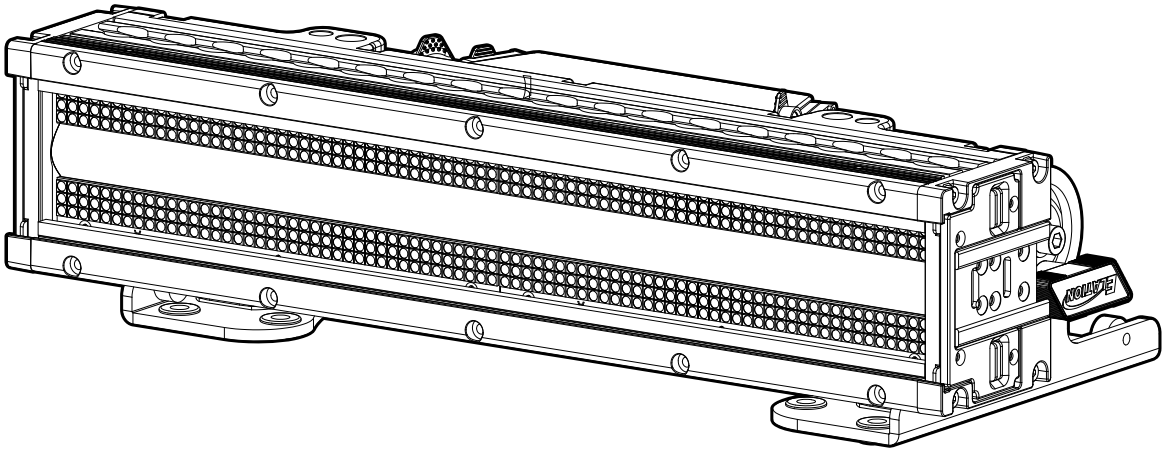
ELATION®



PULSE BAR S

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 | 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 Channel Mode	Notes
05/29/24	1.0	1.01	3/11/22/34/52/124/77/132/110	Initial Release
07/09/24	1.1	N/C	No Change	Updated Dimensional Drawings, Specifications
08/19/24	1.2	1.02	No Change	Updated IP Test Parameters, System Menu, DMX Traits, Dimensional Drawing, Specifications
09/12/24	1.3	N/C	No Change	Added ETL approval
09/23/24	1.4	N/C	No Change	Updated Installation Guidelines
06/19/25	1.5	N/C	No Change	Updated System Menu, DMX Traits, Specifications, Ordering Info
09/22/25	1.6	N/C	No Change	Updated Installation Guidelines
12/04/25	1.7	N/C	No Change	Updated: General Info, IP65 Rated, Installation Guidelines, Dimensional Drawings, Specifications; Added Aria Setup and Guidelines

CONTENTS

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
Safety Cable
IP65 Locking Power Cable
Fixture Interconnect Splice

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 | support@elationlighting.eu

REPLACEMENT PARTS please visit 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

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 for any needed parts or manuals.

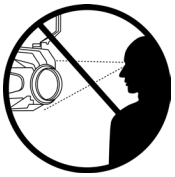
SAFETY GUIDELINES

This fixture is a sophisticated piece of electronic equipment. To guarantee 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 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 DEVICE 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.

DO NOT PLUG THIS UNIT INTO A DIMMER PACK
DO NOT REMOVE THE COVER UNDER ANY CONDITIONS
NEVER OPERATE THIS UNIT WITH THE CASING REMOVED
UNPLUG FROM POWER DURING LONG PERIODS OF NON-USE
DISCONNECT POWER BEFORE PERFORMING MAINTENANCE



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

FIXTURE SHOULD BE PLACED A MINIMUM OF 1.0 FOOT (0.3 METERS) FROM ANY NEARLY OBJECTS OR SURFACES.
FIXTURE SHOULD BE PLACED A MINIMUM OF 1.6 FEET (0.5 METERS) FROM ANY FLAMMABLE MATERIALS.
MAXIMUM AMBIENT OPERATING TEMPERATURE IS 113°F (45°C)

SAFETY GUIDELINES

⚠CAUTION

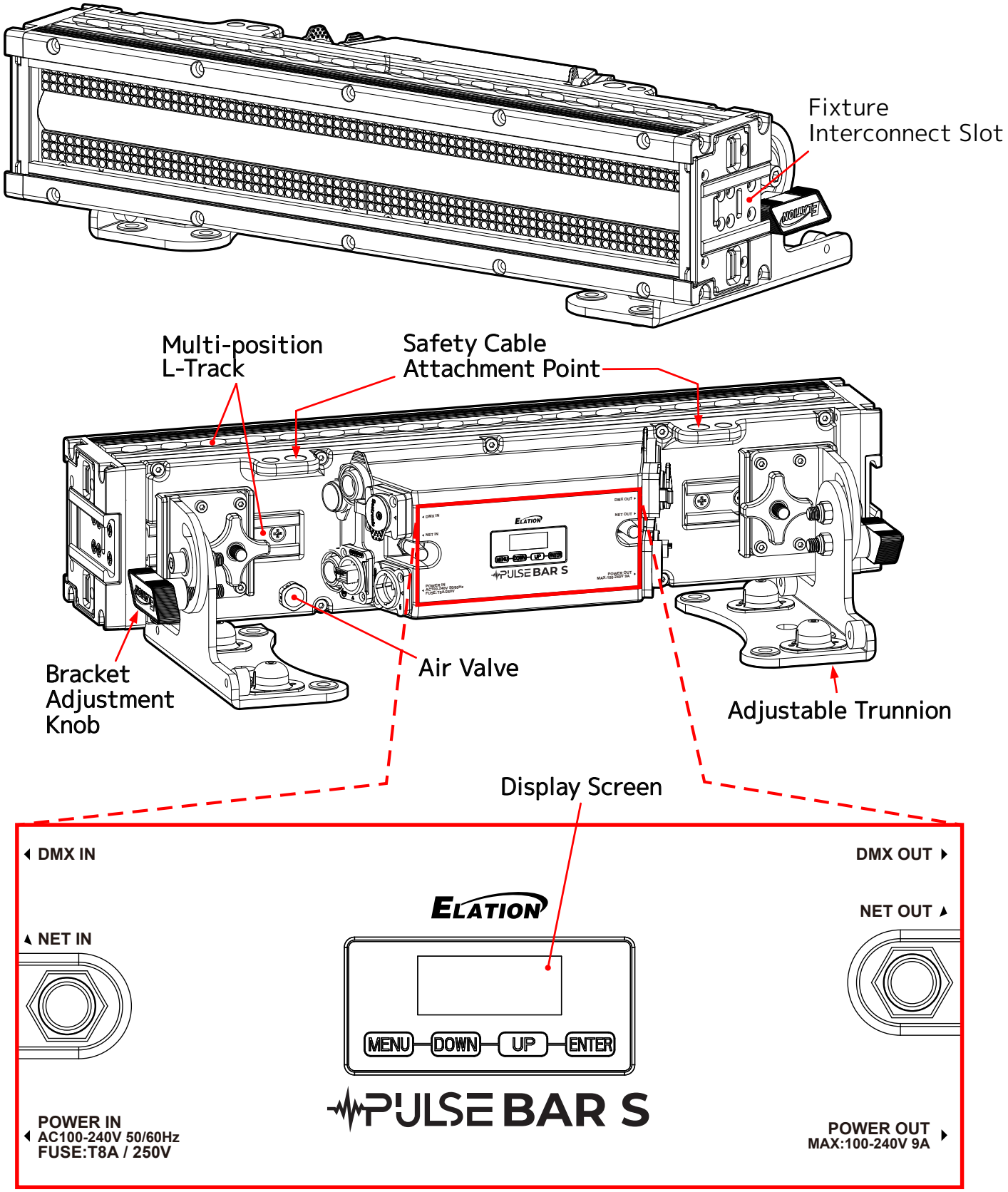
HIGH INTENSITY ULTRAVIOLET LIGHT

AVOID DIRECT EYE & SKIN EXPOSURE.
WEAR PROPER EYE & SKIN PROTECTION.
SEE MANUAL FOR SAFETY INSTRUCTIONS.

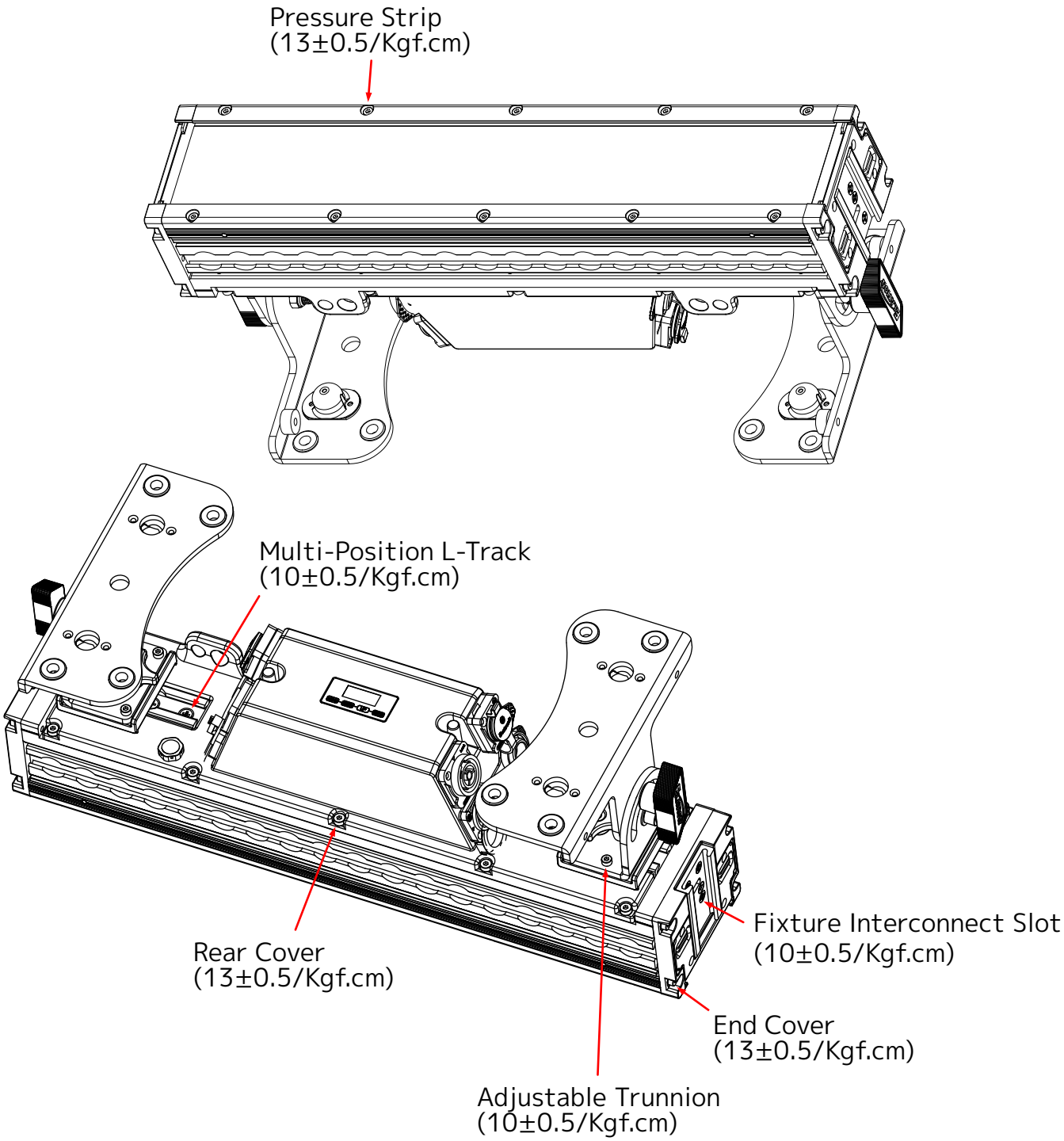
RISK GROUP 3 - RISK OF EXPOSURE TO ULTRAVIOLET UV RADIATION! FIXTURE EMITS HIGH INTENSITY WAVELENGTH OF ULTRAVIOLET UV LIGHT FROM THE UV COLOR FILTER. WEAR PROPER EYE AND SKIN PROTECTION. AVOID PROLONGED PERIODS OF EXPOSURE TO UV COLOR FILTER. AVOID WEARING WHITE COLOR CLOTHING AND/OR USING UV PAINTS ON SKIN. AVOID DIRECT EYE AND/OR SKIN EXPOSURE AT DISTANCES LESS THAN 10 feet (3m). DO NOT OPERATE FIXTURE WITH DAMAGED/MISSING EXTERNAL COVERS. DO NOT LOOK DIRECTLY INTO THE UV LIGHT AND/OR VIEW UV LIGHT DIRECTLY WITH OPTICAL INSTRUMENTS THAT MAY CONCENTRATE THE LIGHT/RADIATION OUTPUT. INDIVIDUALS SUFFERING FROM A RANGE OF EYE CONDITIONS, SUNLIGHT EXPOSURE DISORDERS, OR INDIVIDUALS USING PHOTOSENSITIVE MEDICATION, MAY RECEIVE DISCOMFORT IF EXPOSED TO THE ULTRAVIOLET UV LIGHT EMITTED FROM THE UV LED.

- **DO NOT TOUCH** the fixture housing during operation. Turn OFF the power and allow approximately 15 minutes for the fixture to cool down before serving.
- **DO NOT** shake fixture, avoid brute force when installing and/or operating fixture.
- **DO NOT** operate fixture if the power cord is frayed, crimped damaged and/or if any of the power cord connectors are damaged and do not insert into the fixture securely with ease.
- **NEVER** force a power cord connector into the fixture. If the power cord or any of its connectors are damaged, replace it immediately with a new one of similar power rating.
- **DO NOT** block any air ventilation slots.
- All fan and air inlets must remain clean and never blocked.
- Allow approx.6’’(15cm) between fixture and other devices or a wall for proper cooling.
- Always disconnect fixture from main power source before performing any type of service and/or cleaning procedure. Only handle the power cord by the plug end, never pull out the plug by tugging the wire portion of the cord.
- During the initial operation of this fixture, a light smoke or smell may emit from the interior of the fixture. This is a normal process and is caused by excess paint in the interior of the casing burning off from the heat associated with the lamp and will decrease gradually over time.
- Consistent operational breaks will ensure the fixture will function properly for many years.
- **ONLY** use the original packaging and materials to transport the fixture in for service.

OVERVIEW


Fixture
Interconnect Slot
Multi-position
L-Track
Safety Cable
Attachment Point
Bracket
Adjustment
Knob
Air Valve
Adjustable Trunnion
Display Screen
DMX IN
DMX OUT
NET IN
NET OUT
MENU
DOWN
UP
ENTER
POWER IN
AC100-240V 50/60Hz
FUSE:T8A / 250V
POWER OUT
MAX:100-240V 9A

TORQUE SETTINGS FOR SCREWS



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

TO CONFIRM THE IP65 INTEGRITY, TEST FIXTURE USING THE ELATION IP TESTER. CONTACT ELATION SERVICE FOR MORE DETAILS.

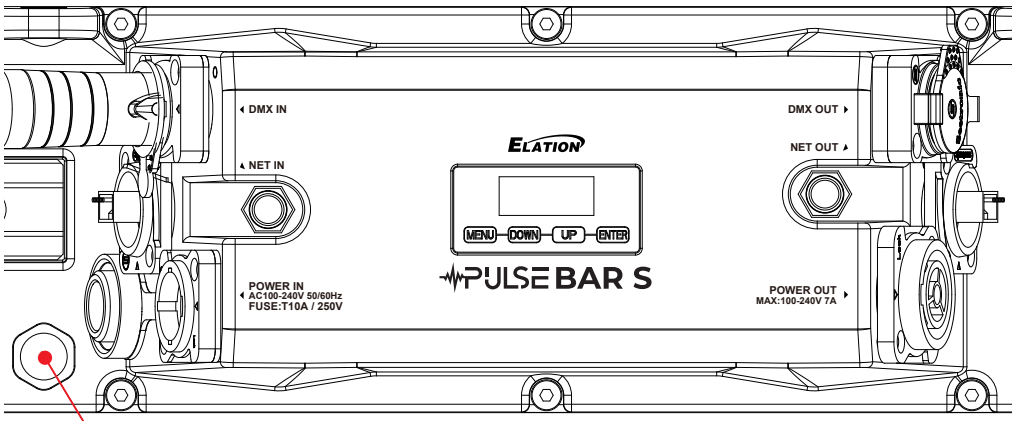
IP TEST PARAMETERS

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. The air valve is located on the back panel next to the display screen, as 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: position the unit with the air valve pointing upwards, then open the air valve 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.

Elation Product	Minimum Value		Maximum Value		Inflation Time	Balance Time	Inspection Time	Leakage
	Kpa	Psi	Kpa	Psi	S	S	S	Pa
Elation PULSE BAR S	20	3	23	3	30	15	15	>100



INSTALLATION GUIDELINES

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

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

MINIMUM DISTANCE TO OBJECTS/SURFACES IS 1 FOOT (0.3 METERS)

MINIMUM DISTANCE OF FLAMMABLE MATERIALS FROM THE SURFACE IS 1.6 FEET (0.5 METER)

MAXIMUM AMBIENT TEMPERATURE 113° F (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 a single fixture or multiple fixtures to any metal truss/structure or placing the fixture(s) on any surface, a professional equipment installer **MUST** be consulted to determine if the metal truss/structure or surface is properly certified to safely hold the combined weight of the fixture(s), clamps, cables, and accessories.

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

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

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

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

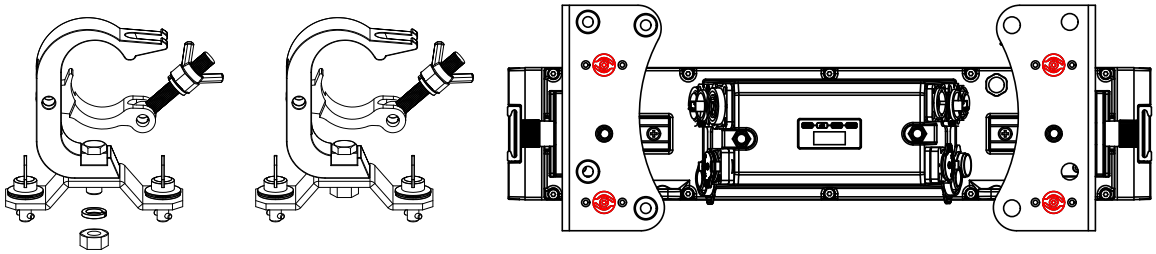
INSTALLATION GUIDELINES

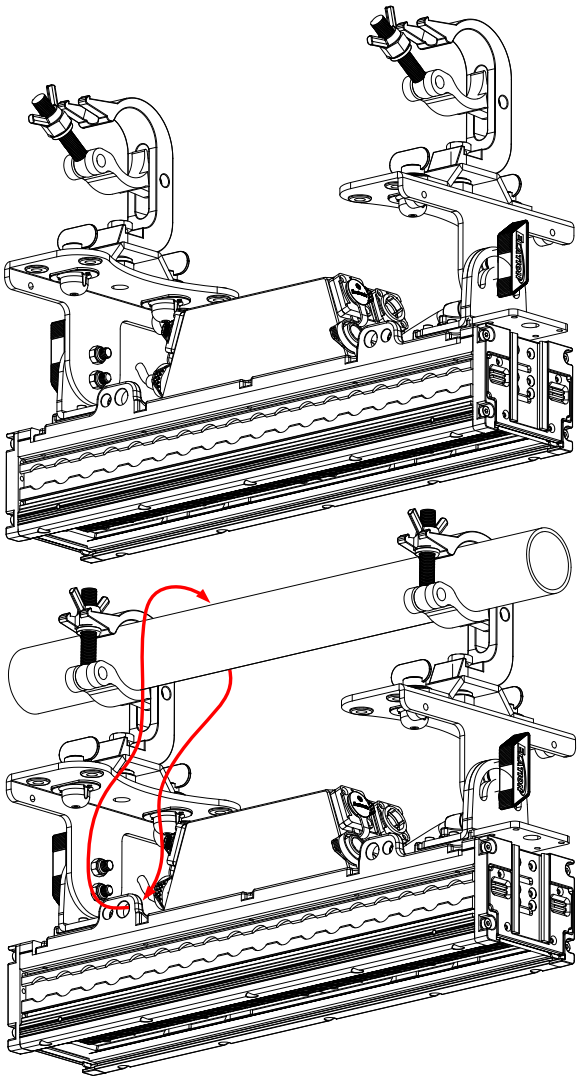
CLAMP INSTALLATION

This device features a mounting clamp attachment point built into the Adjustable Trunnions, as well as a safety cable attachment point located on the bottom of the fixture.

OMEGA BRACKETS WITH CLAMP INSTALLATION

Insert the Omega Brackets into the matching holes on the Adjustable Trunnion. Secure the Omega Brackets to the fixture by turning each quick-lock fastener ¼ turn clockwise; making sure the fastener is completely locked.





SAFETY CABLE

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

IF THE FIXTURES ARE PART OF A LARGER ARRAY, ATTACH A SAFETY CABLE TO THE SAFETY CABLE ATTACHMENT POINT ON THE BACK OF EACH FIXTURE. FOR RIGGING PURPOSES, SECURE THE TOP SAFETY CABLE TO A FIXED POINT AND LOOP EACH SUBSEQUENT SAFETY CABLE THROUGH THE ONE ABOVE IT.

MOUNTING THE FIXTURE ON A TRUSS USING CLAMPS WITH OMEGA BRACKETS

When mounting the fixture to a truss, be sure to secure an appropriately rated professional grade rigging clamp to the included **Omega Brackets** using an M10 or M12 screw fitted through the center hole of the **Omega Brackets**. The fixture provides a built-in rigging point for a **SAFETY CABLE** (not included). Be sure to use the designated rigging points for the safety cable and never secure a safety cable to a carrying handle.

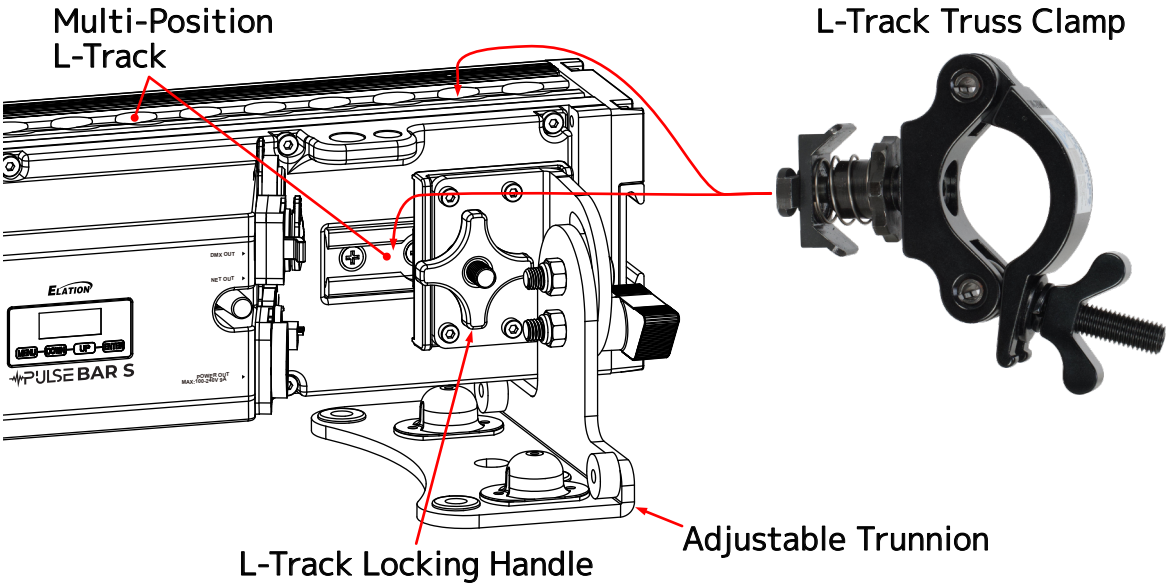
INSTALLATION GUIDELINES

L-TRACK MOUNTING

The L-track mounting system enables the user to slide the mounting clamps along the tracks and secure them in the desired position. The L-tracks are situated on the Rear, and along the sides of the fixture. Special L-track mounting clamps, which feature an L-track attachment rail instead of a mounting bolt hole, are available in both standard and extended lengths. Similarly, L-track adapters are also available, which can be fitted to any standard mounting clamp.

To attach an L-track clamp or adapter, simply insert the attachment rail into the matching track on the fixture, slide it to the desired location, and tighten the fastener knob on the attachment to ensure it is securely in place.

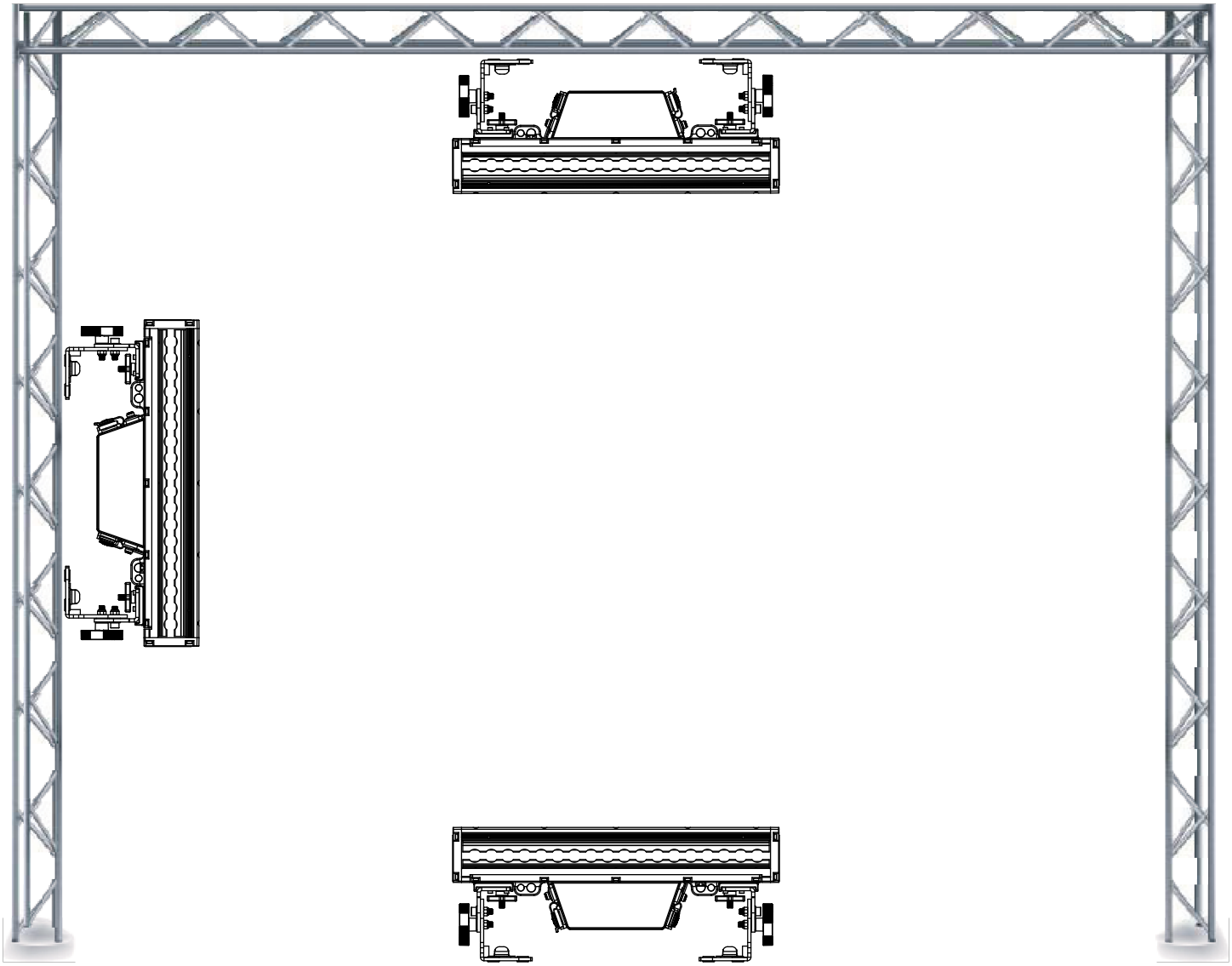
When utilizing the L-track for rigging, the maximum capacity is 8 fixtures, or 187 lbs (84.82 kg).



INSTALLATION GUIDELINES

FIXTURE INSTALLATION

The Elation PULSE BAR S is fully operational in three different mounting positions, hanging upside-down, mounted sideways on trussing, or set on a flat level surface. Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

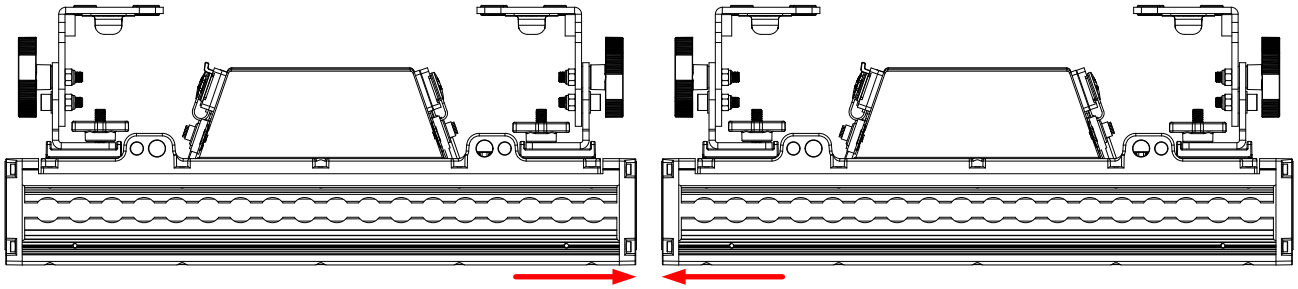


FALLING FIXTURES CAN CAUSE SEVERE INJURY OR SERIOUS EQUIPMENT DAMAGE! FOR THIS REASON, FIXTURES SHOULD BE INSTALLED AND INSPECTED ONLY BY QUALIFIED PERSONNEL. DO NOT INSTALL THE UNIT IF YOU LACK THE QUALIFICATIONS TO DO SO, OR IF YOU HAVE DOUBTS ABOUT THE SAFETY AND SECURITY OF THE INSTALLATION SETUP OR LOCATION!

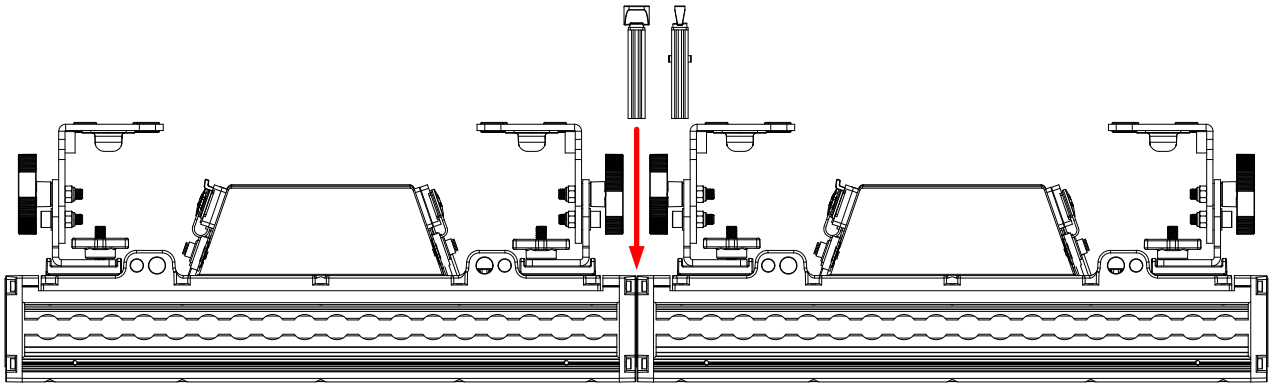
ALWAYS ATTACH A SAFETY CABLE WHENEVER INSTALLING THIS FIXTURE IN A SUSPENDED ENVIRONMENT TO ENSURE THE FIXTURE WILL NOT FALL IF THE CLAMP FAILS.

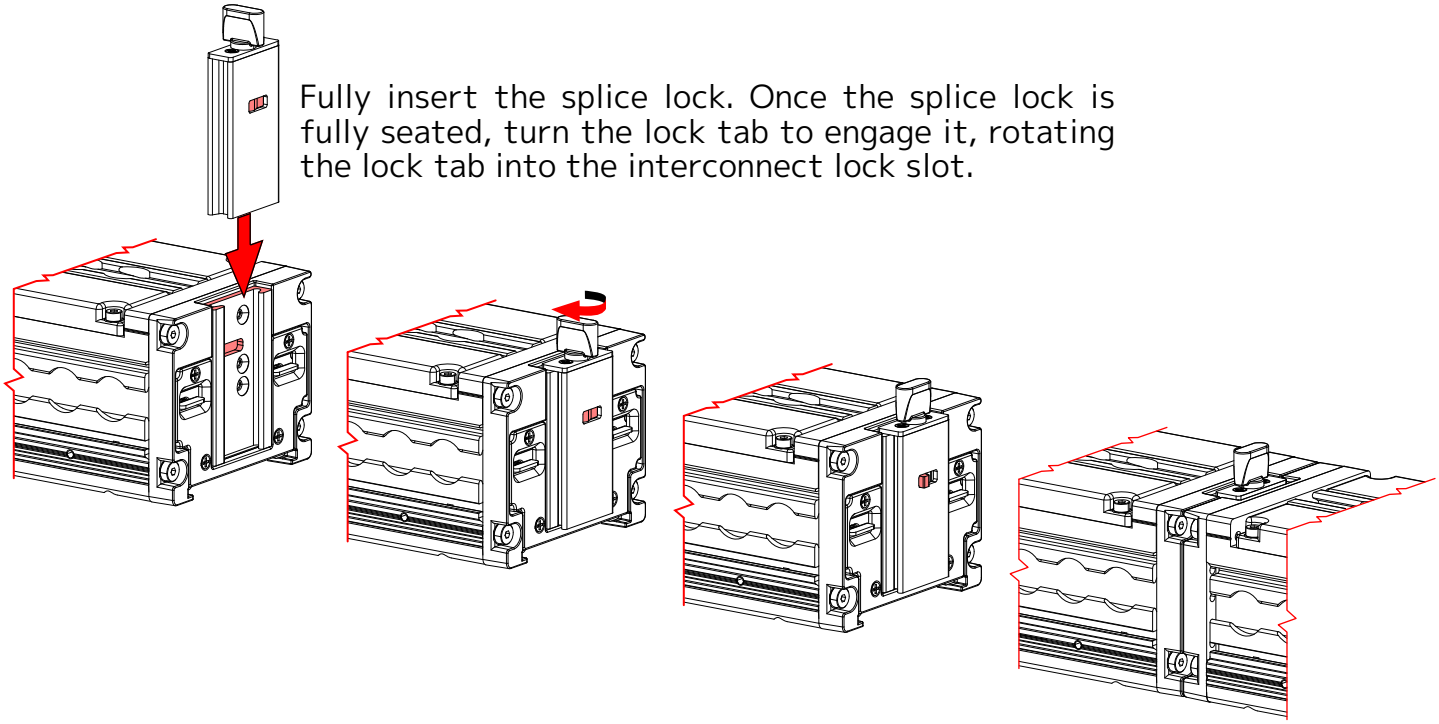
INSTALLATION GUIDELINES

FIXTURE INTERCONNECTORS

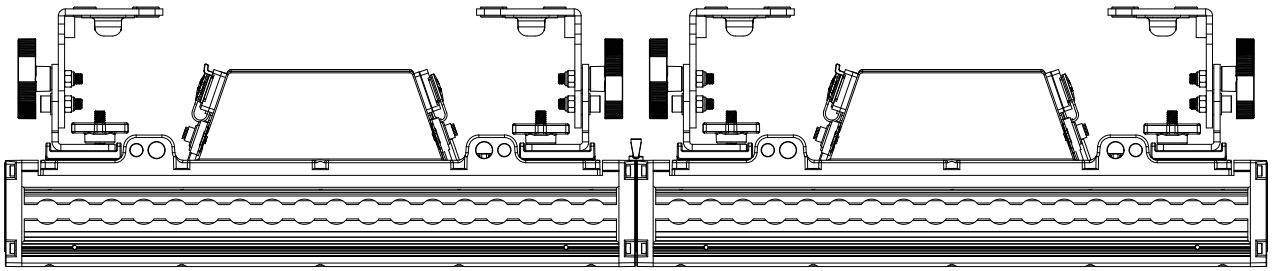


To connect the fixtures end-to-end, ensure that the interconnect slots are flush.





Fully insert the splice lock. Once the splice lock is fully seated, turn the lock tab to engage it, rotating the lock tab into the interconnect lock slot.



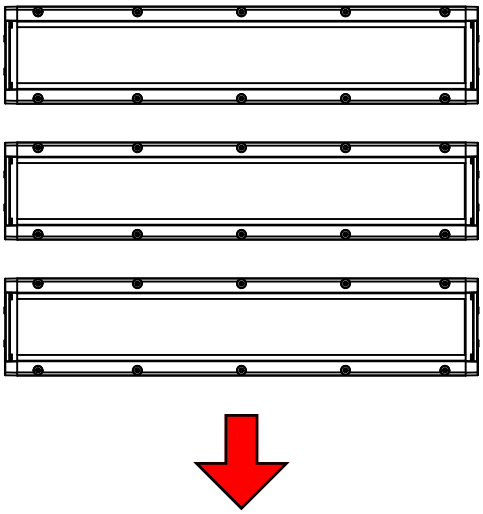
INSTALLATION GUIDELINES

RIGGING LIMIT

ATTENTION! It is crucial to ensure that any arrangement consisting of multiple interconnected fixtures, whether in a vertical, horizontal, or shaped configuration, is securely and properly supported and fixed to prevent any movement that may arise from lateral forces, such as wind or physical contact with a person or other object.

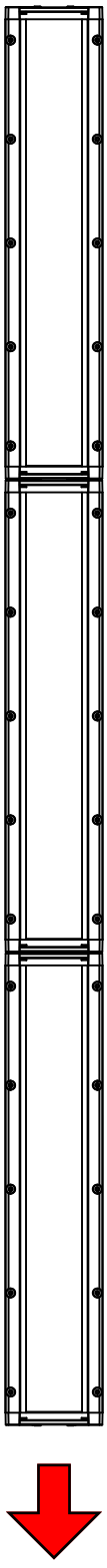
HORIZONTAL SUSPENSION

When utilizing the provided Trunnions for rigging in a horizontal array orientation, the maximum capacity is 4 fixtures, or 96 lbs (43.54 kg). However, if employing the L-Track for rigging in the same orientation, the maximum capacity increases to 8 fixtures, or 187 lbs (84.82 kg).



VERTICAL SUSPENSION

When rigging vertically with Interconnect Splices to connect fixtures, the maximum capacity is 8 fixtures, or 187 lbs (84.82 kg).



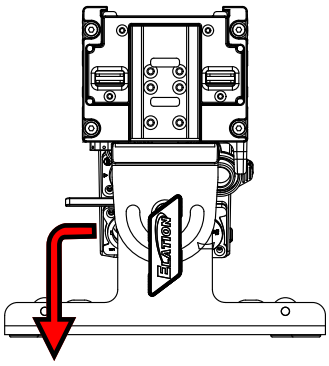
ATTENTION! It is crucial to ensure that any arrangement consisting of multiple interconnected fixtures, whether in a vertical, horizontal, or shaped configuration, is securely and properly supported and fixed to prevent any movement that may arise from lateral forces, such as wind or physical contact with a person or other object.

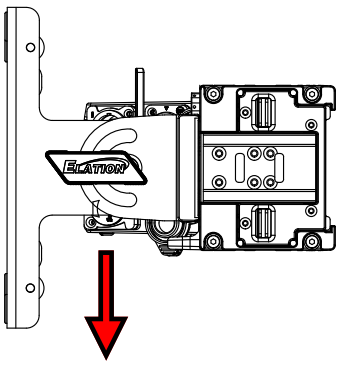
IF THE FIXTURES ARE PART OF A LARGER ARRAY, ATTACH A SAFETY CABLE TO THE SAFETY CABLE ATTACHMENT POINT ON THE BACK OF EACH FIXTURE. FOR RIGGING PURPOSES, SECURE THE TOP SAFETY CABLE TO A FIXED POINT AND LOOP EACH SUBSEQUENT SAFETY CABLE THROUGH THE ONE ABOVE IT.

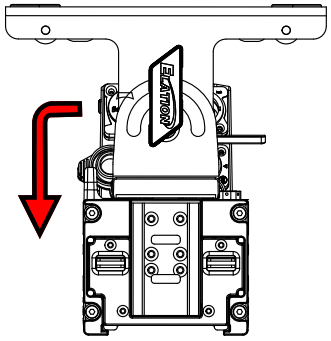
INSTALLATION GUIDELINE

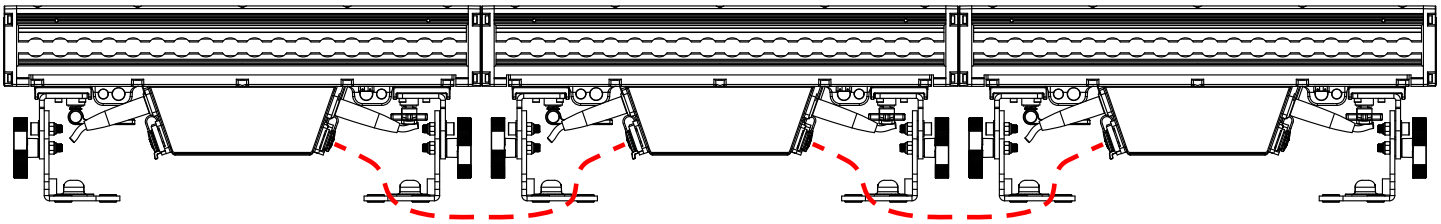
POWER AND DATA CABLES

REGARDLESS OR FIXTURE ORIENTATION, TO MAINTAIN THE IP65 RATING INTEGRITY OF THE FIXTURE, ALL CABLES MUST BE ROUTED TOWARDS THE GROUND TO PREVENT WATER ACCUMULATION AROUND THE CONNECTIONS.









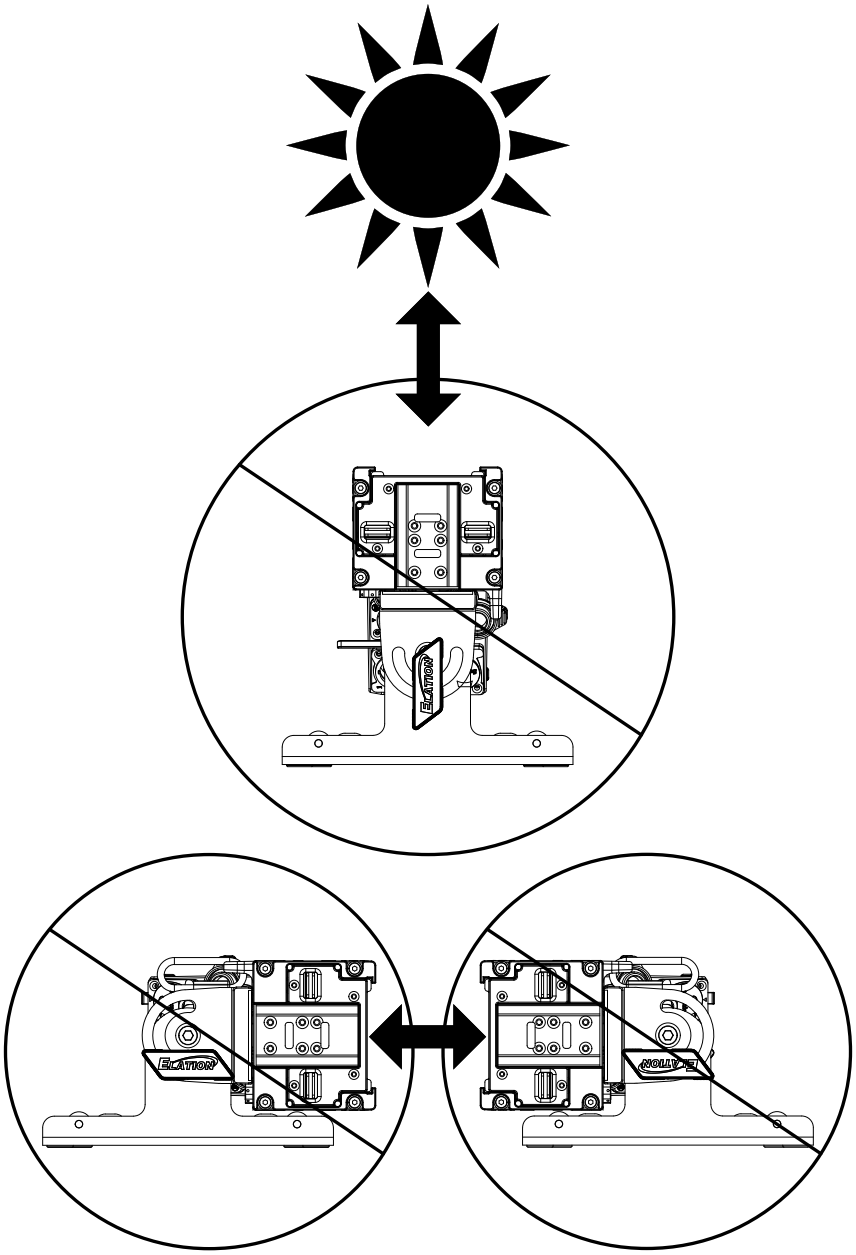
INSTALLATION GUIDELINES

POTENTIAL INTERNAL FIXTURE DAMAGE FROM EXTERNAL SOURCES OF LIGHT BEAMS

External sources of light beams from direct sunlight, lighting 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 to optics, dichroic color filters, glass and metal gobos, prisms, animation wheels, frost filters, iris, shutters, motors, belts, wiring, discharge lamps, and LEDs.

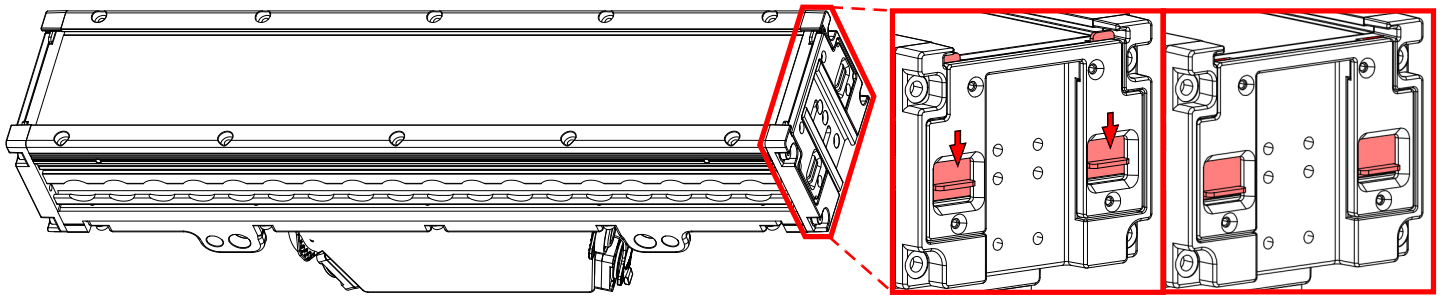
This issue is not specific only to ELATION lighting fixtures, it is a common issue with lighting fixtures from all manufacturers. Although there is no true way to fully prevent this issue from happening, the guidelines below can prevent any potential damage from occurring if followed. Contact ELATION Service for more details.

DO NOT EXPOSE THE FIXTURE AND/OR FRONT LENS OPENING TO LIGHT BEAMS FROM DIRECT SUNLIGHT, OTHER LIGHTING MOVING HEAD FIXTURES, AND LASERS WHILE UNPACKING, INSTALLATION, USE, AND EXTENDED IDLE TIMES OUTDOORS. DO NOT FOCUS A LIGHT BEAM FROM ONE LIGHTING FIXTURE DIRECTLY TOWARDS ANOTHER.

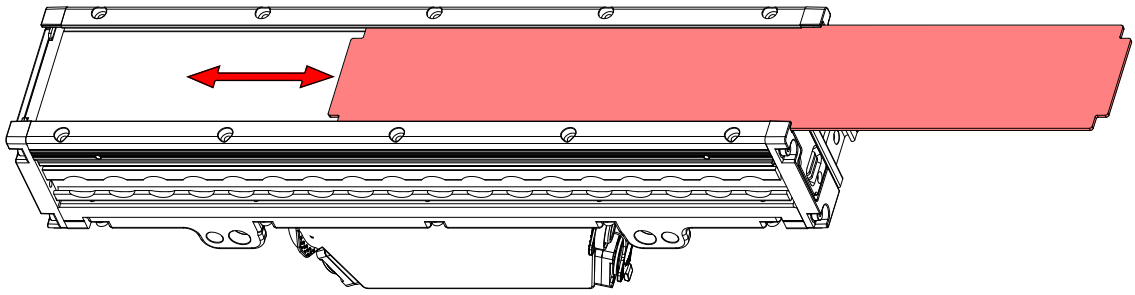


ACCESSORY INSTALLATION - FROST LENS

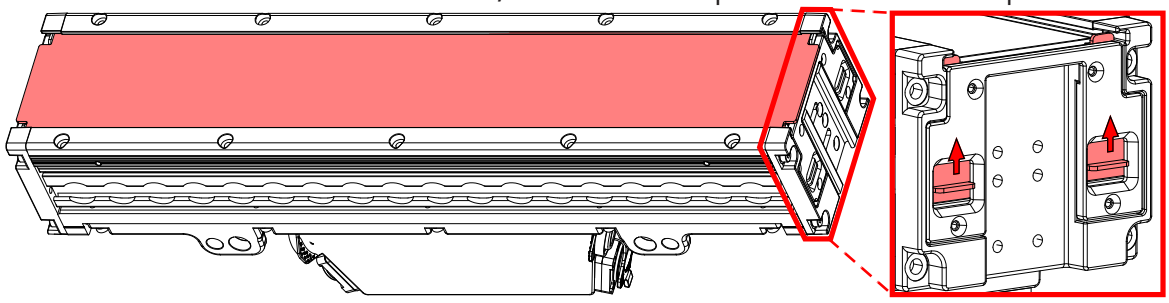
1. Slide lock levers downward to retract the locking tabs.



2. Install the Frost Lens by sliding it into the lens groove.

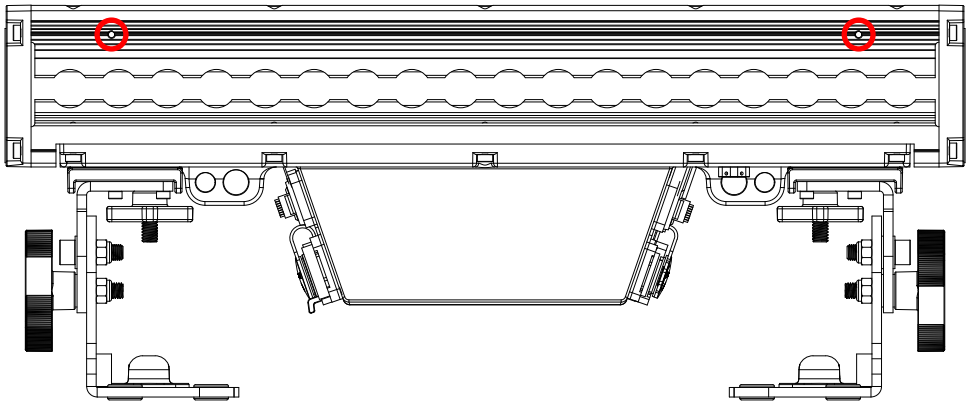


3. With the Frost Lens installed, slide levers upward to lock it in place.

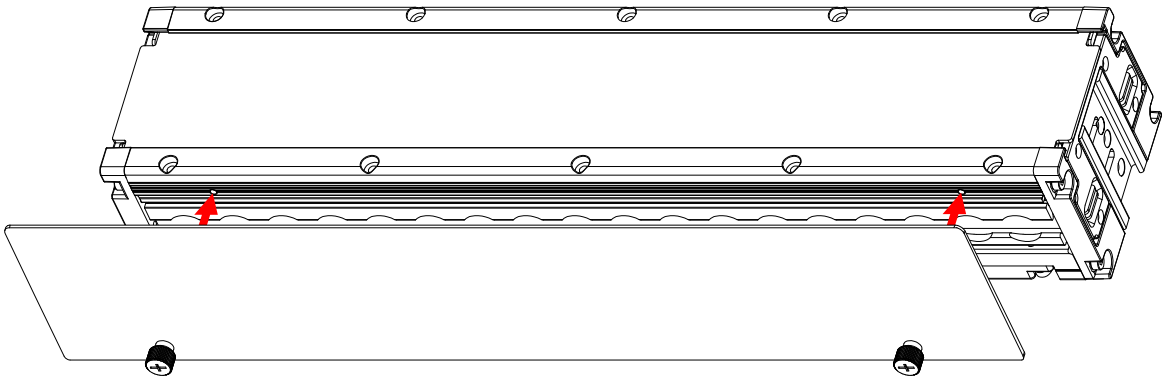


ACCESSORY INSTALLATION - GLARE SHIELD (OPTIONAL)

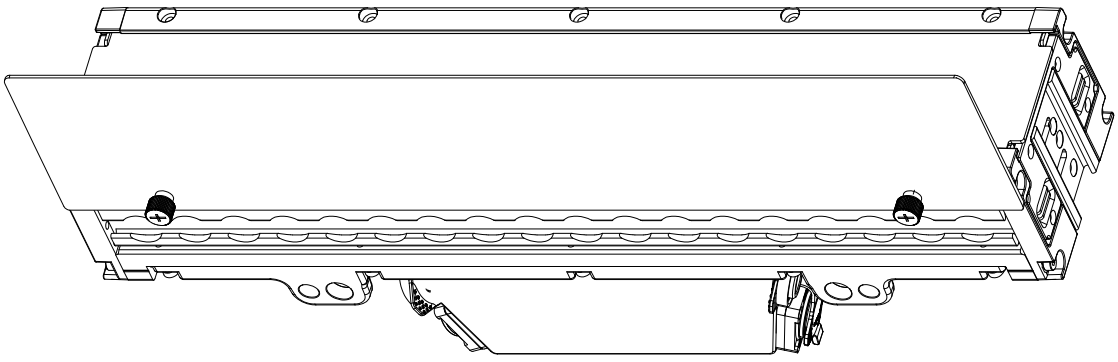
1. Locate two Glare Shield mounting screw holes on side of fixture.



2. Align the thumbscrews of the Glare Shield with the mounting screw holes and insert them.



3. Tighten the two thumbscrews to secure Glare Shield. Thumbscrews can also be tightened with a Phillips screw driver.



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.

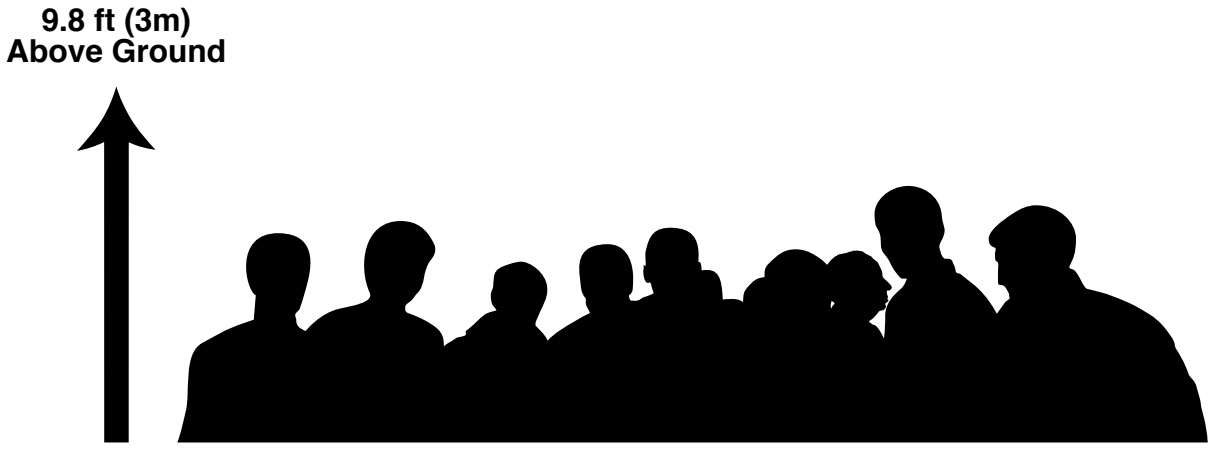
In summary, if an application demands high data rates and more bandwidth in urban or densely populated areas where interference management is feasible, the 2.4 GHz frequency is a suitable choice. On the other hand, for applications requiring long-range communication and better obstacle penetration, particularly 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.



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, and allows the DMX systems of the fixtures to be modified and monitored remotely. This protocol is ideal for instances in which a unit is installed in a location that is 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 its 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:

Device ID	Device Model ID	RDM Code	Personality ID
0000-FFFF	48	22A6	3CH Xenon Strb 11CH Simple Strb 24CH Strobe FX 36CH Large Pixel 52CH Simple Pxl 124CH Pxl Focus 79CH Basic Full 134CH Full Mode 110CH Raw Mode

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:

[0x00C1] Boot Software Version ID	[0x00B0] Language
[0x00C2] Boot Software Version Label	[0x00A0] Language Capabilities
[0x0032] Clear Status ID	[0x0081] Manufacturer Label
[0x0015] Comms Status	[0x1010] Power State
[0x0122] Default Slot Value	[0x1031] Preset Playback
[0x0400] Device Hours	[0x0070] Product Detail ID List
[0x0082] Device Label	[0x0011] Proxied Device Count
[0x0080] Device Model Description	[0x0603] Realtime Clock
[0x0405] Device Power Cycles	[0x0200] Sensor Definition
[0x0500] Display Invert	[0x0201] Sensor Value
[0x0501] Display Level	[0x0031] Status ID Description
[0x00E0] DMX Personality	[0x0030] Status Messages
[0x00E1] DMX Personality Description	[0x0050] Supported Parameters
[0x00F0] DMX Start Address	

PULSE BAR L FEATURE GUIDE

The Pulse Bar S is distinguished from other fixtures by offering more individually controllable zones and LED types. While this feature is distinctive, there may be instances where users desire less control. To address this, we have developed several DMX modes that reduce the overall number of control zones. However, the need for further customization of a mode or the fixture's appearance may still arise. To enhance the fixture's flexibility, we have introduced Zone Linking capabilities.

Zone Linking allows users to modify the control and response of the RGB StrobeLine LEDs as follows:

1. Default Zone Control follows the standard DMX chart settings.
2. RGB StrobeLine Link to Top CW Strobe mirrors the top center CW Strobe LEDs in white light only, creating a unified central strobe array.
3. RGB StrobeLine Link to Top RGB mirrors the top RGB plate LED zones.
4. RGB StrobeLine Link to Bottom RGB mirrors the bottom RGB plate LED zones.
5. RGB StrobeLine Inactive completely deactivates and turns off the RGB StrobeLine LEDs.

Please note that when Zone Linking is enabled, the originally assigned DMX channels will be ignored and will have no effect on the fixture's output.

FX FUNCTIONS AND FEATURES

Multi-zone fixtures, such as the Pulse Panel S, can be time-consuming to create and record impactful effects. In some cases, limited DMX channels may prevent the full use of a fixture's capabilities. To address this, we developed new ways for programmers to control and customize effects, so they don't need to set the fixture to its maximum DMX channel layout to achieve visual impact.

This new FX control method includes multiple settings that can be adjusted and selected to customize any pre-built effect selected from the fixture library. The fixture separates the effects for the CW Strobe Zones and the RGB Zones, allowing two different looks to be selected simultaneously. Both effect types offer a similar level of customization, except for color.

The fixtures include a pre-built library of effects. Selecting an effect is done via the EFFECT SELECTION channel. Once an effect is chosen, the EFFECT SPEED channel adjusts the playback speed and can also reverse the direction of the effect. A new concept we've introduced is EFFECT SIZE. This channel enables an effect that uses only a small portion of the fixture zones to utilize a larger portion of zones, up to treating the full LED selection as a single large pixel. As the size is on a variable control channel, the effects can be even more dynamic than before.

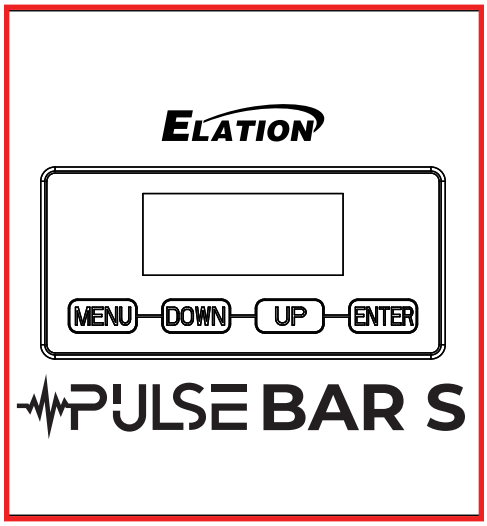
The third channel of control for the FX Functions allows for the timing offset of the effects. If fixtures are set in a line next to one another and an effect needs to move seamlessly from one fixture to the next, the offset can be adjusted until the desired look is achieved. Within the same channel, different randomization settings can be selected to customize the steps for the effect, ensuring that each step, selected pixel, or selected fixture is unique. Lastly, within that channel, the fade between each step of the effects can be adjusted as well. These FX Functions unlock the full effects feature set while occupying only three DMX channels. Once all FX Functions are set as desired, additional Intensity, Strobe, or Color settings can be applied on top of the effect for even more visual impact and customization options.

SYSTEM MENU

The fixture includes an easy to navigate system menu. The control panel display is located on the rear panel of the fixture (see image below) and 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.

PERMANENT INSTALLATION SETTING AND PHANTOM TOUCH

A phantom touch on an LCD screen is an unexpected, unprompted touch that seems to occur without any physical contact, like a raindrop. When installing any fixture in a permanent setting, we recommend setting your display to lock after 10-seconds and not the **OFF** setting. Units in a permanent setting are exposed to various conditions, if a unit is set to **OFF**, the display may interpret a raindrop as a command and change the fixture's setting through a phantom touch. Setting the display to lock after 10-seconds, and not setting a the display to **OFF**, prevents this scenario.



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

Detailed instructions can be found online at www.elationlighting.com.

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 | support@elationlighting.eu

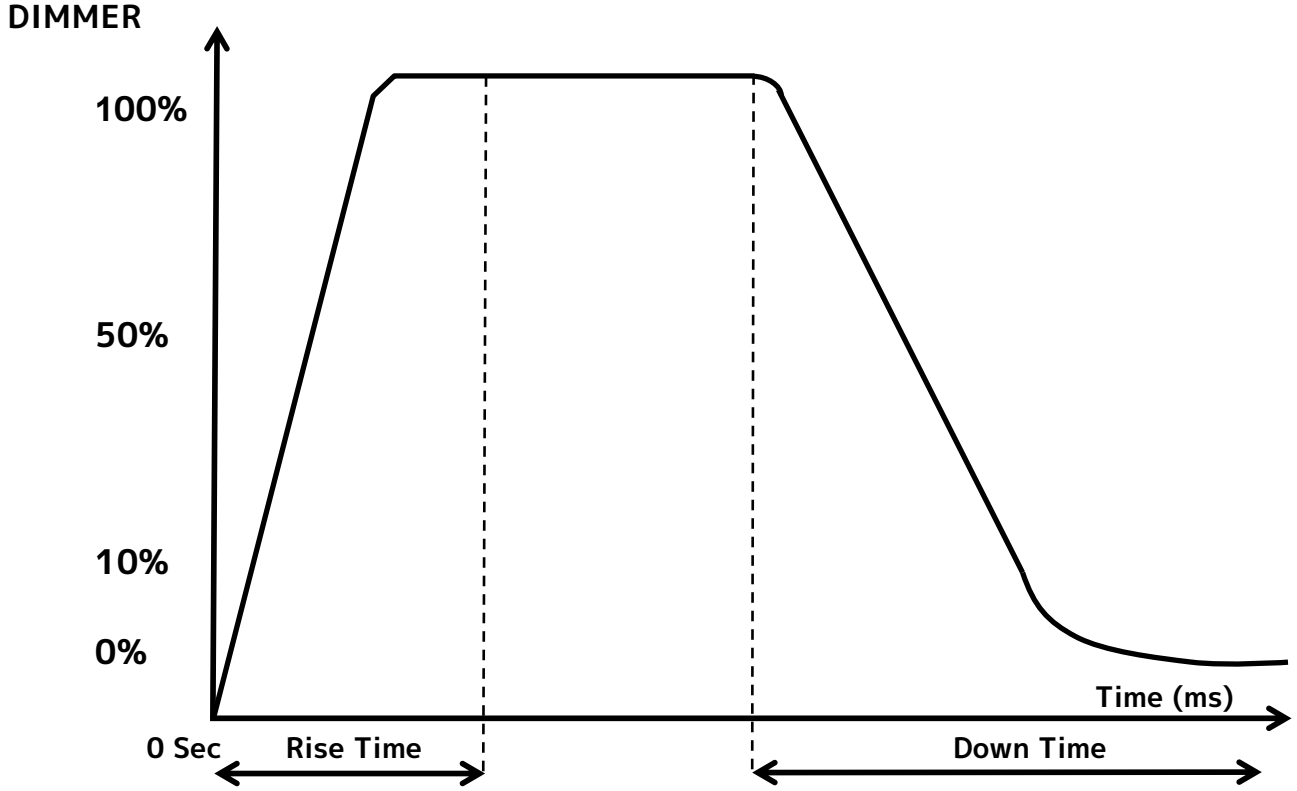
SYSTEM MENU

MAIN MENU	OPTIONS / VALUES (Default Settings in **BOLD**)		
DMX	DMX Address	**001** - 512	
	DMX Mode	3CH Xenon Strb	
		11CH Simple Strb	
		22CH Strobe FX	
		34CH Large Pixel	
		52CH Simple Pxl	
		124CH Pxl Focus	
		77CH Basic Full	
		132CH Full Mode	
		110CH Raw Mode	
	No DMX Status	**Hold Last**, Fade to Black, Standalone	
	Protocol	Select Signal	**DMX** / Art-Net / sACN / Klingnet / Aria In - DMX Out / DMX In - Aria Out
		Universe	0 - 32767 (Default = **1**)
		IP Address	2.x.x.x
		Subnet Mask	**255.0.0.0**
		Ethernet DMX Out	**Off** / On
	Aria	Enable Aria	**Off** / On
		Frequency	**2.4 GHz**
			Sub Gig Us
			Sub Gig EU
		2.4 GHz Ch	**0** - 15
		Sub Gig Ch	**0** - 09
		Enable Mesh	**On** / Off
		Enable Bluetooth	**On** / Off
Control	Manual Control	RGB Dimmer 0-255	000% - **100%**
		Red 0-255	0 - **255**
		Green 0-255	0 - **255**
		Blue 0-255	0 - **255**
		CW Strobe Dimmer	000% - **100%**
		Virtual Color	See Color Macros
	Primary	On / **Off**	
	Secondary	On / **Off**	
	Self Test	All	
		Dimmer	
		Strobe LED	
		Color LED	

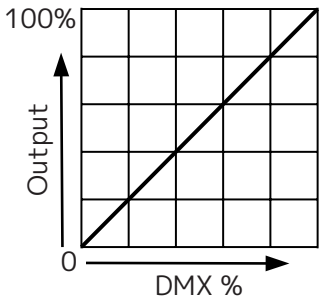
SYSTEM MENU

MAIN MENU	OPTIONS / VALUES (Default Settings in **BOLD**)		
Settings	Dim Modes	**Standard**, Stage, TV, Architectural, Theatre, Stage 2	
		Dim Speed	0s - 10s (Default = **0.1s**)
	Dim Curves	Linear, Square, Square Inverse, **S-Curve**	
	Zone Flip	**Default Layout**, Flip Horizontal, Flip Vertical, Flip Horz & Vert	
	Zone Linking	**Default Control**, RGB Line Top CW, RGB Line Top RGB, RGB Line Bot RGB, RGB Line Off	
	LED Refresh Rate	900Hz - 1500Hz (Default = **1200 Hz**), 2500Hz, 4000Hz, 5000Hz, 6000Hz, 10KHz, 15KHz, 20KHz, 25KHz	
	LED Power Limit	50%, 60%, 70%, 80%, 90%, **100%**	
	Display	Screen Delay	10s - 5min (Default = **1 min**)
		Screen Lock	**Off**, 10s - 5 min
		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)	Update Firmware	On / Off	
	Calibration	All Red 000 - 255	
		All Green 000 - 255	
		All Blue 000 - 255	
		All CW Strobe 000 - 255	
		Red 1 000 - 255	
		Green 1 000 - 255	
		Blue 1 000 - 255	
		...	
		Red 30 000 - 255	
		Green 30 000 - 255	
		Blue 30 000 - 255	
		CW Strobe 1 000 - 255	
		...	
		CW Strobe 20 000 -255	
	Reset Last Run	Yes / No	
	Reset Error Logs	Yes / No	

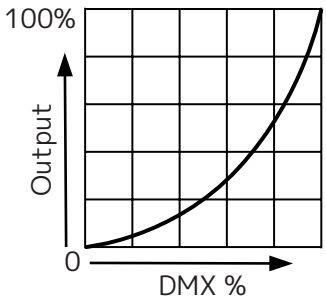
DIMMER MODES & CURVES



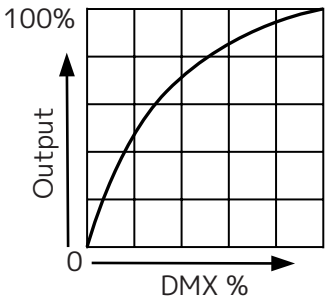
Dimming Curve Ramp Effect	0 sec Fade Time		1 sec Fade Time	
	Rise Time (ms)	Down Time (ms)	Rise Time (ms)	Down Time (ms)
Standard (default)	0	0	0	0
Stage	780	1100	1540	1660
TV	1180	1520	1860	1940
Architectural	1380	1730	2040	2120
Theatre	1580	1940	2230	2280
Stage 2	0	1100	0	1660



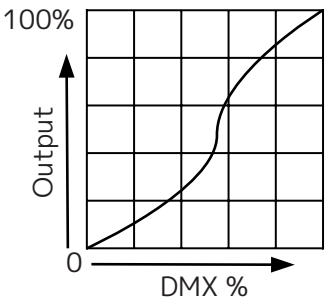
LINEAR



SQUARE



INVERSE SQUARE



S-CURVE

DMX TRAITS

Fixture Part Name	Xenon Strobe 3CH	Simple Strobe 11CH	Strobe FX 22CH	Large Pixels 34CH	Simple Pixel 52CH	Pixel Focus 124CH	Basic Full Control 77CH	Full Control 132CH	Raw Mode 110CH	DMX Values	Function	Snap	Default Value
Main Fixture	1		1	1		1	1	1		0-255	**Master Dimmer**		0
											Intensity 0 → 100%		
		1	2	2	1	2	2	2		0-255	**Strobe Dimmer**		0
											Intensity 0 → 100%		
	2	2	3	3	2	3	3	3		0-255	**CW Strobe Duration**		0
											Min → Max		
	3	3	4	4	3	4	4	4		0-255	**CW Strobe Rate**		0
											Fast → Slow		
		4	5	5	4	5	5	5			**CW Strobe Mode**	X	255
										0-31	Single Strobe/Standard Mode		
										32-63	Ramp Up		
										64-95	Ramp Down		
										96-127	Ramp Up → Ramp Down		
										128-159	Random		
										160-191	Double Flash		
										192-223	Triple Flash		
										224-255	No Effect		
		5	6	6	5	6	6	6		0-255	**RGB Dimmer**		0
											Intensity 0 → 100%		
		6	7	7	6	7	7	7		0-255	**RGB Strobe Duration**		0
											Min → Max		
		7	8	8	7	8	8	8		0-255	**RGB Strobe Rate**		0
											Fast → Slow		
		8	9	9	8	9	9	9			**RGB Strobe Mode**	X	255
										0-31	Single Strobe/Standard Mode		
										32-63	Ramp Up		
										64-95	Ramp Down		
										96-127	Ramp Up → Ramp Down		
										128-159	Random		
										160-191	Double Flash		
										192-223	Triple Flash		
										224-225	Sync Dim and Strobe with CW Strobe		
										226-255	No Effect		
		9	10	10	9	10	10	10		0-255	**All Red**		0
											Red Saturation 0 → 100%		
		10	11	11	10	11	11	11		0-255	**All Green**		0
											Green Saturation 0 → 100%		

DMX TRAITS

Fixture Part Name	Xenon Strobe 3CH	Simple Strobe 11CH	Strobe FX 22CH	Large Pixels 34CH	Simple Pixel 52CH	Pixel Focus 124CH	Basic Full Control 77CH	Full Control 132CH	Raw Mode 110CH	DMX Values	Function	Snap	Default Value
Main Fixture		11	12	12	11	12	12	12		0-255	**All Blue**		0
											Blue Saturation 0 → 100%		
			13				13	13		0-255	**CW Strobe Effect Selection**	X	0
											FX Selection 1 → 255		
			14				14	14			**CW Strobe Effect Speed**		0
										0-126	Slow → Fast		
										127-128	Stop		
										129-255	Rev Fast → Slow		
			15				15	15			**CW Strobe Effect Size**	X	0
										0-50	Idle		
										51-60	1 Zone		
										61-70	2 Zone		
										71-80	4 Zone		
										81-90	8 Zone		
										91-100	10 Zone		
										101-110	20 Zone		
										111-255	Idle		
			16				16	16			**CW Strobe Effect Offset**	X	0
										0	Idle		
										1	Fixture Offset 10 Degrees		
										2	Fixture Offset 20 Degrees		
										3-34	Fixture Offset···		
										35	Fixture Offset 350 Degrees		
										36	Syncronized		
										37-49	Random Fixture Offset		
										50-59	Random Pixel Order		
										60-69	Random Steps		
										70-79	Idle		
											Effect Fade		
										80-89	Sinewave- Cross		
										90-99	Sinewave- Full		
										100-109	Sawtooth- Cross		
										110-119	Sawtooth- Full		
										120-129	Ramp Up		
										130-139	Ramp Down		
										140-149	Steps		
										150-255	Idle		
			17				17	17		0-255	**RGB Effect Selection**	X	0
											FX Selection 1 → 255		
			18				18	18			**RGB Effect Speed**		0
										0-126	Slow → Fast		
										127-128	Stop		
										129-255	Rev Fast → Slow		
			19				19	19			**RGB Effect Size**	X	0
										0-50	Idle		
										51-60	1 Zone		
										61-70	2 Zone		
										71-80	3 Zone		
										81-90	6 Zone		
										91-100	10 Zone		
										101-110	15 Zone		
										111-120	30 Zone		
										121-255	Idle		

DMX TRAITS

Fixture Part Name	Xenon Strobe 3CH	Simple Strobe 11CH	Strobe FX 22CH	Large Pixels 34CH	Simple Pixel 52CH	Pixel Focus 124CH	Basic Full Control 77CH	Full Control 132CH	Raw Mode 110CH	DMX Values	Function	Snap	Default Value
Main Fixture			20				20	20			**RGB Effect Offset**	X	0
										0	Idle		
										1	Fixture Offset 10 Degrees		
										2	Fixture Offset 20 Degrees		
										3-34	Fixture Offset···		
										35	Fixture Offset 350 Degrees		
										36	Syncronized		
										37-49	Random Fixture Offset		
										50-59	Random Pixel Order		
										60-69	Random Steps		
										70-79	Idle		
											Effect Fade		
										80-89	Sinewave- Cross		
										90-99	Sinewave- Full		
										100-109	Sawtooth- Cross		
										110-119	Sawtooth- Full		
										120-129	Ramp Up		
										130-139	Ramp Down		
										140-149	Steps		
										150-255	Idle		
			21	13		13	21	21			**Dim Modes**	X	0
										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		
										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		
										139	8.0s		
										140	9.0s		
										141	10s		
										142-255	Idle		

DMX TRAITS

Fixture Part Name	Xenon Strobe 3CH	Simple Strobe 11CH	Strobe FX 22CH	Large Pixels 34CH	Simple Pixel 52CH	Pixel Focus 124CH	Basic Full Control 77CH	Full Control 132CH	Raw Mode 110CH	DMX Values	Function	Snap	Default Value
Main Fixture			22	14	12	14	22	22			**Control**	X	0
										0-99	Idle		
											Refresh Rate (Hz)		
										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		
										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		

DMX TRAITS

Fixture Part Name	Xenon Strobe 3CH	Simple Strobe 11CH	Strobe FX 22CH	Large Pixels 34CH	Simple Pixel 52CH	Pixel Focus 124CH	Basic Full Control 77CH	Full Control 132CH	Raw Mode 110CH	DMX Values	Function	Snap	Default Value
Main Fixture			22	14	12	14	22	22		144	1340	X	0
										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		
										160	1500		
										161	2500		
										162	4000		
										163	5000		
										164	6000		
										165	10000		
										166	15000		
										167	20000		
										168	25000		
										169-170	Idle		
											Zone Flip		
										171-172	Default Zone Arrangement		
										173-174	Flip Zones Horizontally		
										175-176	Flip Zones Vertically		
										177-178	Flip Zones Horizontally and Vertically		
										179-183	Idle		
											Zone Linking		
										184-185	RGB Strobeline to Default		
										186-187	RGB StrobeLine Link to Top Center CW Strobe		
										188-189	RGB StrobeLine Link to Top RGB		
										190-191	RGB StrobeLine to Bottom RGB		
										192-193	RGB StrobeLine Inactive		
										194-200	Idle		
											Dimmer Curves		
										201-210	Dimmer Curve: Linear (Default)		
										211-220	Dimmer Curve: Square		
										221-230	Dimmer Curve: Inverse Square		
										231-240	Dimmer Curve: S-Curve		
										241-255	Idle		

DMX TRAITS

Fixture Part Name	Xenon Strobe 3CH	Simple Strobe 11CH	Strobe FX 22CH	Large Pixels 34CH	Simple Pixel 52CH	Pixel Focus 124CH	Basic Full Control 77CH	Full Control 132CH	Raw Mode 110CH	DMX Values	Function	Snap	Default Value
Pixel 1				15	13	15	23	23	1	0-255	**Red 1** Red Saturation 0 → 100%		0
				16	14	16	24	24	2	0-255	**Green 1** Green Saturation 0 → 100%		0
				17	15	17	25	25	3	0-255	**Blue 1** Blue Saturation 0 → 100%		0
Pixel 2				18	16	18	26	26	4	0-255	**Red 2** Red Saturation 0 → 100%		0
				19	17	19	27	27	5	0-255	**Green 2** Green Saturation 0 → 100%		0
				20	18	20	28	28	6	0-255	**Blue 2** Blue Saturation 0 → 100%		0
Pixel 3				21	19	21	29	29	7	0-255	**Red 3** Red Saturation 0 → 100%		0
				22	20	22	30	30	8	0-255	**Green 3** Green Saturation 0 → 100%		0
				23	21	23	31	31	9	0-255	**Blue 3** Blue Saturation 0 → 100%		0
Pixel 4				24	22	24	32	32	10	0-255	**Red 4** Red Saturation 0 → 100%		0
				25	23	25	33	33	11	0-255	**Green 4** Green Saturation 0 → 100%		0
				26	24	26	34	34	12	0-255	**Blue 4** Blue Saturation 0 → 100%		0
Pixel 5					25	27	35	35	13	0-255	**Red 5** Red Saturation 0 → 100%		0
					26	28	36	36	14	0-255	**Green 5** Green Saturation 0 → 100%		0
					27	29	37	37	15	0-255	**Blue 5** Blue Saturation 0 → 100%		0
Pixel 6					28	30	38	38	16	0-255	**Red 6** Red Saturation 0 → 100%		0
					29	31	39	39	17	0-255	**Green 6** Green Saturation 0 → 100%		0
					30	32	40	40	18	0-255	**Blue 6** Blue Saturation 0 → 100%		0
Pixel 7					31	33	41	41	19	0-255	**Red 7** Red Saturation 0 → 100%		0
					32	34	42	42	20	0-255	**Green 7** Green Saturation 0 → 100%		0
					33	35	43	43	21	0-255	**Blue 7** Blue Saturation 0 → 100%		0
Pixel 8					34	36	44	44	22	0-255	**Red 8** Red Saturation 0 → 100%		0
					35	37	45	45	23	0-255	**Green 8** Green Saturation 0 → 100%		0
					36	38	46	46	24	0-255	**Blue 8** Blue Saturation 0 → 100%		0
Pixel 9					37	39	47	47	25	0-255	**Red 9** Red Saturation 0 → 100%		0
					38	40	48	48	26	0-255	**Green 9** Green Saturation 0 → 100%		0
					39	41	49	49	27	0-255	**Blue 9** Blue Saturation 0 → 100%		0
Pixel 10					40	42	50	50	28	0-255	**Red 10** Red Saturation 0 → 100%		0
					41	43	51	51	29	0-255	**Green 10** Green Saturation 0 → 100%		0
					42	44	52	52	30	0-255	**Blue 10** Blue Saturation 0 → 100%		0

DMX TRAITS

Fixture Part Name	Xenon Strobe 3CH	Simple Strobe 11CH	Strobe FX 22CH	Large Pixels 34CH	Simple Pixel 52CH	Pixel Focus 124CH	Basic Full Control 77CH	Full Control 132CH	Raw Mode 110CH	DMX Values	Function	Snap	Default Value
Pixel 11						45		53	31	0-255	**Red 11** Red Saturation 0 → 100%		0
						46		54	32	0-255	**Green 11** Green Saturation 0 → 100%		0
						47		55	33	0-255	**Blue 11** Green Saturation 0 → 100%		0
Pixel 12						48		56	34	0-255	**Red 12** Red Saturation 0 → 100%		0
						49		57	35	0-255	**Green 12** Green Saturation 0 → 100%		0
						50		58	36	0-255	**Blue 12** Blue Saturation 0 → 100%		0
Pixel 13						51		59	37	0-255	**Red 13** Red Saturation 0 → 100%		0
						52		60	38	0-255	**Green 13** Green Saturation 0 → 100%		0
						53		61	39	0-255	**Blue 13** Blue Saturation 0 → 100%		0
Pixel 14						54		62	40	0-255	**Red 14** Red Saturation 0 → 100%		0
						55		63	41	0-255	**Green 14** Green Saturation 0 → 100%		0
						56		64	42	0-255	**Blue 14** Blue Saturation 0 → 100%		0
Pixel 15						57		65	43	0-255	**Red 15** Red Saturation 0 → 100%		0
						58		66	44	0-255	**Green 15** Green Saturation 0 → 100%		0
						59		67	45	0-255	**Blue 15** Blue Saturation 0 → 100%		0
Pixel 16						60		68	46	0-255	**Red 16** Red Saturation 0 → 100%		
						61		69	47	0-255	**Green 16** Green Saturation 0 → 100%		0
						62		70	48	0-255	**Blue 16** Blue Saturation 0 → 100%		0
Pixel 17						63		71	49	0-255	**Red 17** Red Saturation 0 → 100%		0
						64		72	50	0-255	**Green 17** Green Saturation 0 → 100%		0
						65		73	51	0-255	**Blue 17** Blue Saturation 0 → 100%		0
Pixel 18						66		74	52	0-255	**Red 18** Red Saturation 0 → 100%		0
						67		75	53	0-255	**Green 18** Green Saturation 0 → 100%		0
						68		76	54	0-255	**Blue 18** Blue Saturation 0 → 100%		0
Pixel 19						69		77	55	0-255	**Red 19** Red Saturation 0 → 100%		0
						70		78	56	0-255	**Green 19** Green Saturation 0 → 100%		0
						71		79	57	0-255	**Blue 19** Blue Saturation 0 → 100%		0
Pixel 20						72		80	58	0-255	**Red 20** Red Saturation 0 → 100%		0
						73		81	59	0-255	**Green 20** Green Saturation 0 → 100%		0
						74		82	60	0-255	**Blue 20** Blue Saturation 0 → 100%		0

DMX TRAITS

Fixture Part Name	Xenon Strobe 3CH	Simple Strobe 11CH	Strobe FX 22CH	Large Pixels 34CH	Simple Pixel 52CH	Pixel Focus 124CH	Basic Full Control 77CH	Full Control 132CH	Raw Mode 110CH	DMX Values	Function	Snap	Default Value
CW Strobe 1				27	43	75	53	83	61	0-255	**CW Strobe 1** Intensity 0 → 100%		0
CW Strobe 2				28	44	76	54	84	62	0-255	**CW Strobe 2** Intensity 0 → 100%		0
CW Strobe 3					45	77	55	85	63	0-255	**CW Strobe 3** Intensity 0 → 100%		0
CW Strobe 4					46	78	56	86	64	0-255	**CW Strobe 4** Intensity 0 → 100%		0
CW Strobe 5					47	79	57	87	65	0-255	**CW Strobe 5** Intensity 0 → 100%		0
CW Strobe 6					48	80	58	88	66	0-255	**CW Strobe 6** Intensity 0 → 100%		0
CW Strobe 7					49	81	59	89	67	0-255	**CW Strobe 7** Intensity 0 → 100%		0
CW Strobe 8					50	82	60	90	68	0-255	**CW Strobe 8** Intensity 0 → 100%		0
CW Strobe 9					51	83	61	91	69	0-255	**CW Strobe 9** Intensity 0 → 100%		0
CW Strobe 10					52	84	62	92	70	0-255	**CW Strobe 10** Intensity 0 → 100%		0
CW Strobe 11						85		93	71	0-255	**CW Strobe 11** Intensity 0 → 100%		0
CW Strobe 12						86		94	72	0-255	**CW Strobe 12** Intensity 0 → 100%		0
CW Strobe 13						87		95	73	0-255	**CW Strobe 13** Intensity 0 → 100%		0
CW Strobe 14						88		96	74	0-255	**CW Strobe 14** Intensity 0 → 100%		0
CW Strobe 15						89		97	75	0-255	**CW Strobe 15** Intensity 0 → 100%		0
CW Strobe 16						90		98	76	0-255	**CW Strobe 16** Intensity 0 → 100%		0
CW Strobe 17						91		99	77	0-255	**CW Strobe 17** Intensity 0 → 100%		0
CW Strobe 18						92		100	78	0-255	**CW Strobe 18** Intensity 0 → 100%		0
CW Strobe 19						93		101	79	0-255	**CW Strobe 19** Intensity 0 → 100%		0
CW Strobe 20						94		102	80	0-255	**CW Strobe 20** Intensity 0 → 100%		0

DMX TRAITS

Fixture Part Name	Xenon Strobe 3CH	Simple Strobe 11CH	Strobe FX 22CH	Large Pixels 34CH	Simple Pixel 52CH	Pixel Focus 124CH	Basic Full Control 77CH	Full Control 132CH	Raw Mode 110CH	DMX Values	Function	Snap	Default Value
RGB StrobeLine 1				29		95	63	103	81	0-255	**StrobeLine Red 1** Red Saturation 0 → 100%		0
				30		96	64	104	82	0-255	**StrobeLine Green 1** Green Saturation 0 → 100%		0
				31		97	65	105	83	0-255	**StrobeLine Blue 1** Blue Saturation 0 → 100%		0
RGB StrobeLine 2				32		98	66	106	84	0-255	**StrobeLine Red 2** Red Saturation 0 → 100%		0
				33		99	67	107	85	0-255	**StrobeLine Green 2** Green Saturation 0 → 100%		0
				34		100	68	108	86	0-255	**StrobeLine Blue 2** Blue Saturation 0 → 100%		0
RGB StrobeLine 3						101	69	109	87	0-255	**StrobeLine Red 3** Red Saturation 0 → 100%		0
						102	70	110	88	0-255	**StrobeLine Green 3** Green Saturation 0 → 100%		0
						103	71	111	89	0-255	**StrobeLine Blue 3** Blue Saturation 0 → 100%		0
RGB StrobeLine 4						104	72	112	90	0-255	**StrobeLine Red 4** Red Saturation 0 → 100%		0
						105	73	113	91	0-255	**StrobeLine Green 4** Green Saturation 0 → 100%		0
						106	74	114	92	0-255	**StrobeLine Blue 4** Blue Saturation 0 → 100%		0
RGB StrobeLine 5						107	75	115	93	0-255	**StrobeLine Red 5** Red Saturation 0 → 100%		0
						108	76	116	94	0-255	**StrobeLine Green 5** Green Saturation 0 → 100%		0
						109	77	117	95	0-255	**StrobeLine Blue 5** Blue Saturation 0 → 100%		0
RGB StrobeLine 6						110		118	96	0-255	**StrobeLine Red 6** Red Saturation 0 → 100%		0
						111		119	97	0-255	**StrobeLine Green 6** Green Saturation 0 → 100%		0
						112		120	98	0-255	**StrobeLine Blue 6** Blue Saturation 0 → 100%		0
RGB StrobeLine 7						113		121	99	0-255	**StrobeLine Red 7** Red Saturation 0 → 100%		0
						114		122	100	0-255	**StrobeLine Green 7** Green Saturation 0 → 100%		0
						115		123	101	0-255	**StrobeLine Blue 7** Blue Saturation 0 → 100%		0
RGB StrobeLine 8						116		124	102	0-255	**StrobeLine Red 8** Red Saturation 0 → 100%		0
						117		125	103	0-255	**StrobeLine Green 8** Green Saturation 0 → 100%		0
						118		126	104	0-255	**StrobeLine Blue 8** Blue Saturation 0 → 100%		0
RGB StrobeLine 9						119		127	105	0-255	**StrobeLine Red 9** Red Saturation 0 → 100%		0
						120		128	106	0-255	**StrobeLine Green 9** Green Saturation 0 → 100%		0
						121		129	107	0-255	**StrobeLine Blue 9** Blue Saturation 0 → 100%		0
RGB StrobeLine 10						122		130	108	0-255	**StrobeLine Red 10** Red Saturation 0 → 100%		0
						123		131	109	0-255	**StrobeLine Green 10** Green Saturation 0 → 100%		0
						124		132	110	0-255	**StrobeLine Blue 10** Blue Saturation 0 → 100%		0

ZONE LAYOUTS

FULL CONTROL, FULL RAW, AND PIXEL FOCUS ZONING

RGB Zone	1	2	3	4	5	6	7	8	9	10
CW Strobe	1	2	3	4	5	6	7	8	9	10
RGB StrobeLine	1	2	3	4	5	6	7	8	9	10
CW Strobe	11	12	13	14	15	16	17	18	19	20
RGB Zone	11	12	13	14	15	16	17	18	19	20

SIMPLE PIXEL ZONING

RGB Zone	1	2	3	4	5	6	7	8	9	10
CW Strobe	1	2	3	4	5	6	7	8	9	10
RGB StrobeLine (CW Only)	1	2	3	4	5	6	7	8	9	10
CW Strobe	1	2	3	4	5	6	7	8	9	10
RGB Zone	1	2	3	4	5	6	7	8	9	10

BASIC FULL CONTROL ZONING

RGB Zone	1	2	3	4	5
CW Strobe	1	2	3	4	5
RGB StrobeLine	1	2	3	4	5
CW Strobe	6	7	8	9	10
RGB Zone	6	7	8	9	10

LARGE PIXEL ZONING

RGB Zone	1	2
CW Strobe	1	
RGB StrobeLine	1	2
CW Strobe	2	
RGB Zone	3	4

ERROR CODES

Error Codes subject to change without notice	
ERROR CODES	**DESCRIPTION**
Temp Error	This message appears when there is a heating error.

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. Clean periodically 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 an authorized Elation dealer.

Please refer to the following points during routine inspections:

- A detailed electrical 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.

SPECIFICATIONS

SOURCE
(560) 1.5W RGB LEDs
(200) 5W CW Strobe LEDs
50,000 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:
Integrating Sphere
All LED: 10,400 Lumens
CW LED: 13,327 Lumens
RGB LED: 5034 Lumens
CRI: TBD
Beam Angle: TBD
Field Angle: TBD

EFFECTS
20 Zones of RGB Plate LEDs (10 x 2)
20 Zones of CW Strobe LEDs (10 x 2)
10 Zones of RGB StrobeLine LED's (10 x 1)
1- 20Hz Strobe Rate
Library of Customizable RGB and CW Strobe Effects
Variable Dimming Modes and Curves

COLOR
RGB Color Array

CONTROL / CONNECTIONS
9 DMX Channel Modes (3ch, 11ch, 22ch, 34ch, 52ch, 124ch, 77ch, 132ch, 110ch)
4 Button Control Panel, LED Display
Aria x2 Wireless Device Management
RDM (Remote Device Management)
IP65 5pin XLR DMX In/Out
IP65 Locking Power Cable In/Out

SIZE / WEIGHT
Length: 19.7" (501.2mm)
Width: 7.9" (200mm)
Vertical Height: 8.11" (206.1mm)
Weight: 15.9 lbs. (7.2 kg)

ELECTRICAL / THERMAL
AC 100-240V - 50/60Hz
Max Power Consumption 750W
Power Thru Capacity: 7A (1 unit @110V; 2 units @240V)
5°F to 113°F (-15°C to 45°C)
BTU/hr (+/- 10%) 2557.5

INCLUDED ITEMS
Safety Cable
IP65 Locking Power Cable
Fixture Interconnect Splice

OPTIONAL ITEMS
BAR S NSP Lens (BLS021)
BAR S WFL Lens (BLS061)
BAR S XFL Lens (BLS101)
BAR S L140 Lens (BLS141)
BAR S L1060 Lens (BLS161)
BAR S Frost (BLS001)
BAR S Dome Frost Lens (BLS181)
BAR S Black Lens (BLS125)
8050000053 - Omega Bracket (Qty.2)
Fixture Interconnect Splice Package (FISP06)
L-Track to M10 Adapter,70mm (LTR001)
L-Track to M10 Adapter, 44.5mm (LTR008)
L Track C-Clamp & Adapter Assembly, 70mm (LTR100)
L Track C-Clamp & Adapter Assembly, 44.5mm (LTR112)
Interconnect Clamp Adapter (FICA01)

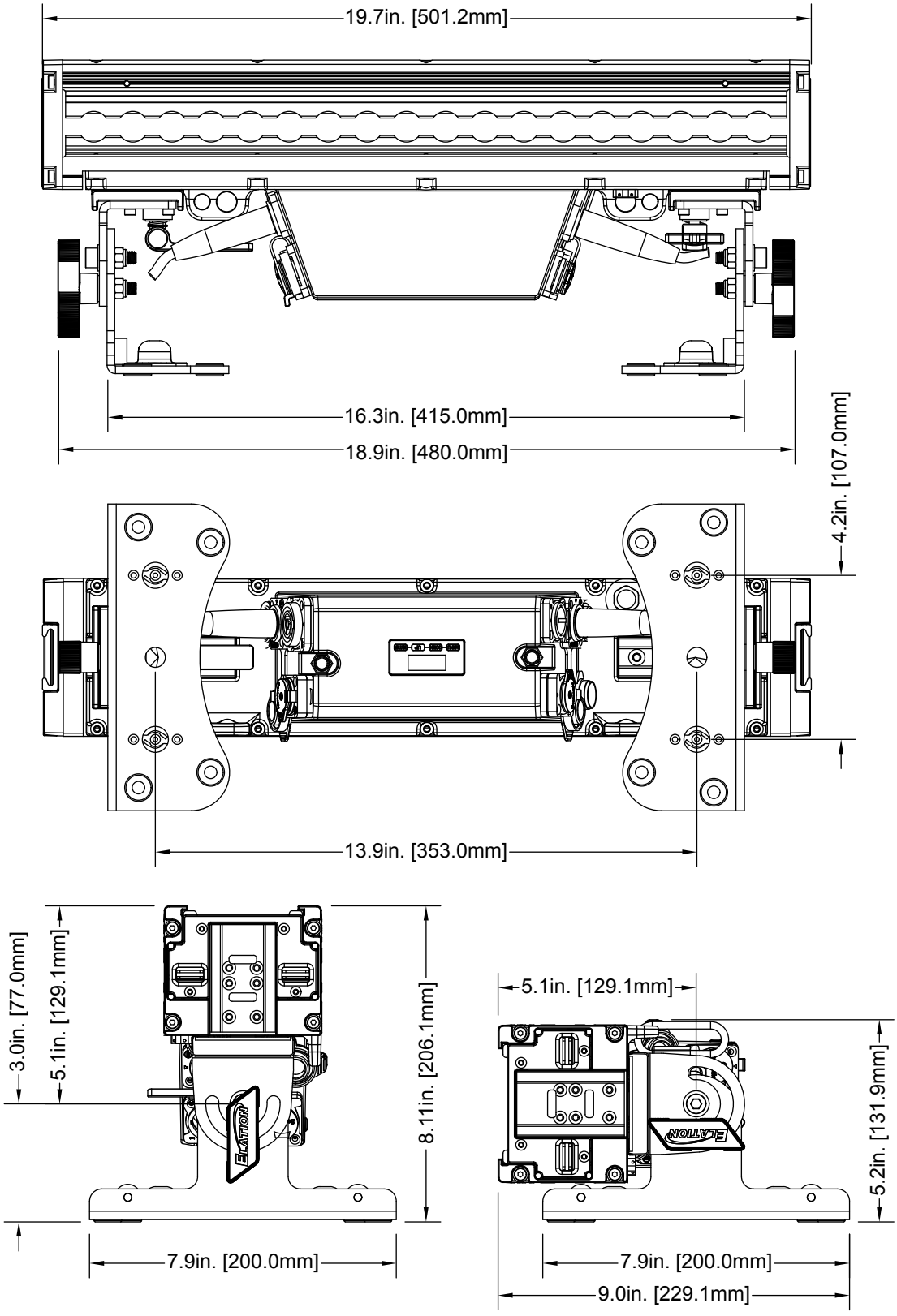
APPROVALS / RATINGS
CE | cETLus | IP65 | FCC | UKCA

Specifications and documentation subject to change without notice.

DIMENSIONAL DRAWINGS

Drawings not to scale

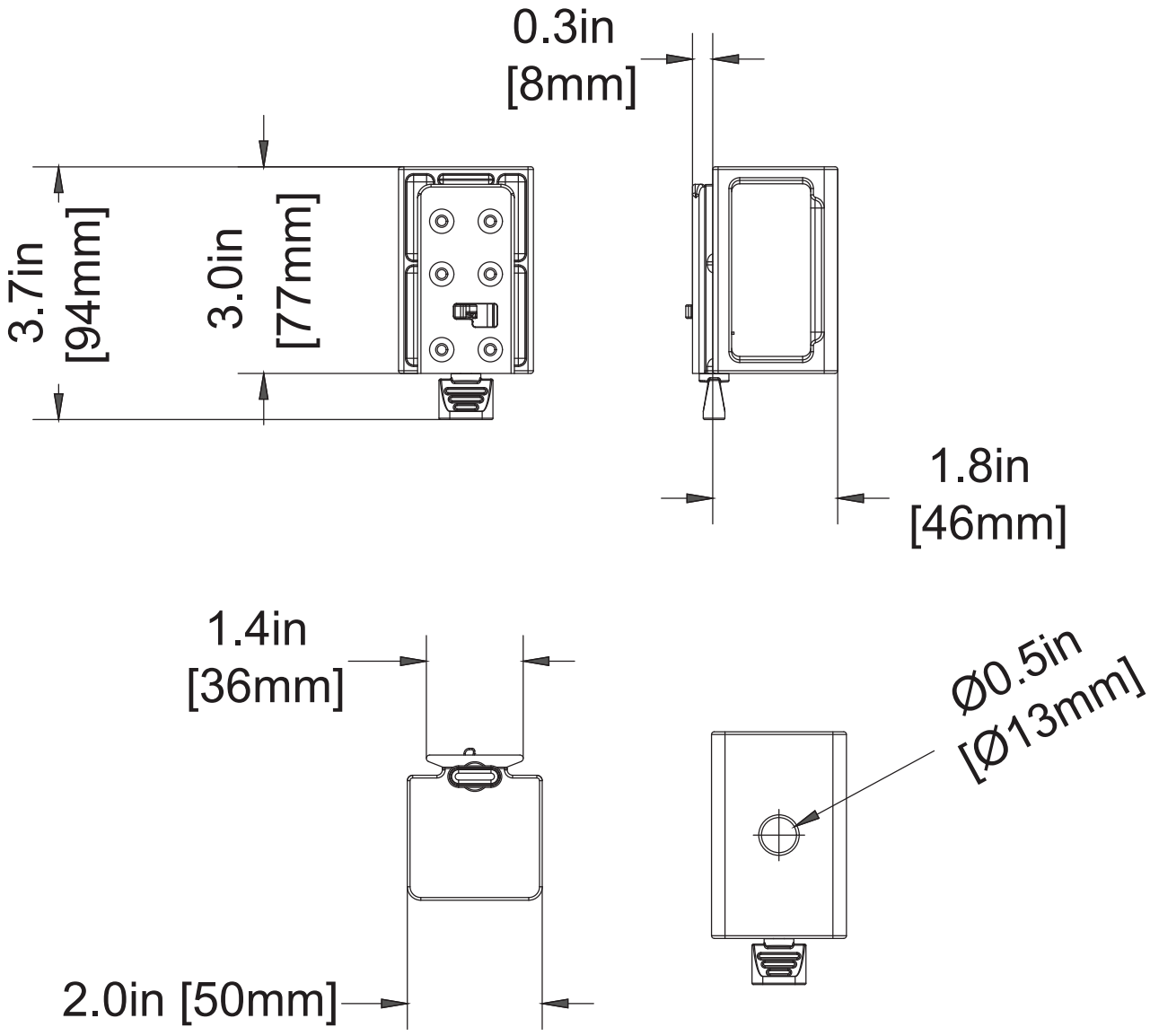
FIXTURE



DIMENSIONAL DRAWINGS

Drawings not to scale

INTERCONNECT CLAMP ADAPTOR



ORDERING INFORMATION

SKU US/EU		ITEM DESCRIPTION
SIX226	1237000341	PULSE BAR S
BLS061	1223200108	BAR S WFL
BLS021	1223200117	BAR S NSP
BLS101	1223200116	BAR S XFL
BLS141	1223200115	BAR S L140
BLS161	1223200114	BAR S L1060
BLS001	N/A	BAR S Frost
BLS181	N/A	BAR S Dome Frost
BLS125	N/A	BAR S Black Lems
SPHDY	1236300112	SŌL/PULSE HD YOKE
FISP06	1236300110	Fixture Interconnect Splice Package
LTR001	N/A	L-Track to M10 Adapter, 70mm
LTR008	N/A	L-Track to M10 Adapter, 44.5mm
LTR100	N/A	L-Track C-Clamp & Adapter Assembly 70mm
LTR112	N/A	L-Track C-Clamp & Adapter Assembly 44.5mm
TRIGGER CLAMP	N/A	Heavy Duty Wrap Around Hook Style Clamp
STR527	N/A	5 ft. (1.5m) IP65 5pin XLR Cable

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!