ELATION

PROFESSIONAL

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

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 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 manufactures 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

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 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.
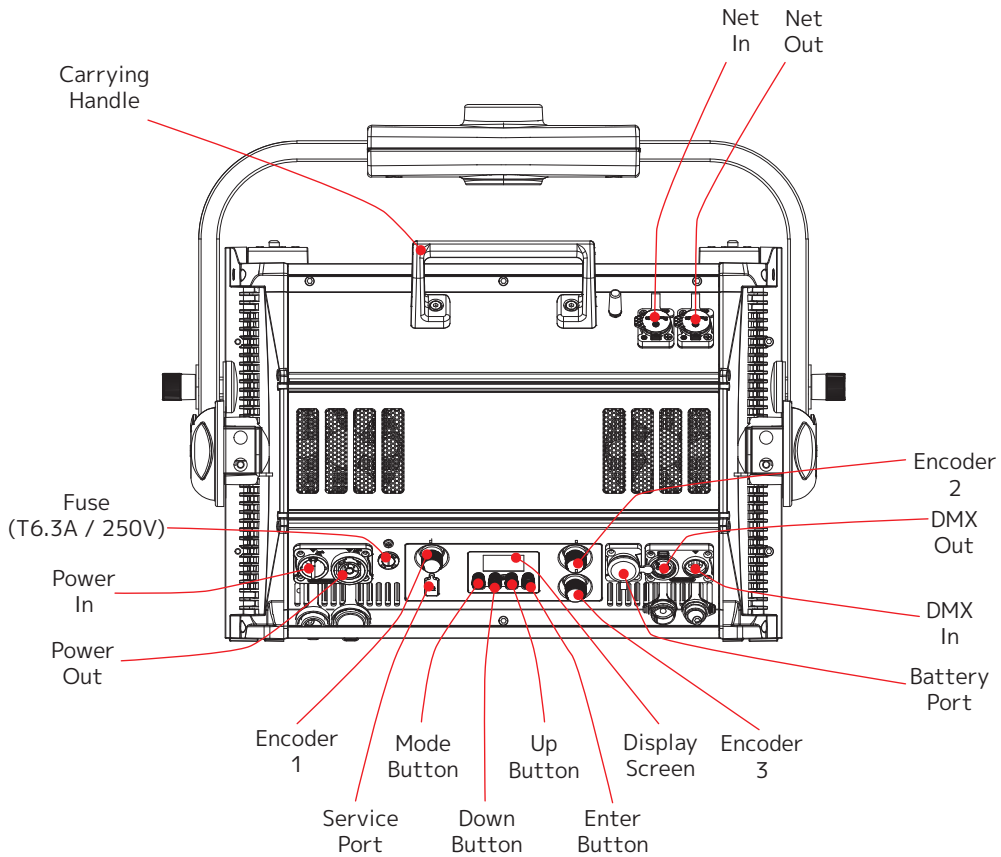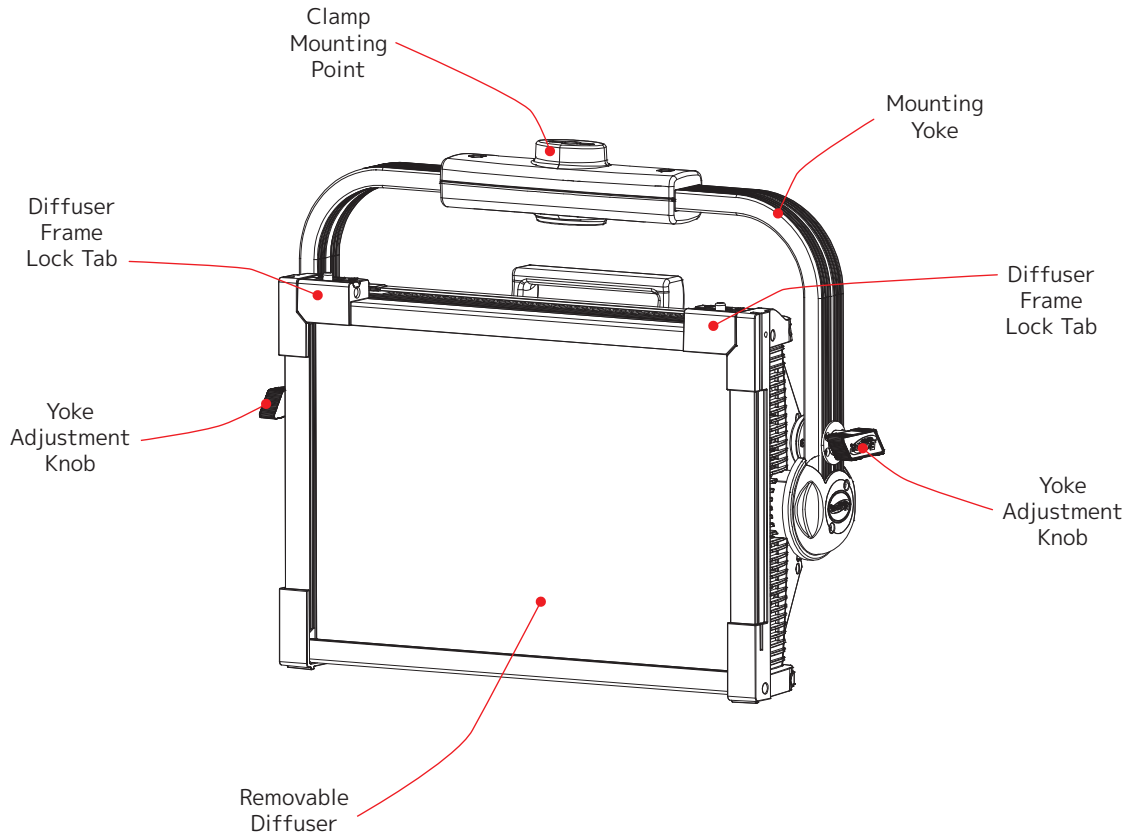There are no user serviceable parts inside this fixture, please refer all other service issues to an authorized Elation service technician. Should you need any spare parts, please order genuine parts from your local Elation dealer.

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. Lose screws may fall out during normal operation resulting in damage or injury as larger parts could fall.
*   Check for any deformations on the housing, color lenses, rigging hardware, and rigging points (ceiling, suspension, trussing). Deformations in the housing could allow for dust to enter into the fixture. Damaged rigging points or unsecured rigging could cause the fixture to fall and seriously injure a person(s).
*   Electric power supply cables must not show any damage, material fatigue or sediments.

N**EVER remove the ground prong from the power cable.**

OVERVIEW

Clamp Mounting Point

Mounting Yoke

Diffuser Frame Lock Tab

Diffuser Frame Lock Tab

Yoke Adjustment Knob

Yoke Adjustment Knob

Removable Diffuser

Carrying Handle

Net In

Net Out

Encoder 2

Fuse (T6.3A / 250V)

DMX Out

Power In

DMX In

Power Out

Battery Port

Encoder 1

Mode Button

Up Button

Display Screen

Encoder 3

Service Port

Down Button

Enter Button

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.
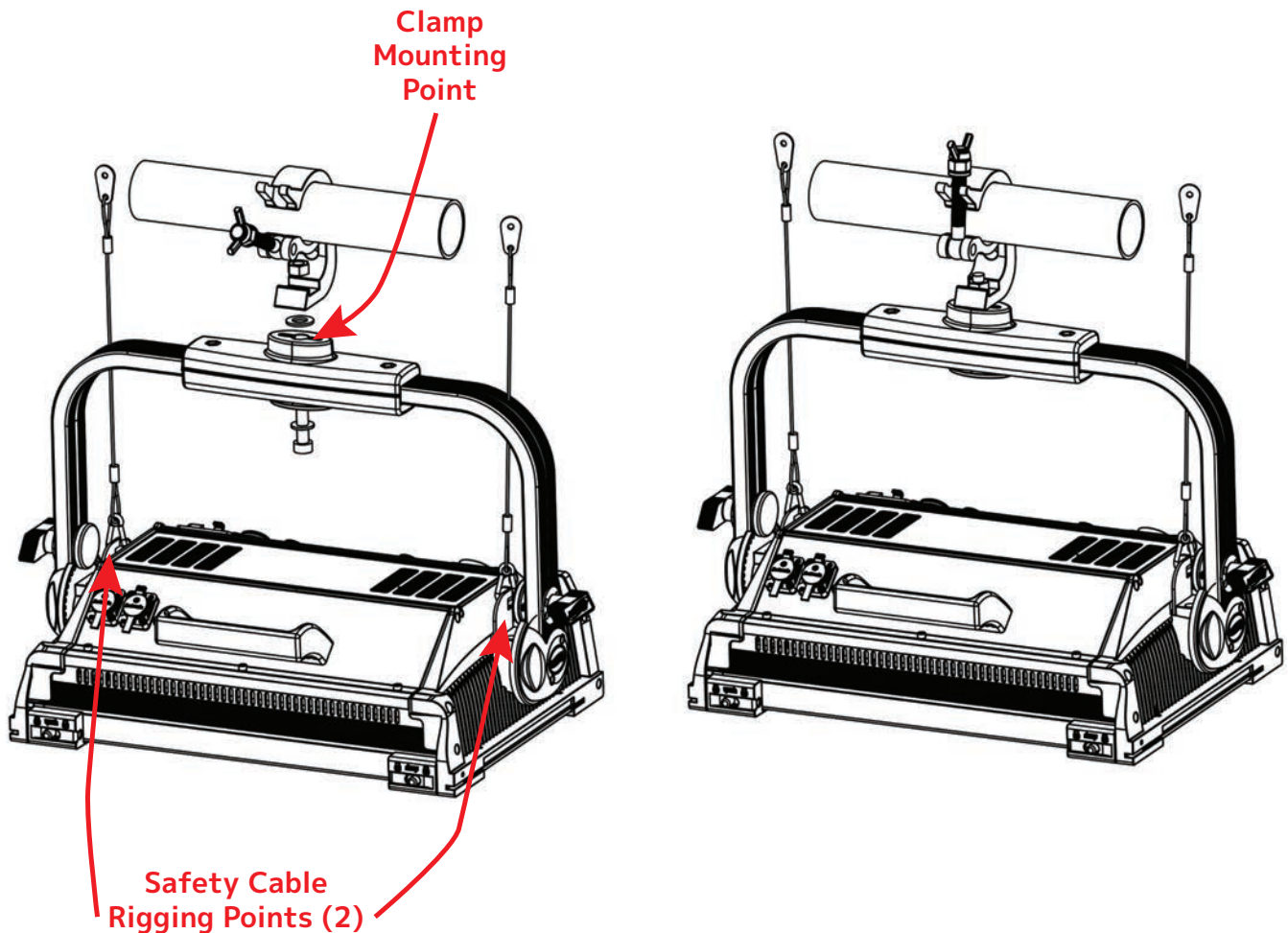
Clamp Mounting Point
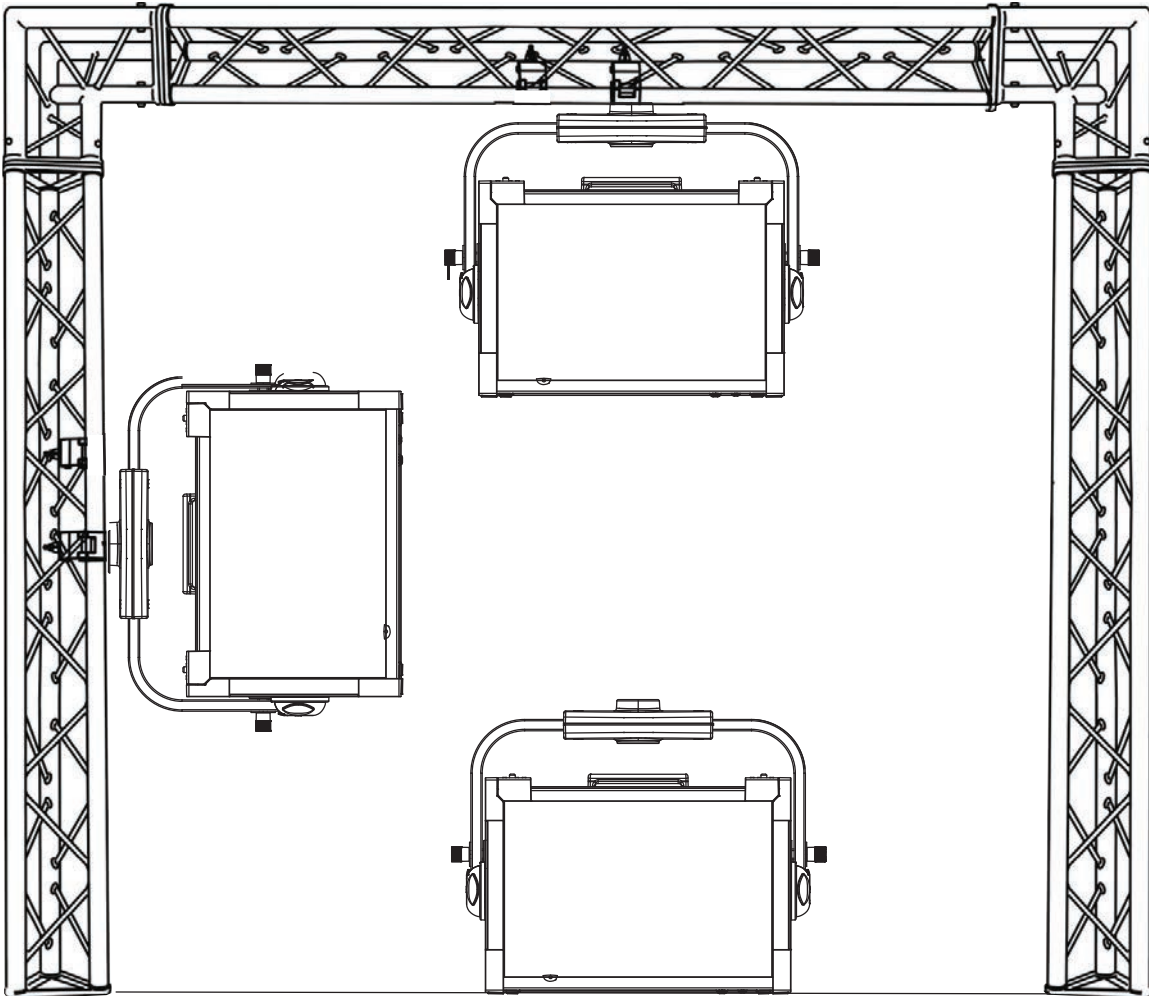
Safety Cable Rigging Points (2)

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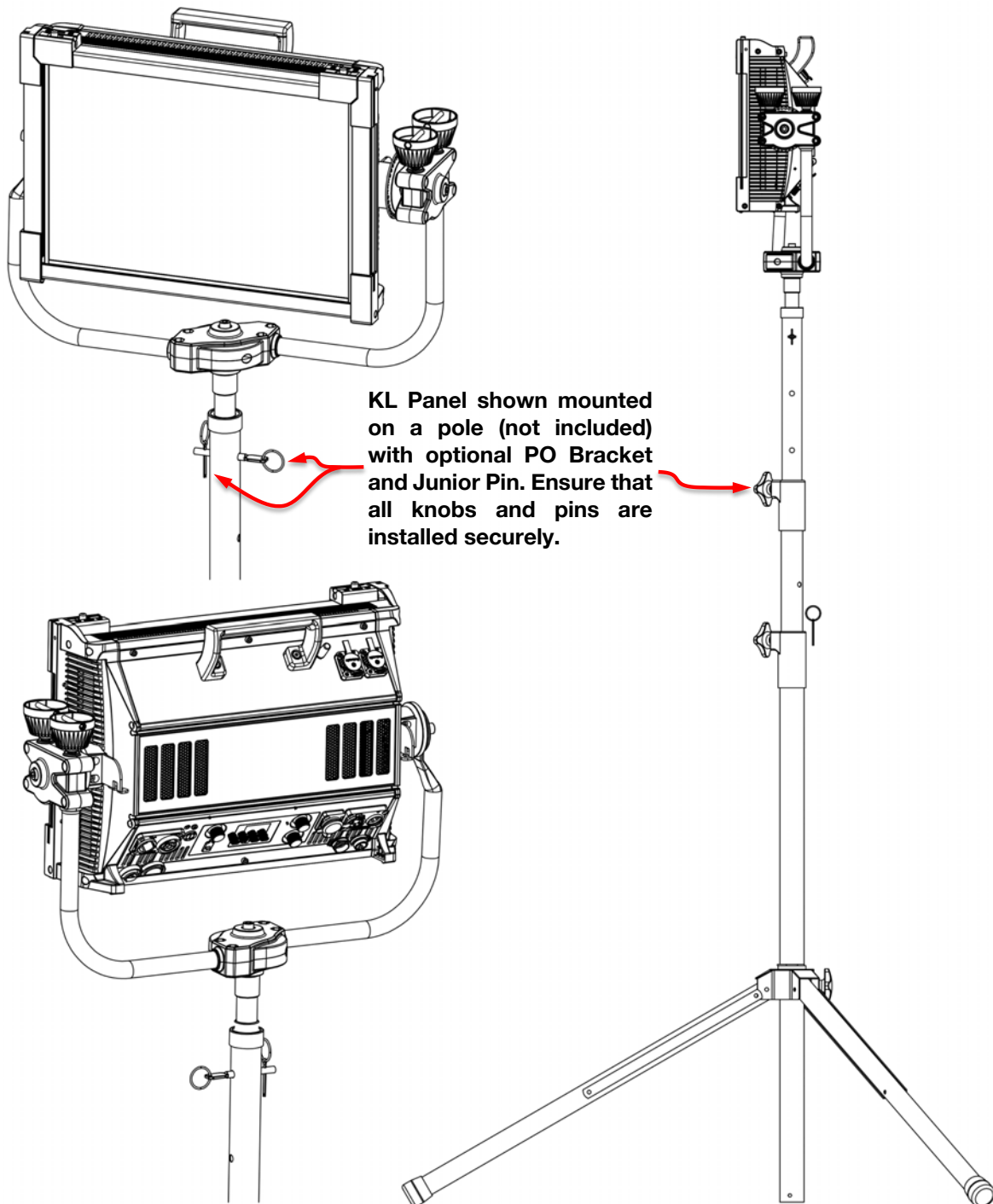
SAFETY CABLE
ALWAYS ATTACH A SAFETY CABLE WHENEVER INSTALLING THIS FIXTURE IN A SUSPENDED ENVIRONMENT TO ENSURE THE FIXTURE WILL NOT DROP IF THE CLAMP FAILS. ONLY USE DESIGNATED RIGGING POINTS FOR SAFETY CABLE, AND NEVER ATTACH A SAFETY CABLE TO A CARRYING HANDLE.

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.
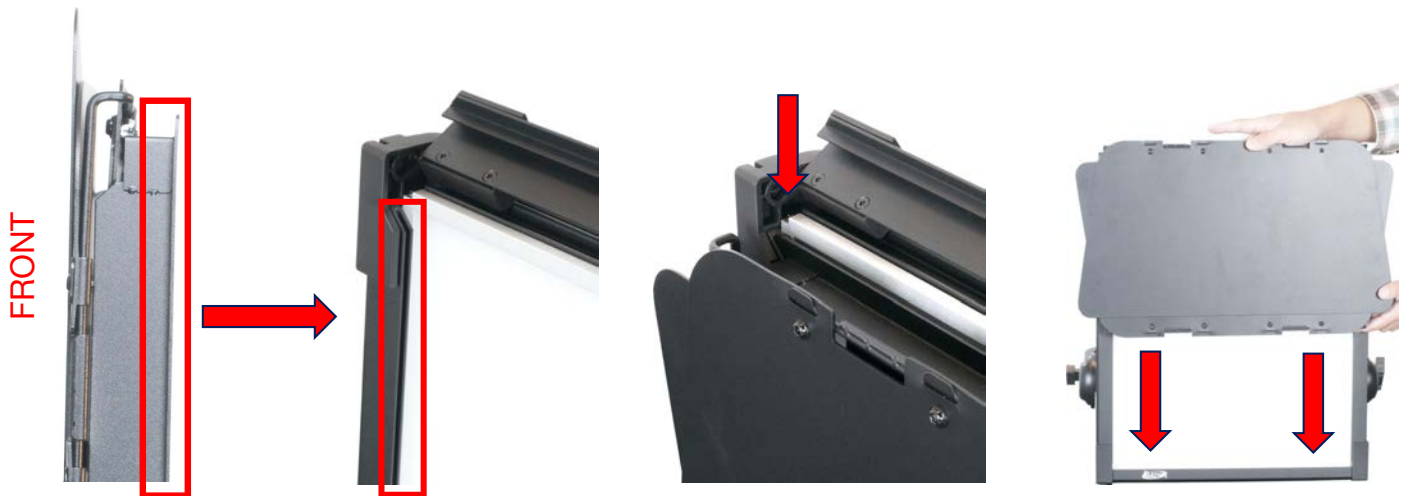
KL Panel shown mounted on a pole (not included) with optional PO Bracket and Junior Pin. Ensure that all knobs and pins are installed securely.

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.

FRONT

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 barndoor with this empty mounting slot, and slowly lower the barndoor into place.
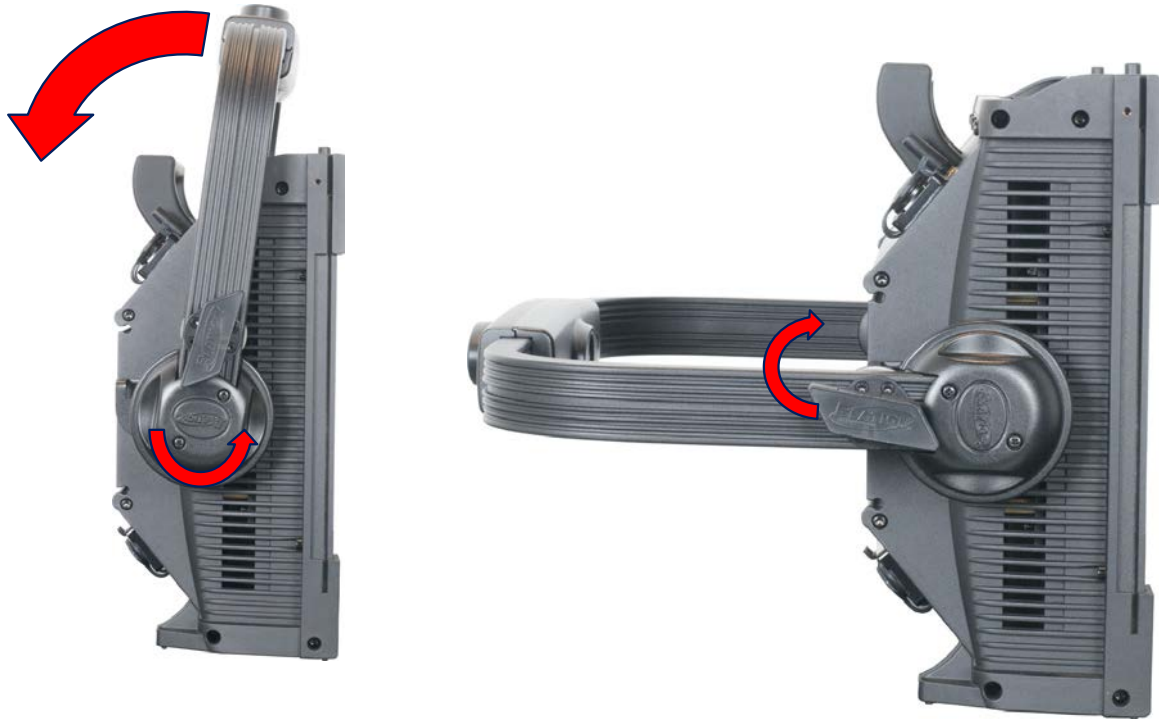
ACCESSORY INSTALLATION

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:
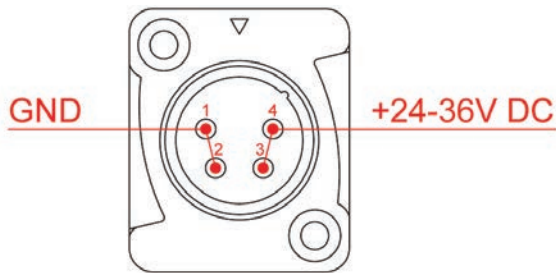
GND ... +24-36V DC

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	[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] Real Time 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 On Mode	[0x0030] Status Messages

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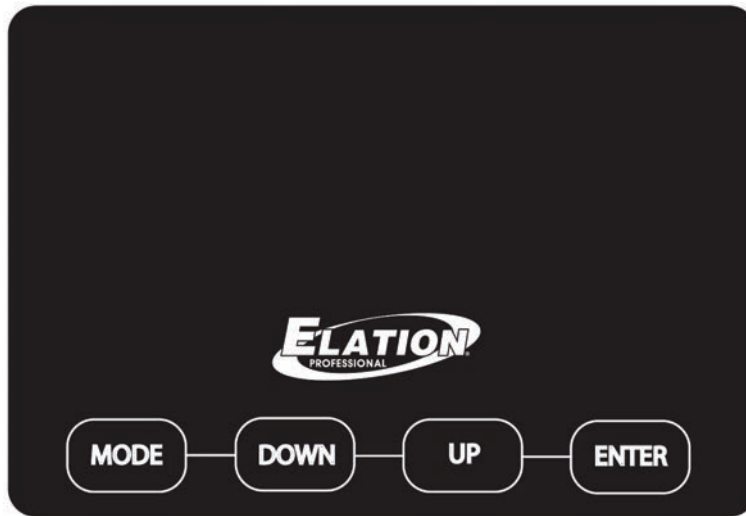
SERVICE PORT
This device features a service port on the control panel that can be used to perform software updates. Please refer to the **Software Updates** section of this manual for detailed information.

SYSTEM MENU

Supports Software Versions: > 1.03			
MANUAL MODE	Disabled		See **Manual Mode** section of this manual for details
	Int CCT Grn		
	HSI		
	Int Color Sat		
	Manual Control		
DMX SETTINGS	DMX Address	001 - 512	Set DMX starting address
	DMX Mode	1-Ch Dimmer	Select DMX channel mode
		4-Ch Dimmer Color	
		7-Ch Dimmer Color FX	
		6-Ch RGBWLC	
		12-Ch RGBWLC 16-Bit	
		14-Ch Standard	
		23-Ch Extended	
		4-Ch HSI	
		12-Ch HSI Extended	
	No DMX Status	Hold Last	Define how fixture will behave when DMX signal is lost or interrupted
		Fade to Black	
		Standalone	
STANDALONE	Dimmer	0% - 100%	Dimmer adjustment
	CCT	2000K - 10000K	Color temperature adjustment
	Green Shift	-100% ~ +100%	Green shift adjustment
	Virtual Color	Color01	Color selection; see **Color Table** section of this manual
		Color02	
		...	
		Color60	
PERSONALITY	Primary	On / Off	Set unit as a primary unit
	Secondary	On / Off	Set unit as a secondary unit
	Select Signal	DMX or E-Fly	Select signal source
		E-Fly and DMX Out	
	Dim Mode	Standard	Select dim mode and dim speed
		Stage	
		TV	
		Architectural	
		Theatre	
		Stage 2	
		Dim Speed	0.0s - 10.0s	
	Dim Curves	Linear	Select dim curve
		Square	
		Square Inverse	
		S-Curve	
	E-Fly Setting	Set Channel	00 - 14	Select E-Fly channel
		Enable E-Fly	Yes / No	Enable or disable E-Fly

CONTINUED ON NEXT PAGE

SYSTEM MENU

Elation KL Panel / KL Panel PO System Menu				
Supports Software Version: ≥ 1.03				
PERSONALITY (continued)	LED Refresh Rate	900 - 1500 Hz		Select LED refresh rate
		2500 Hz		
		4000 Hz		
		5000 Hz		
		6000 Hz		
		10 KHz		
		15 KHz		
		20 KHz		
		25 KHz		
	LED Power Limit	50%		Select limit for LED power output as a percentage of the max output
		60%		
		70%		
		80%		
		90%		
		100%		
	Fan Mode	Auto		Select fan mode
		Silent		
		High		
	Display	Screen Delay	3s - 10s	Set period of inactivity after which screen will lock
		Screen Lock	On / Off	Enable or disable screen lock feature; **to unlock screen, press and hold Mode Button for 3 seconds**
		Rotate Display 180°	Yes	Invert display
			No	Standard display orientation
			Auto	Automatically flip display to maintain upright orientation
	Network	Switch	On / Off	Turn network switch on or off
		Univers	000 - 255	Set universe
		IP	xxx.xxx.xxx.xxx	Set IP address
		Subnet	xxx.xxx.xxx.xxx	Set sub net
		Protocol	Artnet	Set operating protocol
			sACN	
	Service Passcode = 050	Calibration	Red: 050 - 255	Calibrate individual colors
			Green: 050 - 255	
			Blue: 050 - 255	
			Lime: 050 - 255	
			White: 050 - 255	
			Cyan: 050 - 255	
		Update Software	Yes / No	Update unit software
		Factory Restore	Yes / No	Return unit to factory settings
		Edit RDIM UID		Edit RDIM UID
CONTINUED ON NEXT PAGE				

SYSTEM MENU

Elation KL Panel / KL Panel PO System Menu			
Supports Software Version: > 1.03			
INFORMATION	Life Time		Lifetime fixture run time
	Last Run Time		Fixture run time since last reset
	Time Reset Passcode = 038		Reset Last Run Time
	Temperatures	Current	Current measured temperature
		Max Resettable	Maximum recorded temperature since last reset
		Max Unresettable	Lifetime maximum recorded temperature
		Reset (Passcode = 038)	Reset Max Resettable temperature
	DMX Values		Display current value of each DMX channel
	Product IDs	Mac Address	Product ID
		RDM UID	
	Error Logs		List fixture errors one by one
	Reset Error Log Passcode = 050	Yes / No	Reset error log
	Software Version		Display current software version

NETWORK SET UP

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.

Fixture 1   **Fixture 2**

Controller   **To Additional Fixtures**

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

Encoder Knob 1

Encoder Knob 2

SERVICE PORT

MODE — DOWN — UP — ENTER
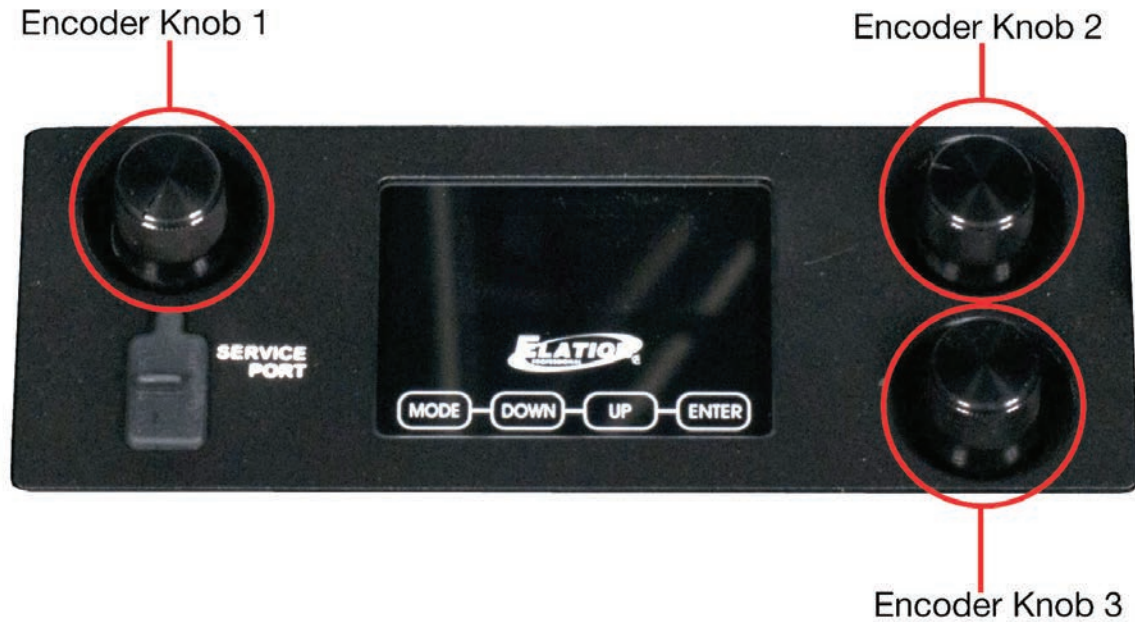
Encoder Knob 3

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

1Ch Dimm.	4Ch Dimm. Color	7Ch Dimm. Color FX	6Ch RGB-WLC	12Ch RGB-WLC 16bit	14Ch Std	23Ch Ext	4Ch HSI	12Ch HSI Ext	DMX VALUES	FUNCTION	DEF.	SNAP
			1	1	4	4			000 - 255	**Red,** 0% to 100%	0	
				2		5			000 - 255	**Red Fine**	0	
			2	3	5	6			000 - 255	**Green,** 0% to 100%	0	
				4		7			000 - 255	**Green Fine**	0	
			3	5	6	8			000 - 255	**Blue,** 0% to 100%	0	
				6		9			000 - 255	**Blue Fine**	0	
			4	7		10			000 - 255	**White,** 0% to 100%	0	
				8		11			000 - 255	**White Fine**	0	
			5	9		12			000 - 255	**Lime,** 0% to 100%	0	
				10		13			000 - 255	**Lime Fine**	0	
			6	11		14			000 - 255	**Cyan,** 0% to 100%	0	
				12		15			000 - 255	**Cyan Fine**	0	
					1	1		1		**Strobe**	50	Snap
									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)		
1	1	1			2	2	1	2	000 - 255	**Dimmer Intensity,** 0% to 100%	0	
	2	2			3	3	2	3	000 - 255	**Dimmer Fine**	0	
							3	4	000 - 255	**Hue,** 0% to 100%	255	
							4	5	000 - 255	**Saturation,** 0% to 100%	255	
	3	3			7	16		6		**CCT**	0	
									000 - 019	Open		
									020 - 100	CCT 2000K - 10000K (see **Color Temperature Table** section of this manual)		
									101 - 255	10000K		
					8	17				**Green Shift**	0	
									000	Idle		
									001 - 127	Full Minus Green to Neutral		
									128	Neutral White		
									129 - 255	Neutral to Full Plus Green		

DMX TRAITS

1Ch Dimm.	4Ch Dimm. Color	7Ch Dimm. Color FX	6Ch RGB-WLC	12Ch RGB-WLC 16bit	14Ch Std	23Ch Ext	4Ch HSI	12Ch HSI Ext	DMX VALUES	FUNCTION	DEF.	SNAP
										Color Wheel		
									000	Open		
									001 - 179	Virtual Swatch Book (see **Virtual Colors Table** section of this manual)		
									180 - 201	Clockwise Color Scroll, fast to slow		
	4	4			9	18		7	202 - 207	Stop	0	
									208 - 229	Counter-Clockwise Color Scroll, slow to fast		
									230 - 234	Open		
									235 - 239	Random Color Scroll, fast		
									240 - 244	Random Color Scroll, medium		
									245 - 249	Random Color Scroll, slow		
									250 - 255	Open		
										Dim Modes		
									000 - 020	Standard		
									021 - 040	Stage		
									041 - 060	TV		
									061 - 080	Architectural		
									081 - 100	Stage 2		
										Dimmer Delay Time		
									121	0s		
									122	0.1s		
									123	0.2s		
									124	0.3s		
									125	0.4s		
									126	0.5s		
					10	19		8	127	0.6s	0	Snap
									128	0.7s		
									129	0.8s		
									130	0.9s		
									131	1.0s		
									132	1.5s		
									133	2.0s		
									134	3.0s		
									135	4.0s		
									136	5.0s		
									137	6.0s		
									138	7.0s		
									139	8.0s		

DMX TRAITS

CHANNEL									DMX VALUES	FUNCTION	DEF.	SNAP
1Ch Dimm.	4Ch Dimm. Color	7Ch Dimm. Color FX	6Ch RGB-WLC	12Ch RGB-WLC 16bit	14Ch Std	23Ch Ext	4Ch HSI	12Ch HSI Ext				
					10	19		8		**Dimmer Delay Time (continued)**	0	Snap
									140	9.0s		
									141	10.0s		
									142 - 255	Idle		
					11	20		9		**Control**	0	Snap
									000 - 029	Idle		
									030 - 039	Fan Mode Auto		
									040 - 049	Fan Mode Silent		
									050 - 059	Fan Mode High		
									060 - 079	Idle		
									080 - 084	Reset		
									085 - 099	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		

DMX TRAITS

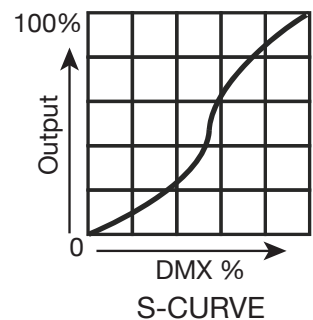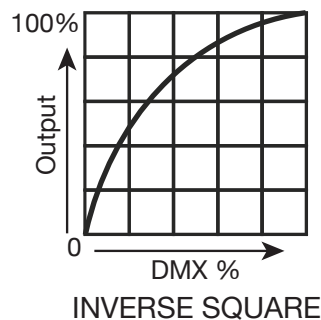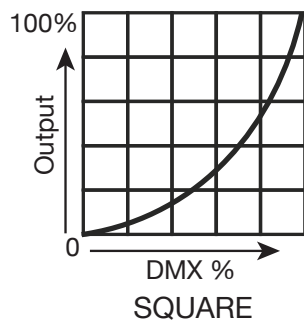| 1Ch Dimm.	4Ch Dimm. Color	7Ch. Dimm. Color FX	6Ch RGB-WLC	12Ch RGB-WLC 16bit	14Ch Std	23Ch Ext	4Ch HSI	12Ch HSI Ext	DMX VALUES	FUNCTION	DEF.	SNAP
										Refresh Rate (Hz) (continued)		
									127	1170		
									128	1180		
									129	1190		
									130	1200		
									131	1210		
									132	1220		
									133	1230		
									134	1240		
									135	1250		
									136	1260		
									137	1270		
									138	1280		
									139	1290		
									140	1300		
									141	1310		
									142	1320		
									143	1330		
									144	1340		
									145	1350		
					11	20		9	146	1360	0	Snap
									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		

DMX TRAITS

1Ch Dimm.	4Ch. Dimm. Color	7Ch. Dimm. Color FX	6Ch RGB-WLC	12Ch RGB-WLC 16cit	14Ch Std	23Ch Ext	4Ch HSI	12Ch HSI Ext	DMX VALUES	FUNCTION	DEF.	SNAP
										Refresh Rate (Hz) (continued)		
									167	20000		
									168	25000		
									169 - 200	Idle		
									201 - 210	Dimmer Curve Linear (default)		
									211 - 220	Dimmer Curve Square		
									221 - 230	Dimmer Curve Inverse Square		
									231 - 240	Dimmer Curve S-Curve		
					11	20		9	241	Internal Program 1 (Scene 1-8)	0	Snap
									242	Internal Program 2 (Scene 9-16)		
									243	Internal Program 3 (Scene 17-24)		
									244	Internal Program 4 (Scene 25-32)		
									245	Internal Program 5 (Scene 33-40)		
									246	Internal Program 6 (Scene 41-48)		
									247	Internal Program 7 (Scene 49-56)		
									248 - 255	Idle		
		5			12	21		10	000 - 255	**FX Selection** (not currently implemented)	0	Snap
		6			13	22		11	000 - 255	**FX Adjustment**	127	Fade
										FX Offset		
									000	Idle		
									001	Fixture Offset, 10°		
									002	Fixture Offset, 20°		
									...	...		
		7			14	23		12	035	Fixture Offset, 350°	0	Snap
									036	Synchronized		
									037 - 100	No function		
									101 - 120	Random Fixture Offset		
									121 - 140	Random Pixel Order		
									141 - 255	Random Steps		

DIMMER MODES

Select desired DIMMER MODE (Standard, Stage, TV, Architectural, Theatre, Stage2).
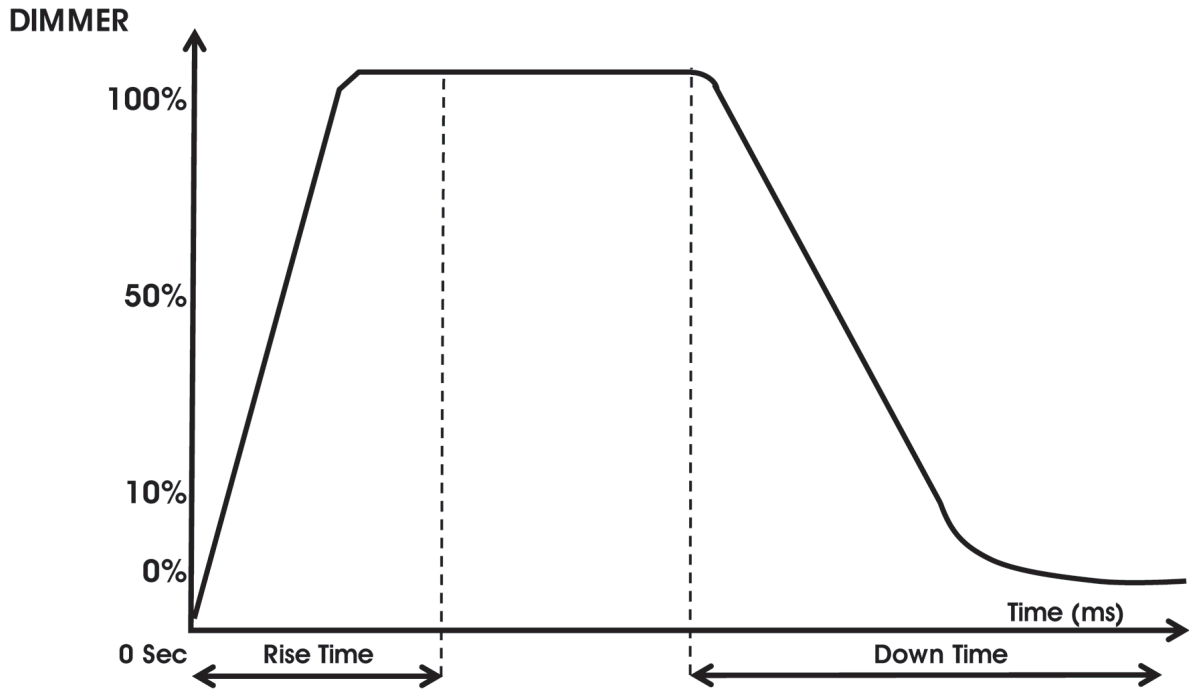
	0 sec Fade Time		1 sec Fade Time	
Dimming Curve Ramp Effect				
	Rise Time (ms)	Down Time (ms)	Rise Time (ms)	Down Time (ms)
Standard (default)	0	0	0	0
Stage	780	1100	1540	1660
TV	1180	1520	1860	1940
Architectural	1380	1730	2040	2120
Theatre	1580	1940	2230	2280
Stage 2	0	1100	0	1660

LINEAR

SQUARE

INVERSE SQUARE

S-CURVE
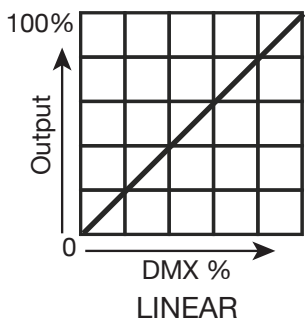
COLOR TEMPERATURE TABLE

DMX VALUES	COLOR TEMP (K)	DMX VALUES	COLOR TEMP (K)
020	2000	052	5200
021	2100	053	5300
022	2200	054	5400
023	2300	055	5500
024	2400	056	5600
025	2500	057	5700
026	2600	058	5800
027	2700	059	5900
028	2800	060	6000
029	2900	061	6100
030	3000	062	6200
031	3100	063	6300
032	3200	064	6400
033	3300	065	6500
034	3400	066	6600
035	3500	067	6700
036	3600	068	6800
037	3700	069	6900
038	3800	070	7000
039	3900	071	7100
040	4000	072	7200
041	4100	073	7300
042	4200	074	7400
043	4300	075	7500
044	4400	076	7600
045	4500	077	7700
046	4600	078	7800
047	4700	079	7900
048	4800	080	8000
049	4900	081	8100
050	5000	082	8200
051	5100		

VIRTUAL COLORS TABLE

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

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
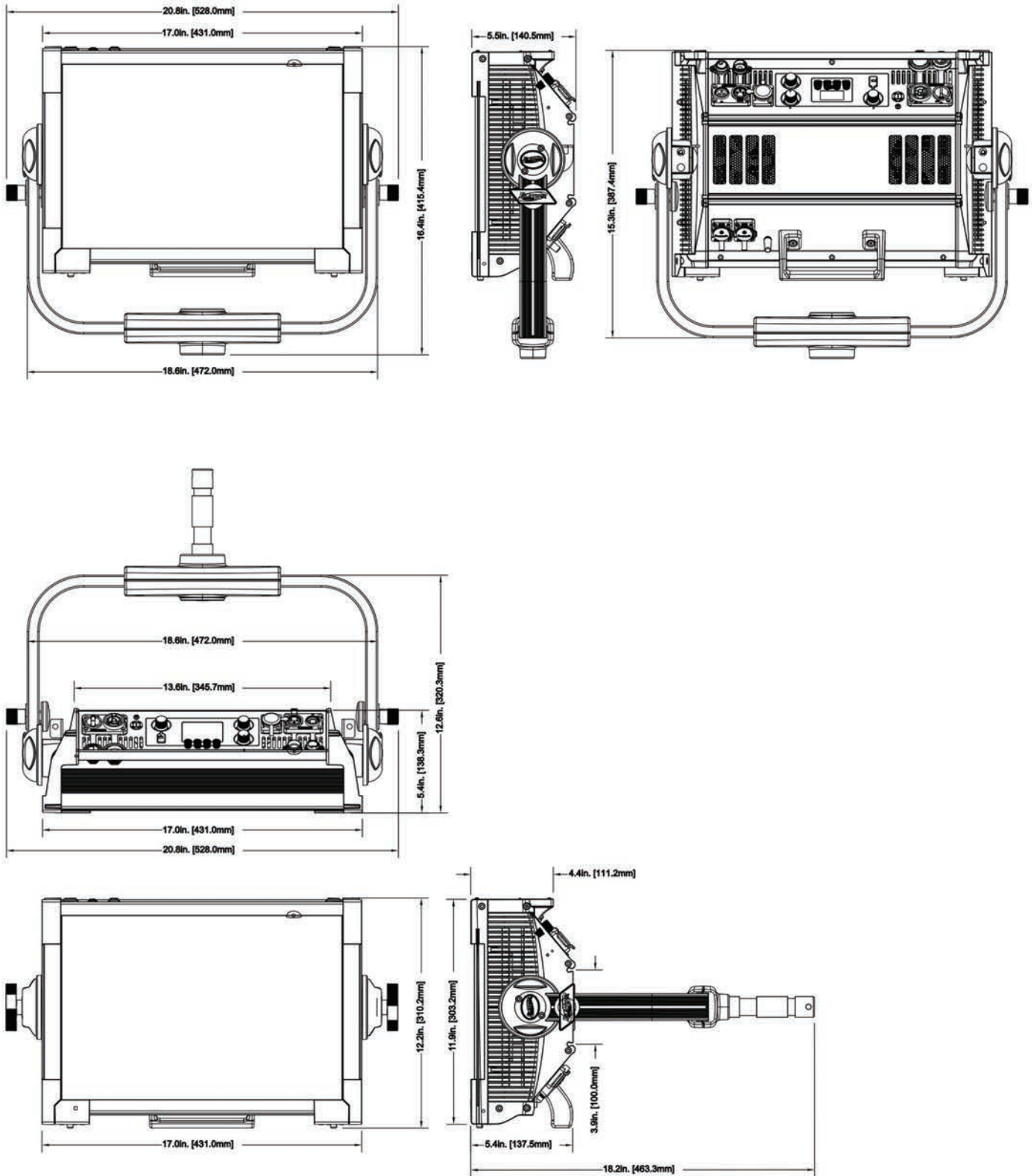14°F to 113°F (-10°C to 45°C)
BTU/hr (+/- 10%) 1005.95

APPROVALS / RATINGS
CE | cETLus | IP20

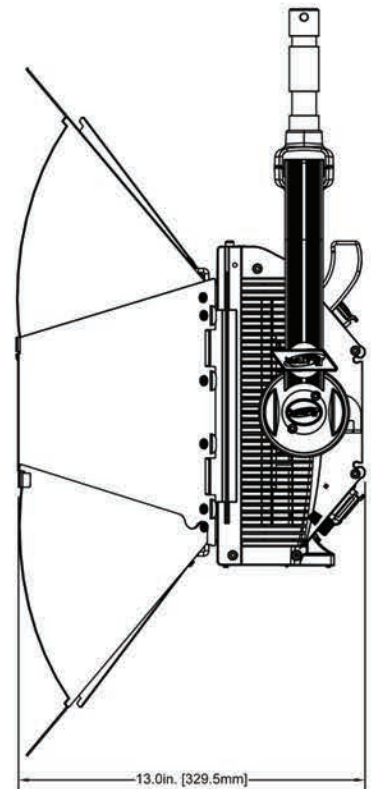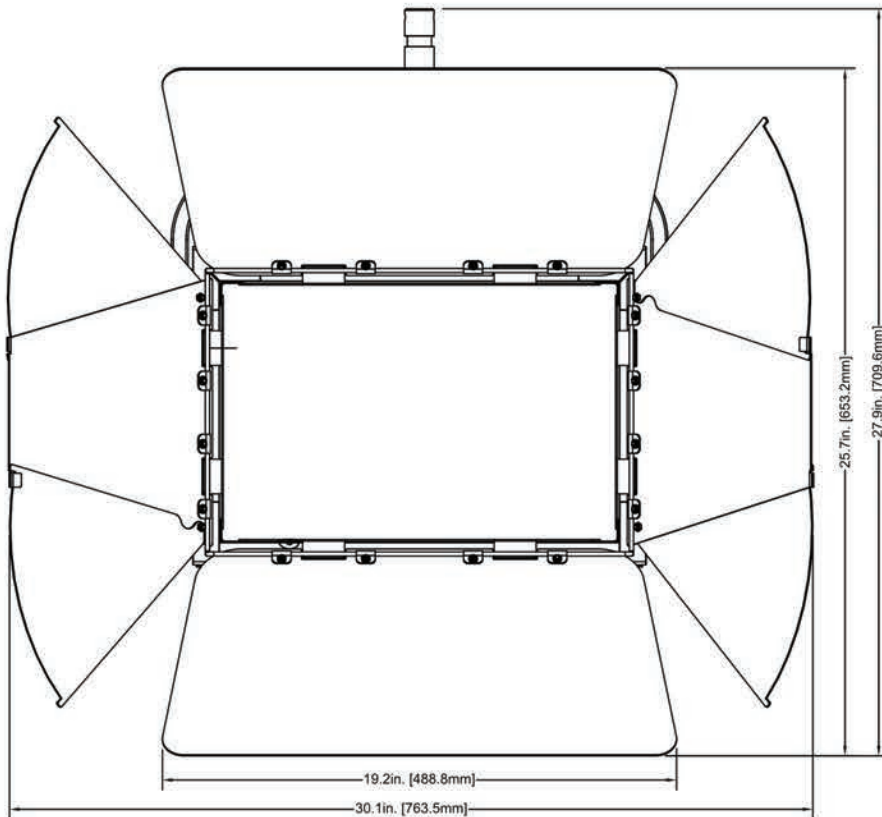Specifications and documentation subject to change without notice.

DIMENSIONAL DRAWINGS

FIXTURE ONLY
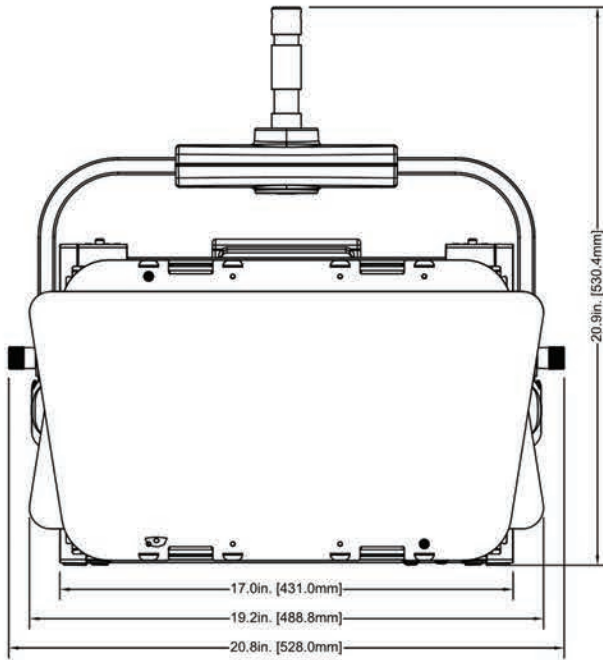

Drawings not to scale.
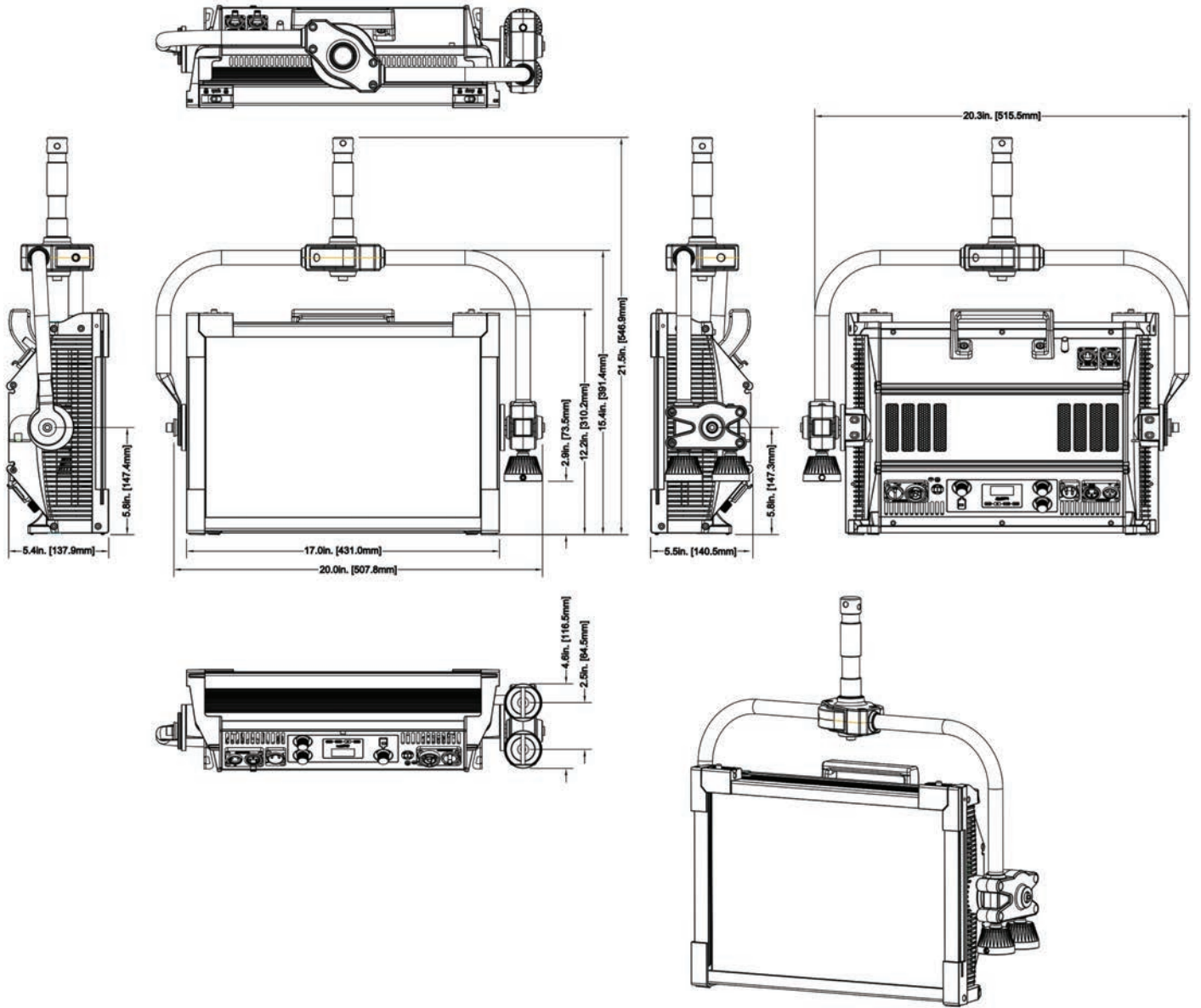
DIMENSIONAL DRAWINGS

BARN DOOR AND JUNIOR PIN INSTALLED

20.9in. [530.4mm]

17.0in. [431.0mm]
19.2in. [488.8mm]
20.8in. [528.0mm]

6.7in. [171.0mm]

27.9in. [709.6mm]
25.7in. [653.2mm]

19.2in. [488.8mm]
30.1in. [763.5mm]

13.0in. [329.5mm]

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.