



PROTEUS EXCALIBUR 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 Modes	Notes
09/07/2021	1.0	1.0	22 / 32	Initial Release
10/04/2021	1.5	1.0	22 / 32	Added Battery Installation
12/01/2021	2.0	1.0	26	Updated DMX Traits
01/05/2022	2.5	1.4.0	26	Add CleanVentMode Notes
01/05/2022	3.0	N/C	N/C	Updated specs.
04/19/2022	3.5	N/C	N/C	Updated General Info.
04/28/2022	4.0	1.5.0	N/C	Updated Safety Guidelines, System Menu, and Specifications.
07/08/2022	4.5	N/C	N/C	Updated specifications
07/18/2022	5.0	N/C	N/C	Updated Torque Settings for Screws
10/10/2022	5.5	1.5.2	N/C	Added RDM, Sky Motion, and Software Updates; Updated Installation Guidelines, System Menu, DMX Traits
04/18/2023	6.0	N/C	N/C	Updated Installation Guidelines, Dimensional Drawings, Specifications

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GENERAL INFORMATION

INTRODUCTION

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

IP65 RATED

An IP rated lighting fixture is one, which is commonly installed in outdoor environments and has been designed with an enclosure that effectively protects the ingress (entry) of external foreign objects such as dust and water. **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 one, which has been designed and tested to protect against the ingress of dust **(6)** and low-pressure water jets from any direction **(5)**.

COOLING

After usage, the lamp may be switched off, but the fixture should remain connected to power in order to allow the fan time to cool down the fixture.

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

Omega Brackets (x2)
IP65 Rated 5pin DMX Cable
IP65 Rated RJ45 DATA Cable (Fixture to Fixture Interconnect Use Only!)
IP65 Rated Twist-Lock Power Cable

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 | Fax 323-832-9142 | support@elationlighting.com

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REPLACEMENT PARTS please visit parts.elationlighting.com

LIMITED WARRANTY (USA ONLY)

- A. Elation Professional hereby warrants, to the original purchaser, Elation Professional products to be free of manufacturing defects in material and workmanship for a period of two years (730 days), and Elation Professional product rechargeable batteries to be free of manufacturing defects in material and workmanship for a period of six months (180 days), from the original date of purchase. This warranty excludes discharge lamps and all product accessories. This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.
- B. For warranty service, send the product only to the Elation Professional factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, Elation Professional will pay return shipping charges only to a designated point within the United States. If any product is sent, it must be shipped in its original package and packaging material. No accessories should be shipped with the product. If any accessories are shipped with the product, Elation Professional shall have no liability what so ever for loss and/or or damage to any such accessories, nor for the safe return thereof.
- C. This warranty is void if the product serial number and/or labels are altered or removed; if the product is modified in any manner which Elation Professional concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the Elation Professional factory unless prior written authorization was issued to purchaser by Elation Professional; if the product is damaged because not properly maintained as set forth in the product instructions, guidelines and/or user manual.
- D. This is not a service contract, and this warranty does not include any maintenance, cleaning or periodic check-up. During the periods as specified above, Elation Professional will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of Elation Professional under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Elation Professional. All products covered by this warranty were manufactured after January 1, 1990, and bare identifying marks to that effect.
- E. Elation Professional reserves the right to make changes in design and/or performance improvements upon its products without any obligation to include these changes in any products theretofore manufactured.
- F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with the products described above. Except to the extent prohibited by applicable law, all implied warranties made by Elation Professional in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty periods set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said periods have expired. The consumer's and/or dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall Elation Professional be liable for any loss and/or damage, direct and/or consequential, arising out of the use of, and/or the inability to use, this product.
- G. This warranty is the only written warranty applicable to Elation Professional products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

WARRANTY RETURNS

All returned service items whether under warranty or not, must be freight pre-paid and accompanied by a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem, as well as the R.A. number, must also be written down on a piece of paper and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. Items returned without an R.A. number clearly marked on the out-side of the package will be refused and returned at customer's expense. You may obtain an R.A. number by contacting customer support.

SAFETY GUIDELINES

This fixture is a sophisticated piece of electronic equipment. To guarantee a smooth operation, it is important to follow all instructions and guidelines in this manual. Elation Professional is not responsible for injury and/or damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual. Only qualified and/or certified personnel should perform installation of this fixture and only the original rigging parts (omega brackets) included with this fixture should be used for installation. Any modifications to the fixture and/or the included mounting hardware will void the original manufacturer's warranty and increase the risk of damage and/or personal injury.



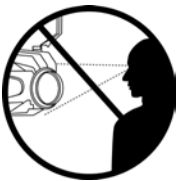
PROTECTION CLASS 1 - FIXTURE MUST BE PROPERLY GROUNDED.



**THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT.
DO NOT ATTEMPT ANY REPAIRS YOURSELF; DOING SO WILL VOID YOUR
MANUFACTURER'S WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS
TO THIS FIXTURE AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND
GUIDELINES IN THIS MANUAL VOID THE MANUFACTURE'S WARRANTY AND
ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS.**



**DO NOT PLUG FIXTURE INTO A DIMMER PACK!
NEVER OPEN THIS FIXTURE WHILE IN USE!
UNPLUG POWER BEFORE SERVICING FIXTURE!
NEVER TOUCH FIXTURE DURING OPERATION, AS IT MAY BE HOT!
KEEP FLAMMABLE MATERIALS AWAY FROM FIXTURE!**



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



**MINIMUM DISTANCE TO OBJECTS/SURFACES
MUST BE 65.6 FEET (20 METERS)
MAXIMUM TEMP OF EXTERNAL SURFACE 212° F (100°C)
MINIMUM DISTANCE OF INFLAMMABLE MATERIALS
FROM THE SURFACE 5 FEET (1.5 METER)**

SAFETY GUIDELINES

 <p>108 Lbs / 49 Kgs</p>	<p>WARNING</p> <p>TWO PERSON LIFT REQUIRED</p>
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! 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 65.6 feet (20m). 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 PHOTSENSITIVE 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.

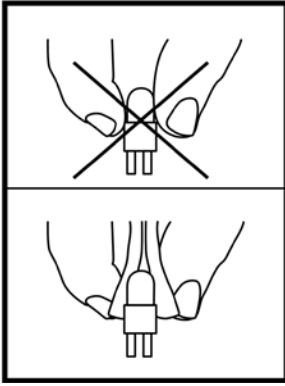
Always disconnect fixture from main power source before performing any type of service and/or cleaning procedure. Only handle the power cord by the plug end, never pull out the plug by tugging the wire portion of the cord.

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 fixture will function properly for many years.

ONLY use the original packaging and materials to transport the fixture in for service.

DISCHARGE LAMP WARNING



This fixture is fitted with a DISCHARGE LAMP, which is highly susceptible to damage if improperly handled. NEVER touch the lamp with your bare hands, as the oil from your hands will shorten the life of the lamp. Also, NEVER move the fixture until the lamp has had ample time to cool. Lamps are NOT covered under warranty conditions. Avoid switching the fixture ON and OFF repeatedly in short intervals, as this will reduce lamp life and intensity. To achieve the intensity associated with discharge lamps, these lamps use gas sealed in a high-pressure environment to emit a brilliant output.

Due to the high pressure involved with the construction of the lamp, the lamp MAY EXPLODE DURING PROLONGED EXTENSIVE USE. This risk is increased with age; added care is encouraged when dealing with older lamps. Thus, the lamp must always be replaced at the end of their recommended duty cycle. Extreme caution should be used when operating this or any fixture fitted with a gas discharge lamp.



UV RADIATION NOTICE

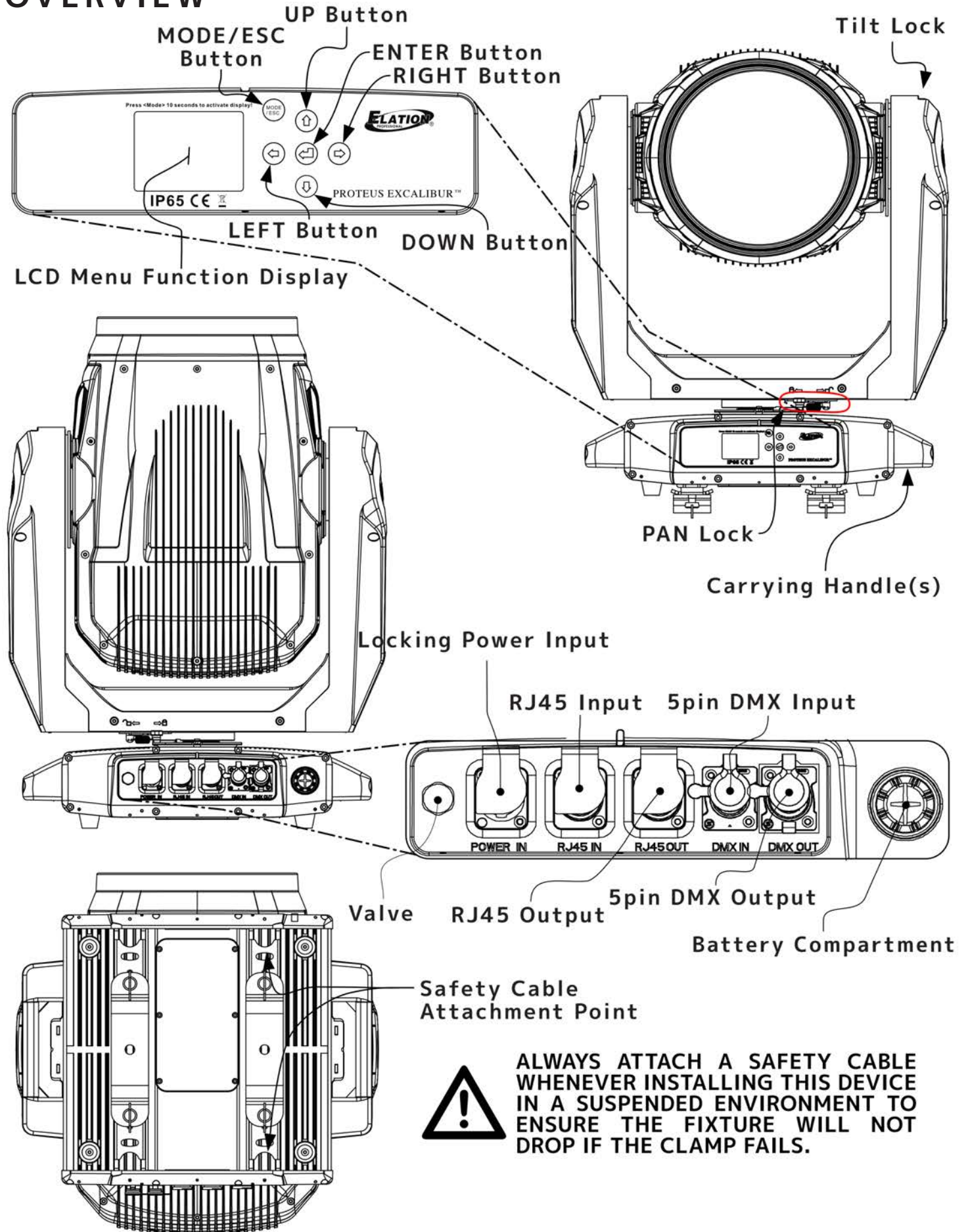
This fixture emits intense UV radiation, which is harmful to the eyes and skin. The intense luminance of the lamp can cause severe damage to the retina. NEVER operate this fixture with ANY of the protective covers removed. These covers have been specially designed to shield against UV radiation.



LAMP REPLACEMENT

Please note that the lamp must be replaced between 1500-6000 hours based on usage as indicated on display. Use only genuine Philips™ Platinum Flex Lamps. Other lamp brands may cause damage and void the warranty.

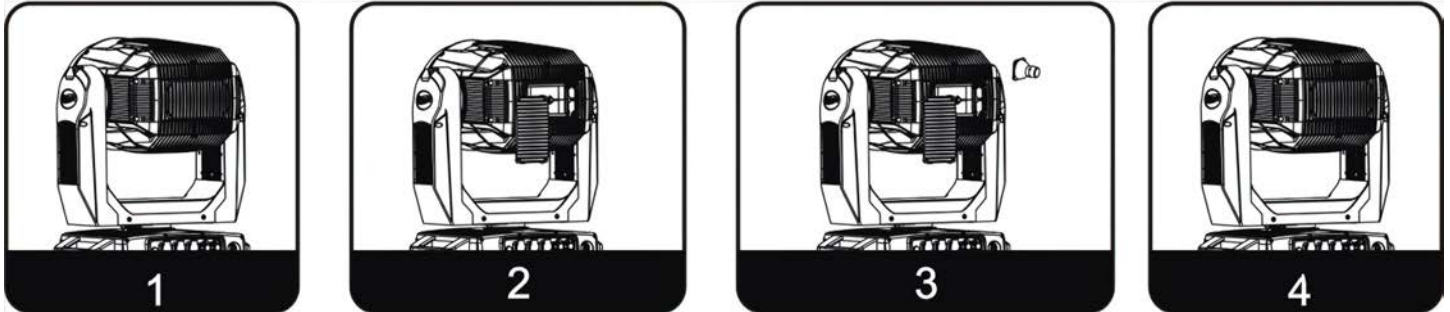
OVERVIEW



LAMP INSTALLATION

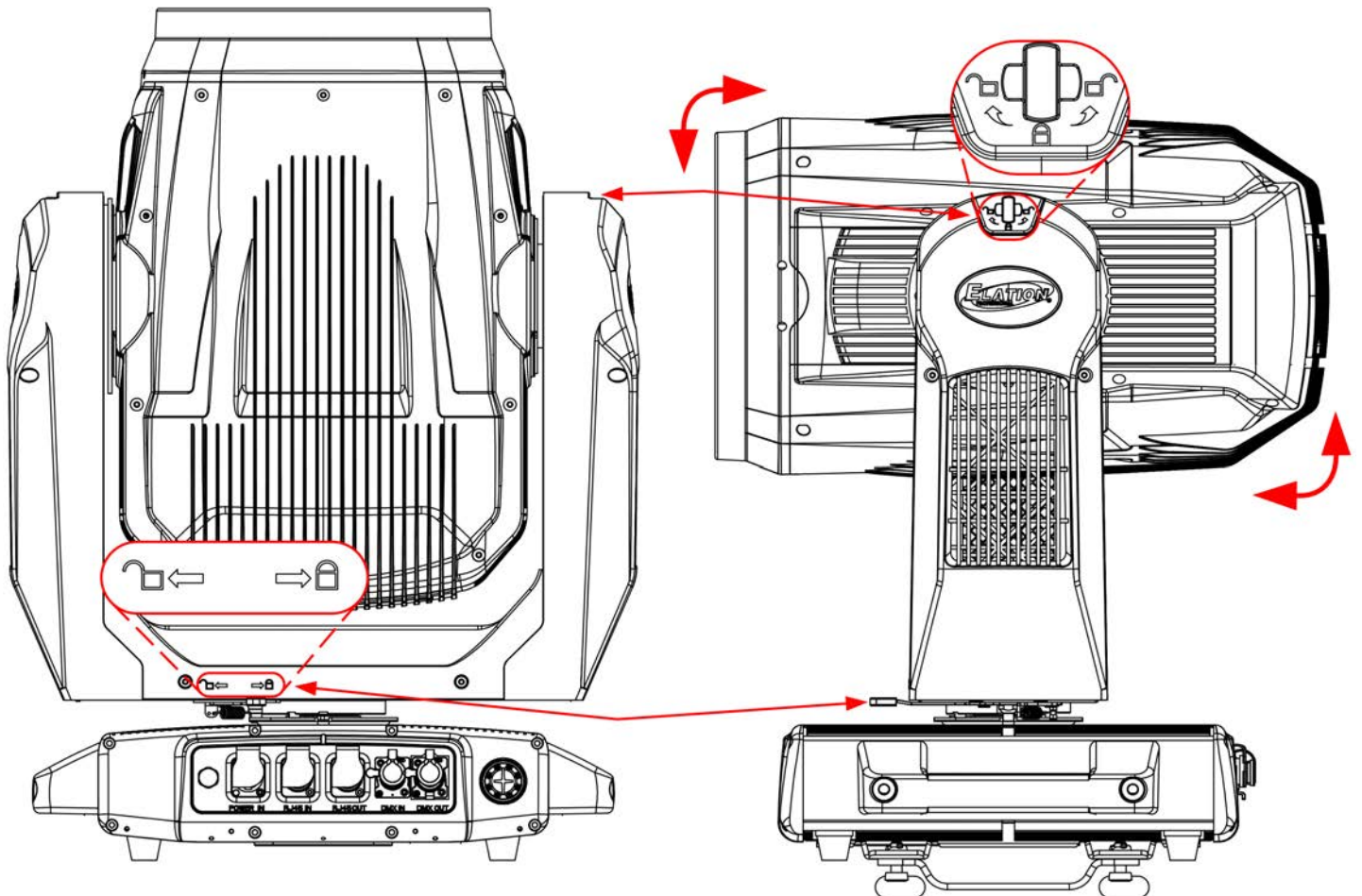
INSTALLING OR REPLACING LAMP

Please note that the lamp must be replaced between 1500-6000 hours based on usage as indicated on display. Use only genuine Philips™ Platinum Flex Lamps. Other lamp brands may cause damage and void the warranty.



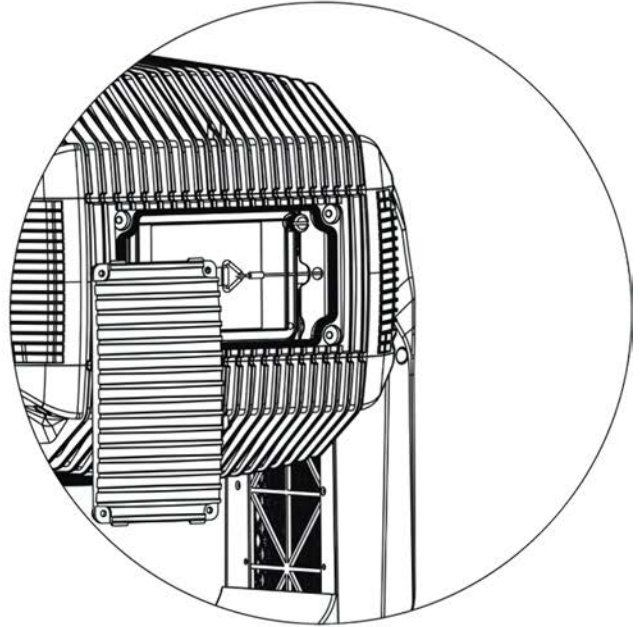
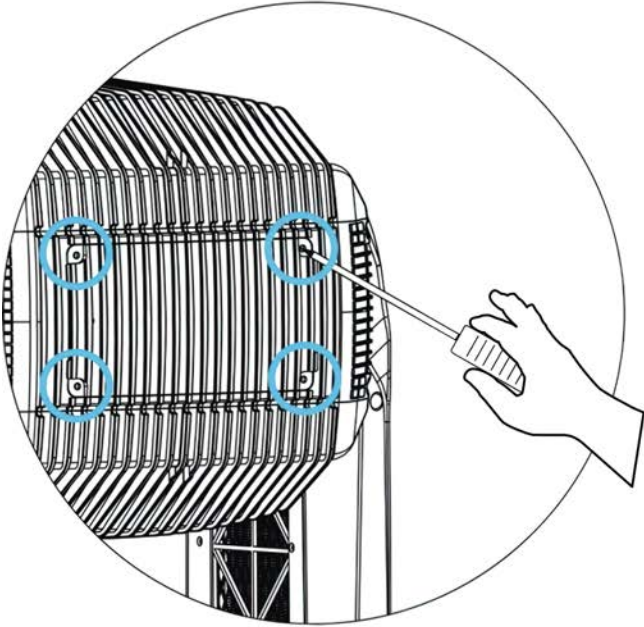
WARNING! LAMP REPLACEMENT SHOULD ONLY BE DONE BY A TRAINED TECHNICIAN.

1. Turn **OFF** power and allow approximately 60-minutes for the fixture to cool down.
2. Place the moving-head in a right-angle horizontal position, and engage both the **PAN** and **TILT** locks for added stability while replacing the lamp.

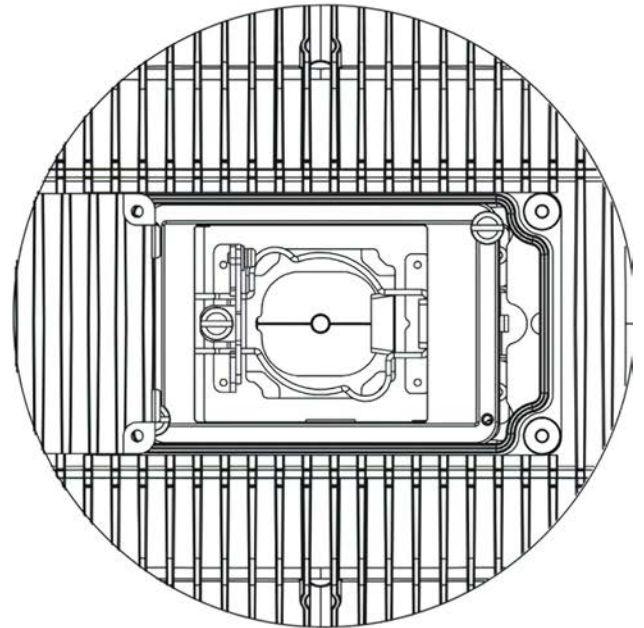
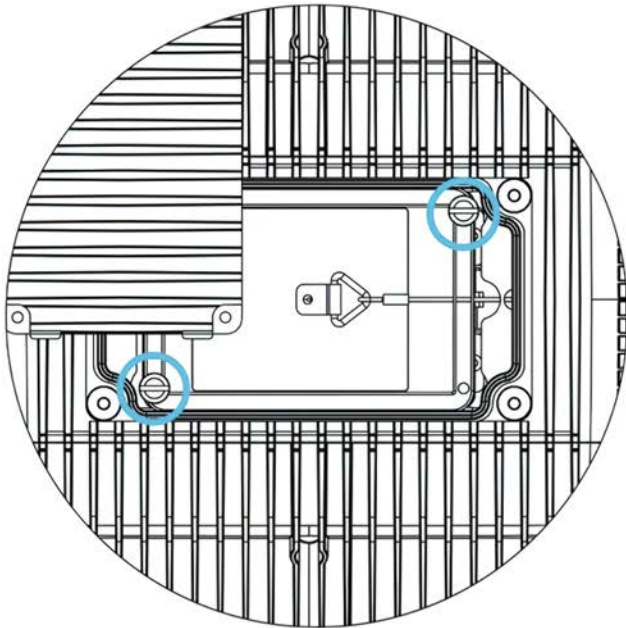


LAMP INSTALLATION

3. Remove (4x) screws that secure the bottom panel.

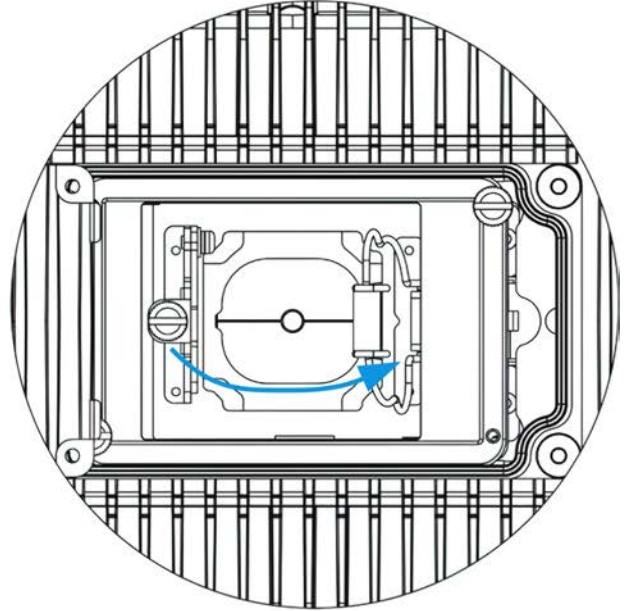
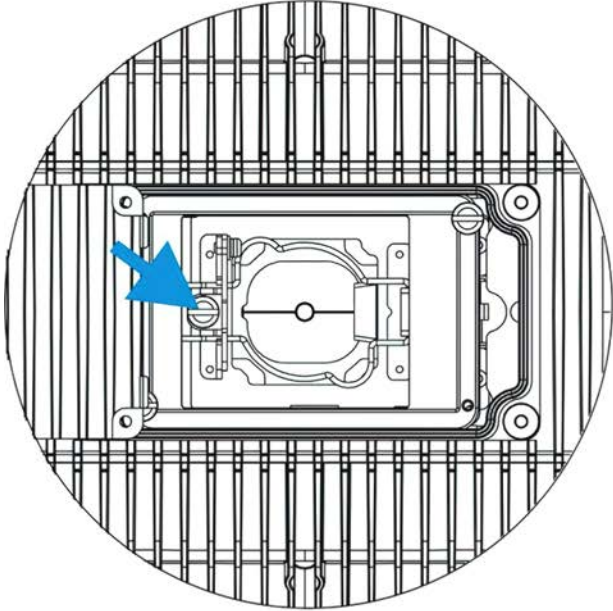


4. Loosen the two slotted thumb screws, and unclip the bottom panel safety cable, and remove the lamp socket cover, exposing the lamp socket.



LAMP INSTALLATION

5. Loosen the two slotted thumb screws, unclip the bottom panel safety cable, and remove the lamp socket cover.
6. Gently remove the (2x) spade terminals connected to the lamp.
7. Loosen the lamp retaining arm screw and pull arm out.
8. Unclip the lamp retaining-clip and swing it out.



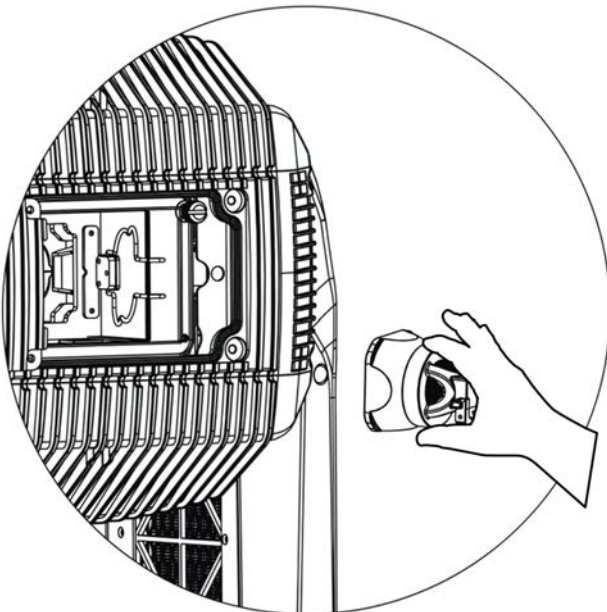
9. Carefully remove the lamp.



WARNING! LAMP MAY BE HOT. USE CAUTION WHEN TOUCHING LAMP WITH BARE HANDS.

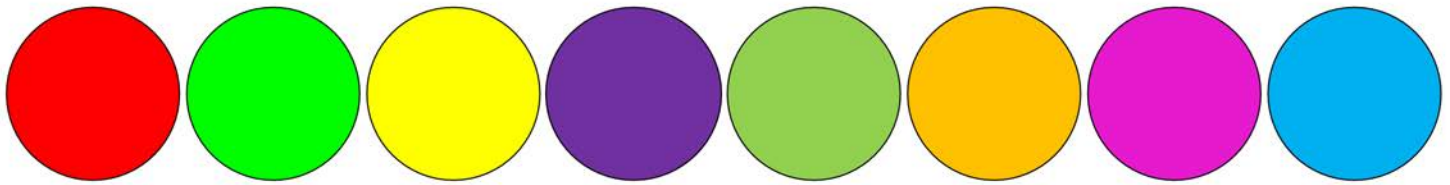
10. Carefully install the new lamp, then follow the removal instruction steps in reverse order.

NOTE: Brush away any debris using a nonabrasive brush before replacing the panel.



COLORS AND GOBOS

COLOR WHEEL



RED
POS. 1

GREEN
POS. 2

YELLOW
POS. 3

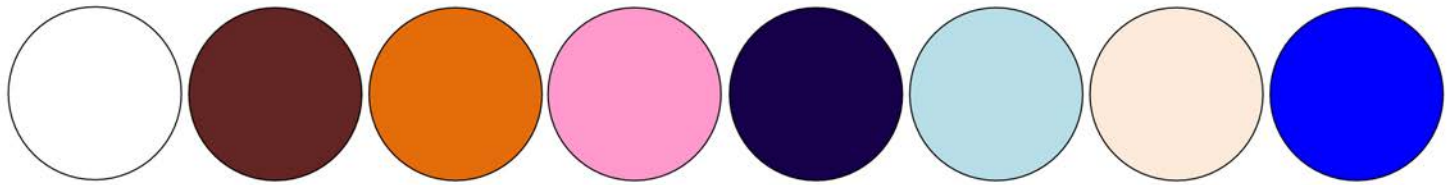
PURPLE
POS. 4

KELLY GREEN
POS. 5

ORANGE
POS. 6

MAGENTA
POS. 7

CYAN
POS. 8



OPEN
POS. 9

DEEP RED
POS. 10

DARK AMBER
POS. 11

PINK
POS. 12

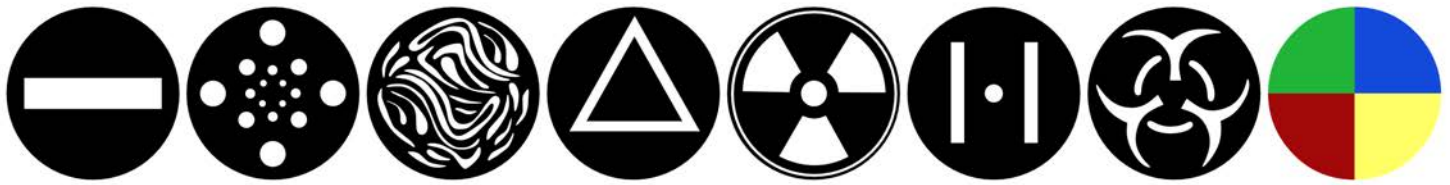
CTB
POS. 13

CTB
POS. 14

CTO
POS. 15

BLUE
POS. 16

ROTATING GOBO WHEEL 1



POS. 1

POS. 2

POS. 3

POS. 4

POS. 5

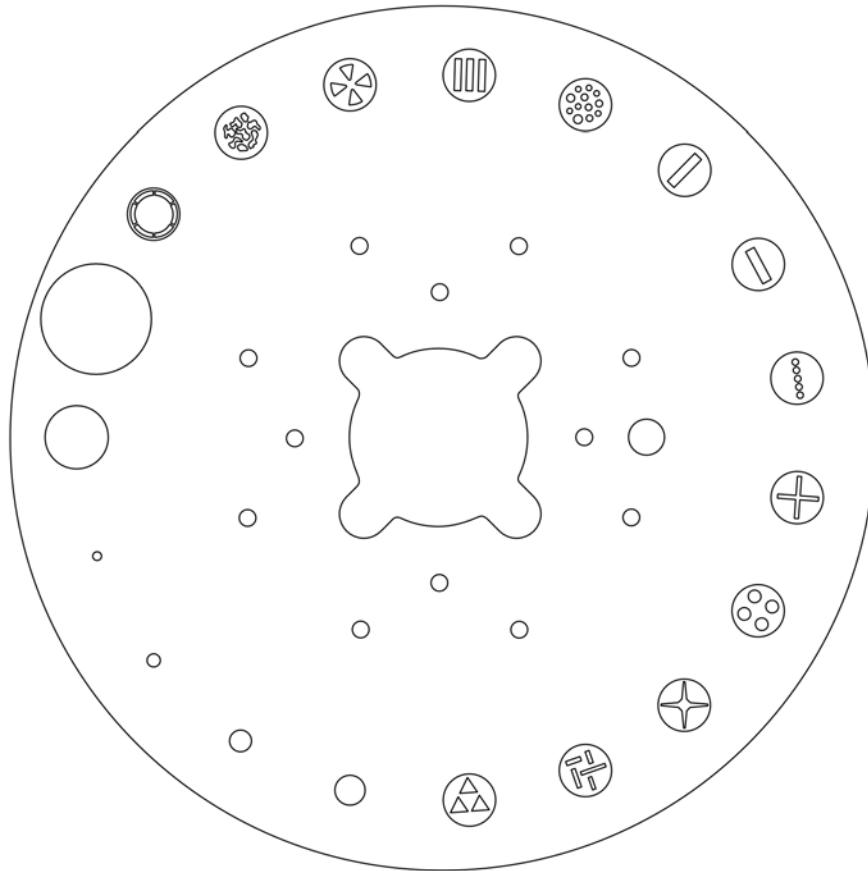
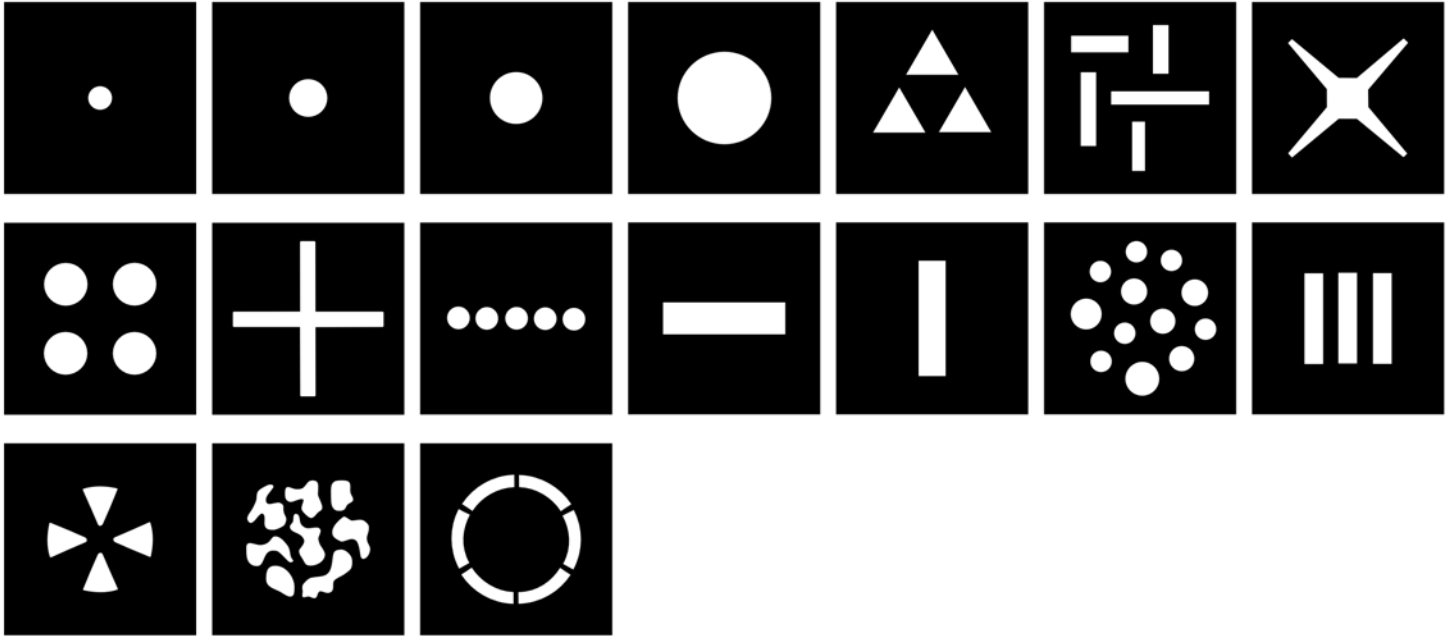
POS. 6

POS. 7

POS. 8

COLORS AND GOBOS

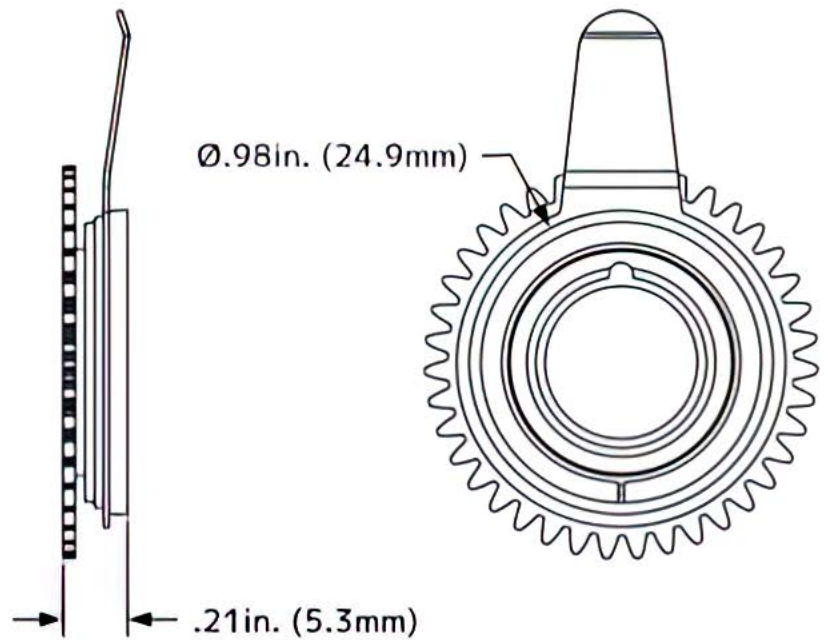
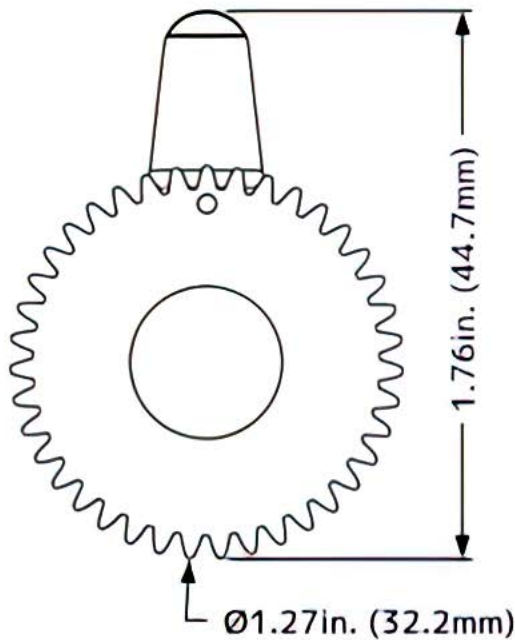
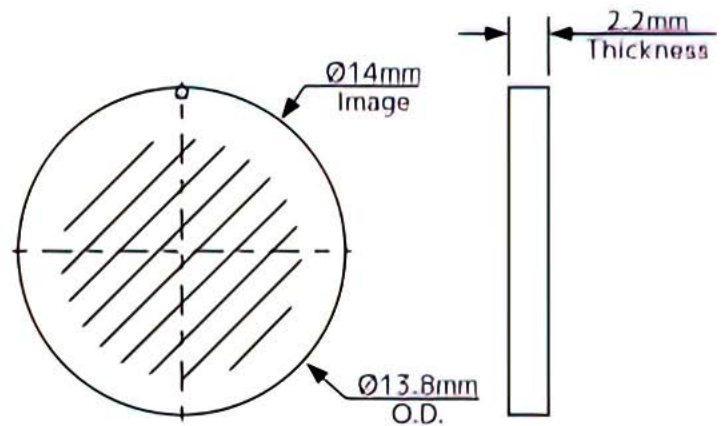
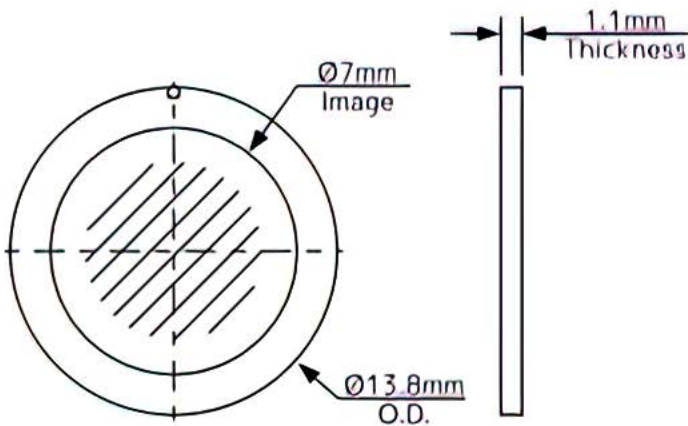
FIXED GOBO WHEEL 2



CUSTOM GOBOS

ROTATING WHEEL1 GOBOS - Pos. 1-7:	
Gobo O.D. (Max. Outer Diameter)	Ø13.8mm
Gobo I.D. (Max. Image Diameter)	Ø7mm
Gobo Holder Diameter	Ø14mm
Gobo Thickness	1.1mm±0.1mm
Gobo Material	Borofloat

ROTATING WHEEL1 GOBO - Pos. 8:	
Gobo O.D. (Max. Outer Diameter)	Ø13.8mm
Gobo I.D. (Max. Image Diameter)	Ø14mm
Gobo Holder Diameter	Ø14mm
Gobo Thickness	2.2mm
Gobo Material	Borofloat



Proteus Excalibur utilizes different size gobo holders on every wheel.

Please be aware of the intended position and correct sizing requirements of custom gobos.

***** IMPORTANT NOTICE REGARDING CUSTOM GOBOS *****

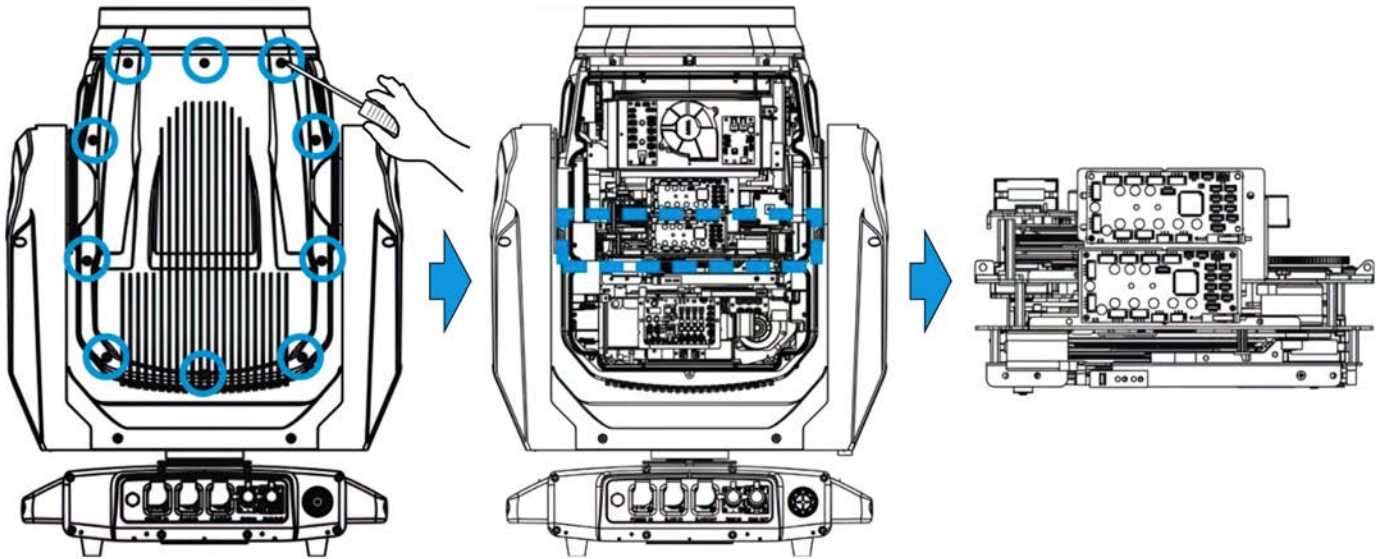
Due to the high temperature optical system, special glass material is required for custom gobos. Due to varying manufacturing processes and tolerances, it is highly recommended to provide a gobo sample and holder from the fixture to the custom gobo vendor for accurate sizing. Extended testing of custom gobo designs is highly recommended prior to use. Contact ELATION SERVICE for further information.

ELATION SERVICE USA -Monday -Friday 8:00am to 4:30pm PST
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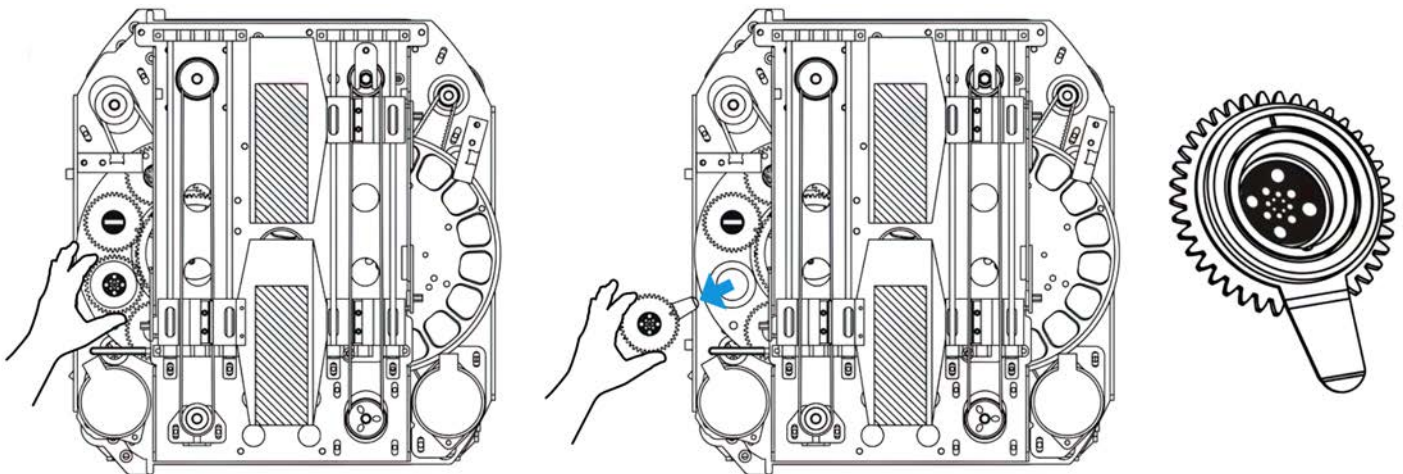
ELATION SERVICE EUROPE -Monday -Friday 08:30 to 17:00 CET
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GOBO INSTALLATION

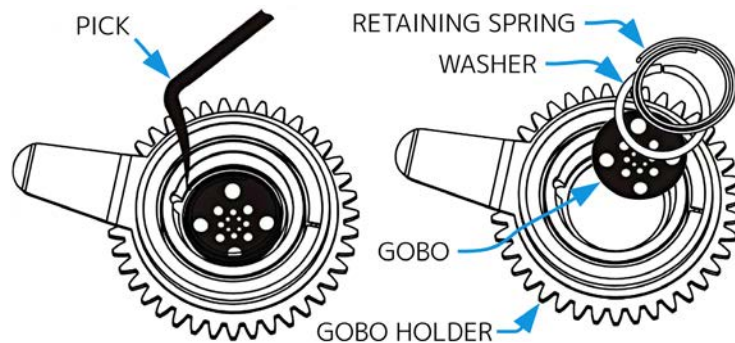
REPLACING A ROTATING GOBO



Place the Elation Proteus Excalibur fixture on a firm flat surface. Locate the (10x) screws on the side of the moving head and remove them. With the panel set aside, locate the Pattern Bracket Assembly and remove the (4x) screws that secure it to the internal housing frame.



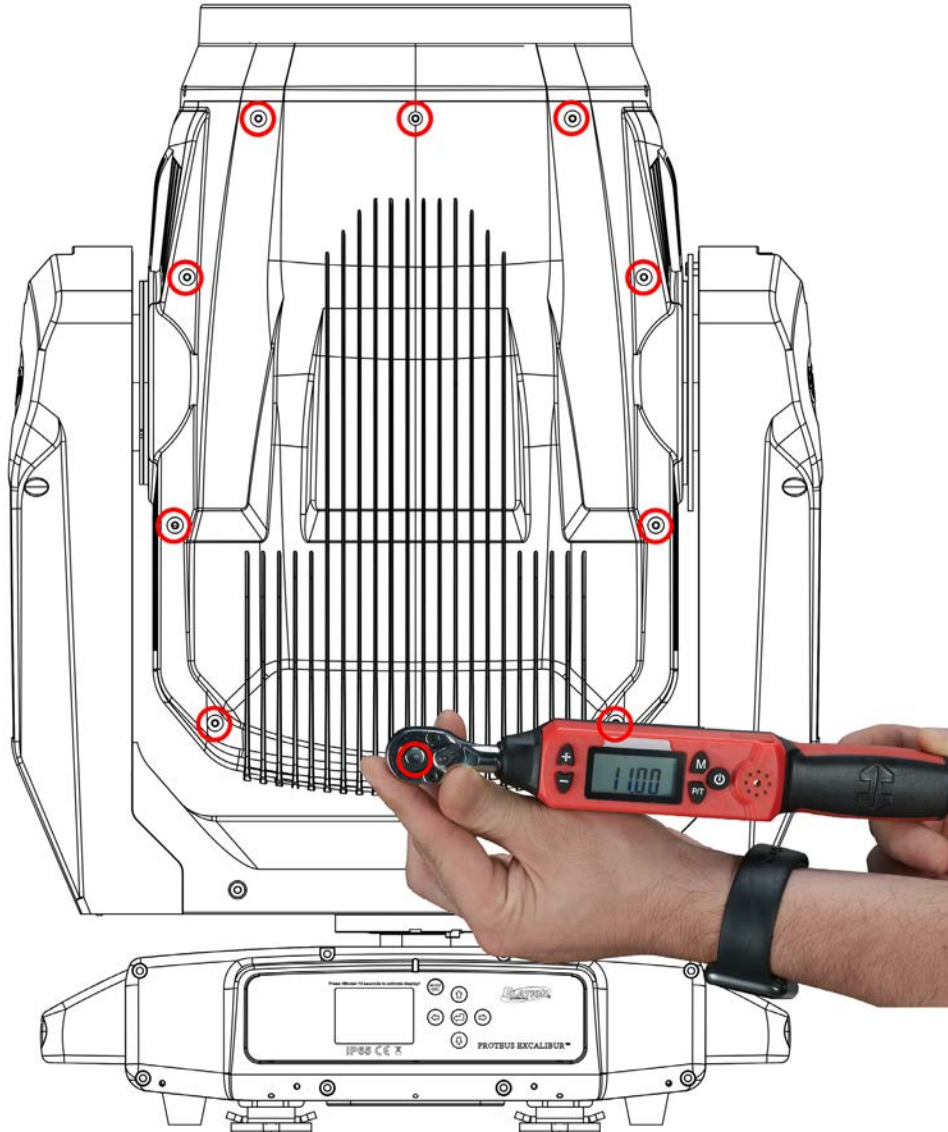
Locate the specific Rotating Gobo to replace. Carefully grip the Gobo using your thumb and index finger, gently lift it slightly, and then pull it out and away until it fully clears the Gobo Wheel.



Locate the tab of the spring, and with a precision pick (or similar tool), carefully press the retaining spring inward to relieve the tension. Remove the retaining spring and carefully separate the GOBO from the GOBO Holder. Lastly, remove the flat washer attached to the removed GOBO and attach it to the desired replacement GOBO. Install the replacement Rotating GOBO following the steps above in reverse order.

CAUTION: TAKE CARE NOT TO SCRATCH GOBO OR GOBO HOLDER

TORQUE SETTINGS FOR SCREWS



The hex-head screws holding either the panels or the base **MUST** be tightened with a torque wrench (not included). **TORQUE SETTING = 11 lbf-in. (12.7kgf-cm)***

*** lbf-in = Pound Force Inches | kgf-cm = Kilogram Force Centimeters**

TORQUE SETTINGS FOR SCREWS



CAUTION! DO NOT OVER TORQUE SCREWS AS THIS CAN CAUSE LEAKAGE ISSUES! TO CONFIRM THE IP65 INTEGRITY AFTER A LAMP REPLACEMENT, TEST FIXTURE USING THE ELATION IP TESTER. CONTACT ELATION SERVICE FOR MORE DETAILS.



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!



IP PRESSURE TESTING PARAMETERS			
Test Type	Low Pressure Limit	High Pressure Limit	Hold Time
Vacuum Test	-4.35 psi (-30.00 KPa)	-5.08 psi (-35.00 KPa)	10 s
Pressure Test	3.62 psi (25.00 KPa)	4.35 psi (30.00 KPa)	10 s

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.



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



**MINIMUM DISTANCE TO OBJECTS/SURFACES
MUST BE 65.6 FOOT (20 METERS)**



**MINIMUM DISTANCE OF INFLAMMABLE MATERIALS
FROM THE SURFACE 5 FEET (1.5 METER)**



MAXIMUM AMBIENT TEMPERATURE 194° F (90°C)



DO NOT INSTALL THE FIXTURE IF YOU ARE NOT QUALIFIED TO DO SO!

Fixture **MUST** be installed following all local, national, and country commercial electrical and construction codes and regulations.

Before rigging/mounting the fixture to any metal truss/structure or placing the fixture on any surface, a professional equipment installer **MUST** be consulted to determine if the metal truss/structure or surface is properly certified to safely hold the combined weight of the fixture, clamps, cables, and accessories.

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

Fixture ambient operating temperature range is **-4° to 113°F. (-20° to 45°C)**

Do not use the fixture under or above this temperature.

Fixture 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 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 10 minutes for the fixture to cool down before serving.

INSTALLATION GUIDELINES

CLAMP INSTALLATION

Insert (2x) minimum grade 8.8 steel M12x25mm bolts (not included) through the respective mounting hole of the clamp (not included), and then thread it into the matching 12M holes on the bottom of the fixture base. Both bolts must be threaded at least 18mm (0.7ins) into the fixture base.

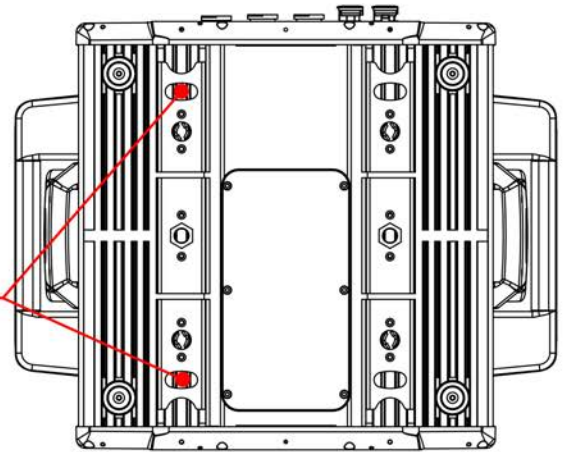
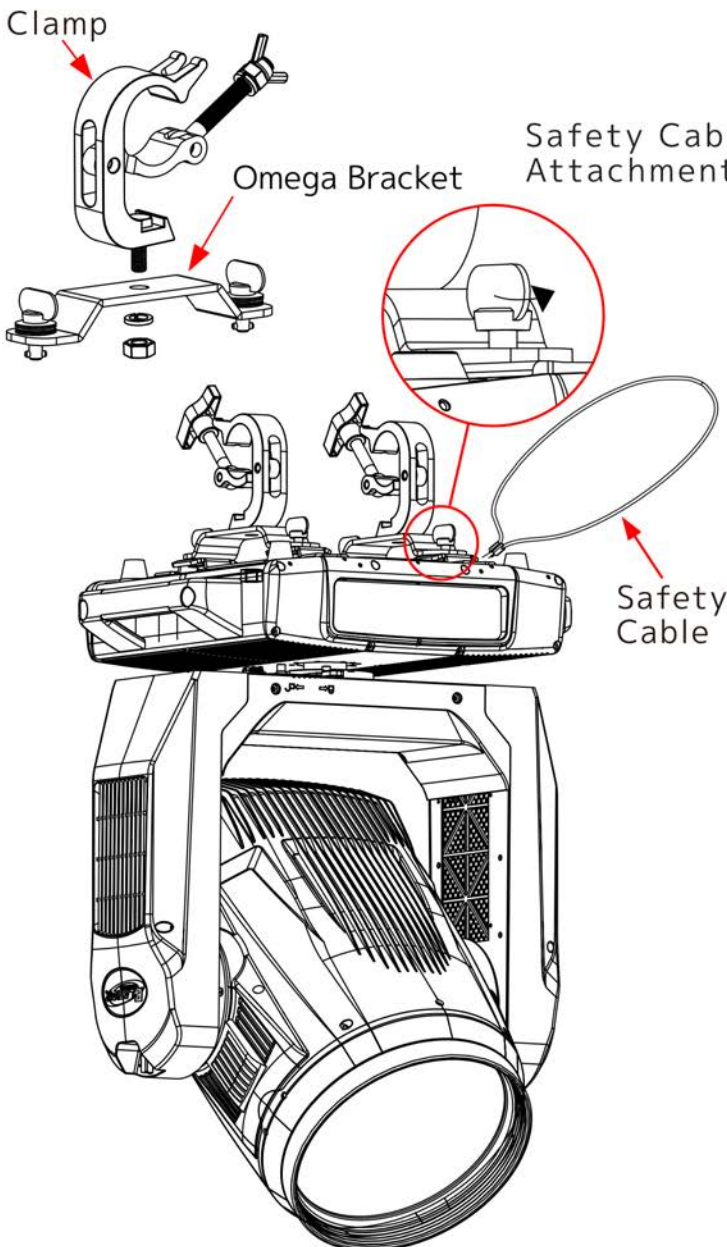
OMEGA BRACKETS: Insert them into the matching holes on the bottom of the fixture, and secure them by turning each quick-lock fastener ¼-turn clockwise, making sure the fastener is completely locked.

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

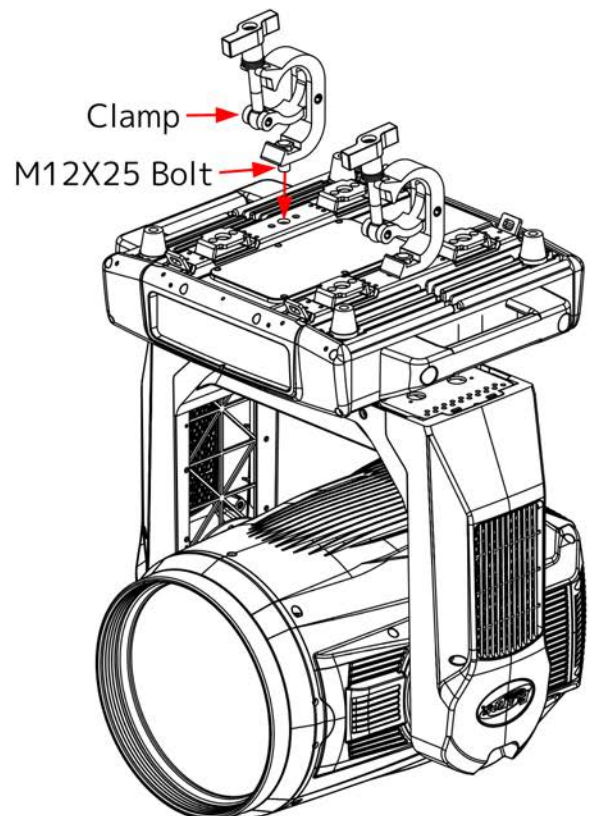
SAFETY CABLE

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.

TRUSS CLAMPS MOUNTED TO BASE VIA OMEGA BRACKETS



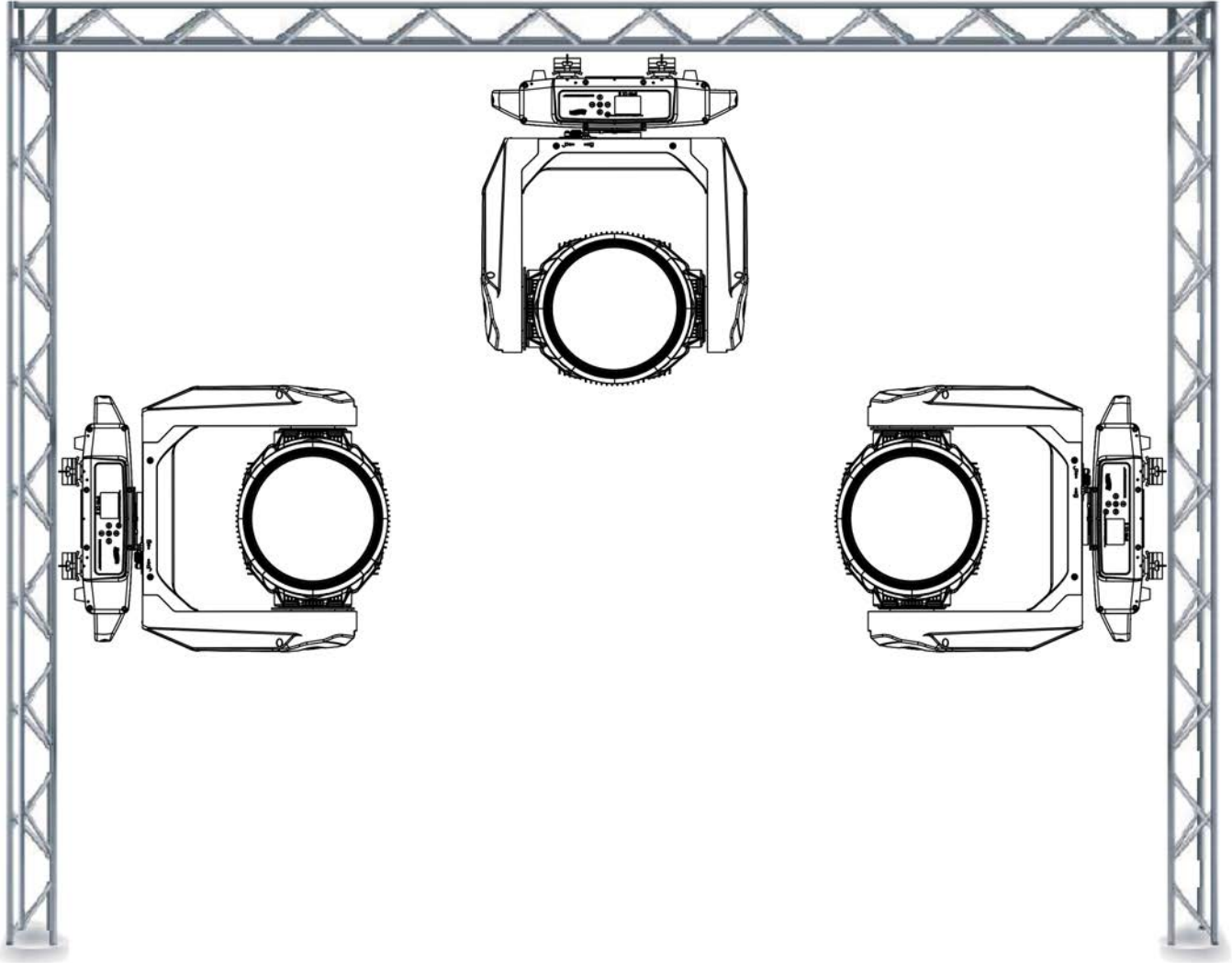
TRUSS CLAMPS MOUNTED DIRECTLY TO FIXTURE BASE USING INTEGRATED M12 THREADED MOUNTING HOLES



INSTALLATION GUIDELINES

RIGGING

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



CAUTION: 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!

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.

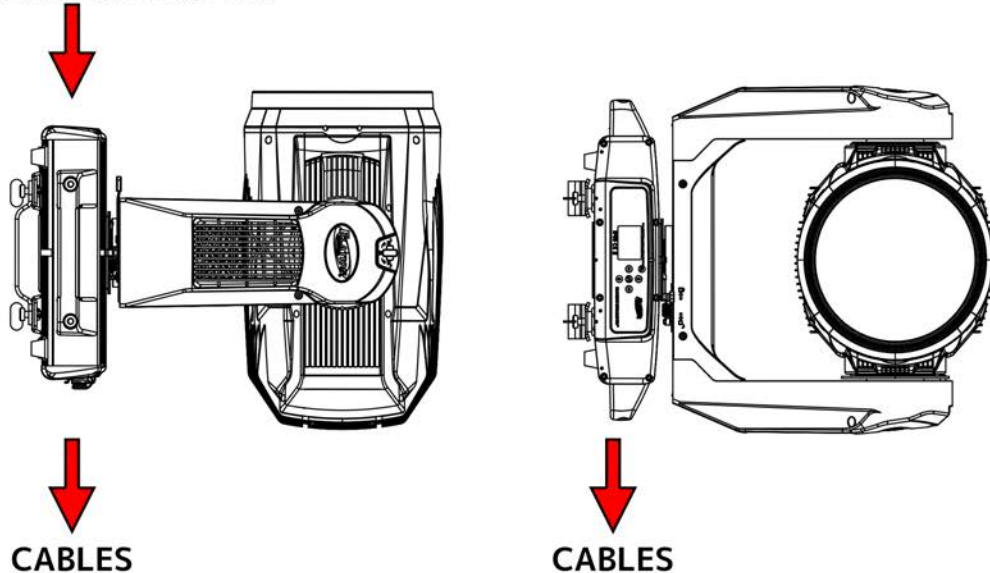
https://en.wikipedia.org/wiki/Internet_Group_Management_Protocol

POWER AND DATA CABLES



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

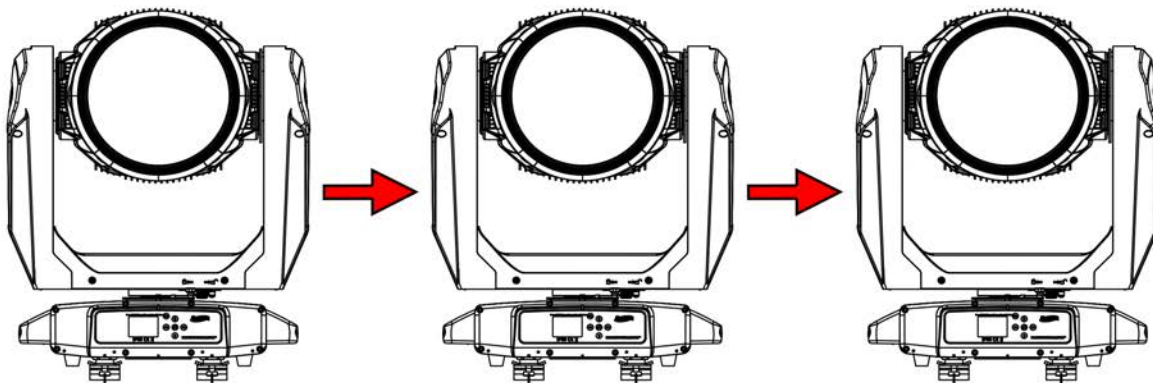
SYSTEM MENU LCD DISPLAY



INCLUDED RJ45 DATA CABLE



THE INCLUDED RJ45 DATA CABLE IS FOR FIXTURE TO FIXTURE INTERCONNECTION ONLY! THE RJ45 CABLE CONNECTORS MAY NOT BE COMPATIBLE WITH OTHER RJ45/ETHERCON TYPE CONNECTORS.



INSTALLATION GUIDELINES

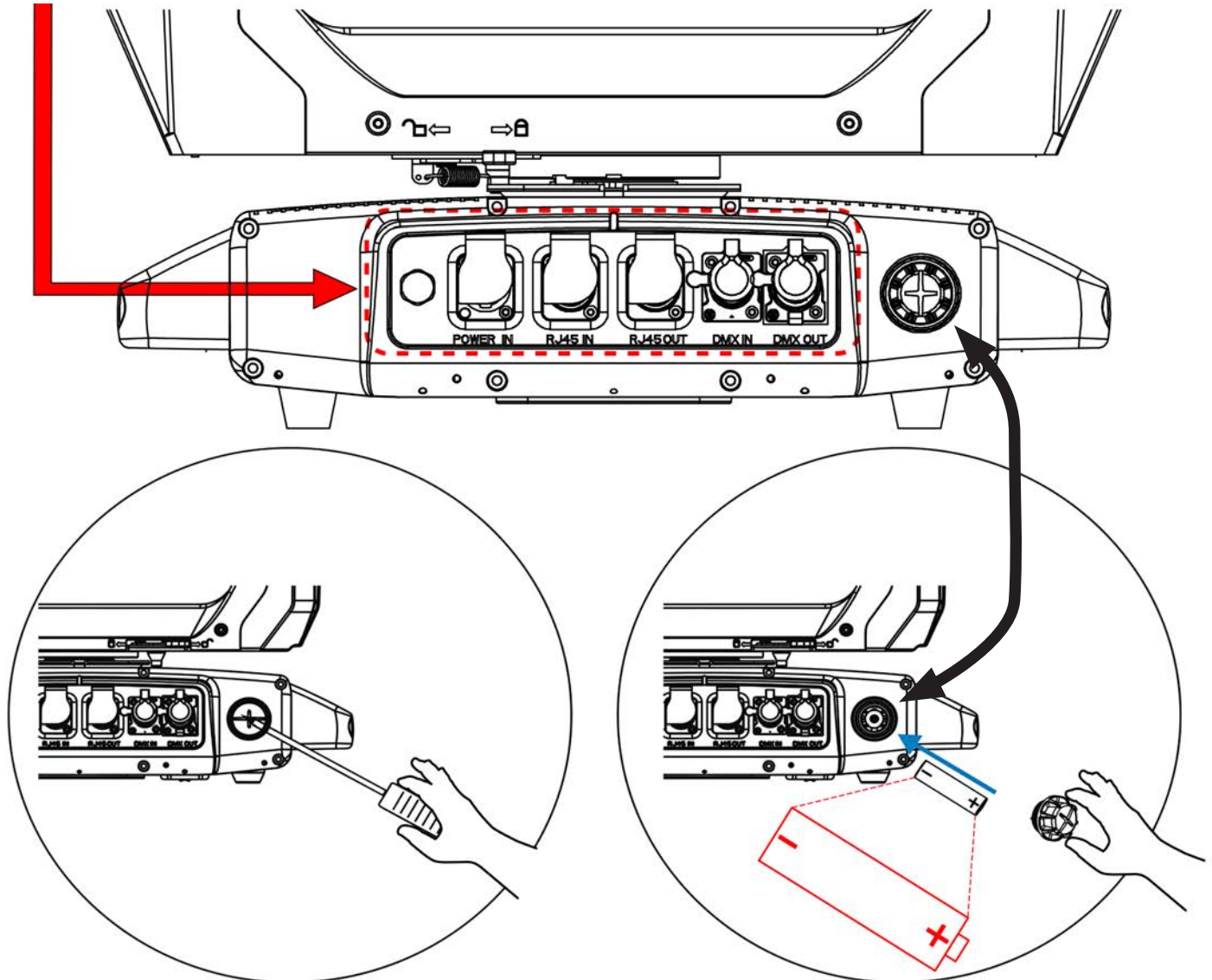
POWER AND DATA CABLES



ENSURE ALL CONNECTIONS AND ENDCAPS ARE PROPERLY SEALED WITH DIELECTRIC GREASE (AVAILABLE AT MOST ELECTRICAL SUPPLIERS) TO PREVENT WATER CORROSION AND/OR ELECTRICAL SHORT CIRCUIT.



TO MAINTAIN THE IP65 RATING INTEGRITY OF THE FIXTURE AND PREVENT WATER FROM ENTERING THE FIXTURE, SEAL ALL UNUSED CONNECTION RUBBER CAPS.



BATTERY REPLACEMENT

Installing the battery incorrectly, in the wrong orientation, where the Plus (+) is inside and Negative (-) is outside, will lead to internal electronics and battery damage. A qualified electrician should be used for all electrical connections and/or installations.

1. Loosen the screw cap for the battery compartment.
2. Remove old battery and replace (inside "-", and outside "+").

NOTE: Replace the battery only with an Li-ion battery (IRC14500/700mAh), which can be ordered from the Elation Parts Website <https://parts.elationlighting.com/catalog/product/view/id/18373/s/60420050026/category/2/>

3. Replace and tighten screw cap for the battery compartment.

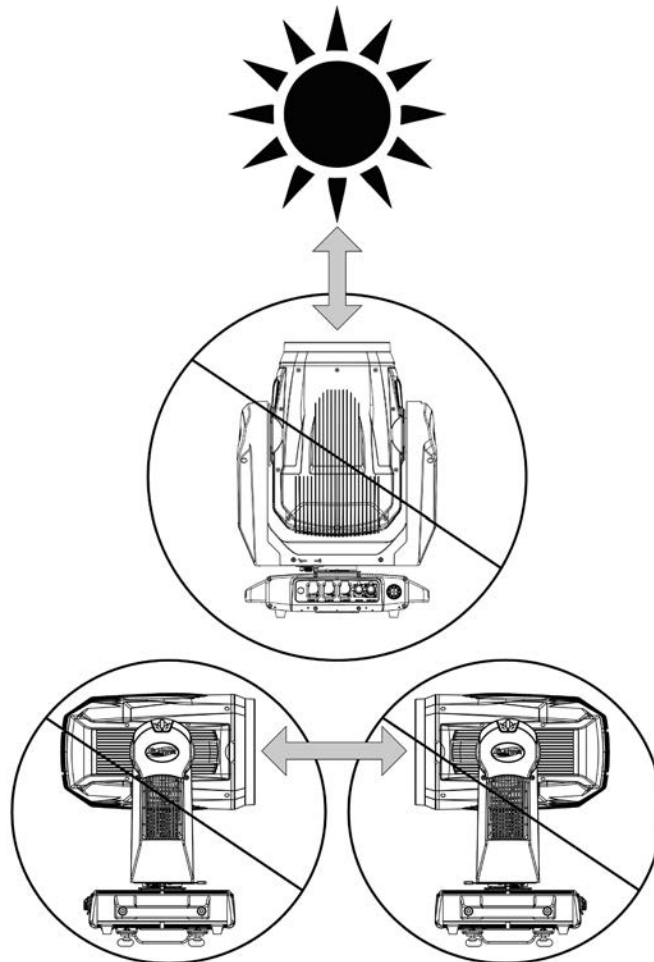
INSTALLATION GUIDELINES

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.



INSTALLATION GUIDELINES

SUN PROTECTION MODE

This fixture incorporates an automatic protection from harmful sun rays, which can damage the fixture's internal components as a result of extended exposure. The fixture uses an internal sensor to determine physical orientation, then point the fixture towards the ground to prevent sunlight from entering the lens.

Please note that this feature only works when the fixture is powered on. When performing installation or maintenance with the fixture powered off, it is important to always move the lenses out of direct sunlight and/or point them manually to the ground. Even a few minutes of sunlight exposure can cause damage to components inside the fixture.

The Sun Protection setting is part of the "No DMX Status" menu, and can be accessed by navigating to PERSONALITY > STATUS SETTINGS > NO DMX STATUS > SUN PROTECTION. A quick reference is provided in the table below. Refer to the System Menu section of this manual for detailed information.

MAIN MENU	SUB MENU	OPTIONS	
Personality	Status Settings	No DMX Status	Sun Protection (default)
			Close
			Hold
			Auto Program

The sun protection position is activated under the following conditions:

- Power on without DMX signal: The fixture always starts in sun protection mode.
- No DMX Status set to "Sun Protection" option: The fixture enters sun protection mode after approximately 3 minutes.
- Remote DMX control: The sun protection position can be temporarily activated from the lighting console without the need to create a custom position preset. The ability to correctly orient the lens towards the ground is built into the fixture. Note that this also means some fixtures hanging straight down may not move their heads. Hold "Sun Protect Position" for 3s to set the fixture to the sun protection position.

The display screen should display the phrase "Sun Protection: Active" to confirm that this feature has been activated.

The sun protection position is deactivated under the following conditions:

- DMX signal is connected.
- Remote DMX control: Hold "Sun Protection Off" for 3s.

The sun protection position always uses a 5 second fade time when it is activated or deactivated to avoid harsh movements of the fixture.

INSTALLATION GUIDELINES

HIBERNATION MODE

This mode disables motors and most electronics in order to reduce wear on the fixture's internal components. The user has the ability to define the period of time that the fixture can remain inactive before it enters hibernation mode. This feature can be accessed by navigating in the main menu to PERSONALITY > STATUS SETTINGS > HIBERNATION (see the **System Menu** section of this manual for detailed information). The default setting for hibernation delay time is 15 minutes, but it can be adjusted from 1 min to 99 min, or switched off completely.

Hibernation mode is activated under the following conditions:

- Loss of DMX signal: the fixture enters hibernation after the timeout expires. Default is 15 minutes.
- Remote DMX control: Press and hold "Hibernate Fixture" for 3s.

Hibernation mode is deactivated under the following conditions:

- DMX signal is connected.
- Remote DMX control: Hold "Hibernate Off" for 3s.

The fixture will perform a full calibration cycle, then assume the current DMX status.

Please note that the Hibernation does not change the PT position of the fixtures. This allows the user to set the desired position and then issue the Hibernate command.

To ensure the fixture is protected from harmful sunrays, it is recommended to either leave the "No DMX Status" in "Sun Protection" mode (so that the fixture is already in the correct position after 3 minutes of DMX loss) or set the fixture to a safe Pan Tilt position manually prior to putting the fixture in hibernation mode.

Burn and heat damage to the fixture's interior components due to external light sources (sun or other fixtures shining into the lens) is never covered under the manufacturer's warranty.

SKY MOTION

INTRODUCTION

Sky Motion is an innovative feature of the Proteus Excalibur which allows a fixture or group of fixtures to operate as a search light effect without the need for a dedicated lighting controller. Multiple fixtures can be interconnected, and with the simple assignment of IDs the fixture provides immediate access to a variety of search light effects that are easily adjustable in size, speed, and color.

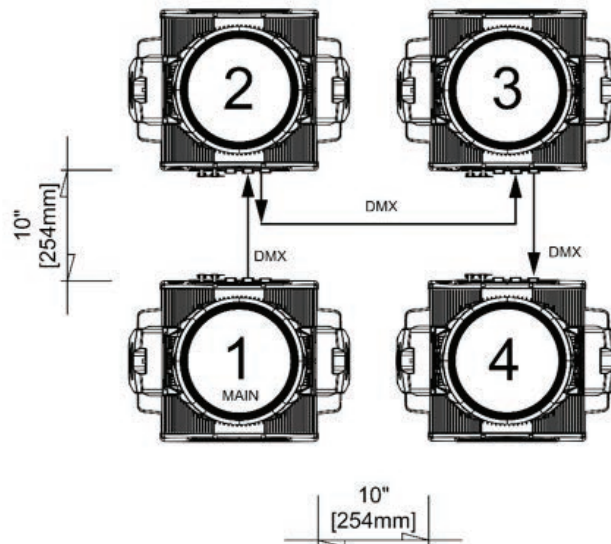
Comparable in output to large 2000W or 4000W Xenon fixtures, the Proteus Excalibur operates at a fraction of the power, supports a wide range of 100V-240V power sources, has a much smaller footprint, lower weight, and is fully IP65 rated.

SKY MOTION

SETUP

Sky Motion is designed to accommodate up to four unique fixture IDs. Fixtures with the same ID will always be at an identical position and have the exact shape, speed, and size. One fixture in the system must be set to the ID "MAIN", which provides all control signals and movement synchronization. Use ID "1" for other fixtures if needed.

For a traditional searchlight system, place four Proteus Excalibur fixtures closely together in a 2x2 grid. **The fixtures require a minimum space of 10" (255mm) between the fixture bases to ensure that the heads do not come into contact while in motion.** All cable connections should face inwards, and all displays should face outwards.

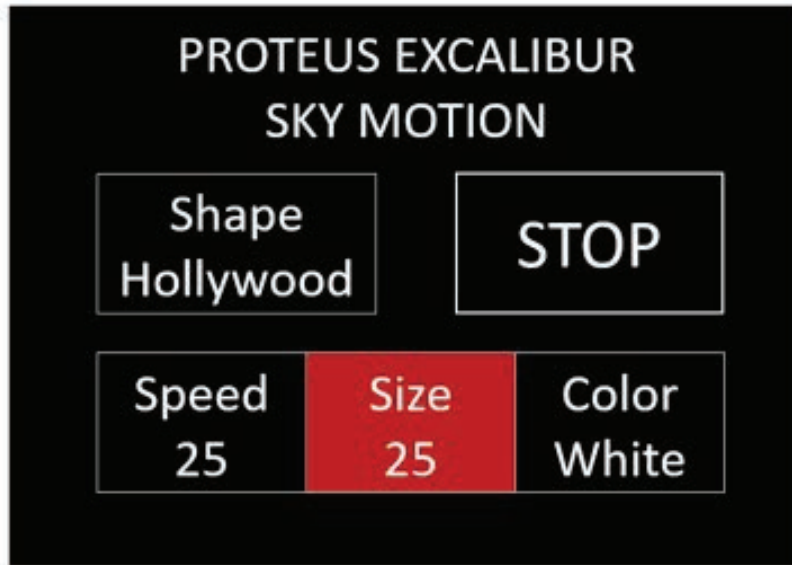


1. Connect the fixtures to an appropriately rated, grounded power source.
2. Connect the fixtures to each other using IP65 rated 5pin DMX cables. Use the "DMX Out" from the MAIN fixture to connect to "DMX In" of the next fixture. The order in which the cables are connected does not affect operation. **Do NOT connect the last fixture back to the MAIN fixture.** Please note that the maximum combined length of all data cables in the Sky Motion system is 330 ft (100m).
3. Power the fixtures on and wait for the calibration cycle to complete.
4. Enter the System Menu by holding the "MODE" button for 10sec. Once in the menu, move to the "Sky Motion" text and press "Enter".
5. Set the Sky Motion feature to "ON". Simply select "Mode" on the screen, then press "ENTER" and set the option to "ON". Confirm your selection by pressing "ENTER" again.
6. Set the desired fixture ID. One fixture must be set to "MAIN". It is recommended to choose a fixture that is within easy reach, as all adjustments for the system will be performed on the Main fixture.
7. Set the following fixtures IDs to 2, 3, and 4 in a clockwise fashion. It may be helpful to mark the ID number on the fixture chassis with a small sticker. The fixture ID is also always shown in the display of the Proteus Excalibur. **Please note that the system allows the repeat use of any ID multiple times. It is possible to have multiple fixture grids, or set up rows of fixtures all controlled by a single MAIN fixture and repeating IDs 1 through 4 as desired.**
8. Once the fixture ID is set, exit the Menu using the "ESC" button. This will now show the dedicated Sky Motion home screen. All fixtures should now move in synchronization.

SKY MOTION

OPERATION

All settings are configured from the MAIN fixture. The display screens on the other fixtures show the ID and settings, but all control via the screens is disabled. The Sky Motion system is controlled by this simple display screen:



If the screen is locked, hold "MODE" for 10 sec until the countdown is completed. Select one of the available shapes in the top left box. Use the arrow keys to navigate, noting that the current selection is indicated by the red highlighting, then press "ENTER" to select. Use the Up/Down arrows to browse the shapes and preview the results.

The most commonly used selection is "Hollywood", which emulates the traditional Xenon Searchlight movement found at movie premiers and special events.

The following unique shapes are available:

- Sky Tracer
- Sky Tracer Offset
- Hollywood
- Hollywood Offset
- Searchlight
- Searchlight Offset
- Diagonal
- Diagonal Offset
- Bounce
- Bounce Offset
- Tilt
- Tilt Offset
- Pan
- Pan Offset
- Orbit
- Orbit offset
- Sweep
- Sweep Offset

After the desired shape has been selected, the speed and size can be adjusted using the arrows and "ENTER" key. Observe the motion of the fixture to confirm that you are satisfied with the range and speed. Always press "ENTER" to confirm the changed value.

In addition to the Shape, Size, and Speed, it is also possible to select a color for the fixtures. 14 color choices are available, plus random color chases and color scrolls. Simply use the arrows to adjust, then confirm with "ENTER". Set the fixture back to White or any other color to stop the color changes.

SKY MOTION

OPERATION

Pressing "STOP" at any time will cause the fixture to fade to a position in which the lens points towards the ground for protection from sun and the elements. The display will show "STOP" in a red-highlighted box. After 15 minutes of inactivity, the lamp will turn off, although the fans will remain powered on in order to cool the fixture down.

To restart the motion, hit "STOP" again. The fixture will move back into the shape, and the lamp will turn on again. It will take a few minutes for the fixture to ramp up to full intensity.

To turn off the fixture, simply disconnect the power. Orient the fixture with the lens facing towards the ground, and lock the fixture in this position using the pan and tilt locks. Never let the lens point at the sun or other bright light sources, including other lighting fixtures, as doing so will damage components inside the fixture.

To restart, release the pan and tilt locks and power up the fixtures. After a short calibration cycle, the fixtures will start the shape movement and the lamp will turn on.

To disable the Sky Motion feature, access the fixture menu (hold MODE for 10 seconds) and turn Sky Motion Mode to "OFF".

Operating Notes:

It is recommended to power off the fixtures when not in use.

Ensure free motion of the fixture and never cover it while it is powered on. Never cover the air inlet and outlet grids.

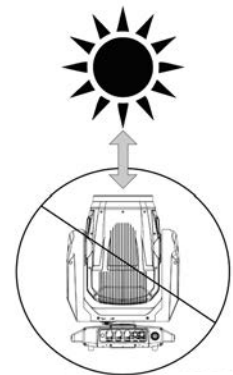
Never point the lens at the sun. Always cover the lens (the fixture must be powered off) or point it towards the ground.

SUN DAMAGE IS NOT COVERED BY THE FIXTURE WARRANTY!

All interconnected fixtures must run the same firmware version. Contact a trained Elation Service Technician for assistance with firmware upgrades.

Periodic lamp changes are required. They are described in the full user manual for this fixture, which can be found online at:

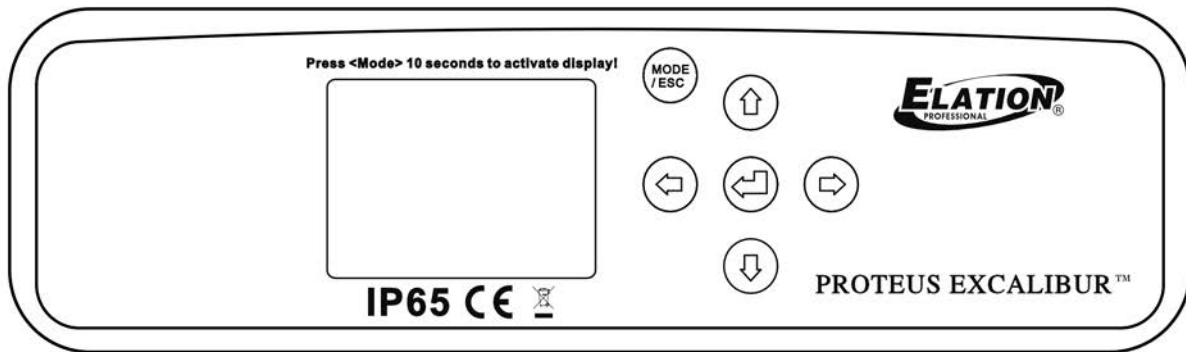
<https://www.elationlighting.com/proteus-excalibur>



SYSTEM MENU

The fixture includes an easy to navigate system menu. The control panel (see image below) located on the front of the fixture, provides access to the main system menu and is where all necessary system adjustments are made to the fixture. During normal operation, pressing **MODE/ESC** button once will access the fixture's main menu. Once in the main menu you can navigate through the different functions and access the sub-menus with the **UP, DOWN, RIGHT,** and **LEFT** buttons. Once you reach a field that requires adjusting, press the **ENTER** button to activate that field and use the **UP** and **DOWN** buttons to adjust the field. Pressing the **ENTER** button once more will confirm your setting. You may exit the main menu at any time without making any adjustments by pressing the **MODE/ESC** button.

KEY LOCK: This setting can be activated or deactivated by navigating to PERSONALITY > DISPLAY SETTING > KEY LOCK in the system menu. When activated, Control Panel buttons lock automatically after a pre-defined period of inactivity (default setting is 5 minutes). To unlock, press and hold **MODE/ESC** for 3 seconds.



SYSTEM MENU

ELATION PROTEUS EXCALIBUR				
Supports Software Versions: ≥ 1.5.2				
MAIN MENU	OPTIONS / VALUES (Default Settings in BOLD)			DESCRIPTION
Function	Set DMX Address	A001 - AXXX		
	DMX Value	Pan...		Display individual channel values
	Secondary Mode	Secondary1, Secondary2, Secondary3		Secondary mode grouping mode
	Auto Program	Primary / Alone		
Sky Motion	Mode	Off / On	Shape	Select Sky Motion Mode; press and hold MODE button 10s to exit
			Stop	
			Speed	
			Size	
			Color	
Fixture ID	Main / 1 / 2 / 3 / 4			
Key Lock	Off / On			
Information	Time Information	Current Time	xxxx Hours	Run time since fixture last booted up
		Total Run Time	xxxx Hours	Total fixture lifetime run time
		Last Run Time	xxxx Hours	Fixture run time since last reset
		Lamp Time Info	Total Time	Total lamp usage time
			Active Time	Lamp active time
			Idle Time	Lamp idle time
			Lamp Life (%)	
		Last Run Password	xxx	
		Clear Last Run	On / Off	
	Lamp Time Password	xxx	Password = 038	
	Clear Lamp Time	On / Off		
	Temperature Info	Head Temperature	xxx C / xxx F	
		Base Temperature	xxx C / xxx F	
		Lamp Temperature	xxx C / xxx F	
	Humidity Info	Head Humidity	xxx %	
		Base Humidity	xxx %	
	Ethernet IP	xxx.xxx.xxx.xxx xxx.xxx.xxx.xxx		
Fan Info	1U_FAN1: ...			
Software Version	Vx.x.x			
Error Info	Error Record 1 Error Record 2 ... Error Record 10		Display last 10 recorded errors one at a time	
Lamp Control	Lamp On / Off	On / Off		Manual lamp switch
	Automatic On	On / Off		Set lamp to turn on automatically when fixture in powered on
	Lamp On Via DMX	On / Off		Turn lamp on using DMX control
	Lamp Off Via DMX	On / Off		Turn lamp off using DMX control
	Max On at Humidity	20% - 100%		Max humidity for light to turn on; default = 70%
	Lamp Power Mode	560W 430W 370W		

SYSTEM MENU

Personality	Status Settings	Address Via DMX	On / Off	Allows address to be modified via DMX control
		No DMX Status	Close	
			Hold	
			Auto	
			Sun Prot	
		Pan Reverse	On / Off	
		Tilt Reverse	On / Off	
		Pan Degree	630 / 540	
		Feedback	On / Off	
		Movement Speed	Normal / Slow	
		CMY Speed	Normal / Fast	
	P/T Brake Mode	Smooth / Fast		
	Hibernation	Off, 01m - 99m	Default = 15m	
	Service Setting	Password = xxx		Password = 050
		Clear Err Info	On / Off	
		DFLT Pow Lamp On	On / Off	Turn on lamp automatically when fixture is powered on
		Clean Vent Mode	On / Off	
	Display Setting	Shutoff Time	02m - 60m	Display turns off after set period of inactivity, default = 05m
		Display Reverse	On	Flip display 180 degrees
			Off	
			Auto	
	Key Lock	On / Off		
	Temperature C/F	Celsius / Fahrenheit		
	Initial Status	Pan = xxx		Show DMX value of each function at reset
		...		
	Select Signal	DMX Only		
		Art-Net		
sACN				
Ethernet IP	xxx.xxx.xxx.xxx			
Ether Mask IP	xxx.xxx.xxx.xxx			
Set Universe	000 - 32767			
DHCP	On / Off		Automatically assign IP address	
Dimmer Curve	Linear			
	Square			
	Inverse Square			
	S-Curve			
Reset Default	On	Passcode = 011		
	Off			
Reset Function	Reset All			
	Reset Pan&Tilt			
	Reset Colors			
	Reset Gobos			
	Reset Shutter			
	Reset Others			
Effect Adjust	Test Channel	Pan		
		...		
	Manual Control	Pan = xxx		
		...		
	Calibration	Password = 050		
		Pan = xxx		
...				

SYSTEM MENU

Edit Program	Select Programs	Auto Pro Part 1 = Program 1 - 10		Default = Program 1	
		Auto Pro Part 2 = Program 1 - 10		Default = Program 2	
		Auto Pro Part 3 = Program 1 - 10		Default = Program 3	
	Edit Program	Program 1	Program Test		
		...	Step 01 = SCxxx		
		Program 10	Step 64 = SCxxx		
	Edit Scenes	Edit Scene 001 - Edit Scene 250	Pan, Tilt, ...		
			-- Fade Time --		
			-- Scene Time --		
			Input by Out		
Rec Controller	xx - xx				

SYSTEM MENU

FUNCTION - Auto Program

Define fixture mode (**Primary or Alone**) for running Auto Programs. Select desired internal programs under "**Select Program**", set the number of steps under "**Edit program**", and edit individual scenes under "**Edit Scenes**".

PERSONALITY - Status Settings - Address Via DMX

When ON, define the desired DMX address via an external controller.

NOTE: This process assumes the fixture DMX address is set to 001. If fixture DMX address is not at 001, you must adjust the channel numbers accordingly in order for this feature to work.

For example: if your fixture address is 010, then Channel 1 becomes Channel 10, Channel 2 becomes Channel 11, and Channel 3 becomes Channel 12.

1. Connect the fixture to the external controller and power ON.
2. Set the DMX value of **Channel 1** on the controller to (7).
3. Set the DMX value of **Channel 2** on the controller to (7) or (8). When set to (7), the DMX address can be set between (1) and (255). When set to (8), the DMX address can be set between (256) and (511).
4. Using **Channel 3** on the controller set the desired DMX address of the fixture.

Example 1:

If the desired DMX address is **57**, set **Channel 1** to a value of (7), set **Channel 2** to a value of (7), and then set **Channel 3** to a value of (57).

Example 2:

If the desired DMX address is **420**, set **Channel 1** to a value of (7), set **Channel 2** to a value of (8), and then set **Channel 3** to a value of (164). (256+164=420)

5. After setting **Channel 3** to the desired DMX address value, wait approximately 20 seconds for the fixture to complete the address reset function.

PERSONALITY - Service Settings - Password (050)

NOTE: The Service Password MUST be entered in order to access the following menus:

Clear Err. Info , DFLT Pow. Lamp On, and CleanVentMode.

CleanVentMode: This function is designed to clear the 4 arm fans from dust or dirt when one (or more) of the four fans are blocked.

The function can be set by display or activated by dmx.

When the unit detects a blocked arm fan during startup or normal running, the unit will dim the light to zero, rotate and shake the pan 5 times to remove any dirt from the fan so that it can rotate freely.

When fans run normally the function cannot be activated by dmx. It only works after a fan gets blocked.

This function is added because certain regions experience adverse conditions such as sand storms, during which it is possible for sand to build up in the arm radiators, especially in fixed installations.

PERSONALITY - Display Setting - Key Lock

When ON, Control Panel buttons lock automatically after exiting main menu for 15 seconds. To unlock, keep **MODE/ESC** button pressed for 3 seconds.

PERSONALITY - Reset Default (011)

SYSTEM MENU



ONLY QUALIFIED TECHNICIANS SHOULD PERFORM THIS FUNCTION!
NOTE: SAVED WHITE BALANCE IS ERASED AFTER A RESET IS PERFORMED!

This function restores all fixture settings to the factory default settings. The password is 011 and must be entered each time a reset is performed.

EFFECT ADJUST - Test Channel

Auto test each individual channel function independently from the DMX control board.

EFFECT ADJUST - Manual Control

Select and manually test and fine adjust each individual channel function Independently from DMX control board. This function will center PAN and TILT motors and set dimmer to 100%. PAN and TILT functions will still operate if the fixture needs to be positioned to a flat clear surface. With the individual functions, you can focus the light on a flat surface (wall) and perform fine adjustments.



EFFECT ADJUST - Calibration
ONLY QUALIFIED TECHNICIANS SHOULD PERFORM THIS FUNCTION.

This function allows small adjustments to be made to the Pan, Tilt, and Zoom movements to compensate for wear or in the event a sensor has been knocked slightly out of place. Because improper use of this function can result in undesired operation this function has been password protected. The password is 050 and must be entered each time the calibration menu function is entered. Because calibration is an extremely delicate procedure, instructions on performing this action are left out of this manual. For a first-time calibrator, please contact our customer support team for step-by-step instructions.

USER MODE SET - Edit User Mode

Create user defined channel orders allowing the fixture to match the channel order of other fixtures on the market for easier operation. A total of three user modes may be configured: User Mode A, User Mode B, and User Mode C.

EDIT PROGRAM - Rec. Controller

The fixture features an integrated DMX-recorder by which you can transmit the programmed scenes from your DMX-controller to the moving head. Adjust the desired scene numbers via the encoder (from – to). When you call up the scenes at your controller, they will automatically be transmitted to the moving head.

SYSTEM MENU

EDIT PROGRAM - Record Controller - Working With Built - In Programs

A Primary unit can send up to 3 different data groups to the Secondary units, i.e. a Primary unit can start 3 different Secondary units, which run 3 different programs. The Primary unit sends the 3 program parts in a continuous loop.



The Secondary unit receives data from the Primary unit according to the group which the Secondary unit was assigned to. If e.g. a Secondary unit is set to **"Secondary 1"** in the menu **"Set to Secondary"**, the Primary unit sends **"Auto Program Part 1"** to the Secondary unit. If set to **"Secondary 2"**, the Secondary unit receives **"Auto Program Part 2"**.

To start an Auto Program proceed as follows:

1. Secondary Setting

- Select **"Function Mode"**.
- Press **ENTER** to confirm.
- Select **"Set to Secondary"**.
- Press **ENTER** to confirm.
- Select **"Secondary 1"**, **"Secondary 2"** or **"Secondary 3"**.
- Press **ENTER** to confirm.
- Press **MODE/ESC** in order to return to the main menu.

2. Automatic Program Run

- Select **"Function Mode"**.
- Press **ENTER** to confirm.
- Select **"Auto Program"**.
- Press **ENTER** to confirm.
- Select **"Primary"** or **"Alone"**.
- Press **ENTER** to confirm.
- Press **MODE/ESC** in order to return to the main menu.

3. Program Selection for Auto Pro Part

- Select **"Edit Program"**.
- Press **ENTER** to confirm.
- Select **"Select Programs"**.
- Press **ENTER** to confirm.
- Select **"Auto Pro Part 1"**, **"Auto Pro Part 2"** or **"Auto Pro Part 3"**, and select which Secondary program is to be sent. Selection **"Part 1"** means, that the Secondary unit runs the same program as the Primary units.
- Press **ENTER** to confirm.
- Press **MODE/ESC** in order to return to the main menu.

4. Program Selection for Edit Program

- Select **"Edit Program"**.
- Press **ENTER** to confirm.
- Select **"Edit Program"**.
- Press **ENTER** to confirm.
- Select the desired program to edit specific scenes into a specific program.
- Press **ENTER** to confirm.
- Press **MODE/ESC** in order to return to the main menu.

5. Automatic Scene Recording

- Select **"Edit Program"**.
- Press **ENTER** to confirm.
- Select **"Edit Scenes"**.
- Press **ENTER** to confirm.
- Select desired scene numbers. A maximum of 250 scenes can be programmed.
- Press **ENTER** to confirm.
- Press **MODE/ESC** in order to return to the main menu.

SYSTEM MENU

EDIT PROGRAM - Record Controller - Working With Built - In Program [continued]

Example:

Program 2 includes scenes: 10, 11, 12, & 13

Program 4 includes scenes: 8, 9, & 10

Program 6 includes scenes: 12, 13, 14, & 15

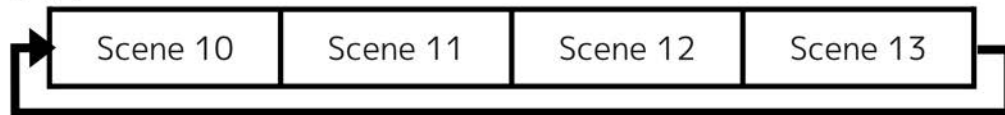
Auto Pro Part 1 is Program 2

Auto Pro Part 2 is Program 3

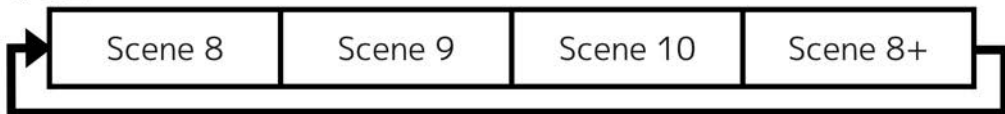
Auto Pro Part 3 is Program 6

The 3 Secondary groups run the Auto Program in certain time segments.

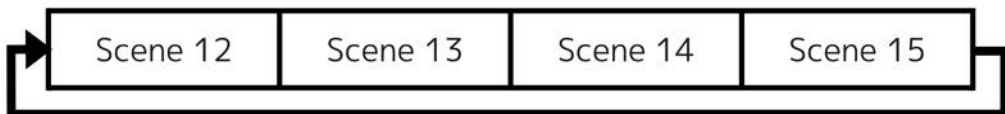
Part 1



Part 2



Part 3



E-FLY WIRELESS DMX SETUP



BEFORE SETTING THE WIRELESS CHANNEL ON ANY E-FLY FIXTURE, MAKE SURE THE SOURCE E-FLY WIRELESS DMX TRANCEIVER DEVICE IS OFF.

1. Ensure the source **E-FLY** wireless DMX Tranceiver device is powered **OFF**.
2. Power **ON** fixture and from the LCD control panel select **DMX & E-FLY** or **E-FLY & OUT** in the Select **Signal** sub menu of the **PERSONALITY** main system menu.
3. From the LCD control panel set the **E-FLY** wireless channel to the same wireless channel of the source **E-FLY** DMX Transceiver device in the **Set E-FLY Chn** sub menu of the **PERSONALITY** main system menu.

NOTE: Erratic fixture movement may occur if other **E-FLY** wireless DMX products are in use in the same area and are using the same **E-FLY** wireless channel. The fixture may immediately start to respond to the DMX wireless signal from another **E-FLY** wireless DMX Transceiver immediately when **E-FLY** is enabled. Make sure to know what **E-FLY** wireless channels are being used in the area where the fixture is being installed.

RELATION E-FLY WIRELESS TRANCEIVER has 0-14 wireless channels.

4. Set fixture DMX address in the **Set Dmx Address** sub menu of the **FUNCTION** main system menu.
5. The **E-FLY** signal Indicator on the fixture LCD control display will illuminate **GREEN** if a successful wireless DMX connection has been made or illuminate **RED** for NO connection. If no connection is made, repeat steps 1-4 above.
6. Repeat this process for all **E-FLY** compatible fixtures in the **E-FLY** wireless network, making sure all fixtures are assigned the same **E-FLY** wireless channel.
7. After all fixtures in the **E-FLY** wireless network have been set to the same **E-FLY** wireless channel and powered **ON**, now power **ON** the source **E-FLY** DMX Transceiver device.
8. Test all fixtures connected to the **E-FLY** wireless network to confirm proper functionality.

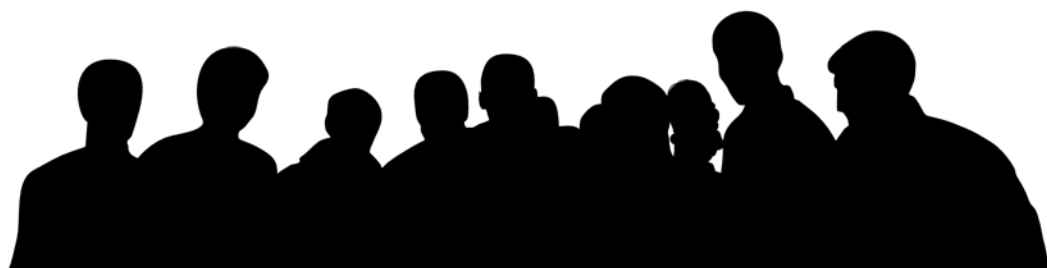
E-FLY WIRELESS INSTALLATION LOCATION GUIDELINES

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

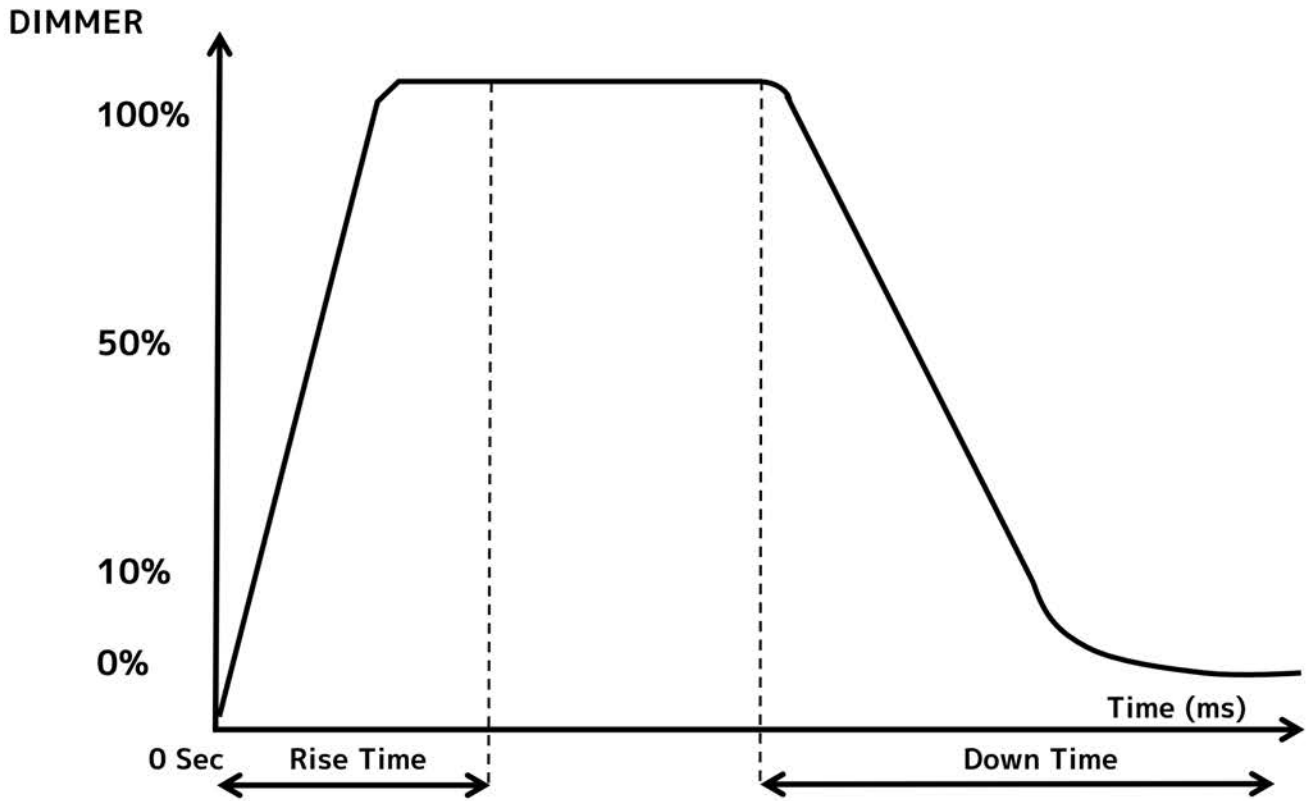
- Install devices a minimum of 9.8 ft. (3m) above audiences and/or ground level
- Adjust the wireless antenna in a vertical upright position
- Position devices in direct line of sight of the controlling E-FLY device

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

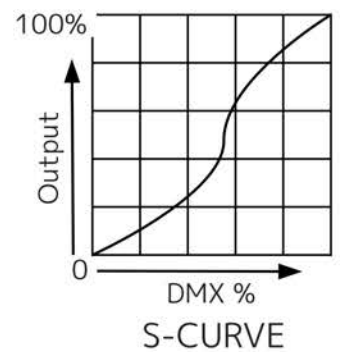
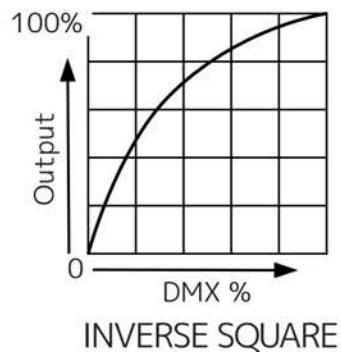
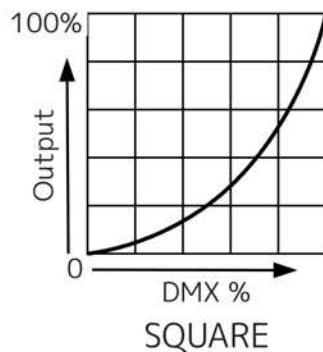
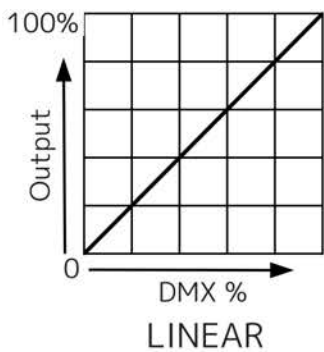
**9.8 ft (3m)
Above Ground**



DIMMER MODE



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



DMX TRAITS: CHANNEL FUNCTIONS & VALUES

ELATION PROTEUS EXCALIBUR DMX Channel Values / Functions					
Supports Software Versions: $\geq 1.5.2$					
Features subject to change without notice					
MODE/CHANNEL STANDARD	VALUE	FUNCTION	HOLD TIME	DEFAULT	SNAP
1		PAN Movement 8bit			
	0-255	Pan Movement			
2		Pan Fine 16bit			
	0-255	Fine control of Pan movement			
3		TILT Movement 8bit			
	0-255	Tilt Movement			
4		Tilt Fine 16bit			
	0-255	Fine control of Tilt movement			
5		Cyan			
	0-255	Cyan (0-100% Cyan)			
6		Magenta			
	0-255	Magenta (0-100% Magenta)			
7		Yellow			
	0-255	Yellow (0-100% Yellow)			
8		Color Wheel			
	0-15	Open			
	16-22	Red			
	23-29	Green			
	30-36	Yellow			
	37-43	Purple			
	44-50	Light Green			
	51-57	Orange			
	58-64	Magenta			
	65-71	Cyan			
	72-78	Open			
	79-85	Deep Red			
	86-92	Dark Amber			
	93-99	Pink			
	100-106	UV			
	107-113	CTB			
	114-120	CTO			
	121-127	Medium Blue			
		Color Scroll			
	128-180	Clockwise, fast \rightarrow slow			
	181	Idle			
	182-234	Counter-clockwise, slow \rightarrow fast			
		Random Slots			
	235-239	Fast			
	240-244	Medium			
245-249	Slow				
250-255	Open				

Features subject to change without notice

MODE/CHANNEL STANDARD	VALUE	FUNCTION	HOLD TIME	DEFAULT	SNAP
9		Rotating Gobo			
	0-10	Beam open			
	11-21	Spot open			
	22-31	Rot. gobo 1			
	32-41	Rot. gobo 2			
	42-51	Rot. gobo 3			
	52-61	Rot. gobo 4			
	62-71	Rot. gobo 5			
	72-81	Rot. gobo 6			
	82-91	Rot. gobo 7			
	92-101	Rot. gobo 8			
	102-112	Rot. gobo 1 shake			
	113-123	Rot. gobo 2 shake			
	124-134	Rot. gobo 3 shake			
	135-145	Rot. gobo 4 shake			
	146-156	Rot. gobo 5 shake			
	157-167	Rot. gobo 6 shake			
	168-178	Rot. gobo 7 shake			
	179-189	Rot. gobo 8 shake			
190-221	Scroll CW fast to slow				
222-223	Idle				
224-255	Scroll CCW slow to fast				
10		Rotating Gobo Index, Rotation			
	0-127	Gobo indexing			
	128-189	Clockwise gobo scroll from fast to slow			
	190-193	No rotation			
194-255	Counter-clockwise gobo scroll from slow to fast				
11		Rotating gobo fine indexing			
	0-255	Fine indexing			

Features subject to change without notice

MODE/CHANNEL STANDARD	VALUE	FUNCTION	HOLD TIME	DEFAULT	SNAP
12		Fixed gobos1			
	0-4	Open			
	5-9	Gobo 1			
	10-14	Gobo 2			
	15-19	Gobo 3			
	20-24	Gobo 4			
	25-29	Gobo 5			
	30-34	Gobo 6			
	35-39	Gobo 7			
	40-44	Gobo 8			
	45-49	Gobo 9			
	50-54	Gobo 10			
	55-59	Gobo 11			
	60-64	Gobo 12			
	65-69	Gobo 13			
	70-74	Gobo 14			
	75-79	Gobo 15			
	80-84	Gobo 16			
	85-87	Gobo 17			
	88-93	Gobo 1 shake slow to fast			
	94-99	Gobo 2 shake slow to fast			
	100-105	Gobo 3 shake slow to fast			
	106-111	Gobo 4 shake slow to fast			
	112-117	Gobo 5 shake slow to fast			
	118-123	Gobo 6 shake slow to fast			
	124-129	Gobo 7 shake slow to fast			
	130-135	Gobo 8 shake slow to fast			
	136-141	Gobo 9 shake slow to fast			
	142-147	Gobo 10 shake slow to fast			
	148-153	Gobo 11 shake slow to fast			
154-159	Gobo 12 shake slow to fast				
160-165	Gobo 13 shake slow to fast				
166-171	Gobo 14 shake slow to fast				
172-177	Gobo 15 shake slow to fast				
178-183	Gobo 16 shake slow to fast				
184-189	Gobo 17 shake slow to fast				
190-221	Scroll CW fast to slow				
222-223	Idle				
224-255	Scroll CCW slow to fast				

Features subject to change without notice					
MODE/CHANNEL STANDARD	VALUE	FUNCTION	HOLD TIME	DEFAULT	SNAP
13		Prism			
	0-50	Open			
	51-100	Beam Expander			
	101-150	8 Facet			
	151-200	4 Facet Linear			
	201-255	8 Facet + 4 Facet			
14		Prism 1 Rotation			
	0-127	Prism indexing			
	128-189	Clockwise prism rotation from fast to slow			
	190-193	No rotation			
	194-255	Counter-clockwise prism rotation from slow to fast			
15		Prism 1 Rotation Fine			
	0-255	Fine indexing			
16		Prism 2 Rotation			
	0-127	Prism indexing			
	128-189	Clockwise prism rotation from fast to slow			
	190-193	No rotation			
	194-255	Counter-clockwise prism rotation from slow to fast			
17		Prism 2 Rotation Fine			
	0-255	Fine Indexing			
18		Focus			
	0-255	Focus edge adjustment			
19		Focus Fine			
	0-255	Focus adjustment Fine			
20		Shutter, Strobe			
	0-31	Shutter closed			
	32-63	No function (shutter open)			
	64-95	Strobe effect slow to fast			
	96-127	No function (shutter open)			
	128-159	Pulse-effect in sequences			
	160-191	No function (shutter open)			
	192-223	Random strobe effect slow to fast			
	224-255	No function (shutter open)			
21		Dimmer			
	0-255	Intensity 0 to 100%			
22		Dimmer Fine			
	0-255	Intensity Fine			
23		Frost1			
	0-255	0% - 100% Frost			
24		Frost 2			
	0-255	0% - 100 Frost			
25		Pan / Tilt Speed			
	0-225	Max to min speed			
	226-235	Blackout by movement			
	236-255	Blackout by all wheel changing			

Features subject to change without notice

MODE/CHANNEL STANDARD	VALUE	FUNCTION	HOLD TIME	DEFAULT	SNAP
26		Control			
	0-19	Colour change normal			
	20-39	Idle			
	40-49	Lamp on			
	50-59	Lamp off			
	60-66	Lamp power 370W			
	67-73	Lamp power 430W			
	74-79	Lamp power 560W			
	80-84	All motor reset			
	85-87	Pan Tilt motor reset			
	88-90	Color motor reset			
	91-93	Gobo motor reset			
	94-96	Shutter & Dimmer motor reset			
	97-99	Other motor reset			
	100-164	Idle			
	165-166	CMY Normal			
	167-168	CMY Fast (default)			
	169-170	Vent Cleaning On			
	171-172	Vent Cleaning Off			
	173-174	Hibernation Off			
	175-176	Hibernation			
	177	Sun Protection On			
	178	Sun Protection Off			
	179-180	Idle			
	181-190	Pan Tilt Smooth (default)			
	191-200	Pan Tilt Fast			
	201-210	Dimmer Curve Linear (default)			
	211-220	Dimmer Curve Square			
	221-230	Dimmer Curve Inverse Square			
	231-240	Dimmer Curve S-Curve			
	241	Internal program 1			
	242	Internal program 2			
	243	Internal program 3			
	244	Internal program 4			
245	Internal program 5				
246	Internal program 6				
247	Internal program 7				
248-249	Idle				
250-251	Display off				
252-253	Display on				
254-255	Idle				

REMOTE DEVICE MANAGEMENT (RDM)

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

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

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

FIXTURE RDM INFORMATION:

DEVICE ID	MODEL ID	RDM CODE
Open	1656	0x678

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:

Sensor Definition
Sensor Value
Device Model Description
Manufacturer Label
Device Label
DMX Personality
DMX Personality Description
Device Hours
Comms Status
Lamp Hours
Lamp State
Pan Invert
Tilt Invert
Display Invert

SOFTWARE UPDATES

E-LOADER III



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

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

<https://www.elationlighting.com/e-loader-iii-software-uploader>

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

SOFTWARE UPDATES

ETHERNET UPDATER

Software updates for this fixture can be performed using the Elation Ethernet Updater. Contact Elation Service to obtain this updater device:

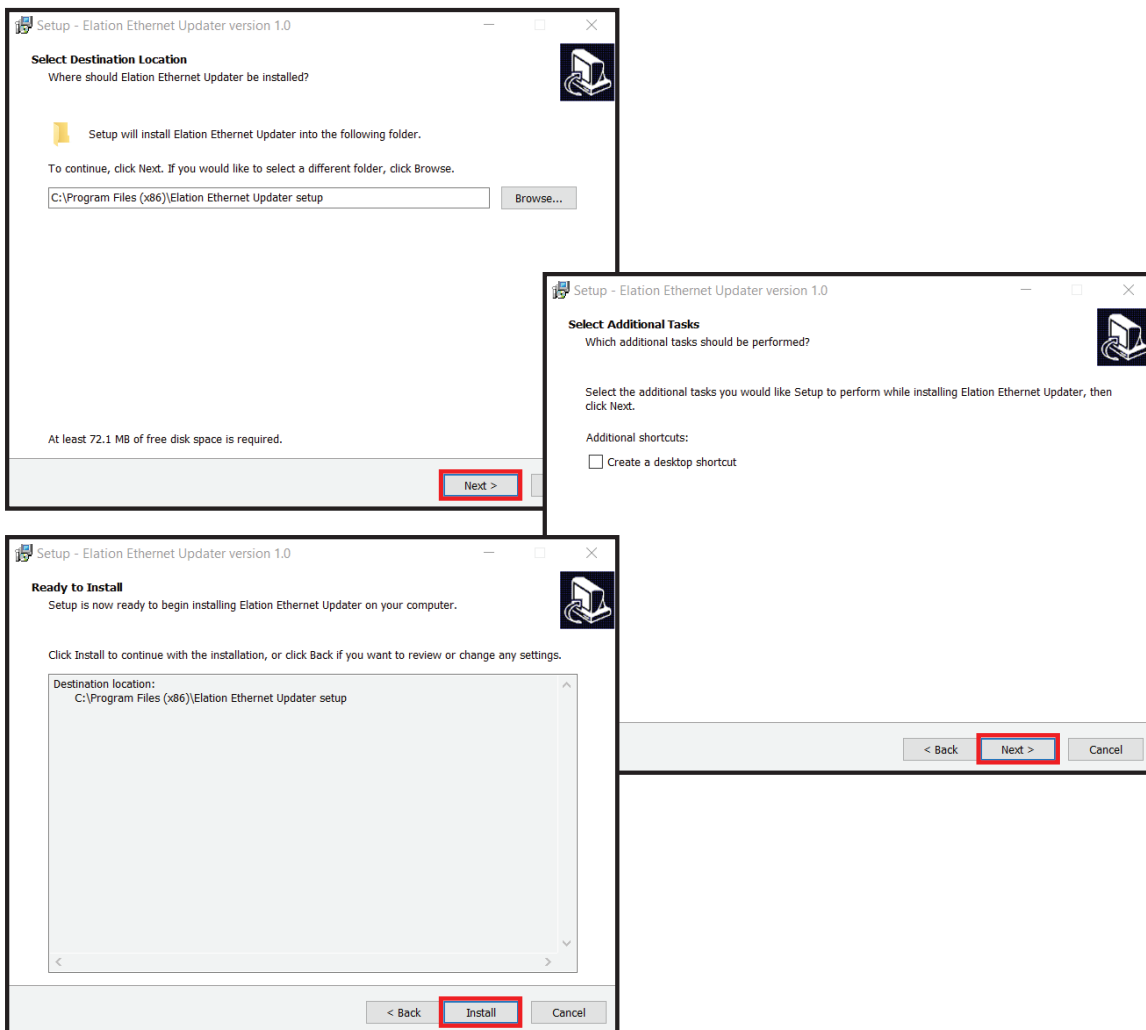
ELATION SERVICE USA - Monday - Friday 8:00am to 4:30pm PST
323-582-3322 | Fax 323-832-9142 | support@elationlighting.com

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

The Elation Ethernet Updater is an EXE file, which only works on a PC System. Once you've received the Elation Ethernet Updater RAR file from Elation Service via email, download and extract the EXE file. With the file extracted, click Elation Ethernet Updater setupV100.exe to launch the installation wizard.

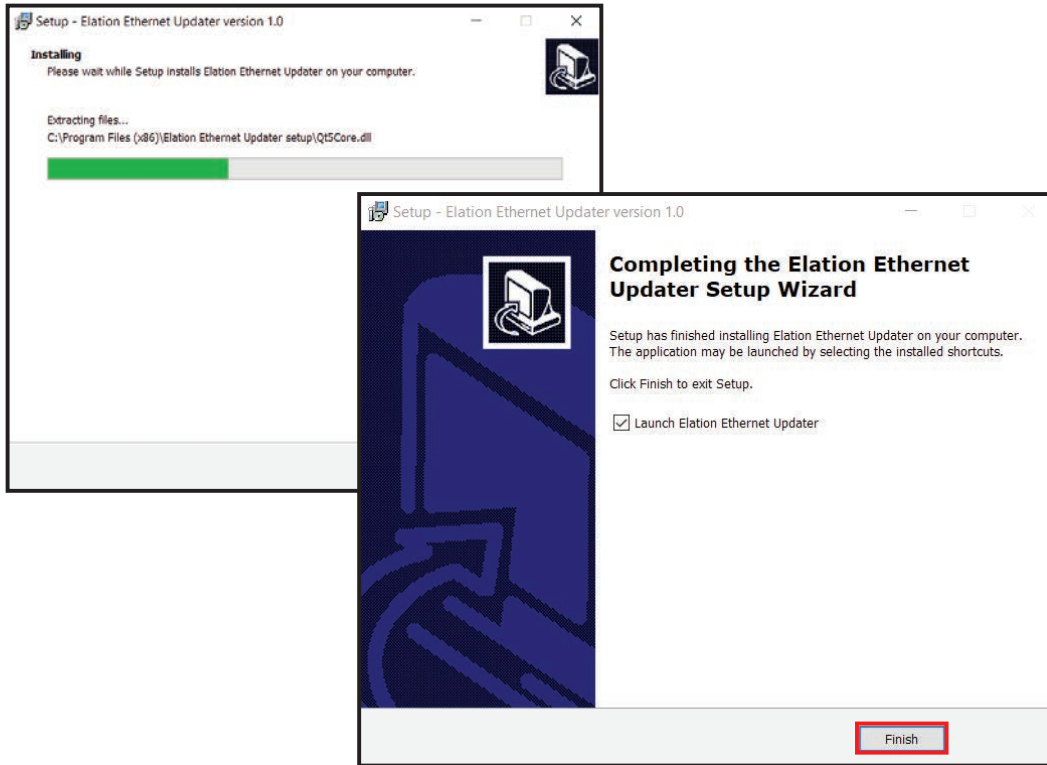


Follow the prompts once the Elation Ethernet Updater EXE has launched the Setup Wizard.

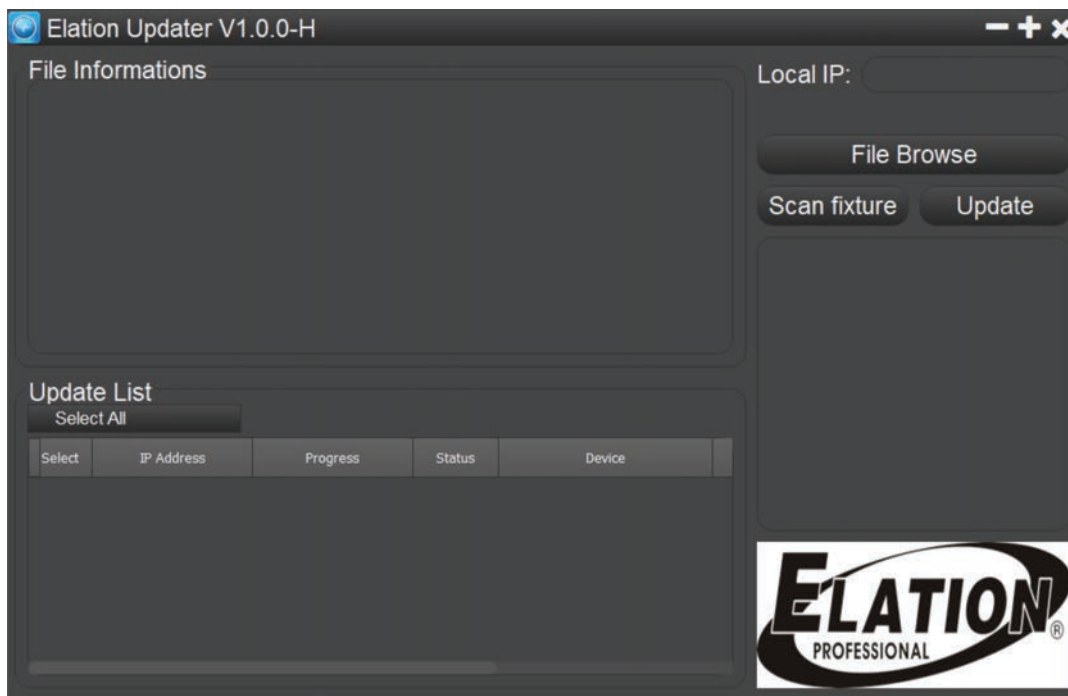


SOFTWARE UPDATES

ETHERNET UPDATER



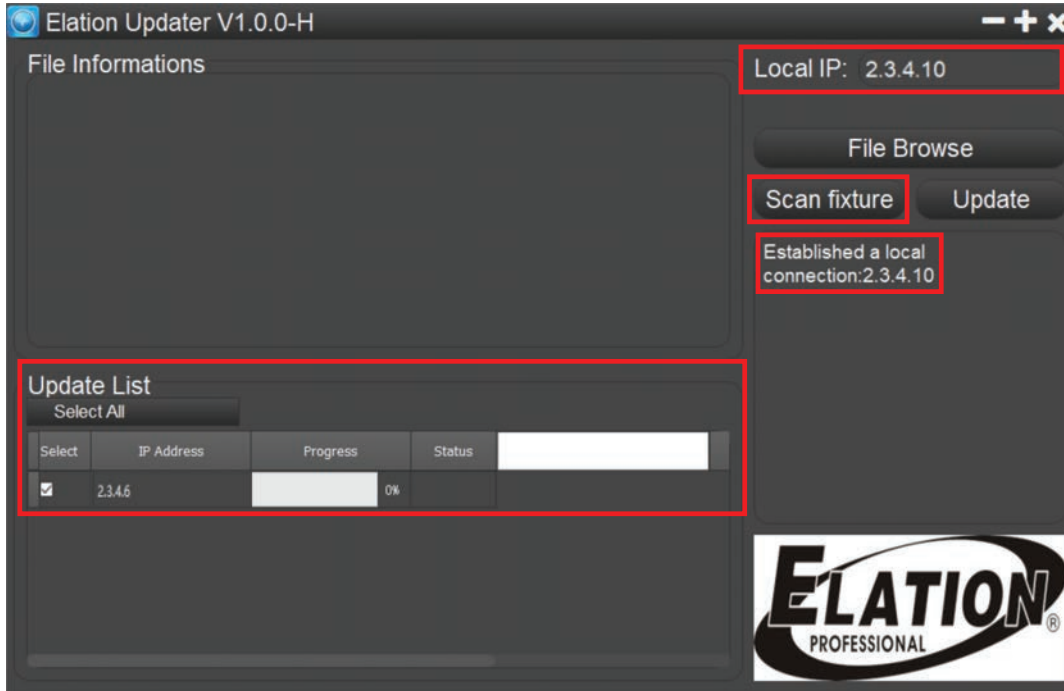
Once you have installed the Elation Ethernet Updater, it will launch automatically (unless you unchecked "Launch Elation Ethernet Updater"), or you can open it any time by clicking on the icon.



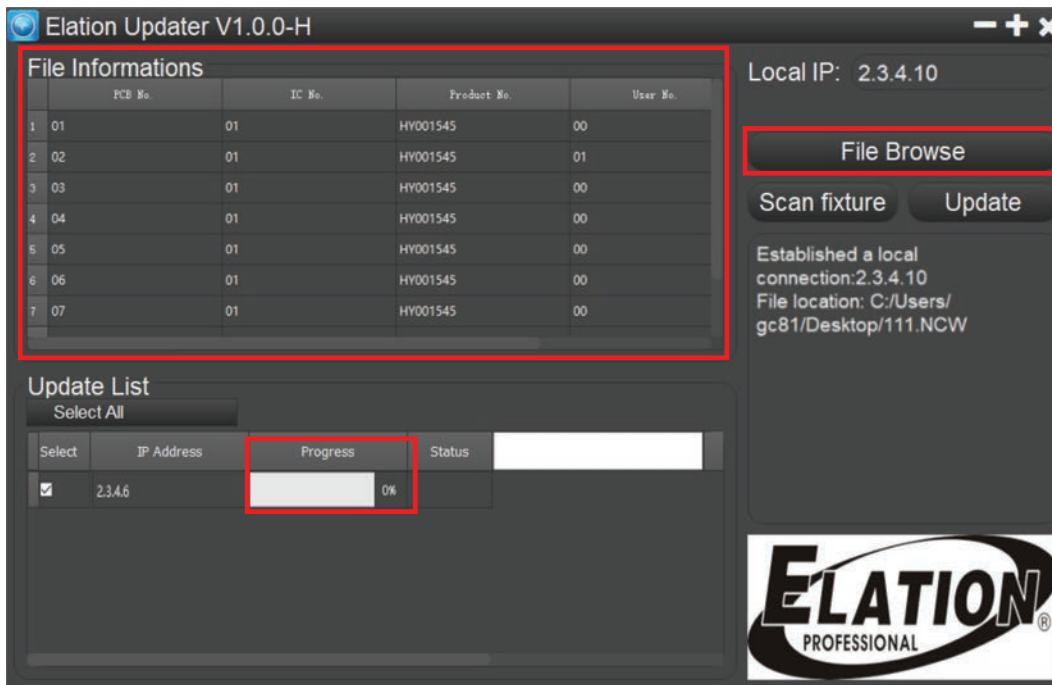
SOFTWARE UPDATES

ETHERNET UPDATER

Once opened, your local IP will automatically be identified. Click "Scan fixture" and create a connection. The fixture identity will appear in the Update List on the left side of browser. A connection will fail to establish if the fixture IP and Local IP are not in the same network segment.



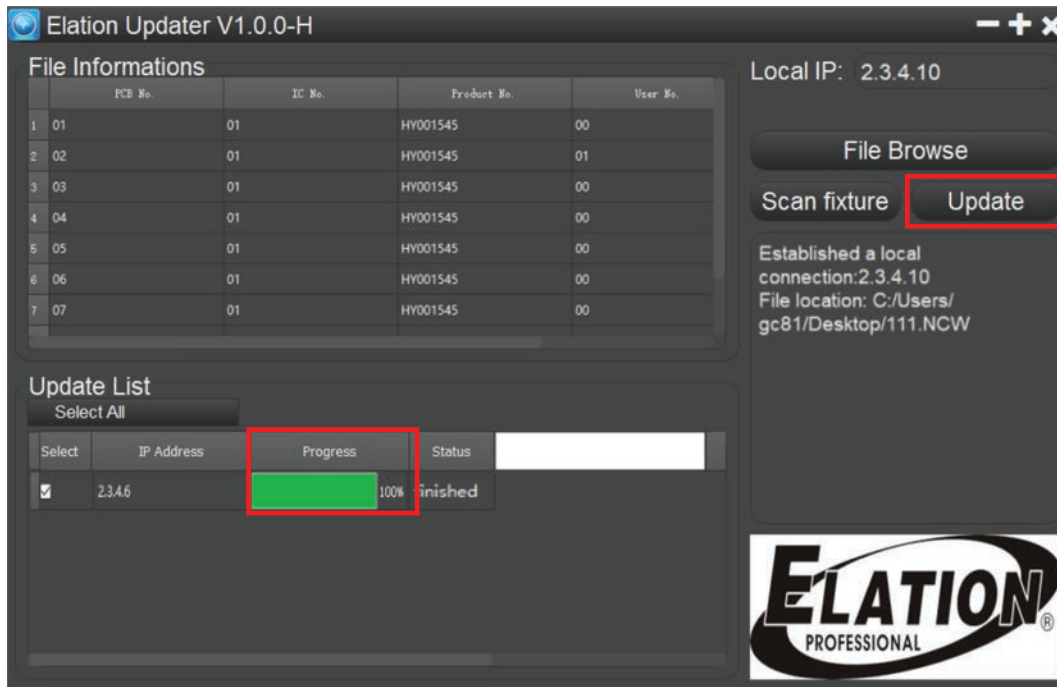
Click "File Browse" to select the files you want to download. The download Progress is displayed in the File information chart as a percentage bar graph.



SOFTWARE UPDATES

ETHERNET UPDATER

Click Update, then wait for the download Progress to reach 100% before closing Updater. The Elation Ethernet Updater can update up to 31 fixtures via connection to a PC.



ERROR CODES

When power is applied, the unit will automatically enter a "Reset/Test" mode. This mode brings all the internal motors to a home position. If there is an internal problem with one or more of the motors an error code will flash in the display in the form of "XXer" where as XX will represent a function number. For example, when the display shows "0Er" it means there is some type of error with the Pan motor. If there are multiple errors during the start-up process they will all flash in the display. For example: if the fixtures has errors on Channel 1, 2, and 5 all at the same time, you will see the error message "01Er", "02Er", and "05Er" flash repeated 5 times.

If an error does occur during the initial start-up procedure the fixture will self-generate a second reset signal and try to realign all the motors and correct the errors. If the error persists after a second attempt a third attempt will be made. If after a third attempt all the errors have not been corrected the fixture will make the following determinations:

- 3 or More Errors: The fixture cannot function properly with three or more errors therefore the fixture will place itself in a stand-by mode until subsequent repairs can be made.
- Less Than 3 Errors: The fixture has less than 3 errors; therefore, most other functions will work properly. The fixture will attempt to operate normally until the errors can be correct by a technician. The errors in question will remain flashing in the display as a reminder of internal errors.

Error Codes subject to change without notice	
ERROR CODES	DESCRIPTION
PAN Er	Movement is not located in the default position after the reset. This message will appear after a fixture reset if the magnetic-indexing circuit malfunctions (sensor failed, or magnet is missing) or there is a motor failure (defective motor or a defective motor IC drive on the main PCB). This error may also be displayed if the head/yoke was blocked during TILT Er a reset function.
TILT Er	
Dimmer Er Focus Er Color wheel Er Cyan Color Er Magenta Color Er Yellow Color Er Gobo wheel Er Gobo Rot. Er Fix_Gobo Er Prism Er Prism Rot Er Prism 2 Er Prism Rot 2Er Prism 3 Er Frost 1 Er Frost 2 Er Flow Er	Movement is not located in the default position after the reset. This message will appear after a fixture reset if the magnetic-indexing circuit malfunctions (sensor failed, or magnet is missing) or there is a motor failure (defective motor or a defective motor IC drive on the main PCB).

MAINTENANCE GUIDELINES



DISCONNECT POWER BEFORE PERFORMING ANY MAINTENANCE!

CLEANING

Frequent cleaning is recommended to insure proper function, optimized light output, and an extended life. The frequency of cleaning depends on the environment in which the fixture operates: damp, smoky or particularly dirty environments can cause greater accumulation of dirt on the fixture's optics. Clean the external lens surface at least every 20 days with a soft cloth to avoid dirt/debris accumulation.

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

MAINTENANCE

Regular inspections are recommended to insure proper function and extended life.

There are no user serviceable parts inside this fixture, please refer all other service issues to an authorized Elation service technician. Should you need any spare parts, please order genuine parts from an authorized Elation dealer.

Please refer to the following points during routine inspections:

A detailed electric check by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating.

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

Check for any deformations on the housing, color lenses, rigging hardware and rigging points (ceiling, suspension, trussing). Deformations in the housing could allow for dust to enter into the fixture. Damaged rigging points or unsecured rigging could cause the fixture to fall and seriously injure a person(s).

Electric power supply cables must not show any damage, material fatigue or sediments.

NEVER remove the ground prong from the power cable.

SPECIFICATIONS

SOURCE

Philips MSD Platinum 500 Flex 550W Lamp
Variable Lamp Power
Automated Lamp Hibernation with Instant Recovery
Up to 4,000 Hour Lamp 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

0.8° Beam Angle
1.6° Field Angle
3.5° Beam Expander Lens
20,000 Total Lumen Output
7000K, CRI 77+
335000 LUX @15m (31100 fc @ 49ft)
7500 LUX @100m (700 fc @ 330ft)

EFFECTS

Beam Expander
Focus
Dual Rotating Prisms and Prism Macros
Dual Frost Filter Hybrid Wash Effect
High Speed Mechanical Shutter and Strobe
Pan Angle: 540°/630°
Tilt Angle: 250°

COLOR

14 Dichroic Colors Including CTO and UV
Full CMY Color Mixing

GOBOS

8 Interchangeable Rotating / Indexing Glass Gobos
17 Static-Stamped Metal Gobos

CONTROL / CONNECTIONS

Single DMX Mode (26ch.)
Sky Motion Standalone mode for searchlight and skytracker animations
16-bit Pan, Tilt, and Dimming Control
Motorized Focus
DMX, RDM, Art-NET, and sACN Protocol Support
6 Button Touch Control Panel
Full Color 180° Reversible LCD Menu Display
Hibernation Mode (Power Save)
IP65 5pin DMX In/Out
IP65 RJ45 etherCON In/Out
Locking IP65 Power In

SIZE / WEIGHT

Length: 19.4" (493mm)
Width: 15.1" (383mm)
Vertical Height: 27.4" (697mm)
Center Spacing: 23.3" (592.8mm)
Weight: 108lbs (49kg)

ELECTRICAL / THERMAL

AC 100-240V - 50/60Hz
800W Max Power Consumption
-4°F to 113°F (-20°C to 45°C)

APPROVALS / RATINGS

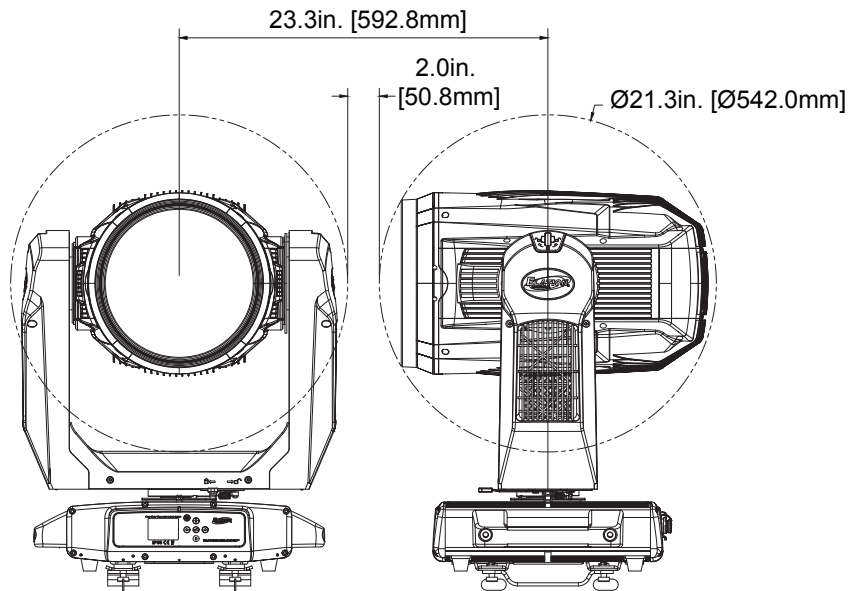
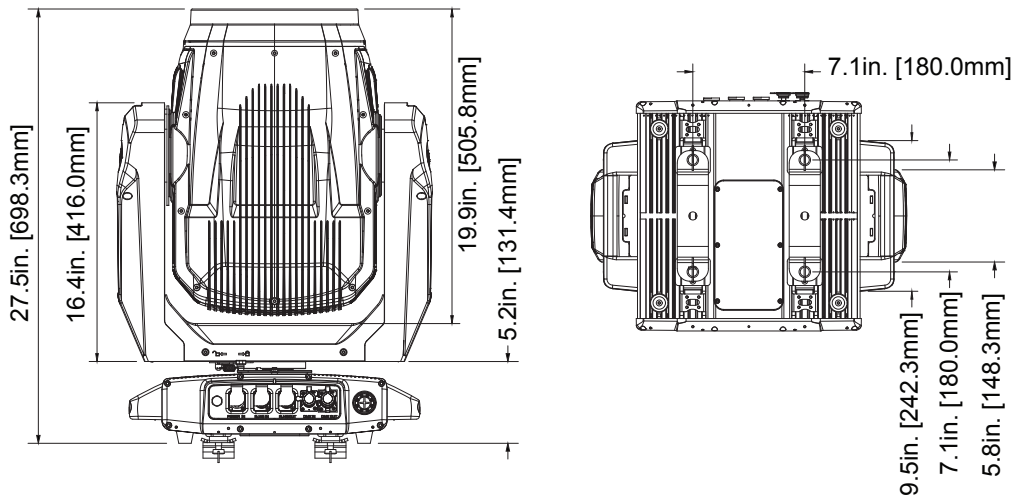
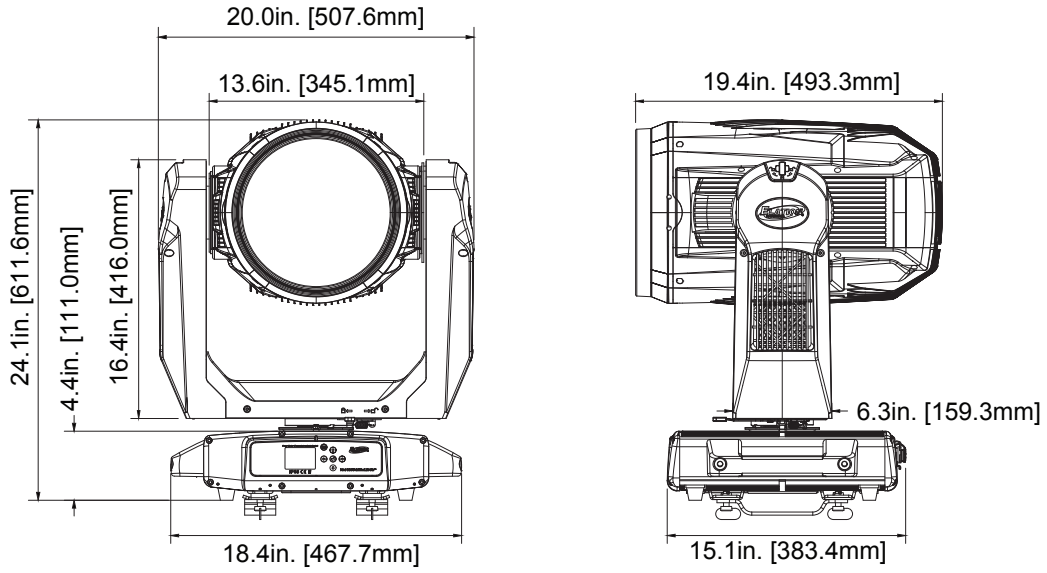
CE | cETLus | IP65 | FCC | UKCA



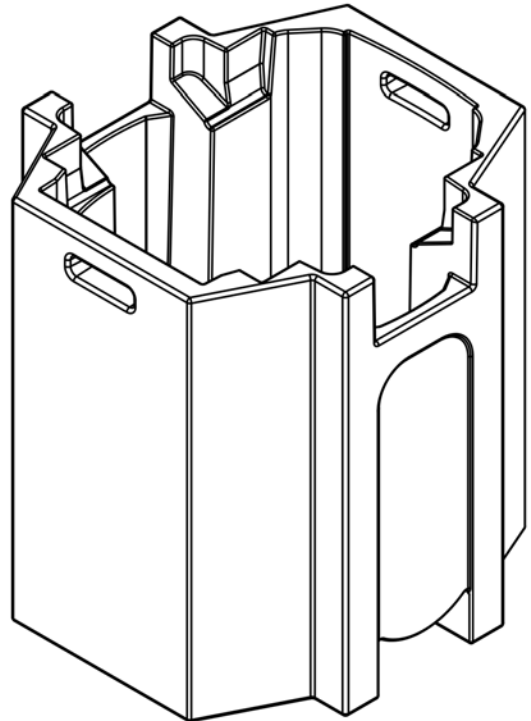
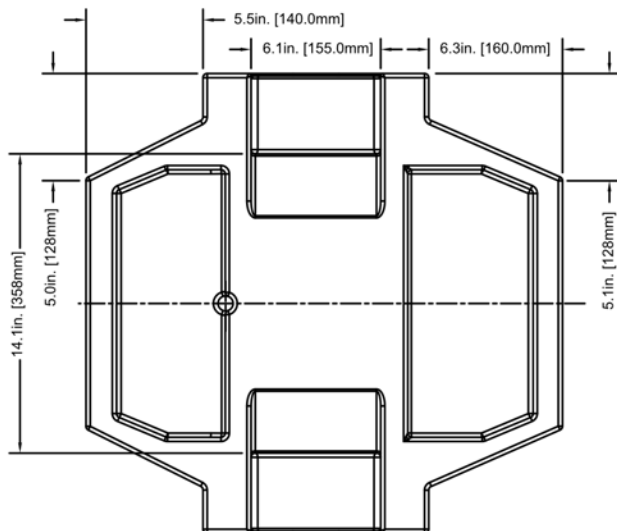
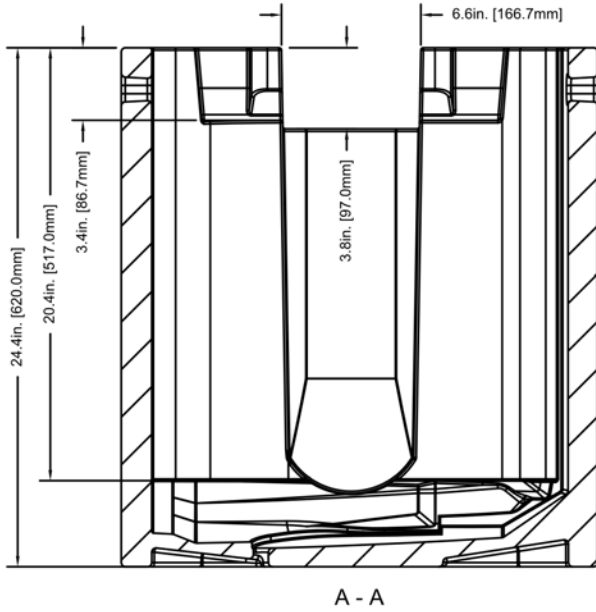
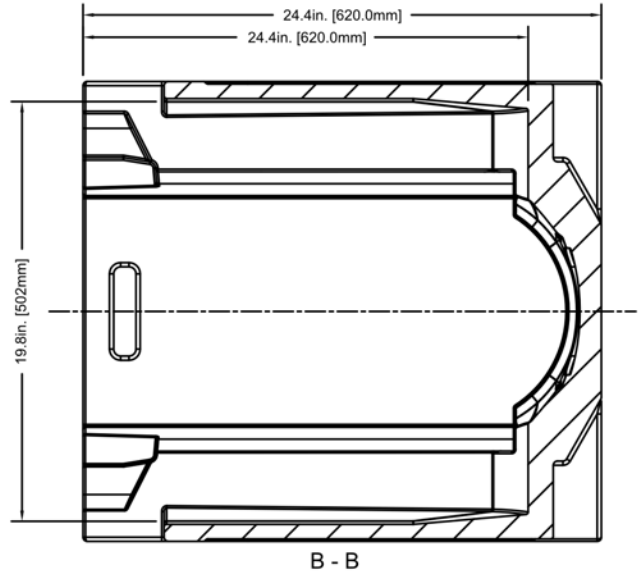
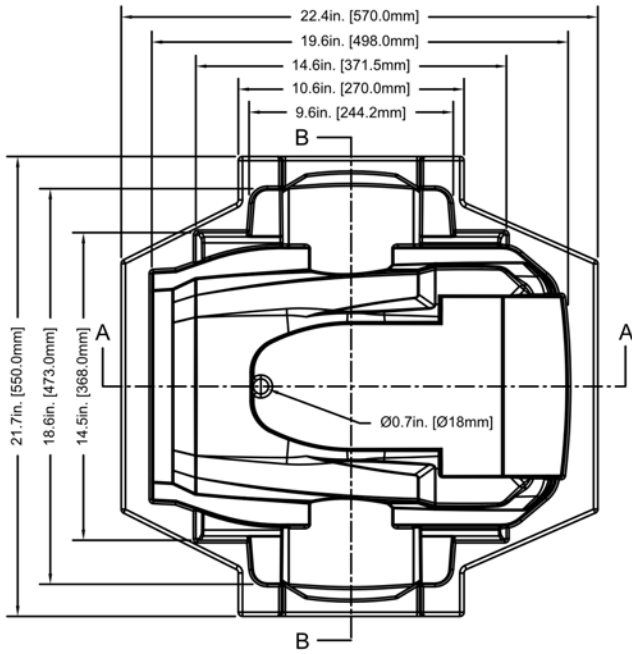
Specifications and documentation subject to change without notice.

DIMENSIONAL DRAWINGS

*Drawings not to scale. Specifications and improvements in the design of this unit and this manual are subject to change without notice.



DIMENSIONAL DRAWINGS



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OPTIONAL ACCESSORIES

ORDER CODE	ITEM
TRIGGER CLAMP	Heavy Duty Wrap Around Hook Style Clamp
SIP126	5 ft. (1.5m) IP65 Twist Lock Power Link Cable
AC5PDMX5PRO	5 ft. (1.5m) 5pin PRO DMX Cable
	Additional Cable Lengths Available

FCC STATEMENT

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

FCC RADIO FREQUENCY INTERFERENCE WARNINGS & INSTRUCTIONS

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

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

Energy Saving Matters (EuP 2009/125/EC)

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



