ELATION

KL FRESNEL 6 FC PO

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.eu for the latest revision/update of this manual, before installation and/or programming.

Date	Document Version	Software Version	DMX Channel Mode	Notes
08/25/22	1.0	1.01	1 / 6 / 11 / 18 / 9 / 14 ch.	Initial Release
05/21/24	1.1	N/C	No Change	Updated Specifications
01/10/25	1.2	N/C	No Change	Updated Specifications

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 use by professionals only, and is not suitable for private use.**

UNPACKING
Every device has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton is damaged, carefully inspect the device for damage, and be sure all accessories necessary to install and operate the device have arrived intact. In the event that damage has been found or parts are missing, please contact our customer support team for further instructions. Please do not return this device to your dealer without first contacting customer support. Please do not discard the shipping carton in the trash. Please recycle whenever possible.

BOX CONTENTS
Power Cable (x1)
Gel Filter (x1)
Barndoor (x1)
Junior Pin (x1)

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

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

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REPLACEMENT PARTS please visit parts.elationlighting.com

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

LIMITED WARRANTY

A. Elation Professional hereby warrants, to the original purchaser, Elation Professional products to be free of manufacturing defects in material and workmanship for a period of two years (730 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 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 accompanied by 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 an R.A. number clearly marked on the outside of the package will be refused and returned at customer's expense. You may obtain an R.A. number by contacting customer support.

SAFETY GUIDELINES

This fixture is a sophisticated piece of electronic equipment. To guarantee 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 included with this fixture should be used for installation. Any modifications to the fixture and/or the included mounting hardware will void the original manufacturer's warranty and increase the risk of damage and/or personal injury.

PROTECTION CLASS 1 - FIXTURE MUST BE PROPERLY GROUNDED.

THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT. DO NOT ATTEMPT ANY REPAIRS YOURSELF, AS DOING SO WILL VOID YOUR MANUFACTURER'S WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS DEVICE 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 THIS UNIT INTO A DIMMER PACK!
NEVER OPERATE THIS UNIT WITH THE CASING REMOVED!
DISCONNECT POWER BEFORE PERFORMING MAINTENANCE!
NEVER TOUCH DURING OPERATION, AS FIXTURE SURFACES 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!

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

MINIMUM DISTANCE TO OBJECTS/SURFACES IS 1.0 FOOT (0.3 METER)
MINIMUM DISTANCE TO FLAMMABLE MATERIALS 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 the same 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 servicing.

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 ensure proper function, optimized light output, and an extended life. The frequency of cleaning depends on the environment in which the fixture operates: damp, smoky, or particularly dirty environments can cause greater accumulation of dirt on the fixture's optics. Clean periodically with a soft cloth to avoid dirt/debris accumulation.

NEVER use alcohol, solvents, or ammonia-based cleaners.

MAINTENANCE

Regular inspections are recommended to ensure proper function and extended life. There are no user serviceable parts inside this fixture. Please refer all 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 electrical check by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating.
- Be sure all screws and fasteners are securely tightened at all times. Loose screws may fall out during normal operation, resulting in damage or injury as larger parts could fall.
- Check for any deformations on the housing, 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

Mounting Yoke

Display Screen

3-pin DMX In

3-pin DMX Out

Update Port

Fuse

Power In

Power Out

5-pin DMX In

5-pin DMX Out

Zoom Adjustment Knob

Mode Button

Down Button

Up Button

Enter Button

Encoder Knob

Junior Pin

Safety Cable Loop

Accessory Slots

Pan Adjustment Knob

Tilt Adjustment Knob
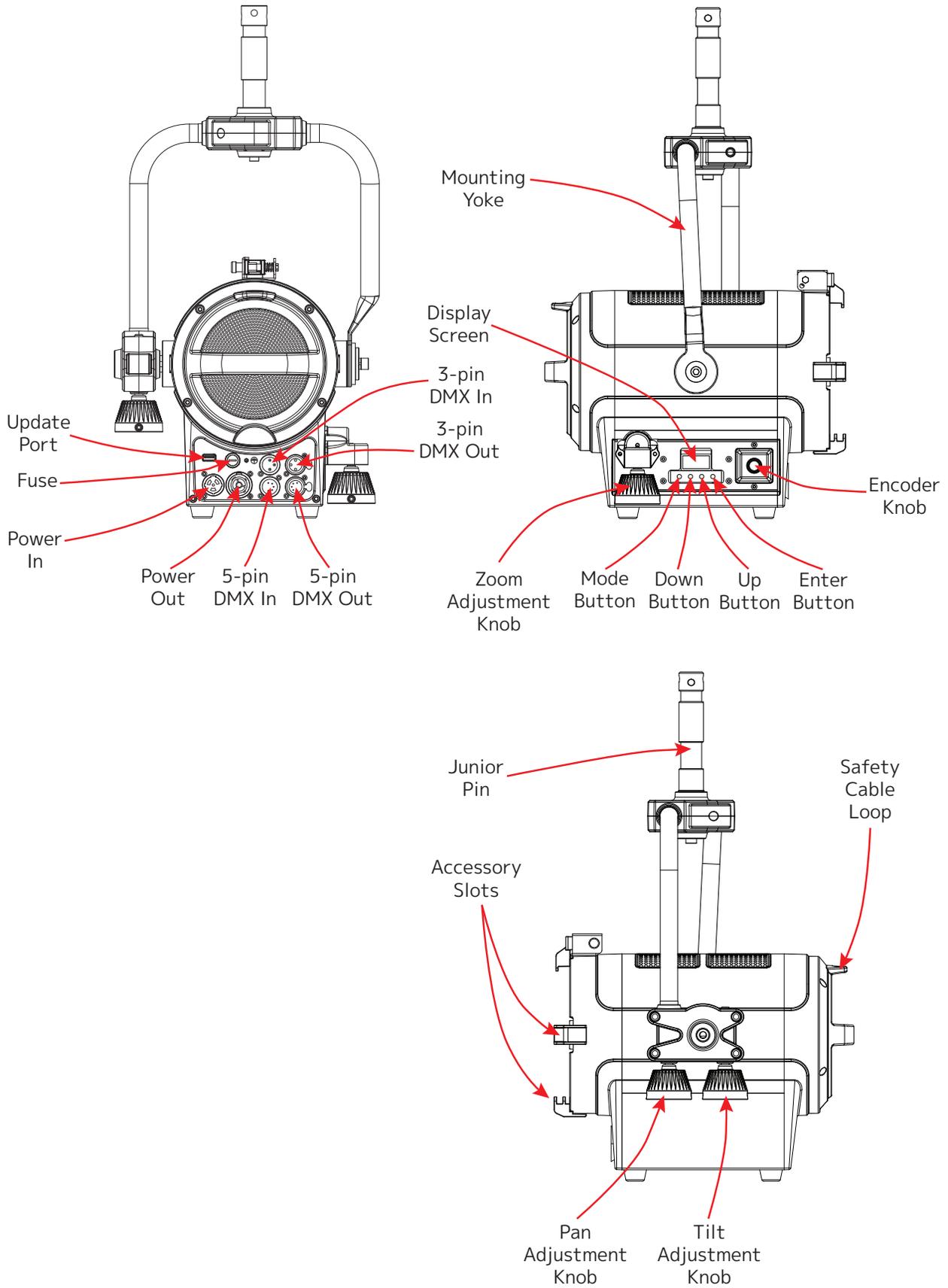
INSTALLATION INSTRUCTIONS

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.

MINIMUM DISTANCE TO OBJECTS/SURFACES IS 1 FOOT (0.3 METERS)
MINIMUM DISTANCE TO FLAMMABLE MATERIALS IS 1.6 FEET (0.5 METERS)
MAXIMUM AMBIENT OPERATING TEMPERATURE IS 113° F (45° C)

INDOOR USE ONLY! THIS DEVICE IS NOT INTENDED FOR OUTDOOR USAGE, OR EXPOSURE TO RAIN OR MOISTURE! USE OF THIS DEVICE OUTDOORS VOIDS YOUR MANUFACTURER'S WARRANTY!

DO NOT PERFORM THE INSTALLATION YOURSELF 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.

Maximum fixture ambient operating temperature is **113°F (45°C).** Do not operate this fixture when ambient temperature exceeds this rating.

Fixture(s) should be installed outside of walking paths, seating areas, or areas where 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 INSTRUCTIONS

RIGGING

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

CLAMP INSTALLATION

The included yoke bracket features a built-in attachment point for a junior pin, which in turn mates to a mounting clamp. The fixture itself also features a safety cable loop, located near the top of the rear panel, as shown in the illustration below. **Please note that the designated safety cable loop is the only safe location to attach a safety cable! Never attach a safety cable to the mounting clamp bracket!**

MOUNTING CLAMP

JUNIOR PIN
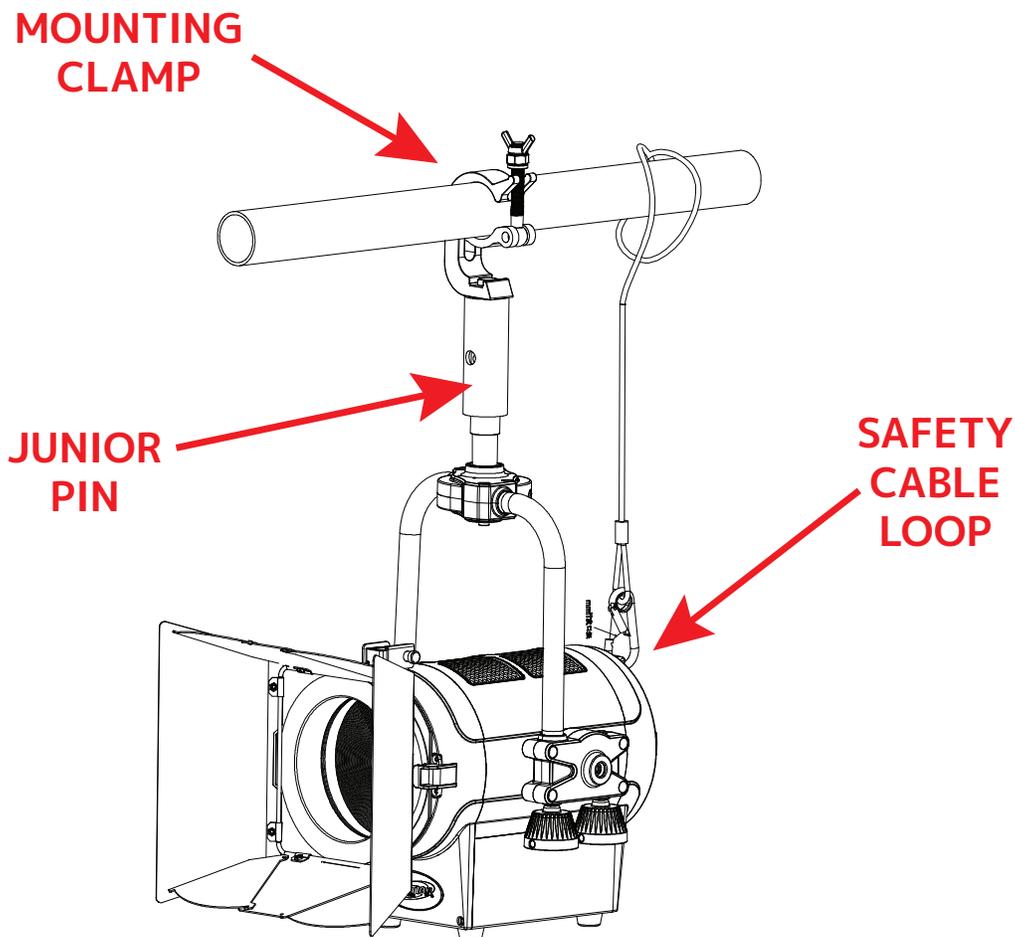
SAFETY CABLE LOOP

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

INSTALLATION INSTRUCTIONS

POTENTIAL INTERNAL FIXTURE DAMAGE FROM EXTERNAL SOURCES OF LIGHT BEAMS

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

This issue is not unique to Elation lighting fixtures, but rather it is a common issue with lighting fixtures from all manufacturers. Although there is no true way to completely prevent this issue from occurring, the guidelines below can reduce the risk of any potential damage 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 OR MOVING HEAD FIXTURES, AND LASERS DURING UNPACKING, INSTALLATION, USE, AND EXTENDED IDLE TIMES OUTDOORS. DO NOT FOCUS A LIGHT BEAM FROM ONE LIGHTING FIXTURE DIRECTLY TOWARDS ANOTHER.
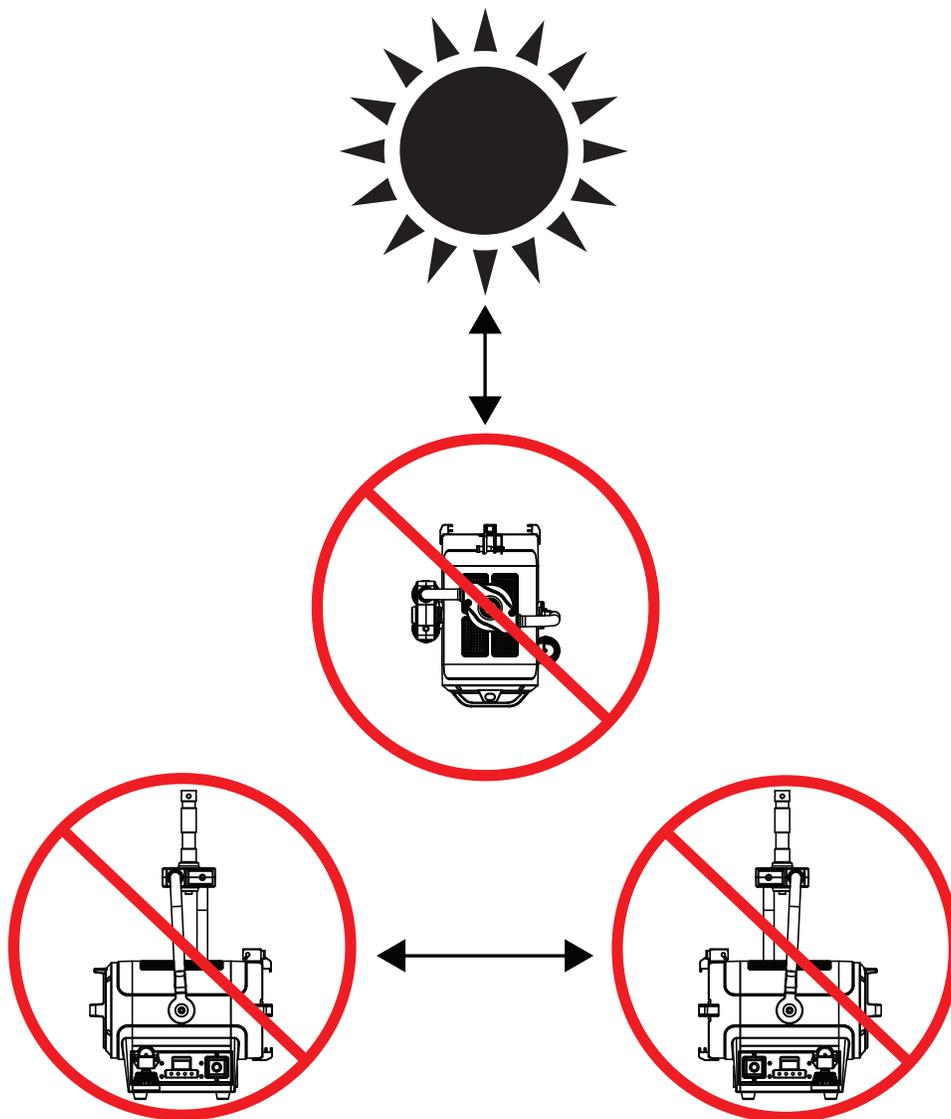
ACCESSORY INSTALLATION

GEL FILTER

This unit includes a gel filter accessory that can be installed or removed. To install, find the accessory slot latch positioned at the top of the lens, press the locking mechanism to unlock the latch, and swing the latch upwards (below left). Then simply slide the gel frame into the lens frame (below right), making sure to use the frame slot that is closest to the lens. Flip the lens frame latch back down to secure the gel frame in place.
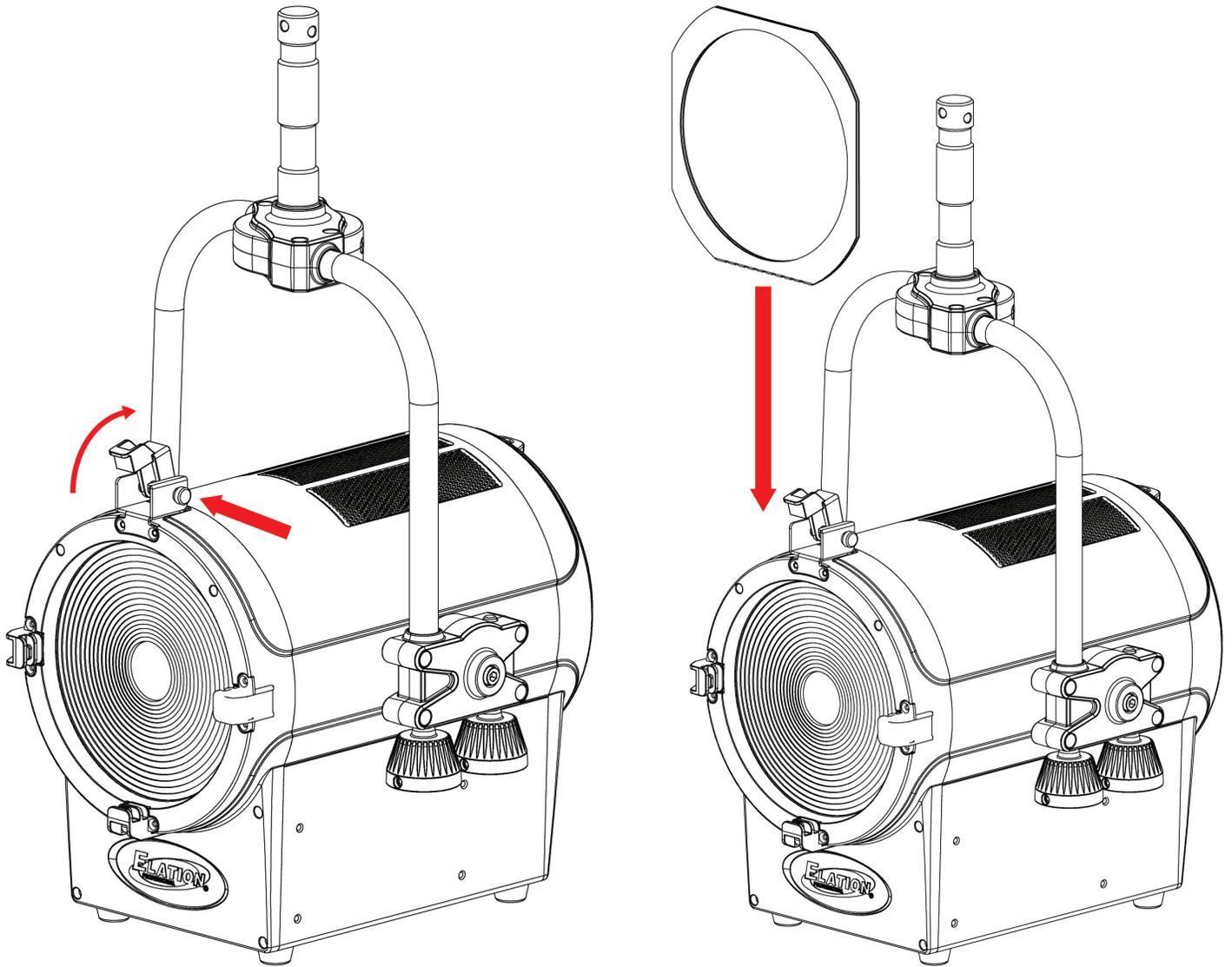
ACCESSORY INSTALLATION

BARNDOORS

This unit includes a barndoor accessory that can be installed or removed. To install, first find the accessory slot latch located at the top of the lens frame. Press the locking mechanism to unlock the latch, then swing the latch upwards (below left). Slide the barndoor into an open lens frame slot (below right). Flip the lens frame latch back down to secure the barndoor in place, then open the barndoor by pulling outward on the panels.
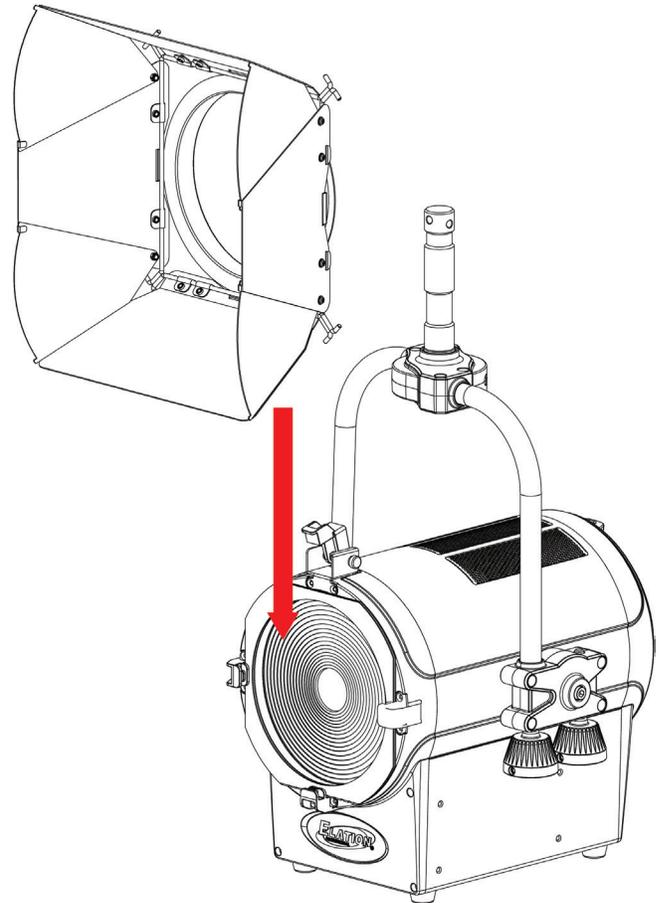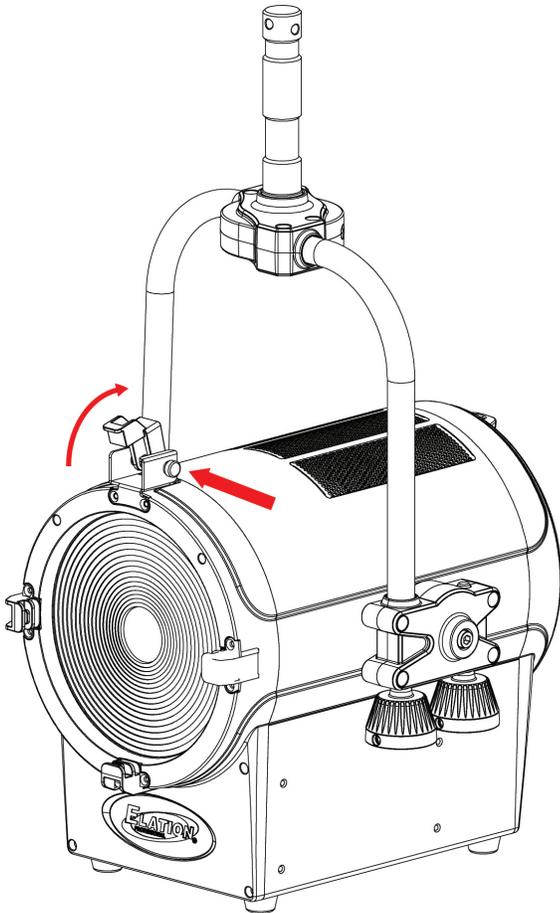
REMOTE DEVICE MANAGEMENT (RDM)

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 fixtures to be modified and monitored remotely. This protocol is ideal for instances in which a unit is installed in a location that is 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 its 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	002B	43	001 - 1Ch Dimmer 002 - 6Ch Dimmer Color 003 - 11Ch Standard 004 - 18Ch Extended 005 - 9Ch CMY 006 - 14Ch CMY Extended

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	[0x0405] Device Power Cycles
[0x0200] Sensor Definition	[0x0600] Pan Invert
[0x0201] Sensor Value	[0x0601] Tilt Invert
[0x0080] Device Model Description	[0x0602] Pan Tilt Swap
[0x0081] Manufacturer Label	[0x0500] Display Invert
[0x0082] Device Label	[0x0501] Display Level
[0x00E0] DMX Personality	[0x0603] Realtime Clock
[0x00E1] DMX Personality Description	[0x1010] Power State
[0x0400] Device Hours	[0x1031] Preset Playback
[0x0015] Comms Status	[0x0122] Default Slot Value
[0x0031] Status ID Description	[0x00B0] Language
[0x0032] Clear Status ID	[0x00A0] Language Capabilities
[0x0401] Lamp Hours	[0x00C2] Boot Software Version Label
[0x0402] Lamp Strikes	[0x00C1] Boot Software Version ID
[0x0403] Lamp State	[0x0070] Product Detail ID List
[0x0404] Lamp Mode	[0x0030] Status Messages

SYSTEM MENU

The fixture includes an easy to navigate system menu. The control panel display located on the side of the fixture (illustrated below) provides access to the main system menu where all necessary system adjustments are made to the fixture.

- During normal operation, pressing the MODE 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 DOWN and UP buttons.
- Once you reach a field that requires adjusting, press the ENTER button to activate that field and use the DOWN and UP buttons to adjust the field.
- Pressing the ENTER button once more will confirm the setting.
- Exit the main menu at any time without making any adjustments by pressing the MODE button.
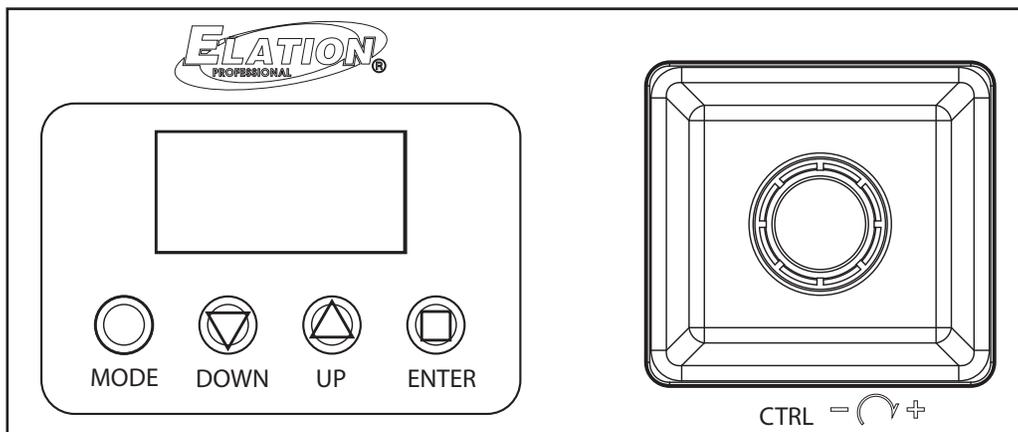
SCREEN LOCK
The screen will lock after a certain period of inactivity. The length of this time period is configurable in the System Menu, under Personality > Display > Display Screen Lock. To unlock the screen, press and hold the MODE button for 3 seconds.

WHITE BALANCE
The white balance menu can be accessed by pressing and holding the MODE, DOWN, and UP buttons simultaneously for 3 seconds. Please note that in this mode, the Color menu will be disabled, and the ColorTemp menu adjusts the color temperature white balance.

CONTROL KNOB
This device features an encoder knob located to the right of the display screen, which is labeled "CTRL." This encoder knob can be used to manually adjust dimming, CCT green shift, color saturation, or manual control. Twisting the knob will scroll through modes and sub-modes, or adjust the value of the select sub-mode, while pressing the button confirms the selection. Please see the **Encoder Knobs** section of this manual for detailed information.

SYSTEM MENU

ENCODER MODE	Disabled		
	Dimmer		
	Int CCT Grn		
	Int Color Sat		
	Manual Control		
DMX SETTINGS	DMX Address	001 - 512	
	DMX Mode	**1ch Dimmer**	
		6ch Dimmer Color	
		11ch Standard	
		18ch Extended	
		9ch CMY	
		14ch CMY Extended	
	No DMX Status	**Hold Last**	Defines reaction to loss or interruption of DMX signal
		Fade to Black	
		Standalone	
STANDALONE	Dimmer	**0%** - 100%	
	CCT	2400K - 8500K	Default = **6000K**
	Green Shift	-100% to +100%	Default = **0%**
	Virtual Color	**Color01** - Color53	Built in color program, see **Virtual Colors** section of this manual
PERSONALITY	Primary	On / **Off**	
	Secondary	On / **Off**	
	Dim Mode	Standard	
		Stage	
		TV	
		Architectural	
		Theatre	
		Stage 2	
		Dim Speed	0.0s - 10s	Default = **0.1s**
	Dim Curves	**Linear**	
		Square	
		Square Inverse	
		S-Curve	

SYSTEM MENU

	LED Refresh Rate	900-1500Hz, 2500Hz, 4000Hz, 5000Hz, 6000Hz, 10KHz, 15KHz, 20KHz, 25KHz			Default = **1200Hz**
	LED Power Limit	50%			
		60%			
		70%			
		80%			
		90%			
		100%			
	Fan Mode	**Auto**			
		Silent			
		High			
		Mute			
PERSONALITY (continued)	Display	Display Screen Delay	10s - 5min		Screen returns to home page after a period of inactivity; default = **1min**
		Display Screen Lock	**Off,** 10s - 5min		
		Rotate Display	Yes		
			No		
			Auto		Screen automatically rotates to keep display oriented upright
	Service	Passcode = 050	Calibration	Red 50-255	
				Green 50-255	
				Blue 50-255	
				...	
			Update Software	Yes / **No**	
			Factory Restore	Yes / **No**	
			Edit RDM UID	xxxxxx	

SYSTEM MENU

INFORMATION	Life Time	xxxxxx h			Total run hours. Not resettable
	Last Run Time	xxxxxx h			Run hours since last reset
	Time Reset	Passcode = 038			Reset run hours
	Temperature	Current			Current temp reading
		Max Resettable			Max temp since last reset
		Reset	Passcode = 038		Reset max temp
	DMX Values	R: xxx			
		G: xxx			
		B: xxx			
		...			
	Product IDs	RDM UID	xxxxxx		
	Error Logs	Fixture Errors (display one by one)			
		Reset Error Log	**No** / Yes	Passcode = 050	
	Software Version	Vx.x.x			

FAN CONTROL AND LOW NOISE OPERATION

The KL Fresnel 6 FC PO is a high-performance fixture suited for multiple applications. For noise critical environments such as Theater, Opera, or Orchestral Halls, it offers various fan operation modes which remove unwanted noise distractions for the audience and performers. Fan Modes can be changed remotely via the DMX control channel, allowing the fixture to offer high output or whisper-silent operation at a moment's notice. All Fan Modes smoothly transition over a brief period, preventing unwanted attraction to the fixture.

Auto (Default) – Fans only run at the speeds needed to keep the LED engine within a safe temperature range, and ensures optimal performance of the fixture. They will turn off if possible; for example, when the fixture is dimmed to a low intensity. Fans sense the ambient and fixture temperature and will, at all times, try to keep noise levels at a minimum. The fixture output will only be reduced when the LED engine cannot be cooled to its safe operating range due to a high ambient temperature.
NOTE: This mode is recommended for daily operation.

Silent – Fan speeds are reduced throughout the fixture for a lower noise profile. The fixture output is also reduced to approximately 80%. This mode should be sufficient for most uses where lower noise is required.

High – Fan speeds are increased throughout the fixture for the most efficient cooling. This mode will increase wear on the fans and should only be utilized in exceptional circumstances. Fans will always run, even if the fixture is dimmed. Fixture output is kept at 100% unless the LED engine temperature reaches an unsafe temperature, at which point the fixture will reduce power carefully to ensure continued safe operation. This mode is only required in very high ambient temperatures when automatic fan speed adjustments are not desired.

Low Noise Modes
For very critical noise environments, the fixture offers two additional Low Noise Modes for silent operation. The fixture output will be reduced, yet due to the extremely high luminous flux, the fixture still offers outstanding performance. In Low Noise Modes, all parameters of the fixture operate more quietly with reduced fan speeds.

Mute – All but one fixture fan is turned off for whisper-quiet operation. The fixture LED power output is reduced to 25%.

ENCODER KNOB

When the device has been set to Encoder mode, the lighting display can be adjusted using the knob located beside the display screen on the side of the device.

To enter Encoder mode, select the ENCODER MODE option from the main system menu, as described in the System Menu section of this manual. Then use the UP and DOWN buttons to scroll through the different modes. Press ENTER to select the mode that is currently displayed.

Once an Encoder Mode has been selected, press the knob to cycle through the available Parameter options. When the desired Parameter is displayed on the screen, simply turn the knob to adjust the value of that Parameter.

Encoder Knob
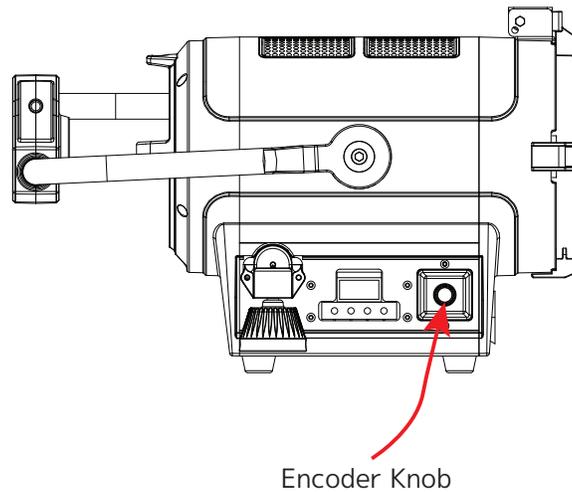
MODE	PARAMETER	DISPLAY	RESOLUTION/ STEPS	DEFAULT
Dimmer	Intensity	Intensity 0-100%	1%	0%
Int CCT Grn	Intensity	Intensity 0-100%	1%	0%
	Color Temperature	CCT 2400-8500K	100K	6000K
	Green Shift	GRN -100% to +100%	1%	Neutral
Int Color Sat	Intensity	Intensity 0-100%	1%	0%
	Color	Virtual Color 1-53	Single Color	-
	Saturation	Sat 0-100%	1%	100%
Manual Control	Intensity	Intensity 0-100%	1%	100%
	Strobe	Strone 0-255	1	0
	Red	Red 0-255	1	0
	Green	Green 0-255	1	0
	Blue	Blue 0-255	1	0
	Mint	Mint 0-255	1	0
	Amber	Amber 0-255	1	0

DMX TRAITS

CHANNEL						DMX VALUES	FUNCTION
1ch Dim.	6ch Dim. Color	11ch St.	18ch Ext.	9ch CMY	14ch CMY Ext.		
1	1	1	1	1	1	000 - 255	**Dimmer,** 0% to 100%
	2	2	2	2	2	000 - 255	**Dimmer Fine**
	3	3	3	3	3		**Shutter, strobe**
						000 - 031	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)
				4	4	000 - 255	**Cyan,** 0% to 100%
					5	000 - 255	**Cyan Fine**
				5	6	000 - 255	**Magenta,** 0% to 100%
					7	000 - 255	**Magenta Fine**
				6	8	000 - 255	**Yellow,** 0% to 100%
					9	000 - 255	**Yellow Fine**
		4	4			000 - 255	**Red,** 0% to 100%
			5			000 - 255	**Red Fine**
		5	6			000 - 255	**Green,** 0% to 100%
			7			000 - 255	**Green Fine**
		6	8			000 - 255	**Blue,** 0% to 100%
			9			000 - 255	**Blue Fine**
		7	10			000 - 255	**Mint,** 0% to 100%
			11			000 - 255	**Mint Fine**
		8	12			000 - 255	**Amber,** 0% to 100%
			13			000 - 255	**Amber Fine**
	4	9	14	7	10		**CTO**
						000 - 023	Open
						024 - 085	CTO, 2400K - 8500K (see **Color Temperature** section of this manual)
						086 - 255	8500K

CONTINUED ON NEXT PAGE

DMX TRAITS

CHANNEL						DMX VALUES	FUNCTION
1ch Dim.	6ch Dim. Color	11ch St.	18ch Ext.	9ch CMY	14ch CMY Ext.		
5	10	15	8	11			**Color Wheel**
						000	Open
						001 - 179	Virtual Swatch Book (see **Virtual Colors** section of this manual)
							Color Scroll
						180 - 201	Clockwise, fast to slow
						202 - 207	Stop
						208 - 229	Counter-clockwise, slow to fast
						230 - 234	Open
							Random Slots
						235 - 239	Fast
						240 - 244	Medium
						245 - 249	Slow
						250 - 255	Open
			16		12		**Green Shift**
						000	Idle
						001 - 127	Full Minus Green to Neutral
						128	Neutral White
						129 - 255	Neutral to Full Plus Green
			17		13		**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	0s
						122	0.1s
						123	0.2s
						124	0.3s
						125	0.4s
						126	0.5s
						127	0.6s
						128	0.7s

DMX TRAITS

CHANNEL						DMX VALUES	FUNCTION
1ch Dim.	6ch Dim. Color	11ch St.	18ch Ext.	9ch CMY	14ch CMY Ext.		
							Dimmer Delay time (continued)
						129	0.8s
						130	0.9s
						131	1.0s
						132	1.5s
						133	2.0s
						134	3.0s
			17		13	135	4.0s
						136	5.0s
						137	6.0s
						138	7.0s
						139	8.0s
						140	9.0s
						141	10s
						142 - 255	Idle
							Control
						000 - 029	Idle
						030 - 039	Fan Mode Auto
						040 - 049	Fan Mode Silent
						050 - 059	Fan Mode High
						060 - 069	Fan Mode Mute
						070 - 099	Idle
							Refresh Rate
						100	900 Hz
						101	910 Hz
6	11	18	9	14		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

DMX TRAITS

CHANNEL						DMX VALUES	FUNCTION
1ch Dim.	6ch Dim. Color	11ch St.	18ch Ext.	9ch CMY	14ch CMY Ext.		
							Refresh Rates (continued)
						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
						121	1110 Hz
						122	1120 Hz
						123	1130 Hz
						124	1140 Hz
						125	1150 Hz
						126	1160 Hz
	6	11	18	9	14	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
CONTINUED ON NEXT PAGE							

DMX TRAITS

CHANNEL						DMX VALUES	FUNCTION
1ch Dim.	6ch Dim. Color	11ch St.	18ch Ext.	9ch CMY	14ch CMY Ext.		
							Refresh Rates (continued)
						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
	6	11	18	9	14	159	1490 Hz
						160	1500 Hz
						161	2500 Hz
						162	4000 Hz
						163	5000 Hz
						164	6000 Hz
						165	10,000 Hz
						166	15,000 Hz
						167	20,000 Hz
						168	25,000 Hz
						169 - 200	Idle
							Dimmer Curve
						201 - 210	Linear
						211 - 220	Square
						221 - 230	Inverse Square
						231 - 240	S-Curve
						241 - 255	Idle

COLOR TEMPERATURE TABLE

DMX VALUE	COLOR TEMP (K)	DMX VALUE	COLOR TEMP (K)
024	2400	055	5500
025	2500	056	5600
026	2600	057	5700
027	2700	058	5800
028	2800	059	5900
029	2900	060	6000
030	3000	061	6100
031	3100	062	6200
032	3200	063	6300
033	3300	064	6400
034	3400	065	6500
035	3500	066	6600
036	3600	067	6700
037	3700	068	6800
038	3800	069	6900
039	3900	070	7000
040	4000	071	7100
041	4100	072	7200
042	4200	073	7300
043	4300	074	7400
044	4400	075	7500
045	4500	076	7600
046	4600	077	7700
047	4700	078	7800
048	4800	079	7900
049	4900	080	8000
050	5000	081	8100
051	5100	082	8200
052	5200	083	8300
053	5300	084	8400
054	5400	085	8500

VIRTUAL COLORS

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	54-179		No function
25	148	Bright Rose			
26	332	Special Rose Pink			
27	793	Vanity Fair			
28	113	Magenta			
29	46	Dark Magenta			
30	48	Rose Purple			

DIMMER CURVES

DIMMER
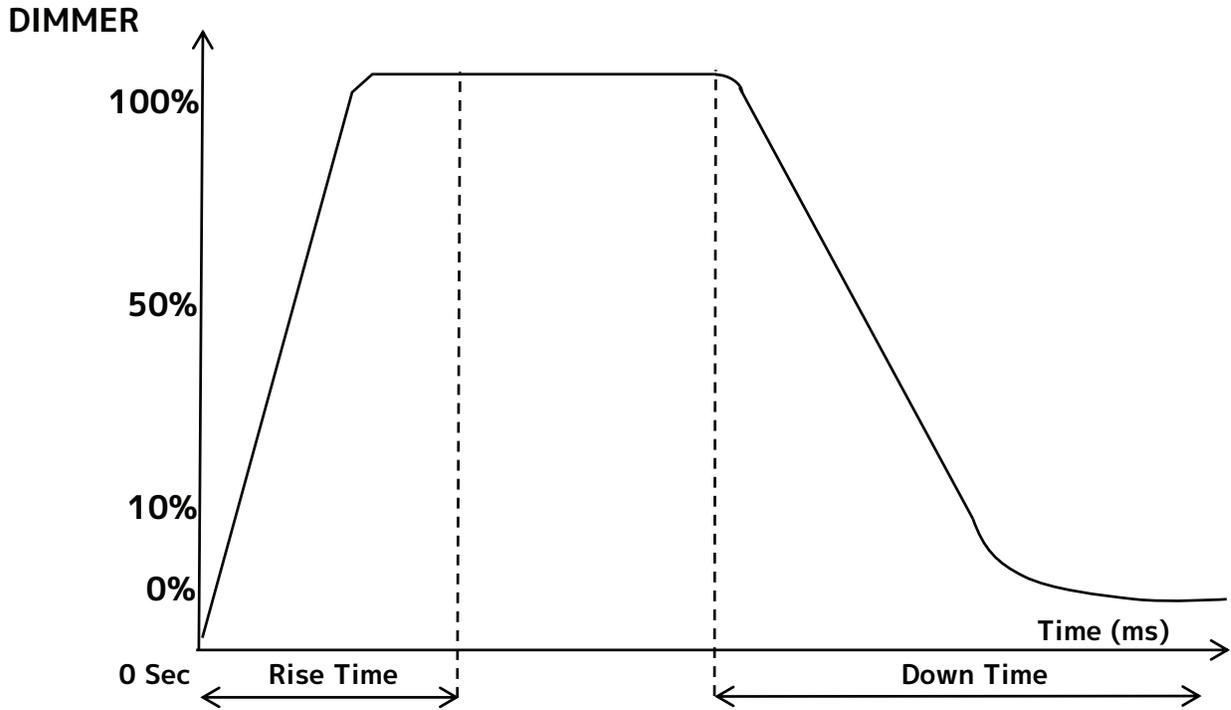
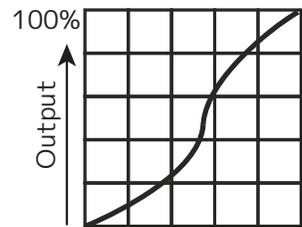|	0 sec Fade Time		1 sec Fade Time	
Dimming Curve Ramp Effect				
	Rise Time (ms)	**Down Time (ms)**	**Rise Time (ms)**	**Down Time (ms)**
Standard (default)	0	0	0	0
Stage	780	1100	1540	1660
TV	1180	1520	1860	1940
Architectural	**1380**	1730	2040	2120
Theatre	1580	1940	2230	2280
Stage 2	0	1100	0	1660
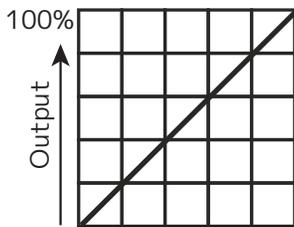
LINEAR
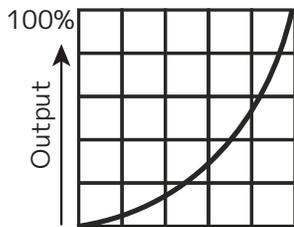
SQUARE
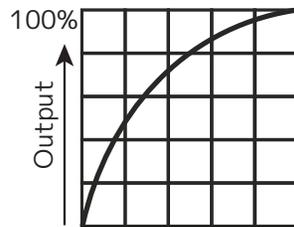
INVERSE SQUARE

S-CURVE

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SOFTWARE UPDATES

⚠️ **ONLY QUALIFIED TECHNICIANS SHOULD PERFORM THIS FUNCTION!**
NOTE ALL MENU SETTINGS BEFORE UPDATING SOFTWARE!
FIXTURE SOFTWARE CAN NOT BE DOWNGRADED!
DOWNLOAD FIXTURE SOFTWARE TO PC ONLY! (NO MAC SUPPORT)
PLEASE CONTACT ELATION SERVICE FOR FURTHER INFORMATION.

An Elation E-Loader III can be used to update the fixture to the latest software. Please visit the E-Loader III product page at the Elation web site and download the product manual for step by step instructions.

https://www.elationlighting.com/e-loader-iii-software-uploader

To order the E-Loader III uploader and the updated software for your fixture, please contact Elation support for details.

ERROR CODES

Note: Error Codes are subject to change without any prior written notice.	
ERROR CODES	**DESCRIPTION**
Temp Er	Temperature Error

SPECIFICATIONS

SOURCE
220W 6500K RGBMA LED Engine
50,000 Hour Average LED Life*
*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
7,200 Total Lumen Output
CRI 92.5
Zoom Range 10° - 32°
Beam Angle 9.7° - 32.2°
Field Angle 18.7° - 49.3°

EFFECTS
Manual Zoom
Electronic Dimmer and Strobe
Variable 16-bit Dimming Modes and Curves

COLOR
RGBMA Color Array
CMY Emulation
Variable CCT 2,400K - 8,500K
Green/Magenta Shift
Virtual Gel Swatch Book

CONTROL / CONNECTIONS
6 DMX Channel Modes (1 to 18 channels)
Direct Access Encoder
4 Button Control Panel, LED Display
RDM (Remote Device Management)
3/5pin DMX and IP65 Locking Power In/Out Connection

SIZE / WEIGHT
Length: 13.5" (344mm)
Width: 11" (280.6mm)
Vertical Height: 23" (584mm)
Weight: 18.5 lbs. (8.4kg)

ELECTRICAL / THERMAL
AC 100-240V - 50/60Hz
219W Max Power Consumption
Power Thru Capacity: 11A (5 units @ 110V; 12 units @ 240V)
5°F to 113°F (-15°C to 45°C)
BTU/hr (+/- 10%): 746.79

INCLUDED ITEMS
Gel Frame and Rotating 8-leaf Barn Doors
Junior Pin (1 1/8" - 28mm)
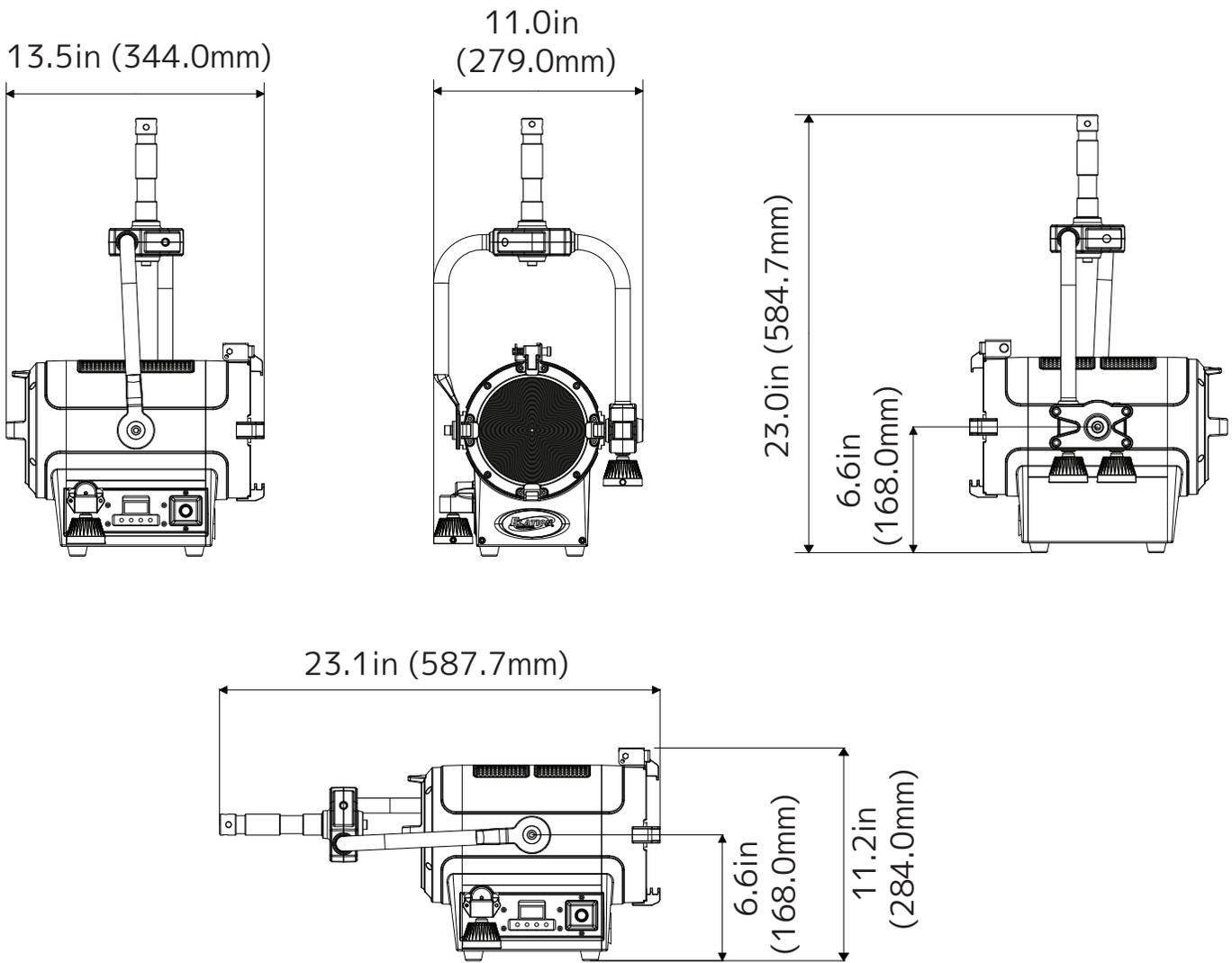Locking Power Cable

APPROVALS / RATINGS
CE | cETLus | IP20

Specifications and documentation are subject to change without notice.
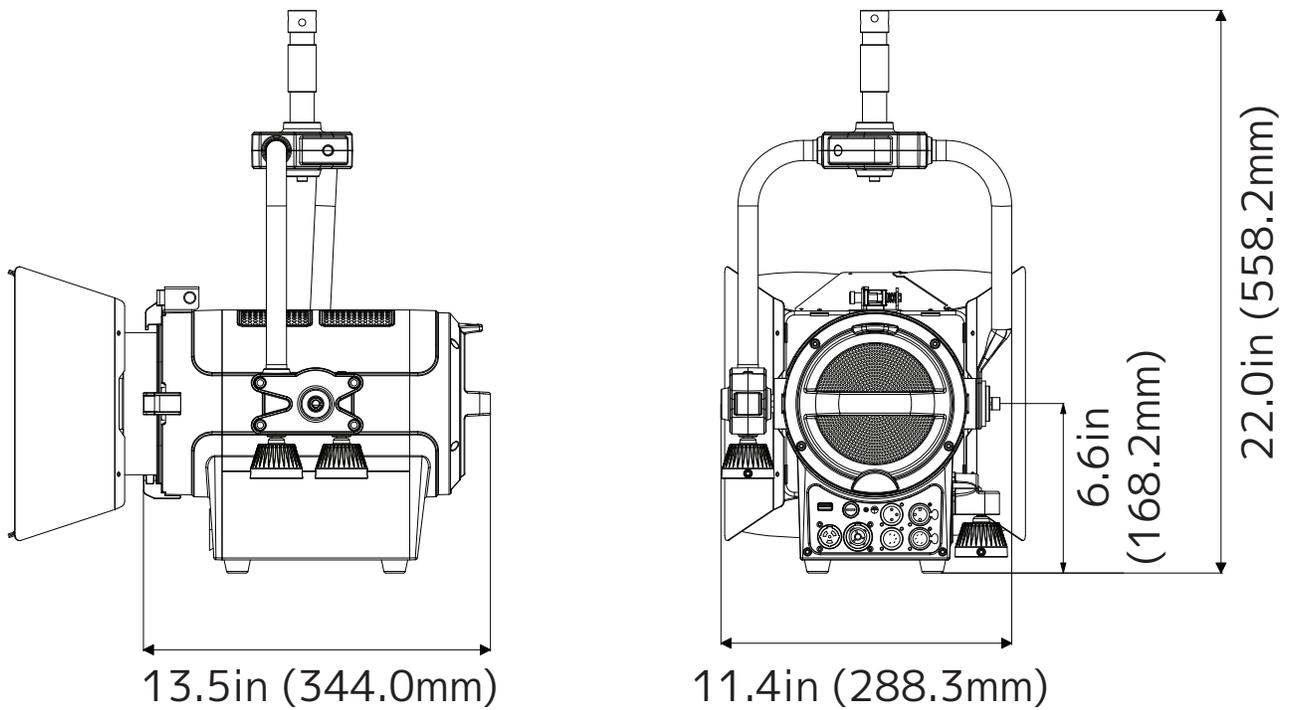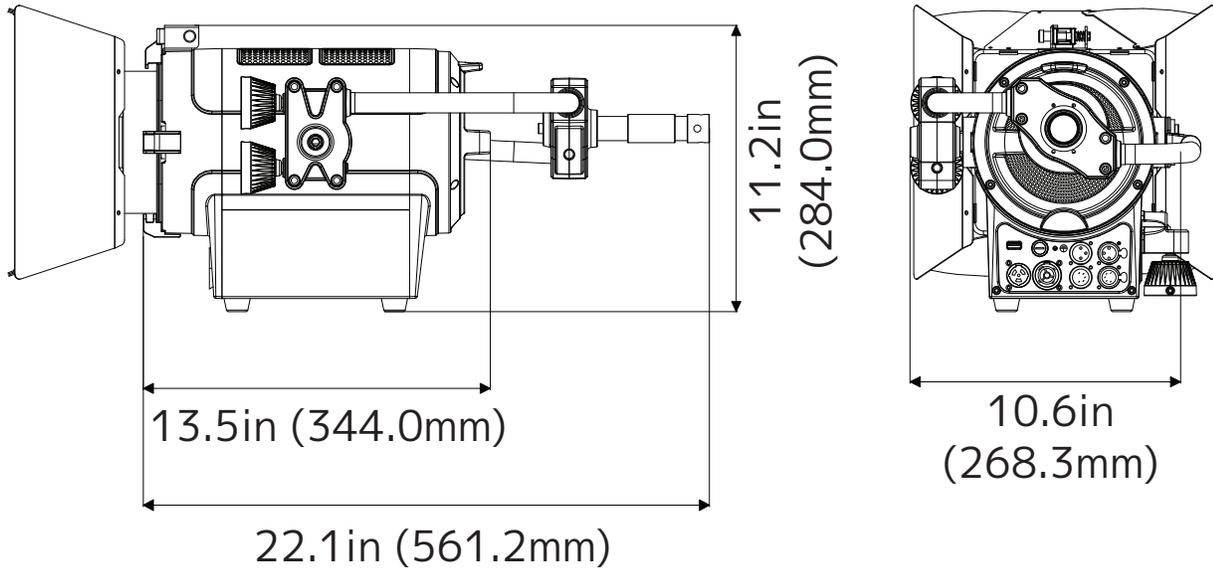
DIMENSIONAL DRAWINGS

FIXTURE ONLY

13.5in (344.0mm)

11.0in (279.0mm)

23.0in (584.7mm)

6.6in (168.0mm)

23.1in (587.7mm)

6.6in (168.0mm)

11.2in (284.0mm)

Dimensions not drawn to scale.

DIMENSIONAL DRAWINGS

BARNDOOR ATTACHED

13.5in (344.0mm)

11.2in (284.0mm)

22.1in (561.2mm)

10.6in (268.3mm)

13.5in (344.0mm)

11.4in (288.3mm)

6.6in (168.2mm)

22.0in (558.2mm)

Dimensions not drawn to scale.