



**PROTEUS  
RAYZOR 760 /  
RAYZOR 760 WMG  
user manual**

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## DOCUMENT VERSION



Due to additional product features and/or enhancements, an updated version of this document may be available online. Please scan the QR Code with your mobile device or visit [www.elationlighting.com](http://www.elationlighting.com) for the latest revision/update of this manual, before installation and/or programming.

| Date       | Document Version | Software Version | DMX Channels | Notes  |
|------------|------------------|------------------|--------------|--|
| 05/28/2019 | 1.0              | 1.2.1            | 25 / 52 / 80 | Initial release  |
| 09/30/2019 | 1.1              | N/C              | No Change    | Included RJ4 data cable note.  |
| 10/15/2019 | 2.0              | 1.2.2            | No Change    | Updated System sub menus, DMX Control Channel, RGBW/ SparkLED FX Tables                                      |
| 03/05/2020 | 2.5              | N/C              | No Change    | Added torque screw setting page  |
| 05/12/2020 | 3.0              | N/C              | No Change    | Added Elation Proteus Rayzor 760 WMG   |
| 08/10/2020 | 3.5              | N/C              | No Change    | Updated thermal  |
| 10/14/2020 | 4.0              | N/C              | No Change    | Updated specifications   |
| 02/04/2021 | 4.5              | 1.2.4            | No Change    | Updated primary/secondary modes  |
| 03/15/2021 | 5.0              | N/C              | No Change    | Hibernation/sun protection warning and information   |
| 05/20/2021 | 5.5              | N/C              | No Change    | Updated Maintenance Guidelines   |
| 08/15/2022 | 6.0              | N/C              | No Change    | Updated Introduction, System Menu, DMX Traits, and Torque settings for screws; added RDM; updated formatting |
| 08/23/2022 | 6.5              | 1.3              | No Change    | Updated System Menu  |
| 12/20/2022 | 7.0              | N/C              | No Change    | Added Limited Warranty; updated Specifications, Torque Settings for Screws                                   |
| 03/17/2023 | 7.5              | 1.3.3            | No Change    | Updated System Menu  |
| 06/26/2023 | 7.5              | N/C              | No Change    | Add IP65 page & Center-to-Center dim.  |

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# INTRODUCTION

Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this device. These instructions contain important safety and use information. **This device is intended for use by trained personnel only, and is not suitable for private use.**

## UNPACKING

Every device has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton is damaged, carefully inspect the device for damage, and be sure all accessories necessary to install and operate the device have arrived intact. In the event that damage has been found or parts are missing, please contact our customer support team for further instructions. Please do not return this device to your dealer without first contacting customer support. Please do not discard the shipping carton in the trash. Please recycle whenever possible.

## IP65 RATED

An IP rated lighting fixture is commonly installed in outdoor environments and has been designed with an enclosure that effectively protects against the ingress (entry) of external foreign objects such as dust and water. The International Protection (IP) rating system is commonly expressed as "IP" followed by two numbers (i.e. IP65) where the numbers define the degree of protection. The first digit (Foreign Bodies Protection) indicates the extent of protection against particles entering the fixture, while the second digit (Water Protection) indicates the extent of protection against water entering the fixture. **An IP65 rated lighting fixture, such as this one, has been designed and tested to protect against the ingress of dust (6) and low-pressure water jets from any direction (5).**

## BOX CONTENTS

Omega Brackets (x2)

IP65 Rated 5-pin DMX Cable (x1)

IP65 Rated RJ45 Data Cable (x1) - **FIXTURE TO FIXTURE INTERCONNECTION USE ONLY!**

IP65 Locking Power Cable (x1)

## CUSTOMER SUPPORT

Contact ELATION Service for any product related service and support needs.

Also visit [forums.elationlighting.com](https://forums.elationlighting.com) with questions, comments or suggestions.

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# IP65 RATED

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

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

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

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

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

**Interior Maintenance:** Inspect the interior every 30-days. The unit must be powered off/disconnected.

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

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

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

## LIMITED WARRANTY (USA ONLY)

- 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 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.

### WARRANTY RETURNS

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.



# SAFETY GUIDELINES

This fixture is a sophisticated piece of electronic equipment. To guarantee a smooth operation, it is important to follow all instructions and guidelines in this manual. Elation Professional is not responsible for injury and/or damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual. Only qualified and/or certified personnel should perform installation of this fixture and only the original rigging parts (omega brackets) included with this fixture should be used for installation. Any modifications to the fixture and/or the included mounting hardware will void the original manufacturer's warranty and increase the risk of damage and/or personal injury.



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



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



**ENSURE ALL CONNECTIONS AND END CAPS ARE PROPERLY SEALED WITH A DIELECTRIC GREASE (AVAILABLE AT MOST ELECTRICAL SUPPLIERS) TO PREVENT WATER CORROSION AND/OR ELECTRICAL SHORT CIRCUIT.**



**DO NOT PLUG FIXTURE INTO A DIMMER PACK!  
NEVER OPEN THIS FIXTURE WHILE IN USE!  
UNPLUG POWER BEFORE SERVICING FIXTURE!  
NEVER TOUCH FIXTURE DURING OPERATION, AS IT MAY BE HOT!  
KEEP FLAMMABLE MATERIALS AWAY FROM FIXTURE!**



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



**MINIMUM DISTANCE TO OBJECTS/SURFACES  
MUST BE 3.3 FEET (1 METERS)  
MAXIMUM TEMP OF EXTERNAL SURFACE 185° F (85°C)  
MINIMUM DISTANCE OF INFLAMMABLE MATERIALS  
FROM THE SURFACE 1.6 FEET (0.5 METER)**

# SAFETY PRECAUTIONS

- **DO NOT TOUCH** the fixture housing during operation. Turn OFF the power and allow approximately 15 minutes for the fixture to cool down before servicing.
- **DO NOT** shake fixture, and avoid brute force when installing and/or operating fixture.
- **DO NOT** operate fixture if the power cord is frayed, crimped, damaged and/or if any of the power cord connectors are damaged and do not insert into the fixture securely with ease.
- **NEVER** force a power cord connector into the fixture. If the power cord or any of its connectors are damaged, replace it immediately with a new one of the same power rating.
- **DO NOT** block any air ventilation slots.
- All fan and air inlets must remain clean and never blocked.
- Allow approx. 6" (15cm) between fixture and other devices or a wall for proper cooling.
- Always disconnect fixture from main power source before performing any type of service and/or cleaning procedure.
- Only handle the power cord by the plug end. Never pull out the plug by tugging the wire portion of the cord.
- During the initial operation of this fixture, a light smoke or smell may emit from the interior of the fixture. This is a normal process and is caused by excess paint in the interior of the casing burning off from the heat associated with the lamp and will decrease gradually over time.
- Consistent operational breaks will ensure fixture will function properly for many years.
- **ONLY** use the original packaging and materials to transport the fixture in for service.



# MAINTENANCE GUIDELINES



**DISCONNECT POWER BEFORE PERFORMING ANY MAINTENANCE!**

## CLEANING

Frequent cleaning is recommended to ensure proper function, optimized light output, and an extended life. The frequency of cleaning depends on the environment in which the fixture operates: damp, smoky or particularly dirty environments can cause greater accumulation of dirt on the fixture's optics. Periodically clean the external lens surface with a soft cloth to avoid dirt/debris accumulation. **NEVER** use alcohol, solvents, or ammonia-based cleaners.

## MAINTENANCE

Regular inspections are recommended to ensure proper function and extended life. There are no user serviceable parts inside this fixture. Please refer all other service issues to an authorized 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:

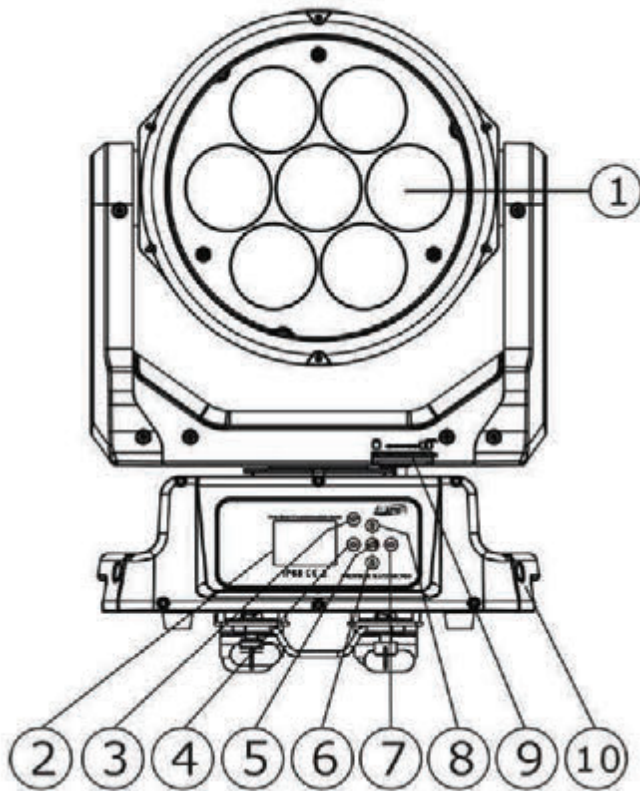
- A detailed electric check by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating.
- Be sure all screws and fasteners are securely tightened at all times. Loose screws may fall out during normal operation, resulting in damage 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.

## FIXTURE DISASSEMBLY

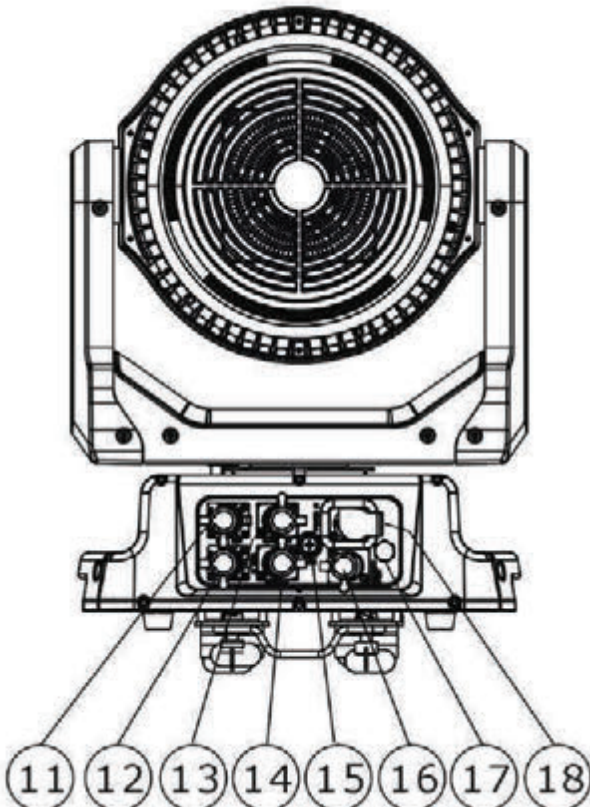
The following points should be observed after performing any maintenance procedure that requires disassembly of the unit:

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

# OVERVIEW



1. Lens
2. System Menu LCD Display
3. Mode/Esc Button
4. Left Button
5. Enter Button
6. Down Button
7. Right Button
8. Up Button
9. Pan Lock
10. Carrying Handle(s)
11. 5-pin DMX Output
12. 5-pin DMX Input
13. RJ45 Output
14. RJ45 Input
15. Fuse
16. Service Port
17. Value
18. Power Input



# INSTALLATION GUIDELINES



## FLAMMABLE MATERIAL WARNING

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



## ELECTRICAL CONNECTIONS

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



**MINIMUM DISTANCE TO SURFACES/OBJECTS IS 3.3 FEET (1 METER).**

**MINIMUM DISTANCE TO FLAMMABLE MATERIALS IS 1.6 FEET (0.5 METER).**

**EXTERNAL SURFACE CAN REACH TEMPERATURES OF 185° F (85° C).**



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

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

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

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

Fixture ambient operating temperature range is **-4° to 113°F (-20° to 45°C)**. Do not operate the fixture when the ambient temperature falls outside of this range.

Fixture(s) should be installed away from walking paths, seating areas, or areas where unauthorized personnel might reach the fixture by hand.

**NEVER** stand directly below the fixture(s) when rigging, removing, or servicing.

Overhead fixture installation must always be secured with a secondary safety attachment, such as an appropriately rated safety cable.

Allow approximately 15 minutes for the fixture to cool down before serving.

# INSTALLATION GUIDELINES

## OMEGA BRACKET INSTALLATION

Insert the Omega Brackets into the matching holes on the bottom of the fixture. Secure the Omega Brackets to the fixture by turning each quick-lock fastener ¼ turn clockwise. **Always check to make sure that each fastener is completely locked.** Omega brackets can be installed into the underside of the fixture's base as illustrated below.



## CLAMP INSTALLATION

When mounting the fixture to a truss, be sure to secure appropriately rated professional grade rigging clamps to the included Omega Brackets using an M10 screw fitted through the center hole of the Omega Brackets. **This fixture requires the installation of two Omega brackets and two clamps for secure truss mounting.** The fixture also provides built-in rigging points for a SAFETY CABLE. Be sure to only use the designated rigging point for the safety cable and never secure a safety cable to a carrying handle.



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

## ART-NET | sACN CONNECTION

When connecting fixture to a network switch to control multiple devices, a Gigabit Ethernet Switch that supports IGMP (Internet Group Management Protocol) is required. Using a Gigabit Ethernet Switch that does not support IGMP can cause erratic behavior of all connected devices to the switch. Click link below for more information about IGMP.

[https://en.wikipedia.org/wiki/Internet\\_Group\\_Management\\_Protocol](https://en.wikipedia.org/wiki/Internet_Group_Management_Protocol)

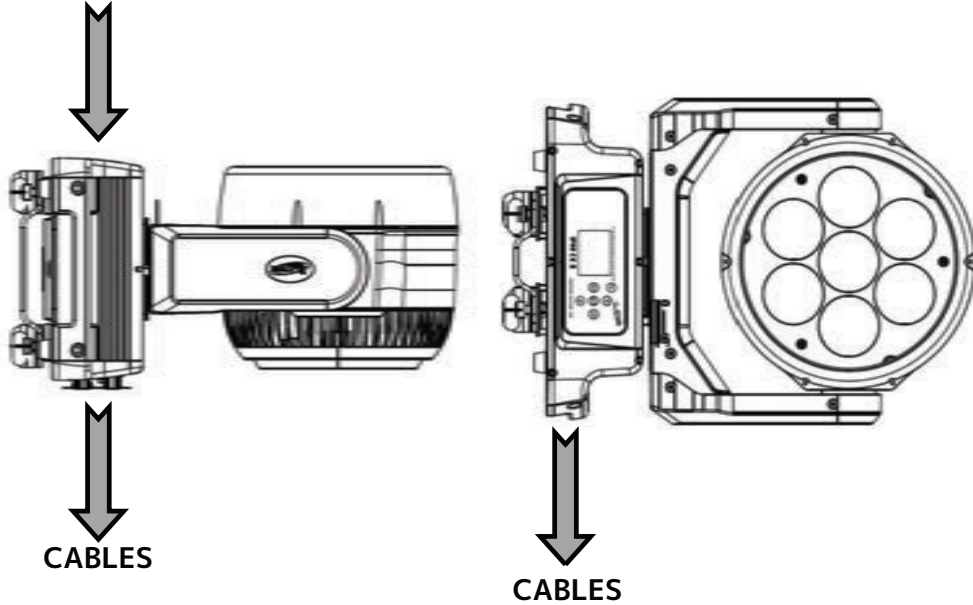
# INSTALLATION GUIDELINES

## POWER AND DATA CABLES



TO MAINTAIN THE IP65 RATING INTEGRITY OF THE FIXTURE, ALL CABLES MUST BE RUN TOWARDS THE GROUND IN ORDER TO PREVENT WATER ACCUMULATION AROUND THE CONNECTIONS.

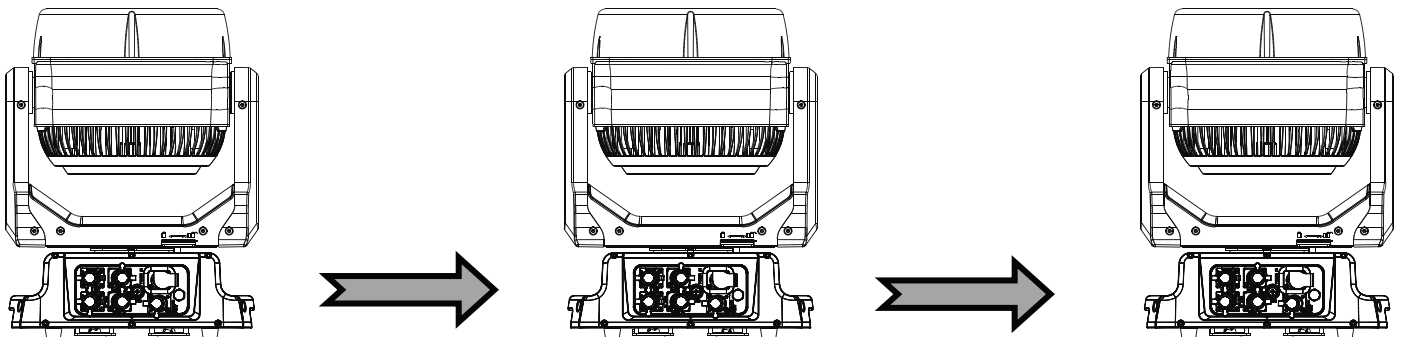
SYSTEM MENU  
LCD DISPLAY



## RJ45 DATA CABLES



THE INCLUDED RJ45 DATA CABLE IS FOR FIXTURE TO FIXTURE INTERCONNECTIONS ONLY! THE RJ45 CABLE CONNECTORS MAY NOT BE COMPATIBLE WITH OTHER RJ45 OR ETHERNET TYPE CONNECTORS.





# INSTALLATION GUIDELINES

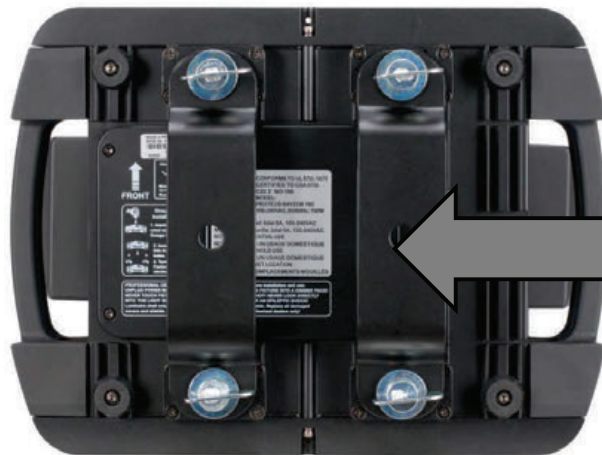
## POWER AND DATA CONNECTIONS



ENSURE ALL CONNECTIONS AND END CAPS ARE PROPERLY SEALED WITH A DIELECTRIC GREASE (AVAILABLE AT MOST ELECTRICAL SUPPLIERS) IN ORDER TO PREVENT WATER CORROSION AND/OR ELECTRICAL SHORT CIRCUIT.



TO MAINTAIN IP65 RATING INTEGRITY AND PREVENT WATER FROM ENTERING THE FIXTURE, SEAL ALL UNUSED CONNECTION RUBBER CAPS.



**SAFETY  
CABLE  
LOOP**



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

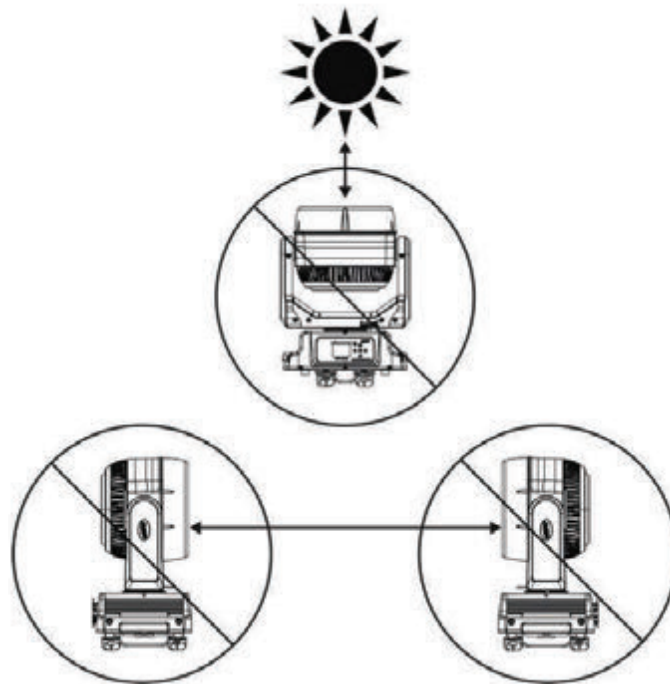
# INSTALLATION GUIDELINES

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

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

This issue is not specific only to Elation lighting fixtures, but rather it is a common issue with lighting fixtures from all manufacturers. Although there is no true way to fully prevent this issue from happening, the guidelines below can reduce the risk of potential damage. Contact Elation Service for more details.

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



## SUN PROTECTION MODE / HIBERNATION MODE

This state can be set via DMX, or the fixture will go into this state after 3 minutes without a DMX signal.

When the sun protection is activated, the pan-and-tilt function of the moving-head will position the lens away from direct sunlight, or other high intensity light source, to protect the internal belts, electronics etc. from burn damage.

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

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



# TORQUE SETTINGS FOR SCREWS



PANEL SCREWS MUST BE TIGHTENED WITH A TORQUE WRENCH ACCORDING TO THE TORQUE SPECIFICATION DESCRIBED BELOW.



The hex-head screws holding the panels **MUST** be tightened with a torque wrench (Torque Wrench Not Included).

**TORQUE SETTING = 11 lbf-in. (12.7kgf-cm)**



**CAUTION! DO NOT OVER TORQUE SCREWS AS THIS CAN CAUSE LEAKAGE ISSUES! TO CONFIRM THE IP65 INTEGRITY AFTER A PROCEDURE REQUIRING DISASSEMBLY/REASSEMBLY, TEST THE FIXTURE USING THE IP TESTER. CONTACT ELATION SERVICE FOR MORE DETAILS.**



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

# TORQUE SETTINGS FOR SCREWS



**CAUTION! DO NOT OVER TORQUE SCREWS AS THIS CAN CAUSE LEAKAGE ISSUES! TO CONFIRM THE IP65 INTEGRITY AFTER A PROCEDURE REQUIRING DISASSEMBLY/REASSEMBLY, TEST THE FIXTURE USING THE IP TESTER. CONTACT ELATION SERVICE FOR MORE DETAILS.**



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



| IP PRESSURE TESTING PARAMETERS |                           |                           |                  |
|--------------------------------|---------------------------|---------------------------|------------------|
| Test Type                      | Minimum Pressure          | Maximum Pressure          | Steady/Hold Time |
| Vacuum Test                    | -1.88 psi<br>(-13.00 KPa) | -2.46 psi<br>(-17.00 KPa) | 10 sec           |
| Pressure Test                  | 1.88 psi<br>(13.00 KPa)   | 2.46 psi<br>(17.00 KPa)   | 10 sec           |

# REMOTE DEVICE MANAGEMENT (RDM)

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

Remote Device Management (RDM) is a protocol that sits on top of the DMX512 data standard for lighting, allowing the DMX systems of the fixtures to be modified and monitored remotely. This protocol is ideal for instances in which a unit is installed in a location that is not easily accessible.

With RDM, the DMX512 system becomes bi-directional, allowing a compatible RDM enabled controller to send out a signal to devices on the wire, as well as allowing the fixture to respond (known as a GET command). The controller can then use its SET command to modify settings that would typically have to be changed or viewed directly via the unit's display screen, including the DMX Address, DMX Channel Mode, and Temperature Sensors.

## FIXTURE RDM INFORMATION:

| RDM Code | Device ID | Device Model ID | Personality ID |
|----------|-----------|-----------------|----------------|
| 0x608    | 1544      | Open            | Open           |

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

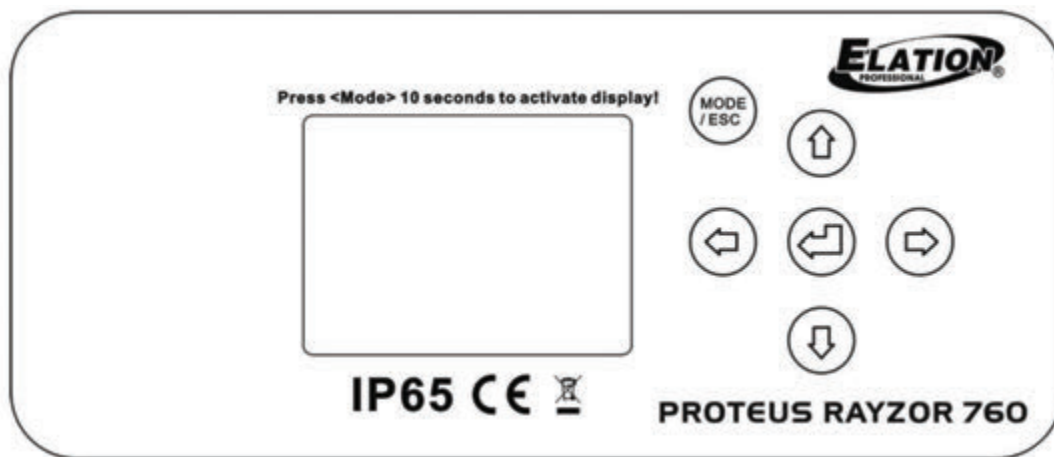
The following parameters are accessible in RDM on this device:

|                             |
|-----------------------------|
| Sensor Definition           |
| Sensor Value                |
| Device Model Description    |
| Manufacturer Label          |
| Device Label                |
| DMX Personality             |
| DMX Personality Description |
| Device Hours                |
| Lamp Hours                  |
| Lamp State                  |
| Pan Invert                  |
| Tilt Invert                 |
| Display Invert              |

# SYSTEM MENU

The fixture includes an easy to navigate system menu. The control panel (see image below) is located on the front of the fixture and provides access to the main system menu where all necessary system adjustments can be made. 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.

To access the LCD Menu Control Display via the internal battery, press and hold the MODE/ESC button for 10 seconds. The LCD Menu Control Display will shut OFF automatically about 1 minute from the last button press.



## BATTERY

This unit features a dedicated battery that can be used to power the screen display. This allows the user to configure the device's channel mode, DMX address, or any other screen-accessible features without needing to power on the device or even connect it to a power source. To activate the display on battery power, press and hold the MODE button for 3 seconds.

**ALTHOUGH E-FLY SETTINGS MAY APPEAR IN THE SYSTEM MENU, THIS FEATURE IS NOT ACTIVATED. E-FLY WIRELESS DMX IS AN OPTIONAL FEATURE WHICH MUST BE ACTIVATED IN THE SERVICE MENU. PLEASE CONTACT ELATION SERVICE FOR FURTHER DETAILS.**

# SYSTEM MENU (V1.2.1)

## Supports Software Versions: 1.2.1

Features subject to change without notice.  
 Rotation direction (clockwise/counter-clockwise) and control of effects depend on head orientation and pan/tilt settings. Default settings listed in **bold**.

| MAIN MENU        | SUB MENU               | OPTIONS / VALUES  |                              | DESCRIPTION                               |  |
|------------------|------------------------|-------------------|------------------------------|---|--|
| FUNCTION         | Set DMX Address        | A001 - Axxx       |                              | Set DMX address                           |  |
|                  | DMX Value              | All...            |                              | Display DMX value                         |  |
|                  | Secondary Mode         | Secondary1        |                              | Active secondary mode and select grouping |  |
|                  |                        | Secondary2        |                              |   |  |
|                  |                        | Secondary3        |                              |   |  |
| Auto Program     | Primary / <b>Alone</b> |                   |                              |   |  |
| INFORMATION      | Time Information       | Current Time      | xxxx hours                   | Run hours since fixture was powered on    |  |
|                  |                        | Total Run Time    | xxxx hours                   | Total fixture lifetime run hours          |  |
|                  |                        | Last Run Time     | xxxx hours                   | Run hours since last reset                |  |
|                  |                        | Last Run Password | 038                          |   |  |
|                  |                        | Clear Last Run    | On / <b>Off</b>              | Clear Last Run Time                       |  |
|                  | Temperature Info       | LED Temperature   | xxx C / <b>xxx F</b>         |   |  |
|                  |                        | Head Temperature  | xxx C / <b>xxx F</b>         |   |  |
|                  |                        | Base Temperature  | xxx C / <b>xxx F</b>         |   |  |
|                  | Humidity Info          | Head Humidity     | xx %                         |   |  |
|                  |                        | Base Humidity     | xx %                         |   |  |
|                  | Ethernet IP            | xxx.xxx.xxx.xxx   |                              | Displays fixture ethernet address         |  |
|                  | Fan Info               | Head Fan 1        | xxxx RPM                     |   |  |
|                  |                        |                   | Standby / Fault              |   |  |
|                  |                        | ...               | ...                          |   |  |
|                  |                        | Head Fan 6        | xxxx RPM                     |   |  |
|                  |                        |                   | Standby / Fault              |   |  |
|                  |                        | Base Fan 1        | xxxx RPM                     |   |  |
| Standby / Fault  |                        |                   |                              |   |  |
| Base Fan 2       | xxxx RPM               |                   |                              |   |  |
|                  | Standby / Fault        |                   |                              |   |  |
| Software Version | Vx.x.x                 |                   |                              |   |  |
| Error Info       | Error Record 1 - 10    |                   | Displays last 10 error codes |   |  |

# SYSTEM MENU (V1.2.1)

| Supports Software Versions: 1.2.1 |                   |  |                             |   |
|-----------------------------------|-------------------|--|-----------------------------|---|
| MAIN MENU                         | SUB MENU          | OPTIONS / VALUES   |                             | DESCRIPTION   |
| PERSONALITY                       | Status Settings   | Address via DMX  | On / Off                    |   |
|                                   |                   | No DMX Status  | Close                       |   |
|                                   |                   |  | Hold                        |   |
|                                   |                   |  | Auto                        |   |
|                                   |                   | Pan Reverse  | On / Off                    |   |
|                                   |                   | Tilt Reverse   | On / Off                    |   |
|                                   |                   | Pan Degree   | 360 / <b>540</b>            |   |
|                                   |                   | Tilt Degree  | 360 / <b>270</b>            |   |
|                                   |                   | Pan Tilt Path  | Shortest Path               |   |
|                                   |                   |  | Continue Path               |   |
|                                   |                   | Feedback   | On / Off                    |   |
|                                   | LED Degree Change | 0 / 180  |                             |   |
|                                   | Hibernation       | Off, 01min - 99min   | <b>Default = 15min</b>      |   |
|                                   | Service Setting   | Password = 050   |                             |   |
|                                   |                   | RDM UID  | 22A6xxxxxxxx                | RDM PID Code  |
|                                   |                   | Clear Err Info   | On / Off                    | Clear error info                                    |
|                                   |                   | USB Update   | Yes / No                    | Service port for software updates                   |
|                                   | Fan Control       | <b>Auto</b>  |                             |   |
|                                   |                   | High   |                             |   |
|                                   |                   | Silent   |                             |   |
|                                   | Display Setting   | Shutoff Time   | 02min - 60min               | <b>Default = 05min</b>                              |
|                                   |                   | Display Reverse  | On / Off                    | Flip display 180 degrees                            |
|                                   |                   | Key Lock   | On / Off                    | Key Lock  |
|                                   | Temperature C/F   | Celsius / <b>Fahrenheit</b>  |                             |   |
|                                   | Initial Status    | Control = xxx  |                             | Initial effect position                             |
|                                   | Select Signal     | <b>DMX Only</b>  |                             | DMX In / Out  |
|                                   |                   | Art-Net  |                             | Select Art-Net                                      |
|                                   |                   | sACN   |                             | Activate sACN                                       |
|                                   | Ethernet IP       | xxx.xxx.xxx.xxx  |                             |   |
|                                   | Ether Mask IP     | xxx.xxx.xxx.xxx  |                             |   |
|                                   | Set Universe      | <b>000</b> - 32767   |                             | Set ArtNet universe                                 |
|                                   | Dimmer Mode       | <b>Standard</b>  |                             |   |
|                                   |                   | Stage  |                             |   |
|                                   |                   | TV   |                             |   |
|                                   |                   | Architectural  |                             |   |
|                                   |                   | Theatre  |                             |   |
|                                   | Refresh           | Stage 2  |                             |   |
|                                   |                   | 900Hz - 1500Hz, 2500Hz, 4000Hz, 5000Hz, 6000Hz, 10000Hz, 15000Hz, 20000Hz, 25000Hz |                             | Select LED refresh rate;<br><b>Default = 1200Hz</b> |
|                                   | Dimmer Curve      | <b>Linear</b>  |                             |   |
|                                   |                   | Square   |                             |   |
| Inverse Square                    |                   |  |                             |   |
| S-Curve                           |                   |  |                             |   |
| Reset Default                     | On / Off          | Passcode = 011   | Restore to factory settings |   |

# SYSTEM MENU (V1.2.1)

| Supports Software Versions: 1.2.1 |                  |  |                                      |                                  |  |
|-----------------------------------|------------------|--|--------------------------------------|----------------------------------|--|
| MAIN MENU                         | SUB MENU         | OPTIONS / VALUES                           |                                      | DESCRIPTION                      |  |
| RESET FUNCTION                    | Reset All        |  |                                      |                                  |  |
|                                   | Reset Pan & Tilt |  |                                      |                                  |  |
|                                   | Reset Others     |  |                                      |                                  |  |
| EFFECT ADJUST                     | Test Channel     | Pan...                                     |                                      | Test each individual function    |  |
|                                   | Manual Control   | Pan = xxx, ...                             |                                      | Fine adjustment to each function |  |
|                                   | Calibration      | Passcode = 050                             |                                      |                                  |  |
| USER MODE SET                     | User Mode        | <b>Standard</b>                            |                                      | Select DMX channel mode          |  |
|                                   |                  | Pixels                                     |                                      |                                  |  |
|                                   |                  | Extended                                   |                                      |                                  |  |
| EDIT PROGRAM                      | Select Program   | Auto Pro Part 1 = Program 1-10 (Program 1) |                                      | Select programs to be run        |  |
|                                   |                  | Auto Pro Part 2 = Program 1-10 (Program 2) |                                      |                                  |  |
|                                   |                  | Auto Pro Part 3 = Program 1-10 (Program 3) |                                      |                                  |  |
|                                   | Edit Program     | Program 1                                  | Program Test                         |                                  | Testing program                        |
|                                   |                  |  | Step01 = SCxxx                       |                                  | Program In Loop                        |
|                                   |                  |  | Step64 = SCxxx                       |                                  | Save and exit                          |
|                                   |                  | ...  |                                      | ...                              |  |
|                                   |                  | Program 10                                 | Program Test                         |                                  | Testing program                        |
|                                   |                  |  | Step01 = SCxxx                       |                                  | Program In Loop                        |
|                                   | Step64 = SCxxx   |  | Save and exit                        |                                  |  |
|                                   | Edit Scenes      | Edit Scene 001<br>~<br>Edit Scene 250      | Pan, Tilt, ...                       |                                  | Save and automatically return          |
|                                   |                  |  | --Fade Time--<br>~<br>--Scene Time-- |                                  | Manual scenes edit                     |
|                                   |                  |  | Input by Outside                     |                                  | Stores scenes via external DMX control |
| Rec Controller                    | xx - xx          |  | Automatic scene recorder             |                                  |  |

SEE FOLLOWING PAGES FOR SYSTEM MENU REVISIONS.



# SYSTEM MENU (V1.2.2)

| REVISED SUB MENUS WITH SOFTWARE UPDATE VERSION 1.2.2 |             |                  |            |                 |                |
|--|-------------|------------------|------------|-----------------|----------------|
| MAIN MENU  | SUB MENU    | OPTIONS / VALUES |            | DESCRIPTION     |                |
| PERSONALITY  | Dimmer Mode | Standard         |            | Set Dimmer Mode |                |
|  |             | Stage            |            |                 |                |
|  |             | TV               |            |                 |                |
|  |             | Architectural    |            |                 |                |
|  |             | Theatre          |            |                 |                |
|  |             | Stage 2          |            |                 |                |
|  |             |                  |            | 0.0 s           | Set Delay Time |
|  |             |                  |            | 0.1 s           |                |
|  |             |                  |            | 0.2 s           |                |
|  |             |                  |            | 0.3 s           |                |
|  |             |                  |            | 0.4 s           |                |
|  |             |                  |            | 0.5 s           |                |
|  |             |                  |            | 0.6 s           |                |
|  |             |                  |            | 0.7 s           |                |
|  |             |                  |            | 0.8 s           |                |
|  |             |                  |            | 0.9 s           |                |
|  |             |                  | Delay Time | 1.0 s           |                |
|  |             |                  |            | 1.5 s           |                |
|  |             |                  |            | 2.0 s           |                |
|  |             |                  |            | 2.5 s           |                |
|  |             | 3.0 s            |            |                 |                |
|  |             | 4.0 s            |            |                 |                |
|  |             | 5.0 s            |            |                 |                |
|  |             | 6.0 s            |            |                 |                |
|  |             | 7.0 s            |            |                 |                |
|  |             | 8.0 s            |            |                 |                |
|  |             | 9.0 s            |            |                 |                |
|  |             | 10.0 s           |            |                 |                |

# SYSTEM MENU (V1.3)

| REVISED SUB MENUS WITH SOFTWARE UPDATE VERSION 1.3 |                   |                    |                        |                                 |
|--|-------------------|--------------------|------------------------|---------------------------------|
| MAIN MENU  | SUB MENU          | OPTIONS / VALUES   |                        | DESCRIPTION                     |
| PERSONALITY  | Status Settings   | Address Via DMX    | On / Off               | Set Dimmer Mode                 |
|  |                   | No DMX Status      | Close                  |                                 |
|  |                   |                    | Hold                   |                                 |
|  |                   |                    | Auto                   |                                 |
|  |                   |                    | <b>SunProt</b>         | Sun Protection Mode             |
|  |                   | Pan Reverse        | On / <b>Off</b>        |                                 |
|  |                   | Tilt Reverse       | On / <b>Off</b>        |                                 |
|  |                   | Pan Tilt Path      | Shortest Path          |                                 |
|  |                   |                    | <b>Continue Path</b>   |                                 |
|  |                   | Feedback           | On / Off               |                                 |
|  | LED Degree Change | 0 / 180            |                        |                                 |
|  | Sun Protection    | On / Off           |                        |                                 |
|  | Hibernation       | Off, 01min - 99min | Default = <b>15min</b> |                                 |
|  | ...               | ...                | ...                    | ...                             |
|  | Set Universe      | 000 - 32767        |                        |                                 |
|  | DHCP              | On / <b>Off</b>    |                        | Automatic IP address assignment |
| Dimmer Mode  | ...               | ...                | ...                    |                                 |
| ...  | ...               | ...                | ...                    |                                 |

# SYSTEM MENU (V1.3.3)

## Supports Software Version 1.3.3

| MAIN MENU    | SUB MENU               | OPTIONS / VALUES                                  |                              | DESCRIPTION                               |  |
|--------------|------------------------|---|------------------------------|---|--|
| FUNCTION     | Set DMX Address        | A001 - Axxx                                       |                              | Set DMX address                           |  |
|              | DMX Value              | All...  |                              | Display DMX value                         |  |
|              | Secondary Mode         | Secondary1  |                              | Active secondary mode and select grouping |  |
|              |                        | Secondary2  |                              |   |  |
| Secondary3   |                        |   |                              |   |  |
| Auto Program | <b>Primary</b> / Alone |   |                              |   |  |
| INFORMATION  | Time Information       | Current Time                                      | xxxx hours                   | Run hours since fixture was powered on    |  |
|              |                        | Total Run Time                                    | xxxx hours                   | Total fixture lifetime run hours          |  |
|              |                        | Last Run Time                                     | xxxx hours                   | Run hours since last reset                |  |
|              |                        | Last Run Password                                 | 038                          |   |  |
|              |                        | Clear Last Run                                    | On / <b>Off</b>              | Clear Last Run Time                       |  |
|              | Temperature Info       | LED Temperature                                   | xxx C / <b>xxx F</b>         |   |  |
|              |                        | Head Temperature                                  | xxx C / <b>xxx F</b>         |   |  |
|              |                        | Base Temperature                                  | xxx C / <b>xxx F</b>         |   |  |
|              | Humidity Info          | Head Humidity                                     | xxx %                        |   |  |
|              |                        | Base Humidity                                     | xxx %                        |   |  |
|              | Ethernet IP            | Ethernet IP<br>xxx.xxx.xxx.xxx<br>xxx.xxx.xxx.xxx |                              | Displays fixture ethernet address         |  |
|              | Fan Info               | Head Fan 1: xxxx RPM<br>...                       |                              | Fan speed information                     |  |
|              | Software Version       | Vx.x.x  |                              |   |  |
| Error Info   | Error Record 1 - 10    |   | Displays last 10 error codes |   |  |

# SYSTEM MENU (V1.3.3)

| Supports Software Version 1.3.3 |                   |  |                             |   |
|---------------------------------|-------------------|--|-----------------------------|---|
| MAIN MENU                       | SUB MENU          | OPTIONS / VALUES   |                             | DESCRIPTION   |
| PERSONALITY                     | Status Settings   | Address via DMX  | On / Off                    |   |
|                                 |                   | No DMX Status  | Close                       |   |
|                                 |                   |  | Hold                        |   |
|                                 |                   |  | Auto                        |   |
|                                 |                   |  | <b>Sun Prot</b>             |   |
|                                 |                   | Pan Reverse  | On / <b>Off</b>             |   |
|                                 |                   | Tilt Reverse   | On / <b>Off</b>             |   |
|                                 |                   | Pan Degree   | <b>360</b> / 540            |   |
|                                 |                   | Tilt Degree  | <b>360</b> / 270            |   |
|                                 |                   | Pan Tilt Path  | Shortest Path               |   |
|                                 |                   |  | <b>Continue Path</b>        |   |
|                                 | Feedback          | On / Off   |                             |   |
|                                 | LED Degree Change | <b>0</b> / 180   |                             |   |
|                                 | Hibernation       | Off, 01min - 99min   | <b>Default = 15min</b>      |   |
|                                 | Service Setting   | Password = 050   |                             |   |
|                                 |                   | Clear Err Info   | On / <b>Off</b>             | Clear error info                                    |
|                                 |                   | USB Update   | Yes / <b>No</b>             | Service port for software updates                   |
|                                 | Fan Control       | <b>Auto</b>  |                             |   |
|                                 |                   | High   |                             |   |
|                                 |                   | Silent   |                             |   |
|                                 | Display Setting   | Shutoff Time   | 02min - 60min               | <b>Default = 05min</b>                              |
|                                 |                   | Display Reverse  | On / <b>Off</b>             | Flip display 180 degrees                            |
|                                 |                   | Key Lock   | On / <b>Off</b>             | Key Lock  |
|                                 | Temperature C/F   | Celsius / <b>Fahrenheit</b>  |                             |   |
|                                 | Initial Status    | Pan = xxx<br>...   |                             | Initial effect position                             |
|                                 | Select Signal     | <b>DMX Only</b>  |                             | DMX In / Out  |
|                                 |                   | Art-Net  |                             | Select Art-Net                                      |
|                                 |                   | sACN   |                             | Activate sACN                                       |
|                                 | Ethernet IP       | xxx.xxx.xxx.xxx  |                             | Set IP address                                      |
|                                 | Ether Mask IP     | xxx.xxx.xxx.xxx  |                             | Set subnet mask                                     |
|                                 | Set Universe      | <b>000</b> - 32767   |                             | Set ArtNet universe                                 |
|                                 | DHCP              | On / <b>Off</b>  |                             | Auto assign IP address                              |
|                                 | Dimmer Mode       | <b>Standard</b>  |                             |   |
|                                 |                   | Stage  |                             |   |
|                                 |                   | TV   |                             |   |
|                                 |                   | Architectural  |                             |   |
|                                 |                   | Theatre  |                             |   |
|                                 |                   | Stage 2  |                             |   |
|                                 | Refresh           | 900Hz - 1500Hz, 2500Hz, 4000Hz, 5000Hz, 6000Hz, 10000Hz, 15000Hz, 20000Hz, 25000Hz |                             | Select LED refresh rate;<br><b>Default = 1200Hz</b> |
|                                 |                   | Dimmer Curve   | <b>Linear</b>               |   |
| Square                          |                   |  |                             |   |
| Inverse Square                  |                   |  |                             |   |
| S-Curve                         |                   |  |                             |   |
| Reset Default                   | On / <b>Off</b>   | Passcode = 011   | Restore to factory settings |   |

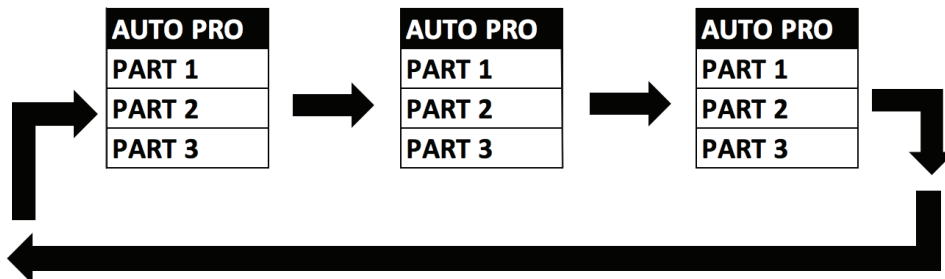
# SYSTEM MENU (V1.3.3)

| Supports Software Version 1.3.3 |                  |  |  |                                  |                               |
|---------------------------------|------------------|--|--|----------------------------------|-------------------------------|
| MAIN MENU                       | SUB MENU         | OPTIONS / VALUES                                     |  | DESCRIPTION                      |                               |
| PERSONALITY                     | Dimmer Curve     | <b>Linear</b>  |  |                                  |                               |
|                                 |                  | Square   |  |                                  |                               |
|                                 |                  | Inverse Square                                       |  |                                  |                               |
|                                 |                  | S-Curve  |  |                                  |                               |
|                                 | Reset Default    | On / <b>Off</b>                                      | Passcode = 011                         | Restore to factory settings      |                               |
| RESET FUNCTION                  | Reset All        |  |  |                                  |                               |
|                                 | Reset Pan & Tilt |  |  |                                  |                               |
|                                 | Reset Others     |  |  |                                  |                               |
| EFFECT ADJUST                   | Test Channel     | Pan...   |  | Test each individual function    |                               |
|                                 | Manual Control   | Pan = xxx, ...                                       |  | Fine adjustment to each function |                               |
|                                 | Calibration      | Passcode = 050<br>Pan = xxx, ...                     |  |                                  |                               |
| USER MODE SET                   | User Mode        | <b>Standard</b>                                      |  | Select DMX channel mode          |                               |
|                                 |                  | Pixels   |  |                                  |                               |
|                                 |                  | Extended   |  |                                  |                               |
| EDIT PROGRAM                    | Select Program   | Auto Pro Part 1 = Program 1-10<br><b>(Program 1)</b> |  | Select auto programs to run      |                               |
|                                 |                  | Auto Pro Part 2 = Program 1-10<br><b>(Program 1)</b> |  |                                  |                               |
|                                 |                  | Auto Pro Part 3 = Program 1-10<br><b>(Program 1)</b> |  |                                  |                               |
|                                 | Edit Program     | Program 1 - 10                                       | Program Test                           |                                  | Testing program               |
|                                 |                  |  | Step01 = SCxxx                         |                                  | Program In Loop               |
|                                 |                  |  | Step64 = SCxxx                         |                                  | Save and exit                 |
|                                 | Edit Scenes      | Edit Scene 001<br>~<br>Edit Scene 250                | Pan, Tilt, ...                         |                                  | Save and automatically return |
|                                 |                  |  | --Fade Time--<br>~<br>--Scene Time--   |                                  | Manual scenes edit            |
| Input by Out                    |                  |  | Stores scenes via external DMX control |                                  |                               |
| Rec Controller                  | xx - xx          |  | Automatic scene recorder               |                                  |                               |

# RECORD CONTROLLER

## WORKING WITH BUILT-IN PROGRAMS

A Primary unit can send up to 3 different data groups to the Secondary units. In other words, a Primary unit can operate up to 3 different Secondary units, with each Secondary unit operating a different set of programs. The Primary unit sends the 3 program parts in a continuous loop.



The Secondary unit receives data from the Primary unit according to the group that the Secondary unit was assigned to. For example, suppose we have a unit that has been assigned as a “Secondary 1” unit. Upon receiving the 3-part Auto Program from the Primary unit, the Secondary 1 unit will implement Part 1 of the Auto Program, while ignoring Part 2 and Part 3.

To start running an Auto Program, follow the directions below:

- 1. Set the Secondary unit(s) to the desired Secondary group.** In the main menu of any unit that you want to set as a Secondary, navigate to Function > Secondary Mode. Select “Secondary 1”, “Secondary 2”, or “Secondary 3” to designate the desired Secondary group. Press ENTER to confirm, and press MODE/ESC to return to the main menu,
- 2. Set the Primary unit.** In the Main Menu of the unit you want to set as the Primary, navigate to Function > Auto Program. Select “Primary” and press ENTER to confirm. Then press MODE/ESC to return to the main menu.
- 3. Program selection for each part of the Auto Program.** In the main menu of the Primary unit, navigate to Edit Program > Select Programs. Select “Auto Pro Part 1”, then select which program (1 - 10) to set as Part 1. Press ENTER to confirm. Repeat the process for “Auto Pro Part 2” and “Auto Pro Part 3”.
- 4. Program selection for edit program.** In the main menu of the Primary unit, navigate to Edit Program > Edit Program, then press ENTER. Select the desired program to edit specific scenes into a specific program, then press ENTER to confirm.
- 5. Automatic Scene Recording.** In the main menu of the Primary unit, navigate to Edit Program > Edit Scenes, then press ENTER. Select the desired scene numbers, noting that a maximum of 250 scenes can be programmed. Press ENTER to confirm.

See the following page for an example.

# RECORD CONTROLLER

## EXAMPLE: WORKING WITH BUILT-IN PROGRAMS

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

Program 4 includes scenes: 8, 9, & 10

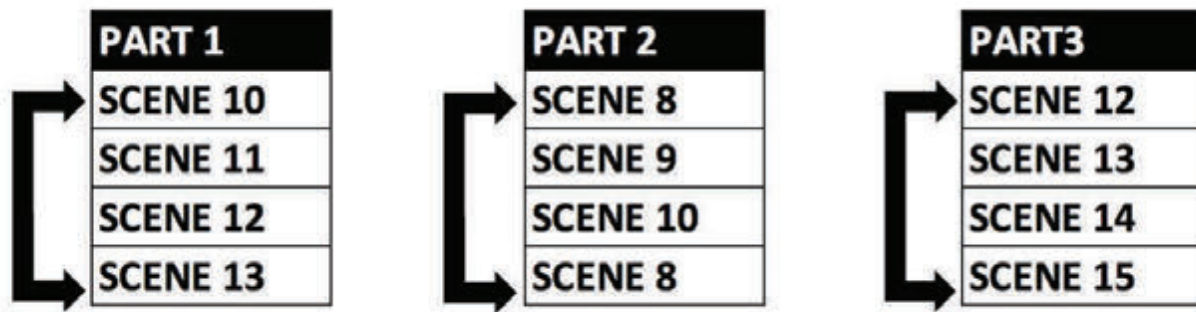
Program 6 includes scenes: 12, 13, 14, & 15

Auto Pro Part 1 is Program 2

Auto Pro Part 2 is Program 3

Auto Pro Part 3 is Program 6

The 3 Secondary groups run the Auto Program in certain time segments, as illustrated in the diagram below.



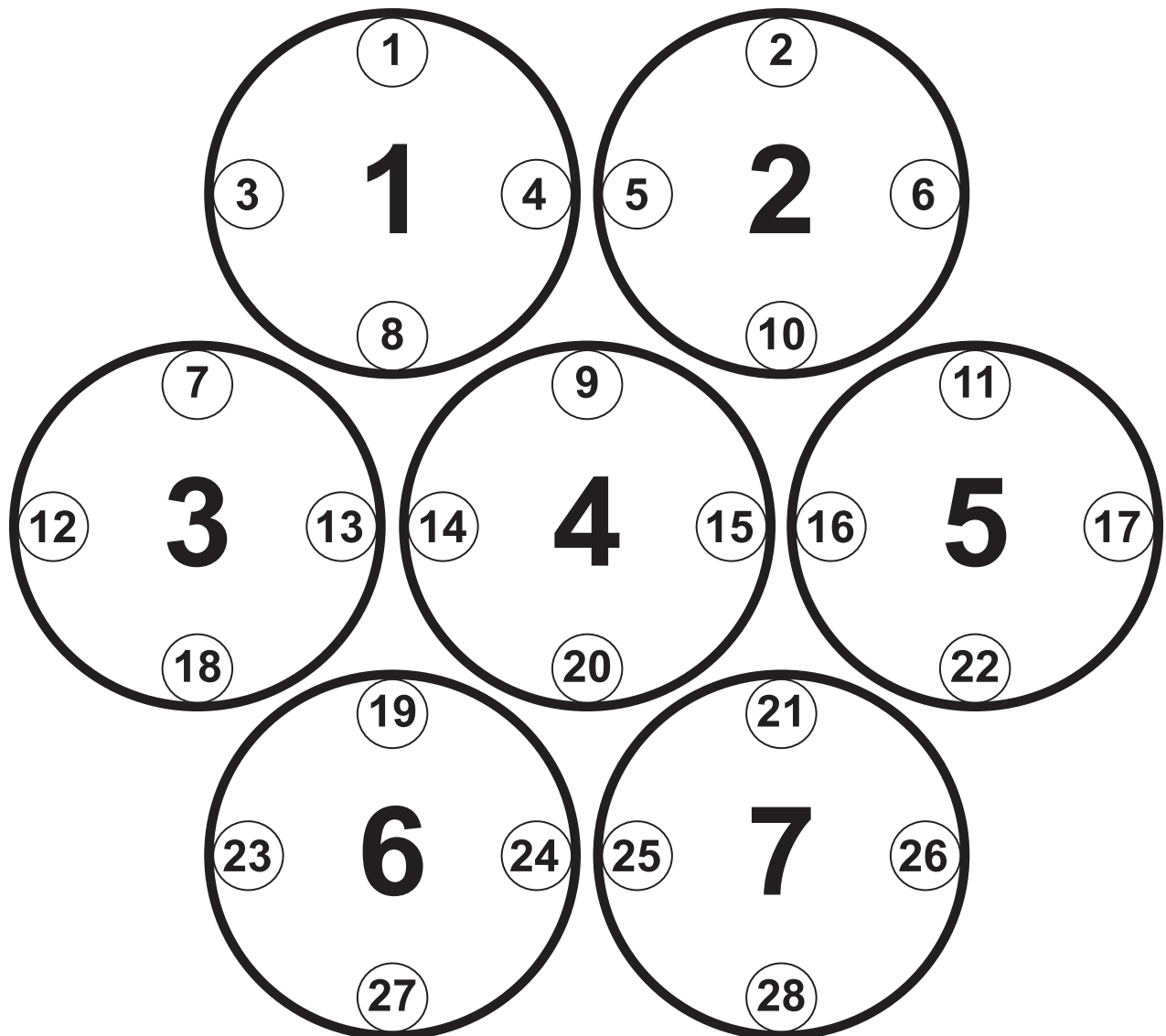


# LIGHTING CONSOLE PATCHING GUIDELINES

The PROTEUS RAYZOR 760 is a versatile luminaire which combines two fixtures into one housing, allowing it to produce multiple unique lighting effects typically not found in a single lighting fixture. The DMX layout is designed to offer a variety of options for controlling each fixture efficiently.

The main fixture contains 7x 60W RGBW pixel cells, while the SparkLED fixture contains 28 x 2W white LEDs. For ease of use the DMX layout is arranged to allow lighting consoles to separate the fixture into multiple segments or parts. It is especially important to arrange the fixture in such segments or parts when using the fixture in the full extended 80 channel DMX mode. For simpler programming, reduced DMX channel modes can be used. However, for easy recall of interesting pixel animations, both the RGBW and SparkLED fixtures contain two FX systems: one which controls the RGBW cells, and a second that is dedicated to the Spark LEDs.

The pixels are arranged in a grid pattern as illustrated below. (RGBW 1-7 | SparkLED 1-28)



# LIGHTING CONSOLE PATCHING GUIDELINES

| PIXEL LAYOUT     | PIXEL NUMBERS                                     |
|------------------|---|
| RGBW Row 1       | 1, 2  |
| RGBW Row 2       | 3, 4, 5   |
| RGBW Row 3       | 6, 7  |
| RGBW Column 1    | 3   |
| RGBW Column 2    | 1, 3, 6   |
| RGBW Column 3    | 1, 4, 6   |
| RGBW Column 4    | 4   |
| RGBW Column 5    | 2, 4, 7   |
| RGBW Column 6    | 2, 5, 7   |
| RGBW Column 7    | 5   |
| Spark LED Row 1  | 1, 2  |
| Spark LED Row 2  | 3, 4, 5, 6  |
| Spark LED Row 3  | 7, 8, 9, 10, 11                                   |
| Spark LED Row 4  | 12, 13, 14, 15, 16, 17                            |
| Spark LED Row 5  | 18, 19, 20, 21, 22                                |
| Spark LED Row 6  | 23, 24, 25, 26                                    |
| Spark LED Row 7  | 27, 28  |
| Spark LED Ring 1 | 1, 2, 6, 11, 17, 22, 26, 28, 27, 23, 18, 12, 7, 3 |
| Spark LED Ring 2 | 4, 5, 10, 16, 21, 25, 24, 19, 13, 8               |
| Spark LED Ring 3 | 9, 15, 20, 14                                     |

# LIGHTING CONSOLE PATCHING GUIDELINES

There are also two additional parts for a primary control of the PROTEUS RAYZOR 760, which creates four separate control areas for the fixture. It is recommended to create fixture groups on the lighting controller for each area of the fixture. (see below)

|                        |  |
|------------------------|--|
| <b>Main Fixture</b>    | Primary Pan, Tilt, RGBW Color, Strobe, Dimmer, Zoom, FX Controls |
| <b>RGBW Cells 1-7</b>  | Red, Green, Blue, White per each individual cell                 |
| <b>Spark LED Main</b>  | Primary Spark LED Strobe, Dimmer                                 |
| <b>Spark LEDs 1-28</b> | Spark LED Dimmer per each individual LED                         |

**SparkLED is not available as a mode in the fixture menu but must be provided as a console control profile for easy programming of the fixture. Use the PROTEUS RAYZOR 760 in Extended mode and patch appropriate parts of the RGBW Pixels and SparkLED fixtures on your control system to access all 80 channels.**

On the lighting controller, patch the two fixture types (RGBW and SparkLED), separating the SparkLEDs into a different ID range. (see below)

## RGBW Pixels for Channels 1-52

## SparkLEDs for Channels 53-80

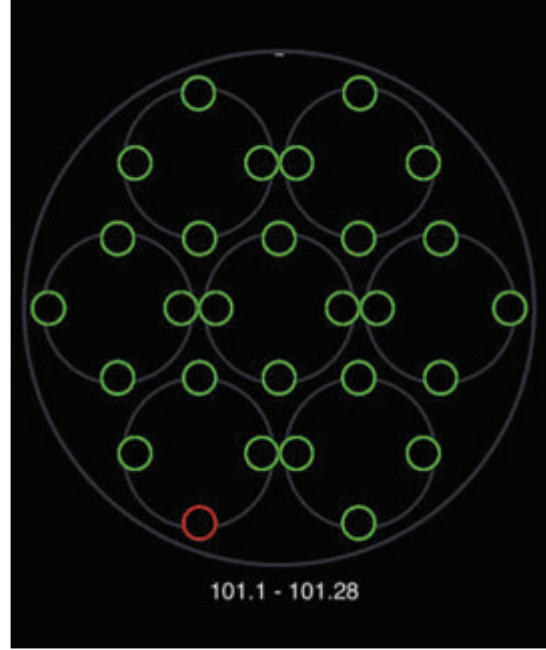
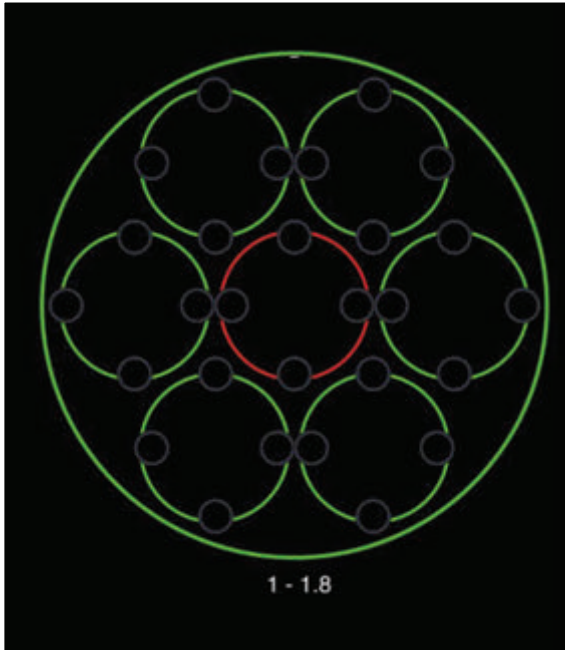
ONYX Main and Sub Fixture ID patch example below for a single PROTEUS RAYZOR 760 fixture.

| ID  | TYPE             | ADDRESS |
|-----|------------------|---------|
| 1.0 | RGBW Pixels Main | 1       |
| 1.1 | Pixel 1          | 22      |
| 1.2 | Pixel 2          | 26      |
| 1.3 | Pixel 3          | 30      |
| 1.4 | Pixel 4          | 34      |
| 1.5 | Pixel 5          | 38      |
| 1.6 | Pixel 6          | 42      |
| 1.7 | Pixel 7          | 46      |
| 1.8 | Spark LED Main   | 50      |

|        |              |     |
|--------|--------------|-----|
| 101.1  | Spark LED 1  | 53  |
| 101.2  | Spark LED 2  | 54  |
| 101.3  | Spark LED 3  | 55  |
| 101.4  | Spark LED 4  | 56  |
| ...    | ...          | ... |
| 101.28 | Spark LED 28 | 80  |

# LIGHTING CONSOLE PATCHING GUIDELINES

**ONLYX** screen shots below illustrate Main and Sub Fixture ID patch for a single PROTEUS RAYZOR 760 fixture.



← Back

Tasks

- Patch
- Cloning
- Swap
- RDM

| ID     | Name                         | Type                         | Universe | Address | Invert |
|--------|------------------------------|------------------------------|----------|---------|--------|
| 1      | Rayzor 760 Pixel (Master)    | Rayzor 760 Pixel (Master)    | 1        | 1       |        |
| 1.1    | Rayzor 760 Pixel (Pixel 1)   | Rayzor 760 Pixel (Pixel 1)   | Auto     | Auto    |        |
| 1.2    | Rayzor 760 Pixel (Pixel 2)   | Rayzor 760 Pixel (Pixel 2)   | Auto     | Auto    |        |
| 1.3    | Rayzor 760 Pixel (Pixel 3)   | Rayzor 760 Pixel (Pixel 3)   | Auto     | Auto    |        |
| 1.4    | Rayzor 760 Pixel (Pixel 4)   | Rayzor 760 Pixel (Pixel 4)   | Auto     | Auto    |        |
| 1.5    | Rayzor 760 Pixel (Pixel 5)   | Rayzor 760 Pixel (Pixel 5)   | Auto     | Auto    |        |
| 1.6    | Rayzor 760 Pixel (Pixel 6)   | Rayzor 760 Pixel (Pixel 6)   | Auto     | Auto    |        |
| 1.7    | Rayzor 760 Pixel (Pixel 7)   | Rayzor 760 Pixel (Pixel 7)   | Auto     | Auto    |        |
| 1.8    | Rayzor 760 Pixel (SparkLED)  | Rayzor 760 Pixel (SparkLED)  | Auto     | Auto    |        |
| 101    | Rayzor 760 SparkLED          | Rayzor 760 SparkLED          | 1        | 51      |        |
| 101.1  | Rayzor 760 SparkLED (LED 1)  | Rayzor 760 SparkLED (LED 1)  | Auto     | Auto    |        |
| 101.2  | Rayzor 760 SparkLED (LED 2)  | Rayzor 760 SparkLED (LED 2)  | Auto     | Auto    |        |
| 101.3  | Rayzor 760 SparkLED (LED 3)  | Rayzor 760 SparkLED (LED 3)  | Auto     | Auto    |        |
| 101.4  | Rayzor 760 SparkLED (LED 4)  | Rayzor 760 SparkLED (LED 4)  | Auto     | Auto    |        |
| 101.5  | Rayzor 760 SparkLED (LED 5)  | Rayzor 760 SparkLED (LED 5)  | Auto     | Auto    |        |
| 101.6  | Rayzor 760 SparkLED (LED 6)  | Rayzor 760 SparkLED (LED 6)  | Auto     | Auto    |        |
| 101.7  | Rayzor 760 SparkLED (LED 7)  | Rayzor 760 SparkLED (LED 7)  | Auto     | Auto    |        |
| 101.8  | Rayzor 760 SparkLED (LED 8)  | Rayzor 760 SparkLED (LED 8)  | Auto     | Auto    |        |
| 101.9  | Rayzor 760 SparkLED (LED 9)  | Rayzor 760 SparkLED (LED 9)  | Auto     | Auto    |        |
| 101.10 | Rayzor 760 SparkLED (LED 10) | Rayzor 760 SparkLED (LED 10) | Auto     | Auto    |        |
| 101.11 | Rayzor 760 SparkLED (LED 11) | Rayzor 760 SparkLED (LED 11) | Auto     | Auto    |        |
| 101.12 | Rayzor 760 SparkLED (LED 12) | Rayzor 760 SparkLED (LED 12) | Auto     | Auto    |        |
| 101.13 | Rayzor 760 SparkLED (LED 13) | Rayzor 760 SparkLED (LED 13) | Auto     | Auto    |        |
| 101.14 | Rayzor 760 SparkLED (LED 14) | Rayzor 760 SparkLED (LED 14) | Auto     | Auto    |        |
| 101.15 | Rayzor 760 SparkLED (LED 15) | Rayzor 760 SparkLED (LED 15) | Auto     | Auto    |        |
| 101.16 | Rayzor 760 SparkLED (LED 16) | Rayzor 760 SparkLED (LED 16) | Auto     | Auto    |        |
| 101.17 | Rayzor 760 SparkLED (LED 17) | Rayzor 760 SparkLED (LED 17) | Auto     | Auto    |        |
| 101.18 | Rayzor 760 SparkLED (LED 18) | Rayzor 760 SparkLED (LED 18) | Auto     | Auto    |        |
| 101.19 | Rayzor 760 SparkLED (LED 19) | Rayzor 760 SparkLED (LED 19) | Auto     | Auto    |        |
| 101.20 | Rayzor 760 SparkLED (LED 20) | Rayzor 760 SparkLED (LED 20) | Auto     | Auto    |        |
| 101.21 | Rayzor 760 SparkLED (LED 21) | Rayzor 760 SparkLED (LED 21) | Auto     | Auto    |        |
| 101.22 | Rayzor 760 SparkLED (LED 22) | Rayzor 760 SparkLED (LED 22) | Auto     | Auto    |        |
| 101.23 | Rayzor 760 SparkLED (LED 23) | Rayzor 760 SparkLED (LED 23) | Auto     | Auto    |        |
| 101.24 | Rayzor 760 SparkLED (LED 24) | Rayzor 760 SparkLED (LED 24) | Auto     | Auto    |        |
| 101.25 | Rayzor 760 SparkLED (LED 25) | Rayzor 760 SparkLED (LED 25) | Auto     | Auto    |        |
| 101.26 | Rayzor 760 SparkLED (LED 26) | Rayzor 760 SparkLED (LED 26) | Auto     | Auto    |        |
| 101.27 | Rayzor 760 SparkLED (LED 27) | Rayzor 760 SparkLED (LED 27) | Auto     | Auto    |        |
| 101.28 | Rayzor 760 SparkLED (LED 28) | Rayzor 760 SparkLED (LED 28) | Auto     | Auto    |        |

Multi Select  OFF

Change Color

Filter

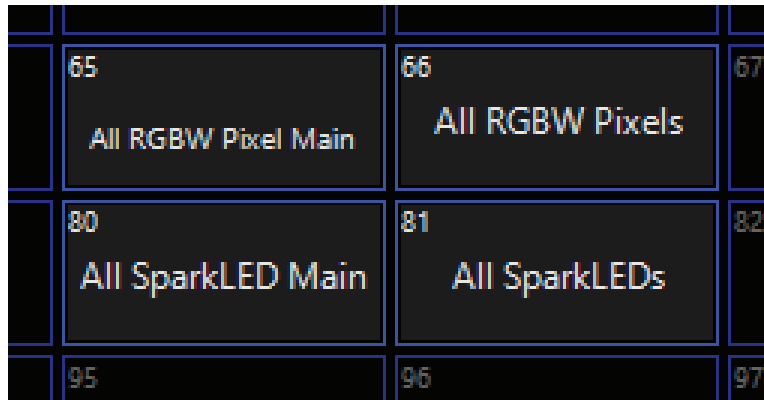
- All Fixture types
- Rayzor 760 Pixel
- Rayzor 760 SparkLED

# LIGHTING CONSOLE PATCHING GUIDELINES

ONYX groups example below for easier selection of a single PROTEUS RAYZOR 760 fixture.

| Group Name           | Group Content            |
|----------------------|--------------------------|
| All RGBW Pixels Main | 1                        |
| All RGBW Pixels      | 1.1, 1.2, 1.3, ... 1.8   |
| All Spark LEDs Main  | 1.8                      |
| All Spark LEDs       | 101.1, 101.2, ... 101.28 |

ONYX screen shot below illustrates Groups for a single PROTEUS RAYZOR 760 fixture.



|                     |                 |    |
|---------------------|-----------------|----|
| 65                  | 66              | 67 |
| All RGBW Pixel Main | All RGBW Pixels |    |
| 80                  | 81              | 82 |
| All SparkLED Main   | All SparkLEDs   |    |
| 95                  | 96              | 97 |
|                     |                 |    |

# DMX TRAITS: MAIN FIXTURE CONTROL (V1.2.1)

| Features subject to change without notice.<br>Rotation direction (clockwise/counter-clockwise) and control of effects depends on head orientation and pan/tilt settings. |                |          |           |            |   |             |               |
|--|----------------|----------|-----------|------------|---|-------------|---------------|
| CHANNEL  |                |          |           | DMX VALUES | FUNCTION  | FADE STATUS | DEFAULT VALUE |
| STANDARD   | PIXELS         | EXTENDED | SPARK LED |            |   |             |               |
| 1  | 1              | 1        |           | 000 - 255  | <b>Pan</b>  | Fade        | 127           |
| 2  | 2              | 2        |           | 000 - 255  | <b>Pan Fine</b>   | Fade        | 127           |
| 3  | 3              | 3        |           | 000 - 255  | <b>Tilt</b>   | Fade        | 127           |
| 4  | 4              | 4        |           | 000 - 255  | <b>Tilt Fine</b>  | Fade        | 127           |
| 5  | 5              | 5        |           |            | <b>Pan Rotate</b>   | Fade        | 0             |
|  |                |          |           | 000 - 002  | Disabled  |             |               |
|  |                |          |           | 003 - 126  | Rotating Clockwise, fast to slow  |             |               |
|  |                |          |           | 127 - 129  | No Rotation   |             |               |
|  |                |          |           | 130 - 253  | Rotating Counter-Clockwise, slow to fast  |             |               |
| 254 - 255  | No Rotation    |          |           |            |   |             |               |
| 6  | 6              | 6        |           |            | <b>Tilt Rotate</b>  | Fade        | 0             |
|  |                |          |           | 000 - 002  | Disabled  |             |               |
|  |                |          |           | 003 - 126  | Rotating Clockwise, fast to slow  |             |               |
|  |                |          |           | 127 - 129  | No Rotation   |             |               |
|  |                |          |           | 130 - 253  | Rotating Counter-Clockwise, slow to fast  |             |               |
| 254 - 255  | No Rotation    |          |           |            |   |             |               |
| 7  | 7              | 7        |           |            | <b>CTC</b>  | Fade        | 0             |
|  |                |          |           | 000 - 010  | Disabled  |             |               |
|  |                |          |           | 011 - 171  | Color Temperature, 2000K to 10,000K in 100K steps (see <b>CTC Table</b> section of this manual) |             |               |
|  |                |          |           | 172 - 255  | 10,000K   |             |               |
| 8  | 8              | 8        |           |            | <b>Color Wheel</b>  | Snap        | 0             |
|  |                |          |           | 000 - 009  | Open  |             |               |
|  |                |          |           | 010 - 014  | Red   |             |               |
|  |                |          |           | 015 - 019  | Red Orange  |             |               |
|  |                |          |           | 020 - 024  | Light Amber   |             |               |
|  |                |          |           | 025 - 029  | Yellow Amber  |             |               |
|  |                |          |           | 030 - 034  | Greenish Yellow   |             |               |
|  |                |          |           | 035 - 039  | Light Yellow Green  |             |               |
|  |                |          |           | 040 - 044  | Dark Yellow Green   |             |               |
|  |                |          |           | 045 - 049  | Green   |             |               |
|  |                |          |           | 050 - 054  | Teal  |             |               |
|  |                |          |           | 055 - 059  | Cyan  |             |               |
|  |                |          |           | 060 - 064  | Light Blue  |             |               |
|  |                |          |           | 065 - 069  | Aqua  |             |               |
|  |                |          |           | 070 - 074  | Dark Aqua   |             |               |
|  |                |          |           | 075 - 079  | Green Blue  |             |               |
|  |                |          |           | 080 - 084  | Light Lavender  |             |               |
|  |                |          |           | 085 - 089  | Dark Purple   |             |               |
|  |                |          |           | 090 - 094  | Medium Purple   |             |               |
|  |                |          |           | 095 - 099  | Mid Rose  |             |               |
|  |                |          |           | 100 - 104  | Mauve   |             |               |
|  |                |          |           | 105 - 109  | Nice Magenta  |             |               |
|  |                |          |           | 110 - 114  | Warm Magenta  |             |               |
|  |                |          |           | 115 - 119  | Light Red   |             |               |
| 120 - 124  | Straw          |          |           |            |   |             |               |
| 125 - 129  | Dark CTB       |          |           |            |   |             |               |
| 130 - 134  | Light Green    |          |           |            |   |             |               |
| 135 - 139  | Purple         |          |           |            |   |             |               |
| 140 - 144  | Lighter Purple |          |           |            |   |             |               |
| 145 - 149  | Pink           |          |           |            |   |             |               |
| 150 - 154  | Rose           |          |           |            |   |             |               |
| 155 - 159  | Rose           |          |           |            |   |             |               |
| 160 - 174  | Not in use     |          |           |            |   |             |               |
|  |                |          |           | 175 - 179  | Open  |             |               |

# DMX TRAITS: MAIN FIXTURE CONTROL

| CHANNEL   |        |          |           | DMX VALUES | FUNCTION                        | FADE STATUS | DEFAULT VALUE |
|-----------|--------|----------|-----------|------------|---------------------------------|-------------|---------------|
| STANDARD  | PIXELS | EXTENDED | SPARK LED |            |                                 |             |               |
| 8         | 8      | 8        |           |            | Color Scroll                    | Snap        | 0             |
|           |        |          |           | 180 - 201  | Clockwise, fast to slow         |             |               |
|           |        |          |           | 202 - 207  | Stop                            |             |               |
|           |        |          |           | 208 - 229  | Counter-Clockwise, slow to fast |             |               |
|           |        |          |           | 230 - 234  | Open                            |             |               |
|           |        |          |           |            | Random Slots                    |             |               |
|           |        |          |           | 235 - 239  | Fast                            |             |               |
|           |        |          |           | 240 - 244  | Medium                          |             |               |
|           |        |          |           | 245 - 249  | Slow                            |             |               |
|           |        |          |           | 250 - 255  | Open                            |             |               |
| 9         | 9      | 9        |           |            | <b>Strobe</b>                   | Snap        | 50            |
|           |        |          |           | 000 - 031  | Shutter Closed                  |             |               |
|           |        |          |           | 032 - 063  | Shutter Open                    |             |               |
|           |        |          |           | 064 - 095  | Strobe, slow to fast            |             |               |
|           |        |          |           | 096 - 127  | Fast Close, Slow Open           |             |               |
|           |        |          |           | 128 - 159  | Fast Open, Slow Close           |             |               |
|           |        |          |           | 160 - 191  | Pulse Effects                   |             |               |
|           |        |          |           | 192 - 223  | Random Strobe, slow to fast     |             |               |
|           |        |          |           | 224 - 255  | Shutter Open                    |             |               |
|           |        |          |           | 10         | 10                              |             |               |
| 11        | 11     | 11       |           | 000 - 255  | <b>Dimmer Fine</b>              | Fade        | 0             |
| 12        | 12     | 12       |           |            | <b>Dim Modes</b>                | Snap        | 0             |
|           |        |          |           | 000 - 020  | Standard                        |             |               |
|           |        |          |           | 021 - 040  | Stage                           |             |               |
|           |        |          |           | 041 - 060  | TV                              |             |               |
|           |        |          |           | 061 - 080  | Architectural                   |             |               |
|           |        |          |           | 081 - 100  | Theatre                         |             |               |
|           |        |          |           | 101 - 120  | Stage 2                         |             |               |
|           |        |          |           |            | <b>Dimmer Delay Time</b>        |             |               |
|           |        |          |           | 121        | 0 s                             |             |               |
|           |        |          |           | 122        | 0.1 s                           |             |               |
|           |        |          |           | 123        | 0.2 s                           |             |               |
|           |        |          |           | 124        | 0.3 s                           |             |               |
|           |        |          |           | 125        | 0.4 s                           |             |               |
|           |        |          |           | 126        | 0.5 s                           |             |               |
|           |        |          |           | 127        | 0.6 s                           |             |               |
|           |        |          |           | 128        | 0.7 s                           |             |               |
|           |        |          |           | 129        | 0.8 s                           |             |               |
|           |        |          |           | 130        | 0.9 s                           |             |               |
|           |        |          |           | 131        | 1.0 s                           |             |               |
|           |        |          |           | 132        | 1.5 s                           |             |               |
|           |        |          |           | 133        | 2.0 s                           |             |               |
|           |        |          |           | 134        | 3.0 s                           |             |               |
|           |        |          |           | 135        | 4.0 s                           |             |               |
|           |        |          |           | 136        | 5.0 s                           |             |               |
|           |        |          |           | 137        | 6.0 s                           |             |               |
|           |        |          |           | 138        | 7.0 s                           |             |               |
|           |        |          |           | 139        | 8.0 s                           |             |               |
| 140       | 9.0 s  |          |           |            |                                 |             |               |
| 141       | 10.0 s |          |           |            |                                 |             |               |
| 142 - 255 | Idle   |          |           |            |                                 |             |               |



# DMX TRAITS: MAIN FIXTURE CONTROL

| CHANNEL  |        |          |           | DMX VALUES | FUNCTION                        | FADE STATUS | DEFAULT VALUE |
|----------|--------|----------|-----------|------------|---------------------------------|-------------|---------------|
| STANDARD | PIXELS | EXTENDED | SPARK LED |            |                                 |             |               |
| 13       | 13     | 13       |           |            | <b>Zoom</b>                     | Fade        | 128           |
|          |        |          |           | 000 - 215  | Zoom, wide to narrow            |             |               |
|          |        |          |           | 215 - 255  | Overdrive, minimum to maximum   |             |               |
|          | 14     | 14       |           | 000 - 255  | <b>Zoom Fine</b>                | Fade        | 0             |
|          | 15     | 15       |           |            | <b>Pan / Tilt Speed</b>         | Snap        | 0             |
|          |        |          |           | 000 - 225  | Max to Min Speed                |             |               |
|          |        |          |           | 226 - 235  | Blackout when pan / tilt moves  |             |               |
|          |        |          |           | 236 - 245  | Blackout when all wheels change |             |               |
|          |        |          |           | 246 - 255  | No function                     |             |               |
| 14       | 16     | 16       |           |            | <b>Control</b>                  | Snap        | 0             |
|          |        |          |           | 000 - 010  | Idle                            |             |               |
|          |        |          |           | 011 - 012  | Pan Tilt Shortest Path          |             |               |
|          |        |          |           | 013 - 014  | Pan Tilt Continue Path          |             |               |
|          |        |          |           | 015 - 016  | Pan Range 540                   |             |               |
|          |        |          |           | 017 - 018  | Pan Range 360                   |             |               |
|          |        |          |           | 019 - 020  | Tilt Range 270                  |             |               |
|          |        |          |           | 021 - 022  | Tilt Range 360                  |             |               |
|          |        |          |           | 023 - 039  | Idle                            |             |               |
|          |        |          |           | 040 - 059  | Fan Mode Silent                 |             |               |
|          |        |          |           | 060 - 079  | Fan Mode Auto                   |             |               |
|          |        |          |           | 080 - 084  | Reset All                       |             |               |
|          |        |          |           | 085 - 087  | Reset Movement                  |             |               |
|          |        |          |           | 088 - 091  | Reset Zoom                      |             |               |
|          |        |          |           | 092 - 099  | Idle                            |             |               |
|          |        |          |           |            | <b>Refresh Rate (Hz)</b>        |             |               |
|          |        |          |           | 100        | 900                             |             |               |
|          |        |          |           | 101        | 910                             |             |               |
|          |        |          |           | 102        | 920                             |             |               |
|          |        |          |           | 103        | 930                             |             |               |
|          |        |          |           | 104        | 940                             |             |               |
|          |        |          |           | 105        | 950                             |             |               |
|          |        |          |           | 106        | 960                             |             |               |
|          |        |          |           | 107        | 970                             |             |               |
|          |        |          |           | 108        | 980                             |             |               |
|          |        |          |           | 109        | 990                             |             |               |
|          |        |          |           | 110        | 1000                            |             |               |
|          |        |          |           | 111        | 1010                            |             |               |
|          |        |          |           | 112        | 1020                            |             |               |
|          |        |          |           | 113        | 1030                            |             |               |
|          |        |          |           | 114        | 1040                            |             |               |
|          |        |          |           | 115        | 1050                            |             |               |
|          |        |          |           | 116        | 1060                            |             |               |
|          |        |          |           | 117        | 1070                            |             |               |
|          |        |          |           | 118        | 1080                            |             |               |
| 119      | 1090   |          |           |            |                                 |             |               |
| 120      | 1100   |          |           |            |                                 |             |               |
| 121      | 1110   |          |           |            |                                 |             |               |
| 122      | 1120   |          |           |            |                                 |             |               |
| 123      | 1130   |          |           |            |                                 |             |               |
| 124      | 1140   |          |           |            |                                 |             |               |
| 125      | 1150   |          |           |            |                                 |             |               |
| 126      | 1160   |          |           |            |                                 |             |               |
| 127      | 1170   |          |           |            |                                 |             |               |
| 128      | 1180   |          |           |            |                                 |             |               |
| 129      | 1190   |          |           |            |                                 |             |               |
| 130      | 1200   |          |           |            |                                 |             |               |

# DMX TRAITS: MAIN FIXTURE CONTROL

| CHANNEL   |                                |          |           | DMX VALUES                              | FUNCTION                      | FADE STATUS | DEFAULT VALUE |
|-----------|--------------------------------|----------|-----------|---|-------------------------------|-------------|---------------|
| STANDARD  | PIXELS                         | EXTENDED | SPARK LED |   |                               |             |               |
| 14        | 16                             | 16       |           |   | Refresh Rate (Hz) (continued) | Snap        | 0             |
|           |                                |          |           | 131                                     | 1210                          |             |               |
|           |                                |          |           | 132                                     | 1220                          |             |               |
|           |                                |          |           | 133                                     | 1230                          |             |               |
|           |                                |          |           | 134                                     | 1240                          |             |               |
|           |                                |          |           | 135                                     | 1250                          |             |               |
|           |                                |          |           | 136                                     | 1260                          |             |               |
|           |                                |          |           | 137                                     | 1270                          |             |               |
|           |                                |          |           | 138                                     | 1280                          |             |               |
|           |                                |          |           | 139                                     | 1290                          |             |               |
|           |                                |          |           | 140                                     | 1300                          |             |               |
|           |                                |          |           | 141                                     | 1310                          |             |               |
|           |                                |          |           | 142                                     | 1320                          |             |               |
|           |                                |          |           | 143                                     | 1330                          |             |               |
|           |                                |          |           | 144                                     | 1340                          |             |               |
|           |                                |          |           | 145                                     | 1350                          |             |               |
|           |                                |          |           | 146                                     | 1360                          |             |               |
|           |                                |          |           | 147                                     | 1370                          |             |               |
|           |                                |          |           | 148                                     | 1380                          |             |               |
|           |                                |          |           | 149                                     | 1390                          |             |               |
|           |                                |          |           | 150                                     | 1400                          |             |               |
|           |                                |          |           | 151                                     | 1410                          |             |               |
|           |                                |          |           | 152                                     | 1420                          |             |               |
|           |                                |          |           | 153                                     | 1430                          |             |               |
|           |                                |          |           | 154                                     | 1440                          |             |               |
|           |                                |          |           | 155                                     | 1450                          |             |               |
|           |                                |          |           | 156                                     | 1460                          |             |               |
|           |                                |          |           | 157                                     | 1470                          |             |               |
|           |                                |          |           | 158                                     | 1480                          |             |               |
|           |                                |          |           | 159                                     | 1490                          |             |               |
|           |                                |          |           | 160                                     | 1500                          |             |               |
|           |                                |          |           | 161                                     | 2500                          |             |               |
|           |                                |          |           | 162                                     | 4000                          |             |               |
|           |                                |          |           | 163                                     | 5000                          |             |               |
|           |                                |          |           | 164                                     | 6000                          |             |               |
|           |                                |          |           | 165                                     | 10000                         |             |               |
|           |                                |          |           | 166                                     | 15000                         |             |               |
|           |                                |          |           | 167                                     | 20000                         |             |               |
|           |                                |          |           | 168                                     | 25000                         |             |               |
|           |                                |          |           | 169 - 200                               | Idle                          |             |               |
|           |                                |          |           | <b>ADDED WITH SOFTWARE UPDATE 1.2.2</b> |                               |             |               |
| 169 - 192 | Idle                           |          |           |   |                               |             |               |
| 193 - 194 | Hibernate Off                  |          |           |   |                               |             |               |
| 195 - 196 | Hibernate                      |          |           |   |                               |             |               |
| 197 - 198 | Home Position Before Power Off |          |           |   |                               |             |               |
| 199 - 200 | Home Position Off              |          |           |   |                               |             |               |
| 201 - 210 | Dimmer Curve Linear (default)  |          |           |   |                               |             |               |
| 211 - 220 | Dimmer Curve Square            |          |           |   |                               |             |               |
| 221 - 230 | Dimmer Curve Inverse Square    |          |           |   |                               |             |               |
| 231 - 240 | Dimmer Curve S-Curve           |          |           |   |                               |             |               |
| 241 - 255 | Idle                           |          |           |   |                               |             |               |

# DMX TRAITS: MAIN FIXTURE CONTROL

| CHANNEL   |               |          |           | DMX VALUES | FUNCTION   | FADE STATUS | DEFAULT VALUE |
|-----------|---------------|----------|-----------|------------|--|-------------|---------------|
| STANDARD  | PIXELS        | EXTENDED | SPARK LED |            |  |             |               |
| 15        | 17            | 17       |           | 000 - 255  | <b>RGBW FX Table</b> , FX selection 1 - 255 (see <b>RGBW FX Table</b> section of this manual)  | Snap        | 0             |
| 16        | 18            | 18       |           | 000 - 126  | <b>RGBW FX Speed</b><br>Rev fast to slow   | Fade        | 160           |
|           |               |          |           | 127 - 128  | Stop   |             |               |
|           |               |          |           | 129 - 255  | slow to fast   |             |               |
| 17        | 19            | 19       |           | 000 - 255  | <b>Spark LED FX Selection</b> , 1 - 255 (see <b>Spark LED FX Table</b> section of this manual) | Snap        | 0             |
| 18        | 20            | 20       |           |            | <b>Spark LED FX Speed</b>  | Fade        | 160           |
|           |               |          |           | 000 - 126  | Rev, fast to slow  |             |               |
|           |               |          |           | 127 - 128  | Stop   |             |               |
| 19        | 21            | 21       |           |            | <b>FX Offset</b>   | Snap        | 0             |
|           |               |          |           | 000        | No Sync  |             |               |
|           |               |          |           | 001 - 035  | Fixture offset, 10 degrees to 350 degrees  |             |               |
|           |               |          |           | 036        | Synchronized   |             |               |
|           |               |          |           | 037 - 100  | No Function  |             |               |
|           |               |          |           | 101 - 120  | Random Fixtures  |             |               |
|           |               |          |           | 121 - 140  | Random Duration  |             |               |
| 141 - 255 | Random Pixels |          |           |            |  |             |               |
| 20        | 22            | 22       |           | 000 - 255  | <b>Red</b> , 0% to 100%  | Fade        | 255           |
| 21        | 23            | 23       |           | 000 - 255  | <b>Green</b> , 0% to 100%  | Fade        | 255           |
| 22        | 24            | 24       |           | 000 - 255  | <b>Blue</b> , 0% to 100%   | Fade        | 255           |
| 23        | 25            | 25       |           | 000 - 255  | <b>White</b> , 0% to 100%  | Fade        | 255           |
|           | 26            | 26       |           | 000 - 255  | <b>Red 2</b> , 0% to 100%  | Fade        | 255           |
|           | 27            | 27       |           | 000 - 255  | <b>Green 2</b> , 0% to 100%  | Fade        | 255           |
|           | 28            | 28       |           | 000 - 255  | <b>Blue 2</b> , 0% to 100%   | Fade        | 255           |
|           | 29            | 29       |           | 000 - 255  | <b>White 2</b> , 0% to 100%  | Fade        | 255           |
|           | 30            | 30       |           | 000 - 255  | <b>Red 3</b> , 0% to 100%  | Fade        | 255           |
|           | 31            | 31       |           | 000 - 255  | <b>Green 3</b> , 0% to 100%  | Fade        | 255           |
|           | 32            | 32       |           | 000 - 255  | <b>Blue 3</b> , 0% to 100%   | Fade        | 255           |
|           | 33            | 33       |           | 000 - 255  | <b>White 3</b> , 0% to 100%  | Fade        | 255           |
|           | 34            | 34       |           | 000 - 255  | <b>Red 4</b> , 0% to 100%  | Fade        | 255           |
|           | 35            | 35       |           | 000 - 255  | <b>Green 4</b> , 0% to 100%  | Fade        | 255           |
|           | 36            | 36       |           | 000 - 255  | <b>Blue 4</b> , 0% to 100%   | Fade        | 255           |
|           | 37            | 37       |           | 000 - 255  | <b>White 4</b> , 0% to 100%  | Fade        | 255           |
|           | 38            | 38       |           | 000 - 255  | <b>Red 5</b> , 0% to 100%  | Fade        | 255           |
|           | 39            | 39       |           | 000 - 255  | <b>Green 5</b> , 0% to 100%  | Fade        | 255           |
|           | 40            | 40       |           | 000 - 255  | <b>Blue 5</b> , 0% to 100%   | Fade        | 255           |
|           | 41            | 41       |           | 000 - 255  | <b>White 5</b> , 0% to 100%  | Fade        | 255           |
|           | 42            | 42       |           | 000 - 255  | <b>Red 6</b> , 0% to 100%  | Fade        | 255           |
|           | 43            | 43       |           | 000 - 255  | <b>Green 6</b> , 0% to 100%  | Fade        | 255           |
|           | 44            | 44       |           | 000 - 255  | <b>Blue 6</b> , 0% to 100%   | Fade        | 255           |
|           | 45            | 45       |           | 000 - 255  | <b>White 6</b> , 0% to 100%  | Fade        | 255           |
|           | 46            | 46       |           | 000 - 255  | <b>Red 7</b> , 0% to 100%  | Fade        | 255           |
|           | 47            | 47       |           | 000 - 255  | <b>Green 7</b> , 0% to 100%  | Fade        | 255           |
|           | 48            | 48       |           | 000 - 255  | <b>Blue 7</b> , 0% to 100%   | Fade        | 255           |
|           | 49            | 49       |           | 000 - 255  | <b>White 7</b> , 0% to 100%  | Fade        | 255           |

# DMX TRAITS: SPARK LED CONTROL

**NOTE:** Spark LED is not available as a mode in the fixture menu, but must be provided as a console control profile for easy programming of the fixture. Use this fixture in Extended mode and patch appropriate parts of the RGBW pixels and Spark LED fixtures on your control system to access all 80 channels. See the **Lighting Console Patch Guidelines** section of this manual for further instructions.

| STANDARD | CHANNEL |          |           | DMX VALUES                         | FUNCTION                                | FADE STATUS | DEFAULT VALUE |
|----------|---------|----------|-----------|------------------------------------|---|-------------|---------------|
|          | PIXELS  | EXTENDED | SPARK LED |                                    |   |             |               |
| 24       | 50      | 50       |           |                                    | <b>Strobe</b>                           | Snap        | 50            |
|          |         |          |           | 000 - 031                          | Shutter Closed                          |             |               |
|          |         |          |           | 032 - 063                          | Shutter Open                            |             |               |
|          |         |          |           | 064 - 095                          | Strobe, slow to fast                    |             |               |
|          |         |          |           | 096 - 127                          | Fast Close, Slow Open                   |             |               |
|          |         |          |           | 128 - 159                          | Fast Open, Slow Close                   |             |               |
|          |         |          |           | 160 - 191                          | Pulse Effects                           |             |               |
|          |         |          |           | 192 - 223                          | Random Strobe All, slow to fast         |             |               |
|          |         |          | 224 - 255 | Random Strobe Pixels, slow to fast |   |             |               |
| 25       | 51      | 51       |           | 000 - 255                          | <b>Dimmer, 0% to 100%</b>               | Fade        | 0             |
|          | 52      | 52       |           | 000 - 255                          | <b>Dimmer Fine</b>                      | Fade        | 0             |
|          |         | 53       | 1         | 000 - 255                          | <b>Spark LED #1 Dimmer, 0% to 100%</b>  | Fade        | 255           |
|          |         | 54       | 2         | 000 - 255                          | <b>Spark LED #2 Dimmer, 0% to 100%</b>  | Fade        | 255           |
|          |         | 55       | 3         | 000 - 255                          | <b>Spark LED #3 Dimmer, 0% to 100%</b>  | Fade        | 255           |
|          |         | 56       | 4         | 000 - 255                          | <b>Spark LED #4 Dimmer, 0% to 100%</b>  | Fade        | 255           |
|          |         | 57       | 5         | 000 - 255                          | <b>Spark LED #5 Dimmer, 0% to 100%</b>  | Fade        | 255           |
|          |         | 58       | 6         | 000 - 255                          | <b>Spark LED #6 Dimmer, 0% to 100%</b>  | Fade        | 255           |
|          |         | 59       | 7         | 000 - 255                          | <b>Spark LED #7 Dimmer, 0% to 100%</b>  | Fade        | 255           |
|          |         | 60       | 8         | 000 - 255                          | <b>Spark LED #8 Dimmer, 0% to 100%</b>  | Fade        | 255           |
|          |         | 61       | 9         | 000 - 255                          | <b>Spark LED #9 Dimmer, 0% to 100%</b>  | Fade        | 255           |
|          |         | 62       | 10        | 000 - 255                          | <b>Spark LED #10 Dimmer, 0% to 100%</b> | Fade        | 255           |
|          |         | 63       | 11        | 000 - 255                          | <b>Spark LED #11 Dimmer, 0% to 100%</b> | Fade        | 255           |
|          |         | 64       | 12        | 000 - 255                          | <b>Spark LED #12 Dimmer, 0% to 100%</b> | Fade        | 255           |
|          |         | 65       | 13        | 000 - 255                          | <b>Spark LED #13 Dimmer, 0% to 100%</b> | Fade        | 255           |
|          |         | 66       | 14        | 000 - 255                          | <b>Spark LED #14 Dimmer, 0% to 100%</b> | Fade        | 255           |
|          |         | 67       | 15        | 000 - 255                          | <b>Spark LED #15 Dimmer, 0% to 100%</b> | Fade        | 255           |
|          |         | 68       | 16        | 000 - 255                          | <b>Spark LED #16 Dimmer, 0% to 100%</b> | Fade        | 255           |
|          |         | 69       | 17        | 000 - 255                          | <b>Spark LED #17 Dimmer, 0% to 100%</b> | Fade        | 255           |
|          |         | 70       | 18        | 000 - 255                          | <b>Spark LED #18 Dimmer, 0% to 100%</b> | Fade        | 255           |
|          |         | 71       | 19        | 000 - 255                          | <b>Spark LED #19 Dimmer, 0% to 100%</b> | Fade        | 255           |
|          |         | 72       | 20        | 000 - 255                          | <b>Spark LED #20 Dimmer, 0% to 100%</b> | Fade        | 255           |
|          |         | 73       | 21        | 000 - 255                          | <b>Spark LED #21 Dimmer, 0% to 100%</b> | Fade        | 255           |
|          |         | 74       | 22        | 000 - 255                          | <b>Spark LED #22 Dimmer, 0% to 100%</b> | Fade        | 255           |
|          |         | 75       | 23        | 000 - 255                          | <b>Spark LED #23 Dimmer, 0% to 100%</b> | Fade        | 255           |
|          |         | 76       | 24        | 000 - 255                          | <b>Spark LED #24 Dimmer, 0% to 100%</b> | Fade        | 255           |
|          |         | 77       | 25        | 000 - 255                          | <b>Spark LED #25 Dimmer, 0% to 100%</b> | Fade        | 255           |
|          |         | 78       | 26        | 000 - 255                          | <b>Spark LED #26 Dimmer, 0% to 100%</b> | Fade        | 255           |
|          |         | 79       | 27        | 000 - 255                          | <b>Spark LED #27 Dimmer, 0% to 100%</b> | Fade        | 255           |
|          |         | 80       | 28        | 000 - 255                          | <b>Spark LED #28 Dimmer, 0% to 100%</b> | Fade        | 255           |

# COLOR TEMPERATURE CONTROL TABLE





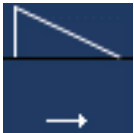
| COLOR TEMP | DMX VALUE | COLOR TEMP | DMX VALUE | COLOR TEMP | DMX VALUE | COLOR TEMP | DMX VALUE |
|------------|-----------|------------|-----------|------------|-----------|------------|-----------|
| 2000       | 011       | 4150       | 054       | 6300       | 097       | 8450       | 140       |
| 2050       | 012       | 4200       | 055       | 6350       | 098       | 8500       | 141       |
| 2100       | 013       | 4250       | 056       | 6400       | 099       | 8550       | 142       |
| 2150       | 014       | 4300       | 057       | 6450       | 100       | 8600       | 143       |
| 2200       | 015       | 4350       | 058       | 6500       | 101       | 8650       | 144       |
| 2250       | 016       | 4400       | 059       | 6550       | 102       | 8700       | 145       |
| 2300       | 017       | 4450       | 060       | 6600       | 103       | 8750       | 146       |
| 2350       | 018       | 4500       | 061       | 6650       | 104       | 8800       | 147       |
| 2400       | 019       | 4550       | 062       | 6700       | 105       | 8850       | 148       |
| 2450       | 020       | 4600       | 063       | 6750       | 106       | 8900       | 149       |
| 2500       | 021       | 4650       | 064       | 6800       | 107       | 8950       | 150       |
| 2550       | 022       | 4700       | 065       | 6850       | 108       | 9000       | 151       |
| 2600       | 023       | 4750       | 066       | 6900       | 109       | 9050       | 152       |
| 2650       | 024       | 4800       | 067       | 6950       | 110       | 9100       | 153       |
| 2700       | 025       | 4850       | 068       | 7000       | 111       | 9150       | 154       |
| 2750       | 026       | 4900       | 069       | 7050       | 112       | 9200       | 155       |
| 2800       | 027       | 4950       | 070       | 7100       | 113       | 9250       | 156       |
| 2850       | 028       | 5000       | 071       | 7150       | 114       | 9300       | 157       |
| 2900       | 029       | 5050       | 072       | 7200       | 115       | 9350       | 158       |
| 2950       | 030       | 5100       | 073       | 7250       | 116       | 9400       | 159       |
| 3000       | 031       | 5150       | 074       | 7300       | 117       | 9450       | 160       |
| 3050       | 032       | 5200       | 075       | 7350       | 118       | 9500       | 161       |
| 3100       | 033       | 5250       | 076       | 7400       | 119       | 9550       | 162       |
| 3150       | 034       | 5300       | 077       | 7450       | 120       | 9600       | 163       |
| 3200       | 035       | 5350       | 078       | 7500       | 121       | 9650       | 164       |
| 3250       | 036       | 5400       | 079       | 7550       | 122       | 9700       | 165       |
| 3300       | 037       | 5450       | 080       | 7600       | 123       | 9750       | 166       |
| 3350       | 038       | 5500       | 081       | 7650       | 124       | 9800       | 167       |
| 3400       | 039       | 5550       | 082       | 7700       | 125       | 9850       | 168       |
| 3450       | 040       | 5600       | 083       | 7750       | 126       | 9900       | 169       |
| 3500       | 041       | 5650       | 084       | 7800       | 127       | 9950       | 170       |
| 3550       | 042       | 5700       | 085       | 7850       | 128       | 10000      | 171       |
| 3600       | 043       | 5750       | 086       | 7900       | 129       |            |           |
| 3650       | 044       | 5800       | 087       | 7950       | 130       |            |           |
| 3700       | 045       | 5850       | 088       | 8000       | 131       |            |           |
| 3750       | 046       | 5900       | 089       | 8050       | 132       |            |           |
| 3800       | 047       | 5950       | 090       | 8100       | 133       |            |           |
| 3850       | 048       | 6000       | 091       | 8150       | 134       |            |           |
| 3900       | 049       | 6050       | 092       | 8200       | 135       |            |           |
| 3950       | 050       | 6100       | 093       | 8250       | 136       |            |           |
| 4000       | 051       | 6150       | 094       | 8300       | 137       |            |           |
| 4050       | 052       | 6200       | 095       | 8350       | 138       |            |           |
| 4100       | 053       | 6250       | 096       | 8400       | 139       |            |           |

# FX GENERATOR GUIDELINES

Selection and control of the integrated FX on the PROTUES RAYZOR 760 is found in the Main Fixture section. All FX are available even in the smallest DMX control modes.

| DMX VALUES | FUNCTION   |
|------------|--|
| 000 - 255  | <b>RGBW FX Selection, 1 - 255</b> (see RGBW FX Table)            |
|            | <b>RGBW FX Speed</b>   |
| 000 - 126  | Rev, fast to slow  |
| 127 - 128  | Stop   |
| 129 - 255  | Slow to fast   |
| 000 - 255  | <b>Spark LED FX Selection, 1 - 255,</b> (see Spark LED FX Table) |
|            | <b>Spark LED FX Speed</b>  |
| 000 - 126  | Rev, fast to slow  |
| 127 - 128  | Stop   |
| 129 - 255  | Slow to fast   |

FX for RGBW and SparkLED contain a selection channel to recall the desired pattern. The pattern direction and speed is then adjusted using the associated Speed channels. FX can run forward or reverse and can also be frozen at any time by using "Stop". The FX tables show the available patterns which are grouped for easier browsing. The first 10 DMX steps of the FX channel are used to change the type of curve for smooth or stepped FX. Once a curve is selected, it will be used for all FX recalled afterwards. When programming curves for fixtures, the user must ensure to change the curve first before selecting the pattern. The fixture defaults to the Sinewave pattern after every power cycle.

|                               |  |                |
|-------------------------------|--|----------------|
| <b>Sinewave<br/>(default)</b> |  |                |
| <b>Step</b>                   |  |                |
| <b>Sawtooth</b>               |  | <b>Ramp Up</b> |
| <b>Ramp Up</b>                |  |                |
| <b>Ramp Down</b>              |  |                |

# FX GENERATOR GUIDELINES

In addition to FX direction and speed control, a Sync channel allows to offset or randomize the fixtures or the FX steps.

| DMX VALUES | FUNCTION                                  |
|------------|---|
|            | <b>FX Offset</b>                          |
| 000        | No Sync                                   |
| 001 - 035  | Fixture Offset, 10 degrees to 350 degrees |
| 036        | Synchronized                              |
| 037 - 100  | No Function                               |
| 101 - 120  | Random Fixture Offset                     |
| 121 - 140  | Random Pixel Order                        |
| 141 - 255  | Random Steps                              |

A full FX cycle is 360 degrees, and the fixture offsets can be set in 10-degree increments. Offsetting a fixture by 180 would mean it is exactly halfway ahead through the FX cycle.

Three randomization options are provided:

## Random Fixture Offset

Every fixture randomly selects any of the 36 offset points. It will then use this until the offset is changed or random offset is selected again.

## Random Pixel Order

The actual FX steps are randomized. This shuffling of the fixture order is done once, then the fixture will use this shuffled order across all FX until changed.

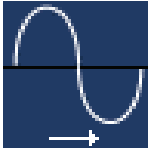



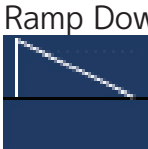
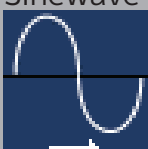

## Random Steps

Every step is randomly chosen every time, giving the most random sequence possible.

To reshuffle the randomization, set the channel to Idle and reselect the desired random option.

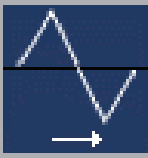
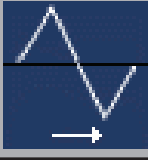
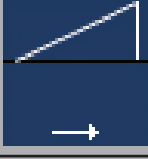
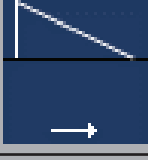
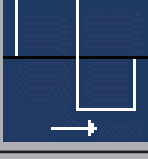
The FX system of the PROTEUS RAYZOR 760 allows many different combinations by changing the curves, offsets and speed parameters. The RGBW and SparkLED systems are separate, and by adjusting color, dimming and strobe channels there are endless creative designs possible.

# RGBW FX TABLE

| TYPE     | SLOT  | DMX VALUES   | NAME  | FX ADJUSTMENT |  |
|----------|---|--|---|---------------|--|
| Waveform | 0   | 000  | Off   |               |  |
|          | 1   | 001  | Sinewave (default)<br>         |               |  |
|          | 2   | 002  | Step<br>                       |               |  |
|          | 3   | 003  | Sawtooth<br>                   |               |  |
|          | 4   | 004  | Ramp Up<br>                   |               |  |
|          | 5   | 005  | Ramp Down<br>                |               |  |
|          | 6-10  | 006 - 010  | No Function   |               |  |
|          | <b>REVISED WITH SOFTWARE UPDATE VERSION 1.2.2</b> |  |   |               |  |
|          | 0   | 000  | Off   |               |  |
|          | 1   | 001  | Sinewave Cross (default)<br> |               |  |
| 2        | 002   | Sinewave Full<br> |   |               |  |



# RGBW FX TABLE

| TYPE  | SLOT             | DMX VALUES | NAME  | FX ADJUSTMENT          |
|---|------------------|------------|---|------------------------|
| <b>REVISED WITH SOFTWARE UPDATE VERSION 1.2.2</b> |                  |            |   |                        |
| <b>Waveform</b>                                   | 3                | 003        | Sawtooth Cross<br> |                        |
|   | 4                | 004        | Sawtooth Full<br>  |                        |
|   | 5                | 005        | Ramp Up<br>        |                        |
|   | 6                | 006        | Ramp Down<br>     |                        |
|   | 7                | 007        | Step<br>         |                        |
|   | 8-10             | 008 - 010  | No Function   |                        |
|   | <b>Intensity</b> | 11         | 011   | Single                 |
| 12  |                  | 012        | Single Bounce   | Reverse, Stop, Forward |
| 13  |                  | 013        | Snake   | Reverse, Stop, Forward |
| 14  |                  | 014        | Snake Bounce  | Reverse, Stop, Forward |
| 15  |                  | 015        | Rows  | Reverse, Stop, Forward |
| 16  |                  | 016        | Rows Bounce   | Reverse, Stop, Forward |
| 17  |                  | 017        | Column  | Reverse, Stop, Forward |
| 18  |                  | 018        | Column Bounce   | Reverse, Stop, Forward |
| 19  |                  | 019        | Columns 2   | Reverse, Stop, Forward |
| 20  |                  | 020        | Slash   | Reverse, Stop, Forward |
| 21  |                  | 021        | Backslash   | Reverse, Stop, Forward |
| 22  |                  | 022        | Slash Back  | Reverse, Stop, Forward |
| 23  | 023              | <>         | Reverse, Stop, Forward  |                        |

# RGBW FX TABLE

| TYPE      | SLOT      | DMX VALUES     | NAME                   | FX ADJUSTMENT          |
|-----------|-----------|----------------|------------------------|------------------------|
| Intensity | 24        | 024            | ><                     | Reverse, Stop, Forward |
|           | 25        | 025            | >>                     | Reverse, Stop, Forward |
|           | 26        | 026            | <<                     | Reverse, Stop, Forward |
|           | 27        | 027            | Rotating Bar           | Reverse, Stop, Forward |
|           | 28        | 028            | Rotating Dot           | Reverse, Stop, Forward |
|           | 29        | 029            | Rotating 2 Dot         | Reverse, Stop, Forward |
|           | 30        | 030            | Ring 2 Cell            | Reverse, Stop, Forward |
|           | 31        | 031            | Ring 2 Cell Overlap    | Reverse, Stop, Forward |
|           | 32        | 032            | Ring 3 Cell Blend      | Reverse, Stop, Forward |
|           | 33        | 033            | Ring - Center Fade     | Reverse, Stop, Forward |
|           | 34        | 034            | X-Bar                  | Reverse, Stop, Forward |
|           | 35        | 035            | Diagonals              | Reverse, Stop, Forward |
|           | 36        | 036            | Arrow Left             | Reverse, Stop, Forward |
|           | 37        | 037            | Arrow Right            | Reverse, Stop, Forward |
|           | 38        | 038            | 2 Pixels               | Reverse, Stop, Forward |
|           | 39        | 039            | 3 Pixels               | Reverse, Stop, Forward |
|           | 40        | 040            | 4 Pixels               | Reverse, Stop, Forward |
|           | 41        | 041            | 1, 2, 3, 4 Pixels      | Reverse, Stop, Forward |
|           | 42        | 042            | Ring Build             | Reverse, Stop, Forward |
|           | 43        | 043            | Ring Build Erase       | Reverse, Stop, Forward |
|           | 44        | 044            | Ring Build Erase 2     | Reverse, Stop, Forward |
|           | 45        | 045            | Chase 1                | Reverse, Stop, Forward |
|           | 46        | 046            | Chase 2                | Reverse, Stop, Forward |
|           | 47        | 047            | Chase 3                | Reverse, Stop, Forward |
|           | 48        | 048            | Chase 4                | Reverse, Stop, Forward |
|           | 49        | 049            | Chase 5                | Reverse, Stop, Forward |
|           | 50        | 050            | Chase 6                | Reverse, Stop, Forward |
|           | 51        | 051            | Chase 7                | Reverse, Stop, Forward |
|           | 52        | 052            | Chase 8                | Reverse, Stop, Forward |
|           | 53        | 053            | Chase 9                | Reverse, Stop, Forward |
|           | 54        | 054            | Chase 10               | Reverse, Stop, Forward |
|           | 55-59     | 055 - 059      | No Function            | No Function            |
|           | 60        | 060            | Center Chase           | Reverse, Stop, Forward |
| 61        | 061       | Center Chase 2 | Reverse, Stop, Forward |                        |
| 62-100    | 062 - 100 | No Function    | No Function            |                        |

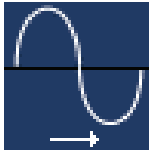
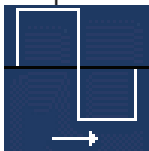
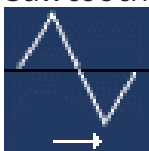
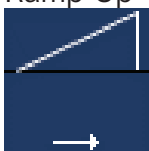
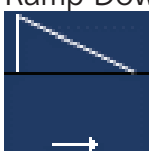
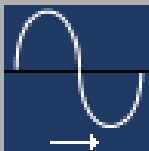

# RGBW FX TABLE

| TYPE                     | SLOT  | DMX VALUES | NAME                     | FX ADJUSTMENT          |
|--------------------------|---|------------|--------------------------|------------------------|
| Intensity<br>(continued) | <b>REVISED WITH SOFTWARE UPDATE VERSION 1.2.2</b> |            |                          |                        |
|                          | 55  | 055        | Center Chase             | Reverse, Stop, Forward |
|                          | 56  | 056        | Center Chase 2           | Reverse, Stop, Forward |
|                          | 57  | 057        | Alternate                | Reverse, Stop, Forward |
|                          | 58  | 058        | Burst Spark LED          | Reverse, Stop, Forward |
|                          | 59  | 059        | Burst RGBW               | Reverse, Stop, Forward |
|                          | 60  | 060        | Strobe Alternate         | Reverse, Stop, Forward |
|                          | 62  | 062        | Lens/Spark LED Alternate | Reverse, Stop, Forward |
|                          | 66-100  | 066 - 100  | No Function              | No Function            |
| Static<br>Patterns       | 101   | 101        | Top 2                    | Disabled               |
|                          | 102   | 102        | Center 3                 | Disabled               |
|                          | 103   | 103        | Bottom 2                 | Disabled               |
|                          | 104   | 104        | Top and Bottom           | Disabled               |
|                          | 105   | 105        | X                        | Disabled               |
|                          | 106   | 106        | Ring                     | Disabled               |
|                          | 107   | 107        | Center Dot               | Disabled               |
|                          | 108   | 108        | Slash                    | Disabled               |
|                          | 109   | 109        | Backslash                | Disabled               |
|                          | 110   | 110        | Arrow Left               | Disabled               |
|                          | 111   | 111        | Arrow Right              | Disabled               |
|                          | 112   | 112        | <                        | Disabled               |
|                          | 113   | 113        | >                        | Disabled               |
|                          | 114-255   | 114 - 255  | No Function              | No Function            |
| Color                    | <b>REVISED WITH SOFTWARE UPDATE VERSION 1.2.2</b> |            |                          |                        |
|                          | 131   | 131        | RGBW Cells               | Reverse, Stop, Forward |
|                          | 132   | 132        | RGBWCMY Cells            | Reverse, Stop, Forward |
|                          | 133   | 133        | Color Wheel Cells        | Reverse, Stop, Forward |
|                          | 134   | 134        | RGBW Rows                | Reverse, Stop, Forward |
|                          | 135   | 135        | RGBWCMY Rows             | Reverse, Stop, Forward |
|                          | 136   | 136        | Color Wheel Rows         | Reverse, Stop, Forward |
|                          | 137   | 137        | RGBW Columns             | Reverse, Stop, Forward |
|                          | 138   | 138        | RGBWCMY Columns          | Reverse, Stop, Forward |
|                          | 139   | 139        | Color Wheel Columns      | Reverse, Stop, Forward |
|                          | 140   | 140        | RGBW Single Row          | Reverse, Stop, Forward |
|                          | 141   | 141        | RGBWCMY Single Row       | Reverse, Stop, Forward |
|                          | 142   | 142        | Color Wheel Single Row   | Reverse, Stop, Forward |

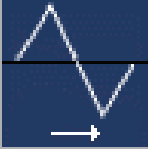
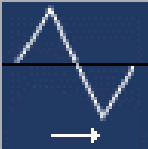
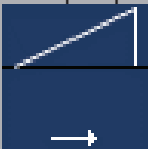
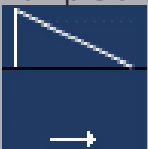
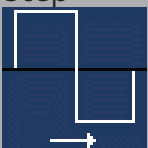
# RGBW FX TABLE

| TYPE                 | SLOT  | DMX VALUES        | NAME                             | FX ADJUSTMENT          |
|----------------------|---|-------------------|----------------------------------|------------------------|
| Color<br>(continued) | <b>REVISED WITH SOFTWARE UPDATE VERSION 1.2.2</b> |                   |                                  |                        |
|                      | 143   | 143               | RGBW Single Columns              | Reverse, Stop, Forward |
|                      | 144   | 144               | RGBWCMY Single Columns           | Reverse, Stop, Forward |
|                      | 145   | 145               | Color Wheel Single Columns       | Reverse, Stop, Forward |
|                      | 146   | 146               | RGB Rows                         | Reverse, Stop, Forward |
|                      | 147   | 147               | RGB Columns                      | Reverse, Stop, Forward |
|                      | 148   | 148               | Red White Cells                  | Reverse, Stop, Forward |
|                      | 149   | 149               | Green White Cells                | Reverse, Stop, Forward |
|                      | 150   | 150               | Blue White Cells                 | Reverse, Stop, Forward |
|                      | 151   | 151               | Red Green Cells                  | Reverse, Stop, Forward |
|                      | 152   | 152               | Red Blue Cells                   | Reverse, Stop, Forward |
|                      | 153   | 153               | Blue Green Cells                 | Reverse, Stop, Forward |
|                      | 154   | 154               | Ring - Center Mix to Color Wheel | Reverse, Stop, Forward |
|                      | 155   | 155               | Random White Cell                | Reverse, Stop, Forward |
|                      | 156   | 156               | Random White Row                 | Reverse, Stop, Forward |
|                      | 157   | 157               | Random White Column              | Reverse, Stop, Forward |
|                      | 158   | 158               | White Flash                      | Reverse, Stop, Forward |
|                      | 159   | 159               | Red Flash                        | Reverse, Stop, Forward |
|                      | 160   | 160               | Green Flash                      | Reverse, Stop, Forward |
|                      | 161   | 161               | Blue Flash                       | Reverse, Stop, Forward |
| 162                  | 162   | Color Wheel Flash | Reverse, Stop, Forward           |                        |
| 163                  | 163   | Alternate Color   | Reverse, Stop, Forward           |                        |
| 164-255              | 164 - 255   | No Function       | No Function                      |                        |

# RGBW FX TABLE

| TYPE     | SLOT  | DMX VALUES | NAME  | FX ADJUSTMENT   |  |
|----------|---|------------|---|---|--|
| Waveform | 0   | 000        | Off   |   |  |
|          | 1   | 001        | Sinewave (default)<br> |   |  |
|          | 2   | 002        | Step<br>               |   |  |
|          | 3   | 003        | Sawtooth<br>           |   |  |
|          | 4   | 004        | Ramp Up<br>           |   |  |
|          | 5   | 005        | Ramp Down<br>        |   |  |
|          | 6-10  | 006 - 010  | No Function   |   |  |
|          | <b>REVISED WITH SOFTWARE UPDATE VERSION 1.1.1</b> |            |   |   |  |
|          |   | 0          | 000   | Off   |  |
|          |   | 1          | 001   | Sinewave Cross (default)<br> |  |
|          |   | 2          | 002   | Sinewave Full<br>            |  |

# RGBW FX TABLE

| TYPE                    | SLOT  | DMX VALUES | NAME  | FX ADJUSTMENT          |
|-------------------------|---|------------|---|------------------------|
| Waveform<br>(continued) | <b>REVISED WITH SOFTWARE UPDATE VERSION 1.1.1</b> |            |   |                        |
|                         | 3   | 003        | Sawtooth Cross<br> |                        |
|                         | 4   | 004        | Sawtooth Full<br>  |                        |
|                         | 5   | 005        | Ramp Up<br>        |                        |
|                         | 6   | 006        | Ramp Down<br>     |                        |
|                         | 7   | 007        | Step<br>         |                        |
|                         | 8-10  | 008 - 010  | No Function   |                        |
| Spark LED FX            | 11  | 011        | Starfield   | Reverse, Stop, Forward |
|                         | 12  | 012        | 1 Pixel   | Reverse, Stop, Forward |
|                         | 13  | 013        | 2 Pixels  | Reverse, Stop, Forward |
|                         | 14  | 014        | 3 Pixels  | Reverse, Stop, Forward |
|                         | 15  | 015        | 4 Pixels  | Reverse, Stop, Forward |
|                         | 16  | 016        | 5 Pixels  | Reverse, Stop, Forward |
|                         | 17  | 017        | 7 Pixels  | Reverse, Stop, Forward |
|                         | 18  | 018        | 14 Pixels   | Reverse, Stop, Forward |
|                         | 19  | 019        | Single Row  | Reverse, Stop, Forward |
|                         | 20  | 020        | 3 Rows  | Reverse, Stop, Forward |
|                         | 21  | 021        | Single Column   | Reverse, Stop, Forward |
|                         | 22  | 022        | 3 Columns   | Reverse, Stop, Forward |

# RGBW FX TABLE

| TYPE                        | SLOT   | DMX VALUES | NAME                | FX ADJUSTMENT          |
|-----------------------------|--------|------------|---------------------|------------------------|
| Spark LED FX<br>(continued) | 23     | 023        | Pixel Ring Chase    | Reverse, Stop, Forward |
|                             | 24     | 024        | Pixel Row Chase     | Reverse, Stop, Forward |
|                             | 25     | 025        | Pixel Ring Chase 2  | Reverse, Stop, Forward |
|                             | 26     | 026        | Center Out          | Reverse, Stop, Forward |
|                             | 27     | 027        | Fireworks           | Reverse, Stop, Forward |
|                             | 28     | 028        | Ring                | Reverse, Stop, Forward |
|                             | 29     | 029        | Row                 | Reverse, Stop, Forward |
|                             | 30     | 030        | Snake               | Reverse, Stop, Forward |
|                             | 31-90  | 031 - 090  | No Function         | No Function            |
| Spark LED<br>Lens Combos    | 91-100 | 091 - 100  | No Function         | No Function            |
| Full Lens<br>Patterns       | 101    | 101        | Single              | Reverse, Stop, Forward |
|                             | 102    | 102        | Single Bounce       | Reverse, Stop, Forward |
|                             | 103    | 103        | Snake               | Reverse, Stop, Forward |
|                             | 104    | 104        | Snake Bounce        | Reverse, Stop, Forward |
|                             | 105    | 105        | Rows                | Reverse, Stop, Forward |
|                             | 106    | 106        | Rows Bounce         | Reverse, Stop, Forward |
|                             | 107    | 107        | Column              | Reverse, Stop, Forward |
|                             | 108    | 108        | Column Bounce       | Reverse, Stop, Forward |
|                             | 109    | 109        | Columns 2           | Reverse, Stop, Forward |
|                             | 110    | 110        | Slash               | Reverse, Stop, Forward |
|                             | 111    | 111        | Backslash           | Reverse, Stop, Forward |
|                             | 112    | 112        | Slash Back          | Reverse, Stop, Forward |
|                             | 113    | 113        | <>                  | Reverse, Stop, Forward |
|                             | 114    | 114        | ><                  | Reverse, Stop, Forward |
|                             | 115    | 115        | >>                  | Reverse, Stop, Forward |
|                             | 116    | 116        | <<                  | Reverse, Stop, Forward |
|                             | 117    | 117        | Rotating Bar        | Reverse, Stop, Forward |
|                             | 118    | 118        | Rotating Dot        | Reverse, Stop, Forward |
|                             | 119    | 119        | Rotating 2 Dot      | Reverse, Stop, Forward |
|                             | 120    | 120        | Ring 2 Cell         | Reverse, Stop, Forward |
|                             | 121    | 121        | Ring 2 Cell Overlap | Reverse, Stop, Forward |
|                             | 122    | 122        | Ring 3 Cell Blend   | Reverse, Stop, Forward |
|                             | 123    | 123        | Ring - Center Fade  | Reverse, Stop, Forward |
|                             | 124    | 124        | X-Bar               | Reverse, Stop, Forward |
|                             | 125    | 125        | Diagonals           | Reverse, Stop, Forward |
|                             | 126    | 126        | Arrow Left          | Reverse, Stop, Forward |

# RGBW FX TABLE

| TYPE                                      | SLOT    | DMX VALUES     | NAME                   | FX ADJUSTMENT          |
|---|---------|----------------|------------------------|------------------------|
| <b>Full Lens Patterns<br/>(continued)</b> | 127     | 127            | Arrow Right            | Reverse, Stop, Forward |
|   | 128     | 128            | 2 Pixels               | Reverse, Stop, Forward |
|   | 129     | 129            | 3 Pixels               | Reverse, Stop, Forward |
|   | 130     | 130            | 4 Pixels               | Reverse, Stop, Forward |
|   | 131     | 131            | 1, 2, 3, 4 Pixels      | Reverse, Stop, Forward |
|   | 132     | 132            | Ring Build             | Reverse, Stop, Forward |
|   | 133     | 133            | Ring Build Erase       | Reverse, Stop, Forward |
|   | 134     | 134            | Ring Build Erase 2     | Reverse, Stop, Forward |
|   | 135     | 135            | Chase 1                | Reverse, Stop, Forward |
|   | 136     | 136            | Chase 2                | Reverse, Stop, Forward |
|   | 137     | 137            | Chase 3                | Reverse, Stop, Forward |
|   | 138     | 138            | Chase 4                | Reverse, Stop, Forward |
|   | 139     | 139            | Chase 5                | Reverse, Stop, Forward |
|   | 140     | 140            | Chase 6                | Reverse, Stop, Forward |
|   | 141     | 141            | Chase 7                | Reverse, Stop, Forward |
|   | 142     | 142            | Chase 8                | Reverse, Stop, Forward |
|   | 143     | 143            | Chase 9                | Reverse, Stop, Forward |
|   | 144     | 144            | Chase 10               | Reverse, Stop, Forward |
|   | 145     | 145            | Center Chase           | Reverse, Stop, Forward |
| 146                                       | 146     | Center Chase 2 | Reverse, Stop, Forward |                        |
|   | 147-200 | 147 - 200      | No Function            | No Function            |
| <b>Full Lens Static Patterns</b>          | 201     | 201            | Top 2                  | Disabled               |
|   | 202     | 202            | Center 3               | Disabled               |
|   | 203     | 203            | Bottom 2               | Disabled               |
|   | 204     | 204            | Top and Bottom         | Disabled               |
|   | 205     | 205            | X                      | Disabled               |
|   | 206     | 206            | Ring                   | Disabled               |
|   | 207     | 207            | Center Dot             | Disabled               |
|   | 208     | 208            | Slash                  | Disabled               |
|   | 209     | 209            | Backslash              | Disabled               |
|   | 210     | 210            | Arrow Left             | Disabled               |
|   | 211     | 211            | Arrow Right            | Disabled               |
|   | 212     | 212            | <                      | Disabled               |
|   | 213     | 213            | >                      | Disabled               |
|   |         | 214-255        | 214 - 255              | No Function            |

CONTINUED ON NEXT PAGE



# RGBW FX TABLE

| TYPE                     | SLOT    | DMX VALUES | NAME        | FX ADJUSTMENT |
|--------------------------|---------|------------|-------------|---------------|
| <b>Spark LED Pattern</b> | 226     | 226        | Row 1       | Disabled      |
|                          | 227     | 227        | Row 2       | Disabled      |
|                          | 228     | 228        | Row 3       | Disabled      |
|                          | 229     | 229        | Row 4       | Disabled      |
|                          | 230     | 230        | Row 5       | Disabled      |
|                          | 231     | 231        | Row 6       | Disabled      |
|                          | 232     | 232        | Row 7       | Disabled      |
|                          | 233     | 233        | Column 1    | Disabled      |
|                          | 234     | 234        | Column 2    | Disabled      |
|                          | 235     | 235        | Column 3    | Disabled      |
|                          | 236     | 236        | Column 4    | Disabled      |
|                          | 237     | 237        | Column 5    | Disabled      |
|                          | 238     | 238        | Column 6    | Disabled      |
|                          | 239     | 239        | Column 7    | Disabled      |
|                          | 240     | 240        | Ring 1      | Disabled      |
|                          | 241     | 241        | Ring 2      | Disabled      |
|                          | 242     | 242        | Ring 3      | Disabled      |
|                          | 243-255 | 243 - 255  | No Function | No Function   |

# ERROR CODES

When power is applied, the unit will automatically enter a "Reset/Test" mode, which 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 on the display screen. For example, when the display shows "Pan Er" 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 Pan, Tilt, and Zoom errors all at the same time, you will see the error message "Pan Er", "Tilt Er", and "Zoom Er" flash in sequence 5 times.

If an error occurs 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, and therefore the fixture will place itself in stand-by mode until subsequent repairs can be made.
- **Less Than 3 Errors** - The fixture has less than 3 errors, and therefore most other functions will work properly. The fixture will attempt to operate normally until the errors can be corrected by a technician. The errors in question will remain flashing in the display as a reminder of internal errors.

| Note: Error Codes are subject to change without any prior written notice. |   |
|---|---|
| ERROR CODES   | DESCRIPTION   |
| Pan Er  | 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. |
| Tilt Er   |   |
| Zoom Er   | 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).  |

# SPECIFICATIONS

## SOURCE

(7) 60W Osram RGBW LEDs

(28) 2W White SparkLED™

50,000 Hour Average LED Life\*

\*Test lab conditions. May vary depending on several factors including but not limited to: Environmental Conditions, Power/Voltage, Usage Patterns (On-Off Cycling), Control, and Dimming.

## PHOTOMETRIC DATA

7,200 Total Lumen Output

CRI 80

Zoom Range 5° - 77°

Beam Angle 5.4° - 56.4°

Field Angle 8.1° - 74°

## EFFECTS

Motorized Zoom

Linear Color Temperature Presets (2700-8000K)

RGBW Color Mixing and Pixel Control

White SparkLED Lens Effect

Color Presets and Macros

Electronic Strobe and Variable Dimming Curves

16-bit Dimming

Pan Angle: 540°/630°

Tilt Angle: 270°/360°

## CONTROL / CONNECTIONS

3 DMX Channel Modes (25 / 52 / 80 channels)

360° Continuous Pan and Tilt Movement

DMX Adjustable Refresh Rate (900 - 25000 Hz)

(6) Button Touch Panel

Full Color 180° Reversible LCD Menu Display

RDM Support IP65 5pin XLR DMX In/Out

IP65 RJ45 Ethernet In/Out (Art-Net, sACN)

IP65 Locking Power Cable In

With Wired Digital Communication Network

## SIZE / WEIGHT

Length: 14.31 in (363.4mm)

Width: 10.24 in (259.97mm)

Height: 19.43 in (493.44mm)

Center-to-Center: 16.6" (421.5mm)

Weight: 41.0 lbs. (18.6kg)

## ELECTRICAL / THERMAL

AC 100-240V 50/60Hz

700W Max Power Consumption

BTU/hr (+/- 10%) 2387

## APPROVALS / RATINGS

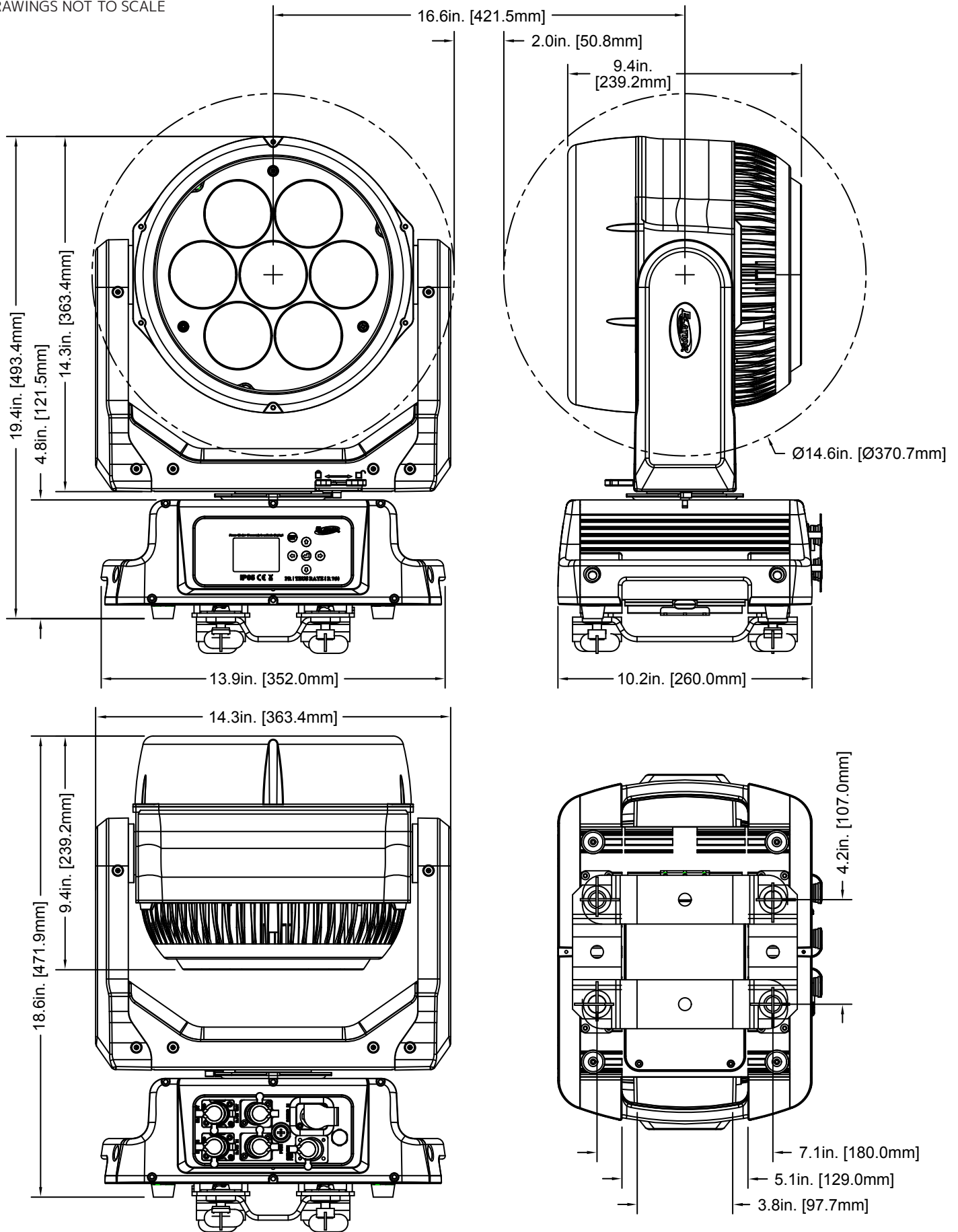
CE | cETLus | IP65



Specifications and documentation subject to change without notice.

# DIMENSIONAL DRAWINGS

DRAWINGS NOT TO SCALE



Specifications and documentation subject to change without notice.

## OPTIONAL ACCESSORIES

| ORDER CODE   | ITEM   |
|--------------|--|
| IP TESTER    | IP Fixture Vacuum and Pressure Leak Tester                                   |
| TRIGGER CAMP | Heavy Duty Wrap Around Hook Style Clamp                                      |
| STR527       | 5 ft (1.5m) IP65 5-pin XLR Cable<br>(additional cable lengths are available) |

## FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## FCC RADIO FREQUENCY INTERFERENCE WARNINGS & INSTRUCTIONS

This product has been tested and found to comply with the limits as per Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device uses and can radiate radio frequency energy and, if not installed and used in accordance with the included instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following methods:

- Reorient or relocate the device.
- Increase the separation between the device and the receiver.
- Connect the device and the radio receiver to electrical outlets on two different circuits.
- Consult the dealer or an experienced radio/TV technician for help.



## Europe Energy Saving Notice

Energy Saving Matters (EuP 2009/125/EC)

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

