# FOCUS SPOT 4Z
# FOCUS SPOT 4Z PEARL
## User Guide

## DOCUMENT VERSION

**Due to additional product features and/or enhancements, an updated version of this document may be available online.**

**Please check www.adj.com for the latest revision/update of this manual**

| Date | Document Version | Software Version | DMX Channels | Notes |
|---|---|---|---|---|
| 12/27/18 | 1 | 1.04 | 16/18/22 | Initial Release |
| 06/07/19 | 1.2 | N/C | N/C | System Menu Access Note |
| 08/14/20 | 1.4 | 1.11 | N/C | System Menu Update |
| 11/22/21 | 1.6 | N/C | N/C | Update Format |
| 02/08/22 | 1.8 | N/C | N/C | Added RDM |
| 03/24/22 | 2.0 | N/C | N/C | Changed connectors to 5-Pin DMX |
| 04/16/24 | 2.2 | N/C | N/C | Updated Cover, System Menu Frequencies, & Specifications |

# CONTENTS

# GENERAL

**INTRODUCTION**
This fixture has been designed to perform reliably for years when the information in this manual are followed. Please read and understand all the instructions and guidelines carefully and thoroughly before operating this unit. This manual contains important information regarding safety, installation, use, and maintenance.

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

**CUSTOMER SUPPORT:** Contact ADJ Service for any product related service and support needs. Also visit **forums.adj.com** with questions, comments or suggestions.

**ADJ SERVICE USA - Monday - Friday 8:00am to 4:30pm PST**
**Voice: 800-322-6337 | Fax: 323-582-2941** | **support@adj.com**

**ADJ SERVICE EUROPE - Monday - Friday 08:30 to 17:00 CET**
**Voice: +31 45 546 85 60 | Fax: +31 45 546 85 96** | **support@adj.eu**

**REPLACEMENT PARTS** please visit **parts.adj.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. ADJ Products, LLC 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 periods below). 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 serviced by anyone other than the 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 checkup. 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 warranty 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. 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. 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

- **Non-LED Lighting Products = 1-Year (365 Days)** (Including Special Effect Lighting, Intelligent Lighting, UV lighting, Strobes, Fog Machines, Bubble Machines, Mirror Balls, Par Cans, Trussing, Lighting Stands, Power/Data Distribution, etc. excluding LED and lamps)
- **Laser Products = 1-Year (365 Days)** (excluding laser diodes which have a 6-Month Limited Warranty)
- **LED Products = 2-Year (730 Days)** (excluding batteries which have a 180 Day Limited Warranty) **PLEASE NOTE: 2-Year (730 Days) Limited Warranty ONLY applies to product purchased within the USA.**
- **StarTec Series = 1-Year (365 Days)** (excluding batteries which have a 180 Day Limited Warranty)
- **ADJ DMX Controllers = 2 Year (730 Days)**
- **American Audio Products = 1 Year (365 Days)**

# SAFETY GUIDELINES

This fixture is a sophisticated piece of electronic equipment. To guarantee smooth operation, it is important to follow all instructions and guidelines in this manual. ADJ is not responsible for injury and/or damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual. Only qualified and/or certified personnel should perform installation of this fixture and only the original rigging parts (omega brackets) included with this fixture should be used for installation. Any modifications to the fixture and/or the included mounting hardware will void the original manufacturer's warranty and increase the risk of damage and/or personal injury.

**PROTECTION CLASS 1 - FIXTURE MUST BE PROPERLY GROUNDED.**

**THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT. DO NOT ATTEMPT ANY REPAIRS YOURSELF, AS 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!**
**DISCONNECT FIXTURE FROM POWER BEFORE SERVICING!**
**NEVER TOUCH THE FIXTURE DURING OPERATION, AS IT MAY BE HOT!**
**KEEP FLAMMABLE MATERIALS AWAY FROM THE FIXTURE!**

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

**MAXIMUM EXTERNAL SURFACE TEMPERATURE: 185° F (85° C)**
**MAXIMUM AMBIENT TEMPERATURE: 104° F (40° C)**

- **DO NOT TOUCH** the fixture housing during operation.
- Turn OFF the power and allow approximately 15 minutes for the fixture to cool down before serving.
- **DO NOT** shake fixture, avoid brute force when installing and/or operating fixture.
- **DO NOT** operate fixture if the power cord is frayed, crimped, damaged and/or if any of the power cord connectors are damaged and do not insert into the fixture securely with ease.
- **NEVER** force a power cord connector into the fixture. If the power cord or any of its connectors are damaged, replace it immediately with a new one of similar power rating.
- **DO NOT** block any air ventilation slots. All fan and air inlets must remain clean and never blocked. Allow approx. 6" (15cm) between fixture and a wall for proper cooling.
- When installing fixture in a suspended environment, always use mounting hardware that is at least 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, and 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.
- In the event that the fixture needs to be returned for servicing, use only the original packaging and materials to transport the fixture.

# SAFETY GUIDELINES

**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 ADJ lighting fixtures, can cause severe internal damage including burning to 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 ADJ lighting fixtures, 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 prevent any potential damage from occurring 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 MOVING HEAD FIXTURES, AND LASERS WHILE UNPACKING, INSTALLATION, USE, AND EXTENDED IDLE TIMES OUTDOORS.**
**DO NOT FOCUS A LIGHT BEAM FROM ONE LIGHTING FIXTURE DIRECTLY TOWARDS ANOTHER.**
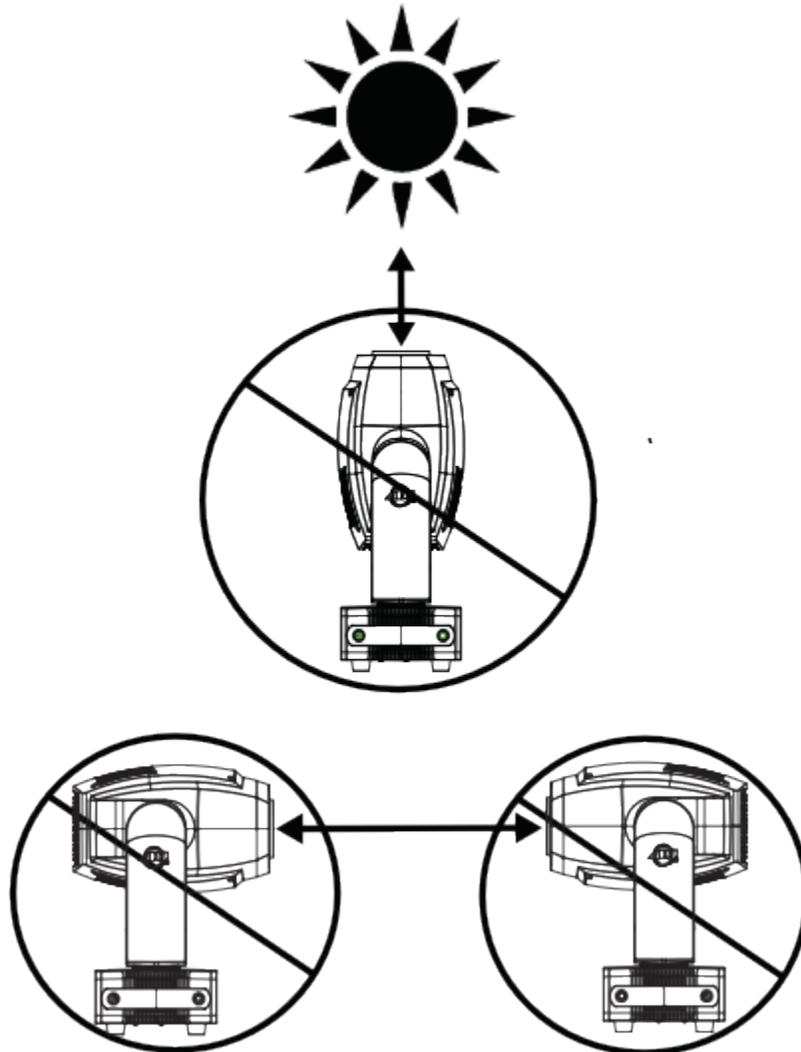
# MAINTENANCE GUIDELINES

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

## CLEANING

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

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

## MAINTENANCE

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

Please refer to the following points during routine inspections:
- A detailed 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 to enter into the fixture. Damaged rigging points or unsecured rigging could cause the fixture to fall and seriously injure a person(s).
- Electric power supply cables must not show any damage, material fatigue, or sediments.

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

## FUSE REPLACEMENT

Unplug the unit from any power source it may be connected to. Once the power has been disconnected, use a flat head screw driver to unscrew the fuse holder located next to the power input. Remove the bad fuse and replace with a new one, and screw the fuse holder back in.

# OVERVIEW

Service Port

LCD Display

Power Cable In/Out

Fuse: T3A/250V

Power Cable Out

5-Pin DMX Out

5-Pin DMX In

MODE

UP

LEFT

ENTER

RIGHT

DOWN
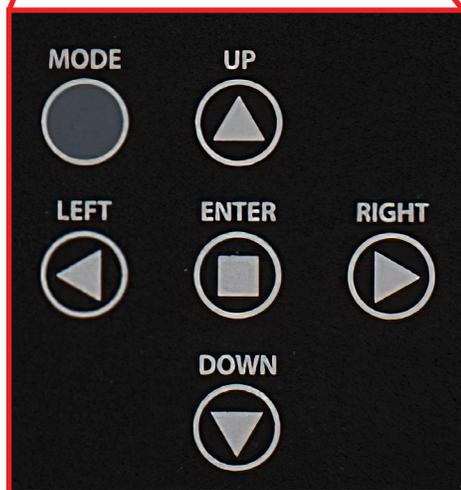
# INSTALLATION INSTRUCTIONS

 **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 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.

Ambient operating temperature range is **-13°F. (-25°C)** to **113°F. (45°C)**.

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

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

Overhead fixture installation must always be secured with a secondary safety attachment, such as an appropriately rated safety cable that can hold 10 times the weight of the fixture. Allow approximately 15 minutes for the fixture to cool down before serving.

# INSTALLATION INSTRUCTIONS

Screw one clamp via a M12 screw and nut into the Omega Bracket. Insert the quick-lock fasteners of the Omega Bracket into the respective holes of the fixture base. **NOTE: The clamp must be attached to the Omega Bracket before attaching the bracket to the fixture.**
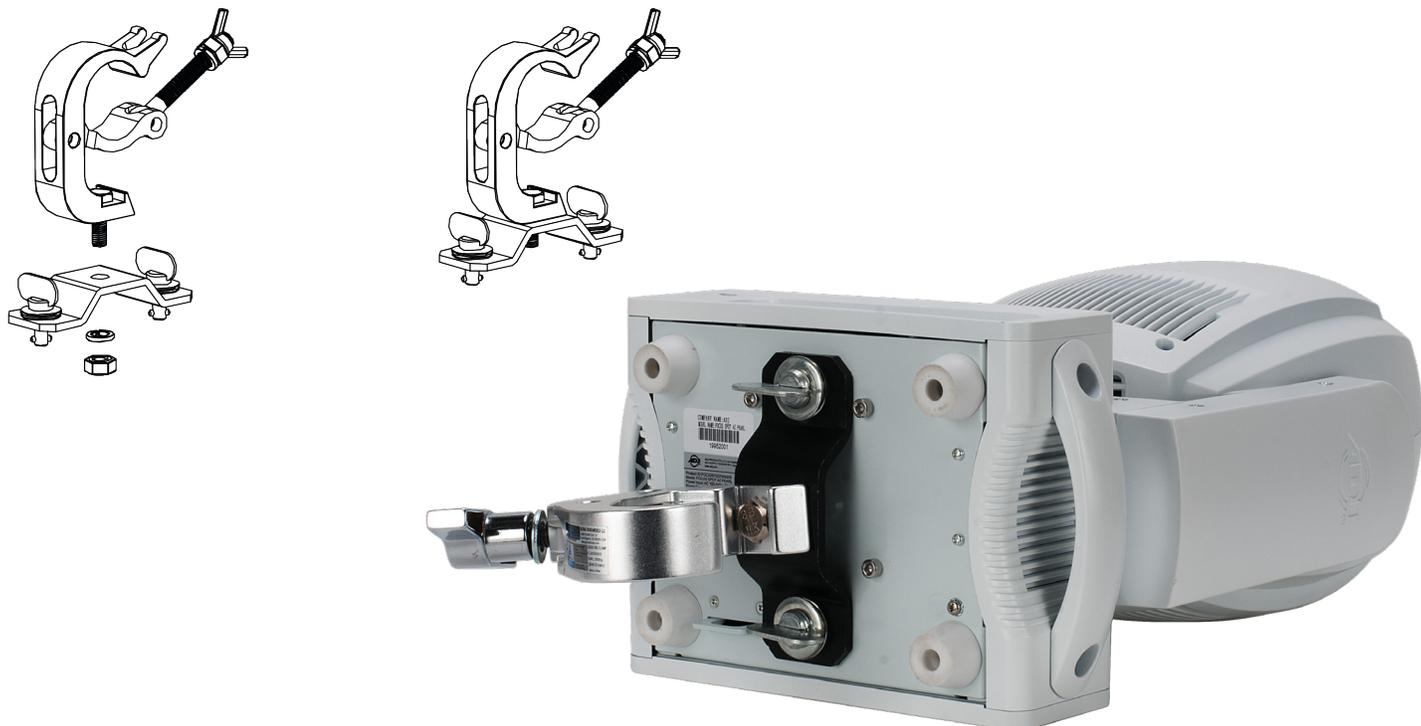


Tighten the quick-lock fasteners fully clockwise. Pull the safety-cable through the opening located on the bottom of the unit and over the trussing system or a safe fixation spot. Insert the end in the carabiner, and tighten the safety screw.
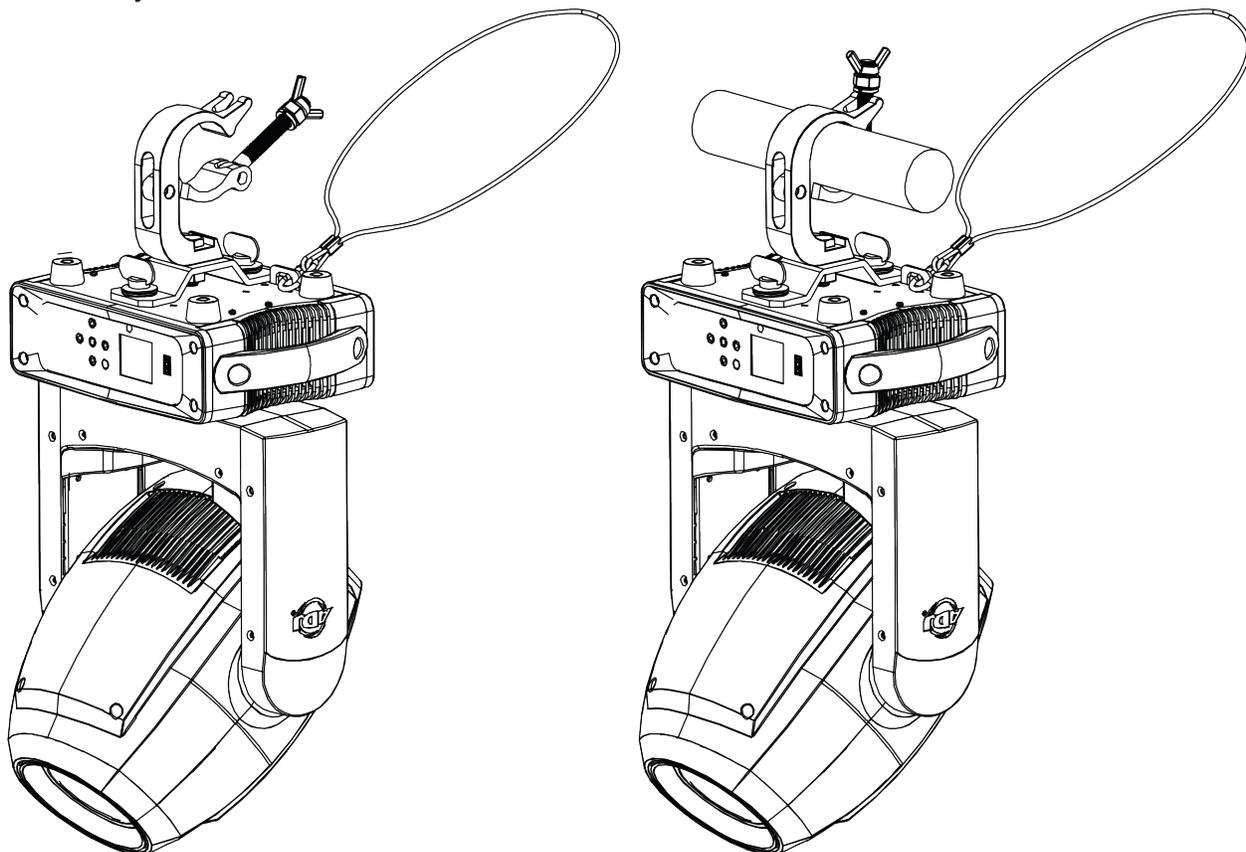
# INSTALLATION INSTRUCTIONS

When installing the unit, the trussing or area of installation must be able to hold 10 times the weight without any deformation. When installing the unit must be secured with a secondary safety attachment, e.g. and appropriate safety cable. Never stand directly below the unit when mounting, removing, or servicing the unit.

Overhead mounting requires extensive experience, including calculating working load limits, installation material being used, and periodic safety inspection of all installation material and unit. If you lack these qualifications, do not attempt the installation yourself.

These installations should be checked by a skilled person once a year.



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

The Focus Spot 4Z is fully operational in three different mounting positions, hanging upside-down, mounted sideways on trussing, or set on a flat level surface. Always use and install a safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails. Never use the carrying handles for secondary attachment.

# GOBOS & GOBO REPLACEMENT

The gobo's featured in this unit are interchangable. Remember when changing these gobo's that they are thin and easy to bend. Please do this process gently so you do not bend or damage gobo.
Caution! Never open the unit when in use. Always disconnect the main power before attempting to change the gobos.
Locating the Gobo wheel: After disconnecting the main power, position the head with the lens facing forward. Look through lens of the unit. When looking through the front lens, position the head so that the gears are on the right side. When the gears are on the right side, the shell that needs to be unscrewed is now facing up.

1. To change a gobo, unscrew the 4 screws that secure the shell to the unit. Gently lift and remove the shell.
2. When you remove the shell you will be able to access the gobo wheel. Turn the wheel with your hand until you come across the gobo you would like to change.
3. To change the gobo you have to remove the individual gobo frames. Gently push the gobo and gobo frame (Not the wheel) away from the gobo wheel. You do not have to the push very hard. While you are pushing the gobo frame away from the wheel, gently pull the the gobo frame up and out.
4. Once the gobo frame has been removed, you will notice that a retainer ring secures the gobo in place. After the retainer ring is removed, your are able to remove the gobo.
5. Change the gobo and replace the retainer ring.
6. Insert the gobo frame back into the unit, positioning it in same way as the other gobo frames.
7. Reassemble the unit.

**Inner Diameter: 19mm**
**Outer Diameter: 23mm**
**Thickness: 0.5mm**
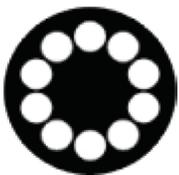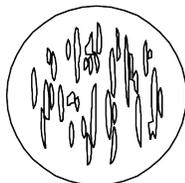
| Gobo 1 | Gobo 2 | Gobo 3 | Gobo 4 | Gobo 5 | Gobo 6 |
|--------|--------|--------|--------|--------|--------|

# 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 manufactures 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, when using sever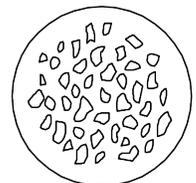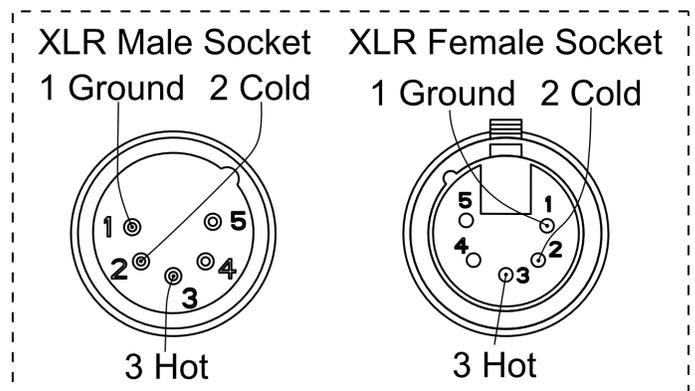al DMX fixtures try to use the shortest cable path possible. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example; a fixture assigned a DMX address of 1 may be placed anywhere in a DMX line, at the beginning, at the end, or anywhere in the middle. 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 Focus Spot 4Z/Focus Spot 4Z Pearl can be controlled via DMX-512 protocol. The Focus Spot 4Z/Focus Spot 4Z Pearl has 3 DMX channel modes. The DMX address is set on the front panel of the Focus Spot 4Z/Focus Spot 4Z Pearl. Your unit and your DMX controller require a standard 5-pin XLR connector for data input and data 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 and female XLR connector on either end of the cable. Also remember that DMX cable must be daisy chained and cannot be split.

**Notice:** Be sure to follow figures two and three when making your own cables. Do not use the ground lug on the XLR connector. Do not connect the cable's shield conductor to the ground lug or allow the shield conductor to come in contact with the XLR's outer casing. Grounding the shield could cause a short circuit and erratic behavior.

| 5-Pin XLR to 5-Pin XLR | | |
|---|---|---|
| Ground/Shield | Pin 1 | Pin 1 |
| Data Compliment (- signal) | Pin 2 | Pin 2 |
| Data True (+ signal) | Pin 3 | Pin 3 |
| Not Used | Pin 4 | Pin 4 |
| Not Used | Pin 5 | Pin 5 |

XLR Male Socket    XLR Female Socket
1 Ground  2 Cold      1 Ground  2 Cold

3 Hot                    3 Hot

# DMX SETUP

## 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.
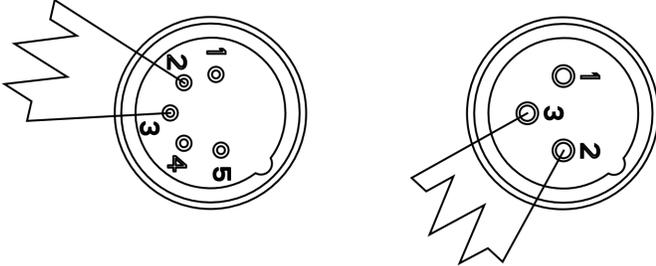


A DMX512 terminator reduces signal errors, avoiding most signal reflection interference. Connect PIN 2 (DMX-) and PIN 3 (DMX+) of the last fixture in series with a 120 Ohm, 1/4 W Resistor to terminate the DMX512.

**5-Pin XLR DMX Connectors.** This fixture uses 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 in to a 3-pin line, a cable adapter must be used. These adapters are readily available at most electric stores. The chart below details a proper cable conversion.

| 5-Pin XLR to 3-Pin XLR Conversion | | |
|---|---|---|
| Conductor | 5-Pin XLR Male (Out) | 3-Pin XLR Female (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 using a DMX controller, so 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.

In the case of the Focus Spot 4Z/Focus Spot 4Z Pearl, when in 16 channel mode you should set the starting DMX address of the first unit to 1, the second unit to 17 (16 + 1), the third unit to 33 (17 + 16), and so on. (See the chart below for more details.)

| Channel Mode | Unit 1 Address | Unit 2 Address | Unit 3 Address | Unit 4 Address |
|---|---|---|---|---|
| **16 Channels** | 1 | 17 | 33 | 49 |
| **18 Channels** | 1 | 19 | 37 | 55 |
| **22 Channels** | 1 | 23 | 45 | 67 |

# SYSTEM MENU

The fixture includes an easy to navigate system menu control panel display where all necessary settings and adjustments are made. (See image below) During normal operation, pressing the **MODE** button once will access the fixture's main menu. Once in the main menu, you can navigate through the different functions and access the sub-menus with the **UP** and **DOWN** buttons. When you reach a field that requires adjusting, press the **ENTER** button to access that field and use the **UP** and **DOWN** buttons to adjust the field. Pressing the **ENTER** button once more will confirm your setting. You may exit the main menu at any time without making any adjustments by pressing the **MODE** button.

# SYSTEM MENU

| MAIN MENU | SUB MENU | OPTIONS / VALUES (Default Settings in BOLD) | | DESCRIPTION |
|---|---|---|---|---|
| **USER MODE** | User Mode | Standard (18 Channel Mode)<br>Basic (16 Channel Mode)<br>Extend (22 Channel Mode)<br>User A<br>User B<br>User C | | |
| | Edit A<br>Edit B<br>Edit C | Max.<br>Channel<br>PAN | | |
| **FUNCTION** | Status | No DMX<br>Mode<br>P.Reverse<br>T.Reverse<br>Pan Degree<br>Feedback<br>Hibernation | **Hold**/Auto/Black<br>ON/**OFF**<br>ON/**OFF**<br>630/**540**<br>**ON**/OFF<br>**Speed 1** ~ 4<br>OFF, 01M~99M, **15M** | |
| | Dim Mode | **Standard**<br>Stage<br>TV<br>Architectur<br>Theatre<br>Stage2 | | |
| | Temp. C/F | Celsius<br>**fahrenheit** | | |
| | Gamma | **2.0**/2.2/2.4/2.6/2.8 | | |
| | Frequency | **900Hz**, 1000Hz, 1100Hz, 1300Hz, 1400Hz,<br>1500Hz, 2500Hz, 4000Hz, 5000Hz, 15KHz,<br>20KHz, 25KHz | | |
| | Fan Set | Head Fan | **Auto**, High, Low | |
| | LCD.Set | Backlight<br>FlipDisplay<br>Key Lock<br>Disp Flash | 02~60m <**50m**><br>ON/**OFF**<br>ON/**OFF**/ON1<br>**ON**/OFF | |
| | Disp.Set | Chan.Value<br>Secondary Set<br>Auto.Prog | PAN...<br>Sec1, Sec2, Sec3<br>Primary/Alone | |
| | USB Update | OFF/ON | | |
| | DFSE | ON/**OFF** | | |
| | Time.Info | CurrentTime<br>Total Time<br>Last Time<br>Timer PIN<br><br>Clear Last<br>Clear Total | | Current Running Time (Hours)<br>Total Running Time (Hours)<br>Total Running Time (Hours)<br>Last Time Clear:<br>(Password=**060**)<br>ON/**OFF**<br>ON/**OFF** |
| | Temp.Info | T:XXX | | |
| | Fan Speed | Fan1:XXXX RPM<br>Fan2:XXXX RPM | | |
| | Error. Info | NONE/Pan, Tilt... | | |
| | Model. Info | FOCUS SPOT 4Z | | |
| | Software.V | 1U:VX.X.X<br>2U:VX.X.X<br>3U:VX.X.X | | |

# SYSTEM MENU

| MAIN MENU | SUB MENU | OPTIONS / VALUES (Default Settings in BOLD) | | DESCRIPTION |
|---|---|---|---|---|
| **TEST** | Reset.Motor | All<br>Pan & Tilt<br>Color & Gobo | | |
| | TestChannel | Pan, Pan Fine, Tilt, Tilt Fine, ColorWheel, Gobo, RotGobo, Strobe, Dimmer, Dim Fine, Prism1, Prism1Rot, Prism1 Fine, Prism2, Prism2Rot, Prism2Fine, Focus, Zoom, ZoomFine, DimMode, P, T Speed, Reset, Prog | | |
| | Panel.Ctrl | Pan, Pan Fine, Tilt, Tilt Fine, ColorWheel, Gobo, RotGobo, Strobe, Dimmer, Prism1, Prism1Rot, Prism2, Prism2Rot, Focus, Zoom, DimMode, P, T Speed, Reset, Prog | | |
| | Calibrate | Password<br>Pan, Tilt, ColorWheel, Gobo, RotGobo, Prism1, Prism1Rot, Prism2, Prism2Rot, Focus, Zoom | | Password=**050** |
| **PROGRAM** | Select.Prog | Prog.Part 1 = Program 1~9<br>Prog.Part 2 = Program 1~9<br>Prog.Part 3 = Program 1~9 | | Program 1<br>Program 2<br>Program 3 |
| | Edit.Prog | Program 1<br>:<br>Program 9 | Program Test<br>Step 01=SCxxx<br>Step 64=SCxxx | |
| | Edit.Scene | Edit Scene 001<br>~EditScene250 | Pan, Tilt, ...<br>Fade Time<br>Scene Time | |

## SYSTEM MENU - OPERATING INSTRUCTIONS

Access the main menu by pressing MODE. Use the UP, DOWN, RIGHT, & LEFT buttons to browse the menu. Press ENTER to access the desired menu, then use UP and DOWN buttons to scroll through the selections. To confirm a selection, press ENTER. Exit any menu by pressing MODE. The unit will automatically exit the menus if no buttons are pressed after 10-seconds.

**System Menu Access: To access the system menu when the fixture is not powered using the internal battery, press and hold the MODE button to illuminate the LCD screen until the DMX address is displayed. Then navigate to the desired system menu.**

**SET ADDRESS** - adjust/set DMX address.
1. Access the main menu and press the **UP** or **DOWN** buttons until "**Receive**" is highlighted, then press **ENTER**.
2. Press **ENTER** when "Set Address" is displayed.
3. Use the **UP**/**DOWN** buttons to adjust the **DMX** address.
4. Press the **ENTER** button to confirm your address or press the **MODE** button to exit.

**USER MODE** - adjust/select DMX Channel mode.
1. Press the **MODE** button to access the main menu. Use the **UP**/**DOWN** buttons to scroll to "**User Mode**", then press **ENTER**.
2. Use the **UP**/**DOWN** buttons to scroll through the 3 DMX Channel Modes.
- Basic Mode - 16 Channel Mode.
- Standard Mode - 18 Channel Mode.
- Extended Mode - 22 Channel Mode.

**User Mode A B C** - These are user customized DMX modes. Select either of these modes and set the number of DMX Channels, and assign the function of each channel.

3. Press ENTER to confirm settings, or press the MODE button to exit.

# SYSTEM MENU

**NO DMX MODE** - Use this function to set 1 of 3 available modes with DMX signal loss.
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Function**", then press **ENTER**.
2. Use the **UP/DOWN** buttons to select "**Status**", then press **ENTER**.
3. Use the **UP/DOWN** buttons to select "**No DMX Mode**", then press **ENTER**.
4. "**Hold**" (Last DMX setting), "**Black**" (Blackout), or "**Auto**" (Auto Program) will be displayed. Use the UP DOWN buttons to scroll through settings.
5. Press the ENTER button to confirm your selection, or press the MODE button to exit.

**PAN INVERSE** - Use this function to reverse the Pan movement.
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Function**", then press **ENTER**.
2. Use the **UP/DOWN** buttons to select "**Status**", then press **ENTER**.
3. Use the **UP/DOWN** buttons to select "**P. Reverse**", then press **ENTER**.
4. Depending on which direction is set for P. Reverse, either "**Off**" or "**On**" will be displayed. Use the **UP/DOWN** buttons to scroll through settings.
5. Press the **ENTER** button to confirm your selection, or press the **MODE** button to exit.

**TILT INVERSE** - Use this function to reverse the left head Tilt movement. This function is used with DMX mode.
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Function**", then press **ENTER**.
2. Use the **UP/DOWN** buttons to select "**Status**", then press **ENTER**.
3. Use the **UP/DOWN** buttons to select "**T. Reverse**", then press **ENTER**.
4. Depending on which direction is set for T. Reverse, either "**Off**" or "**On**" will be displayed. Use the **UP/DOWN** buttons to scroll through settings.
5. Press the **ENTER** button to confirm your selection, or press the **MODE** button to exit.

**PAN DEGREE** - Use this function to change the pan degree from 630 to 540. This function is used with DMX mode.
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Function**", then press **ENTER**.
2. Use the **UP/DOWN** buttons to select "**Status**", then press **ENTER**.
3. Use the **UP/DOWN** buttons to select "**Pan Degree**", then press **ENTER**.
4. Depending on which degree is set for Pan Degree was set, either "**540**" or "**630**" will be displayed. Use the **UP/DOWN** buttons to scroll through settings.
5. Press the **ENTER** button to confirm your selection, or press the **MODE** button to exit.

**FEEDBACK** - Use this function to change between pan-and-tilt position feedback pan degree from 630 to 540. This function is used with DMX mode.
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Function**", then press **ENTER**.
2. Use the **UP/DOWN** buttons to select "**Status**", then press **ENTER**.
3. Use the **UP/DOWN** buttons to select "**Pan Degree**", then press **ENTER**.
4. Depending on which degree is set for Pan Degree was set, either "**540**" or "**630**" will be displayed. Use the **UP/DOWN** buttons to scroll through settings.
5. Press the **ENTER** button to confirm your selection, or press the **MODE** button to exit.

**MOVEMENT SPEED** - Use this function to set the pan-and-tilt movement speed. This function is used with DMX mode.
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Function**", then press **ENTER**.
2. Use the **UP/DOWN** buttons to select "**Status**", then press **ENTER**.
3. Use the **UP/DOWN** buttons to select "**Move. Speed**", then press **ENTER**.
4. Depending on MOVEMENT SPEED setting, "**Speed1**" "**Speed2**", "**Speed3**" ,or "**Speed4**" will be displayed. Use the **UP/DOWN** buttons to scroll through settings.
5. Press the **ENTER** button to confirm your selection, or press the **MODE** button to exit.

# SYSTEM MENU

**HIBERNATION** - Use this function to turn off LEDs and step-motors without a DMX signal after 15 minutes (factory default). The fixture will reset with a reactivated DMX signal.
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Function**", then press **ENTER**.
2. Use the **UP/DOWN** buttons to select "**Status**", then press **ENTER**.
3. Use the **UP/DOWN** buttons to select "**Hibernation**", then press **ENTER**.
4. The current standby signal will be displayed. Use the **UP/DOWN** buttons to adjust hibernation period between "**01M-99M**" or "**Off**".
5. Press the **ENTER** button to confirm your selection, or press the **MODE** button to exit.

**DIMMER MODE** - Use this function to change the dimmer curve setting (see Dimmer Curve Chart on page 25).
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Function**", then press **ENTER**.
2. Use the **UP/DOWN** buttons to select "**Dim Mode**", then press **ENTER**.
3. Use the **UP/DOWN** buttons to find and select applicable curve setting.
4. The current dimmer curve will be displayed. Use the **UP/DOWN** buttons to select applicable dimmer curve.
5. Press the **ENTER** button to confirm your selection, or press the **MODE** button to exit.

**TEMPERATURE C/F** - Use this function to change the temperature display between Celsius and Fahrenheit.
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Function**", then press **ENTER**.
2. Use the **UP/DOWN** buttons to select "**Temp. C/F**", then press **ENTER**.
3. Depending on current setting, either "**Celsius**" or "**Fahrenheit**" will be displayed. Use the **UP/DOWN** buttons to highlight applicable temperature scale.
4. Press the **ENTER** button to confirm your selection, or press the **MODE** button to exit.

**GAMMA ADJUSTMENT** - Use this function to adjust gamma setting. This feature is primarily used when shooting video.
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Function**", then press **ENTER**.
2. Use the **UP/DOWN** buttons to select "**Gamma**", then press **ENTER**.
3. Use the **UP/DOWN** buttons to highlight applicable setting.
4. Press the **ENTER** button to confirm your selection, or press the **MODE** button to exit.

**FREQUENCY ADJUSTMENT** - Use this function to adjust dimming frequency. This feature is mostly used when shooting video for a flicker free operation.
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Function**", then press **ENTER**.
2. Use the **UP/DOWN** buttons to select "**Frequen**", then press **ENTER**.
3. Use the **UP/DOWN** buttons to highlight applicable setting.
4. Press the **ENTER** button to confirm your selection, or press the **MODE** button to exit.

**FAN SET** - Use this function to adjust the moving head fan speed.
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Function**", then press **ENTER**.
2. Use the **UP/DOWN** buttons to select "**Fan Set**", then press **ENTER**.
3. Use the **UP/DOWN** buttons to highlight "**Head Fan**" and press **ENTER**.
4. Use the **UP/DOWN** buttons to adjust the head fan speed.
5. Press the **ENTER** button to confirm your selection, or press the **MODE** button to exit..

# SYSTEM MENU

**BACKLIGHT**. - Use this function to adjust the display LCD backlight time from 2-60 minutes.
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Function**", then press **ENTER**.
2. Use the **UP/DOWN** buttons to select "**LCD.Set**", then press **ENTER**.
3. Use the **UP/DOWN** buttons to highlight "**Backligh**t" and press **ENTER**.
4. The current shutoff time will be displayed ("**05m**" is the default setting). Use the LEFT/RIGHT buttons to adjust the shutoff time between 02m-60m, or "Off."
5. Press the **ENTER** button to confirm your selection, or press the **MODE** button to exit.

**FLIP DISPLAY** - Use this function to rotate (flip) the display 180°.
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Function**", then press **ENTER**.
2. Use the **UP** or **DOWN** buttons to select "**LCD.Set**", then press **ENTER**.
3. Use the **UP** or **DOWN** buttons to select "**Flip Display**", then press **ENTER**.
4. Depending on which direction is set for Flip Display, either "**Off**" or "**On**" will be displayed. Use the **LEFT/RIGHT** buttons to flip between settings.
5. Press the **ENTER** button to confirm your selection, or press the **MODE** button to exit.

**KEY LOCK** - Activating this function locks the buttons after 15 seconds.=.
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Function**", then press **ENTER**.
2. Use the **UP** or **DOWN** buttons to select "**LCD.Set**", then press **ENTER**.
3. Use the **UP** or **DOWN** buttons to select "**Key Lock**", then press **ENTER**.
4. Use the **LEFT/RIGHT** buttons to scroll through Key Lock options, then press **ENTER**.
• "**OFF**" - The keypad is unlocked. Press the **MODE** button to activate the keypad.
• "**ON**" - This is keypad lock. Press the **MODE** button for at least 5-seconds to unlock the keypad.
• "**ON1**" - Use this setting to prevent accidental keypad unlocking. A code needs to be entered to unlock keypad. Press **UP**, **DOWN**, **UP**, **DOWN**, & **ENTER** in that order.
5. Press the **ENTER** button to confirm your selection, or press the **MODE** button to exit.

**DISPLAY FLASH** - Use this function to have display flash with the loss of a DMX signal.
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Function**", then press **ENTER**.
2. Use the **UP** or **DOWN** buttons to select "**LCD.Set**", then press **ENTER**.
3. Use the **UP** or **DOWN** buttons to select "**DispFlash**", then press **ENTER**.
4. Depending on current setting, either "**Off**" or "**On**" will be displayed. Use the **LEFT/RIGHT** buttons to scroll through settings.
5. Press the **ENTER** button to confirm your selection, or press the **MODE** button to exit.

**CHANNEL VALUE** - Use this function to display DMX value of each DMX channel in use.
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Function**", then press **ENTER**.
2. Use the **UP** or **DOWN** buttons to select "**Disp.Set**", then press **ENTER**.
3. Use the **UP** or **DOWN** buttons to select "**Chan. Value**", then press **ENTER**.
4. A DMX channel will now display. Example: Pan, Rotation, LEDs... The channel DMX value will be displayed when you press **ENTER**.
5. Press the **MODE** button to exit.

**SECONDARY SET** - Use this function to designate unit as secondary in a Primary-Secondary configuration.
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Function**", then press **ENTER**.
2. Use the **UP** or **DOWN** buttons to select "**Disp.Set**", then press **ENTER**.
3. Use the **UP** or **DOWN** buttons to select "**Secondary Set**", then press **ENTER**.
4. Depending on current setting, "**Secondary 1**", "**Secondary 2**", or "**Secondary 3**" will be displayed. Use the **UP/DOWN** buttons to scroll through settings.
5. Press the **ENTER** button to confirm your selection, or press the **MODE** button to exit.

# SYSTEM MENU

**AUTO PROGRAM** - This function allows the internal programs to run in either a stand-alone or primary/secondary mode. In "**Primary**" mode, the fixture will send DMX data to other fixtures connected via DMX cable. In "**Alone**" mode, the fixture will operate as a single fixture. The program for this mode is selected in the "**Program**" section of the control menu. You can set the number of steps under "**Edit. Prog**". You can edit the individual scenes under "**Edit Scenes**".
1. Press the **MODE** button to access the main menu. Use the **UP**/**DOWN** buttons to scroll to "**Function**", then press **ENTER**.
2. Use the **UP**/**DOWN** buttons to select "**Disp.Set**", then press **ENTER**.
3. Use the **UP**/**DOWN** buttons to highlight "**Auto. Prog**" and press **ENTER**.
4. Either "**Primary**" or "**Alone**" will be displayed. Use the **UP**/**DOWN** buttons to scroll through settings.
5. Press the **ENTER** button to confirm your selection, or press the **MODE** button to exit.

**DEFAULT SETTINGS** - Use this function to restore factory settings.
1. Press the **MODE** button to access the main menu. Use the **UP**/**DOWN** buttons to scroll to "**Function**", then press **ENTER**.
2. Use the **UP** or **DOWN** buttons to select "**DFSE**", then press **ENTER**.
3. Depending on setting, either "**Off**" or "**On**" will be displayed. Select "**On**" to restore fixture to factory settings.
4. Press the **ENTER** button to confirm your selection, or press the **MODE** button to exit.

**USB UPGRADE FILE** - This submenu is used for any future software updates. Check www.adj.com and this units webpage for any software updates. Download the software update to a flash stick and plug the flash stick into the Service Port slot located on the front of the unit.
1. Contact ADJ customer service for help when updating software.

**TIME INFO** - Use this function to check current running time, total running time, and last clear time. This submenu also allows a user to clear/set "Total Time" and "Last Time" hours.
1. Press the **MODE** button to access the main menu. Use the **UP**/**DOWN** buttons to scroll to "**Information**", then press **ENTER**.
2. Use the **UP** or **DOWN** buttons to select "**Time.Info**", then press **ENTER**.
3. Use the **UP** or **DOWN** buttons to scroll through Time Information selections:
- "**Current Time**" - This will display the current fixture run time in hours. Press the **MODE** button to exit.
- "T**otal Time**" - This displays the total fixture run time in hours. Press the **MODE** button to exit.
- "**Last Time**" - This displays the last time the run time was cleared. Press the **MODE** button to exit.
- "**Time PIN**" - Use this function to enable clearing of "**Last Time**" and "**Total Time**" functions.
- "**Clear Last**" - Use this function to clear "Last Time" counter. Access "Time PIN" and press ENTER. Use the **UP**/**DOWN** buttons to set "**PIN**" to "**050**" and press **ENTER**. Return to the "**Clear Last**" function and press **ENTER**. Press **LEFT**/**RIGHT** buttons until selection is displayed and press **ENTER** to confirm. "**ON**" will clear the time. "**OFF**" returns user to Time Menu display.
- "**Clear Total**" - Use this function to clear "**Total Time**" counter. Access "**Time PIN**" and press **ENTER**. Use the **UP**/**DOWN** buttons to set "**PIN**" to "**060**" and press **ENTER**. Return to the "**Clear Total**" function and press **ENTER**. Press **LEFT**/**RIGHT** buttons until selection is displayed and press **ENTER** to confirm. "**ON**" will clear the time. "**OFF**" returns user to Time Menu display.

**TEMPERATURE INFO** - Use this function to display moving head temperature.
1. Press the **MODE** button to access the main menu. Use the **UP**/**DOWN** buttons to scroll to "**Information**", then press **ENTER**.
2. Use the **UP** or **DOWN** buttons to select "**Temp. Info**", then press **ENTER**.
3. "**T:XXX**" is displayed. "**XXX**" represents the current temperature of the moving head.
4. Press the **ENTER** or **MODE** button to exit.

**FAN SPEED** - Use this function to adjust the base fan speed.
1. Press the **MODE** button to access the main menu. Use the **UP**/**DOWN** buttons to scroll to "**Information**", then press **ENTER**.
2. Use the **UP** or **DOWN** buttons to select "**Fan Speed**", then press **ENTER**.
3. The current fan speeds for "**Fan1**" and "**Fan2**" will be displayed.
4. Press the **ENTER** or **MODE** button to exit.

# SYSTEM MENU

**ERROR INFO** - This submenu will display any function errors that may occur. Please contact ADJ customer support for additional information if any error warnings appear and there is any uncertainty about what action needs to be taken.
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Information**", then press **ENTER**.
2. Use the **UP/DOWN** buttons to select "**Error. Info**", then press **ENTER**.
3. Any errors that may have occurred will be displayed. Press the **MODE** button to exit.

**MODEL INFORMATION** - Use this function to display model name.
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Information**", then press **ENTER**.
2. Use the **UP** or **DOWN** buttons to select "**Model.Info**", then press **ENTER**.
3. Model name will be displayed. Press the **MODE** button to exit.

**SOFTWARE VERSION** - Use this function to display current software version.
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Information**", then press **ENTER**.
2. Use the **UP** or **DOWN** buttons to select "**Software.V**", then press **ENTER**.
3. The current software version will be displayed. Press the **MODE** button to exit.

**RESET MOTOR** - Use this function to display current software version.
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Test**", then press **ENTER**.
2. Use the **UP** or **DOWN** buttons to select "**Reset.Motor**", then press **ENTER**.
3. Press the **ENTER** button to reset fixture motor, or press the **MODE** button to exit.

**TEST CHANNEL** - Use this function to test each of the channel functions.
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Test**", then press **ENTER**.
2. Use the **UP** or **DOWN** buttons to select "**TestChannel**", then press **ENTER**.
3. Use the **UP** or **DOWN** buttons to scroll through channel functions.
4. Press the **ENTER** button to confirm your selection, or press the **MODE** button to exit.

**PANEL CONTROL** - Use this function to make fine adjustments.
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Test**", then press **ENTER**.
2. Use the **UP** or **DOWN** buttons to select "**Panel. Ctrl**", then press **ENTER**.
3. Use the **UP** or **DOWN** buttons to scroll through various functions.
4. Press the **ENTER** button to confirm your selection, or press the **MODE** button to exit.

**CALIBRATE** - Use this function to calibrate/adjust the positions of the effect wheels. The Calibration password is "**050**". **NOTE: ONLY QUALIFIED TECHNICIANS SHOULD PERFORM THIS FUNCTION.**
1. Press the **MODE** button to access the main menu. Use the **UP/DOWN** buttons to scroll to "**Test**", then press **ENTER**.
2. Use the **UP** or **DOWN** buttons to select "**Calibrate**", then press **ENTER**.
3. "**XXXX**" will be displayed. Use the **UP/DOWN** buttons set the "**PIN**" to "**050**" and press **ENTER**
4. Press the **ENTER** button to confirm your selection, or press the **MODE** button to exit.

## PROGRAM

**EDIT PROGRAM** - The fixture comes equipped with a built-in DMX recorder that allows custom programs to be installed and recalled directly from the fixture's control board. Programs can be created and stored using the fixture's control board or by using an external DMX controller.

**Select.Prog** – This function allows the user to select one of nine of the user defined built-in programs. This program is then accessed in "Function Mode" under "Program Run."

**Edit.Prog** – This function allows the user to edit the built-in programs.

**Edit.Scene** – This function allows the user to edit or define the actual scenes that are stored in the user defined built-in programs that are accessed in the previous step.

# SYSTEM MENU

**PRIMARY-SECONDARY**

This function will allows you to link units to run in a Primary-Secondary set-up. In a **Primary-Secondary** set up, one unit will act as the controlling unit and the others will react to the controlling units built-in programs. Any unit can act as a Primary or as a Secondary however, only one unit can be programmed to act as the "Primary."

**Primary-Secondary Connections and Settings:**

1. Daisy chain your units via the XLR connector on the rear of the 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. The last unit in the chain will use the male XLR connector only.
2. Connect the first "Secondary" unit to the "Primary."
3. **Primary Unit:**
   - Press the MODE button to access the main menu. Press the UP or DOWN buttons so that "Function" is highlighted, then press ENTER.
   - Press the UP or DOWN buttons until "**Disp.Set**" is displayed, press ENTER.
   - Press the UP or DOWN buttons until "**Auto. Prog**" is displayed, and press ENTER.
   - Either "**Primary**" or "**Alone**" will be displayed. Use the UP or DOWN buttons to highlight "Primary".
   - Press the ENTER button to confirm your selection.
4. **Secondary Unit(s):**
   - Press the MODE button to access the main menu. Press the UP or DOWN buttons so that "Function" is highlighted, then press ENTER.
   - Press the UP or DOWN buttons until "**Disp.Set**" is highlighted, then press ENTER.
   - Press the UP or DOWN buttons until "**Secondary Set**" is highlighted, then press ENTER.
   - Either "**Secondary 1**", "**Secondary 2**", or "**Secondary 3**" will be displayed. Use the **UP/DOWN** buttons to find your desired secondary setting.
5. Press the **ENTER** button to confirm your selection.

# DIMMING CURVE

The fixture includes 6 different dimming curve modes which can selected from either the system menu or via DMX. The graph below provides details on each dimming curve mode.
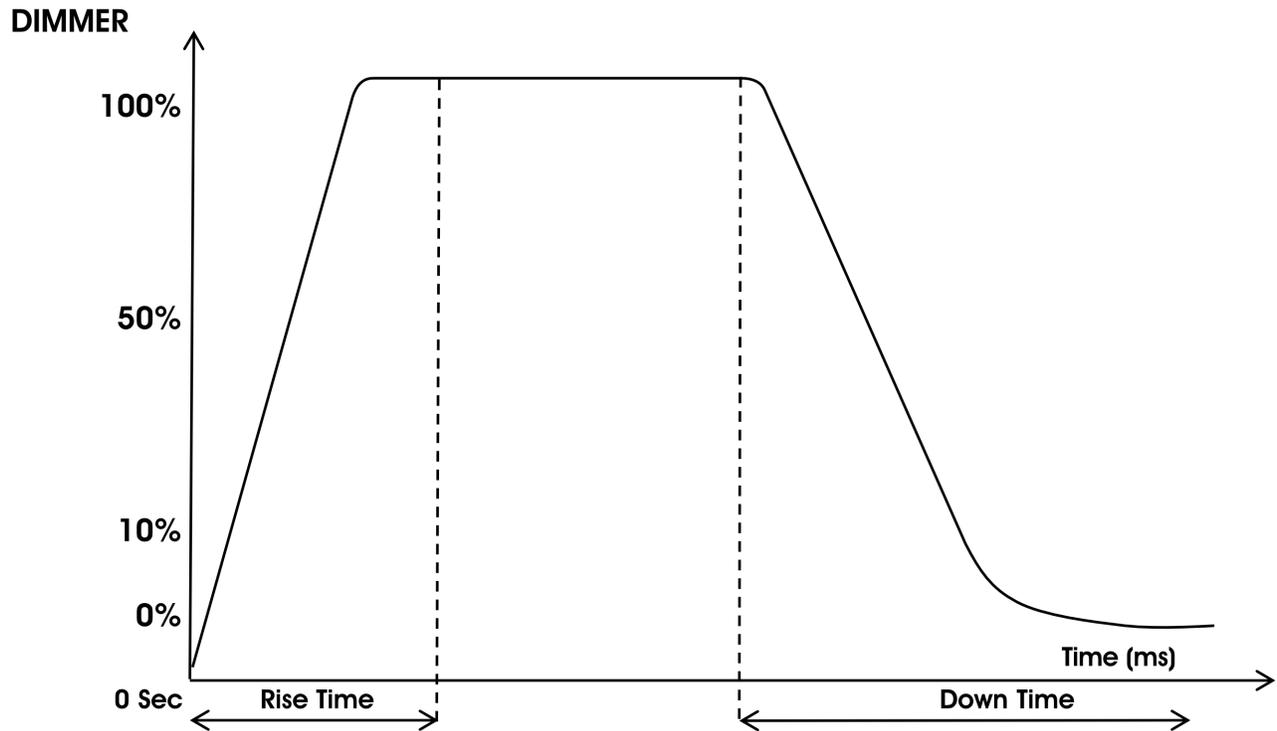


| | 0 sec Fade Time | | 1 sec Fade Time | |
|---|---|---|---|---|
| **Dimming Curve Ramp Effect** | | | | |
| | **Rise Time (ms)** | **Down Time (ms)** | **Rise Time (ms)** | **Down Time (ms)** |
| **Standard (default)** | 0 | 0 | 0 | 0 |
| **Stage** | 780 | 1100 | 1540 | 1660 |
| **TV** | 1180 | 1520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

# DMX CHANNELS / VALUES / FUNCTIONS

**Features subject to change without notice**

*Rotation direction (Clockwise/Counter-Clockwise) and control of effects depends on head orientation and Pan/Tilt settings*

| Basic | Standard | Extended | VALUE | FUNCTION |
|---|---|---|---|---|
| 1 | 1 | 1 | 000-255 | **PAN Movement 8-bit**<br>Pan Movement by 630/540 |
|  | 2 | 2 | 000-255 | **PAN Fine 16-bit**<br>Fine control Pan movement |
| 2 | 3 | 3 | 000-255 | **Tilt Movement 8-bit**<br>Tilt Movement |
|  | 4 | 4 | 000-255 | **Tilt Fine 16-bit**<br>Fine control of Tilt movement |
| 3 | 5 | 5 |  | **Color Wheel** |
|  |  |  | 000-007 | White |
|  |  |  | 008-014 | Red |
|  |  |  | 015-021 | Orange |
|  |  |  | 022-028 | Yellow |
|  |  |  | 029-035 | Green |
|  |  |  | 036-042 | Blue |
|  |  |  | 043-049 | Pink |
|  |  |  | 050-056 | Cyan |
|  |  |  | 057-063 | Magenta |
|  |  |  | 064-127 | Color Mixing |
|  |  |  | 128-189 | Color Wheel Clockwise Rotation Fast-Slow |
|  |  |  | 190-193 | Nothing |
|  |  |  | 194-255 | Color Wheel Counter-Clockwise Rotation Slow-Fast |
| 4 | 6 | 6 |  | **Gobo Wheel** |
|  |  |  | 000-004 | Open |
|  |  |  | 005-019 | Gobo 1 |
|  |  |  | 020-034 | Gobo 2 |
|  |  |  | 035-049 | Gobo 3 |
|  |  |  | 050-064 | Gobo 4 |
|  |  |  | 065-079 | Gobo 5 |
|  |  |  | 080-094 | Gobo 6 |
|  |  |  | 095-109 | Gobo 1 Shake Slow-Fast |
|  |  |  | 110-124 | Gobo 2 Shake Slow-Fast |
|  |  |  | 125-139 | Gobo 3 Shake Slow-Fast |
|  |  |  | 140-154 | Gobo 4 Shake Slow-Fast |
|  |  |  | 155-169 | Gobo 5 Shake Slow-Fast |
|  |  |  | 170-189 | Gobo 6 Shake Slow-Fast |
|  |  |  | 190-221 | Gobo Wheel Clockwise Rotation Fast-Slow |
|  |  |  | 222-223 | Nothing |
|  |  |  | 224-255 | Gobo Wheel Counter-Clockwise Slow-Fast |
| 5 | 7 | 7 |  | **Gobo Rotation** |
|  |  |  | 000-127 | Gobo Rotation Indexing |
|  |  |  | 128-191 | Gobo Rotation Clockwise Fast-Slow |
|  |  |  | 192-255 | Gobo Rotation Counter-Clockwise Slow-Fast |
| 6 | 8 | 8 |  | **Shutter & Strobing** |
|  |  |  | 000-031 | Shutter Closed (No Function) |
|  |  |  | 032-063 | Shutter Open |
|  |  |  | 064-095 | Strobing Slow-Fast |
|  |  |  | 096-127 | Shutter Open |
|  |  |  | 128-159 | Pulse Strobing Slow-Fast |
|  |  |  | 160-191 | Shutter Open |
|  |  |  | 192-223 | Random Strobing Slow-Fast |
|  |  |  | 224-255 | Shutter Open |
| 7 | 9 | 9 |  | **Master Dimmer** |
|  |  |  | 000-255 | Intensity 0 to 100% |
|  |  | 10 | 000-255 | **Dimmer Fine 16-bit** |

# DMX CHANNELS / VALUES / FUNCTIONS

**Features subject to change without notice**

*Rotation direction (Clockwise/Counter-Clockwise) and control of effects depends on head orientation and Pan/Tilt settings*

| Basic | Standard | Extended | VALUE | FUNCTION |
|---|---|---|---|---|
| 8 | 10 | 11 | | **Prism 1** |
| | | | 000-031 | Open |
| | | | 032-255 | 6 Facet Circular Prism |
| 9 | 11 | 12 | | **Prism 1 Indexing & Rotation** |
| | | | 000-127 | Prism 1 Indexing |
| | | | 128-189 | Clockwise Rotation Fast-Slow |
| | | | 190-193 | No Rotation |
| | | | 194-255 | Counter-Clockwise Rotation Slow-Fast |
| | | 13 | 000-255 | **Prism 1 Indexing Fine 16-bit** |
| 10 | 12 | 14 | | **Prism 2** |
| | | | 000-031 | Open |
| | | | 032-063 | 5 Facet Linear Prism |
| 11 | 13 | 15 | | **Prism 2 Indexing & Rotation** |
| | | | 000-127 | Prism 2 Indexing |
| | | | 128-189 | Clockwise Rotation Fast-Slow |
| | | | 190-193 | No Rotation |
| | | | 194-255 | Counter-Clockwise Rotation Slow-Fast |
| | | 16 | 000-255 | **Prism 2 Indexing Fine 16-bit** |
| 12 | 14 | 17 | 000-255 | **Focus** Continuous adjustment from far to near |
| 13 | 15 | 18 | 000-255 | **Zoom (**beam angle Narrow to Wide) |
| | | 19 | 000-255 | **Zoom Fine 16-bit** |
| 14 | 16 | 20 | | **Dim Curves** |
| | | | 000-020 | Standard |
| | | | 021-040 | Stage |
| | | | 041-060 | TV |
| | | | 061-080 | Architectural |
| | | | 081-100 | Theatre |
| | | | 101-120 | Stage 2 |
| | | | 121-255 | Default Unit Setting |
| 15 | 17 | 21 | 000-255 | **Pan/Tilt Speed** Max. to min. speed |
| 16 | 18 | 22 | | **Function, reset, internal programs** |
| | | | 000-009 | No Function |
| | | | 010-019 | Blackout with Pan/Tilt Movement |
| | | | 020-029 | Blackout with Color Wheel Movement |
| | | | 030-039 | Blackout with Gobo Wheel Movement |
| | | | 040-059 | Color and Gobo Motor Reset |
| | | | 060-069 | Prism Motor Reset |
| | | | 070-079 | Pan & Tilt Motor Reset |
| | | | 080-089 | Focus Motor Reset |
| | | | 090-099 | All Motors Reset |
| | | | 100-119 | Internal Program 1 (Scene 1~8 of EEPROM) |
| | | | 120-139 | Internal Program 2 (Scene 9~16 of EEPROM) |
| | | | 140-159 | Internal Program 3 (Scene 17~24 of EEPROM) |
| | | | 160-179 | Internal Program 4 (Scene 25~32 of EEPROM) |
| | | | 180-199 | Internal Program 5 (Scene 33~40 of EEPROM) |
| | | | 200-219 | Internal Program 6 (Scene 41~48 of EEPROM) |
| | | | 220-239 | Internal Program 7 (Scene 49~56 of EEPROM) |
| | | | 240-255 | 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 device to be managed, modified, and monitored remotely (hence, remote device management). This protocol is ideal for fixtures installed in locations that are 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 it's 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.

**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:

| | |
|---|---|
| [0x0011] Proxied Device Count | [0x0600] Pan Invert |
| [0x0200] Sensor Definition | [0x0601] Tilt Invert |
| [0x0201] Sensor Value | [0x0602] Pan Tilt Swap |
| [0x0080] Device Model Description | [0x0500] Display Invert |
| [0x0081] Manufacturer Label | [0x0501] Display Level |
| [0x0082] Device Label | [0x0603] Realtime Clock |
| [0x00E0] DMX Personality | [0x1010] Power State |
| [0x00E1] DMX Personality Description | [0x1031] Preset Playback |
| [0x0400] Device Hours | [0x0122] Default Slot Value |
| [0x0015] Comms Status | [0x00B0] Language |
| [0x0031] Status ID Description | [0x00A0] Language Capabilities |
| [0x0032] Clear Status ID | [0x00C2] Boot Software Version Label |
| [0x0401] Lamp Hours | [0x00C1] Boot Software Version ID |
| [0x0402] Lamp Strikes | [0x0070] Product Detail ID List |
| [0x0403] Lamp State | [0x0030] Status Messages |
| [0x0404] Lamp Mode | [0x1001] Reset Device |
| [0x0405] Device Power Cycles | |

# SPECIFICATIONS

**Light Source:**
• 200W Cool White LED Engine (50,000 hr.)

**Features:**
• Motorized Focus
• Motorized Zoom: 11 ~ 22-degrees plus 16-bit Fine Zoom
• 2 Prism FX: Rotating 5-facet Linear & rotating 6-facet Circular
• 0-100% smooth dimming
• Various strobe speeds
• USB firmware update port
• 2 cooling fans

**Color Wheel:**
• 8 dichroic colors + white

**GOBO Wheel:**
• 6 aluminum GOBOs + open
• All GOBOs removable & rotatable
• GOBO Shake Effect
• GOBO size: 22.5mm (outer); 19mm (viewable); 0.5-2mm (thickness)

**Prism Wheel:**
• Prism Wheel 1: Rotatable 5-facet Linear
• Prism Wheel 2: Rotatable 6-facet Circular
• Prism Indexing

**Control:**
• 3 DMX Channel Modes: 16/18/22 Channels
• Color LCD display with 6-button function menu
• Data In/Out: 5-pin DMX
• Power In/Out: Locking power In/Out connections (Daisy chain 4 units @ 120V; 10 units @ 240V)
• Control Mode: DMX512 or internal programs
• 6 Dimming Curve Modes: Standard, Stage, TV, Architectural, Theatre, Stage 2
• 0-100% smooth dimming
• Various strobe speeds
• USB firmware update port
• With Wired Digital Communication Network
• RDM (Remote Device Management)

**Pan/Tilt:**
• Pan: 540 & 630 degrees
• Tilt: 270 degrees

**Dimensions & Weight:**
• Dimension: 7.15 (L)" x 10.97" (W) x 18" (H) / 181.5 x 278.6 x 457.4mm
• Weight: 23 lbs. / 10 kg.

**What's Included:**
• Omega Bracket
• 6 ft/3M Locking power to Edison cable
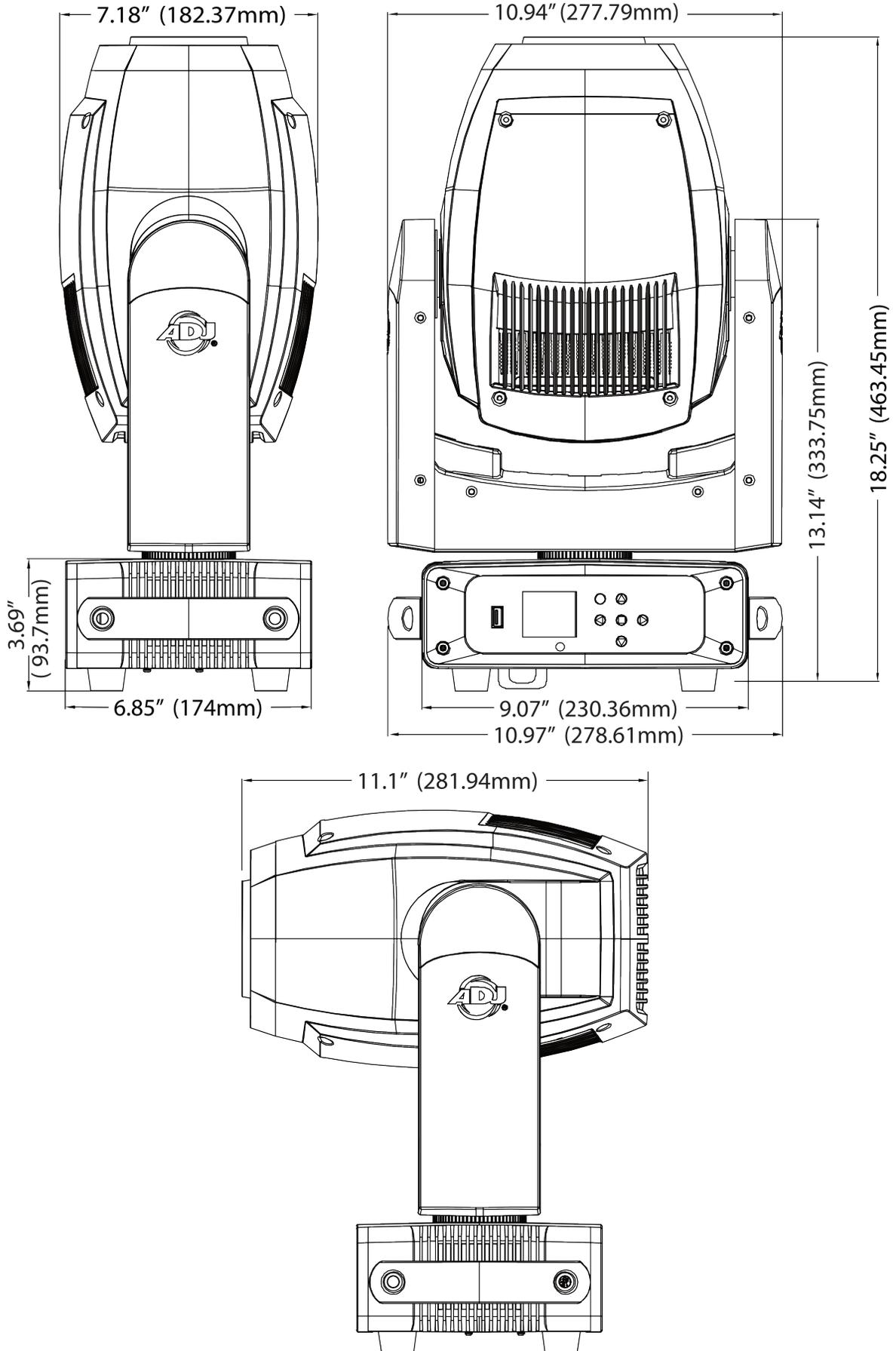• Safety Cable

**Rating/Approvals:**
• cETLus approved (Control #4010765)

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

# DIMENSION DRAWINGS

Dimensions not to scale

7.18″ (182.37mm)

10.94″ (277.79mm)

18.25″ (463.45mm)

13.14″ (333.75mm)

3.69″ (93.7mm)

6.85″ (174mm)

9.07″ (230.36mm)

10.97″ (278.61mm)

11.1″ (281.94mm)

**FCC STATEMENT**

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

**FCC RADIO FREQUENCY INTERFERENCE WARNINGS & INSTRUCTIONS**

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

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

**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!