

DESIGN WASH LED ZOOM CWTM

user manual



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DOCUMENT VERSION



Please check www.elationlighting.com for the latest revision/update of this manual.

Date	Document Version	Software Version	DMX Channel Modes	Notes
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GENERAL INFORMATION

INTRODUCTION

Congratulations, you have just purchased one of the most innovative and reliable lighting fixtures on the market today! The **DESIGN WASH LED ZOOM CW™** has been designed to perform reliably for years when the guidelines in this booklet are followed. Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this unit. These instructions contain important information regarding safety during use and maintenance.

UNPACKING

Thank you for purchasing the **DESIGN WASH LED ZOOM CW™** by Elation Professional®. Every **DESIGN WASH LED ZOOM CW™** 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 unit for damage and be sure all accessories necessary to operate the unit have arrived intact. In the event damage has been found or parts are missing, please contact our customer support team for further instructions. Please do not return this unit to your dealer without first contacting customer support at the number listed below. Please do not discard the shipping carton in the trash. Please recycle whenever possible.

BOX CONTENTS

- (1) 3-Pin XLR Cable
- (1) Omega Bracket (Holder)
- (1) Safety Cable
- Manual & Warranty Card



CUSTOMER SUPPORT

Elation Professional® provides a customer support line, to provide set up help and to answer any question should you encounter problems during your set up or initial operation. You may also visit us on the web at www.elationlighting.com for any comments or suggestions. For service related issue please contact Elation Professional®.

ELATION SERVICE USA - Monday - Friday 8:00am to 5:00pm PST

Voice: 323-582-3322 Fax: 323-832-9142

E-mail: support@elationlighting.com

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

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E-mail: support@elationlighting.eu

WARRANTY REGISTRATION

Please fill out the enclosed warranty card to validate your purchase. All returned service items whether under warranty or not, must be freight pre-paid and accompany 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 and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. Items returned without a R.A. number clearly marked on the outside of the package will be refused and returned at customer's expense. You may obtain a R.A. number by contacting customer support at 323-582-3322.

IMPORTANT NOTICE!

There are no user serviceable parts inside this unit. Do not attempt any repairs yourself; doing so will void your manufactures warranty. Damages resulting from modifications to this fixture and/or the disregard of safety and general user instructions found in this user manual void the manufactures warranty and are not subject to any warranty claims and/or repairs.



LIMITED WARRANTY

- A. Elation Professional® hereby warrants, to the original purchaser, Elation Professional® products to be free of manufacturing defects in material and workmanship for a period of two years (730 days), and Elation Professional® product rechargeable batteries to be free of manufacturing defects in material and workmanship for a period of six months (180 days), from the original date of purchase. This warranty excludes discharge lamps and all product accessories. 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, send the product only to the Elation Professional® factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, Elation Professional® will pay return shipping charges only to a designated point within the United States. If any product 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, Elation Professional® shall have no liability what so ever for loss and/or 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 Elation Professional® concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the Elation Professional® factory unless prior written authorization was issued to purchaser by Elation Professional®; if the product is damaged because 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 any maintenance, cleaning or periodic check-up. During the periods as specified above, Elation Professional® will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of Elation Professional® under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Elation Professional®. All products covered by this warranty were manufactured after January 1, 1990, and bare identifying marks to that effect.
- E. Elation Professional® reserves the right to make changes in design and/or performance 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 the products described above. Except to the extent prohibited by applicable law, all implied warranties made by Elation Professional® in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty periods set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said periods have 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 Elation Professional® be liable for any loss and/or damage, direct and/or consequential, arising out of the use of, and/or the inability to use, this product.
- G. This warranty is the only written warranty applicable to Elation Professional® products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.



SAFETY INSTRUCTIONS



The **DESIGN WASH LED ZOOM CW™** is an extremely sophisticated piece of electronic equipment. To guarantee a smooth operation, it is important to follow the guidelines in this manual. The manufacturer of this device will not accept responsibility for damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual.



This device falls under **PROTECTION CLASS 1**. It's essential this device be grounded properly. Only qualified personnel should perform all electrical connections.



KEEP THIS FIXTURE AWAY FROM RAIN AND MOISTURE!



UNPLUG POWER BEFORE SERVICING FIXTURE



NEVER TOUCH FIXTURE DURING OPERATION AS IT MAY BE HOT



NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE SENSITIVE PERSONS MAY SUFFER AN EPILETIC SHOCK

- For proper operation, follow the **Installation** guidelines described in this manual. Only qualified
 and certified personnel should perform installation of this fixture and only the original rigging parts
 (brackets, holders, clamps, safety cables) included with this fixture should be used for installation.
 Any modifications will void the original manufactures warranty and increase the risk of damage
 and/or personal injury.
- Never look directly into the light source of this fixture to prevent risk of injury to your retina, which
 may induce blindness. Those suffering from EPILEPSY should avoid looking directly into the light
 source of this unit at all times.
- The fan and air inlets must remain clean and never blocked. Allow approx. 6" (15cm) between this fixture and other devices or a wall for proper cooling.
- Always disconnect 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.
- Do not operate this fixture if the power cord has become frayed, crimped and/or damaged. If the power cord is damaged, replace it immediately with a new one of similar power rating.



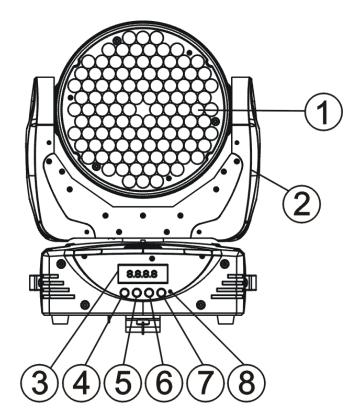
GENERAL GUIDELINES

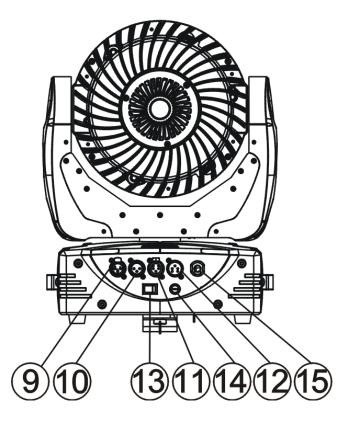
• NEVER OPEN THIS FIXTURE WHILE IN USE!

- 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.
- This fixture is a professional lighting effect designed for INDOOR / DRY LOCATIONS
 ONLY on stage, in nightclubs, theatres, etc.
- Please make sure there are NO FLAMMABLE MATERIALS close to the fixture while operating, to prevent any fire hazard.
- The fixture must be installed in a location with adequate ventilation, at least 1.5 feet (.5m) from adjacent surfaces. Be sure no air ventilation slots are blocked.
- DO NOT attempt installation and/or operation without knowledge how to do so.
- **DO NOT** permit operation by persons who are not qualified to operate this type of fixture. Most damages are the result of operations by nonprofessionals.
- Consistent operational breaks may ensure the fixture will function properly for many years to come.
- **DO NOT** shake fixture, avoid brute force when installing and/or operating fixture.
- Always install the fixture with an appropriate safety cable. When installing the
 fixture in a suspended environment, always use mounting hardware that is no less
 than M10 x 25 mm, also be sure the hardware is insert in the pre-arranged screw
 holes in the bracket of the fixture.
- Use the original packaging and materials to transport the fixture in for service.
- DO NOT TOUCH the housing bare-hand during its operation. Turn OFF the power and allow approximately 15 minutes for the fixture to cool down before replacing or serving.



FIXTURE OVERVIEW





- 1. LED Assembly
- 2. Yoke Assembly
- 3. LCD Menu Control Display
- 4. MENU Button
- 5. UP Button
- 6. DOWN Button
- 7. ENTER Button
- 8. Microphone
- 9. 3-Pin DMX OUT
- 10. 3-Pin DMX IN
- 11. 5-Pin DMX OUT
- 12. 5-Pin DMX IN
- 13. Power Switch
- 14. Fuse Holder
- 15. Power Cord



FIXTURE INSTALLATION



FLAMMABLE MATERIAL WARNING

Keep fixture at least 5.0 ft. (1.5m) away from any flammable materials, decorations, pyrotechnics, etc.



ELECTRICAL CONNECTIONS

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



CAUTIONS

- For added protection, mount the fixture in areas outside walking paths, seating areas, or in areas were unauthorized personnel might reach the fixture.
- Ambient operating temperature range for this fixture is 5°F to 113°F (-15°C to 45°C).
 Do not use the fixture under or above this temperature.
- Before mounting the fixture to any surface, make sure the installation area can hold a minimum point load of 10 times the weight of the fixture. (210 lbs / 95 kg)
- Fixture installation must always be secured with a secondary safety attachment,
 such as an appropriate safety cable.
- Never stand directly below the device when mounting, removing or servicing.

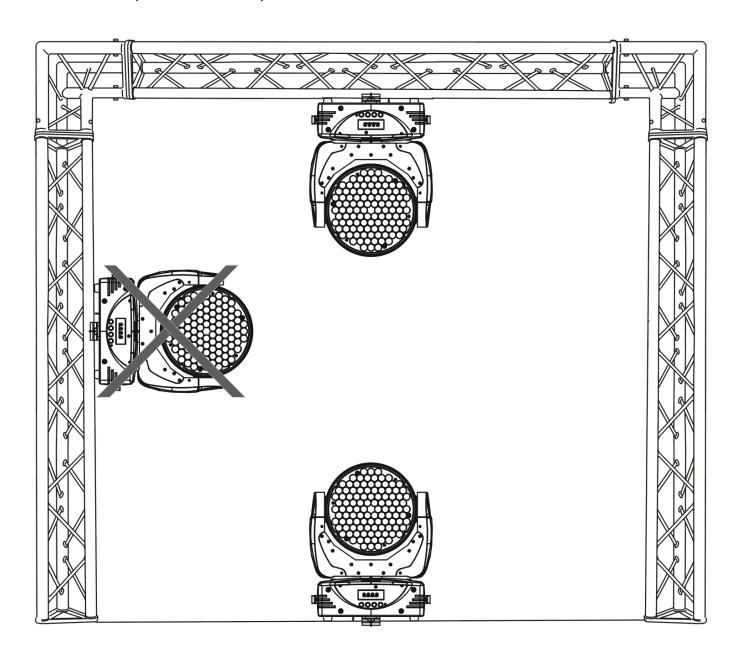
MOUNTING

The **DESIGN WASH LED ZOOM CW™** is fully operational in two different mounting positions, hanging upside-down from a ceiling, or set on a flat level surface (see illustration on the next page). Be sure this fixture is kept at least 1.5 feet (0.5m) away from any flammable materials (decoration etc.). Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.



MOUNTING POINTS

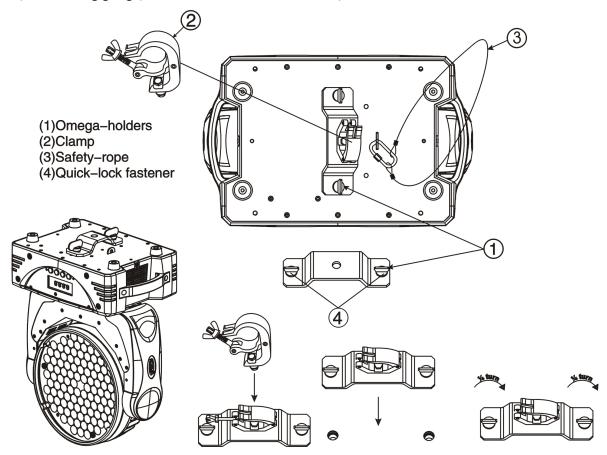
- Overhead mounting requires extensive experience, including amongst others
 calculating working load limits, installation material being used, and periodic
 safety inspection of all installation material and the device. If you lack these
 qualifications, do not attempt the installation yourself. Improper installation can
 result in bodily injury.
- Be sure the fixture is kept at least 0.5m (1.5 feet) away from any flammable materials (decoration etc.).





CLAMP MOUNTING

The **DESIGN WASH LED ZOOM CW™** provides a unique mounting bracket assembly that integrates the bottom of the base, the included "Omega Bracket", and the safety cable rigging point in one unit (see the illustration below). When mounting this fixture to truss be sure to secure an appropriately rated clamp to the included omega bracket using a M10 screw fitted through the center hole of the "Omega Bracket" and attach at least one properly rated safety cable to the integrated safety cable rigging point in the base assembly.



SECURING

- Secure the clamp to the bracket using a M12 screw fitted through the Φ 13 center hole.
- Insert the $\frac{1}{4}$ Turn Twist Locks of the first Omega bracket into the respective holes on the bottom of the device. Tighten the Twist Locks a $\frac{1}{4}$ turn clockwise.
- Install the second Omega bracket on the top of the device in the same way.
- Pull a safety cable through the holes on the bottom of the base and over the trussing system or a safe installation.



This is very important to prevent the fixture from dropping if the clamp fails.



UNDERSTANDING DMX

DMX-512

DMX is short for Digital Multiplex. This is a universal protocol used by most lighting and controller manufactures as a form of communication between intelligent fixtures and controllers. DMX allows all makes and models of different manufactures to be linked together and operate from a single controller. This is possible as long as all the fixtures and the controller are DMX compliant. A DMX controller sends the DMX data instructions to the fixture allowing the user to control the different aspects of an intelligent light. DMX data is sent out as serial data that travels from fixture to fixture via data "IN" and data "OUT" XLR terminals located on the fixtures (most controllers will only have output jacks).

DMX LINKING

To ensure proper DMX data transmission, always use proper DMX cables and a terminator. When using several DMX fixtures try to use the shortest cable path possible. Never split a DMX line with a "Y" style connector. The order in which the fixtures are connected in a DMX line does not influence the DMX addressing. For example; a fixture assigned a starting DMX address of 1 may be placed anywhere in the DMX chain, at the beginning, at the end, or anywhere in the middle. The DMX controller knows to send data assigned to address 1 to that fixture no matter where it is located in the DMX chain. The **DESIGN WASH LED ZOOM CW™** can be controlled via DMX-512 protocol and the DMX address is set via the control menu.

DATA CABLE (DMX Cable) REQUIREMENTS (For DMX and Master/Slave Operation)

Your fixture and your DMX controller require a standard 3-pin or 5-pin XLR connector for data input and data output (see figure below). If you are making your own cables, be sure to use two conductor, shielded digital DMX cable rated at 120 ohms; this cable is designed for DMX transmission and may be purchased from your Elation dealer or at most professional lighting retailers. Your cables should be made with a male and female XLR connector on either end of the cable. Also, remember that a DMX line must be daisy chained and cannot be split, unless using an approved DMX splitter such as the Elation Opto Branch 4TM or DMX Branch/4TM.



DMX Output 3-Pin XLR Socket



DMX Input 3-Pin XLR Socket



1: Ground 2: Data (-) 3: Data (+)

DMX Output 5-Pin XLR Socket



DMX Input 5-Pin XLR Socket



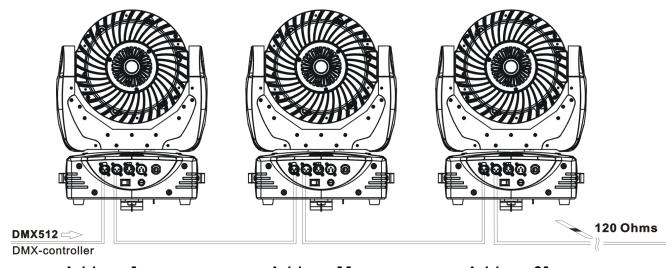
1: Ground 2: Data (-) 3: Data (+) 4: Open 5: Open



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

DMX-512 CONTROLLER CONNECTION

Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the **DESIGN WASH LED ZOOM CWTM** (Please refer to the diagram below.). You can chain multiple panels together through serial linking. The cable that should be used is two conductor, shielded DMX cable with XLR input and output connectors. Always be sure daisy chain your in and out data connections, never split or "Y" your DMX connections unless you are using an approved DMX splitter such as the Elation Opto Branch 4^{TM} or DMX Branch/ 4^{TM} .

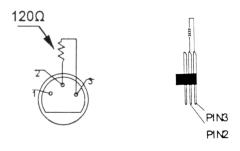


Address 1 Address 11 Address 21



DMX-512 CONNECTION WITH DMX TERMINATOR

A DMX terminator should be used in all DMX lines especially in longer runs. The use of a terminator may avoid erratic behavior in your DMX line. A terminator is a 120 ohm 1/4 watt resistor that is connected between pins 2 and 3 of a male XLR connector (DATA + and DATA -). This fixture is inserted in the female XLR connector of the last fixture in your daisy chain to terminate the line. Using a *line terminator (Elation part: DMXT PACK) will decrease the possibilities of erratic behavior.*



Termination reduces signal errors and avoids signal transmission problems and interference. It is always advisable to connect a DMX terminal, (Resistance 120 Ohm 1/4 W) between PIN 2 (DMX-) and PIN 3 (DMX +) of the last fixture.

5-Pin XLR DMX CONNECTORS

Some manufactures use 5-pin XLR connectors for DATA transmission in place of 3-pin. 5-pin XLR fixtures may be implemented in a 3-pin XLR DMX line. When inserting standard 5-pin XLR connectors in to a 3-pin line a cable adaptor must be used, these adaptors are readily available at most electric stores. The following chart details a proper cable conversion.

3-Pin XLR to 5-Pin XLR Conversion				
Conductor	3-Pin XLR Female (Out)	5-Pin XLR Male (In)		
Ground/Shield	Pin 1	Pin 1		
Data Compliment (- signal)	Pin 2	Pin 2		
Data True (+ signal)	Pin 3	Pin 3		
Not Used		Pin 4 - Do Not Use		
Not Used		Pin 5 - Do Not Use		



DMX ADDRESSING

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

You can set the same starting address for all fixtures or a group of fixtures, or set different address for each individual fixture. Be advised that setting all fixtures to the same DMX address will subsequently control all fixtures in the same fashion, in other words, changing the settings of one channel will affect all the fixtures simultaneously.

If you set each fixture to a different DMX address, each unit will start to "listen" to the channel number you have set, based on the quantity of control channels (DMX channels) of each fixture. That means changing the settings of one channel will only affect the selected fixture.

In the case of the **DESIGN WASH LED ZOOM CWTM** which is a 10 Channel fixture, you should set the starting DMX address of the first unit to 1, the second unit to 11 (1 + 10), the third unit to 21 (11 + 10), the fourth unit to 31 (21 + 10) and so on.

Note: During start-up the DESIGN WASH LED ZOOM CW™ will automatically detect whether a DMX data signal is being received or not. If DMX data signal is being received, the display will show "Addr=XXX" (XXX representing the actual DMX address). If the fixture is not receiving a DMX signal the display will flash. If your fixture is connected to a DMX controller and the display is flashing (not receiving a DMX signal), please check the following:

- The 3-PIN or 5-PIN XLR input plug (cable with DMX signal from controller) is not connected or is not inserted completely into the DMX input jack of the fixture.
- The DMX controller is switched off or defective.
- The DMX cable or connector is defective.
- A DMX terminator has been inserted into the last fixture in your DMX chain.



FIXTURE MENU

ON-BOARD SYSTEM MENU

The **DESIGN WASH LED ZOOM CW™** comes with an easy to navigate system menu. The next section will detail the functions of each command in the system menu.

LCD MENU CONTROL PANEL

The **DESIGN WASH LED ZOOM CW™** control panel (see image below) located on back of the fixture offers several features to select form such as setting the DMX address, running pre-programmed macros, changing display options, and resetting the fixture to factory defaults. There are (4) buttons, which are explained below.

[MENU] Press this button to enter the fixture menus and to return/exit to the previous menu. The display will automatically exit the fixture menus in 10 seconds from the last button press.

[UP] [DOWN] Press these buttons to navigate through the different menu functions and access sub-menu selections.

[ENTER] Press this button to select a menu item and press again to confirm your selection.

NOTE: To access the LCD Menu Control Display via the internal battery when the fixture is not powered, press either the **UP** or **DOWN** buttons. The LCD Menu Control Display will shut **OFF** automatically about 10 seconds from the last button press.





DESIGN WASH	LED ZOOM CWT	M SYSTEM MENU	*D	efault Settings Shaded
	Set DMX Address	001 - 499	DMX Address Setting	
	Value Display	Auto Program, PAN	DMX Value Display	
FUNCTION	Set To Slave	Slave1, Slave2, Slav	Slave Setting	
	Auto Program	Master / Alone	Auto Program	
	Music Control	Master / Alone		Music Control
		Current Time	XXXX(Hours)	Power On Running Time
	 Time	Total Life Hours	XXXX(Hours)	Fixture Running Time
	Information	Last Run Hours	XXXX(Hours)	Fixture Last Times Clear
INFORMATION	Information	Timer Password	Password= XXX	Timer Password <i>038</i>
		Clear Last Run	ON/ OFF	Clear Fixture Last time
	Temperature Info	Head Temperature	XXX C°/F°	Fixture Temperature
	Software Version	Vx.x	Software Version	
	Status Setting	Address via DMX	ON/OFF	Address Via DMX
		No DMX Status	Close/ Hold /Auto/Music	Auto Run If No DMX
		Pan Reverse	ON/ OFF	Pan Reverse Movement
		Tilt Reverse	ON/ OFF	Tilt Reverse Movement
		Fine Resolution	ON/OFF	Fine Resolution Switch
		Pan Degree	630/ 540	Pan Degree Select 1, 2, 3
		Feedback	ON/OFF	Movement Feedback
		Movement Speed	Speed 1 ~ 4	Select Movement Mode
		Mic Sensitivity	0-99% 70%	Sensitivity of Microphone
PERSONALITY	Service Setting	Service Password	Password= XXX	Service Password = 050
		Fan Voltage	HIGH/ LOW	Select Fan Voltage
	Fans Control	Auto Fans Speed		
		High Fans Speed Low Fans Speed		Select Fans Speed Mode
	Display Setting	Shutoff Time	02~60m 05m	Display Shut Off Time
	. , ,	Celsius Fahrenheit		Temperature Switch
	Temperature C/F			Between °C or °F
	Initial Effect	PAN = XXX		Initial Effect Position
	Reset Default	ON/ OFF	Restore Factory Settings	
RESET	Reset All			Reset All Settings
FUNCTION	Reset Pan&Tilt			Reset Pan&Tilt Settings



	Test Channel	Auto Program, PAN, PAN-Fine, TILT, TILT-Fine, Move Speed, Strobe, Dimmer, ZOOM		Test Functions
EFFECT	Manual Control	Auto Program, PAN, PAN-Fine, TILT, TILT-Fine, Move Speed, Strobe, Dimmer, ZOOM		Fine Adjustment of Functions (=000 ~ =255)
ADJUST	Calibrate Values	-Password- PAN TILT ZOOM	Password=XXX (=000 ~ =255) (=000 ~ =255) (=000 ~ =255)	Password = 050 Fine Adjustment of PAN Fine Adjustment of TILT Fine Adjustment of ZOOM
USER MODE	User Mode	Wash LED ZOOM User Mode A User Mode B User Mode C		Edit Channel Numbers For User Modes
SETTING	Edit User Mode A Edit User Mode B Edit User Mode C		Preset User Modes	
	Select Program	Auto Pro Part1 = Program 1 ~ 10 Program 1 Auto Pro Part2 = Program 1 ~ 10 Program 2 Auto Pro Part3 = Program 1 ~ 10 Program 3		Select Auto Programs To Be Run
EDIT PROGRAM	Edit Program	Program 1 ~ Program 10	Program Test, Step 01=SCxxx Step 64=SCxxx	Testing Program Program In Loop Save And Exit
	Edit Scenes	Edit Scene 001 ~ Edit Scene 250	Auto Program, PAN, PAN-Fine, TILT	Save And Automatically Return Manual Scenes Edit
	Record Controller	XX~XX		Automatic Scenes Recorder



FUNCTION - Set DMX Address

Adjust the desired DMX address via the Control Panel.

- 1. Press **MENU** to access the main menu and press **ENTER**.
- 2. Press **UP/DOWN** until **Set DMX Address** is displayed and press **ENTER**.
- Current DMX address is displayed (=001 ~ =499), press UP/DOWN to select desired DMX address (=001 ~ =499), then press ENTER to confirm selection and exit menu.

FUNCTION - Value Display

Display the DMX 512 value of each channel.

- 1. Press **MENU** to access the main menu and press **ENTER**.
- 2. Press UP/DOWN until Value Display is displayed and press ENTER.
- 3. Press **UP/DOWN** to select desired value then press **ENTER** to confirm selection and exit menu.

FUNCTION - Set To Slave

Define the fixture as a slave.

- 1. Press **MENU** to access the main menu and press **ENTER**.
- 2. Press **UP/DOWN** until **Set To Slave** is displayed and press **ENTER**.
- 3. Press **UP/DOWN** to select desired mode **(=Slave1, =Slave2, =Slave3)**, then press **ENTER** to confirm selection and exit menu.

FUNCTION - Auto Program

Define the fixture mode (Master or Alone) for running Auto Programs. Select the desired internal programs under **Select Program**, set the number of steps under **Edit Program**, and edit the individual scenes under **Edit Scenes**.

- 1. Press **MENU** to access the main menu and press **ENTER**.
- 2. Press **UP/DOWN** until **Auto Program** is displayed and press **ENTER**.
- Press UP/DOWN to select desired mode (=Master, =Alone), then press ENTER to confirm selection and exit menu.



FUNCTION – Music Control

Define the fixture mode (Master or Alone) for running Auto Programs via sound activation, default is Master.

- 1. Press **MENU** to access the main menu and press **ENTER**.
- 2. Press **UP/DOWN** until **Music Control** is displayed and press **ENTER**.
- Press UP/DOWN to select desired mode (=Master, =Alone), then press ENTER to confirm selection and exit menu.

INFORMATION - Time Information - Current Time

Display the running time of the fixture from last power ON.

The counter is reset after each time the device is powered OFF.

- Press MENU to access main menu, press UP/DOWN until Information is displayed and press ENTER.
- 2. Press **UP/DOWN** until **Time Information** is displayed and press **ENTER**.
- 3. Press **UP/DOWN** until **Current Time** is displayed, and press **ENTER** again and **XXXh** (Hours) is displayed, and press **MENU** to return to previous menu.

INFORMATION - Time Information - Total Life Hours

Display the total running time of the fixture from initial power ON.

- Press MENU to access main menu, press UP/DOWN until Information is displayed and press ENTER.
- 2. Press **UP/DOWN** until **Time Information** is displayed and press **ENTER**.
- Press UP/DOWN until Total Life Hours is displayed, press ENTER again and XXXh (Hours) is displayed, and press MENU to return to the previous menu.

INFORMATION - Time Information - Last Run Hours

Display the running time of the fixture from its previous cycle.

- Press MENU to access main menu, press UP/DOWN until Information is displayed and press ENTER.
- Press UP/DOWN until Time Information is displayed and press ENTER.
- 3. Press **UP/DOWN** until **Last Run Hours** is displayed, press **ENTER** and **XXXh** (Hours) is displayed, and press **MENU** to return to the previous menu.



INFORMATION - Time Information - Timer Password

Display the timer password. (=038)

- Press MENU to access main menu, press UP/DOWN until Information is displayed and press ENTER.
- 2. Press UP/DOWN until Time Information is displayed and press ENTER.
- 3. Press **UP/DOWN** until **Timer Password** is displayed and press **ENTER**.
- 4. Press **UP/DOWN** to select 3-digit password and press **ENTER** to confirm selection, and press **MENU** to return to the previous menu.

INFORMATION - Time Information - Clear Last Run

Clear the last run time of the fixture, default is **OFF**. A correct password must be entered in the **Timer Password** menu in order to clear last run time.

- Press MENU to access main menu, press UP/DOWN until Information is displayed and press ENTER.
- Press UP/DOWN until Time Information is displayed and press ENTER.
- 3. Press UP/DOWN until Clear Last Run is displayed and press ENTER.
- 4. Press **UP/DOWN** to select desired mode **(=ON, =OFF)** and press **ENTER** to confirm selection, and press **MENU** to return to the previous menu.

INFORMATION - Temperature Info - Head Temperature

Display the temperature of the fixture, default is **Fahrenheit**.

- Press MENU to access main menu, press UP/DOWN until Information is displayed and press ENTER.
- Press UP/DOWN until Temperature Info is displayed and press ENTER, and Head Temperature is displayed.
- 3. Press **ENTER** and **=XXXF** (degrees) is displayed.
- 4. Press **MENU** to return to the previous menu.

INFORMATION - Software Version

Display the software version of the fixture.

- Press MENU to access main menu, press UP/DOWN until Information is displayed and press ENTER.
- 2. Press **UP/DOWN** until **Software Version** is displayed and press **ENTER**, and the display will show = **VX.X** (software version #).
- 3. Press **MENU** to return to the previous menu.



PERSONALITY - Status Settings - Address Via DMX

When ON, define the desired DMX address via an external controller.

- 1. Connect the fixture to the external controller and power ON.
- 2. Set the DMX value of **Channel 1** on the controller to **(7)**.
- 3. Set the DMX value of **Channel 2** on the controller to **(7)** or **(8)**. When set to **(7)**, the DMX address can be set between **(1)** and **(255)**. When set to **(8)**, the DMX address can be set between **(256)** and **(511)**.
- 4. Using **Channel 3** on the controller set the desired DMX address of the fixture.

Example 1:

If the desired DMX address is 57, set Channel 1 to a value of (7), set Channel 2 to a value of (7), and then set Channel 3 to a value of (57).

Example 2:

If the desired DMX address is 420, set Channel 1 to a value of (7), set Channel 2 to a value of (8), and then set Channel 3 to a value of (164). (256+164=420)

5. After setting **Channel 3** to the desired DMX address value, wait for approximately 20 seconds for the fixture to complete the address reset function.

PERSONALITY - Status Settings - No DMX Status

Fixture runs in Auto Run if NO DMX signal is detected. Options include

(Hold/Close Shutter/Music Control/Auto Program), default is Hold.

- Press MENU to access the main menu, press UP/DOWN until Personality is displayed and press ENTER.
- 2. Press UP/DOWN until Status Settings is displayed and press ENTER.
- 3. Press **UP/DOWN** until **No DMX Status** is displayed and press **ENTER**.
- Press UP/DOWN to select desired mode (=Hold, =Close Shutter, =Music Control, =Auto Program) and press ENTER to confirm selection, and press MENU to return to the previous menu.

PERSONALITY - Status Settings - Pan Reverse

Reverse the PAN movement, default is **OFF**.

- 1. Press **MENU** to access the main menu, press **UP/DOWN** until **Personality** is displayed and press **ENTER**.
- Press UP/DOWN until Status Settings is displayed and press ENTER.
- 3. Press UP/DOWN until Pan Reverse is displayed and press ENTER.
- 4. Press **UP/DOWN** to select desired mode **(=ON, =OFF)** and press **ENTER** to confirm selection, and press **MENU** to return to the previous menu.



PERSONALITY - Status Settings - Tilt Reverse

Reverse the TILT movement, default is OFF.

- 1. Press **MENU** to access the main menu, press **UP/DOWN** until **Personality** is displayed and press **ENTER**.
- 2. Press UP/DOWN until Status Settings is displayed and press ENTER.
- 3. Press **UP/DOWN** until **Tilt Reverse** is displayed and press **ENTER**.
- 4. Press **UP/DOWN** to select desired mode **(=ON, =OFF)** and press **ENTER** to confirm selection, and press **MENU** to return to the previous menu.

PERSONALITY - Status Settings - Fine Resolution

Select desired DMX channel operation from **8bit** (12 available DMX channels / NO PAN/TILT Fine Control Channels), or **16bit** (14 available DMX channels + PAN/TILT Fine Control Channels).

- 1. Press **MENU** to access the main menu, press **UP/DOWN** until **Personality** is displayed and press **ENTER**.
- 2. Press **UP/DOWN** until **Status Settings** is displayed and press **ENTER**.
- 3. Press **UP/DOWN** until **Fine Resolution** is displayed and press **ENTER**.
- 4. Press **UP/DOWN** to select desired mode **(=ON, =OFF)** and press **ENTER** to confirm selection, and press **MENU** to return to the previous menu.

PERSONALITY - Status Settings - Pan Degree

Select desired maximum degree of PAN movement (540° or 630°), default is 540°.

- Press MENU to access the main menu, press UP/DOWN until Personality is displayed and press ENTER.
- Press UP/DOWN until Status Settings is displayed and press ENTER.
- 3. Press UP/DOWN until Pan Degree is displayed and press ENTER.
- 4. Press **UP/DOWN** to select desired mode **(=540, =630)** and press **ENTER** to confirm selection, and press **MENU** to return to the previous menu.



PERSONALITY - Status Settings - Feedback

Select desired Feedback setting which allows for automatic **PAN** and **TILT** movement correction in the event either one, is disrupted during normal operation, default is **ON**.

- 1. Press **MENU** to access the main menu, press **UP/DOWN** until **Personality** is displayed and press **ENTER**.
- 2. Press UP/DOWN until Status Settings is displayed and press ENTER.
- 3. Press **UP/DOWN** until **Feedback** is displayed and press **ENTER**.
- 4. Press **UP/DOWN** to select desired mode **(=ON, =OFF)** and press **ENTER** to confirm selection, and press **MENU** to return to the previous menu.

PERSONALITY - Status Settings - Movement Speed

Select desired Movement Speed, default is **Speed 1**.

Speed 1 = (default) Slower than original Design Wash LED Pro for smoother, more precise movements.

Speed 2 = PAN and TILT speeds identical to original Design Wash LED Pro.

Speed 3 = Increased PAN speed, 0.5 seconds faster then original Design Wash LED Pro. TILT speed is the same.

- 1. Press **MENU** to access the main menu, press **UP/DOWN** until **Personality** is displayed and press **ENTER**.
- 2. Press **UP/DOWN** until **Status Settings** is displayed and press **ENTER**.
- 3. Press UP/DOWN until Movement Speed is displayed and press ENTER.
- 4. Press UP/DOWN to select desired mode (=Speed 1, =Speed 2, =Speed 3, =Speed 4) and press ENTER to confirm selection, and press MENU to return to the previous menu.

PERSONALITY - Status Settings - Mic Sensitivity

Select desired Microphone Sensitivity from 0% to 99%, default is 70%.

- 1. Press **MENU** to access the main menu, press **UP/DOWN** until **Personality** is displayed and press **ENTER**.
- Press UP/DOWN until Status Settings is displayed and press ENTER.
- 3. Press **UP/DOWN** until **Mic Sensitivity** is displayed and press **ENTER**.
- 4. Press **UP/DOWN** to select desired mode **(=00% ~ =99%)** and press **ENTER** to confirm selection, and press **MENU** to return to the previous menu.



PERSONALITY - Service Setting - Password

The Password is (=050).

- 1. Press **MENU** to access the main menu, press **UP/DOWN** until **Personality** is displayed and press **ENTER**.
- 2. Press **UP/DOWN** until **Service Setting** is displayed and press **ENTER**.
- 3. Press UP/DOWN until Service Password is displayed and press ENTER.
- 4. Press **UP/DOWN** to select 3-digit password and press **ENTER** to confirm selection, and press **MENU** to return to the previous menu.

PERSONALITY - Service Setting - Fan Voltage

Select desired Fan Voltage setting, **Low** for normal operation or **High** for extreme environmental / operation temperatures default is **Low Voltage**.



Using fans in High mode will decrease the life of the fan over time.

- 1. Enter the Service Password by following the steps in the above section.
- 2. Press **MENU** to access the main menu, press **UP/DOWN** until **Personality** is displayed and press **ENTER**.
- 3. Press **UP/DOWN** until **Service Setting** is displayed and press **ENTER**.
- 4. Press **UP/DOWN** until **Fan Voltage** is displayed and press **ENTER**.
- 5. Press **UP/DOWN** to select desired mode (=Low Voltage, =High Voltage) and press **ENTER** to confirm selection, and press **MENU** to return to previous menu.

PERSONALITY – Fans Control

Select desired Fans Control setting, default is **Auto Speed**.

Auto Speed = (default) Fans automatically switch between

High Speed = PAN and TILT speeds identical to original Design Wash LED Pro.

Low Speed = Increased PAN speed, 0.5 seconds faster then original Design Wash

- 1. Press **MENU** to access the main menu, press **UP/DOWN** until **Personality** is displayed and press **ENTER**.
- 2. Press **UP/DOWN** until **Fans Control** is displayed and press **ENTER**.
- Press UP/DOWN to select desired mode (=Auto Speed, =Low Speed, =High Speed) and press ENTER to confirm selection, and press MENU to return to the previous menu.



PERSONALITY - Display Setting – Shutoff Time

Shut off the Control Panel display after 02 to 59 minutes, default is **05** minutes.

- Press MENU to access the main menu, press UP/DOWN until Personality is displayed and press ENTER.
- 2. Press **UP/DOWN** until **Display Setting** is displayed and press **ENTER**.
- 3. Press ENTER and Shutoff Time=XX is displayed.
- 4. Press **UP/DOWN** to select desired time **(=OFF, =02 ~ =59)** and press **ENTER** to confirm selection and press **MENU** to return to the previous menu.

PERSONALITY – Temperature C/F

Display the temperature in Celsius or Fahrenheit, default is Fahrenheit.

- Press MENU to access the main menu, press UP/DOWN until Personality is displayed and press ENTER.
- 2. Press **UP/DOWN** until **Temperature C/F** is displayed and press **ENTER**.
- 3. Press **UP/DOWN** to select desired mode **(=Celsius, =Fahrenheit)** and press **ENTER** to confirm selection and press **MENU** to return to the previous menu.

PERSONALITY – Initial Effect

Display the initial effect position for DMX functions.

- Press MENU to access the main menu, press UP/DOWN until Personality is displayed and press ENTER.
- 2. Press UP/DOWN until Initial Effect is displayed and press ENTER.
- Tap UP/DOWN to select desired function and press ENTER to confirm selection.
- Press UP/DOWN to select desired position (=000 ~ =255), and press ENTER to confirm selection and press MENU to return to the previous menu.

PERSONALITY – Reset Default

Restore factory settings function (ON or OFF), the default is OFF.

- Press MENU to access the main menu, press UP/DOWN until Personality is displayed and press ENTER.
- 2. Press UP/DOWN until Reset Default is displayed and press ENTER.
- Press UP/DOWN to select desired mode (=ON, =OFF) and press ENTER to confirm selection.



RESET FUNCTION

Reset fixture function (Reset All or Reset Pan&Tilt).

- Press MENU to access the main menu, press UP/DOWN until Reset Function is displayed and press ENTER.
- Press UP/DOWN to select desired mode (=Reset All, =Reset Pan&Tilt) and press ENTER to confirm selection.

EFFECT ADJUST – Test Channel

Test each DMX function.

- Press MENU to access the main menu, press UP/DOWN until Effect Adjust is displayed and press ENTER.
- 2. Press **UP/DOWN** until **Test Channel** is displayed and press **ENTER**.
- 3. Press **UP/DOWN** to select desired function and press **ENTER** to confirm selection.

EFFECT ADJUST – Manual Control

Manual control of each DMX function.

- Press MENU to access the main menu, press UP/DOWN until Effect Adjust is displayed and press ENTER.
- 2. Press **UP/DOWN** until **Manual Control** is displayed and press **ENTER**.
- 3. Press **UP/DOWN** to select desired function and press **ENTER** to confirm selection.
- 4. Press **UP/DOWN** to select desired value **(=000 ~ =255)** and press **ENTER** to confirm selection and press **MENU** to return to the previous menu.



EFFECT ADJUST – Calibrate Values

Fine adjustments to PAN, TILT, and ZOOM. A correct password must be entered in order to make adjustments. The Password is **(=050)**. This function should only be performed by a technician familiar with the operations of this fixture. This function allows small adjustments to be made to the motor alignments to compensate for wear.



Improper use of this function can result in undesired operation!

Please contact **Elation Customer Support** for further instructions.

- Press MENU to access the main menu, press UP/DOWN until Effect Adjust is displayed and press ENTER
- Press UP/DOWN until Calibrate Values is displayed and press ENTER, press ENTER again and --Password-- is displayed, press UP/DOWN to select 3-digit password, and press ENTER to confirm selection.
- Press UP/DOWN to select desired value (PAN, TILT, ZOOM), and press ENTER
 to confirm selection, press UP/DOWN to select desired value (=000 ~ =255)
 and press ENTER to confirm selection and press MENU to return to the
 previous menu.

USERS MODE SET

USER MODE - This function allows the DMX channels assignment to be changed from the default value of 13, to either 8bit/11 channels or extended mode at 13 channels. This function also allows the user to create user defined channel orders allowing the fixture to match the channel order of other fixtures on the market for easier operation. A total of three user modes may be configured: User Mode A, User Mode B, and User Mode C:

EDIT USER MODE – This function allows the user to make the actual changes in the user-defined modes that are created in the previous function.

EDIT PROGRAM - The fixture comes equipped with a built-in DMX recorder that allows custom programs to be installed and recalled directly from the fixture's control board. Programs can be created and stored using the fixture's control board or by using an external DMX controller.



SELECT PROGRAM – This function allows the user to select one of ten of the user defined built-in programs. This program is then accessed in "Function Mode" under "Program Run."

EDIT PROGRAM – This function allows the user to edit the built-in programs.

EDIT SCENCES – This function allows the user to edit or define the actual scenes that are stored in the user defined built-in programs that are accessed in the previous step.

REC CONTROLLER - The DESIGN WASH LED ZOOM[™] features an integrated DMX recorder. Pre-programmed scenes can be transmitted to the fixture via any DMX compliant controller. This function allows those scenes to be stored in to the fixture's built-in memory and then subsequently used to create the user-defined programs.



DMX CHANNEL FUNCTIONS AND VALUES

CHAN		CONCINCING AND VALO		
		DESIGN WASH LED ZOOM CW™		
		'alues / Functions [10 DMX Channels]		
		ubject to change without any prior written notice.		
CHANNEL	VALUE	FUNCTION		
1		PAN MOVEMENT [8 Bit]		
	0-255	PAN Movement		
2		PAN MOVEMENT [16 Bit]		
	0-255	Fine Control Of PAN Movement		
3		TILT MOVEMENT [8 Bit]		
	0-255	TILT Movement		
4	0.055	TILT MOVEMENT [16 Bit]		
	0-255	Fine Control Of TILT Movement		
	0.005	SPEED PAN/TILT MOVEMENT		
5	0-225	Max To Min Speed		
	226-235	Blackout By Movement		
	236-255	NO Function		
6		WHITE LEDs [108 Total]		
	0-255	WHITE (0-Black - 255-100%)		
	0-31	SHUTTER, STROBE		
	32-63	Shutter CLOSED (ALL LEDs OFF) Shutter OPEN (ALL LEDs ON)		
	64-95	Strobe Effect SLOW to FAST		
7	96-127	Shutter OPEN (ALL LEDs ON)		
,	128-159	Pulse Effect In Sequences		
	160-191	Shutter OPEN (ALL LEDs ON)		
	192-223	Random Strobe Effect SLOW to FAST		
	224-255	Shutter OPEN (ALL LEDs ON)		
	224 200	DIMMER INTENSITY		
8	0-255	Intensity 0 to 100%		
	0.200	ZOOM		
9	0-255	Zoom		
	0 200	RESET INTERNAL PROGRAMS		
	0-79	Normal		
	80-84	ALL Motor Reset		
	85-87	SCAN Motor Reset		
	88-99	NO Function		
	100-119	Internal Program 1 (Scene 1 - 8)		
10	120-139	Internal Program 2 (Scene 9 - 16)		
	140-159	Internal Program 3 (Scene 17 - 24)		
	160-179	Internal Program 4 (Scene 25 - 32)		
	180-199	Internal Program 5 (Scene 33 - 40)		
	200-219	Internal Program 6 (Scene 41 - 48)		
	220-239	Internal Program 7 (Scene 49 - 56)		
	240-255	Sound Control (Scene of Program 1)		



ERROR CODES

When the fixture is powered ON, it automatically enters a reset/test program, which brings all the motors to a home position before it is ready. The display may show "Err channel is XX" if there are problems with one or more channels. "XX" stands for channel 1, 2, 3, 4, 5, 6 and 13, which have testing sensors for positioning. For example, when the display shows "Err channel is PAN", it means there is an error in channel 1. If there are errors on channel 1, channel 3, channel 6 at the same time, you may see the error messages, "Err channel is PAN", "Err channel is TILT", "Err channel is RED LED", flash 2 times, and then the fixture will go through a second reset/test program.

If the error messages remain after performing 2 reset/tests, only the channels that have errors will not work properly, all other channels will work normally. If after the third reset/test program all the errors have not been resolved, the fixture cannot function properly and therefore will place itself in a stand-by mode until repairs are made.

PAN - Error (PAN Yoke Movement Error)

This message will appear after completing the motor reset if the PAN movement is not located in the default position after the reset. This error can happen if the yoke's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper-motor or its driving IC on the main PCB is defective or fails.

TILT- Error (TILT Head Movement Error)

This message will appear after completing the motor reset if the TILT movement is not located in the default position after the reset. This error can happen if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepping-motor or its driving IC on the main PCB is defective or fails.



CLEANING AND MAINTENANCE



CAUTION

Disconnect power before cleaning or maintenance.

CLEANING

Frequent cleaning is recommended to insure 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 at least every 20 days with a soft cloth to avoid dirt/debris accumulation.
- Never use alcohol, solvents, or ammonia based cleaners.

MAINTENANCE

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

Please refer to the following points during routine inspections:

- A detailed electric 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. Lose 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 to enter into the fixture. Damaged rigging points or unsecured
 rigging could cause the 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.



TECHNICAL SPECIFICATIONS

FEATURES

High Output Pro Grade Zoom Wash LED Luminaire 8,300 Total Lumens 6° - 19° Motorized Zoom Flicker Free Operation for Broadcast TV and FILM

SOURCE

(108) 3W Osram™ 7,500K Cool White LEDs 50,000 Hour Average LED Life

EFFECTS

Dimming: 0% - 100% Strobe: 1-18fps

CONTROL / CONNECTIONS

(10) DMX Channels
(4) Button Control Panel
LCD Menu Display
8 / 16 Bit Resolution Adjustable Movement
3pin and 5pin DMX In/Out

SIZE / WEIGHT

Length: 13.4" (341mm) Width: 8.7" (220mm) Vertical Height: 17.5" (445) Weight: 21.0 lbs. (9.5 kg)

ELECTRICAL / THERMAL

AC 100-240V - 50/60Hz 350W Max Power Consumption 14°F to 113°F (-10°C to 45°C)

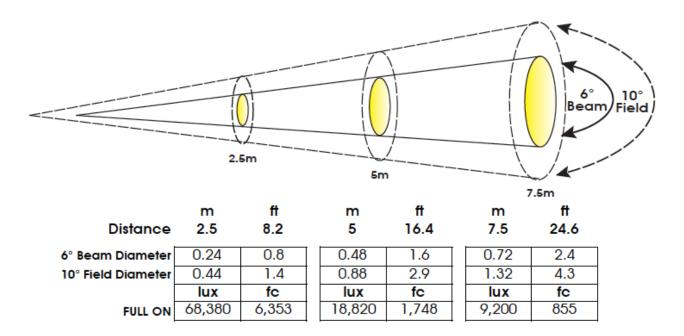
APPROVALS / RATINGS

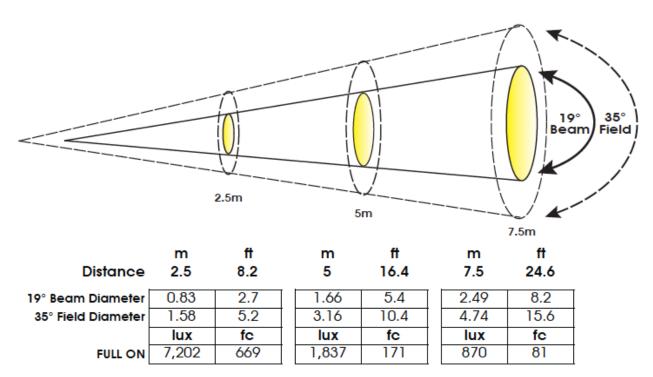
CE | P20 |





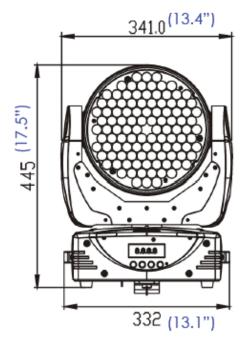
PHOTOMETRIC DATA

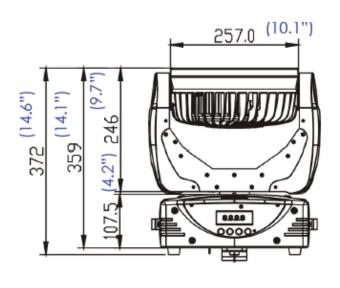


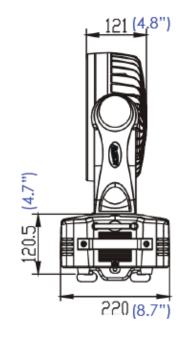


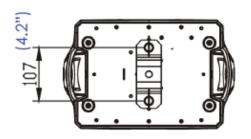


DIMENSIONAL DRAWINGS



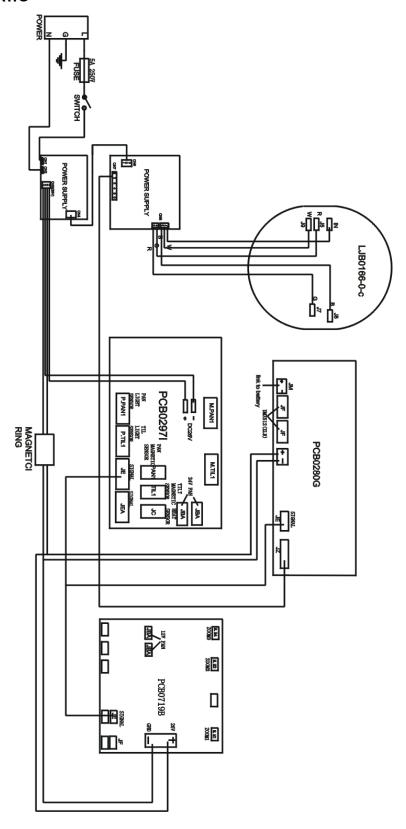








CIRCUIT SCHEMATIC





OPTIONAL ACCESSORIES

ORDER CODE	ITEM	
TRIGGER CLAMP	Heavy Duty Wrap Around Hook Style Clamp	
EWDMXSYSTEM	Wireless DMX System (1 Transmitter, 1 Receiver)	
EWDMXT	Wireless DMX Transmitter	
EWDMXR	Wireless DMX Receiver	
AC3PDMX5PRO	5 ft. (1.5m) 3pin PRO DMX Cable	
AC5PDMX5PRO	5 ft. (1.5m) 5pin PRO DMX Cable	
	Additional Cable Lengths Available	