ELIMINATOR



VORTEX

User Manual

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DOCUMENT VERSION

An updated version of this document may be available online. Please check 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!

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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 | 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 of 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 contact, 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 RE-PAIRS 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!

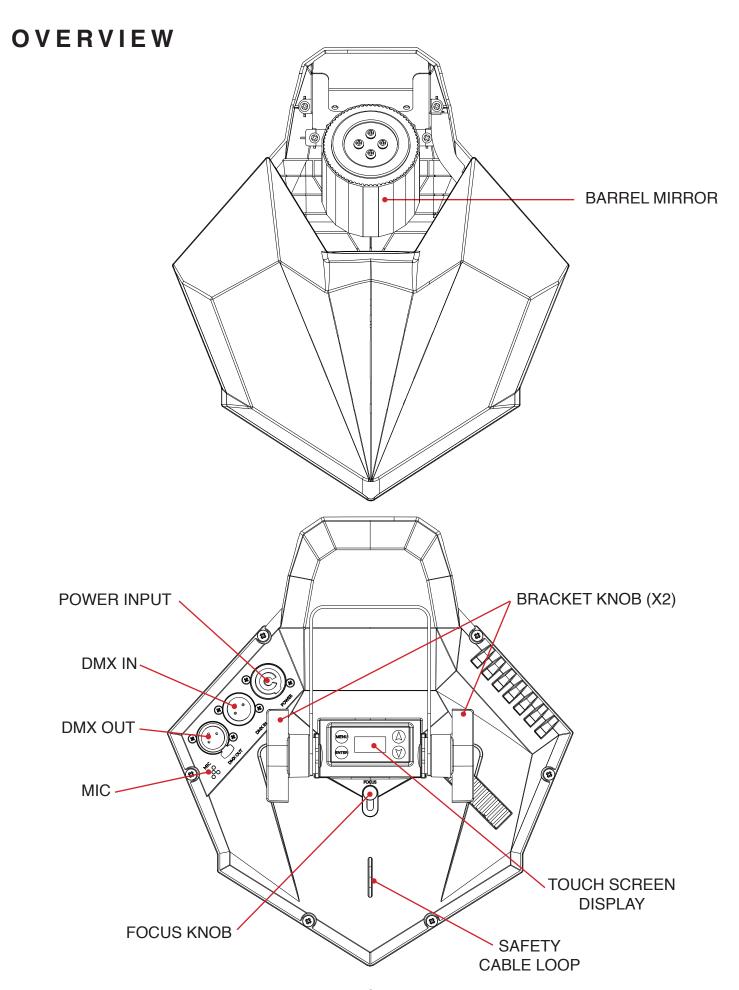


NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE!
RETINA INJURY RISK - MAY INDUCE BLINDNESS!
SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK!

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.





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!

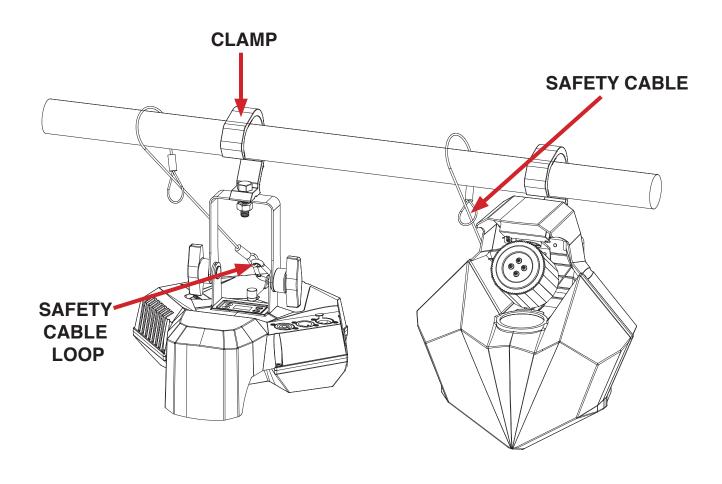
- Fixture MUST be installed following all local, national, and country commercial electrical and construction codes and regulations.
- Before rigging/mounting a single fixture or multiple fixtures to any metal truss/structure or placing the fixture(s) on any surface, a professional equipment installer 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.

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.



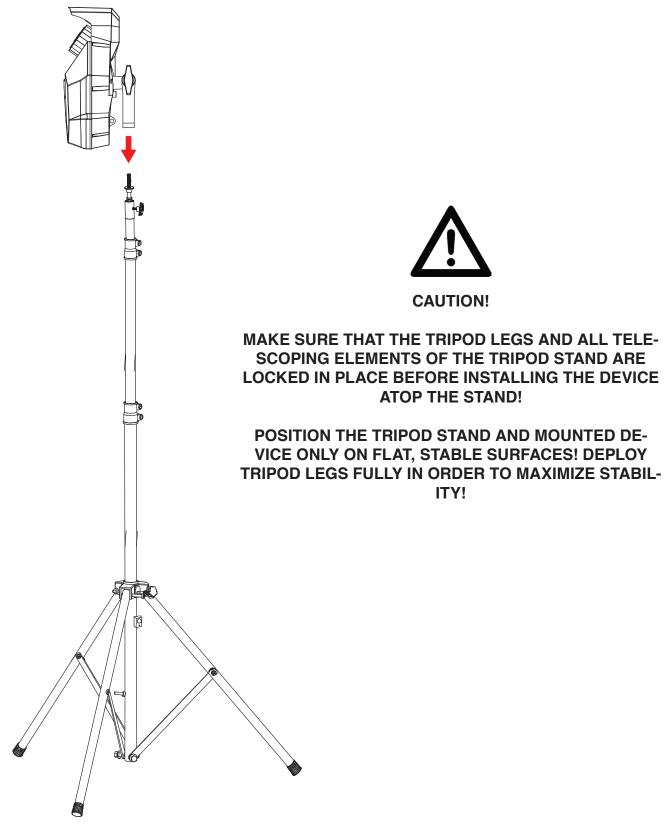
SAFETY CABLE



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.

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.

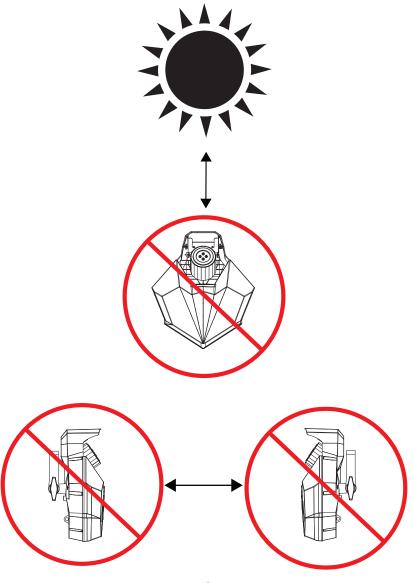


POTENTIAL INTERNAL FIXTURE DAMAGE FROM EXTERNAL SOURCES OF LIGHT BEAMS

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.

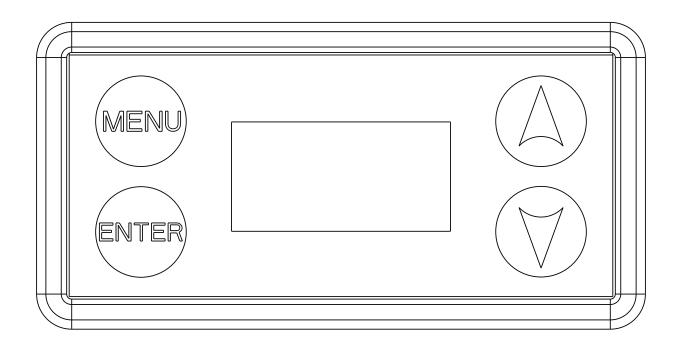
DO NOT EXPOSE THE FIXTURE AND/OR FRONT LENS OPENING TO LIGHT BEAMS FROM DIRECT SUNLIGHT, OTHER LIGHTING OR MOVING HEAD FIXTURES, AND LASERS DURING UNPACKING, INSTALLATION, USE, AND EXTENDED IDLE TIMES OUTDOORS. DO NOT FOCUS A LIGHT BEAM FROM ONE LIGHTING FIXTURE DIRECTLY TOWARDS ANOTHER.



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

SYSTEM MENU

| | DMX Address | 001-xxx | | |
|-------------------|------------------|---|-----------------|-------------------------------|
| DMX Settings | DMX CH Mode | 10CH / 12CH | | |
| | No DMX Status | Hold, Blackout, Show, Manual | | |
| | Show 0 | Speed 1-10 | | |
| | Show 1 | Speed 1-10 | | |
| | Show 2 | Speed 1-10 | | |
| Show | Show 3 | Speed 1-10 | | |
| | Show 4 | Speed 1-10 | | |
| | Show 5 | Speed 1-10 | | |
| | Show 6 | Speed 1-10 | | |
| Sound | On / Off | | | |
| Sound Sensitivity | 0-100 | | | |
| | Pan Invert | Yes / No | | |
| | Tilt Invert | Yes / No | | |
| | | Primary | | |
| | Prim/Sec Mode | Secondary1 | | |
| | | Secondary2 | | |
| | | Standard | | ļ |
| | | Stage | | |
| | | TV | | |
| | Dim Modes | Architectural | | ļ |
| | | Theatre | | |
| Personality | | Stage 2 | 1 | ļ |
| | | Dim Speed | 0.1S~10S | ļ |
| | 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 | | | |
| | Display | Display Invert | Yes / No | |
| | Reset Motor | ON / OFF | | |
| | Service | Passcode (050) | Factory Restore | NO / YES Passcode = 011 |

CONTINUED ON NEXT PAGE

SYSTEM MENU

| | Pan | 000 - 255 | | | |
|----------------|------------|--------------------|----------------|----------------|--|
| | Tilt | 000 - 255 | | | |
| Manual | Gobo | 000 - 255 | | | |
| Manual | Mirror | 000 - 255 | | | |
| | Strobe | 000 - 255 | | | |
| | Dimmer | 000 - 255 | | | |
| | | PwrOnHr1 | xxxxxx Hours | | |
| | Hours | PwrOnHr2 | xxxxxx Hours | | |
| | | PwrOnRst | Passcode (050) | | |
| | Temp. | LED | Current | | |
| | | LED | Max Temp | | |
| | | Temp Rst Yes / No | | | |
| Information | | Pan | | | |
| Illioilliation | DMXValue | | | | |
| | | Function | | | |
| | SoftVers | x.xx | x.xx | | |
| | RDM UID | • | | | |
| | | Fixture Errors | Fixture Errors | | |
| | Error logs | 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 EN-TER 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:

- 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.

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.

| 3-Pin XLR to 5-Pin XLR Conversion | | | | | |
|-----------------------------------|------------------------|---------------------|--|--|--|
| 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 |
|--------------|----------------|----------------|----------------|----------------|
| 10CH | 001 | 011 | 021 | 031 |
| 12CH | 001 | 013 | 025 | 037 |

| CHANNEL | | DMX | FUNCTION |
|---------|------|-----------|---|
| 10CH | 12CH | VALUES | FUNCTION |
| 1 | 1 | 00-255 | Pan |
| | | | Tilt (Barrel Rotation) |
| | | 000-009 | Stop |
| | | 010-120 | Counter-Clockwise Rotation, Fast to slow |
| 2 | 2 | 121-134 | Stop |
| | | 135-245 | Clockwise rotation Slow to Fast |
| | | 246-255 | Stop |
| | | | Gobo Wheel |
| | | 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 Mulit 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 |
| 3 | 3 | 056-064 | Gobo 9, White Small Dots |
| 3 | 3 | 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 |
| | | | Reflector Rotation |
| | | 000 - 009 | Stop |
| | | 010-120 | Clockwise Rotation Slow to Fast |
| 4 | 4 | 121-134 | Stop |
| | | 135-245 | Counter-Clockwise Rotation, Fast to slow |
| | | 246-255 | Stop |

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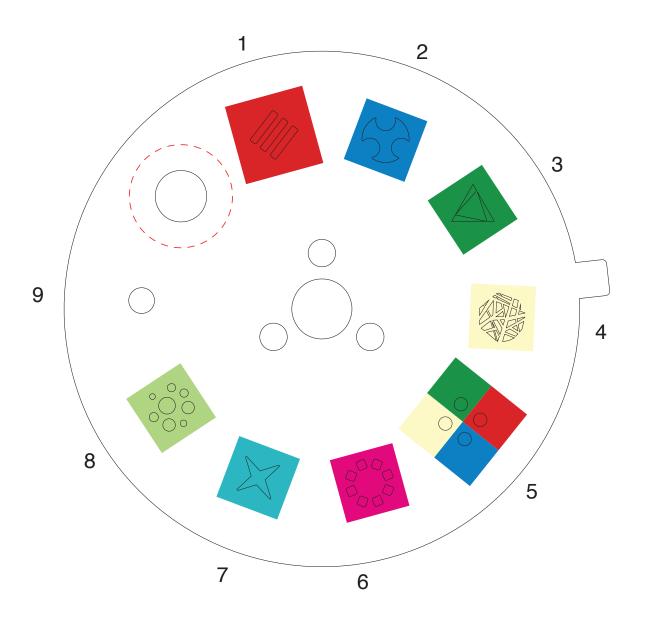
| CHAI | NNEL | DMX | | | |
|------|--------------------------|---------|-----------------------------------|--|--|
| 10CH | | VALUES | FUNCTION | | |
| | | | Shutter | | |
| | Ì | 000-031 | Closed | | |
| | | 032-063 | Open | | |
| | | 064-095 | Strobe effect slow to fast | | |
| 5 | 5 | 096-127 | Open | | |
| | | 128-159 | Pulse-effect in sequences | | |
| | | 160-191 | Open | | |
| | | 192-223 | Random strobe effect slow to fast | | |
| | | 224-255 | Open | | |
| | | | Dimmer | | |
| 6 | 6 | 000-255 | 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) | | |
| | | | Show Speed | | |
| 8 | 8 | 000-255 | 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 | | |
| | 9 | 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 | | |
| | | 146 | 0.6 s | | |
| | Continued onto next page | | | | |

| CHAI | CHANNEL | | FUNCTION | | |
|------|--------------------------|---------------|-----------------------------------|--|--|
| 10CH | 12CH | VALUES | FUNCTION | | |
| | | | Dim Speed (Continued) | | |
| | | 147 | 0.7 s | | |
| | | 148 | 0.8 s | | |
| | | 149 | 0.9 s | | |
| | | 150 | 1 s | | |
| | | 151 | 1.5 s | | |
| | | 152 | 2 s | | |
| | 9 | 153 | 3 s | | |
| | 9 | 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 | | |
| | | 021-040 | Linear | | |
| | 10 | 041-060 | Inv. Squa | | |
| | | 061-080 | S. Curve | | |
| | | 081-255 | No Function | | |
| | | | Pan Speed | | |
| 9 | 11 | 000-255 | Fast to Slow | | |
| | | | 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) | | |
| 10 | 12 | 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 | | | | |

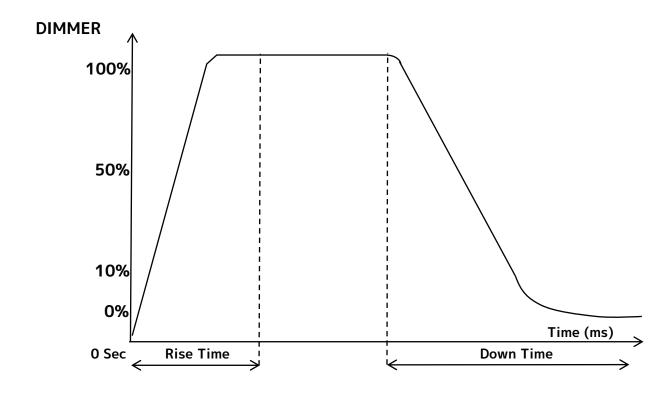
| CHAI | CHANNEL DMX | | | | | | | | | |
|------|-------------|--------|------------------------------------|------------------------------------|-----|------------------------------------|---|-----|------------------------------------|------------------------------------|
| 10CH | | VALUES | FUNCTION | | | | | | | |
| | | | Special (Continued) | | | | | | | |
| | | 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) | | | | | | | |
| 10 | 12 | 191 | 1080 Hz LED Refresh Rate (Hold 1s) | | | | | | | |
| 10 | 12 | 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) | | | | | | | |
| | | | | | Ī | | - | 203 | 1210 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) | | | | | | | |
| | | | | | | | | | | |

| CHANNEL | | DMX | FUNCTION | | |
|---------|------|---------|--------------------------------------|--|--|
| 10CH | 12CH | VALUES | FUNCTION | | |
| | | | Special (Continued) | | |
| | | 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) | | |
| | 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) | | |
| 10 | | 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 | | |

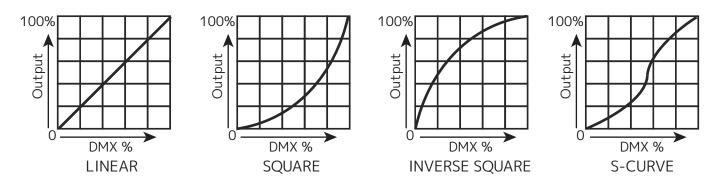
GOBO / COLOR WHEEL



DIMMER MODES AND CURVES



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



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:

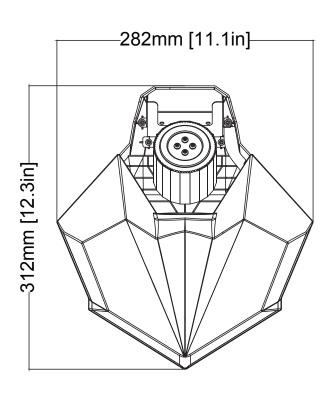
- A detailed electrical check by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating.
- Be sure all screws and fasteners are securely tightened at all times. Loose screws may fall out during normal operation, resulting in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

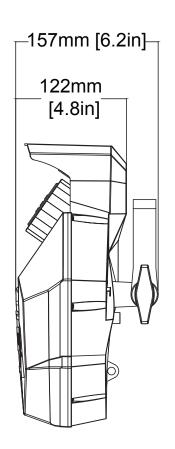
NEVER remove the ground prong from the power cable.

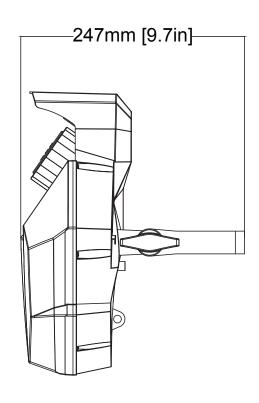
ERROR CODES

| 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: 95W

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.



ADJ Products, LLC 6122 S. Eastern Ave Los Angeles, CA, 90040