



# **CHORUS LINE ST™**

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.

Please contact Elation Service for the latest revision/update of this manual, before beginning installation and/or programming.

| Date     | Document<br>Version | Software<br>Version ≥ | DMX<br>Channel Modes | Notes                                |
|----------|---------------------|-----------------------|----------------------|--------------------------------------|
| 06/19/19 | 1                   | 1.03                  | 16 / 18 / 46         | Initial release.                     |
| 06/20/19 | 1.2                 | N/C                   | NO CHANGE            | Added missing DMX Channels in chart. |

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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**

Safety Cable Omega Brackets (x2) Neutrik powerCON TRUE1 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.

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**REPLACEMENT PARTS** please visit parts.elationlighting.com



THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT.
DO NOT ATTEMPT ANY REPAIRS YOURSELF; 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 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, 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:

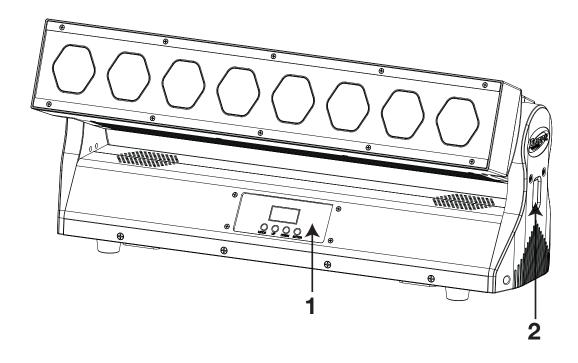
A detailed review by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating.

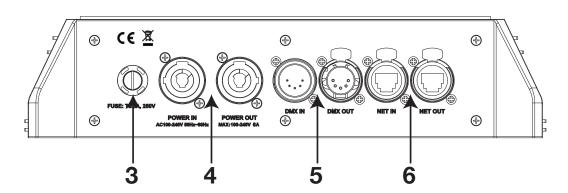
Be sure all screws and fasteners are securely tightened at all times. Lose screws may fall out during normal operation resulting in damage or injury as larger parts could fall.

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. LCD Menu Display, MENU, UP, DOWN, ENTER Buttons
- 2. Tilt Lock
- 3. Fuse
- 4. powerCON IN/OUT
- 5. 5pin DMX IN/OUT
- 6. RJ45 Ethernet IN/OUT

## 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 **15° to 113°F.** (-**15° 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 can hold 10 times the weight of the fixture.

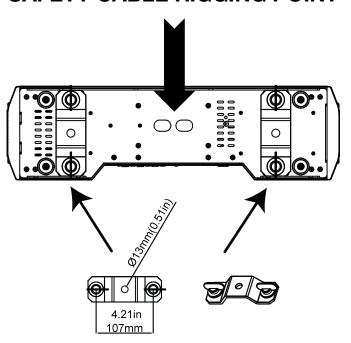
Allow approximately 15 minutes for the fixture to cool down before serving.

## INSTALLATION INSTRUCTIONS

#### **CLAMP MOUNTING**

The fixture can be placed on the flat surface or truss mounted. When mounting this fixture to truss be sure to secure (2) appropriately rated clamps (not included) to the (2) Omega Brackets (included) Be sure to attach the Safety Cable (included) to the fixture using the safety cable rigging points integrated into the bottom of the fixture. (See image below)

## SAFETY CABLE RIGGING POINT



#### **SAFETY CABLE**

The fixture includes an integrated safety cable rigging point. (see image below)

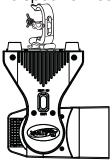


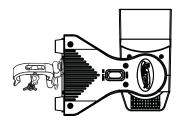
ALWAYS ATTACH A SAFETY CABLE WHEN INSTALLING FIXTURE IN A SUSPENDED ENVIRONMENT TO ENSURE THE FIXTURE WILL NOT DROP IF THE CLAMP FAILS.

#### INSTALLATION INSTRUCTIONS

#### **OVERHEAD RIGGING**

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 and property damage. Fixture is fully operational in the specific mounting positions illustrated below.







#### **POWER LINKING**



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 AMX AMPS.

#### KLING-NET / ART-NET CONNECTION

When connecting fixture to a network switch to control multiple devices, a **Gigabit Ethernet Switch** that supports **IGMP** (Internet Group Management Protocol) is required.

Using a **Gigabit Ethernet Switch** that does not support **IGMP** can cause erratic behavior of all connected devices to the switch. Click link below for more information about IGMP.

<a href="https://en.wikipedia.org/wiki/Internet\_Group\_Management\_Protocol">https://en.wikipedia.org/wiki/Internet\_Group\_Management\_Protocol</a>

#### SYSTEM MENU

The fixture comes with 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 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/ESC button.



#### LCD CONTROL PANEL LOCKOUT

When the **Key Lock** menu is set to **ON**, the LCD display will turn OFF after 30 seconds and the (4) button Control Panel will be LOCKED. To unlock the (4) button LCD control panel, press and hold the **MODE** button.

#### INFORMATION DISPLAYED DURING INITIAL POWER ON

When the fixture is initially powered ON, the display shows the following information:



|              | E           | LATION CHORUS LIN  | NE ST™ - S Y S T E M   | MENU                                 |
|--------------|-------------|--|--|--------------------------------------|
|              |             | Supports So  | ftware Versions: ≥ 1.0   | 03                                   |
| MAIN<br>MENU | SUB<br>MENU | OPTIONS / VALUES (Default Settings in BOLD)                |  | DESCRIPTION                          |
| Address      |             | 001 ~ XXX  |  | Fixture DMX Address Setting          |
| UserMode     |             | Standard, Basic, Exten                                     | d  | Set DMX Channel Mode                 |
|              |             | Lost Dmx   | Close/ <b>Hold</b> / Auto.Pro  | Function If NO DMX Detected          |
|              |             | Tilt Invert  | ON / OFF   | Tilt Reverse Movement                |
|              | Status      | Feedback   | ON/OFF   | Movement Feedback                    |
|              | Status      | Move. Spd  | Speed <b>1</b> ~ 4   | Movement Mode Select                 |
|              |             | Stand By   | OFF, 01M~99M, <b>15M</b>   | Stand By Mode                        |
|              |             | Hibernat   | OFF, 00-99, <b>015</b>   | Hibernation Mode Setting             |
|              | Fan. Set    | Led Fan  | Auto, High, Silent   | Fan Speed Set                        |
|              |             | PassWord   | XXX  | Service PIN 050                      |
|              |             | NOTE: PassWord m   | ust be entered in order to   | set fixture IP Address and Universe  |
|              | Net ID      | DeviceIP   | XXX.XXX.XXX  | Enter Fixture's IP Address           |
|              |             | MaskAddr   | XXX.XXX.XXX  | Enter Fixture's MAC Address          |
|              |             | Universe   | <b>000</b> -255  | Enter Universe Number                |
|              | Protocol    | ArtNet, sACN   |  | Set Network Protocol                 |
|              | KlingNet    | Enable, Disable  |  | Enable/Disable KlingNet Protocol     |
|              | Net         | ON / OFF   |  | Activate NET OUT Port.               |
| Function     | LCD. Set    | Backligh   | 02~60m <b>05m</b>  | LCD Backlight Shut Off Time          |
|              |             | FlipDisp   | ON / <b>OFF</b>  | Flip/Reverse LCD Display 180°        |
|              |             | Key Lock   | ON / <b>OFF</b>  | Control Front Panel Buttons Key Lock |
|              |             | Flash  | ON / OFF   | Display flashes when NO DMX          |
|              | Temp. C/F   | <b>F</b> /C  |  | Temperature Switch Between F°/ C°    |
|              | Dim Mode    | 0.1s, 0.2s, 0.3s, 0.4s, 0.5s,                              | chitec, Theatre, Stage2, 0s, 0.6s, 0.7s, 0.8s, 0.9s, 1.0s, 6.0s, 7.0s, 8.0s, 9.0s, 10.0s | Set Dimmer Mode                      |
|              |             | ADDR   | XXX  | DMX Address Displayed                |
|              | D: 0 .      | Disp.CH  |  | Value of each Channel Displayed      |
|              | Disp. Set   | Slave  | Slave 1, Slave 2, Slave 3  | Set Slave Mode Preset                |
|              |             | Auto.Pro   | Alone, Master  | Set Auto Program Mode                |
|              | DimCurve    | Linear, Square, InSqua                                     | re, S-Curve  | Set Dimmer Curve Mode                |
|              | Frequen     | <b>900</b> /1000/1100/1200/1300<br>4000/5000/10K/15K/20K/2 |  | Set LED Refresh Rate Frequency       |
|              | Pixel       | Standard, Flip   |  | Set Pixel Flip Mode                  |
|              | DFSE        | ON / <b>OFF</b>  |  | Restore Factory Settings             |
|              |             | Current  | XXXX (Hours)   | Fixture Run Time From Power ON       |
|              |             | Total Time   | XXXX (Hours)   | Fixture Total Run Time               |
|              | TimeInfo    | Last   | XXXX (Hours)   | Fixture Last Run Time                |
|              |             | PassWord   | PIN= <b>050</b>  | Enter PIN to Access Clear Last. Menu |
| Information  |             | Clear  | ON / OFF   | Reset Fixture Last Run Time          |
|              | TempInfo    | LED Temp.  | XXX F° / C°  | LED Temperature                      |
|              | Err. Info   | Error Record 1 ~ Error F                                   | Record 10  | Display 10 Recent Error Messages     |
|              | ModelInf    | ChorusST   | T  | Display Model Name                   |
|              | Software    | 1U01: - 5U01:  | ≥V1.03   | Software Version                     |
|              | Reset. M    | All  |  | Reset of Tilt and Zoom Motors        |
| Test         | Test. Ch    | Tilt   |  | Test Functions                       |
| 1031         | ManCtrl     | Tilt=XXX   | 1  | Manual Control                       |
|              | Calibrate   | Password   | Password= <b>050</b>   | Calibration of Motors and LEDs       |

## DMX CHANNEL FUNCTIONS AND VALUES

## **ELATION CHORUS LINE ST™**

## **DMX Channel Values / Functions (46 Total DMX Channels)**

**Supports Software Versions:** ≥ 1.03

Features are subject to change without any prior written notice.
\*Direction of effects and Pixel Control depends on orientation of the fixture head and Tilt/Pixel Flip settings.

|                | MODE / CHANNEL  STANDARD EXTEND |        | VALUE          | FUNCTION                      | Default | Snap |
|----------------|---------------------------------|--------|----------------|-------------------------------|---------|------|
| BASIC STANDARD |                                 | EXTEND |                |                               |         | 0    |
| 1              | 1                               | 1      | 0-255          | TILT MOVEMENT [8 BIT]         |         |      |
| !              | 1                               | ı      | 0-233          | TILT Movement                 |         |      |
|                | 2                               | 2      | 0-255          | TILT FINE MOVEMENT [16 BIT]   |         |      |
|                |                                 | ۷_     | 0 200          | Fine Control of TILT Movement |         |      |
| 2              | 3                               | 3      | 0-255          | RED                           |         |      |
|                | ŭ                               |        | 0 200          | 0 → 100%                      |         |      |
| 3              | 4                               | 4      | 0-255          | GREEN                         |         |      |
|                | 7                               | -      | 0 200          | 0 → 100%                      |         |      |
| 4              | 5                               | 5      | 0-255          | BLUE                          |         |      |
|                | Ů                               |        | 0 200          | 0 → 100%                      |         |      |
| 5              | 6                               | 6      | 0-255          | AMBER                         |         |      |
|                | Ů                               |        | 0 200          | 0 → 100%                      |         |      |
|                |                                 | 7      | 0-255          | RED 2                         |         |      |
|                |                                 | ,      | 0 200          | 0 → 100%                      |         |      |
|                |                                 | 8      | 0-255<br>0-255 | GREEN 2                       |         |      |
|                |                                 | 0      |                | 0 → 100%                      |         |      |
|                |                                 | 9      |                | BLUE 2                        |         |      |
|                |                                 | 3      | 0-233          | 0 → 100%                      |         |      |
|                |                                 | 10     | 0-255          | AMBER 2                       |         |      |
|                |                                 | 10     | 0-233          | 0 → 100%                      |         |      |
|                |                                 | 11     | 0-255          | RED 3                         |         |      |
|                |                                 | 11     | 0-233          | 0 → 100%                      |         |      |
|                |                                 | 12     | 0-255          | GREEN 3                       |         |      |
|                |                                 | 12     | 0-255          | 0 → 100%                      |         |      |
|                |                                 | 13     | 0-255          | BLUE 3                        |         |      |
|                |                                 | 10     | 0-255          | 0 → 100%                      |         |      |
|                |                                 | 14     | 0-255          | AMBER 3                       |         |      |
|                |                                 | 14     | 0-255          | 0 → 100%                      |         |      |
|                |                                 | 15     | 0-255          | RED 4                         |         |      |
|                |                                 | 15     | 0-255          | 0 → 100%                      |         |      |
|                |                                 | 16     | 0.055          | GREEN 4                       |         |      |
|                |                                 | 16     | 0-255          | 0 → 100%                      |         |      |
|                |                                 | 17     | 0-255          | BLUE 4                        |         |      |
|                |                                 | 17     | 0-255          | 0 → 100%                      |         |      |
|                |                                 | 10     | 0.055          | AMBER 4                       |         |      |
|                |                                 | 18     | 0-255          | 0 → 100%                      |         |      |

| N     | MODE / CHANN | IEL    | VALUE |          |         |      |
|-------|--------------|--------|-------|----------|---------|------|
| BASIC | STANDARD     | EXTEND |       | FUNCTION | Default | Snap |
|       |              | 40     | 0.055 | RED 5    |         |      |
|       |              | 19     | 0-255 | 0 → 100% |         |      |
|       |              | 00     | 0.055 | GREEN 5  |         |      |
|       |              | 20     | 0-255 | 0 → 100% |         |      |
|       |              | 21     | 0-255 | BLUE 5   |         |      |
|       |              | 21     | 0-255 | 0 → 100% |         |      |
|       |              | 22     | 0-255 | AMBER 5  |         |      |
|       |              | 22     | 0-233 | 0 → 100% |         |      |
|       |              | 23     | 0-255 | RED 6    |         |      |
|       |              | 23     | 0-233 | 0 → 100% |         |      |
|       |              | 24     | 0-255 | GREEN 6  |         |      |
|       |              | 24     | 0-233 | 0 → 100% |         |      |
|       |              | 25     | 0-255 | BLUE 6   |         |      |
|       |              | 25     | 0-233 | 0 → 100% |         |      |
|       |              | 26     | 0-255 | AMBER 6  |         |      |
|       |              | 20     | 0-233 | 0 → 100% |         |      |
|       |              | 27     | 0-255 | RED 7    |         |      |
|       |              | 21     | 0-255 | 0 → 100% |         |      |
|       |              | 28     | 0-255 | GREEN 7  |         |      |
|       |              | 20     | 0-255 | 0 → 100% |         |      |
|       |              | 29     | 0-255 | BLUE 7   |         |      |
|       |              | 25     | 0-255 | 0 → 100% |         |      |
|       |              | 30     | 0-255 | AMBER 7  |         |      |
|       |              | 00     | 0 200 | 0 → 100% |         |      |
|       |              | 31     | 0-255 | RED 8    |         |      |
|       |              | 01     | 0 200 | 0 → 100% |         |      |
|       |              | 32     | 0-255 | GREEN 8  |         |      |
|       |              | 02     | 0 200 | 0 → 100% |         |      |
|       |              | 33     | 0-255 | BLUE 8   |         |      |
|       |              | 30     | 0 200 | 0 → 100% |         |      |
|       |              | 34     | 0-255 | AMBER 8  |         |      |
|       |              | 0-7    | 0 200 | 0 → 100% |         |      |

| MODE / CHANNEL |          |        |         |                     |         |      |
|----------------|----------|--------|---------|---------------------|---------|------|
| BASIC          | STANDARD | EXTEND | VALUE   | FUNCTION            | Default | Snap |
|                |          |        |         | сто                 |         |      |
|                | 7        | 35     | 0-23    | OPEN                |         |      |
|                |          |        | 24-255  | CTO 2,700K - 7,000K |         |      |
|                |          |        |         | COLOR PRESETS       |         |      |
|                |          |        | 0       | OFF                 |         |      |
|                |          |        | 1-4     | COLOR PRESET 01     |         |      |
|                |          |        | 5-8     | COLOR PRESET 02     |         |      |
|                |          |        | 9-12    | COLOR PRESET 03     |         |      |
|                |          |        | 13-16   | COLOR PRESET 04     |         |      |
|                |          |        | 17-20   | COLOR PRESET 05     |         |      |
|                |          |        | 21-24   | COLOR PRESET 06     |         |      |
|                |          |        | 25-28   | COLOR PRESET 07     |         |      |
|                |          |        | 29-32   | COLOR PRESET 08     |         |      |
|                |          |        | 33-36   | COLOR PRESET 09     |         |      |
|                |          |        | 37-40   | COLOR PRESET 10     |         |      |
|                |          |        | 41-44   | COLOR PRESET 11     |         |      |
|                |          |        | 45-48   | COLOR PRESET 12     |         |      |
|                |          |        | 49-52   | COLOR PRESET 13     |         |      |
|                |          |        | 53-56   | COLOR PRESET 14     |         |      |
| 6              | 8        | 36     | 57-60   | COLOR PRESET 15     |         |      |
| O              |          | 30     | 61-64   | COLOR PRESET 16     |         |      |
|                |          |        | 65-68   | COLOR PRESET 17     |         |      |
|                |          |        | 69-72   | COLOR PRESET 18     |         |      |
|                |          |        | 73-76   | COLOR PRESET 19     |         |      |
|                |          |        | 77-80   | COLOR PRESET 20     |         |      |
|                |          |        | 81-84   | COLOR PRESET 21     |         |      |
|                |          |        | 85-88   | COLOR PRESET 22     |         |      |
|                |          |        | 89-92   | COLOR PRESET 23     |         |      |
|                |          |        | 93-96   | COLOR PRESET 24     |         |      |
|                |          |        | 97-100  | COLOR PRESET 25     |         |      |
|                |          |        | 101-104 | COLOR PRESET 26     |         |      |
|                |          |        | 105-108 | COLOR PRESET 27     |         |      |
|                |          |        | 109-112 | COLOR PRESET 28     |         |      |
|                |          |        | 113-116 | COLOR PRESET 29     |         |      |
|                |          |        | 117-120 | COLOR PRESET 30     |         |      |
|                |          |        | 121-124 | COLOR PRESET 31     |         |      |
|                |          |        | 125-128 | COLOR PRESET 32     |         |      |

|       | MODE / CHANNEL  IC STANDARD EXTEND |        | VALUE   | FUNCTION                         | Default | Sna  |
|-------|------------------------------------|--------|---------|----------------------------------|---------|------|
| BASIC | STANDARD                           | EXTEND | VALUE   | FONCTION                         | Delault | Sila |
|       |                                    |        |         | COLOR PRESETS [continued]        |         |      |
|       |                                    |        | 129-132 | COLOR PRESET 33                  |         |      |
|       |                                    |        | 133-136 | COLOR PRESET 34                  |         |      |
|       |                                    |        | 137-140 | COLOR PRESET 35                  |         |      |
|       |                                    |        | 141-144 | COLOR PRESET 36                  |         |      |
|       |                                    |        | 145-148 | COLOR PRESET 37                  |         |      |
|       |                                    |        | 149-152 | COLOR PRESET 38                  |         |      |
|       |                                    |        | 153-156 | COLOR PRESET 39                  |         |      |
|       |                                    |        | 157-160 | COLOR PRESET 40                  |         |      |
|       |                                    |        | 161-164 | COLOR PRESET 41                  |         |      |
|       |                                    |        | 165-168 | COLOR PRESET 42                  |         |      |
|       |                                    |        | 169-172 | COLOR PRESET 43                  |         |      |
|       |                                    |        | 173-176 | COLOR PRESET 44                  |         |      |
|       |                                    |        | 177-180 | COLOR PRESET 45                  |         |      |
|       |                                    |        | 181-184 | COLOR PRESET 46                  |         |      |
|       |                                    |        | 185-188 | COLOR PRESET 47                  |         |      |
| 6     | 8                                  | 36     | 189-192 | COLOR PRESET 48                  |         |      |
|       |                                    |        | 193-196 | COLOR PRESET 49                  |         |      |
|       |                                    |        | 197-200 | COLOR PRESET 50                  |         |      |
|       |                                    |        | 201-204 | COLOR PRESET 51                  |         |      |
|       |                                    |        | 205-208 | COLOR PRESET 52                  |         |      |
|       |                                    |        | 209-212 | COLOR PRESET 53                  |         |      |
|       |                                    |        | 213-216 | COLOR PRESET 54                  |         |      |
|       |                                    |        | 217-220 | COLOR PRESET 55                  |         |      |
|       |                                    |        | 221-224 | COLOR PRESET 56                  |         |      |
|       |                                    |        | 225-228 | COLOR PRESET 57                  |         |      |
|       |                                    |        | 229-232 | COLOR PRESET 58                  |         |      |
|       |                                    |        | 233-236 | COLOR PRESET 59                  |         |      |
|       |                                    |        | 237-240 | COLOR PRESET 60                  |         |      |
|       |                                    |        | 241-244 | COLOR PRESET 61                  |         |      |
|       |                                    |        | 245-248 | COLOR PRESET 62                  |         |      |
|       |                                    |        | 249-252 | COLOR PRESET 63                  |         |      |
|       |                                    |        | 253-255 | COLOR PRESET 64                  |         |      |
|       |                                    |        |         | STROBE                           |         |      |
|       |                                    |        | 0-31    | CLOSED                           |         |      |
|       |                                    |        | 32-63   | OPEN                             |         |      |
|       |                                    |        | 64-95   | Strobe Effect SLOW → FAST        |         |      |
| 7     | 9                                  | 37     | 96-127  | OPEN                             |         |      |
| •     |                                    |        | 128-159 | Pulse SLOW → FAST                |         |      |
|       |                                    |        | 160-191 | OPEN TAGT                        |         |      |
|       |                                    |        | 192-223 | Random Strobe Effect SLOW → FAST |         |      |
|       |                                    |        | 224-255 | OPEN                             |         |      |
|       | L                                  |        |         | J                                |         |      |

| MODE / CHANNEL |          |        |                |  |         |      |
|----------------|----------|--------|----------------|--|---------|------|
| BASIC          | STANDARD | EXTEND | VALUE FUNCTION |  | Default | Snap |
| 0              | 10       | 00     | 0.055          | MASTER INTENSITY   |         |      |
| 8              | 10       | 38     | 0-255          | CLOSE → OPEN   |         |      |
| 9              | 11       | 39     | 0.055          | MASTER INTENSITY FINE  |         |      |
| 9              | 11       | 39     | 0-255          | CLOSE → OPEN   |         |      |
| 10             | 12       | 40     | 0-255          | ZOOM   |         |      |
| 10             | 12       | 40     | 0-233          | Zoom MIN → MAX   |         |      |
|                |          |        |                | PROGRAM MACROS -<br>NOTE: Color Must Be Selected To Engage Macros. |         |      |
|                |          |        | 0              | IDLE   |         |      |
|                |          |        | 1-14           | OFF  |         |      |
|                |          |        | 15-30          | PROGRAM MACRO 01   |         |      |
|                |          |        | 31-46          | PROGRAM MACRO 02   |         |      |
|                |          |        | 47-62          | PROGRAM MACRO 03   |         |      |
|                |          |        | 63-78          | PROGRAM MACRO 04   |         |      |
|                |          |        | 79-94          | PROGRAM MACRO 05   |         |      |
| 11             | 13       | 41     | 95-110         | PROGRAM MACRO 06   |         |      |
|                |          |        | 111-126        | PROGRAM MACRO 07   |         |      |
|                |          |        | 127-142        | PROGRAM MACRO 08   |         |      |
|                |          |        | 143-158        | PROGRAM MACRO 09   |         |      |
|                |          |        | 159-174        | PROGRAM MACRO 10   |         |      |
|                |          |        | 175-190        | PROGRAM MACRO 11   |         |      |
|                |          |        | 191-206        | PROGRAM MACRO 12   |         |      |
|                |          |        | 207-222        | PROGRAM MACRO 13   |         |      |
|                |          |        | 223-238        | PROGRAM MACRO 14   |         |      |
|                |          |        | 239-255        | PROGRAM MACRO 15   |         |      |
| 12             | 14       | 42     | 0-255          | PROGRAM MACRO SPEED  | 128     |      |
| <del>-</del>   |          | _      |                | SLOW → FAST Speed  |         |      |
| 13             | 15       | 43     | 0-255          | PROGRAM MACRO FADE   | 128     |      |
| 10             |          |        |                | FADE SLOW → FAST   | .=-     |      |

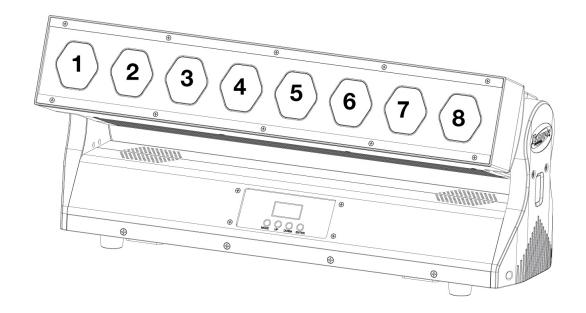
| N     | MODE / CHANN | IEL    |           |                      |         |      |
|-------|--------------|--------|-----------|----------------------|---------|------|
| BASIC | STANDARD     | EXTEND | VALUE     | FUNCTION             | Default | Snap |
|       |              |        |           | DIM MODES            |         |      |
|       |              |        | 0-20      | STANDARD             |         |      |
|       |              |        | 21-40     | STAGE                |         |      |
|       |              |        | 41-60     | TV                   |         |      |
|       |              |        | 61-80     | ARCHITECTURAL        |         |      |
|       |              |        | 81-100    | THEATRE              |         |      |
|       |              |        | 101-120   | STAGE 2              |         |      |
|       |              |        |           | DIMMER DELAY TIME    |         |      |
|       |              |        | 121       | 0s                   |         |      |
|       |              |        | 122       | 0.1s (default)       |         |      |
|       |              |        | 123       | 0.2s                 |         |      |
|       |              |        | 124       | 0.3s                 |         |      |
|       |              | 6 44   | 125       | 0.4s                 |         | x    |
|       |              |        | 126       | 0.5s                 |         |      |
| 14    | 16           |        | 127       | 0.6s                 | 0       |      |
| 14    | 10           | 44     | 128       | 0.7s                 | 0       |      |
|       |              |        | 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                 |         |      |
|       |              |        | 140       | 9.0s                 |         |      |
|       |              |        | 141       | 10s                  |         |      |
|       |              |        | 142 - 255 | Default              |         |      |
|       |              |        |           | TILT MOVEMENT SPEED  |         |      |
| 15    | 17           | 45     | 0-225     | MAX to MIN SPEED     |         |      |
|       |              |        | 226-235   | Blackout By Movement |         |      |
|       |              |        | 236-255   | NO FUNCTION          |         |      |

| N     | MODE / CHANNEL |        |                |                                    |         | 0    |
|-------|----------------|--------|----------------|------------------------------------|---------|------|
| BASIC | STANDARD       | EXTEND | VALUE          | FUNCTION                           | Default | Snap |
|       |                |        |                | CONTROL (Hold 3s)                  |         |      |
|       |                |        | 0 -5           | IDLE                               |         |      |
|       |                |        | 6-10           | RESET                              |         |      |
|       |                |        | 11-15          | Fan Mode AUTO                      |         |      |
|       |                |        | 16-20<br>21-25 | Fan Mode HIGH Fan Mode SILENT      |         |      |
|       |                |        | 25-29          | Program 1                          |         |      |
|       |                |        | 30-34          | Program 2                          |         |      |
|       |                |        | 35-39          | Program 3                          |         |      |
|       |                |        | 40-44          | Program 4                          |         |      |
|       |                |        | 45-49          | Program 5                          |         |      |
|       |                |        | 50-54          | Program 6                          |         |      |
|       |                |        | 55-59          | Program 7                          |         |      |
|       |                |        | 60-64          | Program 8                          |         |      |
|       |                |        | 65-69          | Program 9                          |         |      |
|       |                |        | 70-74          | Program 10                         |         |      |
|       |                |        | 75-79          | Program 11                         |         |      |
|       |                |        | 80-100         | Program 12                         |         |      |
|       |                |        |                | CHANGE REFRESH RATE (Hz) (Hold 3s) |         |      |
|       |                |        | 101-105        | 900                                |         |      |
|       |                |        | 106-110        | 1000                               |         |      |
| 16    | 18             | 46     | 111-115        | 1100                               | 0       | Х    |
|       |                |        | 116-120        | 1200                               |         |      |
|       |                |        | 121-125        | 1300                               |         |      |
|       |                |        | 126-130        | 1400                               |         |      |
|       |                |        | 131-135        | 1500                               |         |      |
|       |                |        | 136-140        | 2500                               |         |      |
|       |                |        | 141-145        | 4000                               |         |      |
|       |                |        | 146-150        | 5000                               |         |      |
|       |                |        | 151-155        | 10000                              |         |      |
|       |                |        |                |                                    |         |      |
|       |                |        | 156-160        | 15000                              |         |      |
|       |                |        | 161-165        | 20000                              |         |      |
| l     |                |        | 166-170        | 25000                              |         |      |
| l     |                |        | 171-200        | IDLE                               |         |      |
|       |                |        |                | DIMMER CURVES (Hold 3s)            |         |      |
|       |                |        | 201-210        | Dimmer Curve Linear (default)      |         |      |
|       |                |        | 211-220        | Dimmer Curve Square                |         |      |
|       |                |        | 221-230        | Dimmer Curve Inverse Square        |         |      |
|       |                |        | 231-240        | Dimmer Curve S-Curve               |         |      |
| 1     |                |        | 241-255        | IDLE                               |         |      |

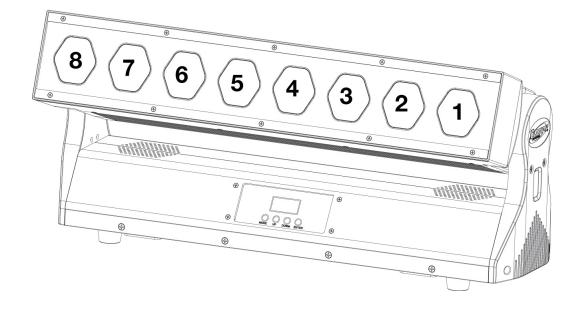
## PIXEL CONTROL

The fixture features pixel control in Extended DMX channel mode. See diagram below, which illustrates the specific pixel mapping order.

# **STANDARD**



# **FLIP**



### SPECIFICATIONS

#### SOURCE

(8) 40W 4-in-1 RGBA LEDs 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**

Motorized 4° to 40° Zoom and 220° Tilt RGBA Color Mixing and Full Pixel Control 2,700K - 7,000K Linear Color Temperature 64 Color Presets and 14 Unique Color Macros Electronic Strobe 16-bit Variable Dimming Curve Modes

#### **COLOR**

**RGBA** 

#### **CONTROL / CONNECTIONS**

3 DMX Channel Modes (46 total channels)
DMX, RDM, Kling-Net, and Art-Net Protocol Support
Adjustable LED Refresh Rate (900-25,000 Hz)
4 Button Touch Control Panel
180° Reversible LCD Menu Display
8 / 16-Bit Resolution Zoom and Tilt Movement
5pin DMX, RJ45 EtherCON, and powerCON Power In/Out

#### SIZE / WEIGHT

Length: 21.28" (540.5mm) Width: 7.44" (189mm)

Vertical Height: 11.46" (291mm) Weight: 25.0 lbs. (11.3 kg)

#### **ELECTRICAL / THERMAL**

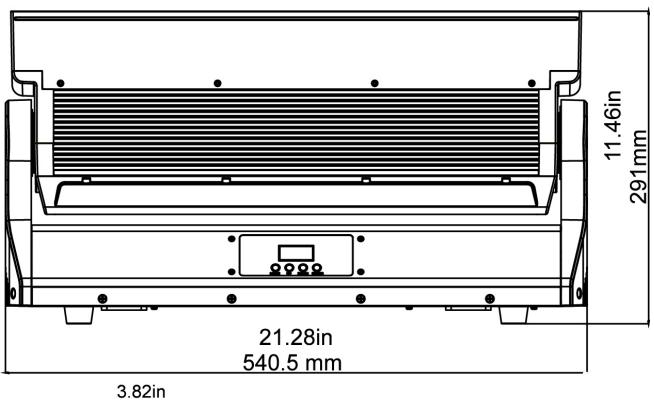
AC 100-250V - 50/60Hz 340W Max Power Consumption 5°F to 113°F (-15°C to 45°C)

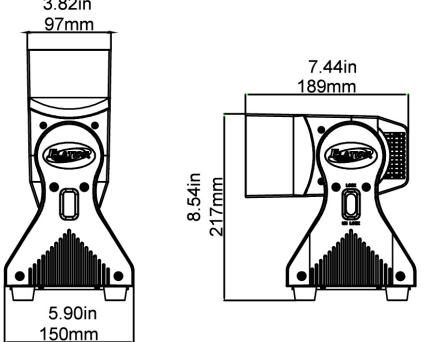
#### APPROVALS / RATINGS

CE | IP30

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

#### **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                                    |
|--------------|---|
| DRCCL8       | 6-Pack Road Case for Chorus Line 8 / ST |
| NARROW CLAMP | Heavy Duty Wrap Around Hook Style Clamp |
| SCABLE 60    | 60 lbs. Rating 24 Inch Safety Cable     |
| AC5PDMX5PRO  | 5 ft. (1.5m) 5pin PRO DMX Cable         |
| PLC3         | 3 ft. (1m) PowerCON PRO Link Cable      |
|              | Additional Cable Lengths Available      |

### **FCC STATEMENT**

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

#### FCC RADIO FREQUENCY INTERFERENCE WARNINGS & INSTRUCTIONS

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

- Reorient or relocate the device.
- Increase the separation between the device and the receiver.
- Connect the device 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.