

# **KL FRESNEL 4™**

# user manual

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## DOCUMENT VERSION



Due to additional product features and/or enhancements, an updated version of this document may be available online. Please 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<br>Version | Software<br>Version ≥ | DMX<br>Channel Modes      | Notes  |
|----------|---------------------|-----------------------|---------------------------|--|
| 11/30/17 | 1                   | 1.02                  | 1/2/3/4                   | Initial release.   |
| 01/31/18 | 1.2                 | N/C                   | NO CHANGE                 | Added Manual Dimming Control instructions.   |
| 11/27/18 | 1.4                 | 1.06                  | 1 / 2 / 2-2 / 3 / 2-3 / 4 | Added 2-2CH + 2-3 DMX Modes, Gamma 1.0<br>brightness, and Stage2 Dimming Curve Mode. |
| 03/02/19 | 1.6                 | 1.07                  | 1/2/3/4/5                 | Updated DMX channels and System Menu.  |

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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.

## 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**

Barn Door Gel Frame powerCON TRUE1 Cable Fixture Safety Cable + Barn Door Safety 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 +31 45 546 85 63 | Fax +31 45 546 85 96 | support@elationlighting.eu

REPLACEMENT PARTS please visit parts.elationlighting.com

# **MIMPORTANT NOTICE!**

## THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT.

DO NOT ATTEMPT ANY REPAIRS YOURSELF; DOING SO WILL VOID YOUR MANUFACTURES WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS FIXTURE AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURES WARRANTY AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS.

# LIMITED WARRANTY (USA ONLY)

A. Elation Professional hereby warrants, to the original purchaser, Elation Professional products to be free of manufacturing defects in material and workmanship for a period of two years (730 days), and Elation Professional product rechargeable batteries to be free of manufacturing defects in material and workmanship for a period of six months (180 days), from the original date of purchase. This warranty excludes discharge lamps and all product accessories. This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought. B. For warranty service, send the product only to the Elation Professional factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, Elation Professional will pay return shipping charges only to a designated point within the United States. If any product is sent, it must be shipped in its original package and packaging material. No accessories should be shipped with the product. If any accessories are shipped with the product, Elation Professional shall have no liability what so ever for loss and/or or damage to any such accessories, nor for the safe return thereof. C. This warranty is void if the product serial number and/or labels are altered or removed; if the product is modified in any manner which Elation Professional concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the Elation Professional factory unless prior written authorization was issued to purchaser by Elation Professional; if the product is damaged because not properly maintained as set forth in the product instructions, guidelines and/or user manual. D. This is not a service contract, and this warranty does not include any maintenance, cleaning or periodic check-up. During the periods as specified above, Elation Professional will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of Elation Professional under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Elation Professional. All products covered by this warranty were manufactured after January 1, 1990, and bare identifying marks to that effect. E. Elation Professional reserves the right to make changes in design and/or performance improvements upon its products without any obligation to include these changes in any products theretofore manufactured. F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with the products described above. Except to the extent prohibited by applicable law, all implied warranties made by Elation Professional in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty periods set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said periods have expired. The consumer's and/or dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall Elation Professional be liable for any loss and/or damage, direct and/or consequential, arising out of the use of, and/or the inability to use, this product. G. This warranty is the only written warranty applicable to Elation Professional products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

### WARRANTY RETURNS

All returned service items whether under warranty or not, must be freight pre-paid and 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; DOING SO WILL VOID YOUR MANUFACTURES WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS FIXTURE AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURES WARRANTY AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS.



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



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



INDOOR / DRY LOCATIONS USE ONLY! DO NOT EXPOSE FIXTURE TO RAIN AND 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 serving.

**DO NOT** shake fixture, 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 similar power rating.

**DO NOT** block any air ventilation slots.

All fan and air inlets must remain clean and never blocked.

Allow approx. 6" (15cm) between fixture and other devices or a wall for proper cooling.

When installing fixture in a suspended environment, always use mounting hardware that is no less than  $M10 \times 25$  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, 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 in for service.

# MAINTENANCE GUIDELINES

# DISCONNECT POWER BEFORE PERFORMING ANY MAINTENANCE!

## CLEANING

Frequent cleaning is recommended to insure proper function, optimized light output, and an extended life. The frequency of cleaning depends on the environment in which the fixture operates: damp, smoky or particularly dirty environments can cause greater accumulation of dirt on the fixture's optics. Clean the external lens surface at least every 20 days with a soft cloth to avoid dirt/debris accumulation.

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

## MAINTENANCE

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

Please refer to the following points during routine inspections:

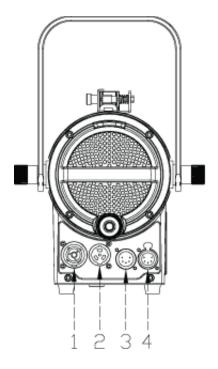
A detailed electric check by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating.

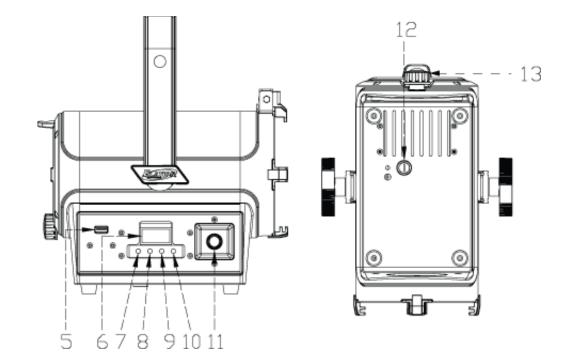
Be sure all screws and fasteners are securely tightened at all times. Lose screws may fall out during normal operation resulting in damage or injury as larger parts could fall.

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

## FIXTURE OVERVIEW





- 1. powerCON TRUE1 Out
- 2. powerCON TRUE1 In
- 3. 5pin DMX In
- 4. 5pin DMX Out
- 5. USB Software Update Port
- 6. OLED Control Menu Display
- 7. MODE Button
- 8. UP Button
- 9. DOWN Button
- 10. ENTER Button
- 11. Manual Dimming Control Knob
- 12. Fuse
- 13. Manual Zoom Control Knob

# INSTALLATION 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 OTHER MODEL FIXTURES AS THE POWER CONSUMPTION OF OTHER MODEL FIXTURES MAY EXCEED THE MAX POWER OUTPUT ON THIS FIXTURE. CHECK SILK SCREEN FOR MAX AMPS.



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

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

Before rigging/mounting a single fixture or multiple 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.

Fixture ambient operating temperature range is **14**° **to 113°F. (-10° to 45°C)** Do not use the fixture under or above this temperature.

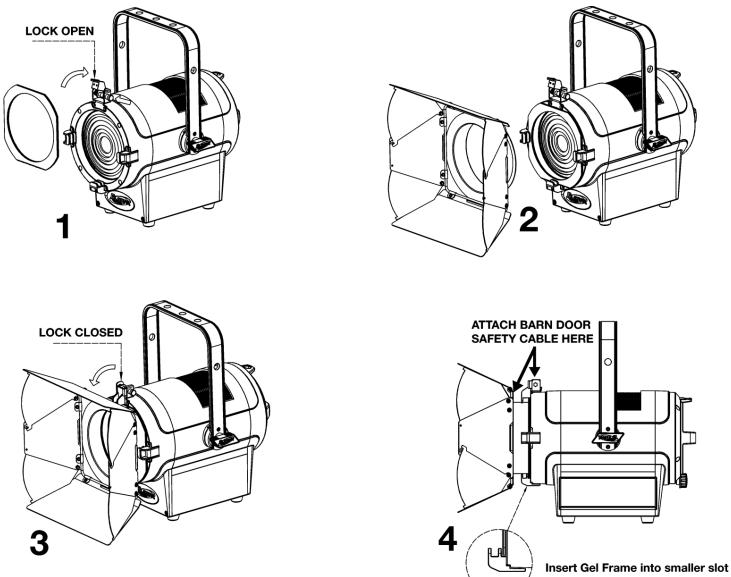
Fixture(s) should be installed in areas outside walking paths, seating areas, or away from areas were unauthorized personnel might reach the fixture by hand.

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

Overhead fixture installation must always be secured with a secondary safety attachment, such as an appropriately rated safety cable that meets all local, national, and country codes and regulations. Allow approximately 15 minutes for the fixture to cool down before serving.

## GEL FRAME AND BARN DOOR INSTALLATION

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



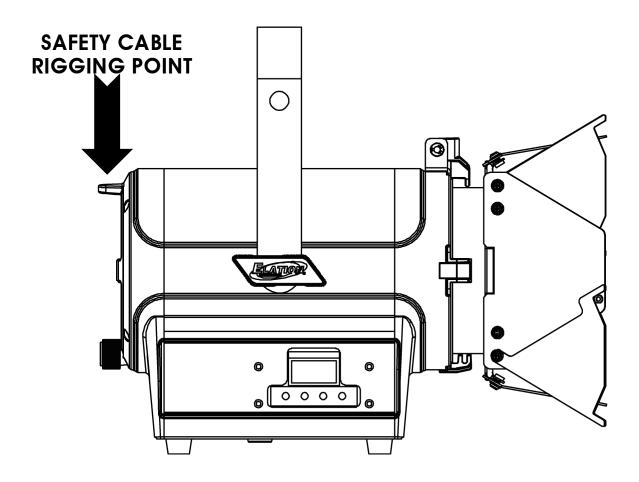
Insert Barn Door into larger slot

Secure the included mini SAFETY CABLE to the BARN DOOR and the top lock.

- 1. Lift up lock on top of fixture and insert GEL FRAME into the first slot closest to fixture.
- 2. Insert BARN DOOR into the second slot.
- 3. Lower the lock on top of the fixture to secure both the GEL FRAME and BARN DOOR.
- 4. Secure the included mini SAFETY CABLE to the BARN DOOR and top lock.

## **CLAMP INSTALLATION**

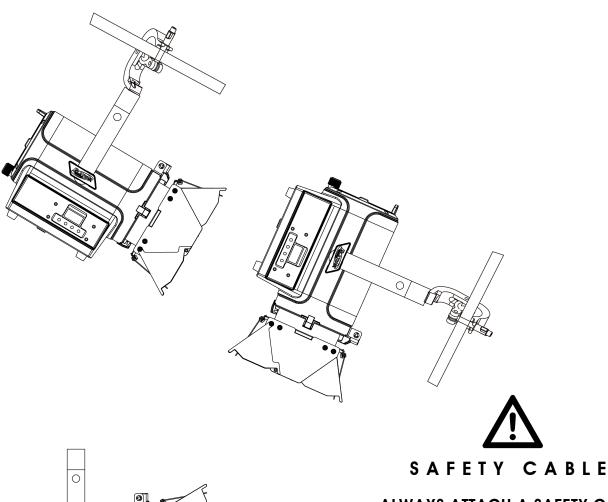
When mounting the fixture to truss, be sure to secure an appropriately rated professional grade rigging clamp to the fixture using an M10 screw fitted through one of the 3 holes of the yoke bracket. The fixture provides a built-in rigging point for a **SAFETY CABLE**. Be sure to only use the designated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



## RIGGING

Same?

Overhead rigging requires extensive experience, including amongst others calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury. Fixture is fully operational in the specific mounting positions illustrated below.

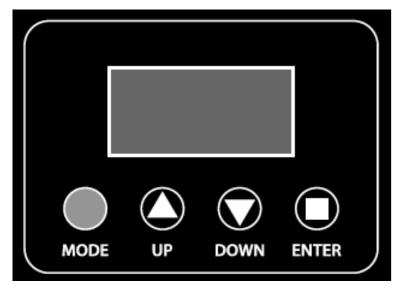


ALWAYS ATTACH A SAFETY CABLE WHENEVER INSTALLING THIS FIXTURE IN A SUSPENDED ENVIRONMENT TO ENSURE THE FIXTURE WILL NOT DROP IF THE CLAMP FAILS.

# SYSTEM MENU

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

**NOTE**: To access the LCD Menu Control Display when locked, press and hold the **MODE** button for 3 seconds. The LCD Menu Control Display will shut **OFF** automatically about 1 minute from the last button press.



|           |            |                            | L FRESNEL 4<br>M M E N U                              |  |
|-----------|------------|----------------------------|---|--|
|           |            | Features subject to        | change without notice.                                |  |
|           |            | Supports Softwa            | are Versions: ≥ 1.02                                  |  |
| MAIN MENU | SUB MENU   | <b>OPTIONS / VALU</b>      | ES (Default Settings in BOLD)                         | DESCRIPTION  |
| Address   | Address    | 001 ~ XXX                  |   | Set DMX Address Setting  |
| UserMode  | User Mode  | 1CH, <b>2CH</b> , 3CH, 4C  | н   | Set DMX Channel / User Mode  |
|           |            | Lost Dmx                   | Hold / Black  | Function If NO DMX Detected  |
|           | Status     | Display                    | ON / OFF  | OLED Display Screen Saver Mode<br>*When ON goes off after 30 seconds.<br>ONLY WHEN DMX IS CONNECTED. |
|           |            | Key Lock                   | ON / OFF  | Control Front Panel Buttons Key Lock   |
|           | LCD. Set   | Flash                      | ON / OFF  | Display flashes when NO DMX  |
|           |            | Invert                     | OFF / ON  | Flip LCD Display 180°  |
|           | Temp. C/F  | F/C                        |   | Temperature Switch Between C°/ F°  |
|           | Dim Curve  | Standard, Stage, T         | /, Architec, Theatre                                  | Set Dimmer Curve Mode  |
| Function  | Disp. Set  | ADDR, Disp.CH, Sa          | lve   | Set Information to Display on LCD  |
|           | Fan. Set   | Led Fan Auto, High, Low    |   | Set LED Fan Speed  |
|           | Gamma      | <b>2.0</b> , 2.2, 2.4, 2.8 |   | Set Gamma Brightness   |
|           | Frequen    |                            | 0Hz, 1200Hz, 1300Hz,<br>00Hz, 4000Hz, 5000Hz,<br>25Hz | Set LED Refreash Frequency   |
|           | USB_Update | OFF, ON                    |   | Software Update Port - Contact<br>Service  |
|           | DFSE       | OFF, ON                    |   | Restore Factory Settings   |
|           |            | Current                    | 000 (Hours)   | Fixture Run Time From Power ON   |
|           |            | Total                      | 000 (Hours)   | Fixture Total Run Time   |
|           | TimeInfo   | Last                       | 000 (Hours)   | Clear Fixture Last Run Time  |
|           |            | Password                   | PIN= <b>050</b>                                       | Enter PIN to Access Clear Last. Menu   |
| Info      |            | Clear                      | ON / OFF  | Reset Fixture Last Run Time  |
|           | TempInfo   | Led Temp                   | 000 <b>F</b> (C)                                      | Temperature of LED   |
|           | Err. Info  | Error Record 1 ~ Err       | or Record 10  | Display 10 Recent Error Messages   |
|           | ModelInf   | KLF4                       |   | Display Model Name   |
|           | Software   | Software                   | V1.02   | Software Version<br>(Greater than or Equal to)   |
| Test      | ManCtrl    | Dimmer, Strobe             |   | Test Functions   |

## SYSTEM MENU UPDATE WITH SOFTWARE UPDATE VERSION ≥1.06

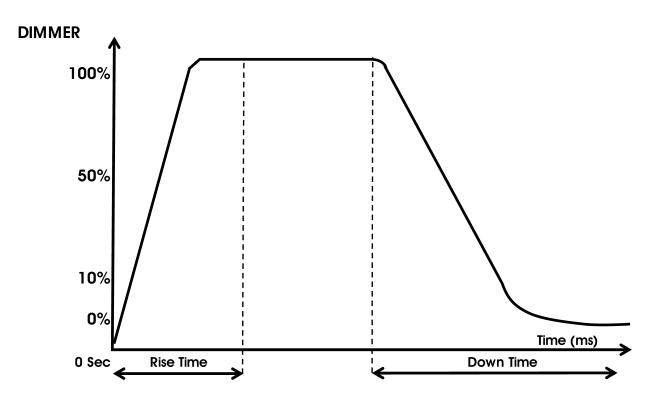
See highlighted items below which have been updated with this software update.

| Supports Software Versions: ≥ 1.06 |           |  |                             |  |  |  |
|------------------------------------|-----------|--|-----------------------------|--|--|--|
| MAIN MENU                          | SUB MENU  | <b>OPTIONS / VALUES</b> (Default Settings in <b>BOLD</b> ) | DESCRIPTION                 |  |  |  |
| Function                           | User Mode | 1CH, <b>2CH</b> , <b>2-2CH</b> , 3CH, <b>2-3CH</b> , 4CH   | Set DMX Channel / User Mode |  |  |  |
|                                    | Gamma     | <b>1.0</b> , <b>2.0</b> , 2.2, 2.4, 2.8                    | Set Gamma Brightness        |  |  |  |
|                                    | Dim Curve | Standard, Stage, TV, Architec, Theatre, Stage2             | Set Dimmer Curve Mode       |  |  |  |

|           | S         | YSTEM MENU - Sup       | ports Software Versions: $\geq$ 1.   | .07  |  |
|-----------|-----------|------------------------|--|--|--|
|           |           | Features subject       | t to change without notice.  |  |  |
| MAIN MENU | SUB MENU  | OPTIONS / VALUE        | S (Default Settings in BOLD)   | DESCRIPTION  |  |
| Address   | Address   | 001 ~ XXX              | · · · · ·  | Set DMX Address Setting  |  |
| UserMode  | User Mode | Dimmer / Dimmer 16     | bit / 3CH / Standard / Extended  | Set DMX Channel / User Mode  |  |
|           | Status    | Lost Dmx               | Hold / Black   | Function If NO DMX Detected  |  |
|           | LCD. Set  | Display                | ON / OFF   | OLED Display Screen Saver Mode<br>*When ON goes off after 30 seconds.<br>ONLY WHEN DMX IS CONNECTED. |  |
|           | LOD. Set  | Key Lock               | ON / OFF   | Control Front Panel Buttons Key Lock   |  |
|           |           | Flash                  | ON / OFF   | Display flashes when NO DMX  |  |
|           |           | Invert                 | ON / OFF   | Flip LCD Display 180°  |  |
|           | Temp. C/F | C / <b>F</b>           |  | Temperature Switch Between C°/ F°  |  |
| Function  | Dim Mode  | 0.1s, 0.2s, 0.3s, 0.4s | /, Architec, Theatre. Stage2, 0.0s,<br>b, 0.5s, 0.6s, 0.7s, 0.8s, 0.9s, 1.0s,<br>5.0s, 6.0s, 7.0s, 8.0s, 9.0s, 10.0s | Set Dimmer Mode  |  |
|           | Disp. Set | ADDR, Disp.CH, Salv    | /e   | Set Information to Display on LCD  |  |
|           | Fan. Set  | Led Fan                | Auto / High / Low  | Set LED Fan Speed  |  |
|           | Dim Curve | Linear / Square / INV  | -Square / S-Curve  | Set Dimmer Curve Mode  |  |
|           | Frequen   |                        | z, <b>1200Hz</b> , 1300Hz, 1400Hz, 1500Hz,<br>Iz, 10Hz, 15Hz, 20Hz, 25Hz   | Set LED Refreash Frequency   |  |
|           | USB_Data  | ON, <b>OFF</b>         |  | Software Update Port - Contac<br>Service   |  |
|           | MasterSW  | ON, OFF                |  |  |  |
|           | DFSE      | ON, OFF                |  | Restore Factory Settings   |  |
|           |           | Current                | 000 (Hours)  | Fixture Run Time From Power ON   |  |
|           |           | Total                  | 000 (Hours)  | Fixture Total Run Time   |  |
|           | TimeInfo  | Last                   | 000 (Hours)  | Clear Fixture Last Run Time  |  |
|           |           | Password               | PIN= <b>050</b>  | Enter PIN to Access Clear Last. Menu   |  |
| Info      |           | Clear                  | ON / OFF   | Reset Fixture Last Run Time  |  |
| inio      | TempInfo  | Led Temp               | 000 C / F  | Temperature of LED   |  |
|           | Err. Info | Error Record 1 ~ Erro  | r Record 10  | Display 10 Recent Error Messages   |  |
|           | ModelInf  | KL F4                  |  | Display Model Name   |  |
|           | Software  | Software               | V1.07  | Software Version<br>(Greater than or Equal to)   |  |
| T 1       | ManChul   | Dimmer                 | <b>000</b> - 255   |  |  |
| Test      | ManCtrl   | Strobe                 | 000 - <b>255</b>   | Manual Control Functions   |  |

## DIMMER CURVE MODES - Dim Curve

Select desired DIMMER MODE (**Standard**, Stage, TV, Architectural, Theatre, Stage2). **STAGE 2 DIMMING CURVE MODE ADDED WITH SOFTWARE UPDATE VERSION** ≥1.06



|                              | 0 sec Fo       | ıde Time       | 1 sec Fo       | ıde Time       |
|------------------------------|----------------|----------------|----------------|----------------|
| Dimming Curve<br>Ramp Effect | 0              | 255            | 0              | 255            |
|                              | Rise Time (ms) | Down Time (ms) | Rise Time (ms) | Down Time (ms) |
| Standard (default)           | 0              | 0              | 0              | 0              |
| Stage                        | 780            | 1100           | 1540           | 1660           |
| TV                           | 1180           | 1520           | 1860           | 1940           |
| Architectural                | 1380           | 1730           | 2040           | 2120           |
| Theatre                      | 1580           | 1940           | 2230           | 2280           |
| Stage 2                      | 0              | 1100           | 0              | 1660           |

# MANUAL DIMMING CONTROL

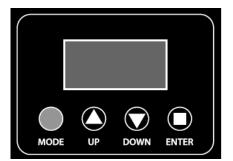
## ► FEATURE IS DISABLED WHEN DMX INPUT CABLE IS CONNECTED TO FIXTURE! TO USE MANUAL DIMMING KNOB, DISCONNECT DMX CABLE IF CONNECTED.

Follow steps below to enable manual DIMMING control knob.

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

|      | Reset.M  | Zoom                        |              | Reset Zoom Motor          |
|------|----------|-----------------------------|--------------|---------------------------|
|      | Calibrat | PassWord                    | Password=050 | Calibrate Zoom Motor      |
| Test | Galibrat | Zoom                        | 000-255      | (PSWD Required to Access) |
|      | ManCtrl  | Dimmer, Zoom, <b>Strobe</b> |              | Manual Control Functions  |

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



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

## LCD DISPLAY



DMX CABLE CONNECTED



NO DMX CABLE CONNECTED

| DN  | 1 X I          | СН       | A N | NEL    |         |                    | TIONS AND VALUES  |  |  |
|-----|----------------|----------|-----|--------|---------|--------------------|---|--|--|
|     |                |          |     |        | EL/     | ATION KL F         | FRESNEL 4   |  |  |
|     |                |          | D   | MX Cha | nnel V  | /alues / Fund      | ctions (4 DMX Channels)                                     |  |  |
|     |                |          |     | Su     | pport   | s Software         | Versions: ≥ 1.02  |  |  |
|     |                |          |     |        | tures s | subject to cha     | ange without notice.  |  |  |
|     | MODE / CHANNEL |          |     |        |         |                    | FUNCTION  |  |  |
| 1CH | 2CH            | 30       | H   | 4Cł    | 4       | VALUE              |   |  |  |
| 1   | 1              | 1        |     | 1      |         |                    |   |  |  |
|     |                |          |     |        |         | 000-255            |   |  |  |
|     |                |          |     | 2      |         | 000-255            | DIMMER INTENSITY FINE<br>Dimmer FINE Adjustment             |  |  |
|     |                |          |     |        |         | 000-235            | SHUTTER, STROBE   |  |  |
|     |                |          |     |        |         | 000-031            | LED OFF   |  |  |
|     |                |          |     |        |         | 032-063            | LED ON  |  |  |
|     |                |          |     |        |         | 064-095            | Strobe Effect SLOW to FAST                                  |  |  |
|     | 2              | 2        | 2   | 3      |         | 096-127            | LED ON  |  |  |
|     |                |          |     |        |         | 128-159            | Pulse Effect In Sequences                                   |  |  |
|     |                |          |     |        |         | 160-191            | LED ON  |  |  |
|     |                |          |     |        |         | 192-223            | Random Strobe Effect SLOW to FAST                           |  |  |
|     |                |          |     |        |         | 224-255            | LED ON  |  |  |
|     |                |          |     |        |         |                    | DIMMER MODES  |  |  |
|     |                |          |     |        |         | 000-020            | Standard  |  |  |
|     |                |          |     |        |         | 201-040            | Stage   |  |  |
|     |                | 3        | 3   | 4      |         | 041-060            | TV  |  |  |
|     |                |          |     |        |         | 061-080            | Architectural   |  |  |
|     |                |          |     |        |         | 081-100            | Theatre   |  |  |
|     |                |          |     |        |         |                    | Default to Setting on Fixture<br>TWARE UPDATE VERSION ≥1.06 |  |  |
|     | U              |          |     |        |         |                    |   |  |  |
|     |                | MODE / C |     |        | Jeiow   | which have b       | een updated with this software update.                      |  |  |
| 1CH | 2CH            | 2-2CH    | ЗСН | 2-3CH  | 4CH     | VALUE              | FUNCTION  |  |  |
| -   | -              |          |     |        |         |                    | DIMMER INTENSITY  |  |  |
| 1   | 1              | 1        | 1   | 1      | 1       | 000-255            | Dimmer 0 to 100%  |  |  |
|     |                | 0        |     | 0      |         |                    | DIMMER INTENSITY FINE                                       |  |  |
|     |                | 2        |     | 2      | 2       | 000-255            | Dimmer FINE Adjustment                                      |  |  |
|     |                |          |     |        |         |                    | SHUTTER, STROBE   |  |  |
|     |                |          |     |        |         | 000-031            | LED OFF   |  |  |
|     |                |          |     |        |         | 032-063            | LED ON  |  |  |
|     |                |          |     |        |         | 064-095            | Strobe Effect SLOW to FAST                                  |  |  |
|     | 2              |          | 2   |        | 3       | 096-127            | LED ON  |  |  |
|     |                |          |     |        |         | 128-159            | Pulse Effect In Sequences                                   |  |  |
|     |                |          |     |        |         | 160-191            | LED ON  |  |  |
|     |                |          |     |        |         | 192-223<br>224-255 | Random Strobe Effect SLOW to FAST<br>LED ON                 |  |  |
|     |                |          |     |        |         | 224-200            | DIMMER MODES  |  |  |
|     |                |          |     |        |         | 000-020            | Standard  |  |  |
|     |                |          |     |        |         | 021-040            | Stage   |  |  |
|     |                |          |     |        | I .     | 041-060            | TV  |  |  |
|     |                |          | 3   | 3      | 4       | 061-080            | Architectural   |  |  |
|     |                |          |     |        |         | 081-100            | Theatre   |  |  |
|     |                |          |     |        |         | 101-120            | Stage 2   |  |  |
|     |                |          |     |        |         | 121-255            | Default to Setting on Fixture                               |  |  |

|       |                        |                 |                   |            |                | FRESNEL 4                         |
|-------|------------------------|-----------------|-------------------|------------|----------------|-----------------------------------|
|       |                        |                 | DMX               |            |                | ctions (5 DMX Channels)           |
|       |                        |                 |                   |            |                | Versions: ≥ 1.07                  |
|       |                        |                 |                   | Features s | subject to cha | ange without notice.              |
| immer | MOD<br>Dimmer<br>16bit | ое / СН/<br>ЗСН | ANNEL<br>Standard | Extended   | VALUE          | FUNCTION                          |
|       | TODIL                  |                 |                   |            |                | DIMMER INTENSITY                  |
| 1     | 1                      | 1               | 1                 | 1          | 000-255        | Dimmer 0 to 100%                  |
|       |                        |                 |                   |            | 000 200        | DIMMER INTENSITY FINE             |
|       | 2                      |                 | 2                 | 2          | 000-255        | Dimmer FINE Adjustment            |
|       |                        |                 |                   |            | 000 200        | SHUTTER   STROBE                  |
|       |                        |                 |                   |            | 000-031        | LED OFF                           |
|       |                        |                 |                   |            | 032-063        | LED ON                            |
|       |                        |                 |                   |            | 064-095        | Strobe Effect SLOW to FAST        |
|       |                        | 2               | 3                 | 3          | 096-127        | LED ON                            |
|       |                        | -               | -                 |            | 128-159        | Pulse Effect In SLOW to FAST      |
|       |                        |                 |                   |            | 160-191        | LED ON                            |
|       |                        |                 |                   |            | 192-223        | Random Strobe Effect SLOW to FAST |
|       |                        |                 |                   | l F        | 224-255        | LED ON                            |
|       |                        |                 |                   |            |                | DIMMER MODES   DIMMER DELAY TIMES |
|       |                        |                 |                   |            | 000-020        | Standard                          |
|       |                        |                 |                   |            | 021-040        | Stage                             |
|       |                        |                 |                   |            | 041-060        | TV                                |
|       |                        |                 |                   |            | 061-080        | Architectural                     |
|       |                        |                 |                   |            | 081-100        | Theatre                           |
|       |                        |                 |                   |            | 101-120        | Stage 2                           |
|       |                        |                 |                   |            | 121            | Dimmer Delay Time 0.0 seconds     |
|       |                        |                 |                   |            | 122            | Dimmer Delay Time 0.1 seconds     |
|       |                        |                 |                   |            | 123            | Dimmer Delay Time 0.2 seconds     |
|       |                        |                 |                   |            | 124            | Dimmer Delay Time 0.3 seconds     |
|       |                        |                 |                   |            | 125            | Dimmer Delay Time 0.4 seconds     |
|       |                        |                 |                   |            | 126            | Dimmer Delay Time 0.5 seconds     |
|       |                        |                 |                   |            | 127            | Dimmer Delay Time 0.6 seconds     |
|       |                        | 3               | 4                 | 4          | 128            | Dimmer Delay Time 0.7 seconds     |
|       |                        |                 |                   |            | 129            | Dimmer Delay Time 0.8 seconds     |
|       |                        |                 |                   |            | 130            | Dimmer Delay Time 0.9 seconds     |
|       |                        |                 |                   |            | 131            | Dimmer Delay Time 1.0 seconds     |
|       |                        |                 |                   |            | 132            | Dimmer Delay Time 1.5 seconds     |
|       |                        |                 |                   |            | 133            | Dimmer Delay Time 2.0 seconds     |
|       |                        |                 |                   |            | 134            | Dimmer Delay Time 3.0 seconds     |
|       |                        |                 |                   |            | 135            | Dimmer Delay Time 4.0 seconds     |
|       |                        |                 |                   |            | 136            | Dimmer Delay Time 5.0 seconds     |
|       |                        |                 |                   |            | 137            | Dimmer Delay Time 6.0 seconds     |
|       |                        |                 |                   |            | 138            | Dimmer Delay Time 7.0 seconds     |
|       |                        |                 |                   |            | 139            | Dimmer Delay Time 8.0 seconds     |
|       |                        |                 |                   |            | 140            | Dimmer Delay Time 9.0 seconds     |
|       |                        |                 |                   |            | 141            | Dimmer Delay Time 10.0 seconds    |
|       |                        |                 |                   |            | 142-255        | Default                           |

|        | MODE / CHANNEL  |     |          |          |         |  |
|--------|-----------------|-----|----------|----------|---------|--|
| Dimmer | Dimmer<br>16bit | зсн | Standard | Extended | VALUE   | FUNCTION   |
|        |                 |     |          |          |         | LED REFRESH RATE   DIMMER CURVES*<br>*Hold selected DMX value for 5 seconds to set LED Refresh Rate. |
|        |                 |     |          |          | 000-100 | IDLE   |
|        |                 |     |          |          | 101-105 | 900 Hz*  |
|        |                 |     |          |          | 106-110 | 1000 Hz*   |
|        |                 |     |          |          | 111-115 | 1100 Hz*   |
|        |                 |     |          |          | 116-120 | 1200 Hz*   |
|        |                 |     |          |          | 121-125 | 1300 Hz*   |
|        |                 |     |          |          | 126-130 | 1400 Hz*   |
|        |                 |     |          |          | 131-135 | 1500 Hz*   |
|        |                 |     |          |          | 136-140 | 2500 Hz*   |
|        |                 |     |          | 5        | 141-145 | 4000 Hz*   |
|        |                 |     |          |          | 146-150 | 5000 Hz*   |
|        |                 |     |          |          | 151-155 | 10,000 Hz*   |
|        |                 |     |          |          | 156-160 | 15,000 Hz*   |
|        |                 |     |          |          | 161-165 | 20,000 Hz*   |
|        |                 |     |          |          | 166-170 | 25,000 Hz*   |
|        |                 |     |          |          | 171-200 | IDLE   |
|        |                 |     |          |          | 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   |

# SPECIFICATIONS

### SOURCE

50W 3,000K Warm White LED Engine 50,000 Hour Average LED Life\* \*May vary depending on several factors including but not limited to: Environmental Conditions, Power/Voltage, Usage Patterns (On-Off Cycling), Control, and Dimming.

#### EFFECTS

Manual Dimmer and Zoom Control High Speed Electronic Shutter and Strobe 16-Bit Variable Dimming Curve Modes

### COLOR

Warm White (3,000K)

### **CONTROL / CONNECTIONS**

Manual and DMX Controlled Dimmer and Shutter Dimmer and Zoom Rotary Dials (5) DMX Channel Modes (1 / 2 / 3 / 4 / 5) 4 Button Control Panel LCD Menu Display RDM (Remote Device Management) Adjustable LED Refresh Rate 5pin DMX and powerCON TRUE1 In/Out

### SIZE / WEIGHT

Length: 13.6" (345mm) Width: 7.9" (201mm) Vertical Height: 11.4" (289mm) Weight: 9.0 lbs. (4.08 kg)

### **ELECTRICAL / THERMAL**

AC 100-240V - 50/60Hz 50W Max Power Consumption 14°F to 113°F (-10°C to 45°C)

#### **APPROVALS / RATINGS**



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

## FCC STATEMENT

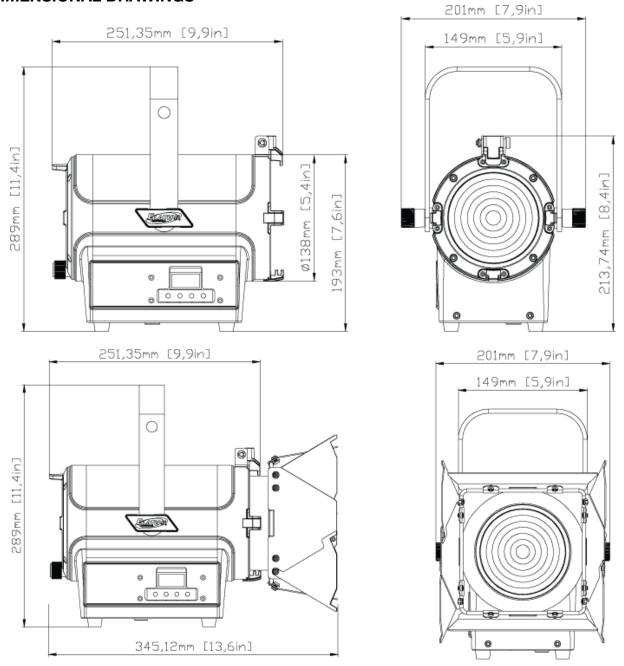
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## FCC RADIO FREQUENCY INTERFERENCE WARNINGS & INSTRUCTIONS

This product has been tested and found to comply with the limits as per Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device uses and can radiate radio frequency energy and, if not installed and used in accordance with the included instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following methods:

- Reorient or relocate the device.
- Increase the separation between the device and the receiver.
- Connect the device to an electrical outlet on a circuit different from which the radio receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## **DIMENSIONAL DRAWINGS**



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

# OPTIONAL ACCESSORIES

| ORDER CODE      | ITEM                                       |
|-----------------|--|
| QUICK RIG CLAMP | Low Profile Quick Release Clamp            |
| AC5PDMX5PRO     | 5 ft. (1.5m) 5pin PRO DMX Cable            |
| NEU088          | 3 ft. (1m) powerCON TRUE1 Power Link Cable |
|                 | Additional Cable Lengths Available         |