FOCUS BEAM LED

User Instructions

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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!

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 before beginning installation and/or programming.

Date	Document Version	Software Version >	DMX Channel Mode	Notes
07/02/19	1	1.0.2	16 / 18	Initial Version
09/26/19	1.2	N/C	N/C	3-Pin DMX Updated to 5-Pin
10/31/19	2	1.0.4	N/C	"Reset All" Added to DMX Modes Pan Degree Selection Added Gamma Removed, Dimming Curves Added
10/14/20	3	1.0.6	N/C	Updated primary/secondary modes
05/06/21	3.5	N/C	N/C	Updated Dimensions

CONTENTS

GENERAL INFORMATION

INTRODUCTION

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

UNPACKING

The products in this kit have been thoroughly tested and have been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect each unit included for damage and be sure all accessories necessary to operate the units have arrived intact. In the event damage has been found or parts are missing, please contact our customer support team for further instructions. Please do not return this kit 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.

WARRANTY RETURNS

All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. Items returned without a R.A. number clearly marked on the outside of the package will be refused and returned at customer's expense. You may obtain a R.A. number by contacting customer support.

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

SAFETY GUIDELINES

To guarantee a 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 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 manufactures warranty and increase the risk of damage and/or personal injury.

PROTECTION CLASS 1 – DEVICES MUST BE PROPERLY GROUNDED

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

DO NOT PLUG THIS UNIT INTO A DIMMER PACK!
DO NOT REMOVE THE COVER UNDER ANY CONDITIONS!
NEVER OPERATE THIS UNIT WITH THE COVER REMOVED!
UNPLUG POWER DURING LONG PERIODS OF NON-USE
NEVER TOUCH LIGHT DURING OPERATION, AS IT MAY BE HOT!
KEEP FLAMMABLE MATERIALS AWAY FROM THESE DEVICES!
DO NOT EXCEED OPERATING TEMPERATURES OF 185°F (85°C)!

ENSURE ALL CONNECTIONS AND END CAPS ARE PROPERLY SEALED WITH A DIELECTRIC GREASE (AVAILABLE AT MOST ELECTRICAL SUPPLIERS) TO PREVENT WATER CORROSION AND/OR ELECTRICAL SHORT CIRCUIT.

IF THE FIXTURE IS EXPOSED TO ENVIRONMENTAL TEMPERATURE CHANGES SUCH AS RELOCATION FROM AN OUTDOOR COLD TO AN INDOOR WARM ENVIRONMENT, DO NOT POWER THE FIXTURE ON IMMEDIATELY. INTERNAL CONDENSATION AS A RESULT OF ENVIRONMENTAL TEMPERATURE CHANGE CAN CAUSE INTERNAL FIXTURE DAMAGE. LEAVE THE FIXTURE POWERED OFF UNTIL IT HAS REACHED ROOM TEMPERATURE BEFORE POWERING ON.

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

SAFETY GUIDELINES

DO NOT position devices close to any FLAMMABLE MATERIALS while operating.

DO NOT attempt installation and/or operation of devices without knowledge how to do so.

DO NOT permit operation by persons who are not qualified to operate these types of devices.

DO NOT shake devices, avoid brute force when installing and/or operating.

DO NOT operate these devices if the main power cord has become frayed, crimped and/or damaged. Replace any damaged power cords with a similar power rating.

DO NOT remove or break-off the ground plug from the device power cords.

DO NOT remove disassemble devices, there are NO user serviceable parts inside.

ALWAYS disconnect devices from main power source before performing any cleaning.

ALWAYS disconnect light from main power before replacing lamp.

ALWAYS be sure to install these devices in an area that will allow proper ventilation.

NEVER remove the ground prong from the power cable.

Power cords should be safely routed and secured so they are not likely pinched.

Disconnect power cords during long periods of non-use.

Only use recommended rigging hardware as described in this guide.

Use the original packaging and materials to transport these devices in for service.

These devices should be serviced by qualified service personnel when:
- The power cords or plugs have become damaged.
- Objects have fallen on and/or liquid has spilled into the devices.
- The devices have been exposed to rain and/or moisture.
- The devices do not operate normally or exhibit a marked change in performance.

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.
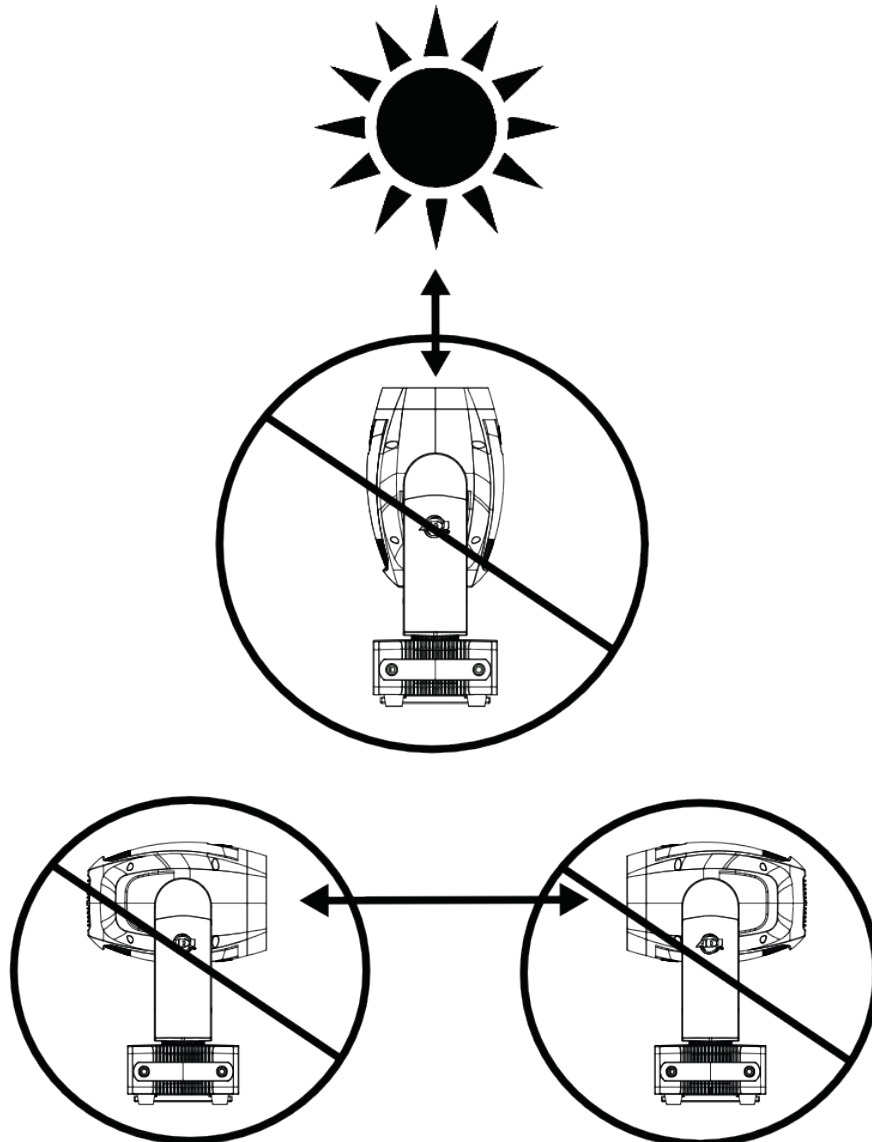
MAINTENANCE GUIDELINES

⚠ **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 at least every 20 days with a soft cloth to avoid dirt/debris accumulation. **NEVER** use alcohol, solvents, or ammonia-based cleaners.

MAINTENANCE

Regular inspections are recommended to insure proper function and extended life.

There are no user serviceable parts inside this fixture, please refer all other service issues to an authorized ADJ service technician. Should you need any spare parts, please order genuine parts from your local ADJ dealer.

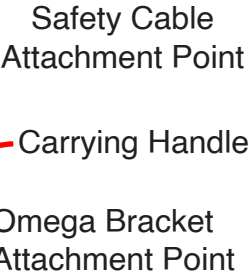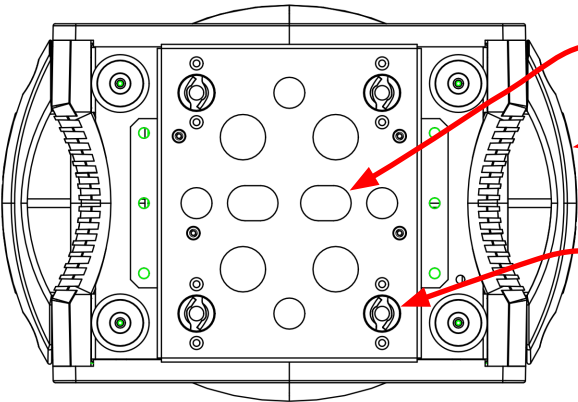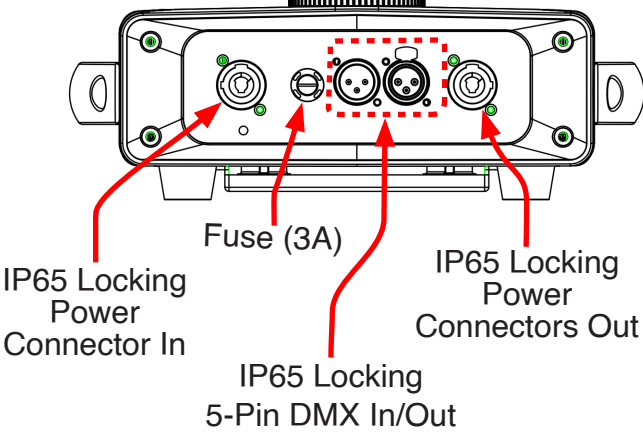Please refer to the following points during routine inspections:

A detailed electric 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 always securely tightened. Lose screws may fall out during normal operation resulting in damage or injury as larger parts could fall.

Check for any deformations on the housing, color lenses, rigging hardware and rigging points (ceiling, suspension, trussing). Deformations in the housing could allow for dust to enter 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.

OVERVIEW

UP Button

RIGHT Button

ENTER Button

DOWN Button

LEFT Button

Menu Screen

SERVICE PORT

Fuse (3A)

IP65 Locking Power Connector In

IP65 Locking 5-Pin DMX In/Out

IP65 Locking Power Connectors Out

Safety Cable Attachment Point

Carrying Handle

Omega Bracket Attachment Point
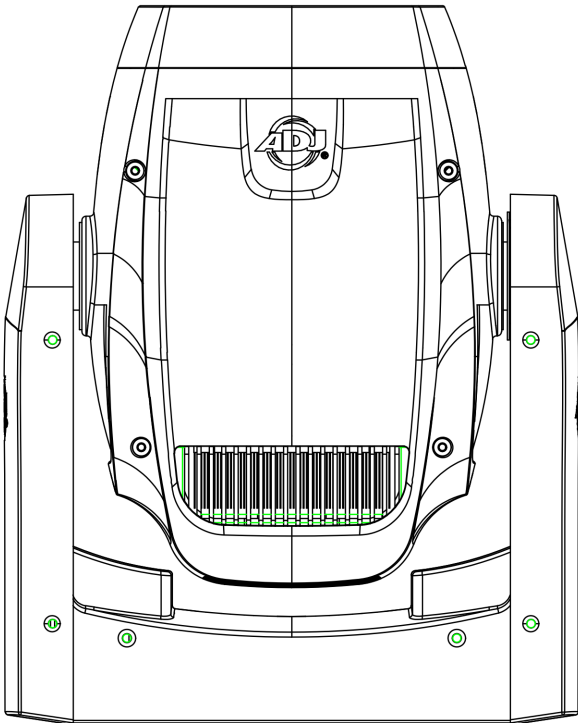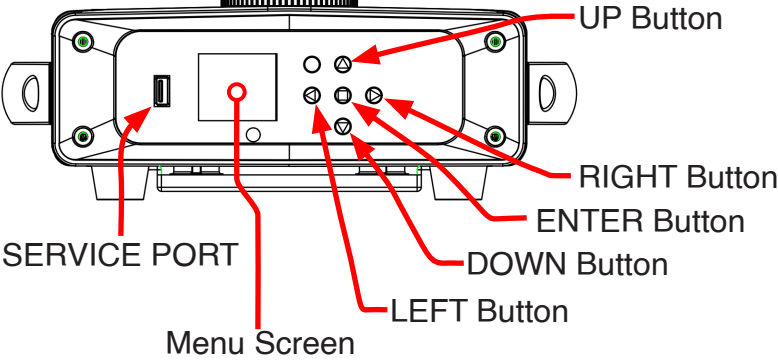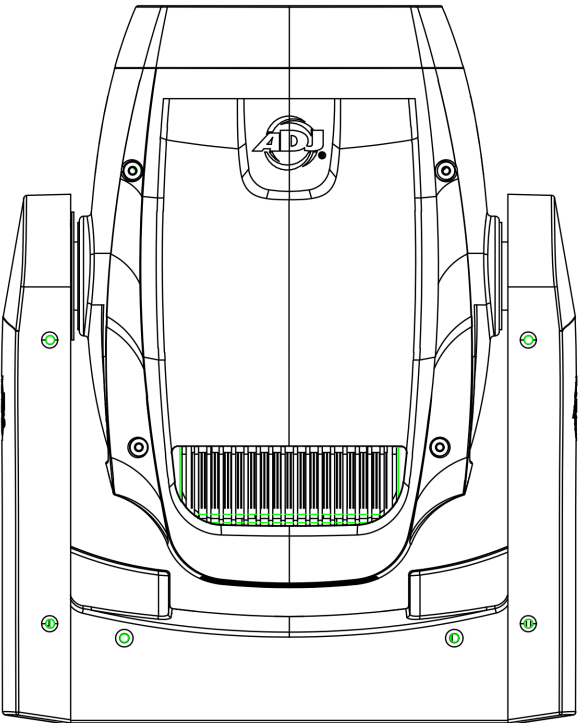
STATIC GOBOS

OPEN	GOBO 1	GOBO 2	GOBO 3	GOBO 4	GOBO 5	GOBO 6

| GOBO 7	GOBO 8	GOBO 9	GOBO 10	GOBO 11	GOBO 12	GOBO 13	GOBO 14

FIXTURE INSTALLATION
OMEGA BRACKETS INSTALLATION
Insert the Omega Brackets into the matching holes on the bottom of the fixture. Secure the Omega Brackets to the fixture by turning each quick-lock fastener ¼ turn clockwise; making sure the fastener is completely locked.

4x Omega Bracket Attachment Points
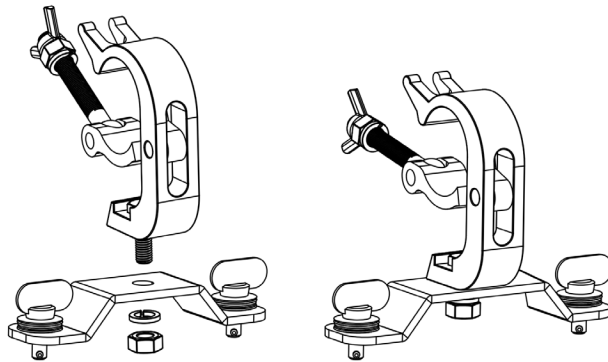
Safety Cable
(not included)
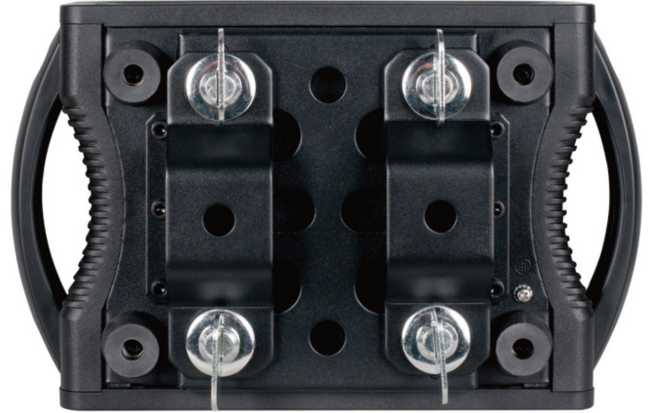
Safety Cable
Attachment Point
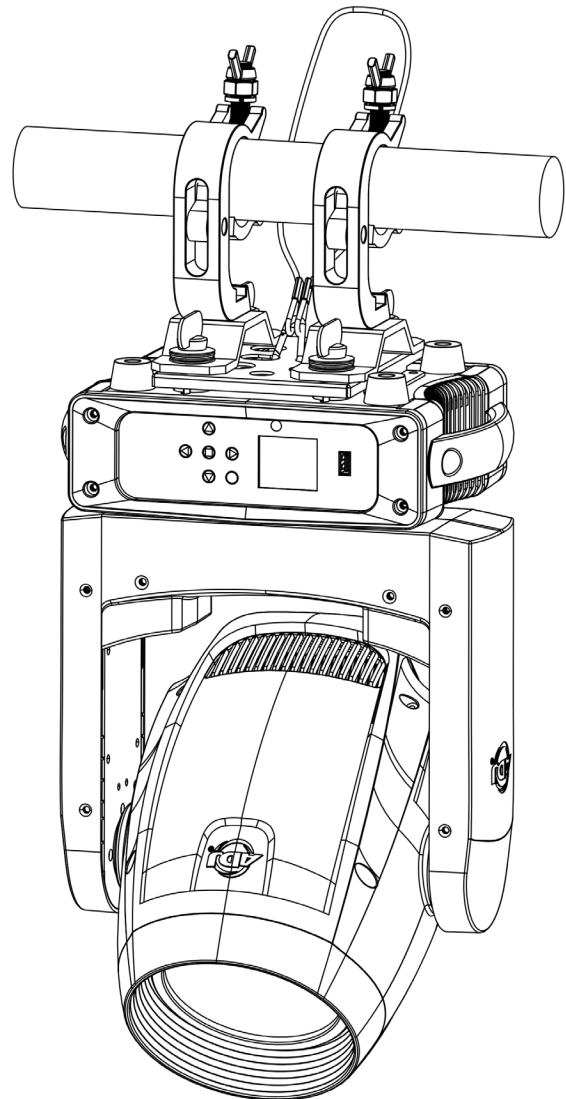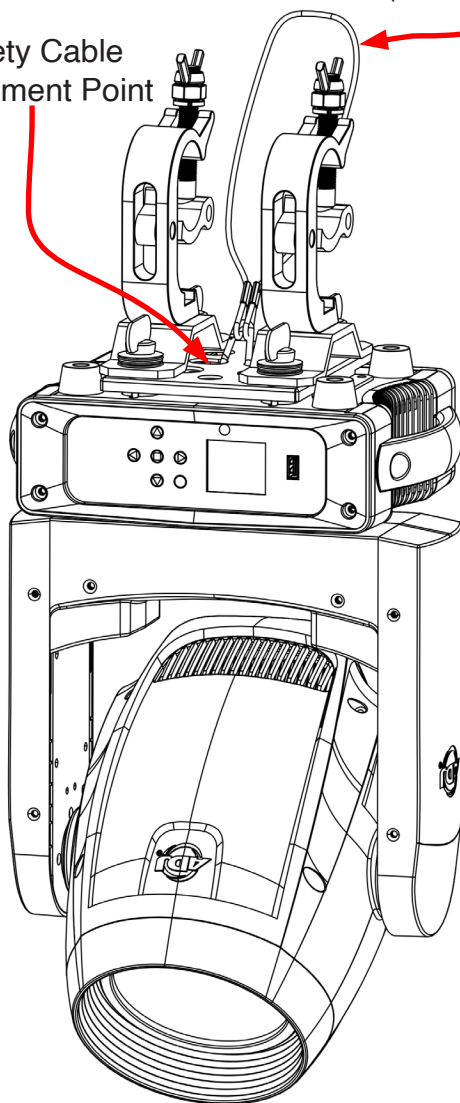
Screw one clamp via a M12 screw and nut into the Omega Bracket. Insert the quick-lock fasteners of the Omega Bracket into the respective holes of the fixture base plate. **NOTE: The clamp must be attached to the Omega Bracket before attaching the bracket to the fixture.** Tighten the quick-lock fasteners 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.

FIXTURE INSTALLATION

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.

MENU PANEL

MENU PANEL

CABLE DOWN

CABLE DOWN
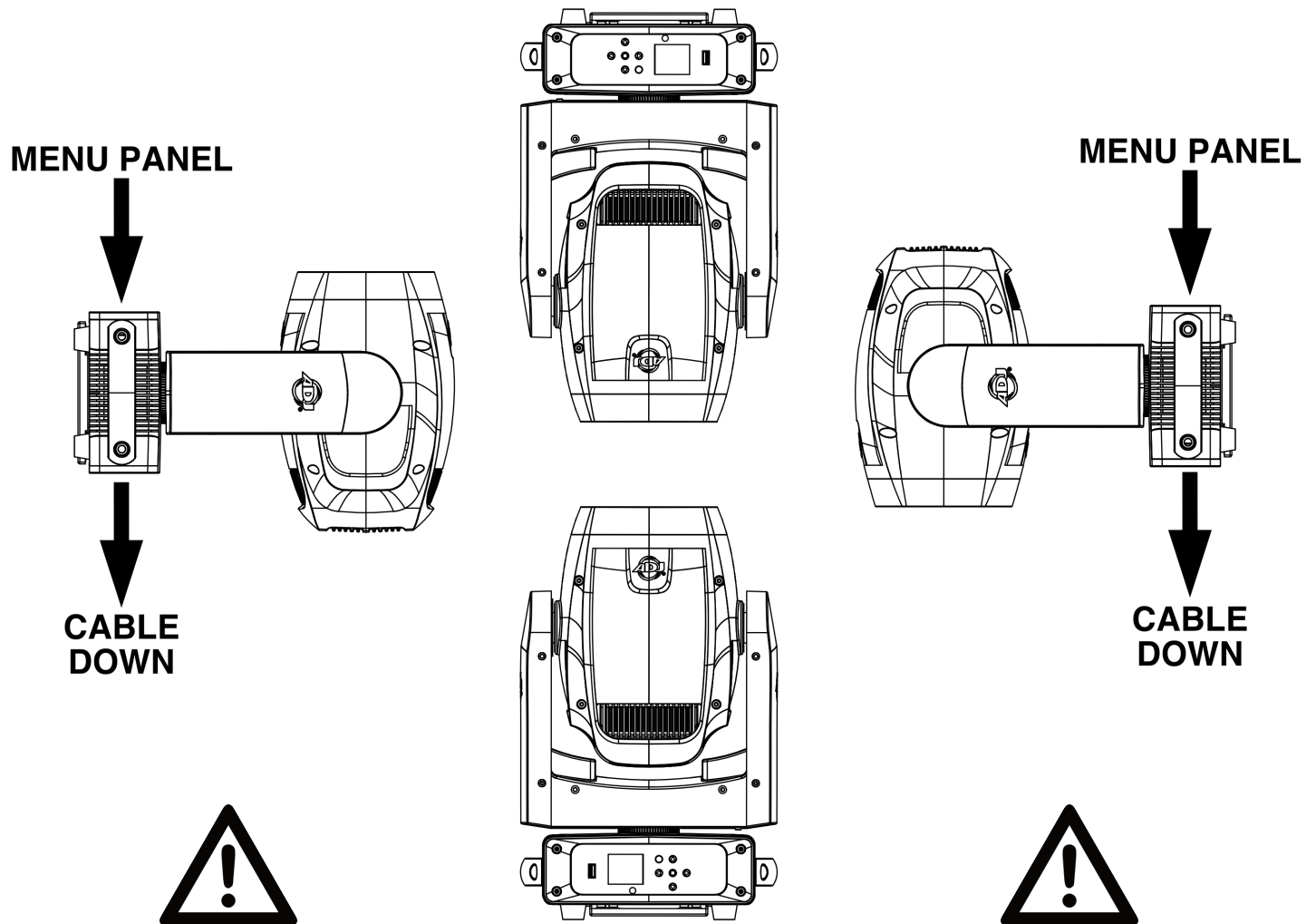
*SIDE MOUNTING

TO MAINTAIN IP65 RATING INTEGRITY, FIXTURE MUST BE INSTALLED WITH CABLES FACING THE GROUND AT ALL TIMES. WATER MUST EASILY RUN OFF AND NOT COLLECT AROUND CABLE CONNECTIONS.

*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 Beam LED 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.

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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).
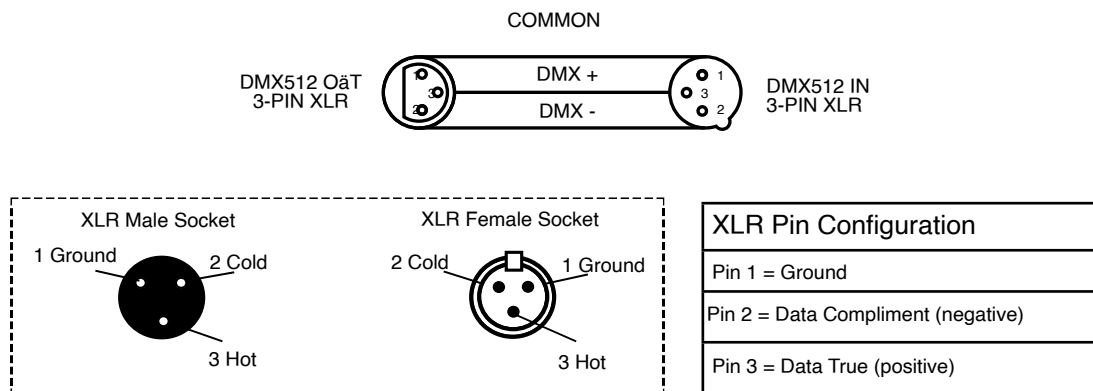
DMX Linking:
DMX is a language allowing all makes and models of different manufactures to be linked together and operate from a single controller, as long as all fixtures and the controller are DMX compliant. To ensure proper DMX data transmission, when using several DMX fixtures try to use the shortest 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 AND PRIMARY/SECONDARY OPERATION):
The Focus Beam LED can be controlled via DMX-512 protocol. Your unit and your DMX controller requires a 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.

TO MAINTAIN IP65 RATING INTEGRITY AND PREVENT WATER FROM ENTERING THE FIXTURE, ALL UNUSED CONNECTION RUBBER CAPS MUST BE SEALED AND ONLY IP65 RATED POWER AND DATE CABLES MUST BE USED.

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.

COMMON

DMX512 OäT
3-PIN XLR

DMX +

DMX -

DMX512 IN
3-PIN XLR

XLR Male Socket

1 Ground   2 Cold

3 Hot

XLR Female Socket

2 Cold   1 Ground

3 Hot

XLR Pin Configuration
Pin 1 = Ground
Pin 2 = Data Compliment (negative)
Pin 3 = Data True (positive)

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.
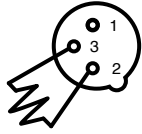
Termination reduces signal errors and avoids signal transmission problems and interference. It is always advisable to connect a DMX terminal, (Resistance 120 Ohm 1/4 W) between PIN 2 (DMX-) and PIN 3 (DMX+) of the last fixture. Figure 4

3-Pin XLR to 5-Pin XLR Conversion		
Conductor	3-Pin XLR Female (Out)	5-Pin XLR Male (In)
Ground/Sheld	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

5-Pin XLR DMX Connectors.

Some manufactures 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 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.

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 Hydro Wash X7, when in 15 Channel you should set the starting DMX address of the first unit to 1, the second unit to 16 (15 + 1), the third unit to 31 (16 + 15), 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

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 menus and 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**, **DOWN**, **LEFT** or **RIGHT** buttons (depending on the sub menu) to adjust the field. Pressing the **ENTER** button once more to confirm your setting. You may exit the main menu at any time without making any adjustments by pressing the **MODE** button.

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.
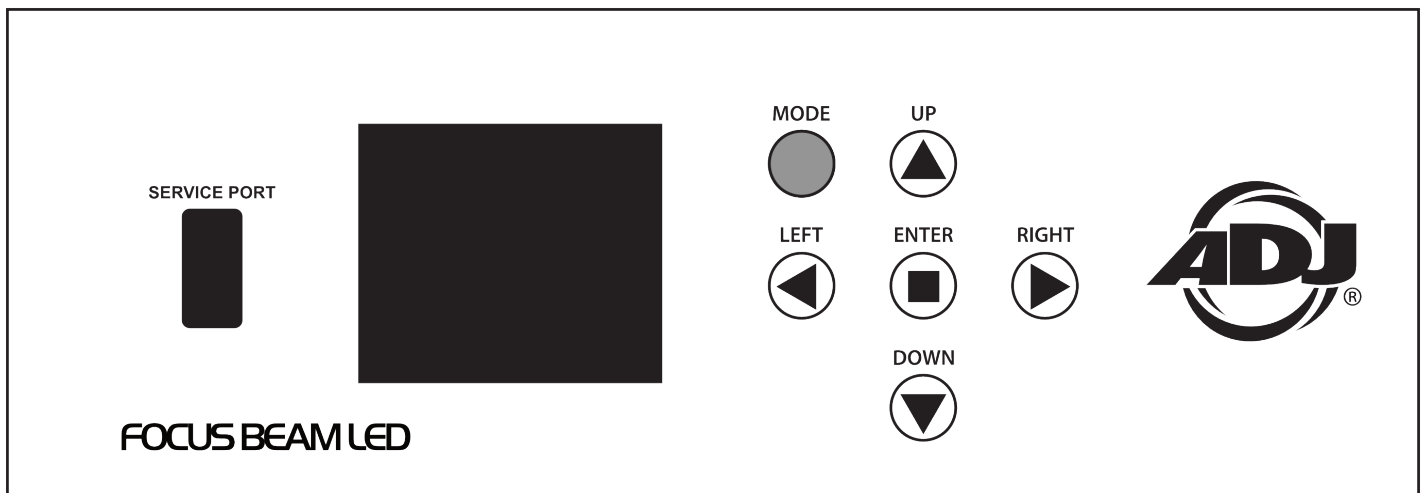
LCD CONTROL PANEL LOCKOUT

When the **Key Lock** function is activated, the control panel will automatically lock after the time set under the **SCREEN SAVER DELAY** submenu.

When the **Key Lock** function is set to **ON**, the control panel will lock, and then the display will show "**Un-Lock**" at the bottom of the display. Press and hold the **MODE** button for 3 seconds to unlock.

When the Key Lock function is set to **ON1**, the control panel will lock and the display will show "**Unlock**" at the bottom of the display. To unlock the display follow these steps:

1. Press the **UP** button, and the display will show *.
2. Press the **DOWN** button, and the display will show **.
3. Press the **UP** button, and the display will show ***.
4. Press the **DOWN** button, and the display will show ****.
5. Press the **ENTER** button, to confirm.

If the button sequence was entered correctly, the display and control panel will unlock. If the button sequence was entered incorrectly, the display will return to the DMX address display.

SYSTEM MENU (Software Version >V1.0.3)

MENU	SUBMENU	OPTIONS / VALUES (Default Settings in **BOLD**)		DESCRIPTION
DMX SETTINGS	Set Address	001-XXX		DMX Addressing
	DMX Channel Mode	16Ch / 18Ch		DMX Channel Mode Selection
	No DMX Status	**Hold Last** / Blackout / Manual		DMX Lost Status
PERSONALITY	Status Settings	Pan Invert: ON / **OFF**		Reverse Pan Motion
		Tilt Invert: ON / **OFF**		Reverse Tilt Motion
		P./T. Feedback: ON / **OFF**		Pan/Tilt Movement Feedback
		P./T. Speed: **Speed 1** / Speed 2		Pan/Tilt Movement Speed
		Hibernation: Off / 01M~99M / **15M**		Sleep Setting (No Activity)
	Fan Setting	Head Fan: **Auto** / High / Silent (Low)		Fan Speed Setting
	Dim Modes	**Standard**/Stage/TV/Architectur/ Theatre/Stage2 Dim Speed: 0.1-0.9s ~ 1-10s		Dimming Curve Modes Dimming Speed
	LED Refresh Rate	**1200**/900-1500/2500/4000/5000/6000' 10000 / 15000 / 20000 / 25000 (Hz)		LED Refresh Setting
	Gamma	1.0 / **2.0** / 2.2 / 2.4 / 2.6 / 2.8		Gamma Brightness
	Reset Motors	Reset All Motors: YES / **NO**		Reset All Motors
		Pan/Tilt Reset: YES / **NO**		Reset the Pan & Tilt Motors
		Effect Reset: YES / **NO**		Reset the Effect Motor
		Shutter Reset: YES / **NO**		Reset the Shutter Motor
	Display	Intensity: 1~**10** (Dimmest-Brightest		Display Intensity Adjustment
		Display Invert: YES / **NO**		Display Inversion
		Screen Saver Delay: OFF~10M		Display Shutoff Time
		Key Lock: OFF / ON / ON1		Display Control Lock
	Service	Pass Code = 050	Effect Adjust (Calibration) **(Pass Code = 50)**	Calibration Adjustment
			USB Port Power: ON / **OFF**	USB Port Activation
			Update Software: YES / **NO**	Software Update
			Factory Restore: YES / **NO** **(Pass Code = 11)**	Restore Factory Settings
Manual Control	Pan	000-255		Manual Control Settings
	Pan Fine	000-255		
	Tilt	000-255		
	Tilt Fine	000-255		
	Color	000-255		
	Gobo	000-255		
	Prism 1	000-255		
	Prism 1 Rot.	000-255		
	Prism 2	000-255		
	Prism 2 Rot.	000-255		
	Shutter	000-255		
	Dimmer	000-255		
	Dimmer Fine	000-255		
	Focus	000-255		
	Frost	000-255		
	Dim Modes	000-255		
	P/T Speed	000-255		
	Special Function	000-255		

SYSTEM MENU (Software Version >V1.0.4)

MENU	SUBMENU	OPTIONS / VALUES (Default Settings in **BOLD**)		DESCRIPTION
DMX SETTINGS	Set Address	001-XXX		DMX Addressing
	DMX Channel Mode	16Ch / 18Ch		DMX Channel Mode Selection
	No DMX Status	**Hold Last** / Blackout / Manual		DMX Lost Status
PERSONALITY	Status Settings	Pan Degree: 630 / **540**		Pan Degree Selection
		Pan Invert: ON / **OFF**		Reverse Pan Motion
		Tilt Invert: ON / **OFF**		Reverse Tilt Motion
		P./T. Feedback: ON / **OFF**		Pan/Tilt Movement Feedback
		P./T. Speed: **Speed 1** / Speed 2		Pan/Tilt Movement Speed
		Hibernation: Off / 01M~99M / **15M**		Sleep Setting (No Activity)
	Fan Setting	Head Fan: **Auto** / High / Silent (Low)		Fan Speed Setting
	Dim Modes	**Standard**/Stage/TV/Architectur/ Theatre/Stage2 Dim Speed: 0.1-0.9s ~ 1-10s		Dimming Curve Modes Dimming Speed
	LED Refresh Rate	**1200**/900-1500/2500/4000/5000/6000' 10000 / 15000 / 20000 / 25000 (Hz)		LED Refresh Setting
	Dim Curve	**Linear** / Square / Inverse Square / S-Curve		Set Dimming Curve
	Reset Motors	Reset All Motors: YES / **NO**		Reset All Motors
		Pan/Tilt Reset: YES / **NO**		Reset the Pan & Tilt Motors
		Effect Reset: YES / **NO**		Reset the Effect Motor
		Shutter Reset: YES / **NO**		Reset the Shutter Motor
	Display	Intensity: 1~10 (Dimmest-Brightest		Display Intensity Adjustment
		Display Invert: YES / NO		Display Inversion
		Screen Saver Delay: OFF~10M		Display Shutoff Time
		Key Lock: OFF / ON / ON1		Display Control Lock
	Service	Pass Code = 050	Effect Adjust (Calibration) **(Pass Code = 50)**	Calibration Adjustment
			USB Port Power: ON / **OFF**	USB Port Activation
			Update Software: YES / **NO**	Software Update
			Factory Restore: YES / **NO** **(Pass Code = 11)**	Restore Factory Settings
Manual Control	Pan	000-255		Manual Control Settings
	Pan Fine	000-255		
	Tilt	000-255		
	Tilt Fine	000-255		
	Color	000-255		
	Gobo	000-255		
	Prism 1	000-255		
	Prism 1 Rot.	000-255		
	Prism 2	000-255		
	Prism 2 Rot.	000-255		
	Shutter	000-255		
	Dimmer	000-255		
	Dimmer Fine	000-255		
	Focus	000-255		
	Frost	000-255		
	Dim Modes	000-255		
	P/T Speed	000-255		
	Special Function	000-255		

SYSTEM MENU

MENU	SUBMENU	OPTIONS / VALUES (Default Settings in **BOLD**)		DESCRIPTION
INTERNAL PROGRAMS	Program 1	Speed: 000~255 Fade: 000~255		Program 1 with Adjustments
	Program 2	Speed: 000~255 Fade: 000~255		Program 2 with Adjustments
	Program 3	Speed: 000~255 Fade: 000~255		Program 3 with Adjustments
	Program 4	Speed: 000~255 Fade: 000~255		Program 4 with Adjustments
	Program 5	Speed: 000~255 Fade: 000~255		Program 5 with Adjustments
	Program 6	Speed: 000~255 Fade: 000~255		Program 6 with Adjustments
	Program 7	Speed: 000~255 Fade: 000~255		Program 7 with Adjustments
INFORMATION	Fixture Life Time	Power On Time: XXXXXX Hours		Total Running Time (Not Resettable)
		P-On Time-R: XXXXXX Hours		Total Running Time (Resettable)
		P-On Time-Reset: YES / NO Pass Code = 50		Reset Total Running Time
	Total LED Time	LED On Time: XXXXXX Hours		Total LED On Running Time (Not Resettable)
		LED On Time-R: XXXXXX Hours		LED On Running Time (Resettable)
		LED Hours Reset: YES / NO **Pass Code = 50**		Reset LED Running Time
	Fixture Temps	LED's	Current: XXX ˚F / XXX ˚C	Current Head Temperature
			Max Resettable: XXX ˚F / XXX ˚C	Maximum Temperature[1] Reached (Resettable) (See Note 1)
			Max Not Resettable: XXX ˚F / XXX ˚C	Maximum Temperature[2] Reached (Not Resettable) (See Note 2)
		Reset Lamp Temp: YES / NO (Pass Code = 050)		Reset LED Temperature (Max Resettable)
	Fan Info. (RPM)	LED Fan: XXXX		LED Fan Speed
	DMX Values[3] (See Note 3)	Pan / Pan Fine / Tilt / Tilt Fine / Color / Gobo /		Current DMX Values
		Prism 1 / Prism 1 Rot / Prism 2 / Prism 2 Rot /		
		Dimmer / Dimmer Fine / Focus / Frost / Dim Modes / P/T Speed / Special Function		
	Error Logs	Fixture Errors		List of Errors (One by One)
		Reset Error Log - Pass Code = 50		Clear the Error Log
	Software Version	X.XX		Current Software Version

SYSTEM MENU

DMX SETTINGS - The submenus listed under **DMX SETTINGS** are as follows: **Set Address**, **DMX Channel Mode**, and **No DMX Status**.

- **SET ADDRESS** - In this submenu you can find and set your desired DMX address.
- **DMX CHANNEL MODE** - In this submenu you can find and set your desired DMX channel mode.
- **NO DMX STATUS** - This submenu setting is used as a precaution mode in case the DMX signal is lost or interrupted. The operating mode chosen in this submenu is the running mode the fixture will go into when the DMX signal is lost. Listed below are the 3 modes.
- **Hold Last** - This setting will have the fixture stay in the last DMX setup.
- **Blackout** - This setting will have the fixture automatically go into stand by mode.
- **Manual** - This setting will go into the current manual control set up. See **MANUAL CONTROL**.

PERSONALITY - The submenus listed under **PERSONALITY** are as follows: **Status Settings**, **Fan Settings**, **Dim Modes**, **LED Refresh Rate**, **Gamma**, **Reset Motors**, **Display**, and **Service**.

- **STATUS SETTINGS** - In this submenu you are able to access and adjust/change: Pan Degree, Pan Invert, Tilt Invert, P./T. Feedback, P./T. Speed, and Hibernation.
  NOTE: Pan Degree Added with software version **≥1.0.4**
- **FAN SETTINGS** - In this submenu you are able to select your desired fan speed setting.
- **DIM MODES** - In this submenu you are able to select your desired dimmer mode and adjust the dimming speed time.
- **LED REFRESH RATE** - In this submenu you are able to select your desired LED refresh rate.
- **GAMMA** - In this submenu you are able to select your desired gamma setting. NOTE: Remove from software version **≥1.0.3**.
- **DIM CURVE** - In this submenu you are able to select your desired dimmer curve setting. NOTE: Added with software version **≥1.0.4**
- **RESET MOTORS** - In this submenu you are able to reset selected motors.
- **DISPLAY** - In this submenu you are able to adjust the display intensity, invert the display, activate the display blackout, and activate/deactivate the display lock.
- **SERVICE** - In this submenu you are able to access and adjust/change: the calibration (effect adjust), activate the service port, update software, and restore the factory settings.

MANUAL CONTROL - This menu is for manual testing and manual control. Pan, tilt, color wheel, gobo wheel, prism 1, prism 1 rotation, shutter, dimmer, focus, frost can all be tested/adjusted.

NOTE: The Prism and Frost features **CANNOT** be used at the same time.

SYSTEM MENU

INTERNAL PROGRAMS - In this menu you are able to select 1 of 7 internal programs to run. Program running speed and fade speed are adjustable.

INFORMATION - The submenus listed under INFORMATION are as follows: Fixture Life Time, Total LED Time, Fixture Temps, Fan Info. (RPM), DMX Values, Error Logs, and Software Version.

- **FIXTURE LIFE TIME**

  - **Power On Time** -The TOTAL power ON running time of the unit is displayed. This time **CANNOT** be reset.

  - **P-On Time-R** - The **CURRENT** power ON running time of the unit is displayed. This running time may not be the same as the total power ON running time displayed under "**Power On Time**". This time **CAN** be reset. **NOTE: The displayed time represents the current power ON time since the last reset.**

  - **P-On Time-Reset** - Reset the **CURRENT** power **ON** running time that is displayed under "**P-On Time-R**".

- **TOTAL LED TIME**

  - **LED On Time** - The **TOTAL LED ON** time is displayed. This total **LED ON** time **CANNOT** be reset. **NOTE: The displayed time represents the TOTAL LED ON time.**

  - **LED On Time-R** - The **CURRENT LED ON** running time is displayed. This running time may not be the same as the total **LED ON** time displayed under "**LED On Time**". This total **LED ON** time **CAN** be reset. **NOTE: The displayed time represents the current LED ON time since the last reset.**

  - **LED On Time Reset** - With this function you can reset the **CURRENT** LED ON time that is displayed under "**LED On Time-R**".

- **FIXTURE TEMPS**

  - **LED** - The current temperature of the LED is displayed.

  - **Reset LED Temp** - Reset the LED temperature reading.

  - **FAN INFO. (RPM)** - In this submenu the current fan speed will be displayed.

  - **DMX VALUES** - Displays the DMX values of any DMX channel that is currently in use. **NOTE: DMX value options depend on the current DMX channel mode setting.**

  - **ERROR LOGS** - In this submenu you are able to check any unit errors as well a clearing the error log.

  - **SOFTWARE VERSION** - Current software version is displayed.

SYSTEM MENU

Primary-Secondary Configuration:

This function will allows you to link units together 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 output. 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. Set the "Primary" unit to your desired mode of operation.
3. Connect the first "Secondary" unit to the "Primary."
4. Set the "Secondary" unit(s) to DMX control.

DMX TRAITS: CHANNEL FUNCTIONS & VALUES (16/18 DMX Channels)

| 16 Channels	18 Channels	Values	Functions
1	1	000-255	**PAN MOVEMENT 8-BIT:** Pan Movement (0° - 630°)
	2	000-255	**PAN FINE 16-BIT:** Fine Control of Pan Movement
2	3	000-255	**TILT MOVEMENT 8-BIT:** Tilt Movement (0° - 270°)
	4	000-255	**TILT FINE 16-BIT:** Fine Control of Tilt Movement
3	5		**COLOR WHEEL:**
		000-004	Open / White
		005-011	White + Red
		012-018	Red
		019-025	Red + Light Blue
		026-032	Light Blue
		033-039	Light Blue + Green
		040-046	Green
		047-053	Green + Yellow
		054-060	Yellow
		061-067	Yellow + Orange
		068-074	Orange
		075-081	Orange + Magenta
		082-088	Magenta
		089-095	Magenta + Amber
		096-102	Amber
		103-109	Amber + Lime
		110-116	Lime
		117-123	Lime + Purple
		124-130	Purple
		131-137	Purple + Pink
		138-144	Pink
		145-151	Pink + Cyan
		152-158	Cyan
		159-165	Cyan + CTO
		166-172	CTO
		173-179	CTO + Blue
		180-186	Blue
		187-193	Blue + White
		194-220	Clockwise Rotation Fast - Slow
		221-229	Stop
		230-255	Counter-Clockwise Rotation Slow - Fast

16 Channels	18 Channels	Values	Functions
			GOBO WHEEL:
		000-003	Open
		004-007	Gobo 1
		008-011	Gobo 2
		012-015	Gobo 3
		016-019	Gobo 4
		020-023	Gobo 5
		024-027	Gobo 6
		028-031	Gobo 7
		032-035	Gobo 8
		036-039	Gobo 9
		040-043	Gobo 10
		044-047	Gobo 11
		048-051	Gobo 12
		052-055	Gobo 13
		056-059	Gobo 14
		060-063	Open
4	6	064-068	Gobo 1 Shake
		069-072	Gobo 2 Shake
		073-076	Gobo 3 Shake
		077-080	Gobo 4 Shake
		081-084	Gobo 5 Shake
		085-089	Gobo 6 Shake
		090-093	Gobo 7 Shake
		094-097	Gobo 8 Shake
		098-101	Gobo 9 Shake
		102-105	Gobo 10 Shake
		106-110	Gobo 11 Shake
		111-114	Gobo 12 Shake
		115-118	Gobo 13 Shake
		119-122	Gobo 14 Shake
		123-127	Open Shake
		128-189	Counter-Clockwise Rotation Fast - Slow
		190-193	Stop
		194-255	Clockwise Rotation Slow - Fast
			PRISM 1 (8 FACET CIRCULAR):
5	7	000-007	Close
		008-255	Open
			ROTATING PRISM 1 (8 FACET CIRCULAR):
		000-127	Indexing
6	8	128-189	Clockwise Rotation Fast - Slow
		190-193	Stop
		194-255	Counter-Clockwise Rotation Slow - Fast
			PRISM 2 (6 FACET LINEAR):
7	9	**000-007**	Close
		008-255	Open
			ROTATING PRISM 2 (6 FACET LINEAR):
		000-127	Indexing
8	10	128-189	Clockwise Rotation Fast - Slow
		190-193	Stop
		194-255	Counter-Clockwise Rotation Slow - Fast

| 16 Channels	18 Channels	Values	Functions
9	11		**SHUTTER & STROBING:**
		000-031	Close
		032-063	Open
		064-095	Strobing Slow - Fast
		096-127	Open
		128-159	Pulsating Strobe
		160-191	Open
		192-223	Random Strobing Slow - Fast
		224-255	Open
10	12		**MASTER DIMMER:**
		000-255	0% - 100%
11	13		**DIMMER FINE:**
		000-255	0% - 100%
12	14		**FOCUS:**
		000-255	Linear Near - Far
13	15		**FROST:**
		000-255	0% - 100%
14	16		**DIMMER MODES:**
		000-020	Standard
		021-040	Stage
		041-060	TV
		061-080	Architectural
		081-100	Theatre
		101-120	Stage 2
			DIMMER DELAY TIME
		121	0.1Sec.
		122	0.2Sec.
		123	0.3Sec.
		124	0.4Sec.
		125	0.5Sec.
		126	0.6Sec.
		127	0.7Sec.
		128	0.8Sec.
		129	0.9Sec.
		130	1.0Sec.
		131	1.5Sec.
		132	2.0Sec.
		133	3.0Sec.
		134	4.0Sec.
		135	5.0Sec.
		136	6.0Sec.
		137	7.0Sec.
		138	8.0Sec.
		139	9.0Sec.
		140	10Sec.
		141-255	Default to Unit Setting
15	17		**PAN/TILT SPEED:**
		000-255	Fast - Slow

16 Channels	18 Channels	Values	Functions
			LED REFRESH RATE & SPECIAL FUNCTIONS:
		000-010	Default LED Refresh Rate 1200Hz
		011-078	Refresh Rate (Hz)
		11	900
		12	910
		13	920
		14	930
		15	940
		16	950
		17	960
		18	970
		19	980
		20	990
		21	1000
		22	1010
		23	1020
		24	1030
		25	1040
		26	1050
		27	1060
		28	1070
		29	1080
		30	1090
		31	1100
		32	1110
		33	1120
16	18	34	1130
		35	1140
		36	1150
		37	1160
		38	1170
		39	1180
		40	1190
		41	1210
		42	1220
		43	1230
		44	1240
		45	1250
		46	1260
		47	1270
		48	1280
		49	1290
		50	1300
		51	1310
		52	1320
		53	1330
		54	1340
		55	1350
		56	1360
		57	1370
		58	1380
		59	1390
		60	1400

16 Channels	18 Channels	Values	Functions
			LED REFRESH RATE & SPECIAL FUNCTIONS:
		61	1410
		62	1420
		63	1430
		64	1440
		65	1450
		66	1460
		67	1470
		68	1480
		69	1490
		70	1500
		71	2500
		72	4000
		73	5000
		74	6000
		75	10,000
		76	15,000
		77	20,000
		78	25,000
16	18	79	Disable LED Refresh Rate
		080-089	Enable Blackout with Pan/Tilt Movement
		090-099	Disable Blackout with Pan/Tilt Movement
		100-109	Enable Blackout with Color Change
		110-119	Disable Blackout with Color Change
		120-129	Enable Blackout with Gobo Change
		130-139	Disable Blackout with Gobo Change
		140-149	Pan/Tilt Reset
		150-159	Focus Reset
		160-169	Effect Reset
		170-179	Shutter Reset
		180-189	Internal Program 1 (Scenes 1-8)
		190-199	Internal Program 2 (Scenes 9-16)
		200-209	Internal Program 3 (Scenes 17-24)
		210-219	Internal Program 4 (Scenes 25-32)
		220-229	Internal Program 5 (Scenes 33-40)
		230-239	Internal Program 6 (Scenes 41-48)
		240-249	Internal Program 7 (Scenes 49-56)
		250-255	No Function
SOFTWARE UPDATE			

16 Channels	18 Channels	Values	Functions
SOFTWARE UPDATE - DMX Values 250-255 Updated in Software Version >1.0.4			
16	18	250-255	Reset All

DIMMER CURVE CHART

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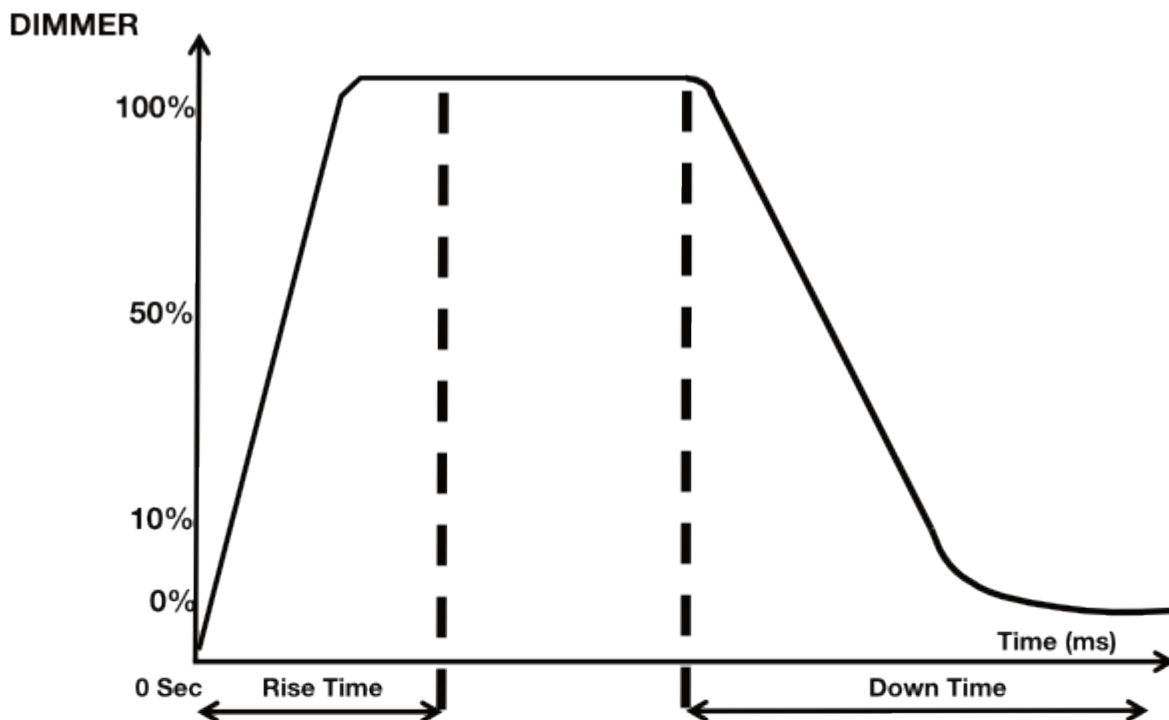
Dimming Curve Ramp Effect	0 sec Fade Time		1 sec Fade Time	
	Rise Time (ms)	Down Time (ms)	Rise Time (ms)	Down Time (ms)
Standard (default)	0	0	0	0
Stage	780	1100	1540	1660
TV	1180	1520	1860	1940
Architectural	1380	1730	2040	2120
Theatre	1580	1940	2230	2280
Stage 2	0	1100	0	1660

LINEAR   SQUARE   INVERSE SQUARE   S-CURVE

29
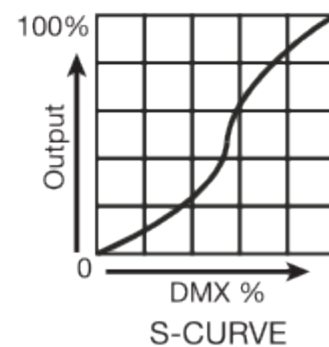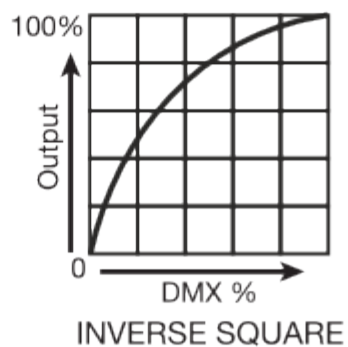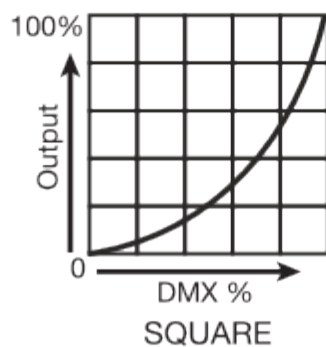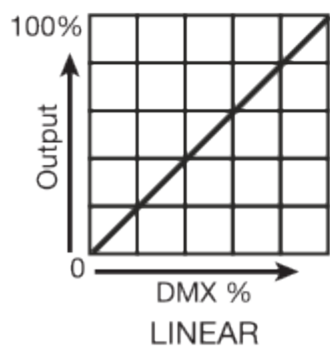
DIMMER CURVE CHART

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 powerCON input. Remove the bad fuse and replace with a new one, and screw the fuse holder back in.

Cleaning
Listed below are a few common problems the user may encounter, with solutions.

Unit not responding to DMX:
1. Check that the DMX cables are connected properly and are wired correctly (pin 3 is "hot"; on some other DMX devices pin 2 may be 'hot'). Also, check that all cables are connected to the right connectors; it does matter which way the inputs and outputs are connected.

Troubleshooting
Due to fog residue, smoke, and dust cleaning the internal and external optical lenses must be carried out periodically to optimize light output.
1. Use normal glass cleaner and a soft cloth to wipe down the outside casing.
2. Clean the external optics with glass cleaner and a soft cloth every 20 days.
3. Always be sure to dry all parts completely before plugging the unit back in.

Cleaning frequency depends on the environment in which the fixture operates (i.e. smoke, fog residue, dust, dew).

SPECIFICATIONS

Light Source:
- 1x 80W Cool White LED Engine
- 2.5° Beam Angle
- Color Temperature: 7400K
- 50,000 Hour Average LED Life

Features:
- Control Protocol: DMX & RDM (Remote Device Management)
- DMX Modes: 2 (16 & 18)
- Dim Modes: 6 Presets (Standard, Stage, TV, Architectural, Theatre & Stage 2)
- Dim Speed control (0.1~10 Seconds)
- Dimming: 0 - 100%
- Strobe & pulse control
- Motorized Focus
- Linear Frost 0-100% (Wash effect)
- 2 Prisms: 6 & 8 Facet, Indexable and Rotatable
- USB firmware update port
- Adjustable LED Refresh Rates (900~25k Hz)
- Adjustable Gamma Settings (1.0-2.8)
- With Wired Digital Communication Network
- Display: Touch display with 5-button touch menu

Color Wheel:
- 13 dichroic colors + white

GOBO Wheel:
- Metal wheel with 15 fixed GOBOs + Open
- GOBO shake effect

Prism Wheel:
- Prism Wheel 1: Rotatable 8-facet Circular
- Prism Wheel 2: Rotatable 6-facet Linear
- Prism Indexing with overlay feature

Control:
- Control Modes: DMX512, RDM (Remote Device Management) & Stand Alone Internal Programs
- 2 DMX Channel Modes: 16 & 18 channels
- 16-Bit Pan, Tilt & Dimmer control

Connections:
- DMX Connections: 5-pin Locking XLR In & Out
- Power Connections: Seetronic Locking Power In & Out

Pan/Tilt:
- Pan & Pan Fine: 630 degrees
- Tilt & Tilt Fine: 270 degrees

Electrical:
- Multi-voltage operation: AC 100-240V, 50-60Hz (Auto Sensing)
- Maximum Power Consumption: 136W @ 120V
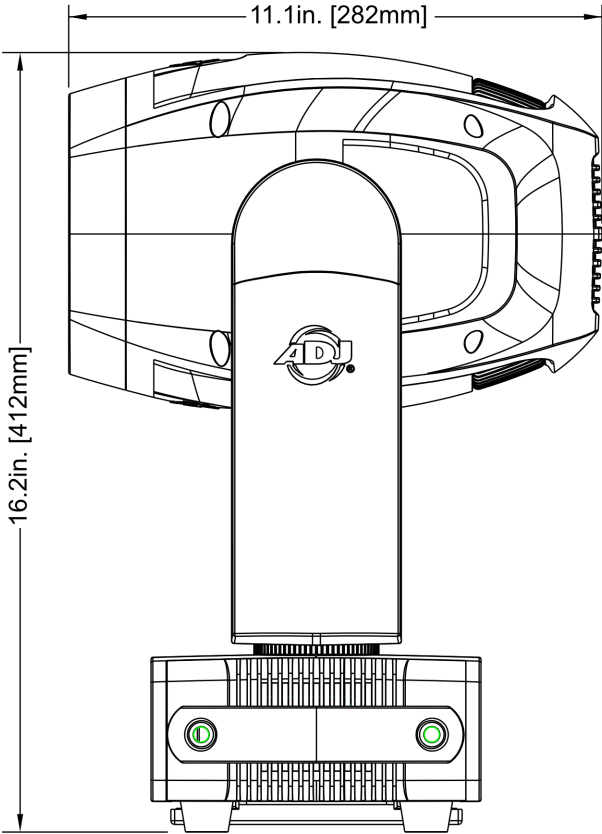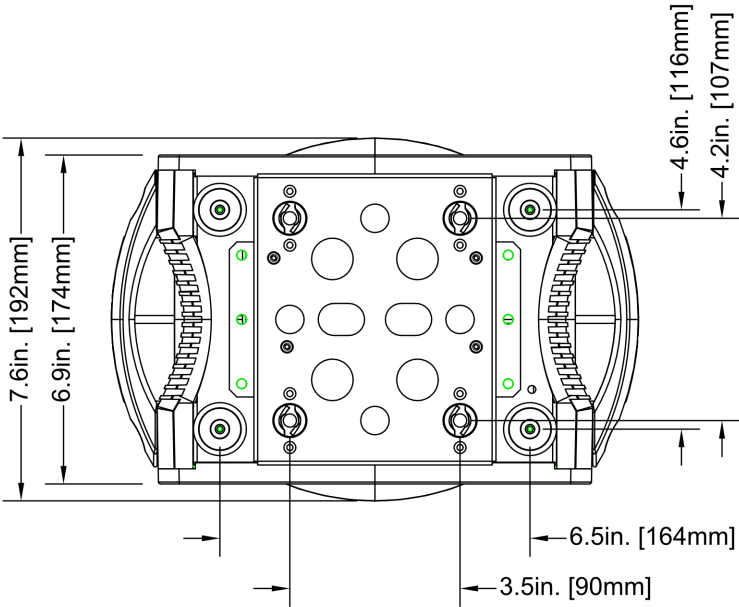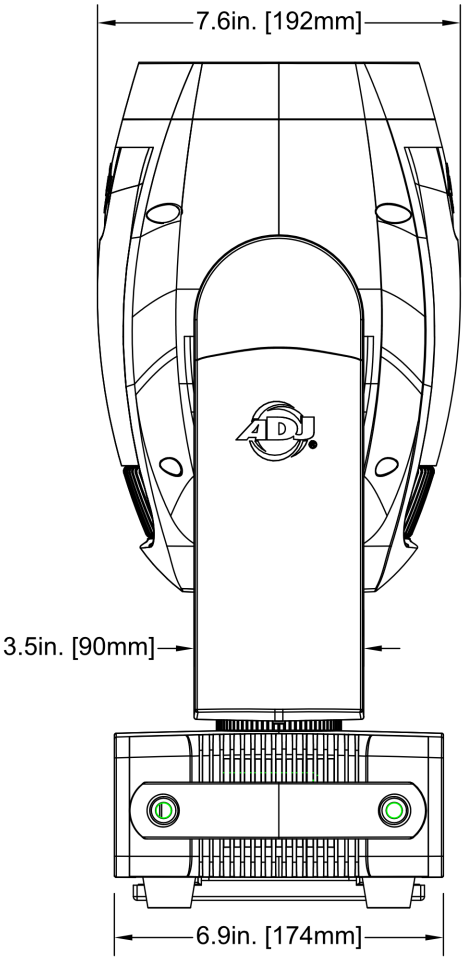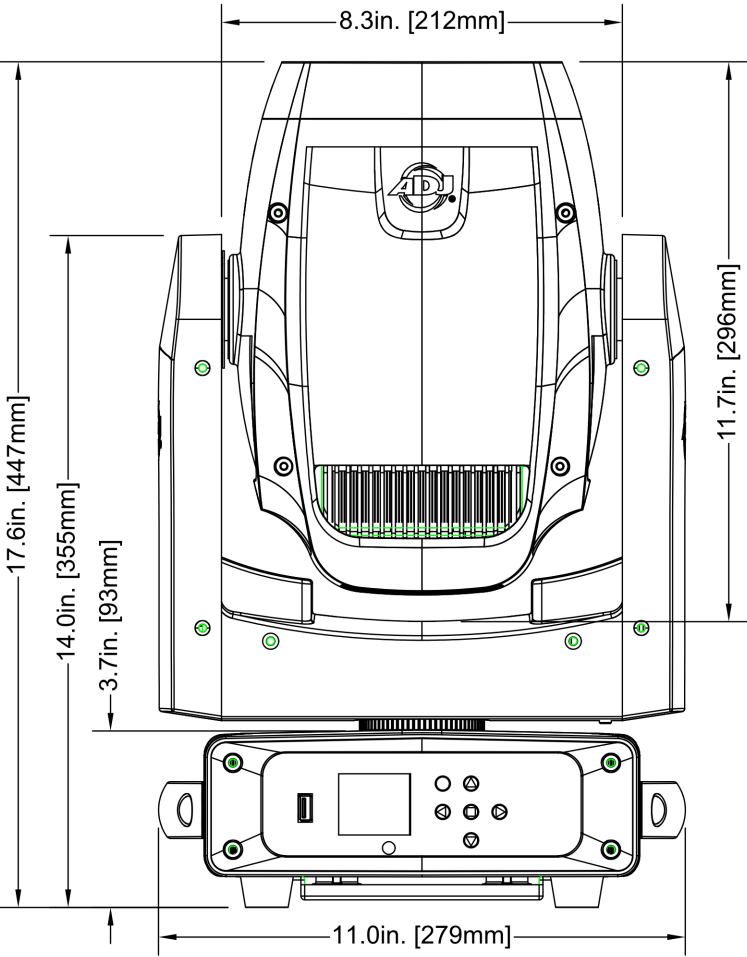- Daisy chain: 15 units @ 120V; 30 units @ 230V

Dimensions & Weight:
- Dimensions (LxWxH): 10.96" x 7.55" x 17.61" / 278x191x447mm
- Weight: 27 lbs. (12.25 kg)

What's Included:
- 2x Omega Brackets
- 1x Seetronic Power Locking Power Cable

DIMENSIONS (VERTICAL)

8.3in. [212mm]

17.6in. [447mm]

14.0in. [355mm]

3.7in. [93mm]

11.7in. [296mm]

11.0in. [279mm]

7.6in. [192mm]

3.5in. [90mm]

6.9in. [174mm]

4.6in. [116mm]

4.2in. [107mm]

7.6in. [192mm]

6.9in. [174mm]

6.5in. [164mm]

3.5in. [90mm]

11.1in. [282mm]

16.2in. [412mm]

FCC STATEMENT

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

FCC RADIO FREQUENCY INTERFERENCE WARNINGS & INSTRUCTIONS

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

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

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