

# PIXEL WASH 40IP

**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 check www.elationlighting.com for the latest revision/update of this manual before beginning installation and/or programming.

Date	Document Version	Software Version	DMX Channels	Notes
12/28/2022	1.0	N/A	4	Initial Release

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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 trained personnel only, and is not suitable for private use.

#### **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 that 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**

Locking Power Cable (x1)

#### **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

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

# LIMITED WARRANTY (USA ONLY)

- A. ADJ Products, LLC hereby warrants, to the original purchaser, ADJ Products, LLC products to be free of manufacturing defects in material and workmanship for a prescribed period from the date of purchase (see specific warranty period on reverse). 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, you must obtain a Return Authorization number (RA#) before sending back the product-please contact ADJ Products, LLC Service Department at 800-322-6337. Send the product only to the ADJ Products, LLC factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, ADJ Products, LLC will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, ADJ Products, LLC shall have no liability whatsoever for loss of or damage to any such accessories, or for the safe return thereof.
- C. This warranty is void of the serial number has been altered or removed; if the product is modified in any manner which ADJ Products, LLC concludes, after inspection, affects the reliability of the product, if the product has been repaired or service by anyone other than ADJ Products, LLC factory unless prior written authorization was issued to purchaser by ADJ Products, LLC; if the product is damaged because not properly maintained as set forth in the instruction manual.
- D. This is not a service contact, and this warranty does not include maintenance, cleaning or periodic check up. During the period specified above, ADJ Products, LLC will replace defective parts at its expense with new or refurbished parts, and will absorb all expenses for warrant service and repair labor by reason of defects in material or workmanship. The sole responsibility of ADJ Products, LLC under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of ADJ Products, LLC. All products covered by this warranty were manufactured after August 15, 2012, and bear identifying marks to that effect.
- E. ADJ Products, LLC reserves the right to make changes in design and/or 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 products described above. Except to the extent prohibited by applicable law, all implied warranties made by ADJ Products, LLC in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has 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 ADJ Products, LLC be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.
- G. This warranty is the only written warranty applicable to ADJ Products, LLC Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

#### LIMITED WARRANTY PERIODS

- Non L.E.D. Lighting Products = 1-year (365 days) Limited Warranty (Such as: Special Effect Lighting, Intelligent Lighting, UV lighting, Strobes, Fog Machines, Bubble Machines, Mirror Balls, Par Cans, Trussing, Lighting Stands etc. excluding LED and lamps)
- Laser Products = 1 Year (365 Days) Limited Warranty (excludes laser diodes which have 6 month limited warranty)
- L.E.D. Products = 2-year (730 days) Limited Warranty (excluding batteries which have a 180 day limited warranty)

  Note: 2 Year Warranty only applies to purchases within the United States.
- StarTec Series = 1 Year Limited Warranty (excluding batteries which have a 180 day limited warranty)
- ADJ DMX Controllers = 2 Year (730 Days) Limited Warranty

# 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 injuries and/or damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual. Only qualified and/or certified personnel should perform installation of this fixture and only the original rigging parts included with this fixture should be used for installation. Any modifications to the fixture and/or the included mounting hardware will void the original manufacturer's warranty and increase the risk of damage and/or personal injury.



PROTECTION CLASS 1 - FIXTURE MUST BE PROPERLY GROUNDED.



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



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!



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



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

# SAFETY GUIDELINES

- DO NOT TOUCH the fixture housing during operation. Disconnect from power and allow approximately 15 minutes for the fixture to cool down before servicing.
- DO NOT shake fixture, and avoid using brute force when installing and/or operating the fixture.
- DO NOT operate the fixture if the power cord is frayed, crimped, damaged, and/or if any of the power cord connectors are damaged and do not plug into the fixture securely with ease.
- NEVER force a power cord connector into the fixture. If the power cord or any of its
  connectors are damaged, replace it immediately with a new one of the same power rating.
- DO NOT block any air ventilation slots.
- All fan and air inlets must remain clean and never blocked.
- Leave approx. 6" (15cm) between the fixture and other devices or a wall in order to allow for proper cooling.
- When installing fixture in a suspended environment, always use mounting hardware that is no less than M10 x 25 mm, and always install fixture with an appropriately rated safety cable.
- Always disconnect the fixture from the main power source before performing any type of service and/or cleaning procedure.
- Only handle the power cord by the plug end. Never pull out the plug by tugging on the wire portion of the cord.
- During the initial operation of this fixture, a light smoke or smell may emit from the interior of the fixture. This is a normal process and is caused by excess paint in the interior of the casing burning off from the heat associated with the lamp. This will decrease gradually over time.
- Consistent operational breaks will ensure fixture will function properly for many years.
- ONLY use the original packaging and materials to transport the fixture for service.

# MAINTENANCE GUIDELINES



### **DISCONNECT POWER BEFORE PERFORMING ANYU MAINTENANCE!**

#### **CLEANING**

Frequent cleaning is recommended to ensure proper function, optimized light output, and an extended life. The frequency of cleaning depends on the environment in which the fixture operates: damp, smoky, or particularly dirty environments can cause greater accumulation of dirt on the fixture's optics. Periodically clean the external lens surface with a soft cloth to avoid dirt/debris accumulation. **NEVER** use alcohol, solvents, or ammonia-based cleaners.

#### **MAINTENANCE**

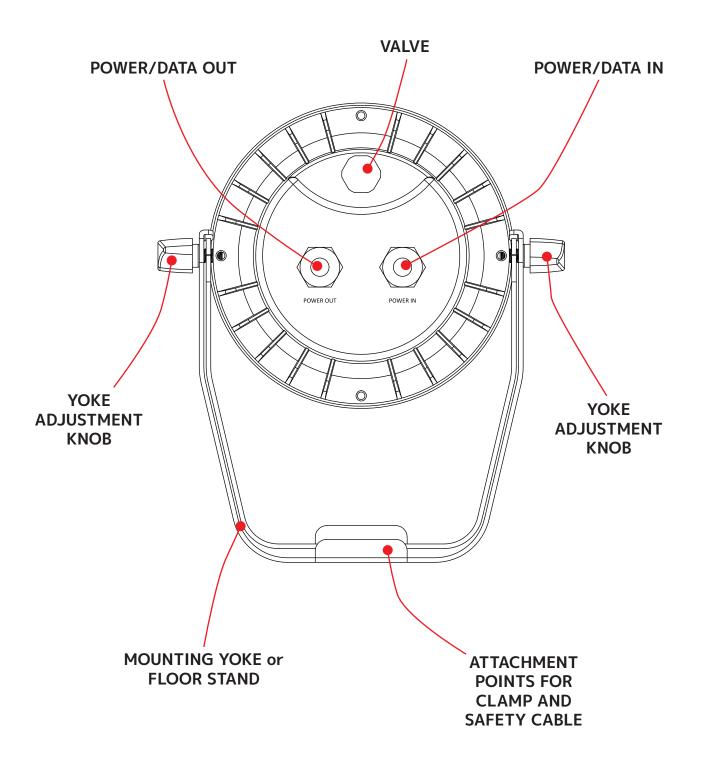
Regular inspections are recommended to ensure proper function and extended life. There are no user serviceable parts inside this fixture. Please refer all other service issues to an authorized Elation service technician. Should you need any spare parts, please order genuine parts from your local Elation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

Please refer to the following points during routine inspections:

- A detailed electrical check by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating.
- Be sure all screws and fasteners are securely tightened at all times. Loose screws may fall out during normal operation, resulting in damage or injury as larger parts could fall.
- Check for any deformations on the housing, lenses, rigging hardware, and rigging points (ceiling, suspension, trussing). Deformations in the housing could allow for dust or moisture 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.

# OVERVIEW



#### **IP65 RATED**

An IP rated lighting fixture can be 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" 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 has been designed and tested to protect against the ingress of dust (6) and water jets from any direction (5).

#### MARINE/COASTAL ENVIRONMENT INSTALLATIONS

Please note although this fixture is IP rated, the fixture is NOT suitable for marine and/or coastal environment installations. Installing this fixture in a marine and/or coastal environment may cause corrosion and/or excessive wear to the interior and/or exterior components of the fixture. Damages and/or performance issues resulting from installation in a marine and/or coastal environment will void the manufacturer's warranty and will NOT be subject to any warranty claims and/or repairs.

#### **OPTIONAL CORROSION-RESISTANT COATING**

Optional Corrosion-Resistant Coatings may be available for this fixture. Please contact Elation Professional for more details.



#### 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.



ENSURE ALL CONNECTIONS AND END CAPS ARE PROPERLY SEALED WITH A NON-CONDUCTIVE DIELECTRIC GREASE (AVAILABLE AT MOST ELECTRICAL SUPPLIERS) TO PREVENT WATER INGRESS/CONDENSATION AND/OR CORROSION.



TO MAINTAIN IP65 RATING INTEGRITY AND PREVENT WATER FROM ENTERING THE FIXTURE, ALL UNUSED CONNECTION RUBBER CAPS AND GLANDS MUST BE INSERTED/SEALED.



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

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

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

Ambient operating temperature range for this fixture is -4°F to 113°F (-20°C to 45°C). Do not operate the fixture when the ambient temperature falls outside of this range.

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

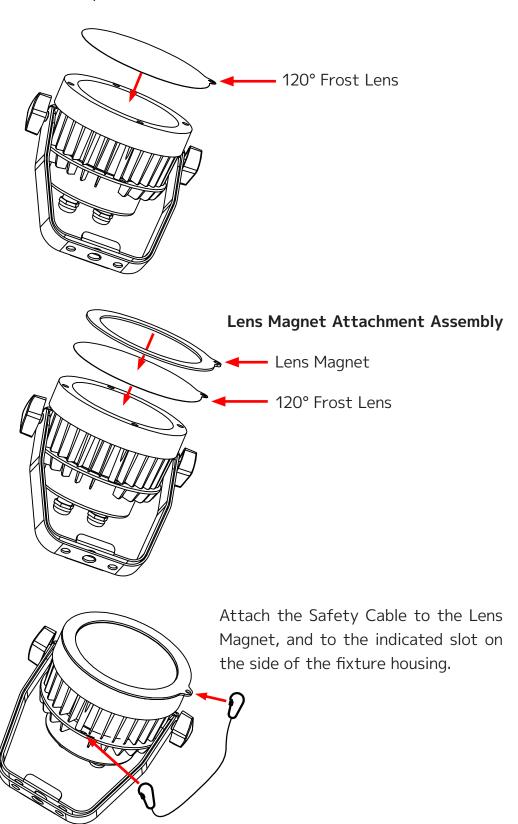
**NEVER** stand directly below the fixture(s) when rigging, removing, or servicing.

Overhead fixture installation must always be secured with a secondary safety attachment, such as an appropriately rated safety cable that meets all local, national, and country codes and regulations.

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

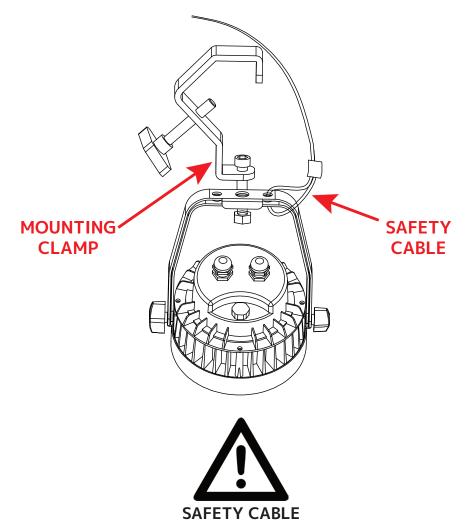
### 120° FROST FILTER, MAGNET, AND SAFETY CABLE INSTALLATION

When installing the 120° Frost Lens Magnet Attachment Assembly (included), the assembly must be secured with a Safety Cable (included).



#### **CLAMP INSTALLATION**

This fixture includes an adjustable mounting yoke with an integrated point for attaching a mounting clamp and safety cable (see the illustration below). When mounting this fixture to a truss, be sure to secure an appropriately rated clamp (not included) to the attachment point on the yoke, as well as attaching a separate SAFETY CABLE of the appropriate rating (not included).

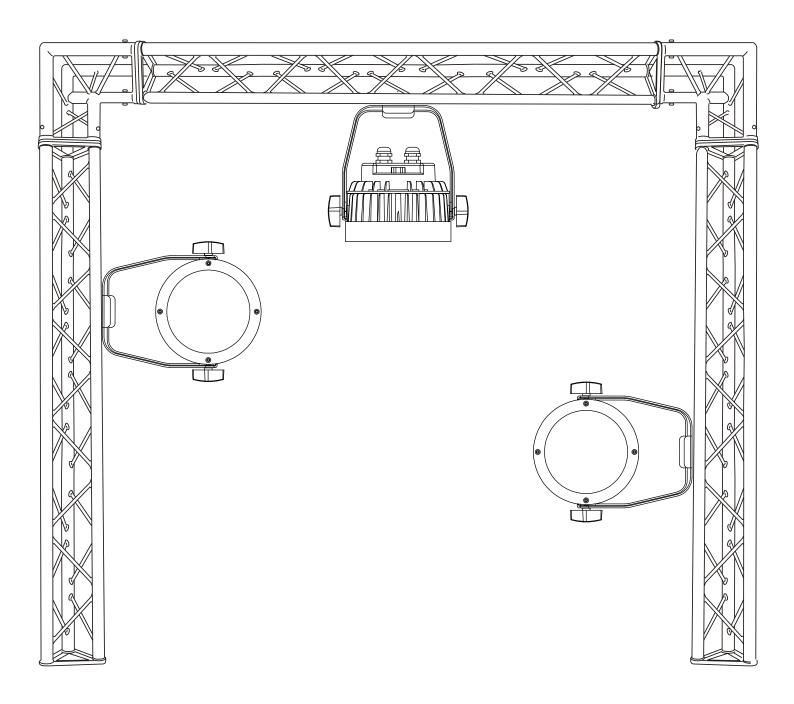


ALWAYS ATTACH A SAFETY CABLE WHENEVER INSTALLING THIS FIXTURE IN A SUSPENDED ENVIRONMENT TO ENSURE THAT THE FIXTURE WILL NOT FALL IF THE CLAMP FAILS.

#### **RIGGING**

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

The fixture is fully operational in the following positions: hanging from a horizontal truss, or suspended sideways from a vertical truss.



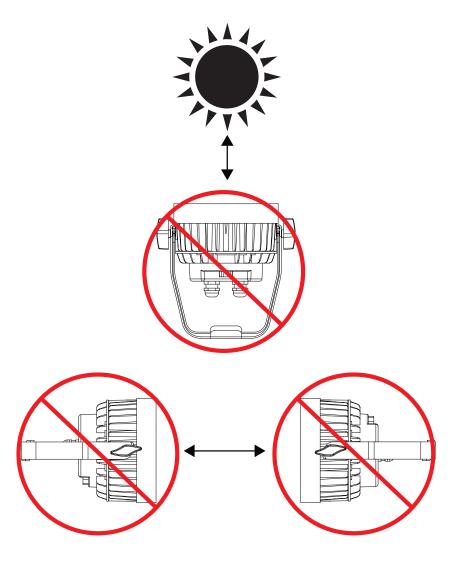
# INSTALLATION INSTRUCTIONS

#### POTENTIAL INTERNAL FIXTURE DAMAGE FROM EXTERNAL SOURCES OF LIGHT BEAMS

External sources of light beams from direct sunlight, lighting and moving head fixtures, and lasers, which are focused directly towards the exterior housing and/or penetrate the front lens opening of Elation lighting fixtures, can cause severe internal damage including burning of optics, dichroic color filters, glass and metal gobos, prisms, animation wheels, frost filters, iris, shutters, motors, belts, wiring, discharge lamps, and LEDs.

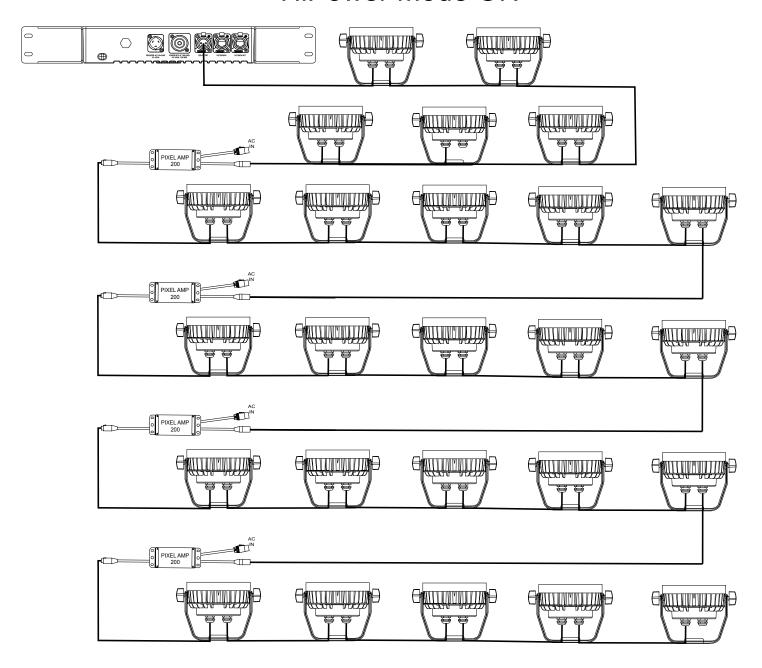
This issue is not specific only to Elation lighting fixtures, but rather it is a common issue with lighting fixtures from all manufacturers. Although there is no true way to fully prevent this issue from happening, the guidelines below can reduce the risk of potential damage. Contact Elation Service for more details.

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



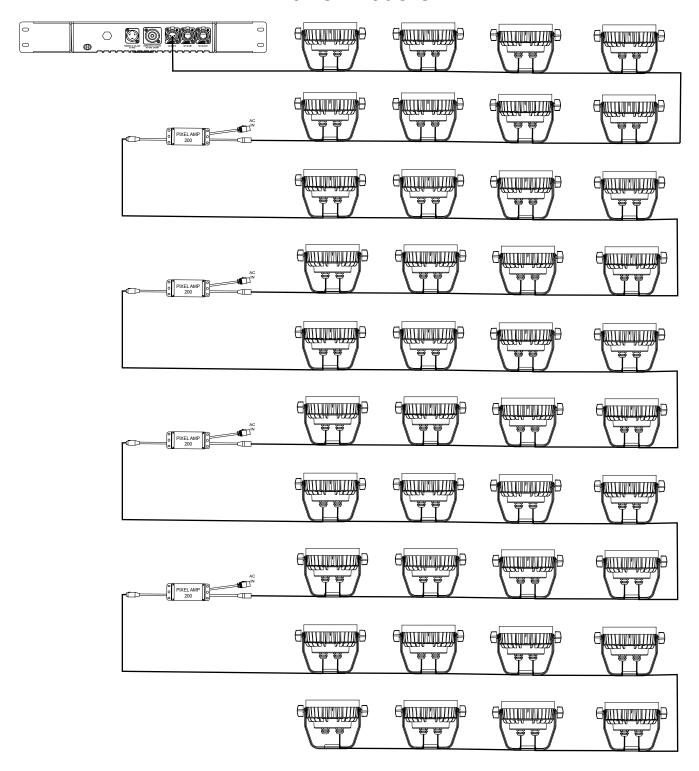
For all drivers, with HiPower Mode ON, each port can drive a maximum of 5(x) Elation Pixel Wash 40IP fixtures, or a maximum of 25(x) fixtures when incorporating up to 4(x) Pixel Amp 200's (sold separately) as shown below.

# HiPower Mode ON



For all drivers, with HiPower Mode OFF, each port can drive a maximum of 8(x) Elation Pixel Wash 40IP fixtures, or a maximum of 40(x) fixtures when incorporating up to 4(x) Pixel Amp 200's (sold separately) as shown below.

### **HiPower Mode OFF**



### Pixel Driver 170IP output limitations when controlling Pixel Wash 40IP's

5pcs Max can be driven when HiPower Mode is set to ON and 8pcs Max can be driven when HiPower Mode is set to OFF.

When incorporating up to 4(x) Pixel Amp 200's (**sold separately**), 25pcs Max can be driven when HiPower Mode is set to ON and 40pcs Max can be driven when HiPower Mode is set to OFF.

### Pixel Driver 170IP output limitations to control Pixel Wash 40IP's:

MODE	Pixel Amp 200's Required	Total Pixel Wash 40IP's Per Port	Total DMX Channels
	0	5	20
	1	10	40
HiPower Mode ON	2	15	60
	3	20	80
	4	25	100
	0	8	32
HiPower Mode OFF	1	16	64
	2	24	96
	3	32	128
	4	40	160

### Pixel Driver 1000IP output limitations when controlling Pixel Wash 40IP's

5pcs Max can be driven when HiPower Mode is set to ON and 8pcs Max can be driven when HiPower Mode is set to OFF.

When incorporating up to 4(x) Pixel Amp 200's (**sold separately**), 25pcs Max can be driven when HiPower Mode is set to ON and 40pcs Max can be driven when HiPower Mode is set to OFF.

Pixel Driver 1000IP output limitations to control Pixel Wash 40IP's per port:

MODE	Pixel Amp 200's Required	Total Pixel Wash 40IP's Per Port	Total DMX Channel's
	0	5	20
LUID M I.	1	10	40
HiPower Mode ON	2	15	60
	3	20	80
	4	25	100
	0	8	32
HiPower Mode OFF	1	16	64
	2	24	96
	3	32	128
	4	40	160

### Pixel Driver 4000 V2 output limitations when controlling Pixel Wash 40IP's

25pcs Max can be driven when HiPower Mode is set to ON and 40pcs Max can be driven when HiPower Mode is set to OFF.

When incorporating up to 4 Pixel Amp 200's (**sold separately**), 100pcs Max can be driven when HiPower Mode is set to ON and 160pcs Max can be driven when HiPower Mode is set to OFF.

### Pixel Driver 4000 V2 output limitations to control Pixel Wash 40IP's per port:

MODE	Pixel Amp 200's Required	Total Pixel Wash 40IP's Per Port	Total DMX Channels	
	0	5	20	
LUD. M. I.	1	10	40	
HiPower Mode ON	2	15	60	
	3	20	80	
	4	25	100	
	0	8	32	
HiPower Mode OFF	1	16	64	
	2	24	96	
	3	32	128	
	4	40	160	

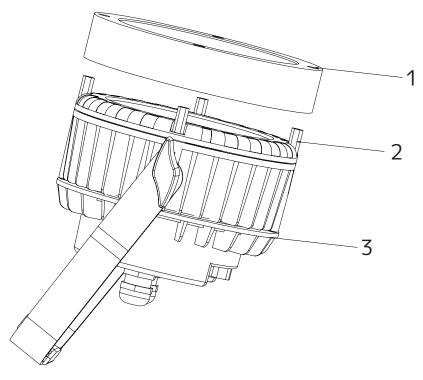
# **DMX TRAITS**

Please note that these traits are not accessible directly on this unit. Rather, the unit will be controlled via your driver.

ELATION PIXEL WASH 40IP DMX CHANNEL TRAITS			
CHANNEL DMX VALUES FUNCTION			
1	000-255	<b>Red</b> , 0-100%	
2	000-255	Green, 0-100%	
3	000-255	Blue, 0-100%	
4	000-255	<b>White</b> , 0-100%	

# **TORQUE SCREW SETTINGS**

IN ORDER TO MAINTAIN THE IP65 RATING ON THE LIGHTING FIXTURES, ALL SCREWS MUST BE TIGHTENED TO THE FOLLOWING TORQUE SPECIFICATION USING A TORQUE DRIVER.



Zone Number	Description	Quantity	Torque Spec
1	Lens Cover	4	10.4 lb-in (12 kg-cm)
2	Upper Cover	4	11.3 lb-in (13 kg-cm)
3	Back Cover	4	11.3 lb-in (13 kg-cm)

### **TORQUE DRIVERS (Recommended):**

UTICA TS-30 (shown)

#### **ALTERNATE DRIVERS:**

- Proto J6107A
- Wiha 28887





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

# TORQUE SCREW SETTINGS

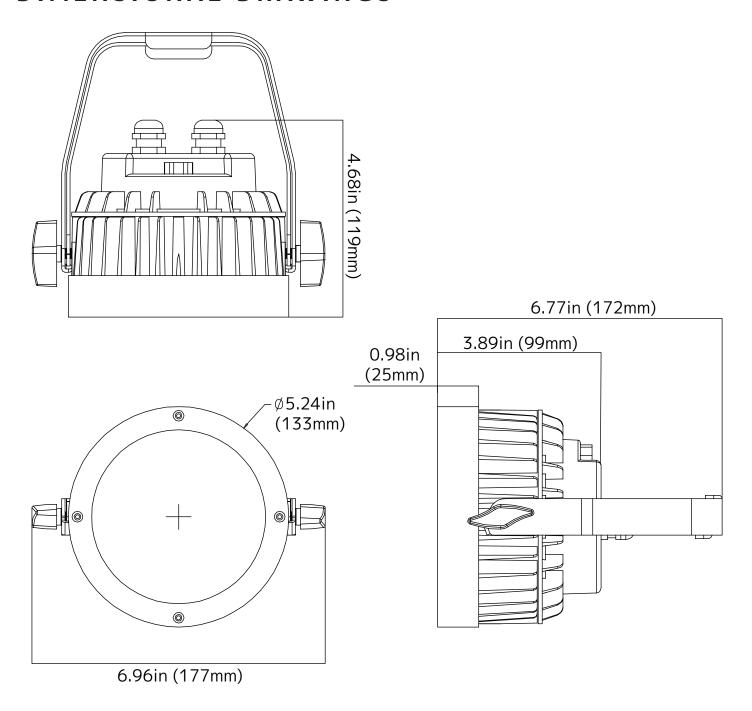


CAUTION! THE USE OF PROTECTIVE GLOVES AND SAFETY GOGGLES IS STRONGLY RECOMMENDED WHILE PERFORMING THE IP PRESSURE TEST! AVOID PLACING YOUR FACE, EYES, HANDS, ETC IN CLOSE PROXIMITY TO THE FIXTURE'S LENS WHILE PERFORMING THE TEST!



IP PRESSURE TESTING PARAMETERS				
Low Pressure Limit   High Pressure Limited   Steady/Hold Time				
1.65 psi (11.4 KPa) 1.70 psi (11.7 KPa) 3 sec				

# **DIMENSIONAL DRAWINGS**



# **SPECIFICATIONS**

#### **SOURCE**

4 in 1, 10W RGBW LEDs

Beam Angle: 32° Field Angle: 60°

PWM (Pulse Width Modulation): 44,000Hz

#### CONNECTIONS

Seetronic 4pin Power/Data In/Out

#### **CONTROL**

For use with Pixel Driver 170IP, Pixel Driver 1000IP and Pixel Driver 4000 V2.

#### SIZE / WEIGHT

Length: 5.24" (133mm) Width: 6.97" (177mm) Height: 6.78" (172mm) Weight: 3.5 lbs. (1.56kg)

#### **ELECTRICAL**

Input: DC24V

Max Power Consumption: 40W

#### **TEMPERATURE**

Max Ambient Temperature: 113°F (45°C) Min Ambient Temperature: -4°F (-20°C)

#### **COOLING**

Convection Cooled

#### **APPROVALS**

CE | cETLus (Pending) | IP65

#### **INCLUDED ITEMS**

120° Frost Lens and Magnet attachment assembly Safety Cable for magnet attachment assembly