

# ELIMINATOR<sup>®</sup>

LIGHTING



**VORTEX**

User Manual

©2023 ADJ Products, LLC all rights reserved. Information, specifications, diagrams, images, and instructions herein are subject to change without notice. Eliminator logo and identifying product names and numbers herein are trademarks of ADJ Lighting, LLC. Copyright protection claimed includes all forms and matters of copyrightable materials and information now allowed by statutory or judicial law or hereinafter granted. Product names used in this document may be trademarks or registered trademarks of their respective companies and are hereby acknowledged. All non-Eliminator brands and product names are trademarks or registered trademarks of their respective companies.

**ADJ Products, LLC** and all affiliated companies hereby disclaim any and all liabilities for property, equipment, building, and electrical damages, injuries to any persons, and direct or indirect economic loss associated with the use or reliance of any information contained within this document, and/or as a result of the improper, unsafe, insufficient and negligent assembly, installation, rigging, and operation of this product.

**ADJ PRODUCTS LLC USA**

6122 S. Eastern Ave. Los Angeles, CA. 90040  
323-582-2650 | Fax 323-532-2941 | [www.adj.com](http://www.adj.com) | [info@adj.com](mailto:info@adj.com)

**ADJ SUPPLY Europe B.V**

Junostraat 2 6468 EW Kerkrade, The Netherlands  
+31 (0)45 546 85 00 | Fax +31 45 546 85 99  
[www.americandj.eu](http://www.americandj.eu) | [info@americandj.eu](mailto:info@americandj.eu)

**ADJ PRODUCTS GROUP Mexico**

AV Santa Ana 30 Parque Industrial Lerma, Lerma, Mexico 52000  
+52 (728) 282-7070

**DOCUMENT VERSION**

An updated version of this document may be available online. Please check [www.adj.com](http://www.adj.com) for the latest revision/update of this document before beginning installation and use.

Date	Document Version	Software Version	DMX Channels	Notes
11/29/2022	1.0	1.0	10 / 12	Initial Release
04/10/2023	1.1	N/C	No Change	Updated Dimensional Drawings, Specifications

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!

# CONTENTS

<b>General Information</b>	<b>4</b>
<b>Limited Warranty (USA Only)</b>	<b>5</b>
<b>Warranty Registration   Features</b>	<b>6</b>
<b>Safety Guidelines</b>	<b>7</b>
<b>Overview</b>	<b>9</b>
<b>Installation</b>	<b>10</b>
<b>Control Panel</b>	<b>14</b>
<b>System Menu</b>	<b>15</b>
<b>Operation</b>	<b>17</b>
<b>Primary-Secondary Mode</b>	<b>18</b>
<b>RDM Parameters &amp; Codes</b>	<b>19</b>
<b>DMX Setup</b>	<b>20</b>
<b>DMX Traits</b>	<b>22</b>
<b>Gobo / Color Wheel</b>	<b>27</b>
<b>Dimmer Modes and Curves</b>	<b>28</b>
<b>Cleaning and Maintenance</b>	<b>29</b>
<b>Error Codes</b>	<b>30</b>
<b>Dimensional Drawings</b>	<b>31</b>
<b>Specifications</b>	<b>32</b>
<b>FCC Statement</b>	<b>33</b>

# GENERAL INFORMATION

## INTRODUCTION

Please read and understand all instructions in this manual carefully and thoroughly before attempting to operate this product. These instructions contain important safety and use information.

**UNPACKING:** This product has been thoroughly tested and has been shipped in perfect condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to have been damaged, carefully inspect your product for damage and be sure all accessories necessary to assemble the product have arrived intact. In the event that damage has been found or parts are missing, please contact our customer support team for further instructions. Please do not return this product to your dealer without first contacting customer support at the number listed below. Please do not discard the shipping carton in the trash. Please recycle whenever possible.

## CUSTOMER SUPPORT

Tel: (323) 213-4592 | Fax: (323) 582-2941

[www.adj.com](http://www.adj.com) | [support@eliminatorlighting.com](mailto:support@eliminatorlighting.com)

## WARRANTY RETURNS

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 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 an R.A. number clearly marked on the outside of the package will be refused and returned at customer's expense. You may obtain an R.A. number by contacting customer support.



## LIMITED WARRANTY (USA ONLY)

- A. Eliminator Lighting, an ADJ Products, LLC brand, hereby warrants, to the original purchaser, ADJ Products, LLC 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 ADJ Products, LLC factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, ADJ Products, LLC 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, ADJ Products, LLC 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 if the serial number has been altered or removed; if the product is modified in any manner which ADJ Products, LLC 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 ADJ Products, LLC; if the product is damaged because not properly maintained as set forth in the instruction manual.
- D. This is not a service contract, and this warranty does not include maintenance, cleaning or periodic check up. During the period specified above, ADJ Products, LLC 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 ADJ Products, LLC under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of ADJ Products, LLC. All products covered by this warranty were manufactured after August 15, 2012, and bear identifying marks to that effect.
- E. ADJ Products, LLC 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 ADJ Products, LLC 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 ADJ Products, LLC 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 ADJ Products, LLC Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

### LIMITED WARRANTY PERIODS

- **All Eliminator Lighting products (except laser diodes) = 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 LED and lamps)
- **Laser Products = 1 Year (365 Days) Limited Warranty** (excludes laser diodes which have 6 month limited warranty)
- **Batteries = 180 Day Limited Warranty** (excluding batteries which have a 180 day limited warranty)

## **WARRANTY REGISTRATION**

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. 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**

Barrel X 180°, Y 360°  
Beam Angle: Multiple Beams, 5° each  
9 Color / Gobo combinations  
Color/Gobo Shake  
1-40Hz Strobe Rate

## **INCLUDED ITEMS**

Power cable

# 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!**



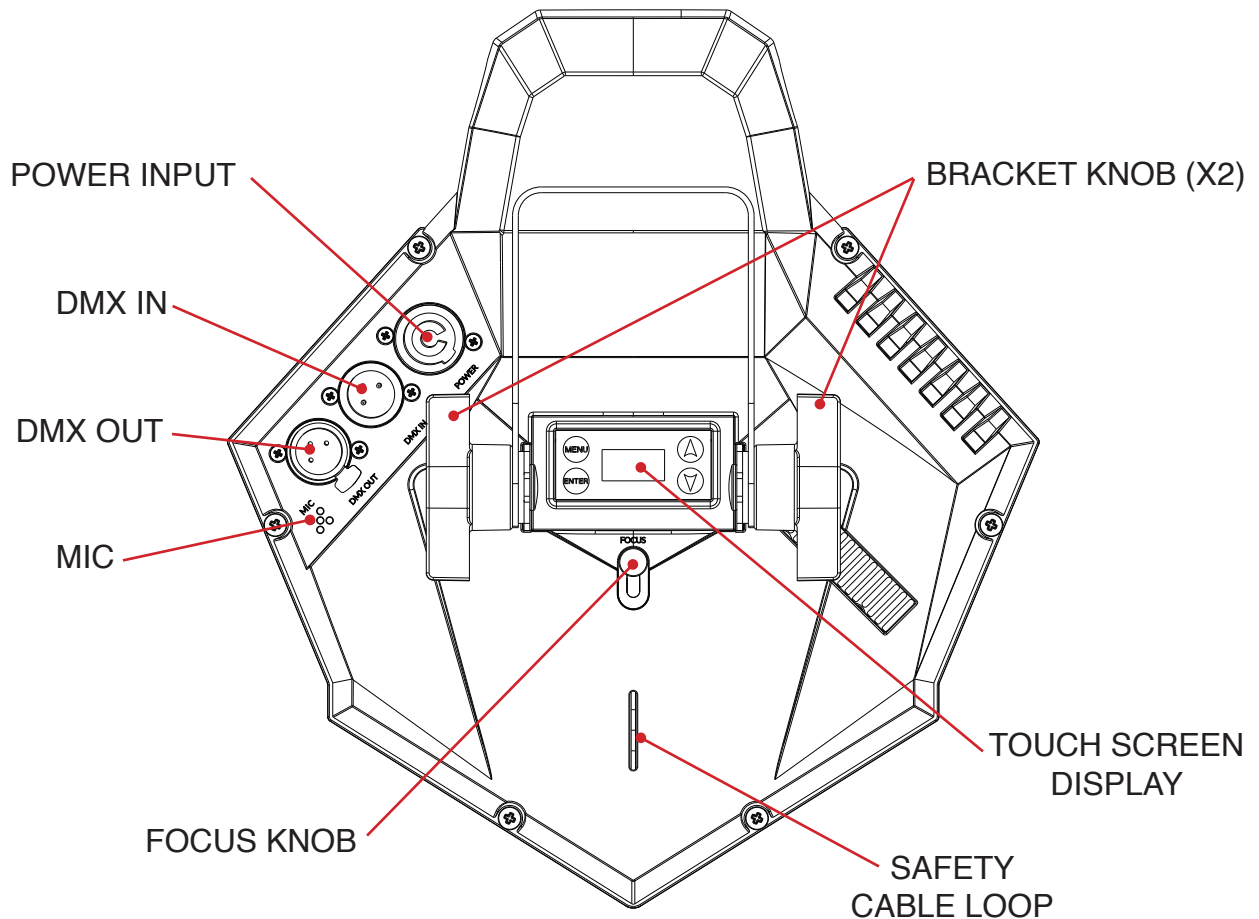
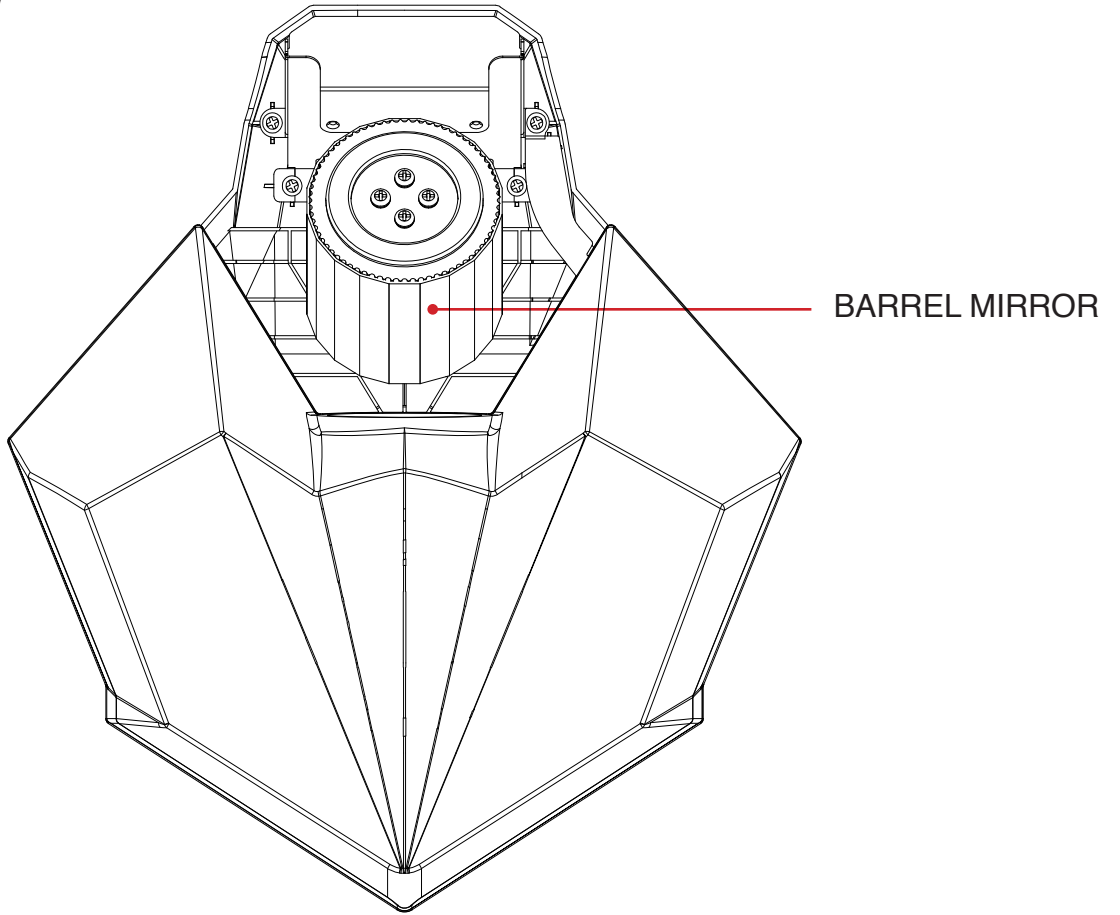
**NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE!  
RETINA INJURY RISK - MAY INDUCE BLINDNESS!  
SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK!**

# 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 6.6 FEET (2 METERS)
- **MINIMUM AMBIENT TEMPERATURE IS 32°F (0°C) AND MAXIMUM AMBIENT TEMPERATURE IS 104° F (40°C). DO NOT OPERATE THE DEVICE WHEN AMBIENT TEMPERATURES EXCEED THESE VALUES.**
- **MINIMUM DISTANCE TO FLAMMABLE MATERIALS FROM THE SURFACE IS 8" (20cm).**
- 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



# 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.

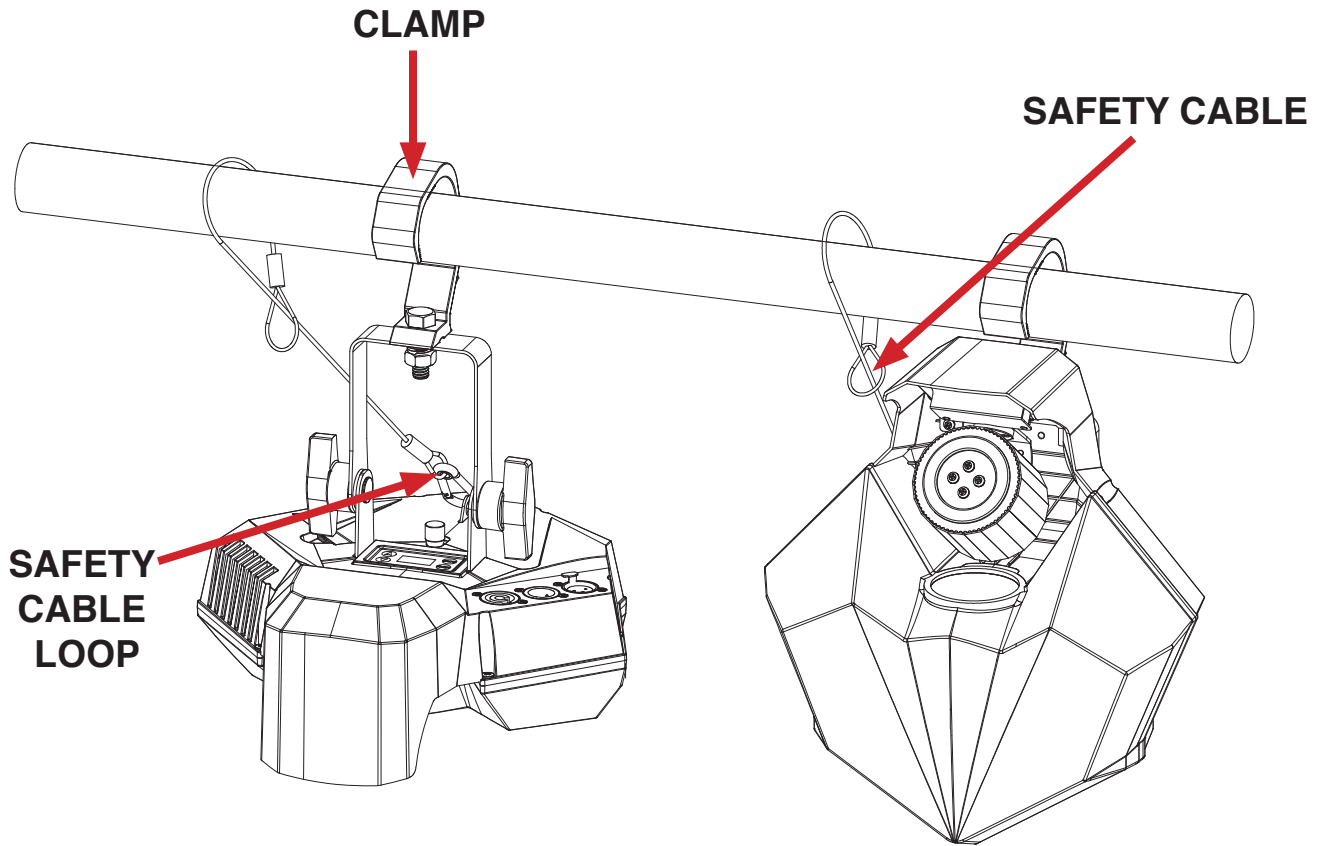
## RIGGING

**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.**

# 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

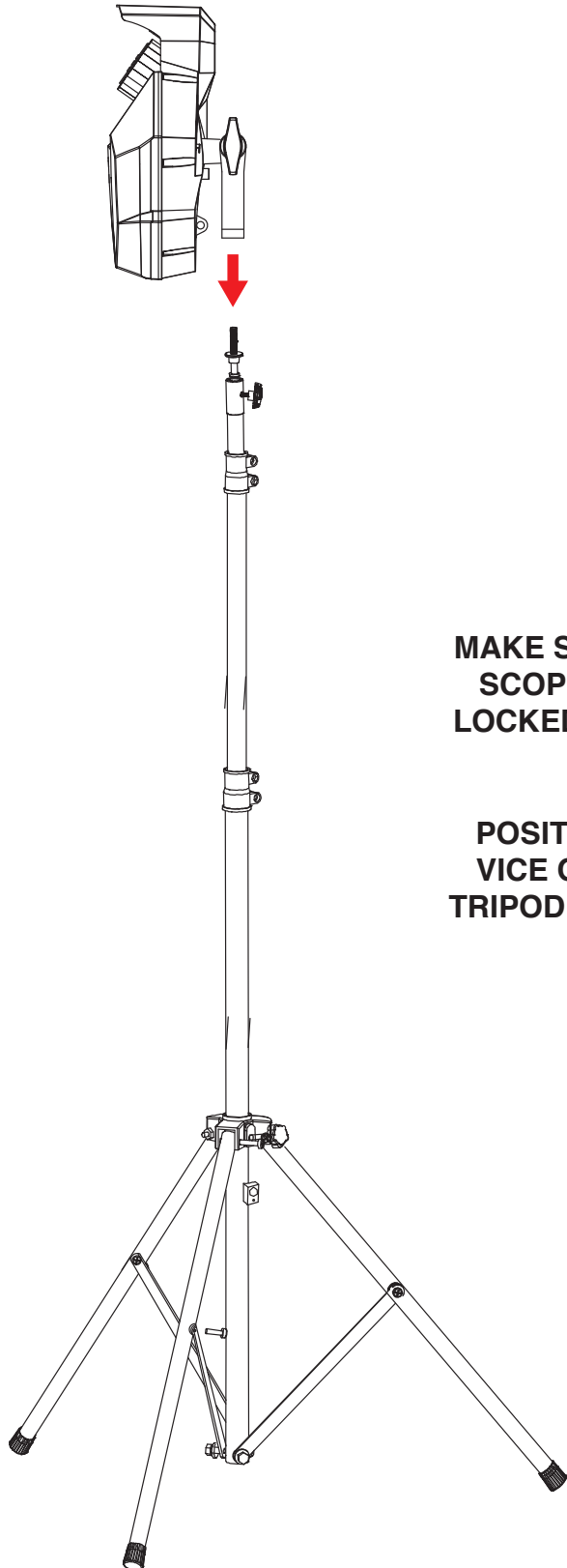


**ALWAYS ATTACH A SAFETY CABLE WHENEVER INSTALLING THIS FIXTURE IN A SUSPENDED ENVIRONMENT TO ENSURE THAT THE FIXTURE WILL NOT FALL IF THE CLAMP FAILS.**

# 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!**



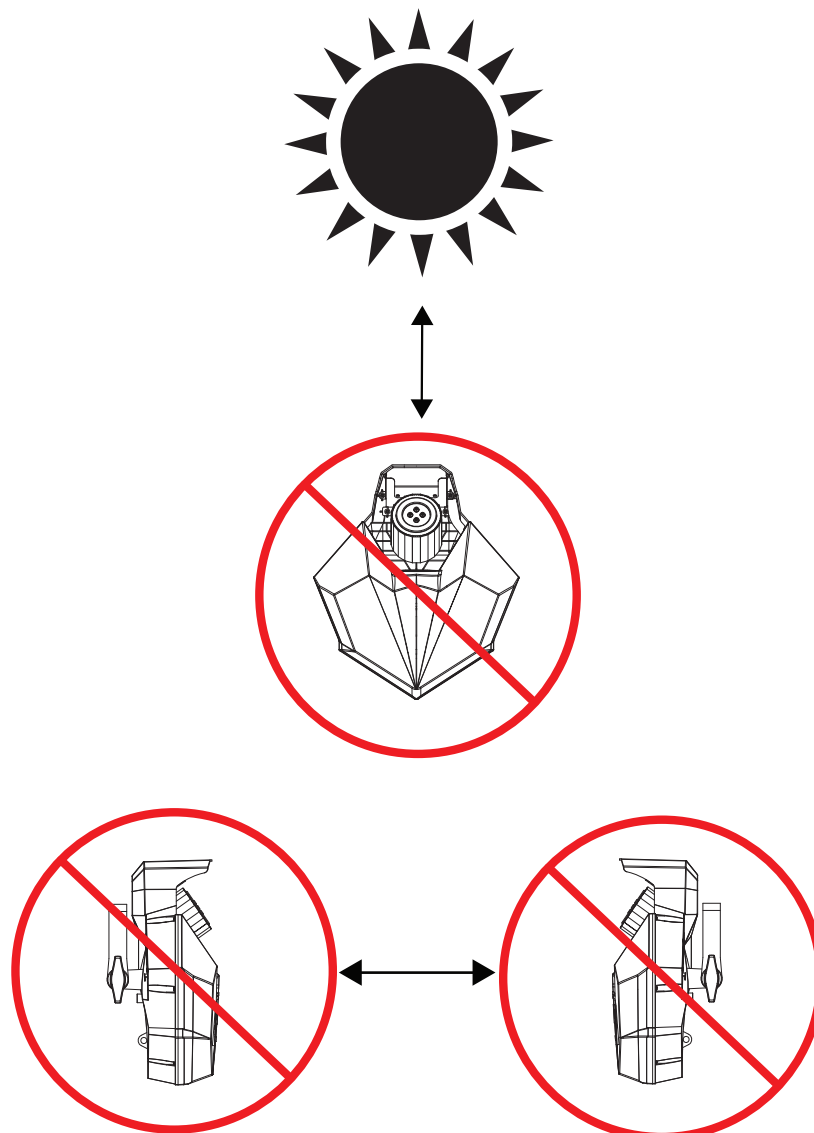
# INSTALLATION

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

External sources of light beams from direct sunlight, lighting 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, irises, shutters, motors, belts, wiring, discharge lamps, and LEDs.

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

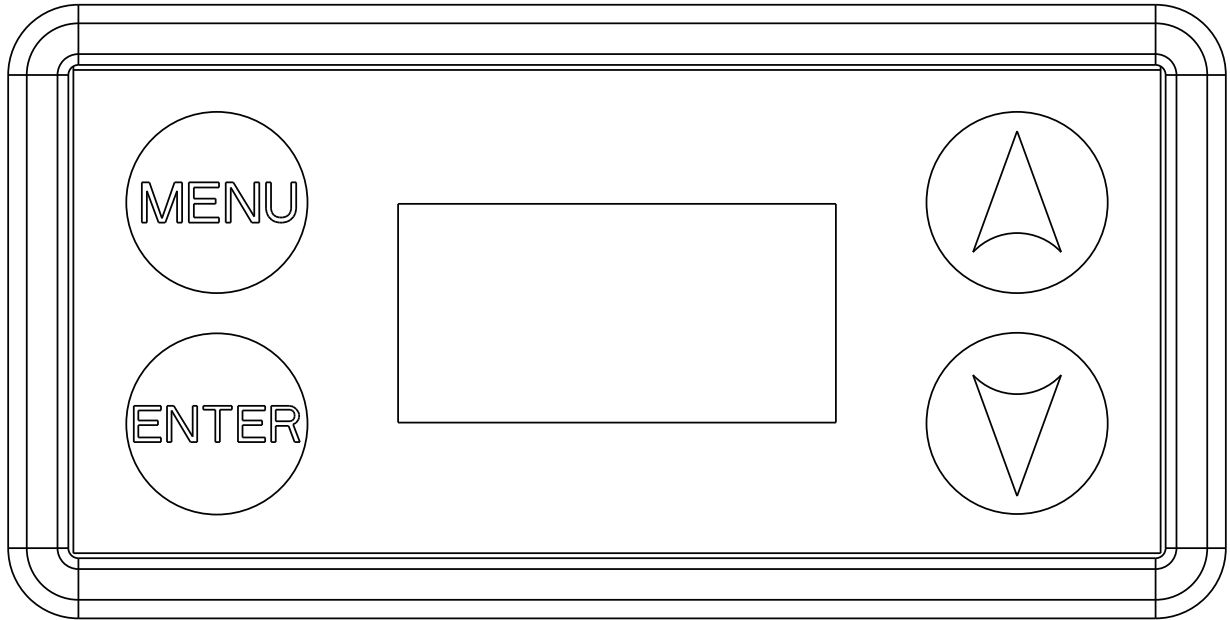
**DO NOT EXPOSE THE FIXTURE AND/OR FRONT LENS OPENING TO LIGHT BEAMS FROM DIRECT SUNLIGHT, OTHER LIGHTING OR MOVING HEAD FIXTURES, AND LASERS DURING UNPACKING, INSTALLATION, USE, AND EXTENDED IDLE TIMES OUTDOORS. DO NOT FOCUS A LIGHT BEAM FROM ONE LIGHTING FIXTURE DIRECTLY TOWARDS ANOTHER.**



# CONTROL PANEL

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

- **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](mailto:support@eliminatorlighting.com)

# SYSTEM MENU

<b>DMX Settings</b>	DMX Address	<b>001-xxx</b>		
	DMX CH Mode	<b>10CH / 12CH</b>		
	No DMX Status	<b>Hold, Blackout, Show, Manual</b>		
<b>Show</b>	<b>Show 0</b>	Speed 1-10		
	Show 1	Speed 1-10		
	Show 2	Speed 1-10		
	Show 3	Speed 1-10		
	Show 4	Speed 1-10		
	Show 5	Speed 1-10		
	Show 6	Speed 1-10		
<b>Sound</b>	<b>On / Off</b>			
<b>Sound Sensitivity</b>	0-100			
<b>Personality</b>	Pan Invert	Yes / No		
	Tilt Invert	Yes / No		
	Prim/Sec Mode	Primary		
		Secondary1		
		Secondary2		
	Dim Modes	<b>Standard</b>		
		Stage		
		TV		
		Architectural		
		Theatre		
		Stage 2		
	LED Refresh Rate	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	Yes / No	
Reset Motor	<b>ON / OFF</b>			
Service	Passcode (050)	Factory Restore	<b>NO / YES</b> Passcode = 011	

CONTINUED ON NEXT PAGE

# SYSTEM MENU

<b>Manual</b>	Pan	000 - 255		
	Tilt	000 - 255		
	Gobo	000 - 255		
	Mirror	000 - 255		
	Strobe	000 - 255		
	Dimmer	000 - 255		
<b>Information</b>	Hours	PwrOnHr1	xxxxxx Hours	
		PwrOnHr2	xxxxxx Hours	
		PwrOnRst	Passcode (050)	
	Temp.	LED	Current	
			Max Temp	
		Temp Rst	Yes / No	
	DMXValue	Pan		
		...		
		Function		
	<b>SoftVers</b>	x.xx		
	RDM UID			
	Error logs	Fixture Errors		
Reset Error Log		YES/NO	Passcode = 050	

# OPERATION

## SHOW PROGRAMS

This unit includes 6 built-in show programs, plus a “Show 0” setting that randomly selects one of the 6 show programs to run.

1. To run a show program, press the MENU button until the “Show” option is displayed on the screen, then press ENTER.
2. Use the UP and DOWN buttons to scroll through the options, then press ENTER to confirm your selection.
3. Finally, use the UP and DOWN buttons to adjust the running speed of the show that you have selected, then press ENTER to confirm.

## SOUND

This feature allows the fixture to run according to the beat of music.

1. To set up this feature, press the MENU button until “Sound” is displayed on the screen, then press ENTER.
2. Use the UP and DOWN buttons to toggle between the “On” and “Off” settings. Press ENTER to confirm your selection.

## MANUAL MODE

Manual mode allows the user to manually input values for the various operating parameters of this unit.

1. To use this feature, press the MENU button until “Manual” is shown on the screen, then press ENTER.
2. Use the UP and DOWN buttons to scroll through the list of selectable parameters, then press ENTER to confirm your selection. Options include pan, tilt, gobo, mirror, show, strobe, and dimmer.
3. Use the UP and DOWN buttons to set the desired value for the selected parameter. Selectable values range from 0 to 255.

# PRIMARY-SECONDARY MODE

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 output. 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 "Personality" 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.

# RDM PARAMETERS & CODES

**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, and allows the DMX systems of the fixtures to be modified and monitored remotely. This protocol 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 controller to send out a signal to devices on the wire, as well as allowing the fixture to respond (known as a GET command). The controller can then use 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:

Device ID	Device Model ID	RDM Code	Personality ID
Random	0X0525	0x1900	0X0102(10CH) 0X0202 (12CH)

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

The following parameters are accessible in RDM on this device:

DISC_UNIQUE_BRANCH	STATUS_MESSAGES	DEFAULT_SLOT_VALUE
DISC_MUTE	STATUS_ID_DESCRIPTION	SENSOR_DEFINITION
DISC_UN_MUTE	CLEAR_STATUS_ID	SENSOR_VALUE
DEVICE_INFO	PRODUCT_DETAIL_ID_LIST	DEVICE_HOURS
SUPPORTED_PARAMETERS	MANUFACTURER_LABEL	TILT_INVERT
SOFTWARE_VERSION_LABEL	DEVICE_LABEL	RESET_DEVICE
DMX_START_ADDRESS	BOOT_SOFTWARE_VERSION_ID	DMX_STATE
IDENTIFY_DEVICE	DMX_PERSONALITY	
DEVICE_MODEL_DESCRIPTION	DMX_PERSONALITY_DESCRIPTION	
COMMS_STATUS	SLOT_INFO	
QUEUED_MESSAGE	SLOT_DESCRIPTION	

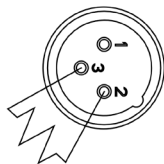
# DMX SETUP

**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):** The unit can be controlled via DMX-512 protocol, and features multiple DMX channel modes. Your unit and your DMX controller require a 3-pin XLR connector for data input and data output. 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 professional lighting stores). Your cables should be made with a male XLR connector at one end and a female XLR connector at 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 will decrease the chances 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.



# DMX SETUP

**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 implemented in a 3-pin DMX line. When inserting standard 5-pin data cables into a 3-pin line a cable adaptor must be used. These adaptors are readily available at most electronics stores. The chart below details a proper cable conversion.

<b>3-Pin XLR to 5-Pin XLR Conversion</b>		
Conductor	3-Pin XLR Female (Out)	5-Pin XLR Male (In)
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 ADDRESSING

All fixtures should be given a DMX starting address when operating with 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 starting DMX address is configured by setting the correct DMX address on the control panel display on the fixture.

You can set the same starting address for multiple fixtures, or set different addresses for each individual fixture. Setting multiple fixtures to the same DMX address will cause all those fixtures to react in the same way. In this case, please note that 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.

As an example, when operating this device in 4 channel mode, you should set the starting DMX address of the first unit to 1, the second unit to 5 (1 + 4), the third unit to 9 (1 + 4 + 4), and so on. (See the chart below for more details.)

Channel Mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
<b>10CH</b>	001	011	021	031
<b>12CH</b>	001	013	025	037

# DMX TRAITS

CHANNEL		DMX VALUES	FUNCTION
10CH	12CH		
1	1	00-255	<b>Pan</b>
			<b>Tilt (Barrel Rotation)</b>
2	2	000-009	Stop
		010-120	Counter-Clockwise Rotation, Fast to slow
		121-134	Stop
		135-245	Clockwise rotation Slow to Fast
		246-255	Stop
			<b>Gobo Wheel</b>
3	3	000-007	Open, White Big Spots
		008-013	Gobo 1, Red Tri-Bar
		014-019	Gobo 2, Blue Hazard
		020-025	Gobo 3, Green Triangle
		026-031	Gobo 4, Yellow Shattered Glass
		032-037	Gobo 5, RGBY Mult Color Quad Dots
		038-043	Gobo 6, Magenta Square Rays
		044-049	Gobo 7, Aqua Four Point Star
		050-055	Gobo 8, Lime Multi Dots
		056-064	Gobo 9, White Small Dots
		065-070	Gobo 1, Red Tri-Bar Shake Slow to Fast
		071-076	Gobo 2, Blue Hazard Shake Slow to Fast
		077-082	Gobo 3, Green Triangle Shake Slow to Fast
		083-088	Gobo 4, Yellow Shattered Glass Shake Slow to Fast
		089-094	Gobo 5, Orange Quad Dots Shake Slow to Fast
		095-100	Gobo 6, Magenta Square Rays Shake Slow to Fast
		101-106	Gobo 7, Aqua Four Point Star Shake Slow to Fast
		107-112	Gobo 8, Lime Multi Dots Shake Slow to Fast
		113-127	Gobo 9, White Small Dots Shake Slow to Fast
128-255	Automatic Gobo Change Slow to Fast		
			<b>Reflector Rotation</b>
4	4	000 - 009	Stop
		010-120	Clockwise Rotation Slow to Fast
		121-134	Stop
		135-245	Counter-Clockwise Rotation, Fast to slow
		246-255	Stop

Continued on next page

# DMX TRAITS

CHANNEL		DMX VALUES	FUNCTION
10CH	12CH		
5	5		<b>Shutter</b>
		000-031	Closed
		032-063	Open
		064-095	Strobe effect slow to fast
		096-127	Open
		128-159	Pulse-effect in sequences
		160-191	Open
		192-223	Random strobe effect slow to fast
		224-255	Open
			<b>Dimmer</b>
6	6	000-255	Intensity 0 to 100%
			<b>Show</b>
7	7	000-015	Off
		016-046	Show 1
		047-077	Show 2
		078-108	Show 3
		109-139	Show 4
		140-170	Show 5
		171-201	Show 6
		202-255	Show 0 (Random Show 1-6)
			<b>Show Speed</b>
8	8	000-255	Slow to Fast
			<b>Dim Modes</b>
	9	000-020	Default to Unit Setting
		021-040	Standard
		041-060	Stage
		061-080	TV
		081-100	Architectural
		101-120	<b>Theatre</b>
		121-140	Stage 2
			<b>Dim Speed</b>
		141	0.1 s
		142	0.2 s
		143	0.3 s
		144	0.4 s
		145	0.5 s
		146	0.6 s

Continued onto next page

# DMX TRAITS

CHANNEL		DMX VALUES	FUNCTION
10CH	12CH		
			<b><i>Dim Speed (Continued)</i></b>
	9	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
			<b><i>Dim Curves</i></b>
	10	000-020	Square
		021-040	Linear
		041-060	Inv. Squa
		061-080	S. Curve
		081-255	No Function
			<b><i>Pan Speed</i></b>
9	11	000-255	Fast to Slow
			<b><i>Special</i></b>
10	12	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)
Continued onto next page			

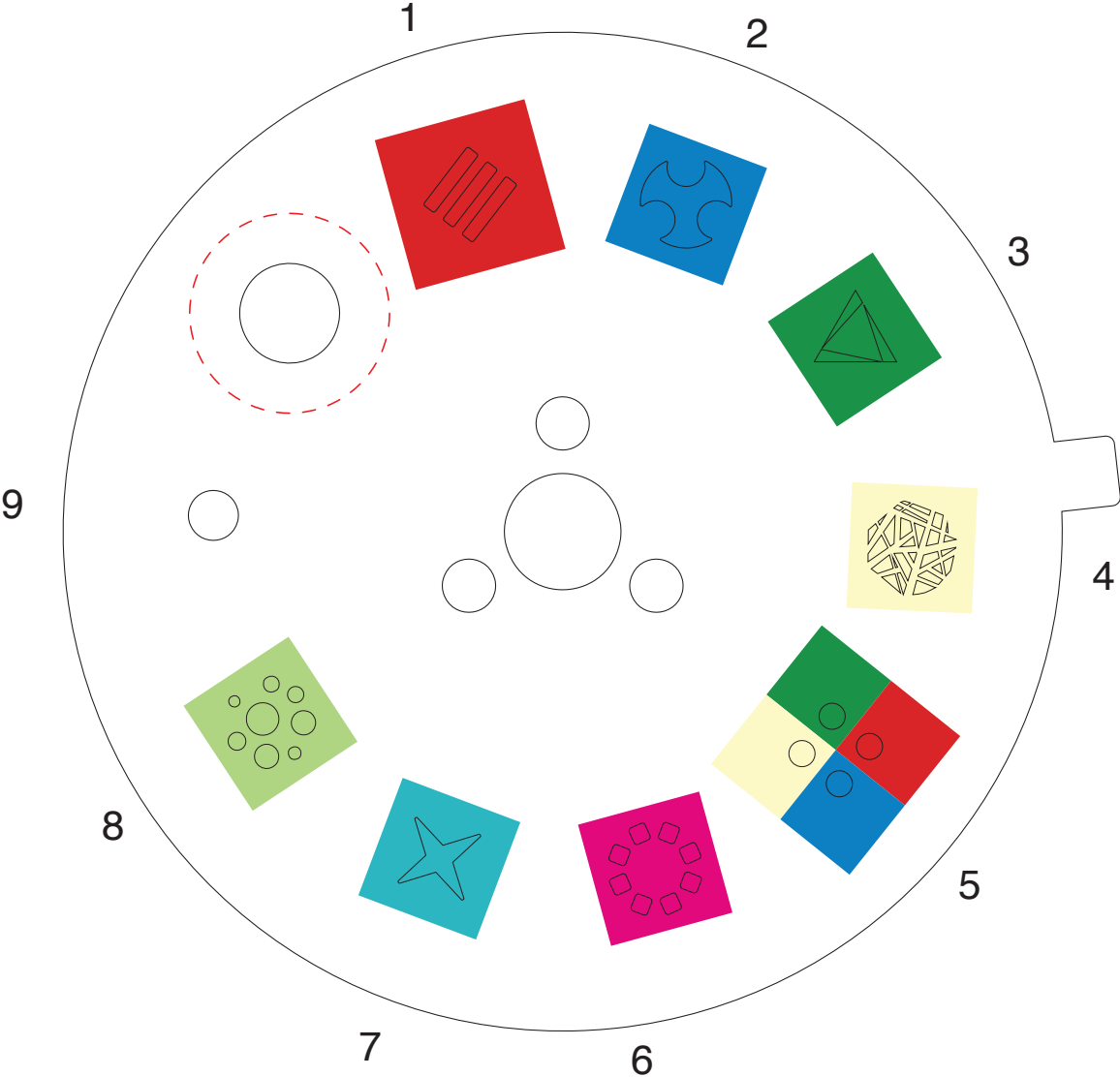
# DMX TRAITS

CHANNEL		DMX VALUES	FUNCTION
10CH	12CH		
10	12		<b><i>Special (Continued)</i></b>
		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)
		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)
		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)		

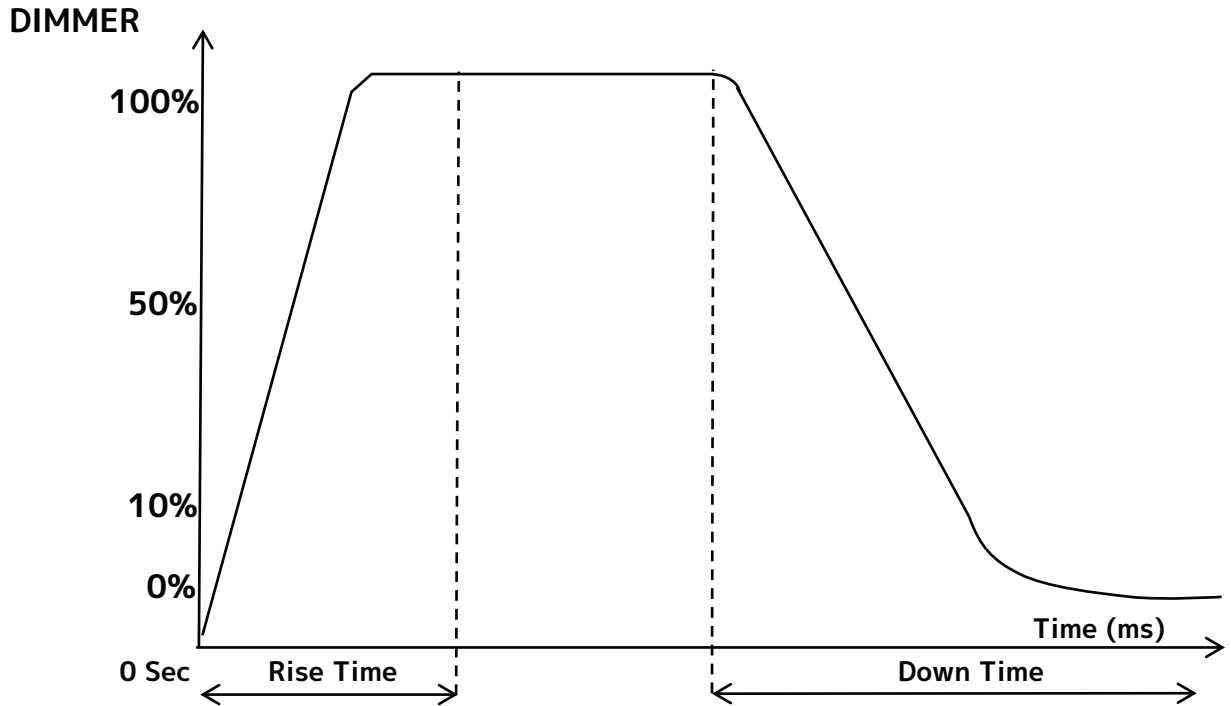
# DMX TRAITS

CHANNEL		DMX VALUES	FUNCTION
10CH	12CH		
10	12		<b><i>Special (Continued)</i></b>
		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)
		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		

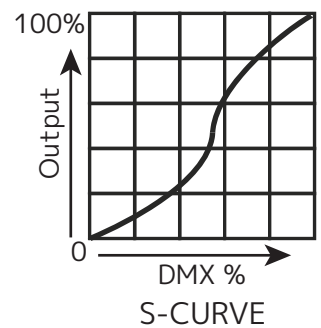
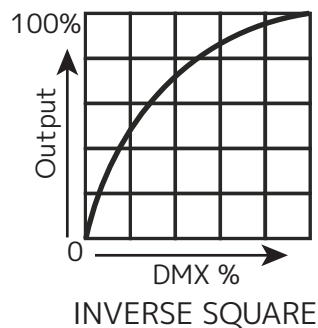
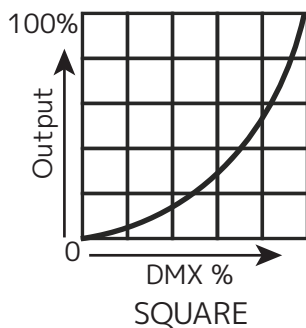
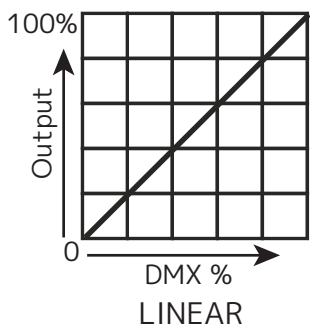
# GOBO / COLOR WHEEL



# 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





# CLEANING AND MAINTENANCE

***DISCONNECT POWER BEFORE PERFORMING ANY MAINTENANCE!***

## **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.

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

## **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:

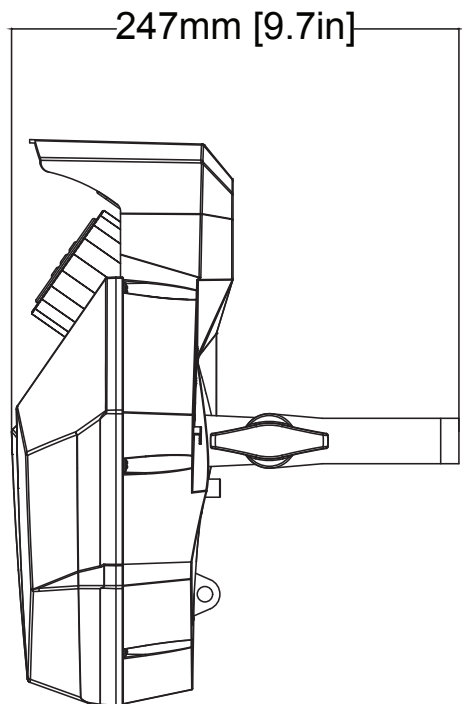
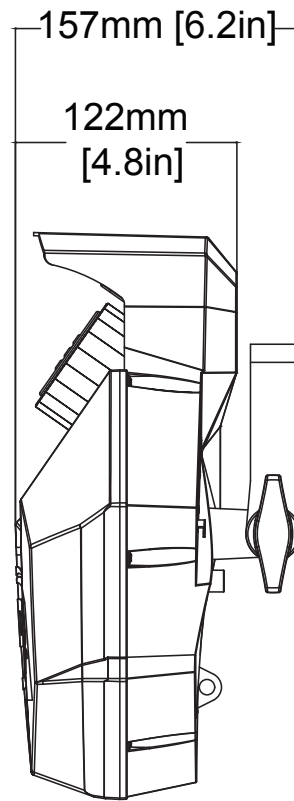
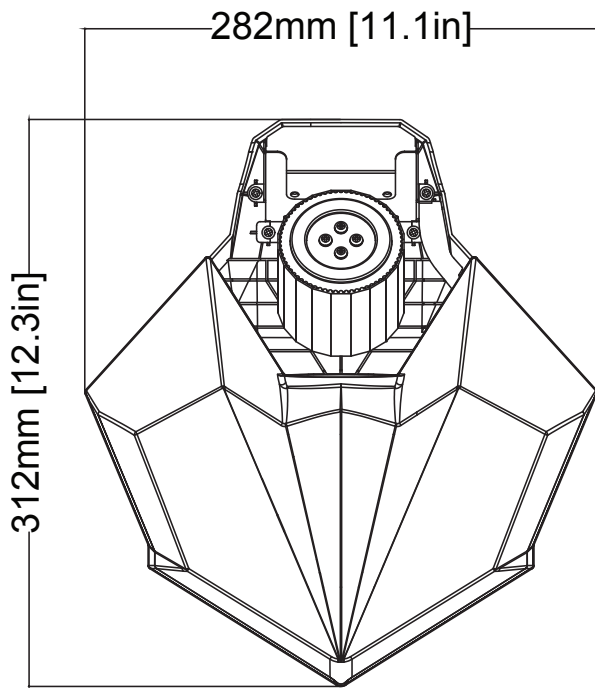
- A detailed electrical check by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating.
- Be sure all screws and fasteners are securely tightened at all times. Loose screws may fall out during normal operation, resulting in 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.

# ERROR CODES

ERROR_LED_TEMPERATURE
ERROR_LED_TIMEOUT_USE
ERROR_LED_TOO_HOT_OFF
ERROR_BASE_FAN_1
ERROR_BASE_FAN_2

# DIMENSIONAL DRAWINGS



# SPECIFICATIONS

Barrel X 180°, Y 360°

Beam Angle: Multiple Beams, 5° each

9 Color / Gobo combinations

Color/Gobo Shake

1-40Hz Strobe Rate

6 Built-In Shows

Control: DMX512, RDM, Sound and Show Mode

DMX Modes: 2 DMX Control Modes (10 & 12 Channels)

80W White LED (50,000 Hrs.)

3 pin XLR DMX In & Out

4 Button Digital Display

Indoor Powerlock In and Thru

Power: 100-240VAC, 50/60HZ

Power Consumption: 100W

Dimensions (LxWxH): 12.3" x 11.1" x 6.2" (312mm x 282mm x 157mm)

Weight: 6.6 lbs. (3.0Kg)

Approvals: CE and cETLus (Pending), UKCA, IP20



## 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 equipment has been tested and found to comply with the limits for a class B digital device, pursuant to 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 that device.
- Increase the separation between the device and the receiver.
- Connect the device to an electrical outlet on a circuit different from the one connected to the radio receiver.
- Consult the dealer or an experienced radio/TV technician for help.

**Please note that the changes or modifications of this product that are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.**



