ELATION PROFESSIONAL

FUZE SPOT™

user manual

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D O C U M E N T V E R S I O N

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

Date	Document Version	Software Version ≥	DMX Channel Modes	Notes
08/15/19	1.0	1.0.3	(RGBMA 31 / 41) (CMY 29 / 37)	Initial release.
08/27/19	1.1	N/C	NO CHANGE	Updated default DMX values for RGBMA.

C O N T E N T S

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.

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

Snoot
Omega Brackets (x2)
Neutrik powerCON TRUE1 Power Cable

CUSTOMER SUPPORT

Contact **ELATION Service** for any product related service and support needs.
Also visit forums.elationlighting.com with questions, comments or suggestions.

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

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REPLACEMENT PARTS please visit parts.elationlighting.com

IMPORTANT NOTICE!

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

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

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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 MOISTURE!

MINIMUM DISTANCE TO OBJECTS/SURFACES
MUST BE 1.6 FOOT (0.5 METER)
MINIMUM DISTANCE OF INFLAMMABLE MATERIALS
FROM THE SURFACE 1.6 FEET (0.5 METER)
MAXIMUM AMBIENT OPERATING TEMPERATURE 113°F (45°C)

SAFETY GUIDELINES

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.

MAINTENANCE GUIDELINES

DISCONNECT POWER BEFORE PERFORMING ANY MAINTENANCE!

CLEANING

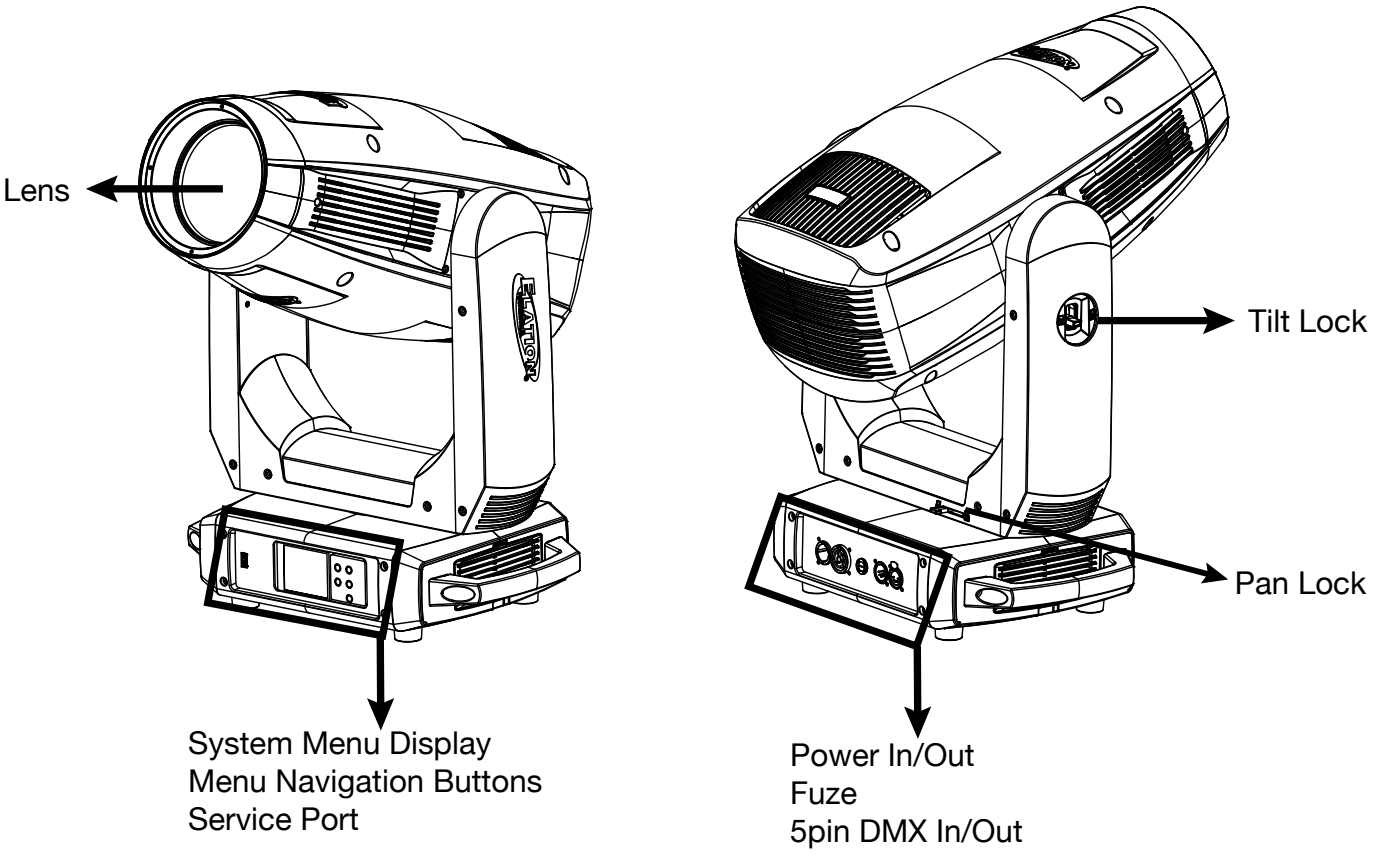
Frequent cleaning is recommended to insure proper function, optimized light output, and an extended life. The frequency of cleaning depends on the environment in which the fixture operates: damp, smoky or particularly dirty environments can cause greater accumulation of dirt on the fixture's optics. 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.

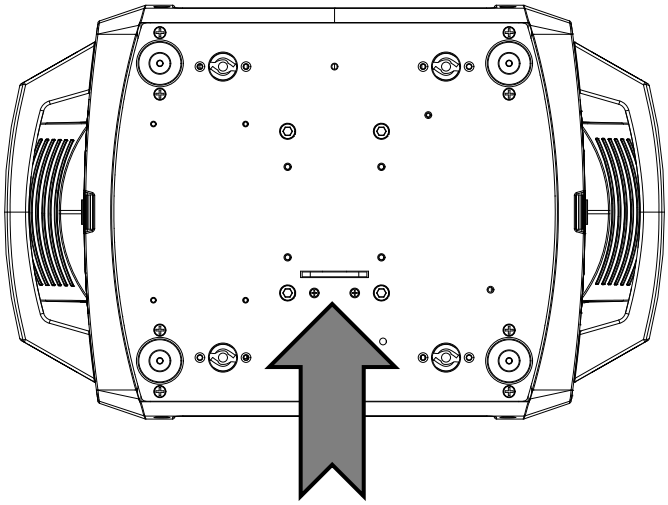
MAINTENANCE

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. 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.

FIXTURE OVERVIEW





SAFETY CABLE ATTACHMENT POINT

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

C O L O R S

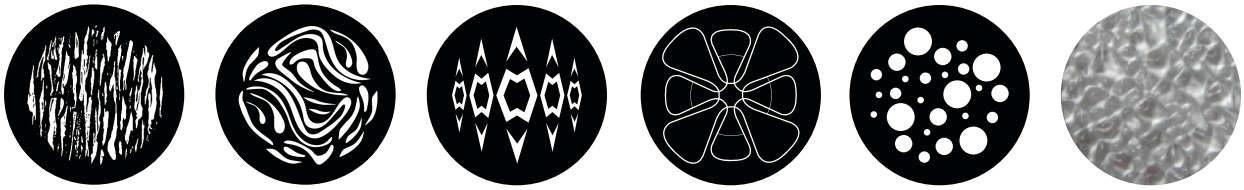
Colors	Color Temperature	Green Shift
Cyan	2700K – 8500K	Full Minus Green to Neutral
Magenta		
Yellow		
Red		Neutral White
Green		
Blue		Neutral to Full Plus Green
Mint		
Amber		

Virtual Gel Swatch Book Colors

7	Pale Yellow	157	Pink	68	Sky Blue
103	Straw	36	Medium Pink	143	Pale Navy Blue
151	Gold Tint	111	Dark Pink	131	Marine Blue
100	Spring Yellow	128	Bright Pink	115	Peacock Blue
10	Medium Yellow	148	Bright Rose	172	Lagoon Blue
101	Yellow	332	Special Rose Pink	116	Medium Blue Green
104	Deep Amber	793	Vanity Fair	90	Dark Yellow Green
15	Deep Straw	113	Magenta	139	Primary Green
179	Loving Amber	46	Dark Magenta	122	Fern Green
21	Gold Amber	48	Rose Purple	89	Moss Green
105	Orange	126	Mauve	124	Dark Green
158	Deep Orange	49	Medium Purple	88	Lime Green
22	Dark Amber	58	Lavender	138	Pale Green
778	Millennium Gold	199	Palace Blue	203	Quarter CT Blue
135	Deep Golden Amber	119	Dark Blue	202	Half CT Blue
24	Scarlet	132	Medium Blue	201	FULL CT Blue
106	Primary Red	120	Deep Blue	200	Double CT Blue
26	Bright Red	165	Daylight Blue	206	Quarter CT Orange
27	Medium Red	161	Slate Blue	205	Half CT Orange
19	Fire	118	Light Blue	204	FULL CT Orange

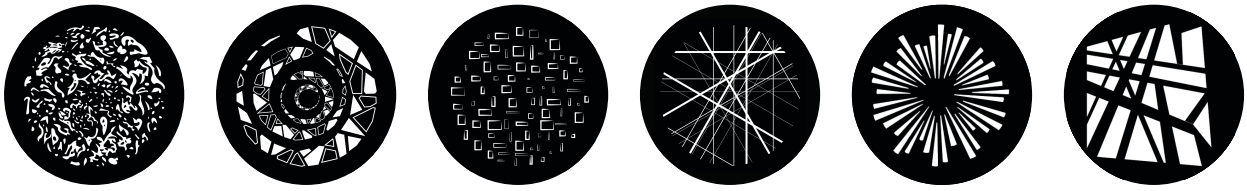
GOBOS AND ANIMATION WHEELS

INTERCHANGEABLE-ROTATING GLASS GOBO WHEEL 1



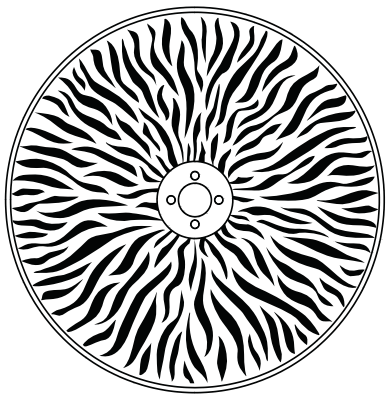
1 2 3 4 5 6

INTERCHANGEABLE-ROTATING GLASS GOBO WHEEL 2

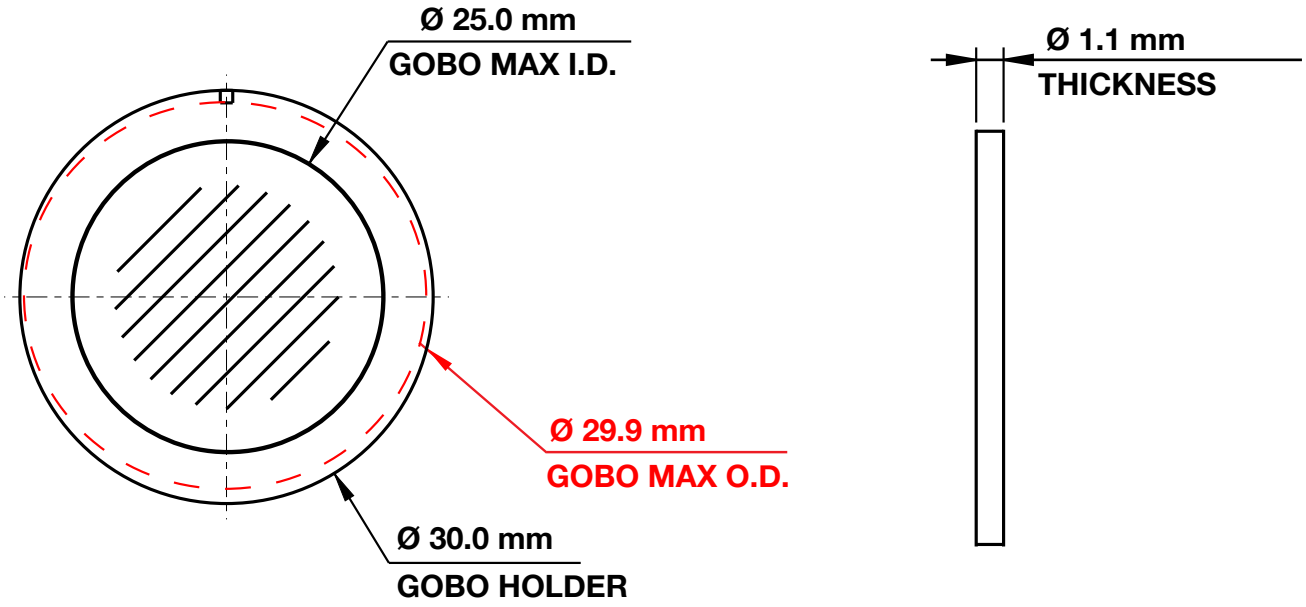


1 2 3 4 5 6

ANIMATION WHEEL



CUSTOM GOBOS



FUZE SPOT ROTATING GLASS GOBOS - WHEELS 1 & 2	
Gobo O.D. (Max. Outer Diameter)	ф29.9mm
Gobo I.D. (Max. Image Diameter)	ф25.0mm
Gobo Holder Diameter	ф30.0mm
Gobo Thickness	ф 1.1mm
Gobo Material	High Temp Glass (Max 600C°)

*** * * 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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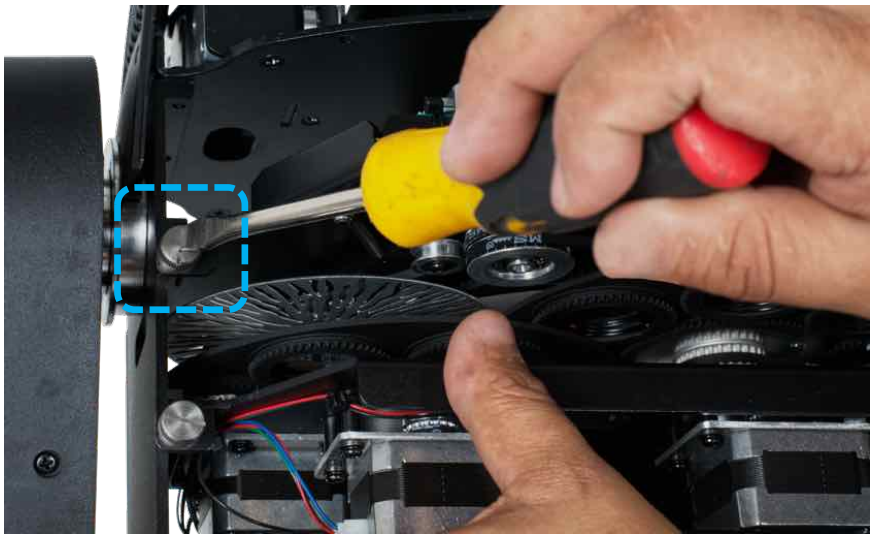
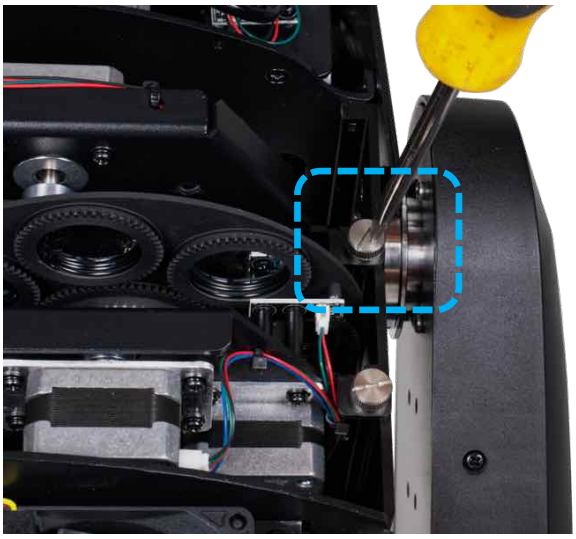
GOBO REPLACEMENT

1. Before removing covers, place fixture on a stable flat surface in an **INDOOR DUST FREE** location. Ensure moving head is locked into a neutral upright position with both **PAN** and **TILT** locks engaged.

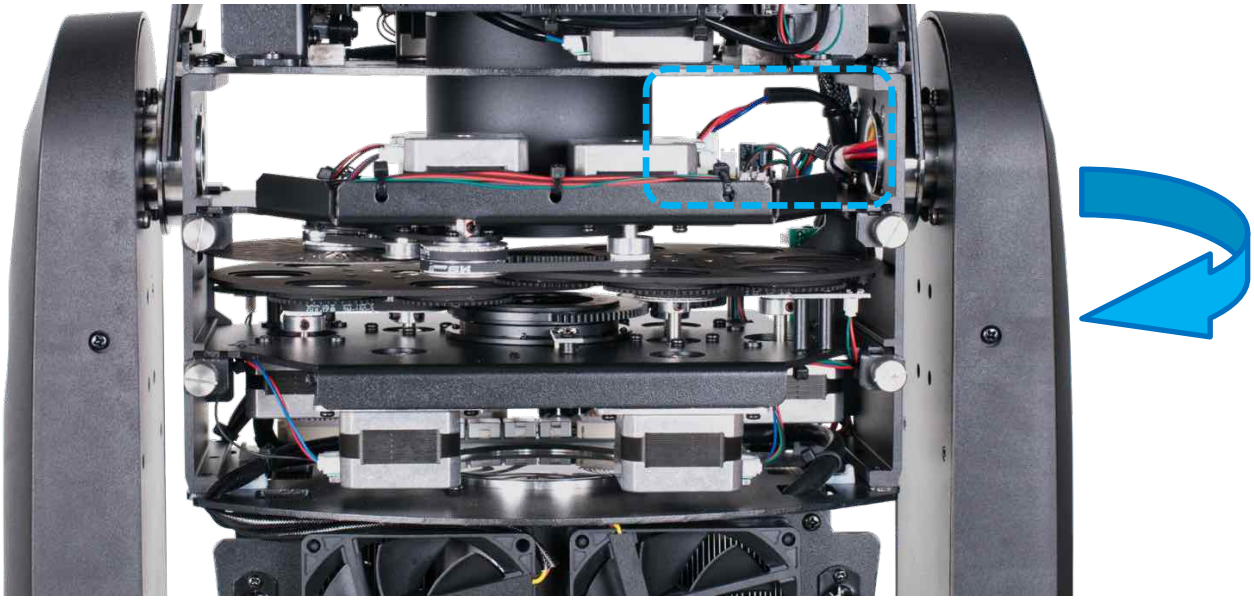
2. Unfasten and remove the front and back panels; each are secured with (4x) ¼-turn Phillips-head screws. (These screws are integrally installed in both panels and cannot be removed.) With the panel screws unfastened, unclip their safety cables to remove them completely from the fixture.

GOBO REPLACEMENT

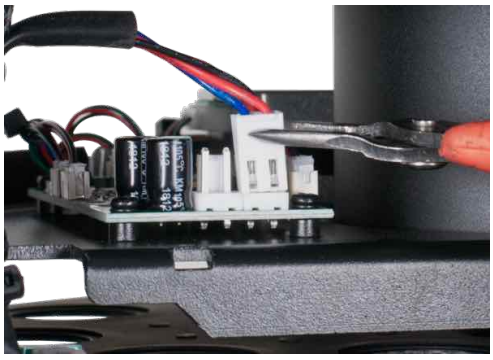


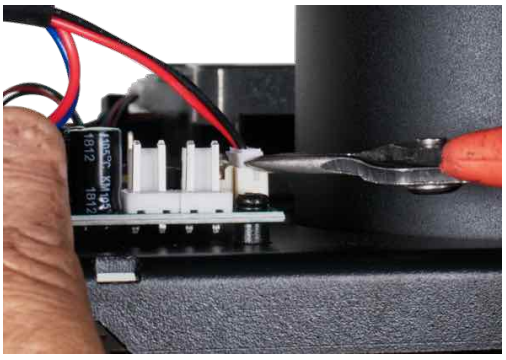


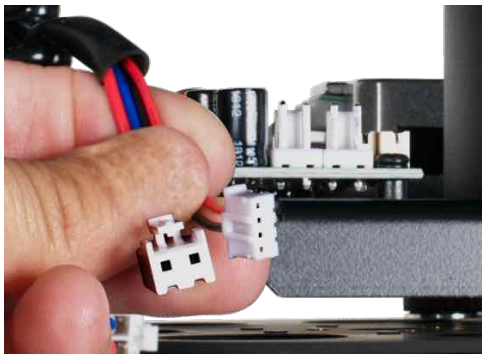
3. The Control Module impedes the removal of the GOBO Wheel Module and will need to be removed to access the GOBO Wheel Module. The Control Module is secured to the fixture frame rail with (2x) slotted thumb screws.



4. To disconnect the Control Module, rotate the gimble to access the two connectors on opposite side.

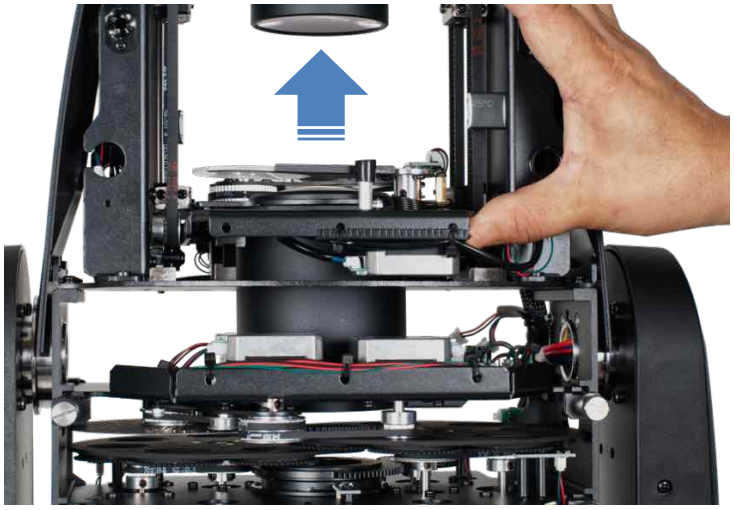


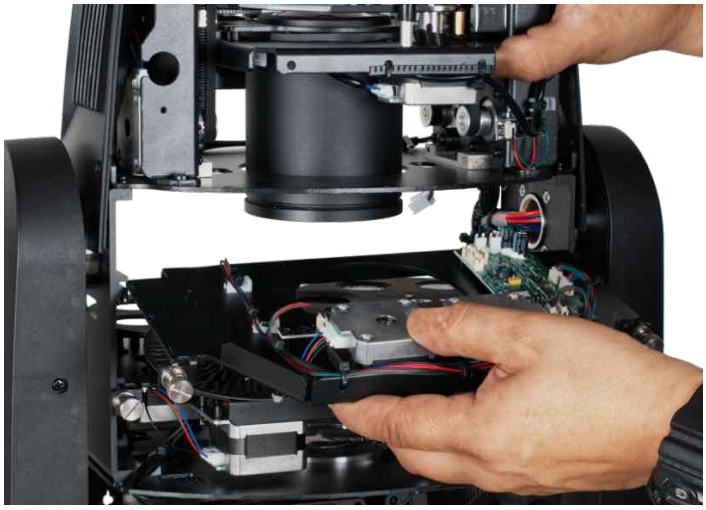




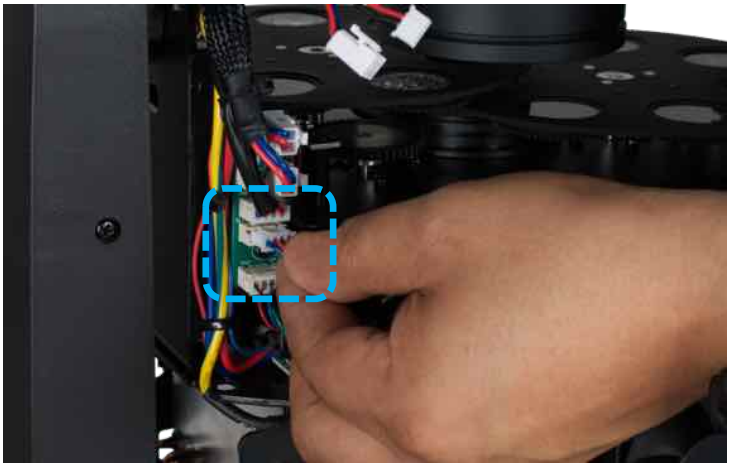
5. Locate the 2-pin and 4-pin Control Module connectors and carefully unplug them from their connector bases. **DO NOT USE FORCE TO REMOVE CONNECTORS!**

GOBO REPLACEMENT



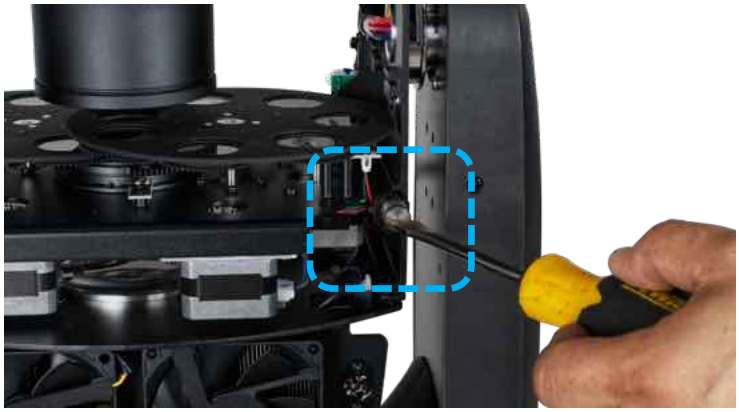


6. Impeding the removal of the Control Module is the lens housing of the Lens Module, which is set within the lens aperture. Lift the Lens Module to clear the lens housing from the lens aperture in the Control Module. With the Lens Module lifted, carefully grip the Control Module and slide it out and away to clear the mounting rails.



7. Locate the 4-pin GOBO Wheel Module connector and carefully unplug it from the connector base.

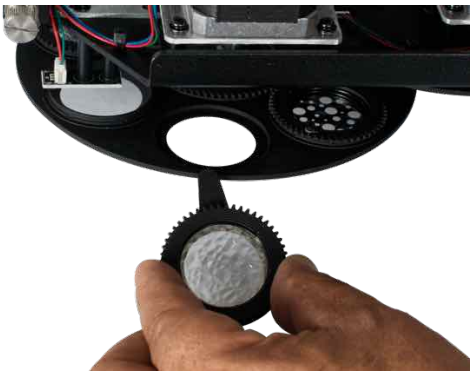
DO NOT USE FORCE TO REMOVE CONNECTOR!



8. Loosen the (2x) slotted thumb screws that secure the GOBO Wheel Module.

GOBO REPLACEMENT

9. Carefully grip the GOBO Wheel module and slide it out and away to clear the mounting rails, and then carefully place the module on a stable flat surface in an **INDOOR DUST FREE** location.

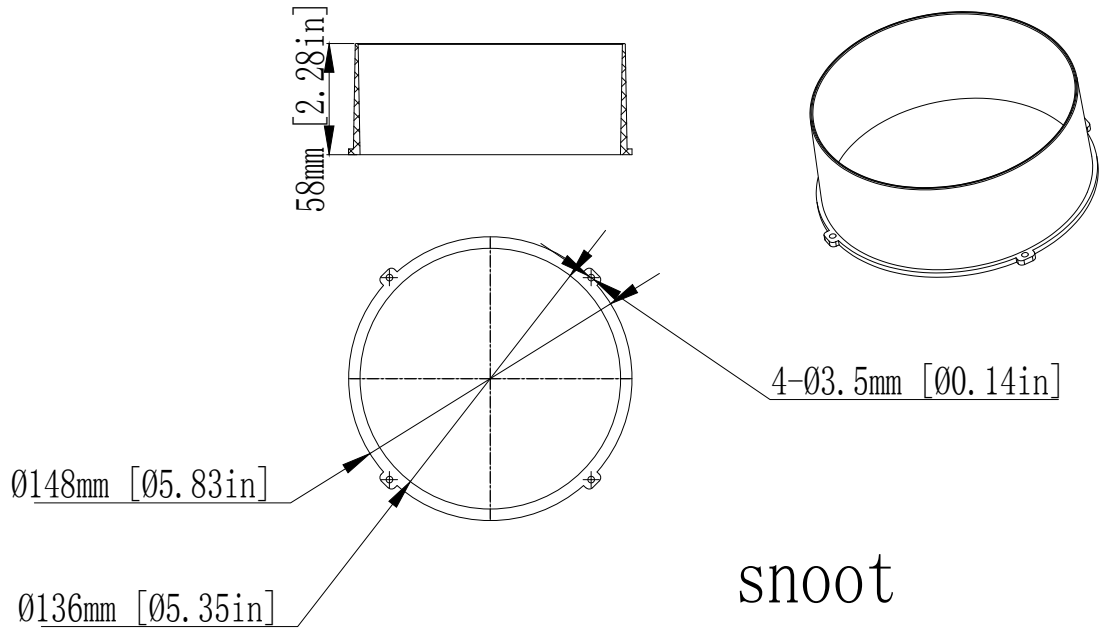


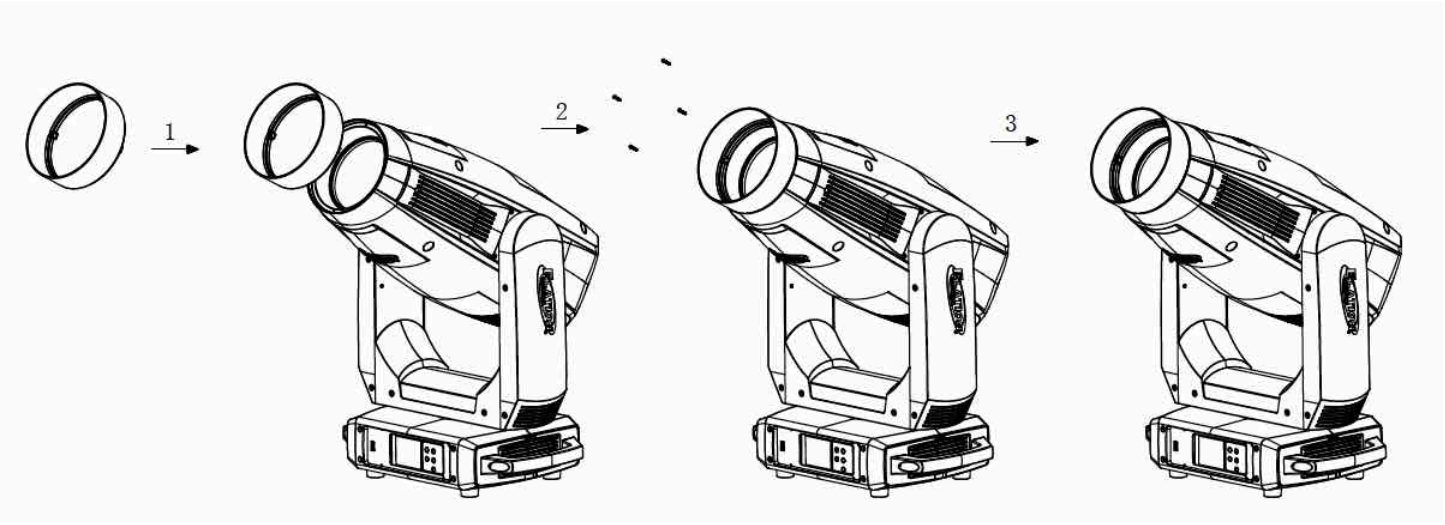
10. REPLACING A ROTATING GOBO Locate the specific Rotating GOBO to replace. Carefully grip the GOBO Holder using your index finger and gently lift it slightly, and then with your fingers pull it out and away until it fully clears the GOBO Wheel. Now locate the tab of the spring, and with a precision pick (or similar tool), carefully press retaining spring inward to relieve tension.

11. Remove the retaining spring and carefully separate the GOBO from the GOBO Holder. Install the replacement Rotating GOBO following the steps above in reverse order.

CAUTION: TAKE CARE NOT TO SCRATCH GOBO OR GOBO HOLDER

SNOOT INSTALLATION





1. Place fixture on the stable flat surface and let cool for 15mins.
2. Align Snoot onto front lens so 4 screw holes on snoot match 4 screw holes on lens.
3. Carefully using a hand screwdriver, insert/secure included 4 screws.
4. Check Snoot to confirm it is seated properly and all 4 screws are secure.

DO NOT OVER TIGHTEN SCREWS! DO NOT USE A POWER SCREWDRIVER!

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 1 FOOT (0.3 METERS)

MINIMUM DISTANCE OF INFLAMMABLE MATERIALS FROM THE SURFACE 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, 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.

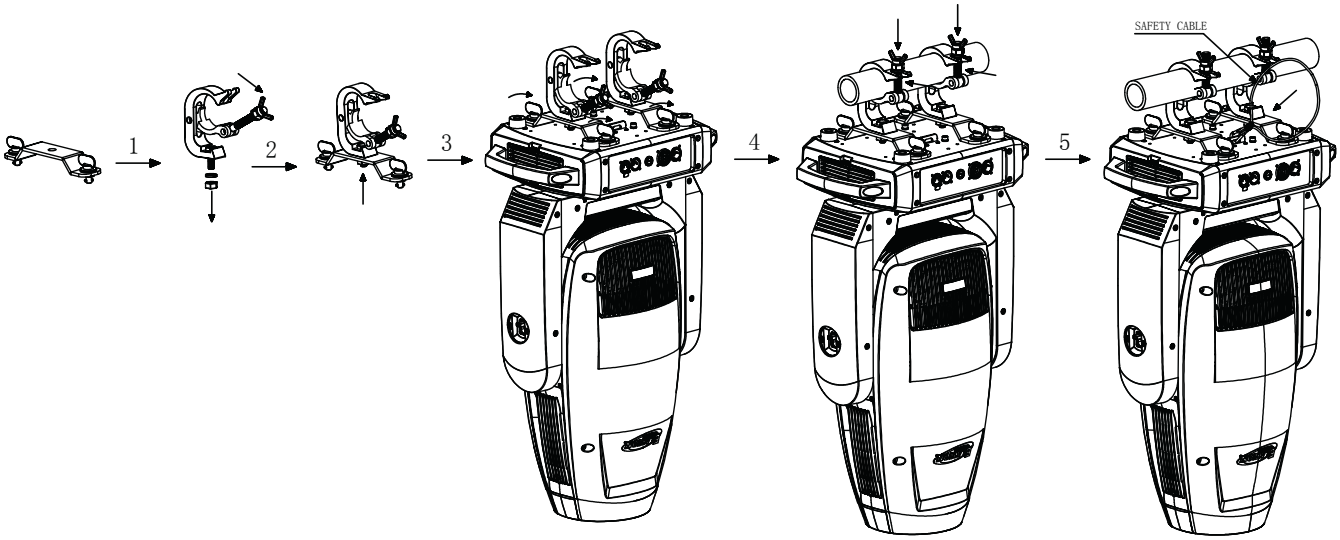
NEVER stand directly below the fixture(s) when rigging, removing or servicing.
Overhead fixture installation must always be secured with a secondary safety attachment, such as an appropriately rated safety cable.

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

INSTALLATION GUIDELINES

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

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 points 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 a carrying handle.

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.

ALWAYS ATTACH AN APPROPRIATELY RATED SAFETY CABLE (NOT INCLUDED) THAT MEETS ALL LOCAL, NATIONAL, AND COUNTRY CODES AND REGULATIONS WHENEVER INSTALLING FIXTURE IN A SUSPENDED ENVIRONMENT!

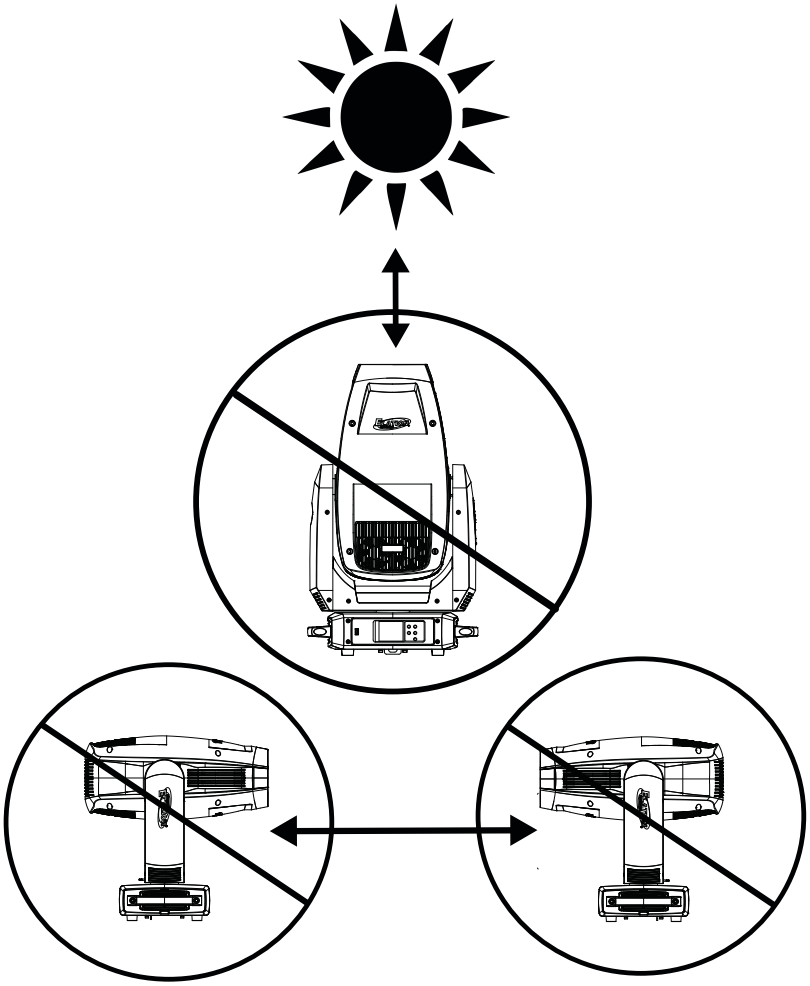
INSTALLATION GUIDELINES

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.

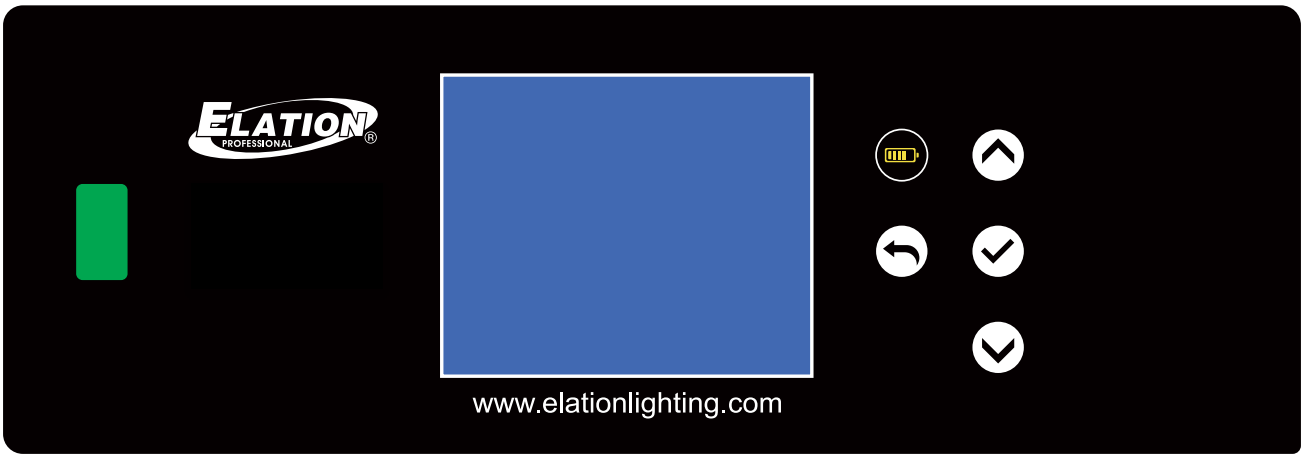
DO NOT EXPOSE THE FIXTURE AND/OR FRONT LENS OPENING TO LIGHT BEAMS FROM DIRECT SUNLIGHT, OTHER LIGHTING MOVING HEAD FIXTURES, AND LASERS WHILE UNPACKING, INSTALLATION, USE, AND EXTENDED IDLE TIMES OUTDOORS. DO NOT FOCUS A LIGHT BEAM FROM ONE LIGHTING FIXTURE DIRECTLY TOWARDS ANOTHER.



SYSTEM MENU

The fixture includes an easy to navigate system menu. The 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 Arrow)** 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.



ELATION FUZE SPOT™ - SYSTEM MENU					
Supports Software Versions: ≥ 1.03					
DMX Settings	DMX Address	**A001** ~ AXXX			
	DMX Channel Mode	**Standard,** Extend			
	No DMX Status	**Hold Last,** Blackout, Internal Programs			
Personality	Master	**ON** / OFF			
	Slave	ON / **OFF**			
	Status Settings	Pan Invert Tilt Invert Pan/Tilt Feedback Pan Degree Pan/TiltSpeed Hibernation		ON / **OFF** ON / **OFF** **ON** / OFF 630/**540** Speed **1** ~ 4 OFF/ 01M~99M, **15M**	
	Fan Settings	**Auto,** High, Silent			
	Dim Modes	**Standard,** Stage, TV, Architectural, Theatre, Stage 2, Dim Speed		**0s**, 0.1s, 0.2s, 0.3s, 0.4s, 0.5s, 0.6s, 0.7s, 0.8s, 0.9s, 1.0s, 1.5s, 2.0s, 3.0s, 4.0s, 5.0s, 6.0s, 7.0s, 8.0s, 9.0s, 10s	
	Dim Curves	**Linear,** Square, Square Inverse, S-Curve			
	LED Refresh Rate	**1200Hz,** 900-1500Hz, 2500Hz, 4000Hz, 5000Hz, 6000Hz, 10KHz, 15KHz, 20KHz, 25KHz			
	Reset Motors	Reset All Motors		YES / **NO**	
		Pan/Tilt Reset		YES / **NO**	
		Color Reset		YES / **NO**	
		Gobo Reset		YES / **NO**	
		Focus and Zoom reset		YES / **NO**	
		Other motor reset		YES / **NO**	
	Display	Screen Saver Delay		**001**-10M/ OFF	
		Touch Screen Lock		**OFF**/ON	
		Rotate Display 180°		YES / **NO**	
	Temp Unit	C / **F**			
	Service	Passcode **050**	Calibration	Pan 000-255 Tilt 000-255 Color 000-255 ... Shutter 000-255	
			USB Software Update	YES / **NO**	
			Factory Restore	YES / **NO**	

Manual Control	Pan Pan Fine Tilt Tilt Fine Red ... Control	000-255 000-255 000-255 000-255 000-255 ... 000-255			
Internal Programs	Program 0	Speed	000-255		
		Fade	000-255		
	Program 1	Speed	000-255		
		Fade	000-255		
	Program 2	Speed	000-255		
		Fade	000-255		
	Program 3	Speed	000-255		
		Fade	000-255		
	...	...	...		
	Program 16	Speed	000-255		
		Fade	000-255		
Information	Fixture Life Time	Power On Time	xxxxxx Hours		
	Fixture Last Run Time	Power On ResetableTime	xxxxxx Hours		
		Power On Time Reset			
	Fixture Temperatures	LED's	Current		xxx F / xxx C
			Max Resettable		xxx F / xxx C
			Max Not Resettable		xxx F / xxx C
		Reset LED Temp			
		Base Temp	Current		xxx F / xxx C
	Fan Info.	LED_fan RPM	1_Fan **Standby**		
			2_Fan **Standby**		
			3_Fan **Standby**		
			4_Fan **Standby**		
		Base_fan RPM	Base_Fan **Standby**		
	DMX Values	Pan, Tilt, …, Control	000-255		
	Product ID's	RDM UID	00000		
	Error Logs	Fixture Errors	Error1, Error2, …		
		Reset Error Log	Passcode	YES/**NO**	
	Software Version	1U:V1.0.3 2U:V1.0.3 3U:V1.0.3 4U:V1.0.3 5U:V1.0.3 6U:V1.0.3			

COLOR LED PROGRAMMING GUIDELINES

The fixture utilizes an advanced additive LED light engine that contains Red, Green, Blue, Mint and Amber LED which when combined, provides a brilliant high CRI White. Using a 5-color LED engine allows the fixture to have a wide color gamut which offers robust saturated colors as well as a wide range of pastel and theatrical colors.

Programming a 5-color LED engine is a bit more time consuming than the more common 3-color CMY (Cyan, Yellow, Magenta) or RGB (Red, Blue Green) systems. To help ensure optimal performance of the fixture, it is highly suggested to try out the multiple DMX control modes to understand specifically how they work with color before programming a full show. A couple suggested modes are listed below.

The **CMY Extended** DMX control mode provides a “natural” color mix which is compatible with color pickers of most lighting consoles and includes 16-bit color control.

The **Extended** RGBMA (Red, Green, Blue, Mint, Amber) DMX control mode provides slightly higher precision color mixes but may be require additional time to find the right values for all 5-color LEDs to achieve a specific desired color.

DMX CHANNEL FUNCTIONS AND VALUES

FUZE SPOT™ DMX Channel Values / Functions (41 DMX Channels)							
Supports Software Versions: ≥ 1.0.3							
Features subject to change without any prior written notice.							
MODE / CHANNEL				VALUE	FUNCTION	DEFAULT	SNAP
Standard	Extended	CMY	CMY Extended				
1	1	1	1		**PAN Movement 8bit**	127	
				0-255	Pan Movement		
2	2	2	2		**Pan Fine 16bit**	127	
				0-255	Fine Control of Pan Movement		
3	3	3	3		**TILT Movement 8bit**	127	
				0-255	Tilt Movement		
4	4	4	4		**Tilt Fine 16bit**	127	
				0-255	Fine Control of Tilt Movement		
		5	5		**Cyan**	0	
				0-255	0 → 100%		
			6		**Cyan Fine**	0	
				0-255	Fine Cyan Control		
		6	7		**Magenta**	0	
				0-255	0 → 100%		
			8		**Magenta Fine**	0	
				0-255	Fine Magenta Control		
		7	9		**Yellow**	0	
				0-255	0 → 100%		
			10		**Yellow Fine**	0	
				0-255	Fine Yellow Control		
5	5				**Red**	255	
				0-255	0 → 100%		
	6				**Red Fine**	255	
				0-255	Fine Red Control		
6	7				**Green**	255	
				0-255	0 → 100%		
	8				**Green Fine**	255	
				0-255	Fine Green Control		
7	9				**Blue**	255	
				0-255	0 → 100%		
	10				**Blue Fine**	255	
				0-255	Fine Blue Control		

MODE / CHANNEL				VALUE	FUNCTION	DEFAULT	SNAP
Standard	Extended	CMY	CMY Extended				
8	11				**Mint**	255	
				0-255	0 → 100%		
	12				**Mint Fine**	255	
				0-255	Fine Mint Control		
9	13				**Amber**	255	
				0-255	0 → 100%		
	14				**Amber Fine**	255	
				0-255	Fine Amber Control		
10	15	8	11		**Color Temperature Control**	0	
				0-23	Disabled		
				24 -85	2400K to 8500K (100K Steps) (See Table Page 34)		
				86-255	8500K		
11	16	9	12		**Color Wheel**	0	
				0	Open		
				1-60	Virtual Gel Swatch Book (See Table Page 35)		
				61-179	No Function		
					Color Scroll		
				180-201	CW Rotation Fast to Slow		
				202-207	Stop		
				208-229	CCW Rotation Slow to Fast		
				230-234	Open		
					Random Slots		
				235-239	Fast		
				240-244	Medium		
				245-249	Slow		
				250-255	Open		
	17		13		**Green Shift**	0	
				0	Idle		
				1-127	Full Minus Green to Neutral		
				128	Neutral White		
				129-255	Neutral to Full Plus Green		

MODE / CHANNEL				VALUE	FUNCTION	DEFAULT	SNAP
Standard	Extended	CMY	CMY Extended				
12	18	10	14		**Gobo Wheel 1**	0	X
				0-9	Open		
				10-19	Gobo 1		
				20-29	Gobo 2		
				30-39	Gobo 3		
				40-49	Gobo 4		
				50-59	Gobo 5		
				60-69	Gobo 6		
				70-89	Gobo 1 Shake Slow to Fast		
				90-109	Gobo 2 Shake Slow to Fast		
				110-129	Gobo 3 Shake Slow to Fast		
				130-149	Gobo 4 Shake Slow to Fast		
				150-169	Gobo 5 Shake Slow to Fast		
				170-189	Gobo 6 Shake Slow to Fast		
				190-221	Gobo Wheel Scroll CW Fast to Slow		
				222-223	Stop		
				224-255	Gobo Wheel Scroll CCW Slow to Fast		
13	19	11	15		**Gobo Wheel 1** **Gobo Index/Rotation**	63	
				0-127	Gobo Indexing		
				128-189	Gobo Scroll CW Fast to Slow		
				190-193	No Rotation		
				194-255	Gobo Scroll CCW Slow to Fast		
14	20	12	16		**Gobo Wheel 1** **Gobo Fine Index**	0	
				0-255	Fine Indexing		
15	21	13	17		**Gobo Wheel 2**	0	X
				0-9	Open		
				10-19	Gobo 1		
				20-29	Gobo 2		
				30-39	Gobo 3		
				40-49	Gobo 4		
				50-59	Gobo 5		
				60-69	Gobo 6		
				70-89	Gobo 1 Shake Slow to Fast		
				90-109	Gobo 2 Shake Slow to Fast		
				110-129	Gobo 3 Shake Slow to Fast		
				130-149	Gobo 4 Shake Slow to Fast		
				150-169	Gobo 5 Shake Slow to Fast		
				170-189	Gobo 6 Shake Slow to Fast		
				190-221	Gobo Wheel Scroll CW Fast to Slow		
				222-223	Stop		
				224-255	Gobo Wheel Scroll CCW Slow to Fast		

MODE / CHANNEL				VALUE	FUNCTION	DEFAULT	SNAP
Standard	Extended	CMY	CMY Extended				
16	22	14	18		**Gobo Wheel 2** **Gobo Index/Rotation**	63	
				0-127	Gobo Indexing		
				128-189	Gobo Scroll CW Fast to Slow		
				190-193	No Rotation		
				194-255	Gobo Scroll CCW Slow to Fast		
17	23	15	19		**Gobo Wheel 2** **Gobo Fine Index**	0	
				0-255	Fine Indexing		
18	24	16	20		**Prism, Prism/Gobo Macros**		
				0-63	Open		
				64-95	Prism		
				96-127	Idle		
				128-135	Prism/Gobo Macro1		
				136-143	Prism/Gobo Macro2		
				144-151	Prism/Gobo Macro3		
				152-159	Prism/Gobo Macro4		
				160-167	Prism/Gobo Macro5		
				168-175	Prism/Gobo Macro6		
				176-183	Prism/Gobo Macro7		
				184-191	Prism/Gobo Macro8		
				192-199	Prism/Gobo Macro9		
				200-207	Prism/Gobo Macro10		
				208-215	Prism/Gobo Macro11		
				216-223	Prism/Gobo Macro12		
				224-231	Prism/Gobo Macro13		
				232-239	Prism/Gobo Macro14		
				240-247	Prism/Gobo Macro15		
				248-255	Prism/Gobo Macro16		
19	25	17	21		**Prism Index/Prism Rotation**		
				0-127	Prism Indexing		
				128-189	Prism Rotation CW Fast to Slow		
				190-193	No Rotation		
				194-255	Prism Rotation CCW Slow to Fast		
	26		22		**Prism Fine Index Rotation**		
				0-255	Fine Indexing		

MODE / CHANNEL				VALUE	FUNCTION	DEFAULT	SNAP
Standard	**Extended**	**CMY**	**CMY Extended**				
20	27	18	23		**Focus**	127	
				0-255	Continuous Adjustment Near to Far		
21	28	19	24		**Focus Fine**	0	
				0-255	Continuous Adjustment Fine		
22	29	20	25		**Zoom**	127	
				0-255	Zoom Adjustment Small to Big		
23	30	21	26		**Zoom Fine**	0	
				0-255	Zoom Adjustment Fine		
24	31	22	27		**Shutter, Strobe**	50	X
				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)		
25	32	23	28		**Dimmer**	0	
				0-255	Intensity 0 → 100%		
26	33	24	29		**Dimmer Fine**	0	
				0-255	Dimmer Fine Adjustment		

MODE / CHANNEL				VALUE	FUNCTION	DEFAULT	SNAP
Standard	Extended	CMY	CMY Extended				
					Dim Modes		
				0-20	Standard		
				21-40	Stage		
				41-60	TV		
				61-80	Architectural		
				81-100	Theatre		
				101-120	Stage 2		
					Dimmer Delay Time		
				121	0.0s		
				122	0.1s		
				123	0.2s		
				124	0.3s		
				125	0.4s		
				126	0.5s		
				127	0.6s		
	34		30	128	0.7s	0	X
				129	0.8s		
				130	0.9s		
				131	1.0s		
				132	1.5s		
				133	2.0s		
				134	3.0s		
				135	4.0s		
				136	5.0s		
				137	6.0s		
				138	7.0s		
				139	8.0s		
				140	9.0s		
				141	10s		
				142-255	Idle		
					Iris		
27	35	25	31	0-191	Max to Min Diameter	0	
				192-223	Pulse Opening Fast to Slow		
				224-255	Pulse Closing Slow to Fast		
					Iris Fine		
	36		32	0-255	Iris Fine Adjustment	0	
					Frost		
28	37	26	33	0-255	Open to Full Frost	0	
					Animation Wheel		
29	38	27	34	0-7	Open		
				8-255	Animation Min to Max		

MODE / CHANNEL				VALUE	FUNCTION	DEFAULT	SNAP
Standard	Extended	CMY	CMY Extended				
30	39	28	35		**Animation Index Rotation**		
				0-127	Animation Indexing		
				128-189	Animation Rotation CW Fast to Slow		
				190-193	No Rotation		
				194-255	Animation Rotation CCW Slow to Fast		
	40		36		**Pan / Tilt and Color Speed**	0	
				0-225	Max to Min Speed		
				226-235	Blackout by Movement		
				236-245	Blackout by All Wheel Changing		
				246-255	No Function		
31	41	29	37		**Control**	0	X
				0-19	Color Change Normal		
				20-29	Color Change to Any position		
				30-39	Color/Gobo Change to Any Position		
				40-59	Fan Mode Low		
				60-69	Fan Mode High		
				70-79	Fan Mode Auto		
				80-84	All Motor Reset		
				85-87	Pan / Tilt Reset		
				88-90	Color Reset		
				91-93	Gobo Reset		
				94-96	Focus and Zoom Reset		
				97-99	Other Motor Reset		
					Refresh Rate (Hz)		
				100	900		
				101	910		
				102	920		
				103	930		
				104	940		
				105	950		
				106	960		
				107	970		
				108	980		
				109	990		
				110	1000		
				111	1010		
				112	1020		
				113	1030		
				114	1040		
				115	1050		
				116	1060		
				117	1070		
				118	1080		
				119	1090		

MODE / CHANNEL				VALUE	FUNCTION	DEFAULT	SNAP
Standard	Extended	CMY	CMY Extended				
31	41	29	37		**Refresh Rate (Hz)**	0	X
				120	1100		
				121	1110		
				122	1120		
				123	1130		
				124	1140		
				125	1150		
				126	1160		
				127	1170		
				128	1180		
				129	1190		
				130	1200		
				131	1210		
				132	1220		
				133	1230		
				134	1240		
				135	1250		
				136	1260		
				137	1270		
				138	1280		
				139	1290		
				140	1300		
				141	1310		
				142	1320		
				143	1330		
				144	1340		
				145	1350		
				146	1360		
				147	1370		
				148	1380		
				149	1390		
				150	1400		
				151	1410		
				152	1420		
				153	1430		
				154	1440		
				155	1450		
				156	1460		
				157	1470		
				158	1480		
				159	1490		
				160	1500		

MODE / CHANNEL				VALUE	FUNCTION	DEFAULT	SNAP
Standard	Extended	CMY	CMY Extended				
31	41	29	37		**Refresh Rate (Hz)**	0	X
				161	2500		
				162	4000		
				163	5000		
				164	6000		
				165	10,000		
				166	15,000		
				167	20,000		
				168	25,000		
				169-200	Idle		
				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 (Scene 1-8)		
				242	Internal Program 2 (Scene 9-16)		
				243	Internal Program 3 (Scene17-24)		
				244	Internal Program 4 (Scene25-32)		
				245	Internal Program 5 (Scene33-40)		
				246	Internal Program 6 (Scene41-48)		
				247	Internal Program 7 (Scene49-56)		
				248-255	Idle		

COLOR TEMPERATURE			
VALUE	**COLOR TEMP (K)**	**VALUE**	**COLOR TEMP (K)**
24	2400	55	5500
25	2500	56	5600
26	2600	57	5700
27	2700	58	5800
28	2800	59	5900
29	2900	60	6000
30	3000	61	6100
31	3100	62	6200
32	3200	63	6300
33	3300	64	6400
34	3400	65	6500
35	3500	66	6600
36	3600	67	6700
37	3700	68	6800
38	3800	69	6900
39	3900	70	7000
40	4000	71	7100
41	4100	72	7200
42	4200	73	7300
43	4300	74	7400
44	4400	75	7500
45	4500	76	7600
46	4600	77	7700
47	4700	78	7800
48	4800	79	7900
49	4900	80	8000
50	5000	81	8100
51	5100	82	8200
52	5200	83	8300
53	5300	84	8400
54	5400	85	8500

VIRTUAL GEL SWATCH BOOK					
VALUE	**FILTER#**	**COLOR**	**VALUE**	**FILTER#**	**COLOR**
1	7	Pale Yellow	31	126	Mauve
2	103	Straw	32	49	Medium Purple
3	151	Gold Tint	33	58	Lavender
4	100	Spring Yellow	34	199	Palace Blue
5	10	Medium Yellow	35	119	Dark Blue
6	101	Yellow	36	132	Medium Blue
7	104	Deep Amber	37	120	Deep Blue
8	15	Deep Straw	38	165	Daylight Blue
9	179	Loving Amber	39	161	Slate Blue
10	21	Gold Amber	40	118	Light Blue
11	105	Orange	41	68	Sky Blue
12	158	Deep Orange	42	143	Pale Navy Blue
13	22	Dark Amber	43	131	Marine Blue
14	778	Millennium Gold	44	115	Peacock Blue
15	135	Deep Golden Amber	45	172	Lagoon Blue
16	24	Scarlet	46	116	Medium Blue Green
17	106	Primary Red	47	90	Dark Yellow Green
18	26	Bright Red	48	139	Primary Green
19	27	Medium Red	49	122	Fern Green
20	19	Fire	50	89	Moss Green
21	157	Pink	51	124	Dark Green
22	36	Medium Pink	52	88	Lime Green
23	111	Dark Pink	53	138	Pale Green
24	128	Bright Pink	54	203	Quarter CT Blue
25	148	Bright Rose	55	202	Half CT Blue
26	332	Special Rose Pink	56	201	FULL CT Blue
27	793	Vanity Fair	57	200	Double CT Blue
28	113	Magenta	58	206	Quarter CT Orange
29	46	Dark Magenta	59	205	Half CT Orange
30	48	Rose Purple	60	204	FULL CT Orange

E R R O R C O D E S

Error Codes subject to change without notice.	
ERROR CODES	**DESCRIPTION**
PAN Er	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 main PCB). This error may also be displayed if the head/yoke was blocked during a reset function.
TILT Er	
RotGobo	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 main PCB).
RotGobo2	
Iris	
RotGoboIndex	
RotGobo2Index	
Animation	
Anima.Index	
Zoom	
Focus	
Frost	
Prism	
PrismIndex	
HeadTemp	These messages will appear if there is a temperature and/or fan malfunction.
CoolFan1	
CoolFan2	
CoolFan3	
CoolFan4	
BaseTemp	
BaseFan	

S P E C I F I C A T I O N S

SOURCE

305W 65000K RGBMA LED Engine. 92 CRI
30,000 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.

EFFECTS

Motorized Zoom
Variable Frost Filter
Rotating 4-Facet Prism
Motorized Iris
Variable 16-bit Dimming Curve Modes
High Speed Electronic Shutter and Strobe
DMX Controllable LED Refresh Rate Frequency

COLOR

RGBMA Color Array
CMY Emulation
Virtual Color Correction (2,400K - 8,500K)
Green / Magenta Shift
Virtual Gel Swatch Book

GOBOS

2 Gobo Wheels
12 Rotating / Indexing Interchangeable Glass Gobos
Animation Wheel

CONTROL / CONNECTIONS

4 DMX Channel Modes (RGBMA 31 / 41) (CMY 29 / 37)
16-bit Pan, Tilt, and Dimming Control
Motorized Focus
DMX, RDM Protocol Support
4 Button / Touch Screen Control Panel
Full Color 180° Reversible LCD Menu Display
5pin DMX In/Out
Neutrik powerCON TRUE1 Power In/Out
USB Connection (Firmware Updates)

SIZE / WEIGHT

Length: 16.06 in (408mm)
Width: 20.4 in (518.2mm)
Height: 27.48 in (698mm)
Weight: 54.0 lbs. (24.5kg)

ELECTRICAL / THERMAL

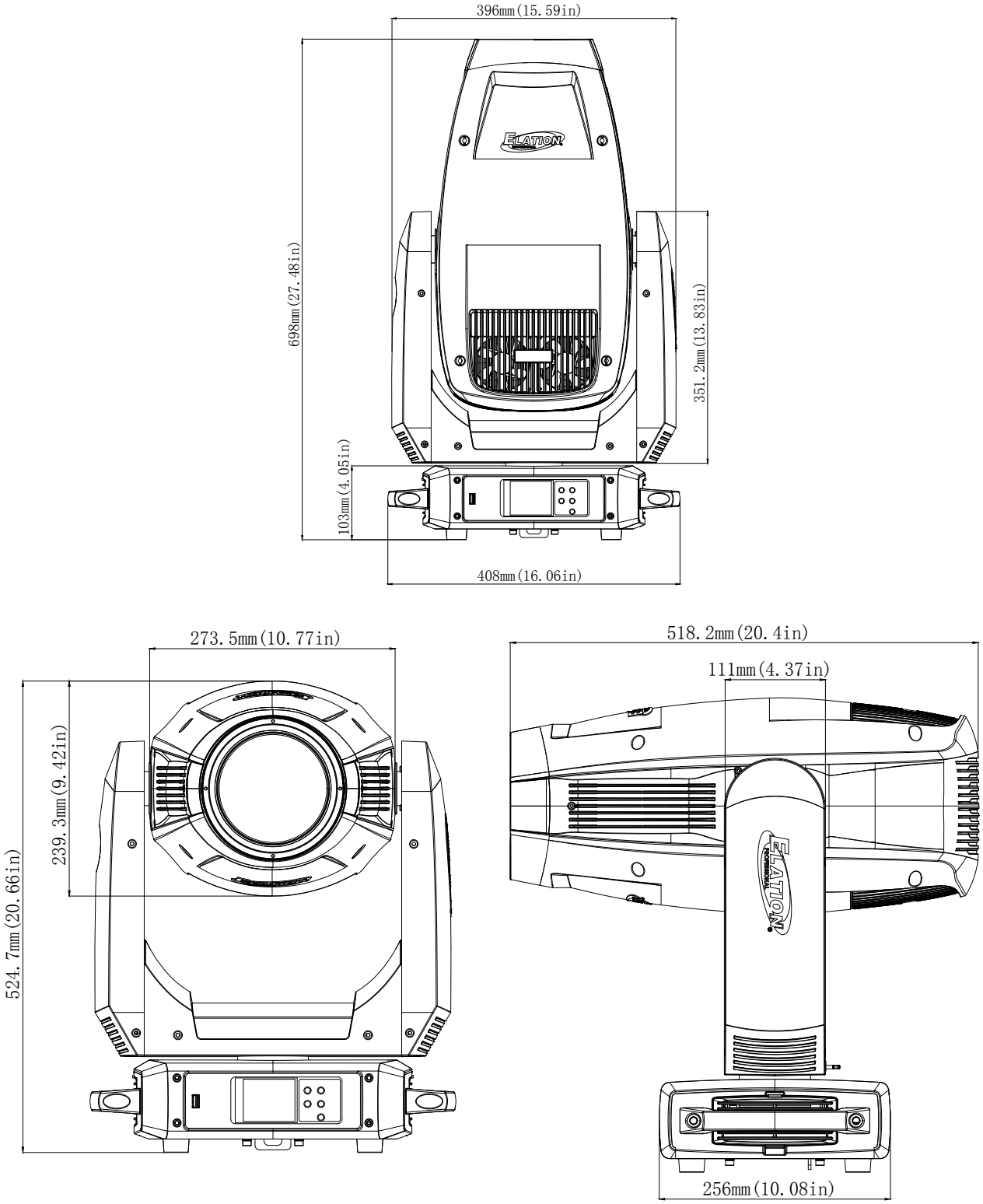
AC 100-240V - 50/60Hz
466W Max Power Consumption
14°F to 113°F (-10°C to 45°C)

APPROVALS / RATINGS

CE | IP30

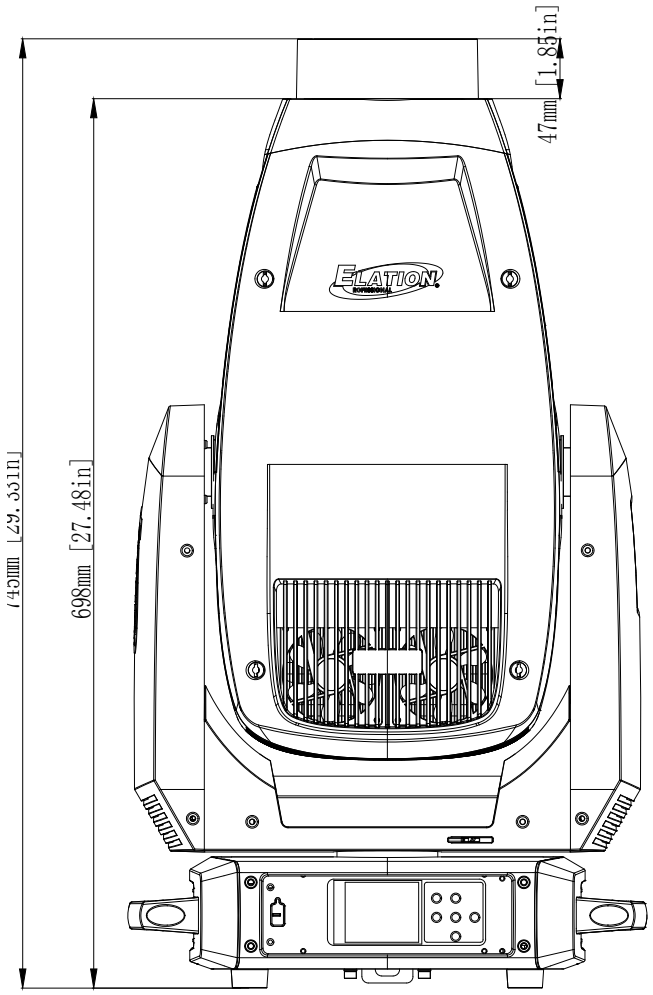
Specifications and improvements in the design of this unit and this manual are subject to change without notice.

DIMENSIONAL DRAWINGS (Not to Scale)



Specifications and improvements in the design of this unit and this manual are subject to change without notice.

DIMENSIONAL DRAWINGS – With Snoot Attached (Not to Scale)



Specifications and improvements in the design of this unit and this manual are subject to change without notice.

O P T I O N A L A C C E S S O R I E S

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.

Europe Energy Saving Notice

Energy Saving Matters (EuP 2009/125/EC)

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