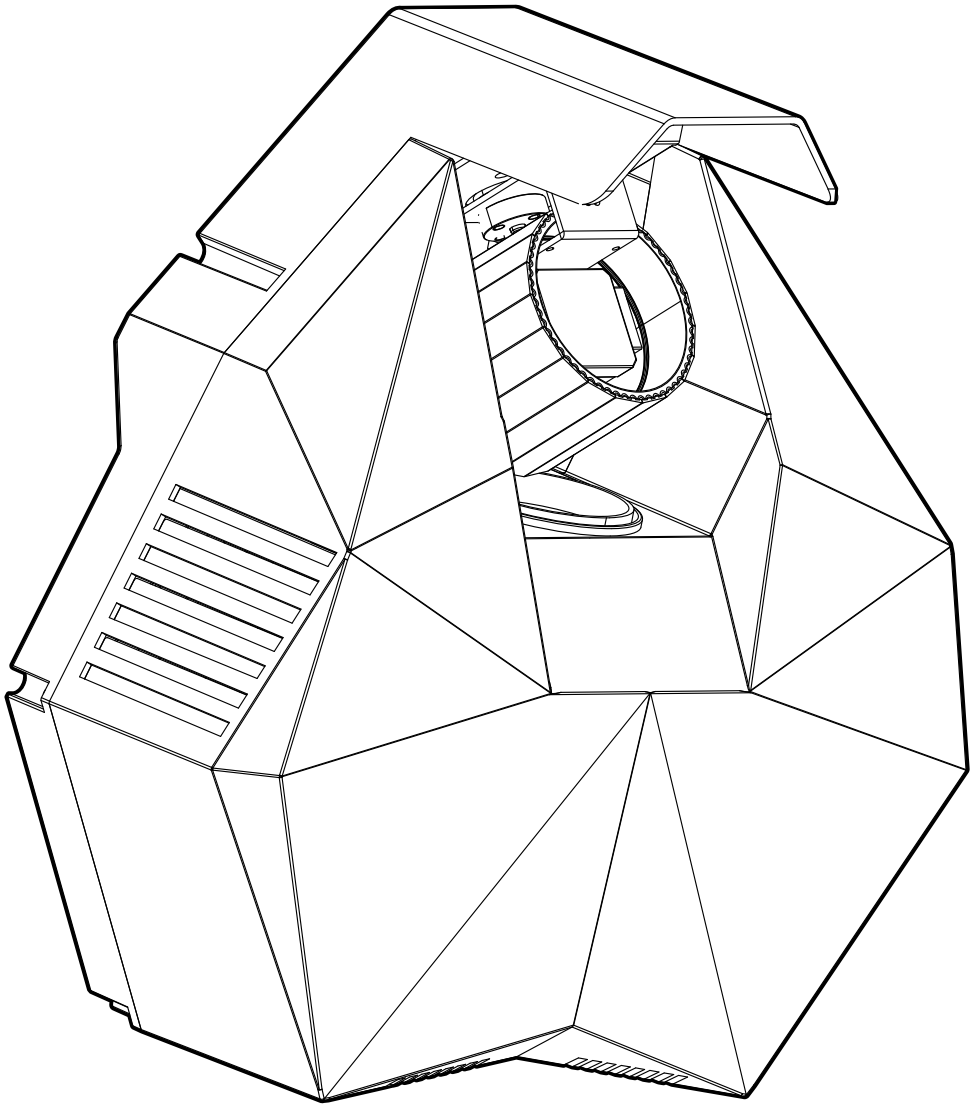
ELIMINATOR®
LIGHTING



# VORTEX 150

## User Manual

**Eliminator Lighting**

6122 S. Eastern Ave. Los Angeles, CA. 90040

323-582-2650 l **www.adj.com l info@adj.com**

**ADJ SUPPLY Europe B.V**

Junostraat 2 6468 EW Kerkrade, The Netherlands

+31 (0)45 546 85 00 l **www.adj.eu l info@adj.eu**

**ADJ PRODUCTS GROUP Mexico**

AV Santa Ana 30 Parque Industrial Lerma, Lerma, Mexico 52000

+52 (728) 282-7070

## DOCUMENT VERSION

**Due to additional product features and/or enhancements, and updated version of this document may be available online.**
**Please check www.adj.com for the latest revision/update of this manual before beginning installation and/or programming.**

| Date | Document Version | Software Version > | DMX Channel Mode | Notes |
|---|---|---|---|---|
| 04/14/25 | 1.0 | 1.13 | 10 / 12 Ch | Initial release |
| 09/19/25 | 1.1 | N/C | No change | Updated Dimensional Drawings, Specifications |
| | | | | |
| | | | | |
| | | | | |

# CONTENTS

# INTRODUCTION

## UNPACKING

Thank you for purchasing the Vortex 150 by Eliminator Lighting. Every unit 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 appears to be damaged, carefully inspect your fixture for any damage and be sure all accessories necessary to operate the unit have arrived intact. In the event that damage is been found or parts are missing, please contact our toll free customer support number for further instructions. Do not return this unit to your dealer without first contacting customer support.

## INTRODUCTION

The Vortex 150 continues to redefine dynamic lighting with its classic moonflower effect and barrel mirrored scanner. Powered by a robust 150W white LED engine, it delivers razor-sharp 3-degree beams that cut through the air with precision. Featuring 11 vibrant Color/GOBO combinations, GOBO shake effects, mesmerizing strobe effects, and 6 built-in light shows, the Vortex 150 is designed to captivate audiences and help bring a party to life.

Take control with multiple operation modes, including DMX, Remote Device Management (RDM), sound activation, or show mode. Adjust settings effortlessly using the intuitive 4-button control menu and digital display. The barrel mirror ensures rapid, fluid movements with a range of 180° on the X-axis and a full 360° on the Y-axis. Fine-tune the beams and GOBO patterns using the manual focusing knob for ultimate precision.

The fixture is equipped with 5-pin DMX In/Out connections, an IP65 locking power input, and a safety loop for secure mounting. Compact and lightweight, the Vortex 150 is ideal for tight spaces, low ceilings, and high-energy venues such as bars, lounges, roller rinks, and fun centers.

## CUSTOMER SUPPORT

Tel: (323) 213-4592 I Fax: (323) 582-2941
**www.adj.com I support@eliminatorlighting.com**

**Warning!** To prevent or reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.

**Caution!** There are no user serviceable parts inside this unit. Do not attempt any repairs yourself, as doing so will void your manufacturer's warranty. In the event that your unit requires service, please contact Eliminator Lighting for assistance.

PLEASE recycle the shipping carton when ever possible.

# LIMITED WARRANTY (USA ONLY)

A. Eliminator Lighting, an ADJ Products, LLC brand, hereby warrants, to the original purchaser, Eliminator Lighting products to be free of manufacturing defects in material and workmanship for a prescribed period from the date of purchase (see specific warranty period on reverse). 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, you must obtain a Return Authorization number (RA#) before sending back the product-please contact ADJ Products, LLC Service Department at 800-322-6337. Send the product only to the Eliminator Lighting factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, Eliminator Lighting will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, Eliminator Lighting shall have no liability whatsoever for loss of or damage to any such accessories, or for the safe return thereof.

C. This warranty is void of the serial number has been altered or removed; if the product is modified in any manner which Eliminator Lighting concludes, after inspection, affects the reliability of the product, if the product has been repaired or service by anyone other than ADJ Products, LLC factory unless prior written authorization was issued to purchaser by Eliminator Lighting; if the product is damaged because not properly maintained as set forth in the instruction manual.

D. This is not a service contact, and this warranty does not include maintenance, cleaning or periodic check up. During the period specified above, Eliminator Lighting will replace defective parts at its expense with new or refurbished parts, and will absorb all expenses for warrant service and repair labor by reason of defects in material or workmanship. The sole responsibility of Eliminator Lighting under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Eliminator Lighting. All products covered by this warranty were manufactured after August 15, 2012, and bear identifying marks to that effect.

E. Eliminator Lighting reserves the right to make changes in design and/or 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 products described above. Except to the extent prohibited by applicable law, all implied warranties made by Eliminator Lighting in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has 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 Eliminator Lighting be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.

G. This warranty is the only written warranty applicable to Eliminator Lighting products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

**MANUFACTURER'S LIMITED WARRANTY PERIODS**

- **Non L.E.D. Eliminator Lighting products =** 1-year (365 days) Limited Warranty (Such as: Special Effect Lighting, Intelligent Lighting, UV lighting, Strobes, Fog Machines, Bubble Machines, Mirror Balls, Par Cans, Trussing, Lighting Stands etc., excluding lamps
- **L.E.D. Eliminator Lighting Products =** 2-year (730 days) Limited Warranty (excluding batteries which have a 180 day limited warranty). Note: 2 Year Warranty only applies to purchases within the United States.
- **Eliminator Laser Products =** 1 Year (365 Days) Limited Warranty (excluding laser diodes which have a 6 month limited warranty)

# WARRANTY REGISTRATION

This device carries a 2 year limited warranty. Please fill out the enclosed warranty card to validate your purchase. All returned service items, whether under warranty or not, must be freight pre-paid and accompanied by a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper included in the shipping carton. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. You may obtain an R.A. number by contacting our customer support team on our customer support number. All packages returned to the service department not displaying an R.A. number on the outside of the package will be returned to the shipper.

## FEATURES

The Eliminator Vortex 150 is a classic moonflower effect with a barrel mirrored scanner that produced multiple razor-sharp 3-degree beams of light powered by an 150W LED engine. It features 11 Color/GOBOs combinations, GOBO shake effect, mesmerizing strobe effects and has 6 built-in light shows.

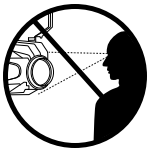
# SAFETY GUIDELINES

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

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

**NEVER TOUCH LIGHT DURING OPERATION, AS IT MAY BE HOT!**
**ALWAYS DISCONNECT FROM MAIN POWER BEFORE PERFORMING ANY REPAIRS OR MAINTENANCE!**
**ALWAYS REPLACE LAMPS AND FUSES WITH REPLACEMENTS OF THE SAME TYPE!**
**KEEP FLAMMABLE MATERIALS AWAY FROM THESE DEVICES!**


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



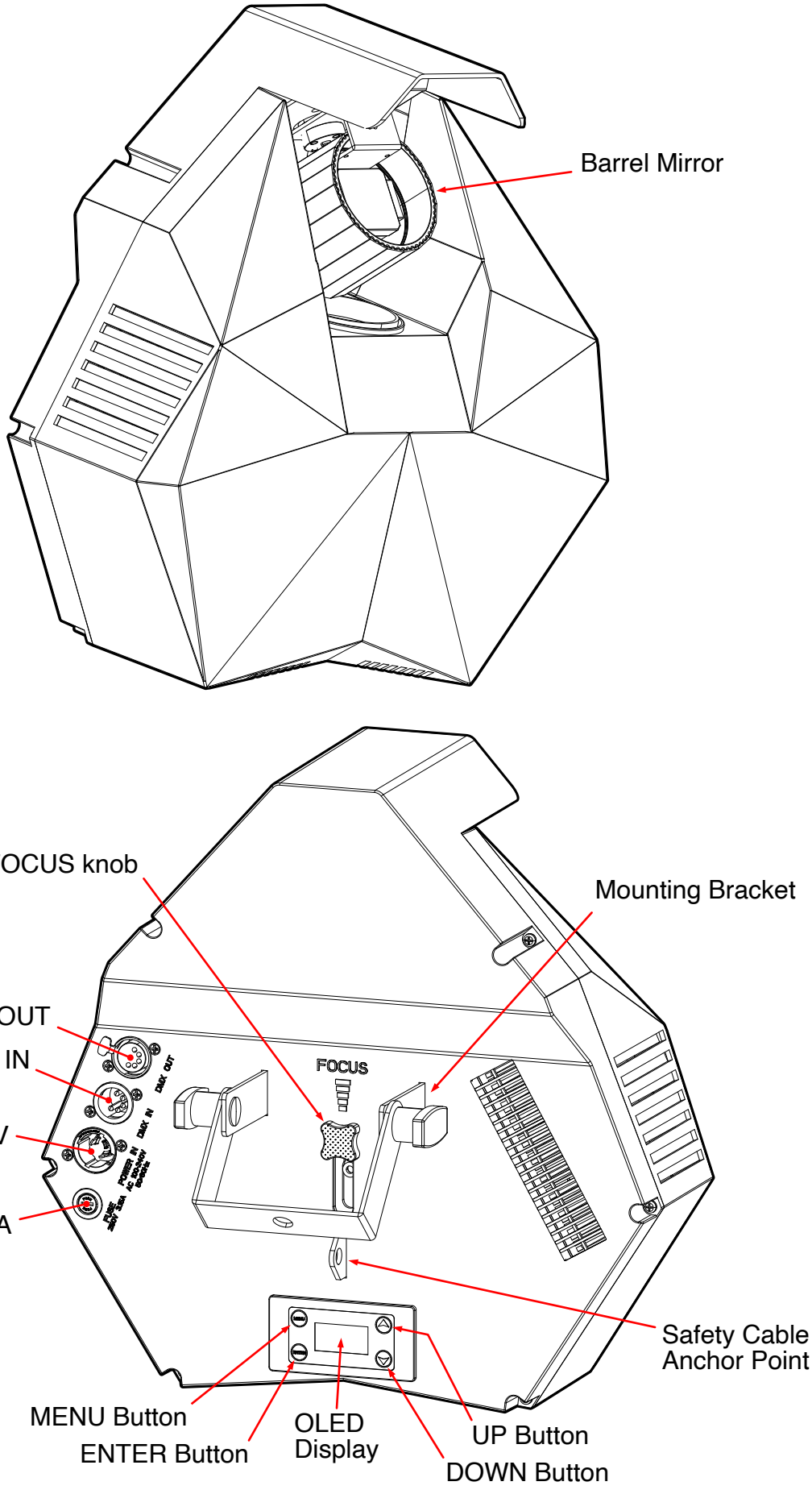
**NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE!**
**RETINA INJURY RISK - MAY INDUCE BLINDNESS!**
**SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK!**

# SAFETY GUIDELINES

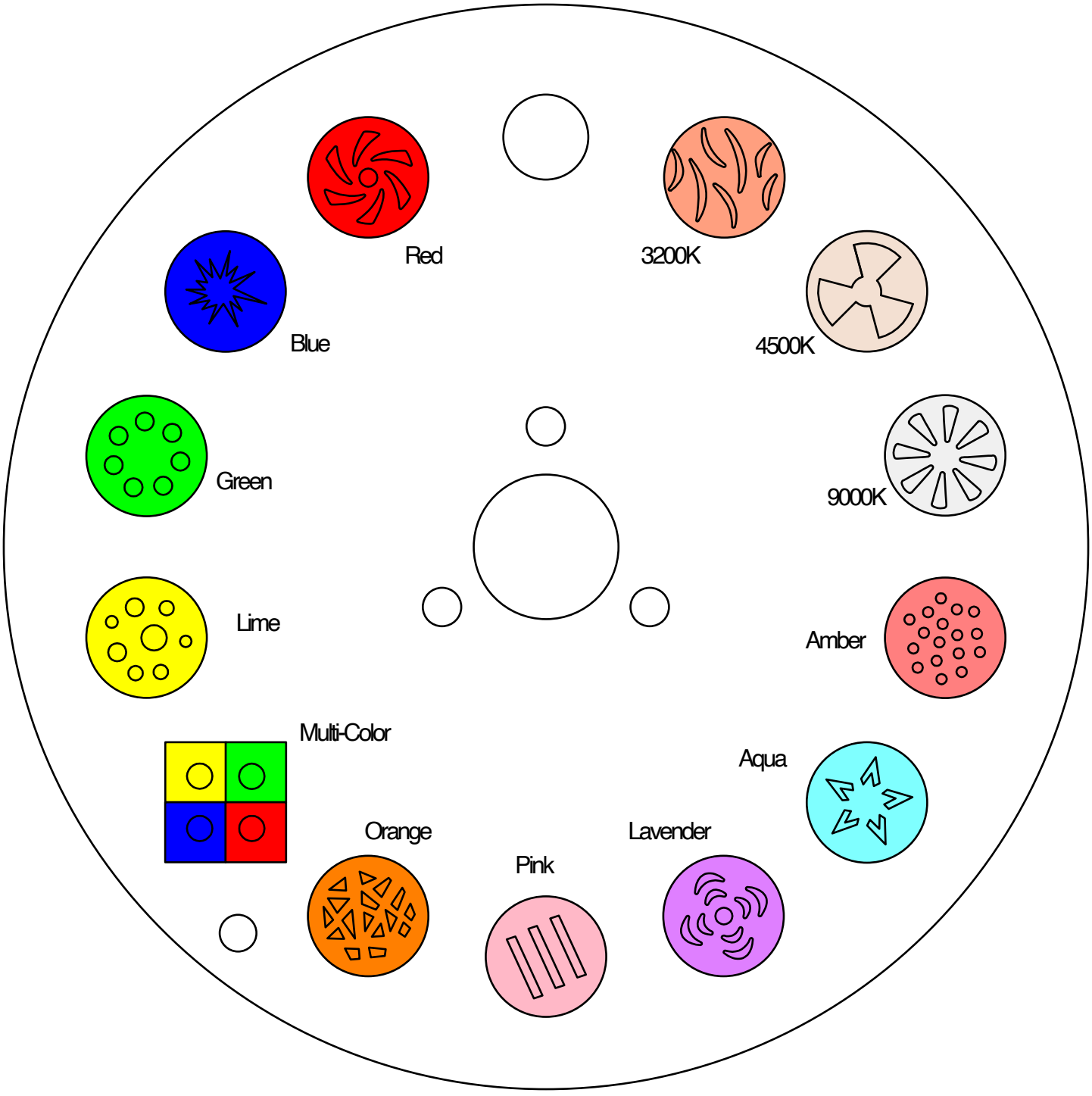
**THIS FIXTURE IS COMPOSED OF SOPHISTICATED ELECTRONIC COMPONENTS. TO GUARANTEE SMOOTH OPERATION, IT IS IMPORTANT TO FOLLOW ALL INSTRUCTIONS AND GUIDELINES IN THIS MANUAL. ADJ PRODUCTS, LLC IS NOT RESPONSIBLE FOR INJURY AND/OR DAMAGES RESULTING FROM THE MISUSE OF THIS FIXTURE DUE TO THE DISREGARD OF THE INFORMATION PRINTED IN THIS MANUAL. ONLY QUALIFIED AND/OR CERTIFIED PERSONNEL SHOULD PERFORM INSTALLATION OF THIS FIXTURE AND ONLY THE ORIGINAL RIGGING PARTS INCLUDED WITH THIS FIXTURE SHOULD BE USED FOR INSTALLATION. ANY MODIFICATIONS TO THE FIXTURE AND/OR THE INCLUDED MOUNTING HARDWARE WILL VOID THE ORIGINAL MANUFACTURER'S WARRANTY AND INCREASE THE RISK OF DAMAGE AND/OR PERSONAL INJURY. ONLY CERTIFIED PERSONNEL SHOULD PERFORM INSTALLATION OF THIS FIXTURE.**

- **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 MANUFACTURER'S WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS FIXTURE AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURER'S WARRANTY AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS.**
- **DO NOT PLUG FIXTURE INTO A DIMMER PACK!**
- **NEVER OPEN THIS FIXTURE WHILE IN USE!**
- **UNPLUG POWER BEFORE SERVICING FIXTURE!**
- **NEVER TOUCH FIXTURE DURING OPERATION, AS IT MAY BE HOT!**
- **KEEP FLAMMABLE MATERIALS AWAY FROM FIXTURE!**
- **NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE!**
- **RETINA INJURY RISK - MAY INDUCE BLINDNESS!**
- **SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK!**
- **MINIMUM DISTANCE TO OBJECTS/SURFACES IS 1.6 FEET (0.5 METERS)**
- **AMBIENT TEMPERATURE IS 14°F (-100°C) TO 113°F (45°C). DO NOT OPERATE THE DEVICE WHEN AMBIENT TEMPERATURES EXCEED THESE VALUES.**
- **MINIMUM DISTANCE TO FLAMMABLE MATERIALS FROM THE SURFACE IS 8" (.2m).**
- **DO NOT TOUCH** the fixture housing during operation. Turn OFF the power and allow approximately 15 minutes for the fixture to cool down before servicing.
- **DO NOT** shake fixture, and avoid brute force when installing and/or operating fixture.
- **DO NOT** operate fixture if the power cord is frayed, crimped, damaged and/or if any of the power cord connectors are damaged and do not insert into the fixture securely with ease. **NEVER** force a power cord connector into the fixture. If the power cord or any of its connectors are damaged, replace it immediately with a new one of the same power rating.
- **DO NOT** block any air ventilation slots. All fan and air inlets must remain clean and never blocked. Allow approx. 8" (20cm) 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 original packaging and materials to transport the fixture for service.

# OVERVIEW


Barrel Mirror
FOCUS knob
Mounting Bracket
DMX OUT
DMX IN
POWER IN
AC 100-240V
50/50Hz
Fuse
250V 3.15A
FOCUS
Safety Cable
Anchor Point
MENU Button
ENTER Button
OLED
Display
UP Button
DOWN Button

# GOBO / COLOR WHEEL



# INSTALLATION

**FLAMMABLE MATERIAL WARNING**
Keep fixture minimum 8” (20cm) away from flammable materials and/or pyrotechnics.

**ELECTRICAL CONNECTIONS**
A qualified electrician should be used for all electrical connections and/or installations.

**MINIMUM DISTANCE TO OBJECTS/SURFACES IS 6.6 FEET (2 METERS).**
**MINIMUM DISTANCE OF FLAMMABLE MATERIALS FROM THE SURFACE IS 8” (20cm)**

**DEVICE IS INTENDED FOR INDOOR USE ONLY! OUTDOOR INSTALLATION OR EXPOSURE TO RAIN OR MOISTURE CAN DAMAGE THE DEVICE AND VOID YOUR MANUFACTURER’S WARRANTY!**

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

- Fixture MUST be installed following all local, national, and country commercial electrical and construction codes and regulations.
- Before rigging/mounting a single fixture or multiple fixtures to any metal truss/structure or placing the fixture(s) on any surface, a professional equipment installer MUST be consulted to determine if the metal truss/structure or surface is properly certified to safely hold the combined weight of the fixture(s), clamps, cables, and accessories.
- Maximum fixture ambient operating temperature is 104°F (40°C)**.** Do not use operate the fixture when ambient temperature exceeds this value!
- Fixture(s) should be installed outside walking paths, seating areas, or 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.
- Allow approximately 15 minutes for the fixture to cool down before servicing.

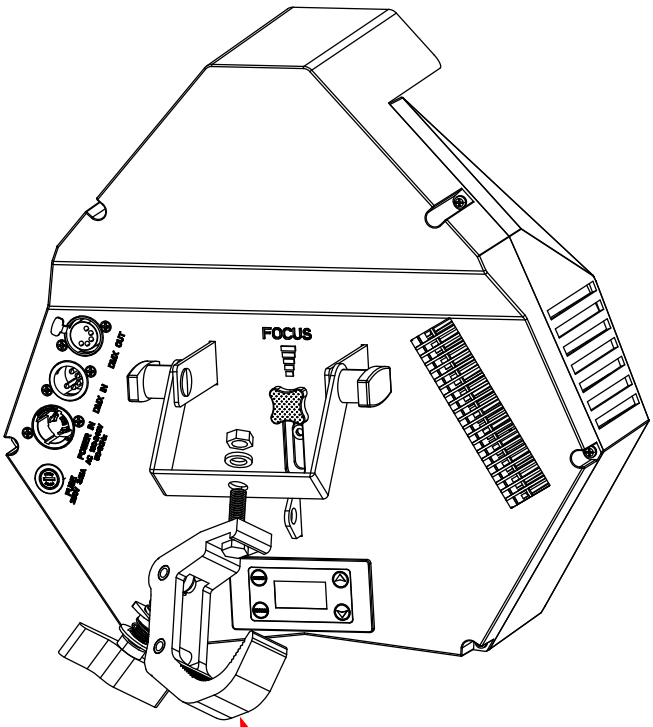
**RIGGING**
**Overhead rigging requires extensive experience, including calculating working load limits, knowledge about installation materials being used, and periodic safety inspection of all installation material and the fixture, among other skills. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.**

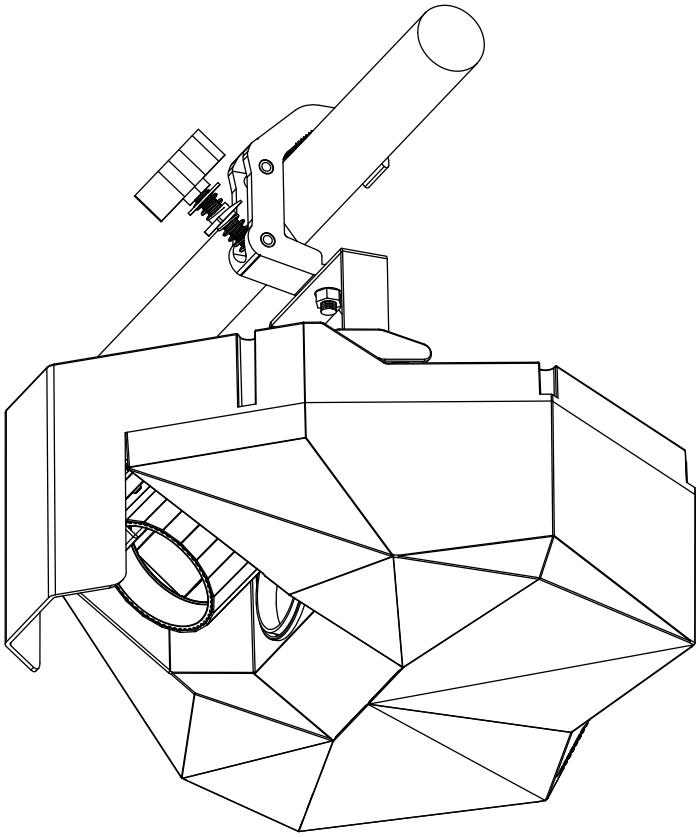
**OPERATIONAL BREAKS**
**Duty Cycle - It is strongly recommended to power the fixture down completely when not in use. Doing so will reduce wear on the fixture due to sustained or extended operational periods, thereby maximizing the fixture’s operational lifespan.**

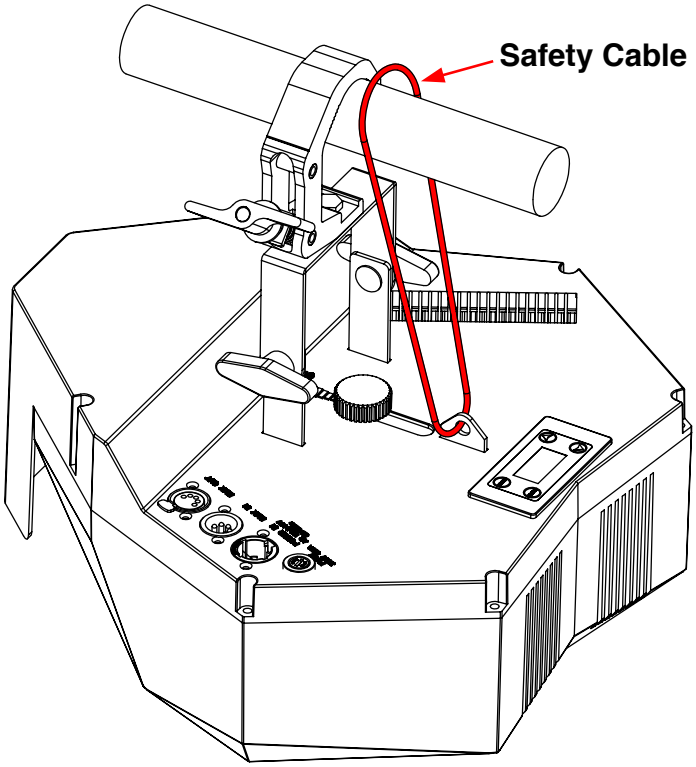
# INSTALLATION

## CLAMP INSTALLATION

This fixture features mounting clamp attachment points for the fitment of an omega bracket, as well as a safety cable loop, located on the underside of the fixture base, as shown in the illustration below. When mounting the fixture to a truss or any other suspended or overhead installation, be sure to secure an appropriately rated clamp **(not included)** to the clamp attachment point and attach a separate **SAFETY CABLE** of the appropriate safety rating to the safety cable rigging point.





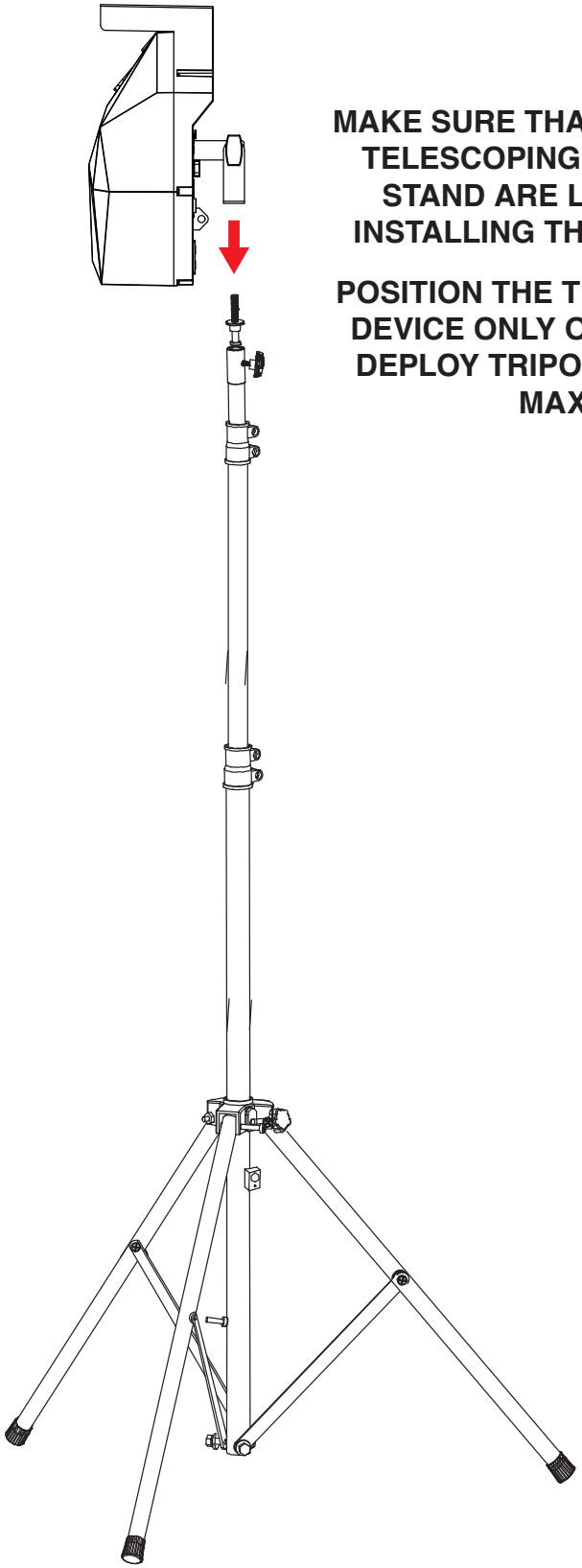

**SAFETY CABLE:**

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

# INSTALLATION

**STAND MOUNTING**

This unit can also be installed atop a tripod stand. Simply insert the threaded bolt on the top of the tripod stand through the hole unit's mounting yoke. Tighten the nut onto the threaded bolt to secure the mounted device in place.



**CAUTION!**

**MAKE SURE THAT THE TRIPOD LEGS AND ALL TELESCOPING ELEMENTS OF THE TRIPOD STAND ARE LOCKED IN PLACE BEFORE INSTALLING THE DEVICE ATOP THE STAND!**

**POSITION THE TRIPOD STAND AND MOUNTED DEVICE ONLY ON FLAT, STABLE SURFACES! DEPLOY TRIPOD LEGS FULLY IN ORDER TO MAXIMIZE STABILITY!**

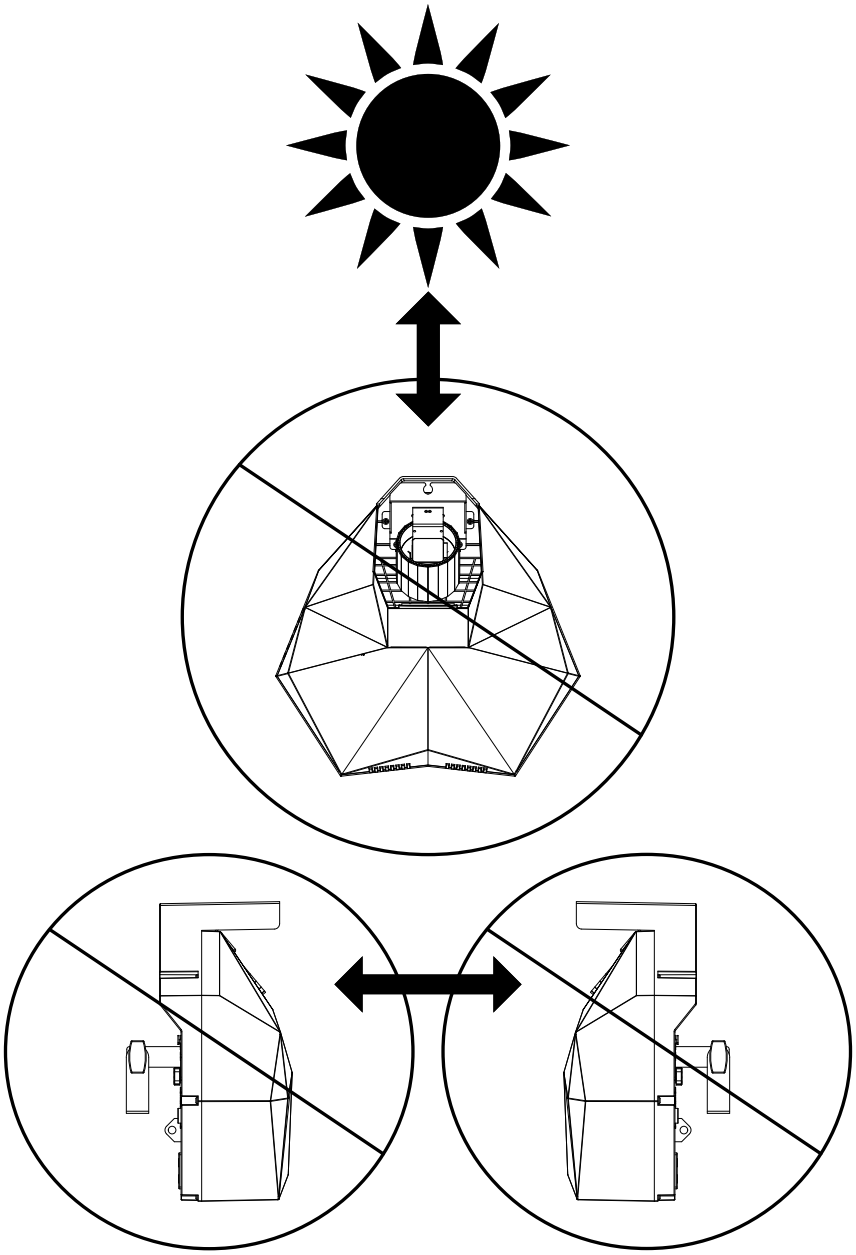
# INSTALLATION

## POTENTIAL INTERNAL FIXTURE DAMAGE FROM EXTERNAL SOURCES OF LIGHT BEAMS

External sources of light beams from direct sunlight, lighting and moving head fixtures, and lasers, which are focused directly towards the exterior housing and/or penetrate the front lens opening of Eliminator lighting fixtures, can cause severe internal damage including burning of optics, dichroic color filters, glass and metal gobos, prisms, animation wheels, frost filters, iris, shutters, motors, belts, wiring, discharge lamps, and LEDs.

This issue is not specific only to Eliminator lighting fixtures, but rather it is a common issue with lighting fixtures from all manufacturers. Although there is no true way to fully prevent this issue from happening, the guidelines below can reduce the risk of potential damage. Contact Eliminator Service for more details.

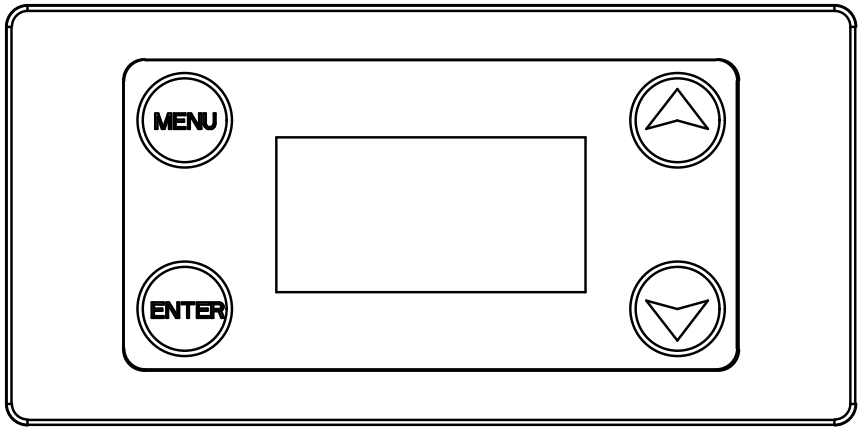
**DO NOT EXPOSE THE FIXTURE AND/OR FRONT LENS OPENING TO LIGHT BEAMS FROM DIRECT SUNLIGHT, OTHER LIGHTING OR MOVING HEAD FIXTURES, AND LASERS DURING UNPACKING, INSTALLATION, USE, AND EXTENDED IDLE TIMES OUTDOORS. DO NOT FOCUS A LIGHT BEAM FROM ONE LIGHTING FIXTURE DIRECTLY TOWARDS ANOTHER.**



# SYSTEM MENU

The fixture includes an easy to navigate system menu control panel display where all necessary settings and adjustments are made.

- **MENU:** Cycles through the main menu options and/or return to previous menu without making changes.
- **DOWN/UP:** Scroll through options in the selected menu.
- **ENTER:** Select highlighted option and/or confirm selection.




**SOFTWARE UPDATES:**
Software updates should be performed by trained personnel only! Contact Customer Service at the number or email listed below for assistance with performing software updates.

Tel: (323) 582-2650
support@eliminatorlighting.com

# SYSTEM MENU

| MENU | OPTIONS / VALUES (Default Settings **BOLD**) | | | |
|---|---|---|---|---|
| **DMX SETTINGS** | DMX Address | **001**-xxx | | |
| | DMX CH Mode | **10CH** / 12CH | | |
| | No DMX Status | **Hold**, Blackout, Show, Manual | | |
| **PERSONALITY** | Pan Invert | **OFF / ON** | | |
| | Tilt Invert | **OFF** / ON | | |
| | Prim/Sec Mode | Primary, **Secondary** | | |
| | Dim Modes | **Standard**, Stage, TV, Architectural, Theatre, Stage 2 | | |
| | | Dim Speed | 0.1S~10S | |
| | LED Refresh Rate | 900-1500, 2500, 4000, 5000, 6000, 10KHZ, **15KHZ**, 20KHZ, 25KHZ, | | |
| | Dimmer Curve | Linear, **Square Law**, Inv SQ Law, S Curve | | |
| | Temperature Unit | **°C** / °F | | |
| | Display | Display Invert | **Auto** / Yes / No | |
| | | Screen Saver Delay | **OFF** / 01M-10M | |
| | Reset Motor | YES / **NO** | | |
| | Service (Passcode = **050**) | Effect Adjust | Pan | -127 - 127 |
| | | | Tilt | -127 - 127 |
| | | | Gobo | -127 - 127 |
| | | | Mirror | -127 - 127 |
| | | Factory Restore | **NO** / YES | |
| **MANUAL** | Pan | 000 - 255 | | |
| | Tilt | 000 - 255 | | |
| | Gobo | 000 - 255 | | |
| | Mirror | 000 - 255 | | |
| | Shutter | 000 - 255 | | |
| | Dimmer | 000 - 255 | | |
| **INTERNAL PROGRAMS** | Program 0 | Speed 1-10 | | |
| | Program 1 | Speed 1-10 | | |
| | Program 2 | Speed 1-10 | | |
| | Program 3 | Speed 1-10 | | |
| | Program 4 | Speed 1-10 | | |
| | Program 5 | Speed 1-10 | | |
| | Program 6 | Speed 1-10 | | |
| **Programs Sound** | ON / **OFF** | | | |
| **Sound Sensitivity** | 0-100 | | | |
| **INFORMATION** | Hours | PwrOnHr1 | xxxxxx Hours | |
| | | PwrOnHr2 | xxxxxx Hours | |
| | | PwrOnRst | Passcode (050) | |
| | Temp. | LED | Current | |
| | | | Max Temp | |
| | | Temp Rst | YES / **NO** | |
| | DMXValue | Pan | | |
| | | ... | | |
| | | Special | | |
| | SoftVers | x.xx | | |
| | RDM UID | | | |
| | Error logs | Error Logs | | |
| | | Reset Error Log | YES / **NO** | Passcode = 050 |

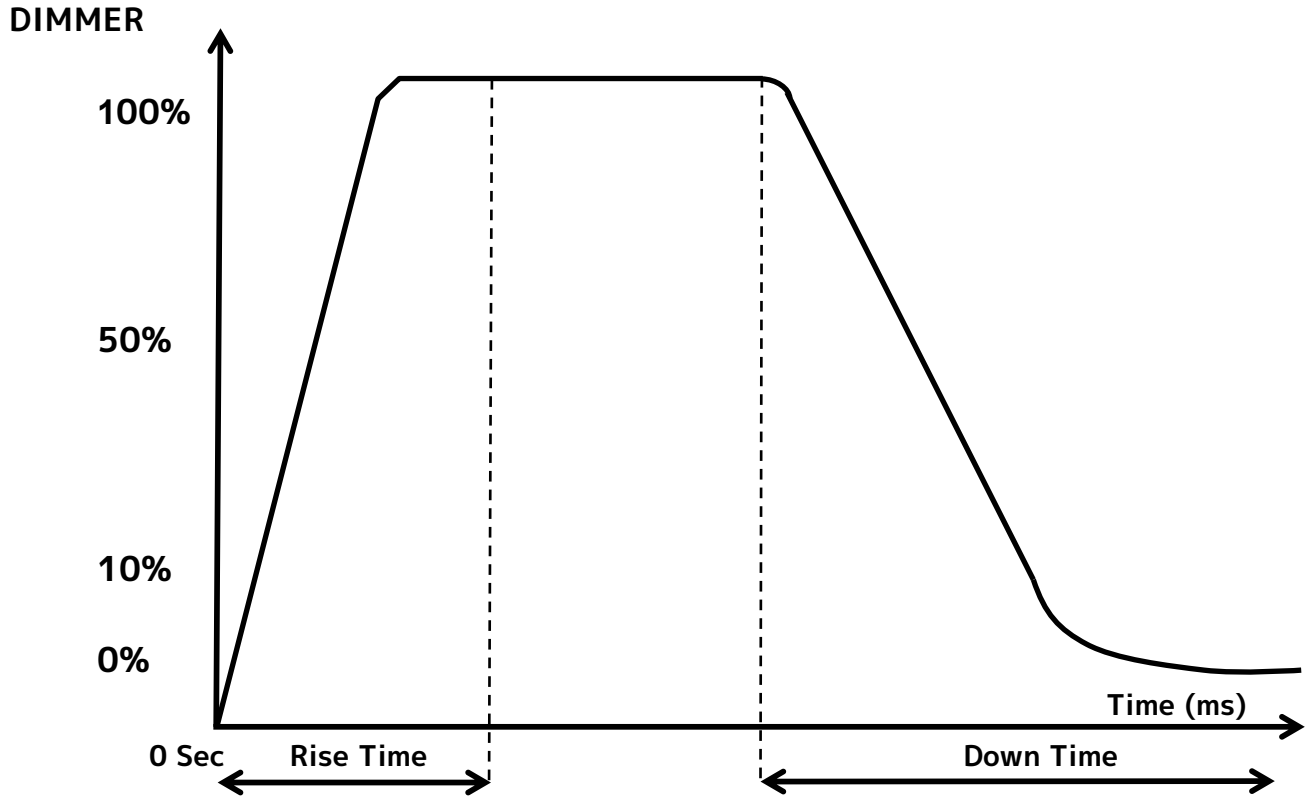
# PRIMARY-SECONDARY CONFIGURATION

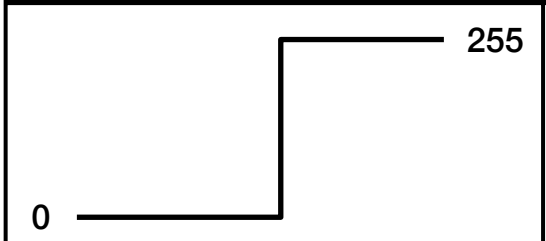
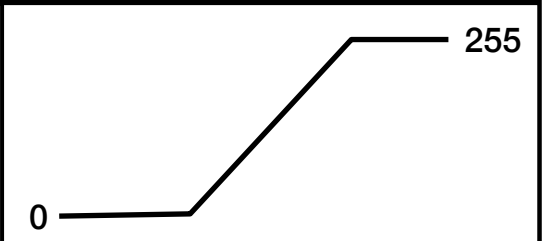
This function allows you to link units together to run in a Primary-Secondary set-up, in which one unit will act as the controlling unit and the others will react to the controlling unit's built-in programs. Any unit can be configured to act as a Primary or as a Secondary, but only one unit in a given system can be programmed to act as the Primary.

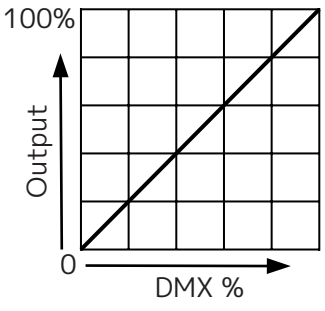
**Primary-Secondary Connections and Settings:**

1. Daisy chain your units via the XLR connectors on the rear panels of each unit. Use standard XLR data cables to link your units together. Remember that the male XLR connector is the input and the female XLR connector is the ouput. The first unit in the chain (primary) will use the female XLR connector only, and the last unit in the chain will use the male XLR connector only.
2. Use the display screen and control panel to navigate to the "Persoanlity" setting in the main menu. Select this setting using the ENTER button, and use the UP and DOWN buttons to scroll to "Prim / Sec Mode" and press ENTER.
3. For the unit that you would like to set as the Primary, use the UP and DOWN buttons to scroll to "Primary", press ENTER. and use UP and DOWN to scroll to ON. Press ENTER to confirm. Then scroll to "Secondary" and set it to OFF, and press ENTER to confirm.
4. For each unit that you would like to set as a Secondary, use the UP and DOWN buttons to scroll to "Secondary", press ENTER. and use UP and DOWN to scroll to ON. Press ENTER to confirm. Then scroll to "Primary" and set it to OFF, and press ENTER to confirm. Repeat for each unit that you would like to operate as a secondary unit.
5. The secondary units will now operate in conjunction with the primary unit.

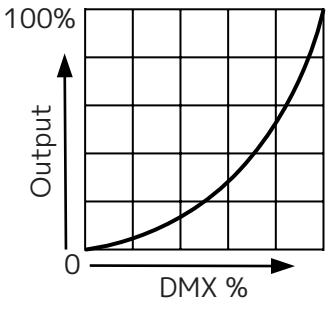
# DIMMER MODES AND CURVES



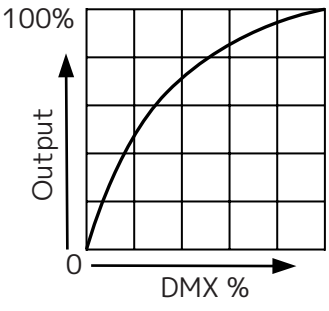

| Dimming Curve Ramp Effect | 0 sec Fade Time   | | 1 sec Fade Time   | |
|---|---|---|---|---|
| | Rise Time (ms) | Down Time (ms) | Rise Time (ms) | Down Time (ms) |
| **Standard (default)** | 0 | 0 | 0 | 0 |
| **Stage** | 780 | 1100 | 1540 | 1660 |
| **TV** | 1180 | 1520 | 1860 | 1940 |
| **Architectural**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



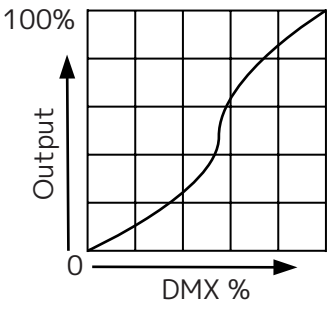
LINEAR



SQUARE



INVERSE SQUARE



S-CURVE

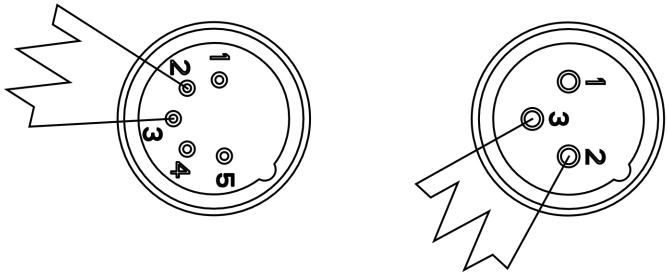
# DMX SETUP

**DMX-512:** DMX is short for Digital Multiplex. This is a universal protocol used as a form of communication between intelligent fixtures and controllers. A DMX controller sends DMX data instructions from the controller to the fixture. DMX data is sent as serial data that travels from fixture to fixture via the DATA "IN" and DATA "OUT" XLR terminals located on all DMX fixtures (most controllers only have a DATA "OUT" terminal).

**DMX Linking:** DMX is a language allowing all makes and models of different manufacturers to be linked together and operate from a single controller, as long as all fixtures and the controller are DMX compliant. To ensure proper DMX data transmission, try to use the shortest cable path possible when linking several DMX fixtures. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example, a fixture assigned a DMX address of 1 may be placed anywhere in a DMX line: at the beginning, at the end, or anywhere in the middle. When a fixture is assigned a DMX address of 1, the DMX controller knows to send DATA assigned to address 1 to that unit, no matter where it is located in the DMX chain.

**Data Cable (DMX Cable) Requirements (For DMX Operation):** This unit can be controlled via DMX-512 protocol and features 2 selectable DMX modes. Please refer to the **DMX Traits** section of this manual for detailed information. The DMX address can be set using the controls on the rear panel of the unit. Your unit and your DMX controller require a 3-pin XLR connector for data input/output. We recommend Accu-Cable DMX cables. If you are making your own cables, be sure to use standard 110-120 Ohm shielded cable (This cable may be purchased at almost all pro lighting stores). Your cables should be made with a male XLR connector on one end and a female XLR connector on the other. Also remember that DMX cable must be daisy chained and cannot be split.

**Special Note: Line Termination.** When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behavior. A terminator is a 110-120 ohm 1/4 watt resistor which is connected between pins 2 and 3 of a male XLR connector (DATA + and DATA -). This unit is inserted in the female XLR connector of the last unit in your daisy chain to terminate the line. Using a cable terminator (ADJ part number Z-DMX/T) will decrease the possibilities of erratic behavior.




A DMX512 terminator reduces signal errors, avoiding most signal reflection interference. Connect PIN 2 (DMX-) and PIN 3 (DMX+) of the last fixture in series with a 120 Ohm, 1/4 W Resistor to terminate the DMX512.

**5-Pin XLR DMX Connectors:** Some manufacturers use 5-pin DMX-512 data cables for DATA transmission in place of 3-pin. 5-pin DMX fixtures may be integrated into a 3-pin DMX line with a 5-pin to 3-pin adapter cable. These adapters are readily available at most electronics stores. Follow the chart below for a proper conversion.

| 3-Pin XLR to 5-Pin XLR Conversion | | |
|---|---|---|
| Ground/Shield | Pin 1 | Pin 1 |
| Data Compliment (- signal) | Pin 2 | Pin 2 |
| Data True (+ signal) | Pin 3 | Pin 3 |
| Not Used | | Do Not Use |
| Not Used | | Do Not Use |

# DMX SETUP

**DMX Addressing:**

All fixtures should be given a DMX starting address when using a DMX controller, in order to ensure that the correct fixture responds to the correct control signal. This digital starting address is the channel number from which the fixture starts to “listen” to the digital control signal sent out from the DMX controller. The assignment of this starting DMX address is achieved by setting the correct DMX address on the digital control display on the fixture.

You can set the same starting address for all fixtures or a group of fixtures, or set different addresses for each individual fixture. Setting all fixtures to the same DMX address will cause all fixtures to react in the same way; in other words, changing the settings of one channel will affect all the fixtures simultaneously.

If you set each fixture to a different DMX address, each unit will start to “listen” to the channel number you have set, based on the quantity of DMX channels of each fixture. That means changing the settings of one channel will only affect the selected fixture. For instance, when this unit is set to 10 Channel mode, you should set the starting DMX address of the first unit to 1, the second unit to 11 (1 + 10), the third unit to 21 (1 + 10 + 10), the fourth unit to 31 (1 + 10 + 10 + 10), etc...

| Channel Mode | Unit 1 Address | Unit 2 Address | Unit 3 Address | Unit 4 Address |
|---|---|---|---|---|
| 10Ch | 1 | 11 | 21 | 31 |
| 12Ch | 1 | 13 | 25 | 37 |

# DMX TRAITS

| CHANNEL | | DMX VALUES | FUNCTION |
|---|---|---|---|
| 10Ch | 12Ch | | |
| 1 | 1 | 000-255 | **Pan** |
| 2 | 2 | | **Tilt (Barrel Rotation)** |
| | | 000-009 | Stop |
| | | 010-120 | Counter-Clockwise Rotation, Fast to slow |
| | | 121-134 | Stop |
| | | 135-245 | Clockwise rotation Slow to Fast |
| | | 246-255 | Stop |
| 3 | 3 | | **Gobo Wheel** |
| | | 000-007 | Open, White Big Spots |
| | | 008-011 | Gobo 1, Red Fan |
| | | 012-015 | Gobo 2, Blue Splat |
| | | 016-019 | Gobo 3, Green Circles |
| | | 020-023 | Gobo 4, Yellow Spots |
| | | 024-027 | Gobo 5, RGBY Mulit Color Quad Dots |
| | | 028-031 | Gobo 6, Orange Shattered Glass |
| | | 032-035 | Gobo 7, Tri-Bar Pink |
| | | 036-039 | Gobo 8, Lavender Dot Wave |
| | | 040-043 | Gobo 9, Cyan Star |
| | | 044-047 | Gobo 10, Amber Multi-dots |
| | | 048-051 | Gobo 11, Splat 2 |
| | | 052-055 | Gobo 12, Hazard |
| | | 056-059 | Gobo 13, Curve Strips |
| | | 060-064 | Open, Shake Slow to Fast |
| | | 065-069 | Gobo 1, Shake Slow to Fast |
| | | 070-074 | Gobo 2, Shake Slow to Fast |
| | | 075-079 | Gobo 3, Shake Slow to Fast |
| | | 080-084 | Gobo 4, Shake Slow to Fast |
| | | 085-089 | Gobo 5, Shake Slow to Fast |
| | | 090-094 | Gobo 6, Shake Slow to Fast |
| | | 095-099 | Gobo 7, Shake Slow to Fast |
| | | 100-104 | Gobo 8, Shake Slow to Fast |
| | | 105-109 | Gobo 9, Shake Slow to Fast |
| | | 110-114 | Gobo 10, Shake Slow to Fast |
| | | 115-119 | Gobo 11, Shake Slow to Fast |
| | | 120-123 | Gobo 12, Shake Slow to Fast |
| | | 124-127 | Gobo 13, Shake Slow to Fast |
| | | 128-255 | CCW Gobo Wheel Rotation Slow - Fast |
| 4 | 4 | | **Reflector Rotation** |
| | | 000-009 | Stop |
| | | 010-120 | Clockwise Rotation Fast to Slow |
| | | 121-134 | Stop |
| | | 135-245 | Counter-Clockwise Rotation, Slow to Fast |
| | | 246-255 | Stop |

# DMX TRAITS

| CHANNEL | | DMX | FUNCTION |
|---|---|---|---|
| 10Ch | 12Ch | VALUES | |
| | | | **Shutter** |
| | | 000-031 | Closed |
| | | 032-063 | Open |
| | | 064-095 | Strobe effect slow to fast |
| 5 | 5 | 096-127 | Open |
| | | 128-159 | Pulse-effect in sequences |
| | | 160-191 | Open |
| | | 192-223 | Random strobe effect slow to fast |
| | | 224-255 | Open |
| 6 | 6 | 000-255 | **Dimmer**, Intensity 0 to 100% |
| | | | **Show** |
| | | 000-015 | Off |
| | | 016-046 | Show 1 |
| | | 047-077 | Show 2 |
| 7 | 7 | 078-108 | Show 3 |
| | | 109-139 | Show 4 |
| | | 140-170 | Show 5 |
| | | 171-201 | Show 6 |
| | | 202-255 | Show 0 (Random Show 1-6) |
| 8 | 8 | 000-255 | **Show Speed**, Slow to Fast |
| | | | **Dim Modes** |
| | | 000-020 | Default to Unit Setting |
| | | 021-040 | Standard |
| | | 041-060 | Stage |
| | | 061-080 | TV |
| | | 081-100 | Architectural |
| | | 101-120 | Theatre |
| | | 121-140 | Stage 2 |
| | | | **Dim Speed** |
| | | 141 | 0.1 s |
| | | 142 | 0.2 s |
| | | 143 | 0.3 s |
| | | 144 | 0.4 s |
| | | 145 | 0.5 s |
| | 9 | 146 | 0.6 s |
| | | 147 | 0.7 s |
| | | 148 | 0.8 s |
| | | 149 | 0.9 s |
| | | 150 | 1 s |
| | | 151 | 1.5 s |
| | | 152 | 2 s |
| | | 153 | 3 s |
| | | 154 | 4 s |
| | | 155 | 5 s |
| | | 156 | 6 s |
| | | 157 | 7 s |
| | | 158 | 8 s |
| | | 159 | 9 s |
| | | 160 | 10 s |
| | | 161-255 | Default to Unit Setting |
| | | | **Dim Curves** |
| | | 000-020 | Square |
| | 10 | 021-040 | Linear |
| | | 041-060 | Inv. Squa |
| | | 061-080 | S. Curve |
| | | 081-255 | No Function |
| 9 | 11 | 000-255 | **Pan Speed**, Fast to Slow |

# DMX TRAITS

| CHANNEL | | DMX VALUES | FUNCTION |
|---|---|---|---|
| 10Ch | 12Ch | | **Special** |
| | | 000-049 | No function |
| | | 050-059 | Display Backlight ON (Hold 3s) |
| | | 060-069 | Display Backlight OFF (Hold 5s) |
| | | 070-079 | Pan / Tilt Reset (Hold 3s) |
| | | 080-089 | Color / Gobo Reset (Hold 3s) |
| | | 090-099 | All motor Reset (Hold 3s) |
| | | 100-117 | Invert Pan ON (Hold 3s) |
| | | 118-136 | Invert Pan OFF (Hold 5s) |
| | | 137-155 | Invert Tilt ON (Hold 3s) |
| | | 156-172 | Invert Tilt OFF (Hold 5s) |
| | | 173 | 900 Hz LED Refresh Rate (Hold 1s) |
| | | 174 | 910 Hz LED Refresh Rate (Hold 1s) |
| | | 175 | 920 Hz LED Refresh Rate (Hold 1s) |
| | | 176 | 930 Hz LED Refresh Rate (Hold 1s) |
| | | 177 | 940 Hz LED Refresh Rate (Hold 1s) |
| | | 178 | 950 Hz LED Refresh Rate (Hold 1s) |
| | | 179 | 960 Hz LED Refresh Rate (Hold 1s) |
| | | 180 | 970 Hz LED Refresh Rate (Hold 1s) |
| | | 181 | 980 Hz LED Refresh Rate (Hold 1s) |
| 10 | 12 | 182 | 990 Hz LED Refresh Rate (Hold 1s) |
| | | 183 | 1000 Hz LED Refresh Rate (Hold 1s) |
| | | 184 | 1010 Hz LED Refresh Rate (Hold 1s) |
| | | 185 | 1020 Hz LED Refresh Rate (Hold 1s) |
| | | 186 | 1030 Hz LED Refresh Rate (Hold 1s) |
| | | 187 | 1040 Hz LED Refresh Rate (Hold 1s) |
| | | 188 | 1050 Hz LED Refresh Rate (Hold 1s) |
| | | 189 | 1060 Hz LED Refresh Rate (Hold 1s) |
| | | 190 | 1070 Hz LED Refresh Rate (Hold 1s) |
| | | 191 | 1080 Hz LED Refresh Rate (Hold 1s) |
| | | 192 | 1090 Hz LED Refresh Rate (Hold 1s) |
| | | 193 | 1100 Hz LED Refresh Rate (Hold 1s) |
| | | 194 | 1110 Hz LED Refresh Rate (Hold 1s) |
| | | 195 | 1120 Hz LED Refresh Rate (Hold 1s) |
| | | 196 | 1130 Hz LED Refresh Rate (Hold 1s) |
| | | 197 | 1140 Hz LED Refresh Rate (Hold 1s) |
| | | 198 | 1150 Hz LED Refresh Rate (Hold 1s) |
| | | 199 | 1160 Hz LED Refresh Rate (Hold 1s) |
| | | 200 | 1170 Hz LED Refresh Rate (Hold 1s) |
| | | 201 | 1180 Hz LED Refresh Rate (Hold 1s) |
| | | 202 | 1190 Hz LED Refresh Rate (Hold 1s) |

# DMX TRAITS

| CHANNEL | | DMX | FUNCTION |
|---|---|---|---|
| 10Ch | 12Ch | VALUES | |
| | | 203 | 1210 Hz LED Refresh Rate (Hold 1s) |
| | | 204 | 1220 Hz LED Refresh Rate (Hold 1s) |
| | | 205 | 1230 Hz LED Refresh Rate (Hold 1s) |
| | | 206 | 1240 Hz LED Refresh Rate (Hold 1s) |
| | | 207 | 1250 Hz LED Refresh Rate (Hold 1s) |
| | | 208 | 1260 Hz LED Refresh Rate (Hold 1s) |
| | | 209 | 1270 Hz LED Refresh Rate (Hold 1s) |
| | | 210 | 1280 Hz LED Refresh Rate (Hold 1s) |
| | | 211 | 1290 Hz LED Refresh Rate (Hold 1s) |
| | | 212 | 1300 Hz LED Refresh Rate (Hold 1s) |
| | | 213 | 1310 Hz LED Refresh Rate (Hold 1s) |
| | | 214 | 1320 Hz LED Refresh Rate (Hold 1s) |
| | | 215 | 1330 Hz LED Refresh Rate (Hold 1s) |
| | | 216 | 1340 Hz LED Refresh Rate (Hold 1s) |
| | | 217 | 1350 Hz LED Refresh Rate (Hold 1s) |
| | | 218 | 1360 Hz LED Refresh Rate (Hold 1s) |
| | | 219 | 1370 Hz LED Refresh Rate (Hold 1s) |
| | | 220 | 1380 Hz LED Refresh Rate (Hold 1s) |
| | | 221 | 1390 Hz LED Refresh Rate (Hold 1s) |
| | | 222 | 1400 Hz LED Refresh Rate (Hold 1s) |
| 10 | 12 | 223 | 1410 Hz LED Refresh Rate (Hold 1s) |
| | | 224 | 1420 Hz LED Refresh Rate (Hold 1s) |
| | | 225 | 1430 Hz LED Refresh Rate (Hold 1s) |
| | | 226 | 1440 Hz LED Refresh Rate (Hold 1s) |
| | | 227 | 1450 Hz LED Refresh Rate (Hold 1s) |
| | | 228 | 1460 Hz LED Refresh Rate (Hold 1s) |
| | | 229 | 1470 Hz LED Refresh Rate (Hold 1s) |
| | | 230 | 1480 Hz LED Refresh Rate (Hold 1s) |
| | | 231 | 1490 Hz LED Refresh Rate (Hold 1s) |
| | | 232 | 1500 Hz LED Refresh Rate (Hold 1s) |
| | | 233 | 2500 Hz LED Refresh Rate (Hold 1s) |
| | | 234 | 4000 Hz LED Refresh Rate (Hold 1s) |
| | | 235 | 5000 Hz LED Refresh Rate (Hold 1s) |
| | | 236 | 6000 Hz LED Refresh Rate (Hold 1s) |
| | | 237 | 10,000 Hz LED Refresh Rate (Hold 1s) |
| | | 238 | 15,000 Hz LED Refresh Rate (Hold 1s) |
| | | 239 | 20,000 Hz LED Refresh Rate (Hold 1s) |
| | | 240 | 25,000 Hz LED Refresh Rate (Hold 1s) |
| | | 241 | Sound Enabled (Hold 3s) |
| | | 242 | Sound Disabled (Hold 5s) |
| | | 243-255 | No function |

# REMOTE DEVICE MANAGEMENT (RDM)

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

Remote Device Management (RDM) is a protocol that sits on top of the DMX512 data standard for lighting, allowing the DMX systems of the fixtures to be modified and monitored remotely. This proto-col is ideal for instances in which a unit is installed in a location that is not easily accessible.

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

**FIXTURE RDM INFORMATION:**

| RDM Code | Device ID | Device Model ID | Personality ID |
|---|---|---|---|
| 0x1900 | Generate by MCU ID | 0x0102 | 20CH(1)<br>24CH(2) |

**Please be aware that not all RDM devices support all RDM features,** and therefore it is important to check beforehand to ensure that the equipment that you are considering includes all of the fea-tures that you require.

| |
|---|
| [0x0001] DISC_UNIQUE_BRANCH |
| [0x0002 DISC_MUTE |
| [0x0003] DISC_UN_MUTE |
| [0x0050] SUPPORTED_PARAMETERS |
| [0x0051] PARAMETER_DESCRIPTION |
| [0x0060] DEVICE_INFO |
| [0x00C0] SOFTWARE_VERSION_LABEL |
| [0x00F0] DMX_START_ADDRESS |
| [0x1000] IDENTIFY_DEVICEl |
| [0x0080] DEVICE_MODEL_DESCRIPTION |
| [0x0081] MANUFAT_LABEL |
| [0X0082] DEVICE_LABEL |
| [0x00E0] DMX_PERSONALITY |
| [0X00E1] DMX_PERSONALITY_DESCRIPTION |
| [0X0400] DEVICE_HOURS |

# MAINTENANCE

**DISCONNECT POWER BEFORE PERFORMING ANY MAINTENANCE!**

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

Please refer to the following points during routine inspections:

- A detailed electrical check by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating.
- Be sure all screws and fasteners are securely tightened at all times. Loose screws may fall out during normal operation, resulting in damage or injury as larger parts could fall.
- Check for any deformations on the housing, color lenses, rigging hardware, and rigging points (ceiling, suspension, trussing). Deformations in the housing could allow for dust or liquids to enter into the fixture. Damaged rigging points or unsecured rigging could cause 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.

# FUSE REPLACEMENT

Disconnect the unit from its power source. Locate the fuse holder on the underside of the unit, as shown in the diagram below. Use the Philips screwdriver to remove the bad fuse, and replace with a new fuse. **Always use a fuse of the same 250V, 3.15A rating for replacement.**

# CLEANING

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

# ERROR CODES

| Error Codes subject to change without notice | | |
|---|---|---|
| **ERROR GROUP** | **ERROR CODE** | **DESCRIPTION** |
| Sensor Error | Gobo Sensor Error | Sensor Error: Gobo Error |
| Temperature Error | Temp Sensitive Error | Temp Sensitive |
| EEPROM Error | EEPROM Error | EEPROM Error |

# SPECIFICATIONS

**Light Source:**
• 150W White LED (30,000 Hrs.)

**Barrel Mirror:**
• Barrel Movement: X-Axis = 180°, Y-Axis 360°
• Beam Angle: Multiple Beams, 3° each
• Beam Focusing Knob

**Colors/GOBOs:**
• 11 Color / Gobo combinations (2 Beam Reducers)
• Color/Gobo Shake

**Control:**
• DMX512, RDM, Sound and Show Mode
• 0.5-33Hz Strobe Rate
• User selectable LED Refresh Rate
• 6 Built-In Light Shows
• DMX Modes: 2 DMX Control Modes (10 & 12 Channels)
• 4-Button Digital Display

**Connections:**
• 5-pin DMX In/Out
• IP65 Locking power input
• Safety eye to attach a safety cable

**Electrical:**
• Power: 100-230VAC, 50/60HZ
• Power Consumption: 195W@ 120V., 175W@230V.

**Size / Weight:**
• Dimensions (LxWxH): 9.3” x 13.4” x 13.2” (236mm x 340mm x 334mm)
• Weight: 10.1 lbs. (4.6Kg)

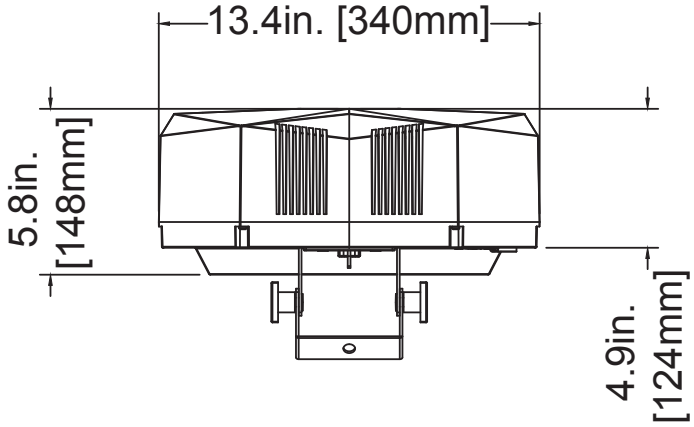
**Approvals:**
• CE, cETLus (Control# 5028947), FCC, IP20

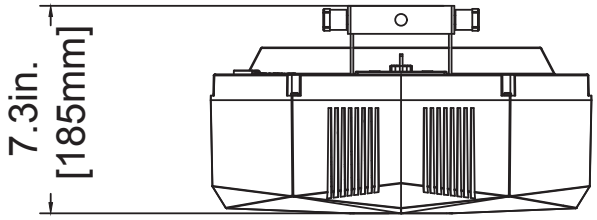
**Included:**
• Adjustable Angle Hanging Bracket
• Power Cable

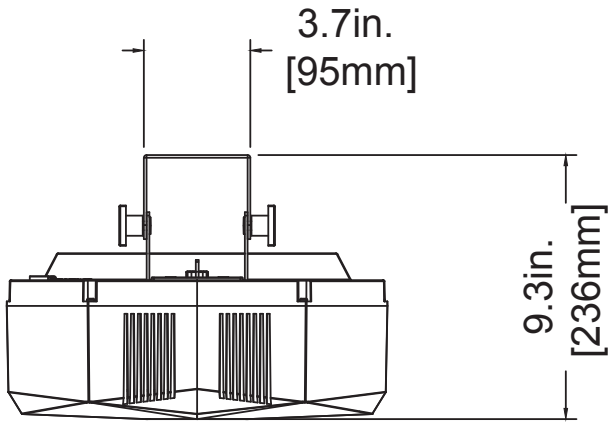
Specifications are subject to change without notice.

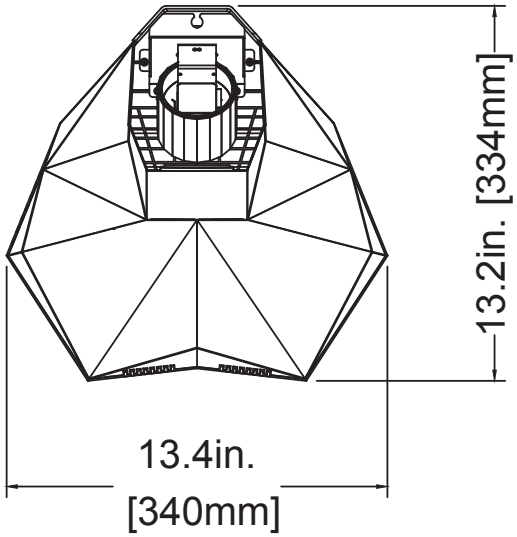
# DIMENSIONAL DRAWINGS

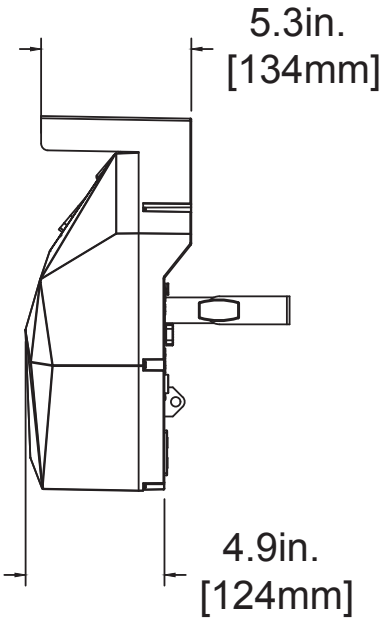
Drawing not to scale.



# OPTIONAL ACCESSORIES

| ORDER CODE | | ITEM |
|---|---|---|
| US | EU | |
| VOR113 | 1900000048 | Vortex 150 |
| TRIGGER CLAMP | N/A | Heavy Duty Wrap Around Hook Style Clamp |
| TOU027 | N/A | 5 ft. (1.5m) 5pin PRO DMX 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.

Please note that changes or modifications of this product is not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**Europe Energy Saving Notice**
Energy Saving Matters (EuP 2009/125/EC)
Saving electric energy is a key to help protecting the environment. Please turn off all electrical products when they are not in use. To avoid power consumption in idle mode, disconnect all electrical equipment from power when not in use. Thank you