

# **User Instructions**

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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 <u>www.adj.com</u> for the latest revision/update of this manual before beginning installation and/or programming.

Date	Document Version	Software Version ≥	DMX Channel Mode	Notes
09/24/19	1	1.0	16/18	Initial Version

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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#### Introduction

**Unpacking:** Thank you for purchasing the Focus Spot 2X 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 2X is a DMX intelligent, moviing head, LED fixture. This fixture can be used in a stand alone mode or connected in a Master/Slave configuration. *This product is intended to be used by professionally trained personnel only and is not suitable for private use.* 

These instructions contain important safety information regarding the use and maintenance of this unit. Please keep this manual with the unit, for future reference.

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

Parts: To purchase parts online visit: http://parts.americandj.com (US) http://www.adjparts.eu (EU)

ADJ SERVICE USA - Monday - Friday 8:00am to 4:30pm PST Voice: 800-322-6337 | Fax: 323-832-2941 | support@adj.com

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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.

- Individual Color and Gobo Wheels
- 8 Colors + White
- 6 Rotating Replaceable Gobos + Open
- 6 Facet Circular Prism & 6 Facet Linear Prism
- Electronic Dimming 0-100%
- DMX-512 protocol
- 3-Pin DMX Connections
- 2 DMX Channel Modes: 16/18
- Multiple Unit Power Linking (See page 29)

#### Included:

1 x powerCON Cable

1 x Mounting Bracket

#### Focus Spot 2X

#### **Warranty Registration**

The Focus Spot 2X 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.

#### **Safety Guidelines**

- Do not attempt to operate this unit if the power cord has been frayed or broken. 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.
- Disconnect from main power before making any type of connection.
- 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
- 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.
- Do not attempt to operate this unit, if it becomes damaged.
- 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 does not appear to operate normally or exhibits a marked change in performance.
  - D. The fixture has fallen and/or subjected to extreme handling.

# **ACAUTION**



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 PHOTOSENSITIVE MEDICATION, MAY RECEIVE DISCOMFORT IF EXPOSED TO THE ULTRAVIOLET (UV) LIGHT EMITTED FROM THIS FIXTURE.

#### **Safety Guidelines**

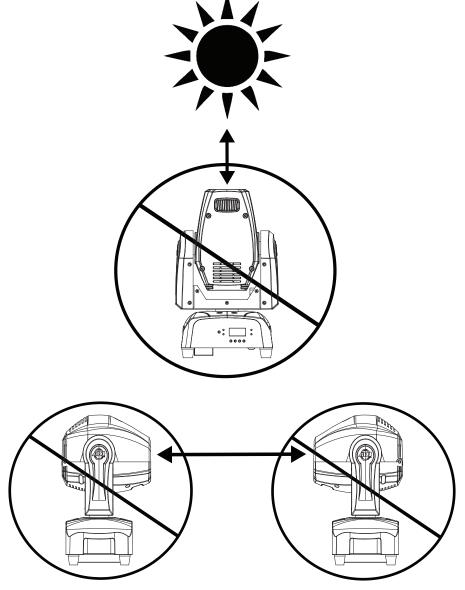
#### POTENTIAL INTERNAL FIXTURE DAMAGE FROM EXTERNAL SOURCES OF LIGHT BEAMS

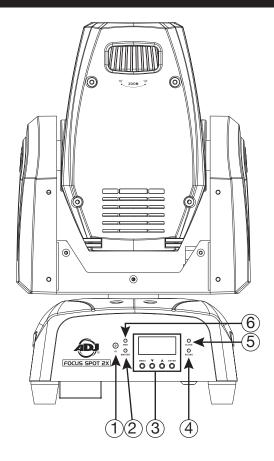
External sources of light beams from direct sunlight, lighting moving head fixtures, and lasers, which are focused directly towards the exterior housing and/or penetrate the front lens opening of ADJ lighting fixtures, can cause severe internal damage including burning to optics, dichroic color filters, glass and metal gobos, prisms, animation wheels, frost filters, iris, shutters, motors, belts, wiring, discharge lamps, and LEDs.

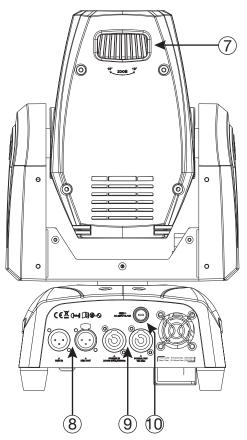
This issue is not specific only to ADJ lighting fixtures, it is a common issue with lighting fixtures from all manufacturers. Although there is no true way to fully prevent this issue from happening, the guidelines below can prevent any potential damage from occurring if followed. Contact ADJ Service for more details.

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

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







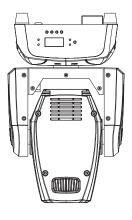
- 1. IR Receiver
- 2. Master Active LED
- 3. LCD Display MENU Button UP Button DOWN Button ENTER Button
- 4. Sound Active LED
- 5. Slave Active LED
- 6. DMX Active LED
- 7. Manual Zoom Control
- 8. 3-Pin DMX In/Out
- 9. powerCON In/Out
- 10. Fuse (3.15A)

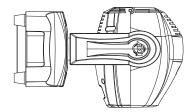
#### Installation

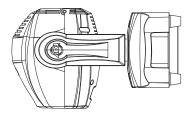
When installing the unit, the trussing or area of installation must be able to hold 10 times the weight without any deformation. When installing the unit must be secured with a secondary safety attachment, e.g. and appropriate safety cable. Never stand directly below the unit when mounting, removing,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

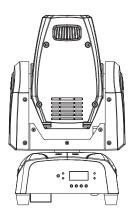
Overhead mounting requires extensive experience, including calculating working load limits, installation material being used, and perodic safety inspection of all installation material and unit. If you lack these qualifications, do not attempt the installation yourself.

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



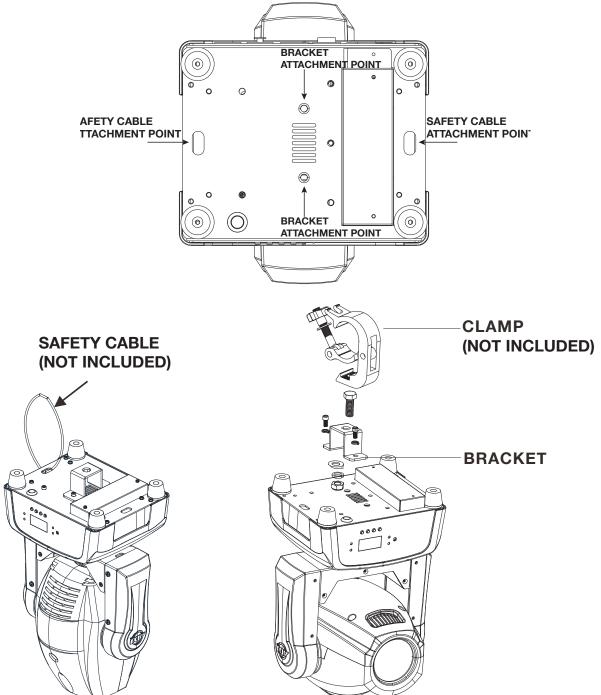






The Focus Spot 2X is fully operational in three different mounting positions, hanging upside-down from a ceiling or trussing, sideways on trussing, or set on a flat level surface. Be sure this fixture is kept at least 12m (40ft) away from any flammable materials (decoration etc.). Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails (see next page). Never use the carrying handles for secondary attachment.

**NOTICE:** The suitable environmental temperature for this lighting fixture is between -25° C to 45° 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 bracket. Attach the bracket to the respective holes located on the bottom of the Focus Spot 2X. Tighten and secure the bracket screws. Pull the safety cable through the opening(s) 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.

**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.

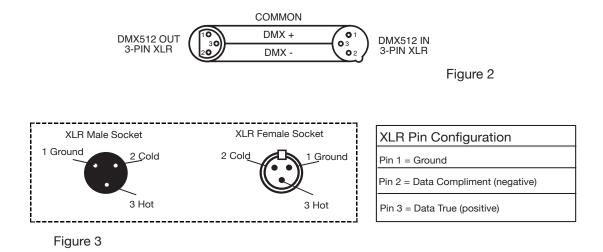
**Data Cable (DMX Cable) Requirements (For DMX Operation):** The Focus Spot 2X can be controlled via DMX-512 protocol. The DMX address is set on the front panel of the Focus Spot 2X. Your unit and your DMX controller require a standard 3-pin XLR connector for data input and data output (Figure 1). We

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.



Figure 1

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



## DMX Set Up

**Special Note: Line Termination.** When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behavior. A terminator is a 110-120 ohm 1/4 watt resistor which is connected between pins 2 and 3 of a male XLR connector (DATA + and DATA -). This unit is inserted in the female XLR connector of the last unit in your daisy chain to terminate the line. Using a cable terminator (ADJ part number Z-DMX/T) will decrease the possibilities of erratic behavior.



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

Figure 4

*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 2X, when in 16 channel mode you should set the starting DMX address of the first unit to 1, the second unit to 17 (16 + 1), the third unit to 33 (17 + 16), and so on. (See the chart below for more details.)

Channel Mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
16 Channels	1	17	33	49
18 Channels	1	19	37	55

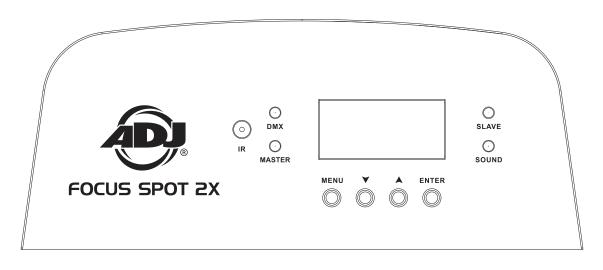
ADJ FOCUS SPOT 2X DMX Channel Values & Functions Supports Software Version ≥ 1.0 Features subject to change without notice *Rotation direction (Clockwise/Counter-Clockwise) and control of effects depends on head orientation and Pan/Tilt settings*				
16 Channels	18 Channels	Values	Functions	
1	1	000-255	PAN MOVEMENT 8-BIT:	
	2	000-255	PAN FINE 16-BIT: Fine Control of Pan Movement	
2	3	000-255	TILT MOVEMENT 8-BIT:	
	4	000-255	TILT FINE 16-BIT: Fine Control of Tilt Movement	
			COLOR WHEEL:	
		000-014	Open / White	
		015-028	Red	
		029-042	Blue	
		043-056	Green	
_		057-070	Yellow	
3	5	071-084	Pink	
		085-098	Light Blue	
		099-112	Light Green	
		113-127	Light Yellow	
		128-189	Clockwise Rotation Fast-Slow	
		190-193	Stop	
		194-255	Counter-Clockwise Rotation Fast-Slow	
		194-200		
			GOBO WHEEL:	
		000-009	Open	
		010-018	Gobo 1	
		019-027	Gobo 2	
		028-036	Gobo 3	
		037-046	Gobo 4	
		047-055	Gobo 5	
		056-063	Gobo 6	
4	6	064-073	Open Shake	
		074-082	Gobo 1 Shake	
		083-091	Gobo 2 Shake	
		092-100	Gobo 3 Shake	
		101-110	Gobo 4 Shake	
		111-119	Gobo 5 Shake	
		120-127	Gobo 6 Shake	
		128-189	Clockwise Rotation Fast-Slow	
		190-193	Stop	
		194-255	Counter-Clockwise Rotation Fast-Slow	
			RGOBO (ROTATING GOBO):	
		000-127	Indexing	
5	7	128-189	Clockwise Rotation Slow-Fast	
		190-193	Stop	
		194-255	Counter-Clockwise Rotation Fast-Slow	
			PRISMS:	
		000-015	No Effect	
6	8	016-135	Prism 1	
		136-255	Prism 2	
		100-200	F110111 Z	

16 Channels	18 Channels	Values	Functions
			SHUTTER & STROBE:
		000-007	LED Off
		008-015	LED On
		016-131	Strobing Slow-Fast
7	9	132-139	LED On
1	9	140-181	Slow Open-Fast Close
		182-189	LED On
		190-231	Fast Open-Slow Close
		232-239	LED On
		240-247	Random Strobing Slow-Fast
		248-255	LED On
8	10	000-255	<b>MASTER DIMMER:</b> 0% - 100%
			UV SHUTTER & STROBE:
		000-007	LED Off
		008-015	LED On
		016-131	Strobing Slow-Fast
		132-139	LED On
9	11	140-181	Slow Open-Fast Close
		182-189	LED On
		190-231	Fast Open-Slow Close
		232-239	LED On
		240-247	Random Strobing Slow-Fast
		248-255	LED On
10	12	000-255	<b>UV MASTER DIMMER:</b> 0% - 100%
11	13	000-255	<b>FOCUS:</b> 0% - 100%
			SHOWS:
		0	Off
		001-021	Show 1
12	14	022-041	Show 2
		042-061	Show 3
		062-081	Show 4
ļ		082-255	Random Show Sound Active
13	15	000-255	SHOW SPEED: Slow-Fast
			DIMMER MODES:
		000-020	Standard
14	16	021-040	Stage
14	16	041-060	TV
		061-080	Architectural
		081-100	Theatre
ļ		101-255	Default to Unit Setting
15	17	000-255	PAN/TILT SPEED: Fast-Slow

16 Channels	18 Channels	Values	Functions
			SPECIAL FUNCTIONS:
		000-069	No Function
		070-079	Enable Blackout with Pan/Tilt Movement
		080-089	Disable Blackout with Pan/Tilt Movement
		090-099	Enable Blackout with Color Change
		100-109	Disable Blackout with Color Change
16	18	110-119	Enable Blackout with Gobo Change
		120-129	Disable Blackout with Gobo Change
		130-139	Pan/Tilt Reset
		140-149	Color Wheel Reset
		150-159	Gobo Wheel Reset
		160-169	Effect Reset
		170-199	No Function
		200-209	Reset All
		210-255	No Function

## SYSTEM MENU

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



MENU	OPTIONS	DESCRIPTION	
DMX Address	001-XXX	DMX Addressing	
Channel Mode	16Chan / 18Chan	DMX Channel Mode Selection	
Slave Mode	Master / Slave 1 / Slave 2	Master/Slave Setting	
Show Mode	Show 0 / Show 1 / Show 2 / Show 3 / Show 4	Show Mode Selection	
Target Mode	Mode 0 / Mode 1 / Mode 2 / Mode 3 / Mode 4	Target Mode Selection	
Sound Mode	On / Off	Sound Mode Activation	
Sound Sense	0~100	Sound Sensitivity Adjustment	
DMX State	Master Slave / Blackout / Last State	DMX State Setting	
Dimmer Curve	Standard / Stage / TV / Architec / Theatre	Dimming Curve Setting	
Pan Invert	Normal / Invert	Pan Inversion	
Tilt Invert	Normal / Invert	Tilt Inversion	
Back Light On / Off Back Ligh		Back Light Setting	
Auto Test		Auto Test	
LED Temp.	XXX	Current LED Temperature	
Fixture Time XXX		Current Fixture Time	
Firmware Version	VX.X	Current Software Version	
Pro Default	On / Off	Restore Factory Defaults	
Reset Yes / No		Reset Motors	

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.

**SLAVE MODE** - In this submenu you are able to designate the unit(s) as either a "master" or "slave" in a master-slave setup.

**SHOW MODE** - In this submenu you can select 1 of 5 (0-4) built-in shows to run.

**TARGET MODE** - In this submenu you are able to select 1 or 5 (0-4) target modes for the unit to follow. Target mode is a restrictive pan/tilt control mode limiting the pan/tilt movements to a certain degree. See page 24 for a diagram of the Target mode movements.

**SOUND MODE** - In this submenu you can activate and deactivate sound active mode.

**SOUND SENSE** - In this submenu you can adjust and set the sound sensitivity level for sound active mode.

**DMX STATE** - This submenu setting is used as a precaution mode in case the DMX signal is lost or interrupted. The operating mode chosen in this submenu is the running mode the fixture will go into when the DMX signal is lost. Listed below are the 3 modes.

- **Master Slave** This setting will have the fixture automatically go into master/slave setup. The unit will go into the setting that is selected under "**SLAVE MODE**".
- Blackout This setting will have the fixture automatically go into stand by mode (blackout).
- Last State This setting will have the fixture stay in the last DMX setup.

**DIMMER CURVE** - In this submenu you are able to select 1 or 5 dimmer curves. See page 25 for the dimmer curve chart for more information.

**PAN INVERT** - In this submenu you can activate pan inversion.

**TILT INVERT** - In this submenu you can activate tilt inversion.

**BACK LIGHT** - In this submenu you can have the display backlight turn off after a minute of no acitivty.

AUTO TEST - In this submenu you can run an auto test of the functions.

**LED TEMP. (TEMPERATURE)** - In this submenu you can check the current running temperature.

FIXTURE TIME - In this submenu you can check the fixture running time.

FIRMWARE VERSION - In this submenu you can check the current software version.

FACTORY RESTORE - In this submenu you restore the factory (default) settings.

**RESET** - In this submenu you can reset the motors.

#### Master-Slave Configuration:

This function will allow you to link up to 16 units together and operate without a controller. The units will be sound activated. In Master-Slave operation one unit will act as the controlling unit and the others will react to the controlling units programs. Any unit can act as a Master or as a Slave.

- Using approved DMX data cables, daisy chain your units together via the XLR connector on the rear of the units. Remember the Male XLR connector is the input and the Female XLR connector is the output. The first unit in the chain (master) will use the female XLR connector only - The last unit in the chain will use the male XLR connector only. For longer cable runs we suggest a terminator at the last fixture.
- 2. On the Master unit press the MENU button until "**Slave Mode**" is displayed, and press ENTER. Use the UP and DOWN buttons to scroll to the "**Master**" setting and press ENTER.
- 3. After setting the Master unit to the master setting find and set your desired operating mode.
- 4. On the slave units press the MENU button until "**Slave Mode**" is displayed, and press ENTER. Choose either "**Slave 1**" or "**Slave 2**" and press ENTER.
- 5. The slave units will now follow the Master unit.

### Focus Spot 2X

The focus can be adjusted under DMX control. The output can be manually zoomed in/out using the "zoom" wheel located on the bottom front of the moving head. Rotate the zoom wheel back and forth until you get your desired output. This wheel is used in conjunction with the focus channel in DMX mode as well.

#### Manual Zoom

OFFSET MENU	OPTIONS
Pan Offset	-128~127
Tilt Offset	-128~127
Focus Offset	000~255
Prism Offset	000~255
Gobo Offset	-128~127
R Gobo Offset	-128~127
Color Offset	-128~127

To enter the Offset Menu, press the MENU button to unlock the display, then press the ENTER button for at least 5 seconds. In this submenu you are able to adjust the home position of the pan, tilt, focus, prism, gobo wheel, rotating gobo, and color wheel. To exit this menu press and hold the MENU button.

#### Pan OffSet - Adjustment of the pan home position.

- 1. Press the **ENTER** button for at least 5 seconds, then press the **UP** or **DOWN** buttons so that "**Pan Offset**" is displayed, press **ENTER**.
- 2. Use the **UP** and **DOWN** buttons to make your adjustments, and then press **ENTER** to confirm. Press the **MENU** button for one second to exit.

#### Tilt OffSet - Adjustment of the tilt home position.

- 1. Press the **ENTER** button for at least 5 seconds, then press the **UP** or **DOWN** buttons so that "**Tilt Offset**" is displayed, press ENTER.
- 2. Use the **UP** and **DOWN** buttons to make your adjustments, and then press **ENTER** to confirm. Press the **MENU** button for one second to exit.

## FOCUS OffSet - Setting adjustment for the focus.

- 1. Press the **ENTER** button for at least 3 seconds, then press the **UP** or **DOWN** buttons so that "Focus Offset" is displayed, press **ENTER**.
- 2. Use the **UP** and **DOWN** buttons to make your adjustments, and then press **ENTER** to confirm. Press the **MENU** button for one second to exit.

#### Prism Offset - Setting adjustment for the prism.

- 1. Press the **ENTER** button for at least 5 seconds, then press the **UP** or **DOWN** buttons so that "**Prism Offset**" i s displayed, press **ENTER**.
- 2. Use the **UP** and **DOWN** buttons to make your adjustments, and then press **ENTER** to confirm. Press the **MENU** button for one second to exit.

#### Gobo OffSet - Setting adjustment for the gobo wheel.

- 1. Press the **ENTER** button for at least 5 seconds, then press the **UP** or **DOWN** buttons so that "Gobo Offset" is displayed, press **ENTER**.
- 2. Use the **UP** and **DOWN** buttons to make your adjustments, and then press **ENTER** to confirm. Press the **MENU** button for one second to exit.

#### R Gobo OffSet - Setting adjustment for the rotating gobo motor.

- 1. Press the ENTER button for at least 5 seconds, then press the UP or DOWN buttons so that "R Gobo Offset" is displayed, press ENTER.
- 2. Use the **UP** and **DOWN** buttons to make your adjustments, and then press **ENTER** to confirm. Press the **MENU** button for one second to exit.

#### Color OffSet - Setting adjustment for the color wheel.

- 1. Press the **ENTER** button for at least 5 seconds, then press the **UP** or **DOWN** buttons so that "**Color Offset**" is displayed, press **ENTER**.
- 2. Use the **UP** and **DOWN** buttons to make your adjustments, and then press **ENTER** to confirm. Press the **MENU** button for one second to exit.

#### UC IR & Airstream Remote Control

The UC IR (sold separately) infrared remote gives you control of various functions (See below). To control the fixture you must aim the remote at the front of the fixture and be no more than 30 feet away.

The Airstream IR (sold separately) remote transmitter plugs into the headphone jack of your iOS phone or tablet. To control your IR fixture you must raise the volume to the maximum on your iOS phone or tablet and aim the transmitter at the fixture sensor and be no more than 15 feet away. After you have purchased the Airstream IR transmitters, the app is a free download from the app store for your iOS phone or tablet. The app comes with 3 pages of control depending on the fixture you are using. Please see below for IR functions including the corresponding app page.

		Stand by	
FullON	Fade/Gobo		FULL ON FADE/GC
Strobe	Color		STROBE COLO
1	2	3	
4	5	6	
7	8	9	7 8
SoundOn	Show 0	SoundOff	SOUND ON SHOW
		·	unum od



#### Works with App page 1

**STAND BY -** Pressing this button will blackout the fixture.

**FULL ON -** Hold this button down to fully light up the unit. When you let the button go, the unit will return to its previous state.

FADE/GOBO - Press this button once to access gobo wheel. Use the number buttons to find your desired gobo.

"DIMMER +" and "DIMMER -" - Use these buttons to adjust the output intensity in Color mode.

STROBE - This button will activate the strobe effect. Press and hold this button to activate strobing and release the button to stop strobing.

**COLOR** - Press this button to access the color wheel. Use the number buttons to select your desired color. Adjust the output intensity using the "DIMMER +" and "DIMMER -" buttons.

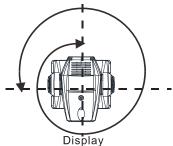
1-9 - In color mode and gobo mode, these buttons will allow you to select a desired color or gobo. In show mode buttons 1-4 will let you select your desired show.

**SOUND ON & OFF -** These buttons activate and deactivate the sound active mode.

**SHOW** - This activates the show mode. Use buttons 1-4 to select your desired show.

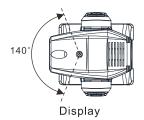


Pan Movement Range = **540**°



Mode 1

Pan Movement Range = 140°

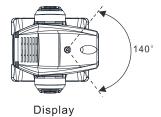


Mode 2 Pan Movement Range = **140**°

140° Display

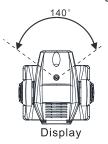
Mode 3

Pan Movement Range = 140°

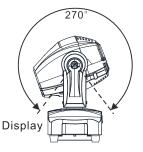


Mode 4

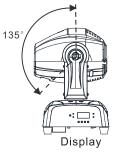
Pan Movement Range = 140°



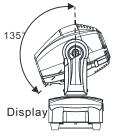
Tilt Movement Range = 270°



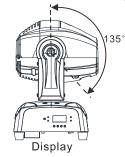
Tilt Movement Range = 135°



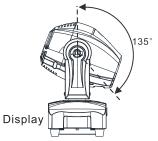
Tilt Movement Range = 135°

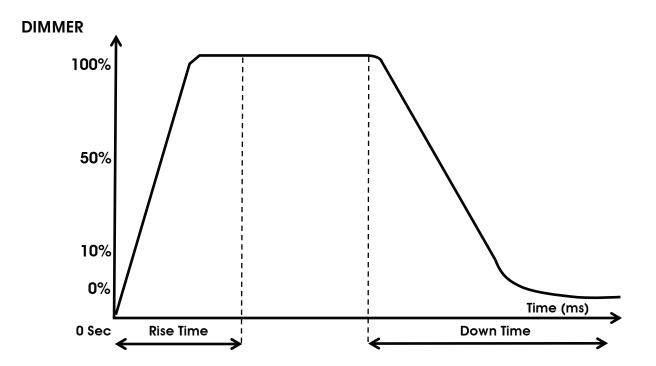


Tilt Movement Range = 135°



Tilt Movement Range = 135°





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

The gobo's featured in this unit are interchangable. Remember when changing these gobo's that they are thin and easy to bend. Please do this process gently so you do not bend or damage gobo. **Caution!** Never open the unit when in use. Always disconnect the main power before attempting to change the gobos.

**Locating the Gobo wheel:** After disconnecting the main power, position the head with the lens facing forward. Look through lens of the unit. When looking through the front lens, position the head so that the gears are on the right side. When the gears are on the right side, the shell that needs to be uscrewed is now facing up.

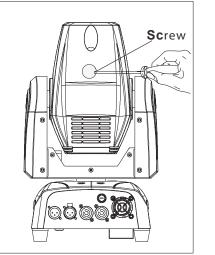
- 1. To change a gobo, rotate the moving head so that the UV lens is located on top. Unscrew the single middle screw. See instruction number 1 on the next page.
- Once you loosen the single screw you are able to swing the head back. See instruction number
   on the next page. You will now be able to access the gobo wheel. Turn the wheel with your
   hand until you come across the gobo you would like to change.
- 3. To remove the gobo holder gently pull the gobo holder towards the front of the unit and slide it up and out.
- 4. Gently and carefully remove the retainer ring. After the retainer ring is removed, carefully remove the gobo.
- 5. Change the gobo and replace the retainer ring. Carefully slide the gobo holder back into the housing slot.
- 6. Reassemble the unit.

## Focus Spot 2X

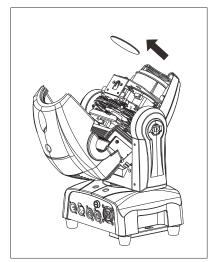
Inner Diameter: 23.8mm Outer Diameter: 19mm Thickness: 0.2mm



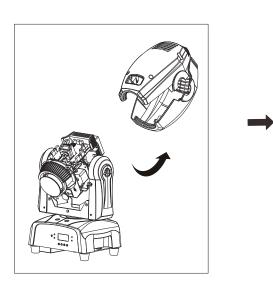
#### Gobos

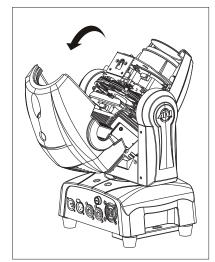


1. Unscrew the single screw located behind the UV LED.

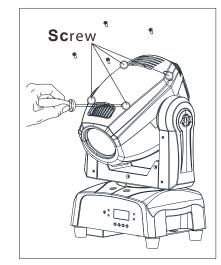


3. Carefully remove the lens.

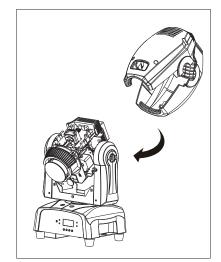


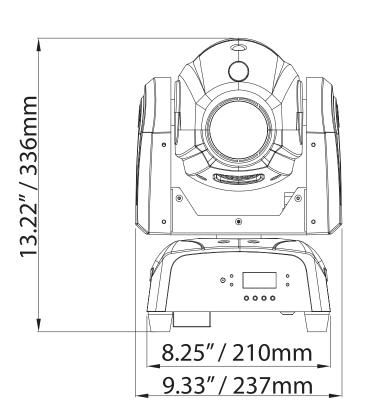


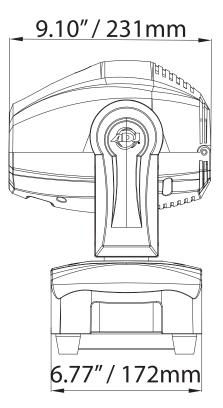
2. Flip the top cover back.

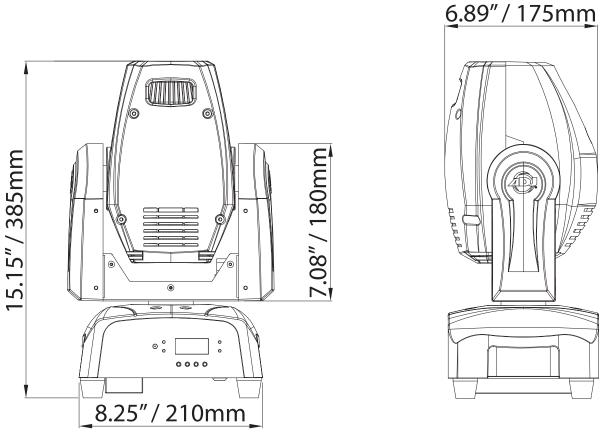


4. Unscrew the 4 screws located on the other side.









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#### Focus Spot 2X

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

#### Focus Spot 2X

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 2X

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 2X

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).

Cleaning

#### **Fuse Replacement**

**Trouble Shooting** 

# Multiple Unit Power Linking

#### 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 it's 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 maintnance, 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 Sp	ot 2X
Voltage:	100V ~ 240V/50~60Hz
LEDs:	1 x 100W White LED
	1 x 3W UV LED
Working Position:	Any safe working position
Power Draw:	180W
Fuse:	3.15A
Dimensions:	9.33" (L) x 9.10" (W) x 15.15" (H)
	237 x 231 x 385mm
Weight:	14.5lbs. / 6.5 kgs
Colors:	8 Colors + White
Gobos:	6 Gobos + Open
	Inner Diameter: 19mm
	Outer Diameter: 23mm
	Thickness: 0.5mm
DMX Channels:	2 DMX Modes: 16/18
Warranty:	2 Year (730 days)

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