



# KL FRESNEL 4

User Manual

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## DOCUMENT VERSION



Due to additional product features and/or enhancements, an updated version of this document may be available online.

Please check [www.elationlighting.com](http://www.elationlighting.com) for the latest revision/update of this manual before beginning installation and/or programming.

Date	Document Version	Software Version	DMX Channels	Notes
11/30/2017	1	1.02	1/2/3/4	Initial release
01/31/2018	1.2	N/C	No Change	Added manual dimming control instructions
11/27/2018	1.4	1.06	1/2/2-2/3/2-3/4	Added 2-2 Ch and 2-3 Ch DMX modes, gamma 1.0 brightness, and Stage 2 dimming curve mode
03/02/2019	1.6	1.07	1/2/3/4/5	Updated DMX channels and system menu
08/20/2020	1.8	1.09	No Change	Update primary/secondary, box contents
10/08/2020	2.0	N/C	No Change	Updated refresh frequency
10/21/2020	2.2	N/C	No Change	Updated specifications
06/17/2021	2.4	N/C	No Change	Add standalone mode statement to system menu section
08/12/2021	2.6	N/C	No Change	Updated manual dimming control
12/06/2022	2.8	N/C	No Change	Updated manual dimming control; added RDM

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# GENERAL INFORMATION

## INTRODUCTION

Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this device. These instructions contain important safety and use information. **This device is intended for use by trained personnel only, and is not suitable for private use.**

## UNPACKING

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

## BOX CONTENTS

Barn Door (x1)  
Gel Frame (x1)  
Power Cable (x1)

## CUSTOMER SUPPORT

Contact ELATION Service for any product related service and support needs. Also visit [forums.elationlighting.com](https://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](mailto:support@elationlighting.com)

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**REPLACEMENT PARTS** - please visit [parts.elationlighting.com](https://parts.elationlighting.com)

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

## LIMITED WARRANTY (USA ONLY)

- A. 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 a smooth operation, it is important to follow all instructions and guidelines in this manual. Elation Professional is not responsible for injuries and/or damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual. Only qualified and/or certified personnel should perform installation of this fixture and only the original rigging parts included with this fixture should be used for installation. Any modifications to the fixture and/or the included mounting hardware will void the original manufacturer's warranty and increase the risk of damage and/or personal injury



**PROTECTION CLASS 1 - FIXTURE MUST BE PROPERLY GROUNDED.**



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



**DO NOT PLUG FIXTURE INTO A DIMMER PACK!  
NEVER OPEN THIS FIXTURE WHILE IN USE!  
UNPLUG POWER BEFORE SERVICING FIXTURE!  
NEVER TOUCH FIXTURE DURING OPERATION, AS IT MAY BE HOT!  
KEEP FLAMMABLE MATERIALS AWAY FROM FIXTURE!**



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



**DO NOT EXPOSE THIS UNIT TO RAIN AND/OR MOISTURE! THIS FIXTURE IS INTENDED FOR USE IN DRY, INDOOR ENVIRONMENTS ONLY!**

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

## MAINTENANCE GUIDELINES



**DISCONNECT POWER BEFORE PERFORMING 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. Periodically clean the external lens surface with a soft cloth to avoid dirt/debris accumulation. **NEVER** use alcohol, solvents, or ammonia-based cleaners.

### MAINTENANCE

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

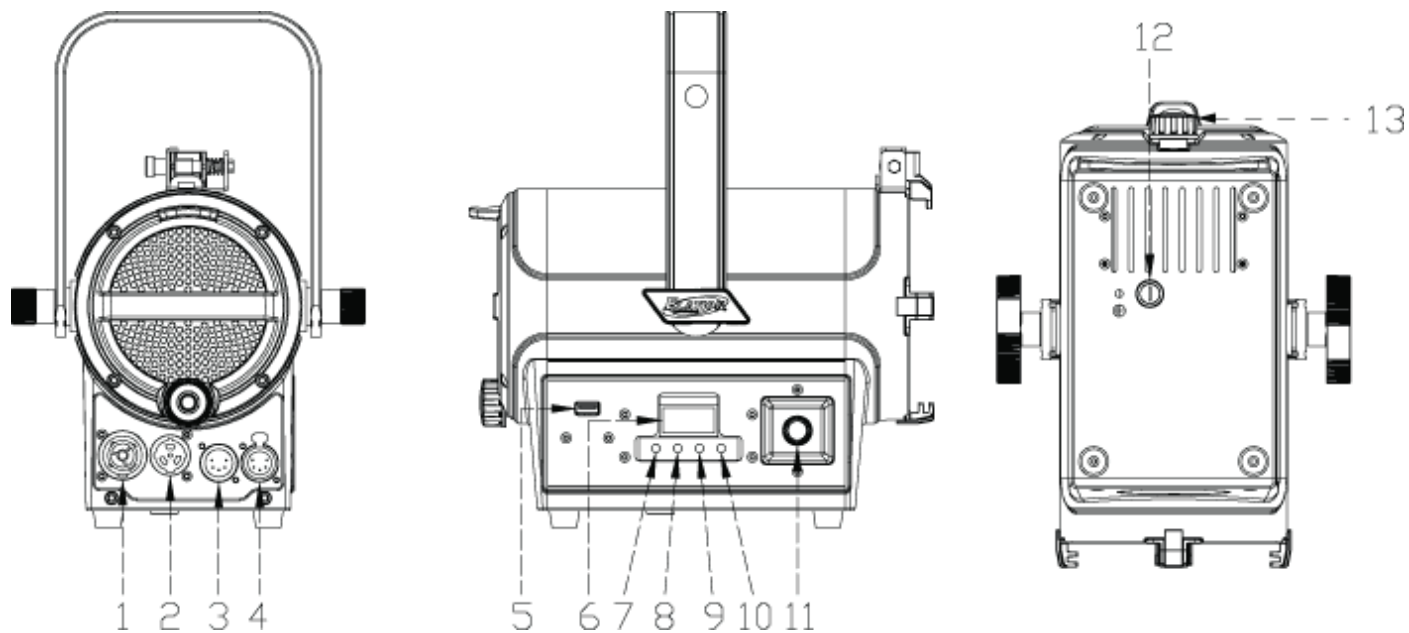
Please refer to the following points during routine inspections:

- A detailed electrical check by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating.
- Be sure all screws and fasteners are securely tightened at all times. Loose screws may fall out during normal operation, resulting in damage or injury as larger parts could fall.
- Check for any deformations on the housing, color lenses, rigging hardware, and rigging points (ceiling, suspension, trussing). Deformations in the housing could allow for dust or moisture to enter into the fixture. Damaged rigging points or unsecured rigging could cause the fixture to fall and seriously injure a person(s).
- Electric power supply cables must not show any damage, material fatigue, or sediments.

**NEVER** remove the ground prong from the power cable.



## OVERVIEW



1. Power Out
2. Power In
3. 5pin DMX In
4. 5pin DMX Out
5. USB Software Update Port
6. OLED Control Menu Display
7. Mode Button
8. Up Button
9. Down Button
10. Enter Button
11. Manual Dimming Control Knob
12. Fuse
13. Manual Zoom Control Knob

## 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.**



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

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

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

Ambient operating temperature range for this fixture is **14°F to 113°F (-10°C to 45°C)**. Do not operate the fixture when the ambient temperature falls outside of this range.

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

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

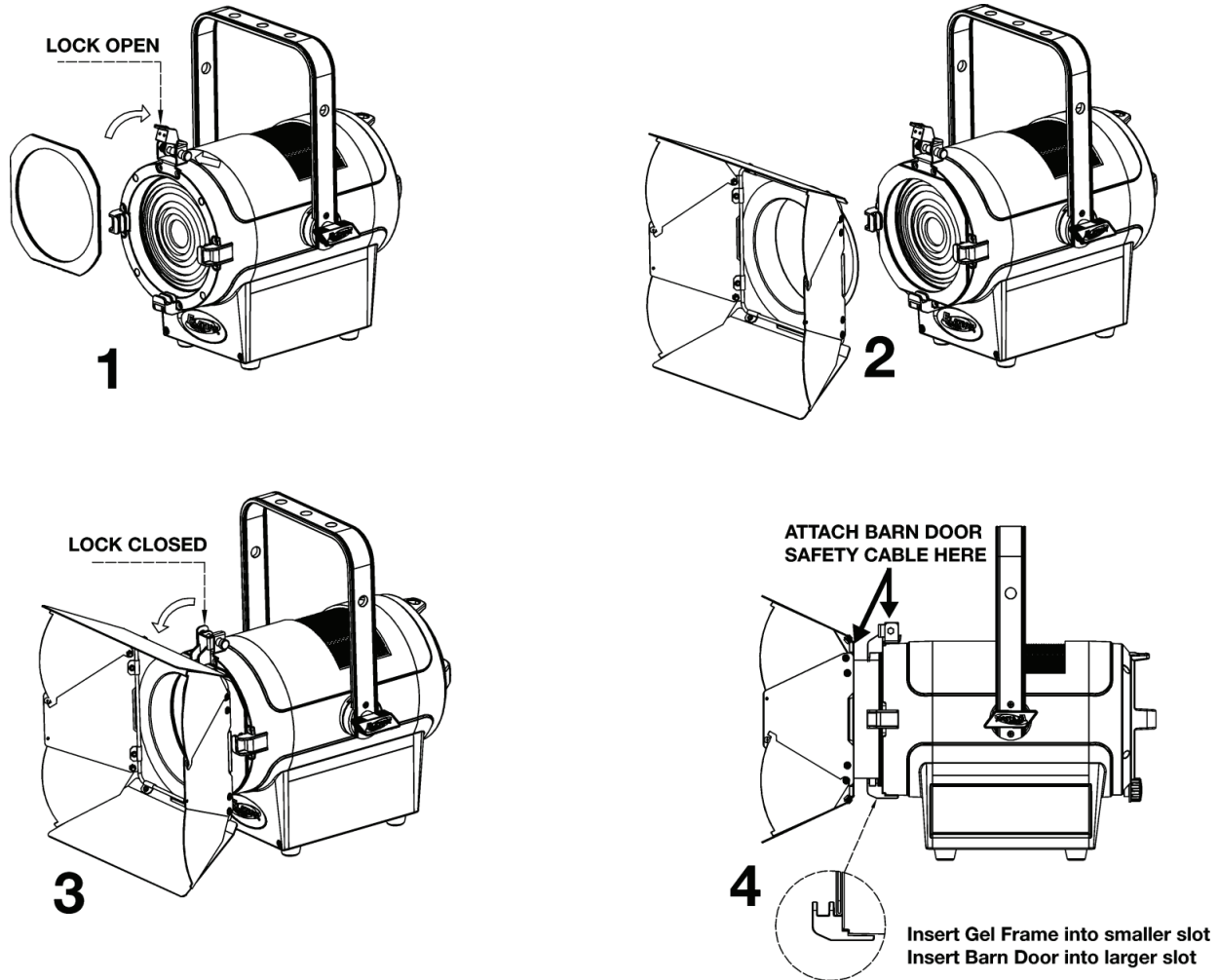
Overhead fixture installation must always be secured with a secondary safety attachment, such as an appropriately rated safety cable that meets all local, national, and country codes and regulations.

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

# INSTALLATION GUIDELINES

## GEL FRAME AND BARN DOOR INSTALLATION

The fixture has 2 slots on the front to hold the GEL FRAME and BARN DOOR. The first smaller slot is for the GEL FRAME and the second larger slot is for the BARN DOOR. The fixture also has a top lock that secures these accessories to the fixture.



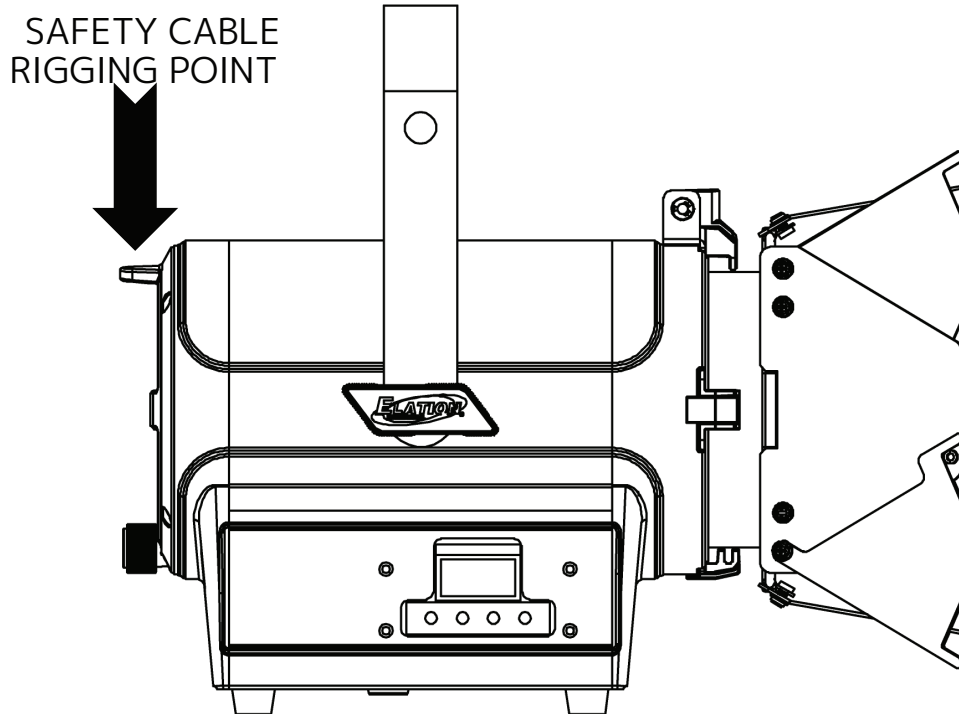
**SECURE A MINI SAFETY CABLE TO THE BARN DOOR AND THE TOP LOCK!**

1. Lift the lock on top of the fixture and insert the GEL FRAME into the first slot (closest to fixture's lens).
2. Insert BARN DOOR into the second slot.
3. Close the lock on top of the fixture to secure both the GEL FRAME and BARN DOOR in place.
4. Secure the mini SAFETY CABLE to the BARN DOOR and top lock.

## INSTALLATION GUIDELINES

### CLAMP INSTALLATION

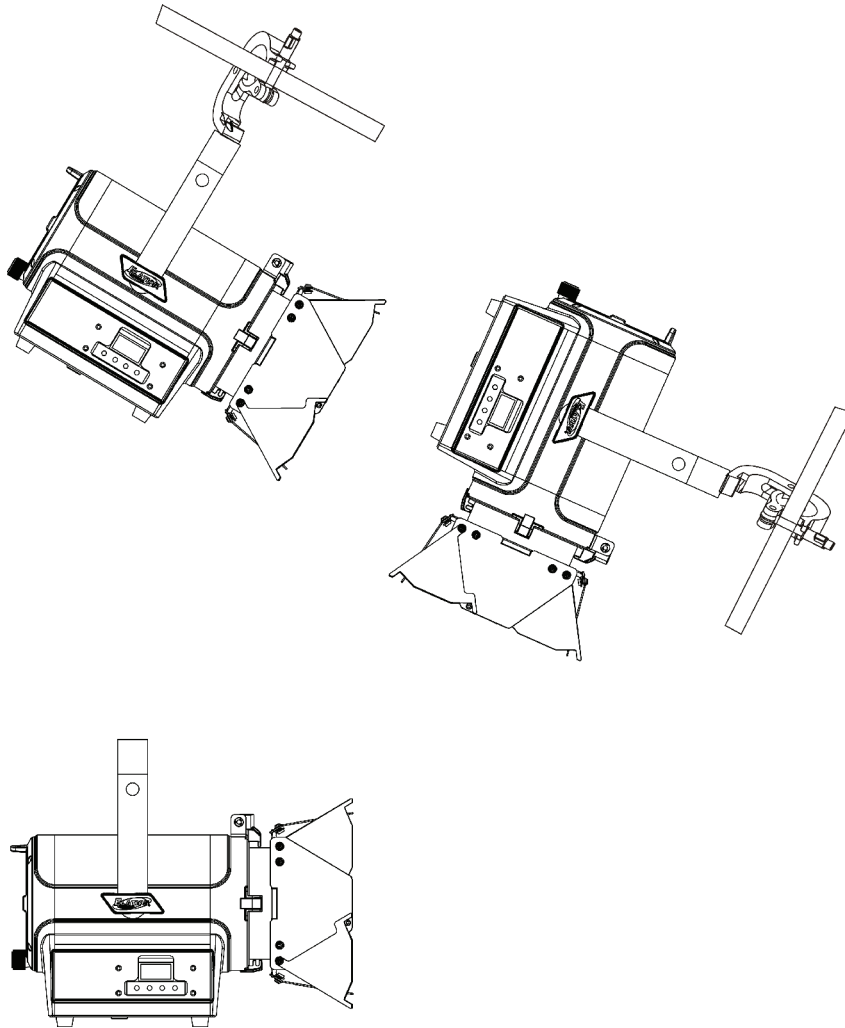
When mounting the fixture to truss, be sure to secure an appropriately rated professional grade rigging clamp to the fixture using an M10 screw fitted through one of the 3 holes of the yoke bracket. The fixture provides a built-in rigging point for a SAFETY CABLE. Be sure to only use the designated rigging point for the safety cable and **never use a carrying handle to secure a safety cable.**



## INSTALLATION GUIDELINES

### 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 skills. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury. The fixture is fully operational in the specific mounting positions illustrated below.



**SAFETY CABLE: 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.**

## 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	0000-FFFF	0735	001 Dimmer 002 16Bit 003 3Ch 004 Standard 005 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 available on this device:

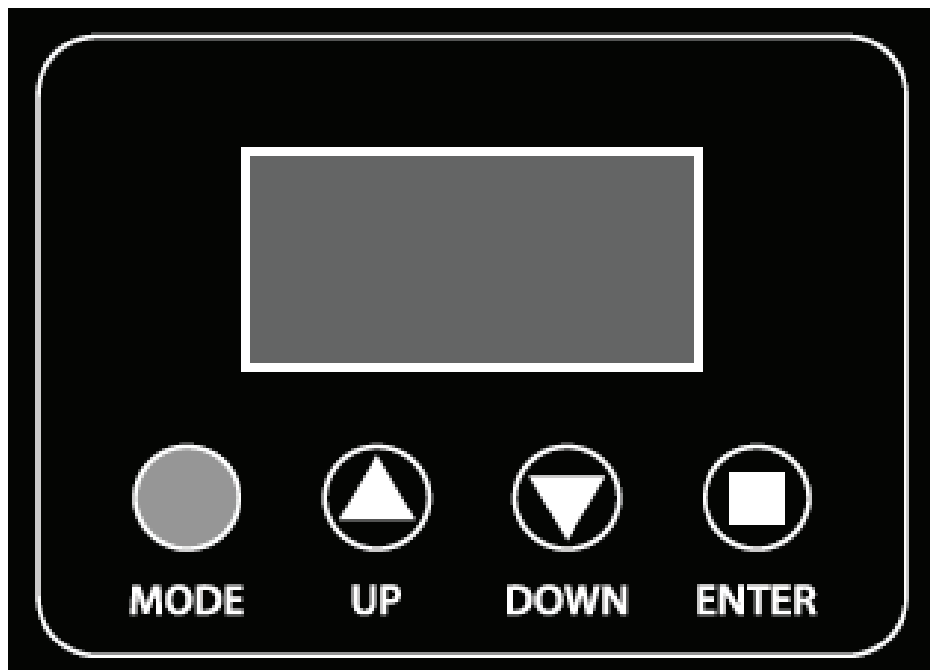
Sensor Definition	Pan Tilt Swap
Sensor Value	Display Invert
Device Model Description	Display Level
Manufacturer Label	Real Time Clock
Device Label	Power State
DMX Personality	Preset Playback
DMX Personality Description	Default Slot Value
Device Hours	Language
Comms Status	Language Capabilities
Status ID Description	Boot Software Version Label
Clear Status ID	Boot Software Version ID
Lamp Hours	Product Detail ID List
Lamp On Mode	Status Messages
Device Power Cycles	Reset Device

## CONTROL PANEL

The fixture includes an easy to navigate system menu. The control panel (see image below) is located on the side of the fixture and provides access to the main system menu, where all necessary system adjustments can be made.

During normal operation, pressing 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 UP and DOWN buttons. Once you reach a field that requires adjusting, press the ENTER button to activate that field, then 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 MODE button.

**NOTE:** The display screen will automatically shut off after approximately 1 minute of inactivity. To re-activate the display screen, press and hold the MODE button for 3 seconds.



### STANDALONE

Press the MODE button to access the fixture's main menu. Use the UP and DOWN buttons to navigate to DMX Settings and press the ENTER button. Navigate to No DMX Status and press the ENTER button. Navigate to Standalone and press the ENTER button.

# SYSTEM MENU

ELATION KL FRESNEL 4 SYSTEM MENU				
Supports Software Versions: 1.02 and up				
Features subject to change without notice. Rotation direction (clockwise/counter-clockwise) and control of effects depend on head orientation and pan/tilt settings. Default settings listed in <b>bold</b> .				
MAIN MENU	SUB MENU	OPTIONS / VALUES		DESCRIPTION
ADDRESS	Address	<b>001</b> - xxx		Set DMX address
USERMODE	User Mode	1CH		Set DMX channel mode
		<b>2CH</b>		
		3CH		
		4CH		
FUNCTION	Status	Lost DMX	<b>Hold</b> / Black	Function if DMX connection is interrupted
		Display	<b>On</b> / Off	Display screen saved mode; when switched on, screen saver activates after 30s of inactivity; functions only when DMX is connected
	LCD Set	Key Lock	<b>On</b> / Off	Control key lock
		Flash	<b>On</b> / Off	Display flashes when DMX not connected
		Invert	<b>Off</b> / On	Flip display 180 degrees
	Temp C / F	<b>F</b> / C		Temperature display units
	Dim Curve	<b>Standard</b>		Select dimmer curve mode
		Stage		
		TV		
		Architec		
	Disp Set	<b>ADDR</b>		Select info to display on screen when idle
		Disp Ch		
		Secondary		
	Fan Set	LED Fan	<b>Auto</b>	Set LED fan speed
			High	
Low				
Gamma	<b>2.0</b>		Set gamma brightness	
	2.2			
	2.4			
	2.8			
Frequen	<b>900 Hz</b> , 1000 Hz, 1100 Hz, 1200 Hz, 1300 Hz, 1400 Hz, 1500 Hz, 2500 Hz, 4000 Hz, 5000 Hz, 10 KHz, 15 KHz, 20 KHz, 25 KHz		Set LED refresh frequency	
USB Update	<b>Off</b> / On		Software update port - contact service for assistance	
DFSE	<b>Off</b> / On		Restore to factory settings	

CONTINUED ON NEXT PAGE



# SYSTEM MENU

INFO	Time Info	Current	xxx Hours	Fixture run time from power on	
		Total	xxx Hours	Fixture total run time	
		Last	xxx Hours	Clear fixture last run time	
		Password	PIN = 050		Enter PIN to access clear last menu
		Clear	On / <b>Off</b>		Reset fixture last run time
	Temp Info	LED Temp	<b>xxx F / xxx C</b>		Temperature of LED
	Err Info	Error Record 1 - 10		Display last 10 error messages	
	Model Inf	KLF4		Display model name	
Software	Software	Vx.xx	Software version		
TEST	Man Ctrl	Dimmer, Strobe		Test functions	

## SYSTEM MENU UPDATE WITH SOFTWARE VERSION 1.06 AND UP

ELATION KL FRESNEL 4 SYSTEM MENU			
Supports Software Versions: 1.06 and up			
Features subject to change without notice. Rotation direction (clockwise/counter-clockwise) and control of effects depend on head orientation and pan/tilt settings. Default settings listed in <b>bold</b> .			
MAIN MENU	SUB MENU	OPTIONS / VALUES	DESCRIPTION
FUNCTION	User Mode	1CH	Set DMX channel mode
		<b>2CH</b>	
		2-2CH	
		3CH	
		2-3CH	
		4CH	
	Gamma	1.0	Set gamma brightness
		<b>2.0</b>	
		2.2	
		2.4	
		2.8	
	Dim Curve	<b>Standard</b>	Select dimmer curve mode
		Stage	
		TV	
		Architec	
Theatre			
Stage 2			

# SYSTEM MENU

## SYSTEM MENU UPDATE WITH SOFTWARE VERSION 1.07 AND UP

ELATION KL FRESNEL 4 SYSTEM MENU					
Supports Software Versions: 1.07 and up					
Features subject to change without notice. Rotation direction (clockwise/counter-clockwise) and control of effects depend on head orientation and pan/tilt settings. Default settings listed in <b>bold</b> .					
MAIN MENU	SUB MENU	OPTIONS / VALUES		DESCRIPTION	
ADDRESS	Address	<b>001</b> - xxx		Set DMX address	
USER MODE	User Mode	Dimmer		Set DMX channel mode	
		<b>Dimmer 16bit</b>			
		3CH			
		Standard			
		Extended			
FUNCTION	Status	Lost DMX	<b>Hold</b> / Black	Function if no DMX detected	
	LCD Set	Display		<b>On</b> / Off	Display screen saver mode; when switched on, screen saver activates after 30s of inactivity; only functions when DMX is connected
		Key Lock		<b>On</b> / Off	Lock control panel buttons
		Flash		<b>On</b> / Off	Display flashes when no DMX connected
		Invert		On / <b>Off</b>	Flip display 180 degrees
		Temp C/F	C / <b>F</b>		Temperature display units
	Dim Mode	<b>Standard</b>		Set dimmer mode and delay time	
		Stage			
		TV			
		Architec			
		Theatre			
		Stage 2			
		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, 10.0s			
	Disp Set	<b>ADDR</b>		Set information to display on idle screen	
		Disp Ch			
Secondry					
Fan Set	LED Fan	<b>Auto</b>	Set LED fan speed		
		High			
		Low			
Dim Curve	<b>Linear</b>		Select dimmer curve mode		
	Square				
	Inv Square				
	S Curve				

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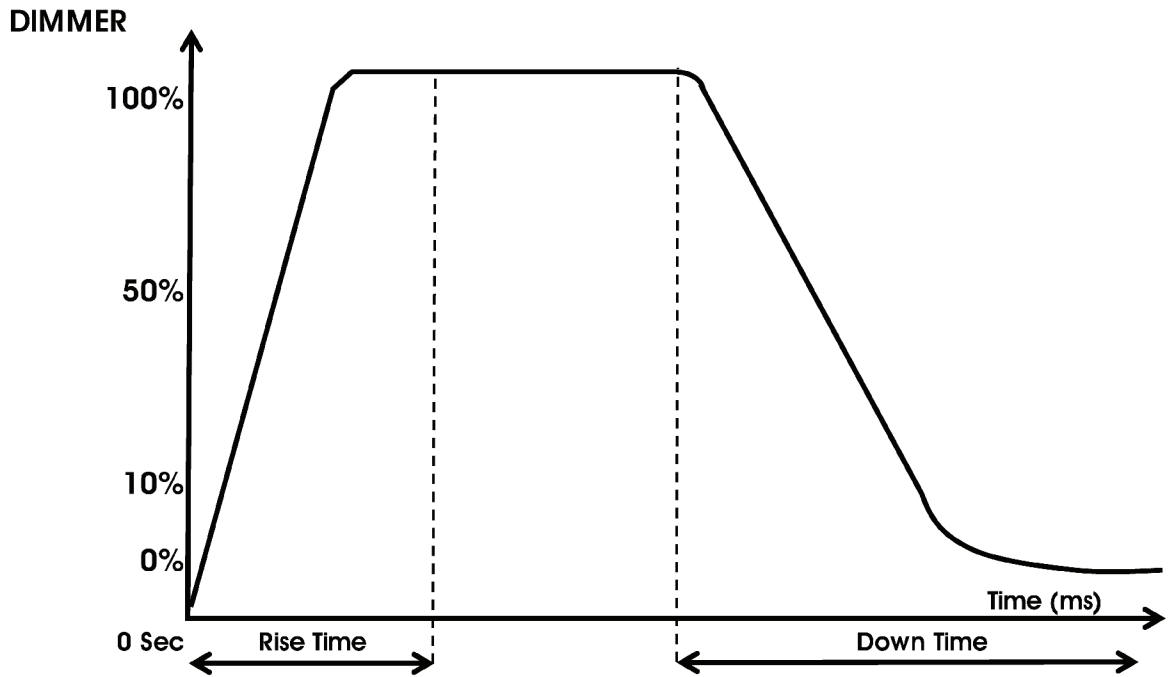
## SYSTEM MENU

FUNCTION (continued)	Frequen	900 Hz, 1000 Hz, 1100 Hz, <b>1200 Hz</b> , 1300 Hz, 1400 Hz, 1500 Hz, 2500 Hz, 4000 Hz, 5000 Hz, 10 KHz, 15 KHz, 20 KHz, 25 KHz		Set LED refresh frequency
	USB Data	On / <b>Off</b>		Software update port - contact service for assistance
	Primary	On / <b>Off</b>		
	DFSE	On / <b>Off</b>		Restore to factory settings
INFO	Time Info	Current	xxx Hours	Fixture run time from power on
		Total	xxx Hours	Fixture total run time
		Last	xxx Hours	Clear fixture last run time
		Password	PIN = 050	Enter PIN to access clear last menu
		Clear	On / <b>Off</b>	Reset fixture last run time
	Temp Info	LED Temp	xxx C / <b>xxx F</b>	Temperature of LED
	Err Info	Error Record 1 - 10		Display 10 last error messages
	Model Inf	KL F4		Display model name
Software	Software	Vx.xx	Software version	
TEST	Man Ctrl	Dimmer	<b>000</b> - 255	Manual control functions
		Strobe	000 - <b>255</b>	

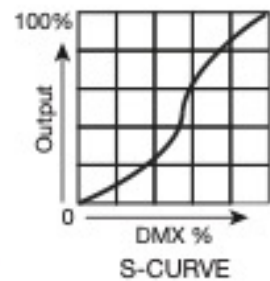
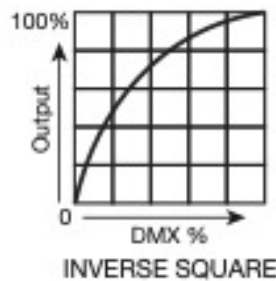
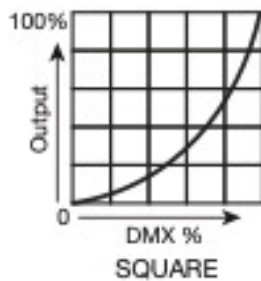
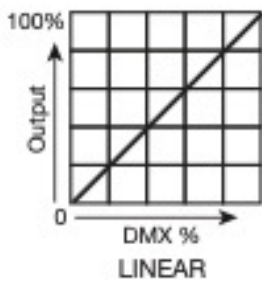
# DIMMER CURVE MODES

Select desired DIMMER MODE (Standard, Stage, TV, Architectural, Theatre, Stage2).

Note: STAGE 2 DIMMING CURVE MODE ADDED WITH SOFTWARE UPDATE VERSION ≥1.06.



Dimming Curve Ramp Effect	0 sec Fade Time		1 sec Fade Time	
	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



## MANUAL DIMMING CONTROL



**FEATURE IS DISABLED WHEN DMX INPUT CABLE IS CONNECTED TO FIXTURE! TO USE MANUAL DIMMING KNOB, DISCONNECT DMX CABLE IF CONNECTED.**

Follow steps below to enable manual DIMMING control knob.

1. Access fixture system menu navigating to Test menu then access ManCtrl sub menu.

TEST	Man Ctrl	Dimmer	Manual Control Functions
		Strobe	

**NOTE: To access the LCD Menu Control Display when locked/OFF, press and hold the MODE button for 3 seconds.**

2. Select the Strobe menu, and set to value of 255 (LED ON). Exit fixture system menu.
3. Push DIMMING knob to unlock, rotate to desired level, and push knob again to lock. Repeat this process each time a dimmer adjustment is desired.

### LCD DISPLAY



**DMX CABLE CONNECTED**



**NO DMX CABLE CONNECTED**

Additionally, the user can press and hold the encoder knob for 10 seconds to activate full output for 1 minute. This feature can be used to aid in aiming and/or positioning the fixture, and overrides any DMX-controlled operations.

# DMX TRAITS

ELATION KL FRESNEL 4 DMX CHANNEL TRAITS					
<b>Supports Software Versions: 1.02 and up</b>					
Features subject to change without notice.					
CHANNEL				DMX VALUES	FUNCTION
1CH	2CH	3CH	4CH		
1	1	1	1	000 - 255	<b>Dimmer Intensity</b> , 0% to 100%
			2	000 - 255	<b>Dimmer Intensity Fine</b>
			3		<b>Shutter, Strobe</b>
				000 - 031	LED Off
				032 - 063	LED On
				064 - 095	Strobe Effect, slow to fast
				096 - 127	LED On
				128 - 159	Pulse Effect in Sequences
				160 - 191	LED On
				192 - 223	Random Strobe Effect, slow to fast
			224 - 255	LED On	
			4		<b>Dimmer Modes</b>
				000 - 020	Standard
				021 - 040	Stage
				041 - 060	TV
				061 - 080	Architectural
				081 - 100	Theatre
			101 - 255	Default to factory setting	
	2	2			
		3			

# DMX TRAITS

## DMX TRAITS UPDATE WITH SOFTWARE VERSION 1.06

ELATION KL FRESNEL 4 DMX CHANNEL TRAITS							
Supports Software Versions: 1.06 and up							
Features subject to change without notice.							
CHANNEL						DMX VALUES	FUNCTION
1CH	2CH	2-2CH	3CH	2-3CH	4CH		
1	1	1	1	1	1	000 - 255	<b>Dimmer Intensity</b> , 0% to 100%
		2		2	2	000 - 255	<b>Dimmer Intensity Fine</b>
							<b>Shutter, Strobe</b>
						000 - 031	LED Off
						032 - 063	LED On
						064 - 095	Strobe Effect, slow to fast
	2		2		3	096 - 127	LED On
						128 - 159	Pulse Effect in Sequences
						160 - 191	LED On
						192 - 223	Random Strobe Effect, slow to fast
						224 - 255	LED On
							<b>Dimmer Modes</b>
						000 - 020	Standard
						021 - 040	Stage
						041 - 060	TV
			3	3	4	061 - 080	Architectural
						081 - 100	Theatre
						101 - 120	Stage 2
						121 - 255	Default to factory setting

# DMX TRAITS

## DMX TRAITS UPDATE WITH SOFTWARE VERSION 1.07

ELATION KL FRESNEL 4 DMX CHANNEL TRAITS						
Supports Software Versions: 1.07 and up						
Features subject to change without notice.						
CHANNEL					DMX VALUES	FUNCTION
Dimmer	Dimmer 16bit	3CH	Std	Ext		
1	1	1	1	1	000 - 255	<b>Dimmer Intensity</b> , 0% to 100%
	2		2	2	000 - 255	<b>Dimmer Intensity Fine</b>
		2	3	3		<b>Shutter, Strobe</b>
					000 - 031	LED Off
					032 - 063	LED On
					064 - 095	Strobe Effect, slow to fast
					096 - 127	LED On
					128 - 159	Pulse Effect in Sequences
					160 - 191	LED On
					192 - 223	Random Strobe Effect, slow to fast
					224 - 255	LED On
						<b>Dimmer Modes</b>
					000 - 020	Standard
					021 - 040	Stage
					041 - 060	TV
					061 - 080	Architectural
					081 - 100	Theatre
					101 - 120	Stage 2
						<b>Dimmer Delay Times</b>
					121	0s
					122	0.1s
					123	0.2s
					124	0.3s
					125	0.4s
					126	0.5s
					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
		3	4	4		

CONTINUED ON NEXT PAGE



# DMX TRAITS

CHANNEL					DMX VALUES	FUNCTION
Dimmer	Dimmer 16bit	3CH	Std	Ext		
		3	4	4		<b>Dimmer Delay Times (continued)</b>
					138	7.0s
					139	8.0s
					140	9.0s
					141	10.0s
					142 - 255	Default
				5		<b>LED Refresh Rate (hold values for 5 sec to set LED refresh rate)</b>
					000 - 100	Idle
					101 - 105	900 Hz
					106 - 110	1000 Hz
					111 - 115	1100 Hz
					116 - 120	1200 Hz
					121 - 125	1300 Hz
					126 - 130	1400 Hz
					131 - 135	1500 Hz
					136 - 140	2500 Hz
					141 - 145	4000 Hz
					146 - 150	5000 Hz
					151 - 155	10,000 Hz
					156 - 160	15,000 Hz
					161 - 165	20,000 Hz
					166 - 170	25,000 Hz
					171 - 200	Idle
						<b>Dimmer Curves</b>
					201 - 210	Linear (default)
					211 - 220	Square
					221 - 230	Inverse Square
		231 - 240	S-Curve			
		241 - 255	Idle			

# SPECIFICATIONS

## SOURCE

150W >97CRI 3,000K Warm White LED

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

1,900+ Total Lumen Output

6,837 LUX 635 FC @6.6' (2m) (Min Zoom / Full ON)

1,791 LUX 166 FC @6.6' (2m) (Max Zoom / Full ON)

Zoom Range 14° - 30°

Beam Angle 14.2° - 29.7°

Field Angle 23.2° - 48°

## EFFECTS

Manual Zoom

Electronic Dimmer and Strobe

Variable 16-bit Dimming Modes and Curves

## COLOR

Warm White 3,000K

## CONTROL / CONNECTIONS

Manual and DMX Controlled Dimmer and Shutter

Dimmer Rotary Dial

(5) DMX Channel Modes (1 / 2 / 3 / 4 / 5)

4 Button Control Panel LCD Menu Display

RDM (Remote Device Management)

5pin DMX and IP65 Locking Power Cable In/Out

With Wired Digital Communication Network

## SIZE / WEIGHT

Length: 13.6" (345mm)

Width: 7.9" (201mm)

Vertical Height: 11.4" (289mm)

Weight: 9.0 lbs. (4.08kg)

## ELECTRICAL / THERMAL

AC 100-240V - 50/60Hz

50W Max Power Consumption

5°F to 113°F (-15°C to 45°C)

Power Linking: 12 Pcs @ 110V / 27 Pcs @ 240V

## INCLUDED ITEMS

Gel Frame and Rotating Barn Doors

IP65 Locking Power Cable

Barn Doors

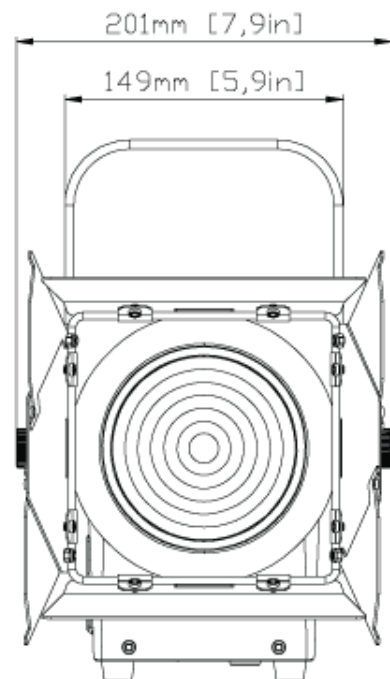
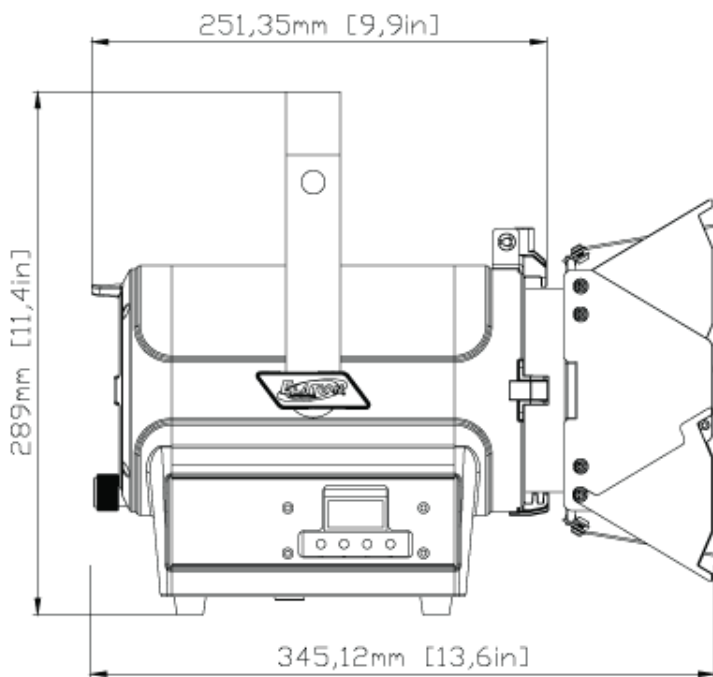
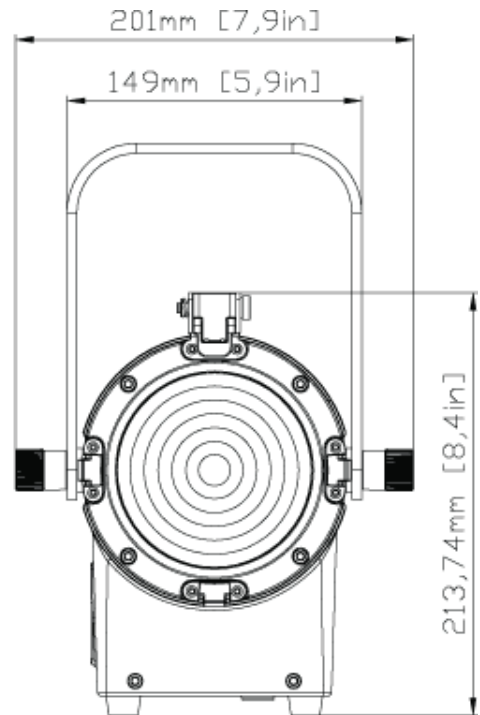
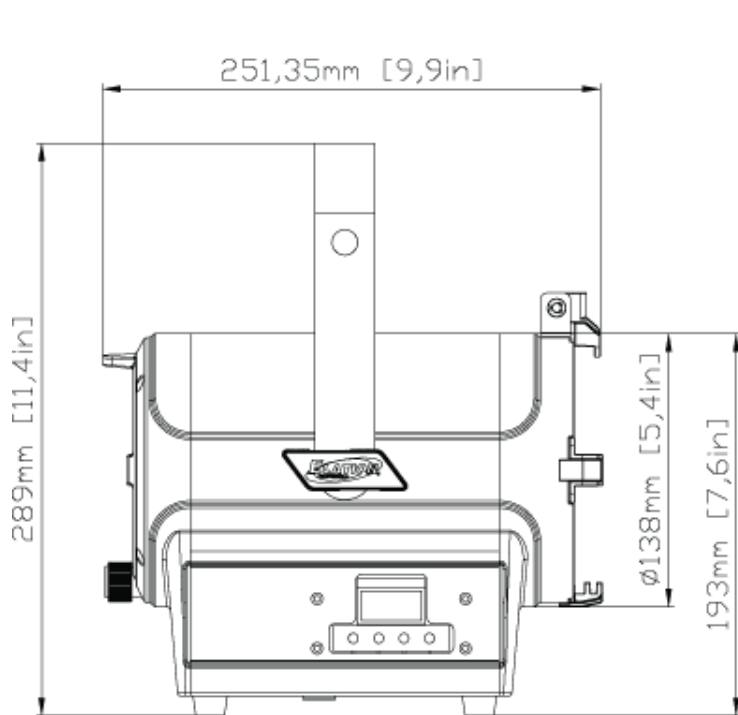
## APPROVALS / RATINGS

CE | IP30 | cETLus



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

# DIMENSIONAL DRAWINGS



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

## OPTIONAL ACCESSORIES

ORDER CODE	ITEM
QUICK RIG CLAMP	Low Profile Quick Release Clamp
AC5PDMX5PRO	5 ft (1.5m) 5pin DMX Cable
NEU088	3 ft (1m) Power Cable

Please note that additional DMX cable and power cable lengths are 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 and the radio receiver to electrical outlets on separate circuits.
- Consult the dealer or an experienced radio/TV technician for help.

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