ENCORE LP7P
User Guide

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

Date	Document Version	Software Version	DMX Channels	Notes
12/30/2021	1.0	1.02	4 / 7 / 8 / 10 / 13 / 16 channels	Initial Release.
02/17/2022	1.1	1.03	No Change	Updated DMX Traits, added RDM
03/08/2023	1.2	1.04	No Change	Updated DMX Traits
04/20/2023	1.3	N/C	No Change	Added IP65 information

Europe Energy Saving Notice
Energy Saving Matters (EuP 2009/125/EC)
Saving electric energy is a key to help protecting the enviroment. 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!

CONTENTS

INTRODUCTION

Unpacking: Thank you for purchasing the Encore LP7IP by ADJ Products, LLC. Every Encore LP7IP has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your fixture for any damage and be sure all accessories necessary to operate the unit 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 Encore LP7IP is a DMX intelligent, heavy duty Par. To optimize the performance of this product, please read these operating instructions carefully 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
Voice: 800-322-6337 | Fax: 323-582-2941 | support@adj.com

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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.

It is strongly recommended to power the fixture down completely when not in use. Doing so will reduce wear on the fixture due to sustained or extended operational periods, thereby maximizing its operational lifespan.

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 periods below). 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 serviced by anyone other than the ADJ Products, LLC factory unless prior written authorization was issued to purchaser by ADJ Products, LLC; if the product is damaged because not properly maintained as set forth in the instruction manual.

D. This is not a service contract, and this warranty does not include maintenance, cleaning or periodic checkup. 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. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by ADJ Products, LLC in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The consumer's and/or Dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall ADJ Products, LLC be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product. This warranty is the only written warranty applicable to ADJ Products, LLC Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

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) **PLEASE NOTE: 2-Year (730 Days) Limited Warranty ONLY applies to product purchased within the USA.**
- **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 REGISTRATION

The Encore LP7IP carries a 2 year limited warranty. Please fill out the enclosed warranty card to validate your purchase. All returned service items, whether under warranty or not, must be freight pre-paid and accompanied by a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper included in the shipping carton. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. You may obtain an R.A. number by contacting our customer support team on our customer support number. All packages returned to the service department not displaying an R.A. number on the outside of the package will be returned to the shipper.

FEATURES

The ADJ Encore LP7IP is a versatile, heavy duty Par with seven (7) 20W Quad LEDs (4-IN-1: Red, Green, Blue & Lime), a 10-degree beam angle, and all metal construction. It is IP65 outdoor rated to protect against, rain, snow and dust for temporary outdoor events. It offers flicker free operation for TV and film and linear white color temperature control from 2700K - 6500K.

INCLUDED ITEMS

- (1) 25° Frost Filter
- (1) Power Cord

IP65 RATED

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

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

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

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

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

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

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

Interior Maintenance: Inspect the interior every 30-days. The unit must be powered off/disconnected.
- Inspect zoom/focus mechanism, clean optics, lubricate linear bearings (Krytox oil) as needed, inspect belts for wear
- Inspect all rotating effect wheels, manually rotate them, note any resistance
- Inspect all remaining rotating belts for any wear
- Inspect all fans, clean as needed, check rotation, check connections
- Inspect CMY module, manually move flags and check for signs of resistance, and if needed, clean guide rods first, then reapply a thin layer of grease (moly lube)
- Clean interior with low-volume compressed air, then clean optics prior to reassembly of head covers

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

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

SAFETY GUIDELINES

THIS FIXTURE IS COMPOSED OF SOPHISTICATED ELECTRONIC COMPONENTS. TO GUARANTEE SMOOTH OPERATION, IT IS IMPORTANT TO FOLLOW ALL INSTRUCTIONS AND GUIDELINES IN THIS MANUAL. ADJ PRODUCTS, LLC IS NOT RESPONSIBLE FOR INJURY AND/OR DAMAGES RESULTING FROM THE MISUSE OF THIS FIXTURE DUE TO THE DISREGARD OF THE INFORMATION PRINTED IN THIS MANUAL. ONLY QUALIFIED AND/OR CERTIFIED PERSONNEL SHOULD PERFORM INSTALLATION OF THIS FIXTURE AND ONLY THE ORIGINAL RIGGING PARTS INCLUDED WITH THIS FIXTURE SHOULD BE USED FOR INSTALLATION. ANY MODIFICATIONS TO THE FIXTURE AND/OR THE INCLUDED MOUNTING HARDWARE WILL VOID THE ORIGINAL MANUFACTURER'S WARRANTY AND INCREASE THE RISK OF DAMAGE AND/OR PERSONAL INJURY. ONLY CERTIFIED PERSONNEL SHOULD PERFORM INSTALLATION OF THIS FIXTURE.

- PROTECTION CLASS 1 - FIXTURE MUST BE PROPERLY GROUNDED.
- THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT.
- DO NOT ATTEMPT ANY REPAIRS YOURSELF; DOING SO WILL VOID YOUR MANUFACTURER'S WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS FIXTURE AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURER'S WARRANTY AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS.
- DO NOT PLUG FIXTURE INTO A DIMMER PACK!
- NEVER OPEN THIS FIXTURE WHILE IN USE!
- UNPLUG POWER BEFORE SERVICING FIXTURE!
- NEVER TOUCH FIXTURE DURING OPERATION, AS IT MAY BE HOT!
- KEEP FLAMMABLE MATERIALS AWAY FROM FIXTURE!
- NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE!
- RETINA INJURY RISK - MAY INDUCE BLINDNESS!
- SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK!
- MINIMUM DISTANCE TO OBJECTS/SURFACES 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 serving.
- DO NOT shake fixture, and avoid brute force when installing and/or operating fixture.
- DO NOT operate fixture if the power cord is frayed, crimped, damaged and/or if any of the power cord connectors are damaged and do not insert into the fixture securely with ease. NEVER force a power cord connector into the fixture. If the power cord or any of its connectors are damaged, replace it immediately with a new one of the same power rating.
- DO NOT block any air ventilation slots. All fan and air inlets must remain clean and never blocked. Allow approx. 6" (15cm) between fixture and other devices or a wall for proper cooling.
- When installing fixture in a suspended environment, always use mounting hardware that is no less than M10 x 25 mm, and always install fixture with an appropriately rated safety cable.
- Always disconnect fixture from main power source before performing any type of service and/or cleaning procedure.
- Only handle the power cord by the plug end. Never pull out the plug by tugging the wire portion of the cord.
- During the initial operation of this fixture, a light smoke or smell may emit from the interior of the fixture. This is a normal process and is caused by excess paint in the interior of the casing burning off from the heat associated with the lamp and will decrease gradually over time.
- Consistent operational breaks will ensure fixture will function properly for many years.
- ONLY Use original packaging and materials to transport the fixture in for service.

OVERVIEW

Power In · Power Out · Safety Cable Loop · DMX Out · DMX In

Bracket Adjustment Knob

Bracket Adjustment Knob

Yoke w/ Mounting Point

Display Screen

Mode Button · Down Button · Up Button · Enter Button
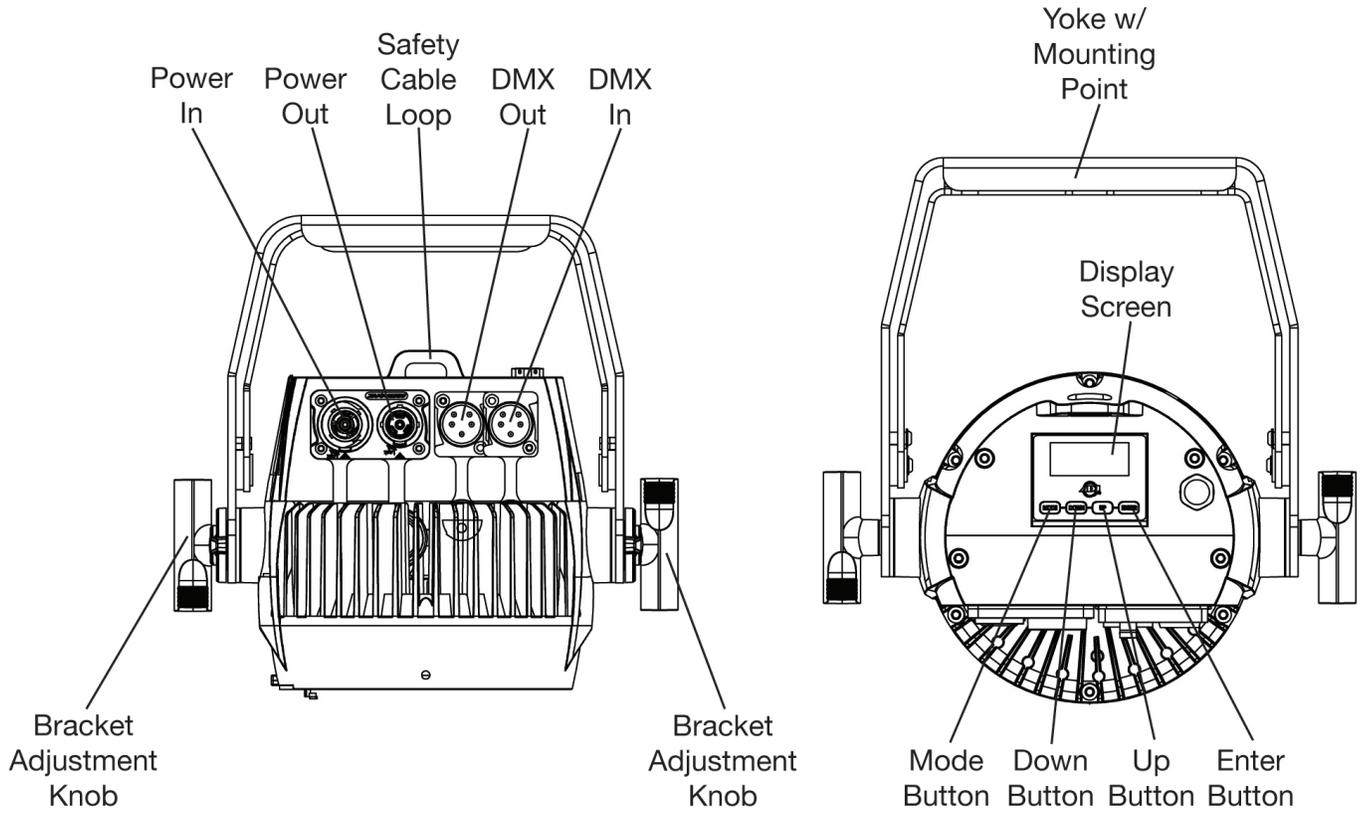
INSTALLATION

FLAMMABLE MATERIAL WARNING

Keep fixture minimum 5.0 feet (1.5m) away from flammable materials and/or pyrotecnics

ELECTRICAL CONNECTIONS

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

USE CAUTION WHEN POWER LINKING FIXTURES OF OTHER TYPES, AS THE POWER CONSUMPTION OF OTHER MODEL FIXTURES MAY EXCEED THE MAX POWER OUTPUT ON THIS FIXTURE. CHECK SILK SCREEN FOR MAX AMPS.

MINIMUM DISTANCE TO OBJECTS/SURFACES IS 6.6 FEET (2 METERS). MINIMUM DISTANCE OF INFLAMMABLE 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 if 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 in areas 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

This device is IP65 rated. This means that the unit is dust-tight, and protected against low-pressure jets of water from any direction.

RIGGING

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

INSTALLATION

CLAMP INSTALLATION

This fixture features a mounting point on the yoke for the attachment of an Omega bracket and mounting clamp. There is also a safety cable loop located on the rear of the fixture near the display screen (see the illustration below). When mounting the fixture to a truss or any other suspended or overhead installation, be sure to secure appropriately rated clamps and Omega brackets (not included) to the yoke, and attach a separate **SAFETY CABLE** of the appropriate weight rating to the safety cable loop.
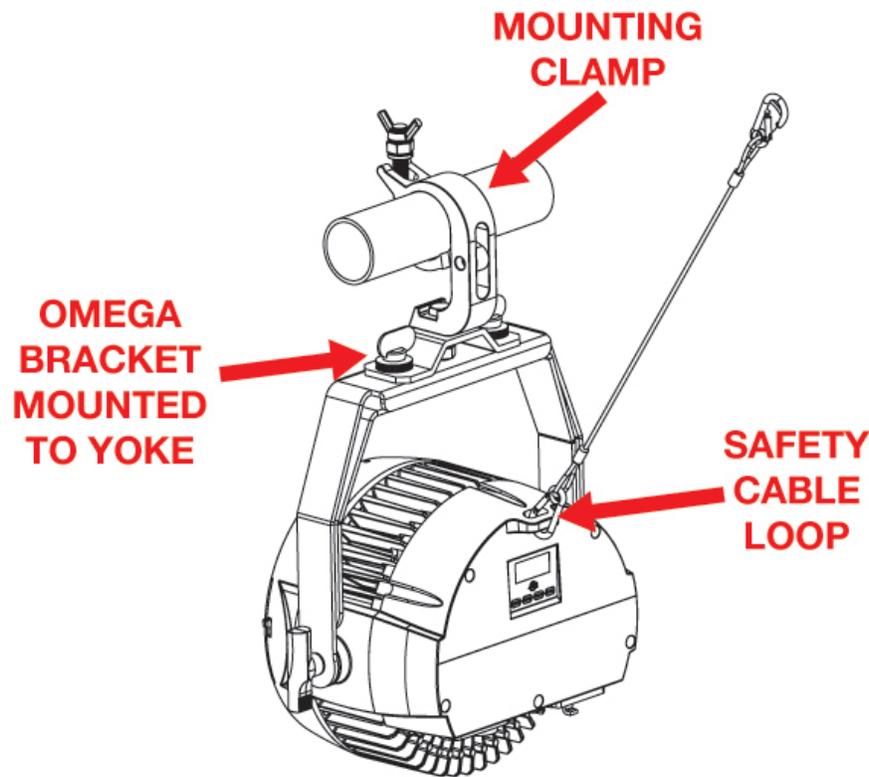
SAFETY CABLE:
ALWAYS ATTACH A SAFETY CABLE WHENEVER INSTALLING THIS FIXTURE IN A SUSPENDED ENVIRONMENT TO ENSURE THAT THE FIXTURE WILL NOT FALL IF THE CLAMP FAILS.

CONNECTIONS

Ensure all connections and end caps are properly sealed with a dielectric grease (available at most electrical suppliers) to prevent corrosion, water intrusion, and/or electrical short circuiting. **In order to maintain IP65 rating integrity and prevent water from entering the fixture, all unused connections must be sealed by closing their protective rubber caps.**

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; it is a common issue with lighting fixtures from all manufacturers. Although there is no true way to fully prevent this issue from happening, the guidelines below can reduce the risk of 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 MOVING HEAD FIXTURES, AND LASERS DURING UNPACKING, INSTALLATION, USE, AND EXTENDED IDLE TIMES OUTDOORS. DO NOT FOCUS A LIGHT BEAM FROM ONE LIGHTING FIXTURE DIRECTLY TOWARDS ANOTHER.
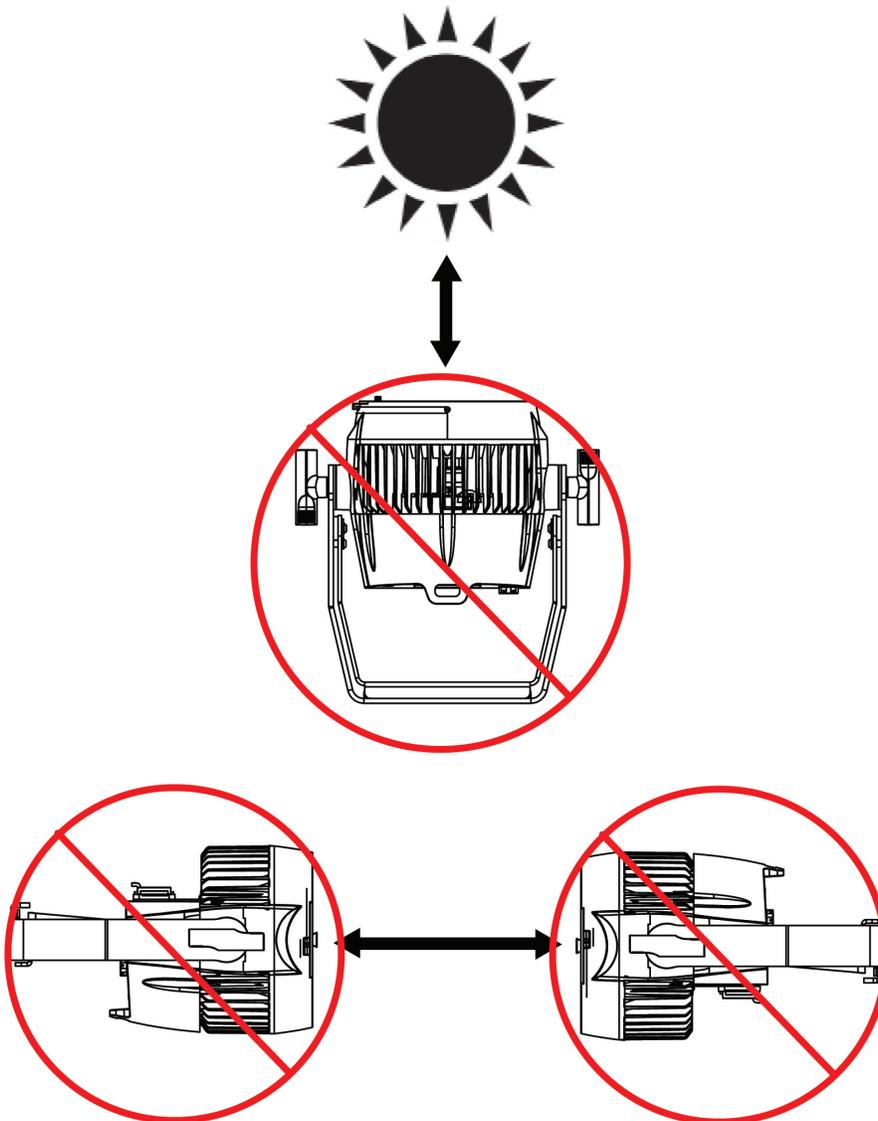
REMOTE DEVICE MANAGEMENT (RDM)

NOTE: 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 device to be managed, modified, and monitored remotely (hence, remote device management). This protocol is ideal for fixtures installed in locations that are 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 it's 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	2104f7	21	4(1) 7(2) 8(3) 10(4) 13(5) 16(6)

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

The following parameters are accessible in RDM on this device:

MANUFACTURER
MANUFACTURER ID
DEVICE ID
MODEL ID
DMX START ADDRESS
DMX PERSONALITY
DMX SLOTS
SOFTWARE VERSION

SYSTEM MENU

The fixture includes an easy to navigate system menu control panel display where all necessary settings and adjustments are made. (See image below)
• **MODE:** Cycles through the main menu options and/or return to previous menu without making changes.
• **DOWN/UP:** Scroll through options in the selected menu.
• **ENTER:** Select highlighted option and/or confirm selection.
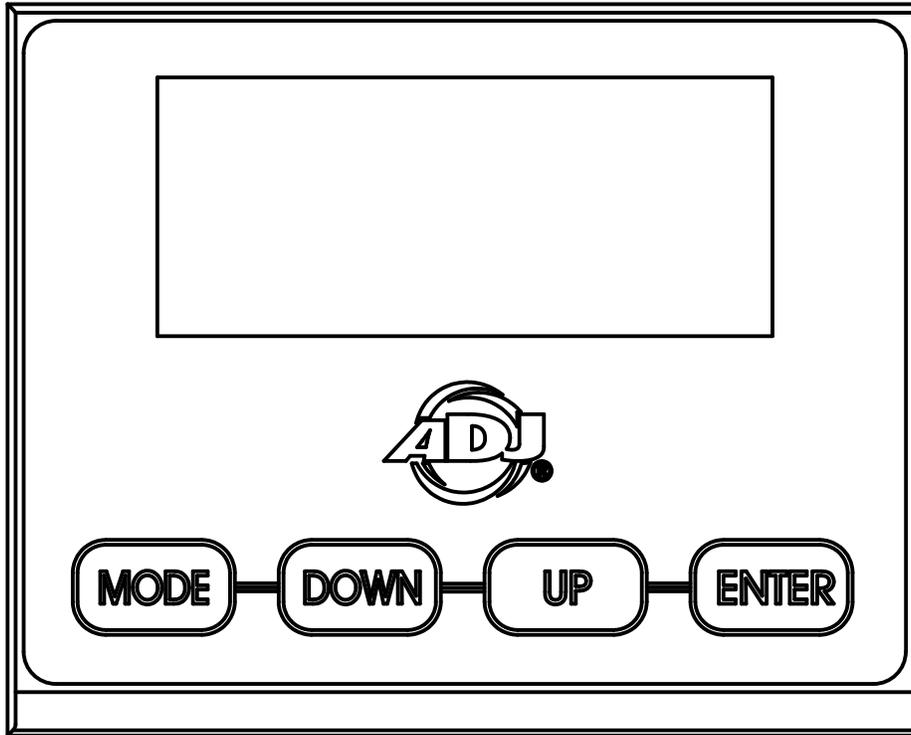
This device features two different settings for locking the keypad. Setting Lock to "ON" requires the user to simply press and hold the MODE button for 10 seconds to unlock the keypad.

Setting Lock to "ON1" provides an additional safeguard against accidental unlocking by requiring a passcode to unlock the device. To unlock, press the MODE button so that "LOCKED *****" is displayed on the screen, then press UP DOWN UP DOWN ENTER in that particular order. Each button press will remove one asterisk from the LOCKED text on the display screen.

⚠️ **Please contact ADJ Support for latest software and updating instructions:**

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SYSTEM MENU

DMX SET	Address	**001** - 512		Set DMX address of the unit.
	Ch. Mode	4ch		Set DMX channel mode
		7ch		
		8ch		
		10ch		
		13ch		
		16ch		
	No DMX	**Hold**		Unit holds last setting if DMX signal is lost.
		Blackout		Unit goes to standby mode if DMX signal is lost.
		Int. Prog		Unit default to last internal program when DMX signal is lost.
PERSONALITY	Primary	On / **Off**		Set primary mode.
	Secondary	On / **Off**		Set secondary mode.
	Fan Set	**Auto**		
		High		
		Silent		
	Dim Mode	**Standard**		
		Stage		
		TV		
		Archi.		
		Theatre		
		Stage 2		
		Dim Speed	0.1s - 10s	
	Dim Curve	**Square**		
		Linear		
		Inv. Squa		
		S. Curve		
	LED Rfrsh	900, 1000, 1100, **1200,** 1300, 1400, 1500, 2500, 4000, 5000, 10k, 15k, 20k, 25k		Set LED refresh rate, default = 1200 Hz
	Display	SaveDelay	1 - **10**	
		Lock	ON	Press MODE for 10s to unlock
			ON1	Press MODE and display shows LOCKED *****. To unlock, press UP DOWN UP DOWN ENTER
			OFF	Keypad is unlocked
	Service	Passcode = 050	Calibrat	Red 000 - 255
				Green 000 - 255
				Blue 000 - 255
				Lime 000 - 255
			S. Update	Yes / **No**
			Restore: Passcode = 011	Yes / **No** — Restore the unit to factory settings

SYSTEM MENU

MANUAL	Red	000 - 255			Manually adjust red
	Blue	000 - 255			Manually adjust blue
	Green	000 - 255			Manually adjust green
	Lime	000 - 255			Manually adjust lime
	ClrMacro	00 - 64			Select built-in color macro
	ClrTemp	000 - 255			Set color temperature
	ClrTeMac	000 - 255			Select built-in color temperature pre-set macro
	Strobe	000 - 255			Manually adjust strobing
	MastrDim	000 - 255			Master dimmer
	AutoProg	000 - 255			Select automatic program
	ProgSpd	000 - 255			Set program speed
	ProgFade	000 - 255			Set program fade
INTPROGS	Prog 0	Speed	000 - 255		
		Fade	000 - 255		
	Prog 1	Speed	000 - 255		
		Fade	000 - 255		
	...	...	...		
	Prog 7	Speed	000 - 255		
		Fade	000 - 255		
INFO	Hours	PwrOnHr1	xxx Hrs		Total hours that fixture has been powered on. Non-resettable.
		PwrOnHr2	xxx Hrs		Hours that fixture has been powered on since last reset.
		PwrOnRst	Passcode = 050		Reset hours to zero.
	Temp.	xxx°	xxx F / xxx C		
		MaxTemp1	xxx F / xxx C		Max temp since last reset.
		MaxTemp2	xxx F / xxx C		All time max temp, non resettable.
		TempRst.	Yes / **No**	Passcode = 050	Reset LED temp.
	DMX Values	Red			Displays current DMX values for each DMX channel.
		Green			
		...			
		AutoProg			
	SoftVers	x.xx			Displays current software version.

PRIMARY/SECONCARY MODE

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 ouput. 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. Units are set to primary mode by default. For any unit(s) that you want to set up as a secondary, use the display screen and control panel to navigate to "Secondary" (Secondary Mode), and press SET UP. The unit should now operate in secondary mode.
3. Make sure that only one unit is designated as the Primary, while all other units are designated as Secondaries.
4. The secondary units will act in conjunction with the primary unit.

FAN MODES and LOW NOISE OPERATION

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

Mode	dbA at 1m LED off	dbA at 1m Dimmer 100%
Fan Control - Auto (Default)	39	46
Fan Control - High	50	59
Low Noise – Silent	32	33

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

NOTE: Recommended for daily operation.

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

Silent—For very critical noise environments, the fixture offers two additional Low Noise Modes for silent operation. The fixture output will be reduced, however due to the extremely high luminous flux the fixture still offers outstanding performance. In Low Noise Modes all parameters of the fixture operate quieter with reduced fan speeds.

Almost all fixture fans are turned off, and only run when necessary. The fixture LED power output is reduced to 50%.

DMX SETUP

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

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

DATA CABLE (DMX CABLE) REQUIREMENTS (FOR DMX AND PRIMARY/SECONDARY OPERATION):
The Hydro Wash X7 can be controlled via DMX-512 protocol. Your unit and your DMX controller requires a 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 and female XLR connector on either end of the cable. Also remember that DMX cable must be daisy chained and cannot be split.

Data Cable (DMX Cable) Requirements (For DMX Operation): The Encore LP7IP can be controlled via DMX-512 protocol, and features multiple DMX channel modes. Your unit and your DMX controller require a 5-pin XLR connector for data input and data output. If you are making your own cables, be sure to use standard 110-120 Ohm shielded cable (This cable may be purchased at almost all pro lighting stores). Your cables should be made with a male XLR connector at one end and a female XLR connector on the other. Also remember that DMX cable must be daisy chained and cannot be split.

Special Note: Line Termination. When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behavior. A terminator is a 110-120 ohm 1/4 watt resistor which is connected between pins 2 and 3 of a male XLR connector (DATA + and DATA -). This unit is inserted in the female XLR connector of the last unit in your daisy chain to terminate the line. Using a cable terminator (ADJ part number Z-DMX/T) will decrease the chances of erratic behavior.
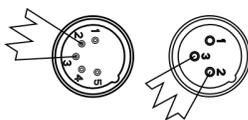
A DMX512 terminator reduces signal errors, avoiding most signal reflection interference. Connect PIN 2 (DMX-) and PIN 3 (DMX+) of the last fixture in series with a 120 Ohm, 1/4 W Resistor to terminate the DMX512.

DMX SETUP

DMX ADDRESSING

All fixtures should be given a DMX starting address when operating with a DMX controller, in order to ensure that the correct fixture responds to the correct control signal. This digital starting address is the channel number from which the fixture starts to "listen" to the digital control signal sent out from the DMX controller. The assignment of this starting DMX address is achieved by setting the correct DMX address on the digital control display on the fixture.

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

If you set each fixture to a different DMX address, each unit will 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 4 channel mode, you should set the starting DMX address of the first unit to 1, the second unit to 5 (1 + 4), the third unit to 9 (1 + 4 + 4), and so on. (See the chart below for more details.)

Channel Mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
4 Channels	1	5	9	13
7 Channels	1	8	15	22
8 Channels	1	9	17	25
10 Channels	1	11	21	31
13 Channels	1	14	27	40
16 Channels	1	17	33	49

DMX TRAITS

CHANNEL						DMX VALUE	FUNCTION
4CH	7CH	8CH	10CH	13CH	16CH		
1	1	1	1	1	1	000 - 255	*Red,* 0% - 100%
		2				000 - 255	*Red Fine*
2	2	3	2	2	2	000 - 255	*Green,* 0% - 100%
		4				000 - 255	*Green Fine*
3	3	5	3	3	3	000 - 255	*Blue,* 0% - 100%
		6				000 - 255	*Blue Fine*
4	4	7	4	4	4	000 - 255	*Lime,* 0% - 100%
		8				000 - 255	*Lime Fine*
			5	5	5	000 - 255	*Color Macros,* see *Color Macros Chart* section for detailed information
			6	6	6	000 - 255	*Color Temperature,* 2700K - 7000K Linear
							Color Temperature Macros
						000	Off
						001 - 054	2700K
			7	7	7	055 - 109	3200K
						110 - 164	4000K
						165 - 219	5600K
						220 - 255	6500K
							Shutter, Strobe
						000 - 031	LEDs Off
						032 - 063	LEDs On
						064 - 095	Strobe effect, slow to fast
	5		8	8	8	096 - 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
	6		9	9	9	000 - 255	*Dimmer Intensity,* 0% - 100%
	7		10	10	10	000 - 255	*Dimmer Fine*
							Auto Programs
						000 - 031	Off
						032 - 063	Auto Program 1
					11	064 - 095	Auto Program 2
						096 - 127	Auto Program 3
						128 - 159	Auto Program 4

DMX TRAITS

CHANNEL						DMX VALUE	FUNCTION
4CH	7CH	8CH	10CH	13CH	16CH		
					11		*Auto Programs (continued)*
						160 - 191	Auto Program 5
						192 - 223	Auto Program 6
						224 - 255	Auto Program 7
					12	000 - 255	*Auto Program Speed,* slow to fast
					13	000 - 255	*Auto Program Fade,* least to most
							Dim Mode
						000 - 020	Default to unit setting
						021 - 040	Standard
						041 - 060	Stage
						061 - 080	TV
						081 - 100	Architectural
						101 - 120	Theatre
						121 - 140	Stage 2
						141	0.1s dim speed
						142	0.2s dim speed
						143	0.3s dim speed
						144	0.4s dim speed
						145	0.5s dim speed
						146	0.6s dim speed
				11	14	147	0.7s dim speed
						148	0.8s dim speed
						149	0.9s dim speed
						150	1.0s dim speed
						151	1.5s dim speed
						152	2.0s dim speed
						153	3.0s dim speed
						154	4.0s dim speed
						155	5.0s dim speed
						156	6.0s dim speed
						157	7.0s dim speed
						158	8.0s dim speed
						159	9.0s dim speed
						160	10.0s dim speed
						161 - 255	Default to unit setting

DMX TRAITS

CHANNEL						DMX VALUE	FUNCTION
4CH	7CH	8CH	10CH	13CH	16CH		
				12	15		*Dim Curves*
						000 - 020	Square
						021 - 040	Linear
						041 - 060	Inv. Squa
						061 - 080	S. Curve
						081 - 255	No function
				13	16		*Special Functions*
						000 - 015	Default to Unit Setting
						016 - 030	900 Hz
						031 - 045	1000 Hz
						046 - 060	1100 Hz
						061 - 075	1200 Hz
						076 - 090	1300 Hz
						091 - 105	1400 Hz
						106 - 120	1500 Hz
						121 - 135	2500 Hz
						136 - 150	4000 Hz
						151 - 165	5000 Hz
						166 - 180	10000 Hz
						181 - 195	15000 Hz
						196 - 210	20000 Hz
						211 - 225	25000 Hz
						226	Auto Fan (hold 5 sec)
						227	High Fan (hold 5 sec)
						228	Silent Fan (hold 5 sec)
						229 - 255	No Function

COLOR MACROS CHART

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

DIM MODES

The fixture includes 6 different dimming curve modes which can selected from either the system menu or via DMX. The graph below provides details on each dimming curve mode.
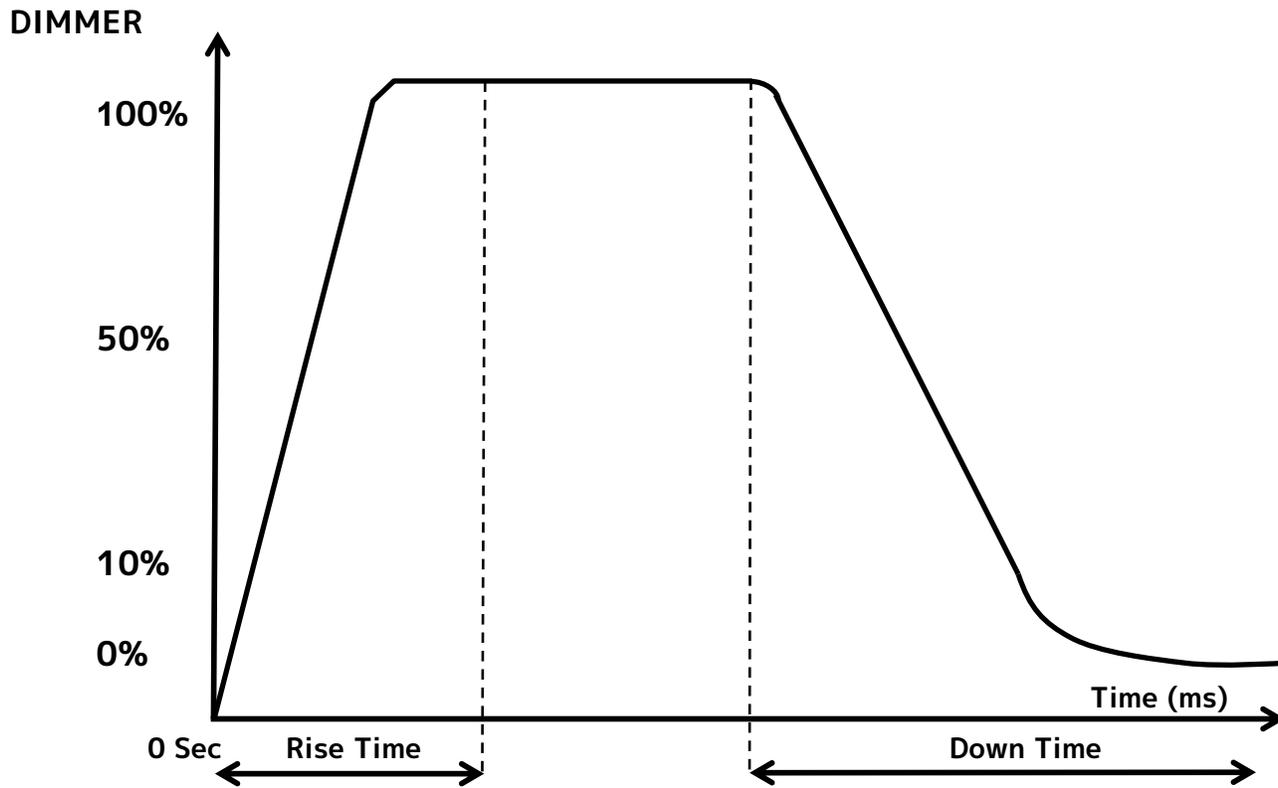
	0 sec Fade Time		1 sec Fade Time	
Dimming Curve **Ramp Effect**				
	Rise Time (ms)	Down Time (ms)	Rise Time (ms)	Down Time (ms)
Standard (default)	0	0	0	0
Stage	780	1100	1540	1660
TV	1180	1520	1860	1940
Architectural	1380	1730	2040	2120
Theatre	1580	1940	2230	2280
Stage 2	0	1100	0	1660
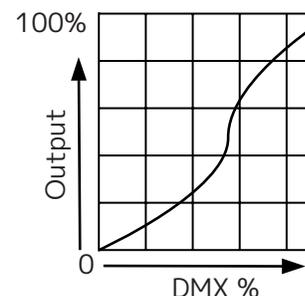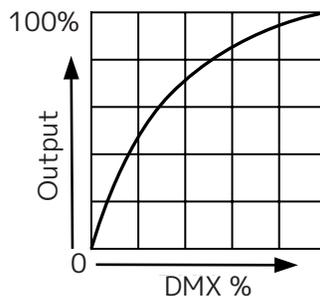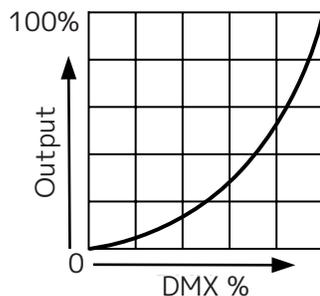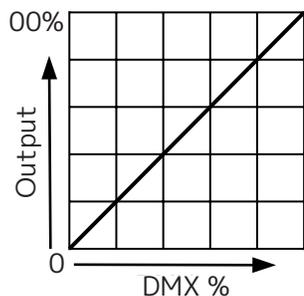
DAISY CHAIN POWER LINKING

These units have the capability to be daisy chained together via the power in/out ports. **The maximum number of units that can be linked together in this manner is as follows:**
· **10 units maximum when running on 120V power.**
· **20 units maximum when running on 240V power.**

DO NOT EXCEED THE NUMBER OF UNITS LISTED ABOVE.

DO NOT MIX MAKE AND MODEL TYPES WHEN DAISY CHAINING! All units that are connected in this manner must be of the same make and model type.

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.

DIMENSIONAL DRAWINGS

Ø 6.3 in (Ø160.4mm)

6.8 in (173.0mm)

3.7 in (95.1mm)

10.2 in (258.0mm)

10.1 in (257.5mm)
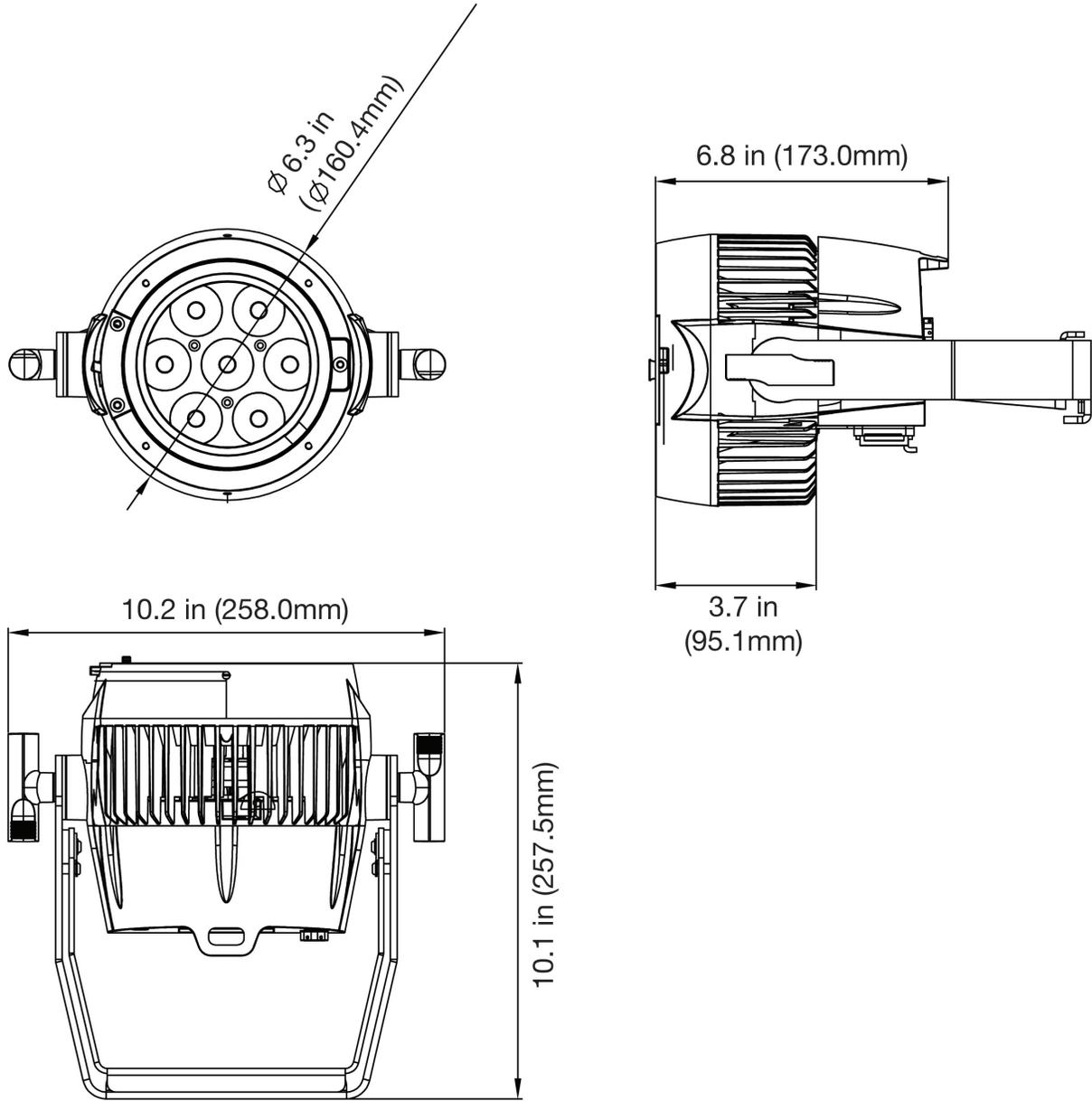
Dimensions may not be drawn to scale.

SPECIFICATIONS

SOURCE:
• Light Source: 7 x 20-Watt Quad RGBL LEDs (4-IN-1: Red, Green, Blue & Lime)

PHOTMETRIC DATA:
• Beam angle: 10° (Includes 25° removable frost filter)
• CRI: 84
• CRI R9: 76.6
• Lumens: 2500

EFFECTS:
• Linear Color Temperature Control (2700K to 7000K)
• Preset Color Temperatures (2700K, 3200K, 4000K, 5600K and 6500K)
• 16-Bit Fine Color Control (Red, Green, Blue & Lime)
• 64 built-in Color Macros

CONTROL / CONNECTIONS:
• 4-button, DMX digital display on rear panel
• Operational modes: Static Color Mode, RGBL Dimmer Mode, Program Mode and DMX Controlled
• Supports RDM (Remote Device Management)
• With Wired Digital Communication Network
• 6 selectable Dimming Modes (Standard, Stage, TV, Architectural, Theatre & Stage 2)
• 4 selectable Dim Curves (Linear, Square Inv. Squa, S-Curve)
• Adjustable Refresh Rate (14 presets from 900 – 25,000Hz)
• Flicker Free operation (No flickering on camera)
• LED pulse and strobe effect
• Electronic Dimming: 0 - 100%
• 6 DMX Modes: 4, 7, 8, 10, 13 & 16-channel
• Quiet fan mode

CONSTRUCTION:
• IP65 Rated: Ingress Protection against liquid, snow, dust and sand
• All metal construction
• IP Rated rubber covers protect In/Out Locking Power connectors and IP rated 5-pin sockets
• Locking, outdoor IN/Out Power connectors
• Data linkable via 5-pin XLR DMX connections
• Scissor Yoke & safety eye

ELECTRICAL / THERMAL:
• Multi-voltage operation: AC 100-240V, 47/63Hz
• Daisy chain: 10 @ 120V, 20 @ 220V
• Max power: 103W

DIMENSIONS / WEIGHT:
• Dimensions (LxWxH): 8.65" x 6.5" x 9.5" / 220x160x242mm
• Weight: 7.5 lbs. / 3.45 kg.

APPROVALS / RATINGS:
• cETLus (Control # 4010765)
• IP65

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

ACCESSORIES

SKU NUMBER	DESCRIPTION
ENC327	ADJ Encore LP7IP
ELP7L100	100-degree Frost Filter
ELP7L60	60-degree Frost Filter
ELP7L20	20-degree Frost Filter
ELP7L30X60	30x60-degree Frost Filter
ELP7L1X40	1x40-degree Frost Filter