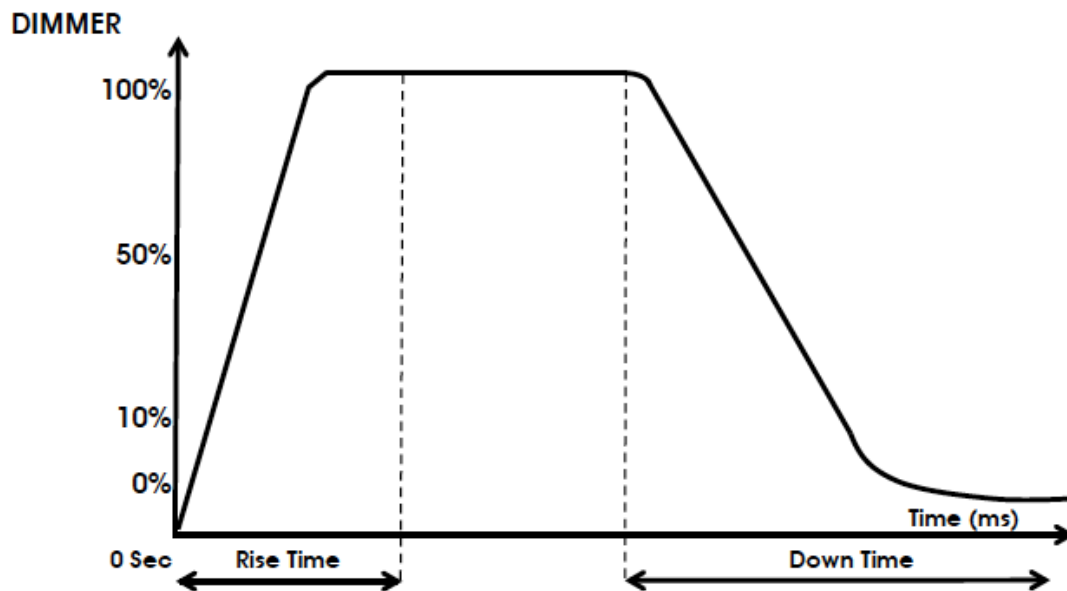
Features are subject to change without any prior written notice.

Supports Software Versions: ≥ 1.02

MAIN MENU	SUB MENU	OPTIONS / VALUES (Default Settings in BOLD)		DESCRIPTION
Address	Address	001 ~ XXX		Set DMX Address Setting
UserMode	User Mode	1CH, 2CH , 3CH, 4CH		Set DMX Channel / User Mode
Function	Status	Lost Dmx	Hold / Black	Function If NO DMX Detected
		Display	ON / OFF	OLED Display Screen Saver Mode *When ON goes off after 30 seconds. ONLY WHEN DMX IS CONNECTED.
	LCD. Set	Key Lock	ON / OFF	Control Front Panel Buttons Key Lock
		Flash	ON / OFF	Display flashes when NO DMX
		Invert	OFF / ON	Flip LCD Display 180°
	Temp. C/F	F / C		Temperature Switch Between C° / F°
	Dim Curve	Standard , Stage, TV, Architec, Theatre		Set Dimmer Curve Mode
	Disp. Set	ADDR , Disp.CH, Salve		Set Information to Display on LCD
	Fan. Set	Led Fan	Auto , High, Low	Set LED Fan Speed
	Gamma	2.0 , 2.2, 2.4, 2.8		Set Gamma Brightness
	Frequen	900Hz , 1000Hz, 1100Hz, 1200Hz, 1300Hz, 1400Hz, 1500Hz, 2500Hz, 4000Hz, 5000Hz, 10Hz, 15Hz, 20Hz, 25Hz		Set LED Refreash Frequency
	USB_Update	OFF , ON		Software Update Port - Contact Service
	DFSE	OFF , ON		Restore Factory Settings
Info	TimeInfo	Current	000 (Hours)	Fixture Run Time From Power ON
		Total	000 (Hours)	Fixture Total Run Time
		Last	000 (Hours)	Clear Fixture Last Run Time
		Password	PIN= 050	Enter PIN to Access Clear Last. Menu
		Clear	ON / OFF	Reset Fixture Last Run Time
	TempInfo	Led Temp	000 F (C)	Temperature of LED
	Err. Info	Error Record 1 ~ Error Record 10		Display 10 Recent Error Messages
	Modellnf	KLF4		Display Model Name
Software	Software	V1.02	Software Version (Greater than or Equal to)	
Test	ManCtrl	Dimmer, Strobe		Test Functions

DIMMER CURVE MODES - Dim Curve

Select desired DIMMER MODE (**Standard**, Stage, TV, Architectural, Theatre).



Dimming Curve Ramp Effect	0 sec Fade Time		1 sec Fade Time	
	Rise Time (ms)	Down Time (ms)	Rise Time (ms)	Down Time (ms)
Standard (default)	0	0	0	0
Stage	780	1100	1540	1660
TV	1180	1520	1860	1940
Architectural	1380	1730	2040	2120
Theatre	1580	1940	2230	2280

MANUAL DIMMING CONTROL

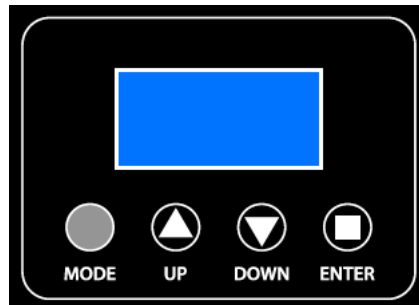
▶ **FEATURE IS DISABLED WHEN DMX INPUT CABLE IS CONNECTED TO FIXTURE! TO USE MANUAL DIMMING AND ZOOM KNOBS, DISCONNECT DMX CABLE.**

Follow steps below to enable manual DIMMING control knob.

1. Access fixture system menu navigating to **Test** menu then access **ManCtrl** sub menu.

Test	Reset.M	Zoom		Reset Zoom Motor
	Calibrat	PassWord	Password=050	Calibrate Zoom Motor
		Zoom	000-255	(PSWD Required to Access)
ManCtrl	Dimmer, Zoom, Strobe		Manual Control Functions	

▶ **NOTE:** To access the LCD Menu Control Display when locked/OFF, press and hold the **MODE** button for 3 seconds.



2. Select **Strobe** menu, set to value of **255 (LED ON)**, then exit fixture system menu.

3. Push **DIMMING** knob to unlock, rotate to desired level, push knob again to lock. Repeat this process each time a dimmer adjustment is desired.

LCD DISPLAY



DMX CABLE CONNECTED



NO DMX CABLE CONNECTED

DMX CHANNEL FUNCTIONS AND VALUES

ELATION KL FRESNEL 4™

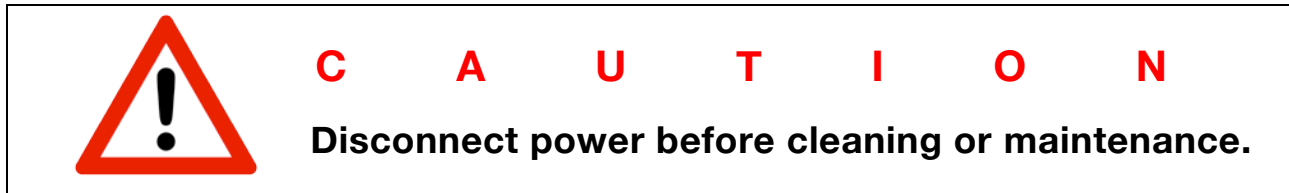
DMX Channel Values / Functions (4 DMX Channels)

Supports Software Versions: ≥ 1.02

Features are subject to change without any prior written notice.

MODE / CHANNEL				VALUE	FUNCTION
1CH	2CH	3CH	4CH		
1	1	1	1		DIMMER INTENSITY
				000-255	Dimmer 0 to 100%
			2		DIMMER INTENSITY FINE
				000-255	Dimmer FINE Adjustment
					SHUTTER, STROBE
				000-031	LED OFF
				032-063	LED ON
				064-095	Strobe Effect SLOW to FAST
				096-127	LED ON
				128-159	Pulse Effect In Sequences
				160-191	LED ON
				192-223	Random Strobe Effect SLOW to FAST
				224-255	LED ON
					DIMMER MODES
				000-020	Standard
				201-040	Stage
				041-060	TV
				061-080	Architectural
				081-100	Theatre
				101-255	Default to Setting on Fixture
	2	2	3		
		3	4		

CLEANING AND MAINTENANCE



CLEANING

Frequent cleaning is recommended to insure proper function, optimized light output, and an extended life. The frequency of cleaning depends on the environment in which the fixture operates: damp, smoky or particularly dirty environments can cause greater accumulation of dirt on the fixture's optics.

- Clean the external lens surface at least every 20 days with a soft cloth to avoid dirt/debris accumulation. NEVER use alcohol, solvents, or ammonia based cleaners.

MAINTENANCE

Regular inspections are recommended to insure proper function and extended life.

There are no user serviceable parts inside this fixture, please refer all other service issues to an authorized Elation service technician. Should you need any spare parts, please order genuine parts from your local Elation dealer.

Please refer to the following points during routine inspections:

- A detailed electric check by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating.
- Be sure all screws and fasteners and accessories are securely tightened at all times. Loose screws may fall out during normal operation resulting in damage or injury as parts could fall.
- Check for any deformations on the housing, lenses, rigging hardware and rigging points (ceiling, suspension, trussing). Deformations in the housing could allow for dust to enter into the fixture. Damaged rigging points or unsecured rigging could cause the fixture to fall and seriously injure a person(s).
- Electric power supply cables must not show any damage, material fatigue or sediments. Never remove the ground prong from the power cable.

TECHNICAL SPECIFICATIONS

SOURCE

50W 3,000K Warm White LED Engine

50,000 Hour Average LED Life*

*May vary depending on several factors including but not limited to:
Environmental Conditions, Power/Voltage, Usage Patterns (On-Off Cycling), Control, and Dimming.

EFFECTS

Manual Dimmer and Zoom Control

High Speed Electronic Shutter and Strobe

16-Bit Variable Dimming Curve Modes

COLOR

Cool White (3,000K)

CONTROL / CONNECTIONS

(4) DMX Channel Modes (1 / 2 / 3 / 4)

4 Button Touch Control Panel

Manual Dimmer and Zoom Control Knobs

Adjustable Refresh Rate

Adjustable Gamma Brightness

180° Reversible LCD Menu Display

DMX and RDM (Remote Device Management) Protocol Support

5pin DMX In/Out

powerCON TRUE1 Power In/Out

SIZE / WEIGHT

Length: 13.6" (345mm)

Width: 7.9" (201mm)

Vertical Height: 11.4" (289mm)

Weight: 9.0 lbs. (4.08 kg)

ELECTRICAL / THERMAL

AC 100-240V - 50/60Hz

50W Max Power Consumption

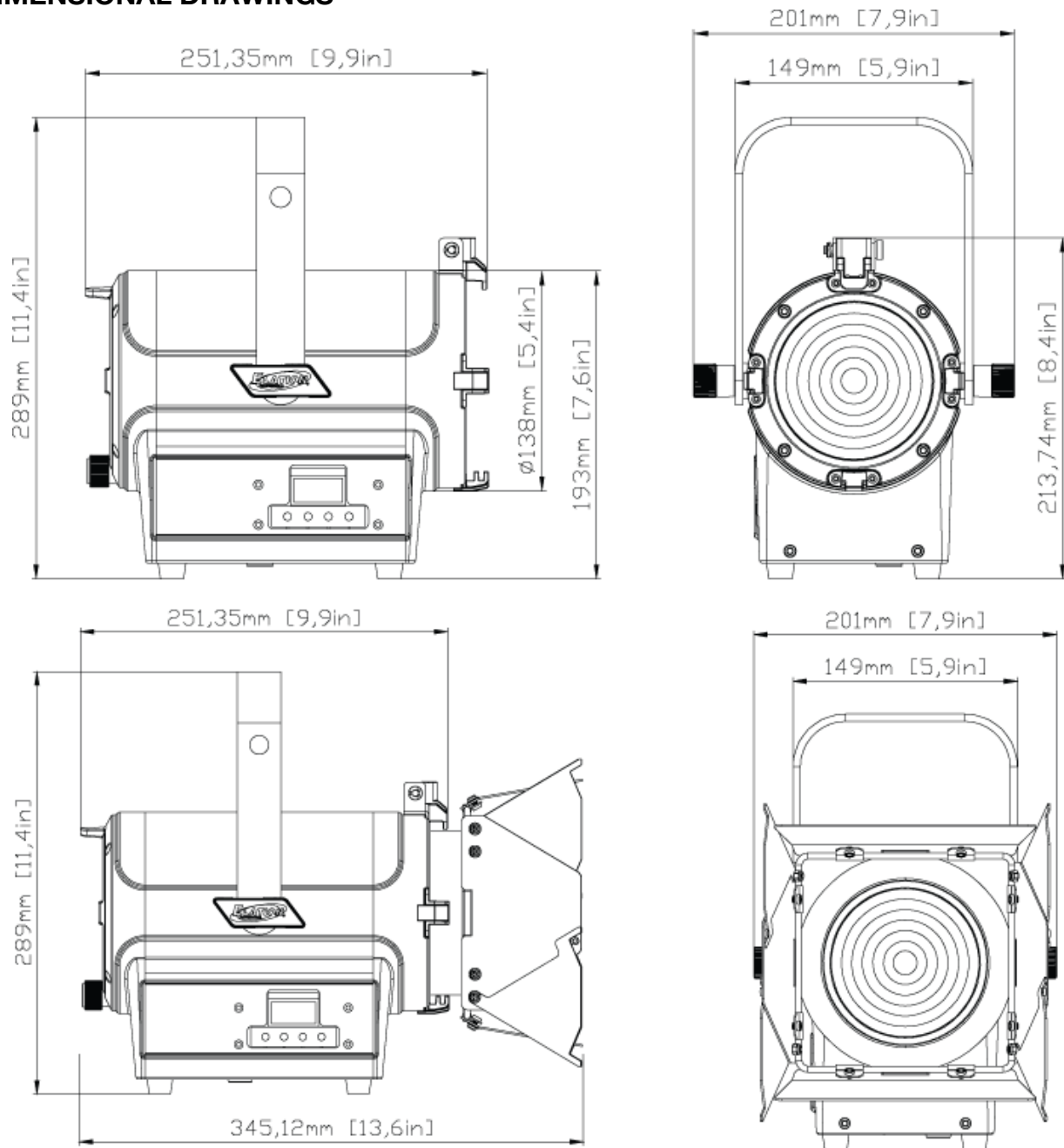
14°F to 113°F (-10°C to 45°C)

APPROVALS / RATINGS



Please Note: Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.

DIMENSIONAL DRAWINGS



Please Note: Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.

OPTIONAL ACCESSORIES

ORDER CODE	ITEM
QUICK RIG CLAMP	Low Profile Quick Release Clamp
AC5PDMX5PRO	5 ft. (1.5m) 5pin PRO DMX Cable
NEU088	3 ft. (1m) powerCON TRUE1 Power Link Cable
	Additional Cable Lengths Available

