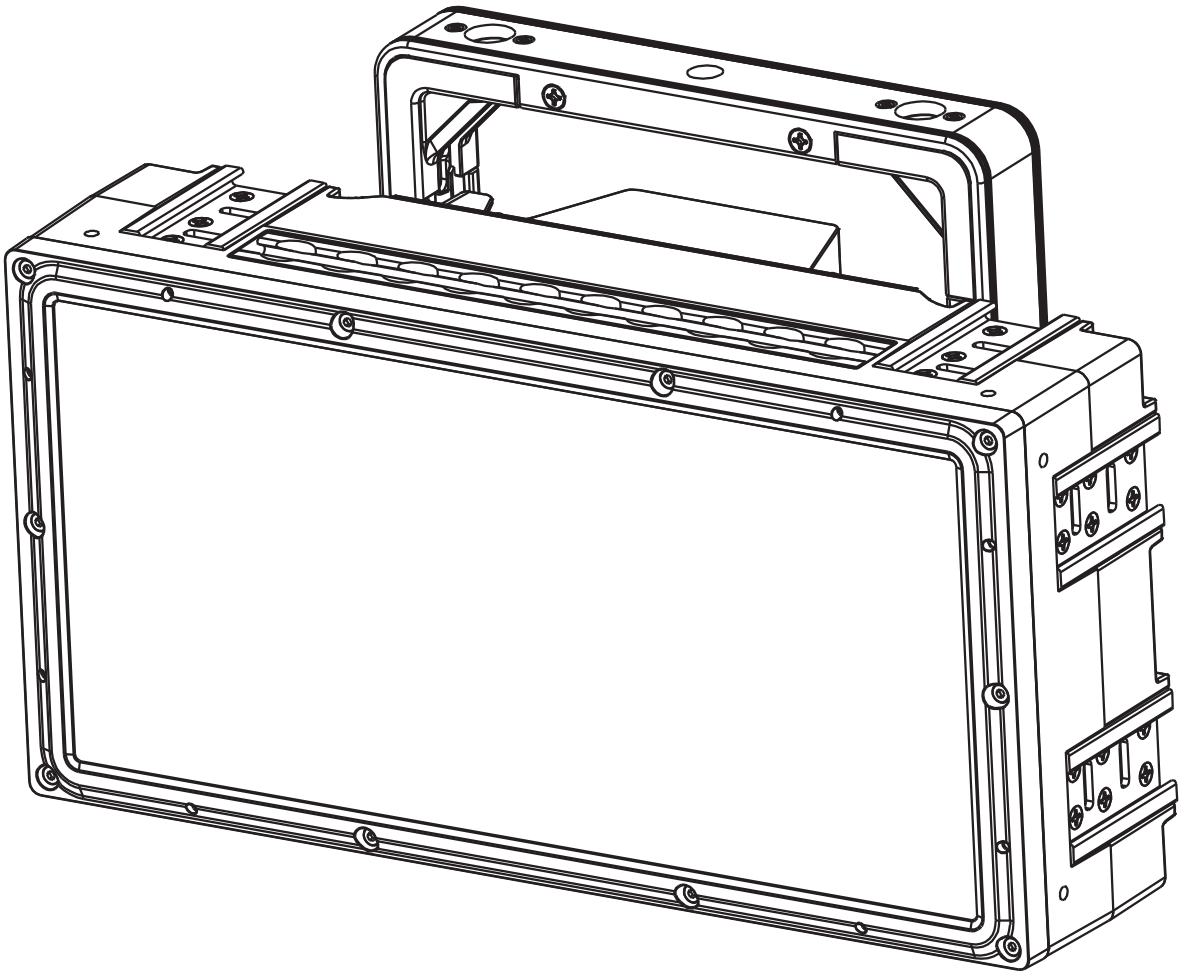
ELATION®



PULSE PANEL

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 for the latest revision/update of this manual, before installation and/or programming.

Date	Document Version	Software Version	DMX Channel Mode	Notes
05/28/24	1.0	1.01	3 / 12 / 22 / 45 / 60 / 170 / 88 / 178 / 156 Ch	Initial Release
07/03/24	1.1	N/C	NO CHANGE	Corrected Dimmer Curves Channel
07/23/24	1.2	N/C	No Change	Updated Ordering Information
09/26/24	1.3	N/C	No Change	Updated Installation Guidelines, Specifications
11/20/24	1.4	N/C	No Change	Updated Zone Layouts, Specifications
04/28/25	1.5	N/C	No Change	Updated Overview, Installation Guidelines, Torque Settings for Screws, IP Test Parameters, Dimensional Drawings; Removed Multi Unit Power Linking
09/22/25	1.6	N/C	No Change	Updated Installation Guidelines, Ordering Information
11/26/25	1.7	N/C	No Change	Updated: General Info, Dimensional Drawings, Specifications; Added: Aria Setup and Guidelines
04/06/26	1.8	N/C	No Change	Updated: General Info

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
Frost Filter

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/Coastal Environment Installations: A coastal environment is seaside adjacent, and caustic to electronics through exposure to atomized salt-water and humidity, whereas maritime is anywhere within 5-miles of a coastal environment.

NOT suitable for maritime/coastal environment installations. Installing this fixture in a maritime/coastal 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/coastal environment will void the manufactures 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.

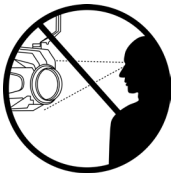
SAFETY GUIDELINES

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 PANELS FOR ANY REASON
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 NEARBY OBJECTS OR SURFACES.

FIXTURE SHOULD BE PLACED A MINIMUM OF 1.6 FEET (0.5 METERS) FROM ANY FLAMMABLE MATERIALS.
AMBIENT OPERATING TEMPERATURE RANGE IS -40°F TO 113° F (-40°C TO 45°C)

SAFETY GUIDELINES

For Your Own Personal Safety, Please Read and Understand This Manual Completely Before You Attempt To Install Or Operate This Unit!

- Do not touch the fixture housing during operation, as it may be hot.
- Do not shake the fixture, and avoid using brute force when installing and/or operating.
- Use only the original packaging and materials to transport or ship the fixture for service. Make sure to retain the original packaging for this purpose.
- Be sure that the local power outlet matches the required voltage for the device.
- Do not open up the device for any reason. There are no user serviceable parts inside.
- Disconnect the device's main power when left unused for long periods of time.
- Never connect this device to a dimmer pack.
- Do not attempt to operate this device if it has been damaged in any way.
- Never operate this device with the cover removed.
- Do not attempt to operate this device if the power cord has been frayed or broken.
- Never force a power cord connector into the fixture. If the power cord or any of its connectors are damaged, replace immediately with a new cord of the same power rating.
- Do not attempt to remove or break off the ground prong from the electrical cord. This prong is used to reduce the risk of electrical shock and fire in case of an internal short.
- Only handle the power cord by the plug end. Never disconnect the plug by tugging on the wire portion of the power cord.
- Disconnect from main power before making any type of connection.
- Never block the air ventilation slots. Always be sure to mount this device in an area that will allow proper ventilation. Allow about 6" (15cm) between this device and a wall.
- Always mount this unit in a safe and stable matter.
- Please route your power cord out of the way of foot traffic. Power cords should be routed so they are not likely to be walked on or pinched by items placed upon or against them.
- Before performing any servicing, turn off and disconnect the device from power and allow at least 15 minutes for the device to cool.
- Consistent operational breaks will ensure that this fixture will function properly for many years.
- The device should be serviced by qualified service personnel when:
  A. The power-supply cord or the plug has been damaged.
  B. Objects have fallen on, or liquid has been spilled into, the device.
  C. The device has been immersed in liquid.
  D. The appliance does not appear to operate normally or exhibits a marked change in performance.

Keep all flammable materials away from this fixture!

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.

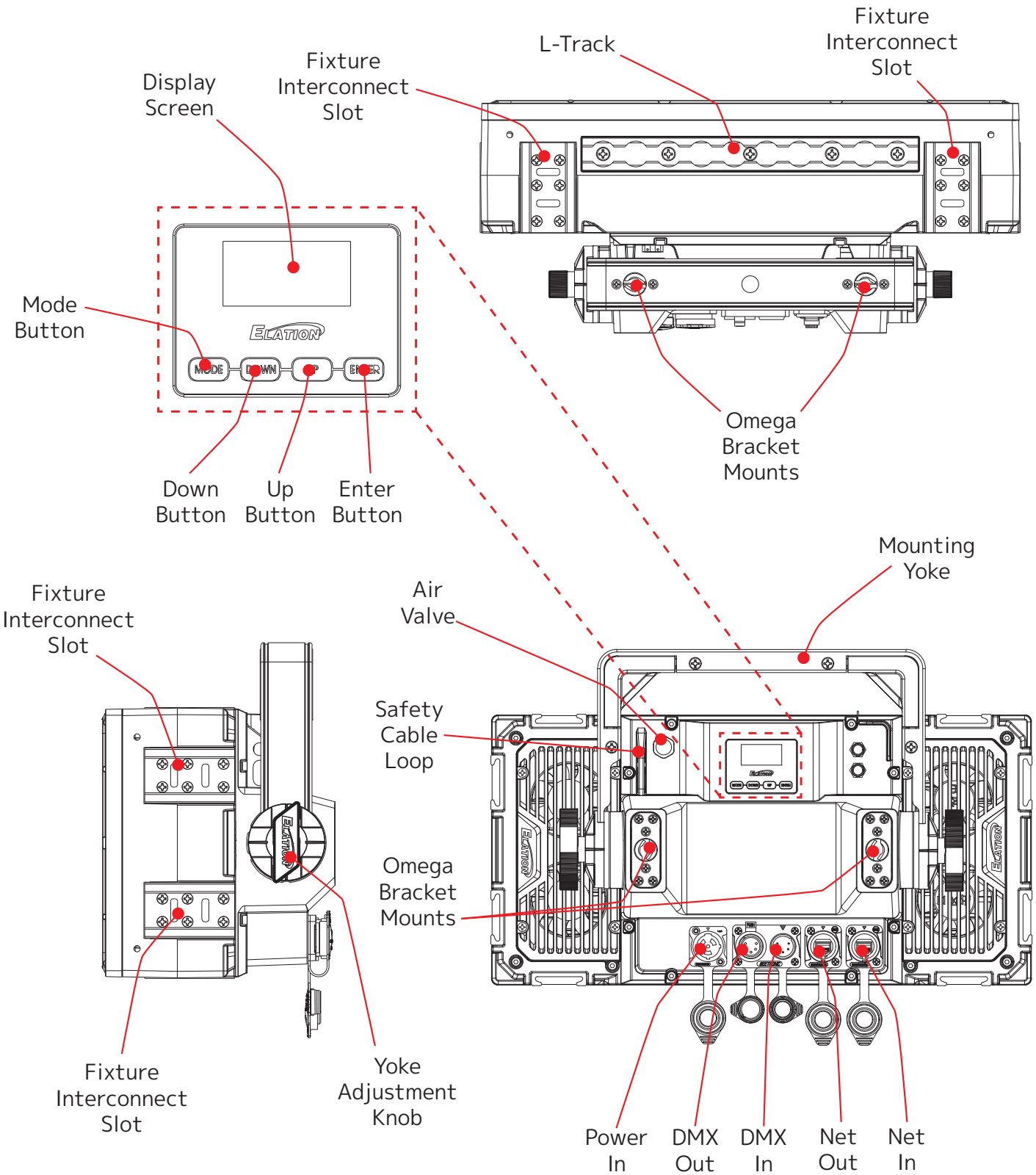
MAINTENANCE

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.

OVERVIEW


Fixture Interconnect Slot
L-Track
Fixture Interconnect Slot
Display Screen
Fixture Interconnect Slot
Mode Button
Omega Bracket Mounts
Down Button
Up Button
Enter Button
Mounting Yoke
Fixture Interconnect Slot
Air Valve
Safety Cable Loop
Omega Bracket Mounts
Fixture Interconnect Slot
Yoke Adjustment Knob
Power In
DMX Out
DMX In
Net Out
Net In

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)

AMBIENT OPERATING TEMPERATURE RANGE IS -40°F TO 113° F (-40°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 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 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.

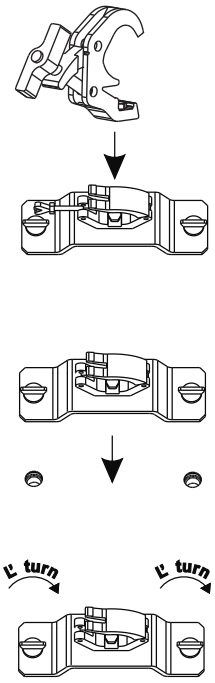
INSTALLATION GUIDELINES

OMEGA BRACKET WITH CLAMP INSTALLATION

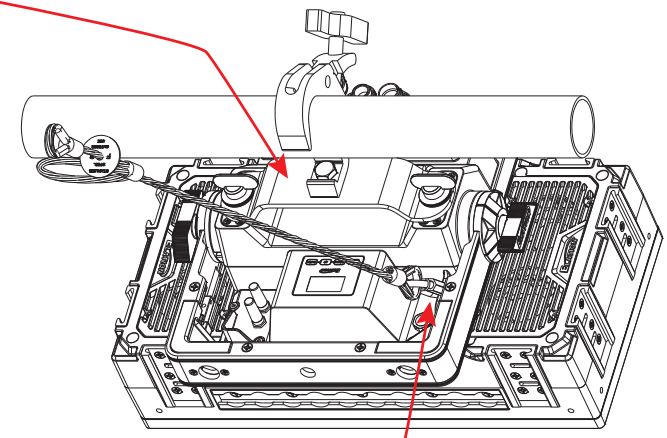
When mounting the fixture to a truss, secure an appropriately rated professional grade rigging clamp to the Omega Brackets using an M10 or M12 screw fitted through the center hole of the Omega Brackets, as described below. Attach the Omega bracket to the fixture using the attachment points located on the top of the yoke or on the rear panel. Attach a safety cable of the appropriate weight rating to the provided attachment point beside the display screen.

OMEGA BRACKET INSTALLATION

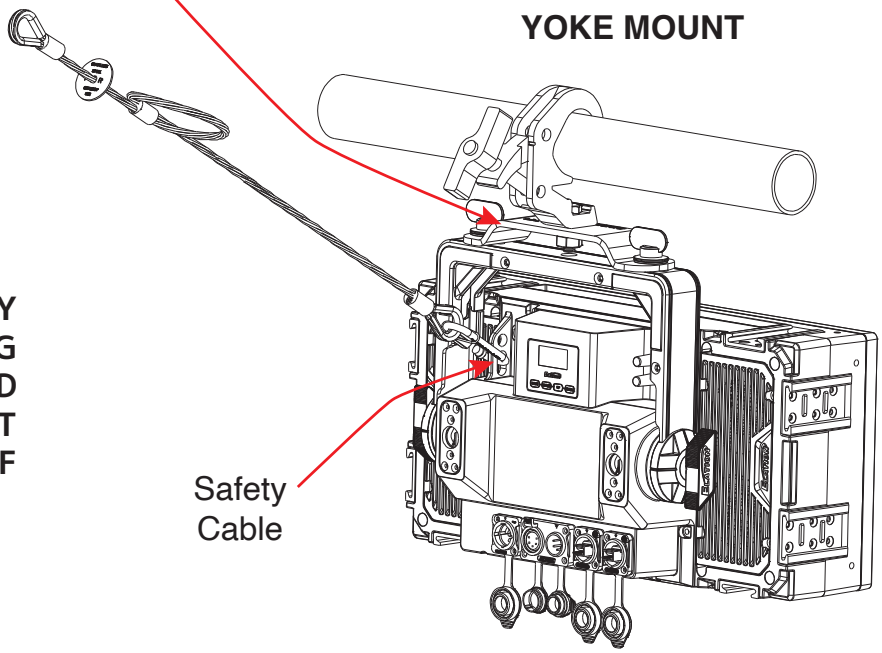
1. Insert a bolt through the holes in the clamp and Omega bracket, and secure in place with a nut and washer.
2. Insert the Omega bracket fasteners into the matching holes on the fixture.
3. Turn both fasteners on the Omega bracket a quarter turn clockwise to secure in place.



REAR PANEL MOUNT



YOKE MOUNT

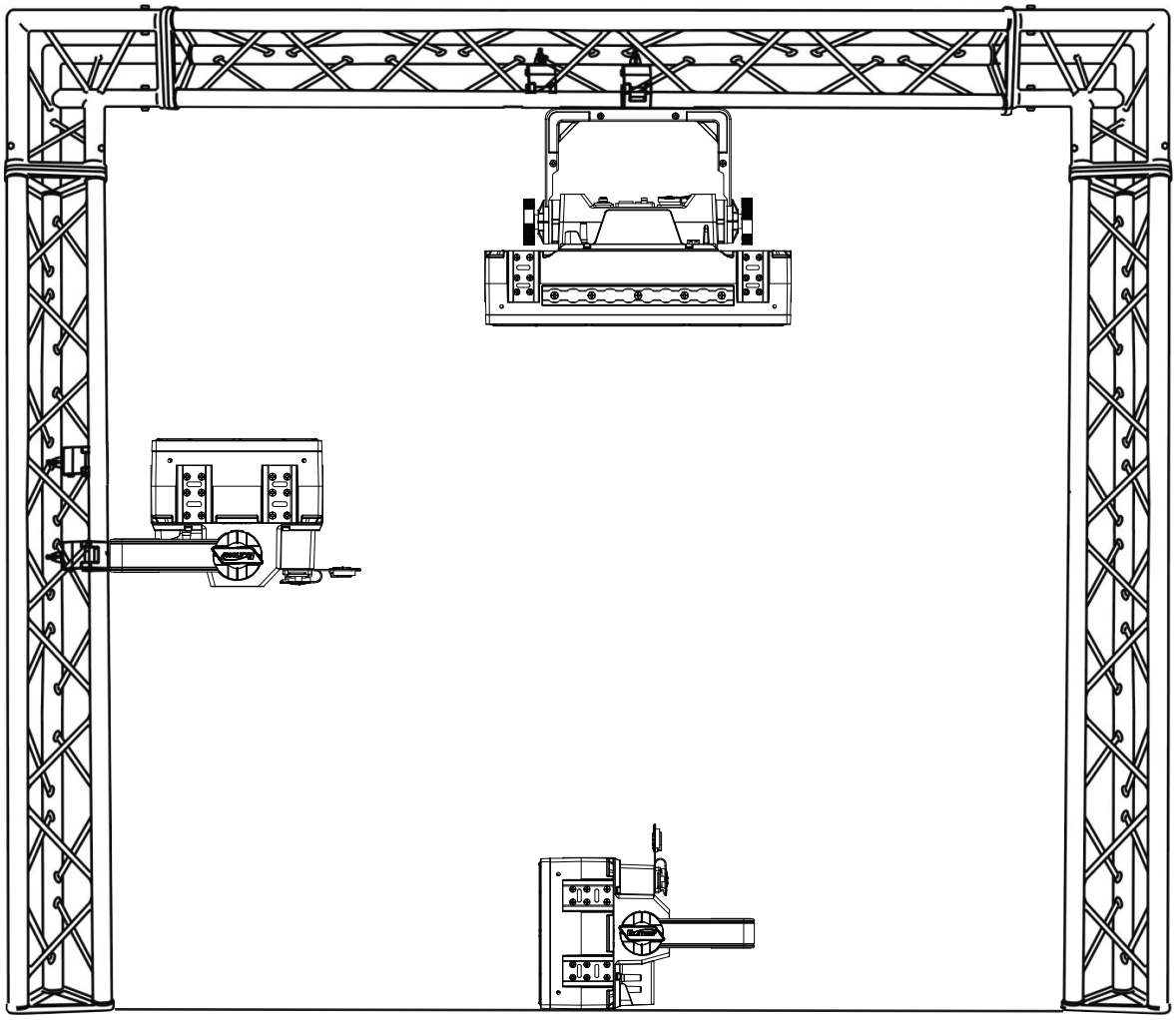


ALWAYS ATTACH A SAFETY CABLE WHENEVER INSTALLING THIS FIXTURE IN A SUSPENDED ENVIRONMENT TO ENSURE THAT THE FIXTURE WILL NOT FALL IF THE CLAMP FAILS.

INSTALLATION GUIDELINES

FIXTURE INSTALLATION

This fixture is fully operational in three different mounting positions: hanging upside-down, mounted sideways on trussing, or set on a flat level surface. Be sure this fixture is kept well away from any flammable materials (decoration etc.). Always use and install a safety cable of the proper rating 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!

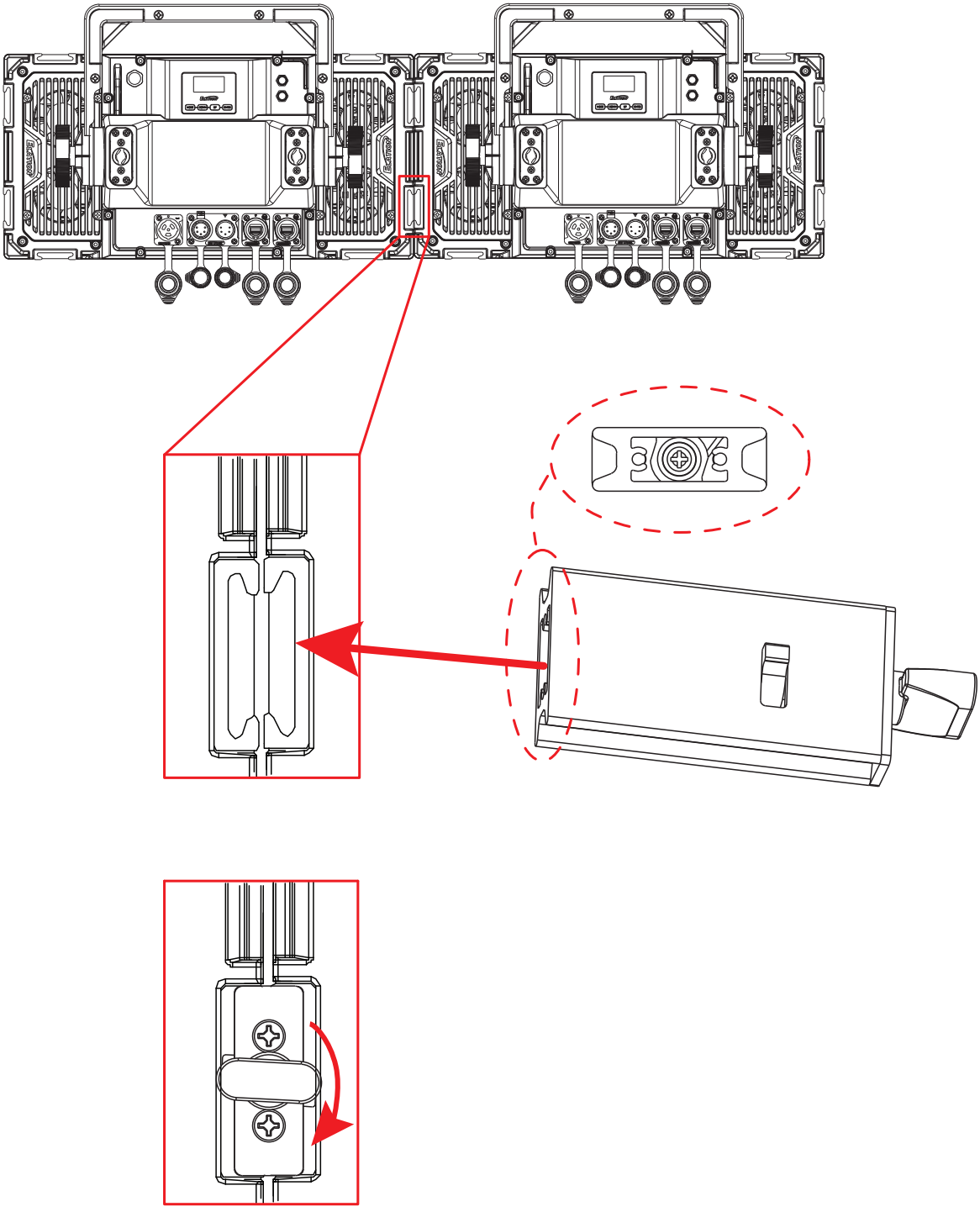
ALWAYS ATTACH A SAFETY CABLE WHENEVER INSTALLING THIS FIXTURE IN A SUSPENDED ENVIRONMENT TO ENSURE THE FIXTURE WILL NOT FALL IF THE CLAMP FAILS.

INSTALLATION GUIDELINES

FIXTURE INTERCONNECT SPLICE

Individual fixtures can be physically linked together using the Fixture Interconnect Slots located along the top, bottom, and sides of the fixture, in conjunction with included Fixture Interconnect Splices.

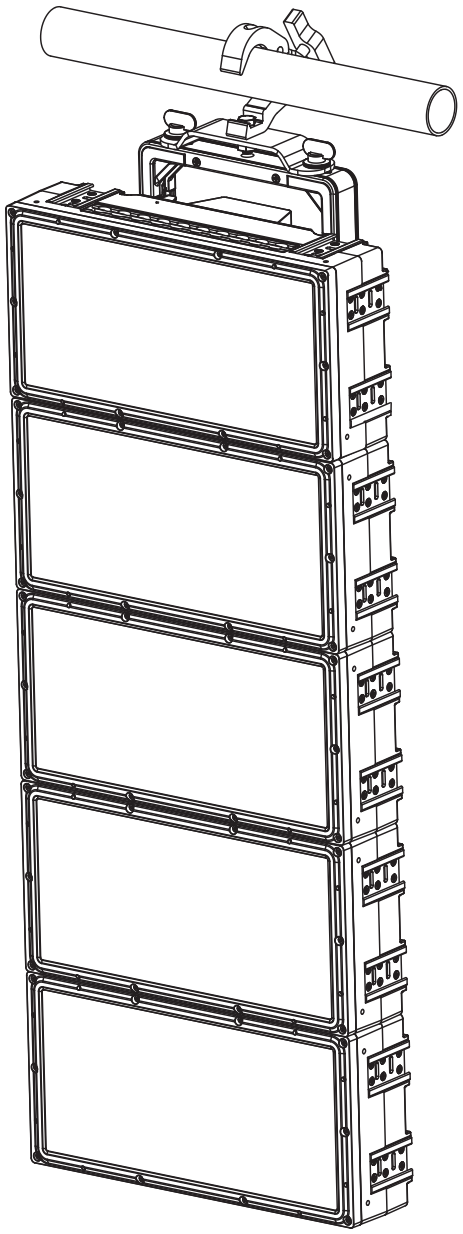
Begin by positioning the fixtures so that the Fixture Interconnect Slots are placed side by side. Insert the Fixture Interconnect Splice into the aperture created by the two Fixture Interconnect Slots, with one half of the Fixture Interconnect Splice inserted into each Fixture Interconnect Slot. Turn the knob on the Fixture Interconnect Splice to lock in place. Please refer to the illustrations below.



INSTALLATION GUIDELINES

ARRAY LIMITATIONS

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.



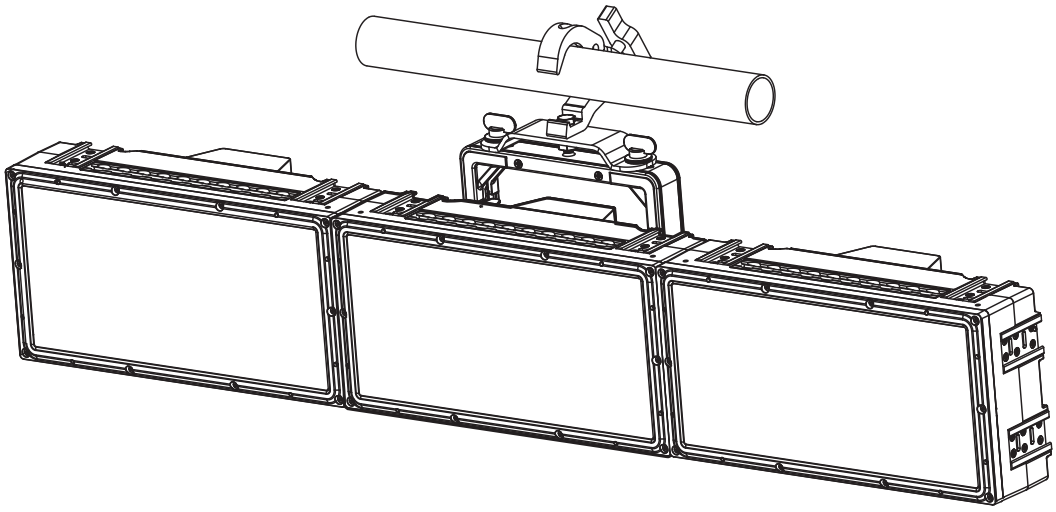
Due to limitations on the amount of weight that the Fixture Interconnect Splices can support, the maximum number of fixtures that can be suspended from a single point of support is as follows:

- **3 fixtures total in a horizontally linked configuration**
- **5 fixtures total in a vertically linked configuration**
- **Maximum array weight of 151 lbs (68.5 kg), including fixtures and accessories.**

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.

If the design of the array configuration exceeds the limits described above, additional supports will be required.

Please note that two Fixture Interconnect Splices are needed at each junction between two fixtures, both in the vertical and horizontal direction, in order to link them in a safe and secure manner. Avoid transporting assembled arrays while hanging or suspended.



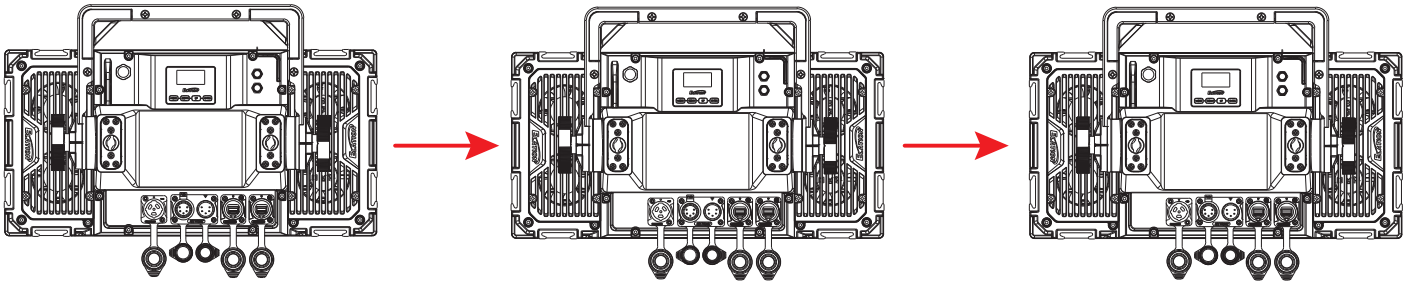
INSTALLATION GUIDELINES

ART-NET | sACN CONNECTION

When connecting fixture to a network switch to control multiple devices, a Gigabit Ethernet Switch that supports IGMP (Internet Group Management Protocol) is required. Using a Gigabit Ethernet Switch that does not support IGMP can cause erratic behavior of all connected devices to the switch. Click link below for more information about IGMP.
https://en.wikipedia.org/wiki/Internet_Group_Management_Protocol

RJ45 DATA CABLES

THE INCLUDED RJ45 DATA CABLE IS INTENDED ONLY FOR FIXTURE TO FIXTURE INTERCONNECTIONS! THE RJ45 CABLE CONNECTORS MAY NOT BE COMPATIBLE WITH OTHER RJ45 OR ETHERNET TYPE CONNECTORS.



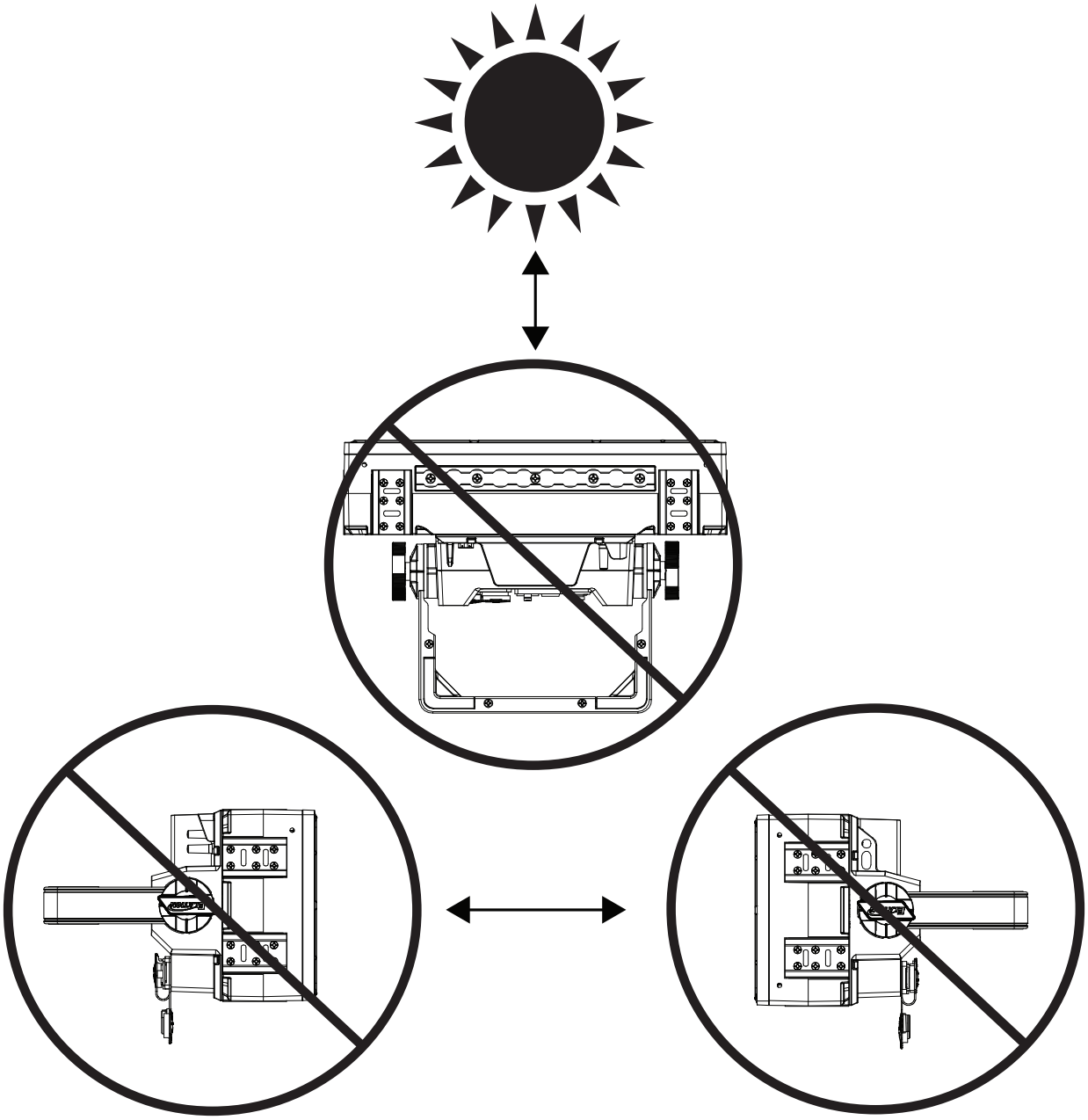
INSTALLATION GUIDELINES

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.

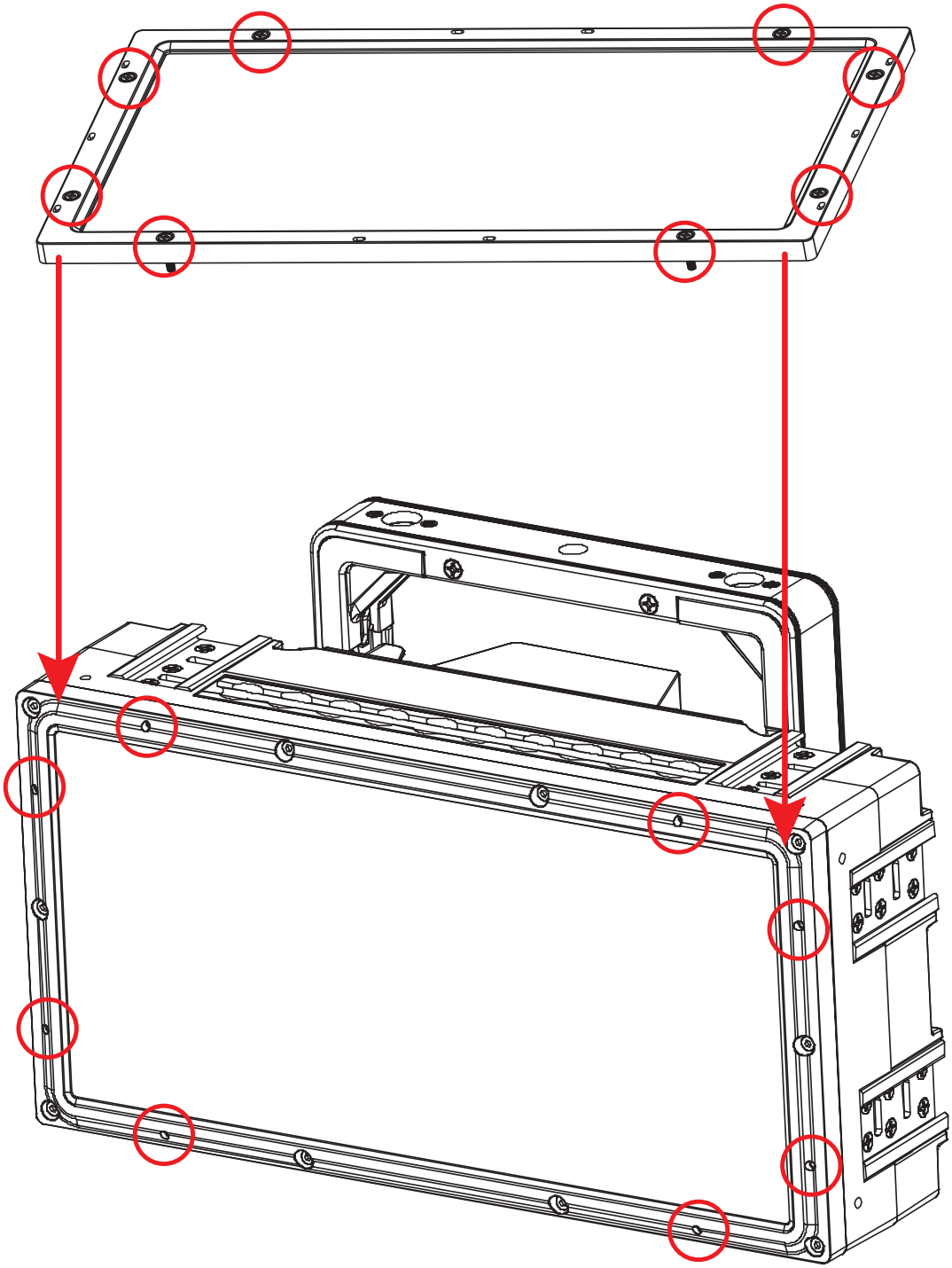
DO NOT EXPOSE THE FIXTURE AND/OR FRONT LENS OPENING TO LIGHT BEAMS FROM DIRECT SUNLIGHT, OTHER LIGHTING MOVING HEAD FIXTURES, AND LASERS WHILE UNPACKING, INSTALLATION, USE, AND EXTENDED IDLE TIMES OUTDOORS. DO NOT FOCUS A LIGHT BEAM FROM ONE LIGHTING FIXTURE DIRECTLY TOWARDS ANOTHER.



ACCESSORY INSTALLATION

FROST FILTERS

This fixture can be fitted with optional filters: a black glass or ND filter, a medium frost filter, a 1x60° frost filter, or a 60x1° frost filter. The installation procedure for all filters is identical. Simply align the eight (8) screw holes on the frame of the frost filter with the eight (8) matching holes on the fixture's lens frame. Insert the included screws and tighten to fix the frost filter in place. Refer to the illustration below.



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.

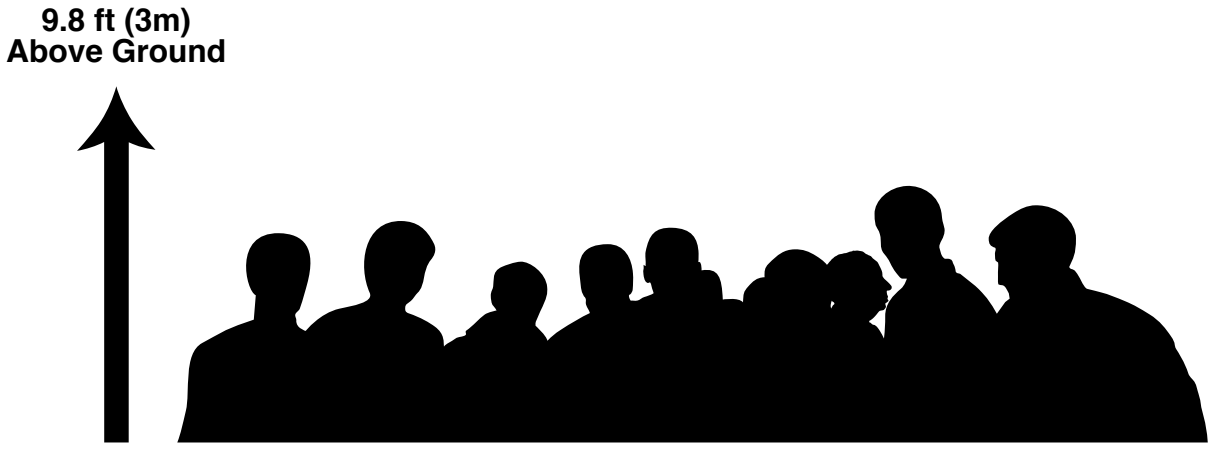
In summary, if an application demands high data rates and more bandwidth in urban or densely populated areas where interference management is feasible, the 2.4 GHz frequency is a suitable choice. On the other hand, for applications requiring long-range communication and better obstacle penetration, particularly 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
0x004B XXXX	0x004B	0x22A6	001: 3Ch Xenon Strobe 002: 12Ch Simple Strobe 003: 22Ch Strobe FX 004: 45Ch Large Pixels 005: 60Ch Simple Pixel 006: 170Ch Pixel Focus 007: 88Ch Basic Full Control 008: 178Ch Full Control 009: 156Ch 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:

[0x0001] Discovery Unique Branch	[0x00E0] DMX Personality
[0x0050] Supported Parameters	[0x00E1] DMX Personality Description
[0x0060] Device Info	[0x00F0] DMX Start Address
[0x0080] Device Model Description	[0x0200] Sensor Definition
[0x0081] Manufacturer Label	[0x0201] Sensor Value
[0x0082] Device Label	[0x0400] Device Hours
[0x00C0] Software Version Label	[0x1000] Identify Device

FAN MODES

The Pulse Panel 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 whisper-silent operation at a moment's notice. All Fan Modes smoothly transition over a brief time, preventing unwanted attraction to the fixture.

Auto (Default) – Fans only run at the speeds needed to keep the LED engine within a safe temperature range, and ensures optimal performance of the fixture. 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, at all times, try to keep noise levels at a minimum. The fixture output will only be reduced when the LED engine cannot be cooled to its safe operating range due to a high ambient temperature.
NOTE: This mode is recommended for daily operation.

Silent – Fan speeds are reduced throughout the fixture for a lower noise profile. The fixture output is also reduced to approximately 80%. This mode should be sufficient for most uses where lower noise is required.

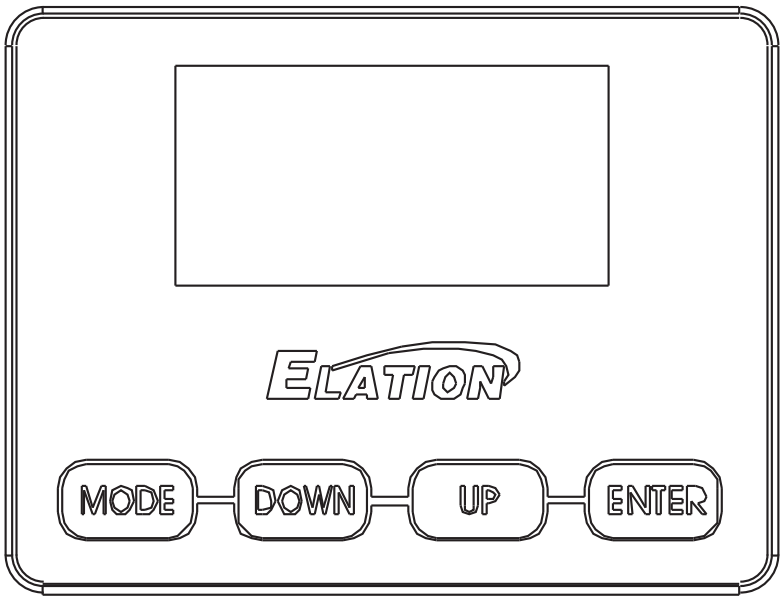
High – Fan speeds are increased throughout the fixture for the most efficient cooling. This mode will increase wear on the fans and should only be utilized in exceptional circumstances. Fans will always run, even if the fixture is dimmed. Fixture output is kept at 100% unless the LED engine temperature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

CONTROL PANEL

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, you can navigate through the different menu options with the DOWN and UP buttons. To select the option shown on the screen, press the ENTER button, then 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.

The control panel also features a battery charge indicator near the control buttons, as well as a service port for updating the device's software (see the note below).

In default setting, the screen will remain on as long as that device is connected to power. However, it can be configured to lock after a certain period of inactivity by navigating to Settings > Display > Screen Lock in the System Menu. To unlock the device, press and hold the ENTER button until a progress bar appears and fills in.



PLEASE NOTE: For units installed in an outdoor setting, the display screen and control panel may interpret a raindrop as a command input and change the fixture's setting (phantom touch) if the display screen is not locked. **The default setting for this unit is to have the display screen unlocked (Settings > Display > Screen Lock > Off).** Therefore, to avoid unintentional command inputs, the Screen Lock setting should be configured so that the screen and control will lock after the selected period of inactivity.

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

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

ZONE LINKING

The Pulse Panel stands out from other fixtures due to its ability to offer more individually controllable zones and LED types. However, different levels of control may sometimes be required, so multiple selectable DMX modes with varying numbers of control zones are offered to cater to these needs. The fixture also offers Zone Linking capabilites for still greater customization needs and flexibility in fixture usage.

Zone Linking allows users to modify the control and behavior of the RGB StrobeLine and Top and Bottom CW Strobe LEDs. The Top and Bottom CW Strobe LEDs can be controlled in three ways:

1. **Default Zone Control** adheres to the default DMX chart settings.
2. **Top and Bottom CW Strip Link to Center CW Strip,** will ignore the assigned channels and follow the corresponding center CW strobe LED zones.
3. **Top and Bottom CW Strobe Inactive** completely disables that top and bottom CW strobe lines if the user or designer prefers not to include the look they provide.

Zone Linking for the RGB StrobeLine LEDs offers even more options and flexibility:

1. **Default Zone Control** adheres to the default DMX chart settings.
2. **RGB StrobeLine Link to Top Center CW Strobe** mirrors the top center CW Strobe LEDs in white light only, blending into one large 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 disables and turns off the RGB StrobeLine LEDs.

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

FX FUNCTIONS AND FEATURES

Multi-zone fixtures, such as the Pulse Panel, can often command a significant investment of time and effort to create and record impactful effects, and in some cases, the limited number of DMX channels prevents the fixture from being used at its full potential capacity. This new FX control method addresses these concerns by including multiple settings that can be selected and adjusted to customize any pre-built effect that can be selected from the fixture library. The fixture separates the effects for the CW Strobe Zones and the RGB Zones, allowing two looks to be selected simultaneously. Additionally, both effects offer the same level of customization, with the sole exception of color. The FX control method therefore presents a new way for programmers to control and customize effects, providing high impact visuals without the need to set the fixture in its maximum DMX channel layout.

The fixture also includes a pre-built library of effects, which can be selected in the EFFECT SELECTION channel. Once an effect is selected, the EFFECT SPEED channel can be used to adjust the speed at which the effect is played back, and can also be used to reverse the direction of the effect. Another new concept is EFFECT SIZE, which uses a large portion of the fixture zones to display an effect that would otherwise use only a small area, up to and including treating the entire LED display as a single large pixel. This feature is controlled by a variable control channel, creating an even more dynamic effect.

The third control channel for the FX Functions allows the offset of the timing for the effects. For example, if the fixtures are set in a line side by side and an effect needs to move seamlessly from one fixture to the next, the offset can be adjusted as needed until the desired look is achieved. Within the same channel, steps can also be customized for the effect by selecting different randomization settings, allowing each step, selected pixel, or selected fixture to show a unique display. Finally, within that channel, the fade between each step of the effects can be adjusted as well.

Remarkably, all these FX Functions unlock a full effects feature set while only occupying three DMX channels. Once all FX Functions are set as desired, Intensity, Strobe, or Color settings can also be added on top of the effect for even more visual impact and customization options.

SYSTEM MENU

DMX	DMX Address	**001** - 512		Set DMX address
	DMX Mode	3CH Xenon Strb		Select DMX channel mode
		12CH Simple Strb		
		22CH Strobe FX		
		45CH Large Pixel		
		60CH Simple Pxl		
		170CH Pxl Focus		
		88CH Basic Full		
		178CH Full Mode		
		156Ch Raw Mode		
	No DMX Status	**Hold Last**		Unit holds last settings when DMX signal is lost or interrupted
		Fade to Black		Unit display fades to black when DMX signal is lost or interrupted
		Standalone		Unit defaults to standalone mode when DMX signal is lost or interrupted
	Protocol	Select Signal	**DMX**	Select signal source
			Art-Net	
			sACN	
			Klingnet	
			Aria In - DMX Out	
			DMX In - Aria Out	
		Universe	0 - 255 **default = 1**	Set universe
		IP Address	2.x.x.x	Set IP address
		Subnet Mask	**255.0.0.0**	Set subnet mask
		Ethernet DMX Out	**Off** / On	Enable or disable DMX signal out over ethernet ports
	Aria	Aria Channel	**0** - 14	Select Aria channel

SYSTEM MENU

CONTROL	Manual Control	RGB Dimmer	000% - **100%**	Manually configure each unit parameter
		Red	0 - **255**	
		Green	0 - **255**	
		Blue	0 - **255**	
		CW Strobe Dimmer	000% - **100%**	
		Virtual Color		
	Primary	On / **Off**		Enable or disable primary mode
	Secondary	On / **Off**		Enable or disable secondary mode
	Self Test	All		Perform diagnotic tests
		Dimmer		
		Strobe LED		
		Color LED		
SETTINGS	Fan Mode	**Auto**		Select fan mode
		High		
		Silent		
	Dim Modes	**Standard**		Set dim mode and speed
		Stage		
		TV		
		Architectural		
		Theatre		
		Stage 2		
		Dim Speed	0s - 10s **Default = 0.1s**	
	Dim Curves	Linear		Set dim curve
		Square		
		Square Inverse		
		S-Curve		
	Zone Flip	**Default Layout**		Select pixel zone orientation
		Flip Horizontal		
		Flip Vertical		
		Flip Horz & Vert		

SYSTEM MENU

SETTINGS (continued)	Zone Linking	**Default Control**	Yes / No	Configure how you would like the Pixel Zones to be operationally linked
		Outer CW Linking	Outer Link Centr	
			Outer CW Off	
		RGB Line Linking	RGB Line Top CW	
			RGB Line Top RGB	
			RGB Line Bot RGB	
			RGB Line Off	
	LED Refresh Rate	900Hz - 1500Hz, 2500Hz, 4000Hz, 5000Hz, 6000Hz, 10KHz, 15KHz, 20KHz, 25KHz **Default = 1200Hz**		Set LED refresh rate
	LED Power Limit	50%		Set LED power output limit
		60%		
		70%		
		80%		
		90%		
		100%		
	Display	Screen Delay	10s - 5min **Default = 1min**	Display screen switches off after selected period of inactivity
		Screen Lock	**Off,** 10s - 5min	Display screen and controls lock after selected period of inactivity
		Rotate Display	Yes	Inverted display orientation
			No	Standard display orientation
			Auto	Screen orientation automatically rotates to keep display upright
	Reset Defaults	Yes / No		Reset unit to factory default settings
INFORMATION	Time	Current Run Time		Display current run time
		Total Run Time		Display total lifetime run time
		Last Run Time		Display run time since last reset
	Temperature	Current		Display current temperature
		Max Resettable		Display max recorded temperature since last reset

SYSTEM MENU

INFORMATION (continued)	DMX Values	Red		Display current DMX value of each parameter
		Green		
		...		
	Product IDs	RDM UID		Display RDM UID
	Error Logs	Fixture Errors		Display logged errors
	Software Version	Vx.x		Display current software version
SERVICE Passcode = 050	Update Firmware	On / Off		Update software
	Calibration	All Red	000 - 255	Calibrate each parameter
		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 36	000 - 255	
		Green 36	000 - 255	
		Blue 36	000 - 255	
		CW Strobe 1	000 - 255	
		...	...	
		CW Strobe 48	000 - 255	
	Reset Last Run	Yes / No		Reset Last Run Hours
	Reset Error Logs	Yes / No		Reset error log

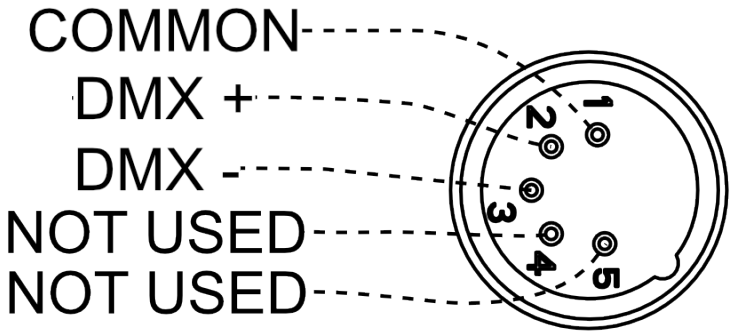
DMX SET UP

DMX-512: DMX is short for Digital Multiplex. This is a universal protocol used as a form of communication between intelligent fixtures and controllers. A DMX controller sends DMX data instructions from the controller to the fixture. DMX data is sent as serial data that travels from fixture to fixture via the DATA “IN” and DATA “OUT” XLR terminals located on all DMX fixtures (most controllers only have a DATA “OUT” terminal).

DMX Linking: DMX is a language allowing all makes and models of different manufacturers to be linked together and operate from a single controller, as long as all fixtures and the controller are DMX compliant. To ensure proper DMX data transmission, try to use the shortest cable path possible when linking several DMX fixtures. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example, a fixture assigned a DMX address of 1 may be placed anywhere in a DMX line: at the beginning, at the end, or anywhere in the middle. When a fixture is assigned a DMX address of 1, the DMX controller knows to send DATA assigned to address 1 to that unit, no matter where it is located in the DMX chain.

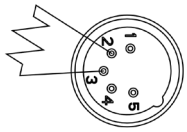
Data Cable (DMX Cable) Requirements (For DMX Operation): This unit can be controlled via DMX-512 protocol. The DMX address is set on the rear panel of the unit. Your unit and your DMX controller require a standard 5-pin XLR connector for data input and data output. We recommend Accu-Cable DMX cables. If you are making your own cables, be sure to use standard 110-120 Ohm shielded cable (This cable may be purchased at almost all pro lighting stores). Your cables should be made with a male XLR connector at one end and a female XLR connector at the other. Also remember that DMX cable must be daisy chained and cannot be split.

Notice: Be sure to follow the illustration below when making your own cables. Do not use the ground lug on the XLR connector. Do not connect the cable’s shield conductor to the ground lug or allow the shield conductor to come in contact with the XLR’s outer casing. Grounding the shield could cause a short circuit and erratic behavior.



DMX SET UP

Special Note: Line Termination. When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behavior. A terminator is a 110-120 ohm 1/4 watt resistor which is connected between pins 2 and 3 of a male XLR connector (DATA + and DATA -). This unit is inserted in the female XLR connector of the last unit in your daisy chain to terminate the line. Using a cable terminator (ADJ part number Z-DMX/T) will reduce the risk of erratic behavior.



A DMX512 terminator reduces signal errors, avoiding most signal reflection interference. Connect PIN 2 (DMX-) and PIN 3 (DMX+) of the last fixture in series with a 120 Ohm, 1/4 W Resistor to terminate the DMX512.

DMX ADDRESSING.
All fixtures should be given a DMX starting address when using a DMX controller, so the correct fixture responds to the correct control signal. This digital starting address is the channel number from which the fixture starts to “listen” to the digital control signal sent out from the DMX controller. The assignment of this starting DMX address is achieved by setting the correct DMX address on the digital control display on the fixture.

You can set the same starting address for all fixtures or a group of fixtures, or set different addresses for each individual fixture. Setting all fixtures to the same DMX address will cause all fixtures to react in the same way. In other words, changing the settings of one channel will affect all the fixtures simultaneously.

If you set each fixture to a different DMX address, each unit will start to “listen” to the channel number you have set, based on the quantity of DMX channels of each fixture. That means changing the settings of one channel will only affect the selected fixture.

For example, when this unit is operating in 3 channel mode, you should set the starting DMX address of the first unit to 1, the second unit to 4 (1 + 3), the third unit to 7 (1 + 3 + 3), and so on. See the chart below for more details.

CHANNEL MODE	UNIT 1 ADDRESS	UNIT 2 ADDRESS	UNIT 3 ADDRESS	UNIT 4 ADDRESS
3Ch	1	4	7	10
12Ch	1	13	25	37
22Ch	1	23	45	67
45Ch	1	46	91	136
60Ch	1	61	121	181
170Ch	1	171	341	511
88Ch	1	89	177	265
178Ch	1	179	357	535
156Ch	1	157	313	469

DMX TRAITS

Fixt. Part	3 Ch	12 Ch	22 Ch	45 Ch	60 Ch	170 Ch	88 Ch	178 Ch	156 Ch	DMX Values	Function	Snap	Def Value
Main	1	1	1	1		1	1	1		0 - 255	**Master Dimmer**		0
											Intensity 0 → 100%		
		2	2	2	1	2	2	2		0 - 255	**Strobe Dimmer Master**		0
											Intensity 0 → 100%		
	2	3	3	3	2	3	3	3		0 - 255	**CW Strobe Duration**		0
											Min → Max		
	3	4	4	4	3	4	4	4		0 - 255	**CW Strobe Rate**		0
											Fast → Slow		
		5	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		
		6	6	6	5	6	6	6			**RGB Dimmer Master**		0
										0 - 255	Intensity 0 → 100%		
		7	7	7	6	7	7	7			**RGB Strobe Duration**		0
										0 - 255	Min → Max		
		8	8	8	7	8	8	8			**RGB Strobe Rate**		0
										0 - 255	Fast → Slow		
		9	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		
		10	10	10	9	10	10	10			**All Red**		255
										0 - 255	Red Saturation 0 → 100		
		11	11	11	10	11	11	11			**All Green**		255
										0 - 255	Green Saturation 0 → 100		
		12	12	12	11	12	12	12			**All Blue**		255
										0 - 255	Blue Saturation 0 → 100		

DMX TRAITS

Fixt. Part	3 Ch	12 Ch	22 Ch	45 Ch	60 Ch	170 Ch	88 Ch	178 Ch	156 Ch	DMX Values	Function	Snap	Def Value
Main			13				13	13			**CW Strobe Effect Selection**	X	0
										0	Idle		
										1 - 40	FX Selection 1 → 40		
										41 - 127	Idle		
										128 - 167	FX Selection 1 → 40		
										168 - 255	Idle		
			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	6 Zone		
										91 - 100	8 Zone		
										101 - 110	12 Zone		
										111 - 120	16 Zone		
										121 - 130	24 Zone		
										131 - 140	48 Zone		
										141 - 255	Idle		
			16				16	16			**CW Strobe Effect Offset**	X	0
										0	Idle		
										1 - 35	Fixture Offset 10 Degrees → 350 Degrees		
										36	Synchronized		
										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		

DMX TRAITS

Fixt. Part	3 Ch	12 Ch	22 Ch	45 Ch	60 Ch	170 Ch	88 Ch	178 Ch	156 Ch	DMX Values	Function	Snap	Def Value
Main			17				17	17			**RGB Effect Selection**	X	0
										0	Idle		
										1 - 30	FX Selection 1 → 30		
										31 - 100	Idle		
										101 - 131	FX Selection 1 → 30		
										132 - 200	Idle		
										201 - 211	RGB Effects 1 → 10		
										212 - 255	Idle		
			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	9 Zone		
										101 - 110	15 Zone		
										111 - 120	18 Zone		
										121 - 130	36 Zone		
										131 - 255	Idle		
			20				20	20			**RGB Effect Offset**	X	0
										0	Idle		
										1 - 35	Fixture Offset 10 → 350 Degrees		
										36	Synchronized		
										37 - 49	Random Fixture Offset		
										50 - 59	Random Pixel Order		
										60 - 69	Random Steps		
										70 - 79	Idle		
			20				20	20			**Effect Fade**	X	0
										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		

DMX TRAITS

Fixt. Part	3 Ch	12 Ch	22 Ch	45 Ch	60 Ch	170 Ch	88 Ch	178 Ch	156 Ch	DMX Values	Function	Snap	Def Value
Main			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

Fixt. Part	3 Ch	12 Ch	22 Ch	45 Ch	60 Ch	170 Ch	88 Ch	178 Ch	156 Ch	DMX Values	Function	Snap	Def Value
											Control		
										0 - 29	Idle		
										30 - 39	Fan Mode: Auto		
										40 - 49	Fan Mode: Silent		
										50 - 59	Fan Mode: High		
										60 - 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		
Main			22	14	12	14	22	22		114	1040	X	0
										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		

DMX TRAITS

Fixt. Part	3 Ch	12 Ch	22 Ch	45 Ch	60 Ch	170 Ch	88 Ch	178 Ch	156 Ch	DMX Values	Function	Snap	Def Value
											Refresh Rate (Hz) (continued)		
										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		
Main			22	14	12	14	22	22		155	1450	X	0
										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	Idle		

DMX TRAITS

Fixt. Part	3 Ch	12 Ch	22 Ch	45 Ch	60 Ch	170 Ch	88 Ch	178 Ch	156 Ch	DMX Values	Function	Snap	Def Value
Main			22	14	12	14	22	22			**Zone Linking**	X	0
										180 - 181	Zones to Default		
										182 - 183	Top and Bottom CW Strobe Link to Center		
										184 - 185	Top and Bottom CW Strobe Inactive		
										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	Linear		
										211 - 220	Square		
										221 - 230	Inverse Square		
										231 - 240	S-Curve (Default)		
										241 - 255	Idle		
Pixels				15	13	15	23	23	1		**Red 1**		0
										0 - 255	Red Saturation 0 → 100		
				16	14	16	24	24	2		**Green 1**		0
										0 - 255	Green Saturation 0 → 100		
				17	15	17	25	25	3		**Blue 1**		0
										0 - 255	Blue Saturation 0 → 100		
				18	16	18	26	26	4		**Red 2**		0
										0 - 255	Red Saturation 0 → 100		
				19	17	19	27	27	5		**Green 2**		0
										0 - 255	Green Saturation 0 → 100		
				20	18	20	28	28	6		**Blue 2**		0
										0 - 255	Blue Saturation 0 → 100		
				21	19	21	29	29	7		**Red 3**		0
										0 - 255	Red Saturation 0 → 100		
				22	20	22	30	30	8		**Green 3**		0
										0 - 255	Green Saturation 0 → 100		
				23	21	23	31	31	9		**Blue 3**		0
										0 - 255	Blue Saturation 0 → 100		
				24	22	24	32	32	10		**Red 4**		0
										0 - 255	Red Saturation 0 → 100		
				25	23	25	33	33	11		**Green 4**		0
										0 - 255	Green Saturation 0 → 100		
				26	24	26	34	34	12		**Blue 4**		0
										0 - 255	Blue Saturation 0 → 100		

DMX TRAITS

Fixt. Part	3 Ch	12 Ch	22 Ch	45 Ch	60 Ch	170 Ch	88 Ch	178 Ch	156 Ch	DMX Values	Function	Snap	Def Value
Pixels				27	25	27	35	35	13		**Red 5**		0
										0 - 255	Red Saturation 0 → 100		
				28	26	28	36	36	14		**Green 5**		0
										0 - 255	Green Saturation 0 → 100		
				29	27	29	37	37	15		**Blue 5**		0
										0 - 255	Blue Saturation 0 → 100		
				30	28	30	38	38	16		**Red 6**		0
										0 - 255	Red Saturation 0 → 100		
				31	29	31	39	39	17		**Green 6**		0
										0 - 255	Green Saturation 0 → 100		
				32	30	32	40	40	18		**Blue 6**		0
										0 - 255	Blue Saturation 0 → 100		
					31	33	41	41	19		**Red 7**		0
										0 - 255	Red Saturation 0 → 100		
					32	34	42	42	20		**Green 7**		0
										0 - 255	Green Saturation 0 → 100		
					33	35	43	43	21		**Blue 7**		0
										0 - 255	Blue Saturation 0 → 100		
					34	36	44	44	22		**Red 8**		0
										0 - 255	Red Saturation 0 → 100		
					35	37	45	45	23		**Green 8**		0
										0 - 255	Green Saturation 0 → 100		
					36	38	46	46	24		**Blue 8**		0
										0 - 255	Blue Saturation 0 → 100		
					37	39	47	47	25		**Red 9**		0
										0 - 255	Red Saturation 0 → 100		
					38	40	48	48	26		**Green 9**		0
										0 - 255	Green Saturation 0 → 100		
					39	41	49	49	27		**Blue 9**		0
										0 - 255	Blue Saturation 0 → 100		
					40	42	50	50	28		**Red 10**		0
										0 - 255	Red Saturation 0 → 100		
					41	43	51	51	29		**Green 10**		0
										0 - 255	Green Saturation 0 → 100		
					42	44	52	52	30		**Blue 10**		0
										0 - 255	Blue Saturation 0 → 100		
					43	45	53	53	31		**Red 11**		0
										0 - 255	Red Saturation 0 → 100		
					44	46	54	54	32		**Green 11**		0
										0 - 255	Green Saturation 0 → 100		
					45	47	55	55	33		**Blue 11**		0
										0 - 255	Blue Saturation 0 → 100		

DMX TRAITS

Fixt. Part	3 Ch	12 Ch	22 Ch	45 Ch	60 Ch	170 Ch	88 Ch	178 Ch	156 Ch	DMX Values	Function	Snap	Def Value
Pixels					46	48	56	56	34	0 - 255	**Red 12** Red Saturation 0 → 100		0
					47	49	57	57	35	0 - 255	**Green 12** Green Saturation 0 → 100		0
					48	50	58	58	36	0 - 255	**Blue 12** Blue Saturation 0 → 100		0
						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
						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
						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
						60		68	46	0 - 255	**Red 16** Red Saturation 0 → 100		0
						61		69	47	0 - 255	**Green 16** Green Saturation 0 → 100		0
						62		70	48	0 - 255	**Blue 16** Blue Saturation 0 → 100		0
						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
						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

DMX TRAITS

Fixt. Part	3 Ch	12 Ch	22 Ch	45 Ch	60 Ch	170 Ch	88 Ch	178 Ch	156 Ch	DMX Values	Function	Snap	Def Value
Pixels						69		77	55		**Red 19**		0
										0 - 255	Red Saturation 0 → 100		
						70		78	56		**Green 19**		0
										0 - 255	Green Saturation 0 → 100		
						71		79	57		**Blue 19**		0
										0 - 255	Blue Saturation 0 → 100		
						72		80	58		**Red 20**		0
										0 - 255	Red Saturation 0 → 100		
						73		81	59		**Green 20**		0
										0 - 255	Green Saturation 0 → 100		
						74		82	60		**Blue 20**		0
										0 - 255	Blue Saturation 0 → 100		
						75		83	61		**Red 21**		0
										0 - 255	Red Saturation 0 → 100		
						76		84	62		**Green 21**		0
										0 - 255	Green Saturation 0 → 100		
						77		85	63		**Blue 21**		0
										0 - 255	Blue Saturation 0 → 100		
						78		86	64		**Red 22**		0
										0 - 255	Red Saturation 0 → 100		
						79		87	65		**Green 22**		0
										0 - 255	Green Saturation 0 → 100		
						80		88	66		**Blue 22**		0
										0 - 255	Blue Saturation 0 → 100		
						81		89	67		**Red 23**		0
										0 - 255	Red Saturation 0 → 100		
						82		90	68		**Green 23**		0
										0 - 255	Green Saturation 0 → 100		
						83		91	69		**Blue 23**		0
										0 - 255	Blue Saturation 0 → 100		
						84		92	70		**Red 24**		0
										0 - 255	Red Saturation 0 → 100		
						85		93	71		**Green 24**		0
										0 - 255	Green Saturation 0 → 100		
						86		94	72		**Blue 24**		0
										0 - 255	Blue Saturation 0 → 100		
CW Strb				33	49	87	59	95	73		**CW Strobe 1**		0
										0 - 255	Intensity 0 → 100		
				34	50	88	60	96	74		**CW Strobe 2**		0
										0 - 255	Intensity 0 → 100		
				35	51	89	61	97	75		**CW Strobe 3**		0
										0 - 255	Intensity 0 → 100		

DMX TRAITS

Fixt. Part	3 Ch	12 Ch	22 Ch	45 Ch	60 Ch	170 Ch	88 Ch	178 Ch	156 Ch	DMX Values	Function	Snap	Def Value
CW Strb				36	52	90	62	98	76		**CW Strobe 4**		0
										0 - 255	Intensity 0 → 100		
					53	91	63	99	77		**CW Strobe 5**		0
										0 - 255	Intensity 0 → 100		
					54	92	64	100	78		**CW Strobe 6**		0
										0 - 255	Intensity 0 → 100		
					55	93	65	101	79		**CW Strobe 7**		0
										0 - 255	Intensity 0 → 100		
					56	94	66	102	80		**CW Strobe 8**		0
										0 - 255	Intensity 0 → 100		
					57	95	67	103	81		**CW Strobe 9**		0
										0 - 255	Intensity 0 → 100		
					58	96	68	104	82		**CW Strobe 10**		0
										0 - 255	Intensity 0 → 100		
					59	97	69	105	83		**CW Strobe 11**		0
										0 - 255	Intensity 0 → 100		
					60	98	70	106	84		**CW Strobe 12**		0
										0 - 255	Intensity 0 → 100		
						99		107	85		**CW Strobe 13**		0
										0 - 255	Intensity 0 → 100		
						100		108	86		**CW Strobe 14**		0
										0 - 255	Intensity 0 → 100		
						101		109	87		**CW Strobe 15**		0
										0 - 255	Intensity 0 → 100		
						102		110	88		**CW Strobe 16**		0
										0 - 255	Intensity 0 → 100		
						103		111	89		**CW Strobe 17**		0
										0 - 255	Intensity 0 → 100		
						104		112	90		**CW Strobe 18**		0
										0 - 255	Intensity 0 → 100		
						105		113	91		**CW Strobe 19**		0
										0 - 255	Intensity 0 → 100		
						106		114	92		**CW Strobe 20**		0
										0 - 255	Intensity 0 → 100		
						107		115	93		**CW Strobe 21**		0
										0 - 255	Intensity 0 → 100		
						108		116	94		**CW Strobe 22**		0
										0 - 255	Intensity 0 → 100		
						109		117	95		**CW Strobe 23**		0
										0 - 255	Intensity 0 → 100		
						110		118	96		**CW Strobe 24**		0
										0 - 255	Intensity 0 → 100		

DMX TRAITS

Fixt. Part	3 Ch	12 Ch	22 Ch	45 Ch	60 Ch	170 Ch	88 Ch	178 Ch	156 Ch	DMX Values	Function	Snap	Def Value
CW Strb						111		119	97		**CW Strobe 25**		0
										0 - 255	Intensity 0 → 100		
						112		120	98		**CW Strobe 26**		0
										0 - 255	Intensity 0 → 100		
						113		121	99		**CW Strobe 27**		0
										0 - 255	Intensity 0 → 100		
						114		122	100		**CW Strobe 28**		0
										0 - 255	Intensity 0 → 100		
						115		123	101		**CW Strobe 29**		0
										0 - 255	Intensity 0 → 100		
						116		124	102		**CW Strobe 30**		0
										0 - 255	Intensity 0 → 100		
						117		125	103		**CW Strobe 31**		0
										0 - 255	Intensity 0 → 100		
						118		126	104		**CW Strobe 32**		0
										0 - 255	Intensity 0 → 100		
						119		127	105		**CW Strobe 33**		0
										0 - 255	Intensity 0 → 100		
						120		128	106		**CW Strobe 34**		0
										0 - 255	Intensity 0 → 100		
						121		129	107		**CW Strobe 35**		0
										0 - 255	Intensity 0 → 100		
						122		130	108		**CW Strobe 36**		0
										0 - 255	Intensity 0 → 100		
						123		131	109		**CW Strobe 37**		0
										0 - 255	Intensity 0 → 100		
						124		132	110		**CW Strobe 38**		0
										0 - 255	Intensity 0 → 100		
						125		133	111		**CW Strobe 39**		0
										0 - 255	Intensity 0 → 100		
						126		134	112		**CW Strobe 40**		0
										0 - 255	Intensity 0 → 100		
						127		135	113		**CW Strobe 41**		0
										0 - 255	Intensity 0 → 100		
						128		136	114		**CW Strobe 42**		0
										0 - 255	Intensity 0 → 100		
						129		137	115		**CW Strobe 43**		0
										0 - 255	Intensity 0 → 100		
						130		138	116		**CW Strobe 44**		0
										0 - 255	Intensity 0 → 100		
						131		139	117		**CW Strobe 45**		0
										0 - 255	Intensity 0 → 100		

DMX TRAITS

Fixt. Part	3 Ch	12 Ch	22 Ch	45 Ch	60 Ch	170 Ch	88 Ch	170 Ch	156 Ch	DMX Values	Function	Snap	Def Value
CW Strb						132		140	118		**CW Strobe 46**		0
										0 - 255	Intensity 0 → 100		
						133		141	119		**CW Strobe 47**		0
										0 - 255	Intensity 0 → 100		
						134		142	120		**CW Strobe 48**		0
										0 - 255	Intensity 0 → 100		
RGB Strb Line				37		135	71	143	121		**StrobeLine Red 1**		0
										0 - 255	Red Saturation 0 → 100		
				38		136	72	144	122		**StrobeLine Green 1**		0
										0 - 255	Green Saturation 0 → 100		
				39		137	73	145	123		**StrobeLine Blue 1**		0
										0 - 255	Blue Saturation 0 → 100		
				40		138	74	146	124		**StrobeLine Red 2**		0
										0 - 255	Red Saturation 0 → 100		
				41		139	75	147	125		**StrobeLine Green 2**		0
										0 - 255	Green Saturation 0 → 100		
				42		140	76	148	126		**StrobeLine Blue 2**		0
										0 - 255	Blue Saturation 0 → 100		
				43		141	77	149	127		**StrobeLine Red 3**		0
										0 - 255	Red Saturation 0 → 100		
				44		142	78	150	128		**StrobeLine Green 3**		0
										0 - 255	Green Saturation 0 → 100		
				45		143	79	151	129		**StrobeLine Blue 3**		0
										0 - 255	Blue Saturation 0 → 100		
						144	80	152	130		**StrobeLine Red 4**		0
										0 - 255	Red Saturation 0 → 100		
						145	81	153	131		**StrobeLine Green 4**		0
										0 - 255	Green Saturation 0 → 100		
						146	82	154	132		**StrobeLine Blue 4**		0
										0 - 255	Blue Saturation 0 → 100		
						147	83	155	133		**StrobeLine Red 5**		0
										0 - 255	Red Saturation 0 → 100		
						148	84	156	134		**StrobeLine Green 5**		0
										0 - 255	Green Saturation 0 → 100		
						149	85	157	135		**StrobeLine Blue 5**		0
										0 - 255	Blue Saturation 0 → 100		
						150	86	158	136		**StrobeLine Red 6**		0
										0 - 255	Red Saturation 0 → 100		
						151	87	159	137		**StrobeLine Green 6**		0
										0 - 255	Green Saturation 0 → 100		
						152	88	160	138		**StrobeLine Blue 6**		0
										0 - 255	Blue Saturation 0 → 100		

DMX TRAITS

Fixt. Part	3 Ch	12 Ch	22 Ch	45 Ch	60 Ch	170 Ch	88 Ch	178 Ch	156 Ch	DMX Values	Function	Snap	Def Value
RGB Strb Line						153		161	139		**StrobeLine Red 7**		0
										0 - 255	Red Saturation 0 → 100		
						154		162	140		**StrobeLine Green 7**		0
										0 - 255	Green Saturation 0 → 100		
						155		163	141		**StrobeLine Blue 7**		0
										0 - 255	Blue Saturation 0 → 100		
						156		164	142		**StrobeLine Red 8**		0
										0 - 255	Red Saturation 0 → 100		
						157		165	143		**StrobeLine Green 8**		0
										0 - 255	Green Saturation 0 → 100		
						158		166	144		**StrobeLine Blue 8**		0
										0 - 255	Blue Saturation 0 → 100		
						159		167	145		**StrobeLine Red 9**		0
										0 - 255	Red Saturation 0 → 100		
						160		168	146		**StrobeLine Green 9**		0
										0 - 255	Green Saturation 0 → 100		
						161		169	147		**StrobeLine Blue 9**		0
										0 - 255	Blue Saturation 0 → 100		
						162		170	148		**StrobeLine Red 10**		0
										0 - 255	Red Saturation 0 → 100		
						163		171	149		**StrobeLine Green 10**		0
										0 - 255	Green Saturation 0 → 100		
						164		172	150		**StrobeLine Blue 10**		0
										0 - 255	Blue Saturation 0 → 100		
						165		173	151		**StrobeLine Red 11**		0
										0 - 255	Red Saturation 0 → 100		
						166		174	152		**StrobeLine Green 11**		0
										0 - 255	Green Saturation 0 → 100		
						167		175	153		**StrobeLine Blue 11**		0
										0 - 255	Blue Saturation 0 → 100		
						168		176	154		**StrobeLine Red 12**		0
										0 - 255	Red Saturation 0 → 100		
						169		177	155		**StrobeLine Green 12**		0
										0 - 255	Green Saturation 0 → 100		
						170		178	156		**StrobeLine Blue 12**		0
										0 - 255	Blue Saturation 0 → 100		

ZONE LAYOUTS

Please note that all zones are shown in default pixel flip configuration.

FULL CONTROL, FULL RAW, AND PIXEL FOCUS ZONING

CW Strobe	1	2	3	4	5	6	7	8	9	10	11	12
RGB Zone	1		2		3		4		5		6	
RGB Zone	7		8		9		10		11		12	
CW Strobe	13	14	15	16	17	18	19	20	21	22	23	24
RGB StrobeLine	1	2	3	4	5	6	7	8	9	10	11	12
CW Strobe	25	26	27	28	29	30	31	32	33	34	35	36
RGB Zone	13		14		15		16		17		18	
RGB Zone	19		20		21		22		23		24	
CW Strobe	37	38	39	40	41	42	43	44	45	46	47	48

SIMPLE PIXEL ZONING

CW Strobe	1	2	3	4	5	6	7	8	9	10	11	12
RGB Zone	1		2		3		4		5		6	
CW Strobe	1	2	3	4	5	6	7	8	9	10	11	12
RGB StrobeLine (CW Only)	1	2	3	4	5	6	7	8	9	10	11	12
CW Strobe	1	2	3	4	5	6	7	8	9	10	11	12
RGB Zone	7		8		9		10		11		12	
CW Strobe	1	2	3	4	5	6	7	8	9	10	11	12

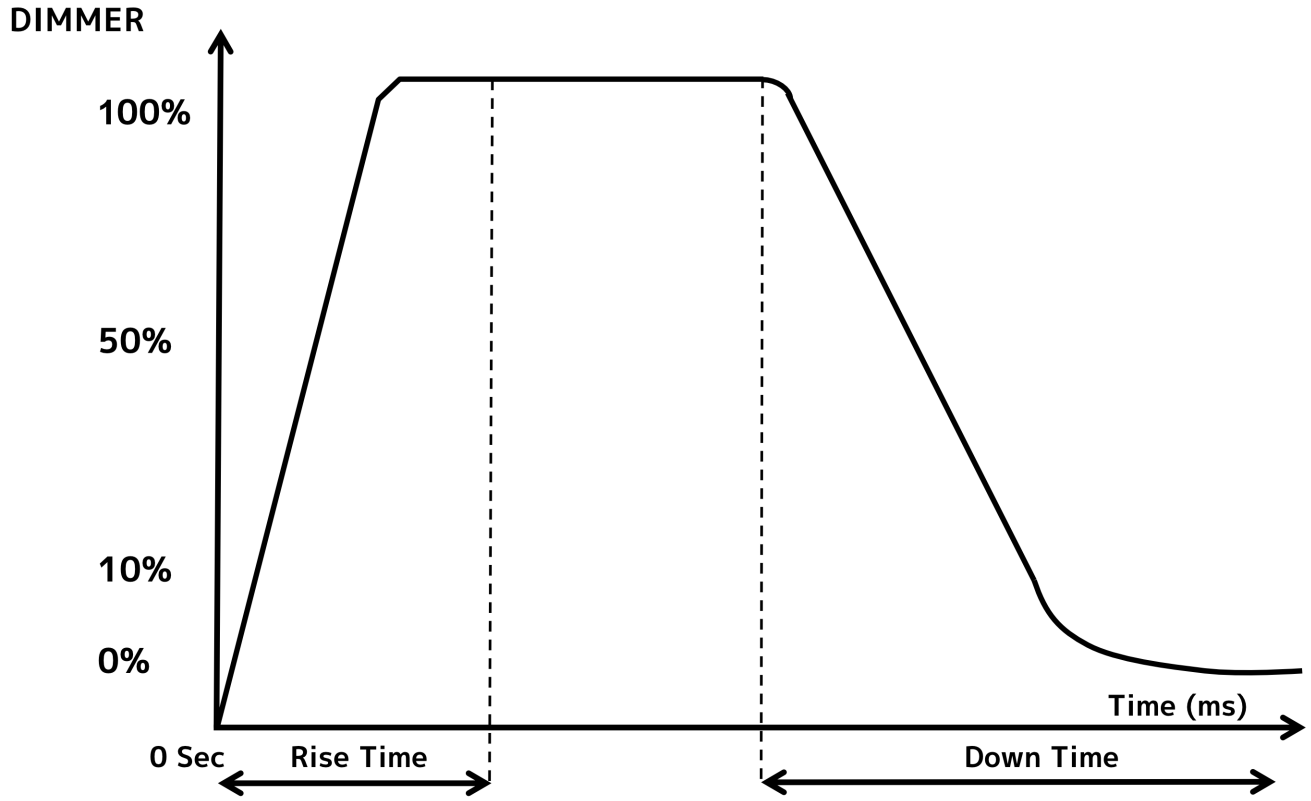
BASIC FULL CONTROL ZONING

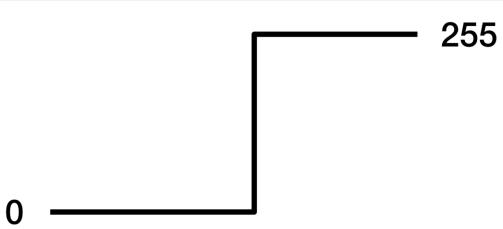
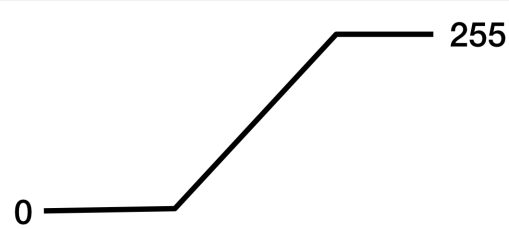
CW Strobe	1	2	3	4	5	6
RGB Zone	1	2	3	4	5	6
CW Strobe	1	2	3	4	5	6
RGB StrobeLine	1	2	3	4	5	6
CW Strobe	7	8	9	10	11	12
RGB Zone	7	8	9	10	11	12
CW Strobe	7	8	9	10	11	12

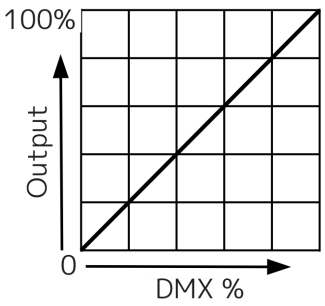
LARGE PIXEL ZONING

CW Strobe	1		
RGB Zone	1	2	3
CW Strobe	2		
RGB StrobeLine	1	2	3
CW Strobe	3		
RGB Zone	4	5	6
CW Strobe	4		

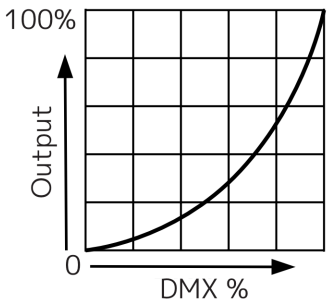
DIMMER MODES & CURVES



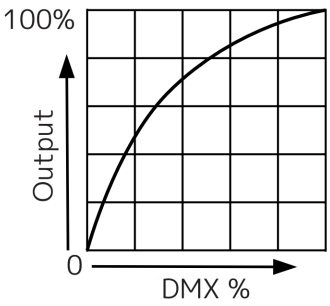
Dimming Curve Ramp Effect	0 sec Fade Time 		1 sec Fade Time 	
	Rise Time (ms)	Down Time (ms)	Rise Time (ms)	Down Time (ms)
Standard (default)	0	0	0	0
Stage	780	1100	1540	1660
TV	1180	1520	1860	1940
Architectural	1380	1730	2040	2120
Theatre	1580	1940	2230	2280
Stage 2	0	1100	0	1660



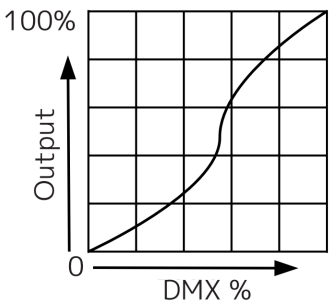
LINEAR



SQUARE



INVERSE SQUARE



S-CURVE

PRIMARY-SECONDARY SET UP

This function allows you to link units together to run in a Primary-Secondary set-up, in which one unit will act as the controlling unit and the others will react to the controlling unit's built-in programs. Any unit can be configured to act as a Primary or as a Secondary, but only one unit in a given system can be programmed to act as the Primary.

Primary-Secondary Connections and Settings:

1. Daisy chain your units via the XLR connectors on the bottom of each unit. Use standard XLR data cables to link your units together. Remember that the male XLR connector is the input and the female XLR connector is the ouput. The first unit in the chain (primary) will use the female XLR connector only. The last unit in the chain will use the male XLR connector only.
2. On the unit that you want to designate as the primary, use the display screen and control panel to navigate to **Control > Primary,** then press the ENTER button to confirm. Configure the operation of the device as desired.
3. On the units that you want to designate as secondaries, use the display screen and control panel to navigate to **Control > Secondary,** then press the ENTER button to confirm. The secondary units will now follow the operation of the primary unit.

NOTES:

- Only one unit should be configured as the primary, while all the other units should be configured as secondaries.
- All units should be set to the same DMX channel mode.
- If fixtures fail to sync, verify that all settings mentioned above are the same, then power all devices off, then switch them on again to re-establish the link.

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 the external lens surface regularly with a soft cloth to avoid dirt/debris accumulation.

NEVER use alcohol, solvents, or ammonia-based cleaners.

MAINTENANCE

Regular inspections are recommended to ensure proper function and extended life. There are no user serviceable parts inside this fixture. Please refer all other service issues to an authorized ADJ service technician. Should you need any spare parts, please order genuine parts from your local ADJ dealer.

Please refer to the following points during routine inspections:

A. 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.
B. 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.
C. 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).
D. Electric power supply cables must not show any damage, material fatigue, or sediments.

NEVER remove the ground prong from the power cable.

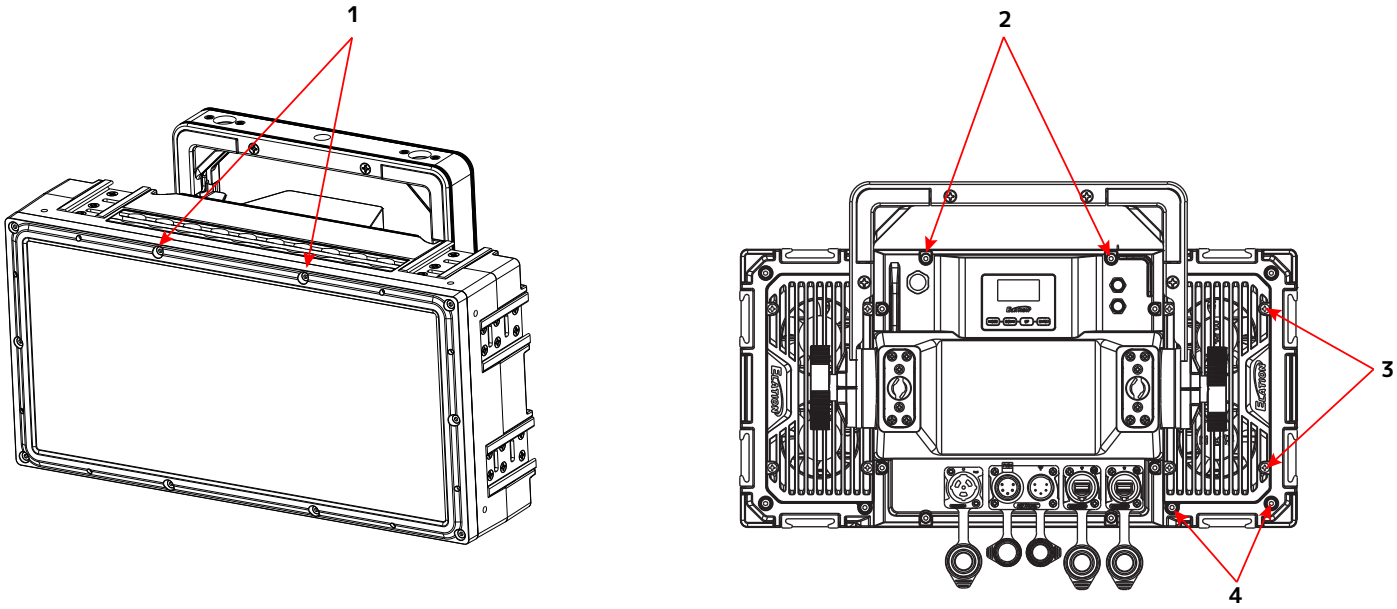
TORQUE SETTINGS FOR SCREWS

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
ALTERNATE DRIVERS:
- Proto J6107A
- Wiha 28887

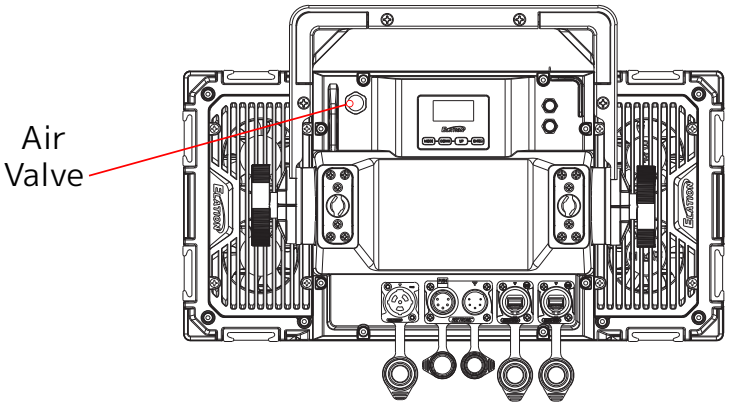
CAUTION! DO NOT OVER TORQUE SCREWS, AS THIS CAN CAUSE LEAKAGE ISSUES!



NO.	LOCATION	QUANTITY	TORQUE
1	Fixed Front Cover	10	11.3 ± 0.4 lb-in (13.0 ± 0.5 kg-cm)
2	Fixed Rear Cover	8	11.3 ± 0.4 lb-in (13.0 ± 0.5 kg-cm)
3	Fixed Fan Cover	8	4.3 ± 0.4 lb-in (5.0 ± 0.5 kg-cm)
4	Fixed Base Cover	8	11.3 ± 0.4 lb-in (13.0 ± 0.5 kg-cm)

IP TEST PARAMETERS

Following any repair or maintenance procedure that requires disassembly of the fixture, use Elation's IP Tester to confirm the IP integrity of the fixture. 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 CLOSE PROXIMITY TO THE FIXTURE'S LENS WHILE PERFORMING THE TEST!

DE-HUMIDIFICATION: IP65 fixtures operating in high-humidity environments may experience residual fogging or condensation. Such fogging will not damage 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 that this procedure should be performed in a dry, air-conditioned environment. Avoid additional fogging by drying the fixture completely before placing into a road case.

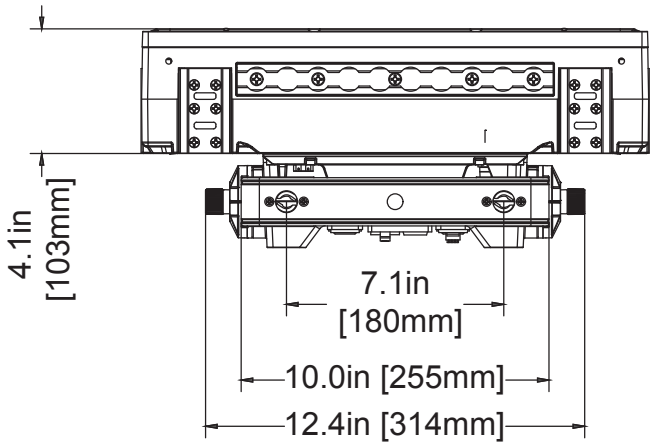
IP PRESSURE TESTING PARAMETERS					
Low Pressure Limit	**High Pressure Limit**	**Inflation Time**	**Equilibrium Time**	**Detection Time**	**Max Leakage**
2.901 psi (20.0 KPa)	3.336 psi (23 KPa)	30 sec	15 sec	15 sec	0.014 psi (100 Pa)

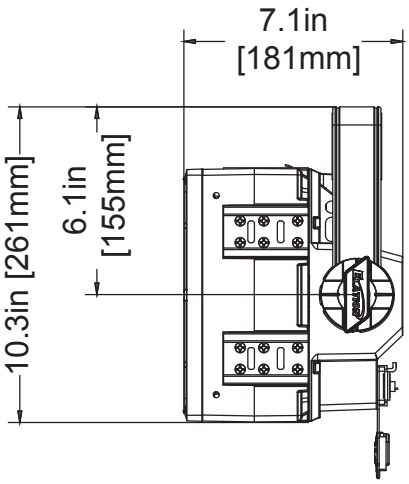
ERROR CODES

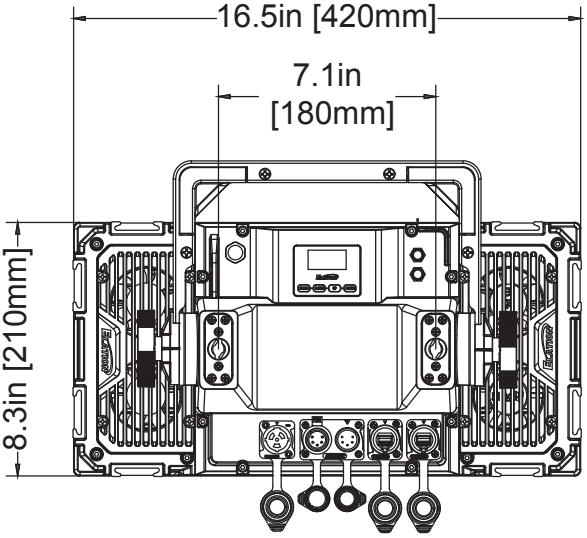
Error Codes subject to change without notice	
ERROR CODES	**DESCRIPTION**
LEDTemp	LED Temperature Error
BaseTemp	Fixture Base Temperature Error
CoolFan1	Cooling Fan 1 Error
CoolFan2	Cooling Fan 2 Error
CoolFan3	Cooling Fan 3 Error
CoolFan4	Cooling Fan 4 Error
PowerFan	Power Unit Fan Error

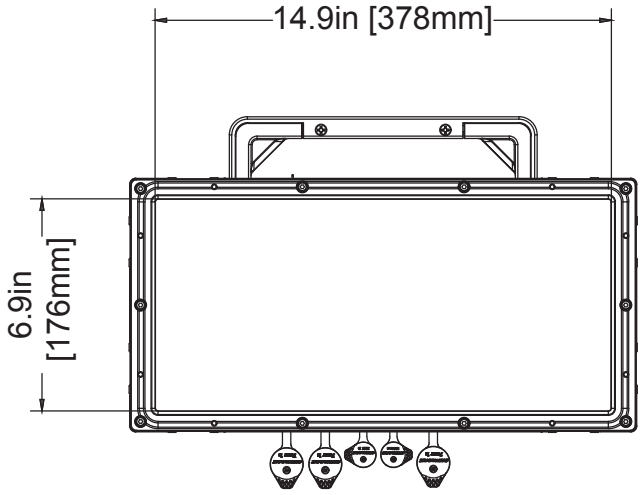
DIMENSIONAL DRAWINGS

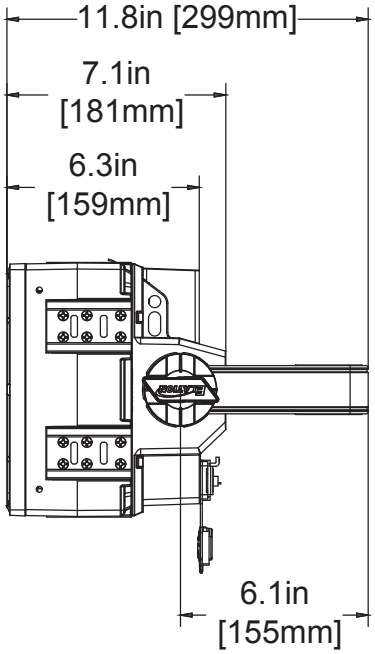
FIXTURE





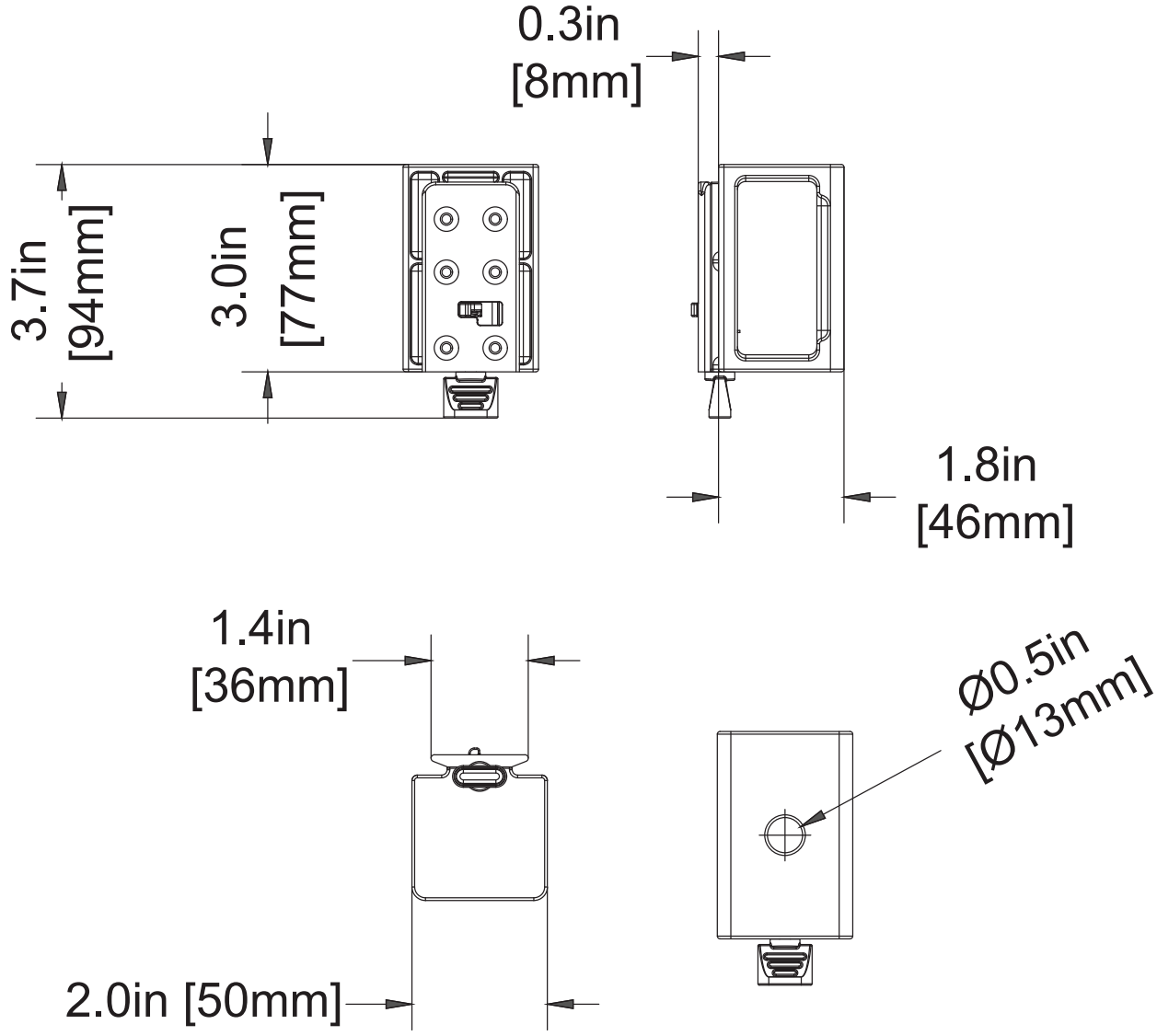






DIMENSIONAL DRAWINGS

INTERCONNECT CLAMP ADAPTOR



SPECIFICATIONS

SOURCE
(1248) 1.5W RGB LEDs
(432) 5W CW Strobe LEDs
50,000 Hour Average LED Life*
*May vary depending on several factors including but not limited to:
Environmental Conditions, Power/Voltage, Usage Patterns (On-Off Cycling), Control and Dimming.

PHOTOMETRIC DATA
Total Lumen Output:
Integrating Sphere:
All LED: 77,919 Lumens
CW LED: 110,709 Lumens
RGB LED: 49,868 Lumens
CRI: >70
Beam Angle: 68°
Field Angle: 112°

EFFECTS
24 Zones of RGB Plate LEDs (6 x 4)
48 Zones of CW Strobe LEDs (12 x 4)
12 Zones of RGB StrobeLine LEDs (12 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, 12ch, 22ch, 45ch, 60ch, 170ch, 88ch, 178ch, 156ch)
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

SIZE / WEIGHT
Length: 16.5in (420mm)
Width: 11.8in (299mm)
Height: 8.3in (210mm)
Weight: 29.5 lbs. (13.4kg)

ELECTRICAL / THERMAL
AC 100-240V - 50/60Hz
Max Power Consumption 1400W
-4°F to 113°F (-20°C to 45°C)
BTU/hr (+/- 10%) 4774

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

ORDERING INFORMATION

SKU (US)	SKU (EU)	ITEM DESCRIPTION
PUL001	1237000343	Elation Pulse Panel
TRIGGER CLAMP	1741000032	Heavy Duty Wrap Around Hook Style Clamp
TOU027	PENDING	Tour Link 5pin, 10Ft, Tour Grade, DMX Data Cable
SPHDY	1236300112	SOL/PULSE HD Yoke
FISP06	1236300110	Fixture Interconnect Splice Package
FICA01	N/A	Interconnect Clamp Adapter
PPL101	N/A	PULSE PANEL Frost
PPL202	N/A	PULSE PANEL Black Lens
50501990448	N/A	180mm Zinc Omega Bracket

FCC STATEMENT

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

FCC RADIO FREQUENCY INTERFERENCE WARNINGS & INSTRUCTIONS

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

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

Europe Energy Saving Notice
Energy Saving Matters (EuP 2009/125/EC)
Saving electric energy is a key to help protecting the environment. Please turn off all electrical products when they are not in use. To avoid power consumption in idle mode, disconnect all electrical equipment from power when not in use. Thank you