



# PROTEUS EXCALTIBUR user manual

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## DOCUMENT VERSION



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

Date	Document Version	Software Version ≥	DMX 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

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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](https://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](mailto:support@elationlighting.com)**

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

## WARRANTY RETURNS (USA ONLY)

To obtain warranty service, a Return Materials Authorization (RMA) number must first be obtained from ELATION. It is the Customer's responsibility to provide product proof of purchase and serial number by acceptable evidence such as an invoice copy or an approved ELATION Extended Warranty Certificate ("EWC") and any relevant maintenance records at the time warranty service is sought. Failure to provide acceptable evidence of product proof of purchase or EWC and any relevant maintenance records may be cause for denial of warranty service.

Products returned for warranty service must be sent without any accessories (i.e., power, data, and safety cables, brackets, clamps, rigging hardware, frost filters, gel frames, barn doors, lens, hoses, nozzles, rack mounting hardware, etc.), must be boxed using the original and/or suitable packaging materials (double-box and foam) that provides ample product protection for ground and/or air freight transit, and must be shipped freight pre-paid and insured to ELATION in Los Angeles, CA or an ELATION Authorized Service Center. The RMA number must be clearly written on the outside of the return box, and a brief description of the problem and the RMA number must be documented and included in the box.

Products returned for warranty service without an RMA number clearly marked on the outside of the package will be refused and returned to the shipper at the Customer's expense. Products returned for warranty service, which are received damaged due to inadequate and/or improper packaging and/or due to damage caused by shipping carrier, may incur additional repair charges before warranty service begins and/or may void this warranty. If any product accessories (included and/or optional) are shipped with the product, ELATION and/or the ELATION Authorized Service Center shall have no liability what so ever for the loss and/or damage to any such accessories, nor the safe return thereof. If the requested warranty repairs or service (including parts replacement) are within the terms of this warranty, ELATION will pay return ground transportation shipping charges to a single designated point within the United States.

# SAFETY GUIDELINES

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



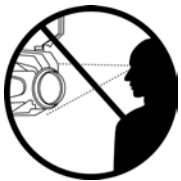
**PROTECTION CLASS 1 - FIXTURE MUST BE PROPERLY GROUNDED.**



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



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



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



**MINIMUM DISTANCE TO OBJECTS/SURFACES  
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



**108 Lbs / 49 Kgs**

# WARNING

## TWO PERSON LIFT REQUIRED

# ! 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.

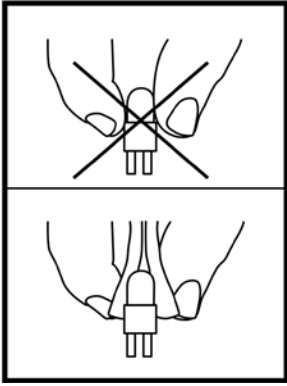
Always disconnect fixture from main power source before performing any type of service and/or cleaning procedure. Only handle the power cord by the plug end, never pull out the plug by tugging the wire portion of the cord.

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

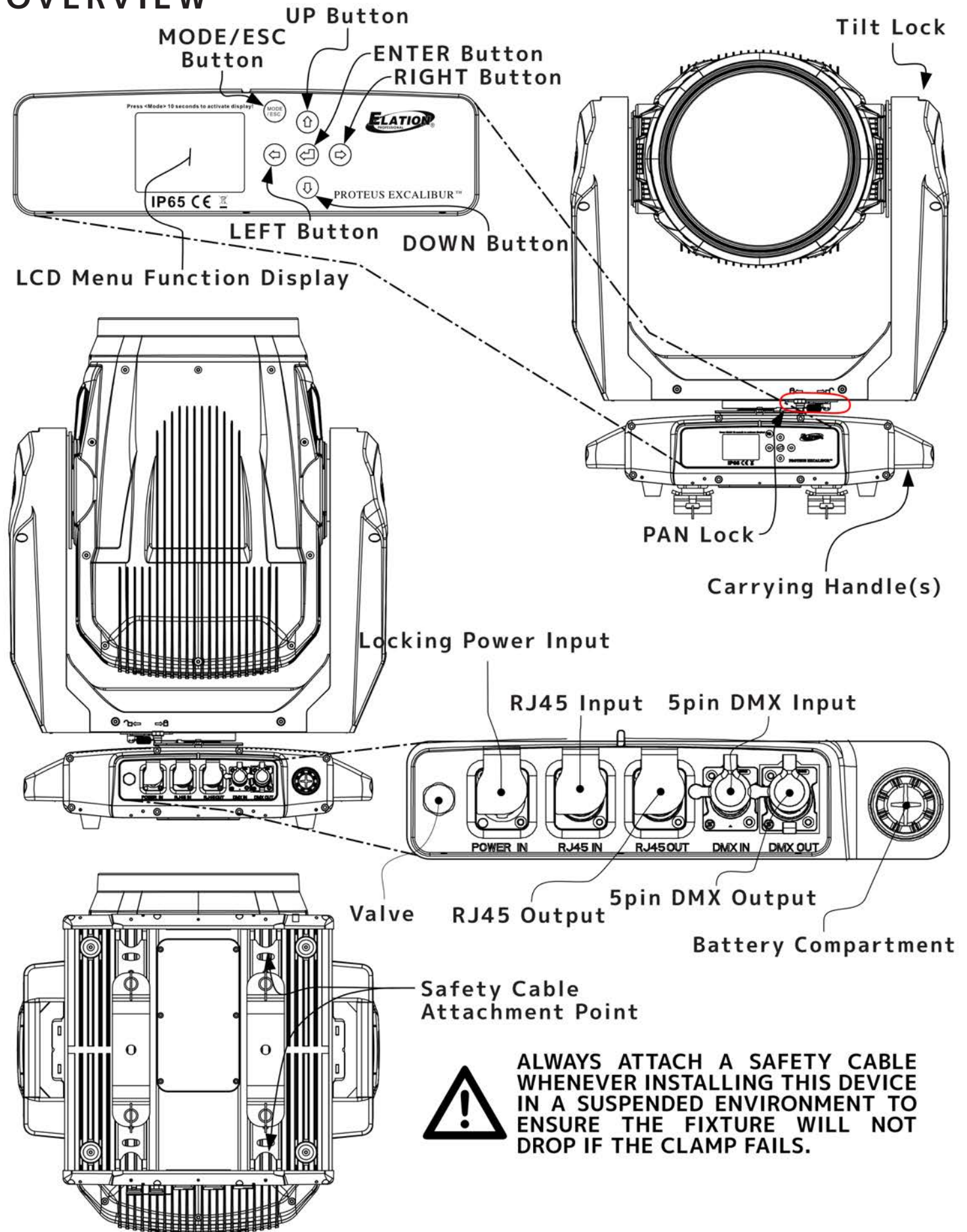
This fixture emits intense UV radiation, which is harmful to the eyes and skin. The intense luminance of the lamp can cause severe damage to the retina. NEVER operate this fixture with ANY of the protective covers removed. These covers have been specially designed to shield against UV radiation.



## 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.

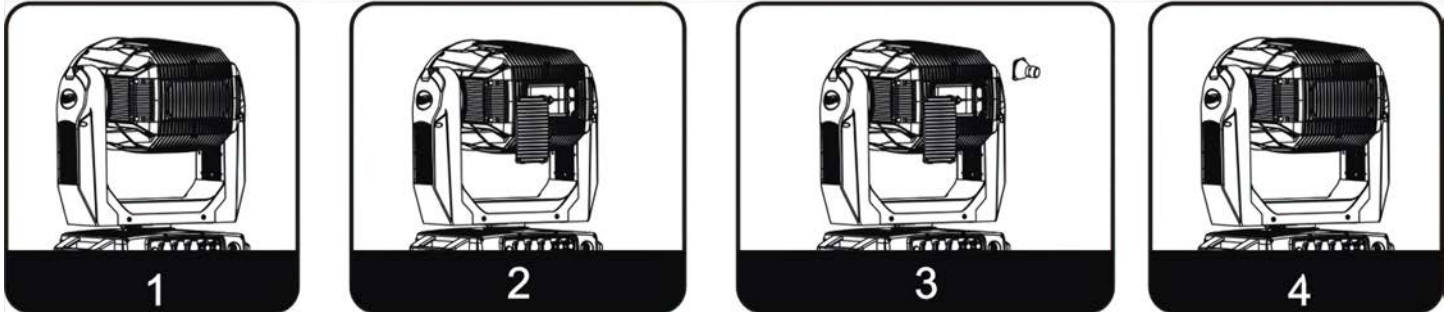
# OVERVIEW



# LAMP INSTALLATION

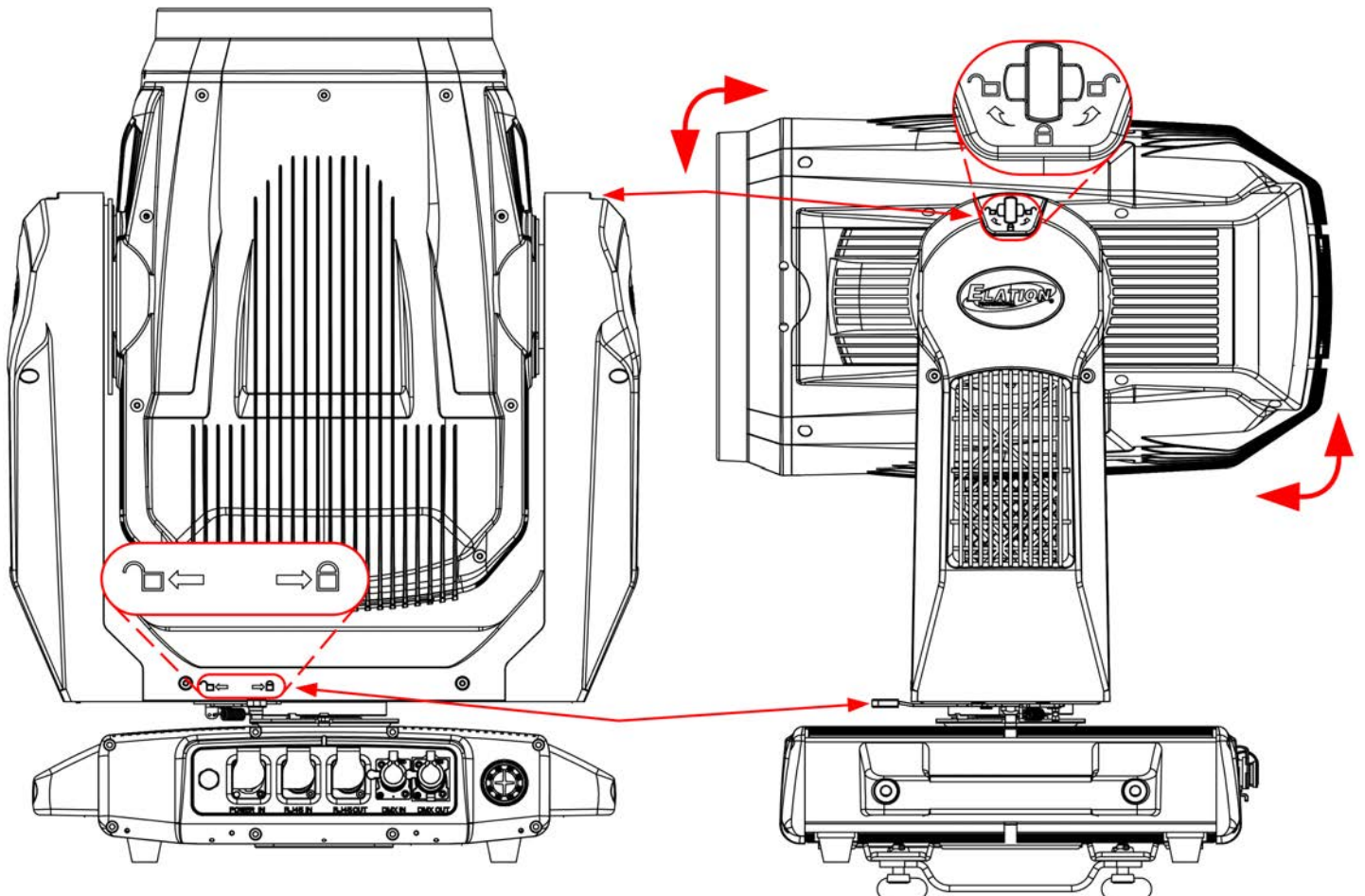
## INSTALLING OR REPLACING LAMP

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.



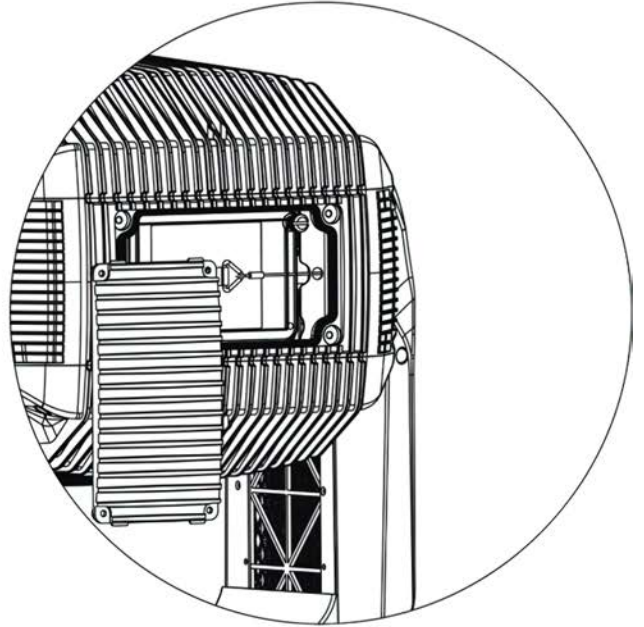
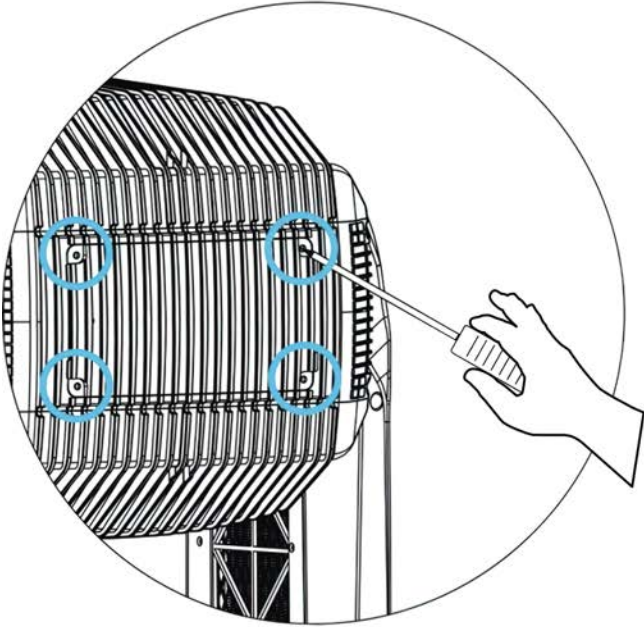
**WARNING! LAMP REPLACEMENT SHOULD ONLY BE DONE BY A TRAINED TECHNICIAN.**

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.

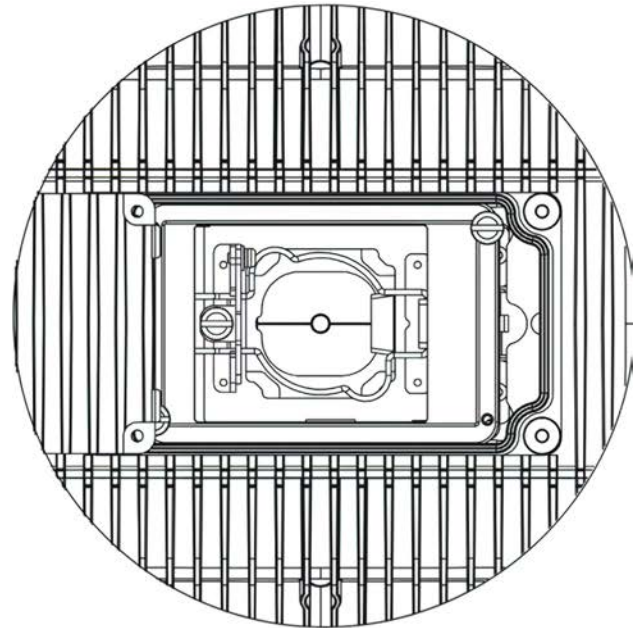
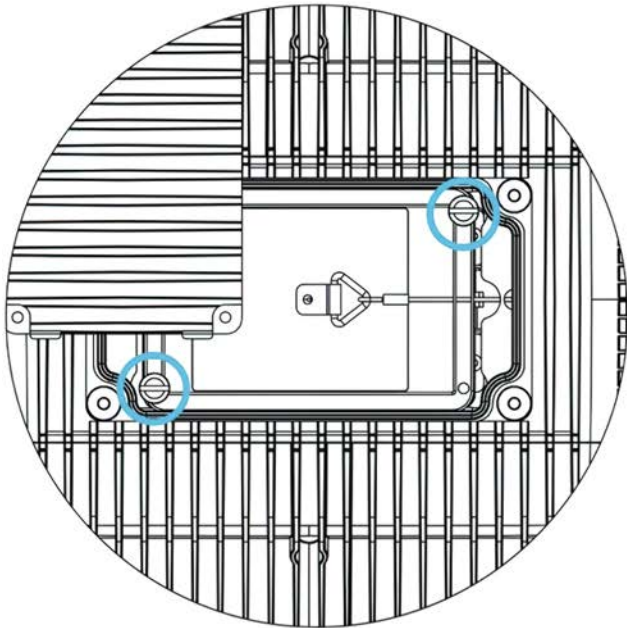


# LAMP INSTALLATION

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

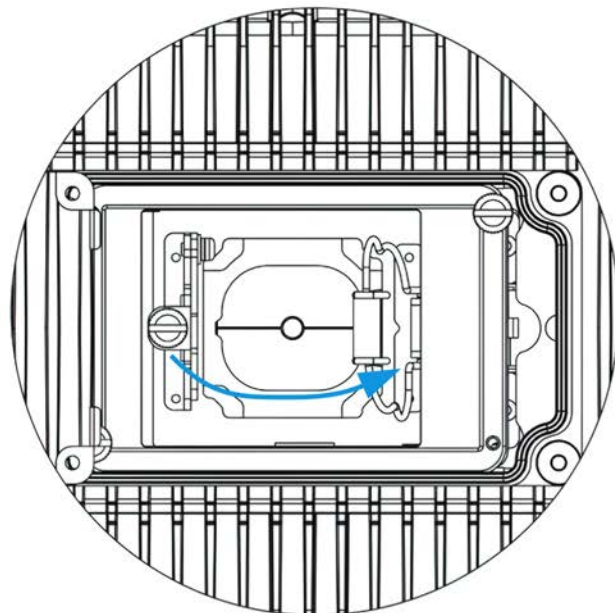
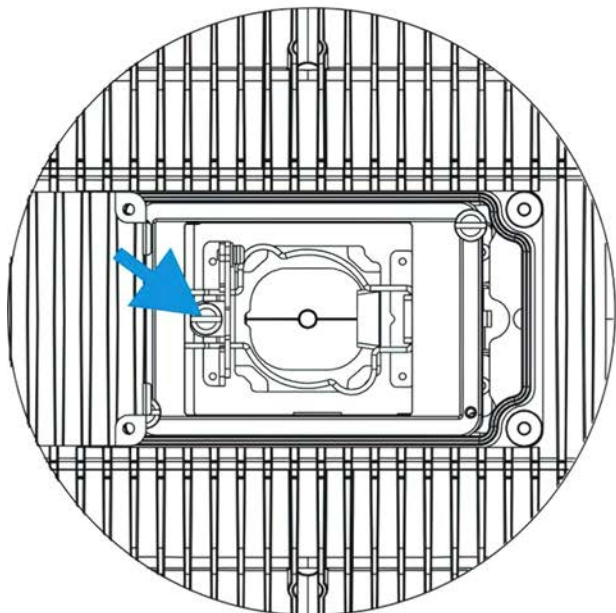


4. Loosen the two slotted thumb screws, and unclip the bottom panel safety cable, and remove the lamp socket cover, exposing the lamp socket.



# 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.



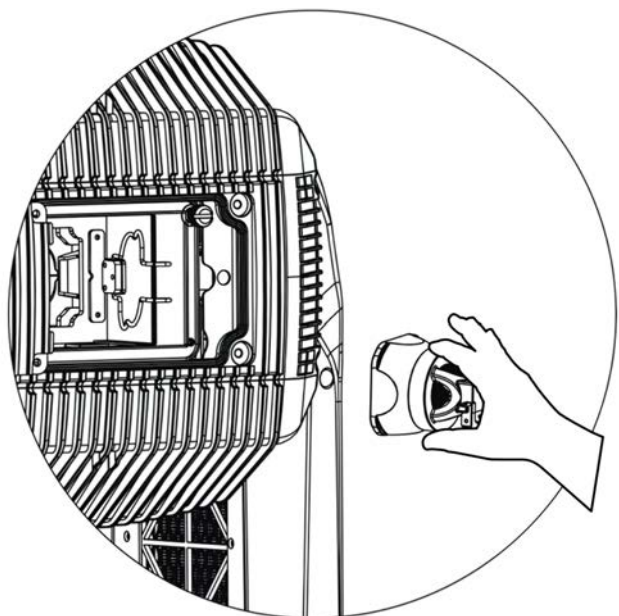
9. Carefully remove the lamp.



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

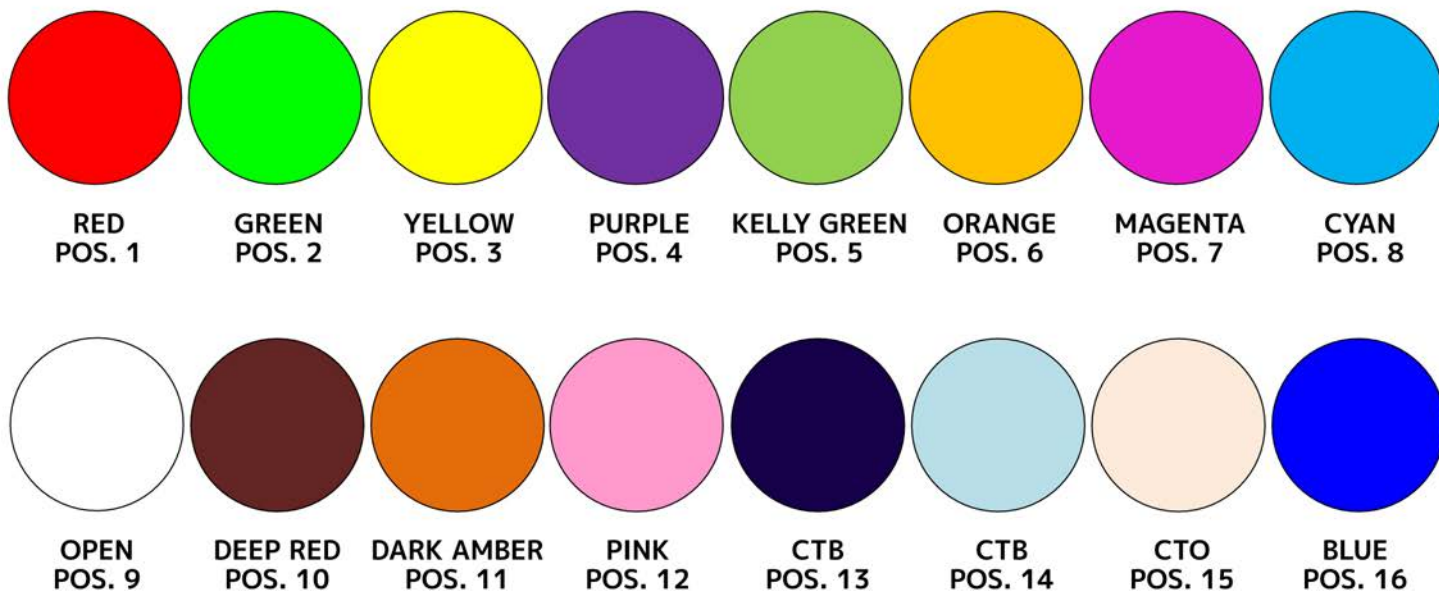
10. Carefully install the new lamp, then follow the removal instruction steps in reverse order.

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

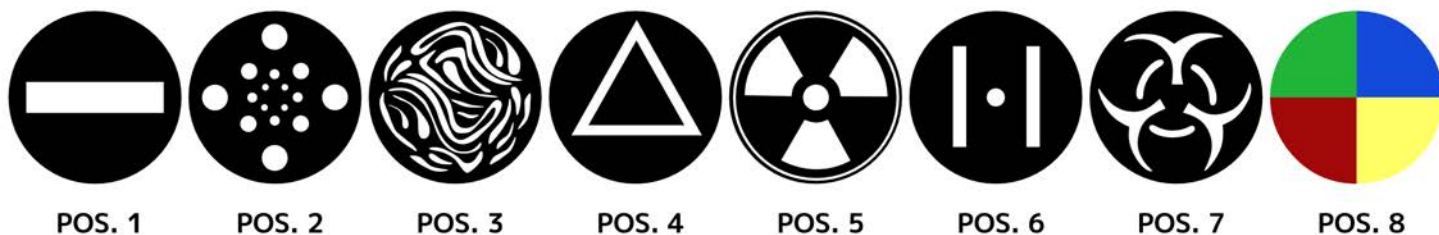


# COLORS AND GOBOS

## COLOR WHEEL

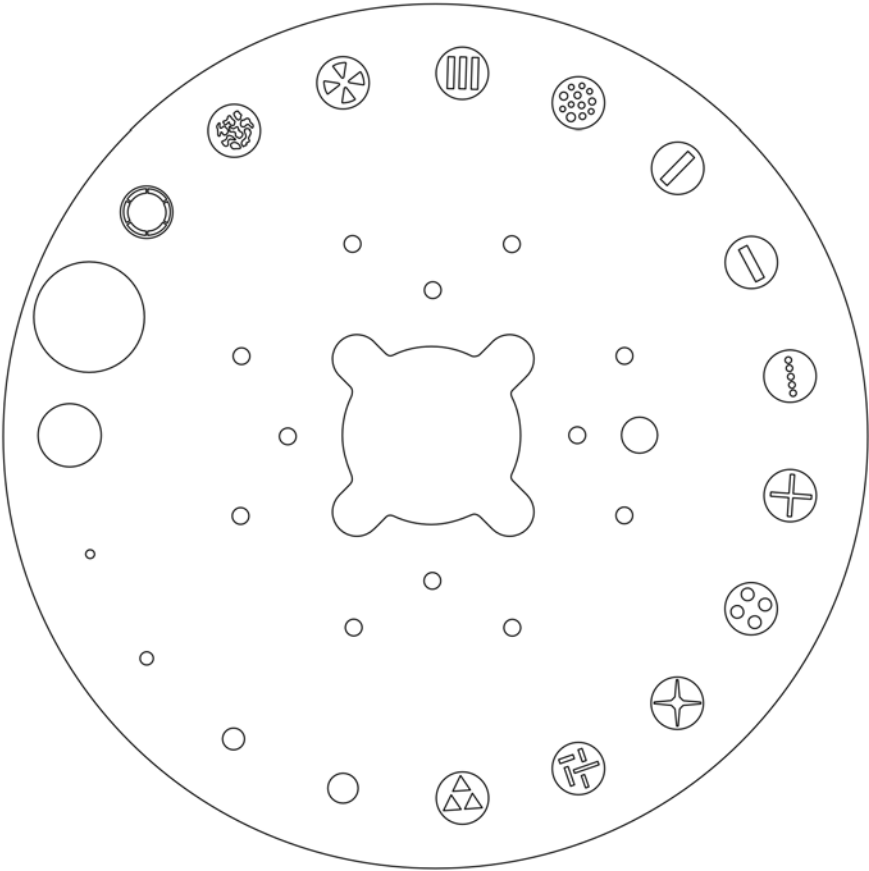
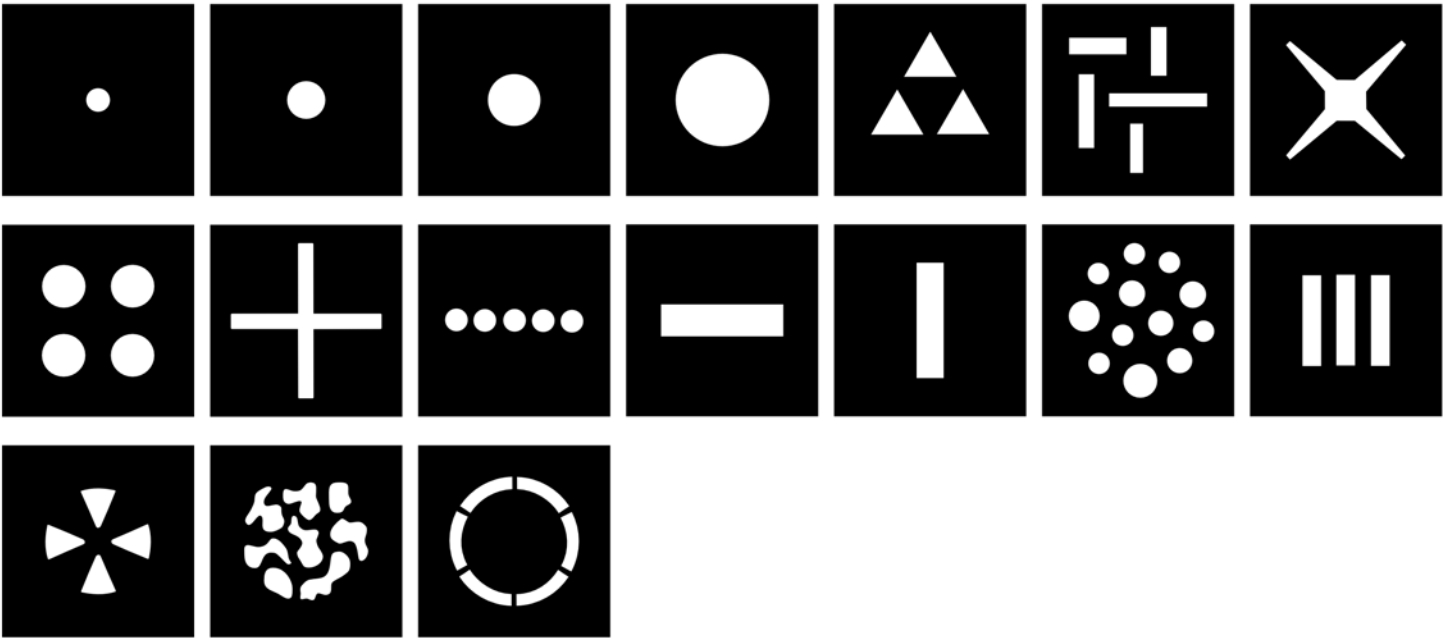


## ROTATING GOBO WHEEL1



COLORS AND GOBOS

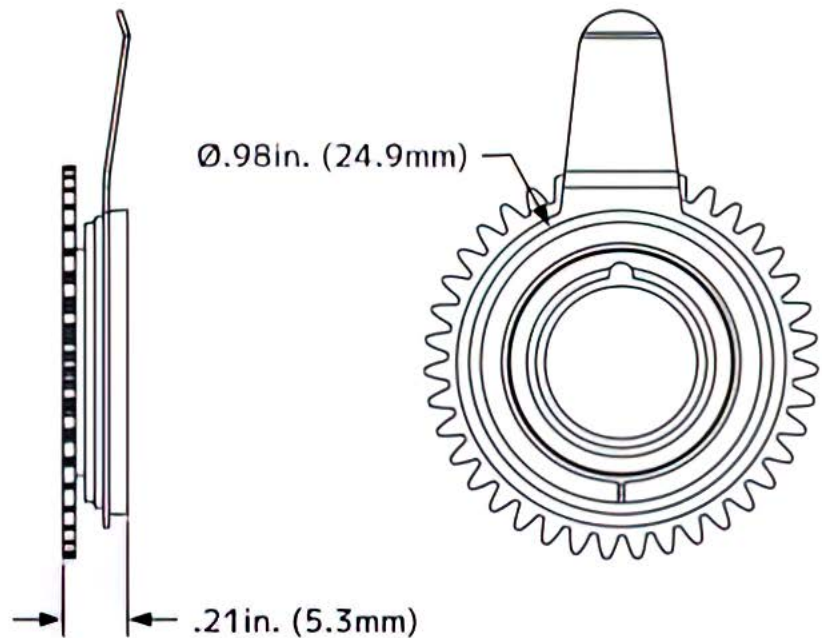
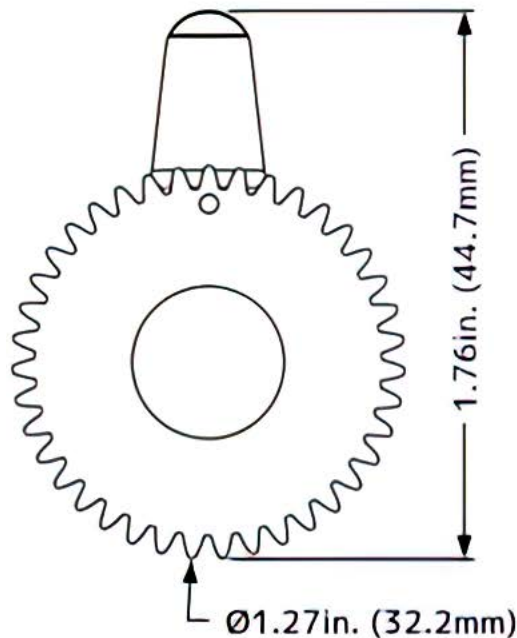
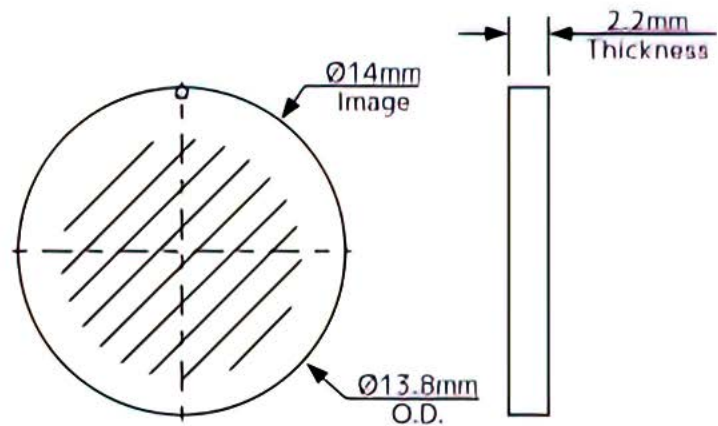
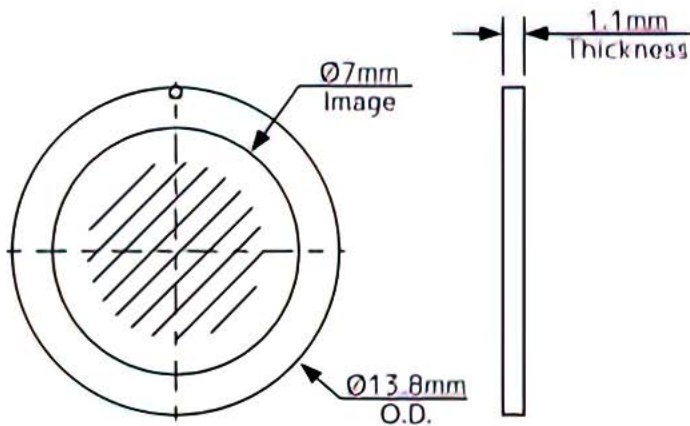
FIXED GOBO WHEEL 2



# 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 \*\*\***

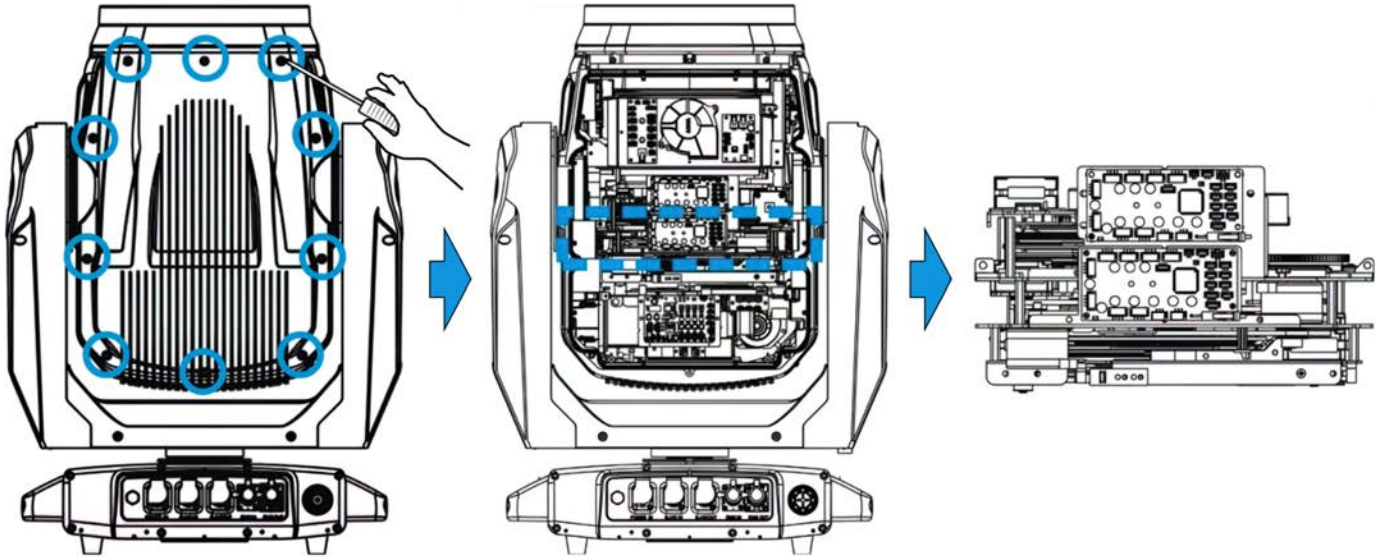
Due to the high temperature optical system, special glass material is required for custom gobos. Due to varying manufacturing processes and tolerances, it is highly recommended to provide a gobo sample and holder from the fixture to the custom gobo vendor for accurate sizing. Extended testing of custom 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**  
**323-582-3322 | Fax 323-832-9142 | support@elationlighting.com**

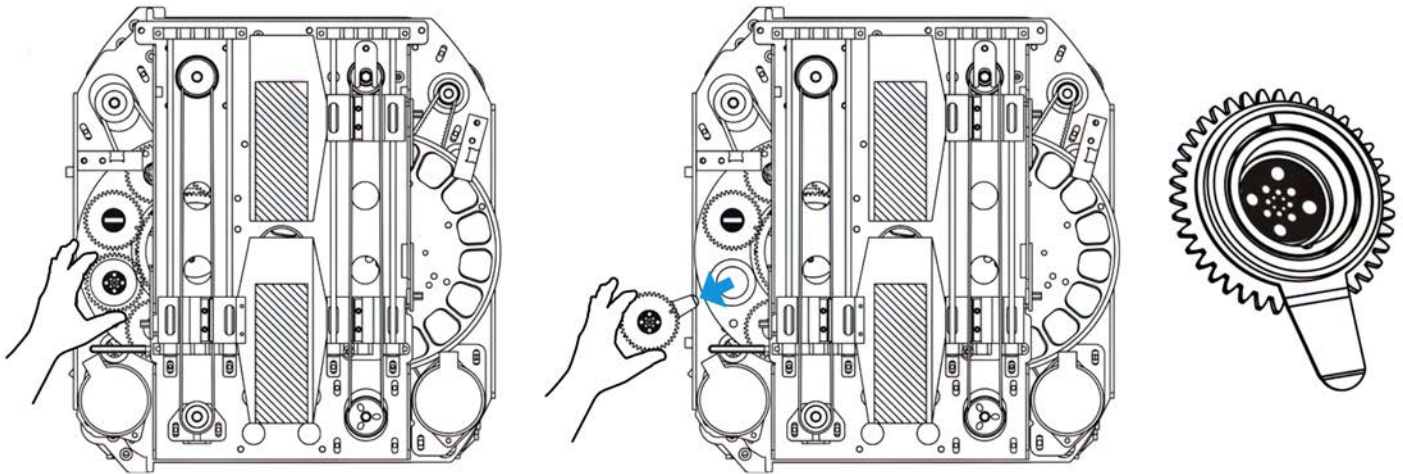
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# GOBO INSTALLATION

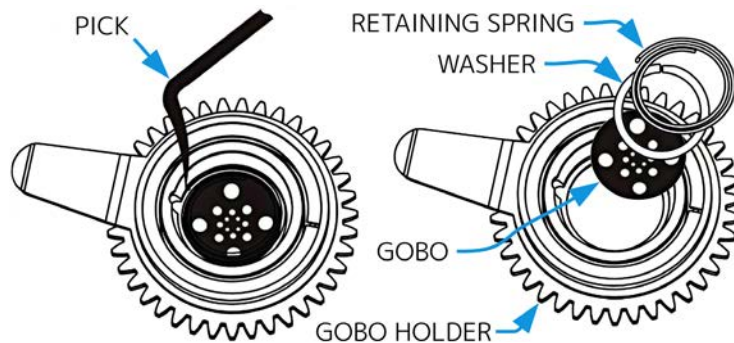
## REPLACING A ROTATING GOBO



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.



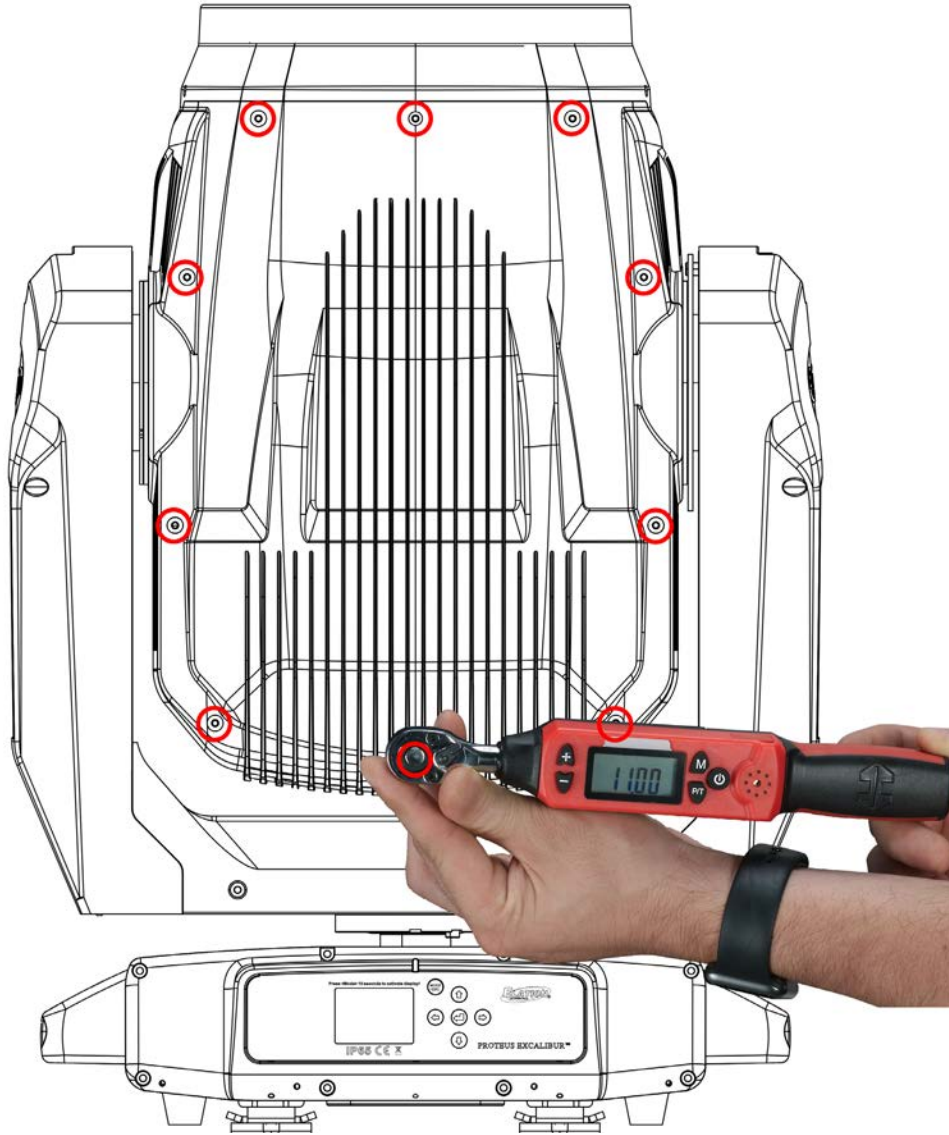
Locate the specific Rotating Gobo to replace. Carefully grip the Gobo using your thumb and index finger, gently lift it slightly, and then pull it out and away until it fully clears the Gobo Wheel.



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 **14° to 113°F. (-10° 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.

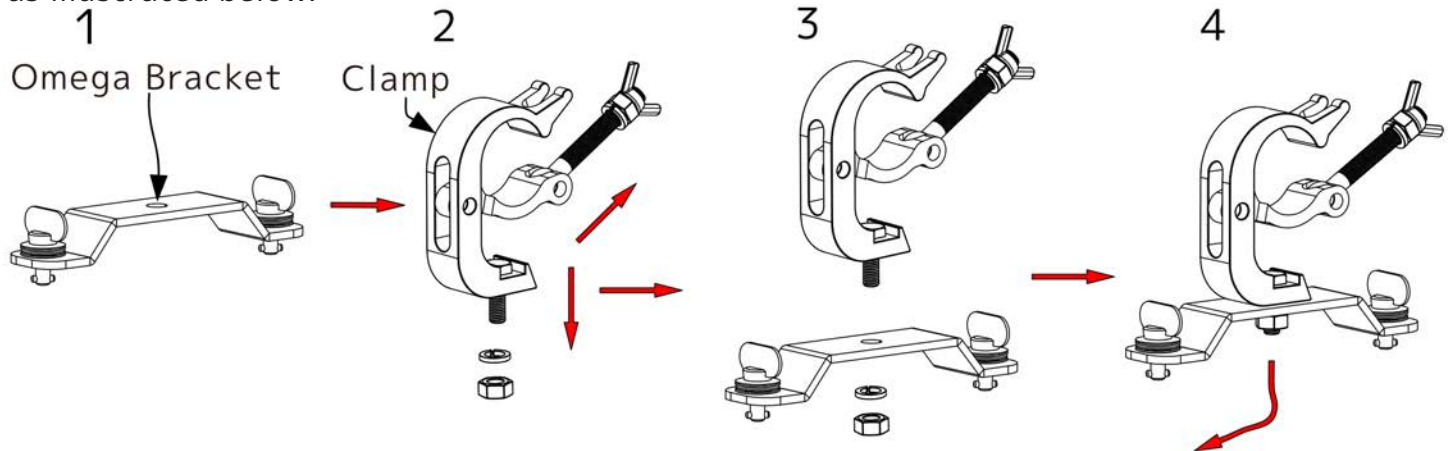
Overhead fixture installation must always be secured with a secondary safety attachment, such as an appropriately rated safety cable.

Allow approximately 10 minutes for the fixture to cool down before serving.

# INSTALLATION GUIDELINES

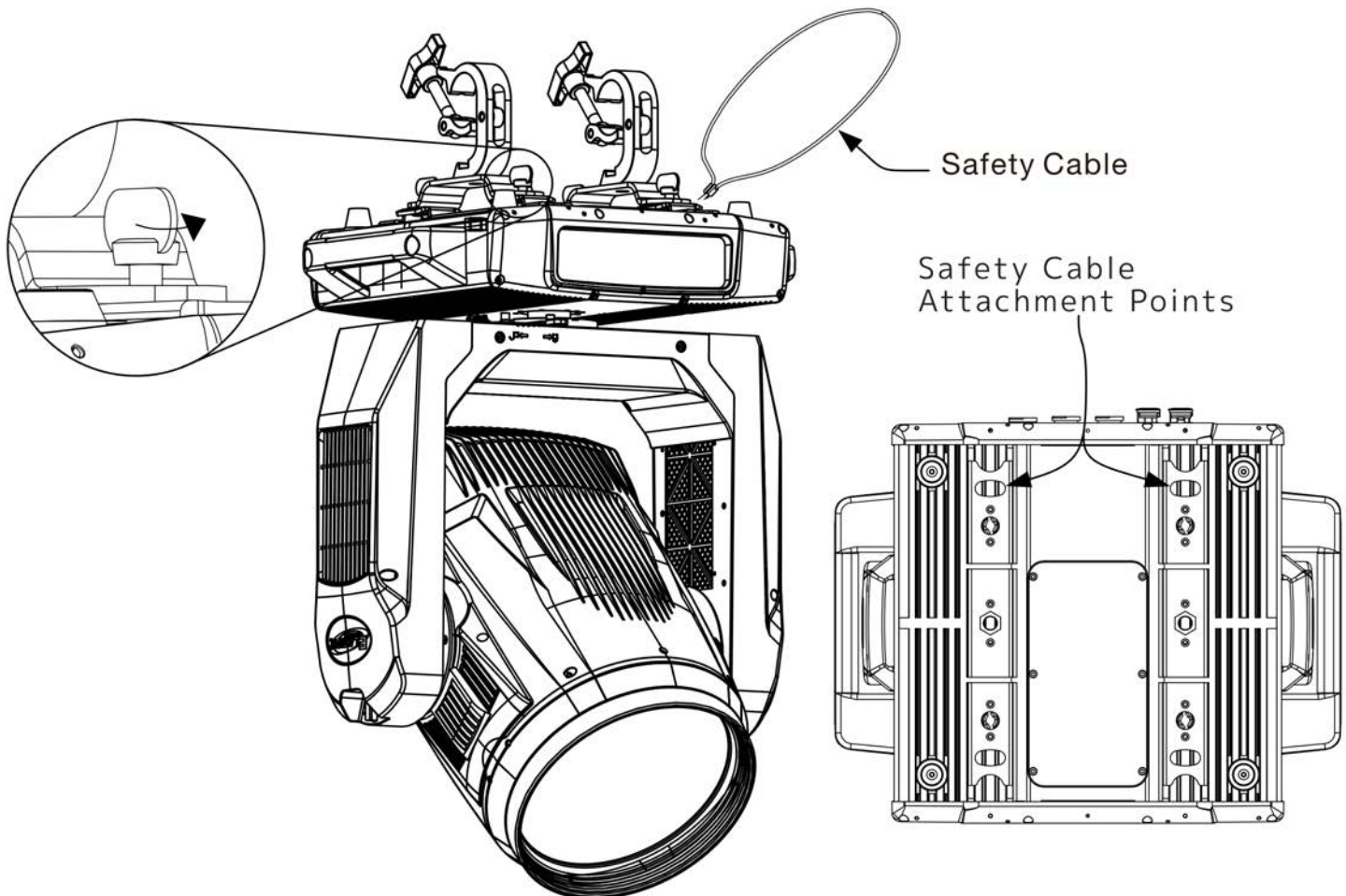
## OMEGA BRACKETS WITH CLAMP INSTALLATION

Insert the Omega Brackets into the matching holes on the bottom of the fixture. Secure the Omega Brackets to the fixture by turning each quick-lock fastener  $\frac{1}{4}$  turn clockwise; making sure the fastener is completely locked. Omega Brackets can be installed into the fixture base as illustrated below.



## 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.**



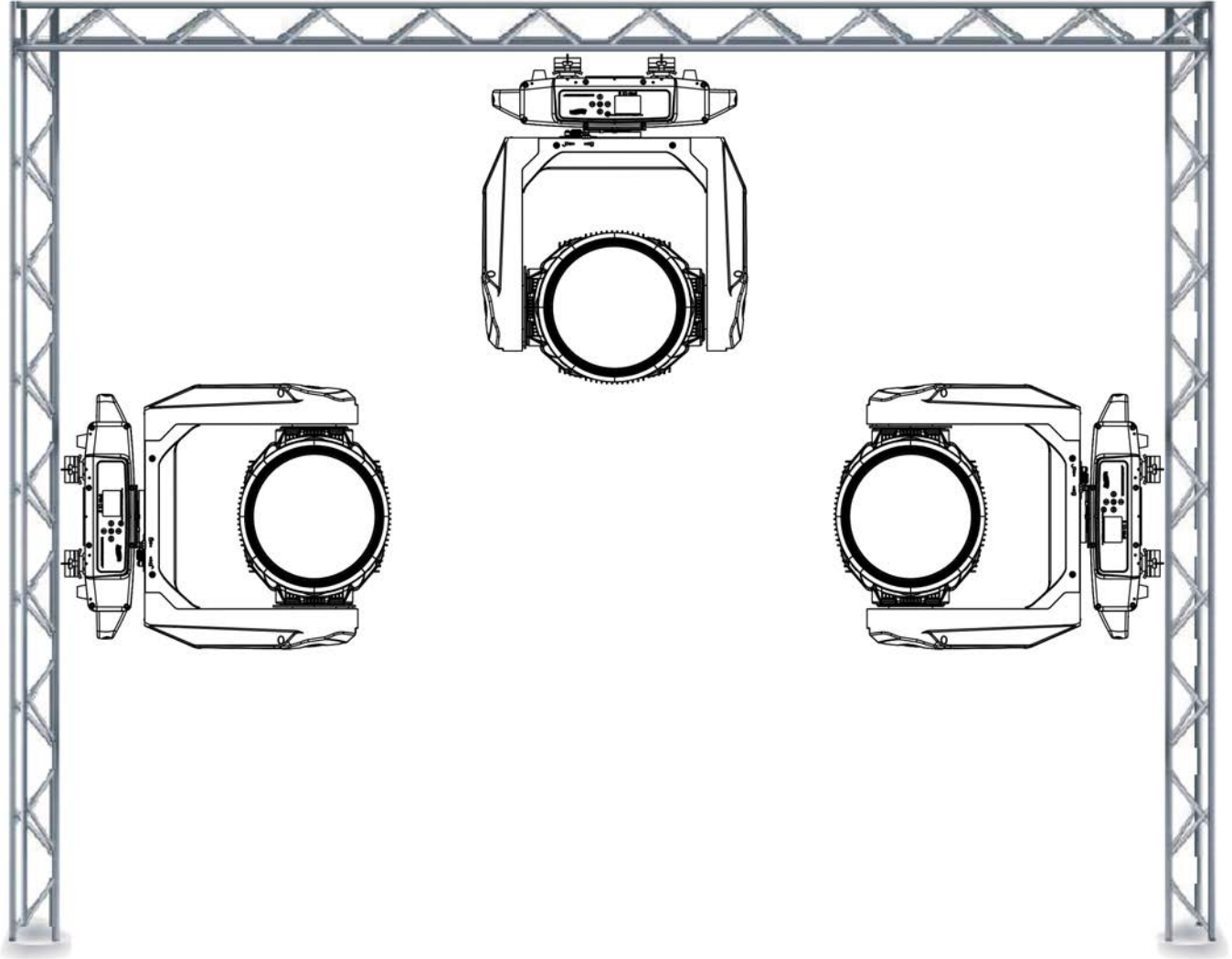
## MOUNTING THE FIXTURE ON A TRUSS USING CLAMPS WITH OMEGA BRACKETS

When mounting the fixture to a truss, be sure to secure an appropriately rated professional grade rigging clamp to the included **Omega Brackets** using an M10 screw fitted through the center hole of the **Omega Brackets**. 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.

# 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.



# 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.

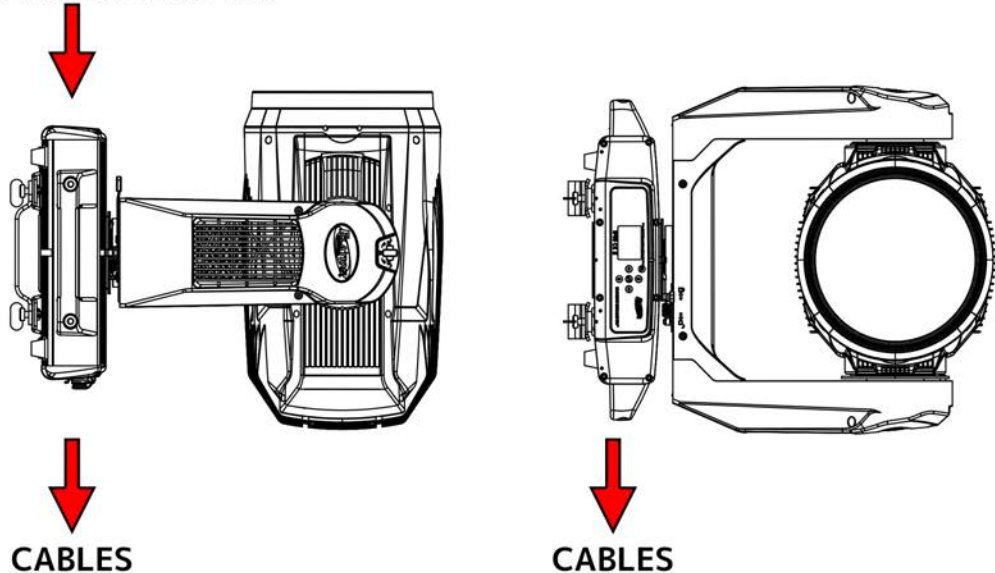
[https://en.wikipedia.org/wiki/Internet\\_Group\\_Management\\_Protocol](https://en.wikipedia.org/wiki/Internet_Group_Management_Protocol)

## 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.

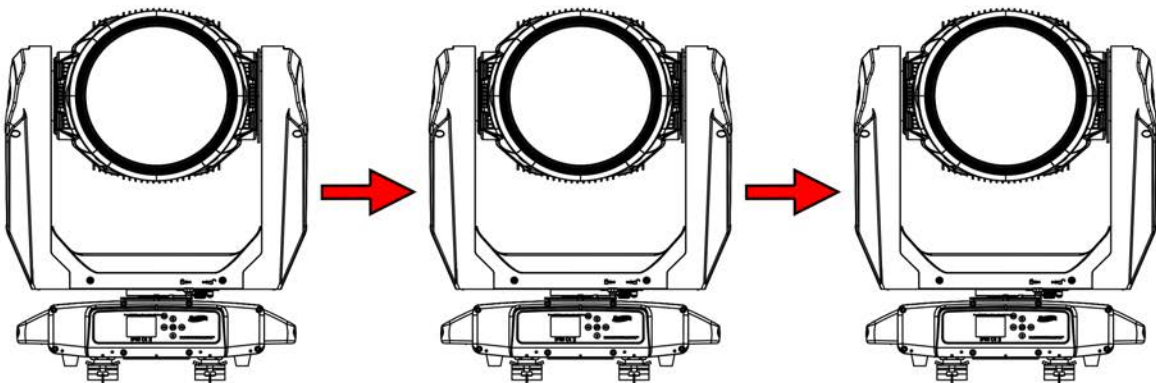
### SYSTEM MENU LCD DISPLAY



## 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

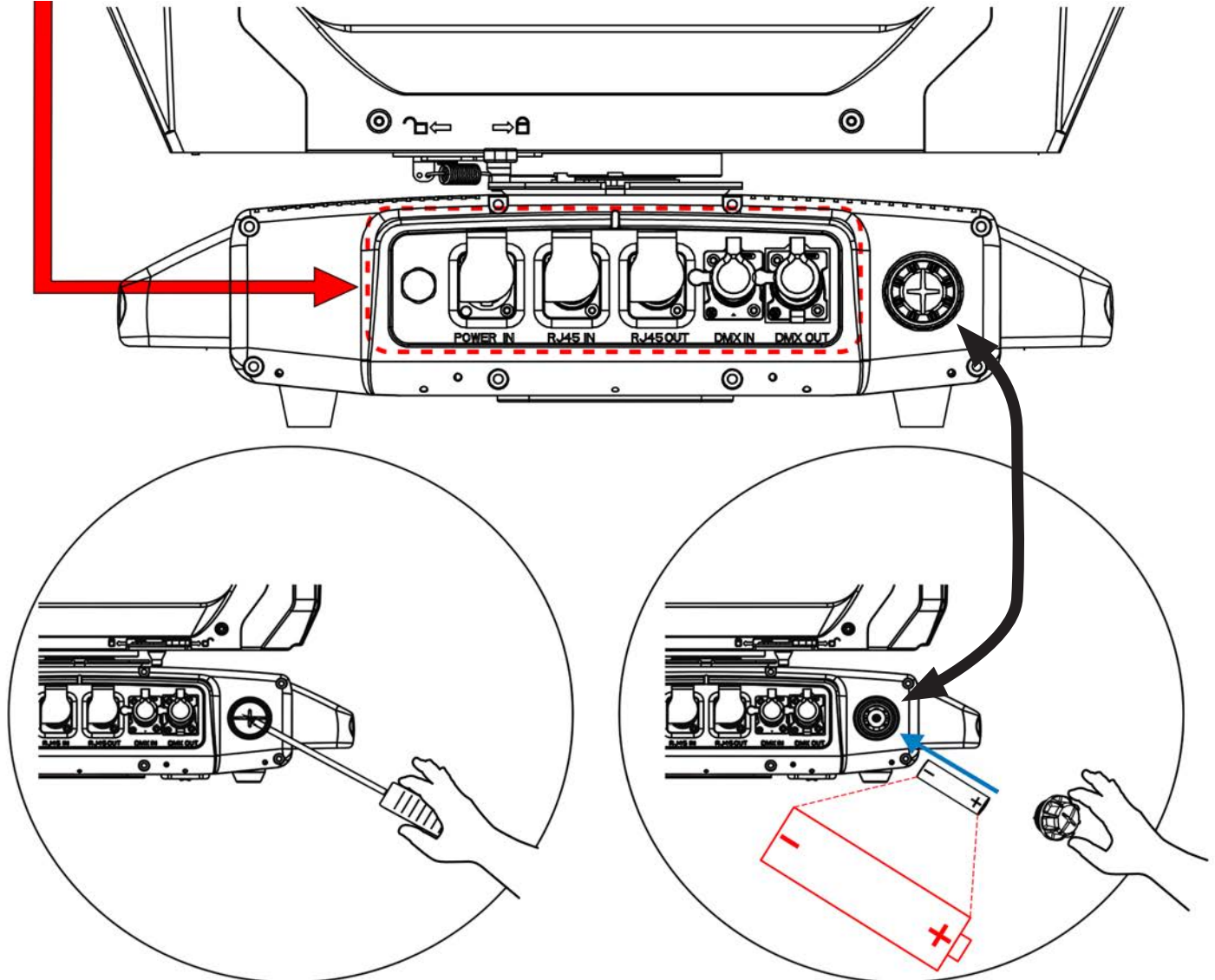
## POWER AND DATA CABLES



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.

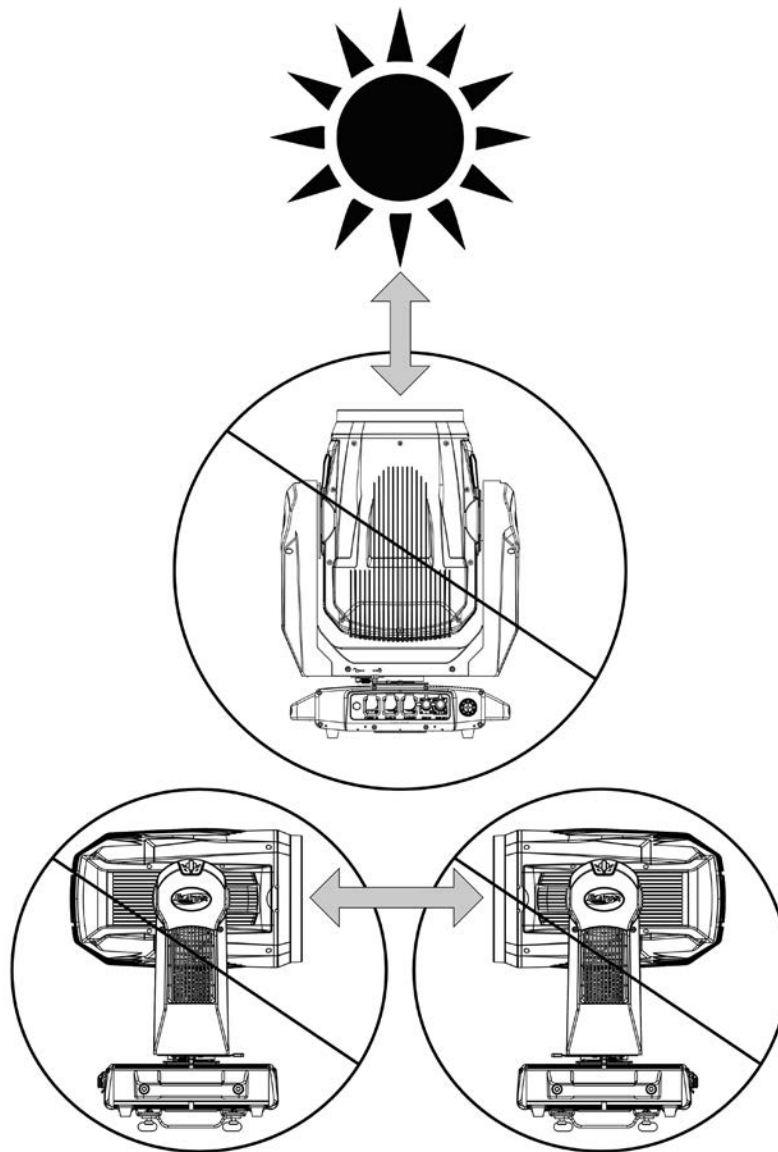
# INSTALLATION GUIDELINES

## 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.

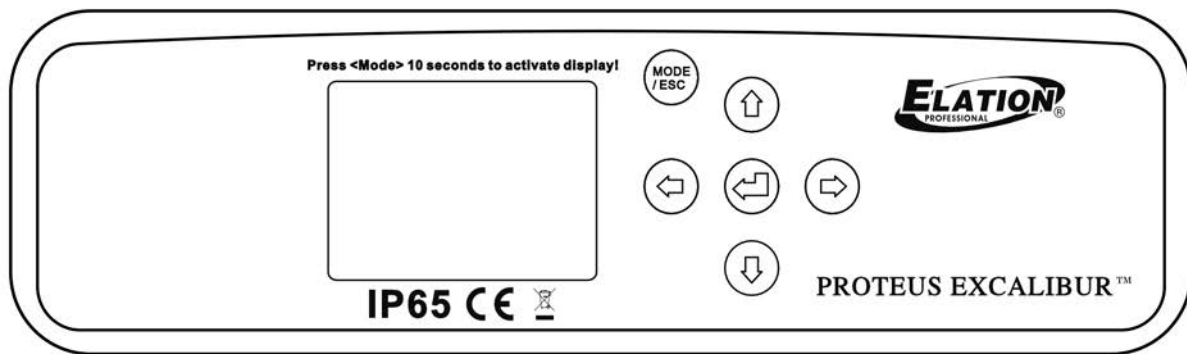
**DO NOT EXPOSE THE FIXTURE AND/OR FRONT LENS OPENING TO LIGHT BEAMS FROM DIRECT SUNLIGHT, OTHER LIGHTING MOVING HEAD FIXTURES, AND LASERS WHILE UNPACKING, INSTALLATION, USE, AND EXTENDED IDLE TIMES OUTDOORS. DO NOT FOCUS A LIGHT BEAM FROM ONE LIGHTING FIXTURE DIRECTLY TOWARDS ANOTHER.**



# 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.

**NOTE:** To access the LCD Menu Control Display via the internal battery, press and hold the **MODE/ESC** button for 10 seconds. The LCD Menu Control Display will shut **OFF** automatically about 1 minute from the last button press.



# SYSTEM MENU

ELATION PROTEUS EXCALIBUR					
Supports Software Versions: ≥ 1.5.0					
MAIN MENU	OPTIONS / VALUES (Default Settings in <b>BOLD</b> )			DESCRIPTION	
Function	Set Dmx Address	A001~AXXX		DMX Address Setting	
	Dmx Value	PAN.....		DMX Value Display	
	Secondary Mode	Secondary1, Secondary2, Secondary3		Secondary Setting	
	Auto Program	Primary / Alone		Auto Program	
Information	Time Information	Current Time	XXXX(Hours)	Power On Running Time	
		Total Run Time	XXXX(Hours)	Fixture Running Time	
		Last Run Time	XXXX(Hours)	Fixture Last Times Clear	
		Lamp Time Info	Total Time(Hours)	Lamp Time Information	
			Active Time(Hours)		
			Idle Time(Hours)		
			Lamp Life(%Percent)		
		LastRun Password	Password=XXX	Timer Password = 038	
		Clear Last Run	ON/ <b>OFF</b>	Clear Fixture Last Time	
		LampTime Password	Password=XXX	LampTime Password = 038	
	Clear Lamp Time	ON/ <b>OFF</b>	Clear Lamp Time		
	Temperature Info	Head Temperature	XXX°C/°F	Temperature in Fixture	
		Base Temperature	XXX°C/°F	Temperature in Base	
		Lamp Temperature	XXX°C/°F	Temperature in LED	
	Humidity Info	Head Humidity	XXX%	Humidity in Fixture	
		Base Humidity	XXX%	Humidity in Base	
	Ethernet IP	Ethernet IP XXX. XXX. XXX. XXX XXX. XXX. XXX. XXX		Ethernet IP	
	Fan Info	1U_FAN1: .....		Fan information	
	Software Version	Vx.x.x		Displays Software Version	
	Error Info	Error Record 1	PAN ....		
		Error Record 2	PAN....		
		... .. Error Record 10	... .. PAN ....		
Lamp Control	Lamp On/Off	ON/OFF		Turns bulb on/off	
	Automatic On	ON/OFF		Bulb turns on automatically	
	Lamp On via DMX	<b>ON</b> /OFF		Controls lamp on/off via DMX	
	Lamp Off via DMX	<b>ON</b> /OFF			
	MaxOnAtHumidity	20~100%, <b>70%RH</b>		Bulb triggers at max. humidity	
	Lamp Power Mode	<b>560W</b> /430W/370W		Lamp power mode	
Personality	Status Settings	Address Via DMX	<b>ON</b> /OFF	Address Via DMX	
		No DMX Status	Close/ <b>Hold</b> /Auto	Auto Run If No DMX	
		Pan Reverse	ON/ <b>OFF</b>	Pan Reverse movement	
		Tilt Reverse	ON/ <b>OFF</b>	Tilt Reverse movement	
		Pan Degree	630/ <b>540</b>	Pan Degree Select	
		Feedback	<b>ON</b> /OFF	Movement Feedback	
		Movement Speed	<b>Normal</b> /Slow	Movement Speed	
		P/T Brake Mode	<b>Smooth</b> /Fast	P/T Brake Mode	
		Hibernation	OFF, 01M~99M, <b>15M</b>	Standby Mode	
	Service Setting	Password	Password=XXX		Password“=050”
		Clear Err. Info	ON/ <b>OFF</b>		Clear Err. Info
		DFLT Pow. LampOn	<b>ON</b> /OFF		Default LampOn On/Off
		CleanVentMode	ON/ <b>OFF</b>		Vent Mode On/Off
	Display Setting	Shutoff Time	02~60m <b>05m</b>		Display Shut Off Time
		Display Reverse	OFF/ON/ <b>AUTO</b>		Reverse 180 degree
		Key Lock	ON/ <b>OFF</b>		LCD Control Panel Key Lock

# SYSTEM MENU

ELATION PROTEUS EXCALIBUR				
Supports Software Versions: ≥ 1.0				
MAIN MENU	OPTIONS / VALUES (Default Settings in <b>BOLD</b> )		DESCRIPTION	
Personality	Temperature C/F	Celsius <b>Fahrenheit</b>	Temp C/F	
	Initial Status	PAN =XXX .....	Initial effect position	
	Select Signal	<b>DMX Only</b> Art-Net sACN	Select Signal	
	Ethernet IP	XXX. XXX. XXX. XXX	Ethernet IP	
	Ether Mask IP	XXX. XXX. XXX. XXX	Ether Mask IP	
	Set Universe	000~32767	Setting Art-Net Universe	
	DHCP	ON / <b>OFF</b>	Auto assign IP address	
	DimmerCurve	<b>Linear</b> Square InverseSquare S-Curve	DimmerCurve Setting	
	Reset Default	<b>ON</b>   PassCode Off	Restore factory settings = 011	
Reset Function	Reset All		Reset Function	
	Reset Pan&Tilt			
	Reset Colors			
	Reset Gobos			
	Reset Shutter			
	Reset Others			
Effect Adjust	Test Channel	Pan = XXX :	Test function	
	Manual Control	Pan = XXX :	Manual Control	
	Calibration	Calibrate Password Pan=XXX :	Password "050" Calibrate and adjust the effects to standard/right position	
Edit Program	Select Program	Auto Pro Part 1 = Program 1 ~ 10 <b>Program 1</b> Auto Pro Part 2 = Program 1 ~ 10 <b>Program 2</b> Auto Pro Part 3 = Program 1 ~ 10 <b>Program 3</b>	Select Programs To Be Run	
	Edit Program	Prog 1 : Prog 10	ProgTest Step 01 = SCxxx STep 64 = SCxxx	Testing Program Program In Loop Save and Exit
	Edit Scenes	Scene 001 ~ Scene 250	Pan, Tilt, ..... - Fade Time - - Scene Time - Input By Out	Save and Automatically Return Manual Scenes Edit
	Rec. Controller	XX~XX	Automatic Scenes Recorder	

# 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

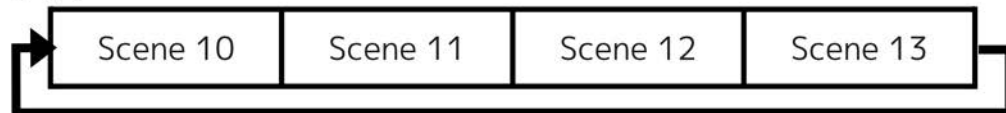
Auto Pro Part 1 is Program 2

Auto Pro Part 2 is Program 3

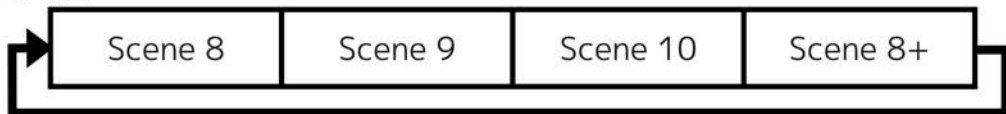
Auto Pro Part 3 is Program 6

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

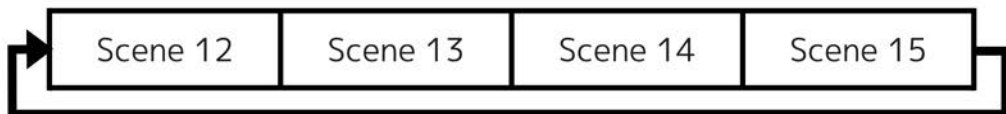
Part 1



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.

## **ELATION E-FLY WIRELESS TRANSCIEVER 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:

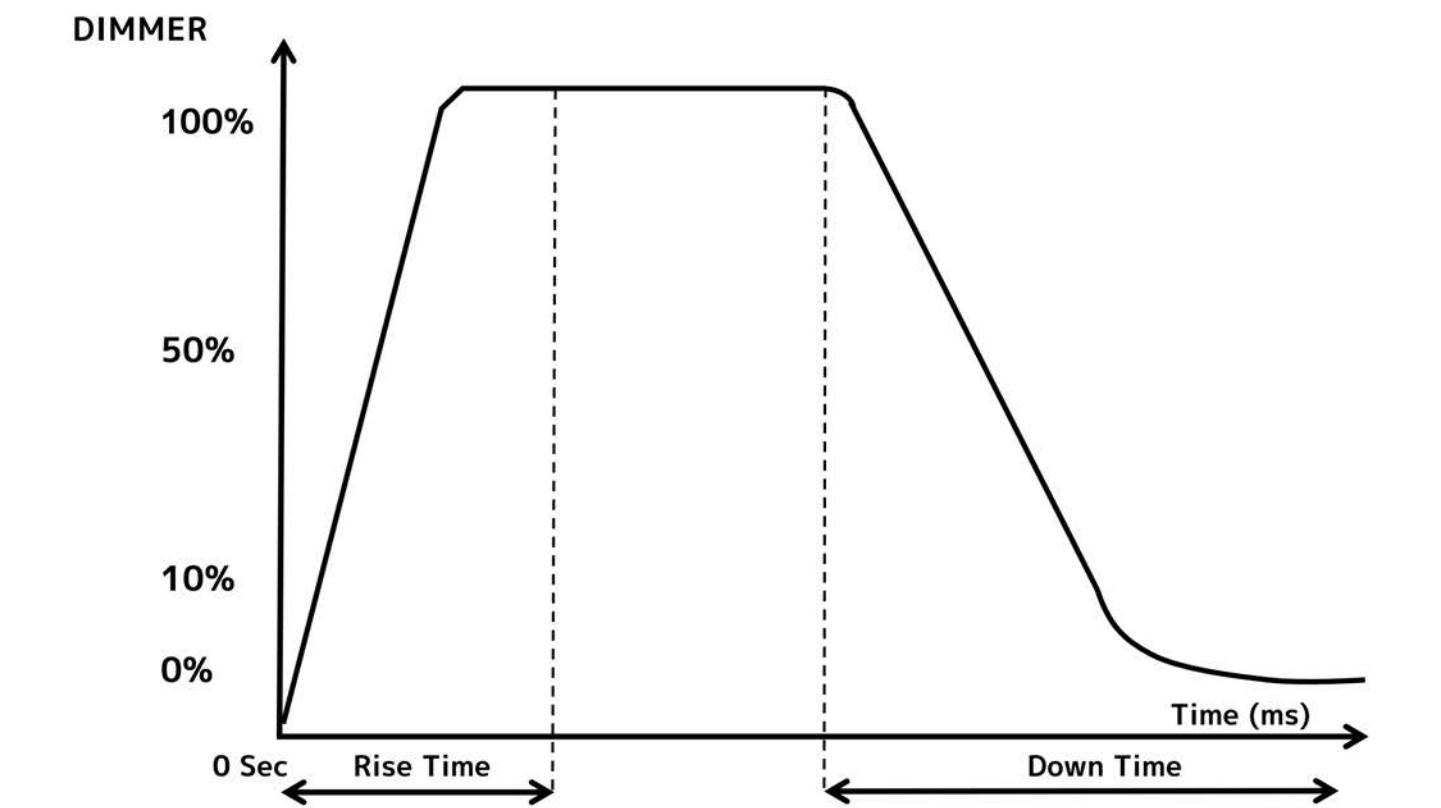
- Install devices a minimum of 9.8 ft. (3m) above audiences and/or ground level
- Adjust the wireless antenna in a vertical upright position
- Position devices in direct line of sight of the controlling E-FLY device

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

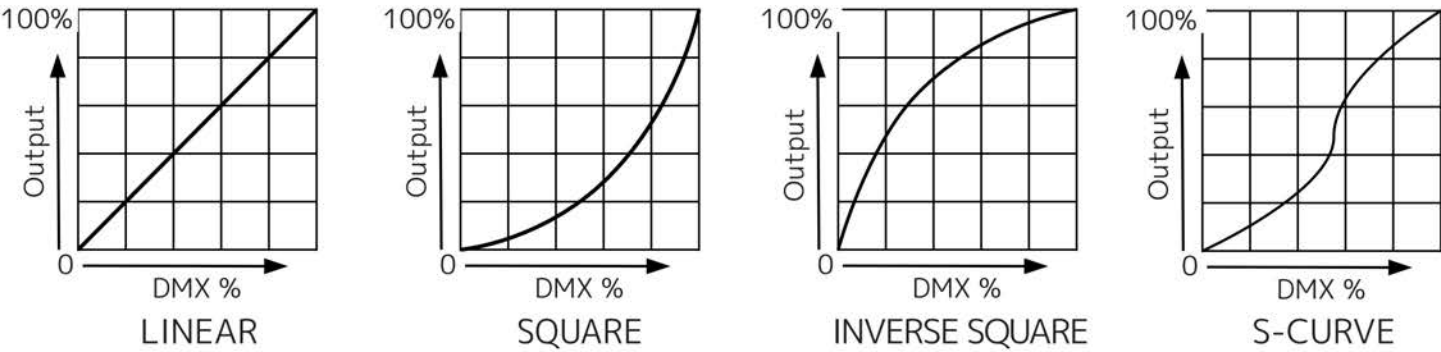
**9.8 ft (3m)  
Above Ground**



# 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: $\geq 1.4.0$					
Features subject to change without notice					
MODE/CHANNEL STANDARD	VALUE	FUNCTION	HOLD TIME	DEFAULT	SNAP
1		<b>PAN Movement 8bit</b>			
	0-255	Pan Movement			
2		<b>Pan Fine 16bit</b>			
	0-255	Fine control of Pan movement			
3		<b>TILT Movement 8bit</b>			
	0-255	Tilt Movement			
4		<b>Tilt Fine 16bit</b>			
	0-255	Fine control of Tilt movement			
5		<b>Cyan</b>			
	0-255	Cyan (0-100% Cyan)			
6		<b>Magenta</b>			
	0-255	Magenta (0-100% Magenta)			
7		<b>Yellow</b>			
	0-255	Yellow (0-100% Yellow)			
8		<b>Color Wheel</b>			
	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			
		<b>Color Scroll</b>			
	128-180	Clockwise, fast $\rightarrow$ slow			
	181	Idle			
	182-234	Counter-clockwise, slow $\rightarrow$ fast			
		<b>Random Slots</b>			
	235-239	Fast			
	240-244	Medium			
	245-249	Slow			
	250-255	Open			

Features subject to change without notice					
MODE/CHANNEL	VALUE	FUNCTION	HOLD TIME	DEFAULT	SNAP
STANDARD					
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	VALUE	FUNCTION	HOLD TIME	DEFAULT	SNAP
STANDARD					
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		<b>Prism</b>			
	0-50	Open			
	51-100	Beam Expander			
	101-150	8 Facet			
	151-200	4 Facet Linear			
	201-255	8 Facet + 4 Facet			
14		<b>Prism 1 Rotation</b>			
	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		<b>Prism 1 Rotation Fine</b>			
	0-255	Fine indexing			
16		<b>Prism 2 Rotation</b>			
	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		<b>Prism 2 Rotation Fine</b>			
	0-255	Fine Indexing			
18		<b>Focus</b>			
	0-255	Focus edge adjustment			
19		<b>Focus Fine</b>			
	0-255	Focus adjustment Fine			
20		<b>Shutter, Strobe</b>			
	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		<b>Dimmer</b>			
	0-255	Intensity 0 to 100%			
22		<b>Dimmer Fine</b>			
	0-255	Intensity Fine			
23		<b>Frost1</b>			
	0-255	0% - 100% Frost			
24		<b>Frost 2</b>			
	0-255	0% - 100 Frost			
25		<b>Pan / Tilt Speed</b>			
	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		<b>Control</b>			
	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			
	100-168	Idle			
	169-170	Vent Cleaning On			
	171-172	Idle			
	173-174	Hibernation Off			
	175-176	Hibernation			
	177-178	Home Position Before Power Off			
	179-180	Home Position Off			
	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.

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

# 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  
Rotating Prisms and Prism Macros  
Dual Frost Filter Hybrid Wash Effect  
Motorized Focus  
High Speed Mechanical Shutter and Strobe

## 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.)  
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)  
Weight: 108lbs (49kg)

## ELECTRICAL / THERMAL

AC 100-240V - 50/60Hz  
800W Max Power Consumption  
14°F to 113°F (-10°C to 45°C)

## APPROVALS / RATINGS

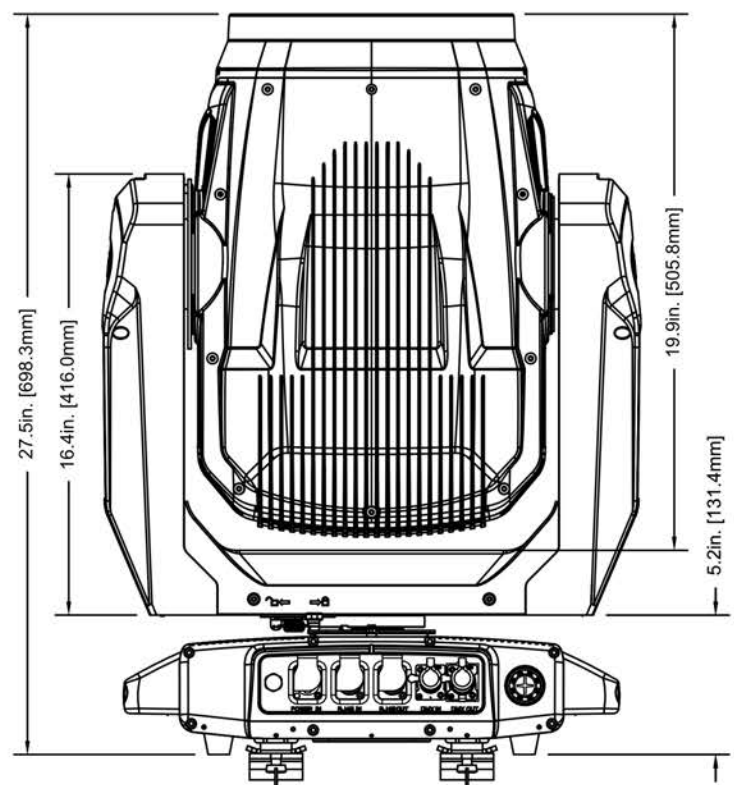
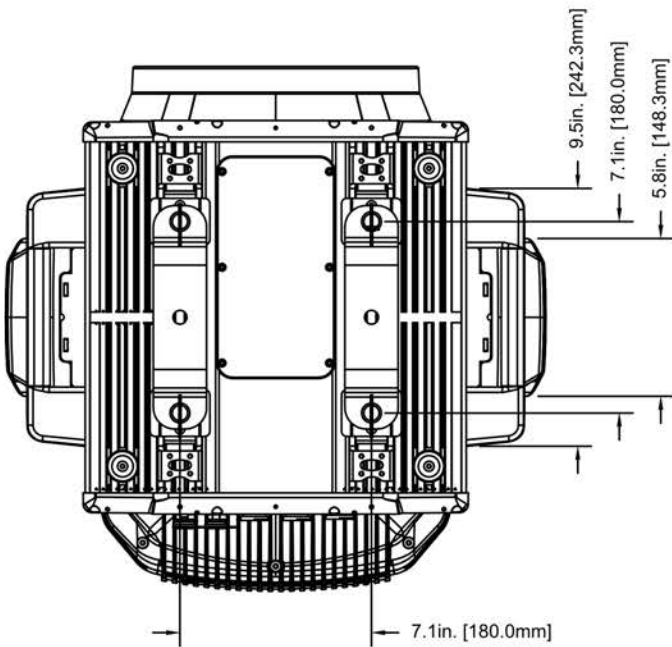
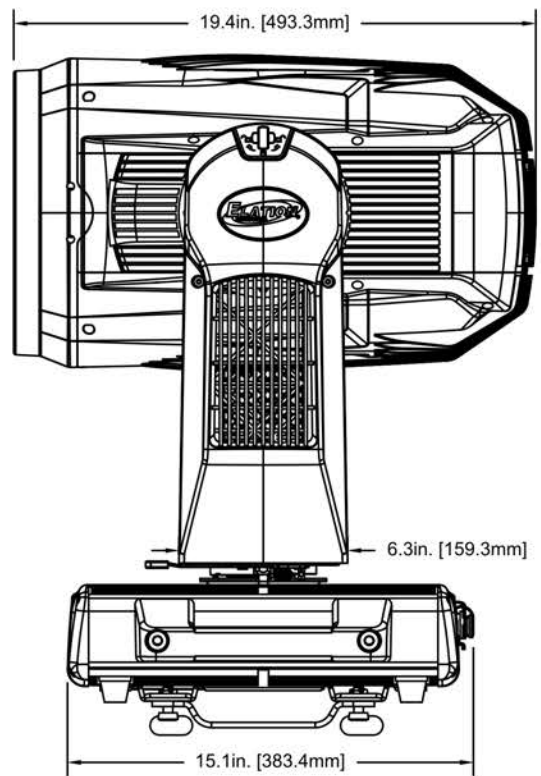
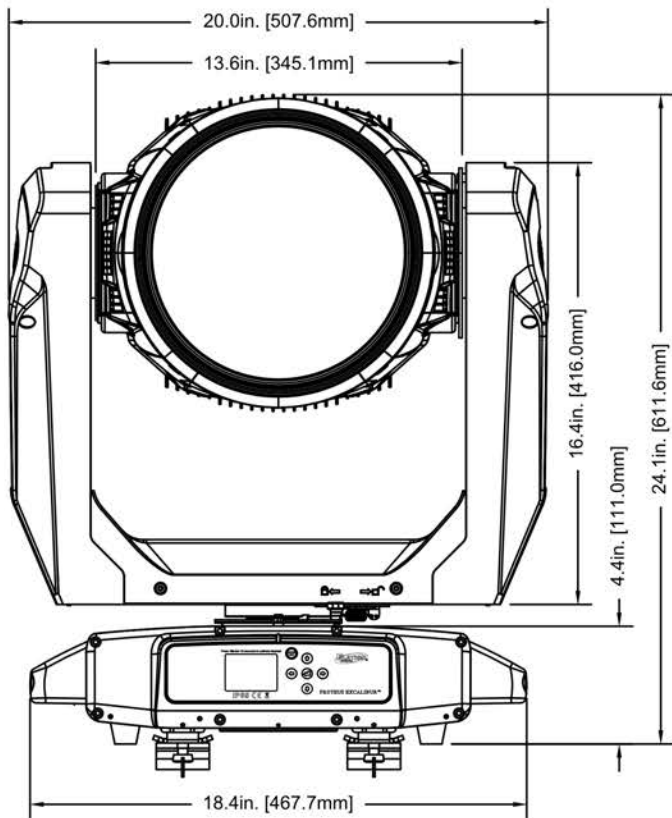
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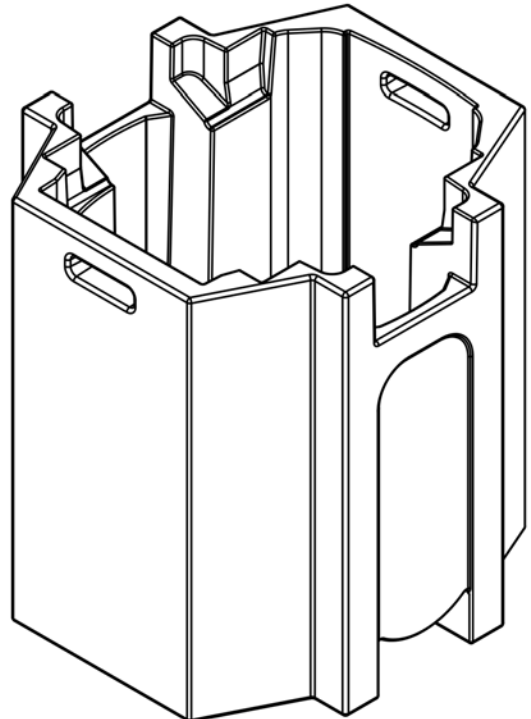
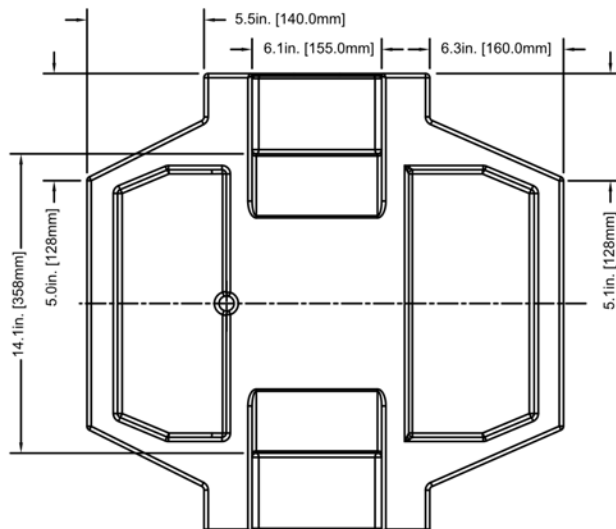
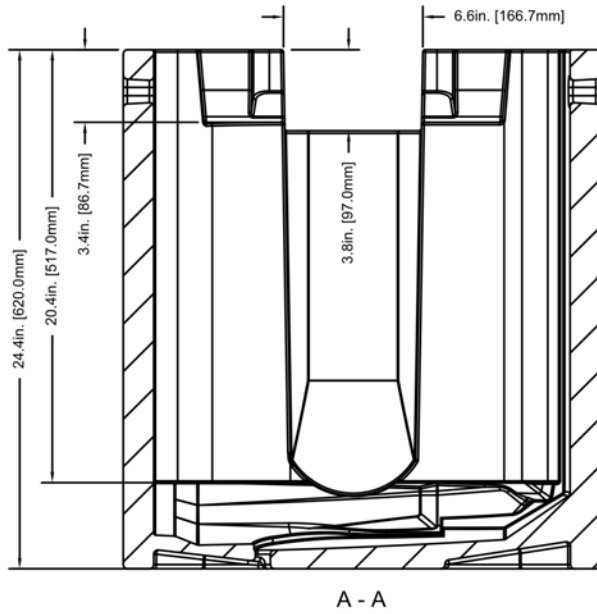
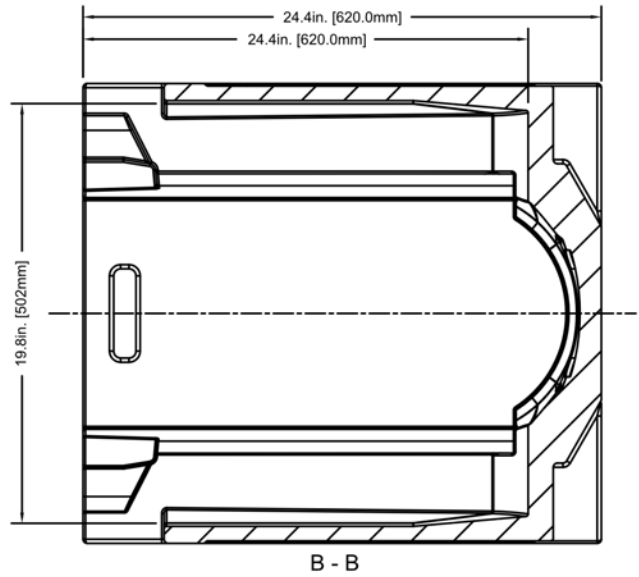
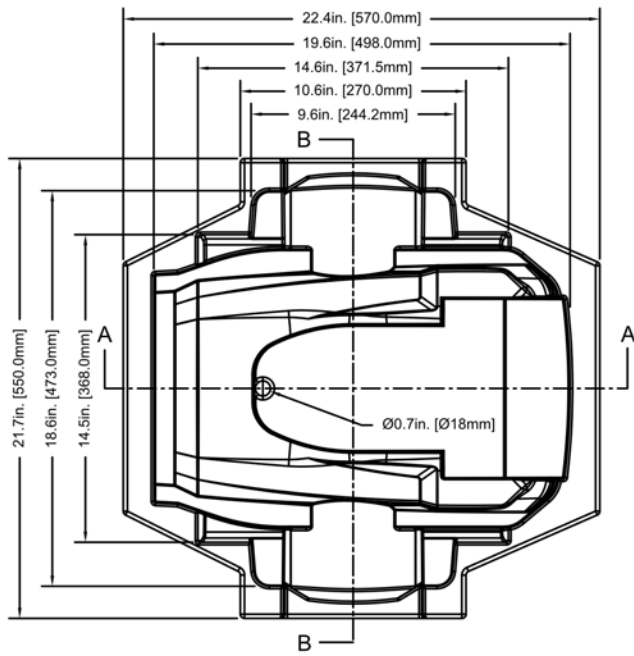
Specifications and documentation subject to change without notice.

# 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



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

## 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!



