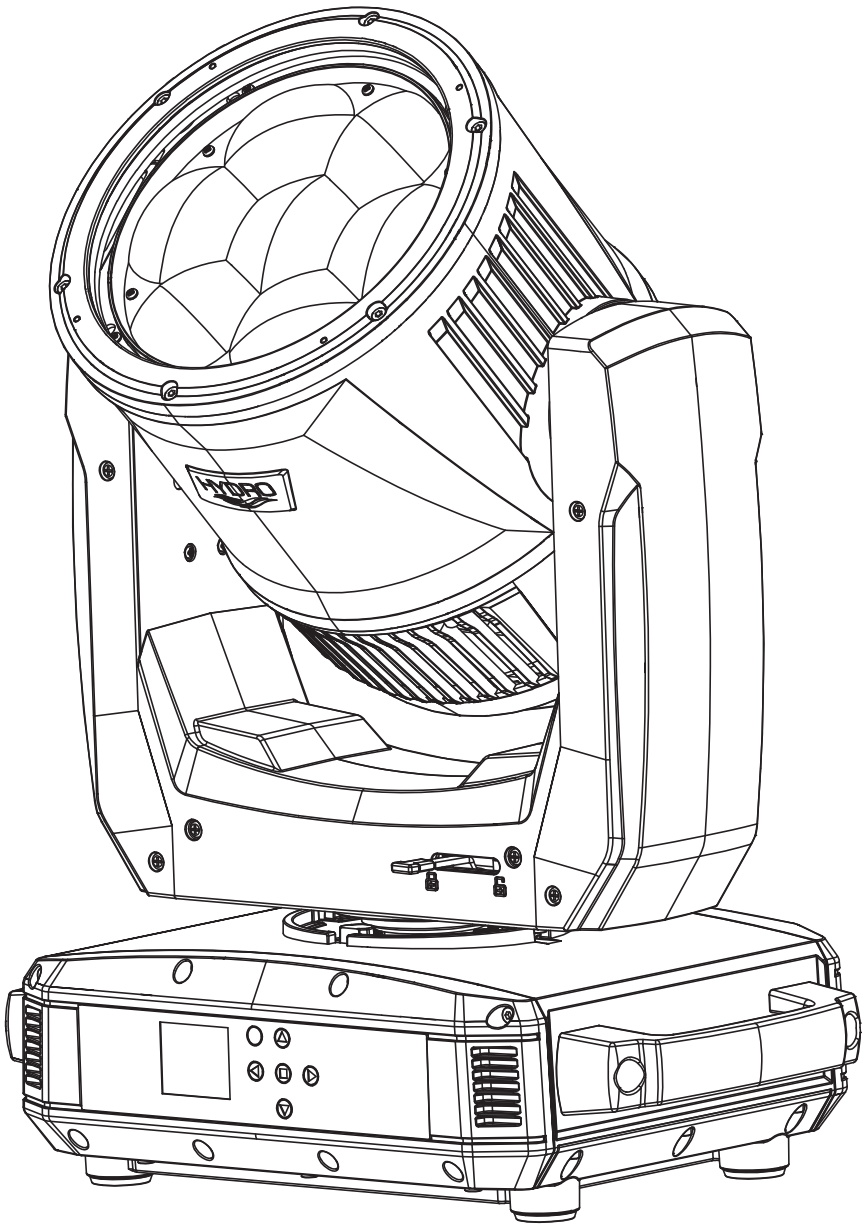


HYDRO FLEX L7

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 for the latest revision/update of this manual before beginning installation and/or programming.

Date	Document Version	Software Version	DMX Channels	Notes
01/20/2025	1.0	1.1.1	16 / 25 Std / 34 / 42 / 50 / 26 / 25 Std CMY / 28 Ch	Initial Release

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GENERAL INFORMATION

INTRODUCTION

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

This product is intended for use by professionally trained personnel only, and is not suitable for private use.

FOR SOFTWARE UPDATES, CONTACT ADJ CUSTOMER SUPPORT.

Unpacking

Every device 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 is damaged, carefully inspect the device for damage, and be sure all accessories necessary to install and operate the device 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 device to your dealer without first contacting customer support. Please do not discard the shipping carton in the trash. Please recycle whenever possible.

FOR SOFTWARE SUPPORT, CONTACT ADJ CUSTOMER SUPPORT.

CUSTOMER SUPPORT

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

ADJ SERVICE USA - Monday - Friday 8:00am to 4:30pm PST
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REPLACEMENT PARTS please visit parts.adj.com



IMPORTANT NOTICE!

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 WARRANTY CLAIMS AND/OR REPAIRS.

LIMITED WARRANTY (USA ONLY)

A. ADJ Products, LLC hereby warrants, to the original purchaser, ADJ Products, LLC products to be free of manufacturing defects in material and workmanship for a prescribed period from the date of purchase (see specific warranty period on reverse). This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.

B. For warranty service, you must obtain a Return Authorization number (RA#) before sending back the product-please contact ADJ Products, LLC Service Department at 800-322-6337. Send the product only to the ADJ Products, LLC factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, ADJ Products, LLC will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, ADJ Products, LLC shall have no liability whatsoever for loss of or damage to any such accessories, or for the safe return thereof.

C. This warranty is void of the serial number has been altered or removed; if the product is modified in any manner which ADJ Products, LLC concludes, after inspection, affects the reliability of the product, if the product has been repaired or service by anyone other than ADJ Products, LLC factory unless prior written authorization was issued to purchaser by ADJ Products, LLC; if the product is damaged because not properly maintained as set forth in the instruction manual.

D. This is not a service contact, and this warranty does not include maintenance, cleaning or periodic check up. During the period specified above, ADJ Products, LLC will replace defective parts at its expense with new or refurbished parts, and will absorb all expenses for warrant service and repair labor by reason of defects in material or workmanship. The sole responsibility of ADJ Products, LLC under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of ADJ Products, LLC. All products covered by this warranty were manufactured after August 15, 2012, and bear identifying marks to that effect.

E. ADJ Products, LLC reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured.

F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by ADJ Products, LLC in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The consumer's and/or Dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall ADJ Products, LLC be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.

G. This warranty is the only written warranty applicable to ADJ Products, LLC Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

LIMITED WARRANTY PERIODS

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

WARRANTY REGISTRATION

The Hydro Flex L7 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

- Moving Light Pixel Wash
- Individual Pixel Control
- Built-In Pixel Effect Programs
- Aria X2 Wireless Management System
- Electronic Strobe / Dimmer
- Pan/Tilt: 540/630 x 243
- Motorized Zoom
- Beam Angle: 4° ~ 38°
- Field Angle: 6° ~ 54°
- Color Calibrated Pixels so units match from batch to batch
- Virtual CMY DMX Control Modes
- Virtual Foreground and Background Color Wheel Control
- Selectable LED Refresh Rates (900 Hz~25K Hz)
- 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

INCLUDED ITEMS:

- 1x Omega Bracket
- 1x Safety Cable
- 1x Power Cable

IP65 RATED

The International Protection (IP) rating system is commonly expressed as "**IP**" (Ingress Protection) followed by two numbers (i.e. IP65), where the numbers define the degree of protection. The first digit (Foreign Bodies Protection) indicates the extent of protection against particles entering the fixture, and the second digit (Water Protection) indicates the extent of protection against water entering the fixture. An **IP65** rated lighting fixture is designed and tested to protect against the ingress of dust (6), and low-pressure water jets from any direction (**5**).

NOTE: THIS FIXTURE IS INTENDED FOR TEMPORARY OUTDOOR USE ONLY!

Maritime/Coastal Environment Installations: A coastal environment is seaside adjacent, and caustic to electronics through exposure to atomized salt-water and humidity, whereas maritime is anywhere within 5-miles of a coastal environment.



NOT suitable for maritime/coastal environment installations. Installing this fixture in a maritime/coastal environment may cause corrosion and/or excessive wear to the interior and/or exterior components of the fixture. Damages and/or performance issues resulting from installation in a maritime/coastal environment will void the manufactures warranty, and will NOT be subject to any warranty claims and/or repairs.

Maritime installations require additional preparation, and additional service intervals may be needed given the maritime use. In general, IP ratings presuppose freshwater conditions VS maritime conditions, which are typically more "caustic" to IP fixtures (both internally and externally). A duty-cycle may also be needed when units are not in use. During times of high humidity and colder temperatures, condensation may occur internally so the fixture may require a duty-cycle to bring it up to running temperature, allowing any accumulation of moisture to be expelled via the vent valve. Recommendations can change based on installation environmental circumstances. A waterproof dome or similar device is recommended for use in permanent outdoor installations. When using a dome, refer to manufacturer recommendations for duty-cycle.

NOTE: NOT ALL FEATURES LISTED ARE AVAILABLE ON ALL FIXTURES; THE FOLLOWING INSTRUCTIONS MAY NOT APPLY. CONTACT SUPPORT FOR ADDITIONAL DETAILS.

Exterior Maintenance: Inspect the exterior every 30-days. The unit must be powered off/disconnected. Inspect optics to determine if the lens is obstructed, then clean optics and chassis accordingly. Based on initial finding, schedule maintenance accordingly, keeping in mind that exterior maintenance will be required. Even if the luminaires are NOT in use, maintenance will still be needed given its location (exterior use). The use of a durable type of wax on the chassis is recommended since it will help prevent contaminant build up. Inspect both power and data lines for any signs of contaminants or corrosion. Periodically reapplying di-electric grease, especially in coastal environments. If any signs of corrosion/contaminants are present, clean thoroughly, and/or replace connectors, then reapply di-electric grease. Typically, this should be done annually, or any time an opportunity presents itself. As a preventive measure, annual replacement of both vent valves is recommended. The vent valve membrane can become contaminated and/or clogged causing improper venting of humidity within the luminaire. Inspect all mounting hardware as a precaution.

Interior Maintenance: Inspect the interior every 30-days. The unit must be powered off/disconnected.

- Inspect zoom/focus mechanism, clean optics, lubricate linear bearings (Krytox oil) as needed, inspect belts for wear
- Inspect all rotating effect wheels, manually rotate them, note any resistance
- Inspect all remaining rotating belts for any wear
- Inspect all fans, clean as needed, check rotation, check connections
- Inspect CMY module, manually move flags and check for signs of resistance, and if needed, clean guide rods first, then reapply a thin layer of grease (moly lube)
- Clean interior with low-volume compressed air, then clean optics prior to reassembly of head covers

Although the base has limited moving parts, the pan belt should also be inspected for wear. Remember to always perform an IP test anytime a cover is removed.

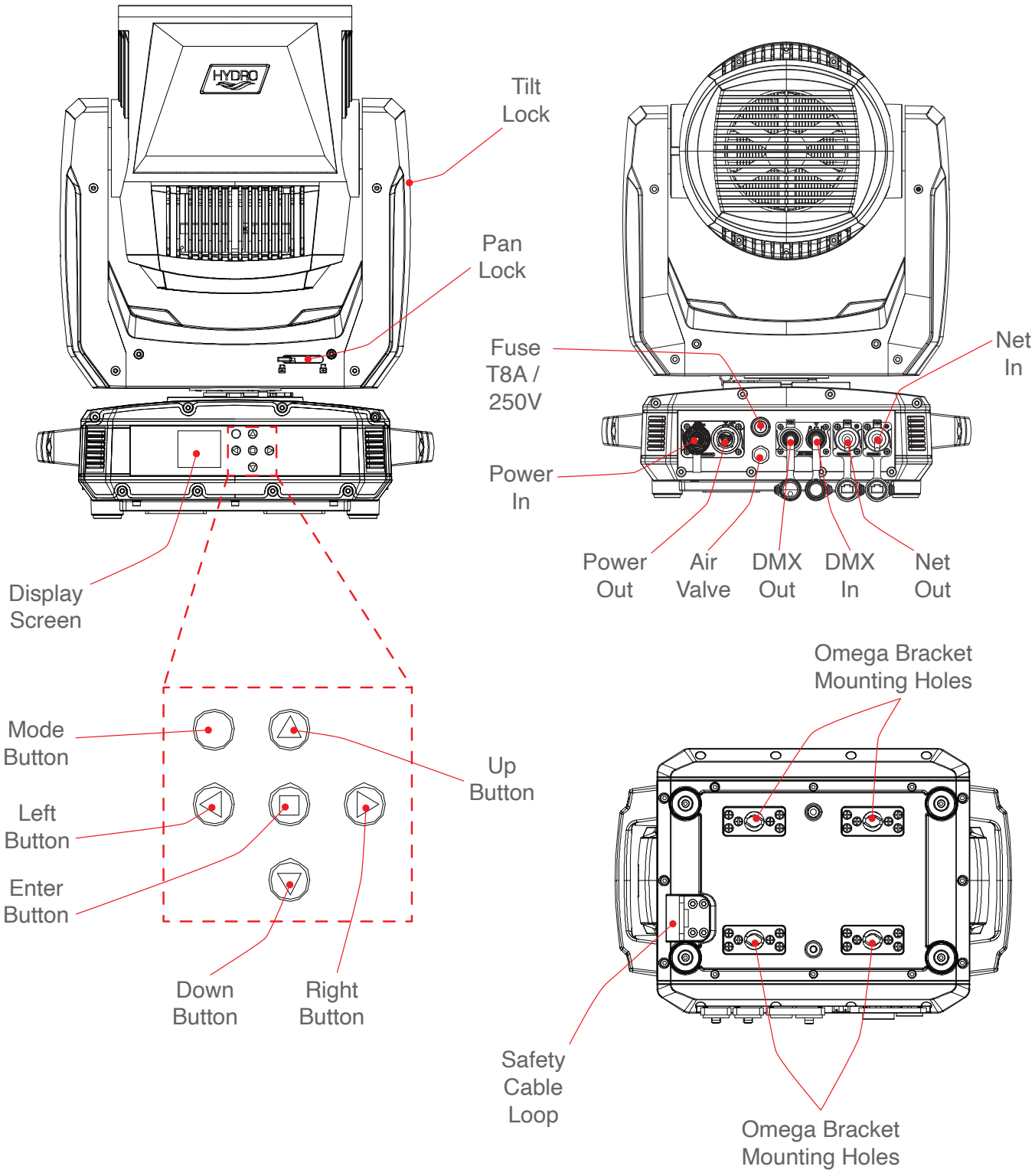
There is no specific time frame regarding the routine replacement of parts such as belts/stepper motors, PCBs, or LEDs. These items should only be replaced on an as needed bases, except for cooling fans, which should be replaced once the luminaries reach 10,000-hours. This is a prophylactic measure intended to keep the unit running as cool as possible, insuring proper function of all internal components. A complete service breakdown is available, please contact service@adj.com for any needed parts or manuals.

SAFETY GUIDELINES

THIS FIXTURE IS COMPOSED OF SOPHISTICATED ELECTRONIC COMPONENTS. TO GUARANTEE 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. ONLY CERTIFIED PERSONNEL SHOULD PERFORM INSTALLATION OF THIS FIXTURE.

- 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!
- KEEP FLAMMABLE MATERIALS AWAY FROM FIXTURE!
- NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE!
- RETINA INJURY RISK - MAY INDUCE BLINDNESS!
- SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK!
- MINIMUM DISTANCE TO OBJECTS/SURFACES AND FLAMMABLE SURFACES IS 21 INCHES (520 mm).
- The fixture should be installed in such a way that the light output will not be aimed directly at viewers or personnel at a distance of less than 8 feet (2.4 meters).
- DO NOT TOUCH the fixture housing during operation. Turn OFF the power and allow approximately 60 minutes for the fixture to cool down before serving.
- 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. All fan and air inlets must remain clean and never blocked. Allow approx. 6" (15cm) between fixture and other devices or a wall for proper cooling.
- When installing fixture in a suspended environment, always use mounting hardware that is no less than M10 x 25 mm, and always install fixture with an appropriately rated safety cable.
- Always disconnect fixture from main power source before performing any type of service and/or cleaning procedure.
- Only handle the power cord by the plug end. 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 original packaging and materials to transport the fixture for service.
- The light source used in this fixture shall be replaced only by the manufacturer or qualified service personnel.
- This fixture is intended for professional use only.

OVERVIEW


Tilt Lock
Pan Lock
Fuse T8A / 250V
Power In
Net In
Power Out
Air Valve
DMX Out
DMX In
Net Out
Display Screen
Mode Button
Up Button
Left Button
Enter Button
Down Button
Right Button
Omega Bracket Mounting Holes
Safety Cable Loop
Omega Bracket Mounting Holes

INSTALLATION GUIDELINES



FLAMMABLE MATERIAL WARNING
Keep fixture minimum 21 inches (520mm) away from flammable materials and/or pyrotechnics.



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



MINIMUM DISTANCE TO OBJECTS/SURFACES OR FLAMMABLE MATERIALS IS 21 INCHES (520 mm).

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

- Fixture MUST be installed following all local, national, and country commercial electrical and construction codes and regulations.
- Before rigging/mounting a single fixture or multiple fixtures to any metal truss/structure or placing the fixture(s) on any surface, a professional equipment installer MUST be consulted to determine if the metal truss/structure or surface is properly certified to safely hold the combined weight of the fixture(s), clamps, cables, and accessories.
- Ambient operating temperature range is **-4°F to 113°F (-20°C to 45°C)**. Do not use fixture when ambient temperature falls outside of this range.
- Fixture(s) should be installed outside walking paths, seating areas, or areas where unauthorized personnel might reach the fixture by hand.
- NEVER stand directly below the fixture(s) when rigging, removingm, or servicing.
- Overhead fixture installation must always be secured with a secondary safety attachment, such as an appropriately rated safety cable.
- Allow approximately 60 minutes for the fixture to cool down before servicing.

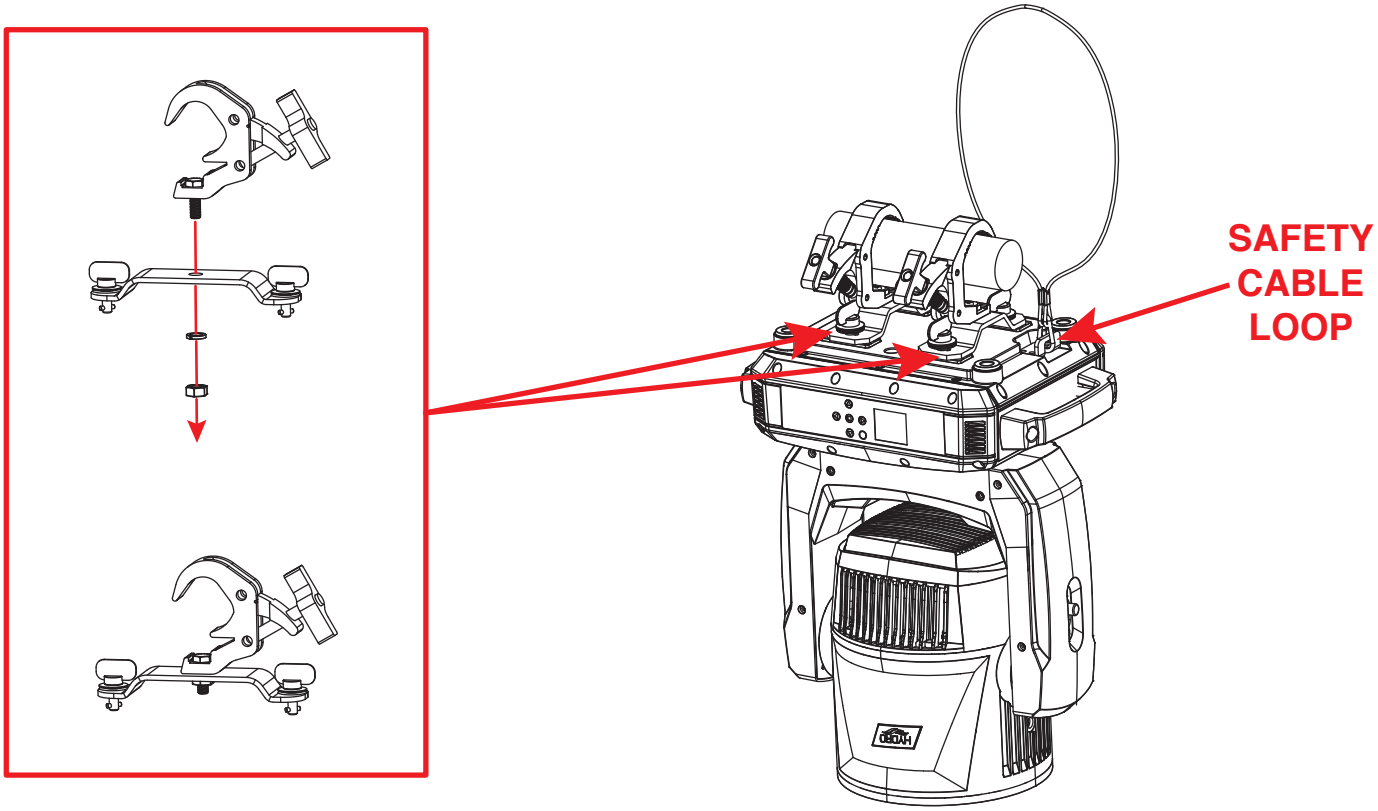
RIGGING
Overhead rigging requires extensive experience, including calculating working load limits, knowledge of installation material being used, and periodic safety inspection of all installation material and the fixture, among other skills. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

INSTALLATION GUIDELINES

CLAMP INSTALLATION

To suspend this fixture from a truss or other elevated installation, begin by attaching appropriately rated mounting clamps to each of the included Omega brackets. Align the hole on the mounting clamp with the hole on the Omega bracket, then insert an appropriately rated bolt through both holes and secure in place with a matching washer and nut, as shown in the image below. Use the twist-lock fasteners on the Omega bracket to secure the mounting clamp and Omega bracket assembly to the mounting points on the underside of the fixture's base. **Please note that two (2) mounting clamps and two (2) Omega brackets are required install the fixture safely and securely.**

Secure a separate SAFETY CABLE of the appropriate weight rating to the safety cable loop located on the underside of the fixture's base. **Never use the carrying handles or location other than the designated safety cable loop for the attachment of the safety cable.**



SAFETY CABLE:

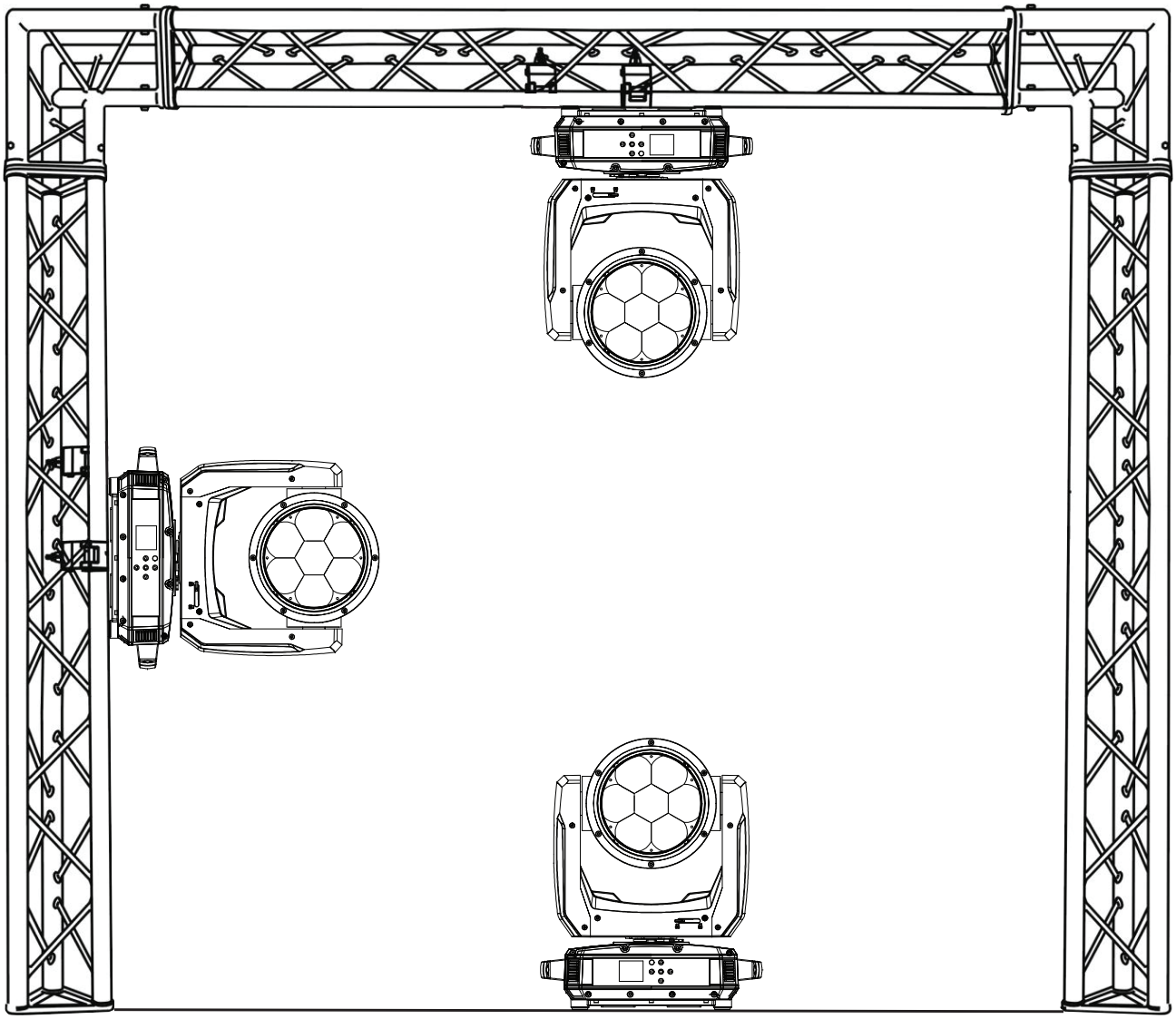
ALWAYS ATTACH A SAFETY CABLE WHENEVER INSTALLING THIS FIXTURE IN A SUSPENDED ENVIRONMENT TO ENSURE THAT THE FIXTURE WILL NOT FALL IF THE CLAMPS FAIL.

INSTALLATION GUIDELINES

RIGGING

Overhead rigging requires extensive experience, including among others, calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

This fixture is designed to be mounted vertically (hanging or upright), or horizontally (perpendicular to vertical axis) only.



FALLING FIXTURES CAN CAUSE SEVERE INJURY OR SERIOUS EQUIPMENT DAMAGE! FOR THIS REASON, FIXTURES SHOULD BE INSTALLED AND INSPECTED ONLY BY QUALIFIED PERSONNEL. DO NOT INSTALL THE UNIT IF YOU LACK THE QUALIFICATIONS TO DO SO, OR IF YOU HAVE DOUBTS ABOUT THE SAFETY AND SECURITY OF THE INSTALLATION SETUP OR LOCATION!

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

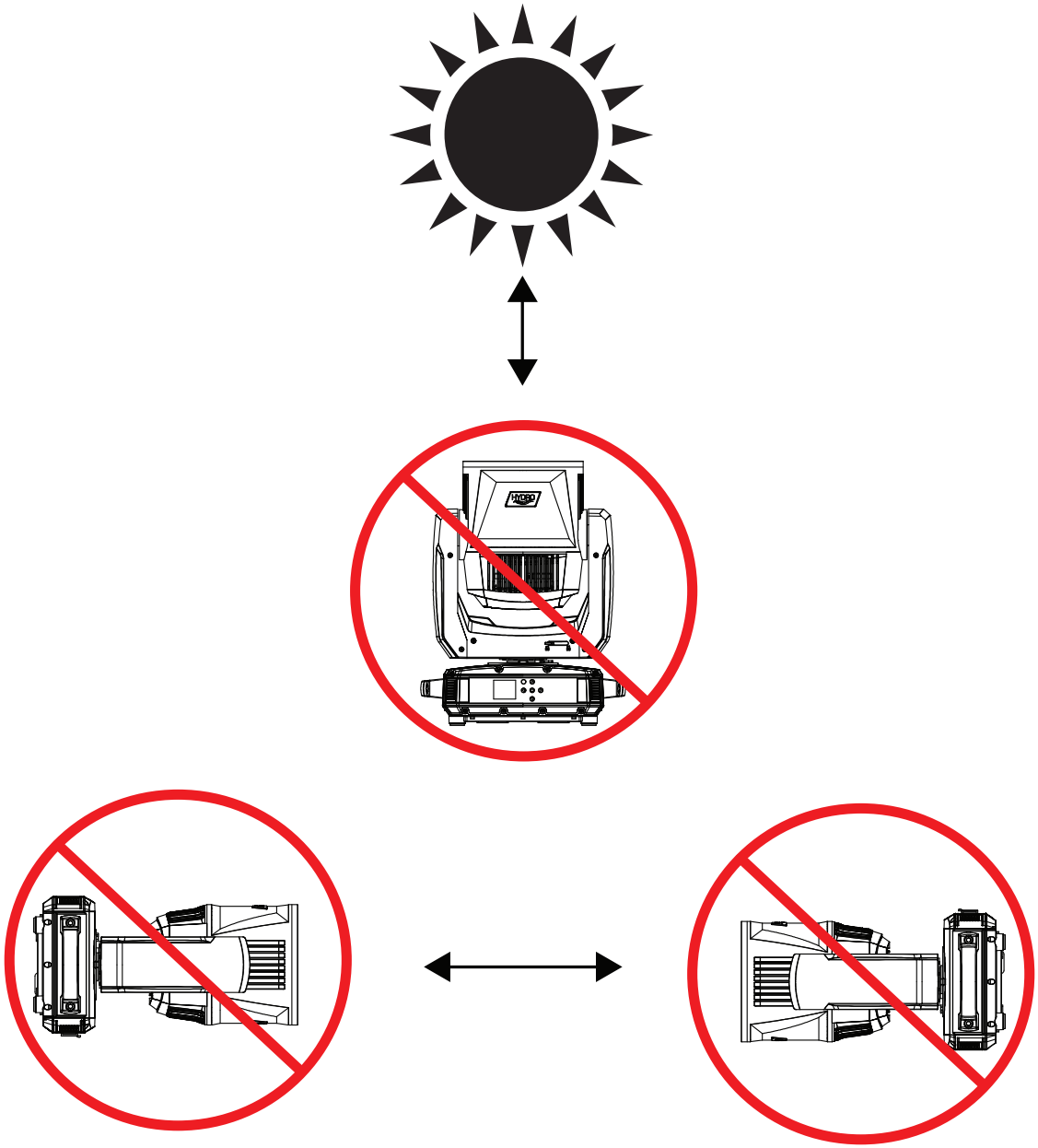
INSTALLATION GUIDELINES

POTENTIAL INTERNAL FIXTURE DAMAGE FROM EXTERNAL SOURCES OF LIGHT BEAMS

External sources of light beams from direct sunlight, lighting and moving head fixtures, and lasers, which are focused directly towards the exterior housing and/or penetrate the front lens opening of Elation lighting fixtures, can cause severe internal damage including burning of 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 Elation lighting fixtures, but rather 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 reduce the risk of potential damage. Contact Elation Service for more details.

DO NOT EXPOSE THE FIXTURE AND/OR FRONT LENS OPENING TO LIGHT BEAMS FROM DIRECT SUNLIGHT, OTHER LIGHTING OR MOVING HEAD FIXTURES, AND LASERS DURING 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: for RDM to work properly, RDM enabled equipment must be used throughout the entire system, including DMX data splitters and wireless systems.

Remote Device Management (RDM) is a protocol that sits on top of the DMX512 data standard for lighting, allowing the DMX systems of the 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:

RDM Code	Device ID	Device Model ID	Personality ID
0x0047	47 0000	47	Basic 16 (1), Standard 25 (2), Extended 34 (3), Extended 42 (4), Extended 50 (5), Standard RGBW 26 (6), Standard CMY 25 (7), Extended CMY 28 (8)

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.

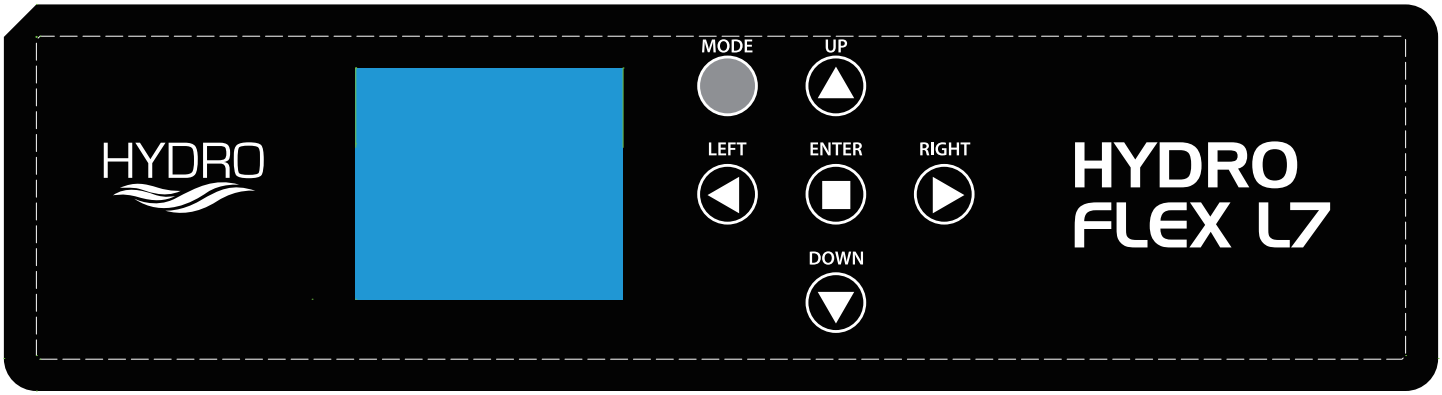
The following parameters are accessible in RDM on this device:

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

CONTROL PANEL

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

- **MODE**: Leave current menu and return to previous menu level.
- **UP**: Scroll up in currently displayed menu.
- **LEFT**: Scroll left in currently displayed menu.
- **RIGHT**: Scroll right in currently displayed menu.
- **DOWN**: Scroll down in currently displayed menu.
- **ENTER**: Select an option or confirm a selection.



SCREEN SAVER

This fixture includes a screen saver function, which turns off the display after a certain period of inactivity, but the screen can be turned back on immediately simply by touching any control key. The period of inactivity is set to 5 minutes by default, but can be set to a different length of time or even turned off entirely by using the system menu to navigate to *Personality > Display > Screen Saver Delay*.

KEY LOCK

This fixture also includes a key lock function, which automatically shuts off the display screen and locks the control keys after a certain period of inactivity. This period of inactivity corresponds to the value for the Screen Saver Delay. The key lock feature is OFF by default, but this status can be changed by using the system menu to navigate to *Personality > Display > Key Lock*. The selectable options are as described below:

- **OFF:** Control keys never lock, even if the display screen goes to sleep.
- **ON:** Control keys lock after a certain period of inactivity, and can be unlocked by pressing and holding the MODE button for 3 seconds.
- **ON1:** Control keys lock after a certain period of inactivity, and can be unlocked by pressing UP, DOWN, UP, DOWN, ENTER in sequence.

SYSTEM MENU

MAIN MENU	OPTIONS / VALUES (Default Settings in BOLD)				DESCRIPTION
DMX Settings	DMX Address	**001** - XXX			Set DMX starting address
	DMX Channel Mode	Basic 16			Select DMX channel mode
		Standard 25			
		Extended 34			
		Extended 42			
		Extended 50			
		Standard RGBW 26			
		Standard CMY 25			
		Extended CMY 28			
		User Mode			
	No DMX Mode	Hold Last			Fixture holds last received settings if DMX signal is lost
		Blackout			Fixture takes all channels to zero if DMX signal is lost
		Manual			Fixture defaults to manual settings if DMX signal is lost
Personality	Prim/Sec Mode	Primary / **Secondary**			Set unit as a primary or a secondary
	Select Signal	DMX or Aria X2			Configure input and output signal
		Aria X2 and DMX Out			
	Aria Settings	Frequency	**2.4 GHz**		Select Aria frequency
			Sub Gig US		
			Sub Gig EU		
		2.4 GHz Ch	**00** - 15		Select channel for 2.4 GHz Aria signal
		Sub Gig Ch	**00** - 09		Select channel for sub gig Aria channel
		Mesh	On / **Off**		Enable data to be distributed among connected units in a de centralized manner
		RDM	**On** / Off		Enable or disable RDM
		Bluetooth	**On** / Off		Enable or disable Bluetooth
	Network	Input	**On** / Off		Enable or disable network input
		Protocol	ArtNet / sACN		Select network protocol
		KlingNet	On / **Off**		Enable or disable KlingNet
		Address	Set Universe	000 - 32767	Set ArtNet universe address
			Ethernet IP	002.000.000.001	Set ethernet IP address
			Ether Mask IP	255.000.000.000	Set ethernet mask IP address

SYSTEM MENU

MAIN MENU	OPTIONS / VALUES (Default Settings in BOLD)			DESCRIPTION
Personality (continued)	Status Settings	Pan Degree	**630** / 540	Select pan degree
		Pan Invert	On / **Off**	Enable or disable pan inversion
		Tilt Invert	On / **Off**	Enable or disable tilt inversion
		P/T Feedback	**On** / Off	Enable or disable pan/ tilt feedback
		P/T Speed	**Speed 1** / Speed 2	Set pan/tilt speed
		Hibernation	Off, 1min - 99min, default = **15min**	Set time after which unit goes into hibernation
	Fan Settings	Head Fan	**Auto**	Select head fan setting
			High	
			Low	
		Base Fan	**Auto**	Select base fan setting
			High	
			Low	
	Zoom Speed	**Standard** / Fast		Set zoom speed
	Zoom Mode	**Mode 1**		Zoom range goes from full minimum to full maximum
		Mode 2		Zoom range limited when zoomed in so as not to overshoot focal point
	LED Power Mode	**LP Mode 1**		Standard maximum LED power output
		LP Mode 2		Regulated LED output with 8500K target CCT
	Dim Mode	**Standard**		Select dim mode
		Stage		
		TV		
		Architectural		
		Theatre		
		Stage 2		
		Dim Speed	0.1s - 10s	Set dim speed
	LED Refresh Rate	900 - 1500Hz, 2500Hz, 4000Hz, 5000Hz, 6000Hz, 10KHz, 15KHz, 20KHz, 25KHz; Default = **1200Hz**		Set LED refresh rate
	Dim Curve	Linear		Select dim curve
		Square		
		Inv Squa		
		S Curve		
	Reset Motors	Reset All Motors	Yes / **No**	Reset selected motors
		Pan / Tilt Reset	Yes / **No**	
		Effect Reset	Yes / **No**	

SYSTEM MENU

MAIN MENU	OPTIONS / VALUES (Default Settings in BOLD)				DESCRIPTION
Personality (continued)	Display	Intensity	1 - **10**		Set display screen intensity level
		Display Invert	Yes / **No**		Enable or disable display screen inversion
		Screen Saver Delay	Off - 10min, Default = **5min**		Display screen switches off after selected period of inactivity
		Key Lock	**Off**		Control keys do not lock
			On		Control keys lock after selected period of inactivity; to unlock press and hold MODE for 3 sec
			On1		Control keys lock after selected period of inactivity; to unlock press UP, DOWN, UP, DOWN, ENTER
	Set User Mode	Pan	**1**		Custom assignment of DMX channel numbers; default values are as shown in Extended (50-ch) mode
		Pan Fine	**2**		
		Tilt	**3**		
		Tilt Fine	**4**		
		Red 1	**5**		
		Green 1	**6**		
		Blue 1	**7**		
		Lime 1	**8**		
		...	...		
		Red 7	**29**		
		Green 7	**30**		
		Blue 7	**31**		
		Lime 7	**32**		
		...	...		
		P/T Speed	**49**		
		Special	**50**		
	Service	Passcode = 050	Effect Adjustment, White Balance	Pan 000 - 255	Adjust effects and white color balance
				Tilt 000 - 255	
				Red 000 - 255	
				Green 000 - 255	
				Blue 000 - 255	
				White 000 - 255	
			Color Calibration	**Enable** / Disable	Enable or disable color calibration
			Factory Restore	Off / On Passcode = 011	Restore fixture to factory default settings

SYSTEM MENU

MAIN MENU	OPTIONS / VALUES (Default Settings in BOLD)				DESCRIPTION
Manual Control	Pan	000 - 255			Manually set each fixture parameter
	Pan Fine	000 - 255			
	Tilt	000 - 255			
	Tilt Fine	000 - 255			
	...	...			
Internal Programs	Program 1	Speed	000 - 255		Select internal program to run, and set program speed and fade
		Fade	000 - 255		
	Program 2	Speed	000 - 255		
		Fade	000 - 255		
	...	...	...		
	Program 20	Speed	000 - 255		
		Fade	000 - 255		
Information	Fixture Life Time	Power On Time	xxxxxx Hours		Total lifetime hours that fixture has been powered on
		P-On Time-R	xxxxxx Hours		Hours that 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 that LED has been powered on
		LED On Time-R	xxxxxx Hours		Hours that 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 / **No**	Passcode = 050	Reset LED Max Resettable temp
		Reset Base Temp	Yes / **No**	Passcode = 050	Reset Base Max Resettable temp
	Humidity	xxx%			Current humidity level
	Fan Info	LED Fan	xxxx RPM LED		Current LED fan speed
		Base Fan	xxxx RPM		Current base fan speed
	DMX Values	Pan			Display current value of each DMX parameter
		Pan Fine			
		...			
	Error Logs	Error 1, Error 2, ...			List errors one by one
		Reset Error Log	Yes / **No**	Passcode = 050	Clear error logs
	Software Version	U: xxx			Display current software version
	Aria ID	xx:xx:xx:xx:xx:xx			Display current Aria ID

FAN MODES

The Hydro Flex L7 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— For very critical noise environments. 75-80% max output, fans run at low speed. The fixture output will be reduced, yet due to the extremely high luminous flux, the fixture still offers outstanding performance. All parameters of the fixture operate more quietly with reduced fan speeds.

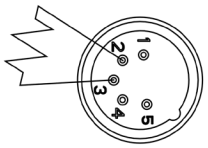
DMX SETUP

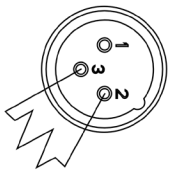
DMX-512: DMX is short for Digital Multiplex. This is a universal protocol used as a form of communication between intelligent fixtures and controllers. A DMX controller sends DMX data instructions from the controller to the fixture. DMX data is sent as serial data that travels from fixture to fixture 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 manufacturers 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, try to use the shortest cable path possible when using several DMX fixtures. 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 fixture can be controlled via DMX-512 protocol, and features multiple DMX channel modes. Your unit and your DMX controller require a 5-pin XLR connector for data input and data output. 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 XLR connector at one end and a female XLR connector on the other. Also remember that DMX cable must be daisy chained and cannot be split.

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





A DMX512 terminator reduces signal errors, avoiding most signal reflection interference. Connect PIN 2 (DMX-) and PIN 3 (DMX+) of the last fixture in series with a 120 Ohm, 1/4 W Resistor to terminate the DMX512.

DMX SETUP

DMX ADDRESSING

All fixtures should be given a DMX starting address when operating with a DMX controller, in order to ensure that 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 this case, please note that 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 “listen” starting at 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.

As an example, when operating this device in 16 channel mode, you should set the starting DMX address of the first unit to 1, the second unit to 17 (1 + 16), the third unit to 33 (1 + 16 + 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 Ch	1	17	33	49
25 Ch (Standard)	1	26	51	76
34 Ch	1	35	69	103
42 Ch	1	43	85	127
50 Ch	1	51	101	151
26 Ch	1	27	53	79
25 Ch (Standard CMY)	1	26	51	76
28 Ch	1	29	57	85

DMX TRAITS

CHANNEL								DMX VALUES	FUNCTION
16 CH	25 CH STD	34 CH	42 CH	50 CH	26 CH	25 CH STD CMY	28 CH		
1	1	1	1	1	1	1	1		**Pan Movement, 8-bit**
								000 - 255	540 / 630 Degrees
	2	2	2	2	2	2	2		**Pan Fine Movement, 16-bit**
								000 - 255	Pan Fine Movement
2	3	3	3	3	3	3	3		**Tilt Movement, 8-bit**
								000 - 255	270 Degrees
	4	4	4	4	4	4	4		**Tilt Fine Movement, 16-bit**
								000 - 255	Tilt Fine Movement
3	5				5				**Red**
								000 - 255	0% - 100%
4	6				6				**Green**
								000 - 255	0% - 100%
5	7				7				**Blue**
								000 - 255	0% - 100%
6	8				8				**Lime**
								000 - 255	0% - 100%
		5	5	5					**Red 1**
								000 - 255	0% - 100%
		6	6	6					**Green 1**
								000 - 255	0% - 100%
		7	7	7					**Blue 1**
								000 - 255	0% - 100%
		8	8	8					**Lime 1**
								000 - 255	0% - 100%
		9	9	9					**Red 2**
								000 - 255	0% - 100%
		10	10	10					**Green 2**
								000 - 255	0% - 100%
		11	11	11					**Blue 2**
								000 - 255	0% - 100%
		12	12	12					**Lime 2**
								000 - 255	0% - 100%
		13	13	13					**Red 3**
								000 - 255	0% - 100%
		14	14	14					**Green 3**
								000 - 255	0% - 100%
		15	15	15					**Blue 3**
								000 - 255	0% - 100%
		16	16	16					**Lime 3**
								000 - 255	0% - 100%

DMX TRAITS

CHANNEL								DMX VALUES	FUNCTION
16 CH	25 CH STD	34 CH	42 CH	50 CH	26 CH	25 CH STD CMY	28 CH		
			17	17					**Red 4**
								000 - 255	0% - 100%
			18	18					**Green 4**
								000 - 255	0% - 100%
			19	19					**Blue 4**
								000 - 255	0% - 100%
			20	20					**Lime 4**
								000 - 255	0% - 100%
			21	21					**Red 5**
								000 - 255	0% - 100%
			22	22					**Green 5**
								000 - 255	0% - 100%
			23	23					**Blue 5**
								000 - 255	0% - 100%
			24	24					**Lime 5**
								000 - 255	0% - 100%
				25					**Red 6**
								000 - 255	0% - 100%
				26					**Green 6**
								000 - 255	0% - 100%
				27					**Blue 6**
								000 - 255	0% - 100%
				28					**Lime 6**
								000 - 255	0% - 100%
				29					**Red 7**
								000 - 255	0% - 100%
				30					**Green 7**
								000 - 255	0% - 100%
				31					**Blue 7**
								000 - 255	0% - 100%
				32					**Lime 7**
								000 - 255	0% - 100%
						5	5		**Cyan**
								000 - 255	0% - 100%
							6		**Cyan Fine**
								000 - 255	Cyan Fine
						6	7		**Magenta**
								000 - 255	0% - 100%
							8		**Magenta Fine**
								000 - 255	Magenta Fine

DMX TRAITS

CHANNEL									
16 CH	**25 CH STD**	**34 CH**	**42 Ch**	**50 CH**	**26 Ch**	**25 CH STD CMY**	**28 CH**	**DMX VALUES**	**FUNCTION**
						7	9		**Yellow**
								000 - 255	0% - 100%
							10		**Yellow Fine**
								000 - 255	Yellow Fine
	9	14	25	33	9	8	11		**Color Temperature Linear**
								000 - 255	2,700K - 10,000K
7	10	18	26	34	10	9	12		**Color Temperature Presets**
								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
	11	19	27	35	11	10	13		**Virtual Foreground Color Wheel**
								000	Open
								001 - 060	Virtual Swatch Colors (see Colors Wheels Table)
								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 Slots Slow
								250 - 255	Open

DMX TRAITS

CHANNEL								DMX VALUES	FUNCTION
16 CH	25 CH STD	34 CH	42 CH	50 CH	26 CH	25 CH STD CMY	28 CH		
									Virtual Background Color Wheel
								000	Open
								001 - 060	Virtual Swatch Colors (see Color Wheels Table)
								061 - 179	Open
								180 - 201	Color Scroll Clockwise, fast to slow
								202 - 207	Stop
	12	20	28	36	12	11	14	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
									Color Temperature, Red to Green
		21	29	37	13	12	15	000	No Function
								001 - 255	Shift CT, red to green
8	13	22	30	38	14	13	16		**64 Color Macros**
								000 - 255	See Color Macros Chart
									Shutter
								000 - 031	Shutter Closed (LEDs Off)
								032 - 063	Shutter Open (LEDs On)
								064 - 095	Strobe Effect, slow to fast
9	14	23	31	39	15	14	17	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)
10	15	24	32	40	16	15	18		**Dimmer**
								000 - 255	0% to 100%
	16	25	33	41	17	16	19		**Dimmer Fine**
								000 - 255	Dimmer Fine Adjustment 16-bit
11	17	26	34	42	18	17	20		**Zoom**
								000 - 255	Wide to Narrow
	18	27	35	43	19	18	21		**Zoom Fine**
								000 - 255	Zoom Fine Adjustment 16-bit

DMX TRAITS

CHANNEL								DMX VALUES	FUNCTION
16 CH	25 CH STD	34 CH	42 CH	50 CH	26 CH	25 CH STD CMY	28 CH		
									Dim Modes
								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
									Dimming Speed
								141	0.1s
								142	0.2s
								143	0.3s
								144	0.4s
								145	0.5s
	19	28	36	44	20	19	22	146	0.6s
								147	0.7s
								148	0.8s
								149	0.9s
								150	1.0s
								151	1.5s
								152	2.0s
								153	3.0s
								154	4.0s
								155	5.0s
								156	6.0s
								157	7.0s
								158	8.0s
								159	9.0s
								160	10.0s
								161 - 255	Default to Unit Setting
									Dim Curves
								000 - 020	Square
	20	29	37	45	21	20	23	021 - 040	Linear
								041 - 060	Inv Squa
								061 - 080	S Curve
								081 - 255	No Function

DMX TRAITS

CHANNEL								DMX VALUES	FUNCTION
16 CH	25 CH STD	34 CH	42 CH	50 CH	26 CH	25 CH STD CMY	28 CH		
12	21	30	38	46	22	21	24		**Internal Programs**
								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
								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
13	22	31	39	47	23	22	25		**Program Speed**
								000 - 255	Slow to Fast
14	23	32	40	48	24	23	26		**Program Fade**
								000 - 255	Minimum to Maximum
15	24	33	41	49	25	24	27		**Pan / Tilt Speed**
								000 - 255	Maximum to Minimum
16	25	34	42	50	26	25	28		**LED Refresh Rate**
								000 - 010	No Function
								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

DMX TRAITS

CHANNEL								DMX VALUES	FUNCTION
16 CH	25 CH STD	34 CH	42 CH	50 CH	26 CH	25 CH STD CMY	28 CH		**LED Refresh Rate (continued)**
								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
								034	1130 Hz
								035	1140 Hz
								036	1150 Hz
								037	1160 Hz
								038	1170 Hz
								039	1180 Hz
16	25	34	42	50	26	25	28	040	1190 Hz
								041	1200 Hz
								042	1210 Hz
								043	1220 Hz
								044	1230 Hz
								045	1240 Hz
								046	1250 Hz
								047	1260 Hz
								048	1270 Hz
								049	1280 Hz
								050	1290 Hz
								051	1300 Hz
								052	1310 Hz
								053	1320 Hz
								054	1330 Hz
								055	1340 Hz
								056	1350 Hz
								057	1360 Hz
								058	1370 Hz
								059	1380 Hz
								060	1390 Hz

DMX TRAITS

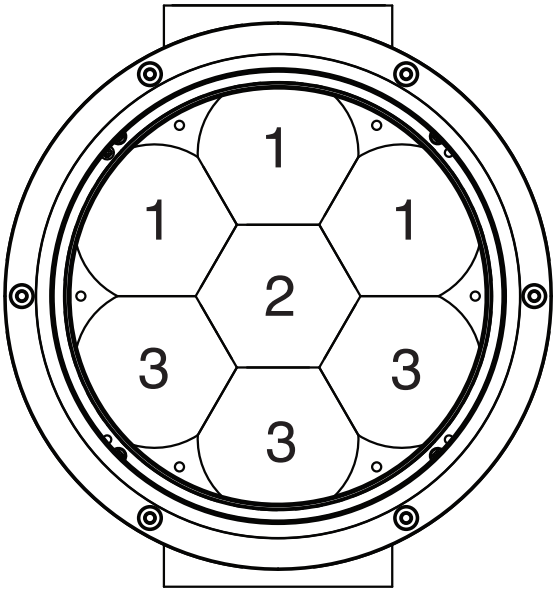
CHANNEL								DMX VALUES	FUNCTION
16 CH	25 CH STD	34 CH	42 CH	50 CH	26 CH	25 CH STD CMY	28 CH		
									LED Refresh Rate (continued)
								061	1400 Hz
								062	1410 Hz
								063	1420 Hz
								064	1430 Hz
								065	1440 Hz
								066	1450 Hz
								067	1460 Hz
								068	1470 Hz
								069	1480 Hz
								070	1490 Hz
								071	1500 Hz
								072	2500 Hz
								073	4000 Hz
								074	5000 Hz
								075	6000 Hz
								076	10 KHz
								077	15 KHz
								078	20 KHz
16	25	34	42	50	26	25	28	079	25 KHz
								080	No Function
									Special Functions
								081 - 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	Enable White Fixed Values (hold 3s)
								186 - 189	Fan Mode Mute (hold 3s)

DMX TRAITS

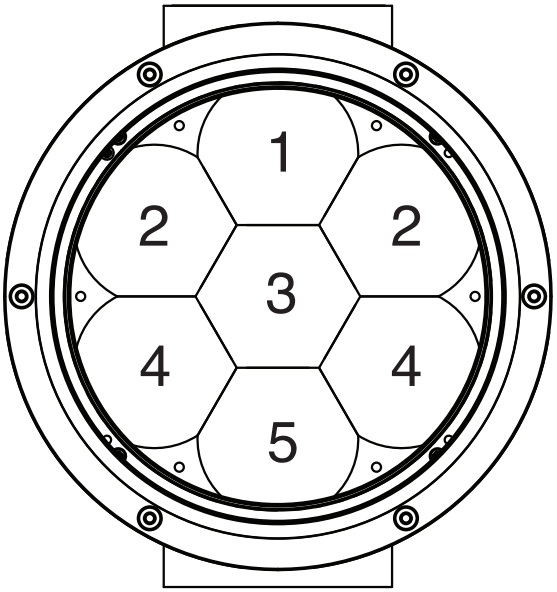
CHANNEL								DMX VALUES	FUNCTION
16 CH	25 CH STD	34 CH	42 CH	50 CH	26 CH	25 CH STD CMY	28 CH		
16	25	34	42	50	26	25	28		**Special Functions (continued)**
								190 - 193	Enable Zoom Mode 2 (hold 3s)
								194 - 197	Disable Zoom Mode 2 (hold 3s)
								198 - 200	Enable LP Mode 1 (hold 3s)
								201 - 203	Enable LP Mode 2 (hold 3s)
								204 - 255	No Function

PIXEL MAP

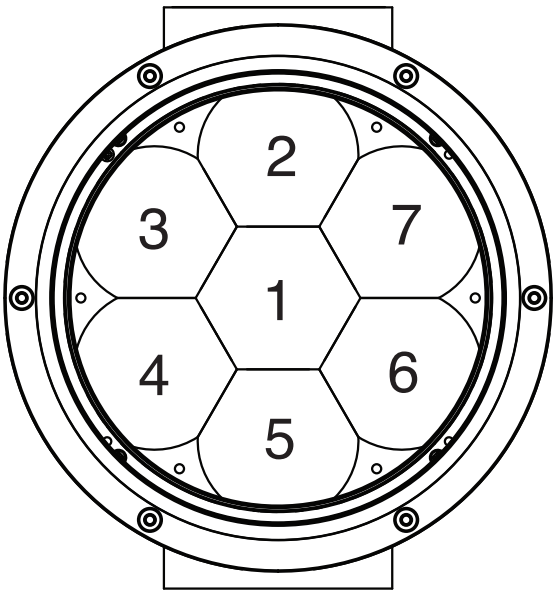
EXTENDED 34
PIXEL CONFIGURATION



EXTENDED 42
PIXEL CONFIGURATION



EXTENDED 50
PIXEL CONFIGURATION



COLOR WHEELS TABLE

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

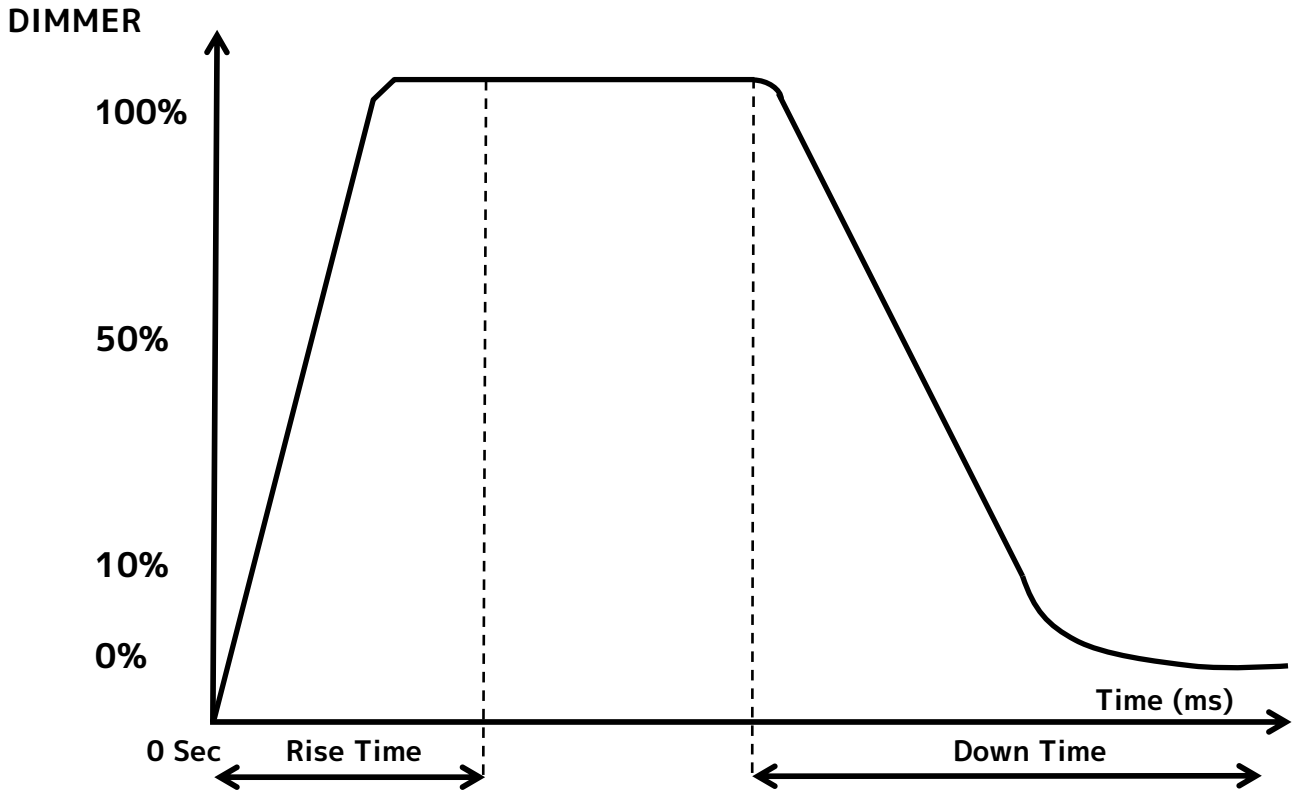
COLOR MACRO CHART

COLOR MACRO	DMX VALUES	RED	GREEN	BLUE	LIME
OFF	000	0	0	0	0
1	001 - 004	80	255	234	80
2	005 - 008	80	255	164	80
3	009 - 012	77	255	112	77
4	013 - 016	117	255	83	83
5	017 - 020	160	255	77	77
6	021 - 024	223	255	83	83
7	025 - 028	255	243	77	77
8	029 - 032	255	200	74	74
9	033 - 036	255	166	77	77
10	037 - 040	255	125	74	74
11	041 - 044	255	97	77	74
12	045 - 048	255	71	77	71
13	049 - 052	255	83	134	83
14	053 - 056	255	93	182	93
15	057 - 060	255	96	236	96
16	061 - 064	238	93	255	93
17	065 - 068	196	87	255	87
18	069 - 072	150	90	255	90
19	073 - 076	100	77	255	77
20	077 - 080	77	100	255	77
21	081 - 084	67	148	255	67
22	085 - 088	77	195	255	77
23	089 - 092	77	234	255	77
24	093 - 096	158	255	144	144
25	097 - 100	255	251	153	153
26	101 - 104	255	175	147	147
27	105 - 108	255	138	186	138
28	109 - 112	255	147	251	147
29	113 - 116	151	138	255	138
30	117 - 120	99	0	255	100
31	121 - 124	138	169	255	138
32	125 - 128	255	255	255	255
33	129 - 132	255	206	143	0
34	133 - 136	254	177	153	0
35	137 - 140	254	192	138	0
36	141 - 144	254	165	98	0
37	145 - 148	254	121	0	0

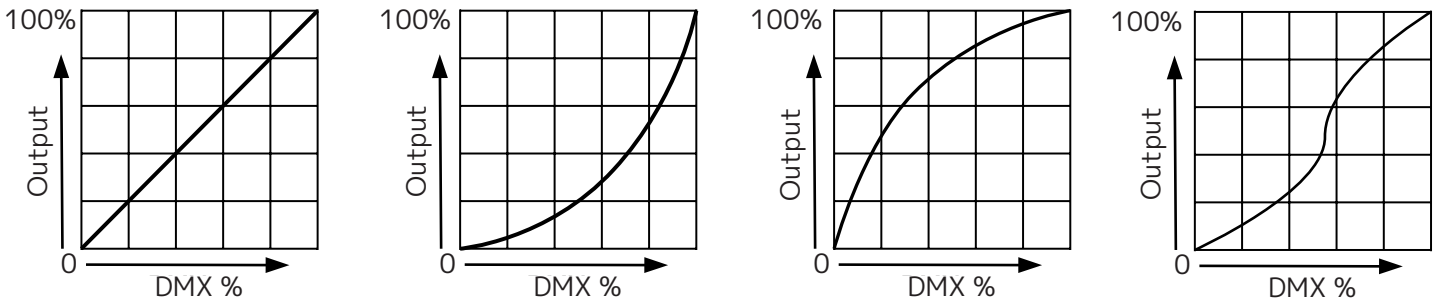
COLOR MACRO CHART

COLOR MACRO	DMX VALUES	RED	GREEN	BLUE	LIME
38	149 - 152	178	17	0	0
39	153 - 156	96	0	11	0
40	157 - 160	234	139	171	0
41	161 - 164	224	5	97	0
42	165 - 168	175	77	173	0
43	169 - 172	119	130	199	0
44	173 - 176	147	164	212	0
45	177 - 180	88	2	163	0
46	181 - 184	0	38	86	0
47	185 - 188	0	142	208	0
48	189 - 192	52	148	209	0
49	193 - 196	1	134	201	0
50	197 - 200	0	145	212	0
51	201 - 204	0	121	192	0
52	205 - 208	0	129	184	0
53	209 - 212	0	83	115	0
54	213 - 216	0	97	166	0
55	217 - 220	1	100	167	0
56	221 - 224	0	40	86	0
57	225 - 228	209	219	182	0
58	229 - 232	42	165	85	0
59	233 - 236	0	46	35	0
60	237 - 240	8	107	222	0
61	241 - 244	255	0	0	0
62	245 - 248	0	255	0	0
63	249 - 252	0	0	255	0
64	253 - 255	0	0	0	255

DIMMER MODES AND CURVES



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



COLOR TEMPERATURE

Colors shown are an approximately representation only.

DMX VALUE	COLOR TEMPERATURE (K)	DMX VALUE	COLOR TEMPERATURE (K)
27	2700	64	6400
28	2800	65	6500
29	2900	66	6600
30	3000	67	6700
31	3100	68	6800
32	3200	69	6900
33	3300	70	7000
34	3400	71	7100
35	3500	72	7200
36	3600	73	7300
37	3700	74	7400
38	3800	75	7500
39	3900	76	7600
40	4000	77	7700
41	4100	78	7800
42	4200	79	7900
43	4300	80	8000
44	4400	81	8100
45	4500	82	8200
46	4600	83	8300
47	4700	84	8400
48	4800	85	8500
49	4900	86	8600
50	5000	87	8700
51	5100	88	8800
52	5200	89	8900
53	5300	90	9000
54	5400	91	9100
55	5500	92	9200
56	5600	93	9300
57	5700	94	9400
58	5800	95	9500
59	5900	96	9600
60	6000	97	9700
61	6100	98	9800
62	6200	99	9900
63	6300	100	10000

CLEANING AND MAINTENANCE



DISCONNECT POWER BEFORE PERFORMING ANY MAINTENANCE!

CLEANING

Frequent cleaning is recommended to ensure proper function, optimized light output, and an extended life. The frequency of cleaning depends on the environment in which the fixture operates: damp, smoky, or particularly dirty environments can cause greater accumulation of dirt on the fixture's optics. Clean the external lens surface periodically with a soft cloth to avoid dirt/debris accumulation.

NEVER use alcohol, solvents, or ammonia-based cleaners.

MAINTENANCE

Regular inspections are recommended to ensure proper function and extended life. There are no user serviceable parts inside this fixture. Please refer all other service issues to an authorized ADJ service technician. Should you need any spare parts, please order genuine parts from your local ADJ dealer.

Please refer to the following points during routine inspections:

- A detailed electrical check by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating.
- Be sure all screws and fasteners are securely tightened at all times. Loose screws may fall out during normal operation, resulting in damage or injury as larger parts could fall.
- Check for any deformations on the housing, color lenses, rigging hardware, and rigging points
- (ceiling, suspension, trussing). Deformations in the housing could allow for dust or liquids to enter into the fixture. Damaged rigging points or unsecured rigging could cause fixture to fall and seriously injure a person(s).
- Electric power supply cables must not show any damage, material fatigue, or sediments.

NEVER remove the ground prong from the power cable.

TORQUE SETTINGS FOR SCREWS

IN ORDER TO MAINTAIN THE IP65 RATING ON THE LIGHTING FIXTURES, ALL SCREWS MUST BE TIGHTENED TO THE FOLLOWING TORQUE SPECIFICATION USING A TORQUE DRIVER.

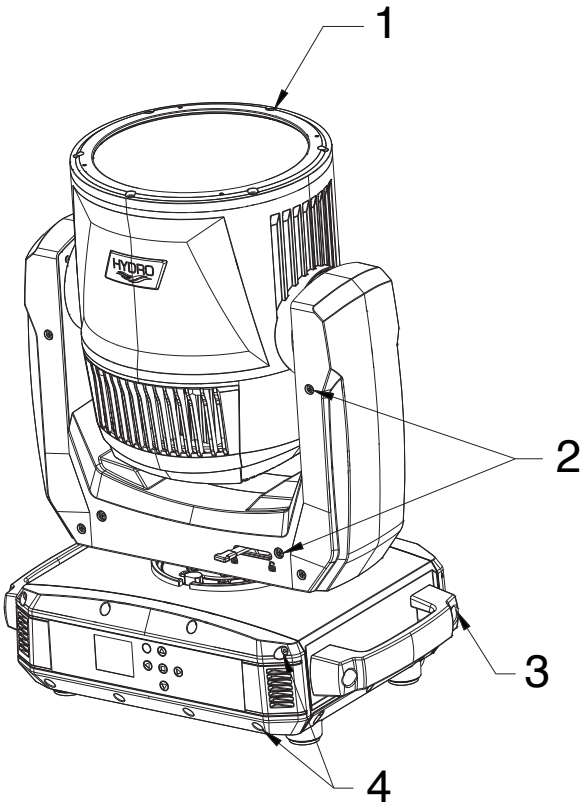
Refer to the table and diagram below for torque specifications.

TORQUE DRIVERS (Recommended): UTICA TS-30 (shown)
ALTERNATE DRIVERS:

- Proto J6107A
- Wiha 28887



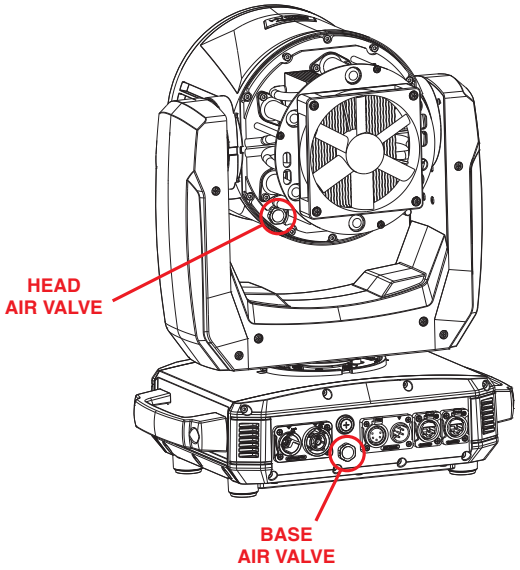
CAUTION! DO NOT OVER TORQUE SCREWS, AS THIS CAN CAUSE LEAKAGE ISSUES!



NO.	LOCATION	QUANTITY	TORQUE
1	Head Front Cover	6	11.3 ± 0.4 Lb-in (13.0 ± 0.5 Kg-cm)
2	Arm Cover	12	4.3 ± 0.4 Lb-in (5.0 ± 0.5 Kg-cm)
3	Carrying Handles	4	11.3 ± 0.4 Lb-in (13.0 ± 0.5 Kg-cm)
4	Base Front/Rear Covers	16	11.3 ± 0.4 Lb-in (13.0 ± 0.5 Kg-cm)

IP TEST PARAMETERS

Following any repair or maintenance procedure that requires disassembly of the fixture, use ADJ's Hydro IP Tester to confirm the IP integrity of the fixture. This fixture has two air valves: one on the back of the head behind the rear head cover, and a second on the base beneath the fuse. Please contact ADJ Service for information regarding the ADJ Hydro IP Tester, or visit the product information page online at: https://www.adj.com/hydro-ip-tester



CAUTION! THE USE OF PROTECTIVE GLOVES AND SAFETY GOGGLES IS STRONGLY RECOMMENDED WHILE PERFORMING THE IP PRESSURE TEST! AVOID PLACING YOUR FACE, EYES, HANDS, ETC IN CLOSE PROXIMITY TO THE FIXTURE'S LENS WHILE PERFORMING THE TEST!

DE-HUMIDIFICATION: IP65 fixtures operating in high-humidity environments may experience residual fogging or condensation. Such fogging will not damage the fixture, and can be removed using the following procedure: position the unit with the air valve pointing upwards, then open the air valves and run the unit for 1-2 hours after reaching operating temperature. Then, while the fixture is still hot, re-install the air valve and allow the unit to cool down. Please note that this procedure should be performed in a dry, air-conditioned environment. Avoid additional fogging by drying the fixture completely before placing into a road case.



IP PRESSURE TESTING PARAMETERS					
Low Pressure Limit	**High Pressure Limit**	**Inflation Time**	**Equilibrium Time**	**Detection Time**	**Acceptable Leakage**
2.901 psi (20.0 KPa)	3.336 psi (23.0 KPa)	40 sec	15 sec	15 sec	0.015 psi (0.1 KPa) (100 Pa)

ERROR CODES

Note: Error Codes are subject to change without any prior written notice.	
ERROR CODES	**DESCRIPTION**
Pan	Pan Motor Error
Tilt	Tilt Motor Error
Zoom	Zoom Motor Error
Head Temp	Head Temperature Error
LED Fan	LED Fan Error
Humi Fan 1	Humidity Fan 1 Error
Humi Fan 2	Humidity Fan 2 Error
Base Temp	Base Temperature Error
Base Fan	Base Fan Error

SPECIFICATIONS

Source:
- 7 x 60-Watt RGBL LEDs (50,000 hr.)
- CRI: TBA
- TM30 Rf: TBA
- TM30 Rg: TBA
- Color Temperature: 2700K ~ 10,000K
- Lumens: 5,600 (Zoomed Out, Full On)

Features:
- Moving Light Pixel Wash
- Individual Pixel Control
- Built-In Pixel Effect Programs
- Aria X2 Wireless Management System
- Electronic Strobe / Dimmer
- Pan/Tilt: 540/630 x 243
- Motorized Zoom
- Beam Angle: 4° ~ 38°
- Field Angle: 6° ~ 54°
- Color Calibrated Pixels so units match from batch to batch
- Virtual CMY DMX Control Modes
- Virtual Foreground and Background Color Wheel Control
- Selectable LED Refresh Rates (900 Hz~25K Hz)
- 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:
- 7x 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:
- 8 DMX Modes - 16/25/34/42/50/26/ 25(CMY) / 28(CMY) Channels
- Color LCD display with 6-button function menu
- Control: DMX512, ArtNet, sACN, KlingNet 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: 243 degrees
- 16-Bit Fine Pan & Tilt
- Pan & Tilt Locks

Connections:
- DMX Connections: IP65-rated Locking In/Out XLR Sockets
- IP65-rated Locking In/Out RJ45 Network Sockets
- Power Connections: IP65-rated Locking In/Out Power Sockets

Electrical:
- Multi-voltage operation: 100-240V, 50/60Hz
- Max power consumption: 530W (4.48Amps) @ 120V. 516W (2.42Amps) @ 220V.

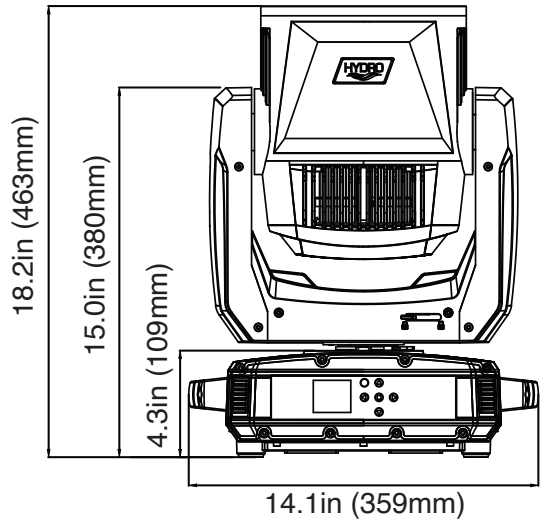
Dimensions & Weight:
- Dimensions (LxWxH): 9.73”L x 14.14”W x 18.23”H (247x359x463mm)
- Weight: 35.3lbs (16kg)

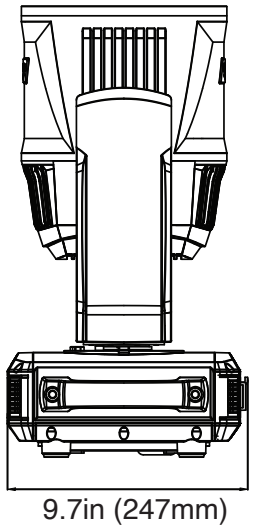
Approvals / Rating:
- cETLus Pending
- CE Certified
- IP65

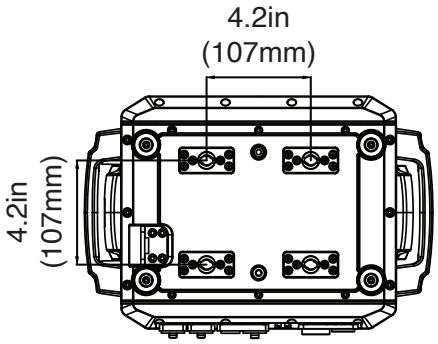
CE IP65

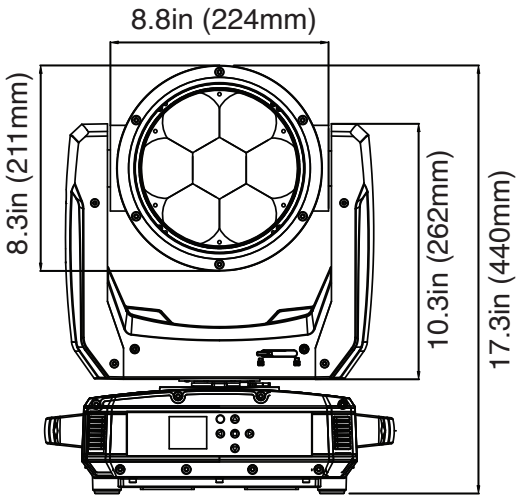
DIMENSIONS

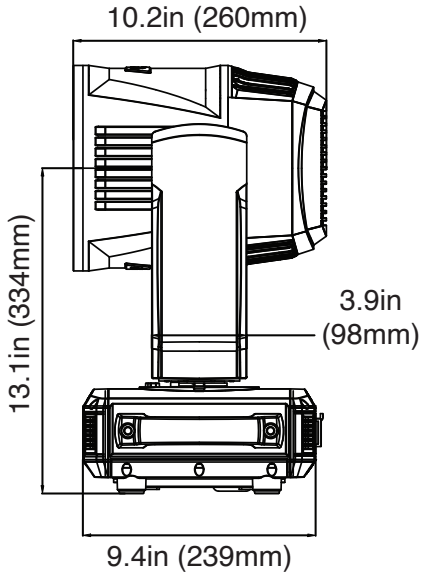
Dimensions are not drawn to scale.











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 and the radio receiver to electrical outlets on two different circuits.
- Consult the dealer or an experienced radio/TV technician for help.

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