ELATION®

FUZE SFX
FUZE SFX WH
user manual

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DOCUMENT VERSION

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

Date	Document Version	Software Version ≥	DMX Channel Modes	Notes
03/11/20	1.0	1.06	31 Channel	Initial release.
05/22/20	1.1	NC	No Change	Updated Installation Guide-lines.
07/14/20	1.2	NC	No Change	Updated Thermal
08/25/20	1.3	1.07	No Change	Updated primary / secondary
10/14/20	1.4	NC	No Change	Updated specifications
05/22/21	1.5	NC	No Change	Updated FCC statement
03/28/22	1.6	NC	No Change	Updated Cover
07/19/22	1.7	NC	No Change	Updated Format
02/20/23	1.8	NC	No Change	Updated System Menu, DMX Traits, Specifications
06/07/23	1.9	N/C	No Change	Updated rigging positions
06/25/24	2.0	1.0.16	No Change	Updated System Menu, DMX Traits, Specifications
12/11/25	2.1	N/C	No Change	Updated General Info, Speci-fications

CONTENTS

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 professional use only.**

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

Fixture (x1)
Omega Brackets (x2)
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 | support@elationlighting.com

ELATION SERVICE EUROPE - Monday - Friday 08:30 to 17:00 CET
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REPLACEMENT PARTS please visit parts.elationlighting.com

LIMITED WARRANTY

For up-to-date warranty information regarding your device, please visit Elation's warranty information page online or scan the QR codes below.

USA: https://www.elationlighting.com/warranty-information

EU: https://www.elationlighting.eu/terms_and_conditions

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.

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.

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.

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

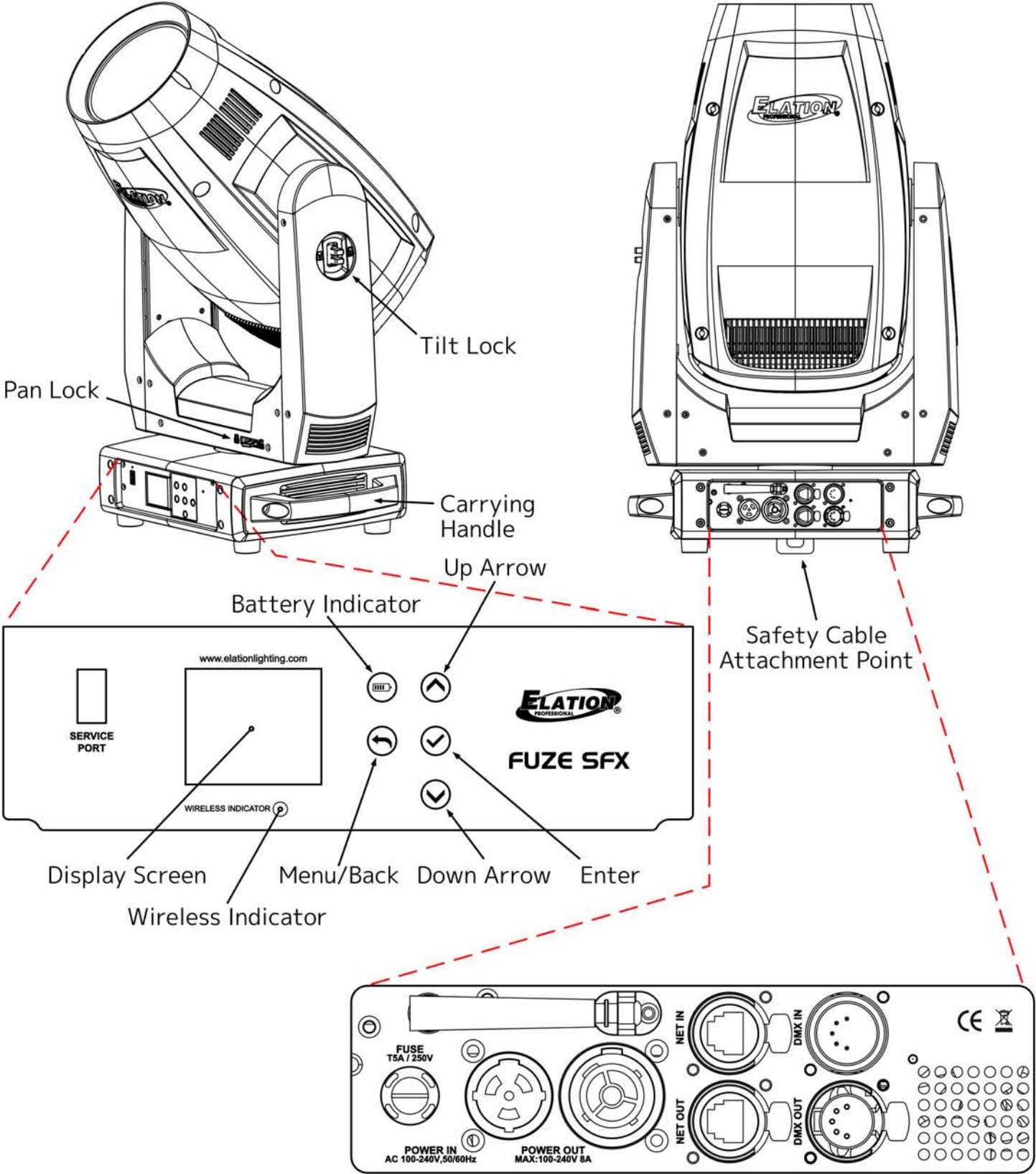Regular inspections are recommended to insure proper function and extended life.
There are no user serviceable parts inside this fixture, please refer all other service issues to an authorized Elation service technician. Should you need any spare parts, please order genuine parts from your local Elation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

OVERVIEW

Tilt Lock

Pan Lock

Carrying Handle

Up Arrow

Battery Indicator

Safety Cable Attachment Point

SERVICE PORT

www.elationlighting.com

ELATION PROFESSIONAL

FUZE SFX

WIRELESS INDICATOR

Display Screen

Wireless Indicator

Menu/Back

Down Arrow

Enter

FUSE T5A / 250V

POWER IN AC 100-240V,50/60Hz

POWER OUT MAX:100-240V 8A

NET IN

NET OUT

DMX IN

DMX OUT

CE

COLOR WHEEL

Slot Number	Color
1	Red
2	Warm Yellow
3	Medium Green
4	Orange
5	Pink
6	CTO
7	Medium Blue
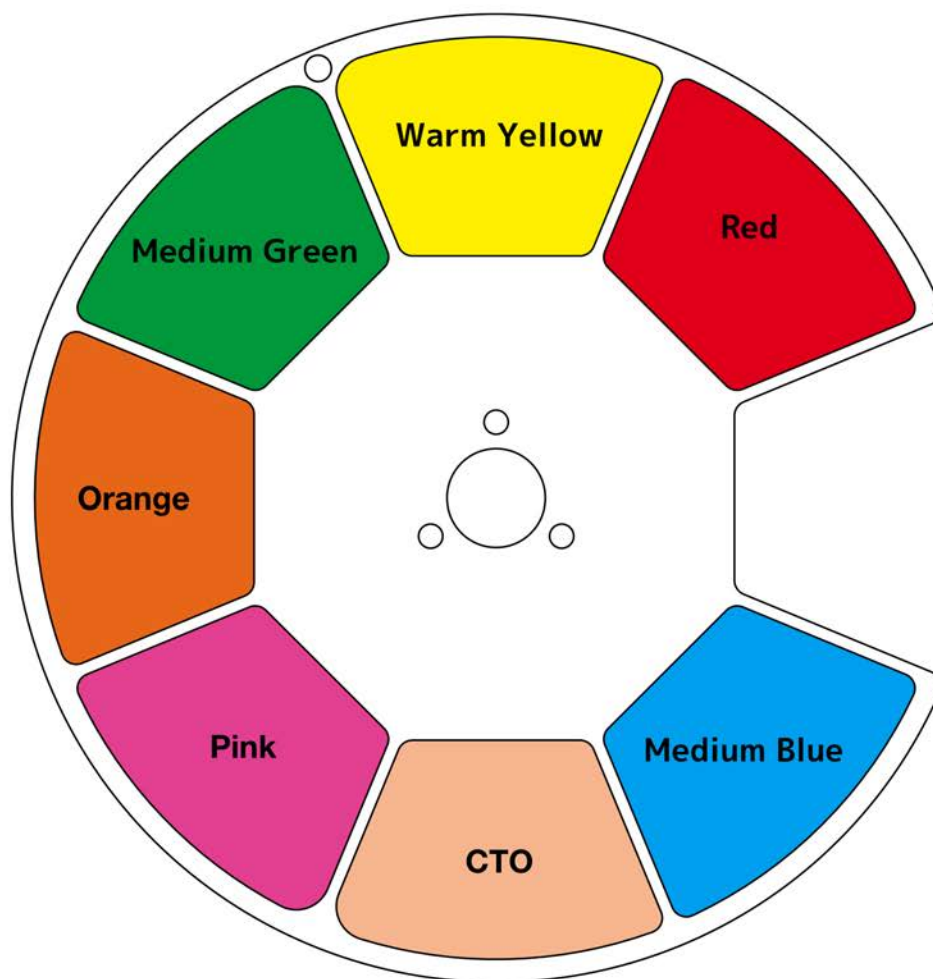
GOBO WHEELS

Gobo Wheel 1 (Rotating)

| 1 | 2 | 3 | 4 | 5 |

| 6 | 7 | 8 |

Gobo Wheel 2 (Static)
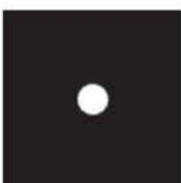
| 1 | 2 | 3 | 4 | 5 |

| 6 | 7 | 8 | 9 | 10 |

CUSTOM GOBOS

12.5 mm
GOBO MAX I.D.

16.4 mm
GOBO MAX O.D.
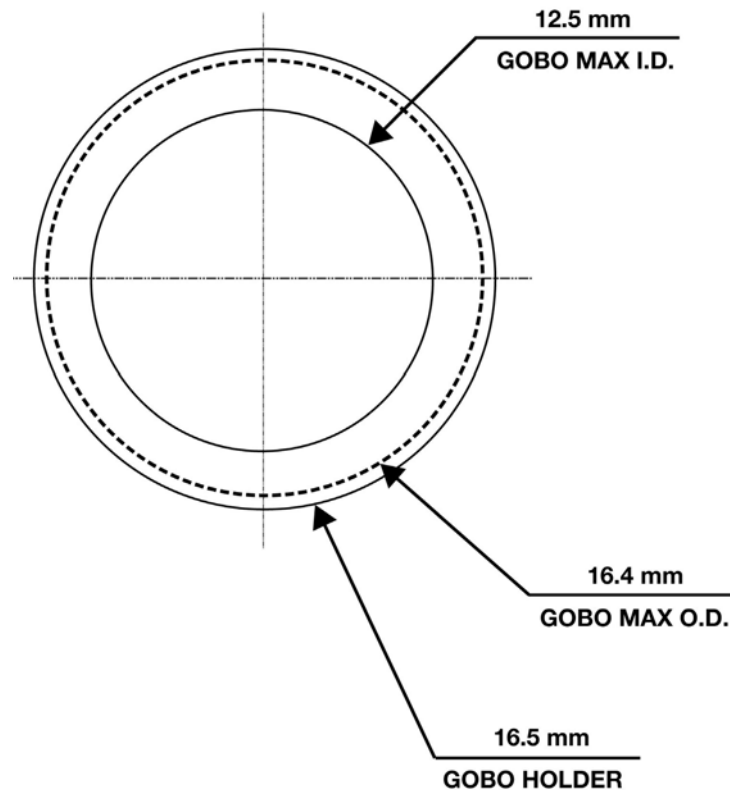
16.5 mm
GOBO HOLDER

FUZE SFX ROTATING GLASS GOBOS - WHEEL 1 ONLY	
Gobo O.D. (Max. Outer Diameter)	ø16.4mm
Gobo I.D. (Max. Image Diameter)	ø12.5mm
Gobo Holder Diameter	ø16.5mm
Gobo Material	Borofloat Glass

* * * 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 INSTALLATION

1. Place the fixture on a stable flat surface in a **DUST-FREE**, **INDOOR** location, and **ensure that the unit has been disconnected from power and given at least 15 minutes to cool down after powering down**. Engage both the Pan Lock (location shown at above left) and the Tilt Lock (location shown at above right). For the purposes of this procedure, we will assume that the head has been fixed in an upright position with the lens oriented upwards.
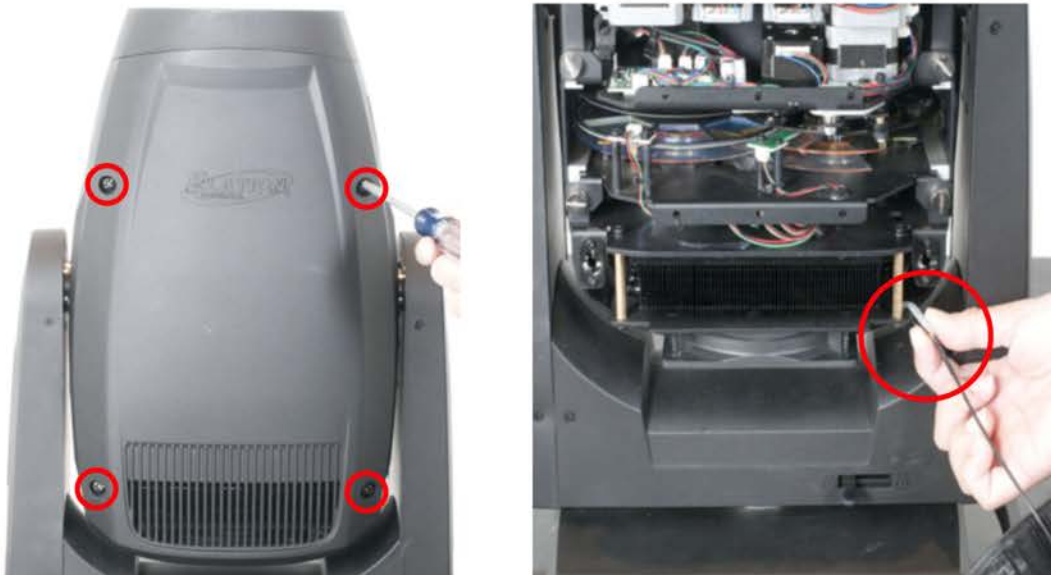
2. Use a Phillips head screwdriver to loosen the four (4) fasteners on each of the covers. **Please note that these fasteners are of the twist-lock variety, and do not come free of the covers**. Remove the safety cable clips securing each cover to the fixture.

GOBO INSTALLATION
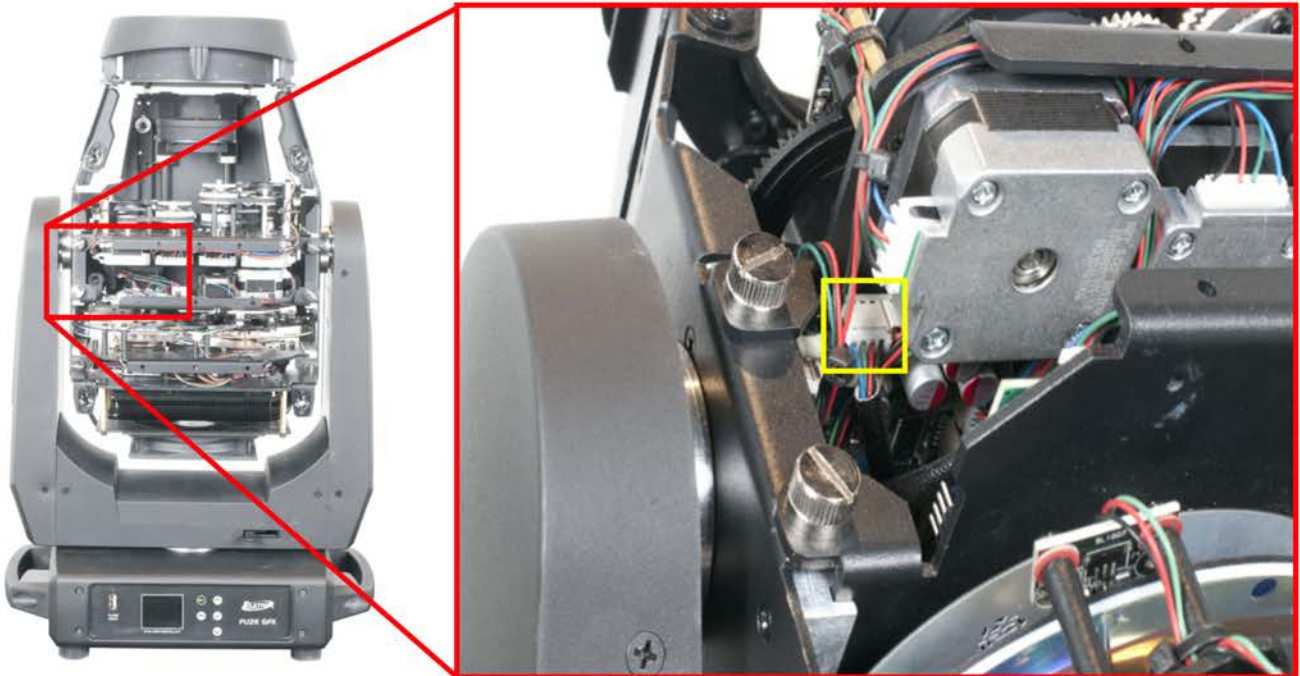
3. **Optional**. This step may be performed to help improve access to the gobo wheel module. On the prism module, find the 4-pin connector (denoted by the yellow box, above right) that is located behind the left-most electric motor, just beside the thumb screw on the left hand side of the prism module. Disconnect this connector.
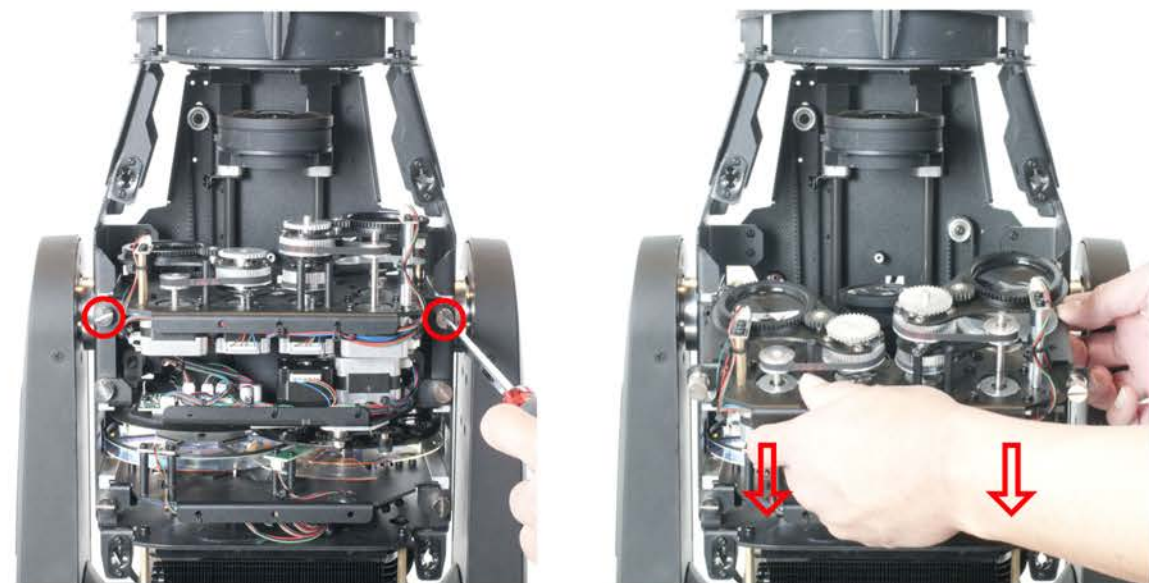
4. **Optional**. This step may be performed to help improve access to the gobo wheel module. Loosen the thumb screws for the prism module, and carefully slide the prism module out of its mounting slots. Set the prism module aside for later reinstallation.

GOBO INSTALLATION
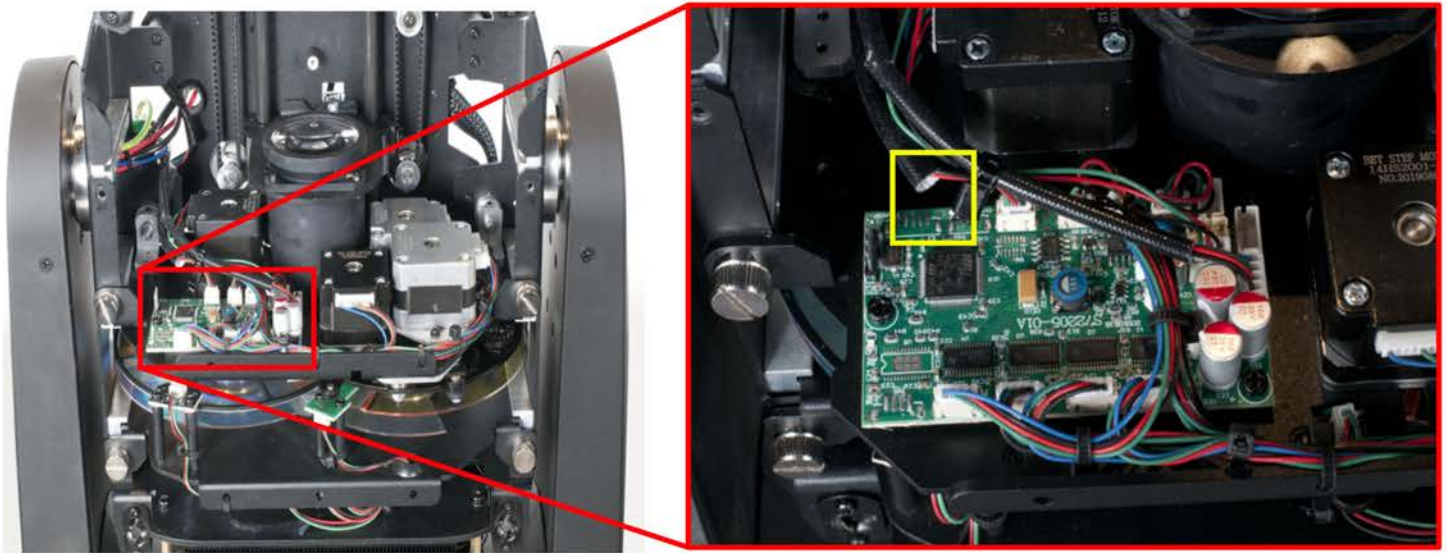
5. On the gobo wheel module, locate the circuit board on the left-hand side of the gobo wheel module, directly above the static gobo wheel. On this circuit board, find the 3-pin connector and the 4-pin connector (denoted by the yellow boxes, above right) located just behind a bank of three (3) capacitors, and disconnect both of these connectors.
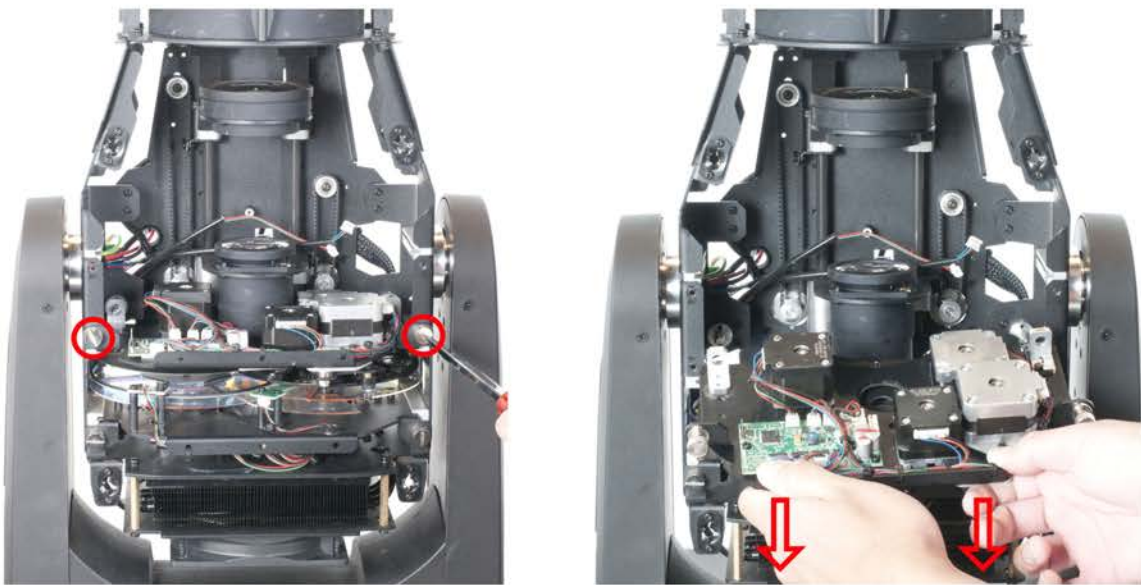
6. Loosen the thumb screws for the gobo wheel module, and carefully slide the gobo wheel module out of its mounting slots. Place the module on a flat, stable surface in a DUST-FREE, INDOOR location.

GOBO INSTALLATION
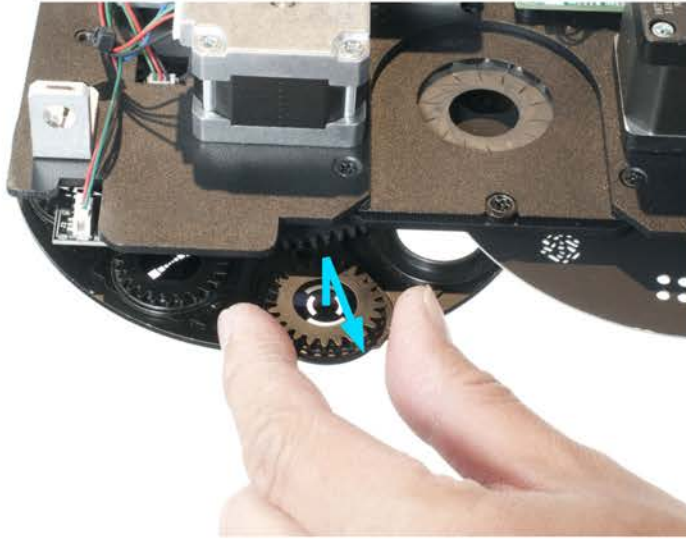
7. Locate the rotating gobo that will be replaced. Grip the edges of the geared gobo holder and gently lift (pictured at left) until the gobo holder clears the surface of the gobo wheel. Then pull the gobo holder out and away (pictured at right).
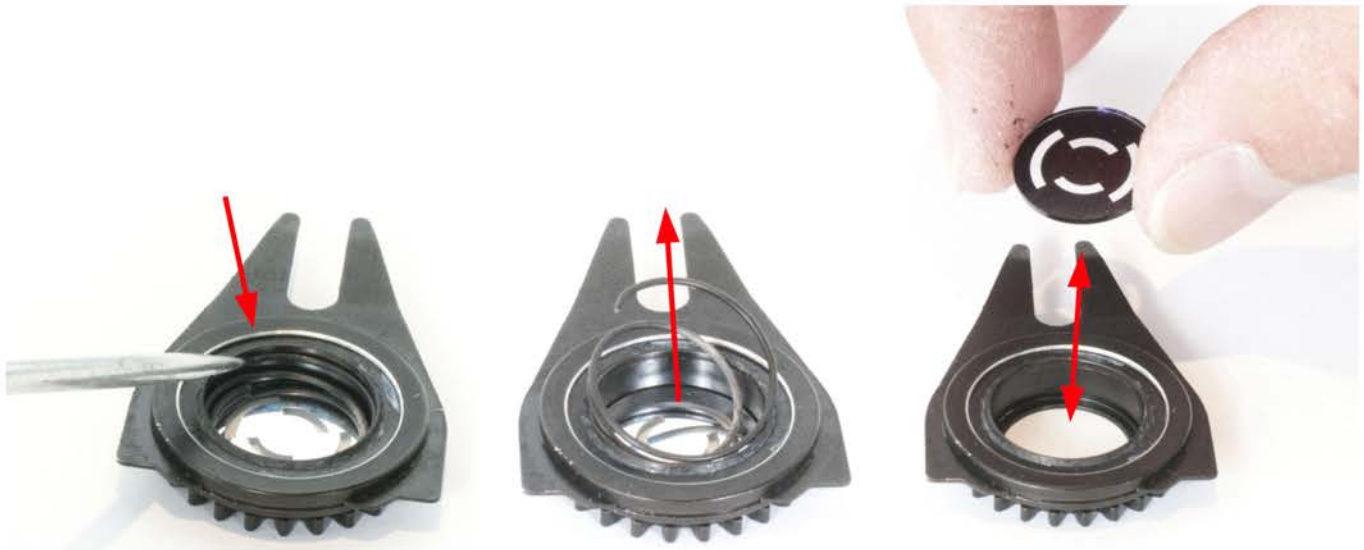
8. Place the gobo holder on a flat, level surface with the geared side down. Locate the tab of the spring, and use a precision pick (or similar tool) to push the spring tab inward. Remove the retaining spring and carefully separate the gobo from the gobo holder. **Exercise caution to avoid scratching the gobo**.

9. Install the new gobo and reassemble the fixture by following the steps above in reverse order.

GOBO INSTALLATION COMPLETE!

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 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.

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.
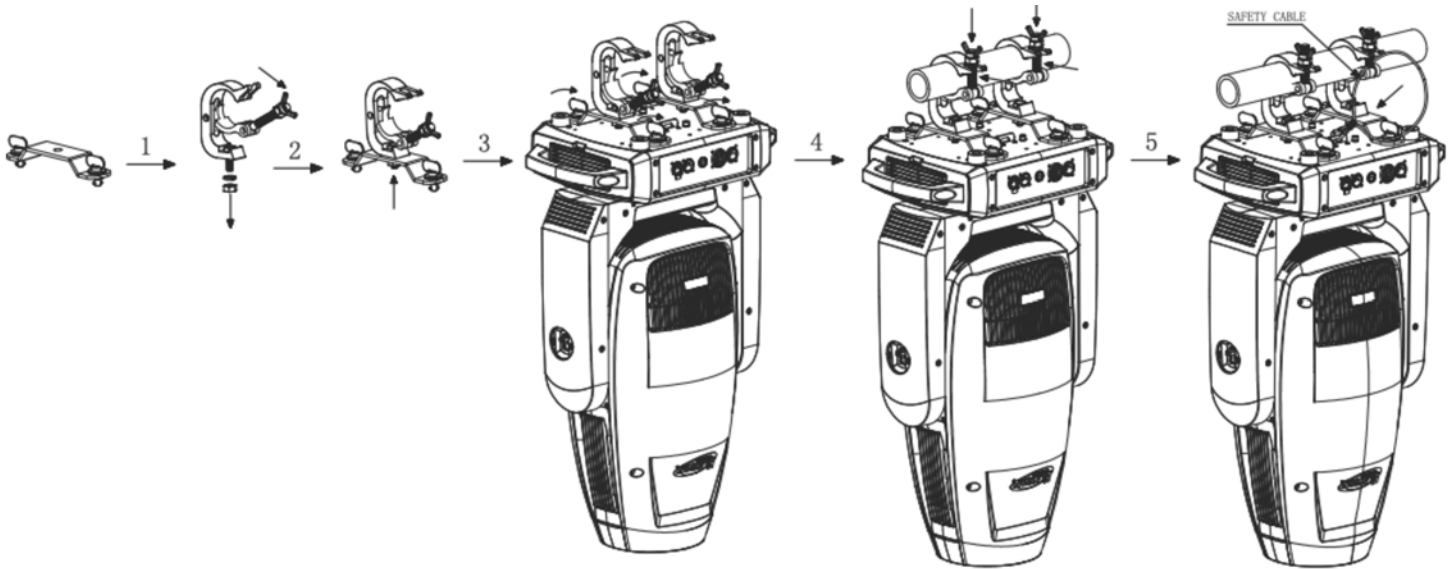
SAFETY CABLE
ALWAYS ATTACH A SAFETY CABLE WHENEVER INSTALLING THIS FIXTURE IN A SUSPENDED ENVIRONMENT TO ENSURE FIXTURE WILL NOT DROP IF MOUNTING / RIGGING HARDWARE FAILS

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.

INSTALLATION GUIDELINES

RIGGING

The Fuze SFX 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.
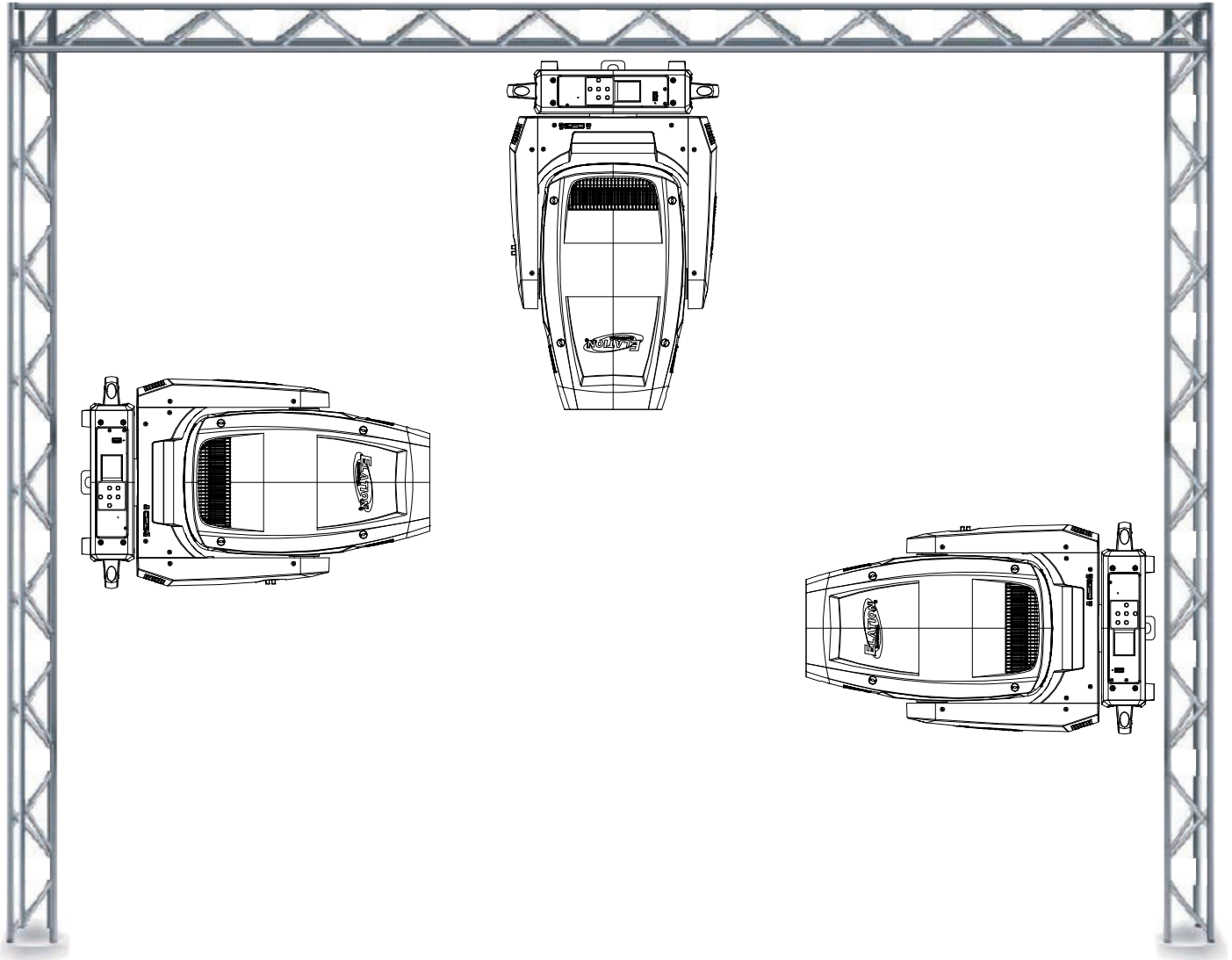
⚠️ **CAUTION:** Falling fixtures can cause severe injury or serious equipment damage! For this reason, fixtures should be installed and inspected only by qualified personnel. Do not install the unit if you lack the qualifications to do so, or if you have doubts about the safety and security of the installation setup or location!

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

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 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.
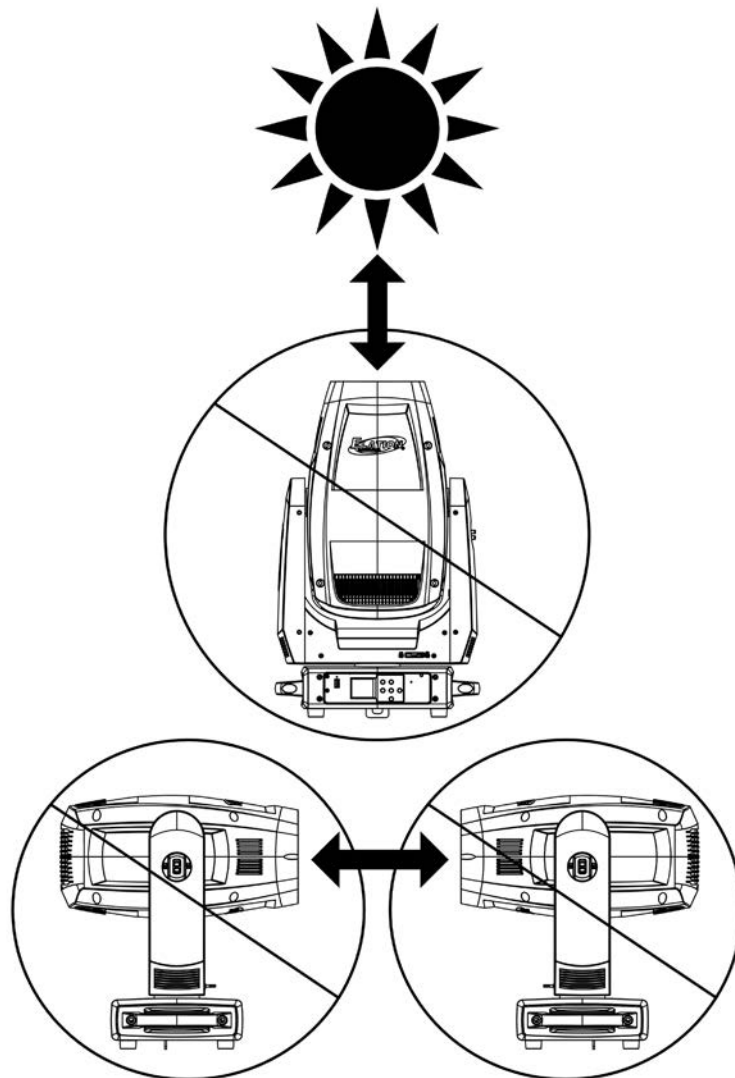
SYSTEM MENU

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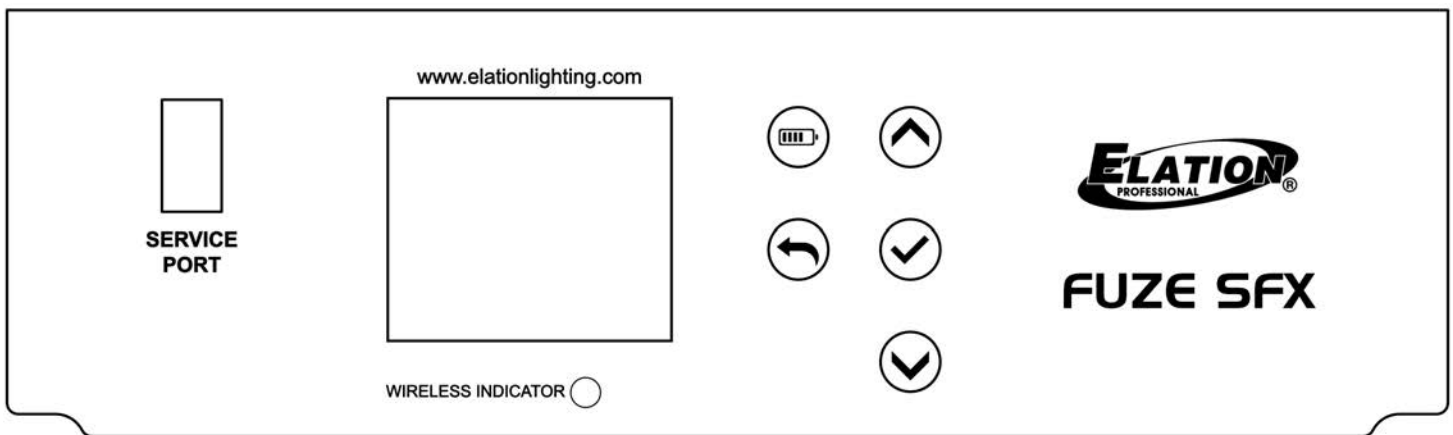
Note: An Elation C-Loader II can be used to update fixture software. Contact Elation Service for more information @ 323-582-3322 | support@elationlighting.com

To update software using a USB Flash Drive, please see page 25.

SYSTEM MENU

MAIN MENU	SUB MENU	OPTIONS / VALUES (Default Settings in **BOLD**)		DESCRIPTION
DMX Settings	DMX Address	**A001** - A512		
	No DMX Status	**Hold Last**		
		Blackout		
		Internal Programs		
PERSONALITY	Primary	On / **Off**		
	Secondary	**On** / Off		
	Status Settings	Pan Invert	On / **Off**	
		Tilt Invert	On / **Off**	
		P/T Feedback	**On** / Off	
		Pan Degree	**540**	
			630	
		P/T Speed	**Speed 1** - Speed 4	
		Hibernation	OFF, 01min - 99min, default = **15min**	
	CMY Mode	**Shortest Path** / Long Path		
	Fixture ID	Service Pin	Password = XXX (default password: 050)	
		Universe	**000** – 255	
		UnitIPAddr	002.xxx.xxx.002	
		Mask Addr	255.xxx.xxx.xxx	
	Protocol Set	**ArtNet**		
		sACN		
	Net Switch	**On** / Off		
	Fan Settings	**Auto**		
		High		
		Low		
		Studio		
		Mute		
	Dim Modes	**Standard**		
		Stage		
		TV		
		Architecture		
		Theatre		
		Stage 2		
		Dim Speed	0 s – 10 s	
	Dim Curves	**Linear**		
		Square		
		Inverse Square		
		S-Curve		

SYSTEM MENU

MAIN MENU	SUB MENU	OPTIONS / VALUES (Default Settings in **BOLD**)		DESCRIPTION
PERSONALITY	LED Refresh Rate	900Hz – 1500Hz (default **1200Hz**), 2500Hz, 4000Hz, 5000Hz, 6000Hz, 10KHz, 15KHz, 20KHz, 25KHz		
	E-FLY	On / **Off**		
	E-FLY CH	**CH 00** – CH 14		
	Reset Motors	Reset All Motors	**No** / Yes	
		Pan / Tilt Reset	**No** / Yes	
		Color Reset	**No** / Yes	
		Gobo Reset	**No** / Yes	
		Focus Reset	**No** / Yes	
		Other Reset	**No** / Yes	
	Display	Screen Saver Delay	Off, 1 min – 10 min (default **1 min**)	
		Screen Lock	On / **Off**	
		Rotate Display 180°	On / **Off**	
	Temp Unit	C / **F**		
	Service (Password: **050**)	Calibration	Pan	
			Tilt	
			Cyan Wheel	
			Magenta Wheel	
			Yellow Wheel	
			Color Wheel	
			Gobo Wheel	
			Gobo Rot. Wheel 1	
			Gobo Rot. Wheel 2	
			Gobo Rot. Wheel 3	
			Gobo Rot. Wheel 4	
			Gobo Rot. Wheel 5	
			Gobo Rot. Wheel 6	
			Gobo Rot. Wheel 7	
			Gobo Rot. Wheel 8	
			Fixed Gobo Wheel	
			Prism 1	
			Prism 1 Rot.	
			Prism 2	
			Prism 2 Rot.	
			Focus	
			Zoom	
			Iris	
			Frost	
			Focus Rot. Gobo 1	
			Focus Rot. Gobo 2	
			Focus Rot. Gobo 3	
			Focus Rot. Gobo 4	
			Focus Rot. Gobo 5	
			Focus Rot. Gobo 6	

SYSTEM MENU

MAIN MENU	SUB MENU	OPTIONS / VALUES (Default Settings in **BOLD**)		DESCRIPTION
PERSONALITY	Service (Password: **050**)	Calibration	Focus Rot. Gobo 7	
			Focus Rot. Gobo 8	
			Focus Fix Gobo 1	
			Focus Fix Gobo 2	
			Focus Fix Gobo 3	
			Focus Fix Gobo 4	
			Focus Fix Gobo 5	
			Focus Fix Gobo 6	
			Focus Fix Gobo 7	
			Focus Fix Gobo 8	
			Focus Fix Gobo 9	
			Focus Fix Gobo 10	
		USB Update	**No** / Yes	
		Factory Restore	**No** / Yes	
MANUAL CONTROL	Pan, Pan Fine, Tilt, Tilt Fine, Cyan, Cyan Fine, Magenta, Magenta Fine, Yellow, Yellow Fine, CMC Mix Mode, Color Wheel, Rotate Gobo, Gobo Index, Gobo Index Fine, Fixed Gobo Wheel, SFX, Prism1 Rot, Prism2 Rot, Focus, Focus Fine, Zoom, Zoom Fine, Strobe, Dimmer, Dimmer Fine, Dim Modes, Iris, Frost, P/T Speed, Control			
INTERNAL PROGRAMS	Program 1	Speed		
		Fade		
	Program 2	Speed		
		Fade		
	Program 3	Speed		
		Fade		
	...	...		
	Program 16	Speed		
		Fade		
INFORMATION	Fixture Life Time	Power On Time		
	Fixture Last Time	P-On Time-R		
		P-On Time Reset		
	Fixture Temps	LEDs	Current	
			Max Resettable	
			Max Not Resettable	
		Reset LED Temp		
		Base Temp	Current	
	Fan Info	LED Fan RPM	Fan1: xxxx RPM	
			Fan2: xxxx RPM	
		Base Fan RPM	Fan1: xxxx RPM	
			Fan2: xxxx RPM	
	DMX Values	Pan, Pan Fine, Tilt...		
	Product IDs	RDM UID	0x22A6-004xxxx	
	Error Logs	Fixture Errors	Error 1-10: Pan, Tilt, Cyanwheel...	
		Reset Error Log	**No** / Yes	
	Software Version	Vx.x.xx		

SOFTWARE UPDATE

Software Update Via USB for Single-Fixture or Multiple Linked Fixtures.

Contact Elation Service for updated software:
@323-582-3322 | support@elationlighting.com

Copy the latest software to a USB Flash Drive. With the software loaded on the USB Flash Drive, insert it into the USB Service Port.

With the USB Flash Drive inserted, select **MENU Personality** and press **ENTER**.

Select **Service**, and then enter the passcode, **050**, and press **ENTER**.

Select **Update Software**, and press **ENTER**, then select **YES**, and press **ENTER**.

Use the **UP** and **DOWN** buttons to select software, and press **ENTER**, then select **ON**, and press **ENTER**, at which time the software will begin loading.

Do not interrupt the process as it is loading.

Do not unplug the USB Flash Drive from the fixture as it is loading. Once it finished loading, the fixture will automatically enter a reset status. If the process of loading software is interrupted, the fixture will not run.

SOFTWARE UPDATE

Software Update Via USB for Single-Fixture Only.

Contact Elation Service for updated software:
@323-582-3322 | support@elationlighting.com

Copy the latest software to a USB Flash Drive. Ensure the fixture is turned off. With the fixture powered off, insert the USB Flash Drive into the USB Service Port, then power the fixture on. Select the desired software using the **UP** and **DOWN** buttons, and press **ENTER**.

Select **ON**, and press **ENTER**, at which time the software will begin loading.
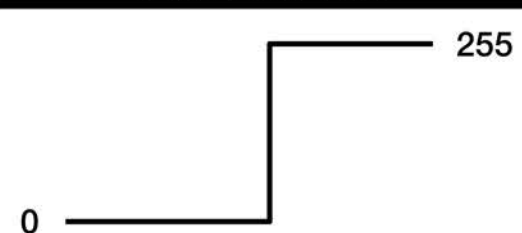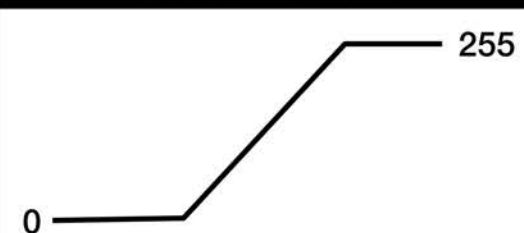
Do not interrupt the process as it is loading.

Do not unplug the USB Flash Drive from the fixture as it is loading. Once it finished loading, the fixture will automatically enter a reset status. If the process of loading software is interrupted, the fixture will not run.

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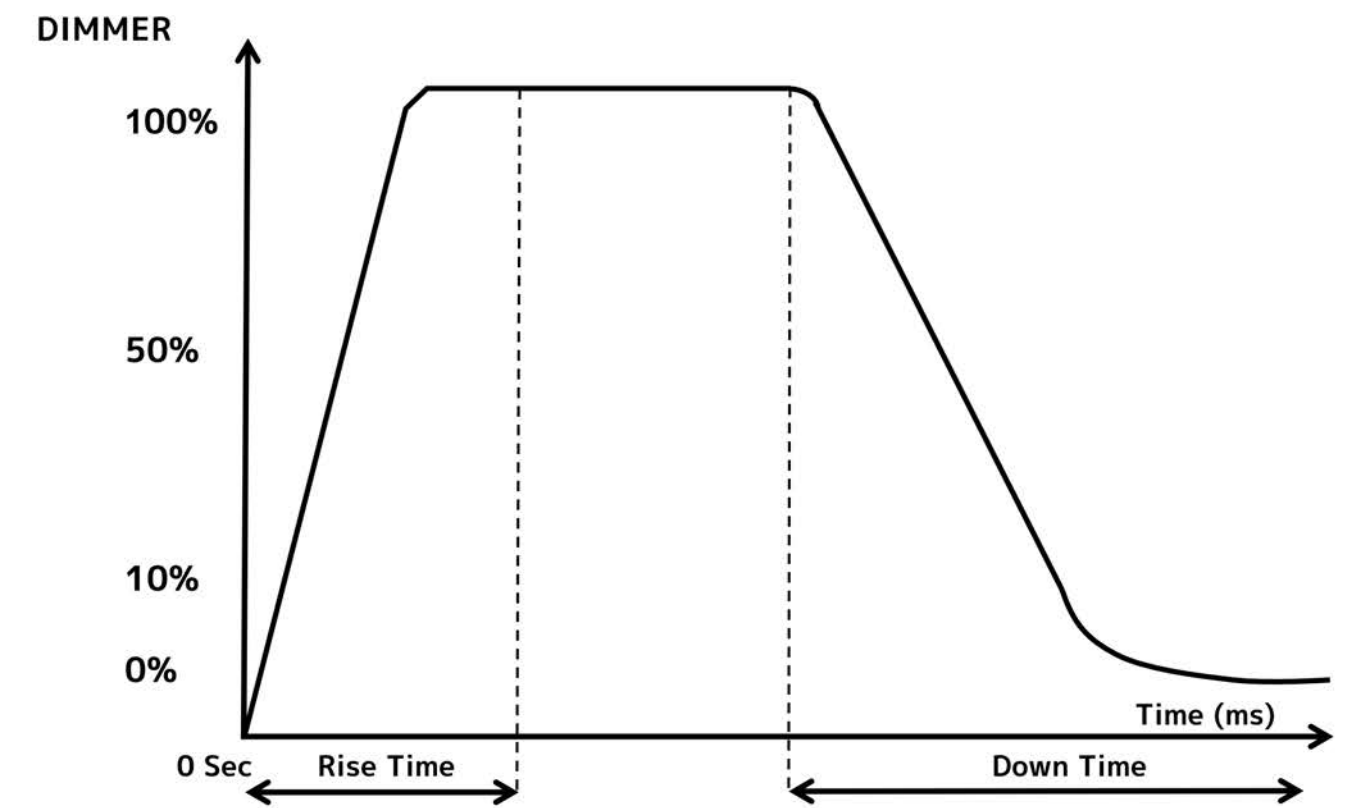
	0 sec Fade Time		1 sec Fade Time	
Dimming Curve Ramp Effect				
	Rise Time (ms)	Down Time (ms)	Rise Time (ms)	Down Time (ms)
Standard (default)	0	0	0	0
Stage	780	1100	1540	1660
TV	1180	1520	1860	1940
Architectural	1380	1730	2040	2120
Theatre	1580	1940	2230	2280

LINEAR

SQUARE

INVERSE SQUARE

S-CURVE
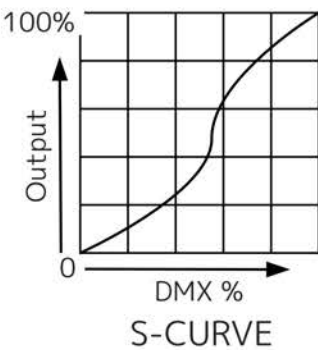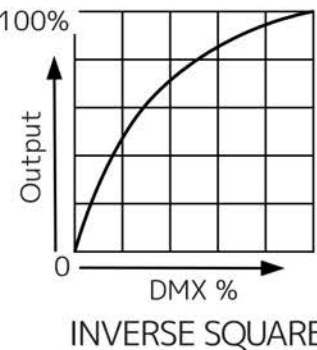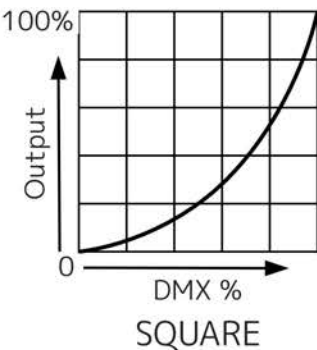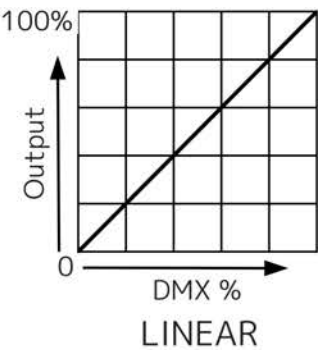
DMX TRAITS: CHANNEL FUNCTIONS AND VALUES

CHANNEL	VALUE	FUNCTION
1	000 – 255	**Pan Movement**
2	000 – 255	**Pan Movement Fine**
3	000 – 255	**Tilt Movement**
4	000 – 255	**Tilt Movement Fine**
5		**Cyan**
	Full	
	000 – 255	Cyan (0 – 100%)
	SFX	
	000 – 170	Cyan (0 – 100%)
	171 – 189	Cyan (100% - Open)
	190 – 221	Scroll Clockwise Fast to Slow
	222 – 223	Stop
	224 – 255	Scroll Counter-Clockwise Slow to Fast
6	000 – 255	**Cyan Fine Control**
7		**Magenta**
	Full	
	000 – 255	Magenta (0 – 100%)
	SFX	
	000 – 170	Magenta (0 – 100%)
	171 – 189	Magenta (100% - Open)
	190 – 221	Scroll Clockwise Fast to Slow
	222 – 223	Stop
	224 – 255	Scroll Counter-Clockwise Slow to Fast
8	000 – 255	**Magenta Fine Control**
9		**Yellow**
	Full	
	000 – 255	Yellow (0 – 100%)
	SFX	
	000 – 170	Yellow (0 – 100%)
	171 – 189	Yellow (100% - Open)
	190 – 221	Scroll Clockwise Fast to Slow
	222 – 223	Stop
	224 – 255	Scroll Counter-Clockwise Slow to Fast
10	000 – 255	**Yellow Fine Control**
11		**CMY Mix Mode**
	000 – 127	Full
	128 – 255	SFX

DMX TRAITS: CHANNEL FUNCTIONS AND VALUES

CHANNEL	VALUE	FUNCTION
		Color Wheel
	000 – 005	Open
	006 – 010	White/Red Split
	011 – 015	Red
	016 – 020	Red/Yellow Split
	021 – 025	Yellow
	026 – 030	Yellow/Green Split
	031 – 035	Green
	036 – 040	Green/Orange Split
	041 – 045	Orange
	046 – 050	Orange/Pink Split
	051 – 055	Pink
	056 – 060	Pink/CTO Split
	061 – 065	CTO
	066 – 070	High CRI
	071 – 075	CTO/High CRI Split
	076 – 080	CTO/Blue Split
12	081 – 085	Medium Blue
	086 – 090	Blue/White Split
	091 – 100	Open
		Combinations (see Combination Sheet for reference)
	101	Combo 1
	102	Combo 2
	103	Combo 3
	104	Combo 4
	105	Combo 5
	106	Combo 6
	107	Combo 7
	108	Combo 8
	109	Combo 9
	110	Combo 10
	111 – 127	Reserved
	128 – 189	Scroll Clockwise Fast to Slow
	190 – 193	Stop
	194 – 255	Scroll Counter-Clockwise Slow to Fast

DMX TRAITS: CHANNEL FUNCTIONS AND VALUES

CHANNEL	VALUE	FUNCTION
		Rotating Gobo
	000 – 005	Open
	006 – 012	Rotating Gobo 1
	013 – 019	Rotating Gobo 2
	020 – 026	Rotating Gobo 3
	027 – 033	Rotating Gobo 4
	034 – 040	Rotating Gobo 5
	041 – 047	Rotating Gobo 6
	048 – 054	Rotating Gobo 7
	055 – 061	Rotating Gobo 8
13	062 – 077	Rotating Gobo 1 Shake, Slow to Fast
	078 – 093	Rotating Gobo 2 Shake, Slow to Fast
	094 – 109	Rotating Gobo 3 Shake, Slow to Fast
	110 – 125	Rotating Gobo 4 Shake, Slow to Fast
	126 – 141	Rotating Gobo 5 Shake, Slow to Fast
	142 – 157	Rotating Gobo 6 Shake, Slow to Fast
	158 – 173	Rotating Gobo 7 Shake, Slow to Fast
	174 – 189	Rotating Gobo 8 Shake, Slow to Fast
	190 – 221	Scroll Clockwise, Fast to Slow
	222 – 223	Stop
	224 – 255	Scroll Counter-Clockwise, Slow to Fast
		Rotating Gobo Rotation Index
	000 – 127	Gobo Indexing
14	128 – 189	Clockwise Gobo Scroll, Fast to Slow
	190 – 193	No Rotation
	194 – 255	Counter-Clockwise Gobo Scroll, Slow to Fast
15	000 – 255	**Rotating Gobo Fine Indexing**
		Fixed Gobo
	000 - 005	Open
	006 – 014	Fixed Gobo 1
	015 – 023	Fixed Gobo 2
	024 – 032	Fixed Gobo 3
	033 – 041	Fixed Gobo 4
	042 – 050	Fixed Gobo 5
	051 – 059	Fixed Gobo 6
	060 – 068	Fixed Gobo 7
	069 – 077	Fixed Gobo 8
	078 – 086	Fixed Gobo 9
	087 – 095	Fixed Gobo 10
16	096 – 104	Fixed Gobo 1 Shake, Slow to Fast
	105 – 113	Fixed Gobo 2 Shake, Slow to Fast
	114 – 122	Fixed Gobo 3 Shake, Slow to Fast
	123 – 131	Fixed Gobo 4 Shake, Slow to Fast
	132 – 140	Fixed Gobo 5 Shake, Slow to Fast
	141 – 149	Fixed Gobo 6 Shake, Slow to Fast
	150 – 158	Fixed Gobo 7 Shake, Slow to Fast
	159 – 167	Fixed Gobo 8 Shake, Slow to Fast
	168 – 176	Fixed Gobo 9 Shake, Slow to Fast
	177 – 185	Fixed Gobo 10 Shake, Slow to Fast
	186 – 217	Scroll Clockwise, Fast to Slow
	218 – 223	Stop
	224 – 255	Scroll Counter-Clockwise, Slow to Fast

DMX TRAITS: CHANNEL FUNCTIONS AND VALUES

CHANNEL	VALUE	FUNCTION	DEFAULT	SNAP	HOLD
17		**SFX**	0	X	
	000 – 020	Open			
	021 – 040	Prism 1			
	041 – 060	Prism 2			
	061 – 080	Prism 1 + 2			
	081 – 100	Idle			
	101	SFX 1			
	102	SFX 2			
	...	...			
	200	SFX 100			
	201 – 255	Idle			
18		**Prism 1 Index / Rotation / SFX Speed**	0		
	000 – 127	Prism Indexing			
	128 – 189	Clockwise Prism Rotation, Fast to Slow			
	190 – 193	No Rotation			
	194 – 255	Counter-Clockwise Prism Rotation, Slow to Fast			
19		**Prism 2 Index / Rotation**	0		
	000 – 127	Prism Indexing			
	128 – 189	Clockwise Prism Rotation, Fast to Slow			
	190 – 193	No Rotation			
	194 – 255	Counter-Clockwise Prism Rotation, Slow to Fast			
20	000 – 255	**Focus Adjustment,** Near to Far	127		
21	000 – 255	**Fine Focus Adjustment**	0		
22	000 – 255	**Zoom Adjustment,** Out to In	127		
23	000 – 255	**Fine Zoom Adjustment**	0		
24		**Strobe**	50	X	
	000 – 031	Off (Shutter Closed)			
	032 – 063	No Function (Shutter Open)			
	064 – 095	Strobe Effect, Slow to Fast			
	096 – 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	000 – 255	**Dimmer Intensity, 0 to 100%**			
26	000 – 255	**Dimmer Fine**			

DMX TRAITS: CHANNEL FUNCTIONS AND VALUES

CHANNEL	VALUE	FUNCTION
		Dimmer Configuration
		Dim Modes
	000 – 020	Standard
	021 – 040	Stage
	041 – 060	TV
	061 – 080	Architectural
	081 – 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
27	127	0.6s
	128	0.7s
	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	10.0s
	142 – 255	Idle
		Iris
28	000 – 191	Iris Diameter, Maximum to Minimum
	192 – 223	Pulse Opening, Fast to Slow
	224 – 255	Pulse Closing, Slow to Fast
29	000 – 255	**Frost, Open to Full**
		Pan / Tilt and Color Speed
30	000 – 225	Speed, Maximum to Minimum
	226 – 235	Blackout by Movement
	236 – 245	Blackout by All Wheel Changing
	246 – 255	No Function

DMX TRAITS: CHANNEL FUNCTIONS AND VALUES

CHANNEL	VALUE	FUNCTION
		CONTROL
	000 – 009	Color Change Normal
	010 – 019	Color Change to Any Position
	020 – 029	Color & Gobo Change to Any Position
	030 – 034	Color Correct Gobo Disabled
	035 – 039	Color Correct Gobo Enabled
	040 – 044	Low Noise – Mute
	045 – 049	Low Noise – Studio
	050 – 059	Fan Control – Low
	060 – 069	Fan Control – High
	070 – 079	Fan Control – Auto (Default)
	080 – 084	Reset All Motors
	085 – 087	Pan / Tilt Reset
	088 – 090	Color Reset
	091 – 093	Gobo Reset
	094 – 096	Focus and Zoom Reset
	097 – 099	Reset Other Motors
		Refresh Rate
	100	900 Hz
31	101	910 Hz
	102	920 Hz
	103	930 Hz
	104	940 Hz
	105	950 Hz
	106	960 Hz
	107	970 Hz
	108	980 Hz
	109	990 Hz
	110	1000 Hz
	111	1010 Hz
	112	1020 Hz
	113	1030 Hz
	114	1040 Hz
	115	1050 Hz
	116	1060 Hz
	117	1070 Hz
	118	1080 Hz
	119	1090 Hz
	120	1100 Hz
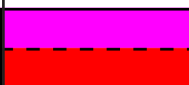
DMX TRAITS: CHANNEL FUNCTIONS AND VALUES

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

DMX TRAITS: CHANNEL FUNCTIONS AND VALUES

CHANNEL	VALUE	FUNCTION
31	161	2500 Hz
	162	4000 Hz
	163	5000 Hz
	164	6000 Hz
	165	10000 Hz
	166	15000 Hz
	167	20000 Hz
	168	25000 Hz
	169 – 174	CMY Mode Shortest Path
	175 – 179	CMY Mode Long Path
	180 – 190	Idle
	191 – 195	Hibernation OFF
	196 – 200	Hibernation ON
		DIMMER CURVE
	201 – 210	Linear (Default)
	211 – 220	Square
	221 – 230	Inverse Square
	231 – 240	S-Curve
	241 – 255	Idle

COLOR COMBINATION TABLE

COLOR COMBINATIONS					
COMBINATION	**IMAGE**	**CYAN**	**MAGENTA**	**YELLOW**	**COLOR WHEEL**
1		50% split	50% split	0%	Open
2		100%	50% split	0%	Open
3		50%	100% split	0%	Open
4		33% split	33% split	0%	Open
5		0%	50% split	50% split	Open
6		0%	50% split	100%	Open
7		0%	100%	50% split	Open
8		0%	33% split	33% split	Open
9		50% split	50% split	50% split	Open
10		33% split	33% split	0%	Yellow

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
0x22A6	0004-FFFF	4436	001 Extended (31)

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:

[0x0200] Sensor Definition
[0x0201] Sensor Value
[0x0080] Device Model Description
[0x0081] Manufacturer Label
[0x0082] Device Label
[0x00E0] DMX Personality
[0x00E1] DMX Personality Description
[0x0400] Device Hours
[0x0015] Comms Status
[0x0031] Status ID Description
[0x0032] Clear Status ID
[0x0405] Device Power Cycles
[0x0600] Pan Invert
[0x0601] Tilt Invert
[0x0602] Pan Tilt Swap
[0x0500] Display Invert
[0x0501] Display Level
[0x0603] Realtime Clock
[0x1010] Power State
[0x1031] Preset Playback
[0x0120] Slot Information
[0x0121] Slot Description
[0x0122] Default Slot Value
[0x00B0] Language
[0x00A0] Language Capabilities
[0x00C2] Boot Software Version Label
[0x00C1] Boot Software Version ID
[0x0070] Product Detail ID List
[0x0030] Status Messages
[0x000C] Undefined PID [0x000C, (12)]

ERROR CODES

ERROR CODES	DESCRIPTION
Error Codes subject to change without notice
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	

SPECIFICATIONS

SOURCE

300W 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

12,135 Total Lumen Output
CRI 68+
Zoom Range 4.5° - 38°
Beam Angle 4.6° - 38.2°
Field Angle 5.6° - 42.2°

EFFECTS

Motorized Zoom
Remote Focus
Variable Frost Filter
Dual Independent Prisms (6 Facet linear & 6 Facet round)
Motorized Iris
Variable 16-bit Dimming Curve Modes
High Speed Electronic Shutter and Strobe
Pan Angle: 540°/630°
Tilt Angle: 270°

COLOR

CMY Variable Color Mix
7 Position Color Wheel
High CRI Filter, CRI 84
CTO Filter, 3200K, CRI 77

GOBOS

2 Gobo Wheels
Wheel #1 with 8 Rotating / Interchangeable Glass Gobos
Wheel #2 with 10 Static Gobos

SPECIFICATIONS

CONTROL / CONNECTIONS

31 DMX Channels
16-bit Pan, Tilt, and Dimming Control
DMX Adjustable LED Frequency
4 Button Touch Control Panel
Full Color 180° Reversible LCD Menu Display
Locking 5pin XLR Connector In/Out
IP65 Locking Power Connector In/Out
USB Connection (Firmware Updates)
With Wired Digital Communication Network

SIZE / WEIGHT

Length: 14.3" (362mm)
Width: 9.2" (233mm)
Vertical Height: 23.4" (595mm)
Weight: 45.9 lbs. (20.8kg)

ELECTRICAL / THERMAL

AC 100-240V - 50/60Hz
432W Max Power Consumption
14°F to 113°F (-10°C to 45°C)
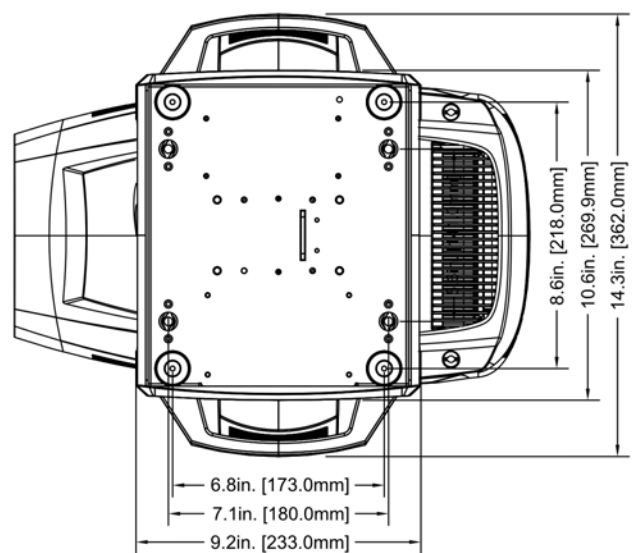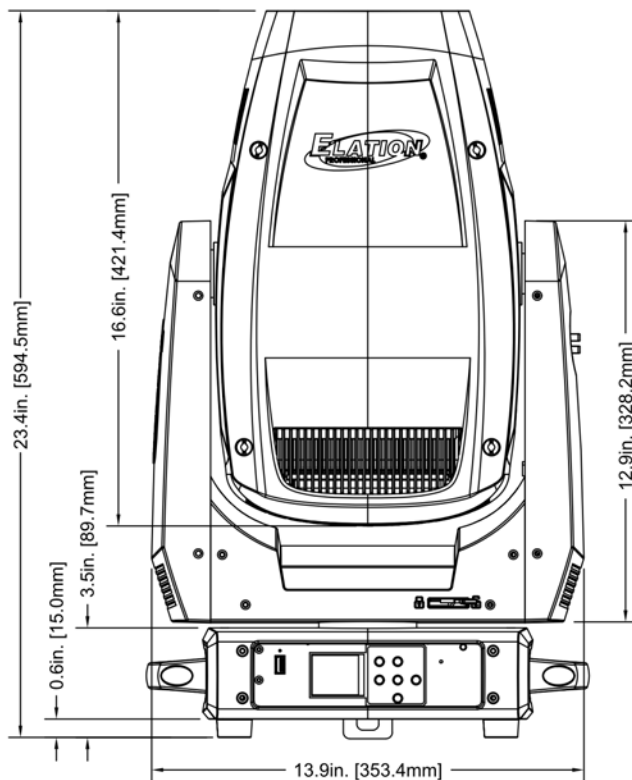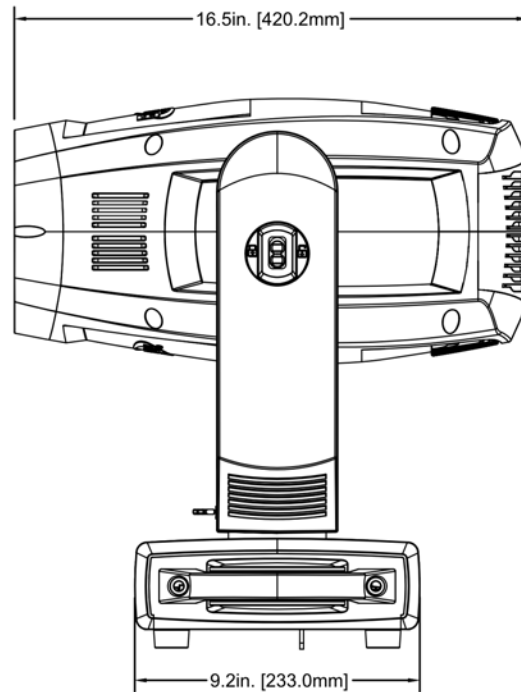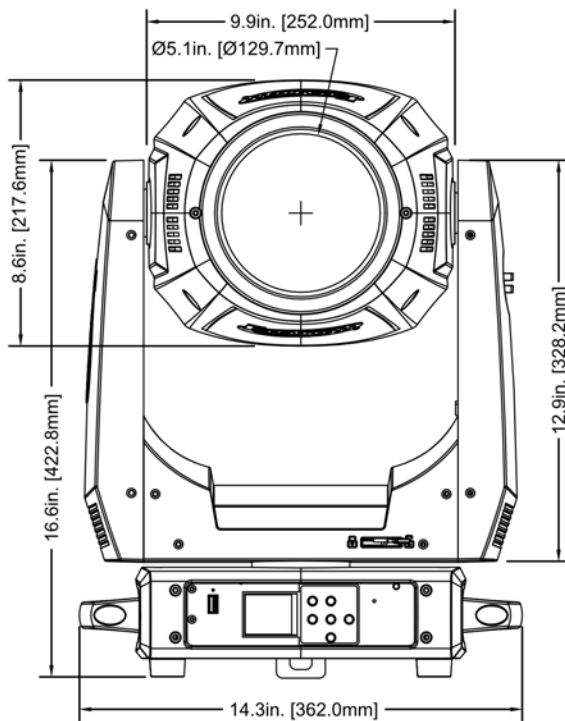BTU/hr (+/- 10%) 1473.12

APPROVALS / RATINGS

CE | cETLus | IP20
Specifications and documentation subject to change without notice.

DIMENSIONS

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

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.