

RAYZOR BEAM 2R™

user manual

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Date	Document Version	Software Version	DMX Channel Modes	Notes
2/2015	1	≥1.1.4	10 / 12 / 16	Initial release.

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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 **RAYZOR BEAM 2R™** 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 **RAYZOR BEAM 2R™** by Elation Professional®. Every **RAYZOR BEAM 2R™** 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) Omega Bracket
- (1) 5pin DMX Cable
- (1) Locking Power 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

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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 **RAYZOR BEAM 2R™** 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 EPILEPTIC SHOCK

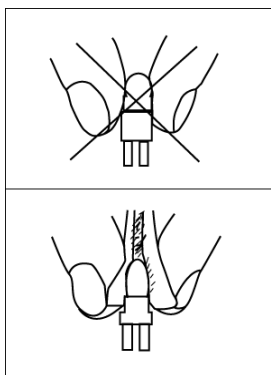
- For proper operation, follow the **Installation** guidelines described in this manual. Only qualified and certified personnel should perform installation of this fixture and only the original rigging parts (brackets) included with this fixture should be used for installation. Any modifications will void the original manufacturer's 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.
- **Minimum** distance to lighted objects must be **16.4 feet (5m)**.
- **Maximum** temp of the external surface **194°F (90°C)**.
- **Minimum** distance of inflammable materials from the surface **1.6 feet (0.5m)**.
- 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** allow 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.

DISCHARGE LAMP WARNING



This fixture is fitted with a DISCHARGE LAMP, which is highly susceptible to damage if improperly handled. NEVER touch the lamp with your bare hands, as the oil from your hands will shorten the life of the lamp. Also, NEVER move the fixture until the lamp has had ample time to cool. Lamps are NOT covered under warranty conditions.

Avoid switching the fixture ON and OFF repeatedly in short intervals, as this will reduce lamp life and intensity. To achieve the intensity associated with discharge lamps, these lamps use gas sealed in a high-pressure environment to emit a brilliant output.

 Due to the high pressure involved with the construction of the lamp, the lamp **MAY EXPLODE DURING PROLONGED EXTENSIVE USE**. This risk is increased with age; added care is encouraged when dealing with older lamps. Thus, the lamp must always be replaced at the end of their recommended duty cycle. Extreme caution should be used when operating this or any fixture fitted with a gas discharge lamp.



U V R A D I A T I O N N O T I C E

This fixture emits intense UV radiation, which is harmful to the eyes and skin. The intense luminance of the lamp can cause severe damage to the retina. NEVER operate this fixture with ANY of the protective covers removed. These covers have been specially designed to shield against UV radiation.

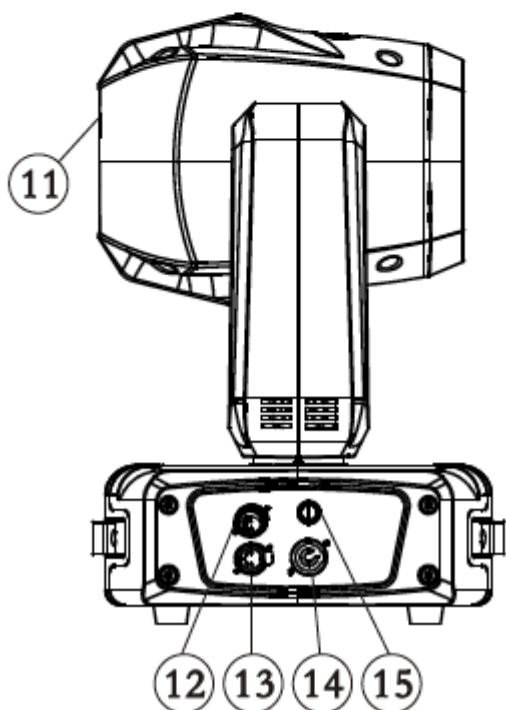
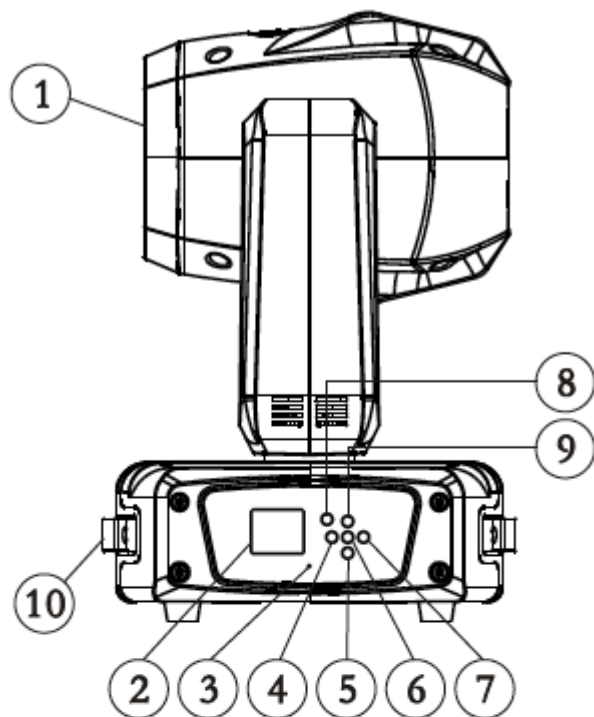


L A M P R E P L A C E M E N T

Please note that due to the nature of the Phillips™ Platinum 2R Lamp and the optical path of the Elation RAYZOR BEAM 2R fixture, the lamp MUST BE replaced at 6,000 hours.

Use only Genuine Original Phillips™ platinum lamps. Other brand lamps may cause damage and void warranty!

FIXTURE OVERVIEW



1. LENS
2. LCD Menu Function Display
3. Microphone
4. LEFT Button
5. DOWN Button
6. ENTER Button
7. RIGHT Button
8. MODE/ESC Button
9. UP Button
10. Carrying Handle(s)
11. Lamp Access/Cover Panel
12. 5pin DMX Input
13. 5pin DMX Output
14. power Input
15. Fuse

LAMP INSTALLATION INSTRUCTIONS



LAMP REPLACEMENT

Please note that due to the nature of the Phillips™ Platinum 2R Lamp and the optical path of the Elation RAYZOR BEAM 2R fixture, the lamp **MUST BE** replaced at 6,000 hours.

Use only Genuine Original Phillips™ Platinum 2R Lamps. Other brand lamps may cause damage and void warranty!

INSTALLING OR REPLACING THE LAMP

To ensure a proper/safe lamp change, carefully read all the following instructions.

LAMP PROTECTION CIRCUITRY

Because of the nature of the extreme heat associated with the Phillips™ Platinum 2R lamp and the tight nature of the internal optical system, it is **IMPERATIVE** that the lamp be replaced every **6,000 Hours**. This is done to protect the internal optical system as well as prevent accidental lamp explosion, which could lead to hot glass particles falling from the fixture.



FAILURE TO CHANGE THE LAMP WITHIN 300 HOUR of the 6,000 HOUR RATED LIFE, WILL CAUSE THE FIXTURE TO AUTOMATICALLY SHUT DOWN!

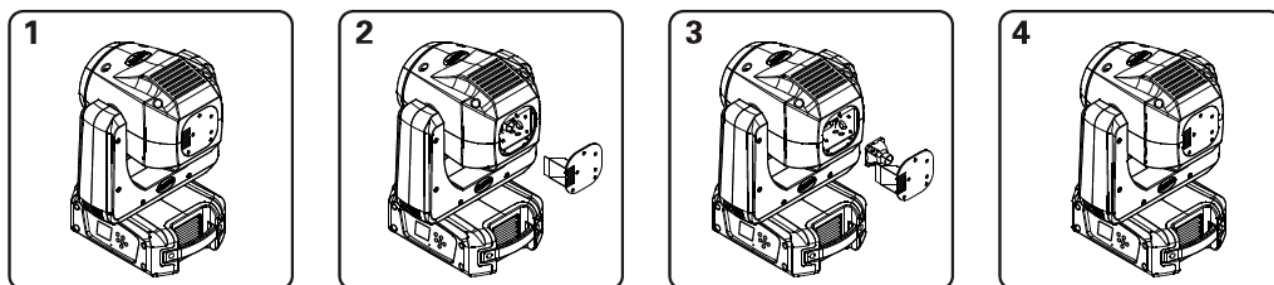
At **6,000 Hours** the LCD control display will begin to flash, **“Replace The Lamp”** and the lamp will flicker for the first five minutes of operation. At this point the lamp has reached the maximum rated life and should be replaced immediately. After the lamp has flickered for about five minutes it should strike normally allowing the fixture to be used temporarily until a replacement lamp can be installed. The fixture will continue to operate for an additional 300 hours, however the **“Replace the Lamp”** warning will continue to flash in the display. Keep in mind that the flicker protection circuitry will only work for about 300 Hours (lamp clock life of 6,000-6,300 Hours).

After 6,300 Hours the fixture will no longer respond to DMX commands and immediately enter a hibernation mode that will electronically discontinue all fixture functionality with the exception of a few menu commands. The fixture will continue to enter hibernation mode until the lamp is replaced and the lamp clock has been reset. To replace the lamp follow the safety guidelines and procedures listed on the next page.

LAMP SAFETY INSTRUCTIONS

- **ALWAYS replace lamp every 6,000 Hours.**
- Use only Genuine Original Phillips™ Platinum 2R lamps. Other brand lamps may cause damage and void the warranty!
- NEVER touch the lamp with your bare hands, as the oil from your hands will shorten the life of the lamp.
- Always disconnect the fixture's main power supply before replacing lamp.
- Allow fixture to cool for at least 15 minutes before attempting any type of service.
- Make sure ALL covers/panels are replaced/secured before operating the fixture to prevent any risk and/or damage to eye retina from UV Radiation exposure!

LAMP INSTALLATION PROCEDURE



1. Place fixture on a flat surface and remove (3) screws marked "A", "B", and "C", then remove rear cover plate to access the lamp.

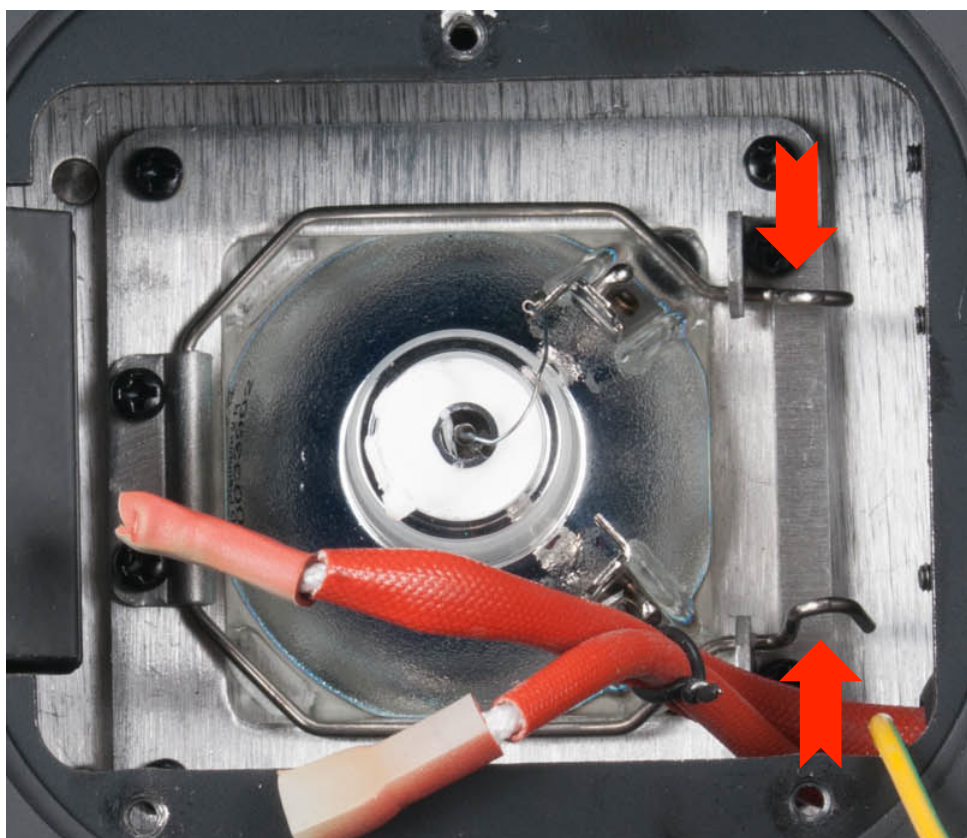
LAMP COVER PLATE



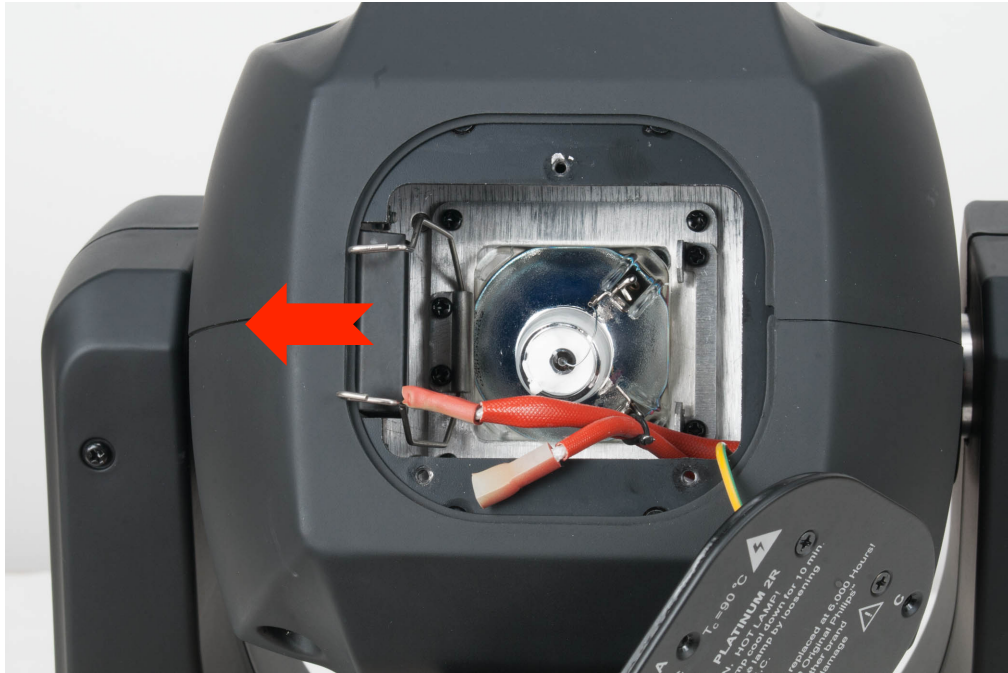
2. Gently remove **(2) Red Wires** connected to spade terminals on base of lamp.



- Using your thumb and index finger, gently squeeze the retention clips together in the direction illustrated by the **RED ARROWS**, to unlock them.



4. Move the retention clips in the direction illustrated by the **RED ARROW**.



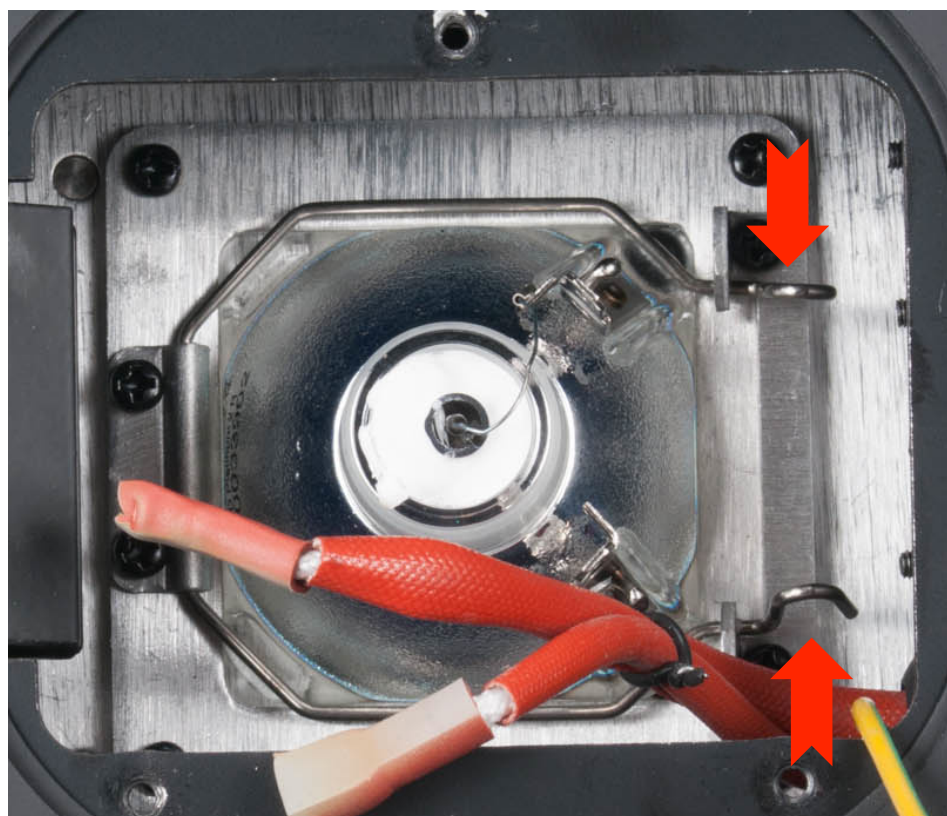
5. Gently remove the lamp out and away from the fixture.



6. Using a clean cloth or gloves, gently install the new lamp into the fixture, making sure the lamp is seated correctly straight and flush against the base.



7. Using your thumb and index finger, gently squeeze the retention clips together in the direction illustrated by the **RED ARROWS**, to lock them into place.



8. Gently attached **(2) Red Wires** connected to spade terminals on base of lamp.



9. Replace the lamp cover plate back into place by securing **(3) screws** marked **"A"**, **"B"**, and **"C"**.



10. Be sure to reset the **LAMP HOURS** in the system menu to prevent the protection circuitry from accidentally shutting off the lamp during normal operation.
11. If the lamp protection circuitry has already been initiated and the **LAMP HOURS** is not reset, the **"Replace the Lamp"** warning will continue to flash and fixture will eventually shut down. To reset **LAMP HOURS**, see instructions on the next page.

LAMP HOURS RESET PROCEDURE

1. Activate the main menu by pressing **MODE/ESC** and toggle to **"Information"**.
2. Press **ENTER** and press **UP** or **DOWN** to toggle to **"Time Information"**.
3. Press **UP** or **DOWN** to toggle to **"L-Timer Password"** and press **ENTER**. Then press **UP** or **DOWN** to enter the reset pass code, **"038"** and press **ENTER** to confirm. The display will automatically revert to **"L-Timer Password"**, next press **UP** or **DOWN** to toggle down to **"Clear Lamp Time"**.
4. Press **ENTER** and select **"ON"**. The lamp timer has now been reset, press **MODE/ESC** to exit the menu and return to the home screen.

LAMP OPTIMIZATION

Unlike traditional discharge lamps the **Phillips™ Platinum 2R Lamp** does **NOT** require optimization. The lamp orientation and optimization procedure has been preset during the manufacturing process of the lamp. Please remember the **Phillips™ Platinum 2R Lamp** is **NOT** a hot-restrike lamp therefore, you must wait approximately **15 minutes** before you can attempt to restrike the lamp once it has been turned off.

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 where unauthorized personnel might reach the fixture.
- Ambient operating temperature range for this fixture is **14° to 113°F. (-10° 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. **(230 lbs / 104 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.



W A R N I N G

MINIMUM distance to lighted objects must be 16.5 feet (5m)

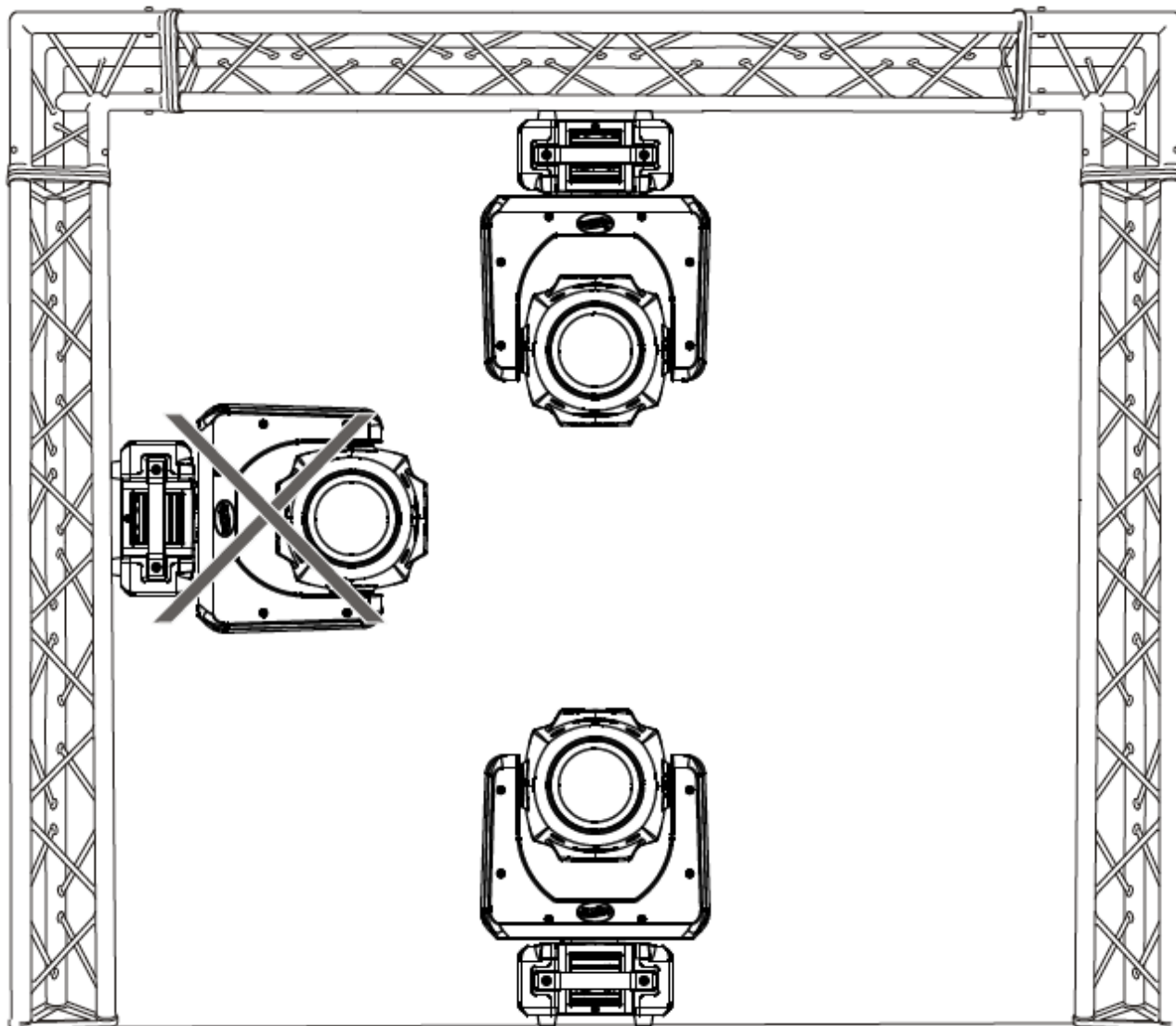
MAXIMUM temperature of external surface 194° F (90° C)

MINIMUM distance of inflammable materials from surface 1.6 feet (0.5m)

Keep fixture at least 4.9 feet (1.5m) away from any flammable materials, decorations, pyrotechnics, etc.

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.
- Fixture is fully operational in the specific mounting positions as illustrated below.

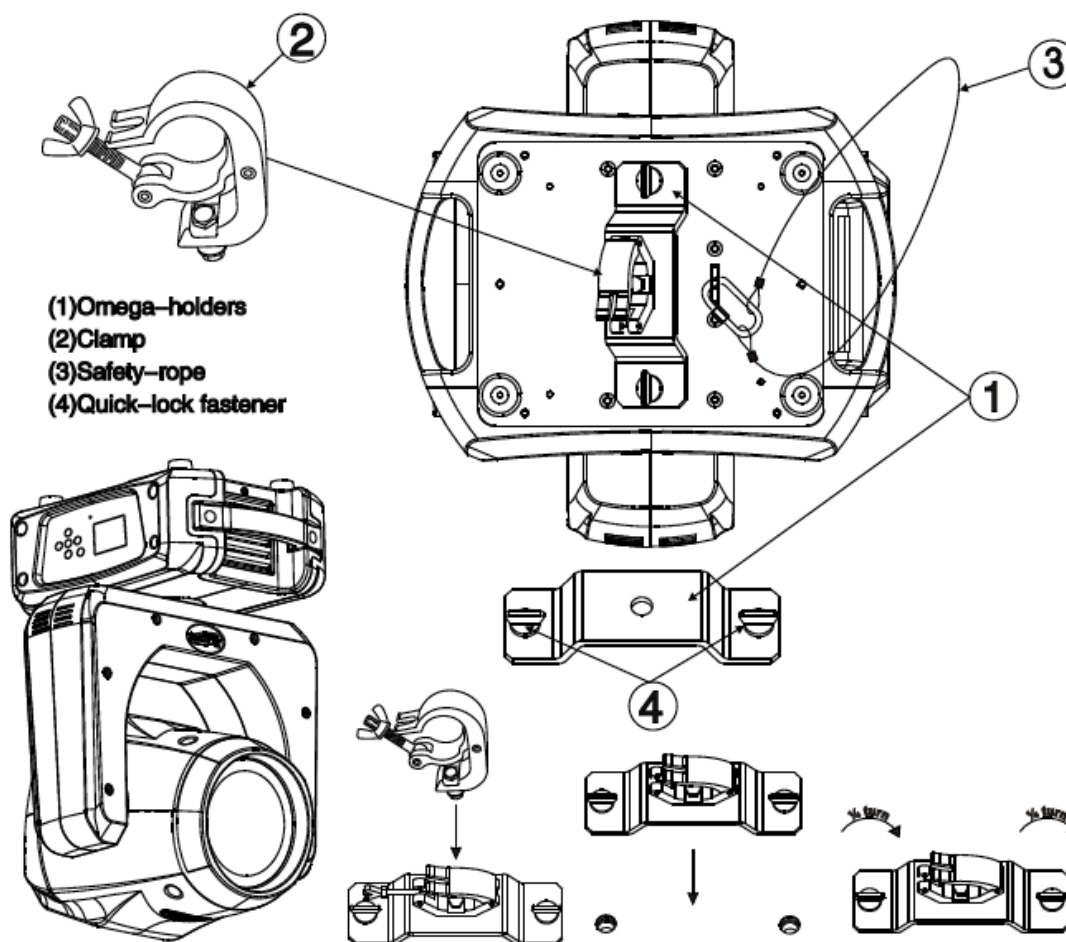


SAFETY CABLE

Always use a Safety Cable whenever installing this fixture in a suspended environment to ensure the fixture will not drop if the clamp fails.

CLAMP MOUNTING

The **RAYZOR BEAM 2R™** provides a unique mounting bracket assembly that integrates the bottom of the base, the included **Omega Bracket** and safety cable rigging point in one unit (see the illustration below). When mounting this fixture to truss be sure to secure an appropriately rated clamps to the included omega bracket using a M10 screw fitted through the center hole of the **Omega Bracket**. Be sure to attach the included **Safety Cable** to the fixture using the safety cable rigging point integrated in the base assembly.



SECURING

Regardless of the rigging option you choose for your **RAYZOR BEAM 2R™** always be sure to secure your fixture with a safety cable. The fixture provides a built-in rigging point for a safety cable on the hanging bracket as illustrated above. Be sure to only use the designated rigging point for the safety cable and never secure a safety cable to a carrying handle.

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 **RAYZOR BEAM 2R™** 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 3pin or 5pin 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 **Elation's Opto Branch 4™, Opto Branch 8™, or DMX-Branch/4™**.

DMX Output
3-Pin XLR Socket

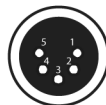


DMX Input
3-Pin XLR Socket

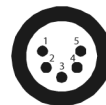


1: Ground
2: Data (-)
3: Data (+)

DMX Output
5-Pin XLR Socket



DMX Input
5-Pin XLR Socket



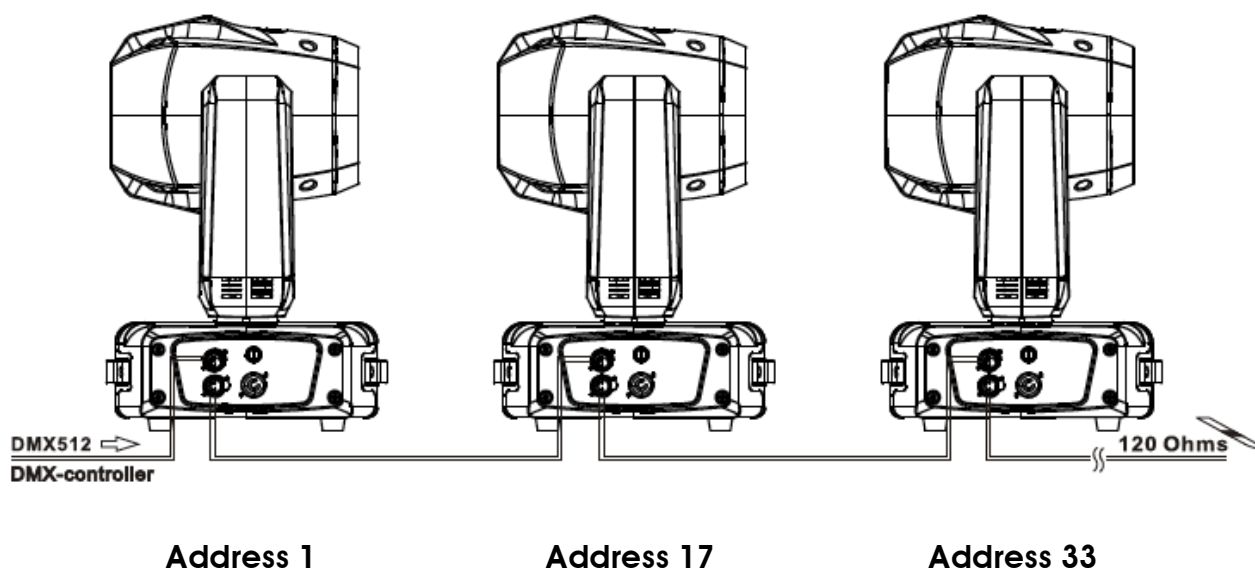
1: Ground
2: Data (-)
3: Data (+)
4: Open
5: Open



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.

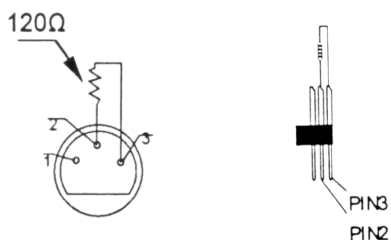
DMX-512 CONTROLLER CONNECTION

Connect the provided XLR cable to the female XLR output of your controller and the other side to the male XLR input of the **RAYZOR BEAM 2R™**. The diagram below illustrates a typical DMX-512 connection when the fixture is in the **16 Channel Extended Mode**. 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 **Elation's Opto Branch 4™, Opto Branch 8™, or DMX-Branch/4™**.



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 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.

5pin XLR DMX CONNECTORS

Some manufactures use 5pin XLR connectors for DATA transmission in place of 3pin. 5pin XLR fixtures may be implemented in a 3pin XLR DMX line. When inserting standard 5pin XLR connectors in to a 3pin 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 **RAYZOR BEAM 2R™**, when in the **16 Channel Extended Mode** you should set the starting DMX address of the first unit to 1, the second unit to 17 (16 + 1), the third unit to 33 (17 + 16), and so on.

Note: During start-up the **RAYZOR BEAM 2R™** 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 3pin or 5pin 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 **RAYZOR BEAM 2R™** 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 control panel (see image below) located on back of the fixture allows you to access the main menu and make all necessary adjustments to the **RAYZOR BEAM 2R™**. During normal operation, pressing **MODE/ESC** button once will access the fixture's main menu. Once in the main menu you can navigate through the different functions and access the sub-menus with the **UP**, **DOWN**, **RIGHT**, and **LEFT** buttons. Once you reach a field that requires adjusting, press the **ENTER** button to activate that field and use the **UP** and **DOWN** buttons to adjust the field. Pressing the **ENTER** button once more will confirm your setting. You may exit the main menu at any time without making any adjustments by pressing the **MODE/ESC** button.



Function	Set Dmx Address Dmx Value Slave Mode Auto Program Sound Control	A001~AXXX PAN..... Slave1,Slave2,Slave3 Master / Alone Master / Alone	DMX address setting DMX value display Slave setting Auto program Sound Control
Information	Time Information	Current Time Total Run Time Last Run Time Lamp Hours Lamp Off Time LastRun Password Clean Last Run LampTime Password Clean Lamp Time	XXXX(Hours) XXXX(Hours) XXXX(Hours) XXXX(Hours) XXXX(Minute) Password=XXX ON/OFF Password=XXX ON/OFF
	Temperature Info	Head Temperature	XXX °F/ °C
	Software Version	V1.1.4	Software version
Lamp Control	Lamp On/Off Automatic On Lamp On via DMX Lamp Off via DMX Max On at Temp. Lamp Off Temp.	ON/OFF ON/OFF ON/OFF ON/OFF 20~79°C [45°C] / 68~174°F 113°F 80~139°C [130°C] / 176~282°F [266°F]	Lamp on/off Lamp on/off Power on Lamp on via DMX Lamp off via DMX Lamp restart at temp. Lamp off at temp.
Personality	Status Settings	Address Via DMX No DMX Status Pan Invert Tilt Invert Pan Degree Feedback Movement Speed Mic Sensitivity Hibernation	ON/OFF Close/Hold/Auto/Music ON/OFF ON/OFF 630/540 ON/OFF Speed 1~ 4 0~99% OFF, 01M~99M, 15M
	Service Setting	Password RDM PID	Password=XXX XXXXXX
	Display Setting	Shutoff Time Display Reverse Key Lock	02~60m 05m ON/OFF ON/OFF
	Temperature C/F	Celsius Fahrenheit	Temperature switch between C/F
	Initial Status	PAN =XXX	Initial effect position
	Reset Default	ON/OFF	Restore factory set.
Reset Function	Reset All Reset Pan&Tilt Reset Colors Reset Gobos Reset Shutter Reset Others		Reset all motors Reset Pan/Tilt Reset color wheel Reset gobos Reset shutter or dimmer Reset other motors

Effect Adjust	Test Channel	PAN	Test function
	Manual Control	PAN =XXX :	Fine adjustment of the lamp
	Calibration	Calibrate Password Color wheel=XXX :	Password "050" Calbrate and adjust the effects to standard/right position
Users Mode Set	User Mode	Standard Mode Basic Mode Extended Mode User Mode A User Mode B User Mode C	User's mode to change channel numbers
	Edit User Mode	Max Channel = XX PAN = CH01 :	Preset User modes
Edit Program	Select Programs	Auto Pro Part 1 = Program 1 ~ 10 Program 1 Auto Pro Part 2 = Program 1 ~ 10 Program 2 Auto Pro Part 3 = Program 1 ~ 10 Program 3	Select programs to be run
	Edit Program	Program 1 : Program 10	Program Test Step 01=SCxxx Step 64=SCxxx
	Edit Scenes	Edit Scene 001 ~ Edit Scene 250	Pan,Tilt,..... --Fade Time-- --Secne Time-- Input By Exterior
	Rec. Controller	XX~XX	Automat. scenes rec

FUNCTION - Set DMX Address

Define desired DMX address via the Control Panel.

FUNCTION - DMX Value

Display DMX 512 value of each channel.

FUNCTION - Set To Slave

Define fixture slave mode (**Slave1, Slave2, Slave3**).

FUNCTION - Auto Program

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

FUNCTION - Sound Control

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

INFORMATION - Time Information - Current Time

Displays fixture run time from last power ON.

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

INFORMATION - Time Information - Total Run Time

Displays fixture total run time.

INFORMATION - Time Information - Last Run Time

Displays fixture run time for a given period of time (i.e. rental period).

This counter can be reset.

INFORMATION - Time Information - Lamp Hours

Displays lamp total run time.

This counter should be reset at each lamp change.

INFORMATION - Time Information - Lamp Off Time

Displays lamp run time from the last power ON.

This counter is automatically reset after each time the lamp is powered ON.

INFORMATION - Time Information - LastRun Password

Display the fixture timer password. (038)

INFORMATION - Time Information - Clear Last Run

Resets the last run time of the fixture.

INFORMATION - Time Information - LampTime Password

Displays the lamp timer password. (038)

INFORMATION - Time Information - Clear Lamp Time

Resets the run time of the lamp.

INFORMATION - Temperature Information - Head Temperature

Displays temperature of the fixture.

INFORMATION - Software Version

Displays software version of the fixture.

LAMP CONTROL - Lamp ON/OFF

When ON, manual control of lamp power can be accessed via system menu.

LAMP CONTROL - Automatic ON

When ON, lamp is automatically powered ON when power is applied to fixture.

LAMP CONTROL - Lamp ON via DMX

When ON, lamp can be powered ON via a DMX controller.

LAMP CONTROL - Lamp OFF via DMX

When ON, lamp can be powered OFF via a DMX controller.

LAMP CONTROL - Max ON at Temp

The fixture is designed to shut the lamp OFF when an excessive temperature is sensed inside the head by the on-board CPU. The lamp is shut OFF to prevent damage to the lamp and avoid possible internal damage to the fixture head. This function sets the MIN internal operating temperature of the fixture head before the lamp will restrike after the lamp has been automatically shut OFF.

LAMP CONTROL - Lamp OFF Temp

The fixture is designed to shut the lamp OFF when an excessive temperature is sensed inside the head by the on-board CPU. The lamp is shut OFF to prevent damage to the lamp and avoid possible internal damage to the fixture head. This function sets the MAX internal operating temperature of the fixture head when the lamp will automatically be shut OFF.

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

Define how fixture operates if NO DMX signal is detected.

PERSONALITY - Status Settings - Pan Invert

When ON, all PAN movements are reversed (inverted).

PERSONALITY - Status Settings - Tilt Invert

When ON, all TILT movements are reversed (inverted).

PERSONALITY - Status Settings – Pan Degree

Select desired maximum degree of the Pan movement.

PERSONALITY - Status Settings - Feedback

When ON, the fixture automatically performs PAN / TILT correction in the event either one is disrupted during normal operation.

PERSONALITY - Status Settings – Movement Speed

Select desired Movement Speed.

PERSONALITY - Status Settings – Mic Sensitivity

Select desired Microphone Sensitivity.

PERSONALITY - Status Settings – Hibernation

Select desired Hibernation time.

PERSONALITY – Service Setting - Password

Displays the service setting password. **(050)**

PERSONALITY – Service Setting - RDM PID

RDM (Remote Device Management)

PERSONALITY - Display Setting – Shutoff Time

Define how many minutes before the LCD Menu display will automatically shut OFF.

PERSONALITY - Display Setting – Display Reverse

When ON, the LCD Menu display by is rotated (inverted) 180°.

PERSONALITY - Display Setting – Key Lock

When ON, Control Panel buttons lock automatically after exiting main menu for 15 seconds. To unlock, keep **MODE/ESC** button pressed for 3 seconds.

PERSONALITY – Temperature C/F

Define how fixture displays internal temperature (Celsius or Fahrenheit).

PERSONALITY – Initial Status

Create custom PAN/TILT and Effect settings and save as a custom Home Position.

PERSONALITY – Reset Default

When ON, all factory settings are restored.

RESET FUNCTION - Reset ALL

Reset ALL internal motors to Home Position.

RESET FUNCTION - Reset PAN and TILT

Reset only PAN and TILT motors to Home Position.

RESET FUNCTION - Reset Colors

Reset only Color Wheel to Home Position.

RESET FUNCTION - Reset Gobos

Reset only Gobo Wheels to Home Position.

RESET FUNCTION - Reset Shutter

Reset only blackout Shutter to Home Position.

RESET FUNCTION - Reset Others

Reset ALL other motors not associated previously listed commands to Home Position.

EFFECT ADJUST – Test Channel

Select and auto test each individual channel function independently from the DMX control board.

EFFECT ADJUST – Manual Control

Select and manually test and fine adjust each individual channel function Independently from DMX control board. This function will center PAN and TILT motors and set dimmer to 100%. PAN and TILT functions will still operate if the fixture needs to be positioned to a flat clear surface. With the individual functions, you can focus the light on a flat surface (wall) and perform fine adjustments.

EFFECT ADJUST – Calibration



ONLY QUALIFIED TECHNICIANS SHOULD PERFORM THIS FUNCTION.

This function allows small adjustments to be made to the effect wheels (Color, Gobo, Shutter, etc.) to compensate for wear or in the event a sensor has been knocked slightly out of place. Because improper use of this function can result in undesired operation this function has been password protected. The password is **050** and must be entered each time the calibration menu function is entered. Because calibration is an extremely delicate procedure, instructions on performing this action are left out of this manual. For a first time calibrator, please contact our customer support team for step-by-step instructions.

USER MODE SET – User Mode

Select operating mode, which includes DMX Channel and User defined modes.

USER MODE SET – Edit User Mode

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 PROGRAM – Select Program

Select one of the (10) user defined internal Auto Programs.

EDIT PROGRAM – Edit Program

Edit any of the (10) user defined internal Auto Programs.

EDIT PROGRAM – Edit Scenes

Edit any of the scenes of the internal Auto Programs.

EDIT PROGRAM – Record Controller

The fixture features an integrated DMX-recorder by which you can transmit the programmed scenes from your DMX-controller to the moving head. Adjust the desired scene numbers via the encoder (from – to). When you call up the scenes at your controller, they will automatically be transmitted to the moving head.

EDIT PROGRAM – Record Controller – Working With Built In Programs

A Master unit can send up to 3 different data groups to the Slave units, i.e. a Master unit can start 3 different Slave units, which run 3 different programs. The Master unit sends the 3 program parts in a continuous loop.



The Slave unit receives data from the Master unit according to the group which the Slave unit was assigned to. If e.g. a Slave unit is set to “**Slave 1**” in the menu “**Set to Slave**”, the Master unit sends “**Auto Program Part 1**” to the Slave unit.

If set to “**Slave 2**”, the Slave unit receives “**Auto Program Part 2**”.

To start an Auto Program proceed as follows:

1. Slave Setting

- Select “**Function Mode**”.
- Press **ENTER** to confirm.
- Select “**Set to Slave**”.
- Press **ENTER** to confirm.
- Select “**Slave 1**”, “**Slave 2**” or “**Slave 3**”.
- Press **ENTER** to confirm.
- Press **MODE/ESC** in order to return to the main menu.

2. Automatic Program Run

- Select “**Function Mode**”.
- Press **ENTER** to confirm.
- Select “**Auto Program**”.
- Press **ENTER** to confirm.
- Select “**Master**” or “**Alone**”.
- Press **ENTER** to confirm.
- Press **MODE/ESC** in order to return to the main menu.

EDIT PROGRAM – Record Controller – Working With Built-In Program [continued]

3. Program Selection for Auto Pro Part

- Select **“Edit Program”**.
- Press **ENTER** to confirm.
- Select **“Select Programs”**.
- Press **ENTER** to confirm.
- Select **“Auto Pro Part 1”**, **“Auto Pro Part 2”** or **“Auto Pro Part 3”**, and select which Slave program is to be sent. Selection **“Part 1”** means, that the Slave unit runs the same program as the master units.
- Press **ENTER** to confirm.
- Press **MODE/ESC** in order to return to the main menu.

4. Program Selection for Edit Program

- Select **“Edit Program”**.
- Press **ENTER** to confirm.
- Select **“Edit Program”**.
- Press **ENTER** to confirm.
- Select the desired program. With this function you can edit specific scenes into a specific program.
- Press **ENTER** to confirm.
- Press **MODE/ESC** in order to return to the main menu.

5. Automatic Scene Recording

- Select **“Edit Program”**.
- Press **ENTER** to confirm.
- Select **“Edit Scenes”**.
- Select desired scene numbers. A maximum of 250 scenes can be programmed.
- Press **ENTER** to confirm.
- Press **MODE/ESC** in order to return to the main menu.

Example:

Program 2 includes scenes: 10, 11, 12, & 13

Program 4 includes scenes: 8, 9, & 10

Program 6 includes scenes: 12, 13, 14, & 15

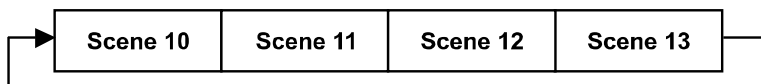
Auto Pro Part 1 is Program 2

Auto Pro Part 2 is Program 3

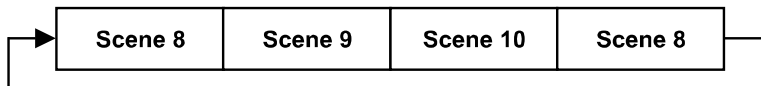
Auto Pro Part 3 is Program 6

The 3 Slave groups run the Auto Program in certain time segments, as shown in the following picture:

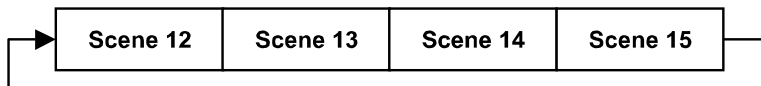
Part 1:



Part 2:



Part 3:



DMX CHANNEL FUNCTIONS AND VALUES

ELATION© RAYZOR BEAM 2R™				
DMX Channel Values / Functions (16 DMX Channels)				
Specifications are subject to change without any prior written notice.				
*Rotation direction (Clockwise or Counterclockwise) of COLOR, GOBO, and PRISM effects depends on the orientation of the fixture head.				
MODE / CHANNEL			VALUE	FUNCTION
BASIC	STAND	EXTEND		
1	1	1		PAN MOVEMENT [8 BIT]
			0-255	PAN Movement By 540/630
	2	2		PAN FINE MOVEMENT [16 BIT]
			0-255	PAN Movement FINE Adjustment
2	3	3		TILT MOVEMENT [8 BIT]
			0-255	TILT Movement By 270
	4	4		TILT MOVEMENT [16 BIT]
			0-255	TILT Movement FINE Adjustment
3	5	5		COLORS
			0-8	OPEN / WHITE
			9-17	RED
			18-26	BLUE
			27-35	GREEN
			36-44	YELLOW
			45-53	MAGENTA
			54-62	LIGHT BLUE
			63-71	ORANGE
			72-80	PINK
			81-89	GOLD
			90-98	NAVY BLUE
			99-107	UV FILTER
			108-116	CTO
			117-127	CTB
			128-189	*Clockwise Color Rotation from FAST to SLOW
			190-193	NO Rotation
			194-255	*Counterclockwise Color Rotation from SLOW to FAST
		6		COLOR WHEEL FINE ADJUSTMENT
			0-255	Color Wheel FINE Adjustment to Any Position

ELATION® RAYZOR BEAM 2R™			
DMX Channel Values / Functions (16 DMX Channels)			
Specifications are subject to change without any prior written notice.			
*Rotation direction (Clockwise or Counterclockwise) of COLOR, GOBO, and PRISM effects depends on the orientation of the fixture head.			
MODE / CHANNEL			FUNCTION
BASIC	STAND	EXTEND	
4	6	7	FIXED GOBOS
			0-7 OPEN
			8-15 Gobo 1
			16-23 Gobo 2
			24-31 Gobo 3
			32-39 Gobo 4
			40-47 Gobo 5
			48-55 Gobo 6
			56-63 Gobo 7
			64-71 Gobo 8
			72-79 Gobo 9
			80-87 Gobo 10
			88-95 Gobo 11
			96-103 Gobo 12
			104-111 Gobo 13
			112-119 Gobo 14
			120-126 Gobo 1 Shake From SLOW to FAST
			127-133 Gobo 2 Shake From SLOW to FAST
			134-140 Gobo 3 Shake From SLOW to FAST
			141-147 Gobo 4 Shake From SLOW to FAST
			148-154 Gobo 5 Shake From SLOW to FAST
			155-161 Gobo 6 Shake From SLOW to FAST
			162-168 Gobo 7 Shake From SLOW to FAST
			169-175 Gobo 8 Shake From SLOW to FAST
			176-182 Gobo 9 Shake From SLOW to FAST
			183-189 Gobo 10 Shake From SLOW to FAST
			190-196 Gobo 11 Shake From SLOW to FAST
			197-203 Gobo 12 Shake From SLOW to FAST
			204-210 Gobo 13 Shake From SLOW to FAST
			211-217 Gobo 14 Shake From SLOW to FAST
			218-255 *Clockwise Fixed Gobo Wheel Rotation From SLOW to FAST
		8	FIXED GOBOS, FINE INDEXING
			0-255 Fixed Gobo FINE Indexing

ELATION® RAYZOR BEAM 2R™			
DMX Channel Values / Functions (16 DMX Channels)			
Specifications are subject to change without any prior written notice.			
*Rotation direction (Clockwise or Counterclockwise) of COLOR, GOBO, and PRISM effects depends on the orientation of the fixture head.			
MODE / CHANNEL			FUNCTION
BASIC	STAND	EXTEND	
5	7	9	8 FACET ROTATING PRISM, PRISM / GOBO MACROS
			0-31 OPEN
			32-127 8 Facet Prism
			128-135 Macro 1
			136-143 Macro 2
			144-151 Macro 3
			152-159 Macro 4
			160-167 Macro 5
			168-175 Macro 6
			176-183 Macro 7
			184-191 Macro 8
			192-199 Macro 9
			200-207 Macro 10
			208-215 Macro 11
			216-223 Macro 12
			224-231 Macro 13
			232-239 Macro 14
			240-247 Macro 15
			248-255 Macro 16
6	8	10	8 FACET ROTATING PRISM, INDEX ROTATION
			0-127 Prism Index Rotation
			128-189 *Clockwise Prism Rotation from FAST to SLOW
			190-193 NO Rotation
			194-255 *Counterclockwise Prism Rotation from SLOW to FAST
		11	ROTATING PRISM, FINE INDEX ROTATION
			0-255 Prism FINE Indexing
7	9	12	SHUTTER, STROBE
			0-31 Shutter CLOSED
			32-63 NO Function (Shutter OPEN)
			64-95 Strobe Effect SLOW to FAST
			96-127 NO Function (Shutter OPEN)
			128-159 Pulse Effect In Sequences
			160-191 NO Function (Shutter OPEN)
			192-223 Random Strobe Effect SLOW to FAST
			224-255 NO Function (Shutter Open)
8	10	13	DIMMER INTENSITY
			0-255 Dimmer Intensity 0 to 100%
		14	DIMMER INTENSITY FINE
			0-255 Dimmer Intensity FINE Adjustment
9	11	15	PAN / TILT MOVEMENT SPEED
			0-225 PAN / TILT MAX to MIN Speed
			226-235 Blackout by Movement
			236-245 Blackout by ALL Wheel Changing
			246-255 NO Function

ELATION® RAYZOR BEAM 2R™			
DMX Channel Values / Functions (16 DMX Channels)			
Specifications are subject to change without any prior written notice.			
*Rotation direction (Clockwise or Counterclockwise) of COLOR, GOBO, and PRISM effects depends on the orientation of the fixture head.			
MODE / CHANNEL			FUNCTION
BASIC	STAND	EXTEND	
10	12	16	LAMP ON/OFF, RESET, INTERNAL PROGRAMS
			0-19 COLOR Change Normal
			20-29 COLOR Change to Any Position
			30-39 COLOR & GOBO Change to Any Position
			40-59 LAMP ON (Value must be maintained for 3 sec)
			60-79 LAMP Switch OFF (Value must be maintained for 3 sec)
			80-84 ALL Motor Reset (Value must be maintained for 3 sec)
			85-87 SCAN Motor Reset (Value must be maintained for 3 sec)
			88-90 COLORS Motor Reset (Value must be maintained for 3 sec)
			91-93 GOBO Motor Reset (Value must be maintained for 3 sec)
			94-96 SHUTTER & DIMMER Motor Reset (Value must be maintained for 3 sec)
			97-99 OTHER Motor Reset (Value must be maintained for 3 sec)
			100-119 Internal Program 1
			120-139 Internal Program 2
			140-159 Internal Program 3
			160-179 Internal Program 4
			180-199 Internal Program 5
			200-219 Internal Program 6
			220-239 Internal Program 7
			240-255 Auto Program by Music Control

ERROR CODES

When power is applied, the unit will automatically enter a **“Reset/Test”** mode. This mode brings all the internal motors to a home position. If there is an internal problem with one or more of the motors an error code will flash in the display in the form of **“XXer”** where as XX will represent a function number. For example, when the display shows **“01Er”** it means there is some type of error with the Pan motor. If there are multiple errors during the start-up process they will all flash in the display. For example: if the fixtures has errors on **Channel 1, 2, and 5** all at the same time, you will see the error message **“01Er”, “03Er”, and “05Er”** flash repeated 5 times.

If an error does occur during the initial start-up procedure the fixture will self-generate a second reset signal and try to realign all the motors and correct the errors. If the error persists after a second attempt a third attempt will be made. If after a third attempt all the errors have not been corrected the fixture will make the following determinations:

- **3 or More Errors** - The fixture cannot function properly with three or more errors therefore the fixture will place itself in a stand-by mode until subsequent repairs can be made.
- **Less Than 3 Errors** - The fixture has less than 3 errors; therefore most other functions will work properly. The fixture will attempt to operate normally until the errors can be correct by a technician. The errors in question will remain flashing in the display as a reminder of internal errors.

ELATION© RAYZOR BEAM 2R™ ERROR CODES	
Specifications and features are subject to change without any prior written notice.	
ERROR CODE	DESCRIPTION
01Er PAN Error	The PAN movement is not located in the default position after the reset. This message will appear after a fixture reset if the magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a motor failure (defective motor or a defective motor IC drive on the main PCB). This error may also be displayed if the head/yoke was blocked during a reset function.
03Er TILT Error	The TILT movement is not located in the default position after the reset. This message will appear after a fixture reset if the magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a motor failure (defective motor or defective motor IC drive on main PCB). This error may also be displayed if the head was blocked during a reset function.
05Er Color Wheel Error	The Color Wheel is not located in the default position after the reset. This message will appear after the reset of the fixture reset if the magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or defective motor IC drive on main PCB).
06Er Fix Gobo Wheel Error	The Gobo Wheel 1 movement is not located in the default position after the reset. This message will appear after a fixture reset if the magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or defective motor IC drive on main PCB).

CLEANING AND MAINTENANCE



C A U T I O N

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. 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 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

3° Sharp Narrow Beam
Super Fast 16 bit 3-Phase Pan and Tilt Motors
CTO and CTB Color Correction
Flicker Free Operation for TV and FILM
Remote Device Management Protocol Support

SOURCE

132W Platinum 2R Lamp
6,000 Hour Average Life

PHOTOMETRIC DATA

49,470 LUX 4596 FC @42.9' (15M) / 7,500K, > 75 CRI

EFFECTS

Strobe (1-13 fps)
Electronic Dimming: 0% - 100%
8 Facet Rotating Prisms and Macros

COLOR

(13) Dichroic Colors Including UV, CTO, CTB + White

GOBOS

(14) Static Gobos Including (6) Multi-Sized Beams

CONTROL / CONNECTIONS

(3) DMX Channel Modes (10 / 12 / 16)
Pan Movement: 540°/630° / Tilt Movement: 270°
6 Button Control Panel
Full Color 180° Reversible LCD Menu Display
16 Bit 3-Phase Pan/Tilt Motors
5pin DMX In/Out
powerCON In/Out

SIZE / WEIGHT

Length: 11.6" (295mm)
Width: 9.6" (245mm)
Vertical Height: 16.6" (421mm)
Weight: 23.0 lbs. (10.4 kg)

ELECTRICAL / THERMAL

AC 100-240V - 50/60Hz
230W Max Power Consumption
14°F to 113°F (-10°C to 45°C)

APPROVALS / RATINGS

CE |  | IP20

4010832

INSTALLATION

Rigging: Omega Bracket
Working Position: Flat Surface / Inverted (180°)

Please Note: Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.

COLORS + GOBOS



1.Red



2.Blue



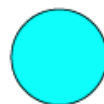
3.Green



4.Yellow



5.Magenta



6.Light blue



7.Orange



8.Pink



9.Gold



10.Navy blue



11.UV Filter



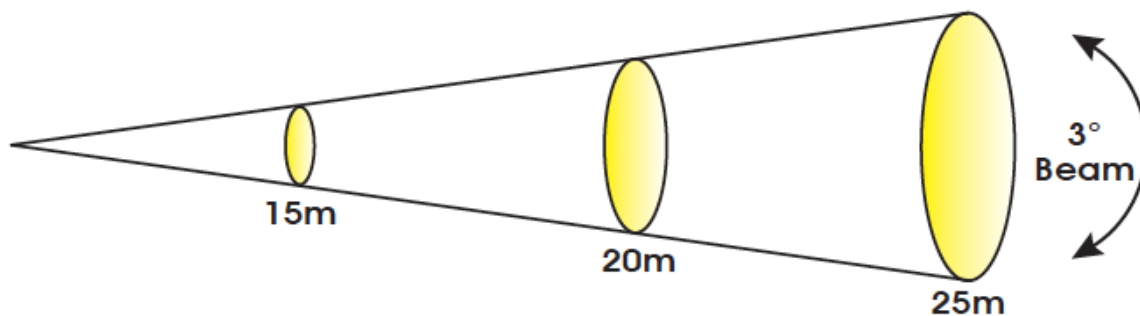
12.CTO



13.CTB



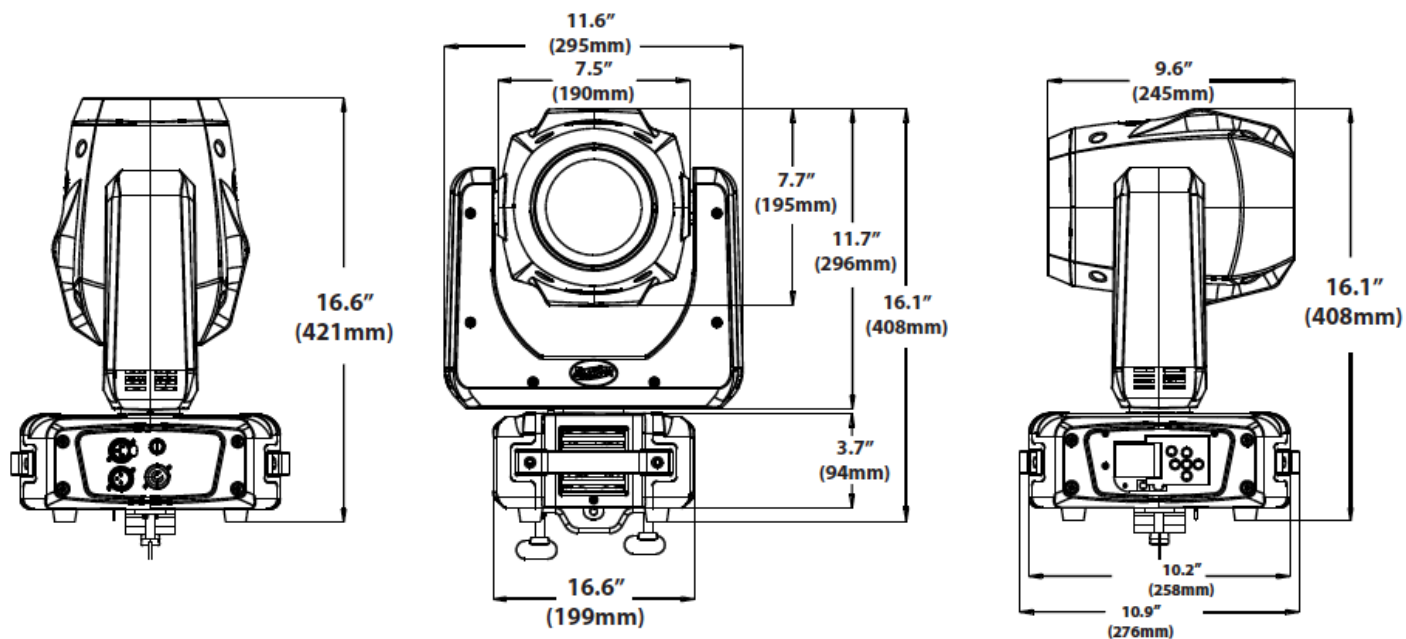
PHOTOMETRIC DATA



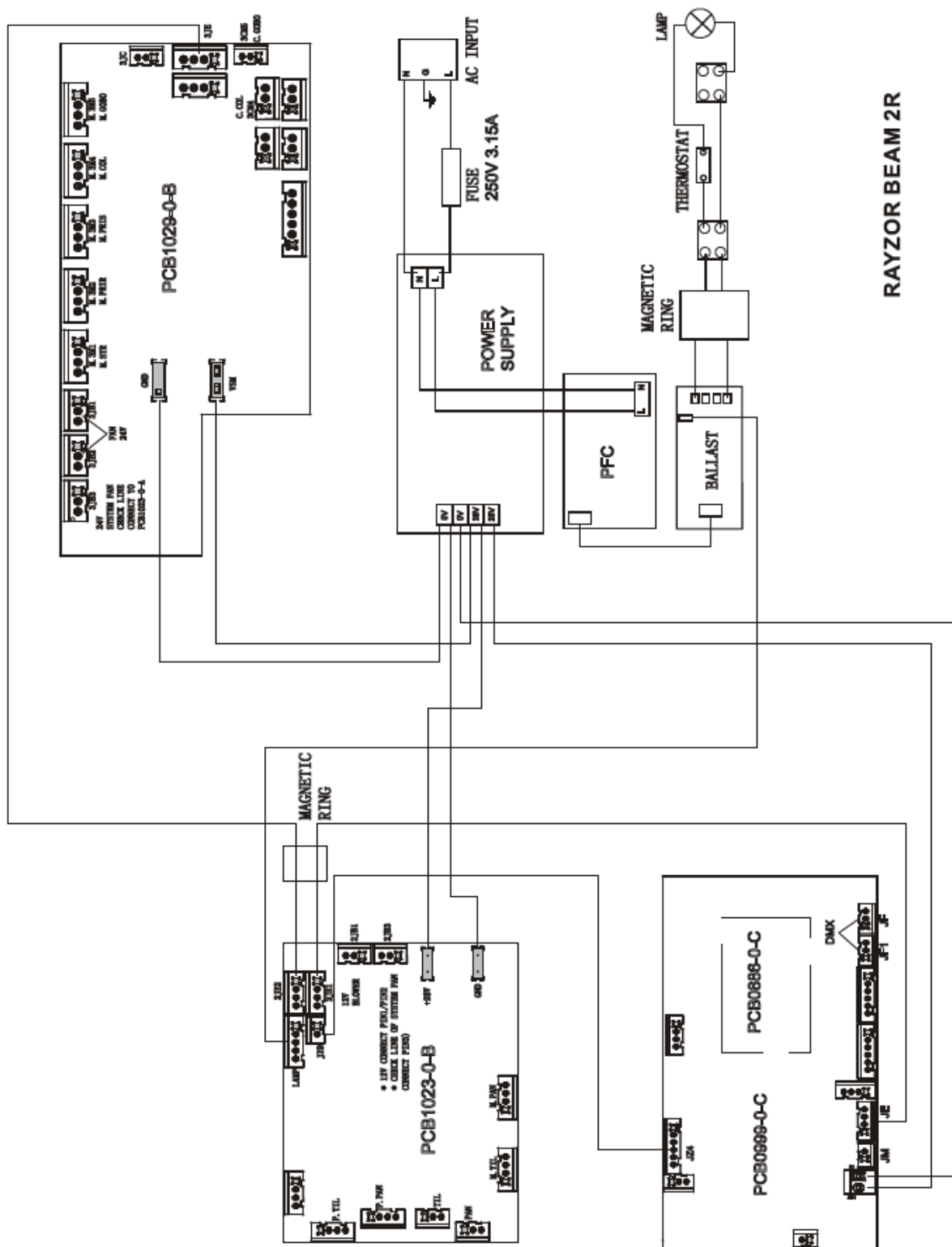
Distance	m 15	ft 49.2	m 20	ft 65.6	m 25	ft 82.0
3° Beam Diameter	0.78	2.6	1.04	3.4	1.3	4.3
	lux	fc	lux	fc	lux	fc
FULL ON	49,470	4,596	29,300	2,722	19,200	1,784

Please Note: Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.

DIMENSIONAL DRAWINGS



CIRCUIT SCHEMATICS



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OPTIONAL ACCESSORIES

ORDER CODE	ITEM
TRIGGER CLAMP	Heavy Duty Wrap Around Hook Style Clamp
DRCRAY2R	Six-Pack Road Case For Rayzor Beam 2R™
EWDMXSYSTEM	Wireless DMX System (1 Transmitter, 1 Receiver)
EWDMXT	Wireless DMX Transmitter
EWDMXR	Wireless DMX Receiver
AC5PDMX5PRO	5 ft. (1.5m) 5pin PRO DMX Cable
	Additional Cable Lengths Available

