



HYDRO PROFILE



User Manual

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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
05/25/2022	1.0	1.01	36 / 50 / 57 Ch.	Initial Release.
07/13/2022	1.1	1.02	No Change	Added: Torque Settings for Screws. Updated: Features, Installation, Gobos, RDM, Control Panel, System Menu, Cleaning & Maintenance.
07/19/2022	1.2	N/C	No Change	Updated Dimensional Drawings and Specifications.
10/19/2022	1.3	1.03	No Change	Updated gobo page, temporary outdoor use notice, System Menu, & DMX Traits

Europe Energy Saving Notice

Energy Saving Matters (EuP 2009/125/EC)

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

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INTRODUCTION

Unpacking: Thank you for purchasing the Hydro Profile 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 ADJ Hydro Profile is a DMX intelligent, weather-proof LED moving head fixture. To optimize the performance of this product, please read these operating instructions carefully in order to familiarize yourself with the basic operations of this unit. These instructions contain important safety information regarding the use and maintenance of this unit. Please keep this manual with the unit for future reference.

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

Parts: To purchase parts online visit:

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

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

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

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

Do not discard the shipping 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 the product back—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 prepaid. 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 and packaging material. No accessories should be shipped with the product. If any accessories are shipped with the product, ADJ Products, LLC shall incur no liability whatsoever for loss of or damage to any such accessories, nor for the safe return thereof.
- C. This warranty is void if the product serial number and/or labels are altered or removed; if the product is modified in any manner which ADJ Products, LLC concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the ADJ Products, LLC factory unless prior written authorization was issued to purchaser by ADJ Products, LLC; if the product is damaged because it was not properly maintained as set forth in the product instructions, guidelines and/or user manual.
- D. This is not a service contract, and this warranty does not include maintenance, cleaning, or periodic check-up. During the period specified above, ADJ Products, LLC will replace defective parts at its expense with new or refurbished parts, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of ADJ Products, LLC under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of ADJ Products, LLC. All products covered by this warranty were manufactured after August 15, 2012, and bear identifying marks to that effect.
- E. ADJ Products, LLC reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured.
- F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by ADJ Products, LLC in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And all warranties, whether expressed or implied, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. 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 Product, LLC be liable for any loss and/or damage, direct and/or consequential arising out of the use of, and/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.

MANUFACTURER'S LIMITED WARRANTY PERIODS:

- Non-LED Lighting Products = 1-Year (365 Days) (Including Special Effect Lighting, Intelligent Lighting, UV lighting, Strobes, Fog Machines, Bubble Machines, Mirror Balls, Par Cans, Trussing, Lighting Stands, Power/Data Distribution, etc. excluding LED and lamps)
- Laser Products = 1-Year (365 Days) (excluding laser diodes which have a 6-Month Limited Warranty)
- LED Products = 2-Year (730 Days) (excluding batteries which have a 180 Day Limited Warranty)
- NOTE: 2-Year (730 Days) Limited Warranty ONLY applies to product purchased within the United States. StarTec Series = 1-Year (365 Days) (excluding batteries which have a 180 Day Limited Warranty)
- ADJ DMX Controllers = 2 Year (730 Days)
- American Audio Products = 1 Year (365 Days)

WARRANTY RETURNS

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

The Hydro Profile is ADJ's first weatherproof moving head profile fixture, which combines a potent 660-Watt cool white LED light engine with an impressive 25,000+ Lumens, and an expansive feature set to deliver a truly powerful and versatile luminaire.

INCLUDED ITEMS

- Omega Bracket (x2)
- Locking Power Cable (x1)

IP RATING

An IP rated lighting fixture is commonly installed in outdoor environments and has been designed with an enclosure that effectively protects the ingress (entry) of external foreign objects such as dust and water. The Ingress Protection (IP) rating system is commonly expressed as "IP" 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, while the second digit (Water Protection) indicates the extent of protection against water entering the fixture.

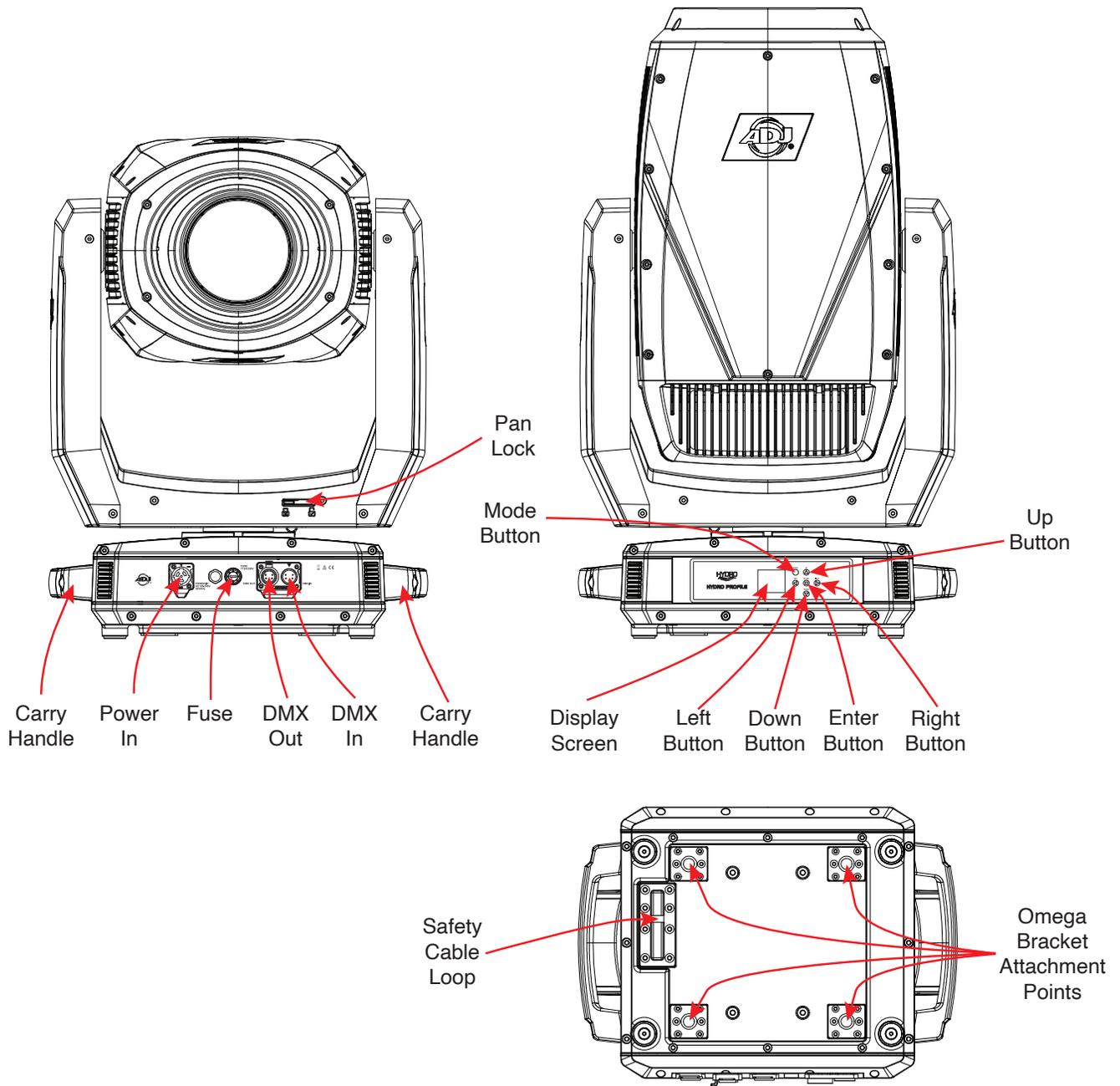
An IP65 rated lighting fixture, such as this one, is dust tight, and protected against low pressure water jets from any direction. INTENDED FOR TEMPORARY OUTDOOR USE ONLY!

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 IS 6.6 FEET (2 METERS)
- **MAXIMUM AMBIENT TEMPERATURE IS 113° F (45°C). DO NOT OPERATE THE DEVICE WHEN AMBIENT TEMPERATURE EXCEEDS THIS VALUE.**
- **MINIMUM DISTANCE TO FLAMMABLE MATERIALS FROM THE SURFACE IS 1.6 FEET (0.5 METER).**
- DO NOT TOUCH the fixture housing during operation. Turn OFF the power and allow approximately 60 minutes for the fixture to cool down before servicing.
- DO NOT shake fixture, and avoid brute force when installing and/or operating fixture.
- DO NOT operate fixture if the power cord is frayed, crimped, damaged and/or if any of the power cord connectors are damaged and do not insert into the fixture securely with ease. NEVER force a power cord connector into the fixture. If the power cord or any of its connectors are damaged, replace it immediately with a new one of the same power rating.
- DO NOT block any air ventilation slots. 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.

OVERVIEW



INSTALLATION



FLAMMABLE MATERIAL WARNING

Keep fixture minimum 5.0 feet (1.5m) 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 IS 6.6 FEET (2 METERS).

MINIMUM DISTANCE OF FLAMMABLE MATERIALS FROM THE SURFACE IS 1.6 FEET (0.5 METER)

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 whether the metal truss/structure or surface is properly certified to safely hold the combined weight of the fixture(s), clamps, cables, and accessories.
- Maximum fixture ambient operating temperature is **113°F (45°C)**. Do not use operate the fixture when ambient temperature exceeds this value!
- Fixture(s) should be installed outside walking paths, seating areas, or areas were 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.
- Allow approximately 60 minutes for the fixture to cool down before servicing.

IP RATING

An IP rated lighting fixture is commonly installed in outdoor environments and has been designed with an enclosure that effectively protects the ingress (entry) of external foreign objects such as dust and water. The Ingress Protection (IP) rating system is commonly expressed as “IP” 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, while the second digit (Water Protection) indicates the extent of protection against water entering the fixture.

An IP65 rated lighting fixture, such as this one, is dust tight, and protected against low pressure water jets from any direction. INTENDED FOR TEMPORARY OUTDOOR USE ONLY!

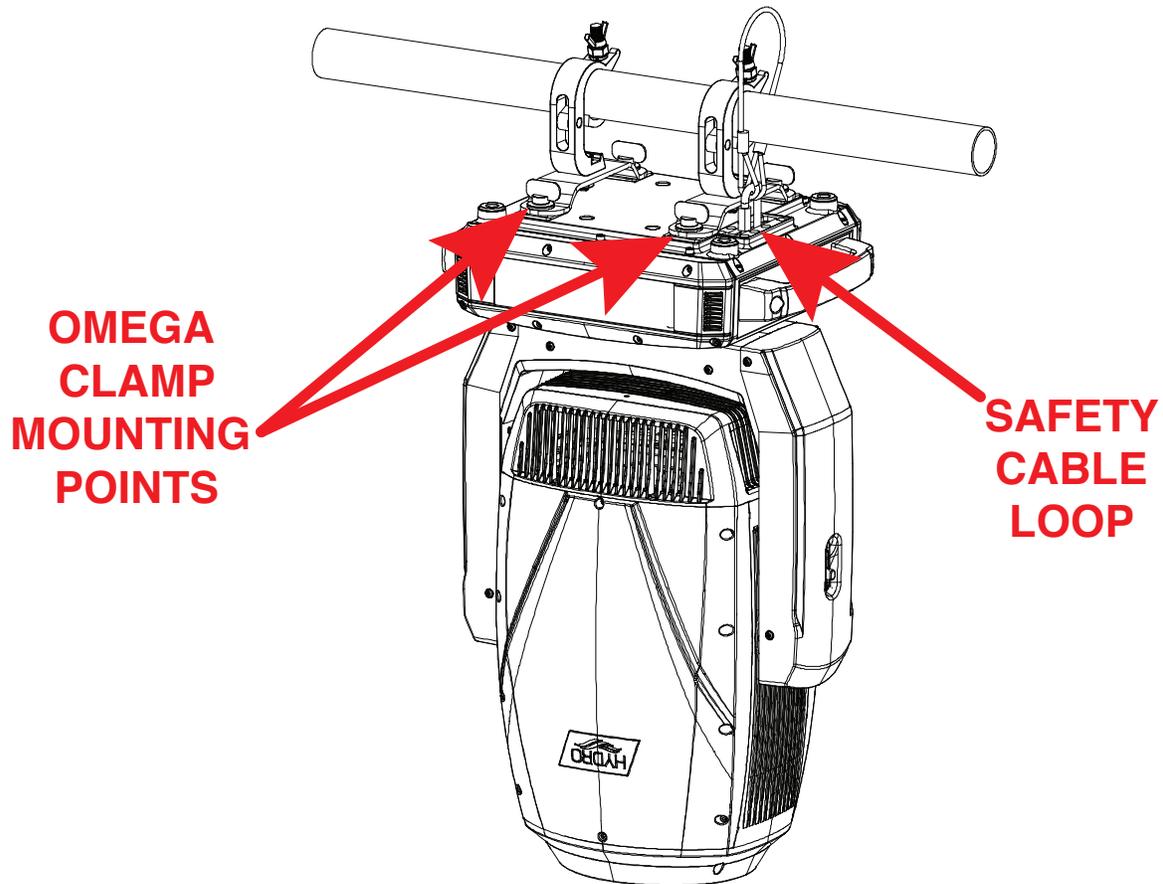
RIGGING

Overhead rigging requires extensive experience, including calculating working load limits, knowledge about installation materials 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

CLAMP INSTALLATION

This fixture features a mounting points on the underside of the base for the attachment of Omega clamps. Make sure to always install the device using **both** Omega clamp mounting points. A loop for the attachment of a safety cable is also located on the underside of the base (see the illustration below). When mounting the fixture to a truss or any other suspended or overhead installation, be sure to secure an appropriately rated clamp (not included) to each Omega bracket, and attach a separate **SAFETY CABLE** of the appropriate weight rating to the safety cable loop.



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.**

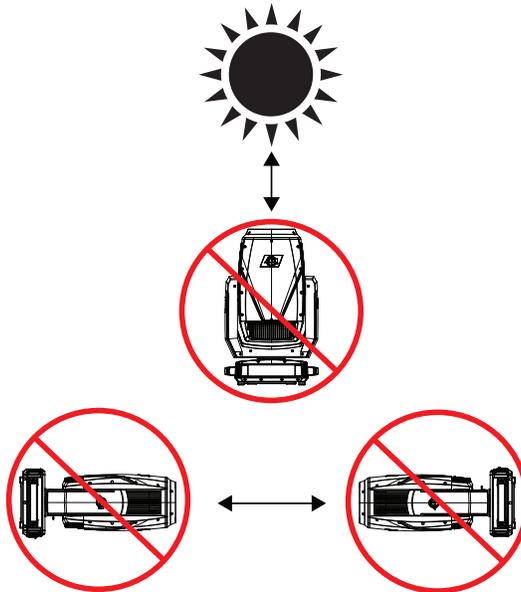
INSTALLATION

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 of optics, dichroic color filters, glass and metal gobos, prisms, animation wheels, frost filters, irises, shutters, motors, belts, wiring, discharge lamps, and LEDs.

This issue is not unique to ADJ lighting fixtures, but rather it is a common issue with lighting fixtures from all manufacturers. Although there is no true way to completely prevent this issue from happening, the guidelines below can reduce the risk of any potential damage 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 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.



SUN PROTECTION MODE/ HIBERNATION MODE:

This state can be set via DMX, or the device will go into this state after 3 minutes without a DMX signal. This function can be switched on or off in the DMX traits (see the **DMX Traits** section for details). When the sun protection is activated, the pan-and-tilt function of the moving-head will position the lens away from direct sunlight, or other high intensity light source, to protect the internal belts, electronics etc. from burn damage.

When the unit is in the 'sun protection state', it uses its accelerometer sensors (X-Y-Z) (only present on discharge units and IP units) to position the front lens downwards, even when the unit(s) will be moved from its position. This will keep on changing the position of the head.

Please note that 'manual mode' overrides the 'sun-protection mode'. The hibernation function is an existing feature that puts the unit into a 'sleep state' to save power (this is a state where only the electronics remain on, and all other functions are turned off, functions such as motors lamps etc). This state is automatically activated when no DMX signal is present for the set time (1-99min or off).

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.

FIXTURE RDM INFORMATION:

RDM Code	Device ID	Device Model ID	Personality ID
0x1900	24 0000-FFFF	24	Basic 36 (1) Standard 50 (2) Extended 57 (3)

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.

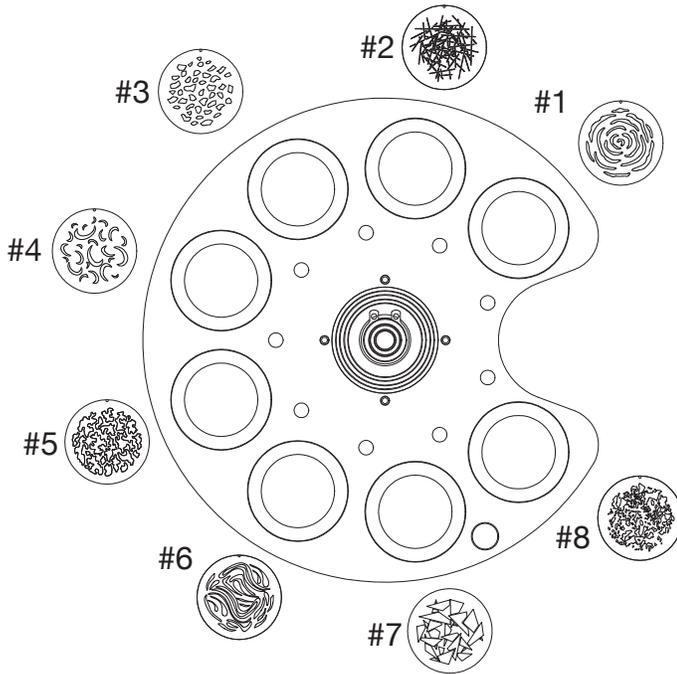
The following parameters are accessible in RDM on this device:

[0x0015] Comms Status	[0x00E1] DMX Personality Description
[0x0020] Queued Message	[0x0200] Sensor Definition
[0x0030] Status Messages	[0x0201] Sensor Value
[0x0031] Status ID Description	[0x0400] Device Hours
[0x0032] Clear Status ID	[0x0405] Device Power Cycles
[0x0080] Device Model Description	[0x0500] Display Invert
[0x0081] Manufacturer Label	[0x0501] Display Level
[0x0082] Device Label	[0x0600] Pan Invert
[0x0090] Factory Defaults	[0x0601] Tilt Invert
[0x00C1] Boot Software Version ID	[0x1001] Reset Device
[0x00E0] DMX Personality	

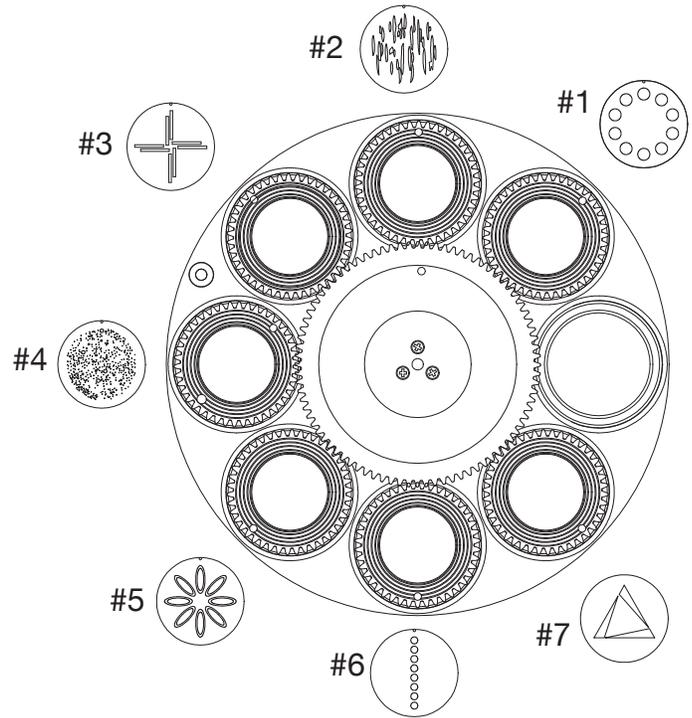
GOBOS

DESIGNS

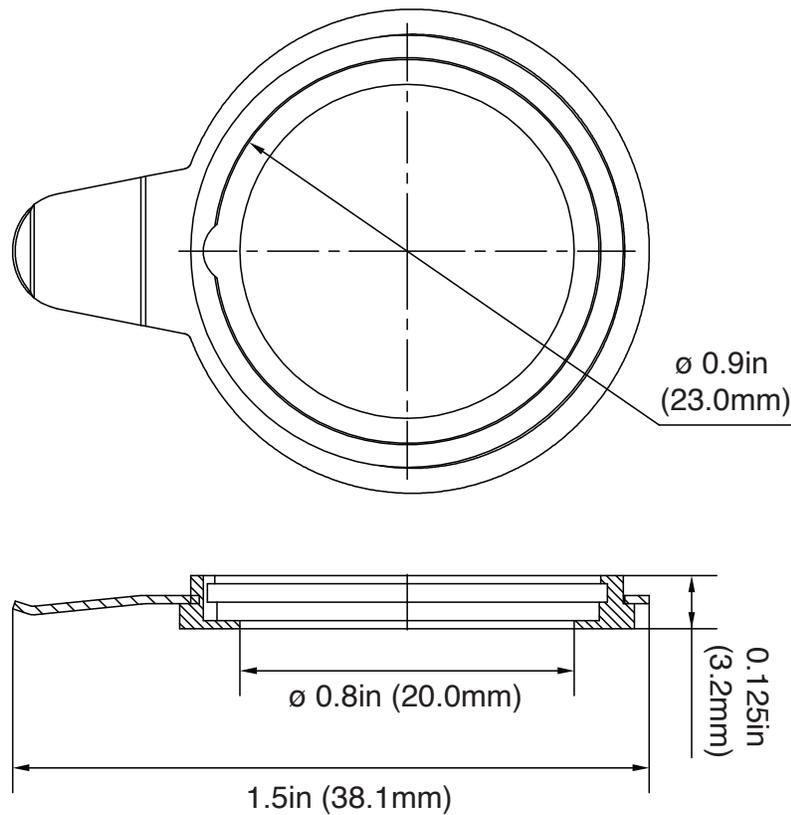
FIXED GOBOS



ROTATING GOBOS

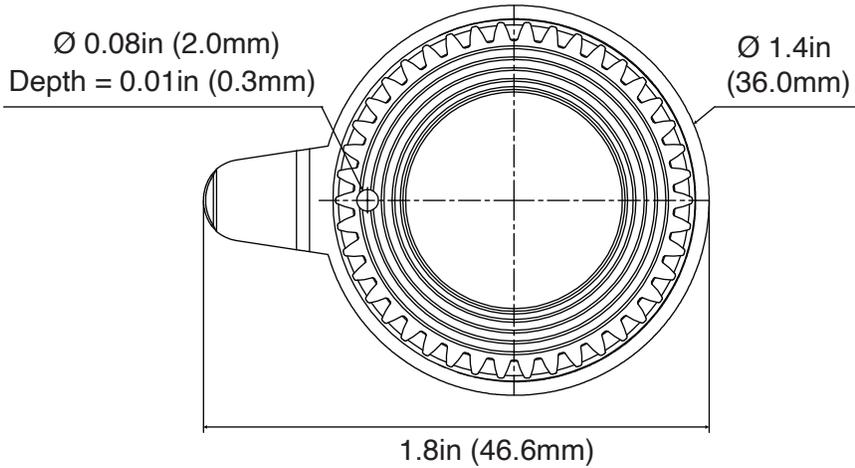


DIMENSIONS - FIXED GOBOS

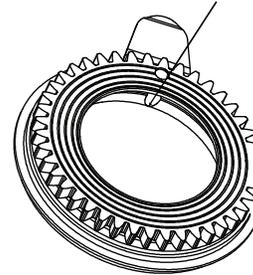


GOBOS

DIMENSIONS - ROTATING GOBOS

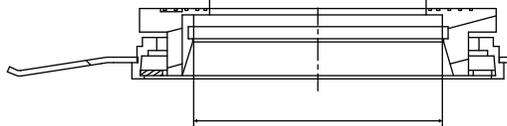


Note: Dotting and milling slot on the same tooth tip.



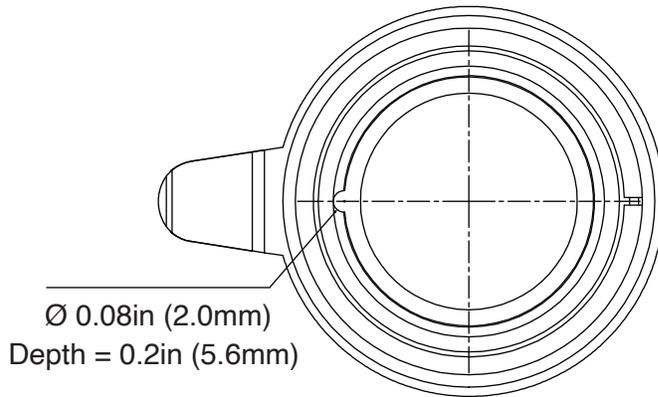
CRITICAL

$\text{Ø } 0.787\text{in } \begin{matrix} +0.003\text{in} \\ -0.001\text{in} \end{matrix}$
 (20.0mm $\begin{matrix} +0.07\text{mm} \\ -0.03\text{mm} \end{matrix}$)



$\text{Ø } 0.906\text{in } \begin{matrix} +0.004\text{in} \\ -0.0008\text{in} \end{matrix}$
 (23.0mm $\begin{matrix} +0.10\text{mm} \\ -0.02\text{mm} \end{matrix}$)

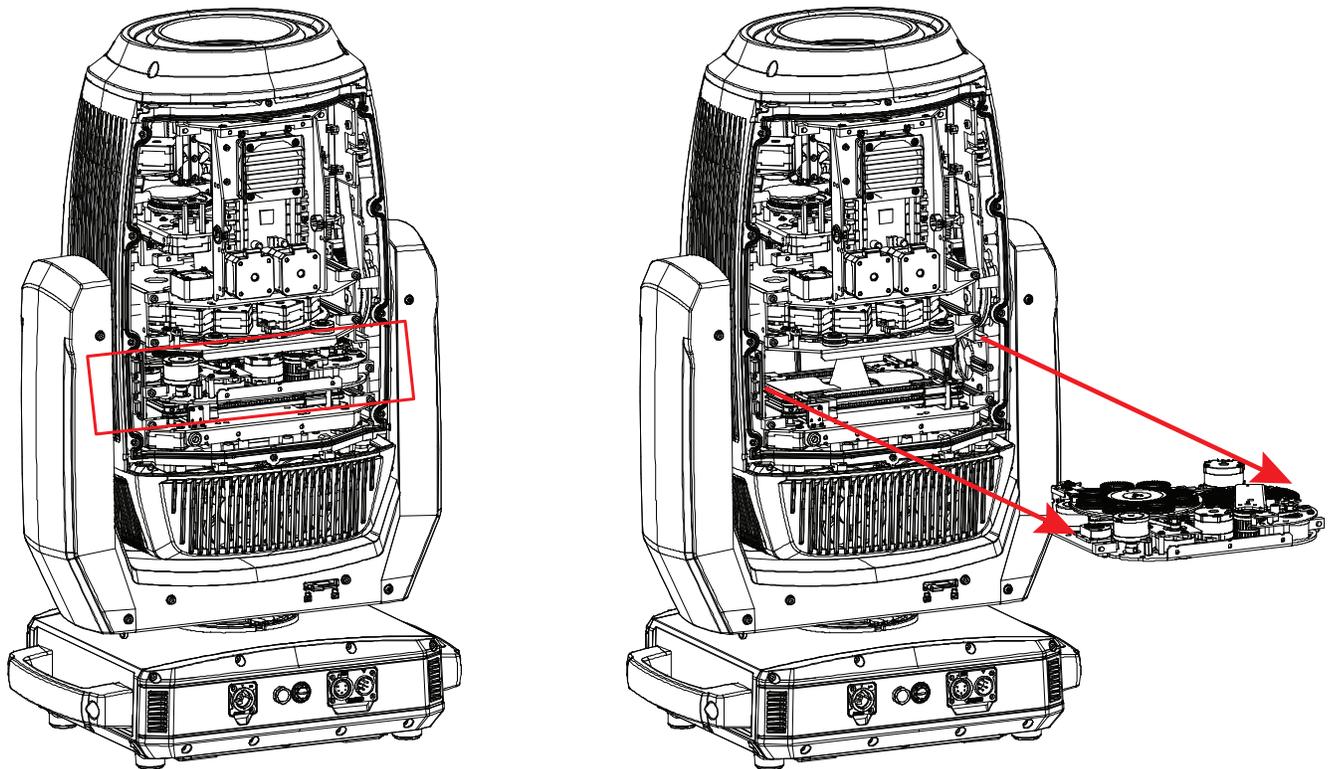
CRITICAL



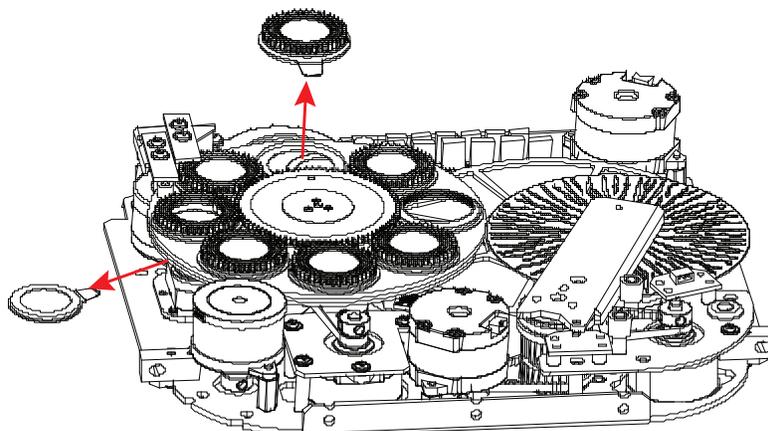
GOBOS

GOBO REPLACEMENT

1. Place the device on a flat, stable surface, and allow the device to cool down for at least 1 hour before beginning this procedure.
2. Engage both the pan and tilt locks, and remove the head covers.
3. Locate the gobo module (second module from the bottom, as shown in the illustration below). Disconnect any electrical connectors linking the module to the fixture head, and remove the screws holding the module in place. Slide the module out of the head.



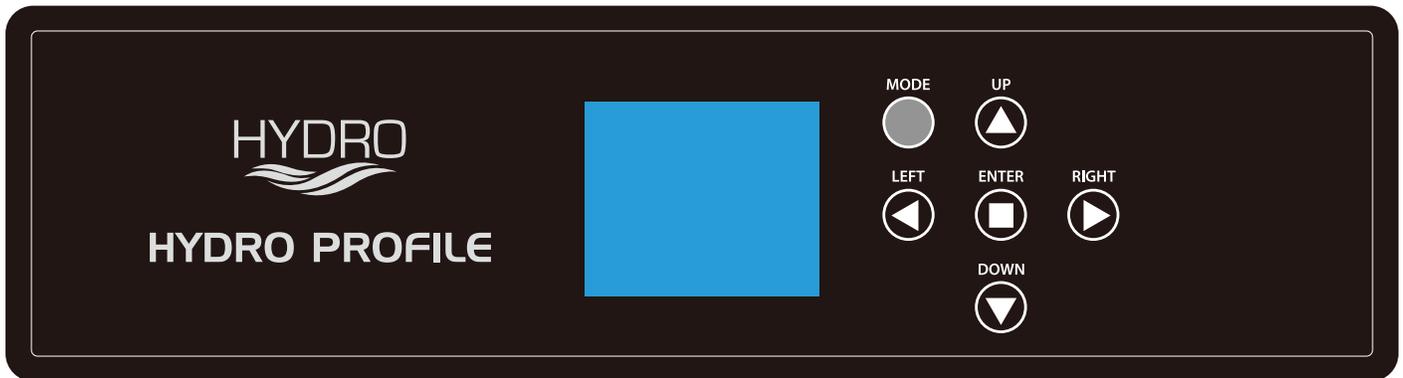
4. Pull the gobo holder away from the gobo wheel, then gently slide it outwards. Use a pair of needle nose pliers to carefully remove the retainer spring from the gobo holder. The gobo can now be removed from the gobo holder, and replaced with a new gobo. Reassemble by reversing these steps.



CONTROL PANEL

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

- **MODE:** Cycles through the main menu options and/or return to previous menu without making changes.
- **ENTER:** Select highlighted option and/or confirm selection.
- **DOWN/UP/LEFT/RIGHT:** Use as a directional pad, or to scroll through menu options.



KEY LOCK

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

- **OFF:** The display screen and control panel keys remain active at all times.
- **ON:** The display screen and control panel keys automatically lock after a certain period of inactivity, which can be set under *Personality > Display > Screen Saver Delay*. To unlock, press and hold the MODE button for 10 seconds.
- **ON1:** The display screen and control panel keys automatically lock after a certain period of inactivity, which can be set under *Personality > Display > Screen Saver Delay*. To unlock, press UP, DOWN, UP, DOWN, ENTER in that order.

BATTERY

This unit features a dedicated battery that can be used to power the screen display. This allows the user to configure the device's channel mode, DMX address, or any other screen-accessible features without needing to power on the device or even connect it to a power source. To activate the display on battery power, press and hold the MODE button for 3 seconds. **Please note that the battery is NOT user-accessible, and the user should NOT attempt to access or replace the battery, as doing so may void your manufacturer's warranty. If battery replacement is required, please contact ADJ service for assistance.**

SYSTEM MENU

DMX Settings	DMX Address	001 - xxx			
	DMX Channel Mode	Basic 36			
		Standard 50			
		Extended 57			
No DMX Status	Hold Last				
	Blackout				
	Manual				
	Internal Programs				
Personality	Prim/Sec Mode	Primary / Secondary			
	Select Signal	DMX or Wifly		DMX has priority	
		Wifly and DMX Out		DMX XLR output shall send signal out	
	Wifly Settings	Wifly Enable	On / Off		
		Set Wifly Channel	00 - 14		
	Status Settings	Pan Degree	540		
		Pan Invert	On / Off		
		Tilt Invert	On / Off		
		P/T Feedback	On / Off		
		P/T Speed	Speed 1 / Speed 2		
		Hibernation	Off, 01m - 99m		Default = 15m
	Fan Settings	Head Fan	Auto		
			High		
			Low		
		Base Fan	Auto		
			High		
			Low		
	Zoom Speed	Standard / Fast			
	Dim Modes	Standard			
		Stage			
		TV			
		Architectural			
		Theatre			
		Stage 2			
		Dim Speed	0.1s - 10s		
	LED Refresh Rate	900-1500 Hz (1200 Hz), 2500 Hz, 4000 Hz, 5000 Hz, 6000 Hz, 10 KHz, 15 KHz, 20 KHz, 25 KHz			
	Dim Curve	Square			
		Linear			
		Inv. Squa.			
		S. Curve			
	Reset Motors	Reset All Motors	Yes / No		
		Pan/Tilt Reset	Yes / No		
...		...			
Effect Reset		Yes / No			
Display	Intensity	1-10			
	Display Invert	YES / NO			
	Screen Saver Delay	OFF-10M 05M			
	Key Lock	OFF/ON/ON1			
Service	Passcode	Effect Adjust (Calibration) Passcode = 050	Pan 000 - 255		
			Tilt 000 - 255		
			Cyan 000 - 255		
			Magenta 000 - 255		
			Yellow 000 - 255		
			CTO 000 - 255		
	...				
Factory Restore	Off / On	Passcode =- 011			

SYSTEM MENU

Manual Control	Pan	000-255			
	Pan Fine	000-255			
	Tilt	000-255			
	Tilt Fine	000-255			
	...	000-255			
Internal Programs	Program 1	Speed	000-255		
		Fade	000-255		
	Program 2	Speed	000-255		
		Fade	000-255		
	...				
	Program 7	Speed	000-255		
		Fade	000-255		
Information	Fixture Life Time	Power On Time	xxxxxx Hours		Total time fixture has been powered during its lifetime
		P-On Time-R	xxxxxx Hours		Time fixture has been powered on since last reset
		P-On Time-Reset	Passcode = 050		Reset power on time
	Total LED Time	LED On Time	xxxxxx Hours		Total time LED has been powered on during fixture lifetime
		LED On Time-R	xxxxxx Hours		Time LED has been powered on since last reset
		LED Hours Reset	Passcode = 050		Reset LED time
	Fixture Temps	LEDs	Current	xxx F / xxx C	
			Max Resettable	xxx F / xxx C	
		Base Temp	Current	xxx F / xxx C	
			Max Resettable	xxx F / xxx C	
		Reset LED Temp	Yes / No	Passcode = 050	
	Reset Base Temp	Yes / No	Passcode = 050		
	Fixture Humidity	Head	xxx%		
		Base	xxx%		
	Fan Info (RPM)	LED Fan	xxxx RPM LED		
		Base Fan	xxxx RPM		
	DMX Values	Pan			
		Pan Fine			
		...			
	Error Logs	xxxxx xxxxx	List Errors one by one		
		Reset Error Log	Yes / No	Passcode = 050	
Software Version	1U:XXX				
	2U:XXX				
	3U:XXX				

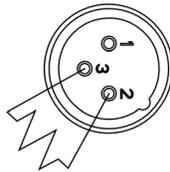
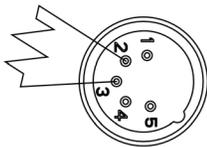
DMX SETUP

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 device can be controlled via DMX-512 protocol, and features multiple DMX channel modes. Your unit and your DMX controller require a 3-pin or 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 professional 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.

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 starting DMX address is configured by setting the correct DMX address on the control panel display on the fixture.

You can set the same starting address for multiple fixtures, or set different addresses for each individual fixture. Setting multiple fixtures to the same DMX address will cause all those 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 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.

As an example, when operating this device in 36 channel mode, you should set the starting DMX address of the first unit to 1, the second unit to 37 (1 + 36), the third unit to 73 (1 + 36 + 36), and so on. (See the chart below for more details.)

Channel Mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
36 Channels	1	37	73	109
50 Channels	1	51	101	151
57 Channels	1	58	115	172

DMX TRAITS

CHANNEL			DMX VALUE	FUNCTION
36 CH	50 CH	57 CH		
1	1	1	000 - 255	Pan Pan Movement (540/630)
	2	2	000 - 255	Pan Fine Pan Fine
2	3	3	000 - 255	Tilt Tilt Movement (270)
	4	4	000 - 255	Tilt Fine Tilt Fine
3	5	5	000 - 255	Cyan 0% to 100%
		6	000 - 255	Cyan Fine 0% to 100%
4	6	7	000 - 255	Magenta 0% to 100%
		8	000 - 255	Magenta Fine 0% to 100%
5	7	9	000 - 255	Yellow 0% to 100%
		10	000 - 255	Yello Fine 0% to 100%
6	8	11	000 - 255	CTO 0% to 100%
		12	000 - 255	CTO Fine 0% to 100%
7	9	13		White Color Temperature Presets
			000 - 023	Open
			024 - 076	White Color Temperature Presets, see White Color Temperature Chart
			077 - 255	7500K
8	10	14		Color Wheel (Snap)
			000 - 004	Open
			005 - 017	Open / Red
			018 - 030	Red
			031 - 043	Red / Medium Blue
			044 - 056	Medium Blue
			057 - 069	Medium Blue / Green
			070 - 082	Green
			083 - 095	Green / Amber
			096 - 108	Amber
			109 - 121	Amber / Orange
			122 - 134	Orange
			135 - 147	Orange / High CRI Filter
			148 - 160	High CRI Filter
			161 - 173	High CRI Filter / CTB
			174 - 186	CTB
			187 - 199	CTB / Open
200 - 226	Clockwise Color Wheel Rotation, Fast -> Slow			
227 - 228	No Rotation			
229 - 255	Counter Clockwise Color Wheel Rotation, Slow -> Fast			
8	10	14		Color Wheel (Index)
			000 - 000	Open
			001 - 029	Open> Red
			030 - 030	Red
			031 - 055	Red > Medium Blue
			056 - 056	Medium Blue
			057 - 078	Medium Blue >Green
			079 - 079	Green
			080 - 105	Green >Amber
			106 - 106	Amber
			107 - 127	Amber >Orange
			128 - 128	Orange
			129 - 152	Orange>High CRI Filter
			153 - 153	High CRI Filter
			154 - 173	High CRI Filter >CTB
			174 - 174	CTB
			175 - 198	CTB >Open
199 - 199	Open			
200 - 226	Clockwise Color Wheel Rotation, Fast -> Slow			
227 - 228	No Rotation			
229 - 255	Counter Clockwise Color Wheel Rotation, Slow -> Fast			

DMX TRAITS

CHANNEL			DMX VALUE	FUNCTION
36 CH	50 CH	57 CH		
	11	15		Color Macros - CMY and Color Wheel
			000 - 031	Off
			032 - 039	Macro1
			040 - 047	Macro2
			048 - 055	Macro3
			056 - 063	Macro4
			064 - 071	Macro5
			072 - 079	Macro6
			080 - 087	Macro7
			088 - 095	Macro8
			096 - 103	Macro9
			104 - 111	Macro10
			112 - 119	Macro11
			120 - 127	Macro12
			128 - 135	Macro13
			136 - 143	Macro14
			144 - 151	Macro15
			152 - 159	Macro16
			160 - 167	Macro17
			168 - 175	Macro18
			176 - 183	Macro19
			184 - 191	Macro20
			192 - 199	Macro21
			200 - 207	Macro22
			208 - 215	Macro23
			216 - 223	Macro24
			224 - 231	Macro25
			232 - 239	Macro26
240 - 247	Macro27			
248 - 255	Random CMY			
9	12	16		Gobo Wheel 1
			000 - 009	Open
			010 - 019	Gobo 1
			020 - 029	Gobo 2
			030 - 039	Gobo 3
			040 - 049	Gobo 4
			050 - 059	Gobo 5
			060 - 069	Gobo 6
			070 - 079	Gobo 7
			080 - 094	Gobo 1 Shake, slow to fast
			095 - 109	Gobo 2 Shake, slow to fast
			110 - 124	Gobo 3 Shake, slow to fast
			125 - 139	Gobo 4 Shake, slow to fast
			140 - 154	Gobo 5 Shake, slow to fast
			155 - 169	Gobo 6 Shake, slow to fast
			170 - 189	Gobo 7 Shake, slow to fast
			190 - 221	Clockwise Gobo Wheel Rotation, fast to slow
222 - 223	No Rotation			
224 - 255	Counter-Clockwise Gobo Wheel Rotation, slow to fast			

DMX TRAITS

CHANNEL			DMX VALUE	FUNCTION
36 CH	50 CH	57 CH		
10	13	17		Gobo 1 Rotation
			000 - 005	Gobo 1 Rotation Off
			006 - 128	Gobo Index, 0°...540°
			129 - 191	Clockwise Gobo Rotation, fast to slow
			192	No Rotation
			193 - 255	Counter-Clockwise Gobo Rotation, slow to fast
		18	000 - 255	Gobo 1 Rotation Fine
11	14	19		Gobo Wheel 2
			000 - 005	Open
			006 - 014	Gobo 1
			015 - 023	Gobo 2
			024 - 032	Gobo 3
			033 - 041	Gobo 4
			042 - 050	Gobo 5
			051 - 059	Gobo 6
			060 - 068	Gobo 7
			069 - 077	Gobo 8
			078 - 091	Gobo 1 Shake, slow to fast
			092 - 105	Gobo 2 Shake, slow to fast
			106 - 119	Gobo 3 Shake, slow to fast
			120 - 133	Gobo 4 Shake, slow to fast
			134 - 147	Gobo 5 Shake, slow to fast
			148 - 161	Gobo 6 Shake, slow to fast
			162 - 175	Gobo 7 Shake, slow to fast
			176 - 189	Gobo 8 Shake, slow to fast
190 - 221	Clockwise Gobo Wheel Rotation, fast to slow			
222 - 223	No Rotation			
224 - 255	Counter-Clockwise Gobo Wheel Rotation, slow to fast			
12	15	20		Shutter
			000 - 031	Shutter Closed
			032 - 063	Shutter Open
			064 - 095	Strobe, slow to fast
			096 - 127	Shutter Open
			128 - 159	Pulse Effect, slow to fast
			160 - 191	Shutter Open
			192 - 223	Random Strobe, slow to fast
224 - 255	Shutter Open			
13	16	21	000 - 255	Dimmer Intensity, 0% to 100%
	17	22	000 - 255	Dimmer Intensity Fine

DMX TRAITS

CHANNEL			DMX VALUE	FUNCTION
36 CH	50 CH	57 CH		
14	18	23		Prisms and Prism/Gobo Macros
			000 - 005	No Prism (Open)
			006 - 066	Prism 1 (6 Linear Prism)
			067 - 127	Prism 2 (4 Facet Prism)
			128 - 135	Macro1
			136 - 143	Macro2
			144 - 151	Macro3
			152 - 159	Macro4
			160 - 167	Macro5
			168 - 175	Macro6
			176 - 183	Macro7
			184 - 191	Macro8
			192 - 199	Macro9
			200 - 207	Macro10
			208 - 215	Macro11
			216 - 223	Macro12
			224 - 231	Macro13
232 - 239	Macro14			
240 - 247	Macro15			
248 - 255	Macro16			
15	19	24		Prism Rotation
			000 - 005	Prism Rotation Off
			006 - 128	Prism Indexing, 0°...540°
			129 - 191	Clockwise Prism Rotation, fast to slow
			192	No Rotation
193 - 255	Counter-Clockwise Prism Rotation, slow to fast			
16	20	25	000 - 255	Focus , 0% to 100%
		26	000 - 255	Focus Fine , 0% to 100%
17	21	27	000 - 255	Zoom , narrow to wide
		28	000 - 255	Zoom Fine , narrow to wide
18	22	29		Iris
			000 - 225	Open to Close
			226 - 235	Pulse Up , slow to fast
			236 - 245	Pulse Down , slow to fast
		246 - 255	Random Effect , slow to fast	
19	23	30	000 - 255	Medium Frost , 0% to 100%
20	24	31	000 - 255	Heavy Frost , 0% to 100%
21	25	32		Animation
			000 - 005	Animation Rot. OFF
			006 - 128	Animation Index 0 ... 540°
			129 - 191	Clockwise Animation Rotation, Fast -> Slow
			192	No Rotation
193 - 255	Counter Clockwise Animation Rotation, Slow-> Fast			

DMX TRAITS

CHANNEL			DMX VALUE	FUNCTION
36 CH	50 CH	57 CH		
22	26	33	000 - 255	Blade 1A , 0% to 100%
	27	34	000 - 255	Blade 1A Fine , 0% to 100%
23	28	35	000 - 255	Blade 1B , 0% to 100%
	29	36	000 - 255	Blade 1B Fine , 0% to 100%
24	30	37	000 - 255	Blade 2A , 0% to 100%
	31	38	000 - 255	Blade 2A Fine , 0% to 100%
25	32	39	000 - 255	Blade 2B , 0% to 100%
	33	40	000 - 255	Blade 2B Fine , 0% to 100%
26	34	41	000 - 255	Blade 3A , 0% to 100%
	35	42	000 - 255	Blade 3A Fine , 0% to 100%
27	36	43	000 - 255	Blade 3B , 0% to 100%
	37	44	000 - 255	Blade 3B Fine , 0% to 100%
28	38	45	000 - 255	Blade 4A , 0% to 100%
	39	46	000 - 255	Blade 4A Fine , 0% to 100%
29	40	47	000 - 255	Blade 4B , 0% to 100%
	41	48	000 - 255	Blade 4B Fine , 0% to 100%
30	42	49	000 - 255	Frame Rotation , 0° to 120°
	43	50	000 - 255	Frame Rotation Fine , 0% to 100%
31	44	51	000 - 255	Frame Speed , max to min
				Frame Macros , refer to Frame Macros Chart section of this manual
			000 - 007	Off
			008 - 015	Macro 1
			016 - 023	Macro 2
			024 - 031	Macro 3
			032 - 039	Macro 4
			040 - 047	Macro 5
			048 - 055	Macro 6
			056 - 063	Macro 7
			064 - 071	Macro 8
			072 - 079	Macro 9
			080 - 087	Macro 10
			088 - 095	Macro 11
			096 - 103	Macro 12
			104 - 111	Macro 13
			112 - 119	Macro 14
32	45	52	120 - 127	Macro 15
			128 - 135	Macro 16
			136 - 143	Macro 17
			144 - 151	Macro 18
			152 - 159	Macro 19
			160 - 167	Macro 20
			168 - 175	Macro 21
			176 - 183	Macro 22
			184 - 191	Macro 23
			192 - 199	Macro 24
			200 - 207	Macro 25
			208 - 215	Macro 26
			216 - 223	Macro 27
			224 - 231	Macro 28
			232 - 239	Macro 29
			240 - 247	Macro 30
			248 - 255	Macro 31

DMX TRAITS

CHANNEL			DMX VALUE	FUNCTION
36 CH	50 CH	57 CH		
33	46	53		Dimmer Mode
			000 - 020	Default to Unit Setting
			021 - 040	Standard
			041 - 060	Stage
			061 - 080	TV
			081 - 100	Architectural
			101 - 120	Theater
			121 - 140	Stage 2
			141 - 160	Dim Speed, fast to slow (0.1s to 10s)
			161 - 255	Default to Unit Setting
	47	54		Dim Curves
			000 - 020	Square
			021 - 040	Linear
			041 - 060	Inv. Squa.
			061 - 080	S. Curve
			081 - 255	No Function
34	48	55	000 - 255	CMY / Color Macro Speed Max -> Min
35	49	56		Pan/Tilt Speed
			000 - 225	Pan/Tilt Fast -> Slow
			226 - 235	Blackout by movement
			236 - 245	Blackout by all wheel changing
			246 - 255	No function
36	50	57		Special Functions
			000 - 039	No function (1200 Hz LED Refresh Rate (Default))
			040 - 049	Fan Control - Low (Hold 3s)
			050 - 059	Fan Control - High (Hold 3s)
			060 - 069	Fan Control - Auto (Default) (Hold 3s)
			070 - 074	All motor Reset (Hold 3s)
			075 - 079	Pan / Tilt Reset (Hold 3s)
			080 - 084	Color Reset (Hold 3s)
			085 - 089	Gobo Reset (Hold 3s)
			090 - 094	Focus and Zoom Reset (Hold 3s)
			095 - 099	Shutter Reset (Hold 3s)
			100 - 104	Framing Reset (Hold 3s)
			105 - 109	Other motors Reset (Hold 3s)
			110 - 114	Enable Zoom Speed Fast (Hold 3s)
			115 - 119	Disable Zoom Speed Fast (Hold 5s)
			120 - 124	Pump ON
			125 - 129	Pump OFF
			130 - 134	Enable Color Wheel Index to any position (Hold 3s)
			135 - 139	Disable Color Wheel Index to any position (Hold 5s)
			140 - 148	No function
			149 - 150	Wifly ON (Default) (Hold 3s)
			151 - 152	Wifly OFF (Hold 5s)
			153 - 154	Hibernation Enable (Hold 3s)
			155 - 156	Hibernation OFF (Hold 5s)
			157 - 158	Display Backlight ON (Hold 3s)
			159 - 160	Display Backlight OFF (Hold 5s)
			161 - 162	Pan/Tilt Speed 1 (Default) (Hold 5s)
			163 - 164	Pan/Tilt Speed 2 (Hold 5s)
			165 - 166	Invert Pan ON (Hold 3s)
			167 - 168	Invert Pan OFF (Hold 5s)
169 - 170	Invert Tilt ON (Hold 3s)			
171 - 172	Invert Tilt OFF (Hold 5s)			

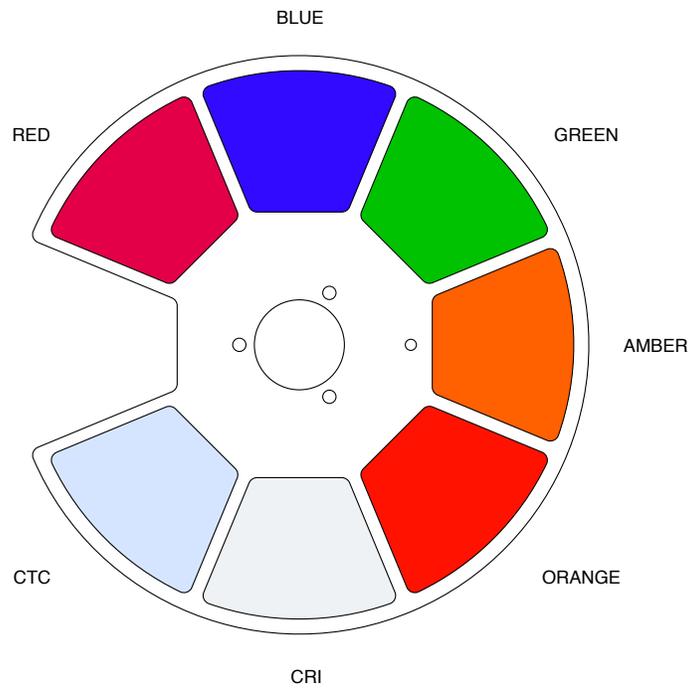
DMX TRAITS

CHANNEL			DMX VALUE	FUNCTION
36 CH	50 CH	57 CH		
				Refresh Rate (Hold 1s)
			173	900 Hz LED Refresh Rate (Hold 1s)
			174	910 Hz LED Refresh Rate (Hold 1s)
			175	920 Hz LED Refresh Rate (Hold 1s)
			176	930 Hz LED Refresh Rate (Hold 1s)
			177	940 Hz LED Refresh Rate (Hold 1s)
			178	950 Hz LED Refresh Rate (Hold 1s)
			179	960 Hz LED Refresh Rate (Hold 1s)
			180	970 Hz LED Refresh Rate (Hold 1s)
			181	980 Hz LED Refresh Rate (Hold 1s)
			182	990 Hz LED Refresh Rate (Hold 1s)
			183	1000 Hz LED Refresh Rate (Hold 1s)
			184	1010 Hz LED Refresh Rate (Hold 1s)
			185	1020 Hz LED Refresh Rate (Hold 1s)
			186	1030 Hz LED Refresh Rate (Hold 1s)
			187	1040 Hz LED Refresh Rate (Hold 1s)
			188	1050 Hz LED Refresh Rate (Hold 1s)
			189	1060 Hz LED Refresh Rate (Hold 1s)
			190	1070 Hz LED Refresh Rate (Hold 1s)
			191	1080 Hz LED Refresh Rate (Hold 1s)
			192	1090 Hz LED Refresh Rate (Hold 1s)
			193	1100 Hz LED Refresh Rate (Hold 1s)
			194	1110 Hz LED Refresh Rate (Hold 1s)
			195	1120 Hz LED Refresh Rate (Hold 1s)
			196	1130 Hz LED Refresh Rate (Hold 1s)
			197	1140 Hz LED Refresh Rate (Hold 1s)
			198	1150 Hz LED Refresh Rate (Hold 1s)
			199	1160 Hz LED Refresh Rate (Hold 1s)
			200	1170 Hz LED Refresh Rate (Hold 1s)
			201	1180 Hz LED Refresh Rate (Hold 1s)
			202	1190 Hz LED Refresh Rate (Hold 1s)
			203	1210 Hz LED Refresh Rate (Hold 1s)
			204	1220 Hz LED Refresh Rate (Hold 1s)
			205	1230 Hz LED Refresh Rate (Hold 1s)
			206	1240 Hz LED Refresh Rate (Hold 1s)
			207	1250 Hz LED Refresh Rate (Hold 1s)
			208	1260 Hz LED Refresh Rate (Hold 1s)
			209	1270 Hz LED Refresh Rate (Hold 1s)
			210	1280 Hz LED Refresh Rate (Hold 1s)
			211	1290 Hz LED Refresh Rate (Hold 1s)
			212	1300 Hz LED Refresh Rate (Hold 1s)
			213	1310 Hz LED Refresh Rate (Hold 1s)
			214	1320 Hz LED Refresh Rate (Hold 1s)
			215	1330 Hz LED Refresh Rate (Hold 1s)

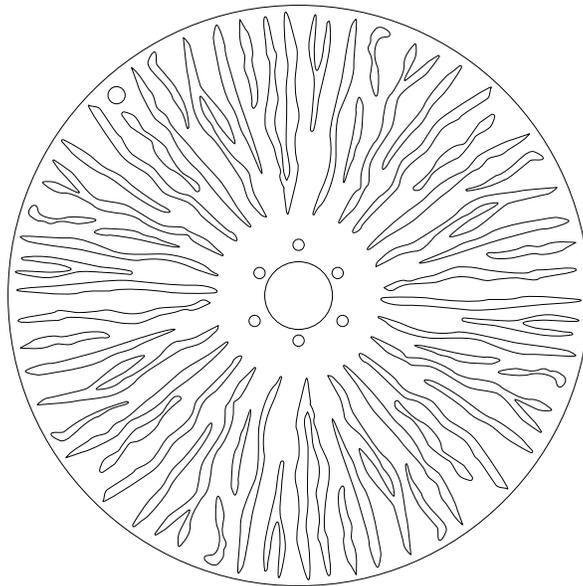
DMX TRAITS

CHANNEL			DMX VALUE	FUNCTION
36 CH	50 CH	57 CH		
36	50	57		Refresh Rate (Hold 1s)
			216	1340 Hz LED Refresh Rate (Hold 1s)
			217	1350 Hz LED Refresh Rate (Hold 1s)
			218	1360 Hz LED Refresh Rate (Hold 1s)
			219	1370 Hz LED Refresh Rate (Hold 1s)
			220	1380 Hz LED Refresh Rate (Hold 1s)
			221	1390 Hz LED Refresh Rate (Hold 1s)
			222	1400 Hz LED Refresh Rate (Hold 1s)
			223	1410 Hz LED Refresh Rate (Hold 1s)
			224	1420 Hz LED Refresh Rate (Hold 1s)
			225	1430 Hz LED Refresh Rate (Hold 1s)
			226	1440 Hz LED Refresh Rate (Hold 1s)
			227	1450 Hz LED Refresh Rate (Hold 1s)
			228	1460 Hz LED Refresh Rate (Hold 1s)
			229	1470 Hz LED Refresh Rate (Hold 1s)
			230	1480 Hz LED Refresh Rate (Hold 1s)
			231	1490 Hz LED Refresh Rate (Hold 1s)
			232	1500 Hz LED Refresh Rate (Hold 1s)
			233	2500 Hz LED Refresh Rate (Hold 1s)
			234	4000 Hz LED Refresh Rate (Hold 1s)
			235	5000 Hz LED Refresh Rate (Hold 1s)
			236	6000 Hz LED Refresh Rate (Hold 1s)
			237	10,000 Hz LED Refresh Rate (Hold 1s)
			238	15,000 Hz LED Refresh Rate (Hold 1s)
			239	20,000 Hz LED Refresh Rate (Hold 1s)
			240	25,000 Hz LED Refresh Rate (Hold 1s)
			241	Internal program 1 (scenes 1~8) (Hold 3s)
			242	Internal program 2 (scenes 9~16) (Hold 3s)
243	Internal program 3 (scenes 17~24) (Hold 3s)			
244	Internal program 4 (scenes 25~32) (Hold 3s)			
245	Internal program 5 (scenes 33~40) (Hold 3s)			
246	Internal program 6 (scenes 41~48) (Hold 3s)			
247	Internal program 7 (scenes 49~56) (Hold 3s)			
248 - 255	No function			

COLOR WHEEL



ANIMATION WHEEL



WHITE COLOR TEMPERATURE CHART

DMX VALUES	COLOR TEMPERATURE
024	2700
025	2800
026	2900
027	3000
028	3100
029	3200
030	3300
031	3400
032	3500
033	3600
034	3700
035	3800
036	3900
037	4000
038	4100
039	4200
040	4300
041	4400
042	4500
043	4600
044	4700
045	4800
046	4900
047	5000
048	5100
049	5200
050	5300

DMX VALUES	COLOR TEMPERATURE
051	5400
052	5500
053	5600
054	5700
055	5800
056	5900
057	6000
058	6100
059	6200
060	6300
061	6400
062	6500
063	6600
064	6700
065	6800
066	6900
067	7000
068	7100
069	7200
070	7300
071	7400
072	7500
073	7600
074	7700
075	7800
076	7900

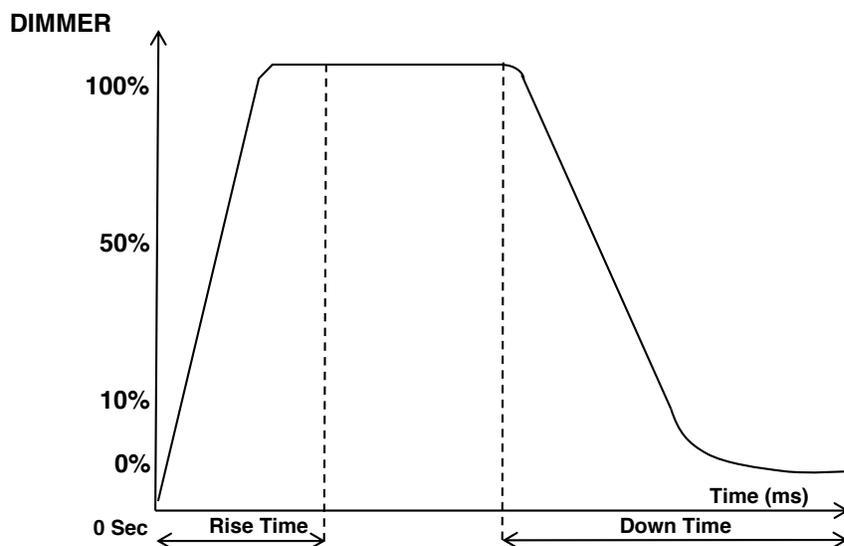
FRAME MACROS CHART

MACRO NUMBER	FRAME BLADE 1A	FRAME BLADE 1B	FRAME BLADE 2A	FRAME BLADE 2B	FRAME BLADE 3A	FRAME BLADE 3B	FRAME BLADE 4A	FRAME BLADE 4B
1	150	0	150	0	150	0	150	0
2	138	116	126	0	162	206	88	146
3	146	0	208	70	166	0	162	168
4	220	0	122	0	166	0	114	64
5	0	104	0	124	0	162	64	132
6	88	74	132	240	84	144	114	60
7	144	74	0	255	10	108	48	116
8	138	116	198	0	162	106	112	78
9	96	100	0	130	162	0	0	172
10	138	216	134	0	0	206	88	146
11	88	94	0	244	46	112	114	44
12	138	216	140	0	0	206	0	0
13	124	62	216	0	108	206	126	2
14	152	118	128	106	136	102	68	114
15	124	54	0	154	16	118	126	206
16	0	214	2	146	0	124	0	128
17	144	74	0	152	10	240	138	74
18	102	120	56	202	30	102	152	40
19	174	104	100	124	194	152	64	132
20	88	74	132	240	84	102	114	172
21	86	112	168	0	228	26	122	64
22	146	0	208	70	166	0	162	0
23	138	116	126	0	162	206	112	78
24	150	154	150	0	150	0	150	86
25	122	0	0	196	150	0	150	86
26	182	0	98	124	162	64	0	168
27	210	0	120	0	166	0	162	0
28	88	92	150	0	228	144	114	0
29	122	0	0	130	162	0	220	86
30	124	54	216	154	16	118	126	2
31	138	116	198	142	0	160	138	80

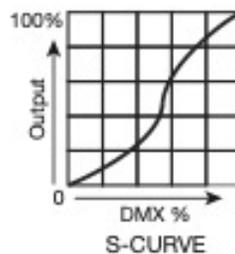
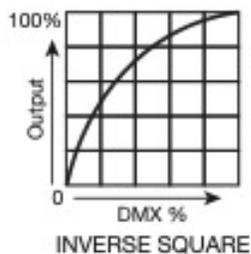
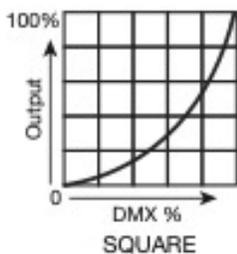
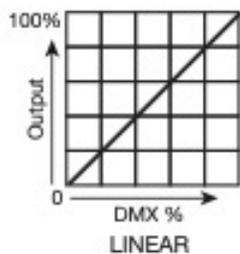
DIM SPEEDS

DMX VALUE	DELAY TIME
141	0.1 s
142	0.2 s
143	0.3 s
144	0.4 s
145	0.5 s
146	0.6 s
147	0.7 s
148	0.8 s
149	0.9 s
150	1.0 s
151	1.5 s
152	2.0 s
153	3.0 s
154	4.0 s
155	5.0 s
156	6.0 s
157	7.0 s
158	8.0 s
159	9.0 s
160	10.0 s

DIMMER MODES



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



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.

FIXTURE DISASSEMBLY

The following points should be observed after performing any maintenance procedure that requires disassembly of the unit:

- After the unit has been reassembled, open the valve, and allow the light to run for approximately 2 hours in order to dry out any moisture that has been trapped inside the fixture. The process should continue until indicated humidity drops below 15% for the head and 30% for the base.
- Once this has been achieved, the light can be switched off, but the unit should remain connected to power so that the cooling fan can cool down the unit. Please note that allowing cool down time should **ALWAYS** be done after lamp operation.
- Some units may require partial disassembly in order to gain access to the valve. Please contact ADJ service for information regarding the location and access procedure for the valve on your specific unit model.

CLEANING AND MAINTENANCE

PUMP FUNCTION

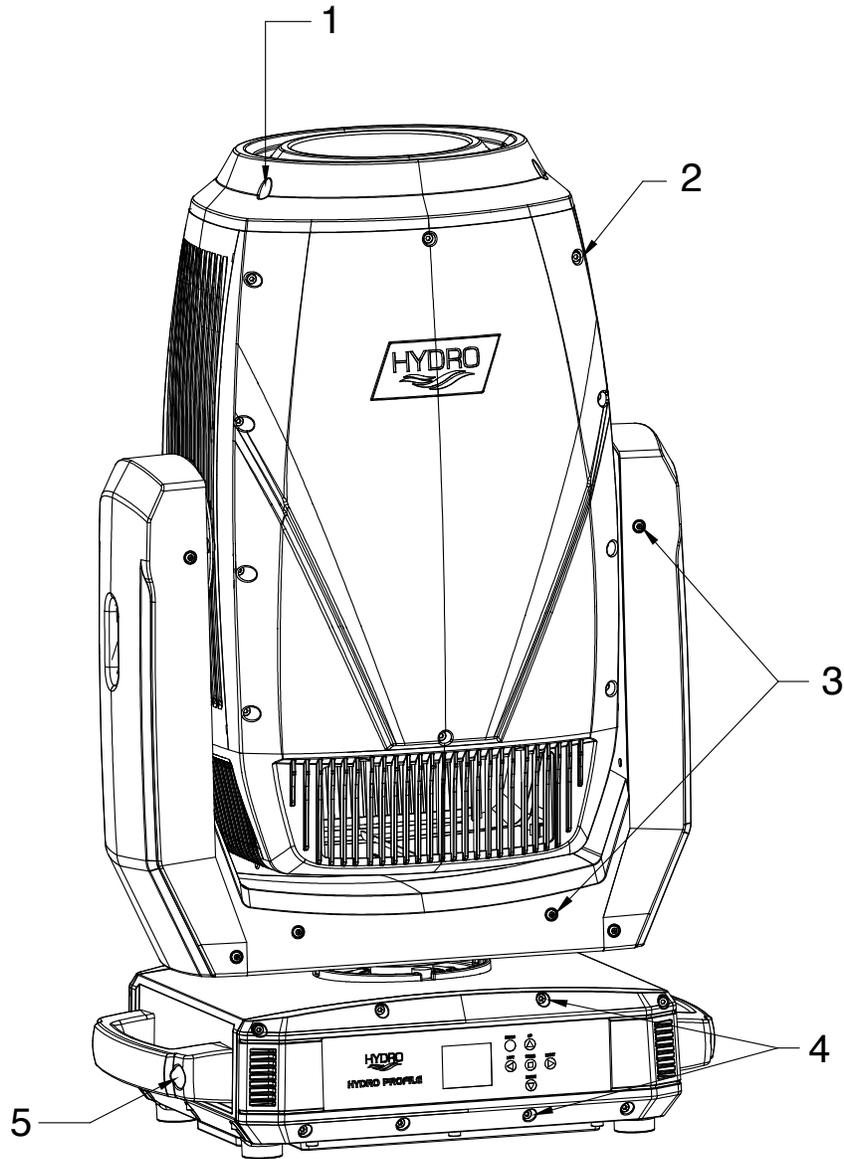
Certain mechanisms within this fixture, such as the effects wheels and the framing mechanism, emit small amounts of oil vapor, which can accumulate on the lens and result in reduced light output. To counteract this issue, this fixture features an air pump installed in the arm, which serves to ventilate the air inside the fixture head in order to remove this oil vapor. In particular, it is recommended to run this pump following maintenance or repair procedures of mechanisms inside the head, as these procedures can result in increased emission of oil vapor. Refer to the ***System Menu*** section of this manual for instructions on how to activate this pump.

SOFTWARE UPDATES

For software updates, please contact ADJ service to obtain a software uploader and detailed instructions. Refer to the ***Introduction*** section of this manual for contact information.

TORQUE SETTINGS FOR SCREWS

ALL SCREWS MUST BE TIGHTENED WITH A TORQUE DRIVER. All screws are Allen head screws. Please refer to the table and diagram below for screw locations, quantity, and torque settings.



Zone No.	Description	Quantity	Torque Spec
1	Lens Frame	4	4.3 ± 0.6 lbf-in (5.0 ± 0.7 kgf-cm)
2	Main Head Covers	10 per side (20 total)	6.9 ± 0.6 lbf-in (8.0 ± 0.7 kgf-cm)
3	Arm Covers	6 per side (12 total)	4.3 ± 0.4 lbf-in (5.0 ± 0.5 kgf-cm)
4	Base Front/Rear Covers	8 per side (16 total)	6.9 ± 0.6 lbf-in (8.0 ± 0.7 kgf-cm)
5	Carry Handles	2 per handle (4 total)	6.9 ± 0.6 lbf-in (8.0 ± 0.7 kgf-cm)

TORQUE SETTINGS FOR SCREWS

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

TORQUE DRIVER (Alternate):

- Proto J6107A
- Wiha 28887



CAUTION! DO NOT OVER TORQUE SCREWS AS THIS CAN CAUSE LEAKAGE ISSUES! TO CONFIRM THE IP65 INTEGRITY AFTER A LAMP REPLACEMENT, TEST THE FIXTURE USING THE IP TESTER. CONTACT ADJ SERVICE FOR MORE DETAILS.

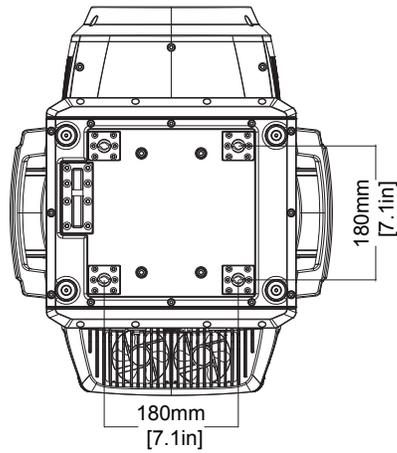
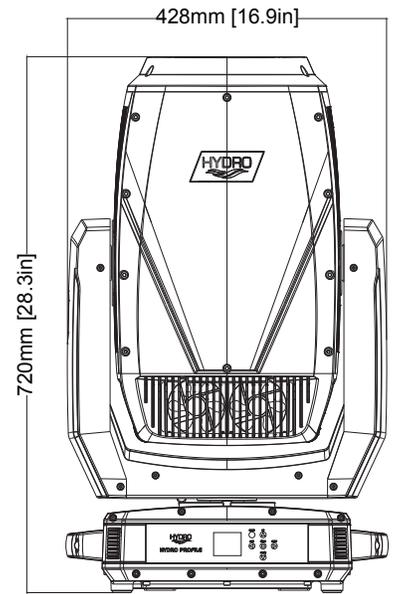
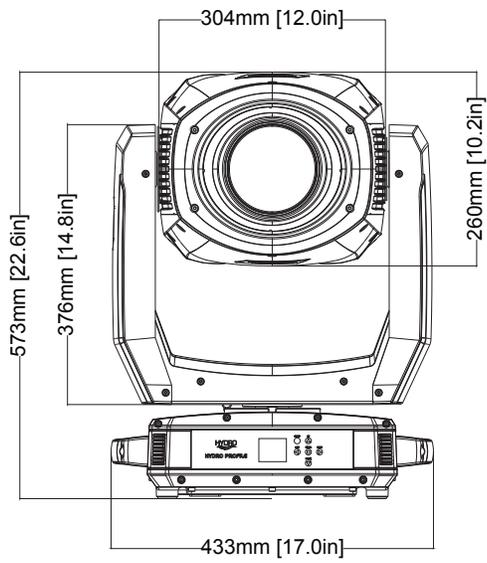
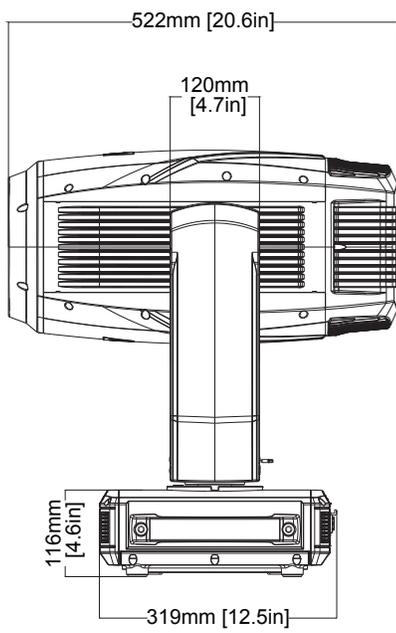


CAUTION! THE USE OF PROTECTIVE GLOVES AND SAFETY GOGGLES IS STRONGLY RECOMMENDED WHILE PERFORMING THE IP PRESSURE TEST! AVOID PLACING YOUR FACE, EYES, HANDS, ETC IN CLOSE PROXIMITY TO THE FIXTURE'S LENS WHILE PERFORMING THE TEST!



IP PRESSURE TESTING PARAMETERS		
Maximum Pressure	Minimum Pressure	Steady/Hold Time
3.3 psi (23 KPa)	2.9 psi (20 KPa)	15 sec

DIMENSIONAL DRAWINGS



Dimensions may not be drawn to scale

ERROR CODES

Pan	Prism1
Tilt	Prism1 Rot
Cyan	Prism2
Magenta	Prism2 Rot
Yellow	Animation
CTO	Animation Rot
Color Wheel	Blade Rot
Gobo	LED Fan
Rot Robo	Base Fan
Fixed Gobo	Gobo Fan
Focus	LED Temp
Zoom	Base Temp

SPECIFICATIONS

Light Source:

- 660W Cool White LED Engine (50,000 hr.)
- 25,000+ Lumens

Features:

- Motorized Focus
- 2 Frost Filters
- Motorized Zoom: 6 ~ 45 degrees
- 4 Blade Framing System (Rotatable)
- Iris
- Animation Wheel
- 2 Prism FX: Rotating 6-facet Linear & rotating 4-facet Circular
- 0-100% smooth dimming
- Various strobe speeds
- 2 cooling fans

Color:

- CMY color mixing system
- Variable CTO flag
- Color wheel with 7 dichroic colors + white (includes CTB and High CRI filters)
- Colors on wheel are removable and replaceable

Gobo Wheels:

- (1) Rotating Gobo wheel with 7 Gobos
- (1) Static Gobo wheel with 8 Gobos
- All Gobo's are replaceable
- Gobo Shake Effect on both wheels
- Aluminum Gobo size: 23mm (outer); 19mm (viewable); 0.5mm (thickness)
- Glass gobo size: 23mm (outer); 19mm (viewable); 3.3mm (thickness)

Prism Wheel:

- Prism Wheel 1: Rotatable 6-facet Linear
- Prism Wheel 2: Rotatable 4-facet Circular
- Both Prisms are indexable

Frost Filters:

- Frost 1: Heavy frost for wash effect
- Frost 2: Medium frost creates lightly blurred edges for Gobo and Prism FX

Control:

- 3 DMX Channel Modes: 36/50/57
- Color LCD display with 6-button function menu
- Control Mode: DMX512 or internal programs
- 6 Dim Modes: Standard, Stage, TV, Architectural, Theatre, Stage2
- 4 Dim Curves: Square, Linear, Inv. Square and S. Curve
- Selectable LED Refresh Rates (900 Hz~25K Hz)
- 0-100% smooth dimming
- Various strobe speeds
- With Wired Digital Communication Network
- RDM (Remote Device Management)

Pan/Tilt:

- Pan: 540 degrees
- Tilt: 270 degrees

Connections:

- DMX Connections: 5-pin XLR In/Out
- Power Connections: IP65 PowerLock Input

Electrical:

- Multi-voltage operation: 100-240V, 50/60Hz
- Max power consumption: 1088W

Dimensions & Weight:

- Dimensions (LxWxH): 12.5" x 17.0" x 28.3" (319x433x720mm)
- Weight: 84.9 lbs (38.5 kg)

Approvals / Rating:

- ETL Approved / CE Certified
- IP65 with Marine Coated Exterior and conformal coated PCBs (Temporary outdoor use only)

Specifications and manual are subject to improvement without prior written notice.

