



 **FRESNEL 4 CW™**  
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 visit <https://www.elationlighting.eu/en> for the latest revision/update of this manual before installation and/or programming.

Date	Document Version	Software Version ≥	DMX Channel Modes	Notes
03/02/19	1.0	1.03	1 / 2 / 3 / 4 / 5	Initial release.
10/02/20	1.1	N/C	NO CHANGE	Updated box contents
10/08/20	1.2	N/C	NO CHANGE	Updated refresh frequency
10/21/20	1.3	N/C	NO CHANGE	Updated specifications
05/26/21	1.4	N/C	NO CHANGE	Added Standalone instructions to System Menu section
08/12/21	1.5	N/C	NO CHANGE	Updated Manual Dimming Control
12/05/22	1.6	N/C	NO CHANGE	Update specifications to add BTU
07/18/23	1.7	N/C	NO CHANGE	Update specifications

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# GENERAL INFORMATION

## INTRODUCTION

Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this device. These instructions contain important safety and use information. **This device is intended for use by professionally trained personnel only, and is not suitable for private use.**

## UNPACKING

Every device 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 is damaged, carefully inspect the device for damage, and be sure all accessories necessary to install and operate the device 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 device to your dealer without first contacting customer support. Please do not discard the shipping carton in the trash. Please recycle whenever possible.

## BOX CONTENTS

Barn Door  
Gel Frame  
Barn Door Safety Cable (USA Only)

## CUSTOMER SUPPORT

Contact ELATION Service for any product related service and support needs. Also visit [forums.elationlighting.com](https://forums.elationlighting.com) with questions, comments or suggestions.

**ELATION SERVICE USA - Monday - Friday 8:00am to 4:30pm PST**  
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REPLACEMENT PARTS please visit [parts.elationlighting.com](https://parts.elationlighting.com)



## I M P O R T A N T N O T I C E !

**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 INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURES WARRANTY AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS.**

# LIMITED WARRANTY (USA ONLY)

- 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 whatsoever 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.

## 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.

# SAFETY GUIDELINES

This fixture is a sophisticated piece of electronic equipment. To guarantee a smooth operation, it is important to follow all instructions and guidelines in this manual. Elation Professional 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 included mounting hardware will void the original manufactures warranty and increase the risk of damage and/or personal injury.



**PROTECTION CLASS 1 - FIXTURE MUST BE PROPERLY GROUNDED**



**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 INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURES WARRANTY AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS.**



**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!**



**NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE!  
RETINA INJURY RISK - MAY INDUCE BLINDNESS!  
SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK!**



**INDOOR / DRY LOCATIONS USE ONLY!  
DO NOT EXPOSE FIXTURE TO RAIN AND MOISTURE!**

# SAFETY 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 is 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 the fixture in for service.

# MAINTENANCE GUIDELINES



**DISCONNECT POWER BEFORE PERFORMING ANY 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.

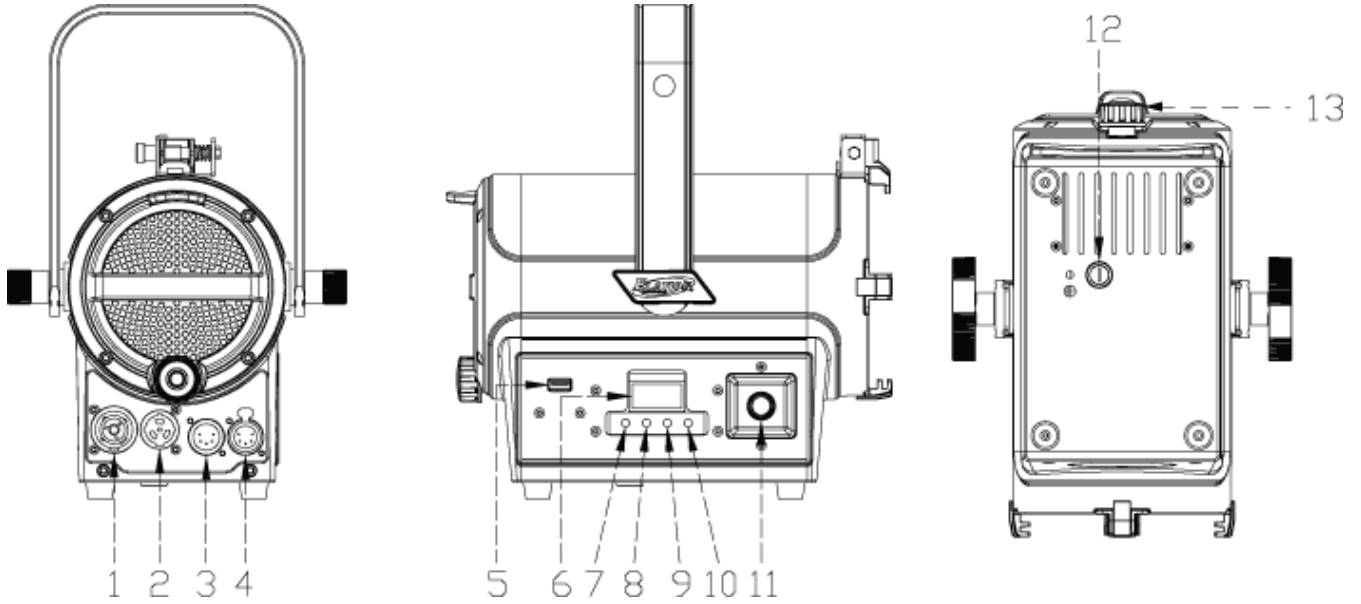
Be sure all screws and fasteners are securely tightened at all times. Loose screws may fall out during normal operation resulting in damage or injury as larger parts could fall.

Check for any deformations on the housing, color 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.



# FIXTURE OVERVIEW



1. Power Out
2. Power 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 INSTRUCTIONS

## FLAMMABLE MATERIAL WARNING



Keep fixture minimum 5.0 feet (1.5m) away from flammable materials and/or pyrotechnics.

## ELECTRICAL CONNECTIONS



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

USE CAUTION WHEN POWER LINKING OTHER MODEL FIXTURES AS THE POWER CONSUMPTION OF OTHER MODEL FIXTURES MAY EXCEED THE MAX POWER OUTPUT ON THIS FIXTURE. CHECK SILK SCREEN FOR MAX AMPS.



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 a single fixture or multiple interconnected fixtures for custom matrix designs to any metal truss/structure or placing the fixture(s) 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(s), 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(s) 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(s) when rigging, removing, or servicing.

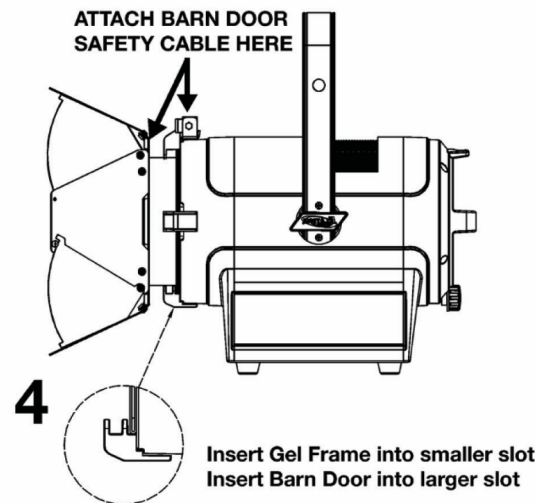
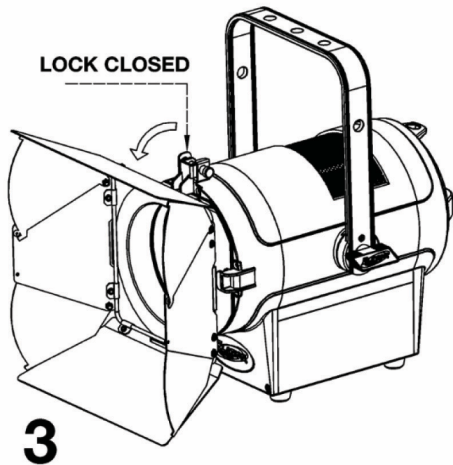
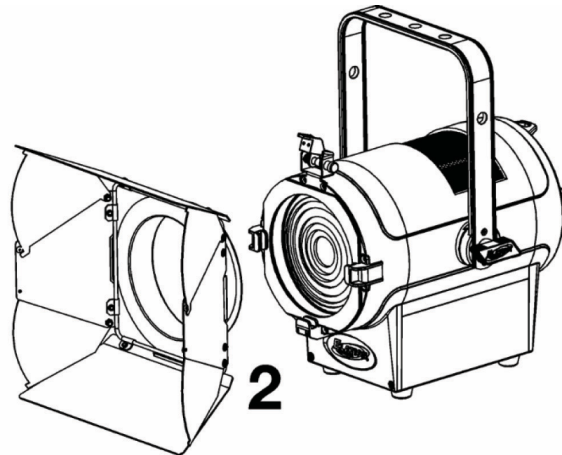
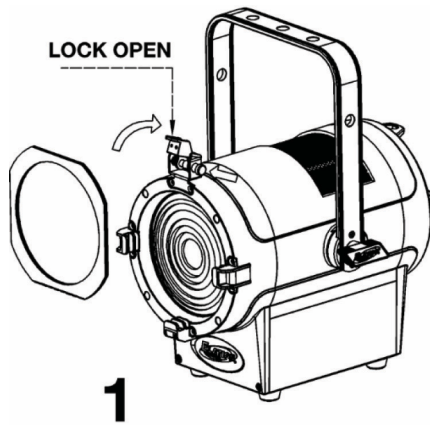
Overhead fixture installation must always be secured with a secondary safety attachment, such as an appropriately rated safety cable that meets all local, national, and country codes and regulations. Allow approximately 15 minutes for the fixture to cool down before serving.

# INSTALLATION INSTRUCTIONS

## GEL FRAME AND BARN DOOR INSTALLATION

The fixture has 2 slots on the front to hold the **GEL FRAME** and **BARN DOOR**. The first smaller slot is for the **GEL FRAME** and the second larger 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.

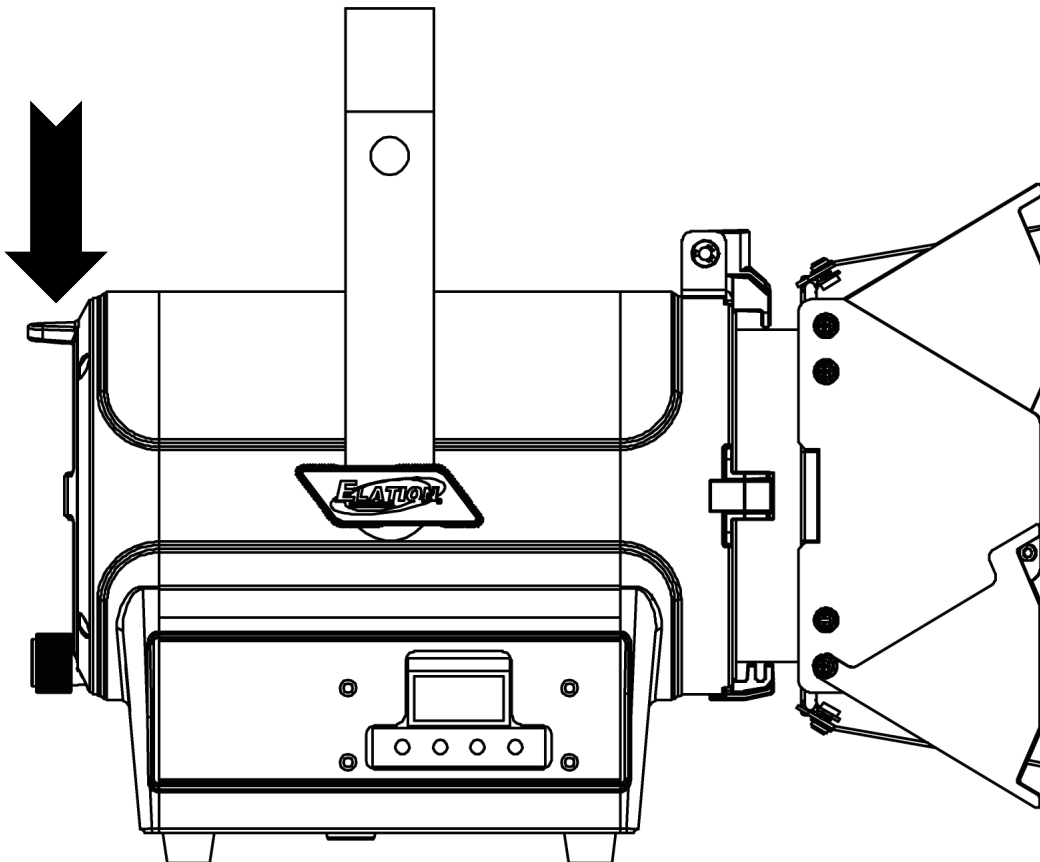
1. Lift up lock on top of fixture and insert **GEL FRAME** into the first slot closest to fixture.
2. Insert **BARN DOOR** into the second slot.
3. Lower the lock on top of the fixture to secure both the **GEL FRAME** and **BARN DOOR**.
4. Secure the included mini **SAFETY CABLE** to the **BARN DOOR**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

# INSTALLATION INSTRUCTIONS

## 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.

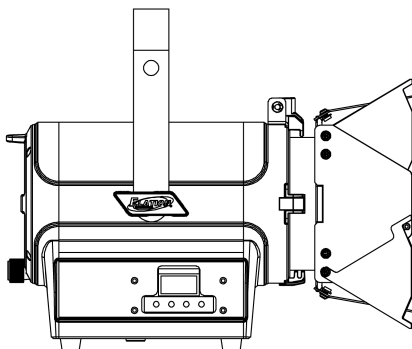
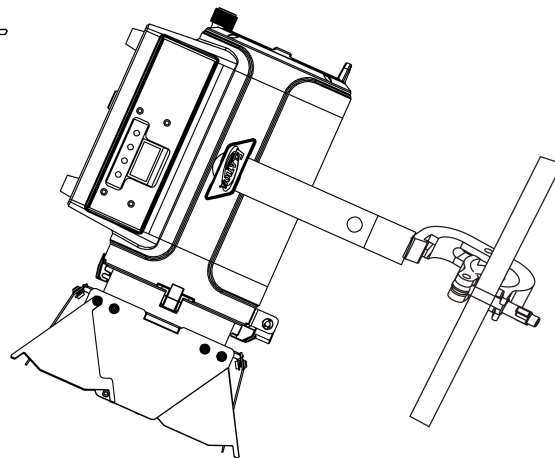
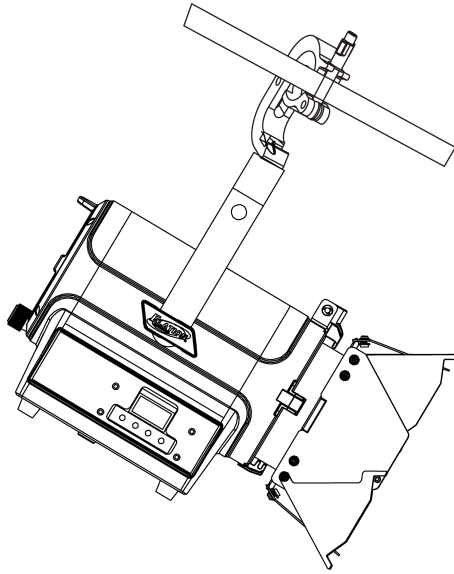
## SAFETY CABLE RIGGING



# INSTALLATION INSTRUCTIONS

## 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.



### SAFETY CABLE

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

# FAN MODES AND LOW NOISE OPERATION

The KL Fresnel 4 CW is a high-performance fixture suited for multiple applications. For noise critical environments such as Theater, Opera or Orchestra Halls, it offers various fan operation modes which remove any distraction for the audience and performers. Fan Modes can be changed remotely via the DMX control channel, allowing the fixture to offer high output or whisper silent operation at a moment's notice. All Fan Modes smoothly transition over a brief time, preventing unwanted attraction to the fixture.

Mode	dbA at 1m LED off	dbA at 1m Dimmer 100%
Fan Control - Auto (Default)	39	47
Fan Control - High	40	55
Fan Control - Low	37	42
Low Noise – Studio	34	37
Low Noise – Mute	31	31

**Auto (Default)**—Fans only run at the speeds needed to keep the LED engine within a safe temperature range and ensures optimal performance of the fixture. If possible, they will turn-off, for example, when the fixture is dimmed to a low intensity. Fans sense the ambient and fixture temperature, and will always try to keep noise levels to a minimum. The fixture output will only reduce when the LED engine cannot be cooled down to its safe operating range due to high ambient temperature. **NOTE: This mode is recommended for daily operation.**

**High**—Fan speeds are increased throughout for the most efficient cooling of the fixture. This mode will increase wear on the fans and should only be utilized in exceptional circumstances. Fans will always run, even if the fixture is dimmed down. Fixture output is kept at 100% unless the LED engine temperature reaches an unsafe temperature at which point the fixture will reduce power carefully to ensure continued safe operation. This mode is only required in very high ambient temperatures when automatic fan speed adjustments are not desired.

**Low**—For very critical noise environments, the fixture offers Low Noise Mode for silent operation. The fixture output will be reduced to 75-80% of maximum output, yet due to the extremely high luminous flux, the fixture still offers outstanding performance. In Low Noise Modes, all parameters of the fixture operate more quietly with reduced fan speeds.

# REMOTE DEVICE MANAGEMENT (RDM)

**NOTE:** For RDM to work properly, RDM enabled equipment must be used throughout the entire system, including DMX data splitters and wireless systems.

Remote Device Management (RDM) is a protocol that sits on top of the DMX512 data standard for lighting, allowing the DMX systems of the device to be managed, modified, and monitored remotely (hence, remote device management). This protocol is ideal for fixtures installed in locations that are not easily accessible.

With RDM, the DMX512 system becomes bi-directional, allowing a compatible RDM enabled controller to send out a signal to devices on the wire, as well as allowing the fixture to respond (known as a GET command). The controller can then use it's SET command to modify settings that would typically have to be changed or viewed directly via the unit's display screen, including the DMX Address, DMX Channel Mode, and Temperature Sensors.

## FIXTURE RDM INFORMATION:

RDM Code	DEVICE ID	Device Model ID Hexadecimal	Personality ID
22A6	0000-FFFF	0970	001 Dimmer 002 16Bit 003 3CH 004 Standard 005 Extended

Please be aware that not all RDM devices support all RDM features, and therefore it is important to check beforehand to ensure that the equipment that you are considering includes all the features that you require.

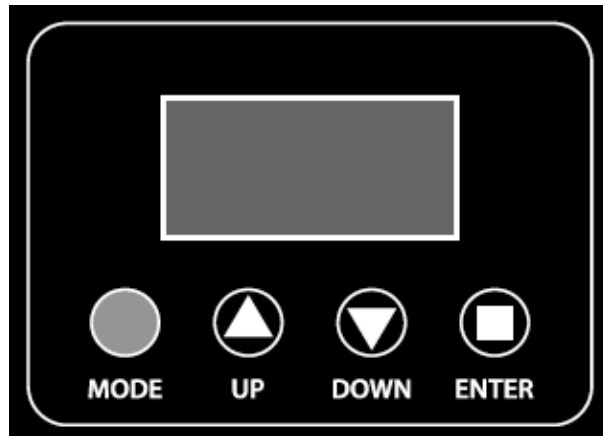
The following parameters are accessible in RDM on this device:

SENSOR DEFINITION	
SENSOR_VALUE	DISPLAY_INVERT
DEVICE_MODEL_DESCRIPTION	DISPLAY_LEVEL
MANUFACTURER_LABEL	REAL_TIME_CLOCK
DEVICE_LABEL	POWER_STATE
DMX_PERSONALITY	PRESET_PLAYBACK
DMX_PERSONALITY_DESCRIPTION	DEFAULT_SLOT_VALUE
DEVICE_HOURS	LANGUAGE
COMMS_STATUS	LANGUAGE_CAPABILITIES
STATUS_ID_DESCRIPTION	BOOT_SOFTWARE_VERSION_LABEL
CLEAR_STATUS_ID	BOOT_SOFTWARE_VERSION_ID
LAMP_HOURS	PRODUCT_DETAIL_ID_LIST
LAMP_ON_MODE	STATUS_MESSAGES
DEVICE_POWER_CYCLES	RESET_DEVICE

# 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.



## STANDALONE

Press the **MODE** button to access the fixture's main menu. Use the **UP** and **DOWN** buttons to navigate to **DMX Settings** and press the **ENTER** button. Navigate to **No DMX Status** and press the **ENTER** button. Navigate to **Standalone** and press the **ENTER** button.



## SOFTWARE UPDATE

A USB FLASH DRIVE CAN BE USED TO UPDATE THE FIXTURE TO THE LATEST SOFTWARE. Using a USB Flash Drive loaded with the latest software, insert it into the USB Service Port, then navigate to **PERSONALITY/SERVICE**, enter the passcode (050), and select **UPDATE SOFTWARE**. A copy of the latest software can be obtained by contacting Elation Support.

AN ELATION C-LOADER II CAN ALSO BE USED TO UPDATE THE FIXTURE TO THE LATEST SOFTWARE. To order this device, please contact Elation Support for further details.

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# SYSTEM MENU

Supports Software Versions:  $\geq 1.03$

Features subject to change without notice.

MAIN MENU	SUB MENU	OPTIONS / VALUES (Default Settings in <b>BOLD</b> )		DESCRIPTION
Address	Address	<b>001</b> ~ XXX		Set DMX Address Setting
UserMode	User Mode	Dimmer / <b>Dimmer 16bit</b> / 3CH / Standard / Extended		Set DMX Channel / User Mode
Function	Status	Lost Dmx	<b>Hold</b> / Black	Function If NO DMX Detected
	LCD. Set	Display	<b>ON</b> / OFF	OLED Display Screen Saver Mode *When ON goes off after 30 seconds. <b>ONLY WHEN DMX IS CONNECTED.</b>
		Key Lock	<b>ON</b> / OFF	Control Front Panel Buttons Key Lock
		Flash	<b>ON</b> / OFF	Display flashes when NO DMX
		Invert	<b>ON</b> / <b>OFF</b>	Flip LCD Display 180°
	Temp. C/F	C / <b>F</b>		Temperature Switch Between C° / F°
	Dim Mode	<b>Standard</b> , Stage, TV, Architec, Theatre. Stage2, 0.0s, 0.1s, 0.2s, 0.3s, 0.4s, 0.5s, 0.6s, 0.7s, 0.8s, 0.9s, 1.0s, 1.5s, 2.0s, 3.0s, 4.0s, 5.0s, 6.0s, 7.0s, 8.0s, 9.0s, 10.0s		Set Dimmer Mode
	Disp. Set	<b>ADDR</b> , Disp.CH, Salve		Set Information to Display on LCD
	Fan. Set	Led Fan	<b>Auto</b> / High / Low	Set LED Fan Speed
	Dim Curve	<b>Linear</b> / Square / INV-Square / S-Curve		Set Dimmer Curve Mode
	Frequen	900kHz, 1000kHz, 1100kHz, <b>1200kHz</b> , 1300kHz, 1400kHz, 1500kHz, 2500kHz, 4000kHz, 5000kHz, 10kHz, 15kHz, 20kHz, 25kHz		Set LED Refresh Frequency
	USB_Data	ON, <b>OFF</b>		Software Update Port - Contact Service
	Primary	ON, <b>OFF</b>		
	DFSE	ON, <b>OFF</b>		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= <b>050</b>	Enter PIN to Access Clear Last. Menu
		Clear	<b>ON</b> / <b>OFF</b>	Reset Fixture Last Run Time
	TempInfo	Led Temp	000 C / <b>F</b>	Temperature of LED
	Err. Info	Error Record 1 ~ Error Record 10		Display 10 Recent Error Messages
	ModelInf	KL F4 CW		Display Model Name
Software	Software	V1.03	Software Version (Greater than or Equal to)	
Test	ManCtrl	Dimmer	<b>000</b> - 255	Manual Control Functions
		Strobe	000 - <b>255</b>	

# MANUAL DIMMING CONTROL

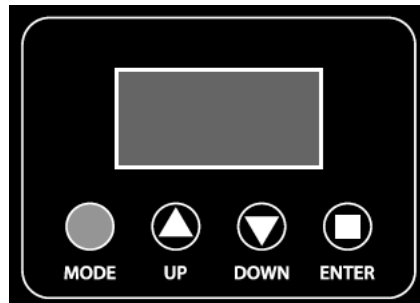
- ▶ **FEATURE IS DISABLED WHEN DMX INPUT CABLE IS CONNECTED TO FIXTURE!**  
**TO USE MANUAL DIMMING KNOB, DISCONNECT DMX CABLE IF CONNECTED.**

Follow steps below to enable manual DIMMING control knob.

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

Test	ManCtrl	Dimmer, Strobe	Manual Control Functions
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**NOTE:** To access the LCD Menu Control Display when locked/OFF, press and hold the **MODE** button for 3 seconds.

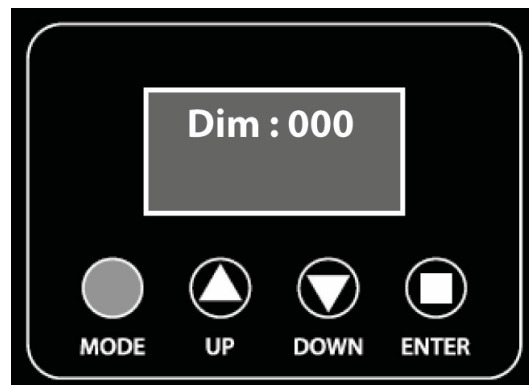


2. Select **Strobe** menu, set to value of **255 (LED ON)**, then exit fixture system menu.
3. Push **DIMMING** knob to unlock, rotate to desired level, push knob again to lock. Repeat this process each time a dimmer adjustment is desired.

## LCD DISPLAY



**DMX CABLE CONNECTED**

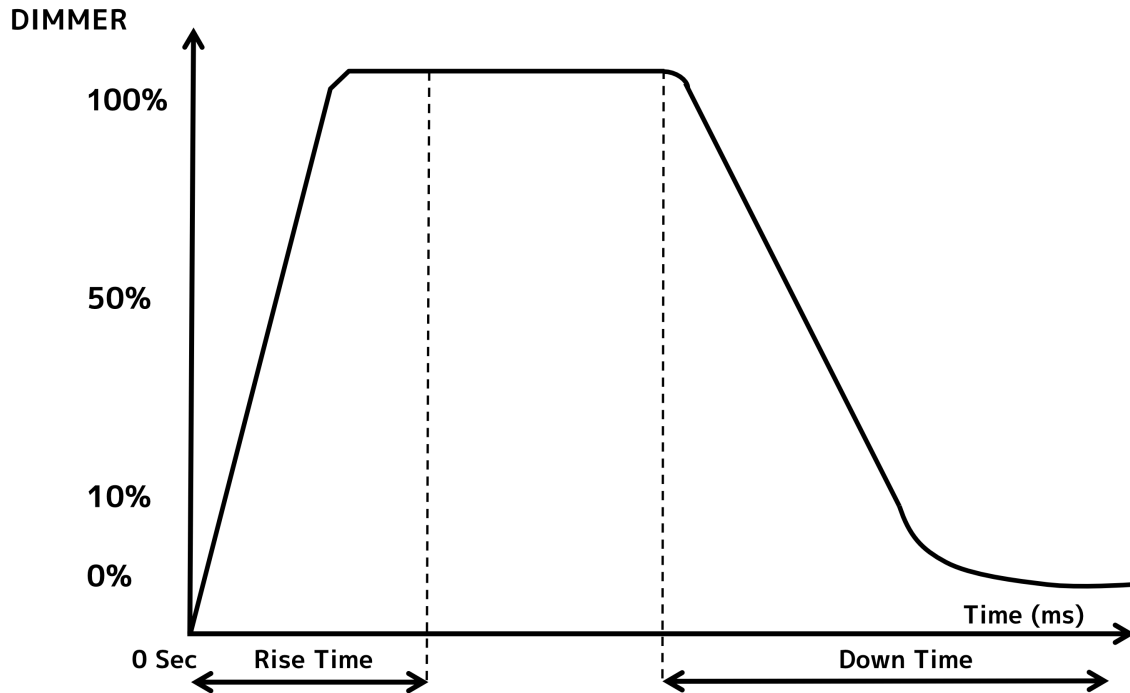


**NO DMX CABLE CONNECTED**

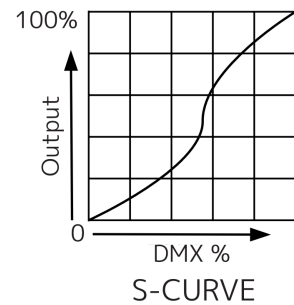
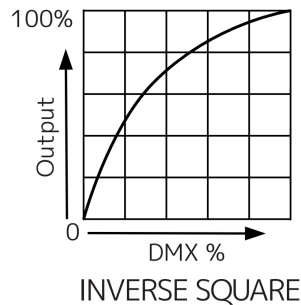
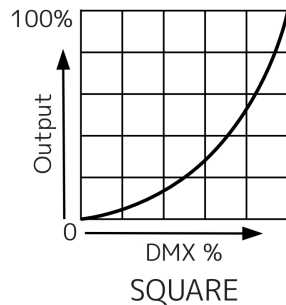
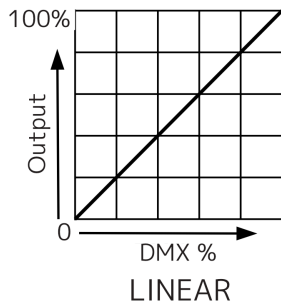
Additionally, the user can press and hold the encoder knob for 10 seconds to activate full output for 1 minute. This feature can be used to aid in aiming and/or positioning the fixture, and overrides any DMX-controlled operations.

# DIMMER CURVE MODES - Dim Curve

Select desired DIMMER MODE (Standard, Stage, TV, Architectural, Theatre, Stage2).



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
Stage 2	0	1100	0	1660



# DMX TRAITS

Supports Software Versions: $\geq 1.03$						
Features subject to change without notice.						
MODE / CHANNEL					VALUE	FUNCTION
Dimmer	Dimmer 16bit	3CH	Standard	Extended		
1	1	1	1	1		<b>DIMMER INTENSITY</b>
					000-255	Dimmer 0 to 100%
	2		2	2		<b>DIMMER INTENSITY FINE</b>
					000-255	Dimmer FINE Adjustment
		2	3	3		<b>SHUTTER   STROBE</b>
					000-031	LED OFF
					032-063	LED ON
					064-095	Strobe Effect SLOW to FAST
					096-127	LED ON
					128-159	Pulse Effect In SLOW to FAST
					160-191	LED ON
					192-223	Random Strobe Effect SLOW to FAST
		3	4	4		<b>DIMMER MODES   DIMMER DELAY TIMES</b>
					000-020	Standard
					021-040	Stage
					041-060	TV
					061-080	Architectural
					081-100	Theatre
					101-120	Stage 2
					121	Dimmer Delay Time 0.0 seconds
					122	Dimmer Delay Time 0.1 seconds
					123	Dimmer Delay Time 0.2 seconds
					124	Dimmer Delay Time 0.3 seconds
					125	Dimmer Delay Time 0.4 seconds
					126	Dimmer Delay Time 0.5 seconds
					127	Dimmer Delay Time 0.6 seconds
					128	Dimmer Delay Time 0.7 seconds
					129	Dimmer Delay Time 0.8 seconds
					130	Dimmer Delay Time 0.9 seconds
					131	Dimmer Delay Time 1.0 seconds
					132	Dimmer Delay Time 1.5 seconds
					133	Dimmer Delay Time 2.0 seconds
					134	Dimmer Delay Time 3.0 seconds
					135	Dimmer Delay Time 4.0 seconds
					136	Dimmer Delay Time 5.0 seconds
					137	Dimmer Delay Time 6.0 seconds
138	Dimmer Delay Time 7.0 seconds					
139	Dimmer Delay Time 8.0 seconds					
140	Dimmer Delay Time 9.0 seconds					
141	Dimmer Delay Time 10.0 seconds					
142-255	Default					

# DMX TRAITS

MODE / CHANNEL					VALUE	FUNCTION
Dimmer	Dimmer 16bit	3CH	Standard	Extended		
						<b>LED REFRESH RATE   DIMMER CURVES*</b> *Hold selected DMX value for 5 seconds to set LED Refresh Rate.
				5	000-100	IDLE
					101-105	900 kHz*
					106-110	1000 kHz*
					111-115	1100 kHz*
					116-120	1200 kHz*
					121-125	1300 kHz*
					126-130	1400 kHz*
					131-135	1500 kHz*
					136-140	2500 kHz*
					141-145	4000 kHz*
					146-150	5000 kHz*
					151-155	10,000 kHz*
					156-160	15,000 kHz*
					161-165	20,000 kHz*
					166-170	25,000 kHz*
					171-200	IDLE
					201-210	DIMMER CURVE LINEAR (DEFAULT)
					211-220	DIMMER CURVE SQUARE
					221-230	DIMMER CURVE INVERSE SQUARE
					231-240	DIMMER CURVE S-CURVE
				241-255	IDLE	

# SPECIFICATIONS

## SOURCE

50W Cool White LED Engine 5,600K,  
97CRI  
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.

## PHOTOMETRIC DATA

2300+ Total Lumen Output  
3,753 LUX 349 FC @ 9.8' (3m) (Min. Zoom)  
814 LUX 76 FC @ 9.8' (3m) (Max. Zoom)  
Zoom Range 14° - 33°  
Beam Angle 14° - 32.9°  
Field Angle 22.1° - 51.7°

## EFFECTS

Manual Zoom  
Electronic Dimmer and Strobe  
Variable 16-bit Dimming Modes and Curves

## COLOR

5,600K Cool White LED

## CONTROL / CONNECTIONS

Manual and DMX Controlled Dimmer and Shutter  
Dimmer Rotary Dial  
(5) DMX Channel Modes (1 / 2 / 3 / 4 / 5)  
4 Button Control Panel LCD Menu Display  
RDM (Remote Device Management)  
5pin DMX and IP65 Locking Cable In/Out  
With Wired Digital Communication Network

## SIZE / WEIGHT

Length: 9.9" (251mm)  
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  
5°F to 113°F (-15°C to 45°C)  
Power Linking: 12Pcs @ 110V / 27Pcs @240V  
BTU/hr (+/- 10%) 157

## INCLUDED ITEMS

Gel Frame and Rotating Barn Doors  
IP65 Locking Power Cable  
Barn Doors

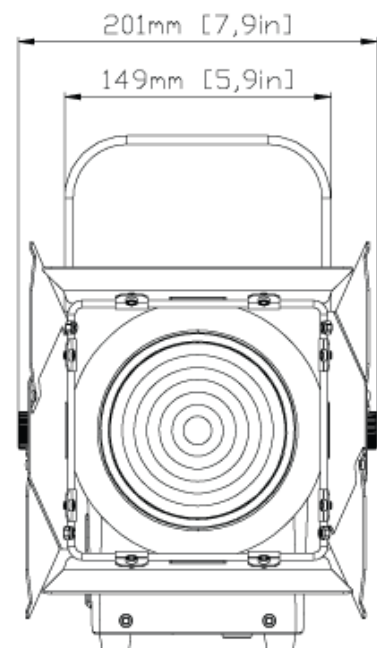
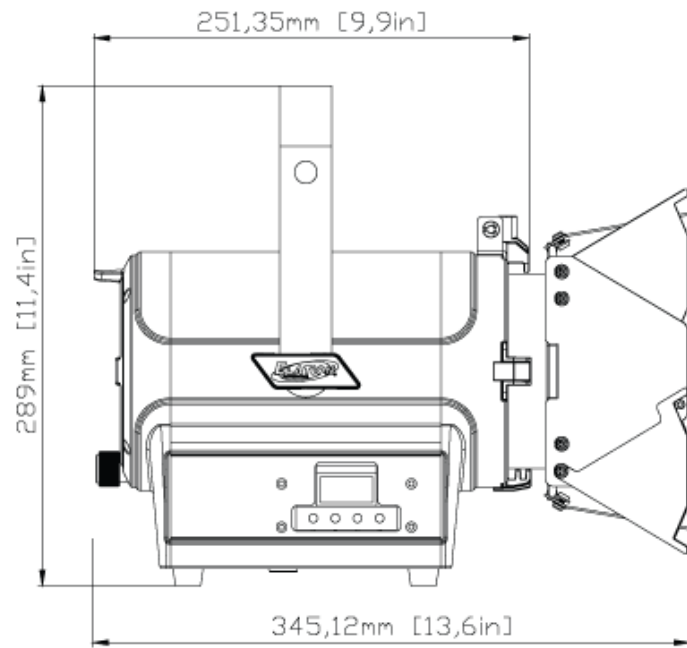
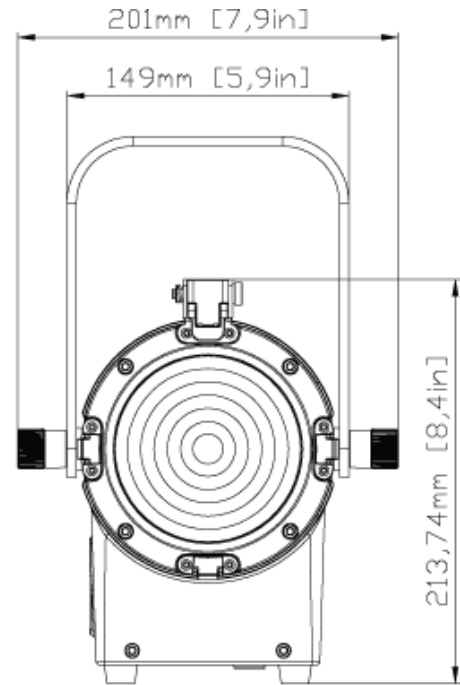
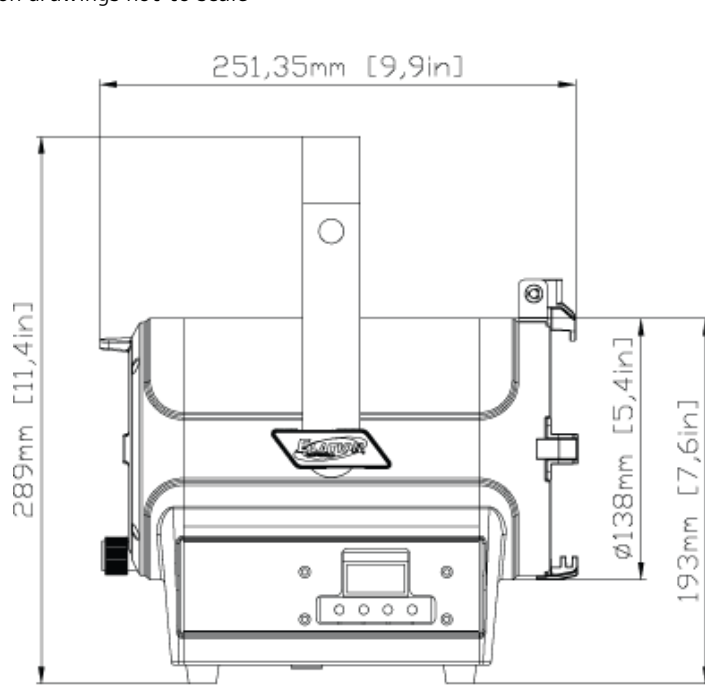
## APPROVALS / RATINGS

CE | cETLus | IP20

Specifications and improvements in the design of this unit and this manual subject to change without written notice.

# DIMENSIONAL DRAWINGS

Dimension drawings not to scale



## **FCC STATEMENT**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## **FCC RADIO FREQUENCY INTERFERENCE WARNINGS & INSTRUCTIONS**

This product has been tested and found to comply with the limits as per Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device uses and can radiate radio frequency energy and, if not installed and used in accordance with the included instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following methods:

- Reorient or relocate the device.
- Increase the separation between the device and the receiver.
- Connect the device to an electrical outlet on a circuit different from which the radio receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## **Europe Energy Saving Notice**

Energy Saving Matters (EuP 2009/125/EC)

Saving electric energy is a key to help protecting the environment. Please turn off all electrical products when they are not in use. To avoid power consumption in idle mode, disconnect all electrical equipment from power when not in use. Thank you

