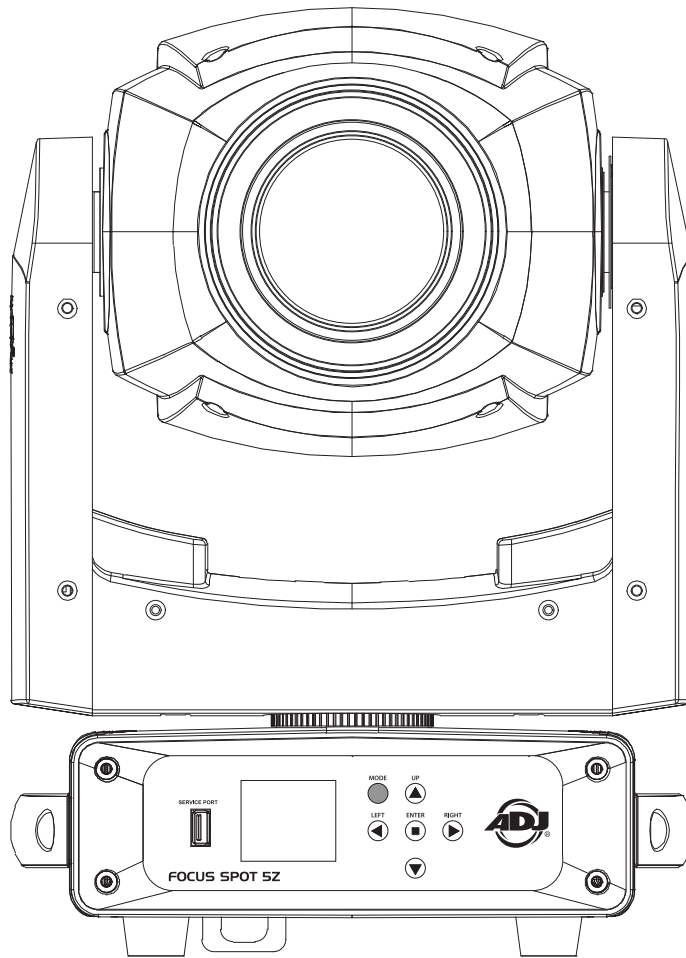




# FOCUS SPOT 5Z



## *User Instructions*

USA# FOC520  
EU# 123000300  
UPC# 818651028201

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#### **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.

## **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](http://www.adj.com) for the latest revision/update of this manual before beginning installation and/or programming.

Date	Document Version	Software Version $\geq$	DMX Channel Mode	Notes
05/13/20	1	1.0.3	19/22/26	Initial Version
08/06/20	1.2	1.0.5	No Change	Update Primary / Secondary

#### Europe Energy Saving Notice

Energy Saving Matters (EuP 2009/125/EC)

Saving electric energy is a key to help protecting the environment. Please turn off all electrical products when they are not in use. To avoid power consumption in idle mode, disconnect all electrical equipment from power when not in use. Thank you!

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**Unpacking:** Thank you for purchasing the Focus Spot 5Z by ADJ Products, LLC. Every unit has been thoroughly tested and has 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 your fixture for any damage and be sure all accessories necessary to operate the unit has arrived intact. In the case damage has been found or parts are missing, please contact our toll free customer support number for further instructions. Do not return this unit to your dealer without first contacting customer support.

**Introduction:** The Focus Spot 5Z is a DMX intelligent, moving head, LED fixture. This fixture can be used in a stand alone mode or connected in a Primary/Secondary configuration. ***This product is intended to be used by professionally trained personnel only and is not suitable for private use.***

**Customer Support:** Contact ADJ Service for any product related service and support needs. Also visit [forums.adj.com](http://forums.adj.com) with questions, comments or suggestions.

**Parts:** To purchase parts online visit <http://parts.americandj.com>

**ADJ SERVICE USA - Monday - Friday 8:00am to 4:30pm PST**

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**Caution!** There are no user serviceable parts inside this unit. Do not attempt any repairs yourself, doing so will void your manufactures warranty. In the unlikely event your unit may require service please contact ADJ Products, LLC.

***PLEASE recycle the shipping carton when ever possible.***

## Focus Spot 5Z

## Features

- Individual Color and Gobo Wheels
- 2 x Color Wheels: 8 Colors + White (Each Wheel)
- 6 Rotating Replaceable Gobos + Open
- 2 Separate Frost Filters
- 2 Separate Rotating Prisms (6 Facet Circular Prism & 5 Facet Linear Prism)
- Adjustable Dimmer Modes, Dimming Speed, and Dimmer Curves
- 5-Pin DMX Connections
- 3 DMX Channel Modes: 19/22/26
- Electronic Dimming 0-100%
- DMX-512 protocol
- Multiple Unit Power Linking (See page 29)

Included:

1 x Locking Power Cable

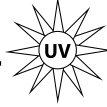
1 x Omega Bracket

## Focus Spot 5Z

## Warranty Registration

The Focus Spot 5Z carries a 2 year limited warranty. Please fill out the enclosed warranty card to validate your purchase. All returned service items whether under warranty or not, must be freight prepaid 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 included in the shipping carton. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. You may obtain a R.A. number by contacting our customer support team on our customer support number. All packages returned to the service department not displaying a R.A. number on the outside of the package will be returned to the shipper.

- **DO NOT TOUCH** the fixture housing during operation. Disconnect the power and allow approximately 15 minutes for the fixture to cool down before servicing.
- **DO NOT** shake the fixture, avoid brute force when installing and/or operating the fixture.
- **DO NOT** operate the fixture if the power cord has become frayed, crimped and/or damaged. If the power cord is damaged, replace immediately with a new one of similar power rating.
- **DO NOT** Do not attempt to remove or break off the ground prong from the electrical cord. This prong is used to reduce the risk of electrical shock and fire in case of an internal short.
- **DO NOT** attempt to operate this unit, if it becomes damaged.
- **DO NOT** spill water or other liquids into or on to your unit.
- This unit is intended for indoor use only, use of this product outdoors voids all warranties.
- To reduce the risk of electrical shock or fire, do not expose this unit rain or moisture
- Disconnect from main power before making any type of connection.
- **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 other devices or a wall for proper cooling.
- Always be sure to mount this unit in an area that will allow proper ventilation. Allow about 6" (15cm) between this device and a wall.
- 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. This will decrease gradually over time.
- **DO NOT** remove the cover under any conditions. There are no user serviceable parts inside.
- Never operate this unit when it's cover is removed.
- Never plug this unit in to a dimmer pack
- During long periods of non-use, disconnect the unit's main power.
- Always mount this unit in safe and stable matter.
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to the point they exit from the unit.
- Cleaning -The fixture should be cleaned only as recommended by the manufacturer. See page 29 for cleaning details.
- Heat -The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- The fixture should be serviced by qualified service personnel when:
  - A. The power-supply cord or the plug has been damaged.
  - B. Objects have fallen, or liquid has been spilled into the fixture.
  - C. The fixture has been exposed to rain or water.
  - D. The fixture does not appear to operate normally or exhibits a marked change in performance.
  - E. The fixture has fallen and/or subjected to extreme handling.

**! CAUTION****HIGH  
INTENSITY  
ULTRAVIOLET  
LIGHT****AVOID DIRECT EYE & SKIN EXPOSURE.  
WEAR PROPER EYE & SKIN PROTECTION.  
SEE MANUAL FOR SAFETY INSTRUCTIONS.****RISK GROUP 3 - RISK OF EXPOSURE TO ULTRAVIOLET (UV) RADIATION!****FIXTURE EMITS HIGH INTENSITY ULTRAVIOLET (UV) LIGHT FROM THE UV LED.****WEAR PROPER EYE AND SKIN PROTECTION.****AVOID PROLONGED PERIODS OF EXPOSURE TO THE UV LED.****AVOID WEARING WHITE COLOR CLOTHING AND/OR USING (UV) PAINTS ON SKIN.****AVOID DIRECT EYE AND/OR SKIN EXPOSURE AT DISTANCES SHORTER THAN 11 feet (3.3m).****DO NOT OPERATE FIXTURE WITH DAMAGED OR MISSING EXTERNAL COVER.****DO NOT LOOK DIRECTLY INTO THE (UV) LIGHT AND/OR VIEW (UV) LIGHT DIRECTLY WITH OPTICAL INSTRUMENTS THAT MAY CONCENTRATE THE LIGHT/RADIATION OUTPUT.****INDIVIDUALS SUFFERING FROM A RANGE OF EYE CONDITIONS, SUNLIGHT EXPOSURE DISORDERS, OR INDIVIDUALS USING PHOTSENSITIVE MEDICATION, MAY RECEIVE DISCOMFORT IF EXPOSED TO THE ULTRAVIOLET (UV) LIGHT EMITTED FROM THIS FIXTURE.**

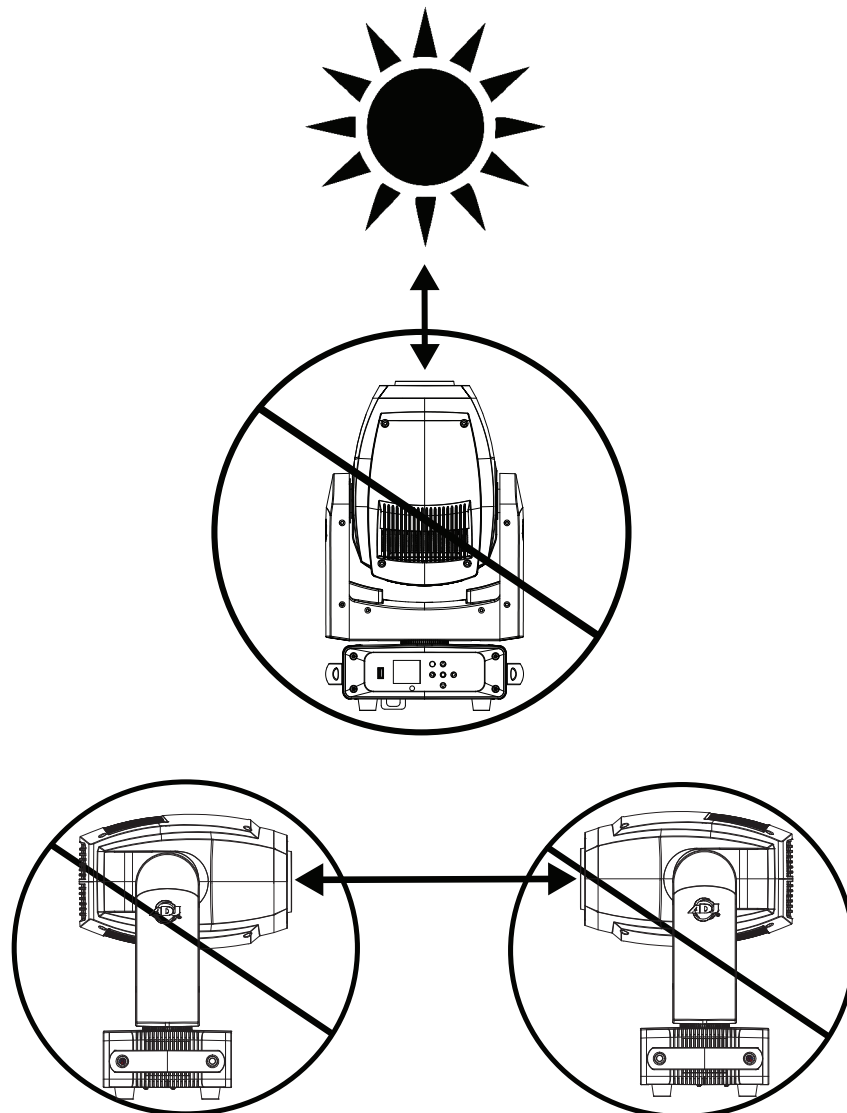
**POTENTIAL INTERNAL FIXTURE DAMAGE FROM EXTERNAL SOURCES OF LIGHT BEAMS**

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.

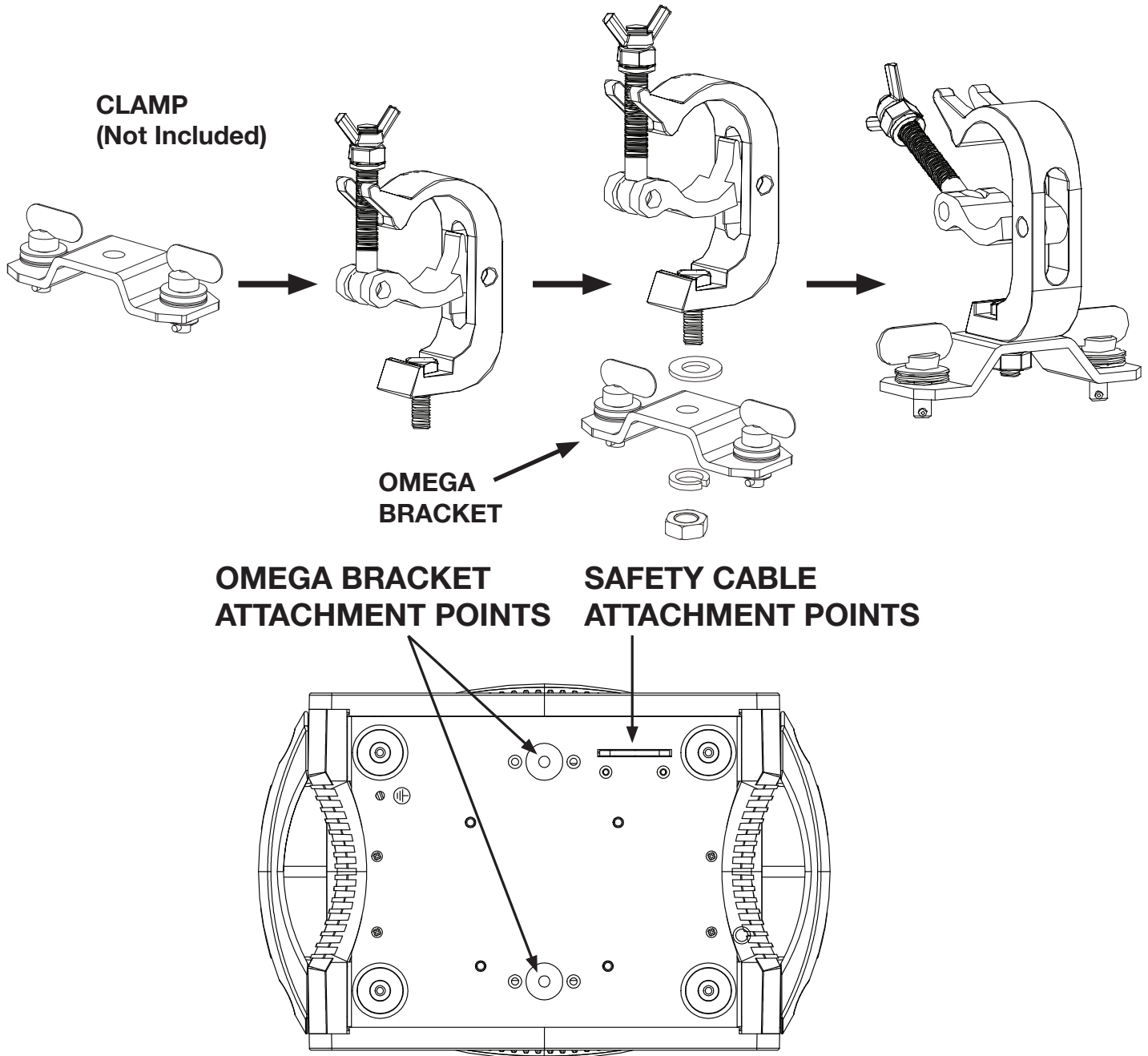
**DO NOT EXPOSE THE FIXTURE AND/OR FRONT LENS OPENING TO LIGHT BEAMS FROM DIRECT SUNLIGHT, OTHER LIGHTING MOVING HEAD FIXTURES, AND LASERS WHILE UNPACKING, INSTALLATION, USE, AND EXTENDED IDLE TIMES OUTDOORS.**

**DO NOT FOCUS A LIGHT BEAM FROM ONE LIGHTING FIXTURE DIRECTLY TOWARDS ANOTHER.**





**NOTICE:** The suitable environmental temperature for this lighting fixture is between  $-25^{\circ}\text{C}$  to  $45^{\circ}\text{C}$ . Do not place this lighting fixture in an environment where the temperatures are under or above the temperatures stated above. This will allow the fixture to run at its best and help prolong the fixture life.

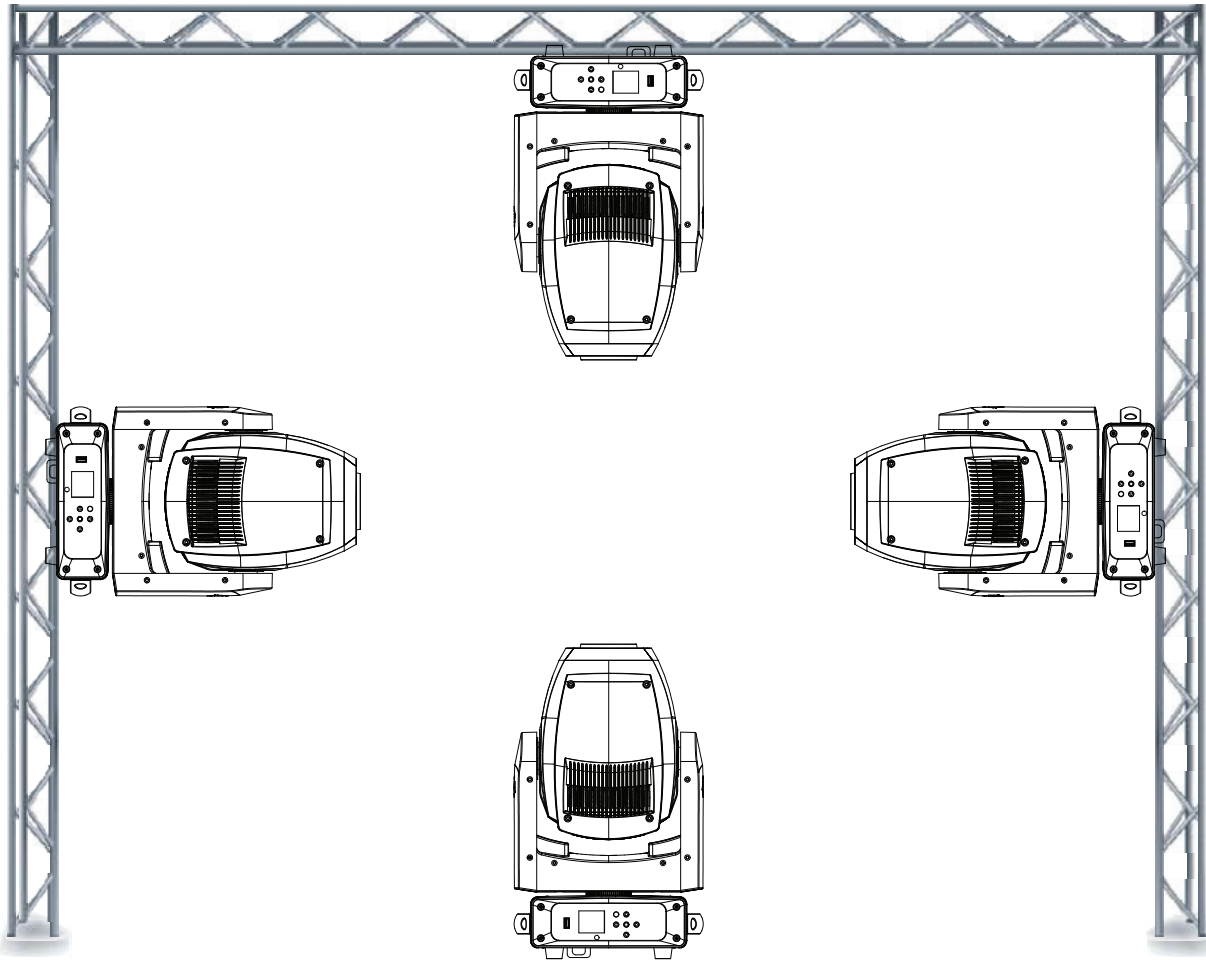


Screw one clamp via a M12 screw and nut into the Omega bracket. Insert the quick-lock fasteners of the Omega bracket into the respective holes on the bottom of the Focus Spot 5Z. Tighten the quick-lock fasteners fully clockwise. Pull the safety cable through the opening located on the base plate and over the trussing system or a safe fixation spot. Insert the end in the carabine and tighten the safety screw.

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.

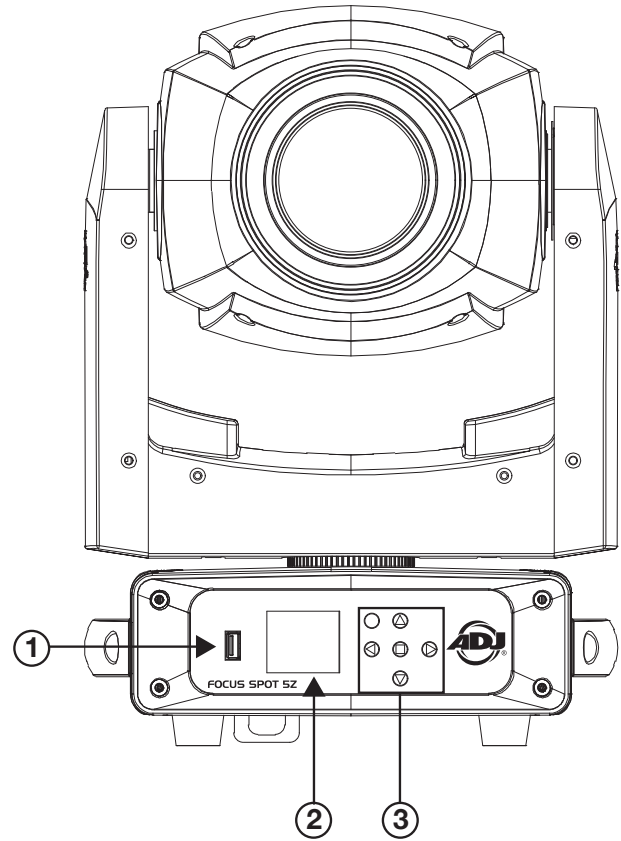
Overhead mounting requires extensive experience, including calculating working load limits, installation material being used, and periodic safety inspection of all installation material and unit. If you lack these qualifications, do not attempt the installation yourself.

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

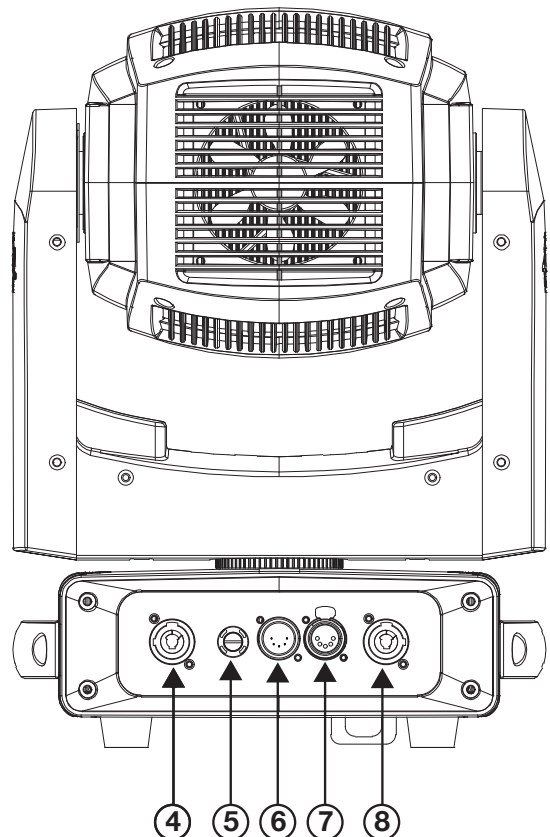


The Focus Spot 5Z is fully operational in three different mounting positions, hanging upside-down from a ceiling or trussing, sideways on trussing, or set on a flat level surface. Be sure this fixture is kept at least 12m (40ft) away from any flammable materials (decoration etc.). Always use and install a safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails (see previous page). Never use the carrying handles for secondary attachment.

- 1. Service Port
- 2. LED Display
- 3. Mode Button  
Up Button  
Down Button  
Left Button  
Right Button  
Enter Button



- 4. Locking Power Connector In
- 5. Fuse Holder
- 6. Locking 5-Pin XLR Connector Out
- 7. Locking 5-Pin XLR Connector In
- 8. Locking Power Connector Out



**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.

**Notice:** Be sure to follow figures one (1) and two (2) 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.

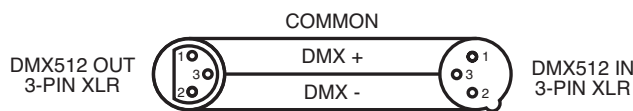


Figure 1

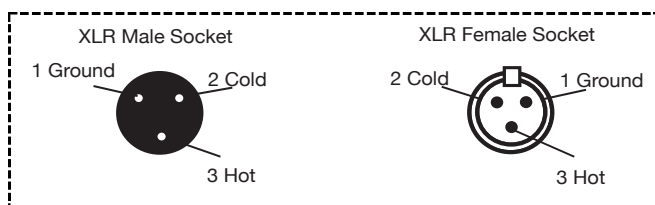
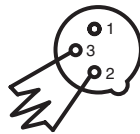


Figure 2

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

**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 3

**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 adaptor must be used, these adaptors 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

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 5Z, when in 19 channel mode you should set the starting DMX address of the first unit to 1, the second unit to 20 ( $19 + 1$ ), the third unit to 39 ( $20 + 19$ ), and so on. (See the chart below for more details.)

Channel Mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
19 Channels	1	20	39	58
22 Channels	1	23	45	64
26 Channels	1	27	53	79

<b>ADJ FOCUS SPOT 5Z</b> <b>DMX Channel Values &amp; Functions</b> <b>Supports Software Version ≥ 1.0.3</b> <small>Feature subject to change without notice</small> <small>*Rotation direction (Clockwise/Counter-Clockwise) and control of effects depends on head orientation and Pan/Tilt settings*</small>				
Basic (19)	Standard (22)	Extend (26)	Values	Functions
1	1	1	000-255	<b>PAN MOVEMENT (8-BIT)</b> Pan Movement
	2	2	000-255	<b>PAN FINE (16-BIT)</b> Fine Control of Pan Movement
2	3	3	000-255	<b>TILT MOVEMENT (8-BIT)</b> Tilt Movement
	4	4	000-255	<b>TILT FINE (16-BIT)</b> Fine Control of Tilt Movement
3	5	5		<b>COLOR WHEEL 1</b>
			000-007	Open / White
			008-014	Red
			015-021	Orange
			022-028	Yellow
			029-035	Green
			036-042	Dark Blue
			043-049	Purple
			050-056	Light Blue
			057-063	Magenta
			064-127	Color Indexing
			128-189	Clockwise Rotation Fast - Slow
			190-193	No Rotation
194-255	Counter-Clockwise Rotation Slow - Fast			
4	6	6		<b>COLOR WHEEL 2</b>
			000-007	Open / White
			008-014	Lavender
			015-021	Blue
			022-028	CTB 5600
			029-035	Green
			036-042	Yellow
			043-049	UV
			050-056	CTO 3200
			057-063	Pink
			064-127	Color Indexing
			128-189	Clockwise Rotation Fast - Slow
			190-193	Stop
194-255	Counter-Clockwise Rotation Slow - Fast			

Basic (19)	Standard (22)	Extend (26)	Values	Functions
5	7	7		<b>GOBO WHEEL</b>
			000-004	Open
			005-019	Gobo 1 
			020-034	Gobo 2 
			035-049	Gobo 3 
			050-064	Gobo 4 
			065-079	Gobo 5 
			080-094	Gobo 6 
			095-109	Gobo 1 Shake (Slow-Fast)
			110-124	Gobo 2 Shake (Slow-Fast)
			125-139	Gobo 3 Shake (Slow-Fast)
			140-154	Gobo 4 Shake (Slow-Fast)
			155-169	Gobo 5 Shake (Slow-Fast)
			170-189	Gobo 6 Shake (Slow-Fast)
			190-221	Clockwise Rotation Fast-Slow
			222-223	No Rotation
			224-255	Counter-Clockwise Rotation Slow-Fast
6	8	8		<b>GOBO ROTATION</b>
			000-127	Indexing
			128-189	Clockwise Rotation (Fast-Slow)
			190-193	No Rotation
			194-255	Counter-Clockwise Rotation Slow-Fast)
7	9	9		<b>SHUTTER &amp; STROBE</b>
			000-031	Shutter Closed
			032-063	Shutter Open
			064-095	Strobe Slow-Fast
			096-127	Shutter Open
			128-159	Pulse Effect Slow-Fast
			160-191	Shutter Open
			192-223	Random Strobe Slow-Fast
224-255	Shutter Open			
8	10	10	000-255	<b>MASTER DIMMER</b> 0%-100%
		11	000-255	<b>DIMMER FINE (16-BIT)</b> 0%-100%



Basic (19)	Standard (22)	Extend (26)	Values	Functions
9	11	12		<b>PRISM 1 (6 FACET CIRCULAR)</b>
			000-031	Open
			032-255	Shutter Open
10	12	13		<b>PRISM 1 INDEXING &amp; ROTATION</b>
			000-127	Indexing
			128-189	Clockwise Rotation Fast-Slow
			190-193	No Rotation
			194-255	Counter-Clockwise Rotation Slow-Fast
		14	000-255	<b>PRISM 1 FINE INDEXING (16-BIT)</b>
11	13	15		<b>PRISM 2 (5 FACET LINEAR)</b>
			000-031	Open
			032-255	Shutter Open
12	14	16		<b>PRISM 2 INDEXING &amp; ROTATION</b>
			000-127	Indexing
			128-189	Clockwise Rotation Fast-Slow
			190-193	No Rotation
			194-255	Counter-Clockwise Rotation Slow-Fast
		17	000-255	<b>PRISM 2 FINE INDEXING (16-BIT)</b>
13	15	18	000-255	<b>FOCUS</b> Far-Near
14	16	19	000-255	<b>ZOOM</b> Minimum-Maximum Beam
		20	000-255	<b>ZOOM FINE INDEXING (16-BIT)</b>
15	17	21	000-255	<b>FROST 1</b> 0%-100%
16	18	22	000-255	<b>FROST 2</b> 0%-100%

Basic (19)	Standard (22)	Extend (26)	Values	Functions
				<b>DIMMER MODES:</b>
			000-020	Standard
			021-040	Stage
			041-060	TV
			061-080	Architectural
			081-100	Theatre
			101-120	Stage 2
				<b>DIMMING SPEED</b>
			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
				<b>DIMMER CURVES</b>
			000-020	Linear
			021-040	Square
			041-060	Inverse Square
			061-080	S-Curve
			081-255	No Function
18	21	25	000-255	<b>PAN/TILT SPEED</b> Fast-Slow

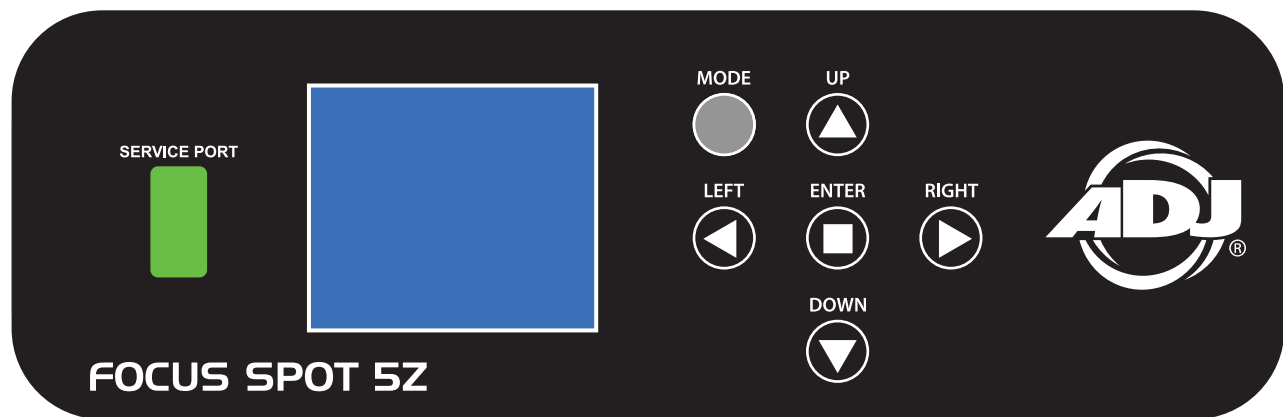
Basic (19)	Standard (22)	Extend (26)	Values	Functions
19	22	26		<b>LED REFRESH RATE &amp; SPECIAL FUNCTIONS</b>
			000-010	Default LED Refresh Rate 1200Hz
			011-078	Refresh Rate (Hz)
			11	900
			12	910
			13	920
			14	930
			15	940
			16	950
			17	960
			18	970
			19	980
			20	990
			21	1000
			22	1010
			23	1020
			24	1030
			25	1040
			26	1050
			27	1060
			28	1070
			29	1080
			30	1090
			31	1100
			32	1110
			33	1120
			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			

Basic (19)	Standard (22)	Extend (26)	Values	Functions
19	22	26		<b>LED REFRESH RATE &amp; SPECIAL FUNCTIONS</b>
			60	1400
			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
			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	Reset All
			150-159	Reset Pan/Tilt
			160-169	Reset Color & Gobo
			170-179	Reset Effect & Focus
			180-185	Internal Program 1 (Scenes 1-8)
			186-191	Internal Program 2 (Scenes 9-16)
192-197	Internal Program 3 (Scenes 17-24)			
198-199	Internal Program 4 (Scenes 25-32)			
200-205	Internal Program 5 (Scenes 33-40)			
206-211	Internal Program 6 (Scenes 41-48)			
212-216	Internal Program 7 (Scenes 49-56)			
217-227	Fan Mode Low			
228-238	Fan Mode High			
239-249	Fan Mode Auto			
250-255	No Function			

## 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.

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



## 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.

MENU	SUBMENU	OPTIONS	DESCRIPTION	
<b>DMX SETTINGS</b>	Set Address	<b>001-XXX</b>	DMX Addressing	
	DMX Channel Mode	Basic (19) / <b>Standard</b> (22) / Extended (26)	DMX Channel Mode Selection	
	No DMX Status	<b>Hold Last</b> / Blackout / Manual	DMX Lost Status	
<b>PERSONALITY</b>	Primary	ON / <b>OFF</b>	Primary Setting	
	Secondary	<b>ON</b> / OFF	Secondary Setting	
	Status Settings	Pan Degree: 630 / <b>540</b>	Pan Degree Selection	
		Pan Invert: ON / <b>OFF</b>	Reverse Pan Motion	
		Tilt Invert: ON / <b>OFF</b>	Reverse Tilt Motion	
		P./T. Feedback: <b>ON</b> / OFF	Pan/Tilt Movement Feedback	
		P./T. Speed: <b>Speed 1</b> / Speed 2	Pan/Tilt Movement Speed	
		Hibernation: Off / 01M~99M / <b>15M</b>	Sleep Setting (No Activity)	
	Fan Settings	Head Fan: <b>Auto</b> / High / Silent (Low)	Fan Speed Setting	
	Dim Modes	<b>Standard</b> /Stage/TV/Architectur/Theatre/Stage2 Dim Speed: 0.1-10s	Dimming Modes Dimming Speed	
	LED Refresh Rate	<b>1200</b> / 900-1500 / 2500 / 4000 / 5000 / 6000 10000 / 15000 / 20000 / 25000 (Hz)	LED Refresh Setting	
	Dim Curve	Linear / Square / Inverse Square / S-Curve	Dimming Curves	
	Reset Motors	Reset All Motors: YES / <b>NO</b>	Reset All Motors	
		Pan/Tilt Reset: YES / <b>NO</b>	Reset Pan/Tilt Motors	
		Color/Gobo Reset: YES / <b>NO</b>	Reset Color/Gobo Motors	
		Effect/Focus Reset: YES / <b>NO</b>	Reset Effect/Focus Motors	
	Display	Intensity: 1~ <b>10</b> (Dimmest-Brightest)	Display Intensity Adjustment	
		Display Invert: YES / <b>NO</b>	Display Inversion	
		Screen Saver Delay: OFF~10M	Display Shutoff Time	
		Key Lock: <b>OFF</b> / ON / ON1	Display Control Lock	
	Service	<b>Pass Code = 050</b>	Effect Adjust (Calibration) <b>(Pass Code = 50)</b>	Calibration Adjustment
			USB Port Power: ON / <b>OFF</b>	USB Port Activation
			Update Software: YES / <b>NO</b>	Software Update
Factory Restore: YES / <b>NO</b> <b>(Pass Code = 11)</b>			Restore Factory Settings	

MENU	SUBMENU	OPTIONS	DESCRIPTION
<b>MANUAL CONTROL</b>	Pan	000-255	Manual Control Settings
	Pan Fine	000-255	
	Tilt	000-255	
	Tilt Fine	000-255	
	Color 1	000-255	
	Color 2	000-255	
	Gobo	000-255	
	Gobo Rot	000-255	
	Shutter	000-255	
	Dimmer	000-255	
	Dimmer Fine	000-255	
	Prism 1	000-255	
	Prism 1 Rot.	000-255	
	Prism1Rot Fine	000-255	
	Prism 2	000-255	
	Prism 2 Rot.	000-255	
	Prism2Rot Fine	000-255	
	Focus	000-255	
	Zoom	000-255	
	Zoom Fine	000-255	
	Frost 1	000-255	
	Frost 2	000-255	
Dim Modes	000-255		
Dim Curves	000-255		
P/T Speed	000-255		
Special Function	000-255		
<b>INTERNAL PROGRAMS</b>	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

MENU	SUBMENU	OPTIONS	DESCRIPTION	
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 / <b>NO</b> <b>Pass Code = 50</b>	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 / <b>NO</b> <b>Pass Code = 50</b>	Reset LED Running Time	
	Fixture Temps	LED's	Current: XXX °F / XXX °C	Current Head Temperature
			Max Resettable: XXX °F / XXX °C	Maximum Temperature <sup>(1)</sup> Reached (Resettable) (See Note 1)
			Max Not Resettable: XXX °F / XXX °C	Maximum Temperature <sup>(2)</sup> Reached (Not Resettable) (See Note 2)
		Reset Lamp Temp: YES / <b>NO</b> <b>(Pass Code = 050)</b>	Reset LED Temperature (Max Resettable)	
	Fan Info. (RPM)	LED Fan1: XXXX RPM	LED Fan 1 Speed	
		LED Fan2: XXXX RPM	LED Fan 2 Speed	
	DMX Values	Pan / Pan Fine / Tilt / Tilt Fine / Color 1 / Color 2 / Gobo / Gobo Rot / Shutter / Dimmer / Dimmer Fine / Prism 1 / Prism 1 Rot / Prism1Rot Fine / Prism 2 / Prism 2 Rot/ Prism2Rot Fine / Focus / Zoom / Zoom Fine / Frost 1 / Frost 2 / Dim Modes / Dim Curves / P/T Speed / SpecialFunction	Current DMX Values <sup>(3)</sup> (See Note 3)	
	Error Logs	Fixture Errors	List of Errors (One by One)	
		Reset Error Log - <b>Pass Code = 50</b>	Clear the Error Log	
Software Version	VX.X	Current Software Version		

**Notes:**

**(1) Current Maximum Temperature - Maximum fixture temp. that has been recorded, before reset and after reset.**

**(2) Maximum Temperature - Overall maximum fixture temp. that has been recorded. (Not Resettable)**

**(3) DMX Value options depend on the current DMX Channel mode setting.**



**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 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 set up. See **MANUAL CONTROL**.

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

- **PRIMARY & SECONDARY SETTINGS** - 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.
- **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.

**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**

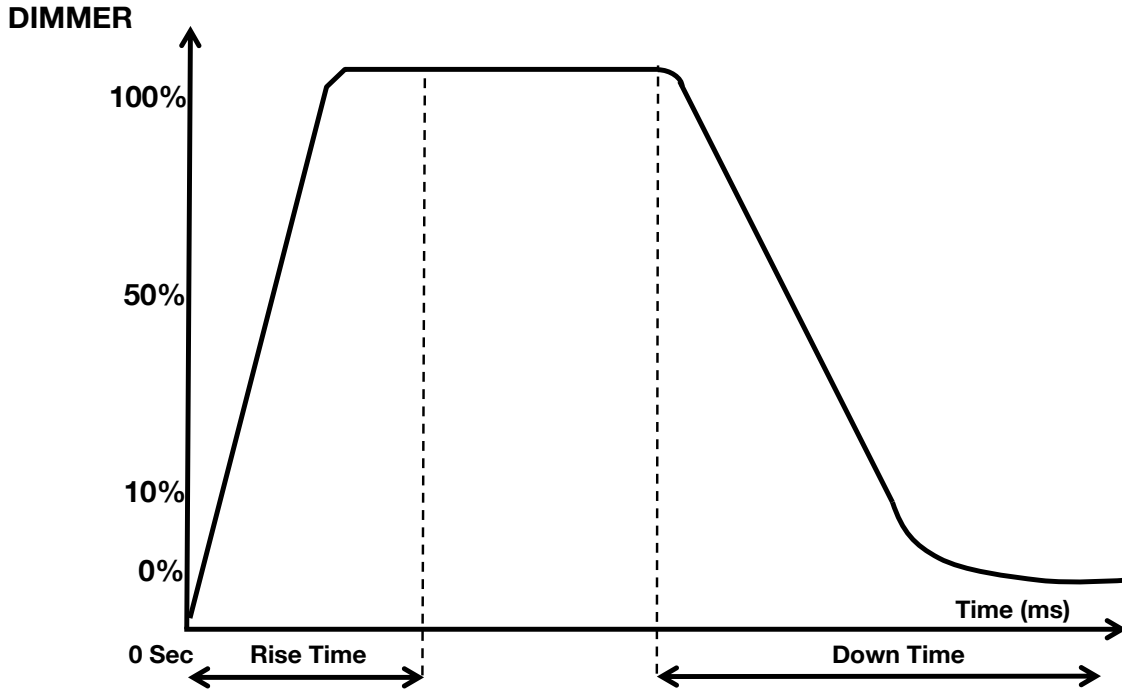
- **LED's:**
  - **Current** - The current LED temperature will be displayed.
  - **Max Resettable** - The current highest temperature the LED has reached will be displayed. This LED temperature may not be the same as the temperature displayed under "**CURRENT**" or "**MAX NOT RESETTABLE**". This LED temperature **CAN** be reset. **NOTE: The displayed temperature represents the highest temperature the LED has reached since the last reset.**
  - **Max Not Resettable** - The highest temperature the LED has reached will be displayed. This LED temperature **CANNOT** be reset, and could continue rise.
- **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.**

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

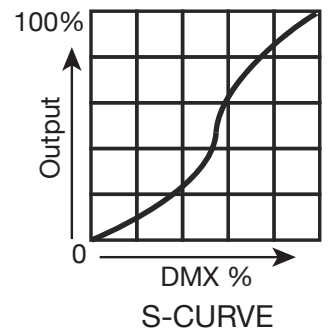
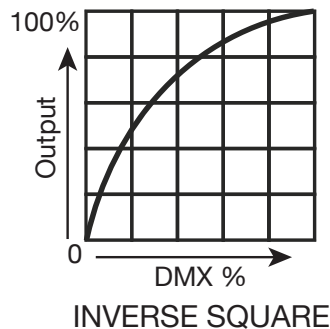
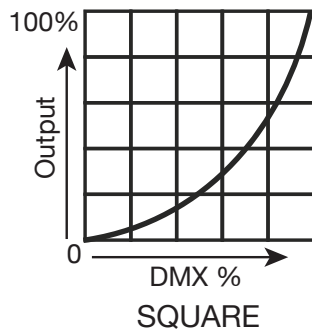
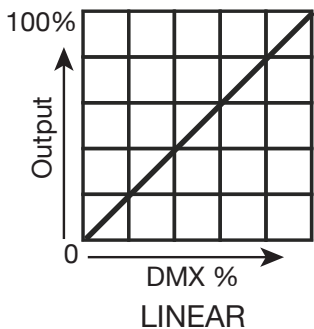
- **DMX VALUES** - Displays the DMX values of any DMX channel that is currently in use. **NOTE: DMX value options depend on the current DMX channel mode setting.**

- **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.



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

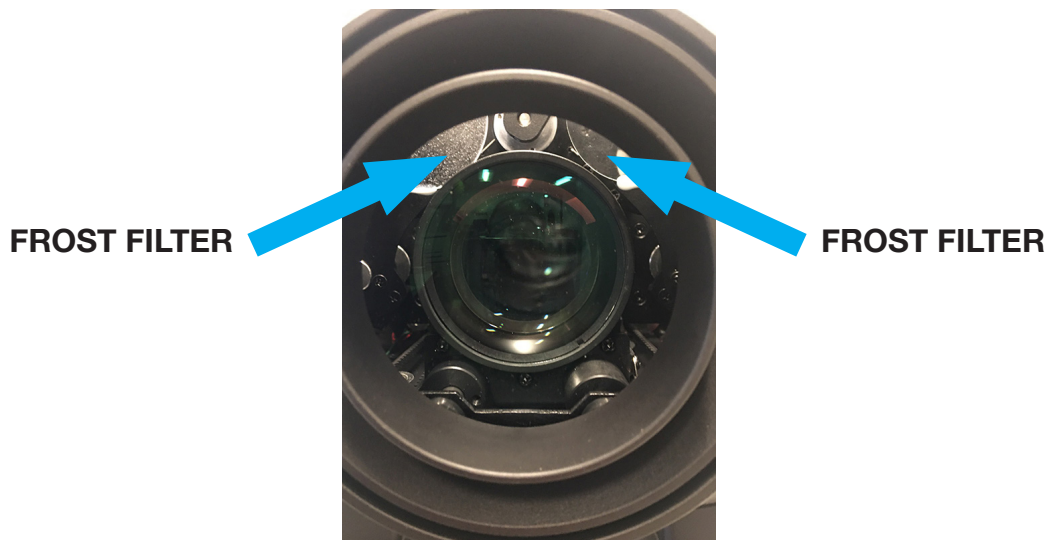


The gobo's featured in this unit are interchangeable. Remember when changing these gobo's that they are thin and easy to bend.

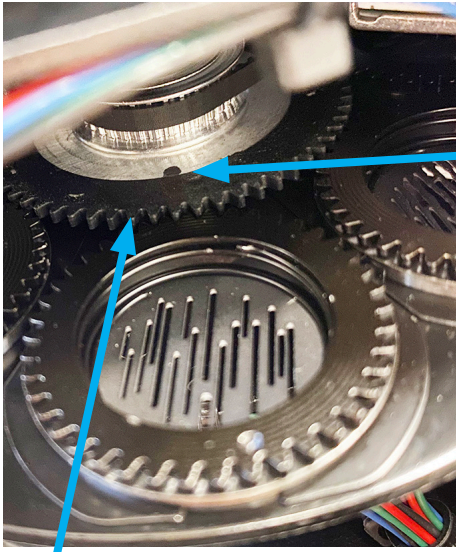
If your removing/replacing the glass gobo, please be very careful. **REMEMBER**, this is a glass gobo, it is delicate. Please be very careful when removing/replacing any of the gobo's.

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

**Locating the Gobo wheel:** After disconnecting the main power, position the head with the lens facing forward. When looking through the front lens, position the head so that the frost filters are located at the top (see image below). When the frost filters are located at the top, the shell that needs to be unscrewed and removed is now facing up.



1. To change a gobo, unscrew the 4 screws that secure the shell to the unit. Gently lift and remove the shell.
  2. Once the shell is removed, you will be able to access the gobo wheel. Turn the wheel until you come across the gobo you would like to change.
  3. Once you have found the gobo you would like to change, use your finger to carefully turn the small inner gear so that the “alignment dot” on the inner gear, lines up with the gobo you would like to replace (**Figure 1**).
  4. Once the gobo and “alignment dot” are lined up, **CAREFULLY**, from underneath the gobo wheel, push the gobo housing with gobo up and pull the housing out.  
**CAUTION!** Do not put too much pressure on the gobo itself due to the fact it is thin and it can bend.
  5. Using your fingernail or needle nose pliers, **CAREFULLY** remove the retainer ring that secures the gobo in place. After the retainer ring is removed, you are able to remove the gobo (**Figure 2**).
  6. Change the gobo and replace the retainer ring.
- NOTE:** The black side of the gobo faces outwards in the gobo holder.
7. To reinsert the gobo housing back into the gobo wheel, make sure the “alignment dot” lines up with the “protruding pin” (**Figure 3**). The “protruding pin” secures the gobo housing to the gobo wheel. You will feel the gobo housing “lock” into place when the housing is inserted correctly.
  8. Reassemble the unit.



(FIGURE 1)

INNER GEAR  
"ALIGNMENT DOT"

INNER GEAR

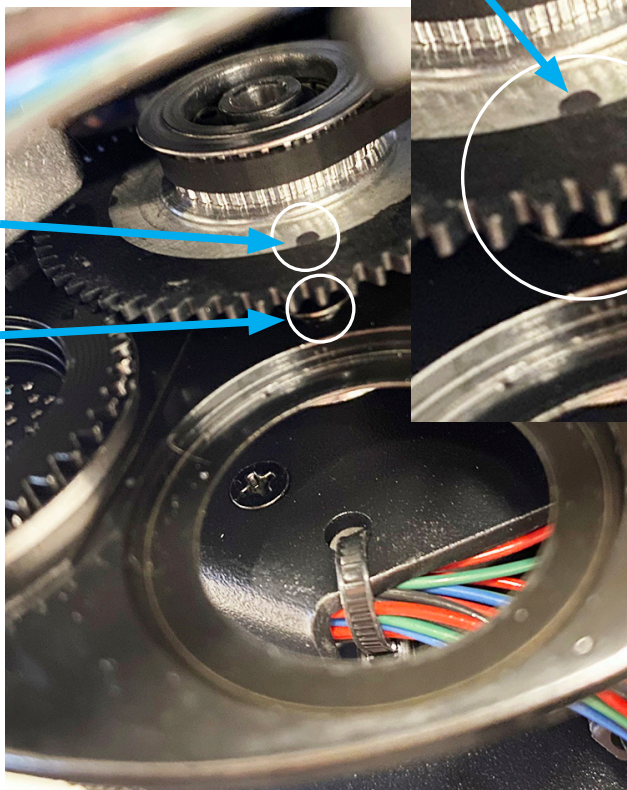


(FIGURE 2)

INNER GEAR  
"ALIGNMENT DOT"

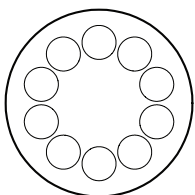
INNER GEAR  
"ALIGNMENT DOT"

PROTRUDING PIN

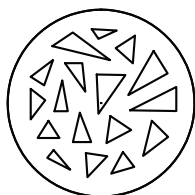


(FIGURE 3)

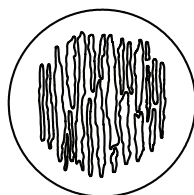
PROTRUDING PIN



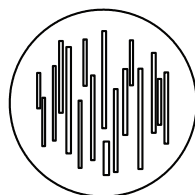
GOBO 1



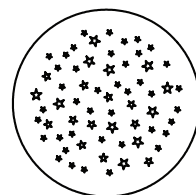
GOBO 2



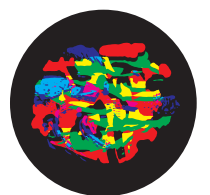
GOBO 3



GOBO 4

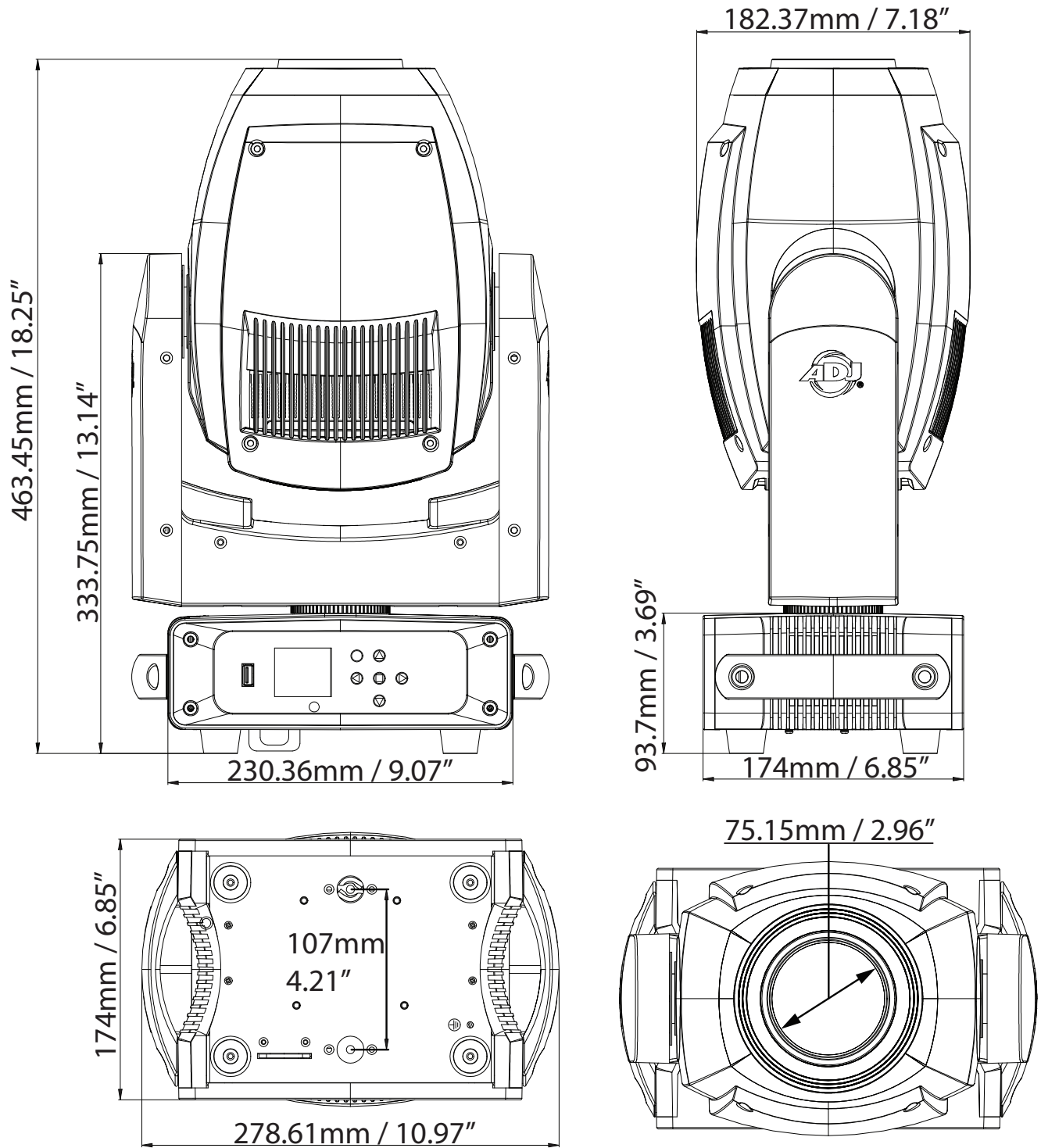


GOBO 5



GOBO 6

\*NOT TO SCALE



## Focus Spot 5Z

## 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.

## Focus Spot 5Z

## Multiple Unit Power Linking

With this feature you can connect the fixtures to one another using the power cable input and output sockets.

**NOTE: USE CAUTION WHEN POWER LINKING OTHER FIXTURES AS THE POWER CONSUMPTION OF OTHER MODEL FIXTURES MAY EXCEED THE MAX POWER OUTPUT ON THIS FIXTURE! CHECK SILK SCREEN FOR MAX AMPS.**

## Focus Spot 5Z

## Trouble Shooting

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.

## Focus Spot 5Z

## Cleaning

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).

**MANUFACTURER'S LIMITED WARRANTY**

- 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, nor 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 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 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 indentifying 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.

**MANUFACTURER'S 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** (excluding laser diodes which have a 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**



**Model: Focus Spot 5Z**

<b>Voltage:</b>	100V ~ 240V/50~60Hz
<b>LEDs:</b>	1 x 200W LED
<b>Working Position:</b>	Any safe working position
<b>Power Draw:</b>	280W
<b>Fuse:</b>	3A
<b>Dimensions:</b>	7.15" (L) x 10.97" (W) x 18" (H) 181.5 x 278.61 x 457.4mm
<b>Weight:</b>	23lbs. / 10 kgs
<b>Colors:</b>	<b>Color Wheel 1:</b> 8 Colors + White <b>Color Wheel 2:</b> 8 Colors + White
<b>Gobos:</b>	6 Gobos (1 Glass) + Open <b>Aluminum Gobos:</b> Inner Diameter: 19mm Outer Diameter: 23mm Thickness: 0.5mm <b>Glass Gobo:</b> Inner Diameter: 19mm Outer Diameter: 23mm Thickness: 3.3mm
<b>DMX Channels:</b>	3 DMX Modes: 19/22/26
<b>Control:</b>	RDM (Remote Device Management)
<b>Warranty:</b>	2 Year (730 days)
<b>Approvals:</b>	ETL Approved

**Please Note:** Specifications and improvements in the design of this unit and this manual are subject to change.



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