ELATION®

CORE IP

user manual

©2025 ELATION PROFESSIONAL all rights reserved. Information, specifications, diagrams, images, and instructions herein are subject to change without notice. ELATION PROFESSIONAL logo and identifying product names and numbers herein are trademarks of ELATION PROFESSIONAL. Copyright protection claimed includes all forms and matters of copyrightable materials and information now allowed by statutory or judicial law or hereinafter granted. Product names used in this document may be trademarks or registered trademarks of their respective companies and are hereby acknowledged. All non-ELATION brands and product names are trademarks or registered trademarks of their respective companies.

ELATION PROFESSIONAL and all affiliated companies hereby disclaim any and all liabilities for property, equipment, building, and electrical damages, injuries to any persons, and direct or indirect economic loss associated with the use or reliance of any information contained within this document, and/or as a result of the improper, unsafe, insufficient and negligent assembly, installation, rigging, and operation of this product.

Elation Professional USA | 6122 S. Eastern Ave. | Los Angeles, CA. 90040
323-582-3322 | www.elationlighting.com | info@elationlighting.com

Elation Professional B.V. | Junostraat 2 | 6468 EW Kerkrade, The Netherlands
+31 45 546 85 66 | +31 45 546 85 96 fax | www.elationlighting.eu | info@elationlighting.eu

Elation Professional Mexico | AV Santa Ana 30 | Parque Industrial Lerma, Lerma, Mexico 52000
+52 (728) 282-7070

DOCUMENT VERSION

Due to additional product features and/or enhancements, an updated version of this document may be available online. Please scan the QR Code with your mobile device or visit www.elationlighting.com for the latest revision/update of this manual, before installation and/or programming.

Date	Document Version	Software Version	DMX Channels	Notes
03/18/2025	1.0	1.01	1 / 4 / 6 / 10 / 11 / 19 / 9 / 15 / 13	Initial Release

CONTENTS

General Information	4
Limited Warranty (USA Only)	5
IP65 Rated	6
Safety Guidelines	7
Overview	9
Installation Guidelines	10
Accessory Installation	14
Near Field Control (NFC)	19
Frequency & Wireless Location Guidelines	20
Remote Device Management (RDM)	21
ColourTune Technology	22
Control Panel	23
System Menu	24
Fan Control	27
DMX Traits	28
Color Temperature Table	34
Virtual Colors Table	35
Dimmer Curves	36
Maintenance Guidelines	37
Torque Settings for Screws	38
IP Test Parameters	39
Software Updates | Error Codes	40
Specifications	41
Dimensional Drawings	42
Ordering Information | FCC Statement	43

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 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 that 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

Safety Cable (x1)

CUSTOMER SUPPORT

Contact ELATION Service for any product related service and support needs.
Also visit forums.elationlighting.com with questions, comments or suggestions.

ELATION SERVICE USA - Monday - Friday 8:00am to 4:30pm PST
323-582-3322 | support@elationlighting.com

ELATION SERVICE EUROPE - Monday - Friday 08:30 to 17:00 CET
+31 45 546 85 63 | Fax +31 45 546 85 96 | support@elationlighting.eu

REPLACEMENT PARTS - please visit parts.elationlighting.com

THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT. DO NOT ATTEMPT ANY REPAIRS YOURSELF, AS DOING SO WILL VOID YOUR MANUFACTURER'S WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS FIXTURE AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURER'S 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 five years (1,825 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.

WARRANTY RETURNS

All returned service items whether under warranty or not, must be freight pre-paid and accompanied by 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 an R.A. number clearly marked on the out-side of the package will be refused and returned at customer's expense. You may obtain an R.A. number by contacting customer support.

IP65 RATED

To ensure the longevity and optimal operation of the **Elation KL Core IP**, with its IP65 rating for enhanced performance in diverse environments, adhere to the following guidelines:

- **Operational Precautions:** It is recommended to avoid continuous operation beyond a 12-hour period without cooling breaks. The unit should not be operated outside of its approved temperature ratings to maintain performance and prevent overheating.
- **Environmental Exposure:** Although the IP65 rating ensures durability against various weather conditions, prolonged exposure to direct sunlight can affect the fixture's performance. Utilize protective covers or shade structures during non-operational periods to protect the fixture and avoid pointing the optics at the sun directly.
- **Maintenance and Inspection:** Regularly inspect the fixture for signs of wear or damage, especially before and after outdoor use. Keeping the fixture clean from dust and debris is essential for maintaining performance and safety.
- **Environment Flexibility:** The KL Core IP is well-suited for both indoor and outdoor installations. It excels in temporary outdoor events or installations, such as holiday lighting and themed attractions, and can be adapted for long-term installations with proper considerations.
- **Marine or Coastal Use:** Given the unique challenges presented by marine or coastal environments, such as increased exposure to salt and moisture, consulting the Elation service team prior to installation is crucial for obtaining approval or learning about additional long-term permanent installation precautions and best practices. Additional Maritime coatings and protections may be needed and are available at additional cost.
- **Deep scratches:** When present on powder-coated metal, deep scratches can compromise the protective layer, exposing the underlying metal to environmental elements. Once the coating is damaged, moisture can infiltrate the surface, leading to corrosion. The scratch essentially creates a pathway for water and other corrosive agents to reach the metal, potentially causing rust and degradation over time. Regular inspection and maintenance of powder-coated surfaces are essential to prevent these issues and preserve the metal's integrity.

Important Notice: Unauthorized modifications or repairs can void the warranty and compromise the fixture's safety and performance.

Following these streamlined guidelines enables users to maximize the creative potential of the KL Core IP while ensuring safe and reliable operation across various applications and environments. Special attention to operational, environmental, and compliance considerations, alongside the fixture's IP65 capabilities and marine or coastal use considerations, provides a comprehensive framework for optimal use.

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 MANUFACTURER'S WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS FIXTURE AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURE'S 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!

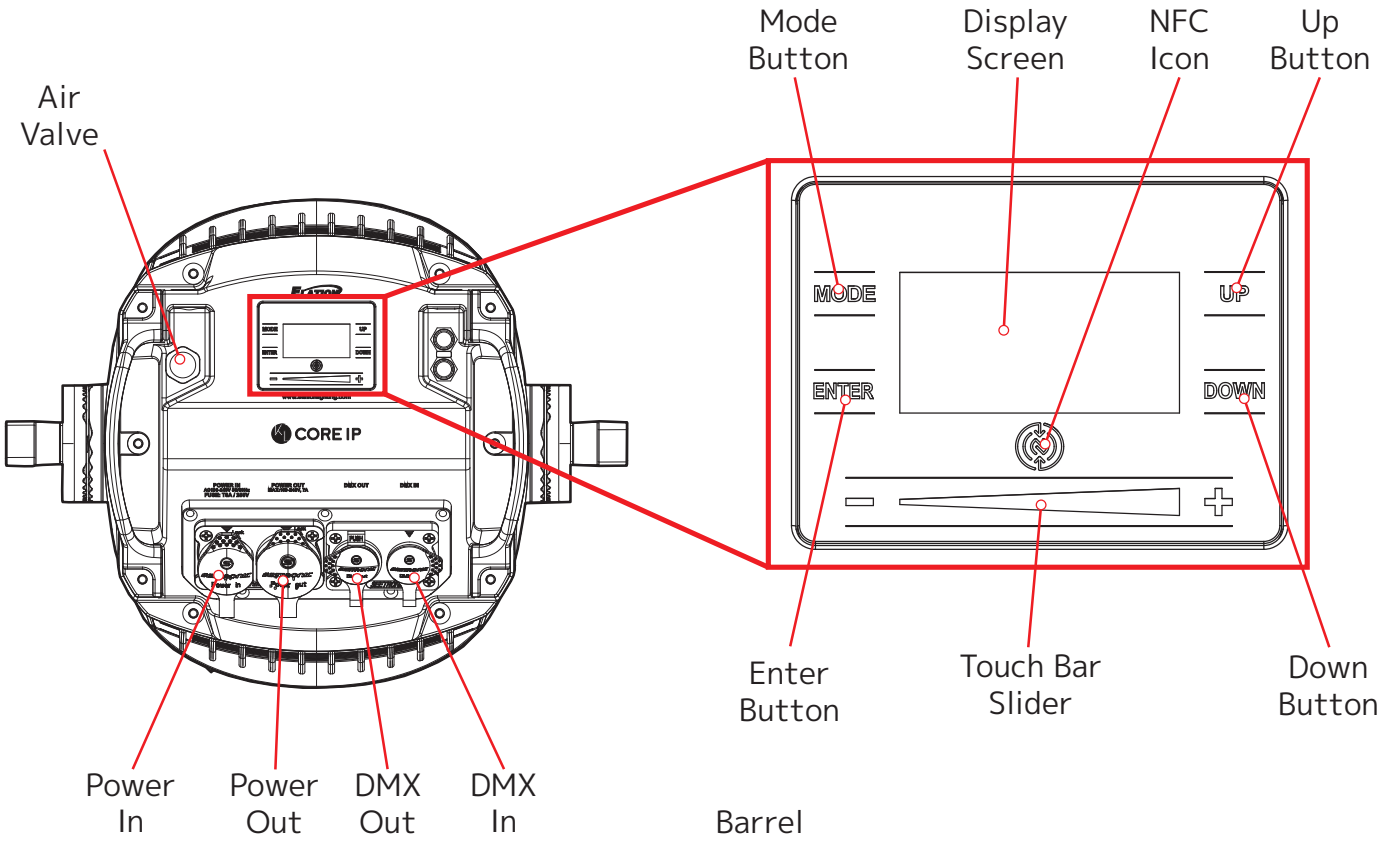
NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE!
RETINA INJURY RISK - MAY INDUCE BLINDNESS!
SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK!

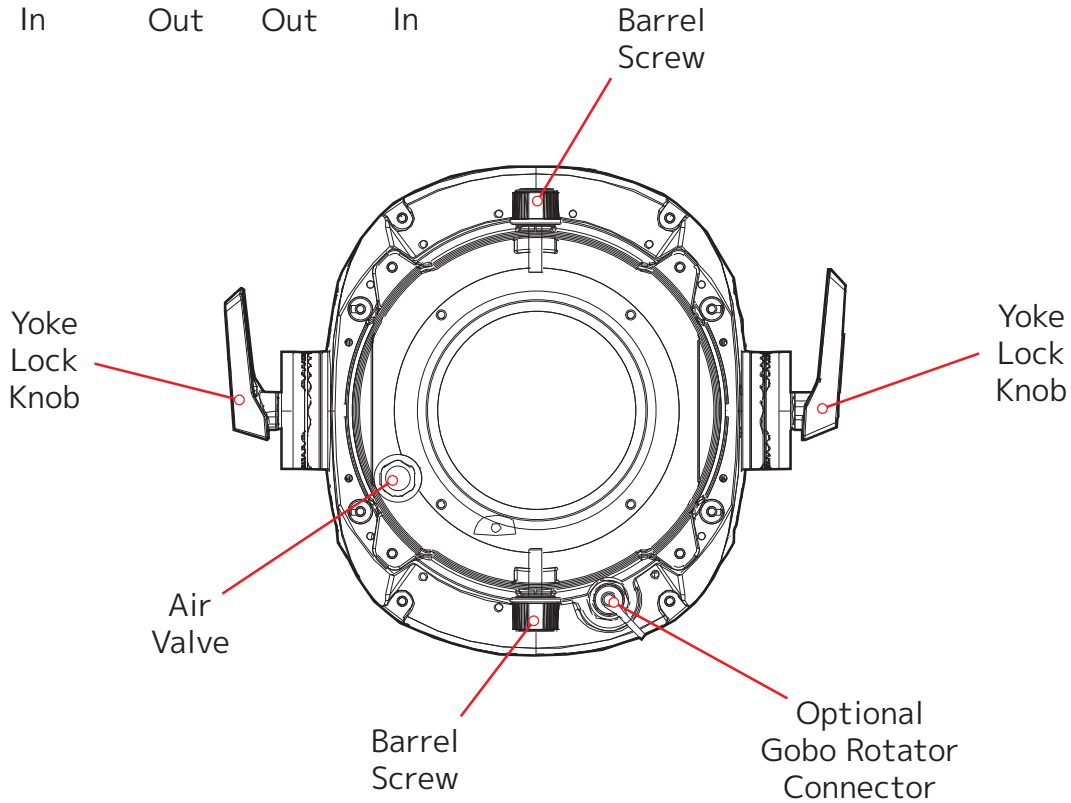
MINIMUM DISTANCE TO OBJECTS/SURFACES IS 1 FOOT (0.3 METERS)
AMBIENT OPERATING TEMPERATURE RANGE IS -40° F TO 113° F (-40° C TO 45° C)
MINIMUM DISTANCE OF INFLAMMABLE MATERIALS FROM THE SURFACE 1.6 FEET (0.5 METER)

SAFETY PRECAUTIONS

- **DO NOT** spill liquids inside the fixture!
- **DO NOT** shake fixture, and avoid using brute force when installing and/or operating the fixture.
- **DO NOT** operate the fixture if the power cord is frayed, crimped, damaged, and/or if any of the power cord connectors are damaged and do not plug 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 the same power rating.
- **DO NOT** block any air ventilation slots.
- All fan and air inlets must remain clean and never blocked.
- Leave approx. 6" (15cm) between the fixture and other devices or a wall in order to allow for proper cooling.
- Always disconnect the fixture from the 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 on 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. This will decrease gradually over time.
- Consistent operational breaks will ensure fixture will function properly for many years.
- It is strongly recommended to power down this fixture when not in use.
- **ONLY** use the original packaging and materials to transport the fixture for service.
- The luminaire is intended for professional use only.
- The highest exterior surface temperature is 80℃.
- The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.
- The luminaire should be positioned so that prolonged staring into the luminaire at a distance closer than 6.4 m is not expected.

OVERVIEW


Air Valve
Mode Button
Display Screen
NFC Icon
Up Button
MODE
UP
ENTER
DOWN
CORE IP
Power In
Power Out
DMX Out
DMX In
Enter Button
Touch Bar Slider
Down Button


Barrel Screw
Yoke Lock Knob
Yoke Lock Knob
Air Valve
Barrel Screw
Optional Gobo Rotator Connector

INSTALLATION GUIDELINES

FLAMMABLE MATERIAL WARNING
Keep fixture minimum 1.6 feet (0.5m) away from flammable materials and/or pyrotechnics.

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

MINIMUM DISTANCE TO SURFACES/OBJECTS IS 3.3 FEET (1 METER).
MINIMUM DISTANCE TO FLAMMABLE MATERIALS IS 1.6 FEET (0.5 METER).
OPERATIONAL AMBIENT TEMPERATURE RANGE IS 5°F TO 113°F (-15°C TO 45°C).

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.

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.

Ambient operating temperature range is **5° F to 113° F (-15° C to 45° C).** Do not operate the fixture when the ambient temperature falls outside of this range.

Fixture(s) should be installed away from walking paths, seating areas, or areas were unauthorized personnel might reach the fixture by hand.

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

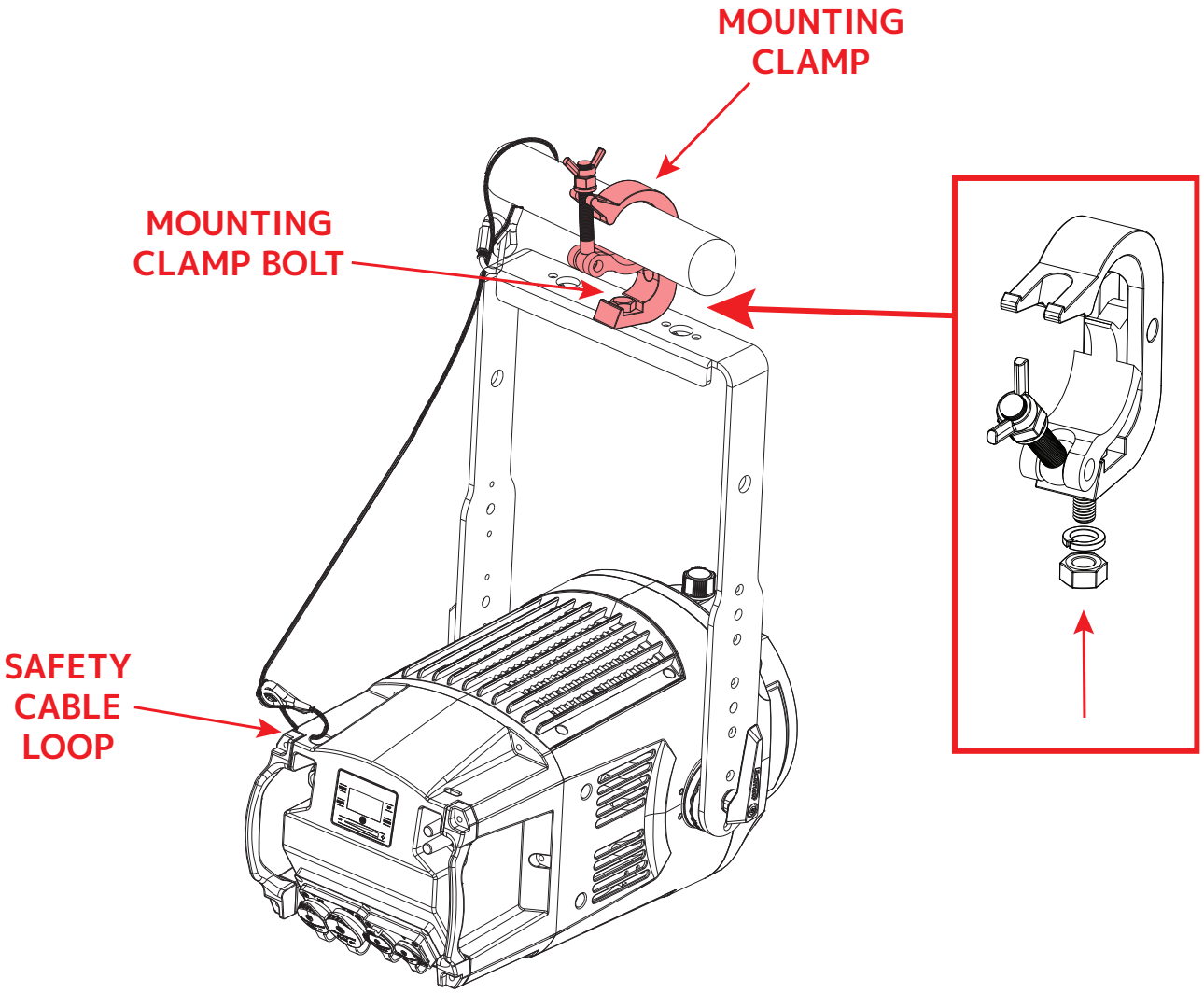
Overhead fixture installation must always be secured with a secondary safety attachment, such as an appropriately rated safety cable.

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

INSTALLATION GUIDELINES

CLAMP INSTALLATION: Insert a bolt of appropriate size and rating for the desired clamp (not included) through the mounting hole of the clamp (not included), and then insert it into the center hole on the top of the mounting yoke. The bolt should pass through both the clamp and the yoke. Thread a matching washer and locking nut onto the shaft of the bolt that extends out from the underside of the yoke.

SAFETY CABLE: The fixture provides a built-in rigging points for a Safety Cable (not included) on the side of the fixture near the base of the yoke. Be sure to only use the designated rigging point for the safety cable, and never secure a safety cable to a carrying handle.



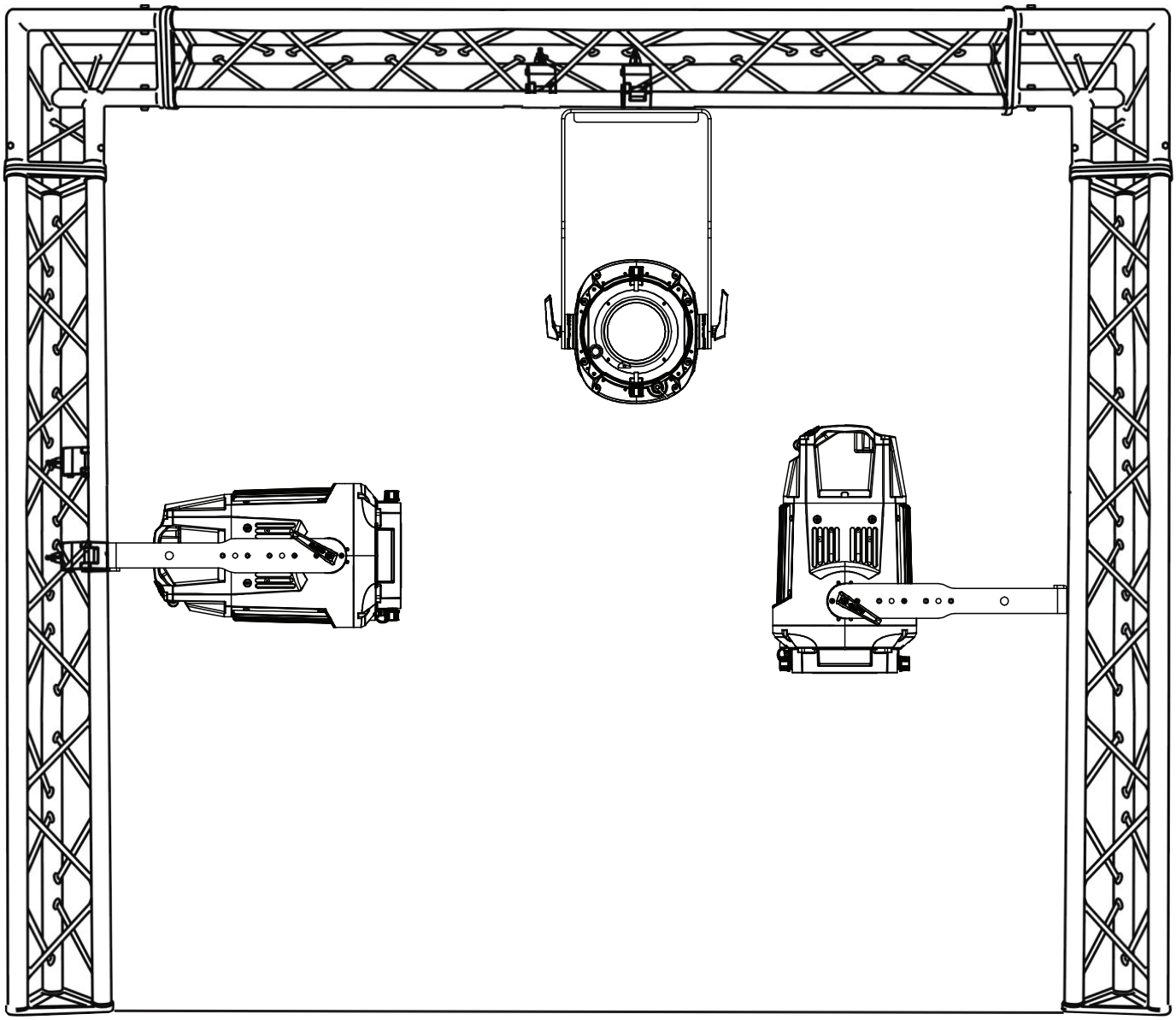
SAFETY CABLE:
ALWAYS ATTACH A SAFETY CABLE WHENEVER INSTALLING THIS FIXTURE IN A SUSPENDED ENVIRONMENT TO ENSURE THAT THE FIXTURE WILL NOT FALL IF THE CLAMP FAILS. ONLY USE DESIGNATED RIGGING POINTS FOR SAFETY CABLE, AND NEVER ATTACH A SAFELY CABLE TO A CARRYING HANDLE.

INSTALLATION GUIDELINES

RIGGING

Overhead rigging requires extensive experience, including calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the fixture, among other skills. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

The fixture is fully operational in the following positions: hanging from a horizontal truss, suspended sideways from a vertical truss, or standing upright on a flat, level surface. See the illustration below for reference.



ALWAYS ATTACH A SAFETY CABLE WHENEVER INSTALLING THIS FIXTURE IN A SUSPENDED ENVIRONMENT TO ENSURE THAT THE FIXTURE WILL NOT FALL IF THE CLAMP FAILS. ONLY USE DESIGNATED RIGGING POINTS FOR SAFETY CABLE, AND NEVER ATTACH A SAFELY CABLE TO A CARRYING HANDLE.

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

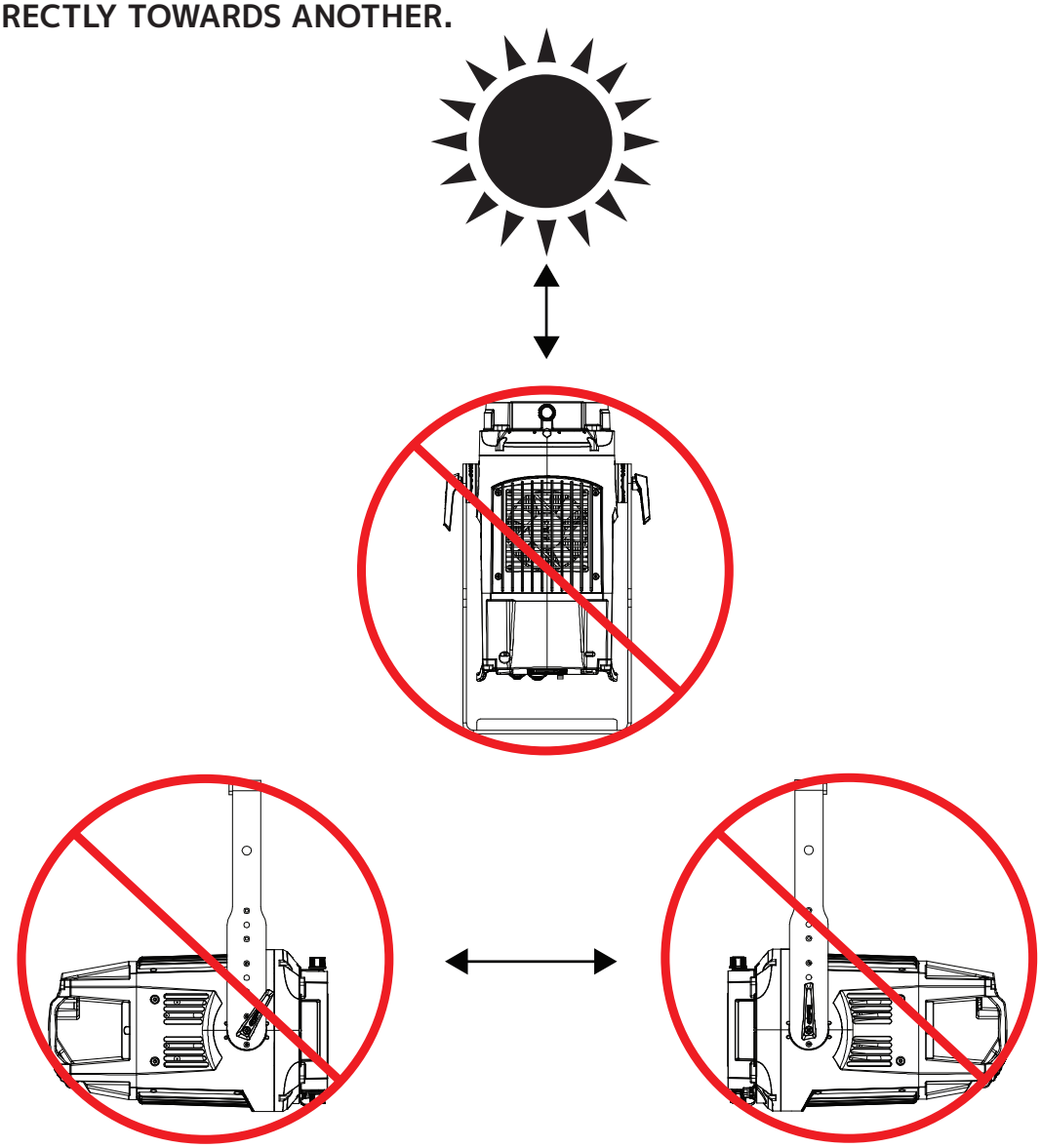
INSTALLATION GUIDELINES

POTENTIAL INTERNAL FIXTURE DAMAGE FROM EXTERNAL SOURCES OF LIGHT BEAMS

External sources of light beams from direct sunlight, lighting and moving head fixtures, and lasers, which are focused directly towards the exterior housing and/or penetrate the front lens opening of Elation lighting fixtures, can cause severe internal damage including burning of optics, dichroic color filters, glass and metal gobos, prisms, animation wheels, frost filters, iris, shutters, motors, belts, wiring, discharge lamps, and LEDs.

This issue is not specific only to Elation lighting fixtures, but rather it is a common issue with lighting fixtures from all manufacturers. Although there is no true way to fully prevent this issue from happening, the guidelines below can reduce the risk of potential damage. Contact Elation Service for more details.

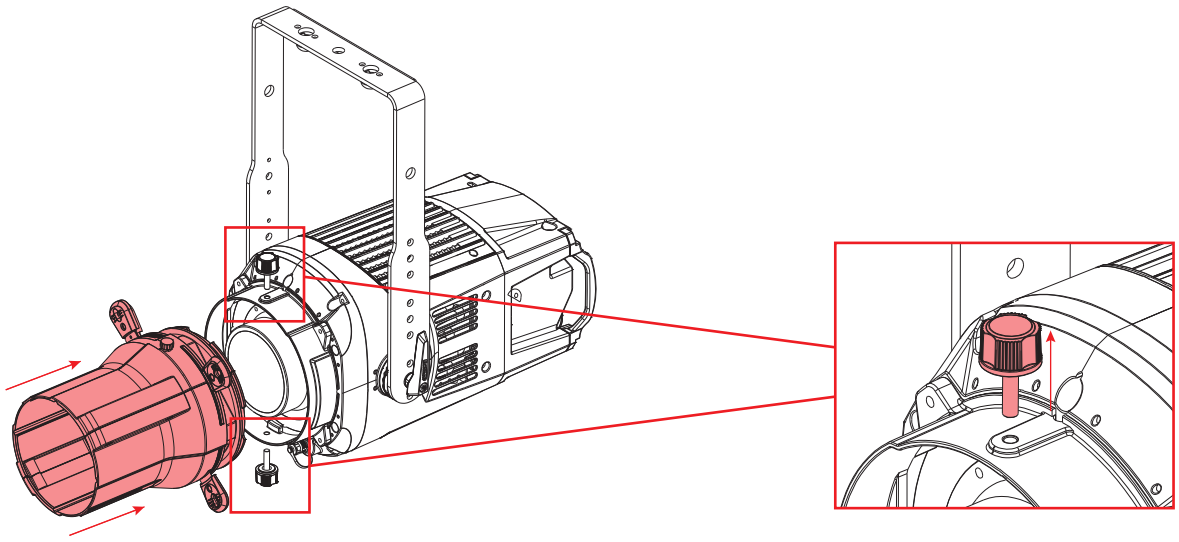
DO NOT EXPOSE THE FIXTURE AND/OR FRONT LENS OPENING TO LIGHT BEAMS FROM DIRECT SUNLIGHT, OTHER FIXTURES, OR LASERS UNDER ANY CIRCUMSTANCES. PLEASE NOTE THAT THIS INCLUDES EXTENDED PERIODS OF NON-USE, AS DAMAGE CAN OCCUR EVEN WHEN THE FIXTURE IS OFF. NEVER FOCUS A LIGHT BEAM FROM ONE LIGHTING FIXTURE DIRECTLY TOWARDS ANOTHER.



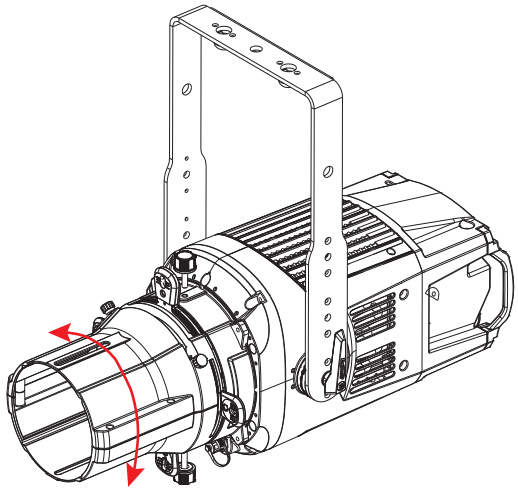
ACCESSORY INSTALLATION

SHUTTER BARREL ASSEMBLY

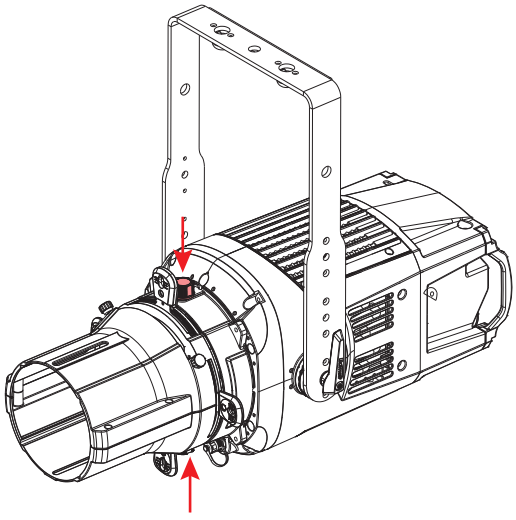
1. Remove the thumb screws at the top and bottom of the fixture's accessory attachment ring, then align and insert the framing assembly in place.



2. Rotate the shutter barrel assembly to adjust it to the desired position.



3. Re-install the thumb screws, and tighten to secure the shutter barrel assembly in position.

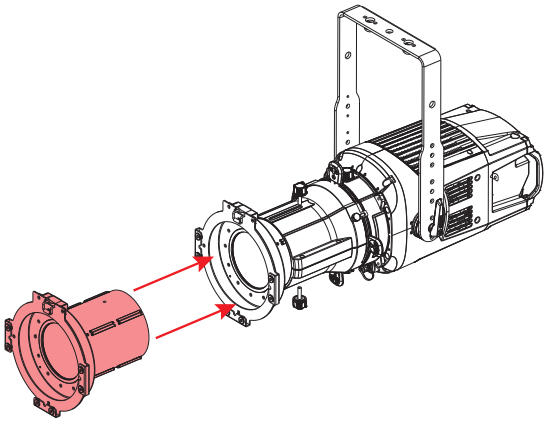


ACCESSORY INSTALLATION

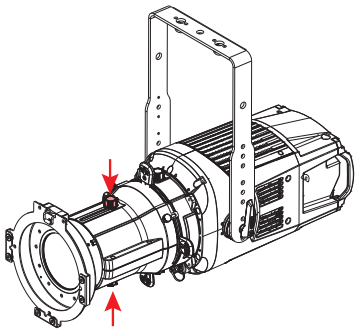
LENSES

Please note that shutter barrel assembly must be installed before lenses can be added.

1. Remove any thumbscrews installed on the lens. Align and insert the lens into the shutter barrel assembly.

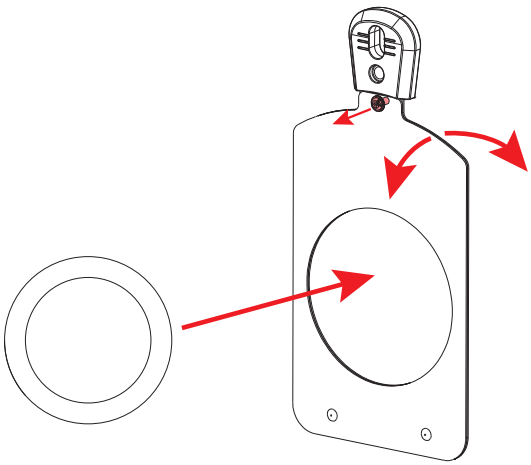


2. Insert the thumb screws through the mounting holes and slots on the shutter barrel assembly, then tighten to secure the lens.

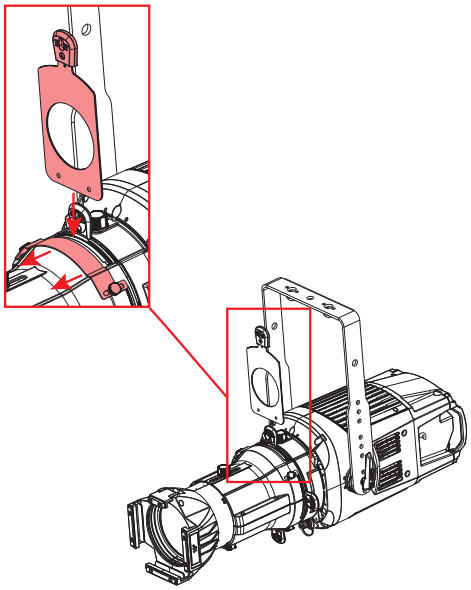


GOBO HOLDER

1. Remove the screw at the top of the gobo holder, then separate the two plates of the gobo holder. Insert the gobo between the plates, and re-install the screw to close the gobo holder.



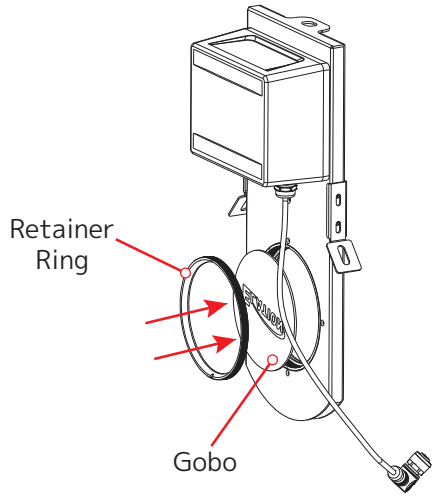
2. Locate the gobo holder panel on the framing module. Loosen the two thumb screws, slide the panel forward, and insert the gobo holder into the slot. Slide the panel closed and re-secure with the thumb screws.



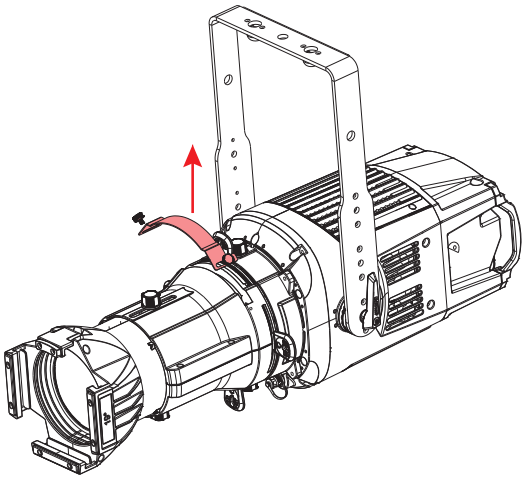
ACCESSORY INSTALLATION

GOBO ROTATOR

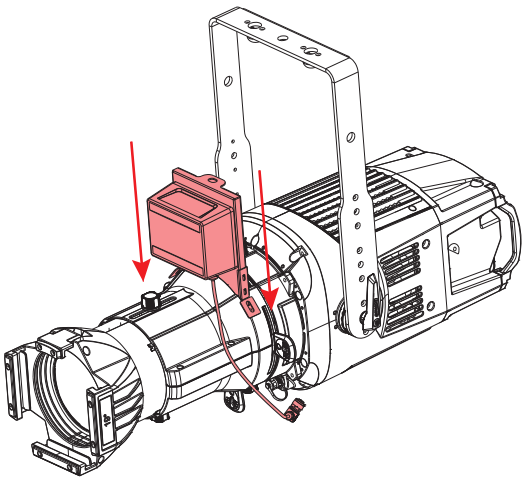
1. Insert the gobo into the slot in the gobo rotator. Screw the retainer ring into place on top of the gobo.



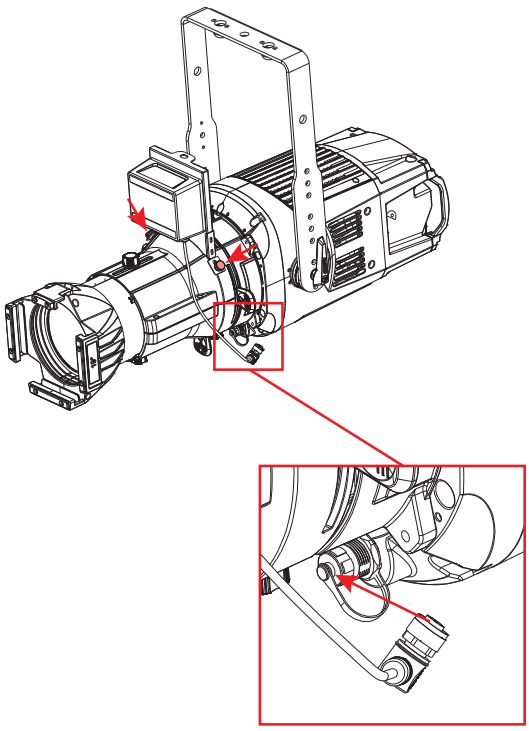
2. Unscrew the thumb screws on the fixture's gobo holder panel, and remove the panel.



3. With the gobo rotator's electrical box oriented towards the front of the fixture, insert the gobo rotator into the gobo holder slot.



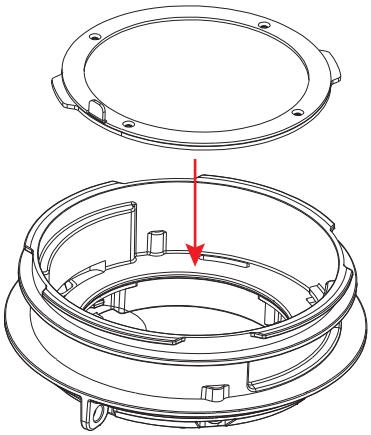
4. Insert the thumb screws into the gobo rotator's mounting tabs, then tighten to secure in place. Uncap the fixture's gobo rotator connector, and plug the gobo rotator's data cable into the connector.



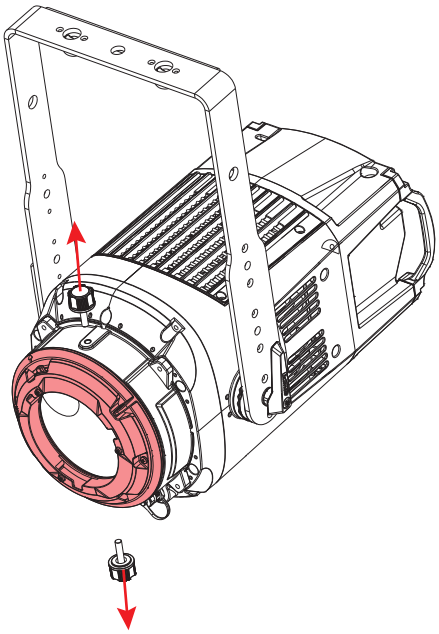
ACCESSORY INSTALLATION

BOWENS MOUNT

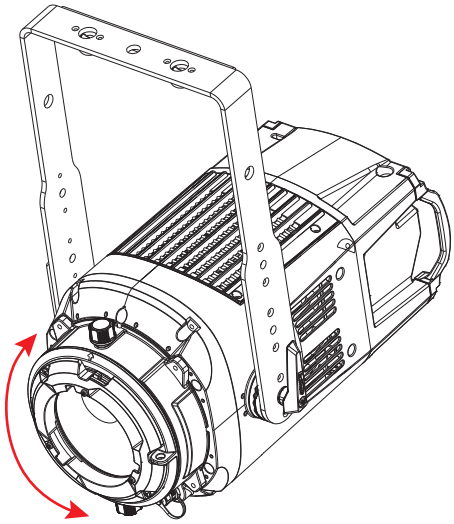
1. Insert the diffuser into the Bowens mount adapter, and twist to lock in place.



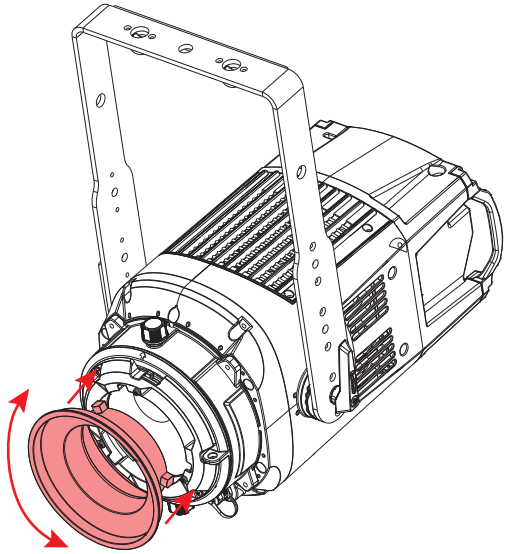
2. Locate and remove the thumb screws at the top and bottom of the fixture's accessory attachment ring. Align and insert the Bowens mount adapter.



3. Rotate the Bowens mount adapter to the desired position, then insert the thumb screws and tighten to secure in place.



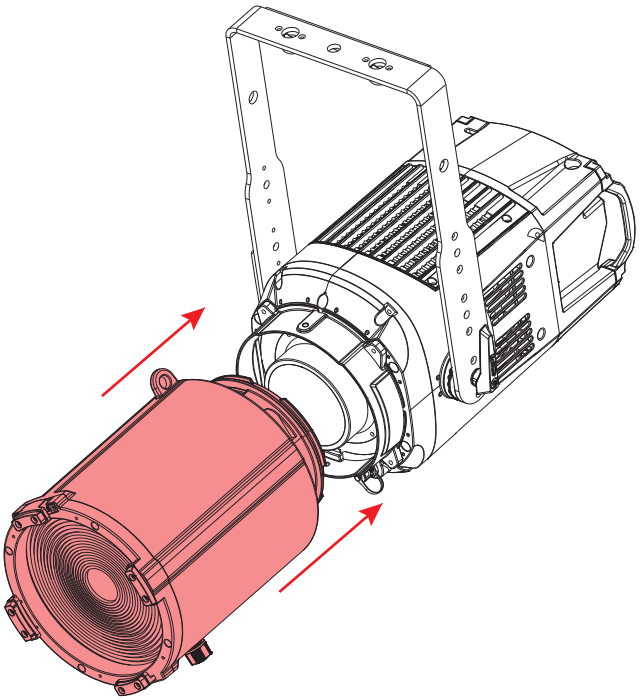
4. Align the tabs on the compatible Bowens mount accessory with the notches on the Bowens mount adapter, then insert the Bowens mount accessory and twist to secure in place.



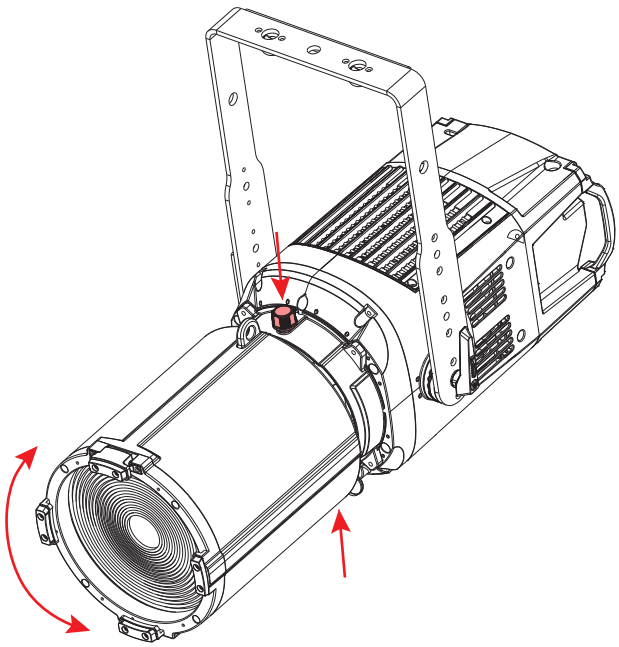
ACCESSORY INSTALLATION

FRESNEL LENS

1. Locate and remove the thumb screws at the top and bottom of the fixture's accessory attachment ring. Align and insert the Fresnel lens.



2. Rotate the Fresnel lens to the desired position, then re-insert the thumb screws and tighten to secure in place.



NEAR FIELD COMMUNICATION (NFC)

Near Field Communication (NFC) is a short-range wireless technology, operating at 13.56 MHz, that enables secure data exchange between devices within a proximity of 6-inches. With NFC, one can use an Android or iOS device to configure an NFC compatible fixture. NFC has three modes of operation: Reader/Writer Mode, which allows an NFC device to read or write data to an NFC tag; Peer-to-Peer Mode, enabling data exchange between two NFC devices; and Card Emulation Mode, which lets an NFC device emulate a contactless smart card. The technology is built on RFID standards, including ISO/IEC 14443 and ISO/IEC 18092, ensuring compatibility between NFC devices. Despite its lower data transfer rates compared to Wi-Fi or Bluetooth, ranging from 106 kbps to 424 kbps, NFC incorporates encryption and authentication protocols. NFC tags on lighting fixtures simplify setup and adjustments, and aid in tracking and maintenance when integrated into lighting equipment.

NFC Setup and Usage

- Enable NFC: Activate NFC on both the control device and the fixture.
- Physical Proximity: Bring the control device near the designated NFC area of the fixture indicated by the NFC directional mark shown here.

- Initiate Connection: The NFC-enabled device should automatically detect the fixture, prompting a connection notification.
- Confirmation: Accept the connection request to establish a link between the control device and the fixture.
- Configuration Options: Adjust lighting settings, presets, and modes via the control device, depending on fixture capabilities.
- Data Exchange: Use NFC to transfer presets, scenes, and firmware updates between devices, simplifying data sharing.

Tips for Successful NFC Interaction

- Proximity: Maintain a short-range distance, within 6-inches, between the control device and the indicated NFC area of the fixture.
- Device Compatibility: Ensure your device supports NFC, and has the necessary apps for interaction.
- Interference: Avoid obstacles between the devices, like metal objects, to ensure smooth communication.
- Security: Disable NFC when not in use for added security against unauthorized access.

FREQUENCY & WIRELESS LOCATION GUIDELINES

2GHZ Versus Sub-Gig (GHz) Frequencies:

Sub-GHz frequencies provide superior reliability and range compared to higher frequencies, making them perfect for consistent communication across vast distances or in difficult conditions. Devices operating in the sub-GHz range, which refers to frequencies below 1 GHz, can transmit signals over significant distances and can penetrate physical barriers such as walls and buildings more effectively. Additionally, these frequencies experience less interference compared to those in the heavily congested 2.4-GHz band, which is commonly used by wireless devices.

In the United States, the 900 MHz band is a versatile frequency range that is utilized by various services, with the FCC overseeing its allocation and regulation.

In the European Union, the 868 MHz frequency is designated by ETSI as the Sub-Gig frequency.

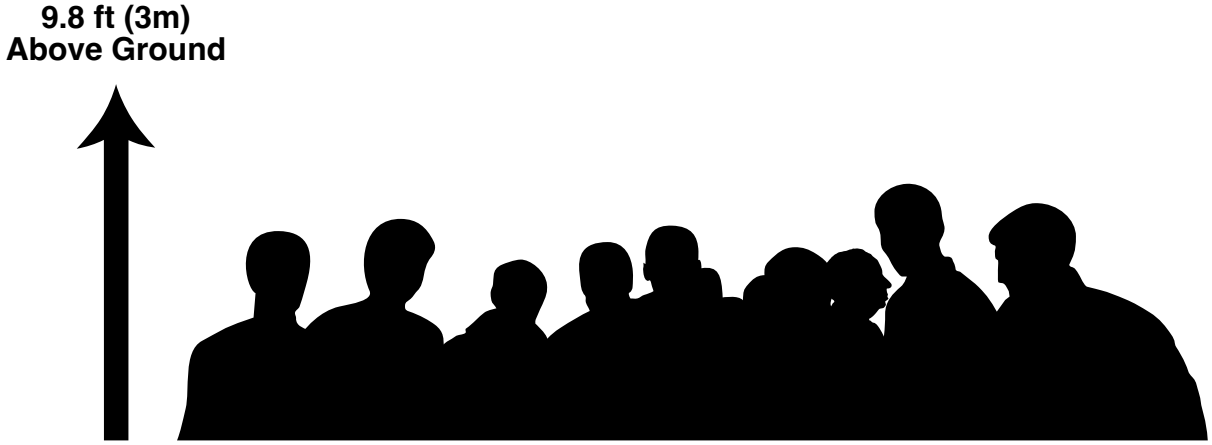
In summary, if an application demands high data rates and more bandwidth in urban or densely populated areas where interference management is feasible, the 2.4 GHz frequency is a suitable choice. On the other hand, for applications requiring long-range communication and better obstacle penetration, particularly in rural or industrial settings with fewer regulatory constraints, a sub-GHz frequency (<1 GHz) is a better option.

Installation Recommendations:

With the many factors that affect and/or interrupt a wireless signal such as walls, glass, metal, objects, and people, it is highly recommended to:

- Install devices a minimum of 9.8 ft. (3m) above audiences and/or ground level where practical.
- Adjust the wireless antenna in a vertical upright position
- Position devices in direct line of sight of the controlling device

Careful planning and testing of the selected installation location is critical to ensure optimum and reliable wireless operation.



REMOTE DEVICE MANAGEMENT (RDM)

NOTE: In order 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	Personality ID
22A6	004D	0000-FFFF	1ch(3ch), 4ch(6ch), 6ch(8ch), 10ch(12ch), 11ch(13ch), 19ch(21ch), 9ch(11ch), 15ch(17ch), 13ch(15ch)

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 of the features that you require.

The following parameters are accessible in RDM on this device:

CODE	PARAMETER	CODE	PARAMETER
0x1031	Preset Playback	0x0400	Device Hours
0x0122	Default Slot Value	0x0015	Comms Status
0x00C2	Boot Software Version Label	0x0031	Status ID Description
0x00C1	Boot Software Version ID	0x0032	Clear Status ID
0x0070	Product Detail ID List	0x0401	Lamp Hours
0x0030	Status Messages	0x0402	Lamp Strikes
0x0011	Proxied Device Count	0x0403	Lamp State
0x0200	Sensor Definition	0x0404	Lamp Mode
0x0201	Sensor Value	0x0405	Device Power Cycles
0x0080	Device Model Description	0x0500	Display Invert
0x0081	Manufacturer Label	0x0501	Display Level
0x0082	Device Label	0x0603	Realtime Clock
0x00E0	DMX Personality	0x1010	Power State
0x00E1	DMX Personality Description	0x0020	Queued Message

COLOURTUNE TECHNOLOGY

The **KL Core IP** features our latest advanced fixture software, **ColourTune Technology**. This innovative software offers various features to enhance the control and precision of the fixture and the light it creates.

COLOR TUNING

This feature allows users to select between Highest Output, Highest Fidelity, or a blend of both. When Highest Output is chosen, the fixture prioritizes intensity by producing the selected CCT and color settings at maximum output while maintaining the best color fidelity possible. When Highest Fidelity is selected, the fixture prioritizes light quality by generating the selected CCT and color settings at the highest fidelity possible while offering the best intensity it can. The difference between fidelity and output changes varies depending on the CCT and color settings. Selecting Balanced Output and Fidelity equally prioritizes fidelity and output to produce the selected CCT and color settings with balanced fidelity and output.

OUTPUT BALANCE

Output Balance settings allow users to choose between Bright and Uniform (Elation Full Spectrum Match). This setting enables color tone balancing across multiple fixture models that also use Elation's Full Spectrum Engine. Selecting the Uniform setting reduces the intensity of some primary colors to ensure all mixed colors match across multiple fixture models. The Uniform setting also ensures color temperature and output levels are closely matched across fixtures of the same model.

16-BIT CCT CONTROL

In a DMX mode with 16-bit CCT control, fully variable CCT values are available, and adjustments of 1 degree Kelvin are achievable.

DIM TO WARM

With this feature activated, the fixture emulates a tungsten lamp by decreasing the color temperature as it dims. This works with any set CCT value, and only affects the output if a base CCT is established.

WHITE POINT ADJUSTMENT

The White Point Adjustment feature allows users to set a desired CCT value, and then mix color from that white set point. This color can be mixed manually through adjusting the primary color channels, or by selecting a color in the virtual swatch book.

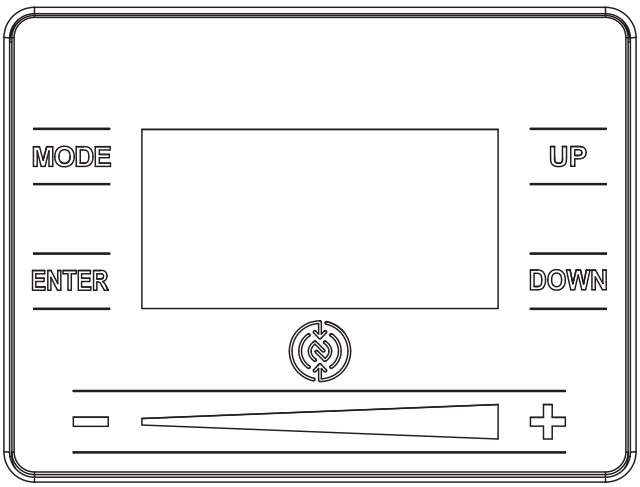
VIRTUAL SWATCH BOOK FADE

The ability to fade between two virtual swatch book color selections has been added. Users can select a fade time using the Dimmer Delay Time setting in the Dim Mode Control Channel. Changing between colors in the swatch book will then utilize the chosen timing.

CONTROL PANEL

The fixture includes an easy to navigate system menu. The control panel display located on the side of the fixture (illustrated below) provides access to the main system menu where all necessary system adjustments are made to the fixture.

- During normal operation, pressing the **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 **DOWN** and **UP** buttons.
- Once you reach a field that requires adjusting, press the **ENTER** button to activate that field and use the **DOWN** and **UP** buttons to adjust the field.
- Pressing the **ENTER** button once more will confirm the setting.
- Exit the main menu at any time without making any adjustments by pressing the **MODE** button.



KEY LOCK

The control keys can be configured to lock after a pre-set period of inactivity. The keys are locked by default, but this setting can also be disabled or set to activate after a period of inactivity ranging from 10 seconds and 5 minutes. To change this setting, use the control panel keys to navigate to Settings > Display > Key Lock in the system menu, then use the UP and DOWN keys to select your desired value and press the ENTER button to confirm your selection. **To unlock the controls, press Up-Down-Up-Down-Enter.**

ARIA

This fixture is equipped with Aria X2. Please note that Aria's wireless functions are switched off by default. Activate Aria X2 and Bluetooth in the system menu to take advantage of the fixture's wireless feature set for wireless connectivity and over the air software updates.

TOUCH BAR MODES

This device features a touch-activated bar located on the bottom of the display screen. This touch bar can be used to manually adjust dimming, CCT, Green shift, color selection, color saturation, or manual control. To use this feature, use the control panel keys to nativate to Touch Bar Mode in the system menu, press ENTER, and scroll through and select your desired mode. The bar can then be used to make adjustments in the selected mode.

SYSTEM MENU

MAIN MENU	OPTIONS / VALUES (Default Settings in **BOLD**)		
TOUCH BAR MODE	Disabled (use when running in DMX mode)		
	Dimmer / Gobo		
	Int CCT Grn (Intensity, CCT, Green Shift)		
	Int CCT GRB GB (Intensity, CCT, Green Shift, Gobo)		
	Int Color Sat (Intensity, Color, Saturation)		
	Int Color Sat GB (Intensity, Color, Saturation, Gobo)		
	Int x,y (Intensity, x Coordinate, y Coordinate)		
	Int x,y GB (Intensity, x Coordinate, y Coordinate, Gobo)		
	Manual Control (Intensity, Strobe, R, G, B, M, A, Gobo)		
DMX	DMX Address	**001** - 512	
	DMX Mode	1Ch Dimmer	
		4Ch Dimmer/CCT	
		6Ch Dim/CCT/Clr	
		10Ch RGBMA	
		11Ch Standard	
		19Ch Extended	
		9Ch CMY	
		15Ch CMY Extended	
		13Ch x,y Extended	
	Gobo Rotator	On (+2 DMX)	
		Off	
	No DMX Status	**Hold Last**	
		Fade to Black	
		Standalone	
	Protocol	Select Signal	**DMX**
			Aria In - DMX Out
			DMX In - Aria Out
	Aria	Enable Aria	**Off** / On
		Frequency	**2.4GHz**
			Sub Gig - US
			Sub Gig - EU
		2.4GHz Chan	**00** - 15
		Sub Gig Chan	**00** - 09
		Enable Mesh	**Off** / On
		Enable Bluetooth	**Off** / On

SYSTEM MENU

MAIN MENU	OPTIONS / VALUES (Default Settings in **BOLD**)		
CONTROL	Dimmer	000% - **100%**	
	Manual Control	Red	0 - **255**
		Green	0 - **255**
		Blue	0 - **255**
		Mint	0 - **255**
		Amber	0 - **255**
		CCT	2400K - 8500K (Default = **6000K**)
		Green Shift	-100% ~ +100% (Default = **0**)
		Virtual Color	See Color Macros Table
		Gobo	
	Primary	On / **Off**	
	Secondary	On / **Off**	
	Self Test	All	
		Dimmer	
		Color	
		Gobo	
SETTINGS	Dim Modes	**Standard**	
		Stage	
		TV	
		Architectural	
		Theatre	
		Stage 2	
		Dim Speed	0s - 10s (Default = **0.1s**)
	Dim to Warm	On / **Off**	
	Dim Curves	Linear	
		Square	
		Square Inverse	
		S-Curve	
	LED Refresh Rate	900Hz - 1500Hz, 2500Hz, 4000Hz, 5000Hz, 6000Hz, 10KHz, 15KHz, 20KHz, 25KHz (Default = **1200Hz**)	
	Color Tuning	Highest Fidelity	
		Balanced Output and Fidelity	
		Highest Output	
	Output Balance	**Bright (Highest Output)**	
		Uniform (Elation Full Spectrum Match)	
	LED Power Limit	50%	
		60%	
		70%	
		80%	
		90%	
		100%	

SYSTEM MENU

MAIN MENU	OPTIONS / VALUES (Default Settings in **BOLD**)		
SETTINGS (continued)	Fan Mode	**Auto**	
		High	
		Silent	
	Display	Screen Delay	10s - 5min (Default = **1min**)
		Screen Lock	Off, 10s - 5min, **Key Lock**
		Rotate Display	Yes
			No
			Auto
	Reset Defaults	Yes / **No**	
INFORMATION	Time	Current Run Time	
		Total Run Time	
		Last Run Time	
	Temperature	Current	
		Max Resettable	
	DMX Values	Red	
		Green	
		...	
	Product IDs	RDM UID	
	Error Logs	Fixture Errors	
	Software Version	Vx.x	
SERVICE (Passcode = 050)	Calibration	Red	000 - 255
		Green	000 - 255
		Blue	000 - 255
		Mint	000 - 255
		Amber	000 - 255
		Gobo Rotator	000 - 255
	Reset Last Run	Yes / No	
	Reset Error Logs	Yes / No	

FAN CONTROL

The Elation KL Core IP is a high-performance fixture suited for multiple applications. For noise critical environments such as Theater, Opera, or Orchestral Halls, it offers various fan operation modes which remove unwanted noise distractions for the audience and performers. Fan Modes can be changed remotely via the DMX control channel, allowing the fixture to offer high output or quiet operation at a moment's notice. All Fan Modes smoothly transition over a brief period, preventing unwanted attraction to the fixture.

Auto – The default AUTO mode ensures optimal performance of the fixture. Fans only run at the speeds needed to keep the LED engine within a safe temperature range. They will turn off if possible, 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 at 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: Auto is the recommend mode for daily operation of the Elation KL Core IP.**

High – This mode is only required in very high ambient temperatures when automatic fan speed adjustments are not desired. High Fan Speed will cool the fixture most efficiently. 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. Fixture output is kept at 100% unless the LED engine temperature is too high, at which point the fixture will reduce power carefully to ensure safe operation.

Additional Low Noise Modes

For very critical situations, the KL Core IP offers an additional low noise mode for quiet operation. The fixture output will be reduced, but as the KL Core IP has such an extremely high luminous flux, it still offers outstanding performance.

Silent – Running the fixture in Silent mode reduces the fixture to about 25% output, and most fans are off.

DMX TRAITS

1Ch	4Ch	6Ch	10Ch	11Ch	19Ch	9Ch	15Ch	13Ch	DMX Values	Function	Snap	Def Val
1	1	1		1	1	1	1	1		**Dimmer**		0
									0-255	Intensity 0 → 100%		
	2	2		2	2	2	2	2		**Dimmer Fine**		0
									0-255	Fine Intensity Control		
		3		3	3	3	3	3		**Shutter/Strobe**		50
									0-31	Shutter closed		
									32-63	No function (shutter open)		
									64-95	Strobe effect, slow to fast		
									96-127	No function (shutter open)		
									128-159	Pulse effect in sequences		
									160-191	No function (shutter open)		
									192-223	Random strobe effect, slow to fast		
									224-255	No function (shutter open)		
			1	4	4					**Red**		
									0-255	0 → 100%		
			2		5					**Red Fine**		
									0-255	Fine Adjustment		
			3	5	6					**Green**		
									0-255	0 → 100%		
			4		7					**Green Fine**		
									0-255	Fine Adjustment		
			5	6	8					**Blue**		
									0-255	0 → 100%		
			6		9					**Blue Fine**		
									0-255	Fine Adjustment		
			7	7	10					**Mint**		
									0-255	0 → 100%		
			8		11					**Mint Fine**		
									0-255	Fine Adjustment		
			9	8	12					**Amber**		
									0-255	0 → 100%		
			10		13					**Amber Fine**		
									0-255	Fine Adjustment		

DMX TRAITS

1Ch	4Ch	6Ch	10Ch	11Ch	19Ch	9Ch	15Ch	13Ch	DMX Values	Function	Snap	Def Val
						4	4			**Cyan**		0
									0-255	0 → 100%		
							5			**Cyan Fine**		0
									0-255	Fine Adjustment		
						5	6			**Magenta**		0
									0-255	0 → 100%		
							7			**Magenta Fine**		0
									0-255	Fine Adjustment		
						6	8			**Yellow**		0
									0-255	0 → 100%		
							9			**Yellow Fine**		0
									0-255	Fine Adjustment		
								4		**x Coordinate**		0
									0-255	0 → 100%		
								5		**x Coordinate Fine**		0
									0-255	Fine Adjustment		
								6		**y Coordinate**		0
									0-255	0 → 100%		
								7		**y Coordinate Fine**		0
									0-255	Fine Adjustment		
		4		9		7				**CCT Presets**	X	0
									0-23	Open		
									24-85	2400K - 8500K		
									86-255	8500K		
	3				14		10	8		**Variable CCT**		0
									0-23	Open		
									24-255	2400K → 8500K		
	4				15		11	9		**Variable CCT Fine**		0
									0-255	Fine Adjustment		
					16		12	10		**Green Shift**		0
									0	Idle		
									1-127	Full Minus Green to Neutral		
									128	Neutral White		
									129-255	Neutral to Full Plus Green		

DMX TRAITS

1Ch	4Ch	6Ch	10Ch	11Ch	19Ch	9Ch	15Ch	13Ch	DMX Values	Function	Snap	Def Val
										Color		
									0	Open		
									1-179	Virtual Swatch Book		
										Color Scroll		
									180-201	Clockwise, fast → slow		
									202-207	Stop		
		5		10	17	8	13	11	208-229	Counter-clockwise, slow → fast		0
									230-234	Open		
										Random Slots		
									235-239	Fast		
									240-244	Medium		
									245-249	Slow		
									250-255	Open		
										Dim Modes		
									0-20	Standard		
									21-40	Stage		
									41-60	TV		
									61-80	Architectural		
									81-100	Theatre		
									101-120	Stage 2		
										Dimmer Delay Time		
									121	0s		
									122	0.1s		
									123	0.2s		
									124	0.3s		
									125	0.4s		
					18		14	12	126	0.5s	X	0
									127	0.6s		
									128	0.7s		
									129	0.8s		
									130	0.9s		
									131	1.0s		
									132	1.5s		
									133	2.0s		
									134	3.0s		
									135	4.0s		
									136	5.0s		
									137	6.0s		
									138	7.0s		

DMX TRAITS

1Ch	4Ch	6Ch	10Ch	11Ch	19Ch	9Ch	15Ch	13Ch	DMX Values	Function	Snap	Def Val
										Dimmer Delay Time (continued)		
									139	8.0s		
									140	9.0s		
									141	10s		
					18		14	12	142-149	Idle	X	0
										Dim to Warm		
									150-154	DTW On		
									155-159	DTW Off		
									160-255	Idle		
										Control		
									0-29	Idle		
									30-39	Fan Mode Auto		
									40-49	Fan Mode Silent		
									50-59	Fan Mode High		
									60-69	Idle		
										Reset		
									70-79	Gobo Rotator		
									80-99	Idle		
										Refresh Rate (Hz)		
									100	900		
									101	910		
									102	920		
									103	930		
									104	940		
		6		11	19	9	15	13	105	950	X	0
									106	960		
									107	970		
									108	980		
									109	990		
									110	1000		
									111	1010		
									112	1020		
									113	1030		
									114	1040		
									115	1050		
									116	1060		
									117	1070		
									118	1080		
									119	1090		
									120	1100		

DMX TRAITS

1Ch	4Ch	6Ch	10Ch	11Ch	19Ch	9Ch	15Ch	13Ch	DMX Values	Function	Snap	Def Val
										Refresh Rate (Hz) (continued)		
									121	1110		
									122	1120		
									123	1130		
									124	1140		
									125	1150		
									126	1160		
									127	1170		
									128	1180		
									129	1190		
									130	1200		
									131	1210		
									132	1220		
									133	1230		
									134	1240		
									135	1250		
									136	1260		
									137	1270		
									138	1280		
		6		11	19	9	15	13	139	1290	X	0
									140	1300		
									141	1310		
									142	1320		
									143	1330		
									144	1340		
									145	1350		
									146	1360		
									147	1370		
									148	1380		
									149	1390		
									150	1400		
									151	1410		
									152	1420		
									153	1430		
									154	1440		
									155	1450		
									156	1460		
									157	1470		
									158	1480		
									159	1490		

DMX TRAITS

1Ch	4Ch	6Ch	10Ch	11Ch	19Ch	9Ch	15Ch	13Ch	DMX Values	Function	Snap	Def Val
										Refresh Rate (Hz) (continued)		
									160	1500		
									161	2500		
									162	4000		
									163	5000		
									164	6000		
									165	10000		
									166	15000		
									167	20000		
									168	25000		
									169-174	Idle		
										Color Tuning		
									175-176	Highest Fidelity		
		6		11	19	9	15	13	177-178	Balanced Output and Fidelity	X	0
									179-180	Highest Output (Default)		
										Output Balance		
									181-182	Bright (Highest Output) (Default)		
									183-184	Uniform (Elation Full Spectrum Match)		
									185-200	Idle		
										Dimmer Curves		
									201-210	Linear		
									211-220	Square		
									221-230	Inverse Square		
									231-240	S-Curve (Default)		
									241-255	Idle		
Channels below are active when Gobo Rotator Option is set to 'On'												
										Gobo Indexing & Rotation		
									0-127	Gobo Indexing		
2	5	7	11	12	20	10	16	14	128-189	Clockwise Gobo Rotation, fast → slow		63
									190-193	Stop		
									194-255	Counter-clockwise Gobo Rotation, slow → fast		
3	6	8	12	13	21	11	17	15		**Gobo Fine Indexing**		0
									0-255	Fine Adjustment		

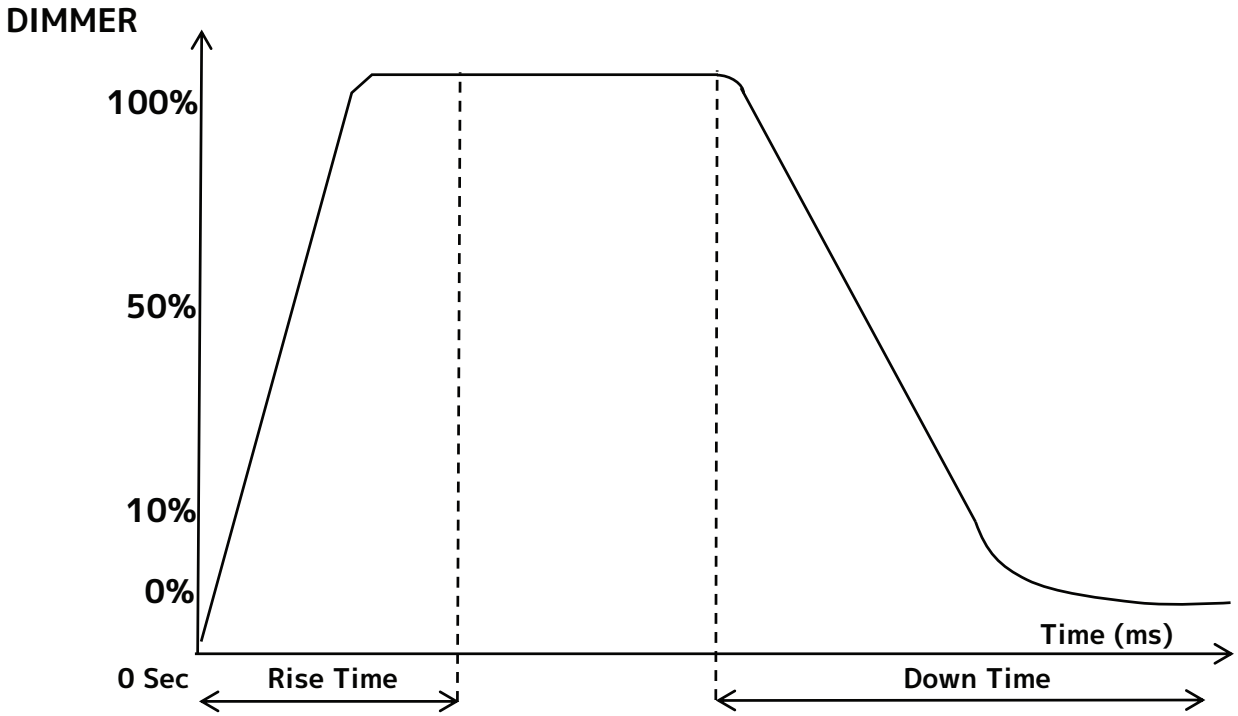
COLOR TEMPERATURE TABLE

DMX VALUE	COLOR TEMPERATURE (K)	DMX VALUE	COLOR TEMPERATURE (K)
24	2400	55	5500
25	2500	56	5600
26	2600	57	5700
27	2700	58	5800
28	2800	59	5900
29	2900	60	6000
30	3000	61	6100
31	3100	62	6200
32	3200	63	6300
33	3300	64	6400
34	3400	65	6500
35	3500	66	6600
36	3600	67	6700
37	3700	68	6800
38	3800	69	6900
39	3900	70	7000
40	4000	71	7100
41	4100	72	7200
42	4200	73	7300
43	4300	74	7400
44	4400	75	7500
45	4500	76	7600
46	4600	77	7700
47	4700	78	7800
48	4800	79	7900
49	4900	80	8000
50	5000	81	8100
51	5100	82	8200
52	5200	83	8300
53	5300	84	8400
54	5400	85	8500

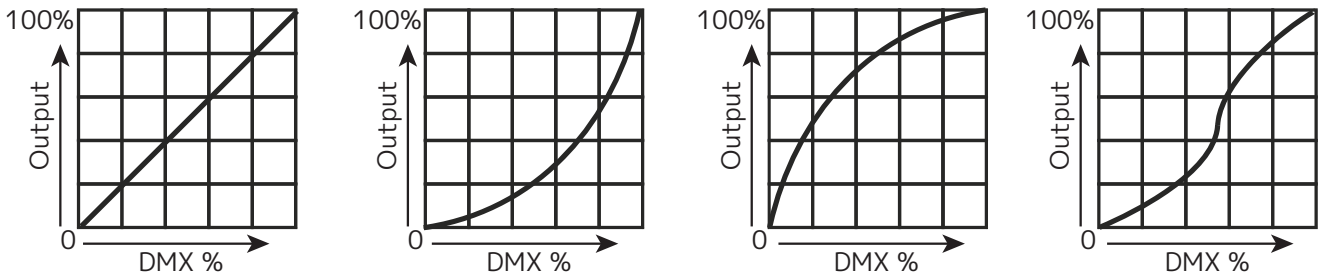
VIRTUAL COLORS TABLE

VALUE	FILTER #	COLOR	VALUE	FILTER #	COLOR
1	7	Pale Yellow	32	49	Medium Purple
2	103	Straw	33	58	Lavender
3	151	Gold Tint	34	199	Palace Blue
4	100	Spring Yellow	35	119	Dark Blue
5	10	Medium Yellow	36	132	Medium Blue
6	101	Yellow	37	120	Deep Blue
7	104	Deep Amber	38	165	Daylight Blue
8	15	Deep Straw	39	161	Slate Blue
9	179	Loving Amber	40	118	Light Blue
10	21	Gold Amber	41	68	Sky Blue
11	105	Orange	42	143	Pale Navy Blue
12	158	Deep Orange	43	131	Marine Blue
13	22	dark amber	44	115	Peacock Blue
14	778	millennium gold	45	172	Lagoon Blue
15	135	deep golden amber	46	116	Medium Blue Green
16	24	scarlet	47	90	Dark Yellow Green
17	106	primary red	48	139	Primary Green
18	26	bright red	49	122	Fern Green
19	27	medium red	50	89	Moss Green
20	19	fire	51	124	Dark Green
21	157	pink	52	88	Lime Green
22	36	medium pink	53	138	Pale Green
23	111	dark pink	54	203	Quarter CT Blue
24	128	bright pink	55	202	Half CT Blue
25	148	bright rose	56	201	FULL CT Blue
26	332	special rose pink	57	200	double CT Blue
27	793	vanity fair	58	206	Quarter CT Orange
28	113	Magenta	59	205	Half CT Orange
29	46	Dark Magenta	60	204	FULL CT Orange
30	48	Rose Purple	61-179		No function
31	126	Mauve			

DIMMER CURVES



Dimming Curve Ramp Effect	0 sec Fade Time (255 / 0)		1 sec Fade Time (255 / 0)	
	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



MAINTENANCE GUIDELINES

DISCONNECT POWER BEFORE PERFORING ANY MAINTENANCE!

CLEANING

Frequent cleaning is recommended to ensure 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. Periodically clean the external lens surface 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.

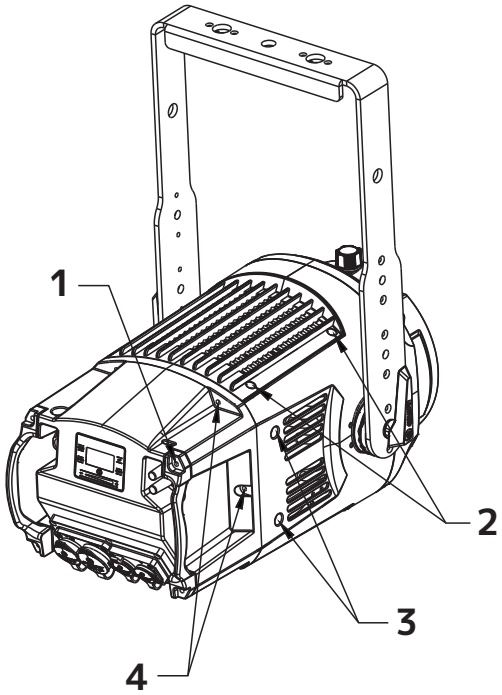
TORQUE SETTINGS FOR SCREWS

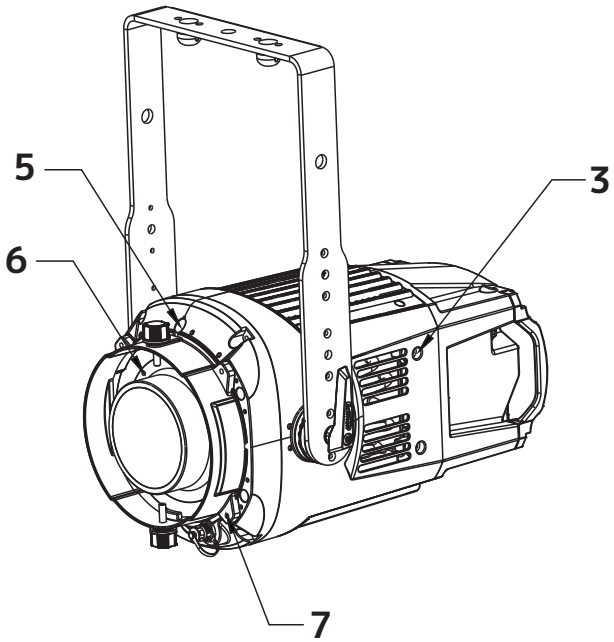
IN ORDER TO MAINTAIN THE IP65 RATING ON THE LIGHTING FIXTURES, ALL SCREWS MUST BE TIGHTENED TO THE FOLLOWING TORQUE SPECIFICATION USING A TORQUE DRIVER.

Refer to the table and diagram below for torque specifications.

TORQUE DRIVERS (Recommended): UTICA TS-30 (shown)
ALTERNATE DRIVERS:
- Proto J6107A
- Wiha 28887

CAUTION! DO NOT OVER TORQUE SCREWS, AS THIS CAN CAUSE LEAKAGE ISSUES!

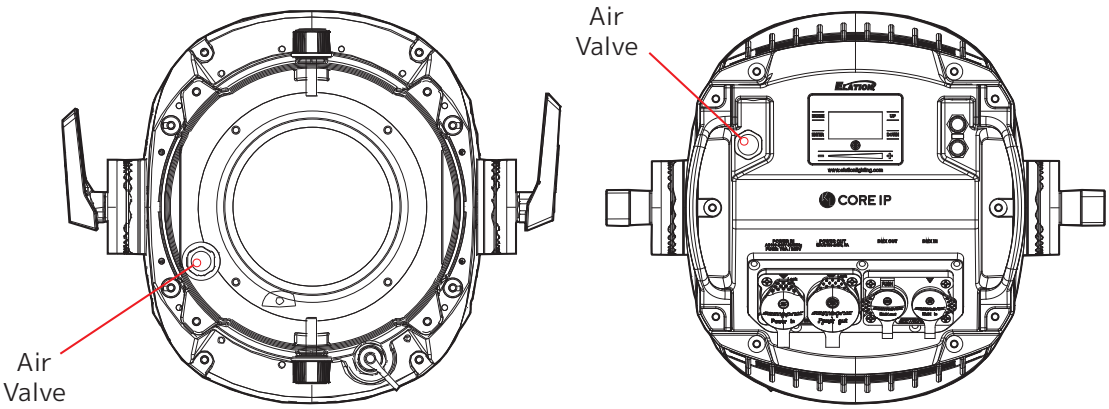




NO.	LOCATION	QTY.	TORQUE	NO.	LOCATION	QTY.	TORQUE
1	Rear Handles	4	11.3 ± 0.4 lb-in (13.0 ± 0.5 kg-cm)	5	Front Cover	6	11.3 ± 0.4 lb-in (13.0 ± 0.5 kg-cm)
2	Vents	8	4.3 ± 0.4 lb-in (5.0 ± 0.5 kg-cm)	6	Fixed Lens	4	11.3 ± 0.4 lb-in (13.0 ± 0.5 kg-cm)
3	Side Covers	4	11.3 ± 0.4 lb-in (13.0 ± 0.5 kg-cm)	7	Accessory Bracket	4	11.3 ± 0.4 lb-in (13.0 ± 0.5 kg-cm)
4	Rear Cover	6	11.3 ± 0.4 lb-in (13.0 ± 0.5 kg-cm)				

IP TEST PARAMETERS

Following any repair or maintenance procedure that requires disassembly of the fixture, use Elation's IP Tester to confirm the IP integrity of the fixture. This fixture features two air valves: one of the front of the unit beside the lens, as well as one on the rear panel beside the control panel. Air valve locations are shown in the diagram below. Please contact Elation Service for information regarding the Elation IP Tester, or visit the product information page online at: **https://www.elationlighting.com/ip-tester**



CAUTION! THE USE OF PROTECTIVE GLOVES AND SAFETY GOGGLES IS STRONGLY RECOMMENDED WHILE PERFORMING THE IP PRESSURE TEST! AVOID PLACING YOUR FACE, EYES, HANDS, ETC IN PROXIMITY TO THE LENS OF THE FIXTURE WHILE PERFORMING THE TEST!

DE-HUMIDIFICATION: IP65 fixtures operating in high-humidity environments may experience residual fogging or condensation. Such fogging will not affect the fixture, and can be removed using the following procedure: open the air valves and run the unit for 1-2 hours after reaching operating temperature. Then, while the fixture is still hot, re-install the air valve and allow the unit to cool down. Please note: this procedure should be performed in a dry, climate-controlled environment. Avoid additional fogging by drying the fixture completely before placing into a road case.

IP PRESSURE TESTING PARAMETERS					
Low Pressure Limit	**High Pressure Limit**	**Inflation Time**	**Equilibrium Time**	**Detection Time**	**Acceptable Leakage**
2.901 psi (20.0 KPa)	3.336 psi (23.0 KPa)	30 sec	15 sec	15 sec	0.015 psi (0.1 KPa) (100 Pa)

SOFTWARE UPDATES

ONLY QUALIFIED TECHNICIANS SHOULD PERFORM THIS FUNCTION!
NOTE ALL MENU SETTINGS BEFORE UPDATING SOFTWARE!
FIXTURE SOFTWARE CAN NOT BE DOWNGRADED!
DOWNLOAD FIXTURE SOFTWARE TO PC ONLY! (NO MAC SUPPORT)
PLEASE CONTACT ELATION SERVICE FOR FURTHER INFORMATION.

ELATION C-LOADER
An Elation C-Loader can be used to update the fixture to the latest software. Please visit the C-Loader product page at the Elation web site and download the product manual for step by step instructions.

https://www.elationlighting.com/c-loader-software-uploader

To order the C-Loader uploader and the updated software for your fixture, please contact Elation support for details.

Alternately, updates can be performed over the Aria connection.

ERROR CODES

ERROR CODE	DESCRIPTION
Fan Error	These messages will appear if there is a fan and/or temperature malfunction.
Temp Error	

Note: Error Codes are subject to change without notice.

SPECIFICATIONS

SOURCE
400W 6,000K RGBMA LED Engine
20,000 Hour Average LED Life*
*Test lab conditions. 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
Total Lumen Output:
15,588 (Integrating Sphere)
CRI 94.9
TLCI 95

EFFECTS
Variable Strobe Rate: 1- 20Hz
Dim-to-Warm/ Red Shift Emulation
Variable 16-bit Dimming Modes and Curves

COLOR
ColourTune Technology
High Brightness and High Fidelity Output Options
RGBMA Color Array
CMY Emulation
16bit Fully Variable CCT 2400K - 8500K
Green/Magenta Shift
Virtual Gel Swatch Book

CONTROL / CONNECTIONS
9 DMX Channel Modes (1, 4, 6, 10, 11, 19, 9, 15, 13)
Manual and DMX Controlled Dimmer and Color
Single Touch Bar Encoder
4 Button Control Panel, LED Display
Integrated IP65 Gobo Rotator Connector and Control
RDM (Remote Device Management)
Aria x2 Wireless Device Management
NFC Configuration
IP65 5pin DMX and IP65 Locking Power Cable In/Out

SIZE / WEIGHT
Length: 9.1" (230mm)
Length (Yoke 0°): 18.5" (470mm)
Width: 11.5" (292 mm)
Height (Fixture Body): 15.6" (397mm)
Height (Yoke 90°): 18.5" (471 mm)
Weight: 22.0 lbs (10.0 kg)

ELECTRICAL / THERMAL
AC 100-240V - 50/60Hz
520W Max Power Consumption
Power Thru Capacity: 7A (1 units @115V, 4 units @240V)
5°F to 113°F (-15°C to 45°C)
BTU/hr (+/- 10%) 1773.2

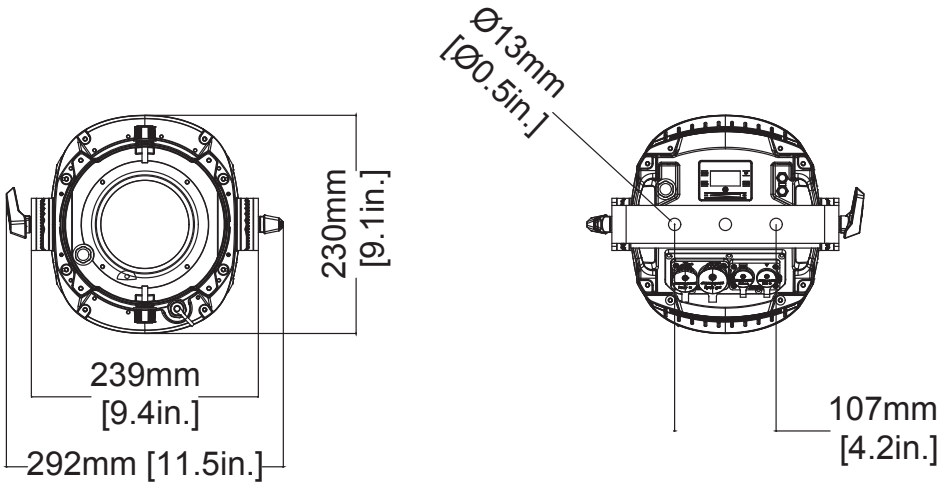
INCLUDED ITEMS
Safety Cable
IP65 Locking Power Cable

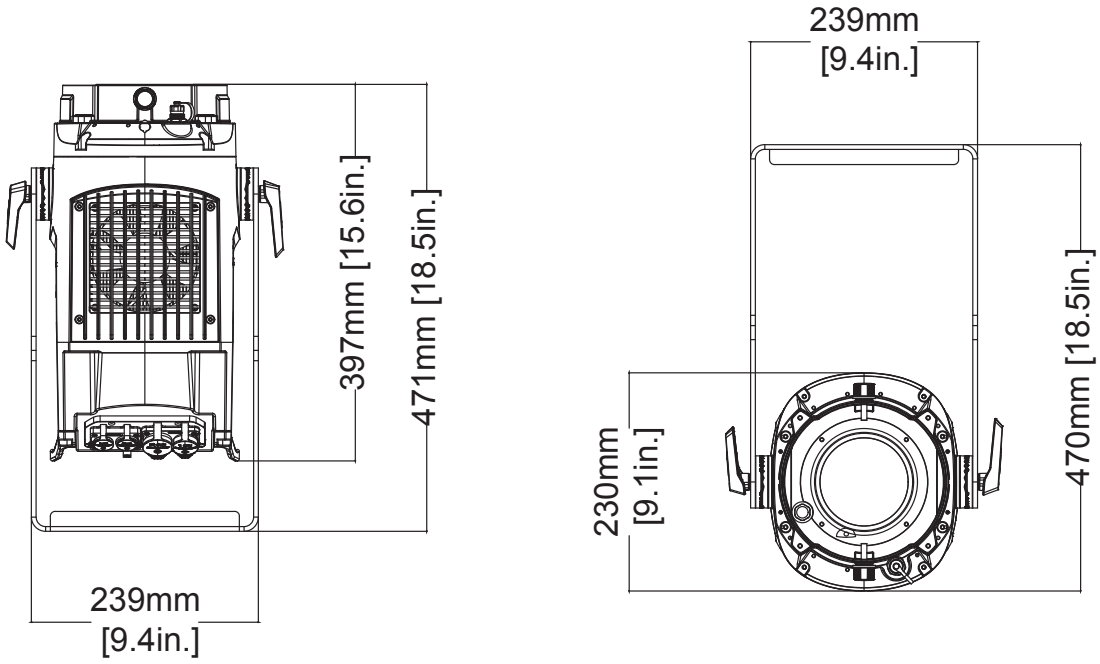
OPTIONAL ACCESSORIES
KL CORE IP Shutter Barrel (KLC113)
KL CORE IP Bowens Mount (KLC136)
KL CORE IP Fresnel Lens (KLC125)
KL CORE IP with Shutter Barrel Kit (KLC124)
14deg IP Lens Tube (IPL014)
19deg IP Lens Tube (IPL119)
26deg IP Lens Tube (IPL226)
36deg IP Lens Tube (IPL336)
50deg IP Lens Tube (IPL450)
70deg IP Lens Tube (IPL570)
IP65 Gobo Rotator (IPGR01)
4 Wire Hardwire Installation Plate (HWP404)
2 Wire Hardwire Installation Plate (HWP202)

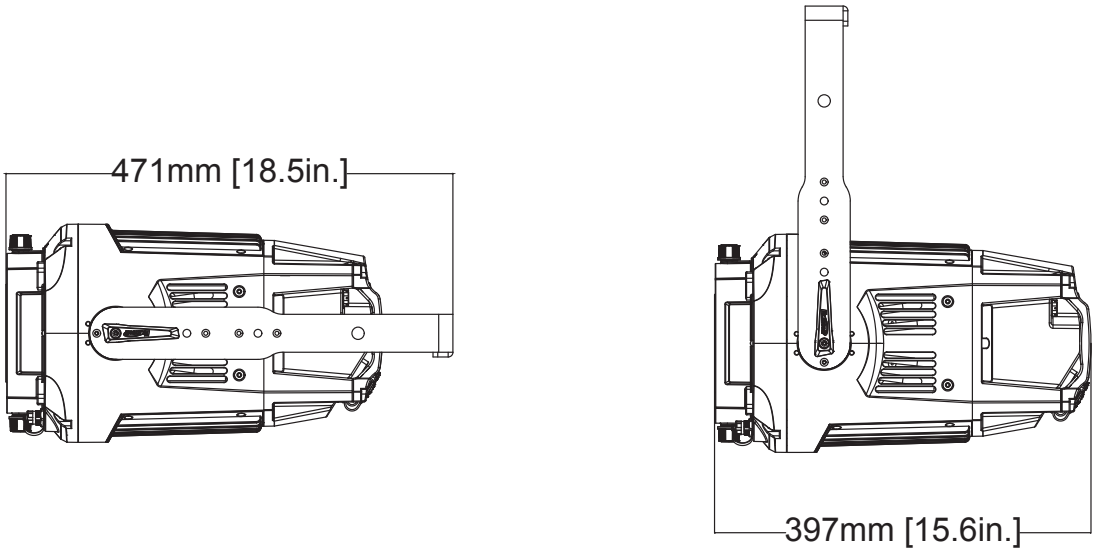
APPROVALS / RATINGS
CE | cETLus | IP65 | FCC | UKCA

Specifications and documentation subject to change without notice.

DIMENSIONS


Ø13mm
[Ø0.5in.]
230mm
[9.1in.]
239mm
[9.4in.]
292mm [11.5in.]
107mm
[4.2in.]


397mm [15.6in.]
471mm [18.5in.]
239mm
[9.4in.]
239mm
[9.4in.]
230mm
[9.1in.]
470mm [18.5in.]


471mm [18.5in.]
397mm [15.6in.]

ORDERING INFORMATION

SKU (US)	SKU (EU)	ITEM DESCRIPTION
KLC102	1237000299	Elation KL Core IP
KLC113	NA	KL Core IP Shutter Barrel
KLC135	NA	KL Core IP Bowens Mount
KLC125	NA	KL Core IP Fresnel Lens
KLC124	NA	KL Core IP with Shutter Barrel Kit
IPL014	NA	14deg IP Lens Tube
IPL119	NA	19deg IP Lens Tube
IPL226	NA	26deg IP Lens Tube
IPL336	NA	36deg IP Lens Tube
IPL450	NA	50deg IP Lens Tube
IPL570	NA	70deg IP Lens Tube
IPGR01	NA	IP65 Gobo Rotator
HWP404	1236300104	4 Wire Hardwire Installation Plate
HWP202	NA	2 Wire Hardwire Installation Plate

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 deter- mined 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.

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!