

# FUZE PFX 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 <u>www.elationlighting.com</u> for the latest revision/update of this manual, before installation and/or programming.

Date	Document Version	Software Version ≥	DMX Channel Modes	Notes
02/12/25	1.0	1.1.2	38/55 Channels	Initial release.

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# **GENERAL INFORMATION**

#### This product is intended for professionally use only, not suitable for private use.

### 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.

#### 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 Locking Power Cable (X1) Safety 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 | support@elationlighting.com

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**REPLACEMENT PARTS** please visit parts.elationlighting.com



**IMPORTANT NOTICE!** 

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 MANUFACTURER'S WARRANTY AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS.

# LIMITED WARRANTY (USA ONLY)

- A. Elation Professional hereby warrants, to the original purchaser, Elation Professional products to be free of general manufacturing defects in material and workmanship for a period of three years (1,095 days), Elation Professional LED arrays to be free of manufacturing defects in material and workmanship for five years (1,825 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 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 accompany 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 a R.A. number clearly marked on the outside of the package will be refused and returned at customer's expense. You may obtain a 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 and mounting hardware included with this fixture or available optional accessories should be used for installation. Any modifications to the fixture and/or the included and optional rigging and mounting hardware will void the original manufacturer's warranty and increase the risk of damage and/or personal injury.

The light source in this luminaire must only be replaced by the manufacturer, their service agent, or a similarly qualified individual.

Do not stare at the operating light source.

Position the luminaire so that prolonged staring into it at distances closer than 3.9 meters is not expected.

Maintain a minimum distance of 10 foot (3 meters) from lighted objects.

Replace shields, lenses, or ultraviolet screens if they show visible damage, such as cracks or deep scratches, that compromise their effectiveness.

Reinforced insulation should be maintained between the main power supply and control contuctors.

This luminaire is designed for professional use only.



**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 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!



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



INDOOR / DRY LOCATIONS USE ONLY! DO NOT EXPOSE FIXTURE TO RAIN AND/OR MOISTURE!



MINIMUM DISTANCE TO OBJECTS/SURFACES IS 1.0 FOOT (0.3 METER) MINIMUM DISTANCE OF FLAMMABLE MATERIALS FROM THE SURFACE IS 1.6 FEET (0.5 METER) MAXIMUM AMBIENT OPERATING TEMPERATURE IS 113°F (45°C)

### SAFETY GUIDELINES

**DO NOT TOUCH** the fixture housing during operation.

**DO NOT** shake fixture and 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 or do not fit 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.

**TURN OFF** the power and allow approximately 15 minutes for the fixture to cool down before serving.

**ALWAYS** disconnect fixture from power before performing any service and/or cleaning procedure.

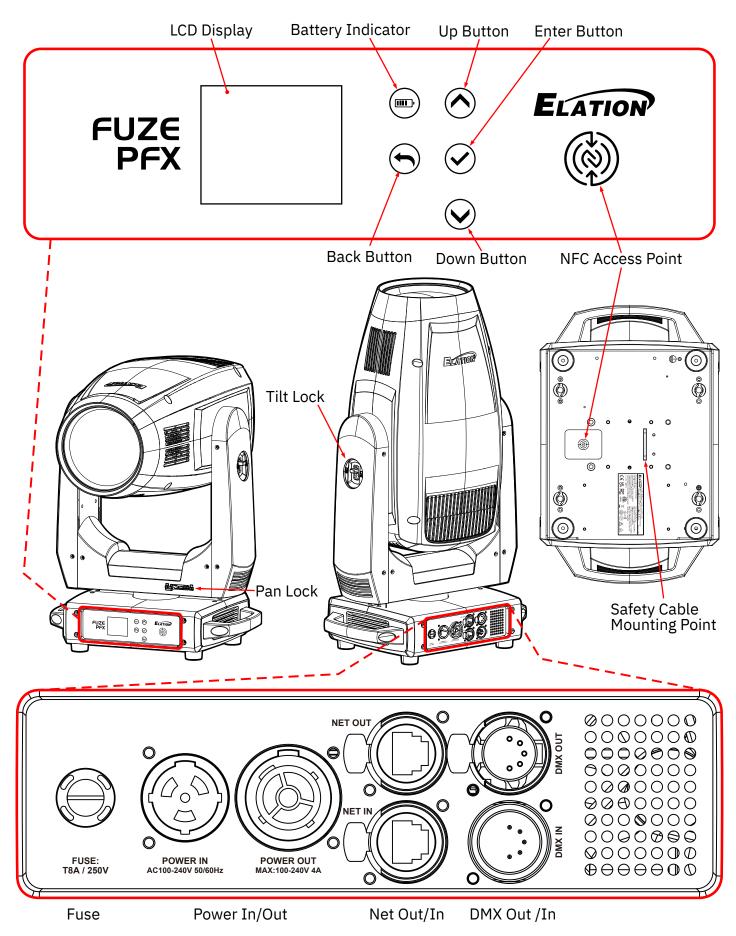
**ONLY** handle power cord by the plug end, never pull plug out by tugging the wire portion of the cord.

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 LED and will decrease gradually over time.

Consistent operational breaks will ensure fixture will function properly for many years.

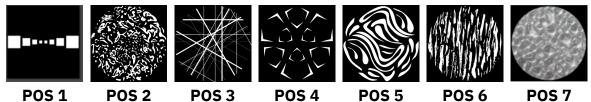
**ONLY** use the original packaging and materials to transport the fixture for service.

### OVERVIEW



### COLORS AND GOBOS

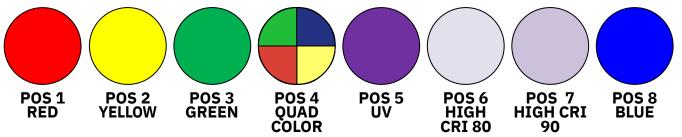
#### **ROTATING GOBO WHEEL**



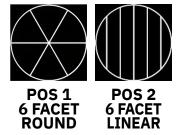
#### FIXED GOBO WHEEL



**COLOR WHEEL** 



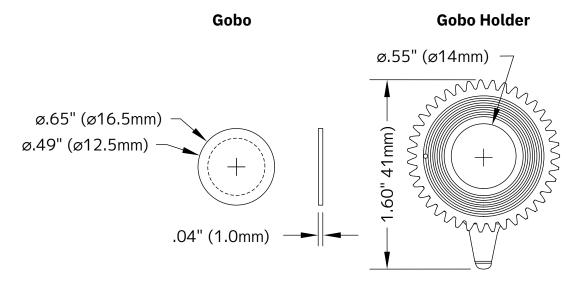
#### PRISM



### CUSTOM GOBOS: ROTATING GOBO WHEEL1

FUZE PFX ROTATING GLASS GOBOS - WHEEL 1 ONLY						
Gobo O.D. (Max. Outer Diameter)	ø16.5mm					
Gobo I.D. (Max. Image Diameter)	ø12.5mm					
Gobo Holder Diameter	ø16.6mm					
Gobo Material	Borofloat Glass					

#### **ROTATING GOBO WHEEL GOBO & HOLDER**



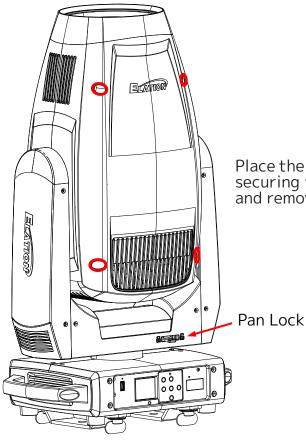
#### \* \* \* IMPORTANT NOTICE REGARDING CUSTOM GOBOS \* \* \*

Due to the high temperature optical system, special material as listed above 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.

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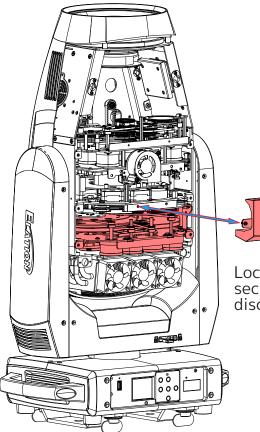
ELATION SERVICE EUROPE - Monday - Friday 08:30 to 17:00 CET +31 45 546 85 63 | support@elationlighting.eu

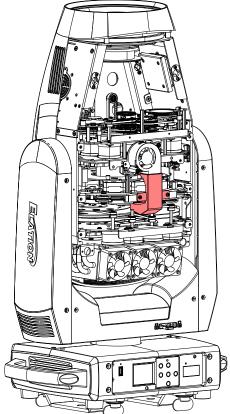
### **GOBO INSTALLATION**



Place the fixture on a firm flat surface. Locate the (4x) screws securing the panel on the **Pan Lock** side of the moving head and remove them.

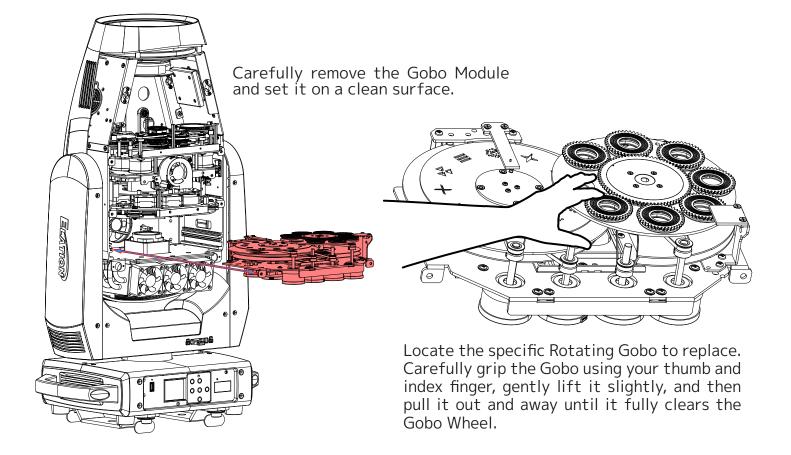
Locate the Fan Ducting, remove the 2x screws that secure it to the internal housing frame..





Locate the Gobo Module, remove the screws that secure it to the internal housing frame, and unplug/ disconnect wire harness.

### **GOBO INSTALLATION**



#### CAUTION: TAKE CARE NOT TO SCRATCH GOBO OR GOBO HOLDER

Locate the tab of the Retention 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.

**Note**: To ensure proper Gobo orientation on the Rotating Gobo Wheel, align the Alignment Indices before installing the Retention Spring.



#### 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. MAX 8A POWER LINK.



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



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



MAXIMUM AMBIENT TEMPERATURE 113° F (45°C)

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

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

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

Overhead rigging requires extensive experience, including amongst others calculating working load limits, understanding of the 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.

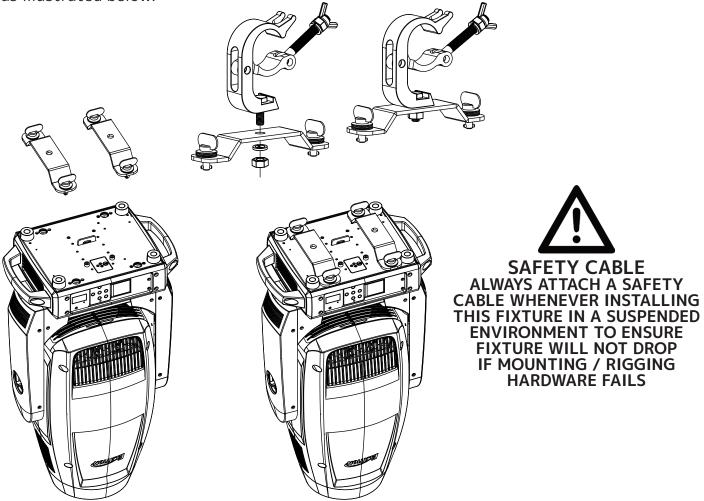
Fixture(s) should be installed in areas outside walking paths, seating areas, or away from areas were unauthorized personnel might reach the fixture by hand.

**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.

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

### OMEGA BRACKETS 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 ¼ turn clockwise; making sure the fastener is completely locked. Omega Brackets can be installed into the fixture base as illustrated below.



### CLAMP INSTALLATION (NOT INCLUDED)

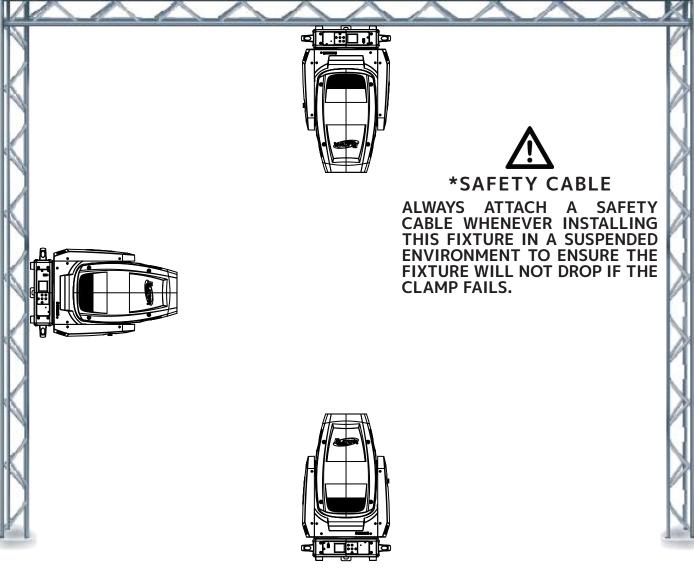
When mounting fixture to truss, be sure to secure an appropriately rated professional grade rigging clamp to the included **Omega Brackets** using an M10 screw fitted through the center hole of the **Omega Brackets**. The fixture provides a built-in rigging point for a **SAFETY CABLE**. Be sure to only use one of the designated rigging points for the safety cable and never secure a safety cable to the Pendant or Yoke Brackets.

#### RIGGING

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 is fully operational in the specific mounting positions illustrated below.

### RIGGING

The Fuze PFX is fully operational in (3) different mounting positions, hanging upside-down, mounted sideways on trussing, or set on a flat level surface. 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!



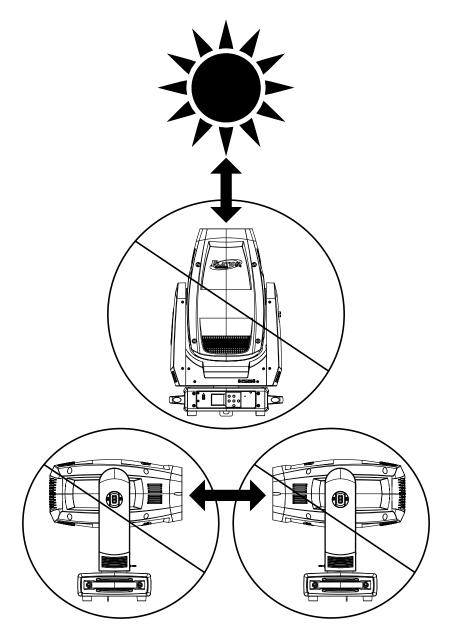
Always attach an appropriate **SAFETY CABLE** whenever installing this fixture in a suspended environment to ensure fixture will not fall if mounting / rigging hardware fails.

#### 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 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.

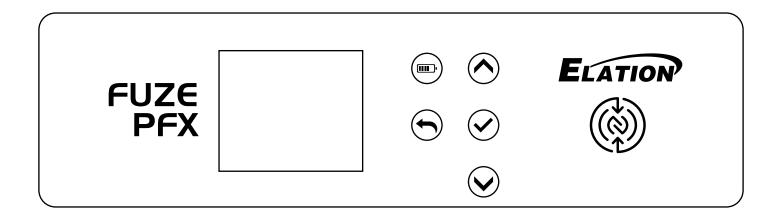
DO NOT EXPOSE THE FIXTURE AND/OR FRONT LENS OPENING TO LIGHT BEAMS FROM DIRECT SUNLIGHT, OTHER LIGHTING MOVING HEAD FIXTURES, AND LASERS WHILE UNPACKING, INSTALLATION, USE, AND EXTENDED IDLE TIMES OUTDOORS. DO NOT FOCUS A LIGHT BEAM FROM ONE LIGHTING FIXTURE DIRECTLY TOWARDS ANOTHER.



### SYSTEM MENU

The fixture includes an easy to navigate system menu. The LCD touch panel display located on the front of the fixture (see image below), provides access to the main system menu and is where all necessary system adjustments are made to the fixture. During normal operation, pressing the **ENTER (Check Mark)** 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** and **DOWN** 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 **ESC (Back)** button.

To access the LCD Menu Control Display via the internal battery, press and hold the **BATTERY ICON** button for 3 seconds. The LCD Menu Control Display will shut **OFF** automatically about 1 minute from the last button press.



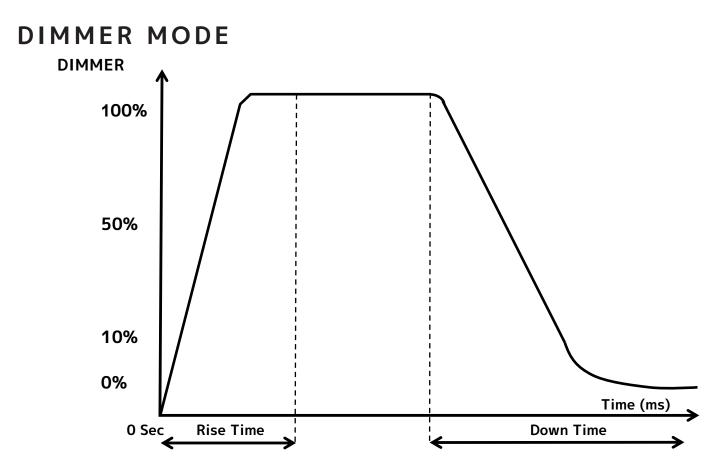
Note: An Elation C-Loader II can be used to update fixture software. Contact Elation Service for more information @ 323-582-3322 | support@elationlighting.com

### SYSTEM MENU

MAIN MENU	SUB MENU	OPTIONS / VAL	<b>_UES</b> (Default Settings in <b>BOLD</b> )		
	DMX Address	001 - 512			
	DMX Mode	Standard, Extended			
		Hold Last, Fade to Black			
	No DMX Status	Hibernation	Off, 1-99M ( <b>Default = 15 Min</b> )		
		Select Signal	DMX / Art-Net / sACN / Aria In- DMX Out / DMX In - Aria Out		
DMX		Universe	1		
			Manual: 2.x.x.x		
		IP Address	Unique Static: 2.x.x.x/ 10.x.x.x/ 172.x.x.x/ 192.x.x.x		
		Subnet Mask	255.0.0.0		
		Ethernet DMX Out	Off/On		
	Aria	Aria Channel	<b>0</b> -14		
	Manual Control	DImmer 0%- <b>100%</b> , Pa	an, Tilt,		
Control	Reset	All, Pan Tilt, Color, G	obo, Shutter, Others		
	Self Test		nt, Color Mix, Gobo, Beam		
	Fan Mode	Mute, Studio, Low, Hi	igh, <b>Auto</b>		
		Pan Invert	Off/On		
	Movement	Tilt Invert	Off/On		
		Pan Tilt Speed	Smooth/ <b>Fast</b>		
		Follow Spot	Off/On		
		Pan Tilt Feedback	Off/ <b>On</b>		
	Dimmer Curve	Linear, Square, Square Inverse, <b>S-Curve</b>			
Settings	Dimmer Mode	Standard, Stage, TV,	Architectural, Theatre, Stage2		
Settings		Dim Speed	0s-10s		
	LED Refresh Rate	900Hz - 1500Hz ( <b>1200Hz</b> ), 2500Hz, 4000Hz, 5000H 6000Hz, 10KHz,15KHz, 20KHz, 25KHz			
	LED Power Limit	50%, 60%, 70%, 80%	, 90%, <b>100%</b>		
		Screen Delay	10s-5min ( <b>Default=1 min</b> )		
	Display	Screen Lock	off, 10s-5minlk		
		Auto Rotate	Off/ <b>On</b>		
	Reset Defaults	Yes/No			
	Time	Current Time, total Run Time, Last Run Time, LED Time			
	Temperature	Head, Base, LED			
	Fan	Fan xx,			
Information	DMX Values	Pan, Tilt,			
	Product IDs	RDM UID			
	Error Logs	Fixture Errors			
	Software Version	Vx.x			
Convice	Calibration	Dimmer, Pan, Tilt,			
Service	Reset Last Run	Yes/No			
(Fasscoue 50)	Reset Last Run Reset Error Logs	Yes/No			

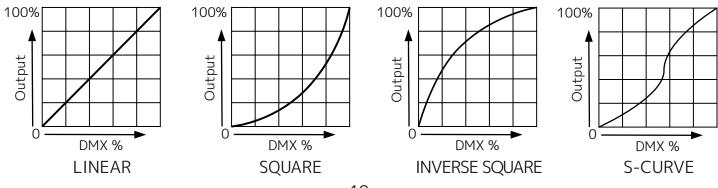
#### Display Shortcuts

Power On	
Up+Down (3s)	Disable Pan Tilt
Back+Enter	Countdown 10 sec
(10s)	Reset to Default (no/yes)



	0 sec Fa	de Time	1 sec Fa	ide Time
Dimming Curve Ramp Effect	e 255			255
	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

### **DIMMER CURVE**



		Featu	res subject to change without notice											
MODE/C STANDARD		VALUE	FUNCTION	SNAP	DEFAULT									
1	1	0-255	<b>Pan</b> Left → Right		127									
2	2	0-255	Pan Fine Fine Position		127									
3	3	0-255	Tilt Forward → Backward		127									
4	4	0-255	Tilt Fine Fine Position		127									
		0-255	Cyan $0 \rightarrow 100\%$											
			SFX											
5	5	0-170	0 → 100%		0									
			100% → 0%		-									
			Clockwise Fast → Slow											
		222-223												
		224-255	Counter-clockwise Slow → Fast											
	6	0-255	Cyan Fine		0									
			Fine Saturation											
		0-255	Magenta											
			0 → 100%											
		0.470	SFX											
6	7	0-170	0 → 100%		0									
												100% → 0%		
		222-223												
			Counter-clockwise Slow → Fast											
	8	0-255	Magenta Fine		0									
		0 200	Fine Saturation		Ŭ									
		0-255	Yellow											
			0 → 100%											
			SFX											
7	9	0-170	0 → 100%		0									
			100% → 0%		Ŭ									
			Clockwise Fast → Slow											
		222-223												
		224-255	Counter-clockwise Slow → Fast											
	10	0-255	Yellow Fine		0									
			Fine Saturation											
8	11		CTO Open → 2700K		0									
	10		CTO Fine	1										
	12		Fine Adjustment		0									
			CMY Mix Mode		1									
9	13	0-127	Full		0									
-	13	128-255												
		1 20 200		I	1									

MODE/C					
STANDARD		VALUE	FUNCTION	SNAP	DEFAULT
			Color		
		0	Open		
		1-11	Open/Color1	•	
		12-22	Color 1		
		23-33	Color 1/2	-	
		34-44	Color 2		
		45-55	Color 2/3		
		56-66	Color 3		
		67-77	Color 3/4		
		78-88	Color 4		
			Color 4/5		
10	14	100-110			0
			Color 5/6		
		122-132			
			Color 6/7		
		144-154			
			Color 7/8		
		166-176			
		177-188	Color 8/Open		
		189-192		-	
			Scroll		
			Clockwise Fast → Slow		
		224	Stop		
		225-255	Counter-clockwise Slow → Fast		
			Rotating Gobo Wheel		
		0-9	Open		
		10-19	Rotating Gobo 1		
		20-29	Rotating Gobo 2		
		30-39	Rotating Gobo 3		
		40-49	Rotating Gobo 4	]	
			Rotating Gobo 5	]	
		60-69	Rotating Gobo 6	]	
		70-77	Rotating Gobo 7	1	
11	15	78-93	Gobo 1 Shake Slow → Fast	1	0
		94-109	Gobo 2 Shake Slow → Fast	1	
			Gobo 3 Shake Slow → Fast	1	
			Gobo 4 Shake Slow → Fast	1	
			Gobo 5 Shake Slow → Fast	1	
			Gobo 6 Shake Slow → Fast	1	
			Gobo 7 Shake Slow → Fast	1	
			Clockwise Fast → Slow	ĺ	
		222-223			
			Counter-clockwise Slow → Fast		
			Rotating Gobo Index/Rotation		
		0-127	Index Position	1	
			Rotate	1	
12	16	128-189	Clockwise Fast → Slow	{	0
		190-193			
			Counter-clockwise Slow → Fast		
	<u> </u>	1	Rotating Gobo Index/Rotation Fine		
13	17	0-255	Fine Adjustment		0
			nine Aujustinent		

MODE/C	HANNEL		FUNCTION	CNIAD	DEFAULT
STANDARD	EXTENDED	VALUE	FUNCTION	SNAP	DEFAULT
			Fixed Gobo Wheel		
		0-9	Open		
		10-17	Gobo 1		
		18-25	Gobo 2		
		26-33	Gobo 3		
		34-41	Gobo 4		
		42-49	Gobo 5		
		50-57	Gobo 6		
		58-65	Gobo 7		
		66-73	Gobo 8		
		74-81	Gobo 9		
		82-89	Gobo 10		
			Gobo 10		
			Gobo 1 Shake Slow → Fast		
14	18		Gobo 2 Shake Slow $\rightarrow$ Fast		0
14	10		Gobo 2 Shake Slow $\rightarrow$ Fast		
			Gobo 3 Shake Slow $\rightarrow$ Fast Gobo 4 Shake Slow $\rightarrow$ Fast		
			Gobo 4 Shake Slow $\rightarrow$ Fast Gobo 5 Shake Slow $\rightarrow$ Fast		
			Gobo 5 Shake Slow $\rightarrow$ Fast Gobo 6 Shake Slow $\rightarrow$ Fast		
			Gobo 7 Shake Slow $\rightarrow$ Fast		
			Gobo 8 Shake Slow → Fast		
			Gobo 9 Shake Slow → Fast		
			Gobo 10 Shake Slow → Fast		
			Gobo 11 Shake Slow → Fast		
		182-189			
			Scroll		
			Clockwise Fast → Slow		
		222-223			
		224-255	Counter-clockwise Slow → Fast		
			Prism		
		0-20	Open		
15	19	21-40	Prism 1 4-Facet Linear	Х	0
15		41-60	Prism 2 4-Facet Round		
		61-80	Prism 1+2		
		81-255	Idle		
			Prism 1 Index/Rotation		
		0-127	Index Position		
16	20		Rotate		64
10	20	128-189	Clockwise Fast → Slow		04
		190-193	Stop		
			Counter-clockwise Slow → Fast		
	24		Prism 1 Index/Rotation Fine		407
	21	0-255	Fine Adjustment	4	127
			Prism 2 Index/Rotation		
		0-127	Index Position		
47	22		Rotate	┥ │	
17	22	128-189	Clockwise Fast → Slow		64
		190-193			
			Counter-clockwise Slow → Fast		
			Prism 2 Index/Rotation Fine		
	23	0-255	Fine Adjustment		127
		1	i ne Aujustinene		1

MODE/C					
STANDARD		VALUE	FUNCTION	SNAP	DEFAULT
			Focus		
18	24	0-255	Infinity → Near	-	127
10	25	0.055	Focus Fine		
19	25	0-255	Fine Adjustment		127
20	26		Zoom		4.07
20	26	0-255	Narrow → Wide		127
21	27	0-255	Zoom Fine		127
21	27	0-233	Fine Adjustment		127
			Strobe	-	
		0-31	Closed		
		32-63	Open		
		64-95	Strobe effect slow to fast		
22	28	96-127	Open		50
		128-159	Pulse Effect		
		160-191			
			Random Slow → Fast	-	
		224-255			
23	29	0-255	Dimmer		0
			0 → 100%		
24	30	0-255	Dimmer Fine		0
			Fine Adjustment	+	
		0-20	Dimmer Modes		
		21-40	Standard		
		41-60	Stage TV		
		61-80	Architectural		
			Theatre		
			Stage 2		
		101 120	Dimmer Time		
		121	Os		
		122	0.1s		
			0.2s	-	
		124	0.3s		
		125	0.4s		
		126	0.5s		
	74	127	0.6s		
	31	128	0.7s	X	0
		129	0.8s	1	
		130	0.9s		
		131	1.0s		
		132	1.5s		
		133	2.0s		
		134	3.0s		
		135	4.0s		
		136	5.0s		
		137	6.0s		
		138	7.0s		
		139	8.0s		
		140	9.0s		
		141	10s		
		142-255			

MODE/C	HANNFI			1	I
STANDARD		VALUE	FUNCTION	SNAP	DEFAULT
51/110/110			Iris		
		0-191	Open $\rightarrow$ Closed	1	
25	32		Pulse opening fast to slow	1	0
			Pulse closing slow to fast	1	
			Iris Fine	1	
	33	0 – 255	Fine Adjustment	1	0
24			Frost (Light)	1	
26	34	0 – 255	Open → Max	1	0
27	75	0 255	Frost (Wash)	1	0
27	35	0 – 255	Open → Max	1	0
20	76		Blade 1 A	Ì	0
28	36	0-255	Open → Closed	]	0
	77	0-255	Blade 1 A Fine		0
	37	0-255	Fine Adjustment		
29	38	0-255	Blade 1 B		0
29	70	0-255	Open → Closed		0
	39	0-255	Blade 1 B Fine		0
	59	0-255	Fine Adjustment		0
30	40	0-255	Blade 2 A		0
50		0 2 3 3	Open → Closed		U
	41	0-255	Blade 2 A Fine		0
		0 2 3 3	Fine Adjustment		U U
31	42	0-255	Blade 2 B		0
51	72	0 2 3 3	Open → Closed		0
	43	0-255	Blade 2 B Fine		0
	10	0 200	Fine Adjustment		
32	44	0-255	Blade 3 A	-	0
-			Open → Closed	ļ	
	45	0-255	Blade 3 A Fine	-	0
			Fine Adjustment	ļ	
33	46	0-255	Blade 3 B	4	0
			$Open \rightarrow Closed$		
	47	0-255	Blade 3 B Fine	-	0
		1	Fine Adjustment Blade 4 A		
34	48	0-255	Open → Closed	1	0
			Blade 4 A Fine		
	49	0-255	Fine Adjustment	1	0
			Blade 4 B		
35	50	0-255	Open → Closed	1	0
			Blade 4 B Fine	1	
	51	0-255	Fine Adjustment	1	0
			Framing Rotation		
74	50	0-126	Min (-60°)	1	407
36	52		Parallel (0°)	1	127
			Max (+60°)	1	
		ĺ	Framing Rotation Fine		107
	53	0-255	Fine Adjustment		127
			Pan / Tilt Speed		
		0-225	Max → Min Speed		
37	54		Blackout by movement	X	0
		236-245	Blackout by wheel changes		
		246-255	No function		

MODE/C		VALUE	FUNCTION	SNAP	DEFAULT
STANDARD	EXTENDED	VALUE			DEIXOEI
			Control		
		0-19	Wheel Snap		
		20-39	Wheel Fade		
			Fan Mode		
		40-44	Mute	1	
		45-49	Studio		
		50-59	Low		
		60-69	High		
		70-79	Auto		0
			Reset	]	
		80-84	All	-	
		85-87	Pan / Tilt		
38	55	88-90	Color		
50	55	91-93	Gobo		
		94-96	Focus and Zoom		
		97-99	Others		
		100-168	Refresh Rate (Hz) See Table on page 26		
		169-174	CMY Shortest Path		
		175-179	CMY Longest Path		
		180-200	Idle	]	
			Dimmer Curves	- - - -	
		201-210	Linear		
		211-220	Square		
			Inverse Square		
		231-240			
		241-255	Idle		

### **REFRESH RATE**

DMX VALUE	REFRESH RATE (HZ)	DMX VALUE	REFRESH RATE (HZ)
100	900	135	1250
101	910	136	1260
102	920	137	1270
103	930	138	1280
104	940	139	1290
105	950	140	1300
106	960	141	1310
107	970	142	1320
108	980	143	1330
109	990	144	1340
110	1000	145	1350
111	1010	146	1360
112	1020	147	1370
113	1030	148	1380
114	1040	149	1390
115	1050	150	1400
116	1060	151	1410
117	1070	152	1420
118	1080	153	1430
119	1090	154	1440
120	1100	155	1450
121	1110	156	1460
122	1120	157	1470
123	1130	158	1480
124	1140	159	1490
125	1150	160	1500
126	1160	161	2500
127	1170	162	4000
128	1180	163	5000
129	1190	164	6000
130	1200	165	10000
131	1210	166	15000
132	1220	167	20000
133	1230	168	25000
134	1240		

### 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:

RDM Code	Device ID	Device Model ID	Personality ID
22A6	58 0000-FFFF	0058	Standard (1) Extended (2)

**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:

[0x0011] Proxied Device Count	[0x0601] Tilt Invert	
[0x0200] Sensor Definition	[0x0602] Pan Tilt Swap	
[0x0201] Sensor Value	[0x0500] Display Invert	
[0x0080] Device Model Description	[0x0501] Display Level	
[0x0081] Manufacturer Label	[0x0603] Realtime Clock	
[0x0082] Device Label	[0x1010] Power State	
[0x00E0] DMX Personality	[0x1031] Preset Playback	
[0x00E1] DMX Personality Description	[0x0122] Default Slot Value	
[0x0400] Device Hours	[0x00B0] Language	
[0x0015] Comms Status	[0x00A0] Language Capabilities	
[0x0031] Status ID Description	[0x00C2] Boot Software Version Label	
[0x0032] Clear Status ID	[0x00C1] Boot Software Version ID	
[0x0405] Device Power Cycles	[0x0070] Product Detail ID List	
[0x0600] Pan Invert	[0x0030] Status Messages	

# MAINTENANCE GUIDELINES



#### DISCONNECT POWER BEFORE PERFORMING ANY MAINTENANCE!

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 your local 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. Lose 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.

### ERROR CODES

Error Codes subject to change without notice				
ERROR CODES	DESCRIPTION			
Pan	Movement is not located in the default position after the reset. These messages 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			
Tilt	main PCB). This error may also be displayed if the head/yoke was blocked during a reset function.			
CyanWheel				
MagentaWheel				
YellowWheel				
CTOWheel	Movement is not located in the default position after the reset. These			
ColorWheel				
RotGoboWheel				
GoboRot	messages will appear after a fixture reset if the magnetic-indexing			
FixGoboWheel	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).			
Prism1				
Prism1Rot				
Prism2				
Prism2Rot				
Zoom				
Focus				
Blade				
LED Temp				
Base Temp				
LED Fan1				
LED Fan2				
LED Fan3				
LED Fan4 LED Fan5	These messages will appear if there is a temperature and/or fan			
LED Fan5	malfunction.			
Head Fan1	-			
Head Fan2				
Gobo Fan	4			
Blade Fan	4			
Base Fan	4			
Dase Fall	<u> </u>			

# SPECIFICATIONS

#### SOURCE

400W 6,600K Bright White LED Engine 20,000 Hour Average LED Life\*

\*Test lab conditions. May vary depending on several factors including but not limited to:

Environmental Conditions, Power/Voltage, Usage Patterns (On-Off Cycling), Control, and Dimming.

#### PHOTOMETRIC DATA

15000 Total Lumen Output CRI 72 (Filter CRI 80, CRI 90) Zoom Range 3° - 53°

#### EFFECTS

Motorized Zoom 4 Rotating Full Blackout Framing Blades +/- 60° Framing Index 2 Variable Frost Filters (Light and Wash) Dual Independent Prisms (6 Facet linear & 6 Facet round) Motorized Iris Variable 16-bit Dimming Curves High Speed Electronic Shutter and Strobe Pan Angle: 540° Tilt Angle: 270°

#### COLOR

CMY Color Mixing Linear CTO Color Correction 7 Dichroic Colors including UV Filter High CRI Filter 80+90

#### GOBOS

7 Rotating / Indexing Interchangeable Glass Gobos 11 Static Metal Gobos

#### **CONTROL / CONNECTIONS**

DMX Channels 16-bit Pan, Tilt, and Dimming Control DMX Adjustable LED Frequency DMX, RDM, E-FLY Wireless, Art-Net, sACN Protocol Support 4 Button Touch Control Panel Full Color 180° Reversible LCD Menu Display Locking 5pin XLR Connector In/Out Locking RJ45 Ethernet Connector In/Out IP65 Locking Power Connector In/Out USB Connection (Firmware Updates)

#### SIZE / WEIGHT

Length: 14.3" (362mm) Width: 9.2" (233mm) Vertical Height: 25.14" (637mm) Weight: 50 lbs. (22.7kg)

### ELECTRICAL / THERMAL

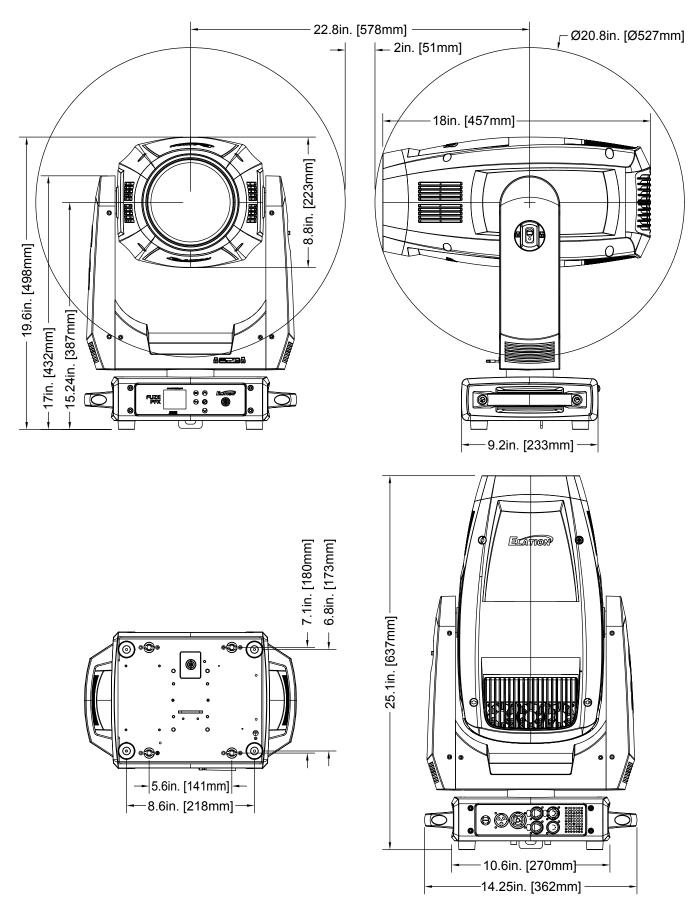
AC 100-240V - 50/60Hz 600W Max Power Consumption 14°F to 113°F (-10°C to 45°C)

APPROVALS / RATINGS CE | cETLus | FCC | UKCA | IP20



### DIMENSIONS

\*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
TOU027	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.