



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

Date	Document Version	Software Version ≥	DMX Channel Modes	Notes
05/21/2020	1.0	1.01	1 / 4 / 5 / 7 / 10 / 13 / 20 Ch 4 / 12 Ch HSI	Initial release
06/02/2020	1.1	N/C	No change	Updated DMX functions
06/16/2020	1.2	1.03	No change	Updated System Menu
10/20/2020	1.3	N/C	No change	Updated Specifications
12/18/2020	1.4	N/C	No change	Updated accessories list
01/26/2021	1.5	N/C	No change	Added Battery Connection
02/26/2021	1.6	N/C	No change	Updated accessories list
06/14/2021	1.7	N/C	No change	Added KL Panel PO information
05/17/2023	1.8	1.1.3	No change	Updated General Information, Overview, Installation Guidelines, System Menu, Color Temperature Table, Specifications; added System Configuration, RDM, Fan Modes, Software Updates
10/30/2023	1.9	N/C	No change	Updated Optional Accessories
09/10/2024	2.0	1.14	1 / 4 / 6 / 12 / 14 / 23 / 21 / 4 / 12 / 13 / 9 / 13	Software Update, updated CCT range & CTO

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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 product is intended to be used by professionally 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 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

Diffuser
Barn Door Assembly
Junior Pin (1.125in. - 28mm) with Mounting Hardware
Locking Power Cable

CUSTOMER SUPPORT

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

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

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

IMPORTANT NOTICE!

There are no user serviceable parts inside this unit. Do not attempt any repairs yourself, 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 damage to any such accessories, nor for the safe return thereof.
- C. This warranty is void if the product serial number and/or labels are altered or removed; if the product is modified in any manner which Elation Professional concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the Elation Professional factory unless prior written authorization was issued to purchaser by Elation Professional; if the product is damaged because not properly maintained as set forth in the product instructions, guidelines and/or user manual.
- D. This is not a service contract, and this warranty does not include any maintenance, cleaning or periodic check-up. During the periods as specified above, Elation Professional will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of Elation Professional under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Elation Professional. All products covered by this warranty were manufactured after January 1, 1990, and bare identifying marks to that effect.
- E. Elation Professional reserves the right to make changes in design and/or performance improvements upon its products without any obligation to include these changes in any products theretofore manufactured.
- F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with the products described above. Except to the extent prohibited by applicable law, all implied warranties made by Elation Professional in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty periods set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said periods have expired. The consumer's and/or dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall Elation Professional be liable for any loss and/or damage, direct and/or consequential, arising out of the use of, and/or the inability to use, this product.
- G. This warranty is the only written warranty applicable to Elation Professional products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

WARRANTY RETURNS

All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. Items returned without a R.A. number clearly marked on the outside of the package will be refused and returned at customer's expense. You may obtain a R.A. number by contacting customer support.

SAFETY GUIDELINES

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



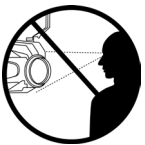
PROTECTION CLASS 1 - FIXTURE MUST BE PROPERLY GROUNDED



**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!**



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

SAFETY GUIDELINES

DONOT 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 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 and do not insert into the fixture securely with ease.

NEVER force a power cord connector into the fixture. If the power cord or any of its connectors are damaged, replace it immediately with a new one of 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.

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 fixture from main power source before performing any type of service and/or cleaning procedure.

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

During the initial operation of this fixture, a light smoke or smell may emit from the interior of the fixture. This is a normal process and is caused by excess paint in the interior of the casing burning off from the heat associated with the lamp and will decrease gradually over time.

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

ONLY use the original packaging and materials to transport the fixture 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 periodically with a soft cloth to avoid dirt/debris accumulation. **NEVER use alcohol, solvents, or ammonia-based cleaners.**

MAINTENANCE

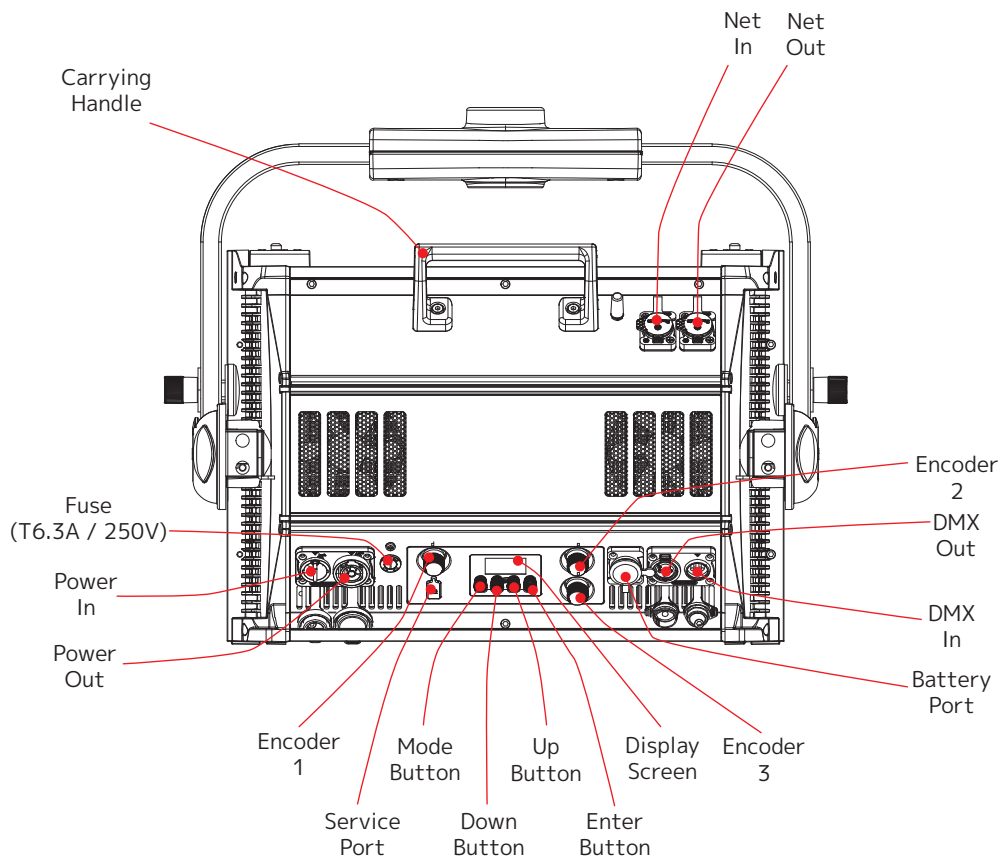
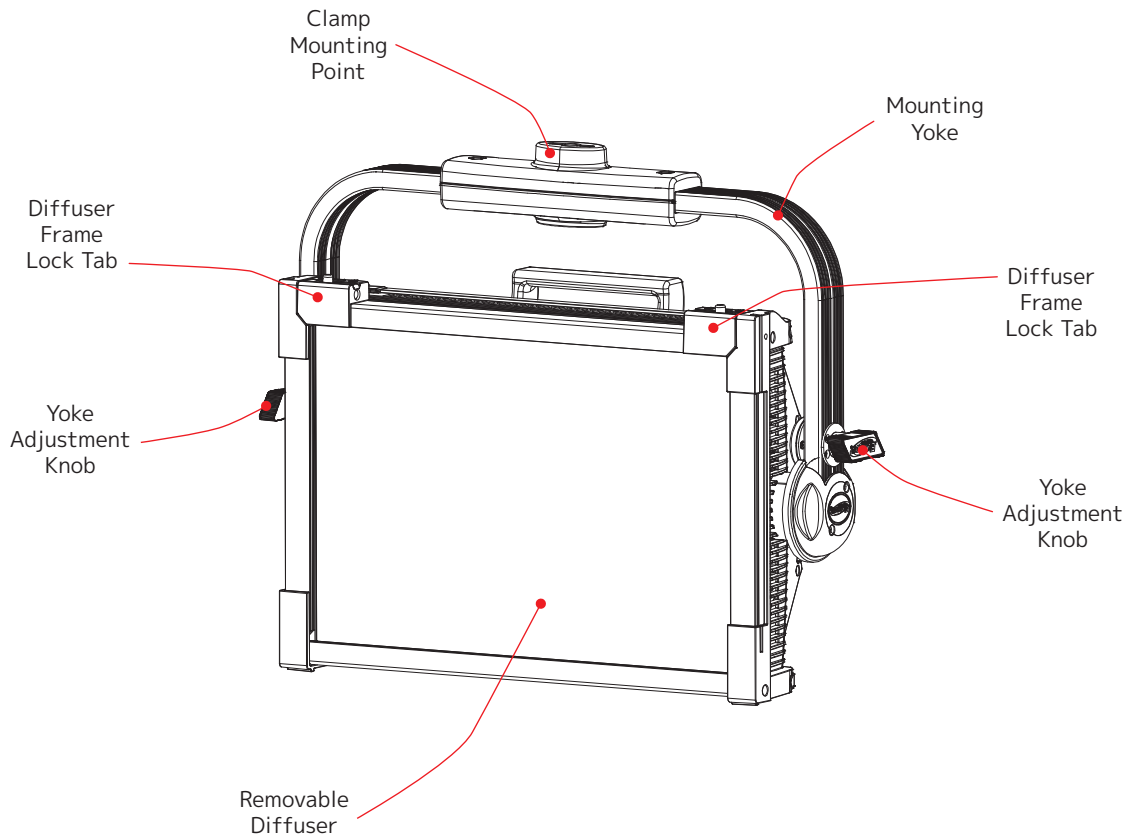
Regular inspections are recommended to insure proper function and extended life. There are no user serviceable parts inside this fixture, please refer all other service issues to an authorized Elation service technician. Should you need any spare parts, please order genuine parts from your local Elation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

Please refer to the following points during routine inspections:

- A detailed 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



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.



USE CAUTION WHEN POWER LINKING FIXTURES OF OTHER MAKES AND MODEL TYPES, 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 interconnected fixtures for custom matrix designs 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 **113°F (45°C)**. Do not operate this fixture when ambient temperature exceeds this value.

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

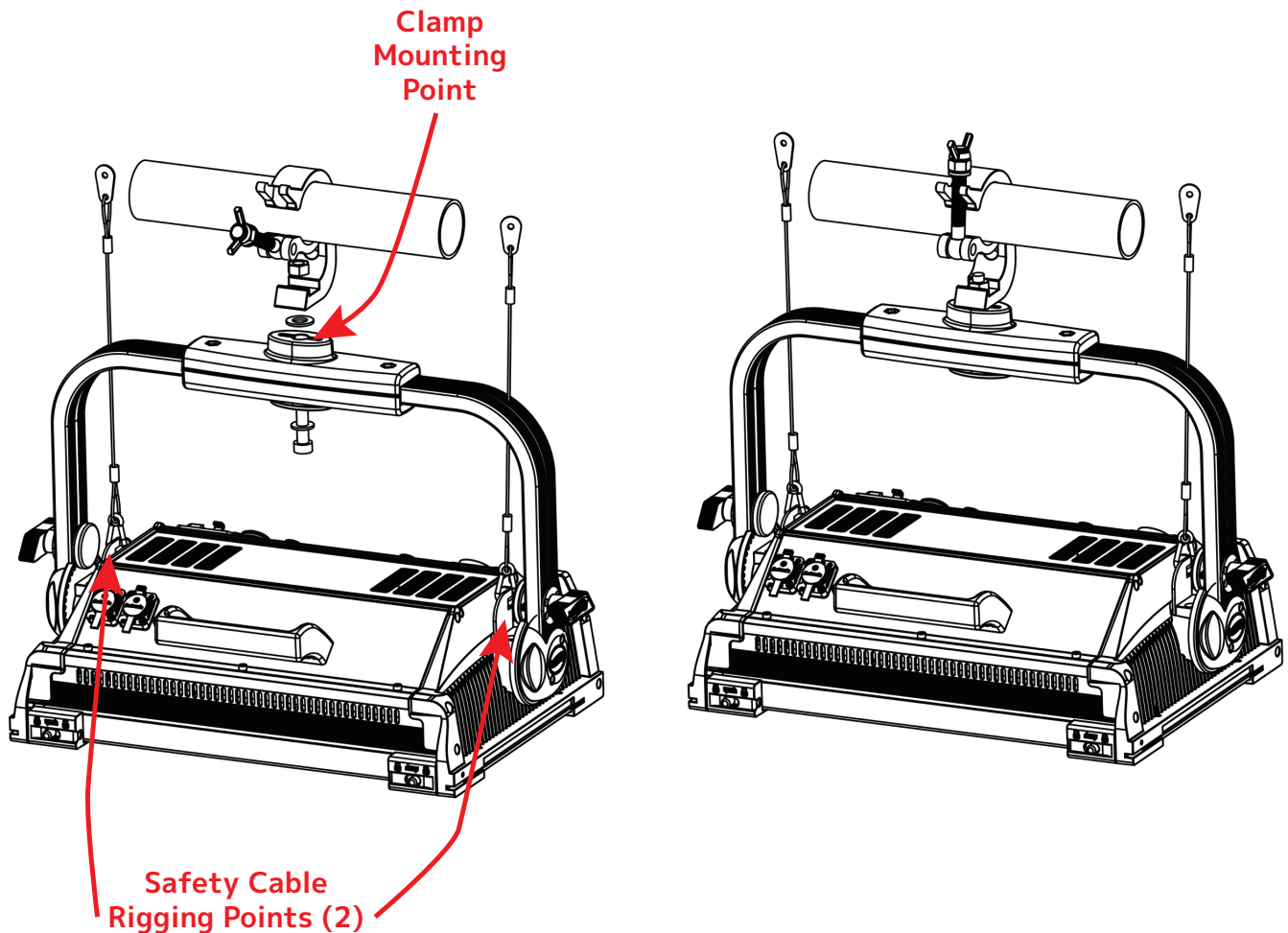
NEVER stand directly below the fixture(s) when rigging, removing or servicing.

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

CLAMP INSTALLATION

This fixture includes an adjustable mounting yoke with an integrated clamp mounting point, as well as two (2) safety cable rigging points attached to the body of the fixture (see the illustration below). When mounting this fixture to truss, be sure to secure an appropriately rated clamp (not included) to the clamp mounting point on the yoke, and attach a separate SAFETY CABLE of the appropriate rating to each safety cable rigging point on the fixture.



SAFETY CABLE

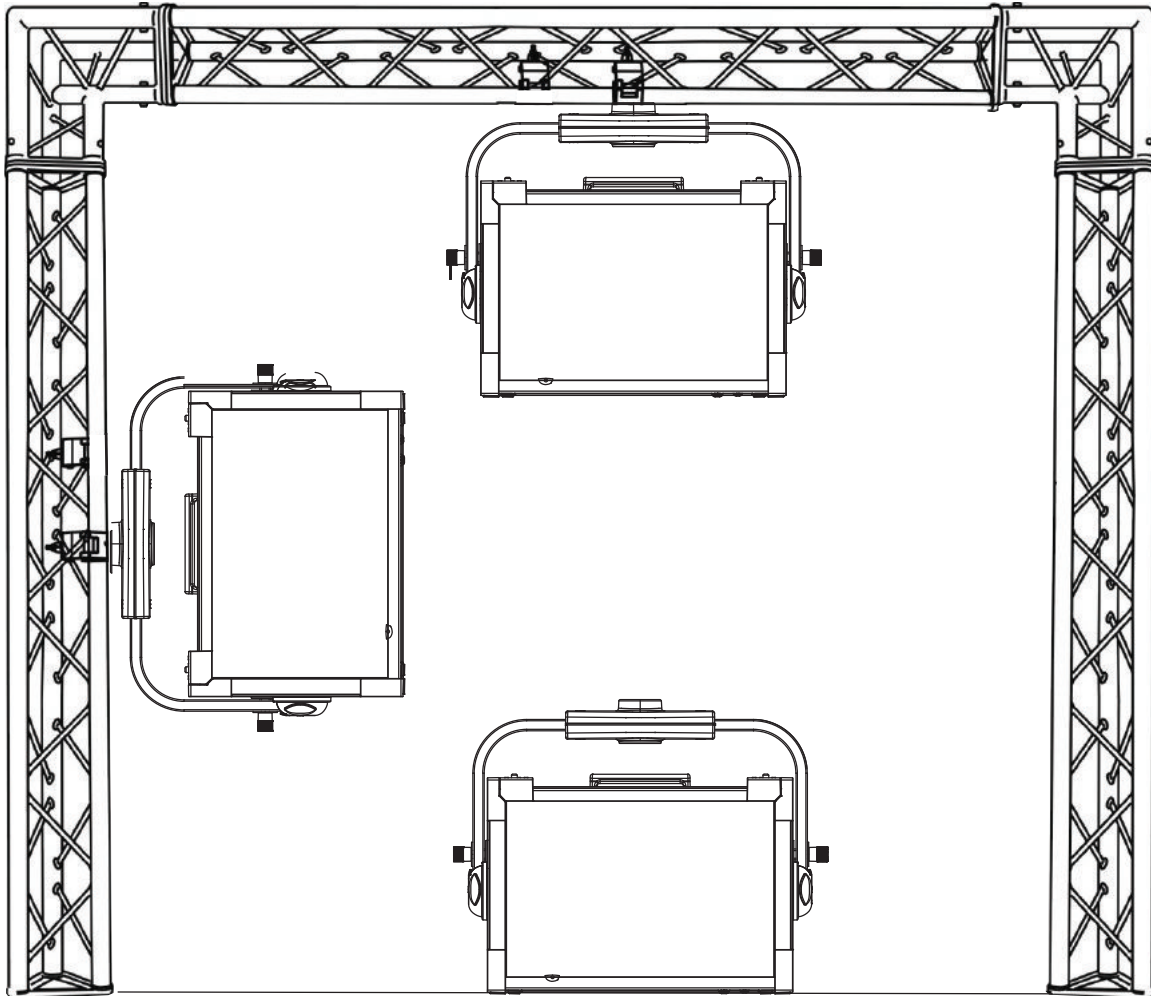
ALWAYS ATTACH A SAFETY CABLE WHENEVER INSTALLING THIS FIXTURE IN A SUSPENDED ENVIRONMENT TO ENSURE THE FIXTURE WILL NOT DROP IF THE CLAMP FAILS. ONLY USE DESIGNATED RIGGING POINTS FOR SAFETY CABLE, AND NEVER ATTACH A SAFETY CABLE TO A CARRYING HANDLE.

INSTALLATION GUIDELINES

RIGGING

Overhead rigging requires extensive experience, including calculating working load limits, understanding the 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 can be mounted hanging upside-down from a truss, suspended vertically on a truss, or mounted upright on a flat, stable surface, as illustrated below.



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!



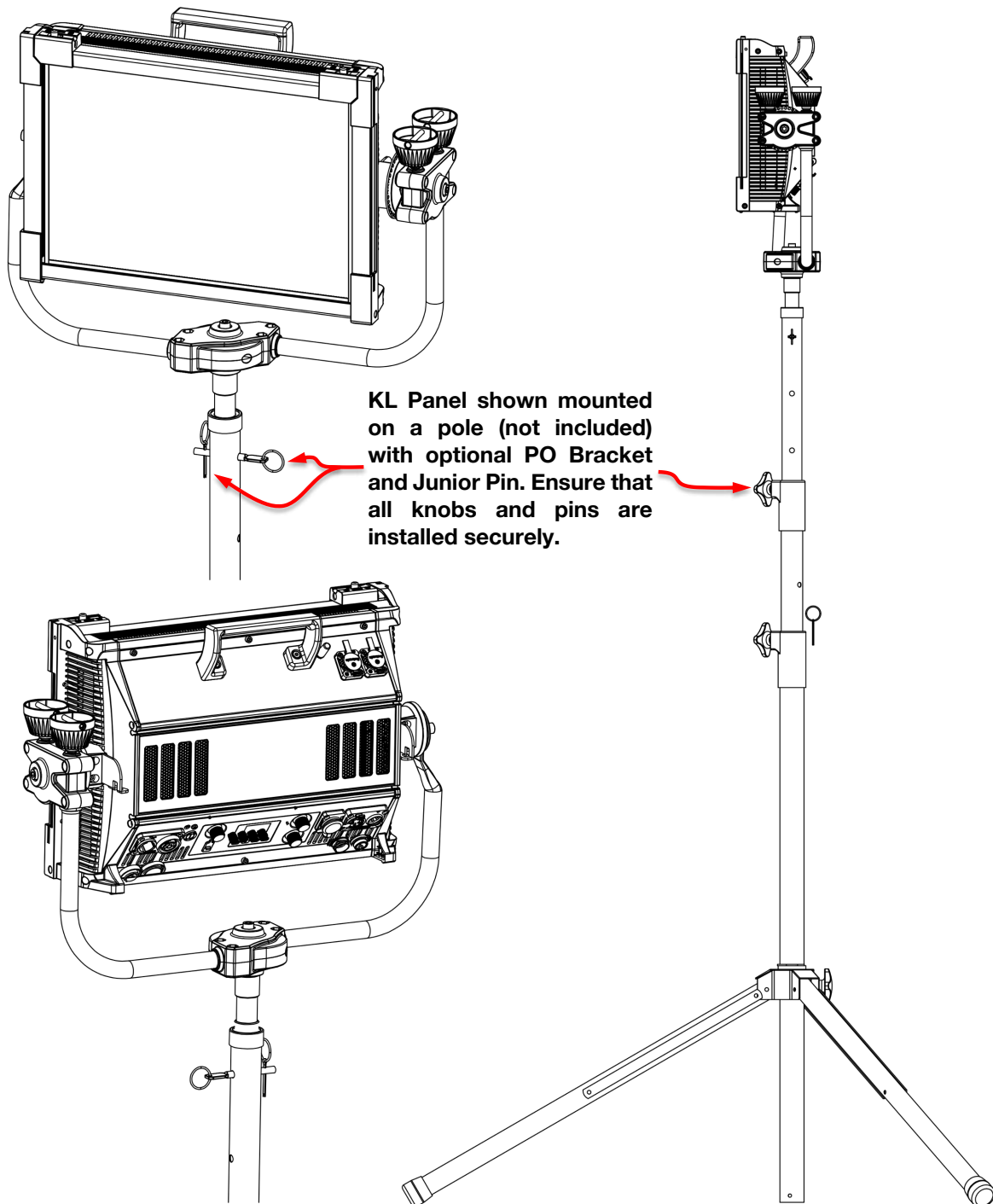
SAFETY CABLE

ALWAYS ATTACH A SAFETY CABLE WHENEVER INSTALLING THIS FIXTURE IN A SUSPENDED ENVIRONMENT TO ENSURE THE FIXTURE WILL NOT DROP IF THE CLAMP FAILS. ONLY USE DESIGNATED RIGGING POINTS FOR SAFETY CABLE, AND NEVER ATTACH A SAFETY CABLE TO A CARRYING HANDLE.

INSTALLATION GUIDELINES

KL PANEL PO BRACKET MOUNTED TO POLE WITH JUNIOR PIN

This fixture is capable of being installed on a tripod stand. **Please note that this ability applies only to the KL Panel PO**, and that the standard KL Panel cannot be installed in this manner. Refer to the **Accessory Installation** section of this manual for details regarding the installation of the Junior Pin.

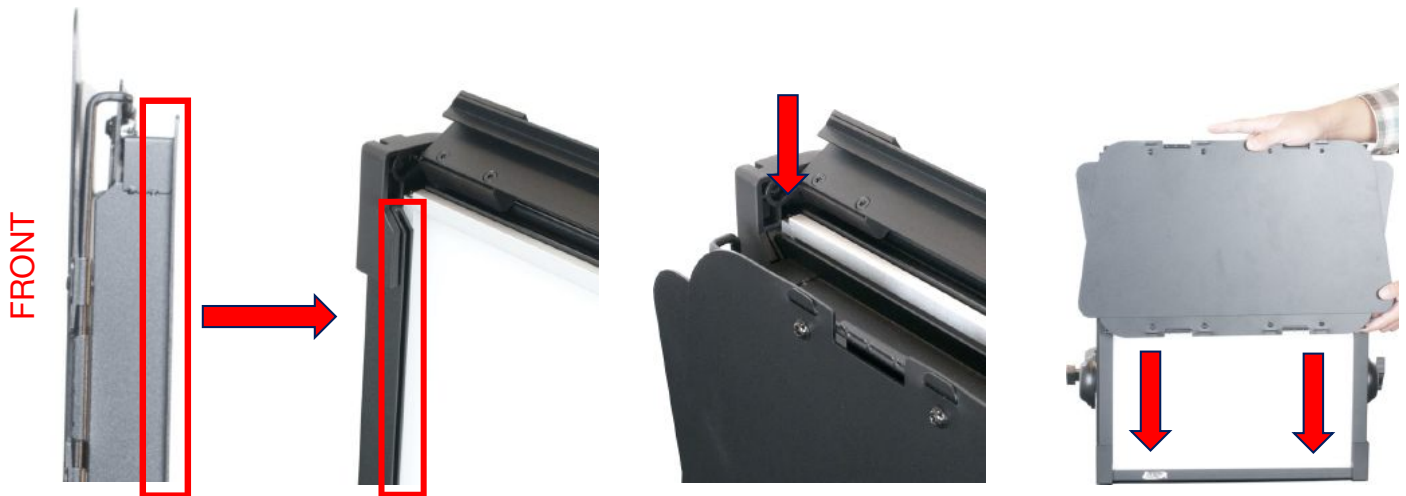


ACCESSORY INSTALLATION

BARN DOOR



1. Unlock both diffuser frame lock tabs using the latches located on each tab. Flip the top edge of the frame upward.



2. The inner frame of the fixture contains an empty mounting slot located just in front of the removable diffuser. Align the mounting rail on the rear of the barn door with this empty mounting slot, and slowly lower the barn door into place.

ACCESSORY INSTALLATION

BARN DOOR



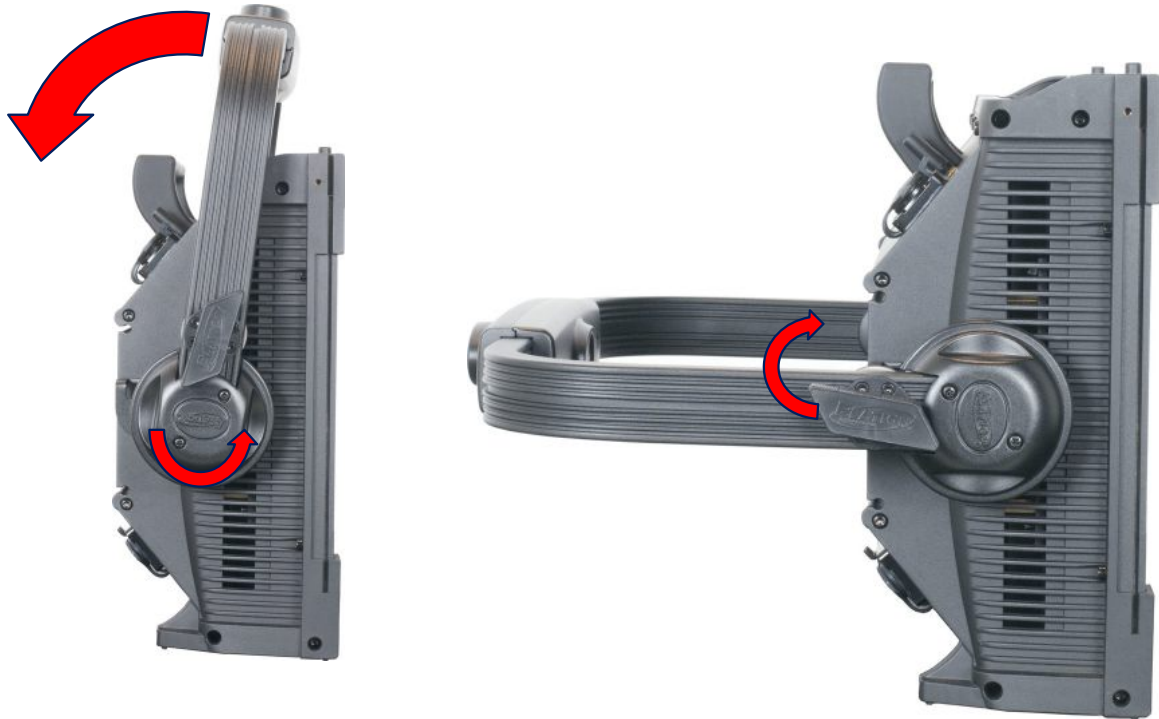
3. Flip the top edge of the frame downwards and engage the lock tabs.



4. Flip the four (4) barndoor segments outward. Note that the left and right barndoor segments can be expanded by pulling upwards or downwards on the thumb tabs.

ACCESSORY INSTALLATION

JUNIOR PIN



1. Loosen the yoke adjustment knobs and adjust the mounting yoke to a position that allows access to both the top and bottom sides of the yoke. Re-tighten the yoke adjustment knobs to lock the yoke in position.



2. Locate the notched face of the junior pin and hold it against the clamp mounting point located on the top side of the yoke. **The notched surface of the junior pin must sit flush against the matching groove on the surface of the clamp mounting point.**

ACCESSORY INSTALLATION

JUNIOR PIN



3. Thread the junior pin bolt in through the underside of the mounting yoke, making sure that the bolt engages the threaded hole in the junior pin. Tighten securely with a 10mm hex key. The junior pin is now ready for attachment to a clamp or stand.

BATTERY CONNECTION

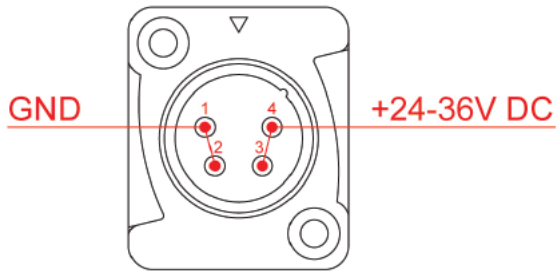
The KL Panel can receive power from a battery pack.

NOTICE: The user is responsible for ensuring compatibility between the device and the battery pack. Always ensure that the output specifications, operating conditions, and connection pinouts of the battery pack match the device requirements.

The device features a 4-pin XLR connector for battery power. The connector is located on the back of the device, next to the DMX In/Out connectors, and is covered with a dust cap.

BE CAREFUL NOT TO CONNECT BATTERY POWER TO ONE OF THE DMX CONNECTORS BY MISTAKE!

The pinout is illustrated below:



Pin	Assignment
1	GND
2	
3	+24-36V DC
4	

Consult the **Safety Guidelines** section of this user manual, as well as any safety instructions included with your battery pack before use or installation.

The KL Panel consumes 300W when operating all LEDs at full output, which may require significant battery output to provide the required power. To extend the battery life, it is possible to reduce the LED power down to 50% of maximum output using the “LED Power Limit” menu in the Personality section of the system menu. Please refer to the **System Menu** section of this manual for detailed information.

REMOTE DEVICE MANAGEMENT (RDM)

NOTE: In order for RDM to work properly, RDM enabled equipment must be used throughout the entire system, including DMX data splitters and wireless systems.

Remote Device Management (RDM) is a protocol that sits on top of the DMX512 data standard for lighting, allowing the DMX systems of the device to be managed, modified, and monitored remotely (hence, remote device management). This protocol is ideal for fixtures installed in locations that are not easily accessible.

With RDM, the DMX512 system becomes bi-directional, allowing a compatible RDM enabled controller to send out a signal to devices on the wire, as well as allowing the fixture to respond (known as a GET command). The controller can then use it's SET command to modify settings that would typically have to be changed or viewed directly via the unit's display screen, including the DMX Address, DMX Channel Mode, and Temperature Sensors.

FIXTURE RDM INFORMATION:

RDM Code	Device ID	Device Model ID	Personality ID
22A6	0003	0003	001 (1Ch Dimmer), 002 (4Ch Dimmer Color), 003 (7Ch Dimmer Color), 004 (6Ch RGBWLC), 005 (12Ch RGBWLC 16bit), 006 (14Ch Standard), 007 (23Ch Extended), 008 (4Ch HSI), 009 (12Ch HSI 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.

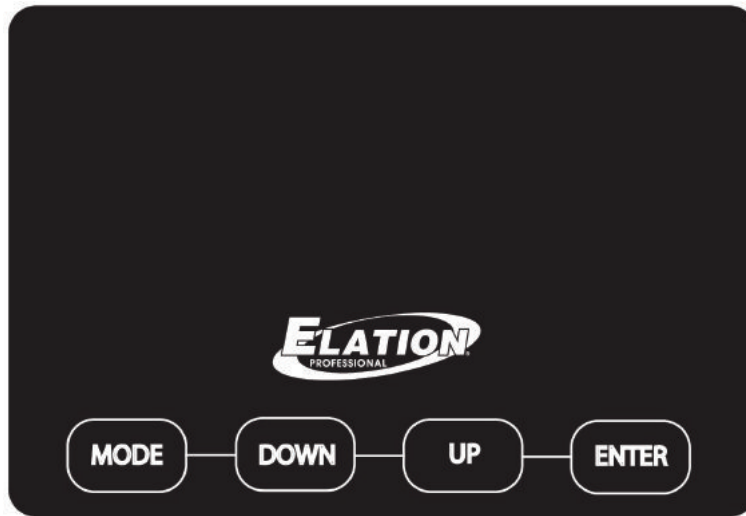
The following parameters are accessible in RDM on this device:

[0x0011] Proxied Device Count	[0x0405] Device Power Cycles
[0x0200] Sensor Definition	[0x0500] Display Invert
[0x0201] Sensor Value	[0x0501] Display Level
[0x0080] Device Model Description	[0x0603] Real Time Clock
[0x0081] Manufacturer Label	[0x1010] Power State
[0x0082] Device Label	[0x1031] Preset Playback
[0x00E0] DMX Personality	[0x0122] Default Slot Value
[0x00E1] DMX Personality Description	[0x00B0] Language
[0x0400] Device Hours	[0x00A0] Language Capabilities
[0x0015] Comms Status	[0x00C2] Boot Software Version Label
[0x0031] Status ID Description	[0x00C1] Boot Software Version ID
[0x0032] Clear Status ID	[0x0070] Product Detail ID List
[0x0401] Lamp Hours	[0x0030] Status Messages
[0x0402] Lamp Strikes	
[0x0403] Lamp State	
[0x0404] Lamp On Mode	

SYSTEM MENU

The fixture includes an easy to navigate system menu. The control panel (see image below) located on the back of the fixture provides access to the main system menu, where all necessary system adjustments are 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 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 MODE button.

The display screen can be locked by selecting PERSONALITY > DISPLAY > SCREEN LOCK. To unlock the display screen, simply press and hold the MODE button for three (3) seconds.



SERVICE PORT

This device features a service port on the control panel that can be used to perform software updates. Please refer to the **Software Updates** section of this manual for detailed information.

SYSTEM MENU

Supports Software Versions: \geq 1.03			
MAIN MENU	OPTIONS / VALUES (Default Settings in BOLD)		
Encoder Mode	Disabled	For use when running fixture in DMX mode	
	HSI	For use when running fixture in HSI mode	
	Int CCT Grn	For use when running fixture in CCT mode with encoder control	
	Int Color Sat	For use when running fixture in color mode with encoder control	
	Int x,y	For use when running fixture in x,y mode with encoder control	
	Manual Control	For use when running fixture in manual control mode with encoder control	
DMX	DMX Address	001 - 512 Set DMX starting address	
	DMX Mode	1CH Dimmer	Select DMX channel mode
		4CH Dimmer Color	
		6CH RGBWLC	
		12CH RGBWLC16bit	
		14CH Standard	
		23CH Legacy Extended	
		21CH Extended	
		4CH HSI	
		12CH LegacyHSI Ex	
		13CH HSI Extended	
		9CH x,y Standard	
		13CH x,y Extended	
	No DMX Status	Hold Last	Define how fixture will behave when DMX signal is lost or interrupted
		Fade to Black	
		Standalone	
	Protocol	Select Signal	DMX / Art-Net / sACN /E-Fly In - DMX Out / DMX In - E-Fly Out
		Enable Network	Off / On
		Universe	0- 255(Default = 1)
		IP Address	2.x.x.x
		Subnet Mask	255.0.0.0
Ethernet DMX Out		Off / On	
E-Fly	E-Fly Channel	0 -14	
	Enable E-Fly	Off / On	
Control	Dimmer	000% - 100%	
	Manual Color	Red	0- 255
		Green	0- 255
		Blue	0- 255
		White	0- 255
		Lime	0- 255
		Cyan	0- 255
		CCT	2000K - 10000K (Default = 6000K)
		Green Shift	-100% ~ +100% (Default = 0)
		Virtual Color	See Color Macros
	Primary	On / Off	
	Secondary	On / Off	
	Self Test	All	
		Dimmer	
Color			

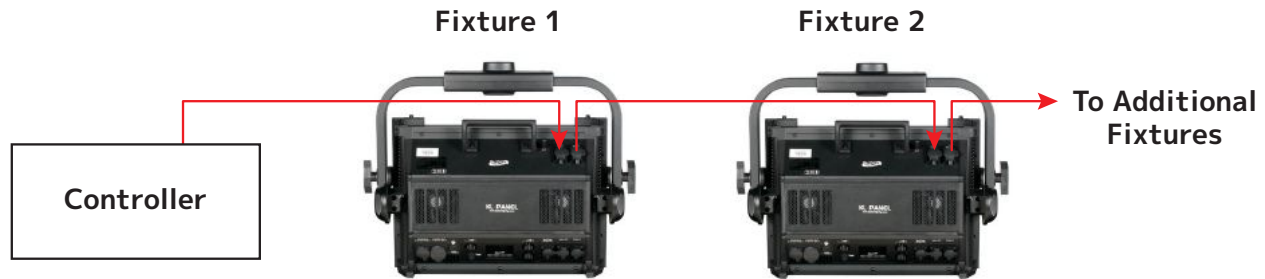
SYSTEM MENU

Supports Software Versions: \geq 1.03			
MAIN MENU	OPTIONS / VALUES (Default Settings in BOLD)		
Settings	Dim Modes	Standard , Stage, TV, Architectural, Theatre	
		Dim Speed	0s - 10s (Default = 0.1s)
	Dim to Warm	On / Off	
	Dim Curves	Linear, Square, Square Inverse, S-Curve	
	LED Refresh Rate	900Hz - 1500Hz (1200Hz), 2500Hz, 4000Hz, 5000Hz, 6000Hz, 10KHz, 15KHz, 20KHz, 25KHz	
	Color Tuning	Highest Fidelity, Balanced Output and Fidelity, Highest Output	
	Output Balance	Bright (Highest Output) , Uniform (Elation Full Specrum Match)	
	LED Power Limit	50%, 60%, 70%, 80%, 90%, 100%	
	Fan Mode	Auto , High, Silent	
	Display	Screen Delay	10s - 5min (Default = 1 min)
		Screen Lock	Off , 10s - 5 min
		Rotate Display	Yes / No / Auto
	Reset Defaults	Yes / No	
Information	Time	Current Run Time	
		Total Run Time	
		Last Run Time	
	Temperature	Current, Max Resettable	
	DMX Values	Red	
		Green	
		...	
Product IDs	RDM UID		
Error Logs	Fixture Errors		
Software Version	Vx.x		
Service (Password = 050)	Update Firware	On / Off	
	Calibration	Red 000 - 255	
		Green 000 - 255	
		Blue 000 - 255	
		White 000 - 255	
		Lime 000 - 255	
		Cyan 000 - 255	
	Reset Last Run	Yes / No	
Reset Error Logs	Yes / No		

NETWORK SETUP: ARTNET / KLINGNET

The KL Panel / KL Panel PO can be configured to operate using ArtNet or sACN protocol by following the steps below:

1. Use an RJ45 cable to link the output of your controller to the “Net In” port of the first KL Panel / KL Panel PO fixture that you wish to control. Then link the “Net Out” port of this fixture to the “Net In” port of the next fixture in line.
2. Continue in this manner until all your fixtures are linked together via their “Net In” and “Net Out” ports, as shown below.



3. Power on the first KL Panel / KL Panel PO unit, and use the control panel and display screen to navigate to Personality > Network in the main menu.
4. Select the “Switch” option and set it to “On” to enable ArtNet / sACN network operation.
5. Go back to the Network sub menu, and use the “IP” option to set the IP address for this fixture. Make sure that both the controller and the fixture are in the same IP address range to ensure that they can communicate with each other.
6. Go back to the Network sub menu, and use the “Subnet” options to set the subnet mask for the unit. Typically, this can be set to “255.255.255.0” to indicate that the first three numbers of the IP address must match in order for the devices to communicate.
7. Go back to the Network sub menu, select the “Protocol” option, and set whether the unit will run on ArtNet or sACN protocol.
8. Finally, go back to the Network sub menu, select the “Univers” option, and set the universe number that the unit will listen for.
9. Repeat steps 3 to 7 for each KL Panel / KL Panel PO unit that has been connected.
10. Power on your controller. You should now be able to control your connected network of KL Panel / KL Panel PO units using ArtNet or sACN protocol. Be sure to test that the system works as intended.

FAN MODES

The KL Panel / KL Panel PO is a high-performance fixture suited for multiple applications. For noise critical environments such as Theater, Opera or Orchestra Halls, it offers various fan operation modes which remove any distraction 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 time, preventing unwanted attraction to the fixture.

Mode	dbA at 1m LED off	dbA at 1m Dimmer 100%
Fan Control - Auto (Default)	39	46
Fan Control - High	50	59
Low Noise – Silent	32	33

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. If possible, they will turn-off, for example, when the fixture is dimmed to a low intensity. Fans sense the ambient and fixture temperature, and will always try to keep noise levels to a minimum. The fixture output will only reduce when the LED engine cannot be cooled down to its safe operating range due to high ambient temperature.

NOTE: Recommended for daily operation.

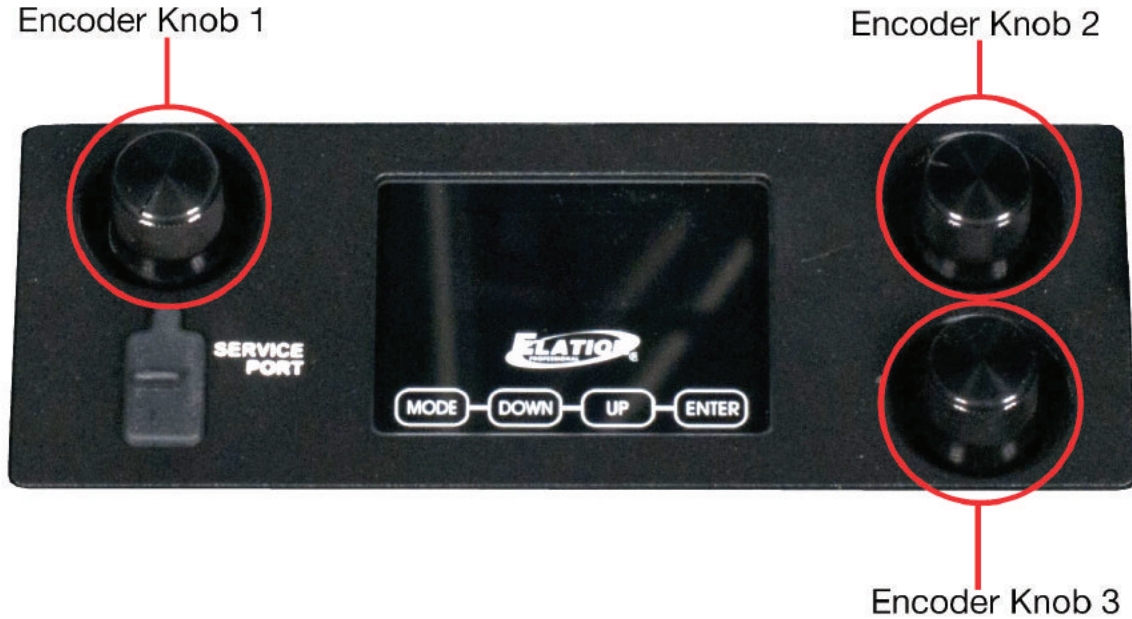
High—Fan speeds are increased throughout for the most efficient cooling of the fixture. This mode will increase wear on the fans and should only be utilized in exceptional circumstances. Fans will always run, even if the fixture is dimmed down. Fixture output is kept at 100% unless the LED engine temperature 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.

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

Almost all fixture fans are turned off, and only run when necessary. The fixture LED power output is reduced to 50%.

MANUAL MODE

ENCODER KNOB DESIGNATIONS



INT CCT GRN (INTENSITY, COLOR TEMPERATURE, GREEN SHIFT)

Elation KL Panel / KL Panel PO Manual Mode - Int CCT Grn				
Supports Software Versions: 1.03				
Encoder Knob	Parameter	Display	Resolution/Steps	Default
1	Intensity	Intensity 0% - 100%	1%	0%
2	Color Temperature	CCT 2000K - 10000K	100K	6000K
3	Green Shift	GRN -100% to +100%	1%	Neutral

HSI (HUE, SATURATION, INTENSITY)

Elation KL Panel / KL Panel PO Manual Mode - HSI				
Supports Software Versions: 1.03				
Encoder Knob	Parameter	Display	Resolution/Steps	Default
1	Intensity	Intensity 0% - 100%	1%	0%
2	Hue	Hue 0° - 360°	1°	0°
3	Saturation	Sat 0% - 100%	1%	Neutral

MANUAL MODE

INT COL SAT (INTENSITY, COLOR, SATURATION)

Elation KL Panel / KL Panel PO Manual Mode - Int Col Sat				
Supports Software Versions: 1.03				
Encoder Knob	Parameter	Display	Resolution/Steps	Default
1	Intensity	Intensity 0% - 100%	1%	0%
2	Color	White, Virtual Color 1, 2, 3, 4...	Single Color	White
3	Saturation	Sat 0% to 100%	1%	100%

MANUAL

Elation KL Panel / KL Panel PO Manual Mode - Manual				
Supports Software Versions: 1.03				
Encoder Knob	Parameter	Display	Resolution/Steps	Default
1	Intensity	Intensity 0% - 100%	1%	0%
2	Setting Adjustment	[Setting Name] 0 - 255	1	0
3	Setting Selection	[Setting Name] 0 - 255	Strobe / Red / Green / Blue / White / Lime / Cyan	Strobe

DMX TRAITS

CHANNEL				DMX VALUES	FUNCTION	Snap	Default Value
Dimmer 1Ch	Dimmer Color 4Ch	RGBWLC 6Ch	RGBWLC 16-bit 12Ch				
1	1			0-255	Dimmer Intensity 0 → 100%		0
	2			0-255	Dimmer Fine Fine Intensity Control		0
		1	1	0-255	Red 0 → 100%		0
			2	0-255	Red Fine Fine Adjustment		0
		2	3	0-255	Green 0 → 100%		0
			4	0-255	Green Fine Fine Adjustment		0
		3	5	0-255	Blue 0 → 100%		0
			6	0-255	Blue Fine Fine Adjustment		0
		4	7	0-255	White 0 → 100%		0
			8	0-255	White Fine Fine Adjustment		0
		5	9	0-255	Lime 0 → 100%		0
			10	0-255	Lime Fine Fine Adjustment		0
		6	11	0-255	Cyan 0 → 100%		0
			12	0-255	Cyan Fine Fine Adjustment		0

DMX TRAITS

CHANNEL								DMX VALUES	FUNCTION	Snap	Default Value
Std. 14Ch	Legacy Ext. 23Ch	Ext. 21Ch	HSI 4Ch	Legacy HSI Ext. 12Ch	HSI Ext. 13Ch	x,y Std. 9Ch	x,y Ext. 13Ch				
1	1	1		1	1	1	1		Shutter/Strobe		50
								0-31	Shutter closed		
								32-63	No function (shutter open)		
								64-95	Strobe effect slow to fast		
								96-127	No function (shutter open)		
								128-159	Pulse-effect in sequences		
								160-191	No function (shutter open)		
								192-223	Random strobe effect slow to fast		
224-255	No function (shutter open)										
2	2	2	1	2	2	2	2	0-255	Dimmer Intensity 0 → 100%		0
3	3	3	2	3	3	3	3	0-255	Dimmer Fine Fine Intensity Control		0
4	4	4						0-255	Red 0 → 100%		0
	5	5						0-255	Red Fine Fine Adjustment		0
5	6	6						0-255	Green 0 → 100%		0
	7	7						0-255	Green Fine Fine Adjustment		0
6	8	8						0-255	Blue 0 → 100%		0
	9	9						0-255	Blue Fine Fine Adjustment		0
	10	10						0-255	White 0 → 100%		0
	11	11						0-255	White Fine Fine Adjustment		0
	12	12						0-255	Lime 0 → 100%		0
	13	3						0-255	Lime Fine Fine Adjustment		0
	14	14						0-255	Cyan 0 → 100%		0
	15	15						0-255	Cyan Fine Fine Adjustment		0
			3	4	4			0-255	Hue 0 → 100%		0
					5			0-255	Hue Fine Fine Adjustment		0
			4	5	6			0-255	Saturation 0 → 100%		0
					7			0-255	Saturation Fine Fine Adjustment		0
						4	4	0-255	x Coordinate 0 → 100%		0
							5	0-255	x Coordinate Fine Fine Adjustment		0
						5	6	0-255	y Coordinate 0 → 100%		0
							7	0-255	y Coordinate Fine Fine Adjustment		0

DMX TRAITS

CHANNEL								DMX VALUES	FUNCTION	Snap	Default Value
Std. 14Ch	Legacy Ext. 23Ch	Ext. 21Ch	HSI 4Ch	Legacy HSI Ext. 12Ch	HSI Ext. 13Ch	x,y Std. 9Ch	x,y Ext. 13Ch				
7	16			6		6			CCT Presets	X	0
								0-19	Open		
								20-100	2000K → 10000K (See Sheet)		
								101-255	10000K		
		16			8		8		Variable CCT		0
								0-19	Open		
								20-255	2000K → 10000K		
		17			9		9	0-255	Variable CCT Fine Fine Adjustment		0
8	17	18			10		10		Green Shift		0
								0	Idle		
								1-127	Full Minus Green to Neutral		
								128	Neutral White		
								129-255	Neutral to Full Plus Green		
9	18	19		7	11	7	11		Color		0
								0	Open		
								1-179	Virtual Swatch Book (See Table)		
									Color Scroll		
								180-201	Clockwise Fast → Slow		
								202-207	Stop		
								208-229	Counter-clockwise Slow → Fast		
								230-234	Open		
									Random Slots		
								235-239	Fast		
								240-244	Medium		
								245-249	Slow		
								245-249	Slow		
250-255	Open										
10	19	20		8	12	8	12		Dim Modes	X	0
								0-20	Standard		
								21-40	Stage		
								41-60	TV		
								61-80	Architectural		
								81-100	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		
								129	0.8s		
								130	0.9s		
								131	1.0s		
								132	1.5s		
133	2.0s										
134	3.0s										
135	4.0s										

DMX TRAITS

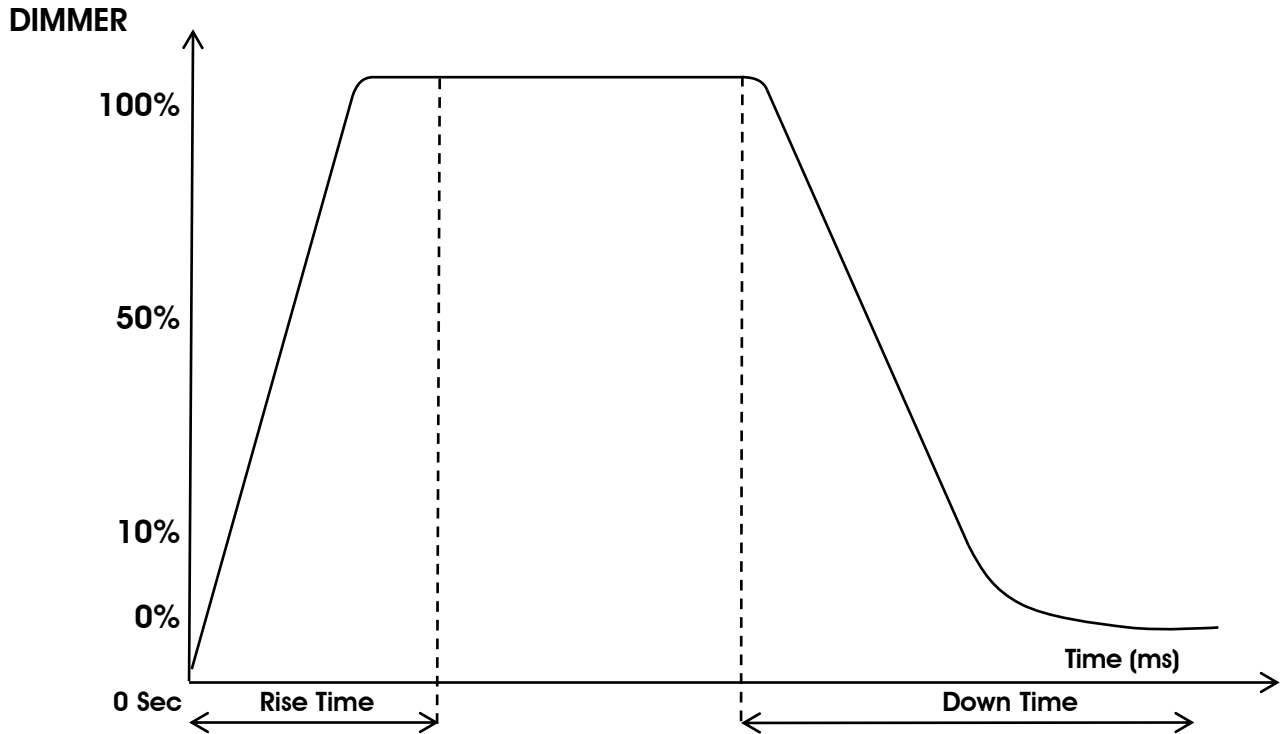
CHANNEL								DMX VALUES	FUNCTION	Snap	Default Value
Std. 14Ch	Legacy Ext. 23Ch	Ext. 21Ch	HSI 4Ch	Legacy HSI Ext. 12Ch	HSI Ext. 13Ch	x,y Std. 9Ch	x,y Ext. 13Ch				
10	19	20		8	12	8	12	136	5.0s	X	0
								137	6.0s		
								138	7.0s		
								139	8.0s		
								140	9.0s		
								141	10s		
								142-149	Idle		
									Dim to Warm		
								150-154	DTW On		
								155-159	DTW Off		
								160-255	Idle		
11	20	21		9	13	9	13		Control	X	0
								0-29	Idle		
								30-39	Fan Mode Auto		
								40-49	Fan Mode Silent		
								50-59	Fan Mode High		
								60-79	Idle		
								80-84	Reset		
								85-99	Idle		
									Refresh Rate (Hz)		
								100	900		
								101	910		
								102	920		
								103	930		
								104	940		
								105	950		
								106	960		
								107	970		
								108	980		
								109	990		
								110	1000		
								111	1010		
								112	1020		
								113	1030		
								114	1040		
								115	1050		
								116	1060		
								117	1070		
								118	1080		
								119	1090		
								120	1100		
								121	1110		
122	1120										
123	1130										
124	1140										
125	1150										
126	1160										
127	1170										
128	1180										
129	1190										
130	1200										

DMX TRAITS

CHANNEL								DMX VALUES	FUNCTION	Snap	Default Value
Std. 14Ch	Legacy Ext. 23Ch	Ext. 21Ch	HSI 4Ch	Legacy HSI Ext. 12Ch	HSI Ext. 13Ch	x,y Std. 9Ch	x,y Ext. 13Ch				
11	13	21		9	13	9	13	131	1210	X	0
								132	1220		
								133	1230		
								134	1240		
								135	1250		
								136	1260		
								137	1270		
								138	1280		
								139	1290		
								140	1300		
								141	1310		
								142	1320		
								143	1330		
								144	1340		
								145	1350		
								146	1360		
								147	1370		
								148	1380		
								149	1390		
								150	1400		
								151	1410		
								152	1420		
								153	1430		
								154	1440		
								155	1450		
								156	1460		
								157	1470		
								158	1480		
								159	1490		
								160	1500		
								161	2500		
								162	4000		
163	5000										
164	6000										
165	10000										
166	15000										
167	20000										
168	25000										
169-174	Idle										
	Color Tuning										
175-176	Highest Fidelity										
177-178	Balanced Output and Fidelity										
179-180	Highest Output (Default)										
	Output Balance										
181-182	Bright (Highest Output)										
183-184	Uniform (Elation Full Spectrum Match)										
185-200	Idle										
	Dimmer Curves										
201-210	Dimmer Curve: Linear (Default)										
211-220	Dimmer Curve: Square										
221-230	Dimmer Curve: Inverse Square										
231-240	Dimmer Curve: S-Curve										
241-255	Idle										
12	21			10				0-255	Reserved 1 Reserved Channel		0
13	22			11				0-255	Reserved 2 Reserved Channel		0
14	23			12				0-255	Reserved 3 Reserved Channel		0

DIMMER MODES

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



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

DMX VALUES	DIMMER MODES
0-20	Standard
21-40	Stage
41-60	TV
61-80	Architectural
81-100	Theatre
101-255	Default to Setting on Fixture

COLOR TEMPERATURE

Colors shown are an approximate representation (<https://www.luxalight.eu/en/cie-converto>).

DMX VALUE	COLOR TEMPERATURE (K)	DMX VALUE	COLOR TEMPERATURE (K)
20	2000	61	6100
21	2100	62	6200
22	2200	63	6300
23	2300	64	6400
24	2400	65	6500
25	2500	66	6600
26	2600	67	6700
27	2700	68	6800
28	2800	69	6900
29	2900	70	7000
30	3000	71	7100
31	3100	72	7200
32	3200	73	7300
33	3300	74	7400
34	3400	75	7500
35	3500	76	7600
36	3600	77	7700
37	3700	78	7800
38	3800	79	7900
39	3900	80	8000
40	4000	81	8100
41	4100	82	8200
42	4200	83	8300
43	4300	84	8400
44	4400	85	8500
45	4500	86	8600
46	4600	87	8700
47	4700	88	8800
48	4800	89	8900
49	4900	90	9000
50	5000	91	9100
51	5100	92	9200
52	5200	93	9300
53	5300	94	9400
54	5400	95	9500
55	5500	96	9600
56	5600	97	9700
57	5700	98	9800
58	5800	99	9900
59	5900	100	10000
60	6000		

VIRTUAL COLORS TABLE

VALUE	FILTER #	COLOR	VALUE	FILTER #	COLOR
1	7	Pale Yellow	32	49	Medium Purple
2	103	Straw	33	58	Lavender
3	151	Gold Tint	34	199	Palace Blue
4	100	Spring Yellow	35	119	Dark Blue
5	10	Medium Yellow	36	132	Medium Blue
6	101	Yellow	37	120	Deep Blue
7	104	Deep Amber	38	165	Daylight Blue
8	15	Deep Straw	39	161	Slate Blue
9	179	Loving Amber	40	118	Light Blue
10	21	Gold Amber	41	68	Sky Blue
11	105	Orange	42	143	Pale Navy Blue
12	158	Deep Orange	43	131	Marine Blue
13	22	Dark Amber	44	115	Peacock Blue
14	778	Millennium Gold	45	172	Lagoon Blue
15	135	Deep Golden Amber	46	116	Medium Blue Green
16	24	Scarlet	47	90	Dark Yellow Green
17	106	Primary Red	48	139	Primary Green
18	26	Bright Red	49	122	Fern Green
19	27	Medium Red	50	89	Moss Green
20	19	Fire	51	124	Dark Green
21	157	Pink	52	88	Lime Green
22	36	Medium Pink	53	138	Pale Green
23	111	Dark Pink	54	203	Quarter CT Blue
24	128	Bright Pink	55	202	Half CT Blue
25	148	Bright Rose	56	201	FULL CT Blue
26	332	Special Rose Pink	57	200	Double CT Blue
27	793	Vanity Fair	58	206	Quarter CT Orange
28	113	Magenta	59	205	Half CT Orange
29	46	Dark Magenta	60	204	FULL CT Orange
30	48	Rose Purple	61-179		No function
31	126	Mauve			

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.**

PERSONALITY – Service Setting – USB Update

To update the fixture software via the UPDATE/SERVICE PORT, follow steps below.

1. Copy fixture software update file from a PC computer to a compatible USB flash drive. Make sure only the fixture software update file is stored on the USB flash drive.
2. Disconnect DMX, Art-Net, and E-FLY connections and power the fixture ON.
3. Insert USB flash drive into the UPDATE/SERVICE PORT on the rear connection panel.
4. Navigate to the Personality > Service, then input the service passcode. Select the Update Software option.
5. Select the software file name on the menu display and press ENTER.
6. Select YES to begin update process. Updating...% will show on the menu display.
7. After file is uploaded, the fixture will check the software, which may take some time.
8. The fixture will perform a reset process when the software update process is complete.
9. Remove the USB flash drive and make necessary system menu setting adjustments.

C-LOADER II

Alternately, an Elation C-Loader II can be used to update the fixture to the latest software. Please visit the C-Loader II product page at the Elation web site and download the product manual for step by step instructions.

<https://www.elationlighting.com/c-loader-software-uploader>

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

SPECIFICATIONS

SOURCE

6-in-1 (Red, Green, Blue, White, Lime, Cyan) Full Spectrum LED Array
50,000 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

Up to 24,000 Total Lumen Output
Diffuser Beam Angle 101°
Diffuser Field Angle 159.4°
No Diffuser Beam Angle 111°
No Diffuser Field Angle 155.4°

EFFECTS

Variable CCT 2000K - 10000K
Green-Shift Adjustment
Virtual Gel Library
Variable 16-bit Dimming Curve Modes
High Speed Electronic Shutter and Strobe
Remote Adjustable LED Refresh Rate Frequency (900Hz-25KHz)

CONTROL / CONNECTIONS

9 DMX Channel Modes
3 Manual Adjustment Encoders
4 Button Control Panel and OLED Menu Display
DMX, RDM, Art-Net, sACN Protocol Support
E-Fly Internal Extended Range Wireless DMX Transceiver
Locking 5pin XLR Connector In/Out
Locking IP65 Power Connector In/Out
USB Connection (Firmware Updates, External 5V Power for Accessories)
4pin XLR External Battery Connection (battery not included)
With Wired Digital Communication Network
Junior Pin Adaptor #7050001062

SIZE / WEIGHT

Length: 20.8" (528mm)
Width: 5.5" (140mm)
Height: 12.2" (310mm)
Height (with yoke): 16.3" (415.2mm)
Weight: 28.6 lbs (13 kg)
Weight (without barndoor): 23.2 lbs (10.52 kg)
Weight (junior pin): 1.02 lbs (0.46kg)

ELECTRICAL / THERMAL

AC 100-240V - 50/60Hz
24-36 VDC (battery operation - battery not included)
Max Power Consumption 295W
14°F to 113°F (-10°C to 45°C)
BTU/hr (+/- 10%) 1005.95

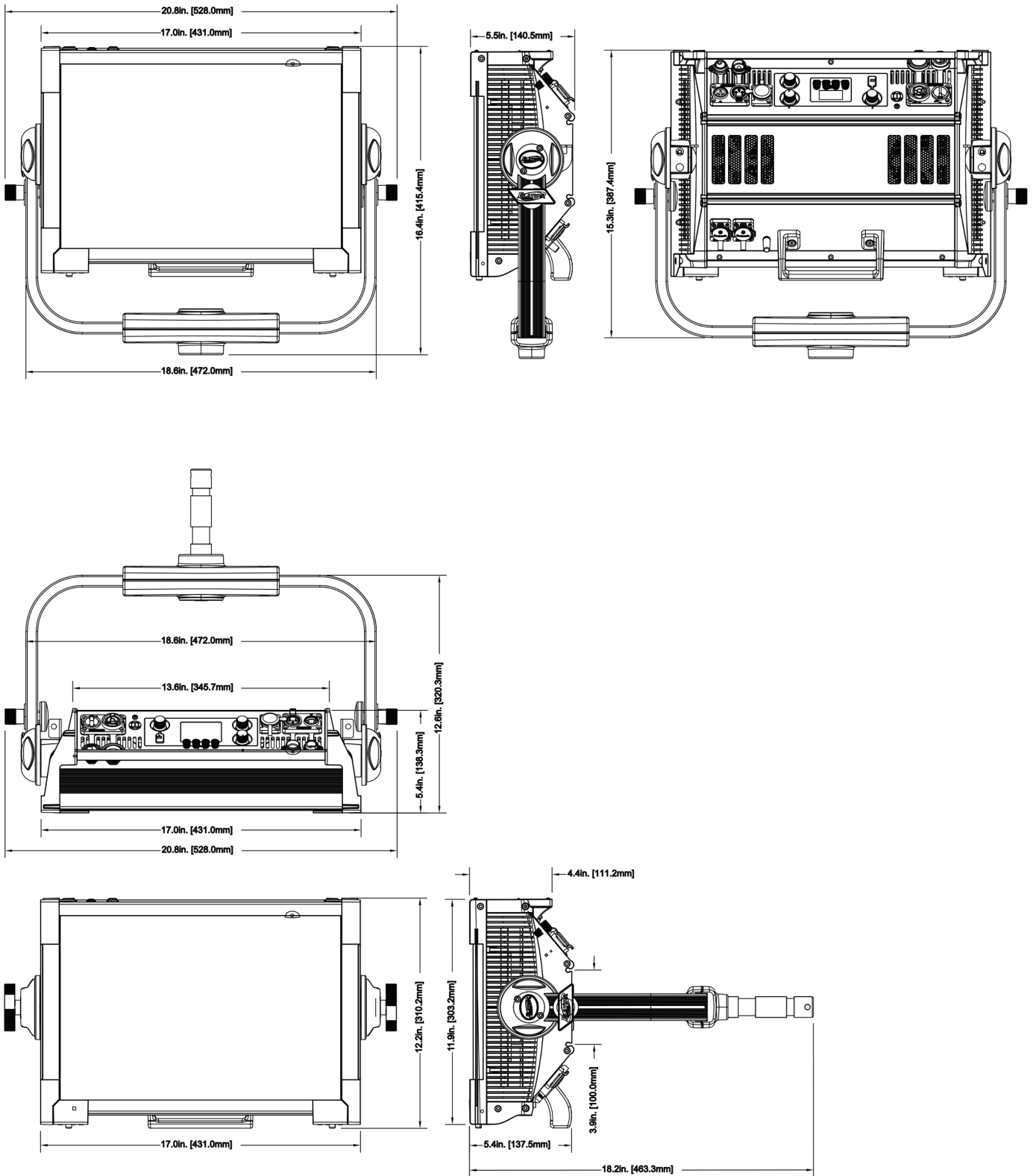
APPROVALS / RATINGS

CE | cETLus | IP20

Specifications and documentation subject to change without notice.

DIMENSIONAL DRAWINGS

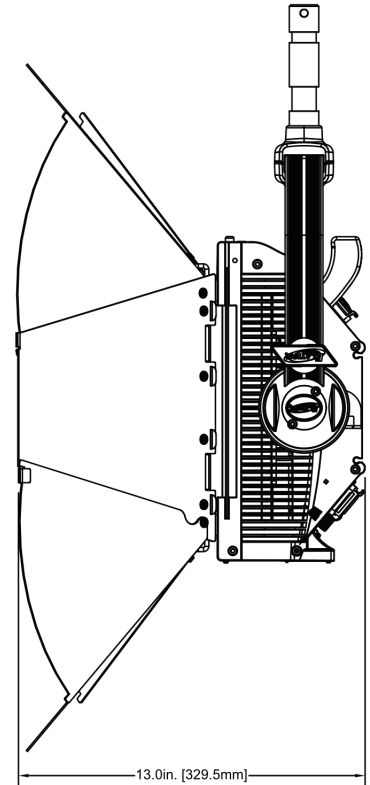
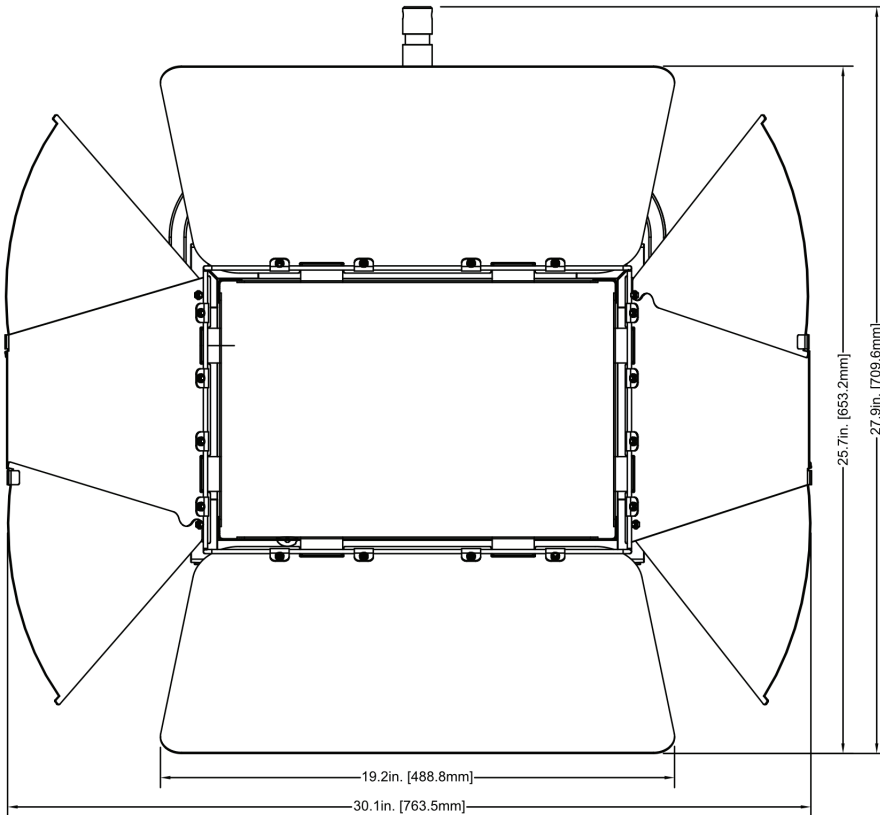
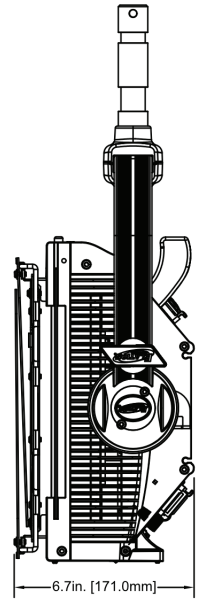
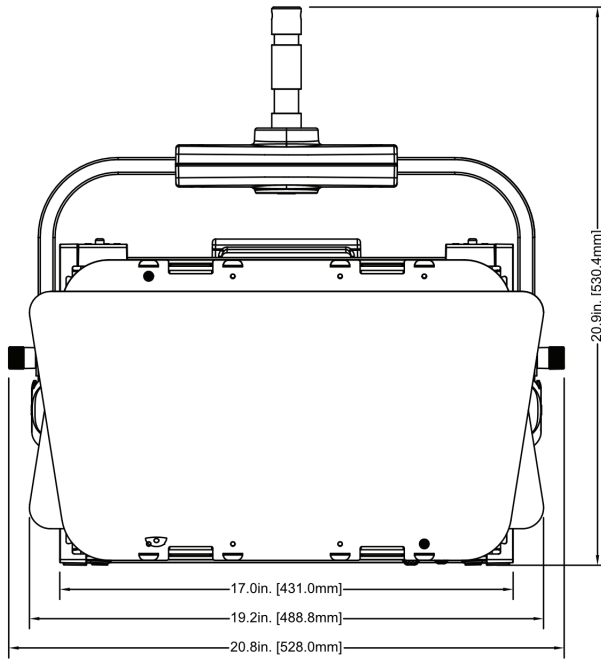
FIXTURE ONLY



Drawings not to scale.

DIMENSIONAL DRAWINGS

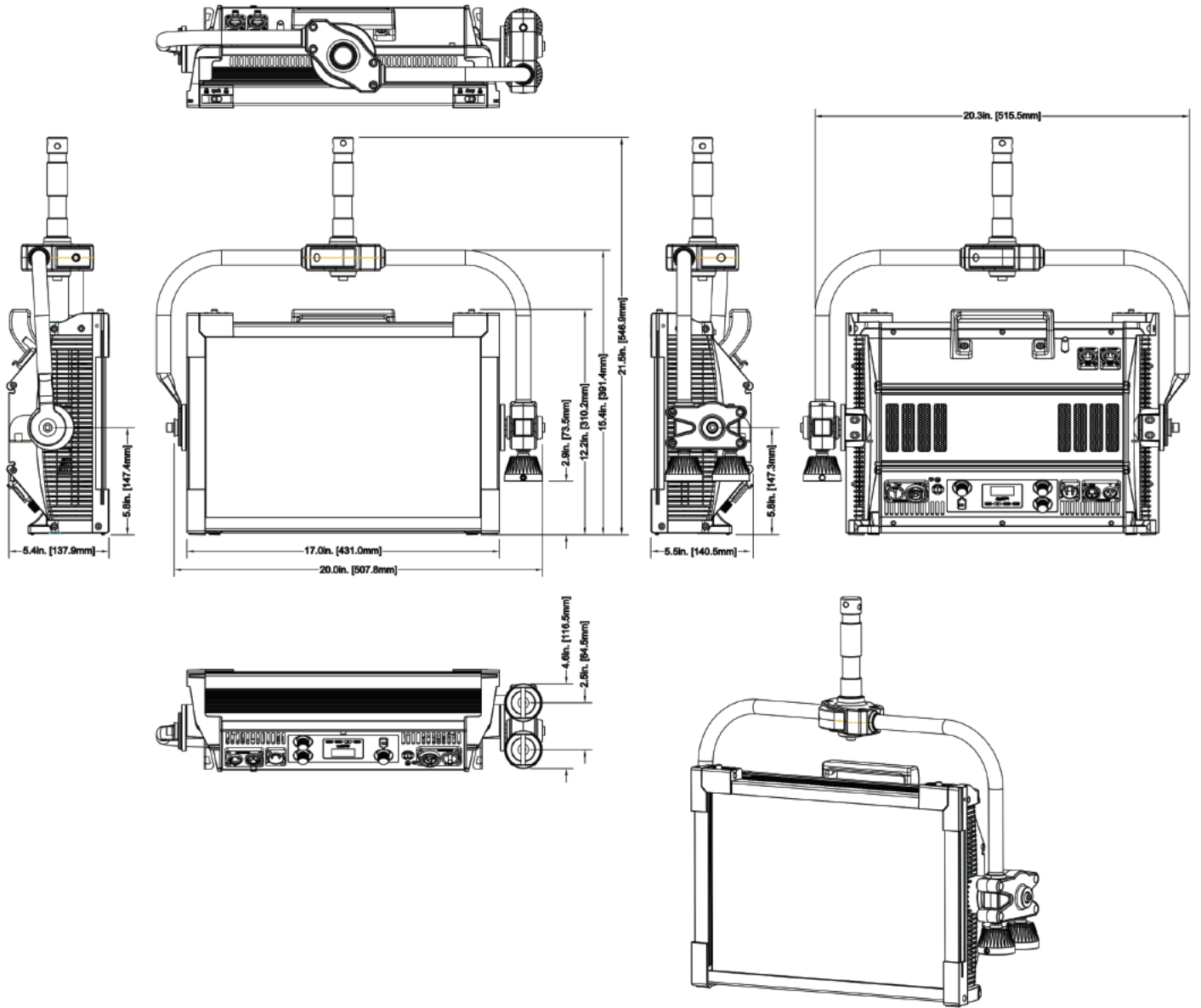
BARN DOOR AND JUNIOR PIN INSTALLED



Drawings not to scale.

DIMENSIONAL DRAWINGS

KL PANEL PO BRACKET INSTALLED



Drawings not to scale.

OPTIONAL ACCESSORIES

SKU (USA)	SKU (EU)	DESCRIPTION
KLP001	1237000224	KL Panel
KLP014	1237000264	KL Panel Narrow Yoke
KLP613	1223200081	Snapgrid 40°
KLP625	1223200082	Snapbag
KLP991	1223200080	KL Panel PO Bracket

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 two different circuits.
- Consult the dealer or an experienced radio/TV technician for help.



