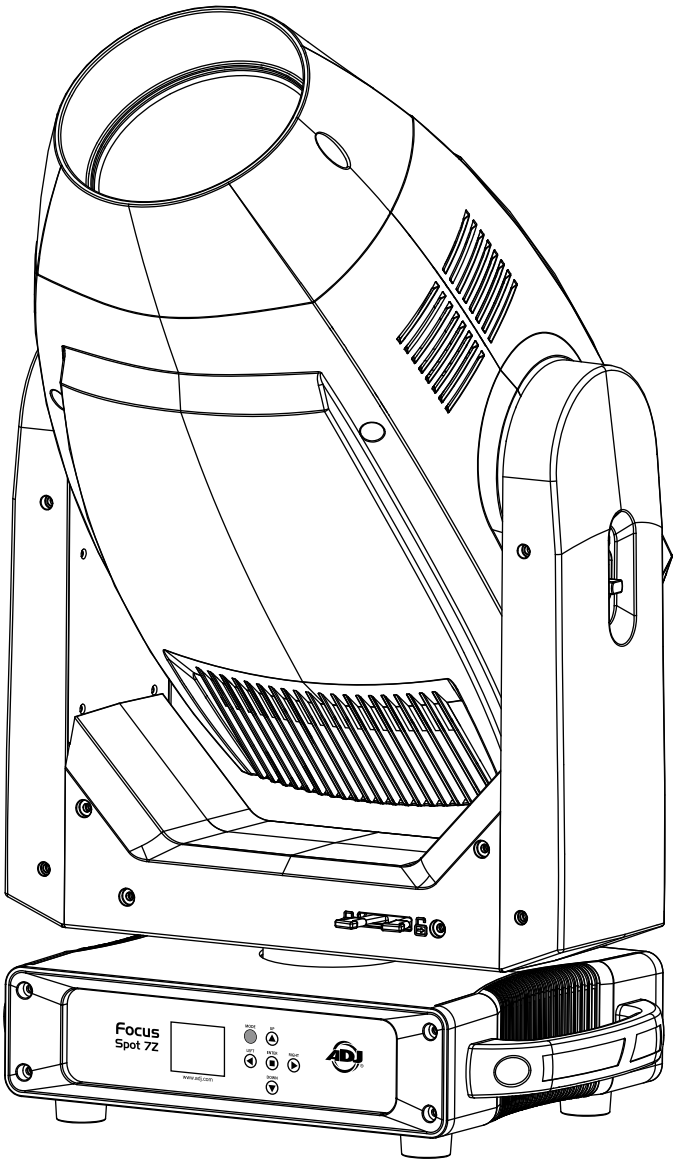

FOCUS SPOT 7Z

User Guide

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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
01/17/23	1	1.04	30/34/45	Initial Release

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.

SOFTWARE UPDATES

For latest software, and updating procedure, please contact ADJ Customer Support.

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.

TRANSPORTATION & HANDLING

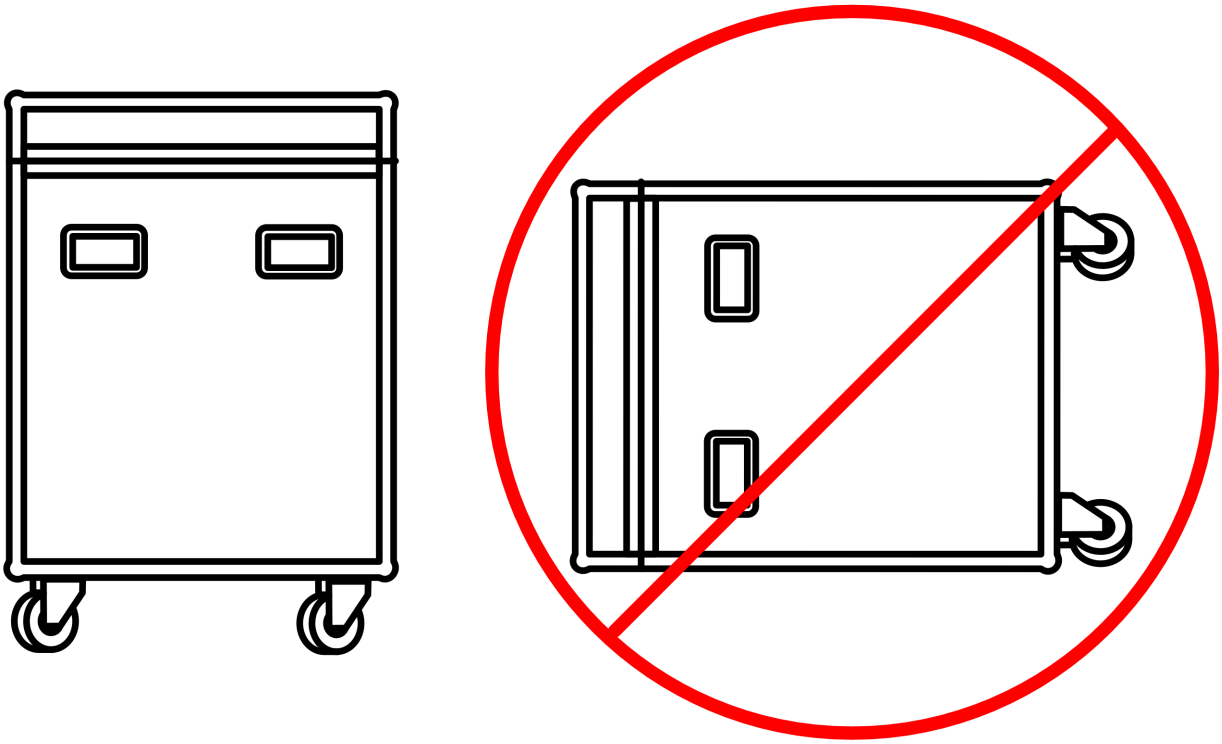
POTENTIAL INTERNAL DAMAGE FROM 'TIPPING' FIXTURE DURING TRANSPORT AND HANDLING

Note that not all features listed are available on all fixtures; the following instructions may not apply.

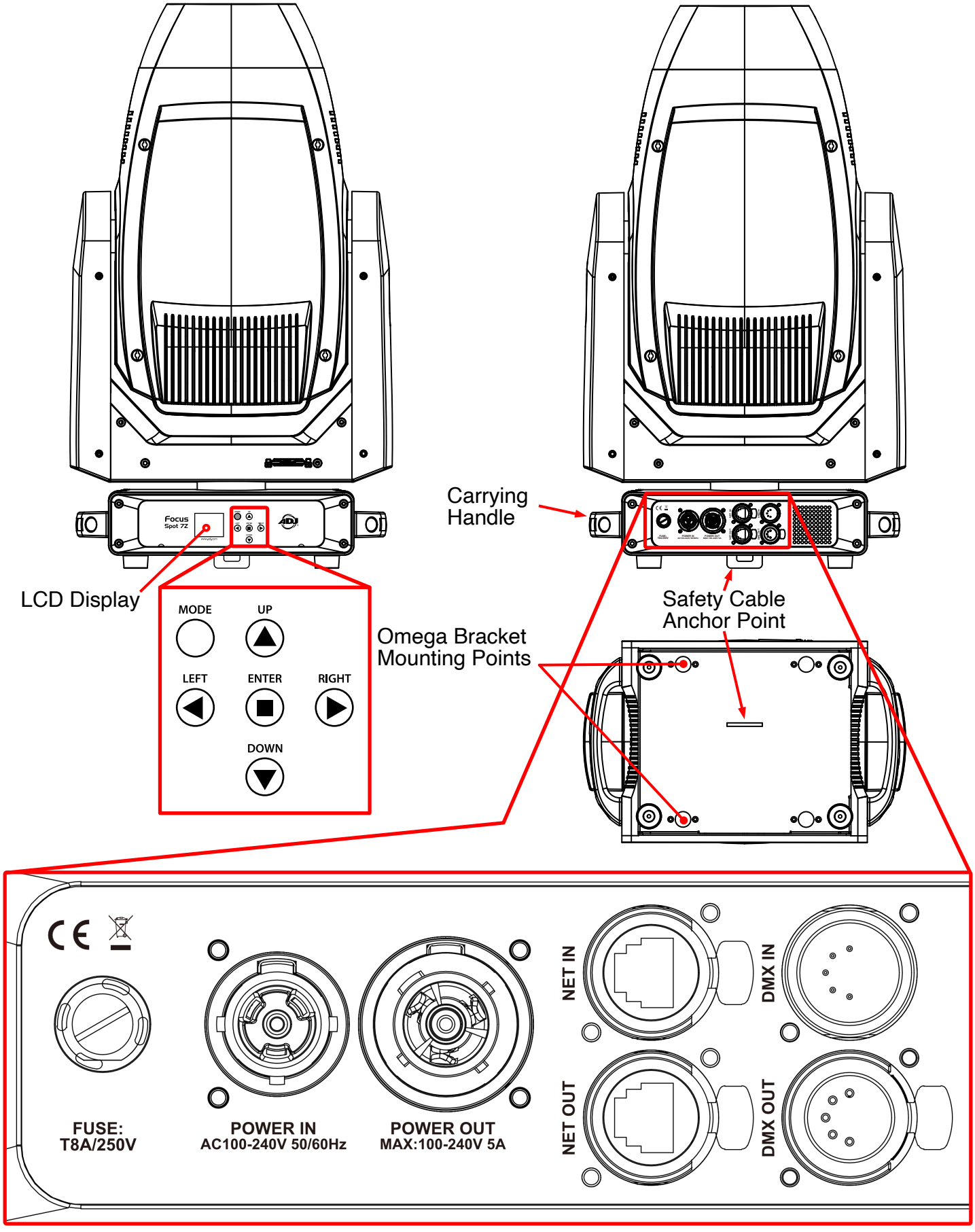
Depending on the model, large format fixtures may contain delicate optics and glass filters. While this product was carefully designed to be roadworthy, it must be handled carefully during transportation. If the fixture contains color flags, before transport, ensure that color flags inside the unit are placed in an OPEN position.

For superior impact protection, some fixtures are shipped in a custom fitted high-density Foam Inlay (FIL). This FIL must be used inside the road-cases for transportation.

DO NOT TIP THE CASE OVER, AND AVOID ALL SHOCKS AND ROUGH HANDLING, ESPECIALLY "TIPPING", THE PRACTICE OF TIPPING THE FIXTURE-CASE OVER TO ITS SIDE AND ONTO A HARD SURFACE. THE CASE MUST RIDE ON ITS WHEELS SO THAT THE FIXTURE-HEAD REMAINS HORIZONTAL DURING TRANSPORTATION.



OVERVIEW

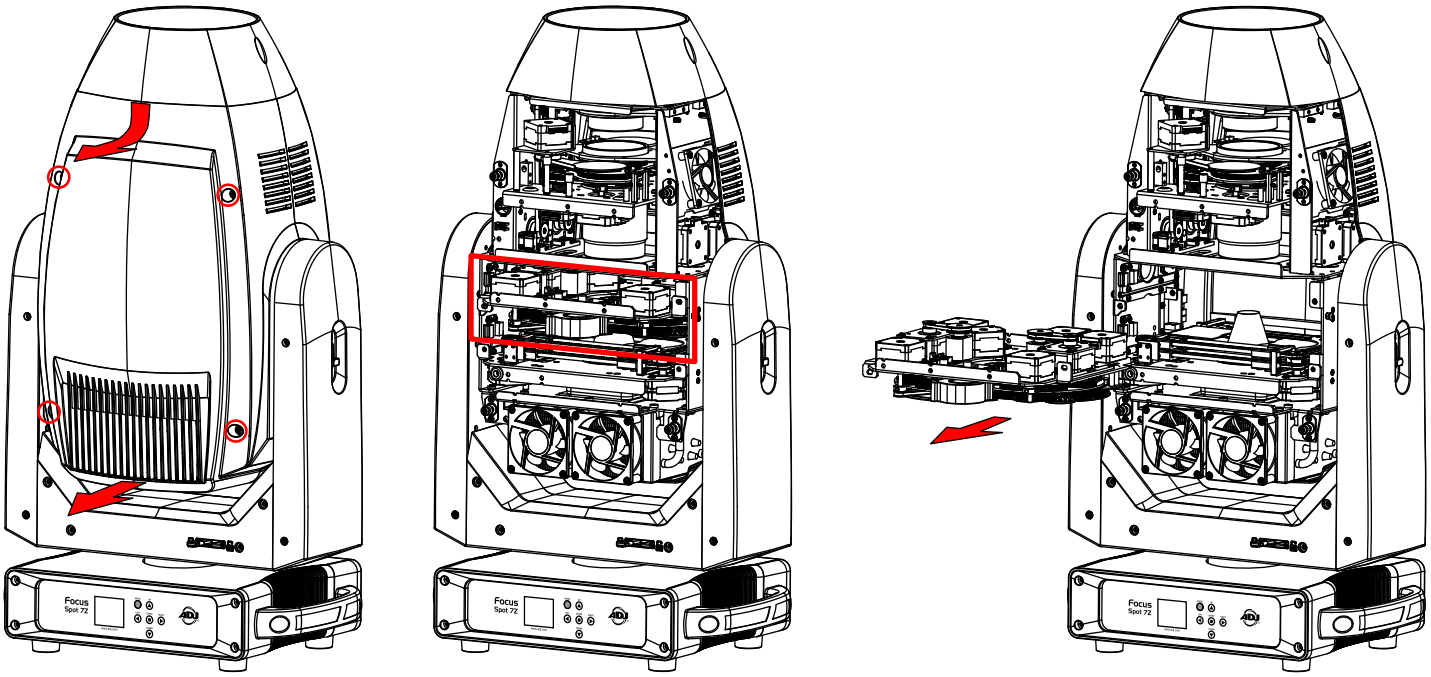

Carrying Handle
LCD Display
Safety Cable Anchor Point
Omega Bracket Mounting Points
MODE
UP
LEFT
ENTER
RIGHT
DOWN
FUSE: T8A/250V
POWER IN AC100-240V 50/60Hz
POWER OUT MAX:100-240V 5A
NET IN
DMX IN
NET OUT
DMX OUT

GOBOS & GOBO REPLACEMENT

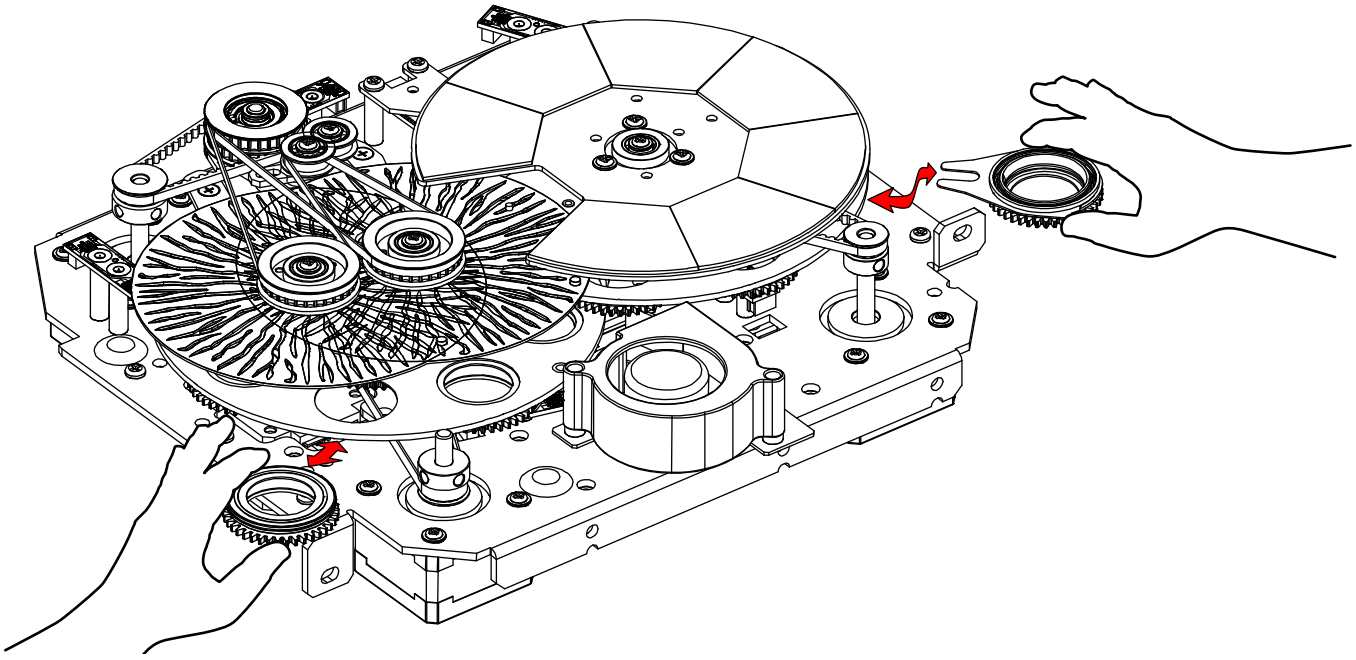
The gobos featured in this unit are interchangeable. Please take care when removing/replacing them, as the metal ones are thin and easy to bend, and the glass gobos are delicate and prone to breakage.

Caution! Never open the unit when in use. Always disconnect the main power before attempting to change the gobos.

Place the fixture on a firm flat surface. Locate the screws on the side of the moving head and remove them. With the panel set aside, locate the Pattern Bracket Assembly and remove the (4x) screws that secure it to the internal housing frame.



Locate the specific Rotating Gobo to replace. Carefully grip the Gobo using your thumb and index finger, gently lift it slightly, and then pull it out and away until it fully clears the Gobo Wheel.



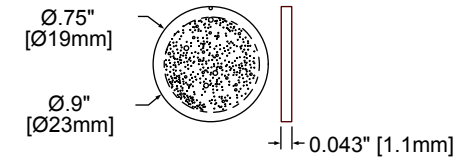
On the Gobo Holders, remove the retaining spring and carefully separate the GOBO from the GOBO Holder. Lastly, remove the flat washer attached to the removed GOBO and attach it to the desired replacement GOBO. Install the replacemet Rotating GOBO.

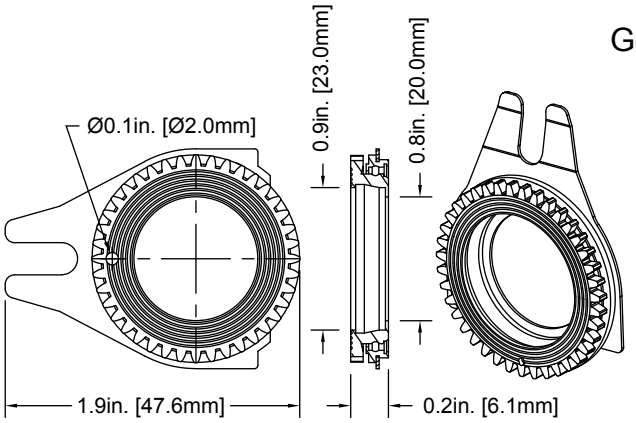
CAUTION: TAKE CARE NOT TO SCRATCH GOBO OR GOBO HOLDER

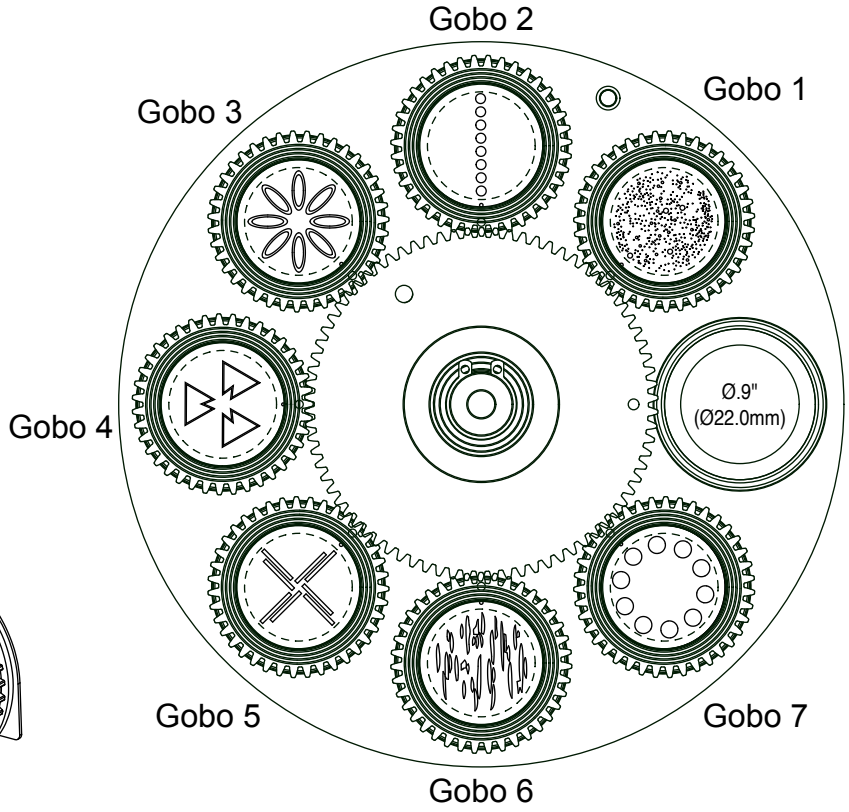
GOBO WHEELS

Gobo Wheel 1 - Factory Default Position Assignments

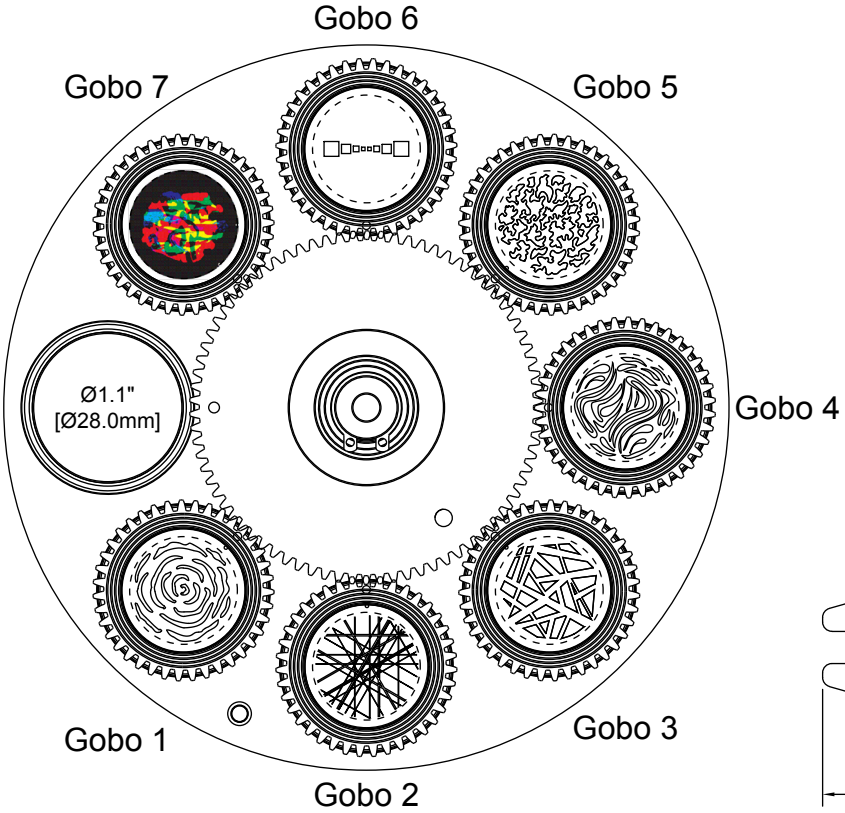
All Gobos on Gobo Wheel 1, and Gobos 1-6 on Gobo Wheel 2 are 1.1mm thick, with Ø19mm I.D., and Ø23mm O.D., and fits in the Gobo Holder shown below.



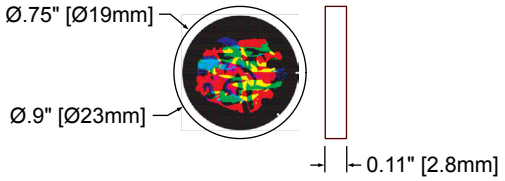


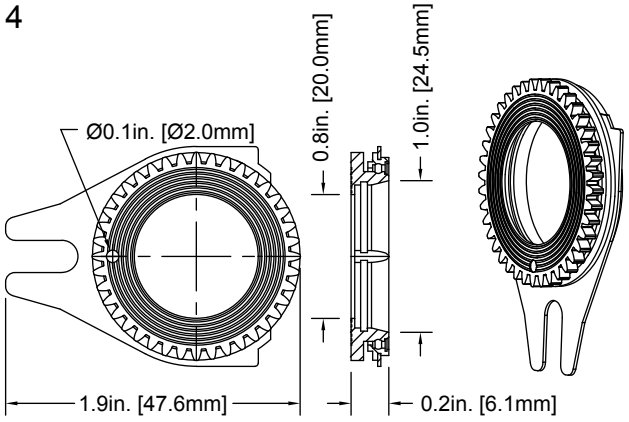


Gobo Wheel 2 - Factory Default Position Assignments



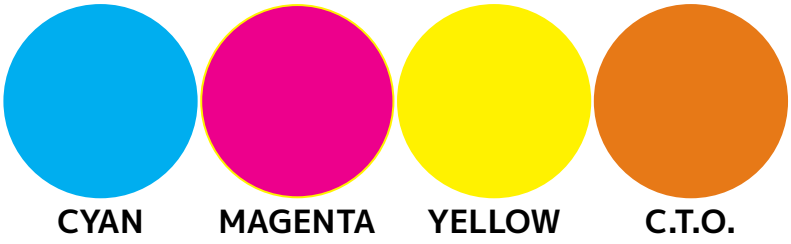
Gobo 7 is 2.8mm thick, with Ø19mm I.D., and Ø23mm O.D., and fits in the Gobo Holder shown below.



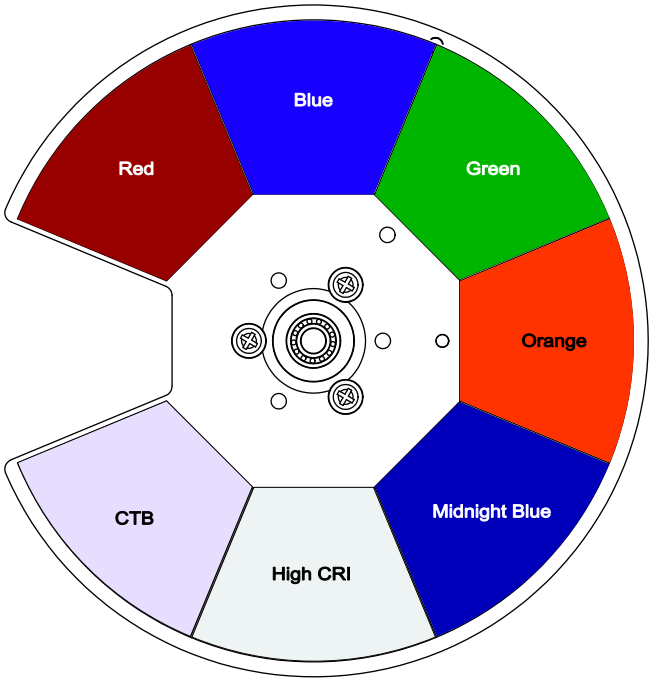


COLOR FLAGS, COLOR WHEEL, & ANIMATION WHEEL

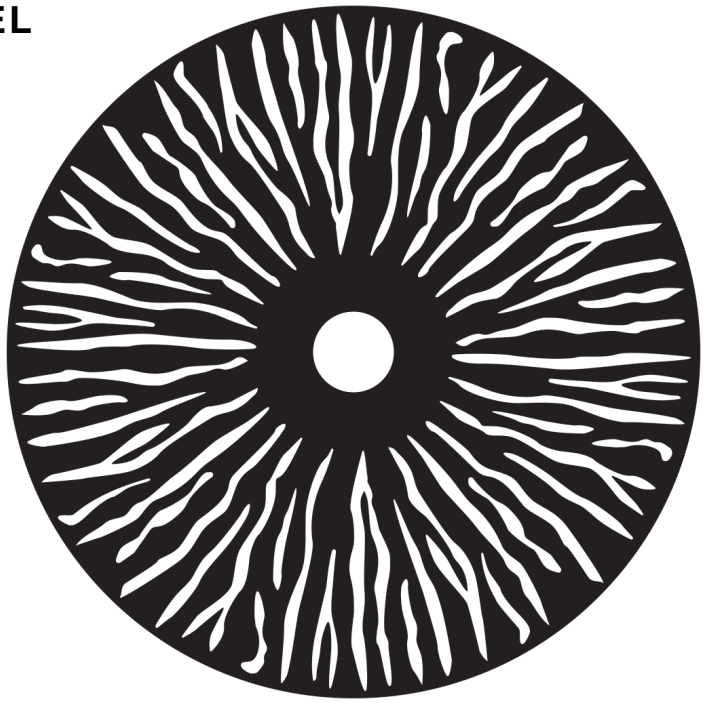
COLOR FLAGS



COLOR WHEEL



ANIMATION WHEEL



INSTALLATION GUIDELINES

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 -**14°F (-10°C)** to **113°F (45°C)**.

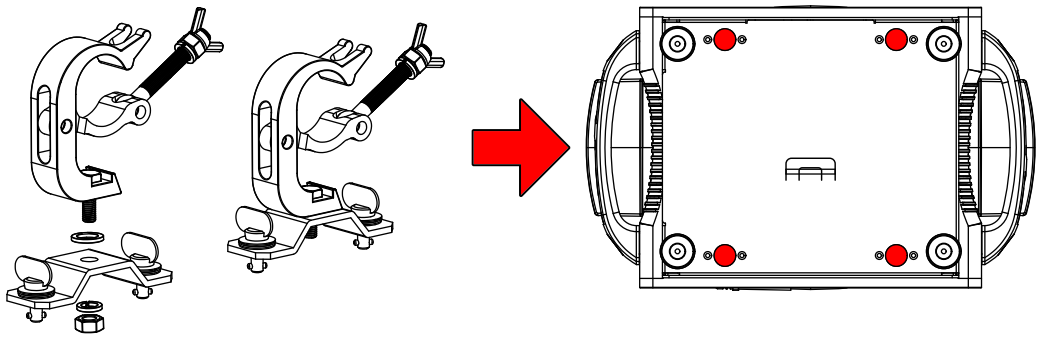
Fixture(s) should be installed in areas outside walking paths, seating areas, or away from areas where unauthorized personnel might reach the fixture by hand.

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 GUIDELINES

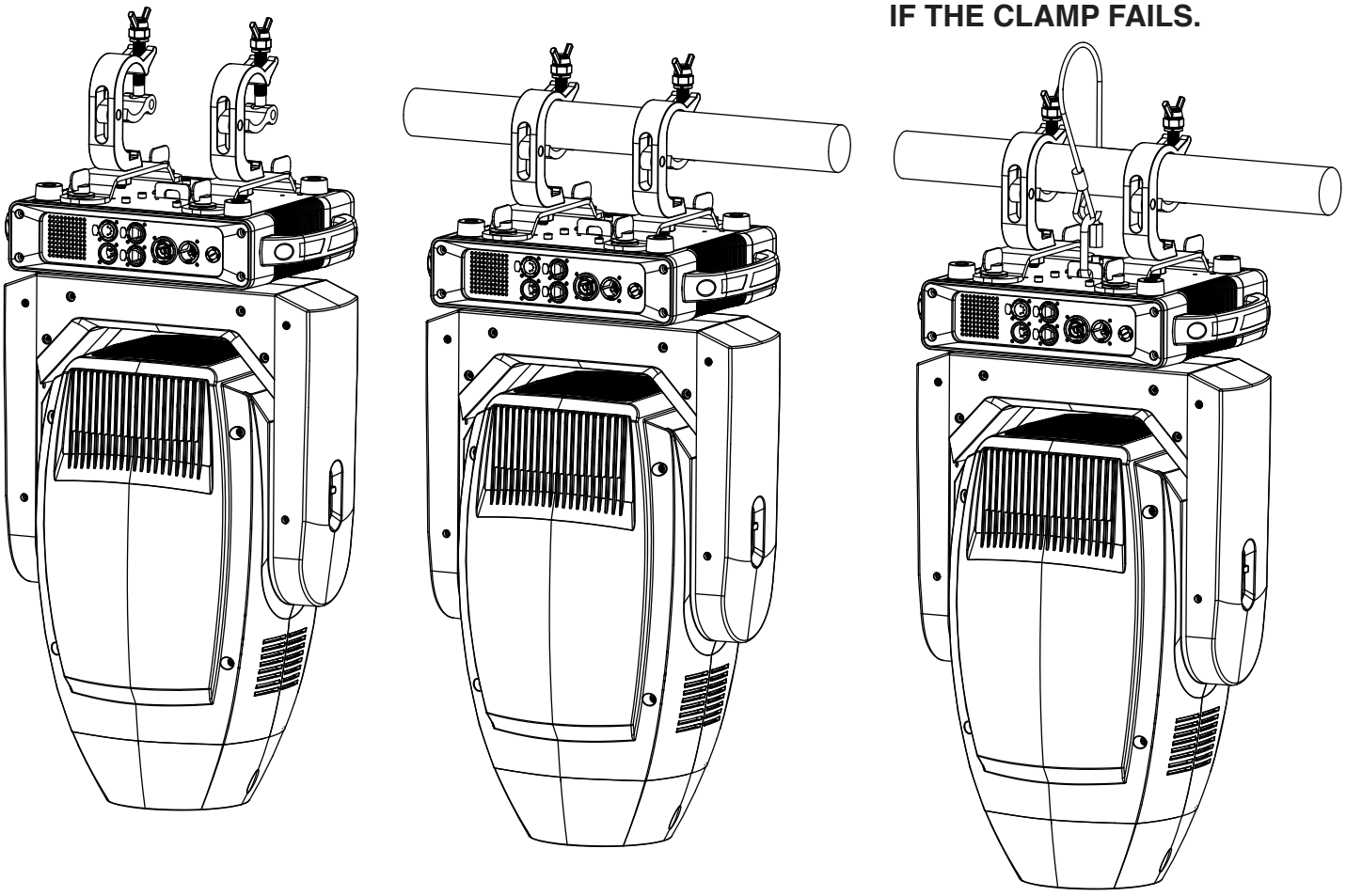
Secure one clamp via a M12 screw and nut into the Omega Bracket. Insert the quick-lock fasteners of the Omega Brackets into the respective holes of the fixture base. **NOTE: The clamp must be attached to the Omega Bracket before attaching the bracket to the fixture.**



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.

*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.

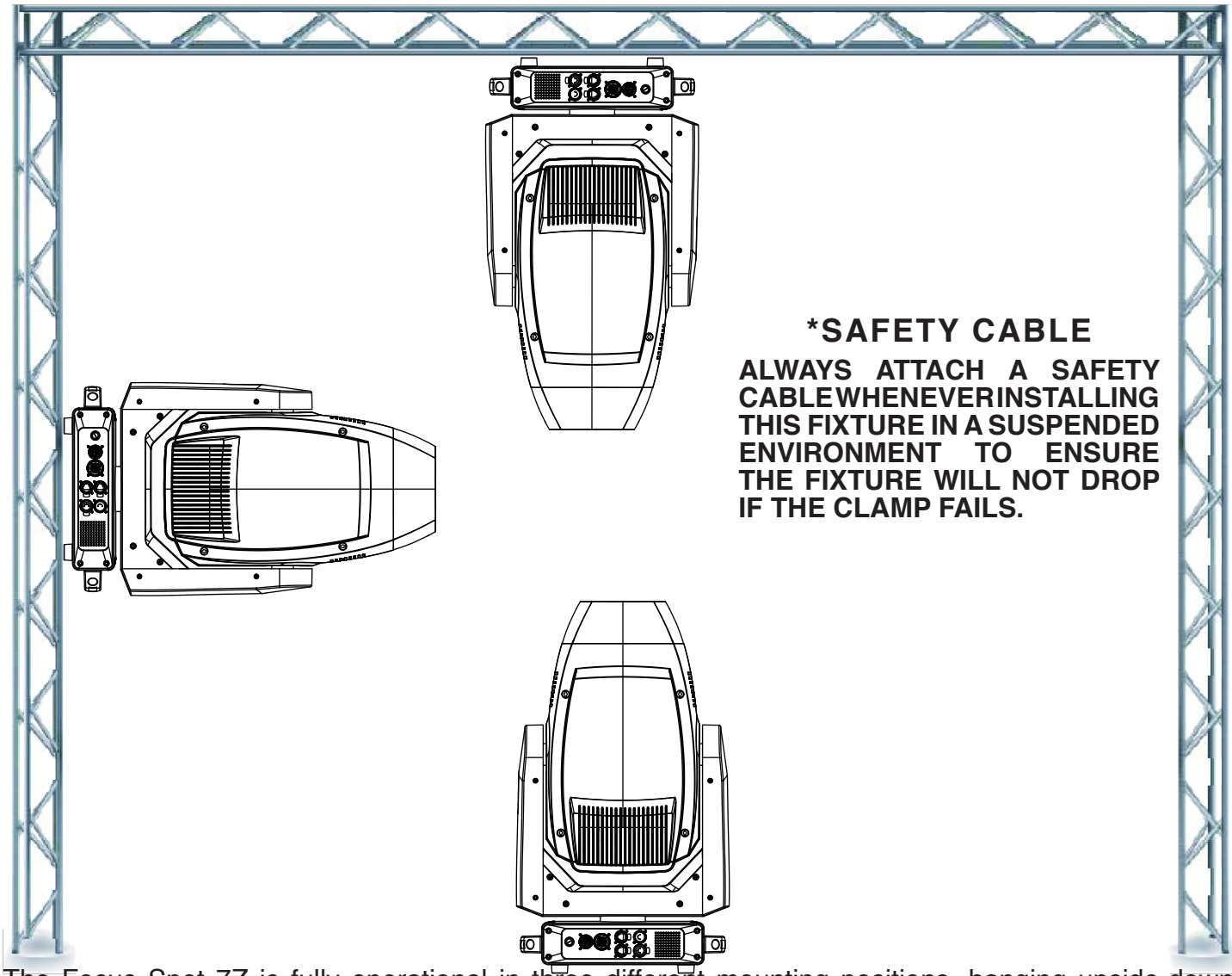


INSTALLATION GUIDELINES

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 7Z 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.

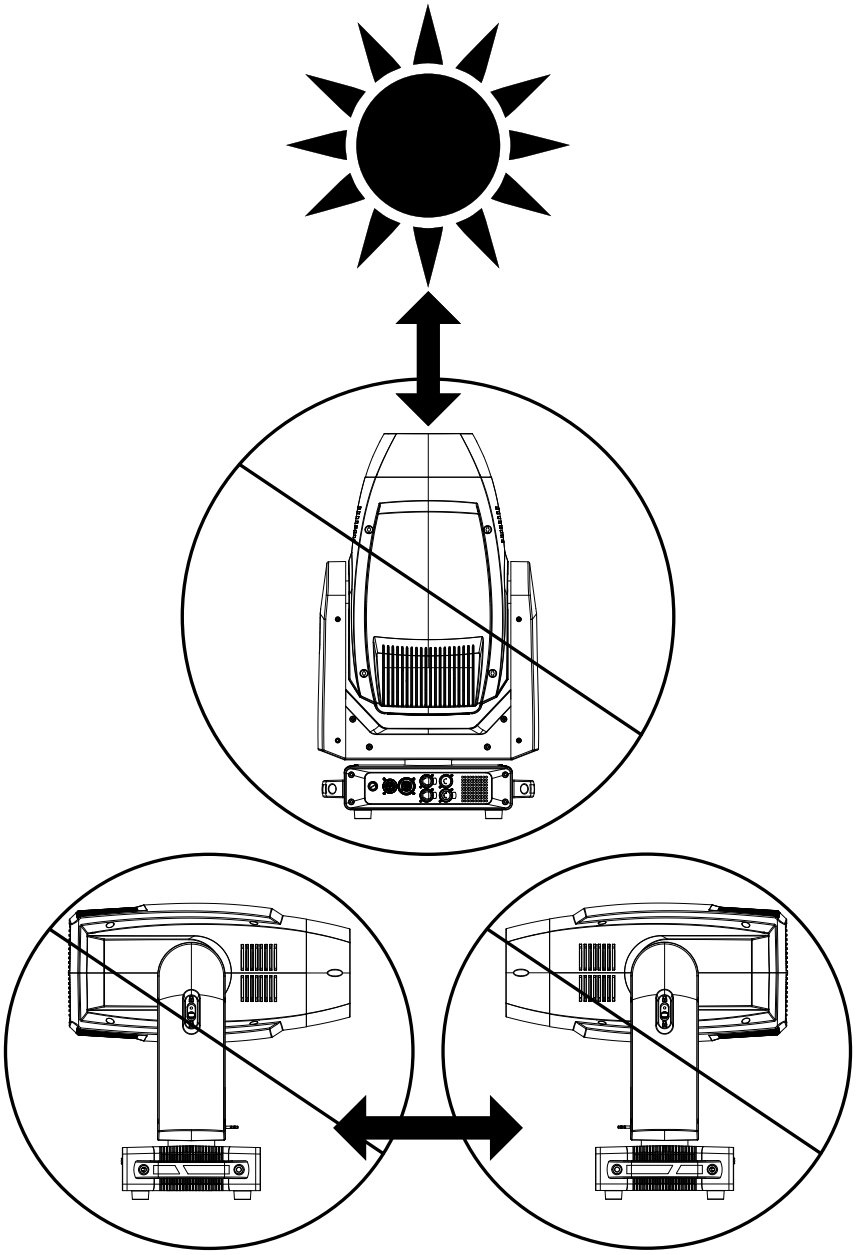
INSTALLATION GUIDELINES

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.



DMX SETUP

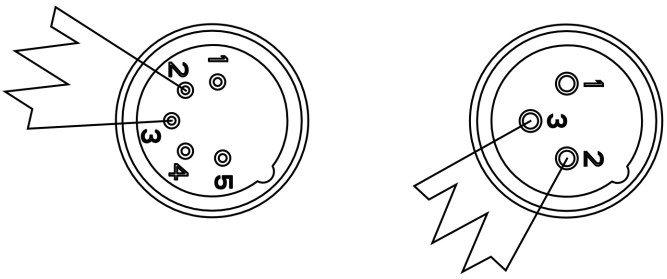
DMX-512: DMX is short for Digital Multiplex. This is a universal protocol used as a form of communication between intelligent fixtures and controllers. A DMX controller sends DMX data instructions from the controller to the fixture. DMX data is sent as serial data that travels from fixture to fixture 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 Operation): The Focus Spot 5Z can be controlled via DMX-512 protocol. The DMX address is set on the front panel of the Focus Spot 5Z. Your unit and your DMX controller require 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.

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.

DMX SETUP

5-Pin XLR DMX Connectors. The Focus Spot 5Z uses 5-pin DMX-512 data cables for DATA transmission in place of a 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.

3-Pin XLR to 5-Pin XLR Conversion		
Conductor	3-Pin XLR Female (Out)	5-Pin XLR Male (In)
Ground/Shield	Pin 1	Pin 1
Data Compliment (- signal)	Pin 2	Pin 2
Data True (+ signal)	Pin 3	Pin 3
Not Used		Do Not Use
Not Used		Do Not Use

DMX ADDRESSING

All fixtures should be given a DMX starting address when 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.

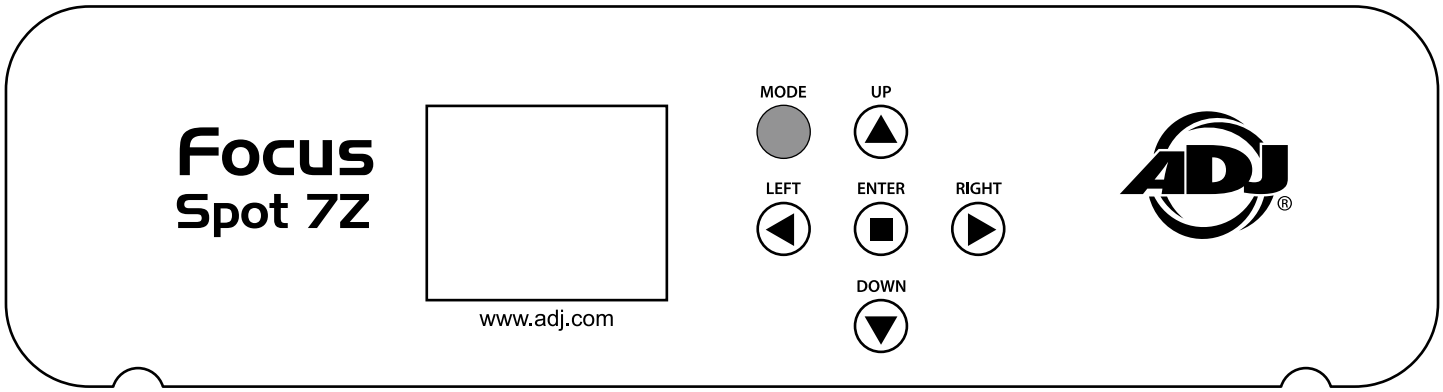
In the case of the Focus Spot 7Z, when in 30 channel mode you should set the starting DMX address of the first unit to 1, the second unit to 31 (30 + 1), the third unit to 61 (31 + 30), and so on. (See the chart below for more details.)

Channel Mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
30 Channels	1	31	61	91
34 Channels	1	35	69	103
45 Channels	1	46	91	136

SYSTEM MENU

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

To access the LCD Menu Control Display via the internal battery, press and hold the BATTERY ICON button for 3 seconds. The LCD Menu Control Display will shut OFF automatically about 1 minute from the last button press.



LCD CONTROL PANEL LOCKOUT

When the Key Lock function is activated, the control panel will automatically lock after the time set under the Display submenu "Screen Saver Delay".

When the Key Lock function is set to ON, the control panel will lock. 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 will not unlock without a code. To unlock the display follow these steps:

1. Press the UP button, and the display will change to: [*][ ][ ][ ] (one * appears).
2. Press the DOWN button, and the display will change to: [*][*][ ][ ] (two * appear).
3. Press the UP button, and the display will change to: [*][*][*][ ] (three * appear).
4. Press the DOWN button, and the display will change to: [*][*][*][*] (four * appear).
5. Press the ENTER button, and the display will be unlocked.

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

MAIN MENU	SUB MENU	OPTIONS / VALUES (Default Settings in **BOLD**)			DESCRIPTION
DMX SETTING	DMX Address	**001**-XXX			
	DMX Channel Mode	Basic 30 / **Standard 34** / Extended 45			
	No DMX Status	**Hold Last** / Blackout / Manual / Internal Programs			
Ethernet Settings	Protocol	**Artnet**, sACN, Disable			
	IP Address	**2.1.1.1**			
	Net Mask	**255.0.0.0**			
	Net Switch	**ON**/OFF			
	Artnet Universe	**0**-32, 767			
	sACN Settings	sACN Universe	**00001**-32000		
		sACN Priority	0-255		
Personality	Prim/Sec Mode	Primary / **Secondary**			
	Select Signal	DMX or Aria			
		Aria and DMX Out			
	Aria Settings	Aria Enable	**ON**/OFF		
		Set Aria Channel	00~14		
			2.4GHz		
		Mesh	**ON**/OFF		
		RDM	**ON**/OFF		
		Bluetooth	ON/**OFF**		
	Status Settings	Pan Degree	540/**630**		
		Pan Invert	ON/**OFF**		
		Tilt Invert	ON/**OFF**		
		P./T. Feedback	**ON**/OFF		
		P./T. Speed	**Speed 1**		
			Speed 2		
			Speed 3		
		Hibernation	OFF, 01M~99M, **15M**		
	Zoom Speed	**Standard**, Fast			
	Dim Modes	**Standard**, Stage, TV, Architectural, Theatre, Stage 2			
		Dim Speed	0.1S~10S		
	LED Refresh Rates	900~1500 (**1200Hz**), 2500, 4000, 5000, 6000, 10KHz, 15KHz, 20KHz, 25KHz			
	Dim Curve	**Square**, Linear, Inv.Squa, S.Curve			
	Reset Motors	Reset All Motors	YES/**NO**		
		Pan/Tilt Reset	YES/**NO**		
		...	...		
		Effect Reset	YES/**NO**		
	Display	Intensity	1-**10**		Intensity - Display Brightness
		Display Invert	YES/**NO**		Invert - Flip Display
		Screen Saver Delay	**OFF**/ON/ON1		
	Service	Passcode	Effect Adjust (Calibration) **050**	Pan 000-255	Pan Calibration
				Tilt 000-255	Tilt Calibration
				Cyan 000-255	Cyan Calibration
				Magenta 000-255	Magenta Calibration
				Yellow 000-255	Yellow Calibration
				CTO 000-255	CTO Calibration
				...	...
			Factory Restore	NO/YES Passcode **011**	Restore to factory settings

SYSTEM MENU

MAIN MENU	SUB MENU	OPTIONS / VALUES (Default Settings in **BOLD**)			DESCRIPTION
MANUAL CONTROL	Pan	000~255			Manual Control Settings
	Pan Fine	000~255			
	Tilt	000~255			
	Tilt Fine	000~255			
	...	000-255			
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		
		P-On Time-R	xxxxxx Hours		
		P-On Time-Reset			
	Total LED Time	LED On Time	xxxxxx Hours		
		LED On Time-R	xxxxxx Hours		
		LED Hourse Reset			
	Fixture Temps	LEDs	Current	T: xxx F / xxx C	
			Max Resettable	T: xxx F / xxx C	
		Base Temp	Current	T: xxx F / xxx C	
			Max Resettable	T: xxx F / xxx C	
		Reset LED Temp	YES/**NO** 50	Passcode **050**	
		Reset Base Temp	YES/**NO** 50	Passcode **050**	
	Fan Info.(RPM)	LED Fan	xxxxRPM LED		
		BaseFan	xxxxRPM		
	DMX Values	Pan			
		Pan Fine			
		...			
	Error Logs	Xxxxx xxxxx	List Errors one by one		
		Reset Error Log	YES/**NO** 50	Passcode **050**	
	Software Version	1U:XXX 2U:XXX 3U:XXX			

SYSTEM MENU

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

- **DMX 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 or power 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/blackout mode.
  - **Manual** - This setting will go into the current manual control setup. See **MANUAL CONTROL**.
  - **Internal Programs** - This setting will go into the current Internal Program setup.

PERSONALITY - The submenus listed under **PERSONALITY** are as follows: **Prim/Sec Mode**, **Select Signal**, **Aria Settings**, **Status Settings**, **Fan Settings**, **Zoom Speed**, **Dim Modes**, **LED Refresh Rate**, **Dim Curve**, **Reset Motors**, **Display**, and **Service**.

PRIM/SEC MODE - In this submenu you are able to designate the units as either "Primary" or "Secondary" unit in a primary-secondary set up.

- **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.
- **FAN SETTINGS** - In this submenu you are able to select your desired fan speed setting.
- ZOOM SPEED - In this submenu you can select between Standard or Fast.
- **DIM MODES** - In this submenu you are able to select your desired dimmer mode and adjust the dimming speed time. See the dimmer mode chart on page 26 for more information.
- **LED REFRESH RATE** - In this submenu you are able to select your desired LED refresh rate.
- **DIM CURVE** - In this submenu you are able to select your desired dimmer curve. See the dimmer curve chart on page 26 for more information.
- **RESET MOTORS** - In this submenu you are able to reset selected motors.
- **DISPLAY** - In this submenu you you are able to adjust the display intensity, invert the display, set the display lock time, and activate/deactivate the display lock.
- **SERVICE** - In this submenu you are able to access and adjust/change: calibration (effect adjust), activate/deactivate the USB port power, update the software, and restore the factory settings.

MANUAL CONTROL - This menu is for manual testing and manual control.

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.

SYSTEM MENU

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** - With this function you can 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.
- **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 current LED ON time CAN be reset. **NOTE: The displayed time represents the current LED ON time since the last reset.**
- **LED Hours Reset** - With this function you can reset the **CURRENT** LED ON time that is displayed under "**LED On Time-R**".

FIXTURE TEMPS

- **LED's:**
  - **Current** - The current LED temperature will be displayed.
  - **Max Resettable** - The current highest temperature the LED has reached will be displayed. This LED temperature may not be the same as the temperature displayed under"CURRENT" or "MAX NOT RESETTABLE". This LED temperature CAN be reset. **NOTE: The displayed temperature represents the highest temperature the LED has reached since the last reset.**
- **RESET LED TEMP** - With this function you can reset the "**MAX RESETTABLE**" LED temperature. **NOTE: When the temperature is reset, the temperature will revert to the CURRENT LED temperature.**
- **RESET BASE TEMP - With this function you can reset the MAX RESETTABLE" Base Temperature.**
- **FAN INFO. (RPM)** - In this submenu the current fan speed's 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 clear the error log.
- **SOFTWARE VERSION** - Current software version is displayed.

FAN CONTROL & NOISE OPERATION

The ADJ Focus Spot 7Z is a high-performance fixture suited for multiple applications. For noise critical environments such as Theater, Opera, or Orchestral Halls, it offers various fan operation modes which remove unwanted noise distractions for the audience and performers. Fan Modes can be changed remotely via the DMX control channel, allowing the fixture to offer high output or whisper-silent operation at a moment's notice. All Fan Modes smoothly transition over a brief period, preventing unwanted attraction to the fixture.

Mode	dbA at 1m LED off	dbA at 1m Dimmer 100%
Fan Control - Auto (Default)	39	47
Fan Control - High	40	55
Fan Control - Low	37	42

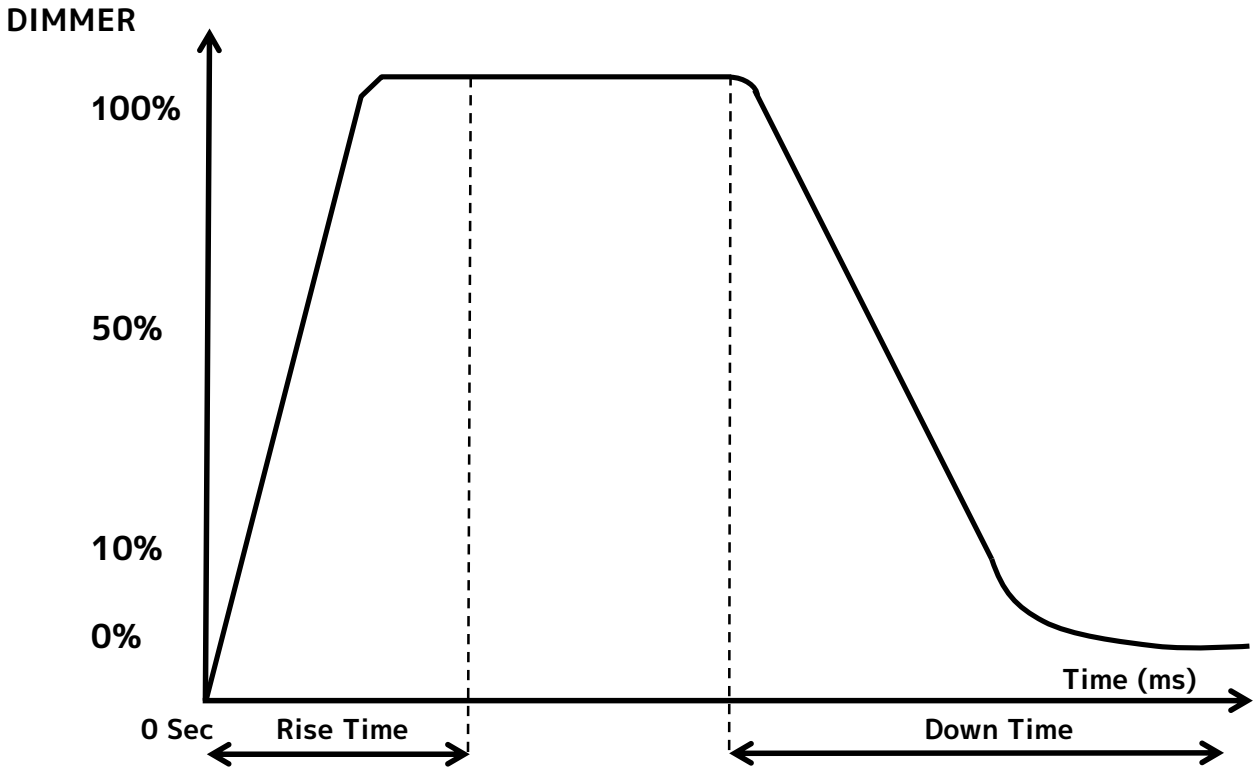
Auto – The default AUTO mode ensures optimal performance of the fixture. Fans only run at the speeds needed to keep the LED engine within a safe temperature range. They will turn off if possible, for example, when the fixture is dimmed to a low intensity. Fans sense the ambient and fixture temperature, and will, always, try to keep noise levels at a minimum. The fixture output will only reduce when the LED engine cannot be cooled down to its safe operating range due to high ambient temperature. **Note: Auto is the recommend mode for daily operation of the ADJ Focus Spot 7Z.**

High – This mode is only required in very high ambient temperatures when automatic fan speed adjustments are not desired. High Fan Speed will cool the fixture most efficiently. This mode will increase wear on the fans and should only be utilized in exceptional circumstances. Fans will always run, even if the fixture is dimmed. Fixture output is kept at 100% unless the LED engine temperature is too high, at which point the fixture will reduce power carefully to ensure safe operation.

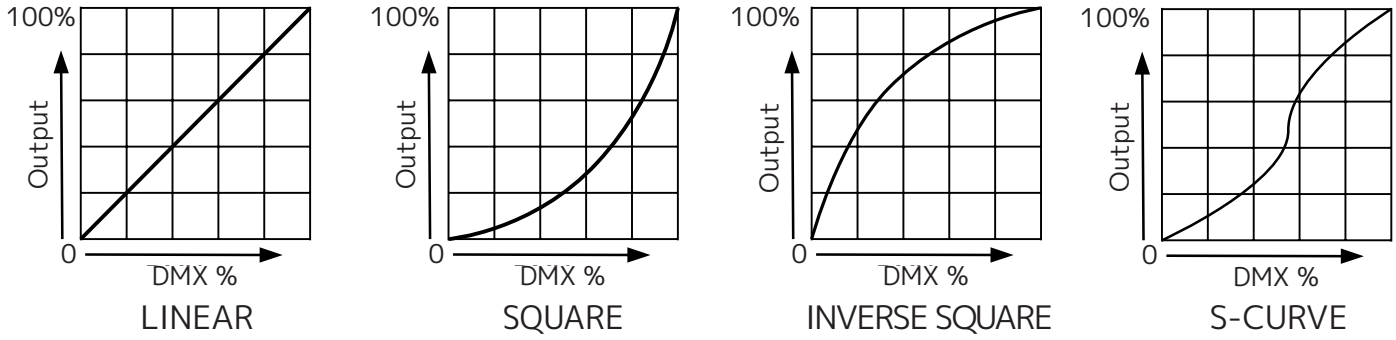
Low – In this mode the fixture reduces fan speeds throughout for a lower noise profile of the fixture. This mode should be sufficient for most uses where lower noise is required. The fixture output is reduced to about 80%.

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.



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



DMX TRAITS: CHANNELS, FUNCTIONS, & VALUES

Features subject to change without notice

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

MODE / CHANNEL			VALUE	FUNCTION
Basic (30)	**Standard (34)**	**Extended (45)**		
1	1	1	000-255	**Pan** - Pan Movement (540/630)
	2	2	000-255	**Pan Fine**
2	3	3	000-255	**Tilt** - Tilt Movement (270)
	4	4	000-255	**Tilt Fine**
3	5	5	000-255	**Cyan** - 0% to 100%
		6	000-255	**Cyan Fine** - 0% to 100%
4	6	7	000-255	**Magenta** - 0% to 100%
		8	000-255	**Magenta Fine** - 0% to 100%
5	7	9	000-255	**Yellow** - 0% to 100%
		10	000-255	**Yellow Fine** - 0% to 100%
6	8	11	000-255	**CTO** - 0% to 100%
		12	000-255	**CTO Fine** - 0% to 100%
7	9	13		**White Color Temp Presets**
			000-023	Open
			024-063	See WCT Preset Chat
			065-255	6700K
8	10	14		**Color Wheel**
			000-004	Open
			005-017	Open / Red
			018-030	Red
			031-043	Red / Blue
			044-056	Blue
			057-069	Blue / Green
			070-082	Green
			083-095	Green / Orange
			096-108	Orange
			109-121	Orange / Midnight Blue
			122-134	Midnight Blue
			135-147	Midnight Blue / High CRI Filter
			148-160	High CRI Filter
			161-173	High CRI Filter
			174-186	CTB
			187-199	CTB / Open
			200-226	Clockwise Color Wheel Rotation, Fast -> Slow
			227-228	No Rotation
			229-255	Counter Clockwise Color Wheel Rotation, Slow -> Fast

Features subject to change without notice

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

MODE / CHANNEL			VALUE	FUNCTION
Basic (30)	Standard (34)	Extended (45)		
9	11	15		**Color Macros - CMY and Color Wheel**
			000-031	OFF
			032-039	Macro1
			040-047	Macro2
			048-055	Macro3
			056-063	Macro4
			064-071	Macro5
			072-079	Macro6
			080-087	Macro7
			088-095	Macro8
			096-103	Macro9
			104-111	Macro10
			112-119	Macro11
			120-127	Macro12
			128-135	Macro13
			136-143	Macro14
			144-151	Macro15
			152-159	Macro16
			160-167	Macro17
			168-175	Macro18
			176-183	Macro19
			184-191	Macro20
			192-199	Macro21
			200-207	Macro22
			208-215	Macro23
			216-223	Macro24
			224-231	Macro25
			232-239	Macro26
			240-247	Macro27
			248-255	Random CMY
10	12	16		**Gobo Wheel 1**
			000-009	Open
			010-019	Gobo 1
			020-029	Gobo 2
			030-039	Gobo 3
			040-049	Gobo 4
			050-059	Gobo 5
			060-069	Gobo 6
			070-079	Gobo 7
			080-094	Gobo 1 shake (slow-fast)
			095-109	Gobo 2 shake (slow-fast)
			110-124	Gobo 3 shake (slow-fast)
			125-139	Gobo 4 shake (slow-fast)
			140-154	Gobo 5 shake (slow-fast)
			155-169	Gobo 6 shake (slow-fast)
			170-189	Gobo 7 shake (slow-fast)
			190-221	Clockwise Gobo Wheel Rotation, Fast -> Slow
			222-223	No Rotation
			224-255	Counter Clockwise Gobo Wheel Rotation, Slow -> Fast
11	13	17		**Gobo 1 Rotation**
			000-005	Gobo1 Rot. Off
			006-128	Gobo Index 0° ... 540°
			129-191	Clockwise Gobo Rotation, Fast -> Slow
			192-192	No Rotation
			193-255	Counter Clockwise Gobo Rotation, Slow -> Fast
		18	000-255	**Gobo 1 Index Fine** - Gobo indexing fine

Features subject to change without notice

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

MODE / CHANNEL			VALUE	FUNCTION
Basic (30)	Standard (34)	Extended (45)		
				Gobo Wheel 2
			000-009	Open
			010-019	Gobo 1
			020-029	Gobo 2
			030-039	Gobo 3
			040-049	Gobo 4
			050-059	Gobo 5
			060-069	Gobo 6
			070-079	Gobo 7
12	14	19	080-094	Gobo 1 shake (slow-fast)
			095-109	Gobo 2 shake (slow-fast)
			110-124	Gobo 3 shake (slow-fast)
			125-139	Gobo 4 shake (slow-fast)
			140-154	Gobo 5 shake (slow-fast)
			155-169	Gobo 6 shake (slow-fast)
			170-189	Gobo 7 shake (slow-fast)
			190-221	Clockwise Gobo Wheel Rotation, Fast -> Slow
			222-223	No Rotation
			224-255	Counter Clockwise Gobo Wheel Rotation, Slow -> Fast
				Gobo 2 Rotation
			000-005	Gobo2 Rot. Off
13	15	20	006-128	Gobo Index 0° ... 540°
			129-191	Clockwise Gobo Rotation, Fast -> Slow
			192-192	No Rotation
			193-255	Counter Clockwise Gobo Rotation, Slow -> Fast
		21	000-255	**Gobo indexing fine**
				Shutter
			000-031	Shutter closed
			032-063	Shutter open
			064-095	Strobe Slow to fast
14	16	22	096-127	Shutter open
			128-159	Pulse effect Slow to fast
			160-191	Shutter open
			192-223	Random strobe Slow to fast
			224-255	Shutter open
15	17	23	000-255	**Dimmer** - Intensity 0 to 100%
	18	24	000-255	**Dimmer Fine** - Dimmer Intensity Fine
				Prism 1
16	19	25	000-031	No Effect
			032-255	Prism 1 (6 Facet Linear)
				Prism 1 Rotate & Index
			000-127	Prism 1 indexing
17	20	26	128-189	Clockwise rotation from fast to slow
			190-193	No rotation
			194-255	Counter-Clockwise rotation from slow to fast
		27	000-255	**Prism 1 Index Fine** - Fine 16-bit index
				Prism 2
18	21	28	000-031	No Effect
			032-255	Prism 2 (4 Facet Square)
				Prism 2 Rotate & Index
			000-127	Prism 2 indexing
19	22	29	128-189	Clockwise rotation from fast to slow
			190-193	No rotation
			194-255	Counter-Clockwise rotation from slow to fast
		30	000-255	**Prism 2 Index Fine** - Fine 16-bit index

Features subject to change without notice

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

MODE / CHANNEL			VALUE	FUNCTION
Basic (30)	**Standard (34)**	**Extended (45)**		
20	23	31		**Prism/Gobo Macros**
			000-009	No Prism - Open
			010-019	Macro1
			020-029	Macro2
			030-039	Macro3
			040-049	Macro4
			050-059	Macro5
			060-069	Macro6
			070-079	Macro7
			080-089	Macro8
			090-099	Macro9
			100-109	Macro10
			110-119	Macro11
			120-129	Macro12
			130-139	Macro13
			140-149	Macro14
			150-159	Macro15
			160-169	Macro16
			170-179	Macro17
			180-189	Macro18
			190-199	Macro19
			200-209	Macro20
			210-219	Macro21
			220-229	Macro22
			230-239	Macro23
			240-255	Macro24
21	24	32	000-255	**Focus** - 0% to 100%
		33	000-255	**Focus fine** - 0% to 100%
22	25	34	000-255	**Zoom** - Narrow to wide
		35	000-255	**Zoom fine** - Narrow to wide 16-bit
23	26	36		**Iris**
			000-191	Max. diameter to Min.diameter
			192-223	Pulse opening fast to slow
			224-255	Pulse closing slow to fast
		37	000-255	**Iris Fine** - Iris Fine
24	27	38	000-255	**Frost 1** - 0% to 100% (Medium)
25	28	39	000-255	**Frost 2** - 0% to 100% (Heavy)
26	29	40		**Animation**
			000-005	Wheel Rot. Off
			006-128	Animation Index 0 ... 540°
			129-191	Clockwise Animation Rotation, Fast -> Slow
			192-192	No Rotation
			193-255	Counter Clockwise Animation Rotation, Slow-> Fast

Features subject to change without notice

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

MODE / CHANNEL			VALUE	FUNCTION
Basic (30)	**Standard (34)**	**Extended (45)**		
27	30	41		**Dimmer Mode**
			000-020	Default to Unit Setting
			021-040	Standard
			041-060	Stage
			061-080	TV
			081-100	Architectural
			101-120	Theater
			121-140	Stage 2
			141-160	**Dim Speed From Fast to Slow** (0.1-10s)
			141	0.1 Sec.
			142	0.2 Sec.
			143	0.3 Sec.
			144	0.4 Sec.
			145	0.5 Sec.
			146	0.6 Sec.
			147	0.7 Sec.
			148	0.8 Sec.
			149	0.9 Sec.
			150	1.0 Sec.
			151	1.5 Sec.
			152	2.0 Sec.
			153	3.0 Sec.
			154	4.0 Sec.
			155	5.0 Sec.
			156	6.0 Sec.
			157	7.0 Sec.
			158	8.0 Sec.
			159	9.0 Sec.
			160	10 Sec.
			161-255	Default to Unit Setting
	31	42		**Dim Curves**
			000-020	Square
			021-040	Linear
			041-060	Inv. Squa
			061-080	S. Curve
			081-255	No function
28	32	43		**CMY / Color Macro Speed** Max -> Min
29	33	44		**Pan/Tilt Speed**
			000-225	Pan/Tilt Fast -> Slow
			226-235	Blackout by movement
			236-245	Blackout by all wheel changing
			246-255	No function

Features subject to change without notice

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

MODE / CHANNEL			VALUE	FUNCTION
Basic (30)	Standard (34)	Extended (45)		
				Special Function
			000-039	No function
			040-049	Fan Control - Low (Hold 3s)
			050-059	Fan Control - High (Hold 3s)
			060-069	Fan Control - Auto (Default) (Hold 3s)
			070-074	All motor Reset (Hold 3s)
			075-079	Pan / Tilt Reset (Hold 3s)
			080-084	Color Reset (Hold 3s)
			085-089	Gobo Reset (Hold 3s)
			090-094	Focus and Zoom Reset (Hold 3s)
			090-099	Shutter Reset (Hold 3s)
			100-104	No function
			105-109	Other motors Reset (Hold 3s)
			110-142	No function
			143-144	Pan/Tilt Speed 1 (Default) (Hold 5s)
			145-146	Pan/Tilt Speed 2 (Hold 5s)
			147-148	Pan/Tilt Speed 3 (Hold 5s)
			149-150	Aria ON (Default) (Hold 3s)
			151-152	Aria OFF (Hold 5s)
			153-154	Hibernation Enable (Hold 3s)
			155-156	Hibernation OFF (Hold 5s)
			157-158	Display Backlight ON (Hold 3s)
			159-160	Display Backlight OFF (Hold 5s)
			161-164	No function
			165-166	Invert Pan ON (Hold 3s)
30	34	45	167-168	Invert Pan OFF (Hold 5s)
			169-170	Invert Tilt ON (Hold 3s)
			171-172	Invert Tilt OFF (Hold 5s)
			173-173	900 Hz LED Refresh Rate (Hold 1s)
			174-174	910 Hz LED Refresh Rate (Hold 1s)
			175-175	920 Hz LED Refresh Rate (Hold 1s)
			176-176	930 Hz LED Refresh Rate (Hold 1s)
			177-177	940 Hz LED Refresh Rate (Hold 1s)
			178-178	950 Hz LED Refresh Rate (Hold 1s)
			179-179	960 Hz LED Refresh Rate (Hold 1s)
			180-180	970 Hz LED Refresh Rate (Hold 1s)
			181-181	980 Hz LED Refresh Rate (Hold 1s)
			182-182	990 Hz LED Refresh Rate (Hold 1s)
			183-183	1000 Hz LED Refresh Rate (Hold 1s)
			184-184	1010 Hz LED Refresh Rate (Hold 1s)
			185-185	1020 Hz LED Refresh Rate (Hold 1s)
			186-186	1030 Hz LED Refresh Rate (Hold 1s)
			187-187	1040 Hz LED Refresh Rate (Hold 1s)
			188-188	1050 Hz LED Refresh Rate (Hold 1s)
			189-189	1060 Hz LED Refresh Rate (Hold 1s)
			190-190	1070 Hz LED Refresh Rate (Hold 1s)
			191-191	1080 Hz LED Refresh Rate (Hold 1s)
			192-192	1090 Hz LED Refresh Rate (Hold 1s)
			193-193	1100 Hz LED Refresh Rate (Hold 1s)
			194-194	1110 Hz LED Refresh Rate (Hold 1s)
			195-195	1120 Hz LED Refresh Rate (Hold 1s)

Features subject to change without notice *Rotation direction (Clockwise/Counter-Clockwise) and control of effects depends on head orientation and Pan/Tilt settings*				
MODE / CHANNEL			**VALUE**	**FUNCTION**
Basic (30)	**Standard (34)**	**Extended (45)**		
30	34	45		**Special Function**
			196-196	1130 Hz LED Refresh Rate (Hold 1s)
			197-197	1140 Hz LED Refresh Rate (Hold 1s)
			198-198	1150 Hz LED Refresh Rate (Hold 1s)
			199-199	1160 Hz LED Refresh Rate (Hold 1s)
			200-200	1170 Hz LED Refresh Rate (Hold 1s)
			201-201	1180 Hz LED Refresh Rate (Hold 1s)
			202-202	1190 Hz LED Refresh Rate (Hold 1s)
			203-203	1210 Hz LED Refresh Rate (Hold 1s)
			204-204	1220 Hz LED Refresh Rate (Hold 1s)
			205-205	1230 Hz LED Refresh Rate (Hold 1s)
			206-206	1240 Hz LED Refresh Rate (Hold 1s)
			207-207	1250 Hz LED Refresh Rate (Hold 1s)
			208-208	1260 Hz LED Refresh Rate (Hold 1s)
			209-209	1270 Hz LED Refresh Rate (Hold 1s)
			210-210	1280 Hz LED Refresh Rate (Hold 1s)
			211-211	1290 Hz LED Refresh Rate (Hold 1s)
			212-212	1300 Hz LED Refresh Rate (Hold 1s)
			213-213	1310 Hz LED Refresh Rate (Hold 1s)
			214-214	1320 Hz LED Refresh Rate (Hold 1s)
			215-215	1330 Hz LED Refresh Rate (Hold 1s)
			216-216	1340 Hz LED Refresh Rate (Hold 1s)
			217-217	1350 Hz LED Refresh Rate (Hold 1s)
			218-218	1360 Hz LED Refresh Rate (Hold 1s)
			219-219	1370 Hz LED Refresh Rate (Hold 1s)
			220-220	1380 Hz LED Refresh Rate (Hold 1s)
			221-221	1390 Hz LED Refresh Rate (Hold 1s)
			222-222	1400 Hz LED Refresh Rate (Hold 1s)
			223-223	1410 Hz LED Refresh Rate (Hold 1s)
			224-224	1420 Hz LED Refresh Rate (Hold 1s)
			225-225	1430 Hz LED Refresh Rate (Hold 1s)
			226-226	1440 Hz LED Refresh Rate (Hold 1s)
			227-227	1450 Hz LED Refresh Rate (Hold 1s)
			228-228	1460 Hz LED Refresh Rate (Hold 1s)
			229-229	1470 Hz LED Refresh Rate (Hold 1s)
			230-230	1480 Hz LED Refresh Rate (Hold 1s)
			231-231	1490 Hz LED Refresh Rate (Hold 1s)
			232-232	1500 Hz LED Refresh Rate (Hold 1s)
			233-233	2500 Hz LED Refresh Rate (Hold 1s)
			234-234	4000 Hz LED Refresh Rate (Hold 1s)
			235-235	5000 Hz LED Refresh Rate (Hold 1s)
			236-236	6000 Hz LED Refresh Rate (Hold 1s)
			237-237	10,000 Hz LED Refresh Rate (Hold 1s)
			238-238	15,000 Hz LED Refresh Rate (Hold 1s)
			239-239	20,000 Hz LED Refresh Rate (Hold 1s)
			240-240	25,000 Hz LED Refresh Rate (Hold 1s)
			241-241	Internal program 1 (scenes 1~8) (Hold 3s)
			242-242	Internal program 2 (scenes 9~16) (Hold 3s)
			243-243	Internal program 3 (scenes 17~24) (Hold 3s)
			244-244	Internal program 4 (scenes 25~32) (Hold 3s)
			245-245	Internal program 5 (scenes 33~40) (Hold 3s)
			246-246	Internal program 6 (scenes 41~48) (Hold 3s)
			247-247	Internal program 7 (scenes 49~56) (Hold 3s)
			248-250	Enable CT Mode (Hold 3s)
			251-253	Disable CT Mode (Hold 5s)
			254-255	No function

DMX TRAITS: COLOR TEMPERATURE

DMX VALUE	COLOR TEMPERATURE (K)	DMX VALUE	COLOR TEMPERATURE (K)
24	2700	44	4700
25	2800	45	4800
26	2900	46	4900
27	3000	47	5000
28	3100	48	5100
29	3200	49	5200
30	3300	50	5300
31	3400	51	5400
32	3500	52	5500
33	3600	53	5600
34	3700	54	5700
35	3800	55	5800
36	3900	56	5900
37	4000	57	6000
38	4100	58	6100
39	4200	59	6200
40	4300	60	6300
41	4400	61	6400
42	4500	62	6500
43	4600	63	6600

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.

FIXTURE RDM INFORMATION:

RDM Code	Device ID	Device Model ID	Personality ID
0X667	OPEN	1639	OPEN

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:

RDM Accessible Parameters	
[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	[0x0016] Undefined PID [0x0016, (22)]

ERROR CODES

Error Codes subject to change without notice	
ERROR CODES	**DESCRIPTION**
Pan Tilt Cyan Megenta Yellow CTO Gobo1 Gobo2 Gobo1Rot Gobo2Rot Color1 Animation Anima.Rot Iris Prism1 Prism1Rot Prism2 Prism2Rot Frost1 Frost2 Zoom Focus Base Temp Head Temp LED Fan1 LED Fan3 LED Fan4 Focus Fan Gobo Fan Base Fan	Movement is not located in the default position after the reset. This message will appear after a fixture reset if the magnetic-indexing circuit malfunctions (sensor failed, or magnet is missing) or there is a motor failure (defective motor or a defective motor IC drive on the main PCB).

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.

SPECIFICATIONS

SOURCE
- 420W White LED Engine
- 20,000 Hour Average LED Life

PHOTOMETRIC DATA
- 20,000 Total Lumens
- 8,000K, >73CRI (without CRI Filter)
- 7,700K >85CRI (with CRI Filter)
- 56,513 LUX @16.4' (5m) (6° Beam)
- 1,585 LUX @16.4' (5m) (48° Beam)

EFFECTS
- 4-Facet Circular & 6-Facet Linear Rotating Prisms
- 2 Frost Filters (Light & Heavy)
- Animation Wheel (Rotatable and Indexable)
- Motorized Zoom (6° ~ 48°)
- Motorized Focus
- Motorized Iris
- Electronic Dimming & Strobe (1-20Hz)

COLOR
- Full CMY color mixing
- Variable CTO (2,700K to 8,000K)
- Colors Wheel with 7 dichroic slots (Includes High CRI and CTB Filters)
- CMY and Color Wheel preset macros

GOBOS
- (2) Gobo Wheels
- #1 - (7) Interchangeable Rotating-Indexing Gobos
- #2 - (7) Interchangeable Rotating-Indexing Gobos

CONTROL / CONNECTIONS
- (3) DMX Channel Modes (30 / 34 / 45)
- DMX512, ArtNet and sACN protocols
- Aria XT Wireless DMX
- RDM (Remote Device Management) compliant
- 6 Button Touch Control Panel
- Full Color 180° Reversible LCD Menu Display
- 8 / 16 Bit Resolution Adjustable Movement
- 3 & 5 pin XLR DMX In/Out
- Locking In/Out power connections
- With Wired Digital Communication Network

PAN / TILT
- Pan: 540-degrees
- Tilt: 270-degrees
- Pan & Tilt Locks

SIZE / WEIGHT
- Length: 14.73" (374mm)
- Width: 9.22" (234mm)
- Vertical Height: 24.81" (630mm)
- Weight: 51.7 lbs. (23.45kg)

ELECTRICAL / THERMAL
- AC 100-240V - 50/60Hz
- Max Power Consumption: 524W
- Max ambient temperature: 14°F to 113°F (-10°C to 45°C)
- Max housing temperature: 136°F (58°C)

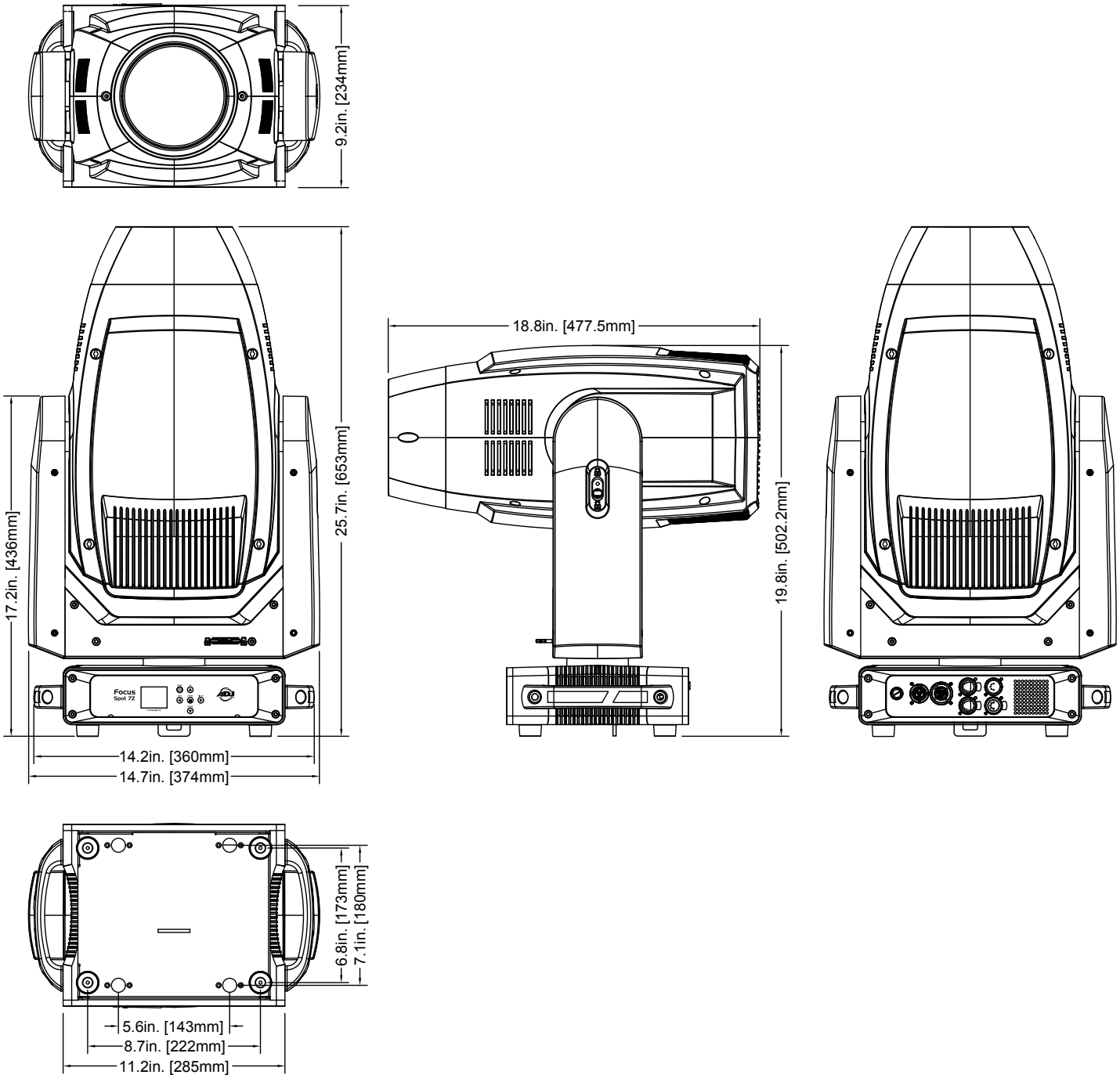
TECHNICAL DATA
- DB Rating @ 3ft.: 49dB
- BTU: 0.53
- BTU/H: 1,909.60

APPROVALS / RATINGS
- CE I ETL (Pending)
- IP20

INCLUDED ACCESSORIES
- Locking Power cable
- 180mm Omega brackets (x2)

DIMENSION DRAWINGS

Dimensions not to scale

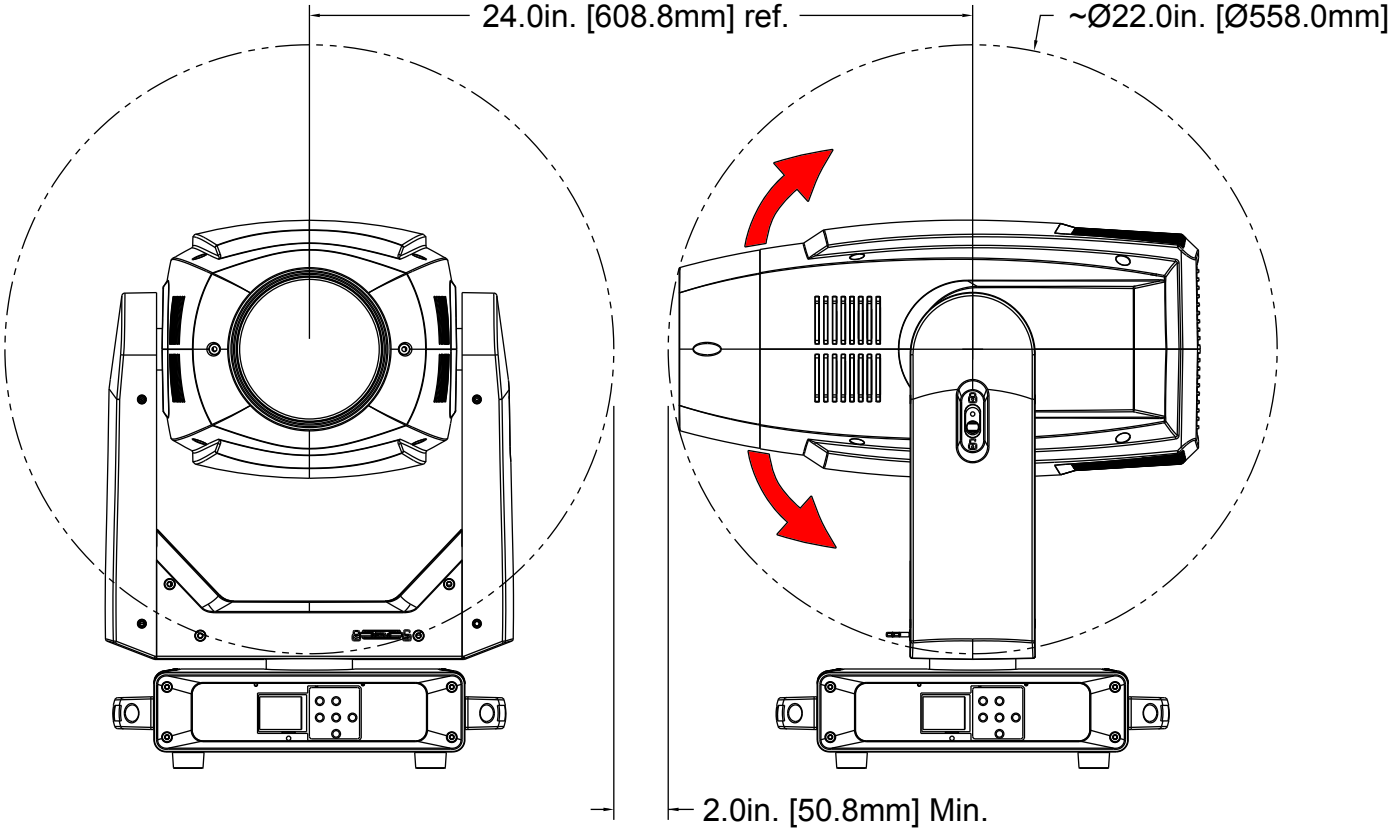


DIMENSION DRAWINGS

Dimensions not to scale

MINIMUM CENTER-TO-CENTER FIXTURE INSTALLATION DISTANCE

The moving-head radial movement arc of the ADJ Focus Spot 7Z is approximately 11-inches [279mm]. To avoid damaging fixtures through convergent head-movement radial interference impacts, maintain a 22.4in. [570mm] minimum center-to-center distance between fixtures.



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.
- 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.

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!