

# ***ELATION***<sup>®</sup>



**CORE IP**  
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 scan the QR Code with your mobile device or visit [www.elationlighting.com](http://www.elationlighting.com) for the latest revision/update of this manual, before installation and/or programming.

Date	Document Version	Software Version	DMX Channels	Notes
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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 professional use only.**

## 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

Frost Filter  
Concentric Ring  
Snoot

## 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**  
**323-582-3322** | [support@elationlighting.com](mailto:support@elationlighting.com)

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**REPLACEMENT PARTS** please visit [parts.elationlighting.com](https://parts.elationlighting.com)

## LIMITED WARRANTY

For up-to-date warranty information regarding your device, please visit Elation's warranty information page online or scan the QR codes below.



USA: <https://www.elationlighting.com/warranty-information>



EU: [https://www.elationlighting.eu/terms\\_and\\_conditions](https://www.elationlighting.eu/terms_and_conditions)

**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.**



# IP65 RATED

**The International Protection (IP)** rating system is commonly expressed as “IP” (Ingress Protection) followed by two numbers (i.e. IP65), where the numbers define the degree of protection. The first digit (Foreign Bodies Protection) indicates the extent of protection against particles entering the fixture, and the second digit (Water Protection) indicates the extent of protection against water entering the fixture. An **IP65** rated lighting fixture is designed and tested to protect against the ingress of dust (6), and low-pressure water jets from any direction (5).

**NOTE: THIS FIXTURE IS INTENDED FOR TEMPORARY OUTDOOR USE ONLY!**

**Maritime/Seaside Environment Installations:** A maritime/seaside environment is adjacent to the sea and caustic to electronics through exposure to atomized salt water and humidity, whereas a coastal environment extends 5 miles inland.



**NOT suitable for maritime/seaside environment installations. Installing this fixture in a maritime/seaside environment may cause corrosion and/or excessive wear to the interior and/or exterior components of the fixture. Damages and/or performance issues resulting from installation in a maritime/seaside environment will void the manufacturer’s warranty, and will NOT be subject to any warranty claims and/or repairs.**

Maritime installations require additional preparation, and additional service intervals may be needed given the maritime use. In general, IP ratings presuppose freshwater conditions VS maritime conditions, which are typically more “caustic” to IP fixtures (both internally and externally). A duty-cycle may also be needed when units are not in use. During times of high humidity and colder temperatures, condensation may occur internally so the fixture may require a duty-cycle to bring it up to running temperature, allowing any accumulation of moisture to be expelled via the vent valve. Recommendations can change based on installation environmental circumstances. A waterproof dome or similar device is recommended for use in permanent outdoor installations. When using a dome, refer to manufacturer recommendations for duty-cycle.

**NOTE: NOT ALL FEATURES LISTED ARE AVAILABLE ON ALL FIXTURES; THE FOLLOWING INSTRUCTIONS MAY NOT APPLY. CONTACT SUPPORT FOR ADDITIONAL DETAILS.**

**Exterior Maintenance:** Inspect the exterior every 30-days. The unit must be powered off/disconnected. The chassis should be inspected for any signs of contaminants. Inspect optics to determine if the lens is obstructed, then clean optics and chassis accordingly. Based on initial finding, schedule maintenance accordingly, keeping in mind that exterior maintenance will be required. Even if the luminaires are NOT in use, maintenance will still be needed given its location (exterior use). The use of a durable type of wax on the chassis is recommended since it will help prevent contaminant build up. Inspect both power and data lines for any signs of contaminants or corrosion. Periodically reapplying di-electric grease, especially in coastal environments. If any signs of corrosion/contaminants are present, clean thoroughly, and/or replace connectors, then reapply di-electric grease. Typically, this should be done annually, or any time an opportunity presents itself. As a preventive measure, annual replacement of both vent valves is recommended. The vent valve membrane can become contaminated and/or clogged causing improper venting of humidity within the luminaire. Inspect all mounting hardware as a precaution.

**Interior Maintenance:** Inspect the interior every 30-days. The unit must be powered off/disconnected.

- Inspect zoom/focus mechanism, clean optics, lubricate linear bearings (Krytox oil) as needed, inspect belts for wear
- Inspect all rotating effect wheels, manually rotate them, note any resistance
- Inspect all remaining rotating belts for any wear
- Inspect all fans, clean as needed, check rotation, check connections
- Inspect CMY module, manually move flags and check for signs of resistance, and if needed, clean guide rods first, then reapply a thin layer of grease (moly lube)
- Clean interior with low-volume compressed air, then clean optics prior to reassembly of head covers

Although the base has limited moving parts, the pan belt should also be inspected for wear. Remember to always perform an IP test anytime a cover is removed.

There is no specific time frame regarding the routine replacement of parts such as belts/stepper motors, PCBs, or LEDs. These items should only be replaced on an as needed bases, except for cooling fans, which should be replaced once the luminaries reach 10,000-hours. This is a prophylactic measure intended to keep the unit running as cool as possible, insuring proper function of all internal components. A complete service breakdown is available, please contact [service@elationlighting.com](mailto:service@elationlighting.com) for any needed parts or manuals.

# 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 manufacturer's 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!**

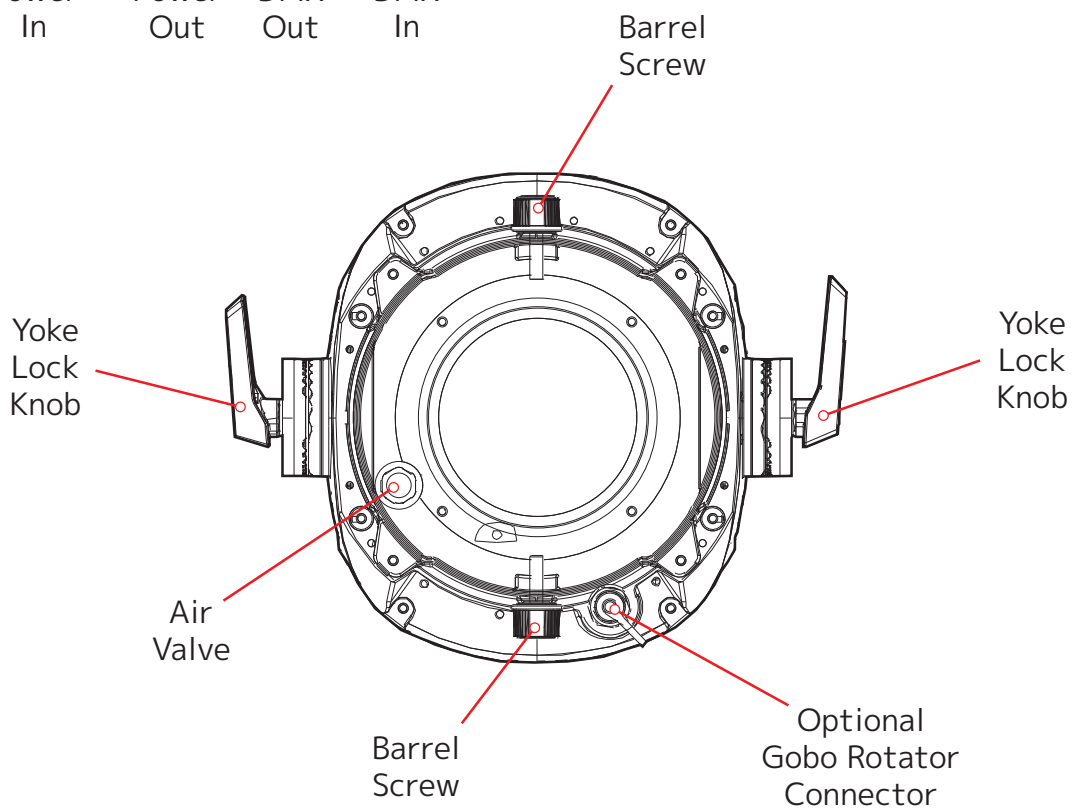
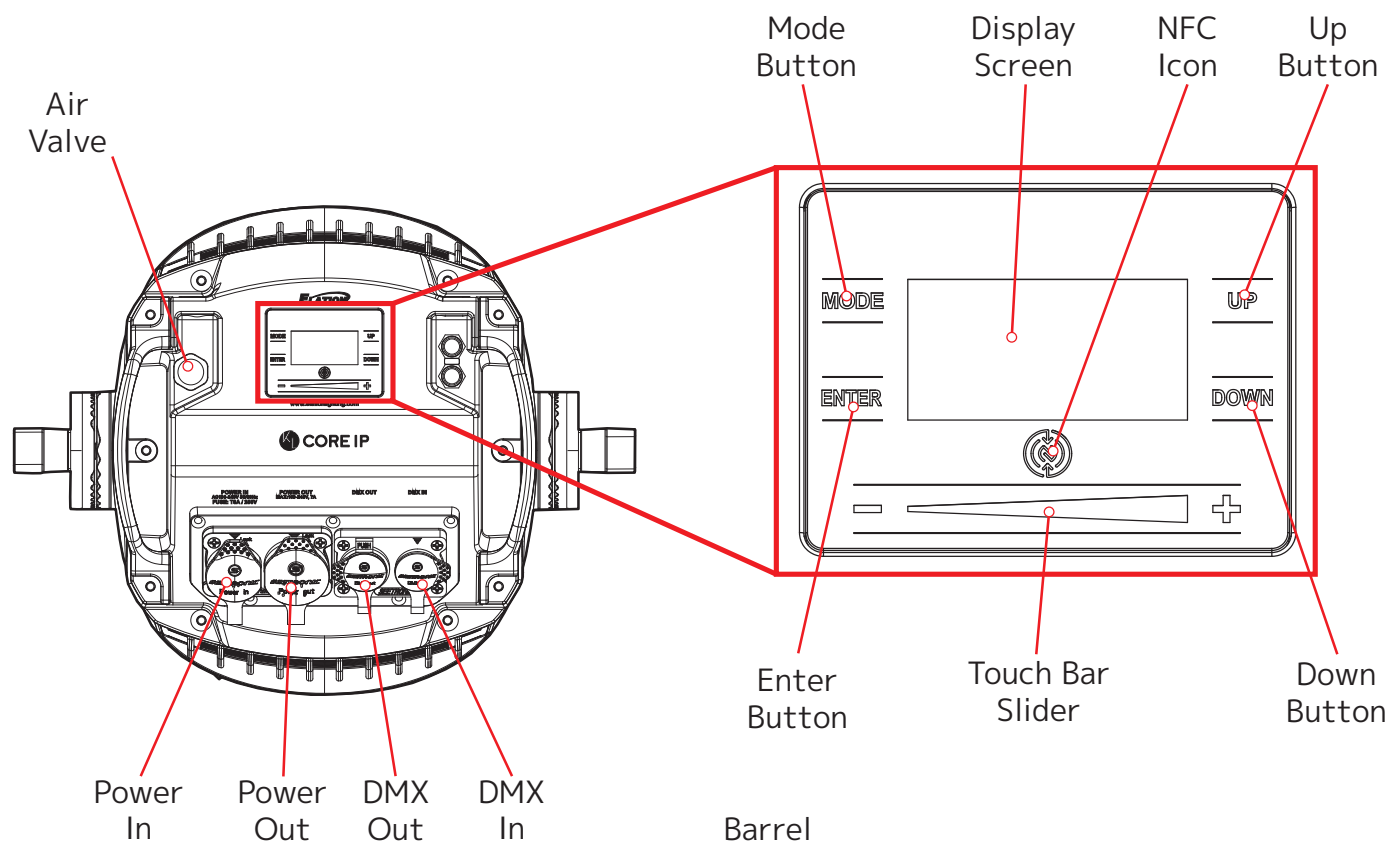


**MINIMUM DISTANCE TO OBJECTS/SURFACES IS 1 FOOT (0.3 METERS)  
AMBIENT OPERATING TEMPERATURE RANGE IS -40° F TO 113° F (-40° C TO 45° C)  
MINIMUM DISTANCE OF INFLAMMABLE MATERIALS FROM THE SURFACE 1.6 FEET (0.5 METER)**

# 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°C.
- 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



# 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 where unauthorized personnel might reach the fixture by hand.

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

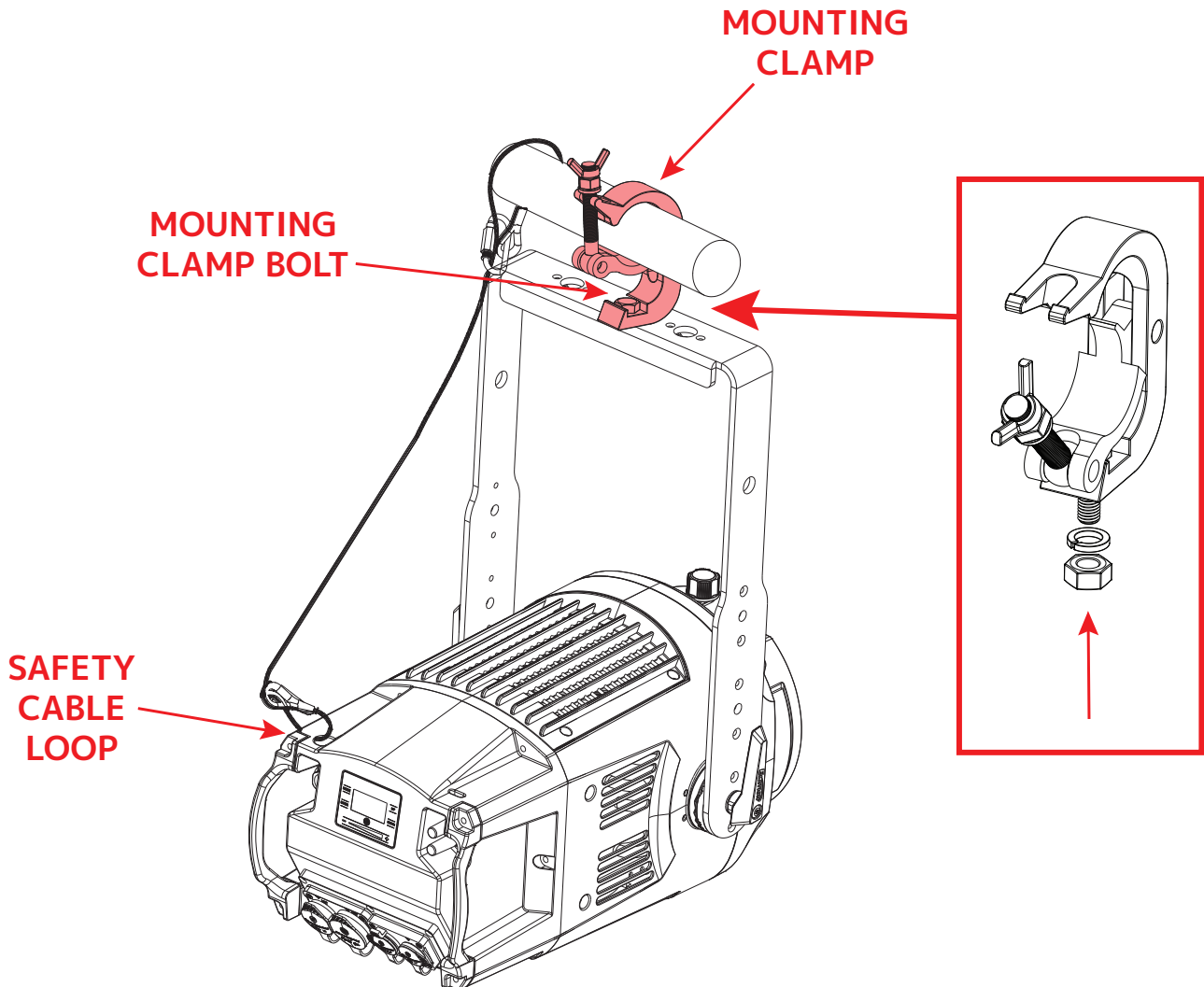
Overhead fixture installation must always be secured with a secondary safety attachment, such as an appropriately rated safety cable.

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 SAFETY CABLE TO A CARRYING HANDLE.

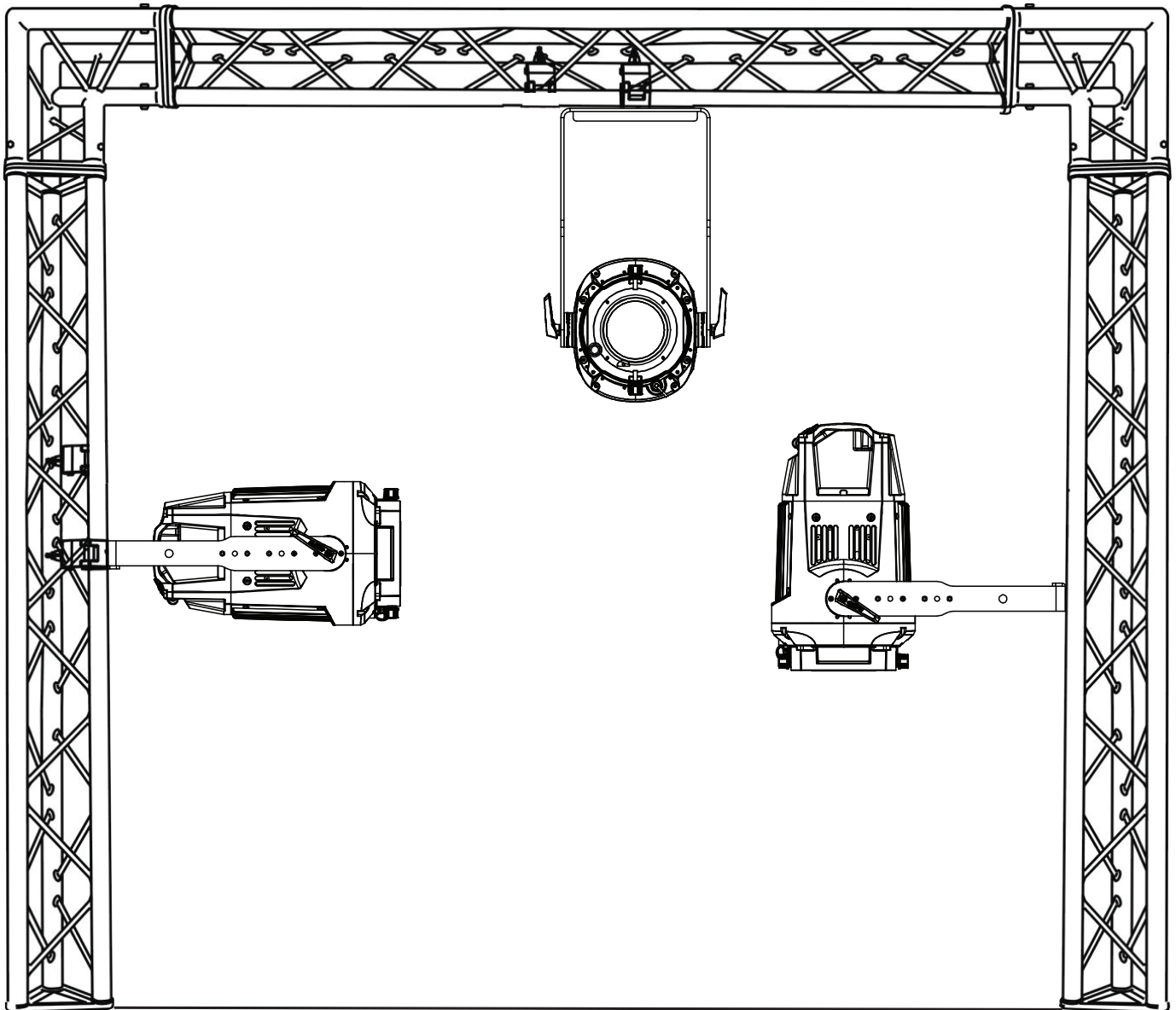


# INSTALLATION GUIDELINES

## 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 SAFETY 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.**

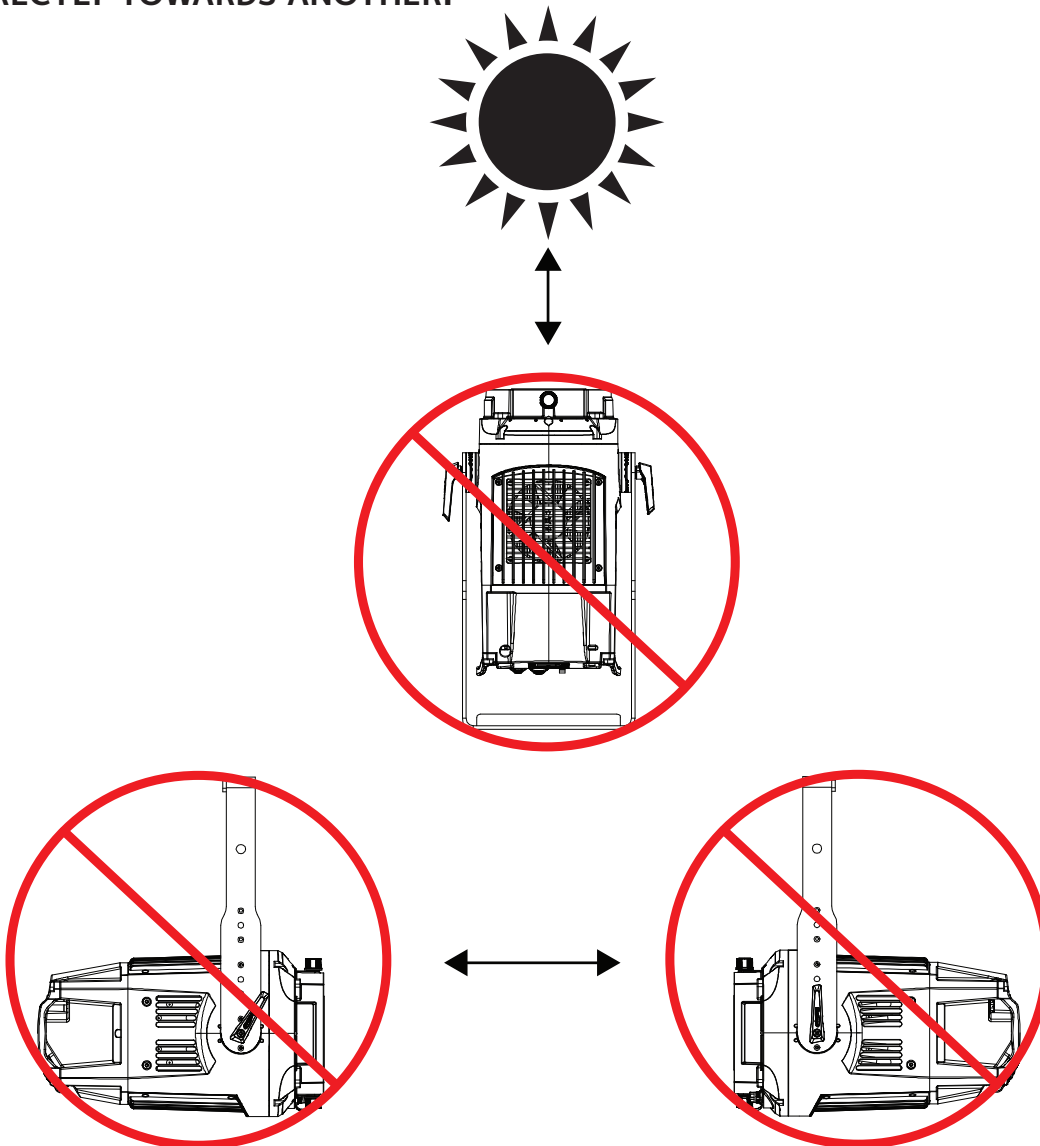
# INSTALLATION GUIDELINES

## 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.**

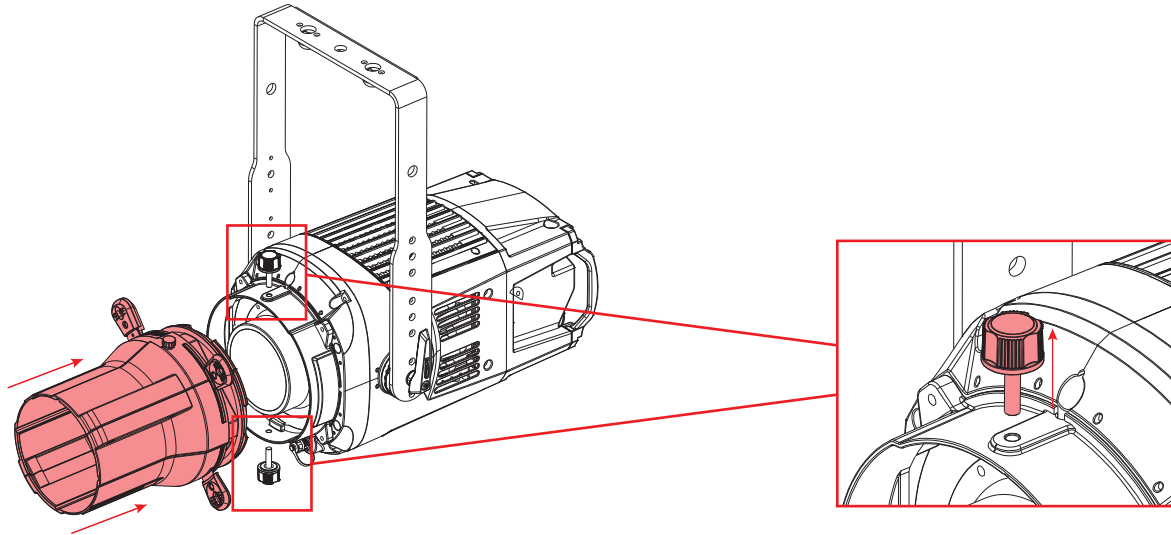




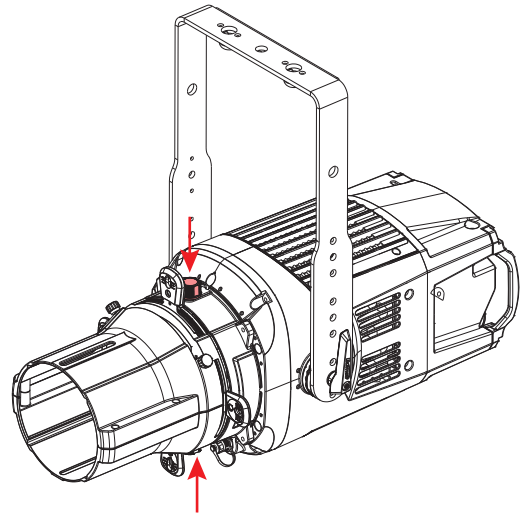
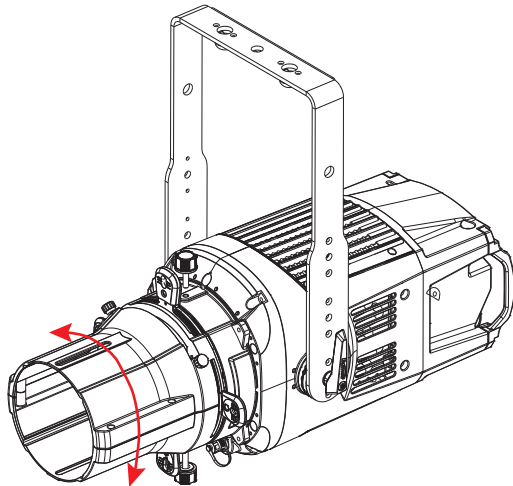
# ACCESSORY INSTALLATION

## 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.

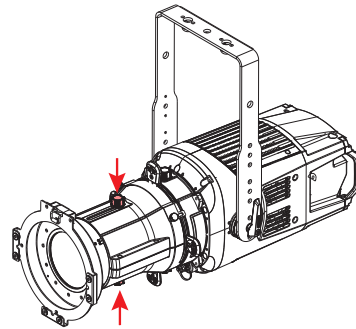
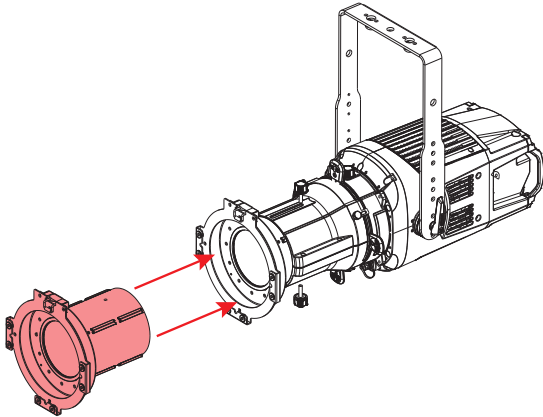


# ACCESSORY INSTALLATION

## LENSES

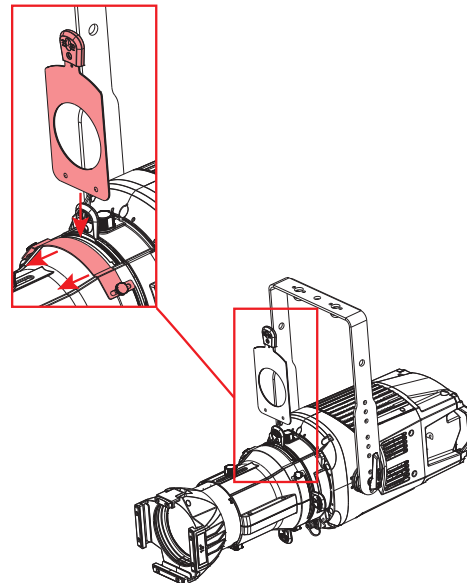
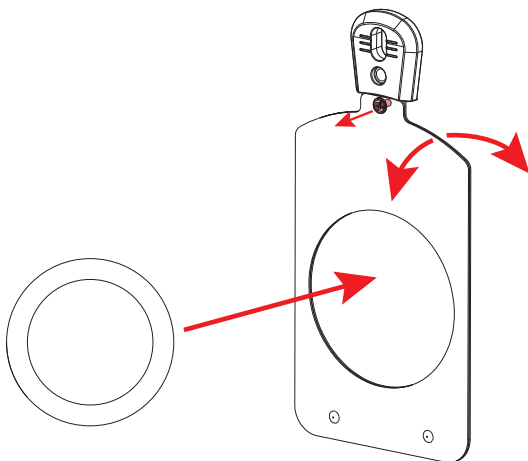
Please note that shutter barrel assembly must be installed before lenses can be added.

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

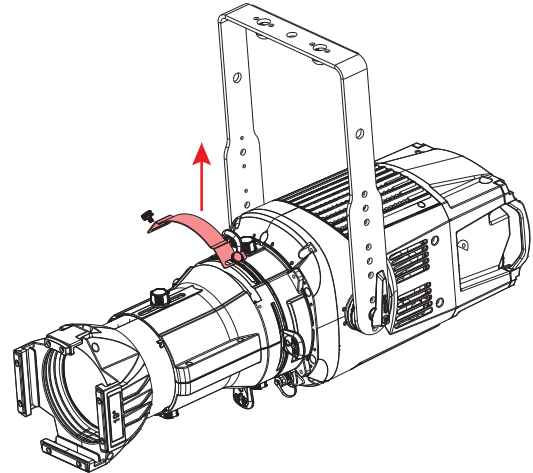
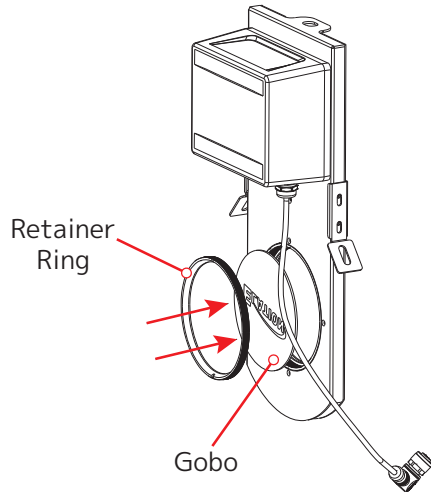
1. Remove the screw at the top of the gobo holder, then separate the two plates of the gobo holder. Insert the gobo between the plates, and re-install the screw to close the gobo holder.
2. Locate the gobo holder panel on the framing module. Loosen the two thumb screws, slide the panel forward, and insert the gobo holder into the slot. Slide the panel closed and re-secure with the thumb screws.



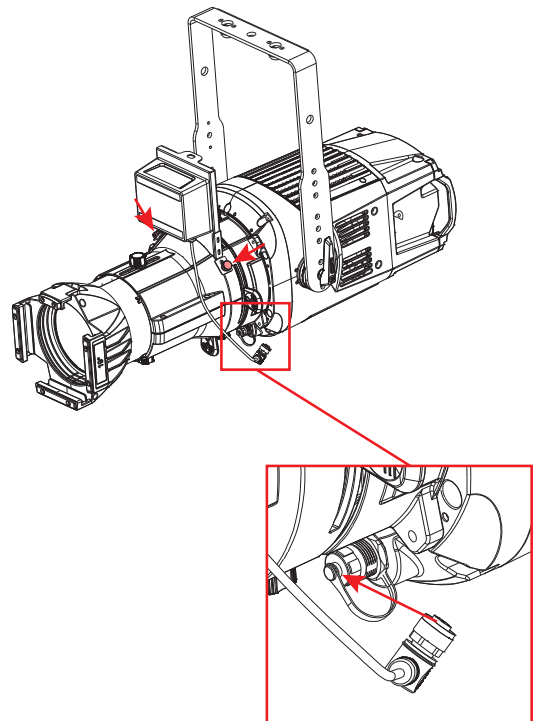
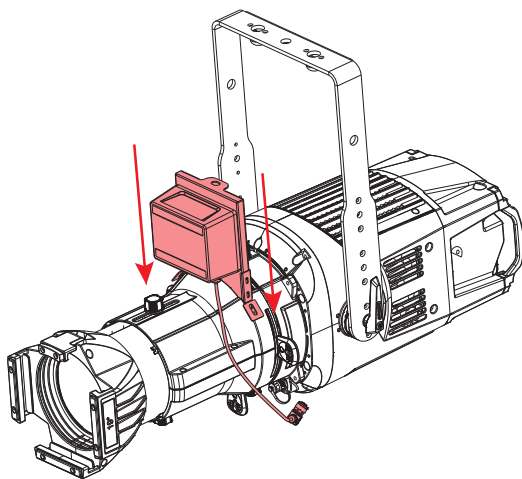
# ACCESSORY INSTALLATION

## 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.



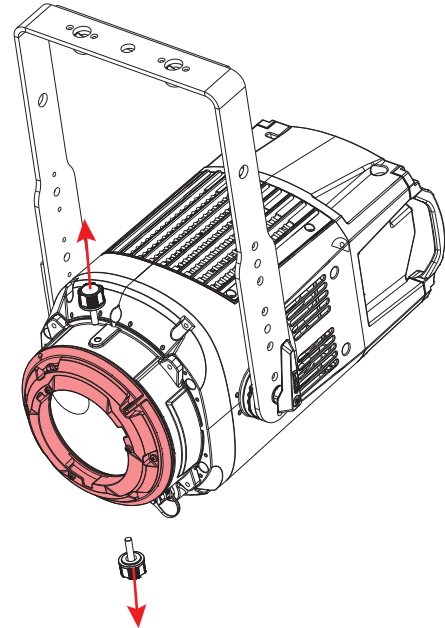
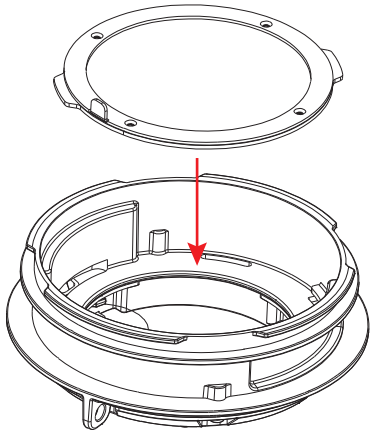
3. With the gobo rotator's electrical box oriented towards the front of the fixture, insert the gobo rotator into the gobo holder slot.
4. Insert the thumb screws into the gobo rotator's mounting tabs, then tighten to secure in place. Uncap the fixture's gobo rotator connector, and plug the gobo rotator's data cable into the connector.



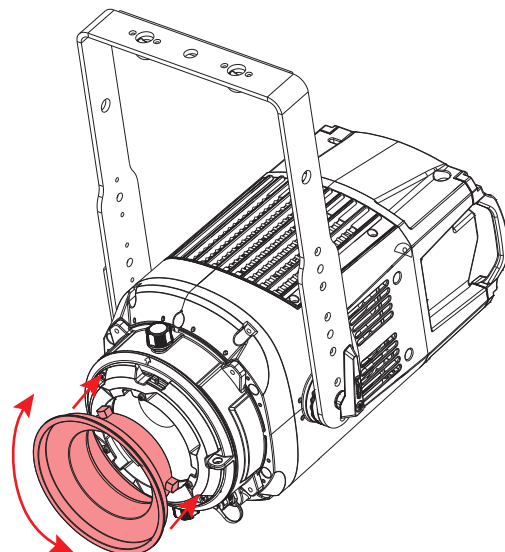
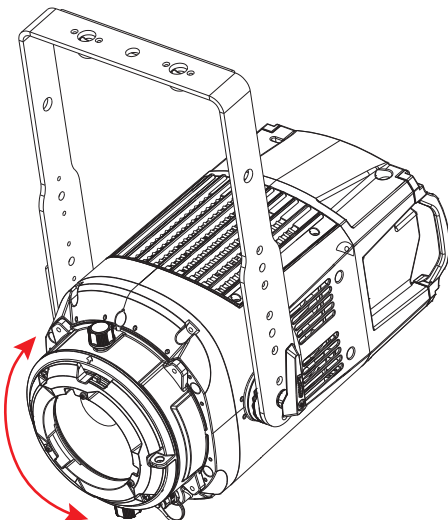
# ACCESSORY INSTALLATION

## 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.



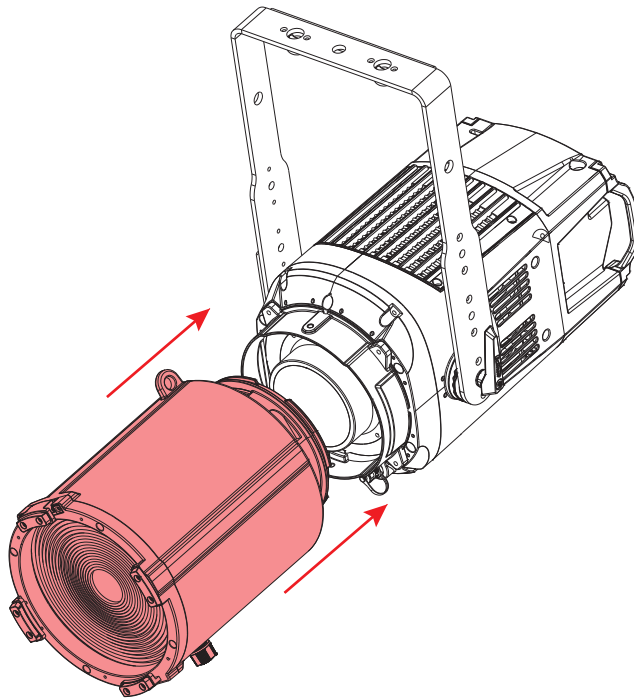
3. Rotate the Bowens mount adapter to the desired position, then insert the thumb screws and tighten to secure in place.
4. Align the tabs on the compatible Bowens mount accessory with the notches on the Bowens mount adapter, then insert the Bowens mount accessory and twist to secure in place.



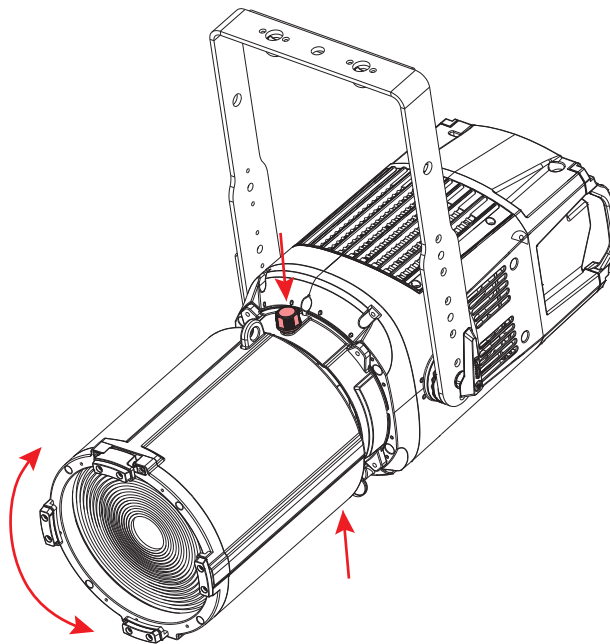
# ACCESSORY INSTALLATION

## 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.

# ARIA SETUP AND 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.

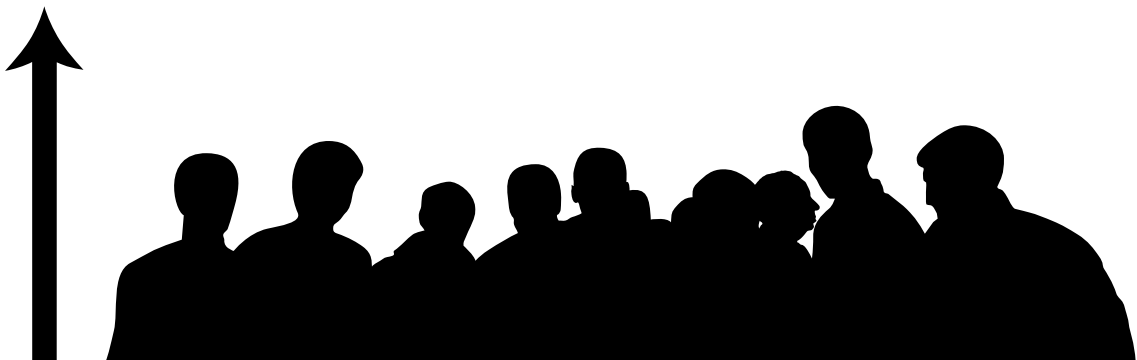
## Installation Recommendations:

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.

**9.8 ft (3m)  
Above Ground**





# ARIA SETUP AND GUIDELINES

## GENERAL INFORMATION

The Aria Bluetooth app has the ability to connect wirelessly to any device that has Aria wireless DMX installed and has Bluetooth enabled.

**Before installing the fixture in a remote location, double check that the fixture's main power is switched on, and that the Bluetooth function has been enabled in the fixture's system menu.** Certain fixtures may have Bluetooth disabled by default. If this function is disabled, then the fixture cannot be configured remotely using the Aria app, and will have to be configured directly from the fixture's control screen.

Additionally, the user should consider setting the fixture's No DMX setting to "Hold Last". This will allow the fixture to continue running using the current settings, even if the Aria app device moves out of range, the app is closed, or the signal is otherwise interrupted, minimizing disruption in the operation of the fixtures.

## LEGACY DEVICES

Please note that legacy connected devices, such as those using Wifly, E-Fly, or Magfly, are not compatible with this app. For such legacy devices, the use of a bridge is recommended, as the bridge can communicate with these devices via its SM220 protocol.

The Aria X2 BLE app is currently available from the Apple app store.

## FIXTURE IDENTIFICATION

Aria compatible devices can be identified and connected via the **Fixtures** tab in the app. This tab displays a field of twenty-four buttons that can be assigned to Aria compatible devices that are within range, and the buttons will automatically be assigned to devices in the order in which they are discovered. If more than twenty-four units are within range, it may be necessary to use the filter feature to search for the desired fixture. Button location can be edited by selecting the configuration key, then the user can drag and drop the buttons to the desired location and hit save to keep changes. Once a device is known to the app, it can also be assigned to a particular button. From that point forward, the assigned device will always be assigned to that button location.

**IMPORTANT NOTE:** For version 0.65 or higher, a shared system password is required to connect to any device.

Unlike wireless DMX, Bluetooth is a connect first protocol. To connect to a device or fixture, tap the assigned button in the **Fixtures** tab. If the connection is successful, a green frame will appear around the button, indicating that the app was able to retrieve the current channel values from the fixture. The app must be connected to a fixture in order to use its channel controls or view and change settings. Please note that not all Aria devices have channel controls.

Additionally, each fixture can only be connected to one device with the app at any given time. Once a fixture is connected to the app installed on one device, any other devices will be blocked from connecting. As a result, when setting up a new fixture for the first time, best practice is to have only a single user with the app open within range, in order to ensure that the fixture pairs to the intended user's device.



# ARIA SETUP AND GUIDELINES

The second table section shows all Aria devices detected in range. A checkmark indicates the device is currently assigned to a button. If more than 24 devices are within range, the user may remove or add devices to the buttons list by tapping a row to check or uncheck a device. If all buttons are full, it will be necessary to uncheck a device before adding another.

**Filter:** The user can filter which Aria devices get button assignments by tapping “filter” at the top of the view. A popup will appear where the user can enter text to filter devices by username, model name, or manufacturer. **Please note that these searches are case sensitive.**

Note: If a device shows an asterisk (\*) it means that there is no fixture profile currently available, and therefore there will be limited support available for that device. The user will still be able to connect and adjust channels if the device supports that feature, but the user will not be able to view how many channels the device has or the channel names.

## SECURITY

Each fixture must have a password saved to be secure. When a new fixture is installed for the first time, its password will automatically be set to the app’s system password on first connection. Once the password has been entered, the user will need to exit out to the main page containing the fixture buttons, then de-select and re-select the fixture to lock in the password. From that point forward only, controlling devices that use the correct password can connect to this fixture. **This security is now required by law in most jurisdictions.**

The app will detect any Aria capable fixture within range, even if the app does not have the password to that fixture and therefore cannot access that fixture. If that fixture is selected in the app, the green frame will momentarily appear around that fixture’s button, but then disappear. This indicates that the fixture is visible but inaccessible.

# 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.

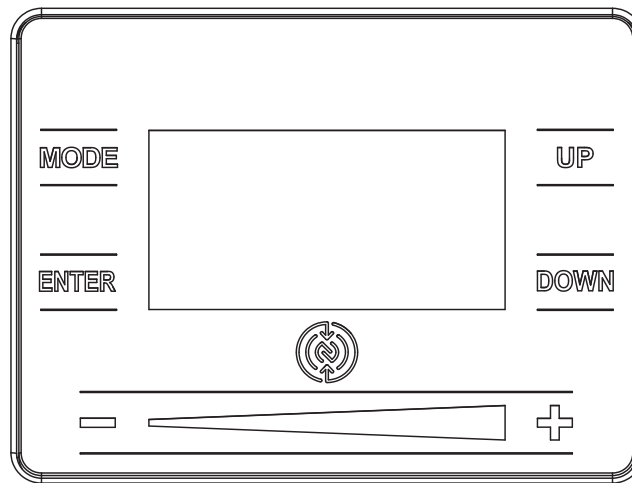
The following parameters are accessible in RDM on this device:

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

# 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 navigate 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 <b>BOLD</b> )		
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	<b>001</b> - 512		
	DMX Mode	1Ch Dimmer		
		4Ch Dimmer/CCT		
		6Ch Dim/CCT/Clr		
		10Ch RGBMA		
		11Ch Standard		
		19Ch Extended		
		9Ch CMY		
		15Ch CMY Extended		
		<b>13Ch x,y Extended</b>		
	Gobo Rotator	On (+2 DMX)		
		<b>Off</b>		
	No DMX Status	<b>Hold Last</b>		
		Fade to Black		
		Standalone		
	Protocol	Select Signal	<b>DMX</b>	
			Aria In - DMX Out	
			DMX In - Aria Out	
	Aria	Enable Aria	<b>Off</b> / On	
		Frequency	<b>2.4GHz</b>	
			Sub Gig - US	
			Sub Gig - EU	
		2.4GHz Chan	<b>00</b> - 15	
		Sub Gig Chan	<b>00</b> - 09	
		Enable Mesh	<b>Off</b> / On	
	Enable Bluetooth	<b>Off</b> / On		

# SYSTEM MENU

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

# SYSTEM MENU

MAIN MENU		OPTIONS / VALUES (Default Settings in <b>BOLD</b> )	
<b>SETTINGS</b> (continued)	Fan Mode	<b>Auto</b>	
		High	
		Silent	
	Display	Screen Delay	10s - 5min (Default = <b>1min</b> )
		Screen Lock	Off, 10s - 5min, <b>Key Lock</b>
		Rotate Display	Yes
			<b>No</b>
			Auto
	Reset Defaults	Yes / <b>No</b>	
<b>INFORMATION</b>	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	
<b>SERVICE</b> (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		<b>Dimmer</b>		0
									0-255	Intensity 0 → 100%		
	2	2		2	2	2	2	2		<b>Dimmer Fine</b>		0
									0-255	Fine Intensity Control		
		3		3	3	3	3	3		<b>Shutter/Strobe</b>		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					<b>Red</b>		
									0-255	0 → 100%		
			2		5					<b>Red Fine</b>		
									0-255	Fine Adjustment		
			3	5	6					<b>Green</b>		
									0-255	0 → 100%		
			4		7					<b>Green Fine</b>		
									0-255	Fine Adjustment		
			5	6	8					<b>Blue</b>		
									0-255	0 → 100%		
			6		9					<b>Blue Fine</b>		
									0-255	Fine Adjustment		
			7	7	10					<b>Mint</b>		
									0-255	0 → 100%		
			8		11					<b>Mint Fine</b>		
									0-255	Fine Adjustment		
			9	8	12					<b>Amber</b>		
									0-255	0 → 100%		
			10		13					<b>Amber Fine</b>		
									0-255	Fine Adjustment		



# DMX TRAITS

1Ch	4Ch	6Ch	10Ch	11Ch	19Ch	9Ch	15Ch	13Ch	DMX Values	Function	Snap	Def Val
						4	4			<b>Cyan</b>		0
									0-255	0 → 100%		
							5			<b>Cyan Fine</b>		0
									0-255	Fine Adjustment		
						5	6			<b>Magenta</b>		0
									0-255	0 → 100%		
							7			<b>Magenta Fine</b>		0
									0-255	Fine Adjustment		
						6	8			<b>Yellow</b>		0
									0-255	0 → 100%		
							9			<b>Yellow Fine</b>		0
									0-255	Fine Adjustment		
								4		<b>x Coordinate</b>		0
									0-255	0 → 100%		
								5		<b>x Coordinate Fine</b>		0
									0-255	Fine Adjustment		
								6		<b>y Coordinate</b>		0
									0-255	0 → 100%		
								7		<b>y Coordinate Fine</b>		0
									0-255	Fine Adjustment		
		4		9		7				<b>CCT Presets</b>		
									0-23	Open		0
									24-85	2400K - 8500K	X	
									86-255	8500K		
	3				14		10	8		<b>Variable CCT</b>		
									0-23	Open		0
									24-255	2400K → 8500K		
	4				15		11	9		<b>Variable CCT Fine</b>		0
									0-255	Fine Adjustment		
										<b>Green Shift</b>		
									0	Idle		
					16		12	10	1-127	Full Minus Green to Neutral		0
									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
5	10	17	8	13	11			0		<b>Color</b>		0
									0	Open		
									1-179	Virtual Swatch Book		
										<b>Color Scroll</b>		
									180-201	Clockwise, fast → slow		
									202-207	Stop		
									208-229	Counter-clockwise, slow → fast		
									230-234	Open		
										<b>Random Slots</b>		
									235-239	Fast		
									240-244	Medium		
									245-249	Slow		
									250-255	Open		
18	14	12	X	0						<b>Dim Modes</b>		0
									0-20	Standard		
									21-40	Stage		
									41-60	TV		
									61-80	Architectural		
									81-100	Theatre		
									101-120	Stage 2		
										<b>Dimmer Delay Time</b>		
									121	0s		
									122	0.1s		
									123	0.2s		
									124	0.3s		
									125	0.4s		
									126	0.5s		
									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
					18		14	12		<b>Dimmer Delay Time (continued)</b>	X	0
									139	8.0s		
									140	9.0s		
									141	10s		
									142-149	Idle		
										<b>Dim to Warm</b>		
									150-154	DTW On		
									155-159	DTW Off		
									160-255	Idle		
		6		11	19	9	15	13		<b>Control</b>	X	0
									0-29	Idle		
									30-39	Fan Mode Auto		
									40-49	Fan Mode Silent		
									50-59	Fan Mode High		
									60-69	Idle		
										<b>Reset</b>		
									70-79	Gobo Rotator		
									80-99	Idle		
										<b>Refresh Rate (Hz)</b>		
									100	900		
									101	910		
									102	920		
									103	930		
									104	940		
									105	950		
									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
		6		11	19	9	15	13		Refresh Rate (Hz) (continued)	X	0
									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		
									139	1290		
									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
		6		11	19	9	15	13		Refresh Rate (Hz) (continued)	X	0
									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		
									177-178	Balanced Output and Fidelity		
									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'												
2	5	7	11	12	20	10	16	14		Gobo Indexing & Rotation		63
									0-127	Gobo Indexing		
									128-189	Clockwise Gobo Rotation, fast → slow		
									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		

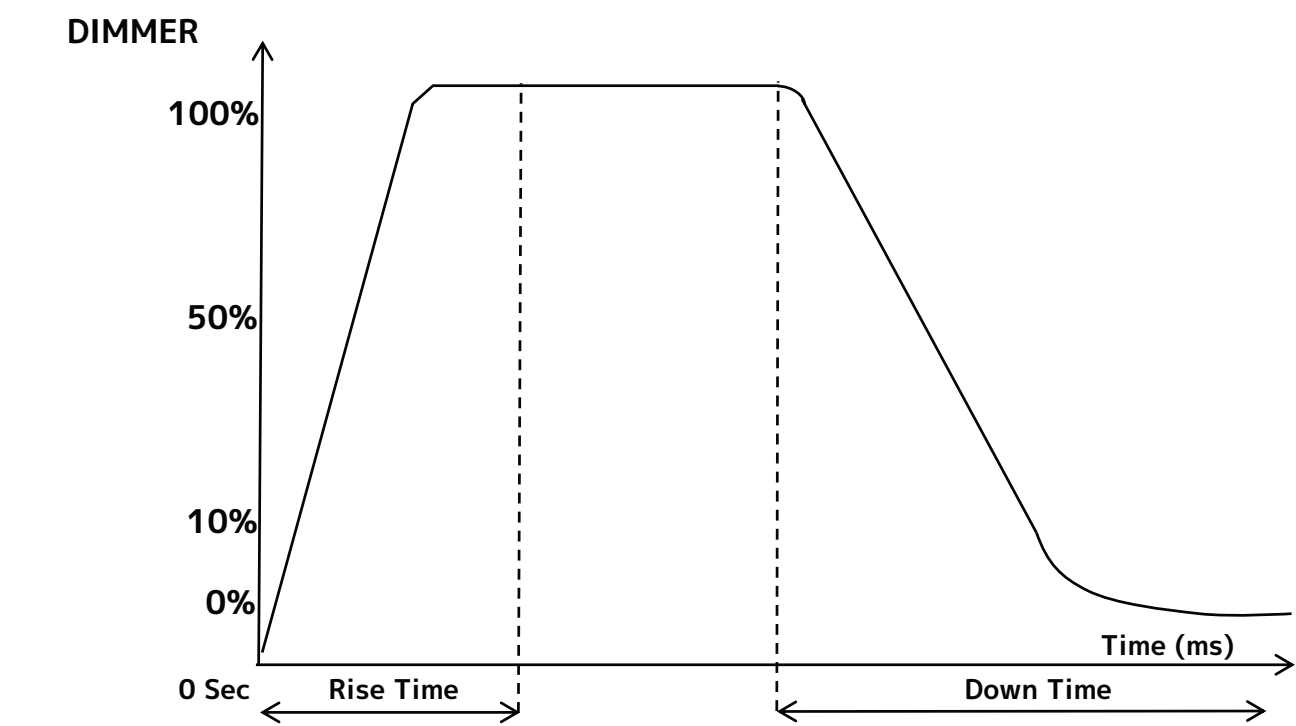
# COLOR TEMPERATURE TABLE

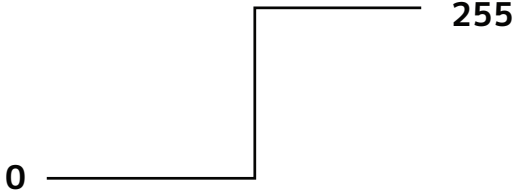
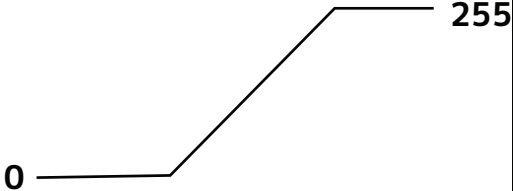
DMX VALUE	COLOR TEMPERATURE (K)	DMX VALUE	COLOR TEMPERATURE (K)
24	2400	55	5500
25	2500	56	5600
26	2600	57	5700
27	2700	58	5800
28	2800	59	5900
29	2900	60	6000
30	3000	61	6100
31	3100	62	6200
32	3200	63	6300
33	3300	64	6400
34	3400	65	6500
35	3500	66	6600
36	3600	67	6700
37	3700	68	6800
38	3800	69	6900
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

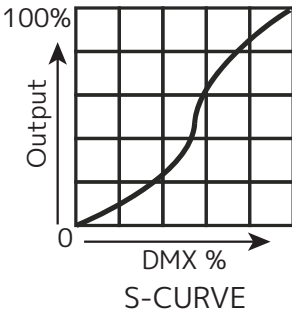
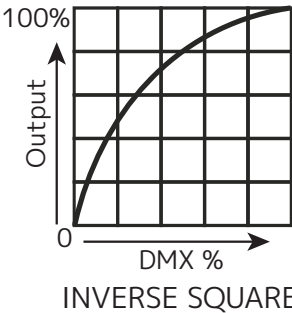
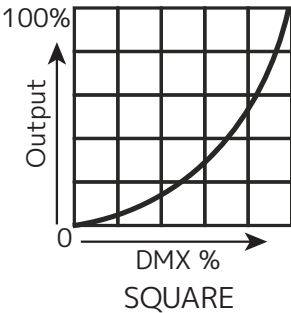
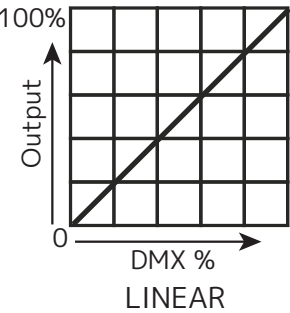
# VIRTUAL COLORS TABLE

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		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





# MAINTENANCE GUIDELINES



**DISCONNECT POWER BEFORE PERFORMING 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.

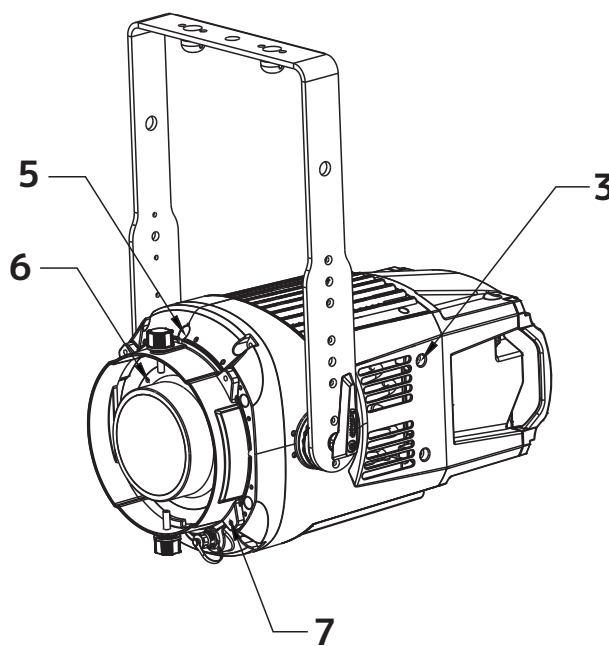
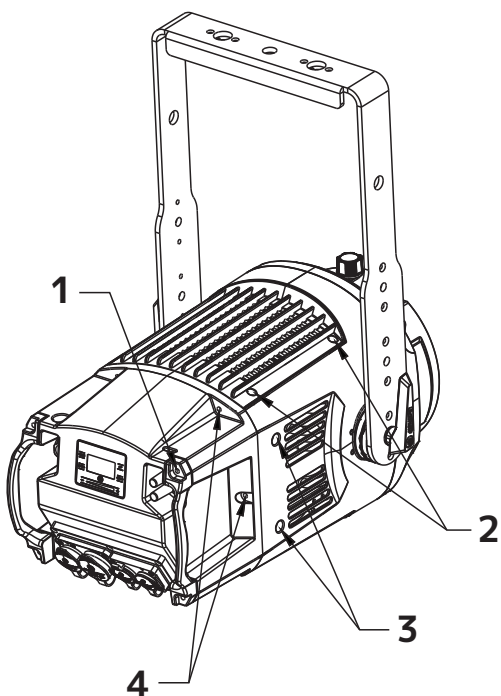
TORQUE DRIVERS (Recommended): UTICA TS-30 (shown)

ALTERNATE DRIVERS:

- Proto J6107A
- Wiha 28887



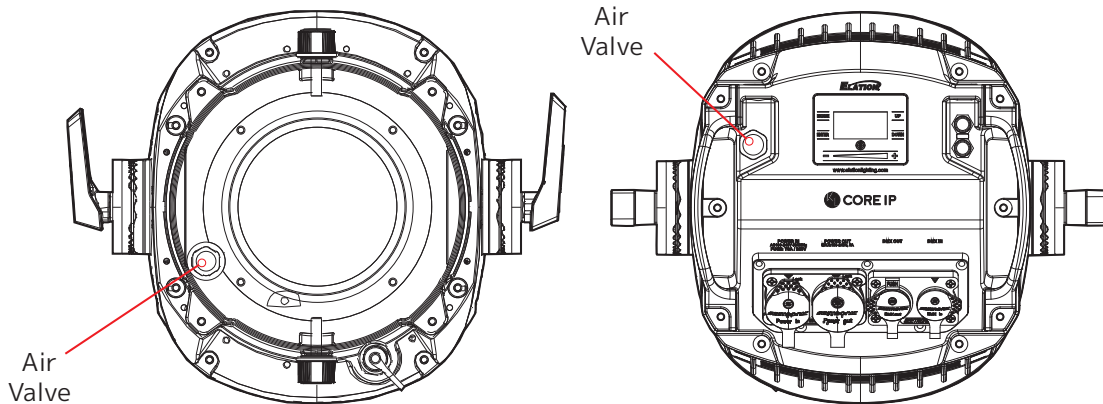
**CAUTION! DO NOT OVER TORQUE SCREWS, AS THIS CAN CAUSE LEAKAGE ISSUES!**



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

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): 8.9" (227.5mm)  
Height (Yoke 90°): 18.5" (471 mm)  
Weight: 22.0 lbs (10.0 kg)

## ASSEMBLED DIMENSIONS:

KL CORE w/ Shutter & 14° Lens  
Weight: 32.6 lbs (14.8 kg)

KL CORE w/ Shutter & 19° or 26° Lens  
Weight: 31.5 lbs (14.3 kg)

KL CORE w/ Shutter & 36° Lens  
Weight: 30.9 lbs (14 kg)

KL CORE w/ Shutter & 50° Lens  
Weight: 30 lbs (13.6 kg)

KL CORE w/ Shutter & 70° Lens  
Weight: 33.3 lbs (15.1 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

Size 'A' Metal Gobo Holder  
Safety Cable  
IP65 Locking Power Cable

## OPTIONAL ACCESSORIES

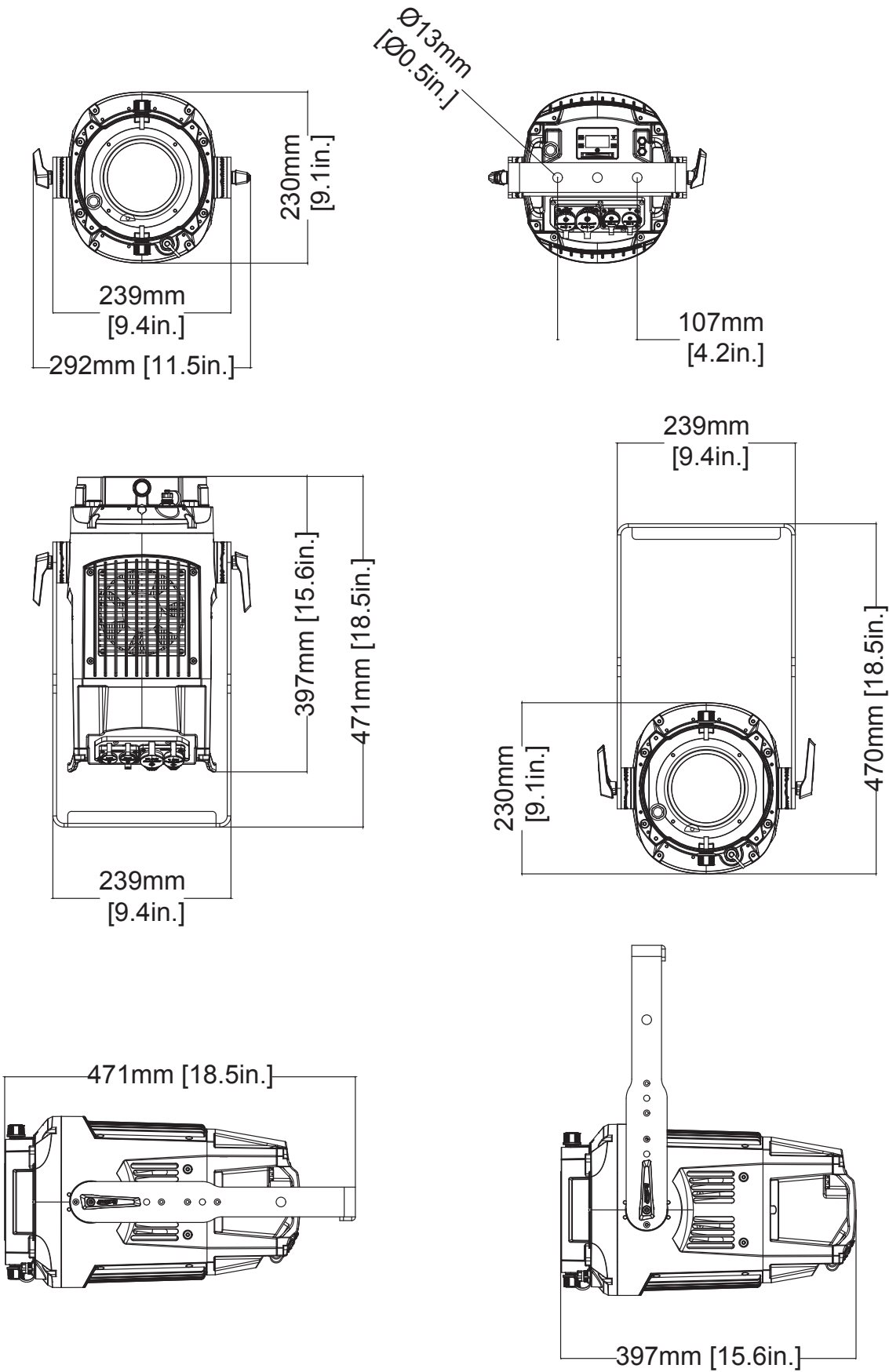
KL CORE IP Shutter Barrel (KLC113)  
KL CORE IP Bowens Mount (KLC136)  
KL CORE IP Fresnel Lens (KLC125)  
KL CORE IP with Shutter Barrel Kit (KLC124)  
14deg IP Lens Tube (IPL014)  
19deg IP Lens Tube (IPL119)  
26deg IP Lens Tube (IPL226)  
36deg IP Lens Tube (IPL336)  
50deg IP Lens Tube (IPL450)  
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



# 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 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.

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!



