



# FOCUS FLEX LI9

## User Manual

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Europe Energy Saving Notice

Energy Saving Matters (EuP 2009/125/EC)

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

**DOCUMENT VERSION**



Due to additional product features and/or enhancements, an updated version of this document may be available online. Please check [www.adj.com](http://www.adj.com) for the latest revision/update of this manual before beginning installation and/or programming.

Date	Document Version	Software Version >	DMX Channel Mode	Notes
06/09/23	1.0	1.01	22 / 31 / 40 / 104 / 31 CMY / 34 CMY Ch.	Initial Release
03/13/24	1.1	1.0.2	22 / 31 / 40 / 104 / 31 RGBW / 31 CMY / 34 CMY Ch.	Removed Transportation/Handling; Updated System Menu, DMX Traits, Pixel Map, Dimensional Drawings, Specifications
10/29/24	1.2	N/C	No Change	Updated System Menu, DMX Traits, Specifications

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# GENERAL INFORMATION

## INTRODUCTION

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

## UNPACKING

The products in this kit have been thoroughly tested and have been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect each unit included for damage and be sure all accessories necessary to operate the units have arrived intact. In the event damage has been found or parts are missing, please contact our customer support team for further instructions. Please do not return this kit to your dealer without first contacting customer support at the number listed below. Please do not discard the shipping carton in the trash. Please recycle whenever possible.

## 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.adj.com> (US)

<http://www.adjparts.eu> (EU)

**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, as doing so will void your manufacturer's warranty. In the unlikely event your unit may require service, please contact ADJ Products, LLC.

*Do not discard the shipping cartoon in the trash. Please recycle when ever possible.*

# LIMITED WARRANTY (USA ONLY)

- A. ADJ Products, LLC hereby warrants, to the original purchaser, ADJ Products, LLC products to be free of manufacturing defects in material and workmanship for a prescribed period from the date of purchase (see specific warranty period on reverse). This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.
- B. For warranty service, you must obtain a Return Authorization number (RA#) before sending back the product-please contact ADJ Products, LLC Service Department at 800-322-6337. Send the product only to the ADJ Products, LLC factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, ADJ Products, LLC will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, ADJ Products, LLC shall have no liability whatsoever for loss of or damage to any such accessories, or for the safe return thereof.
- C. This warranty is void 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 service by anyone other than ADJ Products, LLC factory unless prior written authorization was issued to purchaser by ADJ Products, LLC; if the product is damaged because not properly maintained as set forth in the instruction manual.
- D. This is not a service 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 identifying marks to that effect.
- E. ADJ Products, LLC reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured.
- F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by ADJ Products, LLC in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The consumer's and/or Dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall ADJ Products, LLC be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.
- G. This warranty is the only written warranty applicable to ADJ Products, LLC Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

## LIMITED WARRANTY PERIODS

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

# WARRANTY REGISTRATION

This device 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 pre-paid and accompanied by a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper 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 an R.A. number by contacting our customer support team on our customer support number. All packages returned to the service department not displaying an R.A. number on the outside of the package will be returned to the shipper.

## FEATURES

Robust and punchy, the Focus Flex L19 from ADJ Lighting is a versatile moving head luminaire capable of creating wash, beam and pixel effects. Designed to provide lighting designers with both flexibility and creative potential, it is ideal for event production and rental applications as well as for permanent installation in concert halls, theatres, nightclubs and churches.

### KEY FEATURES:

- 19x 40W 4-in-1 RGBL color mixing LEDs
- Virtual CMY mode
- Foreground and background color wheels
- Variable white light color temperature, 2700K to 10,000K
- Motorized zoom
- Quick motor movement
- Fine pan and tilt motor control

### INCLUDED ITEMS

- Power Cord (x1)
- Omega Brackets (x2)

# SAFETY GUIDELINES

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



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



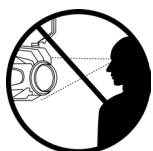
**THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT. DO NOT ATTEMPT ANY REPAIRS YOURSELF; DOING SO WILL VOID YOUR MANUFACTURER'S WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS FIXTURE AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURER'S WARRANTY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



**DO NOT PLUG FIXTURE INTO A DIMMER PACK!  
NEVER OPEN THIS FIXTURE WHILE IN USE!  
UNPLUG POWER BEFORE SERVICING FIXTURE!  
NEVER TOUCH FIXTURE DURING OPERATION AS IT MAY BE HOT!  
MAXIMUM AMBIENT TEMPERATURE IS 113°F (45°C). DO NOT OPERATE WHEN AMBIENT TEMPERATURE EXCEEDS THIS VALUE!  
UNIT SURFACE TEMPERATURE MAY REACH UP TO 167°F (75°C). DO NOT TOUCH THE HOUSING WITH BARE HANDS DURING OPERATION! TURN OFF THE POWER AND ALLOW ABOUT 15 MINUTES FOR THE UNIT TO COOL DOWN BEFORE REPLACING OR SERVICING.  
KEEP FLAMMABLE MATERIALS AWAY FROM FIXTURE!**



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



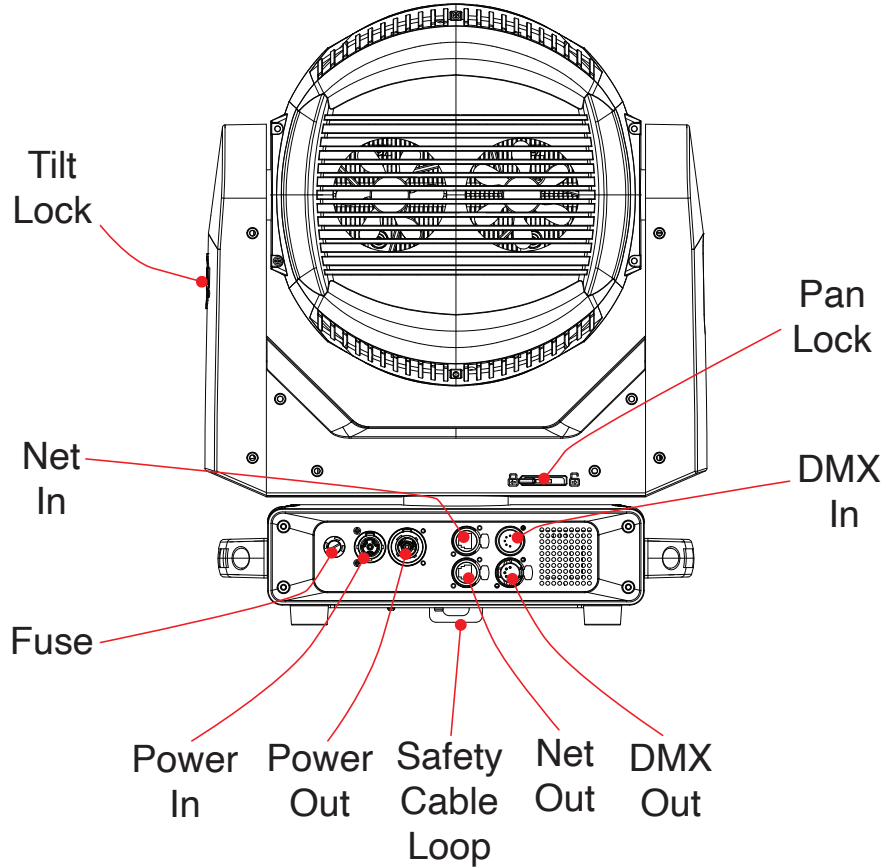
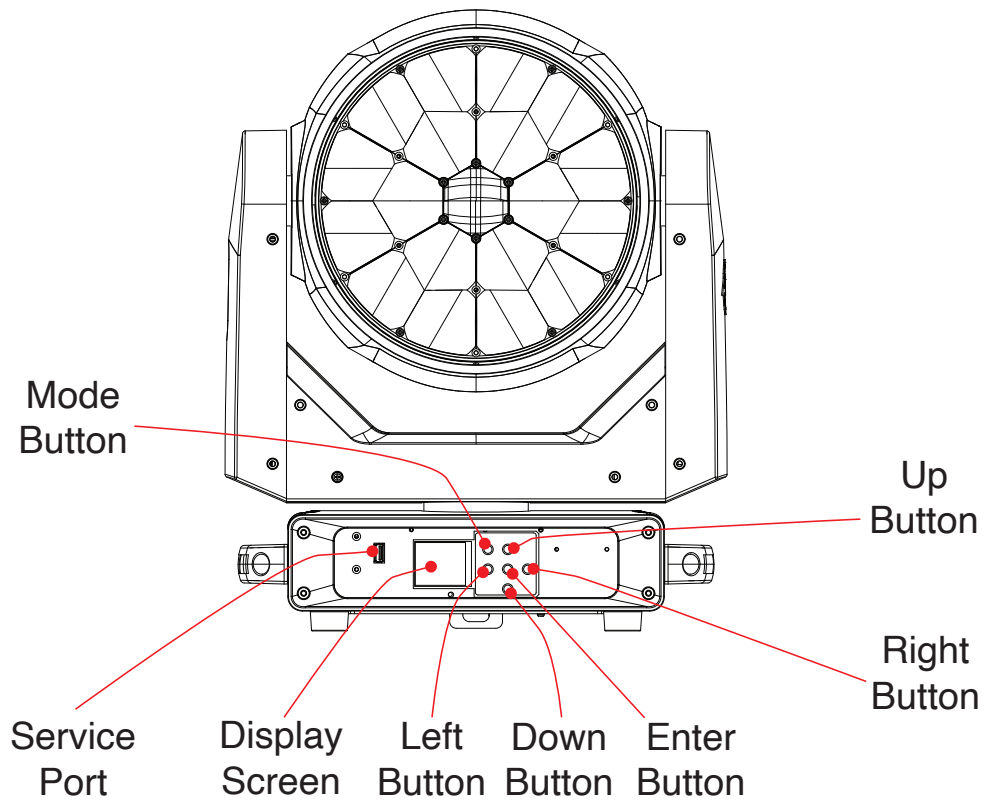
**NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE! RETINA INJURY RISK - MAY INDUCE BLINDNESS! SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK! THIS IS A RISK GROUP 3 (HIGH RISK) PRODUCT ACCORDING TO EN 62471 AND IEC/TR 62778. THE LUMINAIRE SHOULD BE POSITIONED 63 METERS OR MORE FROM THE OUTPUT OF THE FIXTURE TO REDUCE OR ELIMINATE EXPOSURE.**

# SAFETY GUIDELINES

- **DO NOT TOUCH** the fixture housing during operation. Turn OFF the power and allow approximately 15 minutes for the fixture to cool down before servicing.
- **DO NOT** shake fixture, and avoid brute force when installing and/or operating fixture.
- **DO NOT** operate fixture if the power cord is frayed, crimped, damaged and/or if any of the power cord connectors are damaged and do not insert into the fixture securely with ease.
- **NEVER** force a power cord connector into the fixture. If the power cord or any of its connectors are damaged, replace it immediately with a new one of the same power rating.
- **DO NOT** block any air ventilation slots; these must remain clean and never blocked. Allow approx. 7.9" (20cm) between fixture and other devices or a wall for proper cooling.
- When installing fixture in a suspended environment, always use mounting hardware that is no less than M10 x 25 mm, and always attach an appropriately rated safety cable.
- **ALWAYS** disconnect fixture from main power source before performing any type of service and/or cleaning procedure. Only handle the power cord by the plug end; never pull out the plug by tugging the wire portion of the cord.
- During the initial operation of this fixture, a light smoke or smell may emit from the interior of the fixture. This is a normal process and is caused by excess paint in the interior of the casing burning off from the heat associated with the lamp and will decrease gradually over time.
- Consistent operational breaks will ensure fixture will function properly for many years. **ONLY** use the original packaging and materials to transport the fixture in for service.



# OVERVIEW



# FIXTURE INSTALLATION



## **FLAMMABLE MATERIAL WARNING**

Keep fixture at least 7.9in. (0.2m) away from any flammable materials, decorations, pyrotechnics, etc.



## **ELECTRICAL CONNECTIONS**

A qualified electrician should be used for all electrical connections and/or installations.



## **MINIMUM DISTANCE TO OBJECTS/SURFACES MUST BE 40 FEET (12 METERS)**

### **DO NOT INSTALL THE FIXTURE IF YOU ARE NOT QUALIFIED TO DO SO!**

Fixture **MUST** be installed following all local, national, and country commercial electrical and construction codes and regulations. Before rigging/mounting the fixture to any metal truss/structure or placing the fixture on any surface, a professional equipment installer **MUST** be consulted to determine if the metal truss/structure or surface is properly certified to safely hold the combined weight of the fixture, clamps, cables, and accessories.

Overhead fixture installation must always be secured with a secondary safety attachment, such as an appropriately rated safety cable that meets all local, national, and country codes and regulations.

Fixture ambient operating temperature range is **14°F to 113°F. (-10°C to 45°C)**. Do not use this fixture when ambient temperature falls outside of this range!

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

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

Allow approximately 15-minutes for the fixture to cool down before servicing.

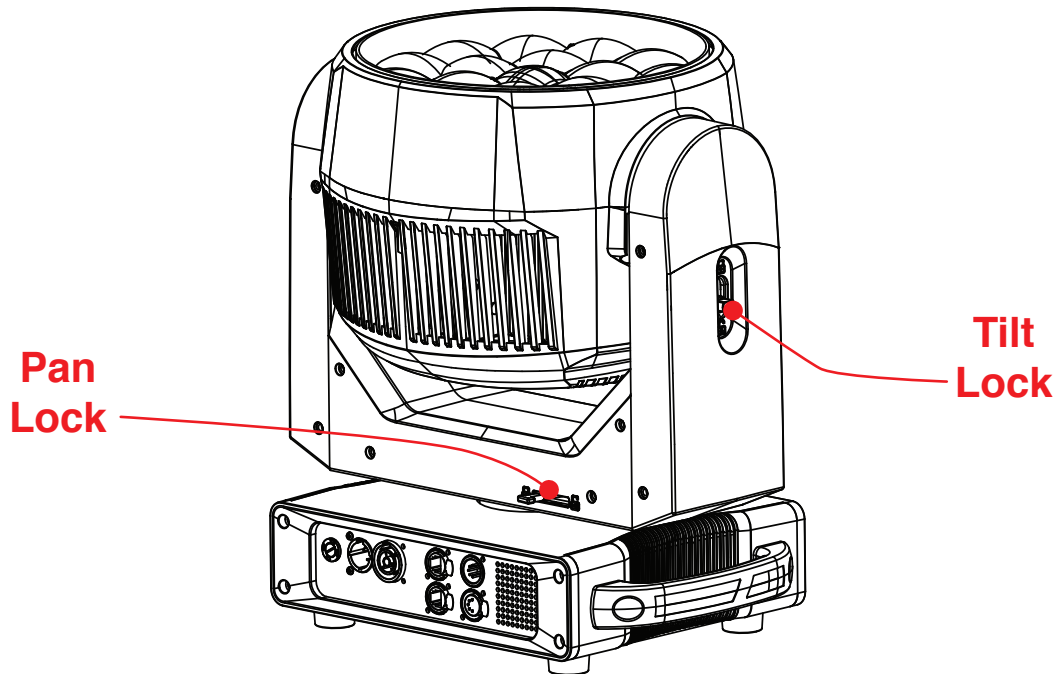
# FIXTURE INSTALLATION

## PAN AND TILT LOCK

Please note that this fixture features separate manual locks for both the pan and tilt movement. Both locks should be engaged during shipping, transportation, and installation in order to keep the fixture head secured in place and avoid damage.

**Always make sure to release both locks before powering on and operating the fixture.**

The location of the pan and tilt locks are illustrated below:

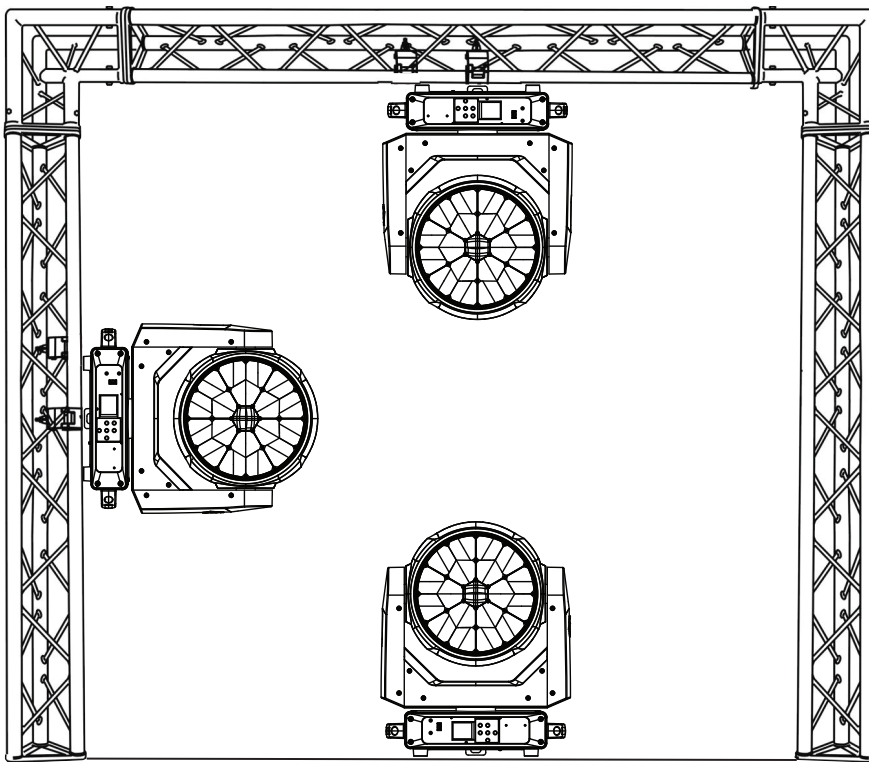


# FIXTURE INSTALLATION

When installing the unit, the trussing or area of installation must be able to hold 10 times the weight without any deformation. During installation, the unit must be secured with a secondary safety attachment, such as an appropriately rated 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.

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



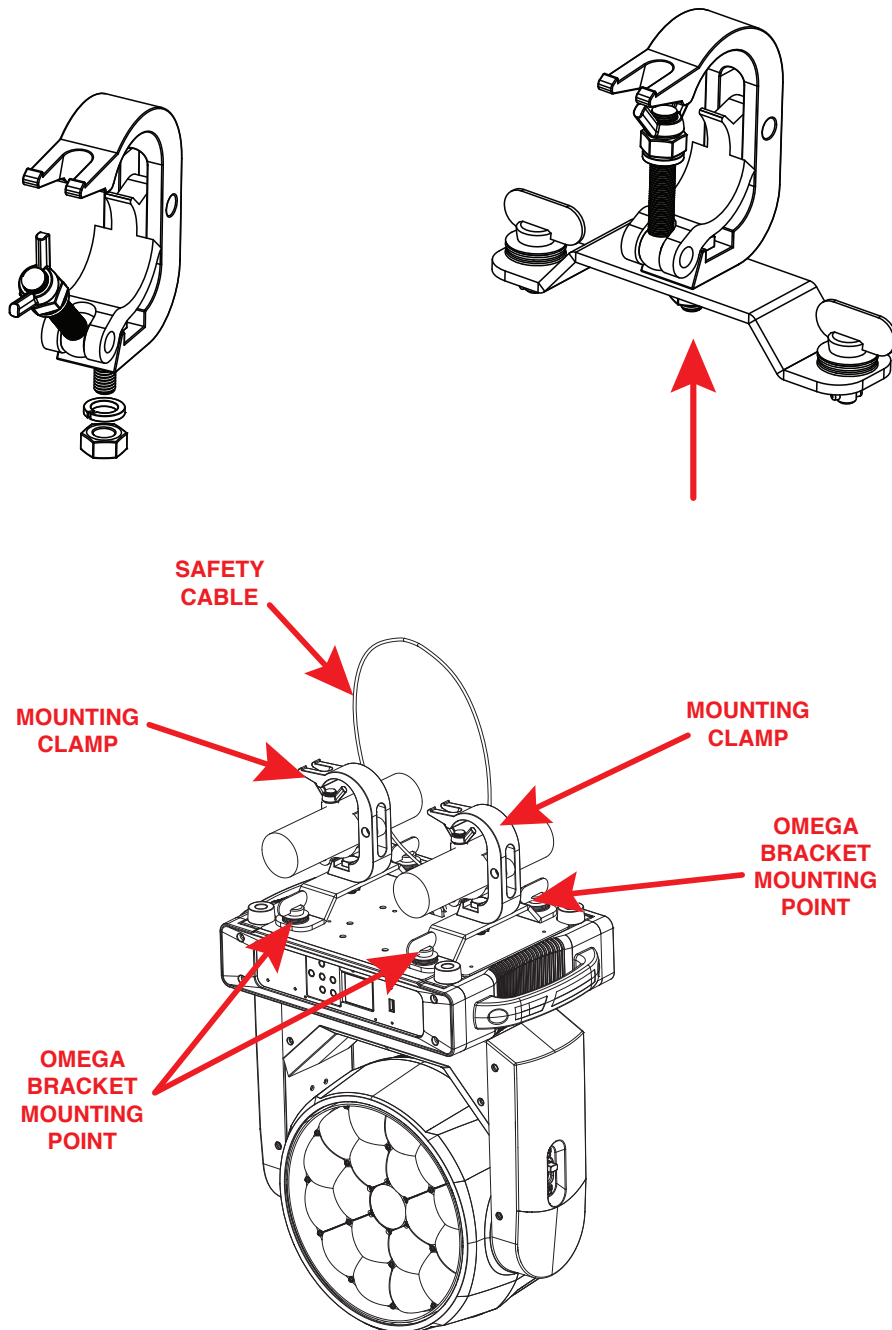
## **\*SAFETY CABLE**

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

The fixture is fully operational in three different mounting positions: hanging upside-down, mounted sideways on trussing, or set on a flat level surface. Be sure this fixture is kept at least 0.2m (8in.) away from any flammable materials (decoration etc.). Always use an appropriately rated safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails. Never use the carrying handles for secondary attachment.

# FIXTURE INSTALLATION

**NOTICE:** The suitable environmental temperature for this lighting fixture is 14°F to 113°F (-10°C to 45°C). Do not place this lighting fixture in an environment where the temperatures fall outside of this range. This will allow the fixture to run at its best and help prolong the fixture life.



Insert an M12 screw through the hole of a mounting clamp, then fit an Omega bracket over the screw and secure in place with an M12 washer and nut. Insert the quick-lock fasteners of the Omega holder into the respective holes of the adjustable mounting bracket. Tighten the quick-lock fasteners fully clockwise. **PLEASE NOTE THAT TWO OMEGA BRACKET AND TWO MOUNTING CLAMP ARE REQUIRED TO SECURELY INSTALL THIS FIXTURE.** Pull the safety-cable through the opening located on the bottom of the unit and over the trussing system or a safe fixation spot. Insert the end in the carabiner and tighten the safety screw.

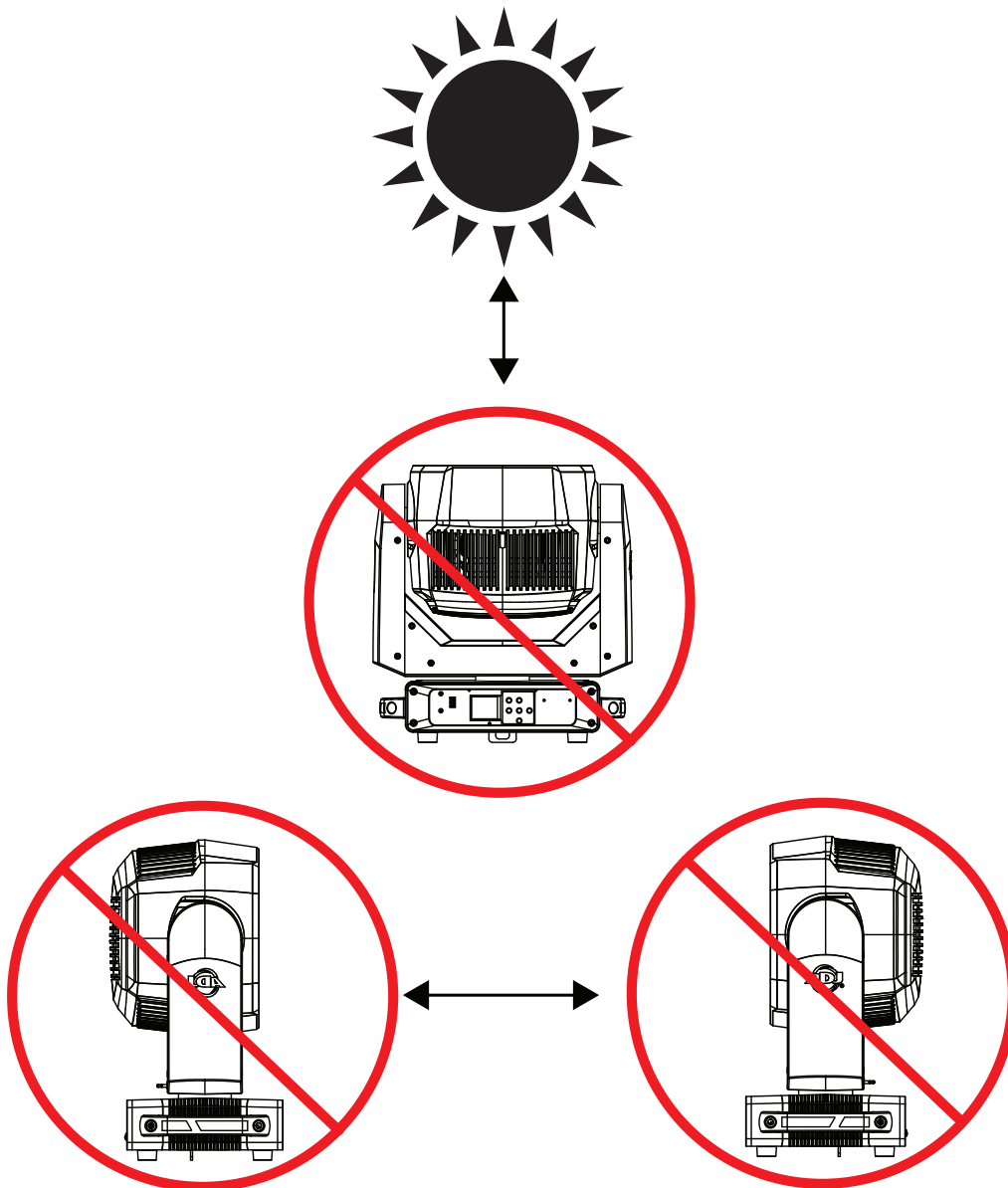
# FIXTURE INSTALLATION

## 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.**



# REMOTE DEVICE MANAGEMENT (RDM)

**NOTE: In order for RDM to work properly, RDM enabled equipment must be used throughout the entire system, including DMX data splitters and wireless systems.**

Remote Device Management (RDM) is a protocol that sits on top of the DMX512 data standard for lighting, and allows the DMX systems of the fixtures to be modified and monitored remotely. This protocol is ideal for instances in which a unit is installed in a location that is not easily accessible.

With RDM, the DMX512 system becomes bi-directional, allowing a compatible RDM enabled controller to send out a signal to devices on the wire, as well as allowing the fixture to respond (known as a GET command). The controller can then use its SET command to modify settings that would typically have to be changed or viewed directly via the unit's display screen, including the DMX Address, DMX Channel Mode, and Temperature Sensors.

## FIXTURE RDM INFORMATION:

Device ID	Device Model ID	RDM Code	Personality ID
0038 0000-FFFF	0038	0x1900	Basic 22 (1) Standard 31 (2) Extended 40 (3) Extended 104 (4) Standard CMY 25 (5) Extended CMY 28 (6)

Please be aware that **not all RDM devices support all RDM features**, and therefore it is important to check beforehand to ensure that the equipment that you are considering includes all of the features that you require.

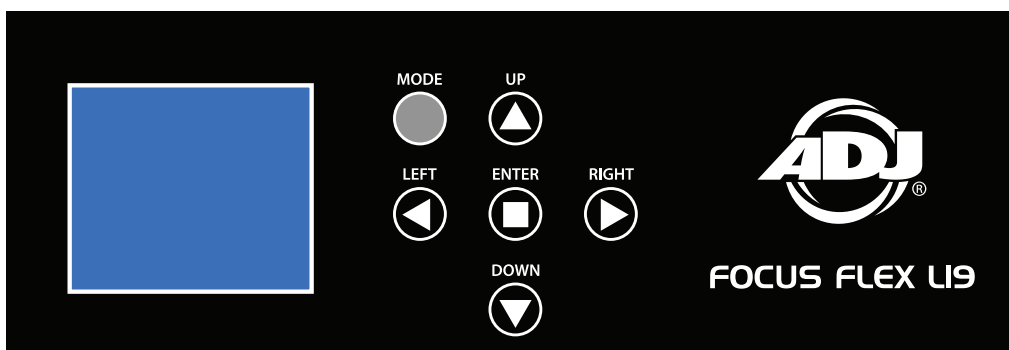
The following parameters are accessible in RDM on this device:

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

# SYSTEM MENU

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

**NOTE:** To access the LCD Menu Control Display via the internal battery, press and hold the **MODE** button for 10 seconds. The LCD Menu Control Display will shut **OFF** automatically about 1 minute from the last button press.



## KEY LOCK

This function allows the user to configure whether or not the display screen and control panel keys will lock after a certain period of inactivity. It can be accessed by navigating to Personality > Display > Key Lock in the system menu. The setting options are described below:

- OFF: The display screen and control panel keys remain active at all times.
- ON: The display screen and control panel keys automatically lock after a certain period of inactivity, which can be set under Personality > Display > Screen Saver Delay. To unlock, press and hold the MODE button for 3 seconds.
- ON1: The display screen and control panel keys automatically lock after a certain period of inactivity, which can be set under Personality > Display > Screen Saver Delay. To unlock, press UP, DOWN, UP, DOWN, ENTER in that order.

## SERVICE PORT / SOFTWARE UPDATES

Please contact ADJ customer support or latest software and updating instructions.



# SYSTEM MENU

<b>DMX Settings</b>	DMX Address	<b>001 - xxx</b>		Set DMX starting address	
	DMX Channel Mode	Basic 22		Select DMX channel mode	
		<b>Standard 31</b>			
		Extended 40			
		Extended 104			
		Standard RGBW 31			
		Standard CMY 31			
		Extended CMY 34			
	No DMX Status	User Mode		Hold last setting when DMX signal is lost	
		<b>Hold Last</b>			
Blackout		Black out fixture when DMX signal is lost			
Manual		Default to manual mode when DMX signal is lost			
	Internal Programs		Default to selected internal program when DMX signal is lost		
<b>Personality</b>	Prim/Sec Mode	Primary / <b>Secondary</b>		Set fixture as primary or secondary fixture	
	Select Signal	DMX or Aria X2		DMX has priority. When Aria X2 is connected, a green LED indicator shall be on solid. When Wireless DMX is not connected, a red LED indicator shall be on solid.	
		Aria X2 and DMX Out		When Wireless DMX is connected, a green LED indicator shall be on solid. The DMX XLR output shall send DMX signal out.	
	Aria Settings	Frequency	<b>2.4 GHz</b>		Select Aria frequency
			Sub Gig US		
			Sub Gig EU		
		2.4 GHz Ch	<b>00 - 15</b>		Select channel for 2.4GHz frequency
		Sub Gig Ch	<b>00 - 09</b>		Select channel for sub gig frequency
		Mesh	<b>ON / OFF</b>		Allow units to be interconnected so data can be relayed in a decentralized manner
	RDM	<b>ON / OFF</b>		Enable/disable RDM	
	Bluetooth	<b>ON / OFF</b>		Enable/disable Bluetooth	
	Network	Input	<b>ON / OFF</b>		Switch network input on or off
		Protocol	Artnet / sACN		Select protocol
		KlingNet	<b>ON / OFF</b>		Switch Klingnet function on or off
		Address	Set Universe	000 - 32767	Set Artnet universe
Ethernet IP			002.000.000.001	Set ethernet address	
Ether Mask IP	255.000.000.000		Set ethernet mask address		

# SYSTEM MENU

Personality (continued)	Status Settings	Pan Degree	<b>630/540</b>	Select pan degree
		Tilt Degree	<b>250</b>	Select tilt degree
		Pan Invert	ON / OFF	Turn pan inverting on or off
		Tilt Invert	ON / OFF	Turn tilt inverting on or off
		P./T. Feedback	ON / OFF	Turn pan/tilt feedback on or off
		P./T. Speed	<b>Speed 1</b>	Select pan/tilt speed
			Speed 2	
	Hibernation	OFF, 01M~99M, default = <b>15M</b>	The fixture will go into hibernation after the set period of inactivity	
	Fan Settings	Head Fan	<b>Auto</b>	Set fan operation modes
			High	
			Low	
		Base Fan	Mute	
			<b>Auto</b>	
			High	
	Zoom Speed	<b>Standard</b>	Zoom function runs slower than Fast option	
		Fast	Zoom function runs as fast as possible with lower noise level	
	Zoom Mode	<b>Mode 1</b>	Zoom range at maximum limits for zoom in/zoom out	
		Mode 2	Zoom range limited to avoid over shooting focal point	
	LED Mode	<b>LP Mode 1</b>	Standard max LED output	
		LP Mode 2	Regulated LED output with 8500k target CCT	
	Dim Modes	<b>Standard</b>	Select dim mode, and set dimming speed	
		Stage		
		TV		
		Architectural		
		Theatre		
		Stage 2		
	Dim Speed	0.1s - 10s		
LED Refresh Rate	900-1500 Hz, 2500 Hz, 4000 Hz, 5000 Hz, 6000 Hz, 10 KHz, 15 KHz, 20 KHz, 25 KHz, Default = <b>1200 Hz</b>	Set LED refresh rate		
Dim Curve	Linear	Select dimming curve		
	<b>Square</b>			
	Inv Squa			
	S Curve			
Reset Motors	Reset All Motors	YES / NO	Reset fixture motors	
	Pan/Tilt Reset	YES / NO		
	Effect Reset	YES / NO		

# SYSTEM MENU

Personality (continued)	Display	Intensity	1 - 10	Adjust display intensity	
		Display Invert	YES / NO	Invert screen display orientation	
		Screen Saver Delay	Off - 10min, <b>Default = 5min</b>	Screen goes to screen saver after set period of inactivity	
		Key Lock	Off	Enable/disable key lock after period of inactivity. Note: On1 requires unlock sequence	
	On		Down, Up, Down, Up, Enter		
	Set User Mode	Pan	1	User mode can be set by the user. By default, all channels are assigned as in Extended mode.	
		Pan Fine	2		
		Tilt	3		
		Tilt Fine	4		
		Red 1	5		
		Green 1	6		
		Blue 1	7		
		Lime 1	8		
		...	...		
		Red 19	77		
		Green 19	78		
		Blue 19	79		
		Lime 19	80		
		...	...		
	Program	100			
	Program Speed	101			
	Program Fade	102			
	P/T Speed	103			
	Special	104			
	Service	Passcode = 050	Effect Adjust (Calibration)	Pan 000 - 255	Calibrate effects
				Tilt 000 - 255	
				Red 000 - 255	
				Green 000 - 255	
				Blue 000 - 255	
				White 000 - 255	
			...	...	
			Color Calibration	Enable / Disable	Enable to allow unit to use calibrated data; when disabled, unit does not use calibrated data and outputs to its fullest
			USB Port Power	Off / On	Activate/deactivate power to USB port
Update Software			Off / On	Choose whether to initiate software update	
Factory Restore Passcode = 011	Off / On	Restore fixture to factory settings			
Manual Control	Pan	000 - 255		Manual control settings	
	Pan Fine	000 - 255			
	Tilt	000 - 255			
	Tilt Fine	000 - 255			
...	...	...			
Internal Programs	Program 1	Speed	000 - 255	Configure internal program settings	
		Fade	000 - 255		
	Program 2	Speed	000 - 255		
		Fade	000 - 255		
	...	...	...		
	Program 20	Speed	000 - 255		
		Fade	000 - 255		

# SYSTEM MENU

<b>Information</b>	Fixture Life Time	Power On Time	xxxxxx Hours		Total lifetime hours fixture has been powered on (non resettable)	
		P-On Time-R	xxxxxx Hours		Total hours fixture has been powered on since last reset	
		P-On Time-Reset	Passcode = 050		Reset P-On Time-R	
	Total LED Time	LED On Time	xxxxxx Hours		Total lifetime hours LED has been powered on (non-resettable)	
		LED On Time-R	xxxxxx Hours		Total hours LED has been powered on since last reset	
		LED Hours Reset	Passcode = 050		Reset LED On Time-R	
	Fixture Temps	LEDs	Current	xxx F / xxx C		Current LED temp
			Max Resettable	xxx F / xxx C		Max recorded LED temp since last reset
		Base Temp	Current	xxx F / xxx C		Current base temp
			Max Resettable	xxx F / xxx C		Max recorded base temp since last reset
		Reset LED Temp	Yes / <b>No</b>	Passcode = 050		Reset LED max temp
		Reset Base Temp	Yes / <b>No</b>	Passcode = 050		Reset base max temp
	Fan Info (RPM)	LED Fan	xxxx RPM LED		Current LED fan speed	
		Base Fan	xxxx RPM		Current base fan speed	
	DMX Values	Pan				Displays current value of each DMX channel
		Pan Fine				
	Error Logs	xxxxx				List errors one by one
		Reset Error Log	Yes / <b>No</b>	Passcode = 050		Reset error log
	Software Version	x.xx			Current software version	
	Aria ID	xx:xx:xx:xx:xx:xx			Display fixture Aria ID	

# FAN MODES AND LOW NOISE OPERATION

The Focus Flex L19 is a high-performance fixture suited for multiple applications. For noise critical environments such as Theater, Opera or Orchestra Halls, it offers various fan operation modes which remove any distraction for the audience and performers. Fan Modes can be changed remotely via the DMX control channel, allowing the fixture to offer high output or whisper silent operation at a moment's notice. All Fan Modes smoothly transition over a brief time, preventing unwanted attraction to the fixture.

**Auto (Default)**—Fans only run at the speeds needed to keep the LED engine within a safe temperature range and ensures optimal performance of the fixture. If possible, they will turn-off, for example, when the fixture is dimmed to a low intensity. Fans sense the ambient and fixture temperature, and will always try to keep noise levels to a minimum. The fixture output will only reduce when the LED engine cannot be cooled down to its safe operating range due to high ambient temperature. ***NOTE: Recommended for daily operation.***

**High**—Fan speeds are increased throughout for the most efficient cooling of the fixture. This mode will increase wear on the fans and should only be utilized in exceptional circumstances. Fans will always run, even if the fixture is dimmed down. Fixture output is kept at 100% unless the LED engine temperature reaches an unsafe temperature at which point the fixture will reduce power carefully to ensure continued safe operation. This mode is only required in very high ambient temperatures when automatic fan speed adjustments are not desired.

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

**Mute**— Running the fixture in MUTE mode reduces the fixture to about 25% output, and all fans are off. The fixture is totally silent.

# WIRELESS DMX



**BEFORE SETTING THE WIRELESS CHANNEL ON ANY WIRELESS DMX FIXTURE, MAKE SURE THE SOURCE WIRELESS DMX TRANSCEIVER DEVICE IS OFF.**

With this feature you are able to control the unit with DMX without the use of XLR cables. Your DMX controller must be connected to a ADJ Wireless DMX Transceiver to use this function. Effective range is up to 2500 feet/760 meters (open line of sight).

1. Ensure the source Wireless DMX Transceiver device is powered OFF.
2. Power ON the fixture and using the control panel scroll to the PERSONALITY menu and press ENTER. Use the UP and DOWN buttons to highlight the WIRELESS DMX SETTINGS submenu and press ENTER.
3. Using the UP and DOWN buttons, highlight ENABLE WIRELESS DMX. Press the ENTER button to toggle between On and Off. Press ENTER so that “On” is displayed.
4. Next highlight SET WIRELESS DMX CHANNEL and press ENTER. Use the UP and DOWN buttons to find your desired Wireless DMX address and press ENTER to confirm.

**NOTE:** Erratic fixture movement may occur if other Wireless DMX products are in use in the same area and are using the same Wireless DMX channel. When Wireless DMX is enabled, the fixture may immediately start to respond to the DMX wireless signal from another wireless DMX Transceiver. Make sure to know what wireless DMX channels are being used in the area where the fixture is being used.

**ADJ WIRELESS DMX TRANSCEIVER only has 0-14 wireless channels, NO CH 15.**

5. Set your desired DMX address in the DMX ADDRESS submenu of the DMX SETTINGS main system menu. Set your desired DMX channel mode in the DMX CHANNEL MODE submenu of the DMX SETTINGS main system menu.
6. Repeat this process for all Wireless DMX compatible fixtures in the wireless DMX network, making sure all fixtures are assigned the same wireless DMX channel.
7. After all fixtures in the wireless DMX network have been set to the same wireless DMX channel and powered ON, power ON the source Wireless DMX Transceiver device.
8. Test all fixtures connected to the wireless DMX network to confirm proper functionality.

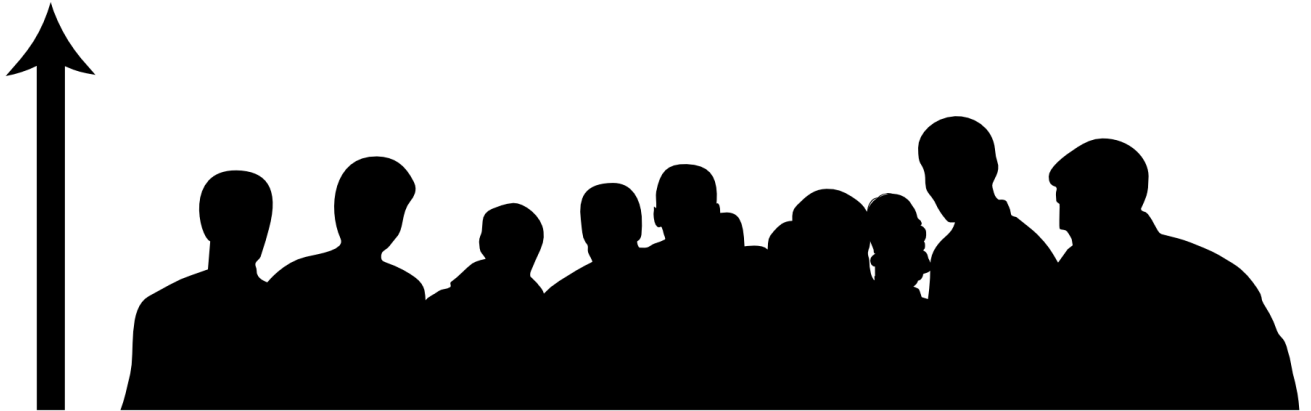
# WIRELESS DMX

## WIRELESS DMX INSTALLATION GUIDELINES

For best results, position the fixture so that the display screen is oriented in the direction of the transmitter device or remote.

Wireless DMX signal can penetrate walls, glass, metal, and most objects. However, there are many factors that can effect and/or interrupt the wireless DMX signal, including the presence of people. Therefore, it is highly recommended to position the wireless antenna a minimum of 9.8ft (3m) above audiences to ensure optimum and reliable wireless DMX operation.

**9.8 ft (3m)  
Above Ground**



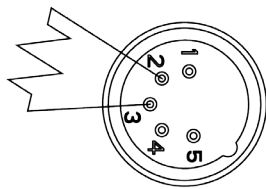
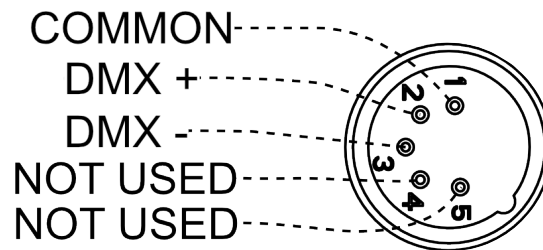
# DMX SETUP

**DMX-512:** DMX is short for Digital Multiplex. This is a universal protocol used as a form of communication between intelligent fixtures and controllers. A DMX controller sends DMX data instructions from the controller to the fixture. DMX data is sent as serial data that travels from fixture to fixture via the DATA “IN” and DATA “OUT” XLR terminals located on all DMX fixtures (most controllers only have a DATA “OUT” terminal).

**DMX Linking:** DMX is a language allowing all makes and models of different manufactures to be linked together and operate from a single controller, as long as all fixtures and the controller are DMX compliant. To ensure proper DMX data transmission, when using several DMX fixtures try to use the shortest cable path possible. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example; a fixture assigned a DMX address of 1 may be placed anywhere in a DMX line, at the beginning, at the end, or anywhere in the middle. When a fixture is assigned a DMX address of 1, the DMX controller knows to send DATA assigned to address 1 to that unit, no matter where it is located in the DMX chain.

**Data Cable (DMX Cable) Requirements (For DMX Operation):** This unit can be controlled via DMX-512 protocol. Your unit and your DMX controller requires a 5-pin XLR connector for data input/output. We recommend Accu-Cable DMX cables. If you are making your own cables, be sure to use standard 110-120 Ohm shielded cable (This cable may be purchased at almost all pro lighting stores). Your cables should be made with a male and female XLR connector on either end of the cable. Also remember that DMX cable must be daisy chained and cannot be split.

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



A DMX512 terminator reduces signal errors, avoiding most signal reflection interference. Connect PIN 2 (DMX-) and PIN3 (DMX+) of the last fixture in series with a 120 Ohm, 1/4W resistor to terminate the line.

**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.



# DMX ADDRESSING

All fixtures should be given a DMX starting address when using a DMX controller, so the correct fixture responds to the correct control signal. This digital starting address is the channel number from which the fixture starts to “listen” to the digital control signal sent out from the DMX controller. The assignment of this starting DMX address is achieved by setting the correct DMX address on the digital control display on the fixture.

You can set the same starting address for all fixtures or a group of fixtures, or set different addresses for each individual fixture. Setting all fixtures to the same DMX address will cause all fixtures to react in the same way, in other words, changing the settings of one channel will affect all the fixtures simultaneously.

If you set each fixture to a different DMX address, each unit will start to “listen” to the channel number you have set, based on the quantity of DMX channels of each fixture. That means changing the settings of one channel will only affect the selected fixture. In the case of the Focus Flex, when in 22 Channel mode, you should set the starting DMX address of the first unit to 1, the second unit to 23 (1 + 22), the third unit to 45 (1 + 22 + 22), the fourth unit to 67 (1 + 22 + 22 + 22), etc...

Channel Mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
<b>Basic: 22 Channels</b>	<b>1</b>	<b>23</b>	<b>45</b>	<b>67</b>
<b>Standard: 31 Channels</b>	<b>1</b>	<b>32</b>	<b>63</b>	<b>94</b>
<b>Extended 40: 40 Channels</b>	<b>1</b>	<b>41</b>	<b>81</b>	<b>121</b>
<b>Extended 104: 104 Channels</b>	<b>1</b>	<b>105</b>	<b>209</b>	<b>313</b>
<b>Standard RGBW: 31 Channels</b>	<b>1</b>	<b>32</b>	<b>63</b>	<b>94</b>
<b>CMY Standard: 31 Channels</b>	<b>1</b>	<b>32</b>	<b>63</b>	<b>94</b>
<b>CMY Extended: 34 Channels</b>	<b>1</b>	<b>35</b>	<b>69</b>	<b>103</b>

# DMX TRAITS: CHANNEL FUNCTIONS & VALUES

CHANNEL							DMX VALUES	FUNCTION
Basic	Std	Ext 40	Ext 104	Std RGBW 31	Std CMY	Ext CMY		
1	1	1	1	1	1	1	000 - 255	<b>Pan Movement</b> , 540/630 degrees
	2	2	2	2	2	2	000 - 255	<b>Pan Fine</b>
2	3	3	3	3	3	3	000 - 255	<b>Tilt Movement</b> , 250 degrees
	4	4	4	4	4	4	000 - 255	<b>Tilt Fine</b>
3	5			5			000 - 255	<b>Red</b> , 0% to 100%
4	6			6			000 - 255	<b>Green</b> , 0% to 100%
5	7			7			000 - 255	<b>Blue</b> , 0% to 100%
6	8			8			000 - 255	<b>Lime</b> , 0% to 100%
		5	5				000 - 255	<b>Red 1</b> , 0% to 100%
		6	6				000 - 255	<b>Green 1</b> , 0% to 100%
		7	7				000 - 255	<b>Blue 1</b> , 0% to 100%
		8	8				000 - 255	<b>Lime 1</b> , 0% to 100%
		9	9				000 - 255	<b>Red 2</b> , 0% to 100%
		10	10				000 - 255	<b>Green 2</b> , 0% to 100%
		11	11				000 - 255	<b>Blue 2</b> , 0% to 100%
		12	12				000 - 255	<b>Lime 2</b> , 0% to 100%
		13	13				000 - 255	<b>Red 3</b> , 0% to 100%
		14	14				000 - 255	<b>Green 3</b> , 0% to 100%
		15	15				000 - 255	<b>Blue 3</b> , 0% to 100%
		16	16				000 - 255	<b>Lime 3</b> , 0% to 100%
			17				000 - 255	<b>Red 4</b> , 0% to 100%
			18				000 - 255	<b>Green 4</b> , 0% to 100%
			19				000 - 255	<b>Blue 4</b> , 0% to 100%
			20				000 - 255	<b>Lime 4</b> , 0% to 100%
			21				000 - 255	<b>Red 5</b> , 0% to 100%
			22				000 - 255	<b>Green 5</b> , 0% to 100%
			23				000 - 255	<b>Blue 5</b> , 0% to 100%
			24				000 - 255	<b>Lime 5</b> , 0% to 100%
			25				000 - 255	<b>Red 6</b> , 0% to 100%
			26				000 - 255	<b>Green 6</b> , 0% to 100%
			27				000 - 255	<b>Blue 6</b> , 0% to 100%
			28				000 - 255	<b>Lime 6</b> , 0% to 100%
			29				000 - 255	<b>Red 7</b> , 0% to 100%
			30				000 - 255	<b>Green 7</b> , 0% to 100%
			31				000 - 255	<b>Blue 7</b> , 0% to 100%
			32				000 - 255	<b>Lime 7</b> , 0% to 100%
			33				000 - 255	<b>Red 8</b> , 0% to 100%
			34				000 - 255	<b>Green 8</b> , 0% to 100%
			35				000 - 255	<b>Blue 8</b> , 0% to 100%
			36				000 - 255	<b>Lime 8</b> , 0% to 100%

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# DMX TRAITS: CHANNEL FUNCTIONS & VALUES

CHANNEL							DMX VALUES	FUNCTION
Basic	Std	Ext 40	Ext 104	Std RGBW 31	CMY Std	CMY Ext		
			37				000 - 255	<b>Red 9</b> , 0% to 100%
			38				000 - 255	<b>Green 9</b> , 0% to 100%
			39				000 - 255	<b>Blue 9</b> , 0% to 100%
			40				000 - 255	<b>Lime 9</b> , 0% to 100%
			41				000 - 255	<b>Red 10</b> , 0% to 100%
			42				000 - 255	<b>Green 10</b> , 0% to 100%
			43				000 - 255	<b>Blue 10</b> , 0% to 100%
			44				000 - 255	<b>Lime 10</b> , 0% to 100%
			45				000 - 255	<b>Red 11</b> , 0% to 100%
			46				000 - 255	<b>Green 11</b> , 0% to 100%
			47				000 - 255	<b>Blue 11</b> , 0% to 100%
			48				000 - 255	<b>Lime 11</b> , 0% to 100%
			49				000 - 255	<b>Red 12</b> , 0% to 100%
			50				000 - 255	<b>Green 12</b> , 0% to 100%
			51				000 - 255	<b>Blue 12</b> , 0% to 100%
			52				000 - 255	<b>Lime 12</b> , 0% to 100%
			53				000 - 255	<b>Red 13</b> , 0% to 100%
			54				000 - 255	<b>Green 13</b> , 0% to 100%
			55				000 - 255	<b>Blue 13</b> , 0% to 100%
			56				000 - 255	<b>Lime 13</b> , 0% to 100%
			57				000 - 255	<b>Red 14</b> , 0% to 100%
			58				000 - 255	<b>Green 14</b> , 0% to 100%
			59				000 - 255	<b>Blue 14</b> , 0% to 100%
			60				000 - 255	<b>Lime 14</b> , 0% to 100%
			61				000 - 255	<b>Red 15</b> , 0% to 100%
			62				000 - 255	<b>Green 15</b> , 0% to 100%
			63				000 - 255	<b>Blue 15</b> , 0% to 100%
			64				000 - 255	<b>Lime 15</b> , 0% to 100%
			65				000 - 255	<b>Red 16</b> , 0% to 100%
			66				000 - 255	<b>Green 16</b> , 0% to 100%
			67				000 - 255	<b>Blue 16</b> , 0% to 100%
			68				000 - 255	<b>Lime 16</b> , 0% to 100%
			69				000 - 255	<b>Red 17</b> , 0% to 100%
			70				000 - 255	<b>Green 17</b> , 0% to 100%
			71				000 - 255	<b>Blue 17</b> , 0% to 100%
			72				000 - 255	<b>Lime 17</b> , 0% to 100%
			73				000 - 255	<b>Red 18</b> , 0% to 100%
			74				000 - 255	<b>Green 18</b> , 0% to 100%
			75				000 - 255	<b>Blue 18</b> , 0% to 100%
			76				000 - 255	<b>Lime 18</b> , 0% to 100%
			77				000 - 255	<b>Red 19</b> , 0% to 100%

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# DMX TRAITS: CHANNEL FUNCTIONS & VALUES

CHANNEL							DMX VALUES	FUNCTION
Basic	Std	Ext 40	Ext 104	Std RGBW 31	CMY Std	CMY Ext		
			78				000 - 255	<b>Green 19</b> , 0% to 100%
			79				000 - 255	<b>Blue 19</b> , 0% to 100%
			80				000 - 255	<b>Lime 19</b> , 0% to 100%
					5	5	000 - 255	<b>Cyan</b> , 0% to 100%
						6	000 - 255	<b>Cyan Fine</b> , 0% to 100%
					6	7	000 - 255	<b>Magenta</b> , 0% to 100%
						8	000 - 255	<b>Magenta Fine</b> , 0% to 100%
					7	9	000 - 255	<b>Yellow</b> , 0% to 100%
						10	000 - 255	<b>Yellow Fine</b> , 0% to 100%
	9	17	81	9	8	11	000 - 255	<b>Color Temperature</b> , Linear 2700K - 10000K
								<b>Color Temperature Presets</b>
							000	No function
							001 - 060	2700K
							061 - 179	3000K
							180 - 201	3200K
							202 - 207	4000K
							208 - 229	4500K
							230 - 234	5000K
							235 - 239	5600K
							240 - 244	6500K
							245 - 249	8000K
							250 - 255	10000K
7	10	18	82	10	9	12		<b>Virtual Foreground Color Wheel</b>
							000	Open
							001 - 060	Virtual Swatch Colors (see <b>Virtual Swatch Colors</b> section)
							061 - 179	Open
							180 - 201	Color Scroll Clockwise, fast to slow
							202 - 207	Stop
							208 - 229	Color Scroll Counter-Clockwise, slow to fast
							230 - 234	Open
							235 - 239	Random Slots Fast
							240 - 244	Random Slots Medium
							245 - 249	Random Slot Slow
							250 - 255	Open

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# DMX TRAITS: CHANNEL FUNCTIONS & VALUES

CHANNEL							DMX VALUES	FUNCTION
Basic	Std	Ext 40	Ext 104	Std RGBW 31	CMY Std	CMY Ext		
								<b>Virtual Background Color Wheel</b>
							000	Open
							001 - 060	Virtual Swatch Colors (see <b>Virtual Swatch Colors</b> section)
							061 - 179	Open
	12	20	84	12	11	14	180 - 201	Color Scroll Clockwise, fast to slow
							202 - 207	Stop
							208 - 229	Color Scroll Counter-Clockwise, slow to fast
							230 - 234	Open
							235 - 239	Random Slots Fast
							240 - 244	Random Slots Medium
							245 - 249	Random Slots Slow
							250 - 255	Open
8	13	21	85	13	12	15	000 - 255	<b>Color Macros</b> (see <b>Color Macros</b> section)
								<b>Foreground Effect Macro</b>
							000	Open
							001 - 060	Macro 1
							061 - 179	Macro 2
							180 - 201	Macro 3
							202 - 207	Macro 4
							208 - 229	Macro 5
							230 - 234	Macro 6
							235 - 239	Macro 7
							240 - 244	Macro 8
							245 - 255	No function
10	15	23	87	15	14	17	000 - 255	<b>Foreground Effect Macro Speed</b> , slow to fast
11	16	24	88	16	15	18	000 - 255	<b>Foreground Effect Macro Fade</b> , min to max

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# DMX TRAITS: CHANNEL FUNCTIONS & VALUES

CHANNEL							DMX VALUES	FUNCTION
Basic	Std	Ext 40	Ext 104	Std RGBW 31	CMY Std	CMY Ext		
12	17	25	89	17	16	19		<b>Background Effect Macro</b>
							000	Open
							001 - 060	Macro 1
							061 - 179	Macro 2
							180 - 201	Macro 3
							202 - 207	Macro 4
							208 - 229	Macro 5
							230 - 234	Macro 6
							235 - 239	Macro 7
							240 - 244	Macro 8
							245 - 255	No function
13	18	26	90	18	17	20	000 - 255	<b>Background Effect Macro Speed</b> , slow to fast
14	19	27	91	19	18	21	000 - 255	<b>Background Effect Macro Fade</b> , min to max
		28	92		19	22		<b>Color Temperature Red to Green</b>
							000	No function
							001 - 255	Shift CT red to green
15	20	29	93	20	20	23		<b>Shutter</b>
							000 - 031	Shutter closed (LEDs off)
							032 - 063	Shutter open (LEDs on)
							064 - 095	Strobe effect, slow to fast
							096 - 127	Shutter open (LEDs on)
							128 - 159	Pulse effect in sequences
							160 - 191	Shutter open (LEDs on)
							192 - 223	Random strobe effect, slow to fast
							224 - 255	Shutter open (LEDs on)
16	21	30	94	21	21	24	000 - 255	<b>Dimmer</b> , 0% to 100%
	22	31	95	22	22	25	000 - 255	<b>Dimmer Fine</b>
17	23	32	96	23	23	26	000 - 255	<b>Zoom</b> , wide to narrow
	24	33	97	24	24	27	000 - 255	<b>Zoom Fine</b>
	25	34	98	25	25	28		<b>Dim Modes</b>
							000 - 020	Default to unit setting
							021 - 040	Standard
							041 - 060	Stage
							061 - 080	TV
							081 - 100	Architectural
							101 - 120	Theatre
							121 - 140	Stage 2

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# DMX TRAITS: CHANNEL FUNCTIONS & VALUES

CHANNEL							DMX VALUES	FUNCTION
Basic	Std	Ext 40	Ext 104	Std RGBW 31	CMY Std	CMY Ext		
	25	34	98	25	25	28		<b><i>Dimming Speed</i></b>
							141	0.1 s
							142	0.2 s
							143	0.3 s
							144	0.4 s
							145	0.5 s
							146	0.6 s
							147	0.7 s
							148	0.8 s
							149	0.9 s
							150	1.0 s
							151	1.5 s
							152	2.0 s
							153	3.0 s
							154	4.0 s
							155	5.0 s
							156	6.0 s
							157	7.0 s
							158	8.0 s
							159	9.0 s
160	10.0 s							
161 - 255	Default to unit settings							
	26	35	99	26	26	29		<b><i>Dim Curves</i></b>
							000 - 020	Square
							021 - 040	Linear
							041 - 060	Inv. Squa.
							061 - 080	S. Curve
							081 - 255	No function
	27	36	100	27	27	30		<b><i>Internal Programs</i></b>
							000 - 009	No function
							010 - 019	Program 1
							020 - 029	Program 2
							030 - 039	Program 3
							040 - 049	Program 4
							050 - 059	Program 5
							060 - 069	Program 6
							070 - 079	Program 7
							080 - 089	Program 8
							090 - 099	Program 9
							100 - 109	Program 10
110 - 119	Program 11							

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# DMX TRAITS: CHANNEL FUNCTIONS & VALUES

CHANNEL							DMX VALUES	FUNCTION
Basic	Std	Ext 40	Ext 104	Std RGBW 31	CMY Std	CMY Ext		
18	27	36	100	27	27	30		<b>Internal Programs (continued)</b>
							120 - 129	Program 12
							130 - 139	Program 13
							140 - 149	Program 14
							150 - 159	Program 15
							160 - 169	Program 16
							170 - 179	Program 17
							180 - 189	Program 18
							190 - 199	Program 19
							200 - 209	Program 20
							210 - 255	No function
19	28	37	101	28	28	31	000 - 255	<b>Program Speed</b> , slow to fast
20	29	38	102	29	29	32	000 - 255	<b>Program Fade</b> , min to max
21	30	39	103	30	30	33	000 - 255	<b>Pan/Tilt Speed</b> , max to min
22	31	40	104	31	31	34		<b>Special Function</b>
							000 - 010	Default Refresh Rate (1200 Hz)
							011	900 Hz
							012	910 Hz
							013	920 Hz
							014	930 Hz
							015	940 Hz
							016	950 Hz
							017	960 Hz
							018	970 Hz
							019	980 Hz
							020	990 Hz
							021	1000 Hz
							022	1010 Hz
							023	1020 Hz
							024	1030 Hz
							025	1040 Hz
							026	1050 Hz
							027	1060 Hz
							028	1070 Hz
029	1080 Hz							
030	1090 Hz							
031	1100 Hz							
032	1110 Hz							
033	1120 Hz							

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# DMX TRAITS: CHANNEL FUNCTIONS & VALUES

CHANNEL							DMX VALUES	FUNCTION
Basic	Std	Ext 40	Ext 104	STD RGBW 31	CMY Std	CMY Ext		
22	31	40	104	31	31	34		<i>Special Function (continued)</i>
							034	1130 Hz
							035	1140 Hz
							036	1150 Hz
							037	1160 Hz
							038	1170 Hz
							039	1180 Hz
							040	1190 Hz
							041	1210 Hz
							042	1220 Hz
							043	1230 Hz
							044	1240 Hz
							045	1250 Hz
							046	1260 Hz
							047	1270 Hz
							048	1280 Hz
							049	1290 Hz
							050	1300 Hz
							051	1310 Hz
							052	1320 Hz
							053	1330 Hz
							054	1340 Hz
							055	1350 Hz
							056	1360 Hz
							057	1370 Hz
							058	1380 Hz
							059	1390 Hz
							060	1400 Hz
							061	1410 Hz
							062	1420 Hz
063	1430 Hz							
064	1440 Hz							
065	1450 Hz							
066	1460 Hz							
067	1470 Hz							
068	1480 Hz							
069	1490 Hz							
070	1500 Hz							
071	2500 Hz							
072	4000 Hz							

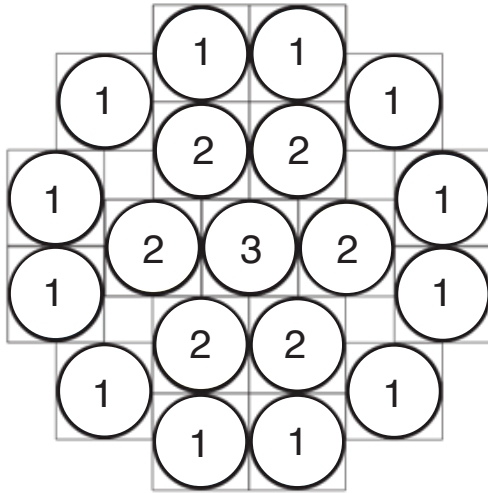
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# DMX TRAITS: CHANNEL FUNCTIONS & VALUES

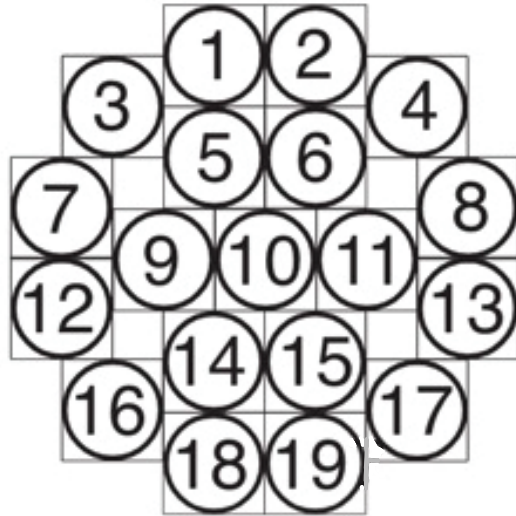
CHANNEL							DMX VALUES	FUNCTION
Basic	Std	Ext 40	Ext 104	Std RGBW 31	CMY Std	CMY Ext		
22	31	40	104	31	31	34		<b><i>Special Functions (cont'd)</i></b>
							073	5000 Hz
							074	6000 Hz
							075	10 KHz
							076	15 KHz
							077	20 KHz
							078	25 KHz
							079	No function
							080 - 089	Enable blackout while pan/tilt moving
							090 - 099	Disable blackout while pan/tilt moving
							100 - 105	Fan Mode Low (hold 3s)
							106 - 111	Fan Mode High (hold 3s)
							112 - 117	Fan Mode Auto (hold 3s)
							118 - 122	Enable Pan Invert (hold 3s)
							123 - 127	Disable Pan Invert (hold 3s)
							128 - 132	Enable Tilt Invert (hold 3s)
							133 - 139	Disable Tilt Invert (hold 3s)
							140 - 149	Reset All
							150 - 159	Reset Pan/Tilt
							160 - 169	Reset Effect
							170 - 174	Enable Zoom Speed Fast
							175 - 179	Disable Zoom Speed Fast
							180 - 182	Enable White Calibration (hold 3s)
							183 - 185	Disable White Fixed Values (hold 3s)
							186 - 189	Fan Mode Mute (hold 3s)
190 - 193	Enable Zoom Mode 2 (hold 2s)							
194 - 197	Disable Zoom Mode 2 (hold 3s)							
198 - 255	No function							

# PIXEL MAP

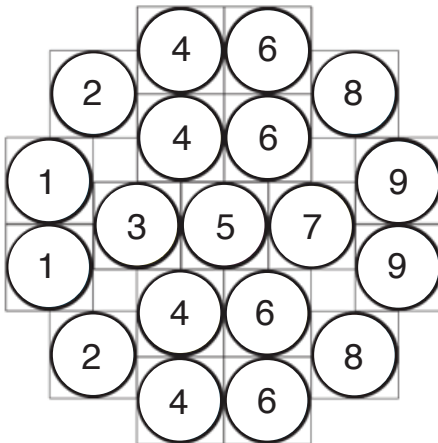
**EXTENDED 40-CH  
(RINGS)**



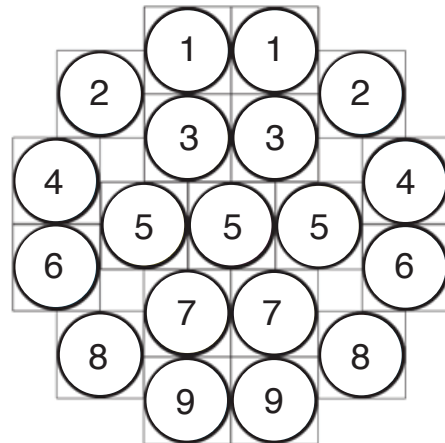
**EXTENDED 104-CH  
(DEFAULT)**



**RGBL COLUMNS**



**RGBL ROWS**



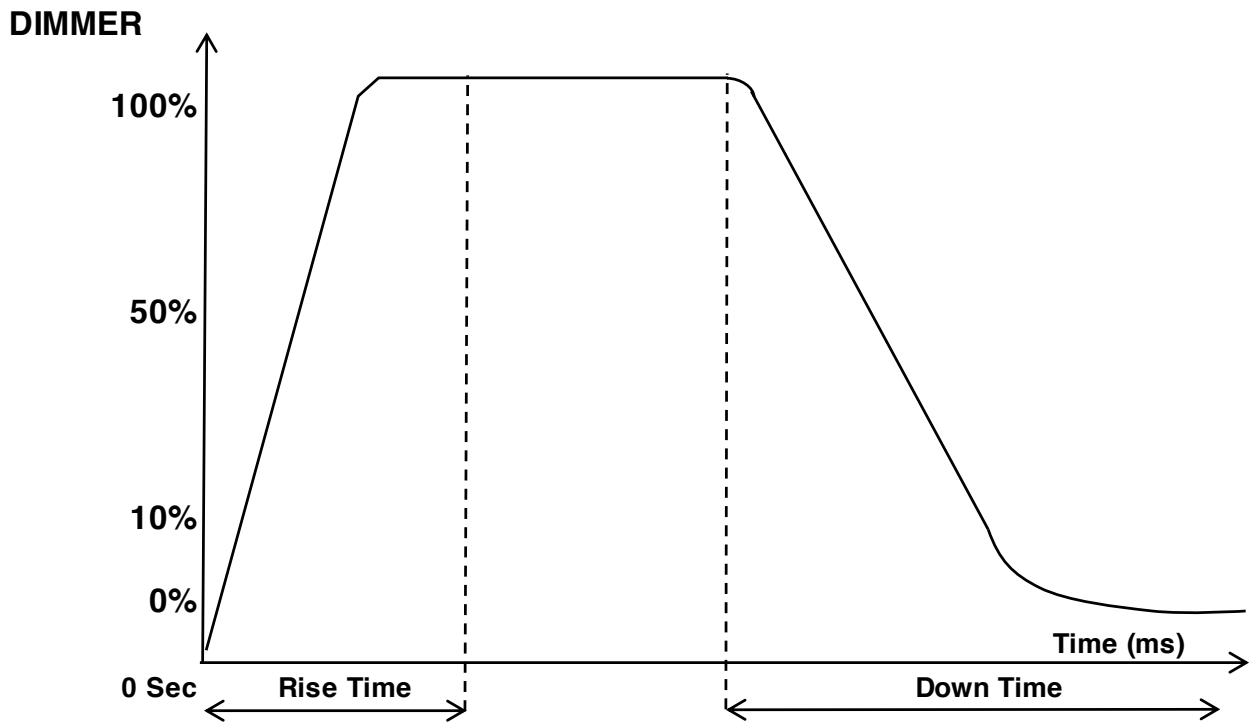
# VIRTUAL SWATCH COLORS

VIRTUAL GEL SWATCH BOOK COLORS								
Value	Filter Number	Name	Value	Filter Number	Name	Value	Filter Number	Name
1	7	Pale Yellow	21	157	Pink	41	68	Sky Blue
2	103	Straw	22	36	Medium Pink	42	143	Pale Navy Blue
3	151	Gold Tint	23	111	Dark Pink	43	131	Marine Blue
4	100	Spring Yellow	24	128	Bright Pink	44	115	Peacock Blue
5	10	Medium Yellow	25	148	Bright Rose	45	172	Lagoon Blue
6	101	Yellow	26	332	Special Rose Pink	46	116	Medium Blue Green
7	104	Deep Amber	27	793	Vanity Fair	47	90	Dark Yellow Green
8	15	Deep Straw	28	113	Magenta	48	139	Primary Green
9	179	Loving Amber	29	46	Dark Magenta	49	122	Fern Green
10	21	Gold Amber	30	48	Rose Purple	50	89	Moss Green
11	105	Orange	31	126	Mauve	51	124	Dark Green
12	158	Deep Orange	32	49	Medium Purple	52	88	Lime Green
13	22	Dark Amber	33	58	Lavender	53	138	Pale Green
14	778	Millennium Gold	34	199	Palace Blue	54	203	Quarter CT Blue
15	135	Deep Golden Amber	35	119	Dark Blue	55	202	Half CT Blue
16	24	Scarlet	36	132	Medium Blue	56	201	FULL CT Blue
17	106	Primary Red	37	120	Deep Blue	57	200	Double CT Blue
18	26	Bright Red	38	165	Daylight Blue	58	206	Quarter CT Orange
19	27	Medium Red	39	161	Slate Blue	59	205	Half CT Orange
20	19	Fire	40	118	Light Blue	60	204	FULL CT Orange

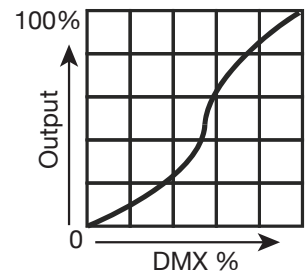
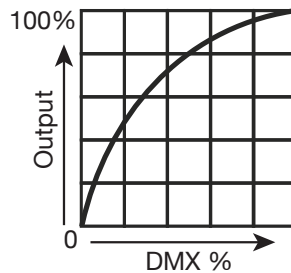
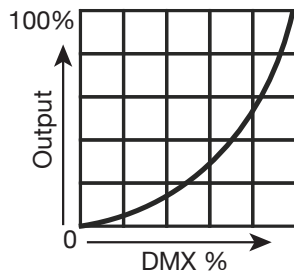
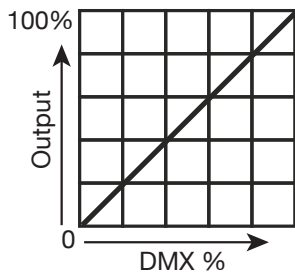
# COLOR MACRO CHART

Color	DMX Value	RGLB COLOR INTENSITY				Color	DMX Value	RGLB COLOR INTENSITY			
		RED	GREEN	BLUE	LIME			RED	GREEN	BLUE	LIME
Off	0	0	0	0	0	Color Macro 33	129-132	255	206	143	0
Color Macro 1	1-4	80	255	234	80	Color Macro 34	133-136	254	177	153	0
Color Macro 2	5-8	80	255	164	80	Color Macro 35	137-140	254	192	138	0
Color Macro 3	9-12	77	255	112	77	Color Macro 36	141-144	254	165	98	0
Color Macro 4	13-16	117	255	83	83	Color Macro 37	145-148	254	121	0	0
Color Macro 5	17-20	160	255	77	77	Color Macro 38	149-152	176	17	0	0
Color Macro 6	21-24	223	255	83	83	Color Macro 39	153-156	96	0	11	0
Color Macro 7	25-28	255	243	77	77	Color Macro 40	157-160	234	139	171	0
Color Macro 8	29-32	255	200	74	74	Color Macro 41	161-164	224	5	97	0
Color Macro 9	33-36	255	166	77	77	Color Macro 42	165-168	175	77	173	0
Color Macro 10	37-40	255	125	74	74	Color Macro 43	169-172	119	130	199	0
Color Macro 11	41-44	255	97	77	71	Color Macro 44	173-176	147	164	212	0
Color Macro 12	45-48	255	74	77	71	Color Macro 45	177-180	88	2	163	0
Color Macro 13	49-52	255	83	134	83	Color Macro 46	181-184	0	38	86	0
Color Macro 14	53-56	255	93	182	93	Color Macro 47	185-188	0	142	208	0
Color Macro 15	57-60	255	96	236	96	Color Macro 48	189-192	52	148	209	0
Color Macro 16	61-64	238	93	255	93	Color Macro 49	193-196	1	134	204	0
Color Macro 17	65-68	163	87	255	87	Color Macro 50	197-200	0	145	212	0
Color Macro 18	69-72	150	90	255	90	Color Macro 51	201-204	0	121	192	0
Color Macro 19	73-76	100	77	255	77	Color Macro 52	205-208	0	129	184	0
Color Macro 20	77-80	77	100	255	77	Color Macro 53	209-212	0	83	115	0
Color Macro 21	81-84	67	148	255	67	Color Macro 54	213-216	0	97	166	0
Color Macro 22	85-88	77	195	255	77	Color Macro 55	217-220	1	100	167	0
Color Macro 23	89-92	77	234	255	77	Color Macro 56	221-224	0	40	86	0
Color Macro 24	93-96	158	255	144	144	Color Macro 57	225-228	209	219	182	0
Color Macro 25	97-100	255	251	153	153	Color Macro 58	229-232	42	165	85	0
Color Macro 26	101-104	255	175	147	147	Color Macro 59	233-236	0	46	35	0
Color Macro 27	105-108	255	138	186	138	Color Macro 60	237-240	8	107	222	0
Color Macro 28	109-112	255	147	251	147	Color Macro 61	241-244	255	0	0	0
Color Macro 29	113-116	151	135	255	138	Color Macro 62	245-248	0	255	0	0
Color Macro 30	117-120	99	0	255	100	Color Macro 63	249-252	0	0	255	0
Color Macro 31	121-124	138	169	255	138	Color Macro 64	253-255	0	0	0	255
Color Macro 32	128-128	255	255	255	255						

# DIMMER CURVE



Dimming Curve Ramp Effect	0 sec Fade Time		1 sec Fade Time	
		255		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
Stage 2	0	1100	0	1660



# PRIMARY-SECONDARY SET UP

This function allows you to link units together to run in a Primary-Secondary set-up, in which one unit will act as the controlling unit and the others will react to the controlling unit's built-in programs. Any unit can be configured to act as a Primary or as a Secondary, but only one unit in a given system can be programmed to act as the Primary.

## ***Primary-Secondary Connections and Settings:***

1. Daisy chain your units via the XLR connectors on the rear panels of each unit. Use standard XLR data cables to link your units together. Remember that the male XLR connector is the input and the female XLR connector is the output. The first unit in the chain (primary) will use the female XLR connector only. The last unit in the chain will use the male XLR connector only.
2. Use the display screen and control panel to navigate to the Personality > Prim/Sec Mode, and press ENTER.
3. The fixture can be set to Primary or Secondary. Select one or the other, depending on which mode you would like the current fixture to use.
4. Make sure that only one unit is designated as the Primary, while all other units are designated as Secondaries.
5. The secondary units will act in conjunction with the primary unit.

# POWER LINKING

This feature allows multiple units to be linked together by way of the power input and output sockets. The maximum number of devices that can be connected in this manner is as follows:

- **2 units @ 240v**
- **Power linking is NOT possible when operating the fixture on 220v or less.**

After this quantity has been reached, a new power outlet must be used to accommodate additional devices.

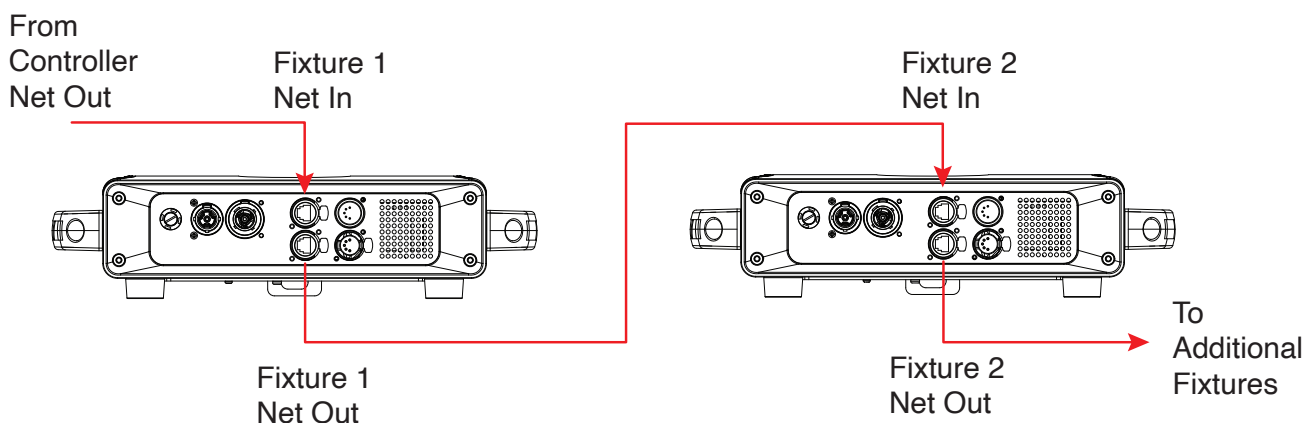
**Linked devices must be of the same make and model type. DO NOT mix devices!**

# ETHERNET LINKING

These fixtures may also be linked via the Ethernet ports on the connection panel, for use with ArtNet or sACN operation, as illustrated below. Please refer to the manual for the controller that you are using for information on setup limitations.

To link the fixtures in this way, link the Net Out port of your controller to the Net In port on the first fixture. Then link the Net Out port on the first fixture to the Net In port of the next fixture in line, and continue until all fixtures are linked in this manner. All connections should be made using an Ethernet type cable. Refer to the image below (note that only the fixture bases are shown for clarity).

**Linked devices must be of the same make and model type. DO NOT mix devices!**





# CLEANING

Due to fog residue, smoke, and dust cleaning the internal and external optical lenses must be carried out periodically to optimize light output.

- Use normal glass cleaner and a soft cloth to wipe down the outside casing.
- Clean the external optics with glass cleaner and a soft cloth every 20 days.
- 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).

# ERROR CODES

<b>Print Error Message</b>	<b>Description</b>
Error code	PAN, TILT, Zoom, Head Fan1, Head Fan2, Base Fan1, Base Fan2, LED Temp, Base Temp

# ORDERING INFORMATION

<b>SKU (US)</b>	<b>SKU (EU)</b>	<b>ITEM</b>
FOC747	1237000332	ADJ Focus Flex L19

# SPECIFICATIONS

## Source:

- 19 x 40-Watt RGBL LEDs (50,000 hr.)
- CRI: 84.2
- TM30 Rf: 84.7
- TM30 Rg: 99.8
- CT: 2700K ~ 10,000K
- 39,975 lux / 4.3° beam @ 16' (5m)
- 1,422 lux / 28.3° beam @ 16' (5m)
- Lumens: 7,814 (zoomed out, full on)

## Features:

- Moving Light Pixel Wash
- Individual Pixel Control
- Built-In Pixel Effect Programs
- Electronic Strobe / Dimmer
- Pan/Tilt: 540/630 x 250
- Beam Angle: 4.3° ~ 29°
- Field Angle: 5° ~ 50°
- Color Calibrated Pixels so units to match from batch to batch
- Virtual CMY DMX Control Modes
- Virtual Foreground and Background Color Wheel Control
- Selectable LED Refresh Rates (900Hz~25KHz)
- Selectable Dim Modes: Standard, Stage, TV, Arch., Theatre, Stage 2, and user settable Dim Speed (0.1s~10s)
- 4 Dim Curves: Square, Linear, Inv. Square, and S. Curve
- 0-100% smooth dimming
- Fan Cooled

## Colors:

- 19x RGBL LEDs (Red, Green, Blue and Lime)
- Virtual CMY DMX Control Modes
- Virtual Foreground and Background Color Wheel Control
- Built-In Color Macros
- 2,700K ~ 10,000K Linear White Color Temperature Control
- Color Temperature Presets: 2,700, 3,000, 3,200, 4,000, 4,500, 5,000, 5,600, 6,500, 8,000 and 10,000K

## Control:

- 6 DMX Modes (22, 31, 40, 104, Standard CMY 31, Extended CMY 34)
- Color LCD display with 6-button function menu
- Control: DMX512, ArtNet, sACN and KlingNet Compatible and Aria X2 Wireless Management System
- Built-In Effect Pixel Programs with Speed and Fade Control
- RDM (Remote Device Management) compliant
- With Wired Digital Communication Network

## Pan/Tilt:

- Pan: 540/630 degrees
- Tilt: 250 degrees
- 16-Bit Fine Pan & Tilt
- Pan & Tilt Locks

## Connections:

- DMX Connections: 5-pin XLR In/Out
- RJ45 In/Out
- Power Connections: Indoor Locking Power In/Out

## Electrical:

- Multi-voltage operation: 100-240V, 50/60Hz
- Max power consumption: 990W

## Dimensions & Weight:

- Dimensions (LxWxH): 10.16"L x 15.04"W x 18.51"H (258x382x470mm)
- Center to Center Spacing: 16.5" (420mm)
- Weight: 42lbs (19kg)

## What's Included:

- 180mm Omega Brackets (2x)
- 1.83M locking power cable
- Safety Cable

## Approvals / Rating:

- cETLus Approved
- CE Certified
- IP20



# DIMENSIONAL DRAWINGS

