

# UV PAR 100IP

## User Manual

©2024 ADJ Products, LLC all rights reserved. Information, specifications, diagrams, images, and instructions herein are subject to change without notice. ADJ Products, LLC logo and identifying product names and numbers herein are trademarks of ADJ Products, LLC. Copyright protection claimed includes all forms and matters of copyrightable materials and information now allowed by statutory or judicial law or hereinafter granted. Product names used in this document may be trademarks or registered trademarks of their respective companies and are hereby acknowledged. All non-ADJ Products, LLC brands and product names are trademarks or registered trademarks of their respective companies.

**ADJ Products, LLC** and all affiliated companies hereby disclaim any and all liabilities for property, equipment, building, and electrical damages, injuries to any persons, and direct or indirect economic loss associated with the use or reliance of any information contained within this document, and/or as a result of the improper, unsafe, insufficient and negligent assembly, installation, rigging, and operation of this product.

#### **ADJ PRODUCTS LLC World Headquarters**

6122 S. Eastern Ave. | Los Angeles, CA 90040 USA

Tel: 800-322-6337 | Fax: 323-582-2941 | [www.adj.com](http://www.adj.com) | [support@adj.com](mailto:support@adj.com)

#### **ADJ Supply Europe B.V.**

**ADJ SERVICE EUROPE** - Monday - Friday 08:30 to 17:00 CET

Junostraat 2 | 6468 EW Kerkrade | Netherlands

+31 45 546 85 60 | Fax: +31 45 546 85 96 | [support@adj.eu](mailto:support@adj.eu)

#### **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 Channels	Notes
06/27/2024	1.0	1.01	1 / 2 / 3 / 6 Ch.	Initial release
06/09/2025	1.1	N/C	N/C	Update Specifications

# CONTENTS

<b>Introduction</b>	<b>4</b>
<b>Limited Warranty (USA Only)</b>	<b>5</b>
<b>Warranty Registration I Features</b>	<b>6</b>
<b>IP65 Rated</b>	<b>7</b>
<b>Safety Precautions</b>	<b>8</b>
<b>Overview</b>	<b>10</b>
<b>Installation Guidelines</b>	<b>11</b>
<b>Remote Device Management (RDM)</b>	<b>16</b>
<b>Control Panel</b>	<b>17</b>
<b>System Menu</b>	<b>18</b>
<b>DMX Set Up</b>	<b>20</b>
<b>DMX Traits</b>	<b>22</b>
<b>Dimmer Modes and Curves</b>	<b>24</b>
<b>Primary-Secondary Set Up I Multi Unit Power Linking</b>	<b>25</b>
<b>Maintenance Guidelines</b>	<b>26</b>
<b>Torque Settings for Screws</b>	<b>27</b>
<b>IP Test Parameters</b>	<b>28</b>
<b>Dimensional Drawings</b>	<b>29</b>
<b>Specifications</b>	<b>30</b>
<b>Error Codes I FCC Statement</b>	<b>31</b>

# INTRODUCTION

**Unpacking:** Thank you for purchasing the UV Par 100IP by ADJ Products, LLC. 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 appears to have been damaged, carefully inspect your fixture for any damage and be sure all accessories necessary to operate the unit have arrived intact. In the event that damage has been found or parts are missing, please contact our toll free customer support number for further instructions. Do not return this unit to your dealer without first contacting customer support.

**Introduction:** The UV Par 100IP is a IP65-rated UV par fixture powered by a 100-Watt COB ultraviolet LED. **This product is intended to be used by professionally trained personnel only and is not suitable for private use.**

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

**Parts:** To purchase parts online visit:

<http://parts.adj.com> (US)

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

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

**Voice:** 800-322-6337 | [support@adj.com](mailto:support@adj.com)

**ADJ SERVICE EUROPE - Monday - Friday 08:30 to 17:00 CET**

**Voice:** +31 45 546 85 60 | **Fax:** +31 45 546 85 96 | [support@adj.eu](mailto:support@adj.eu)

## **ADJ PRODUCTS LLC USA**

6122 S. Eastern Ave. Los Angeles, CA. 90040

323-582-2650 | [www.adj.com](http://www.adj.com) | [info@adj.com](mailto:info@adj.com)

## **ADJ SUPPLY Europe B.V**

Junostraat 2 6468 EW Kerkrade, The Netherlands

+31 (0)45 546 85 00 | Fax +31 45 546 85 99

[www.adj.eu](http://www.adj.eu) | [info@adj.eu](mailto:info@adj.eu)

## **ADJ PRODUCTS GROUP Mexico**

AV Santa Ana 30 Parque Industrial Lerma, Lerma, Mexico 52000

+52 (728) 282-7070

**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 carton 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 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

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. 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

- Control Protocol: DMX & RDM
- DMX Modes: 5 (1, 3, 4, 5 & 8 Channel Modes)
- Dim Modes: 6 Presets (Standard, Stage, TV, Architectural, Theatre & Stage 2)
- Dim Curves: 4 Presets (Square, Linear, Inv. Curve & S-Curve)
- Dim Speed control (0.1~10 Seconds)
- Dimming: 0 - 100%
- Linear, Pulse and Random Strobe control
- Adjustable LED Refresh Rates (900~25k Hz)
- With Wired Digital Communication Network
- Display: OLED display with 4-button touch menu

## INCLUDED ITEMS

- IP65, 6-foot (1.83m) 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

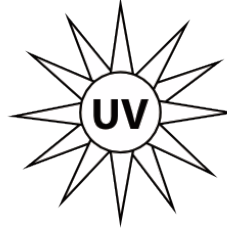
Although the base has limited moving parts, the pan belt should also be inspected for wear. Remember to always perform an IP test anytime a cover is removed.

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](mailto:service@adj.com) for any needed parts or manuals.

## **SAFETY PRECAUTIONS**



**HIGH  
INTENSITY  
ULTRAVIOLET  
LIGHT**



**AVOID DIRECT EYE & SKIN EXPOSURE.  
WEAR PROPER EYE & SKIN PROTECTION.**

**RISK GROUP 3 - RISK OF EXPOSURE TO ULTRAVIOLET UV RADIATION! THE FIXTURE EMITS A HIGH-INTENSITY WAVELENGTH OF ULTRAVIOLET UV LIGHT FROM THE UV COLOR FILTER. WEAR PROPER EYE AND SKIN PROTECTION.**

**AVOID PROLONGED PERIODS OF EXPOSURE TO THE UV COLOR FILTER.**

**AVOID WEARING WHITE CLOTHING AND/OR USING UV PAINTS ON THE SKIN.**

**AVOID DIRECT EYE AND/OR SKIN EXPOSURE AT DISTANCES LESS THAN 11 FEET (3.3M).**

**DO NOT OPERATE THE FIXTURE WITH DAMAGED/MISSING EXTERNAL COVERS.**

**DO NOT LOOK DIRECTLY INTO THE UV LIGHT AND/OR VIEW UV LIGHT DIRECTLY WITH OPTICAL INSTRUMENTS THAT MAY CONCENTRATE THE LIGHT/RADIATION OUTPUT.**

**INDIVIDUALS SUFFERING FROM A RANGE OF EYE CONDITIONS, SUNLIGHT EXPOSURE DISORDERS, OR INDIVIDUALS USING PHOTSENSITIVE MEDICATION MAY EXPERIENCE DISCOMFORT IF EXPOSED TO THE ULTRAVIOLET UV LIGHT EMITTED FROM THE UV LED.**

# SAFETY PRECAUTIONS



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



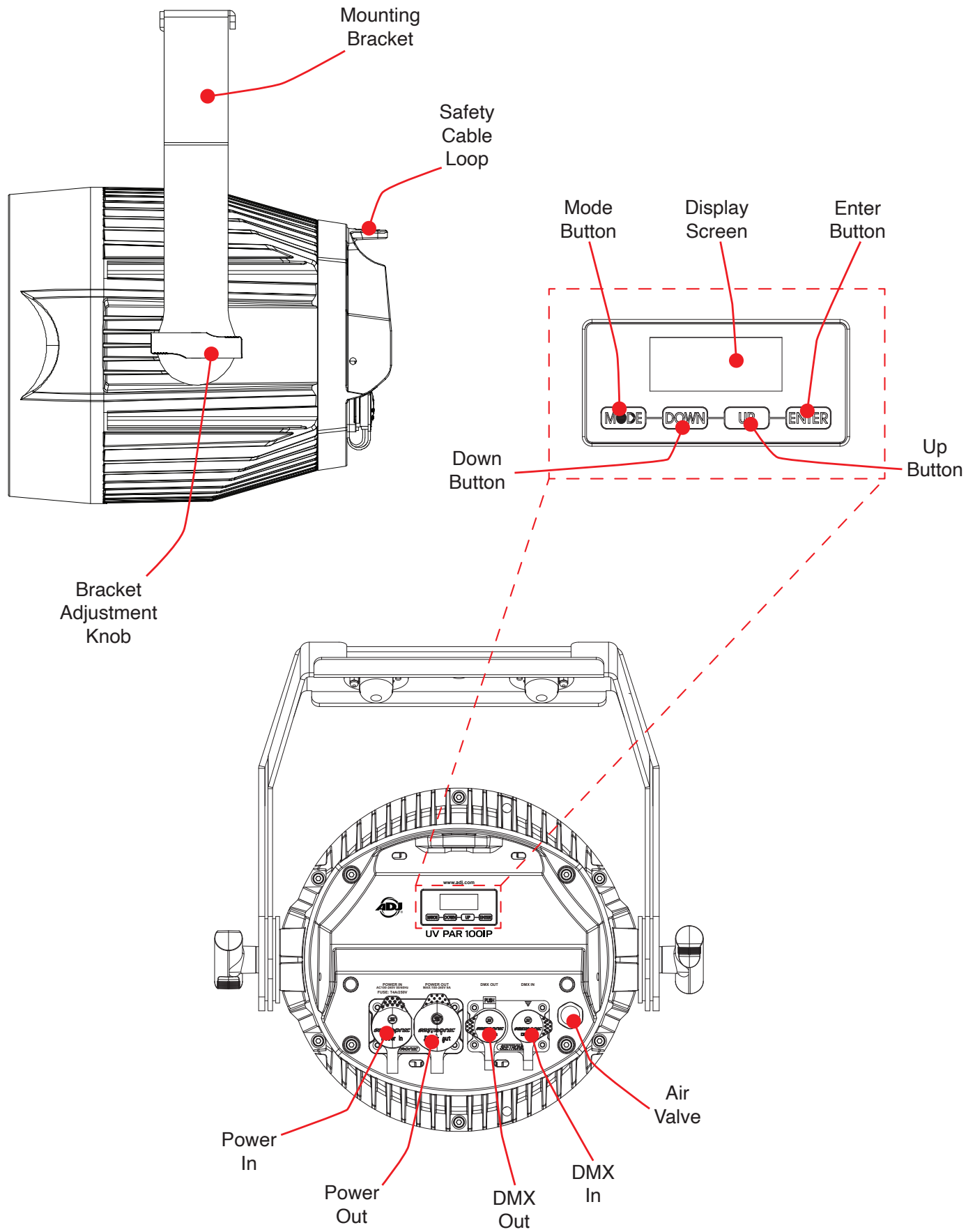
**THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT. DO NOT ATTEMPT ANY REPAIRS YOURSELF, AS DOING SO WILL VOID YOUR MANUFACTURER'S WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS FIXTURE AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURER'S WARRANTY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



**NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE!  
RETINA INJURY RISK - MAY INDUCE BLINDNESS!  
SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK!**

- **Ambient operating temperature range is -22°F to 113°F (-30°C to 45°C)!**
- DO NOT TOUCH the fixture housing during operation. Disconnect the power and allow approximately 15 minutes for the fixture to cool down before servicing.
- DO NOT shake the fixture, and avoid brute force when installing and/or operating the fixture.
- DO NOT operate the fixture if the power cord has become frayed, crimped and/or damaged. If the power cord is damaged, replace immediately with a new one of the same power rating.
- DO NOT attempt to remove or break off the ground prong from the electrical cord. This prong is used to reduce the risk of electrical shock and fire in case of an internal short.
- DO NOT attempt to operate this unit if it has been damaged in any way.
- Disconnect from main power before making any type of connection.
- DO NOT block any air ventilation slots. All fan and air inlets must remain clean and never blocked. Allow approx. 20" (0.5m) between fixture and other devices or a wall for proper cooling.
- Always be sure to mount this unit in an area that will allow proper ventilation. Allow about 20" (0.5m) between this device and a wall.
- DO NOT remove the cover for any reason.
- When installing fixture in a suspended environment, always use mounting hardware that is no less than M10 x 25mm, and always install fixture with an appropriately rated safety cable.
- Never plug this unit in to a dimmer pack.
- During long periods of non-use, disconnect the unit's main power.
- Always mount this unit in safe and stable matter.
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to the point where they exit from the unit.
- Cleaning - The fixture should be cleaned only as recommended by the manufacturer.
- Heat - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- The fixture should be serviced by qualified service personnel when:
  - A. The power-supply cord or the plug have been damaged.
  - B. Objects have fallen onto, or liquids have been spilled into, the fixture.
  - C. The fixture does not appear to operate normally or exhibits a marked change in performance.
  - D. The fixture has fallen and/or has been subjected to extreme handling.

# OVERVIEW



# INSTALLATION GUIDELINES



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

Fixture **MUST** be installed following all local, national, and country commercial electrical and construction codes and regulations.

When installing the unit, the trussing or area of installation must be able to hold 10 times the weight of the unit and any attached accessories without any deformation. The unit must be secured with a secondary safety attachment, e.g. an appropriately-rated safety cable.

Before rigging/mounting a single fixture to any metal truss/structure or placing the fixture(s) on any surface, a professional equipment installer **MUST** be consulted to determine if the metal truss/structure or surface is properly certified to safely hold the combined weight of the fixture(s), clamps, cables, and accessories.

Ambient operating temperature range for this fixture is **-22°F to 113°F (-30°C to 45°C)**. Do not operate this device when ambient temperature exceeds this value!

Fixture(s) 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(s) when rigging, removing, or servicing.

Overhead fixture installation must always be secured with a secondary safety attachment, such as an appropriately rated safety cable that can hold 10 times the weight of the fixture.

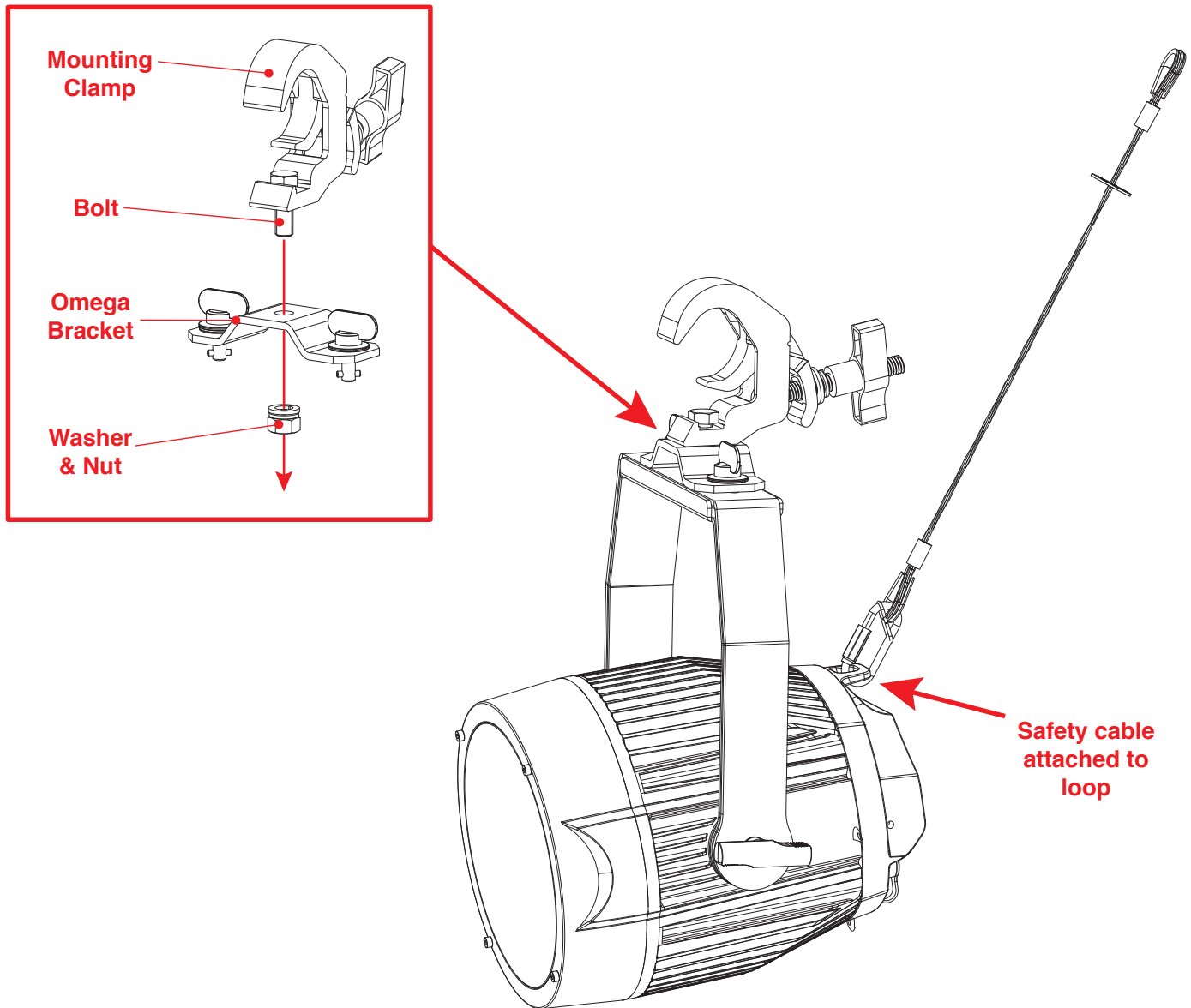
Overhead mounting requires extensive experience, including calculating working load limits, knowledge of installation material being used, and periodic safety inspection of all installation material as well as the unit itself. If you lack these qualifications, do not attempt the installation yourself.

The installation should be checked by a skilled person once a year.

# INSTALLATION GUIDELINES

## CLAMP MOUNTING

When mounting the fixture to a truss or any other suspended structure, secure an appropriately rated clamp to an Omega bracket using a properly rated nut and bolt, then attach the Omega bracket to the fixture's mounting bracket. Additionally, a safety cable of the appropriate weight rating should be secured through the safety cable loop located on the rear panel, just above the display screen.



## SAFETY CABLE:

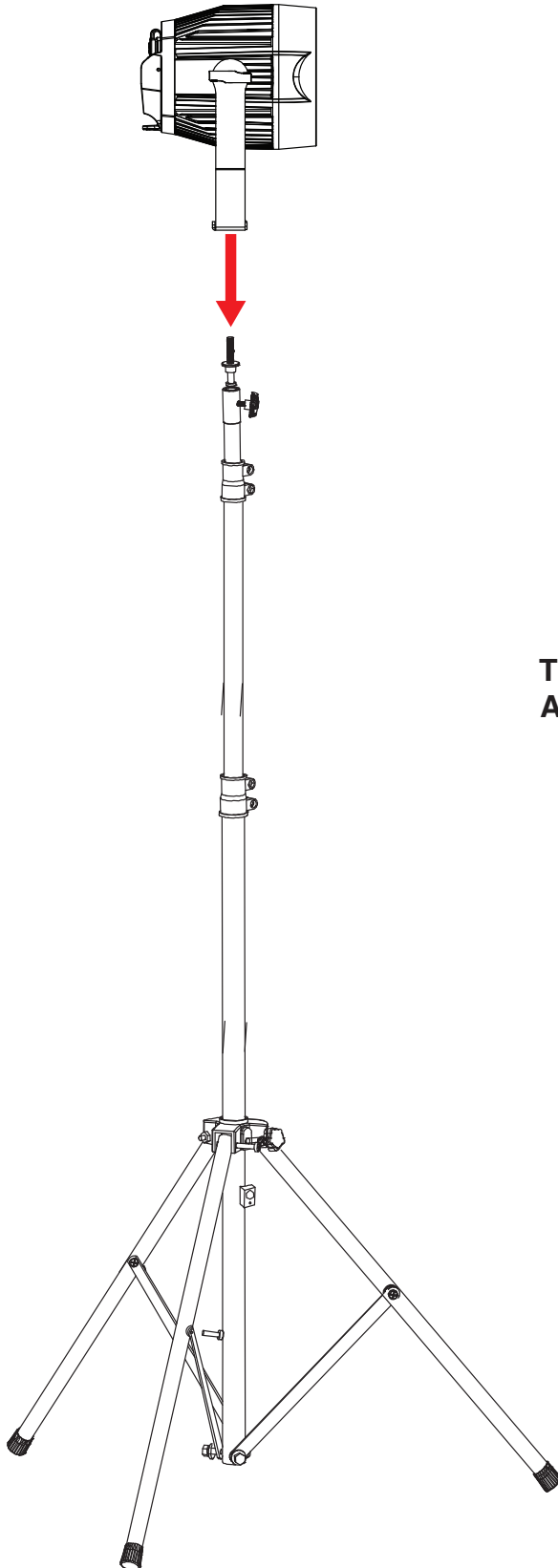


**ALWAYS ATTACH A SAFETY CABLE WHENEVER INSTALLING THIS FIXTURE IN A SUSPENDED ENVIRONMENT TO ENSURE THAT THE FIXTURE WILL NOT FALL IF THE CLAMP FAILS.**

# INSTALLATION GUIDELINES

## STAND MOUNTING

This unit can also be installed atop a tripod stand. Simply secure the Omega bracket to the mounting bracket, then insert the threaded bolt on the top of the tripod stand through the hole in the Omega bracket. Tighten the nut onto the threaded bolt to secure the mounted device in place.



**CAUTION!**

**MAKE SURE THAT THE TRIPOD LEGS AND ALL TELESCOPING ELEMENTS OF THE TRIPOD STAND ARE LOCKED IN PLACE BEFORE INSTALLING THE DEVICE ATOP THE STAND!**

**POSITION THE TRIPOD STAND AND MOUNTED DEVICE ONLY ON FLAT, STABLE SURFACES! DEPLOY TRIPOD LEGS FULLY IN ORDER TO MAXIMIZE STABILITY!**

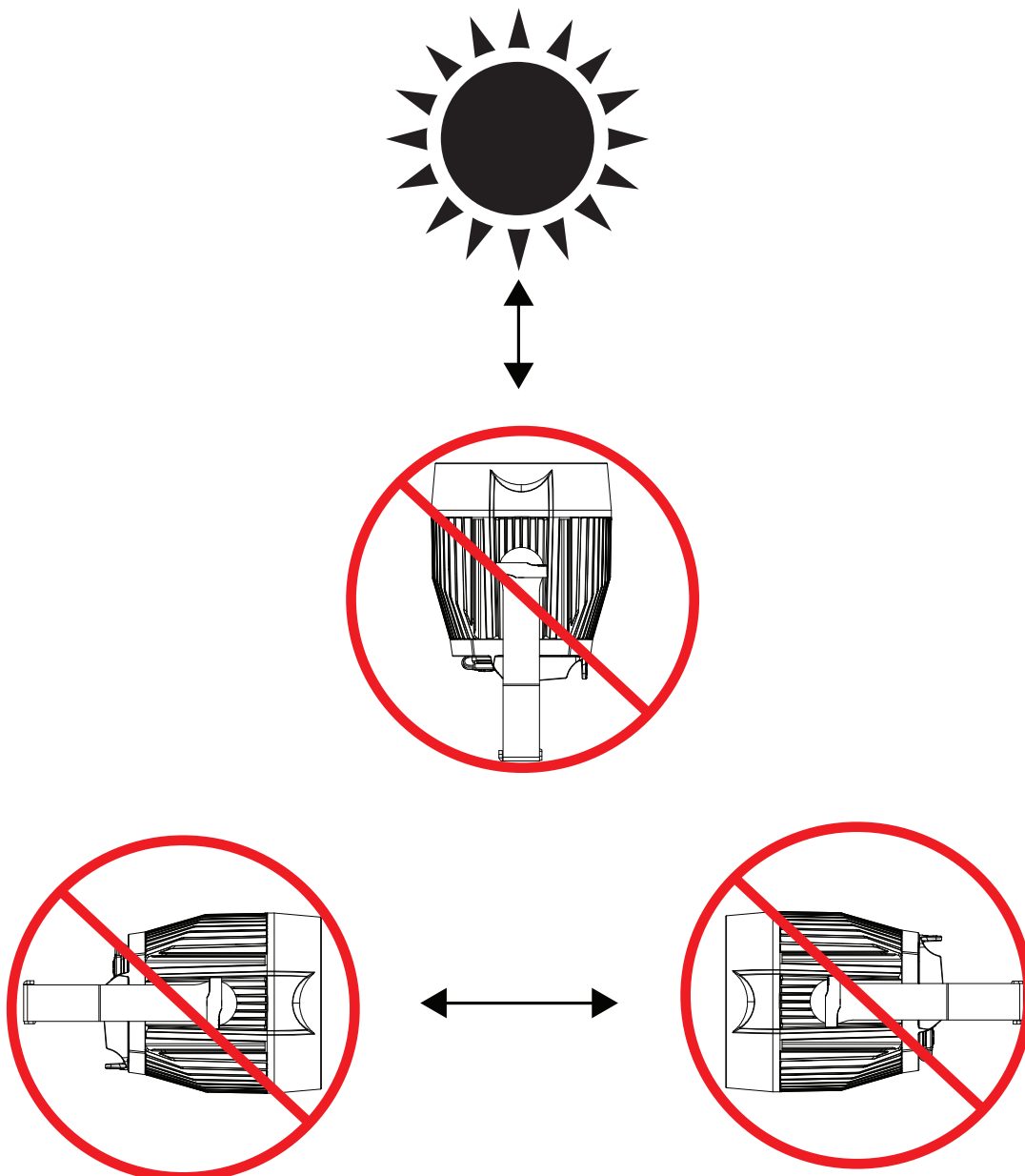
# INSTALLATION GUIDELINES

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

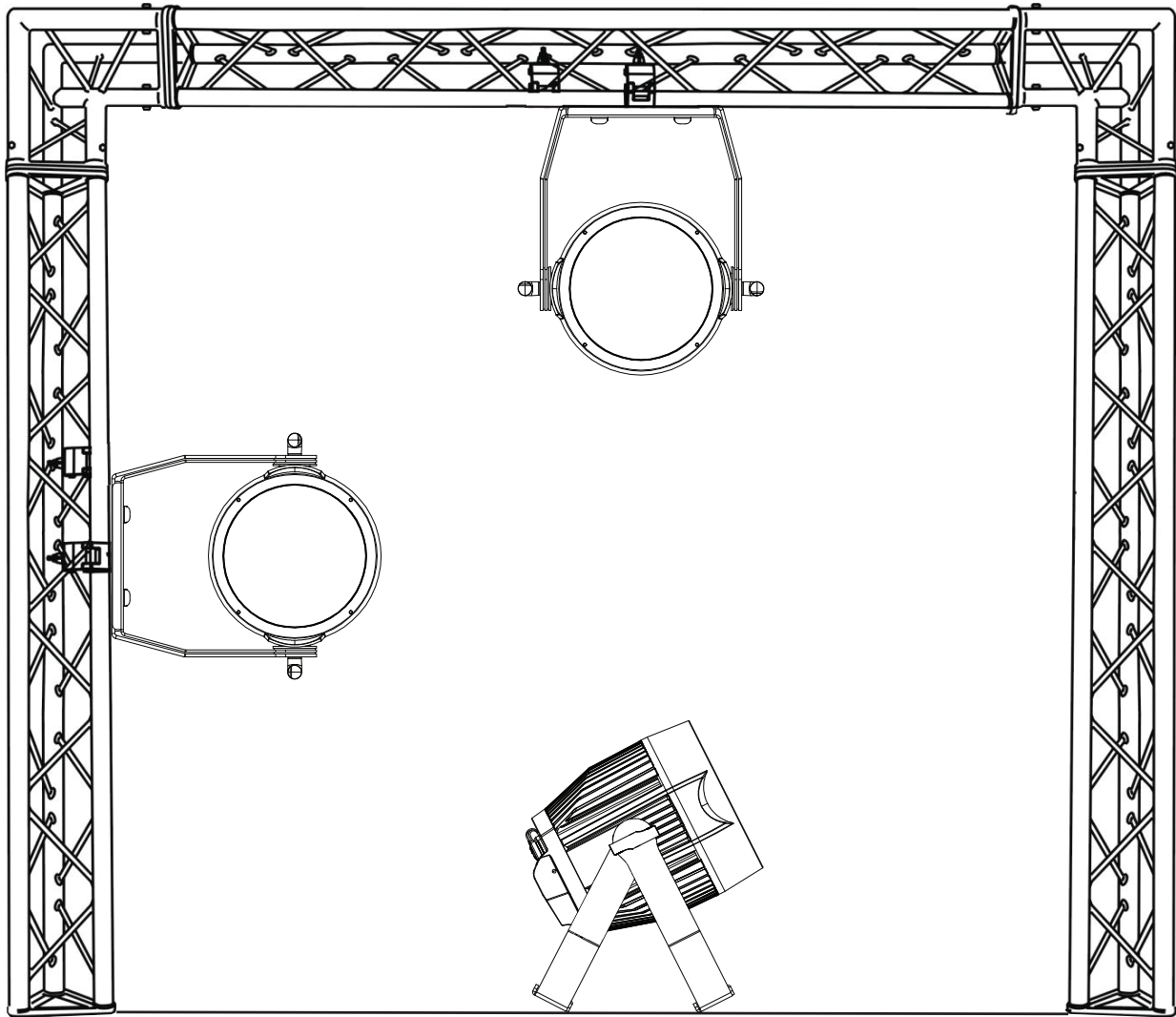
External sources of light beams from direct sunlight, lighting moving head fixtures, and lasers, which are focused directly towards the exterior housing and/or penetrate the front lens opening of ADJ lighting fixtures, can cause severe internal damage including burning to optics, dichroic color filters,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

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

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



# INSTALLATION GUIDELINES



The unit is fully operational in three different mounting positions: hanging upside-down from the ceiling or trussing, sideways on trussing, or set on a flat level surface. Be sure this fixture is kept at least 12m (40ft) away from any flammable materials (decorations, etc). Always use and install a safety cable (not included) 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.



**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 THAT THE FIXTURE WILL NOT FALL IF THE CLAMP FAILS.**

# REMOTE DEVICE MANAGEMENT (RDM)

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

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

RDM Code	Device ID	Device Model ID	Personality ID
1900	45	69	1Ch (001) 2Ch (002) 3Ch (003) 6Ch (004)

## FIXTURE RDM INFORMATION:

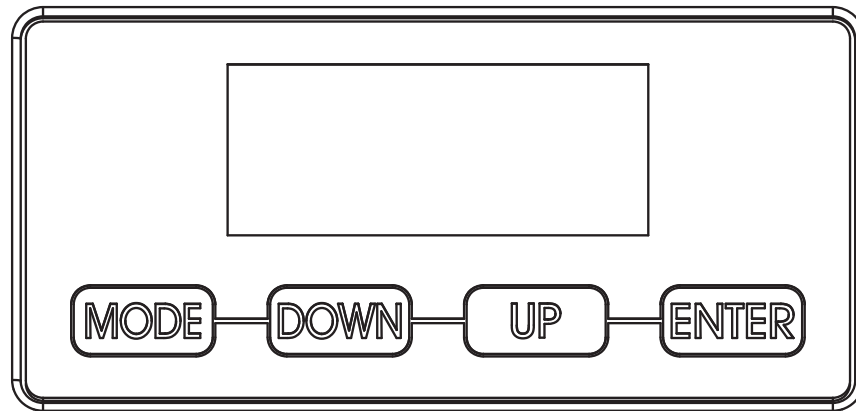
**Please be aware that not all RDM devices support all RDM features**, and therefore it is important to check beforehand to ensure that the equipment that you are considering includes all of the features that you require.

[0x1031] Preset Playback	[0x00E0] DMX Personality
[0x0122] Default Slot Value	[0x00E1] DMX Personality Description
[0x00C2] Boot Software Version Label	[0x0400] Device Hours
[0x00C1] Boot Software Version ID	[0x0015] Comms Status
[0x0070] Product Detail ID List	[0x0031] Status ID Description
[0x0030] Status Messages	[0x0032] Clear Status ID
[0x0011] Proxied Device Count	[0x0405] Device Power Cycles
[0x0200] Sensor Definition	[0x0500] Display Invert
[0x0201] Sensor Value	[0x0501] Display Level
[0x0080] Device Model Description	[0x0603] Realtime Clock
[0x0081] Manufacturer Label	[0x1010] Power State
[0x0082] Device Label	[0x0020] Queued Message

# SYSTEM MENU

This unit features a touch screen with a 4-button control pad, which can be used to easily adjust any device settings.

Pressing the MODE button will cycle through the various Main Menu options. When the desired Main Menu option is displayed on the screen, press the ENTER button to enter the sub-menu, then use the UP and DOWN buttons to scroll through sub-menu options. In some cases, there will be a second sub-menu that can be navigated in the same way.



## SCREEN LOCK

The control panel screen includes a feature that can be used to lock the control keys after a pre-defined period of inactivity. The default setting for this inactivity period is 30 seconds, and this feature can be set or modified in the System Menu by navigating to Personality > Display > Touch Screen Lock. The controls can be unlocked by pressing and holding MODE for 3 seconds.

# SYSTEM MENU

MAIN MENU	OPTIONS / VALUES (Default Settings in <b>BOLD</b> )			DESCRIPTION	
DMX Settings	DMX Address	001 - 512		Set the DMX starting address	
	DMX Channel Mode	1ch, 2ch, 3ch, 6ch		Select DMX channel mode	
	No DMX Status	Hold Last		Unit holds last settings received if DMX signal is lost	
		Blackout		All channels go to 0 if DMX signal is lost	
		Manual Settings		Unit defaults to manual mode if DMX signal is lost	
Personality	Prim/Sec Mode	Primary / Secondary		Set unit as a primary or a secondary unit	
	Select Signal	DMX or Aria		Select signal source	
		Aria and DMX OUT			
	Aria Settings	Aria Enable	On / Off		Enable or disable Aria
		Set Aria Band	2.4Ghz		Select Aria broadcast frequency
			Subgig (US)		
			Subgig (EU)		
		Aria 2.4Ghz Channel	00 - 15		Select 2.4Ghz Aria channel
		Aria Subgig Channel	00 - 09		Select subgig Aria channel
		Mesh	On / Off		Enable or disable mesh feature
		Bluetooth Enable	On / Off		Enable or disable Bluetooth
	Dim Curves	Square, Linear, Inv. Curve, S-Curve		Select dim curve	
	LED Refresh Rate	900Hz-1500Hz (1200Hz), 2500Hz, 4000Hz, 5000Hz, 6000Hz, 10KHz, 15KHz, 20KHz, 25KHZ		Select LED refresh frequency	
	Dim Modes	Standard, Stage, TV, Architectural, Theatre, Stage 2		Set dim mode and dim speed	
		Dim Speed	0.1s - 10s		
	Display	Screen Saver Delay	Off, 1s - 10s		Screen enters power saving mode after defined period of inactivity
		Touch Screen Lock	Off - 30s, 1min		Screen controls lock after defined period of inactivity
	Service	Passcode = 050	Calibrate	UV 000 - 255	Calibrate fixture output
			Factory Restore (passcode = 011)	Yes / No	Reset fixture to default factory settings

# SYSTEM MENU

MAIN MENU	OPTIONS / VALUES (Default Settings in <b>BOLD</b> )		DESCRIPTION	
<b>Manual Control</b>	Shutter	000 - <b>255</b>	Manually control each fixture parameter	
	Dimmer	<b>000</b> - 255		
<b>Information</b>	Hours	Powered On Hours 1		Lifetime total number of hours that fixture has been powered on
		Powered On Hours 2		Number of hours that fixture has been powered on since last reset
		Power On Reset	Passcode = 050	Reset Powered On Hours 2
	Temperature	xxx° F / xxx° C		Displays current temperature
		Max Temp 1		Max recorded temperature since last reset
		Max Temp 2		Lifetime max recorded temperature
		Temperature Reset	Passcode = 050	Reset Max Temp 1
	Humidity	xxx% HR		Displays current humidity
	DMX Values	UV: 000 - 255		Displays current DMX value
	Software Version	x.xx		Displays current software version

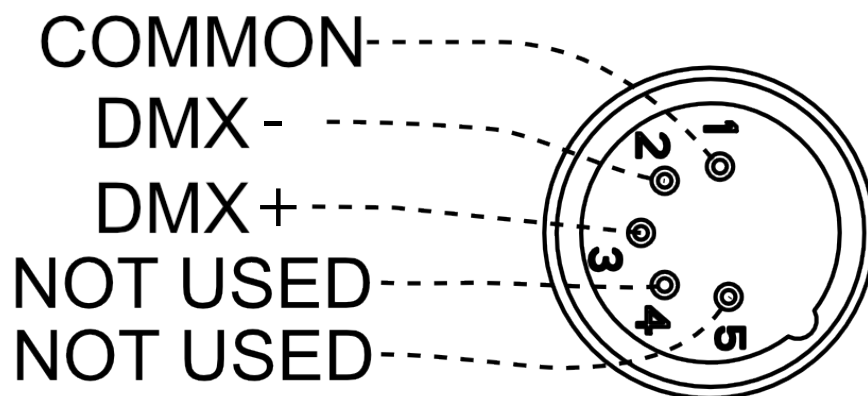
# DMX SETUP

**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 linking 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.

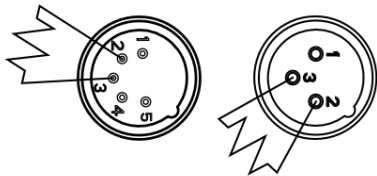
**Data Cable (DMX Cable) Requirements (For DMX Operation):** This unit can be controlled via DMX-512 protocol. The DMX address is set on the rear panel of the unit. Your unit and your DMX controller require a standard 5-pin XLR connector for data input and data output. We recommend Accu-Cable DMX cables.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

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



# DMX SETUP

**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 reduce the risk 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 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.

For example, when this unit is operating in 2 channel mode, you should set the starting DMX address of the first unit to 1, the second unit to 3 (1 + 2), the third unit to 5 (1 + 2 + 2), and so on. See the chart below for more details.

CHANNEL MODE	UNIT 1 ADDRESS	UNIT 2 ADDRESS	UNIT 3 ADDRESS	UNIT 4 ADDRESS
1Ch	1	2	3	4
2Ch	1	3	5	7
3Ch	1	4	7	10
6Ch	1	7	13	19

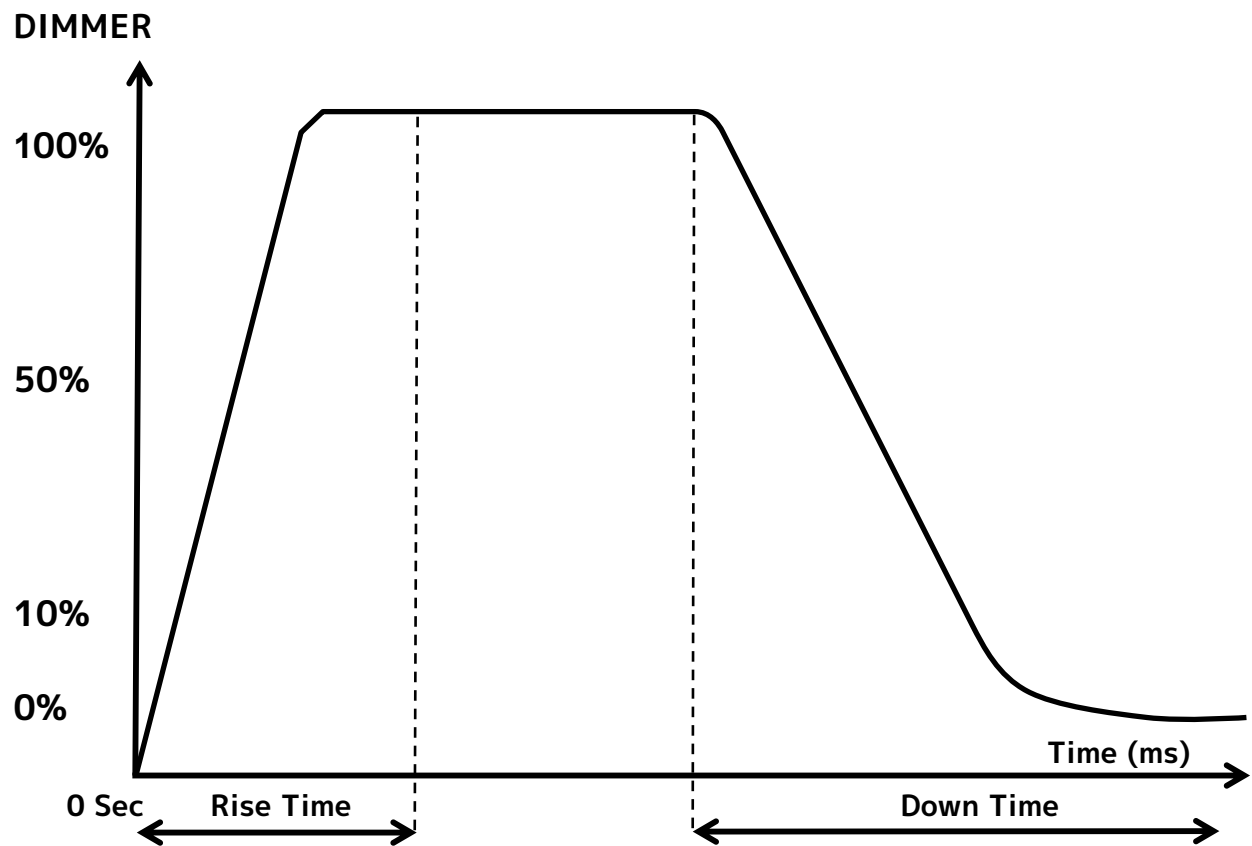
# DMX TRAITS

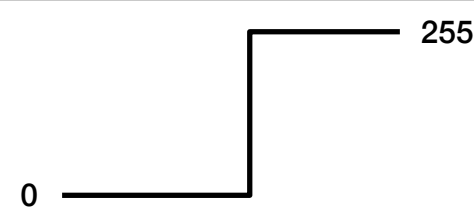
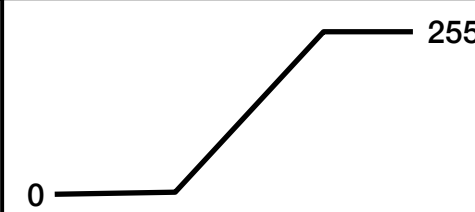
CHANNEL				DMX VALUES	FUNCTION
1Ch	2Ch	3Ch	6Ch		
	1	1	1		<b>Shutter</b>
				0 - 31	LEDs Off
				32 - 63	LEDs On
				64 - 95	Strobe Effect, slow to fast
				96 - 127	LEDs On
				128 - 159	Pulse Effect in Sequences
				160 - 191	LEDs On
				192 - 223	Random Strobe Effect, slow to fast
				224 - 255	LEDs On
1	2	2	2		<b>Dimmer (Intensity)</b>
				0 - 255	Intensity, 0 to 100%
		3	3		<b>Dimmer Fine 16-bit</b>
				0 - 255	Dimmer Fine Intensity
			4		<b>Dim Mode</b>
				0 - 20	Default to Unit Setting
				21 - 40	Standard
				41 - 60	Stage
				61 - 80	TV
				81 - 100	Architectural
				101 - 120	Theatre
				121 - 140	Stage 2
					<b>Dim Speed</b>
				141	0.1s
				142	0.2s
				143	0.3s
				144	0.4s
				145	0.5s
				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

# DMX TRAITS

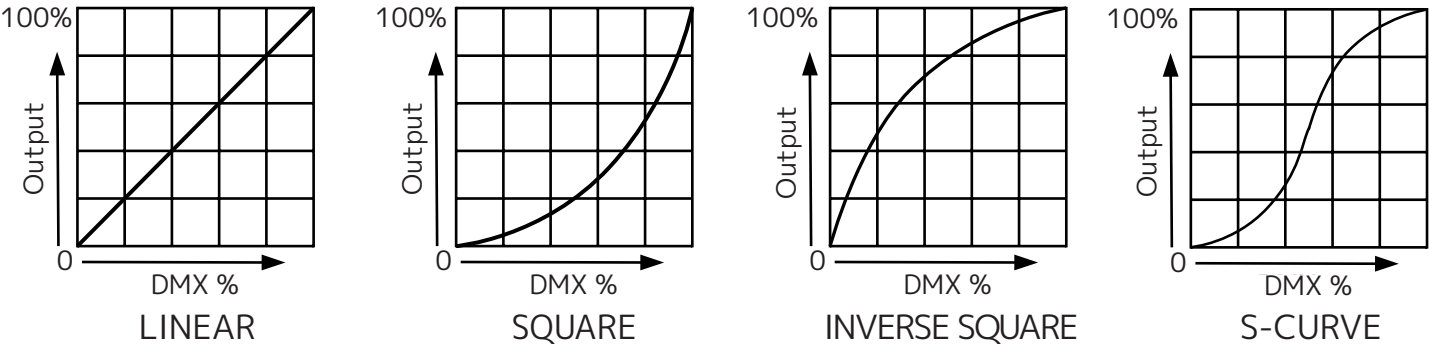
CHANNEL				DMX VALUES	FUNCTION
1Ch	2Ch	3Ch	6Ch		
			5		<b>Dim Curves</b>
				0 - 20	Square
				21 - 40	Linear
				41 - 60	Inv. Squa
				61 - 80	S. Curve
				81 - 255	No Function
			6		<b>Refresh Rates</b>
				0 - 15	Default to Unit Setting
				16 - 30	900Hz
				31 - 45	1000Hz
				46 - 60	1100Hz
				61 - 75	1200Hz
				76 - 90	1300Hz
				91 - 105	1400Hz
				106 - 120	1500Hz
				121 - 135	2500Hz
				136 - 150	4000Hz
				151 - 165	5000Hz
				166 - 180	6000Hz
				181 - 195	10000Hz
				196 - 210	15000Hz
				211 - 225	20000Hz
				226 - 240	25000Hz
				241 - 255	No Function

# DIMMER 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

# DIMMER MODES



# PRIMARY-SECONDARY SETUP

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. On the unit that you want to designate as the primary, use the display screen and control panel to navigate to Personality > Prim/Sec Mode, and press the ENTER button to confirm. Use the UP or DOWN button to toggle this setting to "Primary". The device is now configured as the primary unit. Configure the unit's desired programming.
3. On the units that you want to designate as secondaries, use the display screen and control panel to navigate to Personality > Prim/Sec Mode, and press the ENTER button to confirm. Use the UP or DOWN button to toggle this setting to "Secondary". The device is now configured as secondary unit which will follow the behavior of the primary unit.

## NOTES:

- Only one unit should be configured as the primary, while all the other units should be configured as secondaries.
- All units should be set to the same DMX channel mode.
- If fixtures fail to sync, verify that all settings mentioned above are the same, then power all devices off, then switch them on again to re-establish the link.

# MULTI-UNIT POWER LINKING

This feature allows you to connect the fixtures to one another using the power cable input and output sockets.

**The maximum number of units that can be linked in this manner is as follows:**

- 2 units when running on 120V power.
- 4 units when running on 230V power.

**DO NOT EXCEED THIS MAXIMUM NUMBER WHEN POWER LINKING UNITS!**

All linked units must be of the same make and model type. Do not mix and match units!

# MAINTENANCE GUIDELINES



**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 regularly 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. 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.
- B. 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.
- C. Check for any deformations on the housing, color lenses, rigging hardware, and rigging points (ceiling, suspension, trussing). Deformations in the housing could allow for dust to enter into the fixture. Damaged rigging points or unsecured rigging could cause the fixture to fall and seriously injure a person(s).
- D. Electric power supply cables must not show any damage, material fatigue, or sediments.

**NEVER** remove the ground prong from the power cable.

# TORQUE SETTING 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.

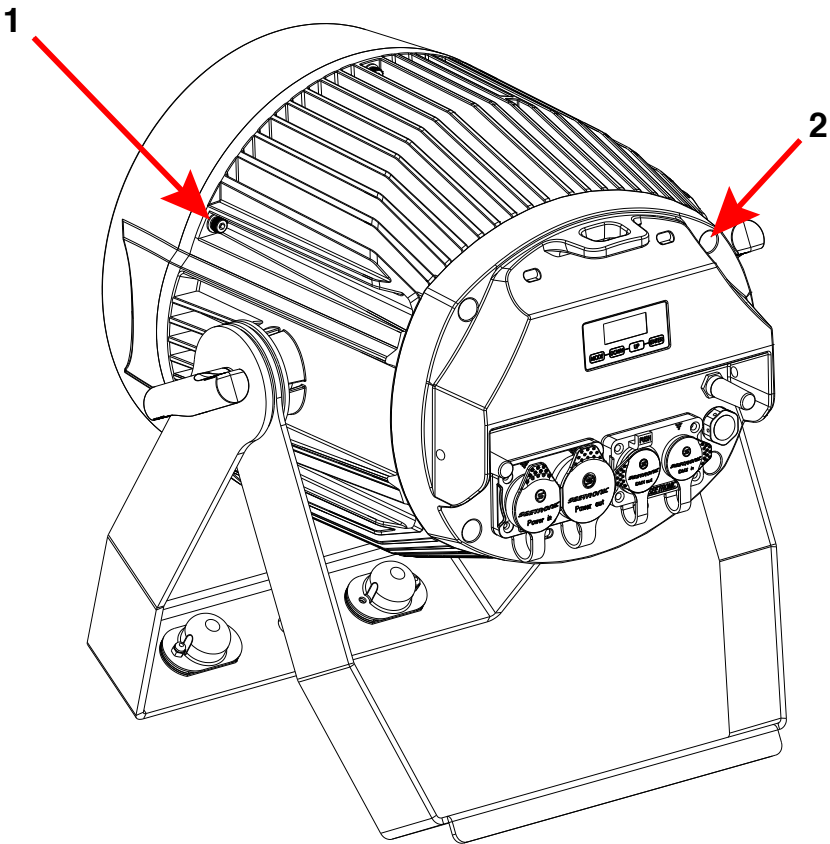
TORQUE DRIVERS (Recommended): UTICA TS-30 (shown)

ALTERNATE DRIVERS:

- Proto J6107A
- Wiha 28887



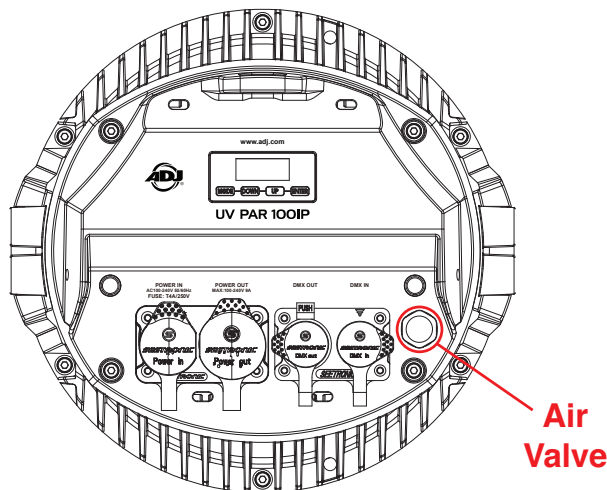
**CAUTION! DO NOT OVER TORQUE SCREWS, AS THIS CAN CAUSE LEAKAGE ISSUES!**



NO.	LOCATION	QUANTITY	TORQUE
1	Front Cover	6	11.3 ± 0.4 Lb-in (13.0 ± 0.5 Kg-cm)
2	Rear Cover	4	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. The air valve is located on the back panel next to the display screen, as shown in the diagram below. 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>



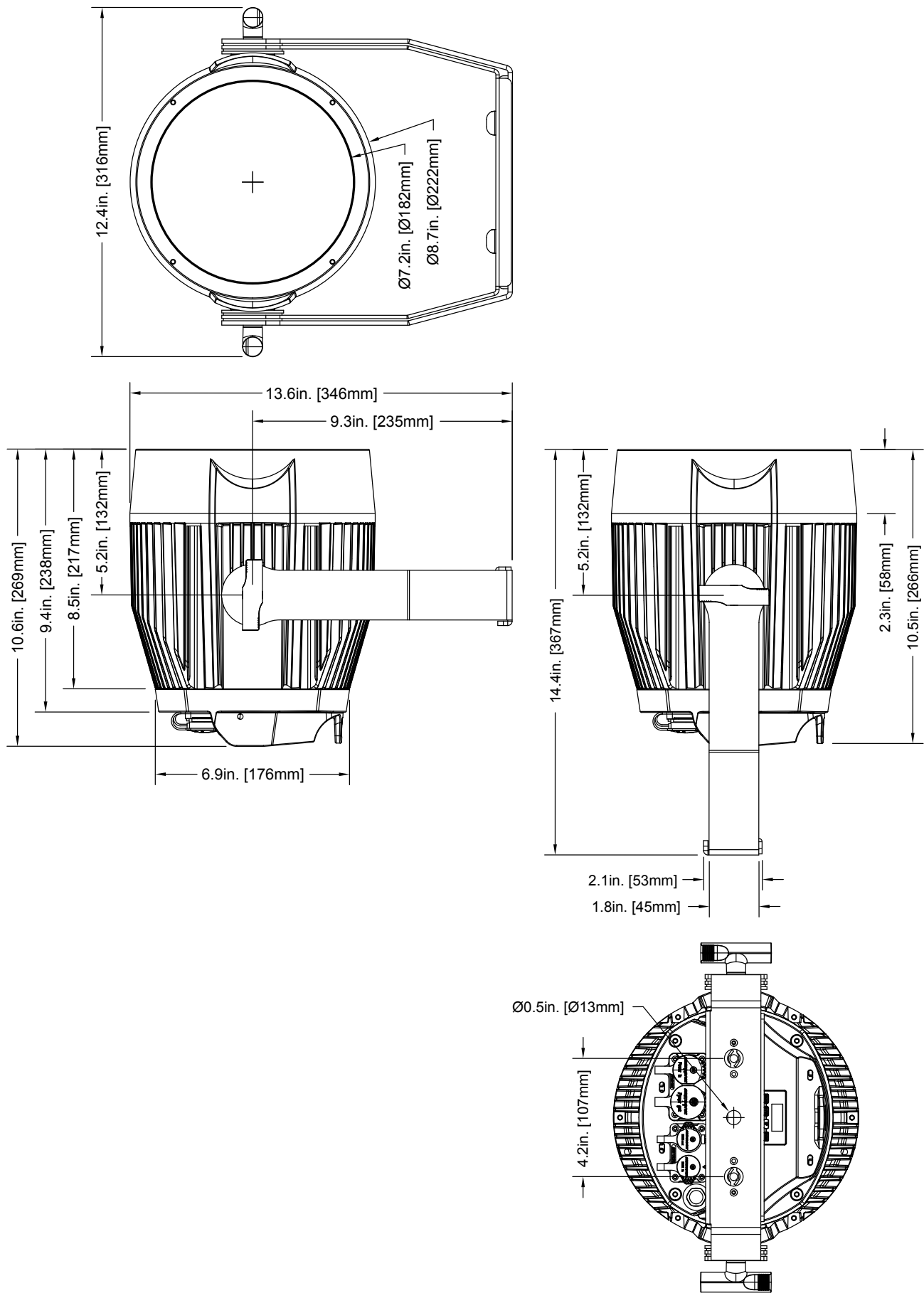
**CAUTION! THE USE OF PROTECTIVE GLOVES AND SAFETY GOGGLES IS STRONGLY RECOMMENDED WHILE PERFORMING THE IP PRESSURE TEST! AVOID PLACING YOUR FACE, EYES, HANDS, ETC IN CLOSE PROXIMITY TO THE FIXTURE'S LENS WHILE PERFORMING THE TEST!**

**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 valve 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)	30 sec	15 sec	15 sec	0.015 psi (0.1 KPa) (100 Pa)

# DIMENSIONAL DRAWINGS



# SPECIFICATIONS

## Light Source:

- 1x 100W C.O.B. Ultraviolet LED
- 120° Beam Angle
- Wavelength: 390-399nm
- 30,000 Hour Average LED Life

## Features:

- Aria X2 Wireless Management System
- Control Protocol: DMX & RDM
- DMX Modes: 4 (1, 2, 3, & 6 Channel Modes)
- Dim Modes: 6 Presets (Standard, Stage, TV, Architectural, Theatre & Stage 2)
- Dim Curves: 4 Presets (Square, Linear, Inv. Curve & S-Curve)
- Dim Speed control (0.1~10 Seconds)
- Dimming: 0 - 100%
- Linear, Pulse and Random Strobe control
- Adjustable LED Refresh Rates (900~25k Hz)
- With Wired Digital Communication Network
- Display: OLED display with 4-button touch menu

## Connections:

- Data Input: IP65 rated 5pin DMX In/Out
- Power Input: IP65 power locking In/Out (with protective rubber caps)

## Electrical:

- 100-240V 50Hz/60Hz (Auto Sensing)
- Max Power Consumption: ?W

## Physical:

- Outdoor Rated, IP65: protects from dust, sand, moisture, liquid. 6 (Protection against Dust); 5 (Protection against Water)
- Please note: you must use IP65 data and power cables in order for this fixture to be IP65 outdoor rated.
- Safety Cable Loop
- Scissor yoke with Omega bracket receivers (Omega Bracket sold separately)

## Dimensions / Weight:

- Length: 14.4" (367mm)
- Width: 12.4" (316mm)
- Height: 8.7" (222mm)
- Weight: 14.11lbs. (6.4kg)

## What's Included:

- 1x IP65, 6' locking power cable (1.83m)

## Approvals:

- cETLus (Control # 4010765)
- CE Compliant
- FCC Compliant

## ERROR CODES

Code	Description
Temp Error	Temperature Error



## 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 electrical circuits.
- Consult the dealer or an experienced radio/TV technician for help.

### Energy Saving Matters (EuP 2009/125/EC)

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

