## ElAtion


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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 for the latest revision/update of this manual, before installation and/or programming.

| Date | Document <br> Version | SoftwareVersion $\geq$ | DMX Channel Modes | Notes |
| :---: | :---: | :---: | :---: | :---: |
| $07 / 27 / 2022$ | 1.0 | 1.0 .0 | $28 / 76 / 140 / 188$ | Initial Release |
| $09 / 08 / 2022$ | 1.1 | N/C | No Change | Updated Torque Settings, <br> RDM, and System Menu |
| $10 / 06 / 2022$ | 1.2 | N/C | No Change | Updated Specifications |
| $01 / 31 / 2023$ | 1.3 | N/C | No Change | Updated DMX Traits, <br> Specifications |
| $02 / 15 / 2023$ | 1.4 | N/C | No Change | Updated IP65 notice, Error <br> Codes, \& Specifications |
| $08 / 18 / 2023$ | 1.5 | N/C | No Change | Updated IP65 Notice <br> $10 / 06 / 2023$ |
| 1.6 | N/C | No Change | Added Shielded Cable note |  |
| $12 / 13 / 2023$ | 1.7 | N/C | No Change | Updated Installation <br> Guidelines, Specifications |
| $03 / 29 / 2024$ | 1.8 | 1.2 .1 | $28 / 76 / 140 / 108 /$ | Updated DMX Traits, System <br> Menu, RGBW Pixel FX, <br> SparkLED FX, Strobeline FX, <br> Specifications |

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## GENERAL INFORMATION

## FOR PROFESSIONAL USE ONLY

## 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. For professional use only

## 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 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.

## BOX CONTENTS

Omega Brackets (x2)
IP65 Rated 5pin DMX Cable
IP65 Rated RJ45 DATA Cable (Fixture to Fixture Interconnect Use Only!)
IP65 Rated Power Cable

## CUSTOMER SUPPORT

Contact ELATION Service for any product related service and support needs.
Also visit forums.elationlighting.com with questions, comments or suggestions.

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

323-582-3322 | Fax 323-832-9142 | support@elationlighting.com
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REPLACEMENT PARTS please visit parts.elationlighting.com

## 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 bases, except for cooling fans, which should be replaced once the luminaries reach 10,000-hours. This is a prophylactic measure intended to keep the unit running as cool as possible, insuring proper function of all internal components. A complete service breakdown is available, please contact service@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 manufactures 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 MANUFACTURE'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!


IF THE FIXTURE IS EXPOSED TO ENVIRONMENTAL TEMPERATURE CHANGES SUCH AS RELOCATION FROM AN OUTDOOR COLD TO AN INDOOR WARM ENVIRONMENT, DO NOT POWER THE FIXTURE ON IMMEDIATELY. INTERNAL CONDENSATION AS A RESULT OF ENVIRONMENTAL TEMPERATURE CHANGE CAN CAUSE INTERNAL FIXTURE DAMAGE. LEAVE THE FIXTURE POWERED OFF UNTIL IT HAS REACHED ROOM TEMPERATURE BEFORE POWERING ON.


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 1.6 FEET (0.5 METERS)
MAXIMUM TEMP OF EXTERNAL SURFACE $185^{\circ} \mathrm{F}\left(85^{\circ} \mathrm{C}\right)$
MINIMUM DISTANCE OF INFLAMMABLE MATERIALS
FROM THE SURFACE 1.6 FEET (0.5 METER)

## SAFETY GUIDELINES

- DO NOT TOUCH the fixture housing during operation. Turn OFF the power and allow approximately 15 minutes for the fixture to cool down before serving.
- DO NOT shake fixture, 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 similar power rating.
- DO NOT block any air ventilation slots.
- All fan and air inlets must remain clean and never blocked.
- 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 the plug out by tugging the wire portion of the cord.
- 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.


## OVERVIEW



LCD Display \& System Menu Controls


## TORQUE SETTINGS FOR SCREWS

| NO. | Name | Torque Settings/kgf.cm |
| :---: | :---: | :---: |
| 1 | Lamp Back Cover 2 | $7 \pm 0.7$ |
| 2 | Cooling Shell Cover Assembly | $14 \pm 1.4$ |
| 3 | Cooling Cover | $14 \pm 1.4$ |
| 4 | Toughened Glass | $14 \pm 1.4$ |
| 5 | Rear Head Cover Fan | $14 \pm 1.4$ |

$\triangle$
CAUTION! DO NOT OVER TORQUE SCREWS AS THIS CAN CAUSE LEAKAGE ISSUES! TO CONFIRM THE IP65 INTEGRITY, TEST FIXTURE USING THE ELATION IP TESTER. CONTACT ELATION SERVICE FOR MORE DETAILS.


## IP TEST PARAMETERS

Following any repair or maintenance procedure that requires disassembly of the fixture, use Elation's IP Tester to confirm the IP integrity of the fixture. The air valve is located on the back panel next to the display screen, as shown in the diagram below. Please contact Elation Service for information regarding the Elation IP Tester, or visit the product information page online at: https://www.elationlighting.com/ip-tester

$\triangle$
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 PROXIMITY TO THE LENS OF THE FIXTURE WHILE PERFORMING THE TEST!
DE-HUMIDIFICATION: IP65 fixtures operating in high-humidity environments may experience residual fogging or condensation. Such fogging will not affect the fixture, and can be removed using the following procedure: position the unit with the air valve pointing upwards, then open the air valve and run the unit for 1-2 hours after reaching operating temperature. Then, while the fixture is still hot, re-install the air valve and allow the unit to cool down. Please note: this procedure should be performed in a dry, climate-controlled environment. Avoid additional fogging by drying the fixture completely before placing into a road case.

## Gore Valve



| Elation Product | Minimum <br> Value |  | Maximum <br> Value |  | Steady <br> Time <br> (Hold Time) | Tester | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Kpa | Psi | Kpa | Psi | S |  |  |
| Proteus Rayzor Blade L/S <br> (Same settings both units) | -17 | -2.5 | -13 | -1.9 | 30 | Elation IP <br> Tester | Complete Unit |
|  | 13.00 | 1.9 | 17.00 | 2.5 | 30 | Elation IP <br> Tester |  |



## INSTALLATION GUIDELINES

FLAMMABLE MATERIAL WARNING

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

## ELECTRICAL CONNECTIONS

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

# MINIMUM DISTANCE TO OBJECTS/SURFACES 

## MUST BE 3.2 FOOT (1.0 METERS)

MINIMUM DISTANCE OF INFLAMMABLE MATERIALS
FROM THE SURFACE 3.2 FEET (1.0 METER)


## AMBIENT TEMPERATURE RANGE IS $-4^{\circ} \mathrm{F}$ TO $113^{\circ} \mathrm{F}\left(-20^{\circ} \mathrm{C}\right.$ TO $\left.45^{\circ} \mathrm{C}\right)$.

## 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 the fixture to any metal truss/structure or placing the fixture 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, clamps, cables, and accessories.

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

Fixture ambient operating temperature range is $-4^{\circ}$ to $113^{\circ} \mathrm{F}$. $\left(-20^{\circ}\right.$ to $\left.45^{\circ} \mathrm{C}\right)$
Do not use the fixture under or above this temperature.
Fixture should be installed in areas outside walking paths, seating areas, or away from areas were unauthorized personnel might reach the fixture by hand.

NEVER stand directly below the fixture 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 10 minutes for the fixture to cool down before servicing.

## INSTALLATION GUIDELINES

## TILT-LOCK

To lock, press the Tilt-Lock Button until it clicks.
To Unlock, press the Limiting-Plate to the right until the Tilt-Lock button pops up.


## FROST-FILTER

1. Loosen the screws on both sides of the Frost-Filter Baffle and lift it away as shown below.
2. Insert the Frost Filter into the slot above the lens glass and slide it in fully.
3. Replace the Frost-Filter Baffle and tighten the screws


## INSTALLATION GUIDELINES

## OMEGA BRACKETS WITH CLAMP 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 $1 / 4$ turn clockwise; making sure the fastener is completely locked. Omega Brackets can be installed into the fixture base as illustrated below.


MOUNTING THE FIXTURE ON A TRUSS USING CLAMPS WITH OMEGA BRACKETS
When mounting the fixture to a truss, be sure to secure an appropriately rated professional grade rigging clamp to the included Omega Brackets using an M10 or M12 screw fitted through the center hole of the Omega Brackets. The fixture provides built-in rigging points for a SAFETY CABLE (not included). Be sure to only use one of the designated rigging points for the safety cable and never secure a safety cable to a carrying handle.

## INSTALLATION GUIDELINES

## RIGGING

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


## INSTALLATION GUIDELINES

## 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

## POWER AND DATA CABLES

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


INCLUDED RJ45 DATA CABLE
THE INCLUDED RJ45 DATA CABLE IS FOR FIXTURE TO FIXTURE INTERCONNECTION ONLY! THE RJ45 CABLE CONNECTORS MAY NOT BE COMPATIBLE WITH OTHER RJ45/ETHERCON TYPE CONNECTORS.

DO NOT USE SHIELDED CABLES TO CONNECT UNITS AS THESE CONNECTIONS CAN CREATE GROUND LOOPS WHICH MAY CORRUPT DATA TRANSFER.


## INSTALLATION GUIDELINES

## POWER AND DATA CABLES

$\uparrow$
ENSURE ALL CONNECTIONS AND ENDCAPS ARE PROPERLY SEALED WITH DIELECTRIC GREASE (AVAILABLE AT MOST ELECTRICAL SUPPLIERS) TO PREVENT WATER CORROSION AND/OR ELECTRICAL SHORT CIRCUIT.

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


## INSTALLATION GUIDELINES

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

External sources of light beams from direct sunlight, lighting moving head fixtures, and lasers, which are focused directly towards the exterior housing and/or penetrate the front lens opening of ELATION lighting fixtures, can cause severe internal damage including burning to 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, 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 prevent any potential damage from occurring if followed. Contact ELATION Service for more details.

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

Note: See 'DMX Traits: Fixture' table on page 30 under 'Control' for channel values to engage or disengage these functions.


## SUN PROTECTION MODE

The fixture incorporates an automatic protection from harmful sunlight, which can damage a fixture's internal components from extended exposure. Fixtures use an internal sensor to determine their physical orientation, then reorient the fixture towards the ground to prevent sunlight from entering the lens.
This automatic feature only works when the fixture is powered. If the fixture is unpowered during setup, it is necessary to manually reorient the lenses away from the sun, and aim them towards the ground. Even a few minutes of sun exposure can cause damage inside the fixture.

The Sun Protection setting is accessed via the "No DMX Status" menu.
The automatic sun protection positioning is activated under the following conditions:

1. Power on without DMX signal: the fixture always starts in sun protection mode.
2. No DMX Status "Sun Protection": the fixture enters sun protection mode after approximately 3 minutes.
3. Remote DMX control: the sun protection position can be temporarily activated from the lighting console without the need to create a custom position preset. The fixture senses the correct ground orientation. This means that fixtures already facing the ground may not move their heads.

Hold "Sun Protect Position" for 3 s to set the fixture to the sun protection position.
Sun protection status displays as "Sun Protection: Active".
The sun protection position deactivates under the following conditions:

1. Connect DMX signal.
2. Remote DMX control: Hold "Sun Protection Off" for 3 s .

To avoid harsh or jarring movements, the sun protection position always uses a 5-second fade time when it is activated or deactivated.

## HIBERNATION MODE

To reduce wear on the fixture and its components, this mode disables motors and most electronics. Set the hibernation mode countdown time in the Display Menu: "Status Settings / Personality / Hibernation". Hibernation can be fully disabled.
The hibernation mode activates under the following conditions:

1. Loss of DMX: the fixture enters hibernation after the timeout expires. Default is 15 minutes.
2. Remote DMX control: Hold "Hibernate Fixture" for 3s

The hibernation mode deactivates under the following conditions:

1. Connect DMX Signal
2. Remote DMX control: Hold "Hibernate Off" for 3s

The fixture will perform a full calibration cycle, then assume the current DMX status.
Please note that the Hibernation does not change the PT position of the fixtures, allowing the user to set the desired position and then issue the Hibernate command.

To ensure the fixture is protected from harmful sunrays it is recommended to either leave the "No DMX Status" in "Sun Protection" (so the fixture is already in the correct position after 3 minutes of DMX loss) or set the fixture to a safe Tilt position manually first before hibernation.

Burn and heat damage to the fixture's interior components due to external light sources (sun or other fixtures shining into the lens) is never covered under the manufacturers warranty.

## SYSTEM MENU

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

NOTE: 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.


## SYSTEM MENU

| ELATION PROTEUS RAYZOR BLADE L |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| MAIN MENU | OPTIONS / VALUES (Default Settings in BOLD) |  |  | DESCRIPTION |
| Function | Set Dmx Address | A001~AXXX |  | DMX Address Setting |
|  | Dmx Value | ALL $\cdot$.... |  | DMX Value Display |
|  | Secondary Mode | Secondary1, Secondary2, Secondary3 |  | Secondary Setting |
|  | Auto Program | Primary / Alone |  | Auto Program |
| Information | Time Information | Current Time | XXXX(Hours) | Power On Running Time |
|  |  | Total Run Time | XXXX(Hours) | Fixture Running Time |
|  |  | Last Run Time | XXXX(Hours) | Fixture Last Times Clear |
|  |  | LastRun Password | Password=XXX | Timer Password 038 |
|  |  | Clear Last Run | ON/OFF | Clear Fixture Last Time |
|  | Temperature Info | LED Temperature | $X X X^{\circ} \mathrm{C} /{ }^{\circ} \mathrm{F}$ | Temperature in LED |
|  |  | Head Temperature | $X X X^{\circ} \mathrm{C} /{ }^{\circ} \mathrm{F}$ | Temperature in Base |
|  |  | Base Temperature | XXX ${ }^{\circ} \mathrm{C} /{ }^{\circ} \mathrm{F}$ | Temperature in Fixture |
|  | Humidity Info | Head Humidity | XXX\% | Humidity in Fixture |
|  |  | Base Humidity | XXX\% | Humidity in Base |
|  | Ethernet IP | $\begin{aligned} & \text { Ethernet IP } \\ & \text { XXX. XXX. XXX. XXX } \\ & \text { XXX. XXX. XXX. XXX } \end{aligned}$ |  | Ethernet IP |
|  | Fan Info | HeadFan1: xxxx ....... RPM |  | Fan information |
|  | Software Version | Vx.x.x |  | Software Version |
|  | Error Info | $\begin{array}{\|l\|} \hline \text { Error Record } 1 \\ \text { Error Record } 2 \\ \ldots \text { … } \\ \text { Error Record } 10 \\ \hline \end{array}$ |  |  |
| Personality | Status Settings | Address Via DMX | ON/OFF | Address Via DMX |
|  |  | No DMX Status | Sun Prot | The fixture moves to the sun protection position after 3 minutes |
|  |  |  | Close | The fixture turns off the light output |
|  |  |  | Hold | The current fixture state is held until power off or DMX is resumed |
|  |  |  | Auto | The fixture recalls the internal auto program |
|  |  | Tilt Reverse | ON/OFF | Tilt Reverse movement |
|  |  | Zoom Speed | Fast / Slow | Zoom speed mode |
|  |  | Pixel Mapping | Full | Select pixel mapping mode |
|  |  |  | Full Sync |  |
|  |  |  | Split |  |
|  |  |  | Left |  |
|  |  |  | Right |  |
|  |  | Strline Pair Dir | Horizontal / Vertical | Select strobeline pairing direction, pixel compact mode only |
|  |  | Pixel Order | Normal / Inverse | Select pixel order |
|  |  | Feedback | ON/OFF | Movement Feedback |
|  |  | Hibernation | OFF, 01M~99M, 15M | Standby Mode |
|  | Service Setting | Password | Password=XXX | Password (050) |
|  |  | Clear Err. Info | ON/OFF | Clear Err. Info |
|  | Fans Control | Auto / High/ Silent / Studio / Mute |  | Fans Control |

## SYSTEM MENU

| ELATION PROTEUS RAYZOR BLADE L |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| MAIN MENU | OPTIONS / VALUES (Default Settings in BOLD) |  |  | DESCRIPTION |
| Personality | Display Setting | Shutoff Time | 02~60m, Default $=05 \mathrm{~m}$ | Display Shut Off Time |
|  |  | Display Reverse | OFF/ON/AUTO | Reverse 180 degree |
|  |  | Key Lock | ON/OFF | LCD Control Panel Key Lock |
|  | Temperature C/F | Celsius |  | Temp C/F |
|  |  | Fahrenheit |  |  |
|  | Initial Status | TILT=XXX |  | Initial effect position |
|  | Select Signal | DMX Only |  |  |
|  |  | Art-Net |  | Select Signal |
|  |  | sACN |  |  |
|  | Klingnet | ON/OFF |  | Klingnet |
|  | Ethernet IP | XXX. XXX. XXX. XXX |  | Ethernet IP |
|  | Ether Mask IP | XXX. XXX. XXX. XXX |  | Ether Mask IP |
|  | Set Universe | 000~32767 |  | Setting Art-Net Universe |
|  | DHCP | ON / OFF |  | Automatically assign IP address |
|  | Ethernet DMX Out | ON / OFF |  | Enable or disable ethernet DMX output |
|  | Dimmer Mode | Standard |  |  |
|  |  | Stage |  |  |
|  |  | TV |  |  |
|  |  | Architectural |  | Dimmer Mode |
|  |  | Theatre |  |  |
|  |  | Stage2 |  |  |
|  |  | Delay 0s, 0.1s, 0.2s, ..., 10s |  |  |
|  | Refresh | $\begin{aligned} & 1200,900-1500,2500,4000,5000,6000 \\ & 10000,15000,20000,25000(\mathrm{~Hz}) \end{aligned}$ |  | Refresh Frequency Rate Setting |
|  | DimmerCurve | Linear, Square, Inverse Square, S-Curve |  | DimmerCurve Setting |
|  | ResetDef | ON | PassCode=XXX | Restore factory settings |
|  |  | Off |  | Password (011) |
| Reset Function | Reset All |  |  | Reset Function |
|  | Reset Tilt |  |  |  |
|  | Reset Others |  |  |  |
| Effect Adjust | Test Channel | TILT... |  | Test function |
|  | Manual Control | TILT=XXX |  | Manual Control function |
|  | Calibration | Calibrate Password TILT=XXX |  | Password (050) Calibrate and adjust the effects to standard/right position |
| User Mode Set | User Mode | Standard, Pixel, Pixel Plus, Pixel Compact, Pixel Compact SparkLED, Extended |  | Standard channel mode RGBW main LED pattern Extended channel mode |
| Edit Program | Select Program | Auto Pro Part $1=$ Program $1 \sim 10$ Program 1 <br> Auto Pro Part 2 = Program $1 \sim 10$ Program 1 |  | Select Programs To Be Run |
|  | Edit Program | Prog 1 : Prog 10 | ProgTest | Testing Program |
|  |  |  | Step 01 = SCxxx | Program In Loop |
|  |  |  | Step 64 = SCxxx | Save and Exit |
|  | Edit Scenes | $\begin{aligned} & \text { Edit Scene } 001 \\ & \text { to } \\ & \text { Edit Scene } 250 \end{aligned}$ | Tilt, .........ime- - Fade Ti - Scene Time- Input By Out | Save and Automatically Return Manual Scenes Edit |
|  | Rec. Controller | XX X XX |  | Automatic Scenes Recorder |

## SYSTEM MENU

## FUNCTION-Auto Program

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

## PERSONALITY-Status Settings-Address Via DMX

When ON, define the desired DMX address via an external controller.
NOTE: This process assumes the fixture DMX address is set to 001. If fixture DMX address is not at 001, you must adjust the channel numbers accordingly in order for this feature to work.
For example: if your fixture address is 010, then Channel 1 becomes Channel 10, Channel 2 becomes Channel 11, and Channel 3 becomes Channel 12.

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

Example 1:
If the desired DMX address is $\mathbf{5 7}$, set Channel $\mathbf{1}$ to a value of (7), set Channel $\mathbf{2}$ to a value of (7), and then set Channel 3 to a value of (57).

## Example 2:

If the desired DMX address is 420, set Channel $\mathbf{1}$ to a value of ( $\mathbf{7}$ ), set Channel $\mathbf{2}$ to a value of (8), and then set Channel 3 to a value of (164). $(256+164=420)$
5. After setting Channel 3 to the desired DMX address value, wait approximately 20 seconds for the fixture to complete the address reset function.

## PERSONALITY-Service Settings-Password (050)

NOTE: The Service Password MUST be entered in order to access the following menus: Clear Err. Info .

## PERSONALITY-Display Setting-Key Lock

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

## SYSTEM MENU

$\triangle$
ONLY QUALIFIED TECHNICIANS SHOULD PERFORM THIS FUNCTION! NOTE: SAVED WHITE BALANCE IS ERASED AFTER A RESET IS PERFORMED!

This function restores all fixture settings to the factory default settings. The password is 011 and must be entered each time a reset is performed.

## EFFECT ADJUST-Test Channel

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

$\triangle$

## EFFECT ADJUST-Calibration

 ONLY QUALIFIED TECHNICIANS SHOULD PERFORM THIS FUNCTION.This function allows small adjustments to be made to the Pan, Tilt, and Zoom movements to compensate for ware or in the event a sensor has been knocked slightly out of place. Because improper use of this function can result in undesired operation this function has been password protected. The password is 050 and must be entered each time the calibration menu function is entered. Because calibration is an extremely delicate procedure, instructions on performing this action are left out of this manual. For a first-time calibrator, please contact our customer support team for step-by-step instructions.

## USER MODE SET-Edit User Mode

Create user defined channel orders allowing the fixture to match the channel order of other fixtures on the market for easier operation. A total of three user modes may be configured: User Mode A, User Mode B, and User Mode C.

## EDIT PROGRAM-Rec. Controller

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

## SYSTEM MENU

## EDIT PROGRAM-Record Controller-Working With Built-In Programs

A Primary unit can send up to 3 different data groups to the Secondary units, i.e. a Primary unit can start 3 different Secondary units, which run 3 different 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 which the Secondary unit was assigned to. If e.g. a Secondary unit is set to "Secondary 1" in the menu
"Set to Secondary", the Primary unit sends "Auto Program Part 1" to the Secondary unit. If set to "Secondary 2", the Secondary unit receives "Auto Program Part 2".
To start an Auto Program proceed as follows:

1. Secondary Setting

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

2. Automatic Program Run

- Select "Function Mode".
- Press ENTER to confirm.
- Select "Auto Program".
- Press ENTER to confirm.
- Select "Primary" or "Alone".
- Press ENTER to confirm.
- Press MODE/ESC in order to return to the main menu.

3. Program Selection for Auto Pro Part

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

4. Program Selection for Edit Program

- Select "Edit Program".
- Press ENTER to confirm.
- Select "Edit Program".
- Press ENTER to confirm.
- Select the desired program to edit specific scenes into a specific program.
- Press ENTER to confirm.
- Press MODE/ESC in order to return to the main menu.

5. Automatic Scene Recording

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


## SYSTEM MENU

EDIT PROGRAM-Record Controller-Working With Built-In Program [continued]
Example:
Program 2 includes scenes: 10, 11, 12, \& 13
Program 4 includes scenes: $8,9, \& 10$
Program 6 includes scenes: 12, 13, 14, \& 15
Auto Pro Part 1 is Program 2
Auto Pro Part 2 is Program 3
Auto Pro Part 3 is Program 6
The 3 Secondary groups run the Auto Program in certain time segments.


Part 2


DIMMER CURVE GRAPHS
DIMMER


| Dimming Curve Ramp Effect | 0 sec Fade Time |  | 1 sec Fade Time |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $0$ | - 255 |  |  |
|  | Rise Time (ms) | Down Time (ms) | Rise Time (ms) | Down Time (ms) |
| Standard (default) | 0 | 0 | 0 | 0 |
| Stage | 780 | 1100 | 1540 | 1660 |
| TV | 1180 | 1520 | 1860 | 1940 |
| Architectural- | 1380 | 1730 | 2040 | 2120 |
| Theatre | 1580 | 1940 | 2230 | 2280 |
| Stage 2 | 0 | 1100 | 0 | 1660 |



LINEAR


SQUARE


INVERSE SQUARE


S-CURVE

## PATCHING AND FX PROGRAMMING GUIDE

The Proteus Rayzor Blade $L$ is a versatile fixture that combines three unique fixtures into one chassis. The DMX layout is designed to offer a variety of options for controlling the fixture efficiently, allowing control of many FX with very few channels, or providing full access of all elements for external pixel mappers.
The FX system of the Proteus Rayzor Blades allows many different combinations by changing the curves, offsets, and speed parameters. The RGBW, SparkLED, and StrobeLine systems are separate, and by adjusting color, dimming, and strobe channels, there are endless creative designs possible.
The main fixture contains $12 x$ 60W RGBW cells, while the SparkLED fixture contains $4 \times 2 \mathrm{~W}$ white LEDs per LED. Two dazzling StrobeLines are added to the edge of the fixture, with 33 elements per side.
For ease of use, the DMX layout is arranged to allow the lighting console to separate the fixture into multiple segments, or parts. It is important to arrange the fixture into the required parts as outlined in the DMX table. For simpler programming, the Blade also offers reduced channel modes. However, for easy recall of interesting pixel animations, the fixture contains three independent FX systems for Main, SparkLED, and StrobeLine FX.

## Fixture Parts

To control the fixture, a console fixture profile must combine parameters into the correct parts, otherwise, programming of the three layers is very difficult. Please use the part names shown in the DMX table.

| Main | RGBW Dimmer, Strobe, Pan, Tilt, Main FX Controls, FX Sync |
| :--- | :--- |
| Pixels | Red, Green, Blue, White per cell |
| StrobeLine | StrobeLine Dimmer, Strobe, Duration, StrobeLine FX Controls |
| Strobe | StrobeLine Dimmer per pixel |
| SparkLED | SparkLED Dimmer, Strobe, SparkLED FX Controls |
| LED | Sparkled Dimmer per pixel |

The number of parts depends on the selected DMX mode of the fixture. Depending on console type and application, it may be useful to have all parts as sub fixtures, or create completely separate fixture types for Main, StrobeLine, and SparkLED with their own smaller subset of fixture parts.

## Strobe and Dimmer Sync

For effecgtive programming, it may be helpful to have dimming and strobing of all parts in perfect sync. This can be accomplished by setting the strobe channel of the SparkLEDs or StrobeLines to DMX value 255. It forces dimming and strobing to follow the parameters of the main fixture.

$$
255 \quad \text { Sync Dim and Strobe with Main }
$$

The highest output strobe of the Proteus Rayzor Blade $S$ is achieved by synchronizing the StrobeLine and RGBW cells. It provides a rare combination of a focused beam, or wide wash with the dazzling white strobing edges of the fixture.

## PATCHING AND FX PROGRAMMING GUIDE

## FX Concept

Selection and control of integrated FX on the Rayzor Blade are found in the Main, SparkLED and StrobeLine Parts. All FX are available even in the smallest DMX control mode.

|  | RGBW FX (see table) |
| :---: | :--- |
| $0-255$ | FX Selection 1-255 |
|  | RGBW FX Speed |
| $0-126$ | Rev Fast $\rightarrow$ Slow |
| $127-128$ | Stop |
| $129-255$ | Slow $\rightarrow$ Fast |
|  | SparkLED FX (see table) |
| $0-255$ | FX Selection 1-255 |
|  | SparkLED FX Speed |
| $0-126$ | Rev Fast $\rightarrow$ Slow |
| $127-128$ | Stop |
| $129-255$ | Slow $\rightarrow$ Fast |

FX for RGBW, SparkLED and StrobeLine contain a selection channel to recall the desired pattern. The pattern direction and speed is then adjusted using the associated Speed channel. FX can run forward / backward and can also be frozen at any time by using "Stop".

The FX table shows 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 its used for all FX recalled afterwards. When programming cues 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.

Sine Wave

Step Wave (Square)

Sawtooth Wave

Ramp Up Wave

Ramp Down Wave

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

|  | FX Offset |
| :---: | :--- |
| 0 | Idle |
| 1 | Fixture Offset 10 Degree |
| 2 | Fixture Offset 20 Degree |
| $3-34$ | Fixture Offset... |
| 35 | Fixture Offset 350 Degree |
| 36 | Synchronized |
| $3-100$ | No Function |
| $101-120$ | Random Fixture Offset |
| $121-140$ | Random Pixel Order |
| $141-255$ | Random Steps |

## PATCHING AND FX PROGRAMMING GUIDE

A full FX cycle is 360-degrees and the fixture allows offsets in 10 degree increments. Offsetting a fixture by 180 would mean it is exactly halfway ahead through the FX cycle. Through individual offsets or utilizing lighting consoles fan functions the fixture allows a variety of spreads for impactful FX.

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, 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 looks possible. To reshuffle the randomization set the channel to Idle, then reselect the desired random option.

## Blade L Strobe Mapping

The fixture offers several ways to map the StrobeLines depending on alignment with Blade S or to change the desired FX mapping across the strobe edge. For perfect match of distances, the L fixture contains 33 cells. The alignment can be selected in the StrobeLine FX channel.

| DMX | Pixel <br> Alignment |  |
| :---: | :---: | :--- |
| 250 | Full | All elements are used, FX have the same speed from pixel to pixel |
| 251 | Full Sync | All elements are used, FX have the same speed across the S and L width |
| 252 | Split | The Center Element is disabled, all FX act identical as Blade S in two sections |
| 253 | Left | Elements start at the left edge, with a gap at the right |
| 254 | Right | Elements start at the right edge, with a gap at the left |

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

DMX TRAITS: MAIN FIXTURE

| Features subject to change w |  |  |  |  |  |  | ithout notic |  | FADE | DEFAULT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | value | FUNCTION |  |  |
| FIXTURE CONTROL PART/NAME | STANDARD $28 C H$ | $\begin{aligned} & \text { PIXEL } \\ & 76 C H \end{aligned}$ | $\begin{array}{\|l} \text { PIXEL } \\ \text { PLUS } \\ \text { CH140 } \end{array}$ | PIXEL COMP <br> 108CH | PIXEL COMP SPARK LED 120CH | $\begin{aligned} & \text { EXTENDED } \\ & 188 \mathrm{CH} \end{aligned}$ |  |  |  |  |
| MAIN | 1 | 1 | 1 | 1 | 1 | 1 | 0-255 | Tilt | Fade | 127 |
|  | 2 | 2 | 2 | 2 | 2 | 2 | 0-255 | Tilt Fine | Face | 127 |
|  | 3 | 3 | 3 | 3 | 3 | 3 |  | CTC |  |  |
|  |  |  |  |  |  |  | 0-10 | Disabled |  |  |
|  |  |  |  |  |  |  | 11-171 | Color Temperature <br> 2000 k to 10000 k in <br> 100 k steps (see table) |  |  |
|  |  |  |  |  |  |  | 172-255 | 10000K |  |  |
|  |  |  |  |  |  |  |  | Color Wheel |  |  |
|  |  |  |  |  |  |  | 0-9 | Open |  |  |
|  |  |  |  |  |  |  | 10-14 | Red |  |  |
|  |  |  |  |  |  |  | 15-19 | Red Orange |  |  |
|  |  |  |  |  |  |  | 20-24 | Light Amber |  |  |
|  |  |  |  |  |  |  | 25-29 | Yellow Amber |  |  |
|  |  |  |  |  |  |  | 30-34 | Greenish Yellow |  |  |
|  |  |  |  |  |  |  | 35-39 | Light Yellow Green |  |  |
|  |  |  |  |  |  |  | 40-44 | Dark Yellow Green |  |  |
|  |  |  |  |  |  |  | 45-49 | Green |  |  |
|  |  |  |  |  |  |  | 55-59 | Cyan |  |  |
|  |  |  |  |  |  |  | 60-64 | Light Blue |  |  |
|  |  |  |  |  |  |  | 65-69 | Aqua |  |  |
|  |  |  |  |  |  |  | 70-74 | Dark Aqua |  |  |
|  |  |  |  |  |  |  | 80-84 | Light Lavender |  |  |
|  |  |  |  |  |  |  | 85-89 | Dark Purple |  |  |
|  |  |  |  |  |  |  | 90-94 | Medium Purple |  |  |
|  |  |  |  |  |  |  | 95-99 | Mid Rose |  |  |
|  |  |  |  |  |  |  | -105-109 | Mauve | snap | 0 |
|  |  |  |  |  |  |  | 110-114 | Warm Magenta |  |  |
|  | 4 | 4 | 4 | 4 | 4 | 4 | 115-119 | Light Red |  |  |
|  |  |  |  |  |  |  | 120-124 | Straw |  |  |
|  |  |  |  |  |  |  | 125-129 ${ }^{\text {d }}$ | Dark CTB |  |  |
|  |  |  |  |  |  |  | 130-134 | Light Green |  |  |
|  |  |  |  |  |  |  | $\frac{140-144}{}$ | Lighter Purple |  |  |
|  |  |  |  |  |  |  | 145-149 | Pink |  |  |
|  |  |  |  |  |  |  | 150-154 | Rose |  |  |
|  |  |  |  |  |  |  | 155-159 | White |  |  |
|  |  |  |  |  |  |  | $\begin{array}{\|l\|} \hline 160-164 \\ \hline 165-169 \\ \hline \end{array}$ | TBD |  |  |
|  |  |  |  |  |  |  | 170-174 | TBD |  |  |
|  |  |  |  |  |  |  | 175-179 | Open |  |  |
|  |  |  |  |  |  |  | 180-201 | Clockwise,fast $\rightarrow$ slow |  |  |
|  |  |  |  |  |  |  | 202-207 | Stop |  |  |
|  |  |  |  |  |  |  | 208-229 | Counter- <br> clockwise,slow $\rightarrow$ fast |  |  |
|  |  |  |  |  |  |  | 230-234 | Open |  |  |
|  |  |  |  |  |  |  | 235-239 | Random Slots |  |  |
|  |  |  |  |  |  |  | 240-244 | Medium |  |  |
|  |  |  |  |  |  |  | 245-249 | Slow |  |  |
|  |  |  |  |  |  |  | 250-255 | Open |  |  |

## DMX TRAITS: MAIN FIXTURE

| MODE/CHANNEL |  |  |  |  |  |  | thout noti |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | value | FUNCTION | $\begin{aligned} & \text { FADE } \\ & \text { STATUS } \end{aligned}$ | DEFAULT |
| FIXTURE <br> CONTROL <br> PART/NAM | STANDARD 28 CH | $\begin{aligned} & \text { PIXEL } \\ & 76 \mathrm{CH} \end{aligned}$ | $\begin{array}{\|l\|} \hline \text { PIXEL } \\ \text { PLUS } \\ \text { CH140 } \end{array}$ | $\begin{aligned} & \text { PIXEL } \\ & \text { COMP } \\ & 108 \mathrm{CH} \end{aligned}$ | $\begin{aligned} & \text { PIXEL } \\ & \text { SPARK } \\ & \text { LED } \\ & \text { 120CH } \end{aligned}$ $120 \mathrm{CH}$ | $\begin{gathered} \text { EXTENDED } \\ 188 \mathrm{CH} \end{gathered}$ |  |  |  |  |
| MAIN | 5 | 5 | 5 | 5 | 5 | 5 |  | Strobe | Snap | 50 |
|  |  |  |  |  |  |  | $\frac{0-31}{32-63}$ | Shutter closed |  |  |
|  |  |  |  |  |  |  | 64-95 | Strobe (slow $\rightarrow$ fast) |  |  |
|  |  |  |  |  |  |  | 96-127 | Fast Close, Slow Open |  |  |
|  |  |  |  |  |  |  | 128-159 | Fast Open, Slow Close |  |  |
|  |  |  |  |  |  |  | 160-191 | Pulse Effects |  |  |
|  |  |  |  |  |  |  | 192-223 | $\underset{\rightarrow \text { fast) }}{\substack{\text { Random } \\ \rightarrow}}$ |  |  |
|  |  |  |  |  |  |  | 224-255 | Shutter open |  |  |
|  | 6 | 6 | 6 | 6 | 6 | 6 | 0-255 | Dimmer | Fade | 0 |
|  |  |  |  |  |  |  |  | Dimmer Fine |  |  |
|  | 7 | 7 | 7 | 7 | 7 | 7 | 0-255 | Fine Dimming | Fade | 0 |
|  |  |  |  |  |  |  |  | Dim Modes |  |  |
|  |  |  |  |  |  |  | 0-20 | Standard |  |  |
|  |  |  |  |  |  |  | 21-40 | Stage |  |  |
|  |  |  |  |  |  |  | 61-80 | Architectural |  |  |
|  |  |  |  |  |  |  | 81-100 | Theatre |  |  |
|  |  |  |  |  |  |  | 101-120 | Stage 2 |  |  |
|  |  |  |  |  |  |  |  | Dimmer Delay Time |  |  |
|  |  |  |  |  |  |  | 121 | Os |  |  |
|  |  |  |  |  |  |  | 122 | 0.15 |  |  |
|  |  |  |  |  |  |  | 123 | 0.2 s |  |  |
|  |  |  |  |  |  |  | 124 | 0.35 |  |  |
|  |  |  |  |  |  |  | 125 | 0.45 |  |  |
|  | 8 | 8 |  |  |  | 8 | 127 | 0.65 |  | 0 |
|  |  | 8 |  |  |  |  | 128 | 0.75 | Snap | 0 |
|  |  |  |  |  |  |  | 129 | 0.8s |  |  |
|  |  |  |  |  |  |  | 130 | 0.9 s |  |  |
|  |  |  |  |  |  |  | 131 | 1.0 s |  |  |
|  |  |  |  |  |  |  | 132 | 1.55 |  |  |
|  |  |  |  |  |  |  | 133 | $\frac{2.0 \mathrm{~s}}{3.0 \mathrm{~s}}$ |  |  |
|  |  |  |  |  |  |  | 135 | 4.0s |  |  |
|  |  |  |  |  |  |  | 136 | 5.0s |  |  |
|  |  |  |  |  |  |  | 137 | 6.0 s |  |  |
|  |  |  |  |  |  |  | 138 | 7.0 s |  |  |
|  |  |  |  |  |  |  | 139 | 8.05 |  |  |
|  |  |  |  |  |  |  | 141 | 10s |  |  |
|  |  |  |  |  |  |  | 142-255 | Idle |  |  |
|  |  |  |  |  |  |  |  | Zoom1 |  |  |
|  | 9 | 9 | 9 | 9 | 9 | 9 | $\begin{array}{\|c} \hline 0-230 \\ \hline 231-255 \\ \hline \end{array}$ | Zoom Wide $\rightarrow$ Narrow Overdrive Min $\rightarrow$ Max | Fade | 255 |
|  |  | 10 | 10 | 10 | 10 | 10 |  | Zoom1 Fine | Fade | 255 |
|  |  |  |  |  |  |  | 0-255 | Fine Zoom |  |  |
|  |  | 11 | 11 | 11 | 11 | 11 | 0-230 | Zoom Wide $\rightarrow$ Narrow | Fade |  |
|  |  |  |  |  |  |  | 231-254 | Overdrive Min $\rightarrow$ Max | Fade | 255 |
|  |  |  |  |  |  |  | 255 | Follow Zoom 1 |  |  |
|  |  | 12 | 12 | 12 | 12 | 12 | 0-255 | Zoom2 Fine | Fade | 255 |
|  |  |  |  |  |  |  |  | Tilt Speed |  |  |
|  |  | 13 | 13 | 13 | 13 | 13 | 0-225 | Max to Min speed | Snap | 0 |
|  |  |  |  |  |  |  | $\begin{array}{\|l\|} \hline 226-235 \\ \hline 236-255 \\ \hline \end{array}$ | Blackout while moving |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

## DMX TRAITS: MAIN FIXTURE

|  |  |  |  | Features | subject | to change wi | thout noti |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | MODE | /CHANN |  |  |  |  |  |  |  |
| FIXTURE CONTROL PART/NAM | STANDARD $28 C H$ | $\begin{aligned} & \text { PIXEL } \\ & 76 \mathrm{CH} \end{aligned}$ | $\begin{array}{\|l\|} \hline \text { PIXEL } \\ \text { PLUS } \\ \text { CH140 } \\ \hline \end{array}$ | $\begin{array}{\|l} \text { PIXEL } \\ \text { COMP } \\ 108 \mathrm{CH} \end{array}$ | PIXEL SPARK <br> LED <br> 120CH | $\left\lvert\, \begin{gathered} \text { EXTENDED } \\ 188 \mathrm{CH} \end{gathered}\right.$ | VALUE | FUNCTION | FADE <br> STATUS | DEFAULT |
| MAIN | 10 | 14 | 14 | 14 | 14 | 14 |  | Control |  | 0 |
|  |  |  |  |  |  |  | 0-9 | Idle |  |  |
|  |  |  |  |  |  |  | 10-19 | Pixel Order Normal |  |  |
|  |  |  |  |  |  |  | 20-24 | Pixel Order Inverse |  |  |
|  |  |  |  |  |  |  | 25-29 | Strobeline Pair Horizontal (Pixel Compact |  |  |
|  |  |  |  |  |  |  |  | Mode only |  |  |
|  |  |  |  |  |  |  | 30-34 | Strobeline Pair <br> Vertical (Pixel Com- |  |  |
|  |  |  |  |  |  |  | 35-39 | Idle |  |  |
|  |  |  |  |  |  |  | 40-44 | Low Noise -Mute |  |  |
|  |  |  |  |  |  |  | 45-49 | Low Noise - Studio |  |  |
|  |  |  |  |  |  |  | 50-59 | Fan Control - Low |  |  |
|  |  |  |  |  |  |  | 60-69 | Fan Control - High |  |  |
|  |  |  |  |  |  |  | 70-79 | Fan Control - Auto (default) |  |  |
|  |  |  |  |  |  |  | 80-84 | Reset All |  |  |
|  |  |  |  |  |  |  | 85-87 | Reset Movement |  |  |
|  |  |  |  |  |  |  | 88-91 | Reset Zoom |  |  |
|  |  |  |  |  |  |  | 92-100 | Idle Refresh Rate ( Hz ) |  |  |
|  |  |  |  |  |  |  | -100 | ${ }^{\text {Refresh Rate }}$ ( Hz ) |  |  |
|  |  |  |  |  |  |  | 101 | 910 |  |  |
|  |  |  |  |  |  |  | 102 | 920 |  |  |
|  |  |  |  |  |  |  | 105 | 950 |  |  |
|  |  |  |  |  |  |  | 106 | 960 |  |  |
|  |  |  |  |  |  |  | 107 | 970 |  |  |
|  |  |  |  |  |  |  | 108 | 980 |  |  |
|  |  |  |  |  |  |  | 109 | 990 |  |  |
|  |  |  |  |  |  |  | 110 | 1000 |  |  |
|  |  |  |  |  |  |  | 112 | 1020 |  |  |
|  |  |  |  |  |  |  | 113 | 1030 |  |  |
|  |  |  |  |  |  |  | 114 | 1040 |  |  |
|  |  |  |  |  |  |  | 115 | 1050 |  |  |
|  |  |  |  |  |  |  | 117 | 1070 |  |  |
|  |  |  |  |  |  |  | 118 | 1080 |  |  |
|  |  |  |  |  |  |  | 119 | 1090 |  |  |
|  |  |  |  |  |  |  | 120 | 1100 |  |  |
|  |  |  |  |  |  |  | 122 | 1120 |  |  |
|  |  |  |  |  |  |  | 123 | 1130 |  |  |
|  |  |  |  |  |  |  | 124 | 1140 |  |  |
|  |  |  |  |  |  |  | 125 | 1150 |  |  |
|  |  |  |  |  |  |  | 127 | 1170 |  |  |
|  |  |  |  |  |  |  | 128 | 1180 |  |  |
|  |  |  |  |  |  |  | 129 | 1190 |  |  |
|  |  |  |  |  |  |  | 130 | 1200 |  |  |
|  |  |  |  |  |  |  | 132 | 1220 |  |  |
|  |  |  |  |  |  |  | 133 | 1230 |  |  |
|  |  |  |  |  |  |  | 134 | 1240 |  |  |
|  |  |  |  |  |  |  | 135 | 1250 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

## DMX TRAITS: MAIN FIXTURE



DMX TRAITS: MAIN FIXTURE

| Features subject to change without notice |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MODE/CHANNEL |  |  |  |  |  |  | VALUE | FUNCTION | FADESTATUS | DEFAULT |
| FIXTURE CONTROL PART/NAM | $\begin{array}{\|l\|} \hline \text { STANDARD } \\ 28 C H \end{array}$ | $\begin{aligned} & \text { PIXEL } \\ & 76 C H \end{aligned}$ | $\begin{array}{\|c\|} \hline \text { PIXEL } \\ \text { PLUS } \\ \text { CH140 } \end{array}$ | $\begin{aligned} & \text { PIXEL } \\ & \text { COMP } \\ & 108 \mathrm{CH} \end{aligned}$ | PTXEL SPARK LED 120CH | $\begin{aligned} & \text { EXTENDED } \\ & \mathbf{1 8 8 C H} \end{aligned}$ |  |  |  |  |
| MAIN | 11 | 15 | 15 | 15 | 15 | 15 | 0-255 | RGBW FX (see table) | Snap | 0 |
|  |  |  |  |  |  |  |  | RGBW FX Speed |  |  |
|  | 12 | 16 | 16 | 16 | 16 | 16 | 0-126 | Rev Fast $\rightarrow$ Slow | Fade | 160 |
|  |  |  |  |  |  |  | $\begin{array}{r} 127-128 \\ \hline 129-255 \\ \hline \end{array}$ | $\begin{aligned} & \text { Stop } \\ & \hline \text { Slow } \rightarrow \text { Fast } \end{aligned}$ |  |  |
|  | 13 | 17 | 17 | 17 | 17 | 17 |  | FX Offset | Snap | 0 |
|  |  |  |  |  |  |  | 0 | Idle |  |  |
|  |  |  |  |  |  |  | 1 | Fixture Offset 10 |  |  |
|  |  |  |  |  |  |  |  | Fixture Offset 20 |  |  |
|  |  |  |  |  |  |  | 2 | Degree |  |  |
|  |  |  |  |  |  |  | 3-34 | Fixture Offset $\cdots$ |  |  |
|  |  |  |  |  |  |  | 35 | Fixture Offset 350 |  |  |
|  |  |  |  |  |  |  | 36 | Synchronized |  |  |
|  |  |  |  |  |  |  | 37-100 | No Function |  |  |
|  |  |  |  |  |  |  | 101-120 | Random Fixture |  |  |
|  |  |  |  |  |  |  | 121-140 | Random Pixel Order |  |  |
|  |  |  |  |  |  |  | 141-255 | Random Steps |  |  |

## DMX TRAITS: RGBW PIXELS

| Features subject to change without notice |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MODE/CHANNEL |  |  |  |  |  |  | VALUE | FUNCTION | FADESTATUS | DEFAULT |
| FIXTURE CONTROL PART/NAM | STANDARD 28 CH | $\begin{aligned} & \text { PIXEL } \\ & 76 \mathrm{CH} \end{aligned}$ | $\begin{array}{\|c\|} \hline \text { PIXEL } \\ \text { PLUS } \\ \text { CH140 } \\ \hline \end{array}$ | $\begin{aligned} & \hline \text { PIXEL } \\ & \text { COMP } \\ & \text { 108CH } \end{aligned}$ | PIXEL SPARK LED 120CH | $\begin{aligned} & \text { EXTENDED } \\ & 188 \mathrm{CH} \end{aligned}$ |  |  |  |  |
| MAIN or Pixel 1 | 14 | 18 | 18 | 18 | 18 | 18 | 0-255 | $\begin{aligned} & \text { Red } \\ & \hline 0 \rightarrow 100 \% \end{aligned}$ | Fade | 255 |
|  | 15 | 19 | 19 | 19 | 19 | 19 | 0-255 | $\begin{aligned} & \text { Green } \\ & \hline 0 \rightarrow 100 \% \end{aligned}$ | Fade | 255 |
|  | 16 | 20 | 20 | 20 | 20 | 20 | 0-255 | Blue | Fade | 255 |
|  | 17 | 21 | 21 | 21 | 21 | 21 | 0-255 | White | Fade | 255 |
| Pixel 2 |  | 22 | 22 | 22 | 22 | 22 | 0-255 | Red 2 | Fade | 255 |
|  |  | 23 | 23 | 23 | 23 | 23 | 0-255 | Green 2 | Fade | 255 |
|  |  | 24 | 24 | 24 | 24 | 24 | 0-2 | Blue 2 | Fade | 255 |
|  |  | 25 | 25 | 25 | 25 | 25 |  | White 2 | Fade | 255 |
|  |  |  |  |  |  |  | 0-255 | $0 \rightarrow 100 \%$ |  |  |
| Pixel 3 |  | 26 | 26 | 26 | 26 | 26 | 0-255 | Red 3 $0 \rightarrow 100 \%$ | Fade | 255 |
|  |  | 27 | 27 | 27 | 27 | 27 | 0-255 | Green 3 | Fade | 255 |
|  |  | 28 | 28 | 28 | 28 | 28 | $0-255$ | Blue 3 | Fade | 255 |
|  |  |  |  |  |  |  |  | White 3 | Fade | 255 |
|  |  | 29 | 29 | 29 | 29 | 29 | 0-255 | $0 \rightarrow 100 \%$ |  |  |
| Pixel 4 |  | 30 | 30 | 30 | 30 | 30 | 0-255 | $\begin{aligned} & \text { Red } 4 \\ & \hline 0 \rightarrow 100 \% \end{aligned}$ | Fade | 255 |
|  |  | 31 | 31 | 31 | 31 | 31 | 0-255 | $\begin{aligned} & \text { Green } 4 \\ & \hline 0 \rightarrow 100 \% \end{aligned}$ | Fade | 255 |
|  |  | 32 | 32 | 32 | 32 | 32 | 0-255 | Blue 4 | Fade | 255 |
|  |  | 33 | 33 | 33 | 33 | 33 | $0-255$ | White 4 | Fade | 255 |
| Pixel 5 |  | 34 | 34 | 34 | 34 | 34 | 0-255 | Red 5 | Fade | 255 |
|  |  | 35 | 35 | 35 | 35 | 35 |  | Green 5 | Fade | 255 |
|  |  |  | 35 | 35 | 35 | 35 | 0-255 | $0 \rightarrow 100 \%$ |  |  |
|  |  | 36 | 36 | 36 | 36 | 36 | 0-255 | Blue 5 | Fade | 255 |
|  |  | 37 | 37 | 37 | 37 | 37 | $0-255$ | White 5 | Fade | 255 |
| Pixel 6 |  | 38 | 38 | 38 | 38 | 38 |  | Red 6 | Fade | 255 |
|  |  | 39 | 39 | 39 | 39 | 39 |  | Green 6 | Fade | 255 |
|  |  |  |  |  |  | 39 | 0-255 | $0 \rightarrow 100 \%$ |  |  |
|  |  | 40 | 40 | 40 | 40 | 40 | 0-255 | $\begin{aligned} & \text { Blue } 6 \\ & \hline 0 \rightarrow 100 \% \\ & \hline \end{aligned}$ | Fade | 255 |
|  |  | 41 | 41 | 41 | 41 | 41 | 0-255 | White 6 | Fade | 255 |

DMX TRAITS: RGBW PIXELS

|  |  |  |  | eatures | subject | to change wi | out no |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MODE/CHANNEL |  |  |  |  |  |  | VALUE | FUNCTION | $\begin{aligned} & \text { FADE } \\ & \text { STATUS } \end{aligned}$ | DEFAULT |
| FIXTURE CONTROL PART/NAM | $\begin{array}{\|c} \hline \text { STANDARD } \\ 28 C H \end{array}$ | $\begin{aligned} & \text { PIXEL } \\ & 76 \mathrm{CH} \end{aligned}$ |  | $\begin{aligned} & \text { PIXEL } \\ & \text { COMP } \\ & 108 \mathrm{CH} \end{aligned}$ | PIXEL SPARK LED <br> 20CH | $\begin{array}{\|l\|} \hline \text { EXTENDED } \\ 188 \mathrm{CH} \end{array}$ |  |  |  |  |
|  |  | 42 | 42 | 42 | 42 | 42 |  | Red 7 | Fade | 255 |
|  |  | 42 | 42 | 42 | 42 | 42 | 0-255 | $0 \rightarrow$ 100\% | Fade | 255 |
|  |  | 43 | 43 | 43 | 43 | 43 | 0-255 | Green 7 | Fade | 255 |
| Pix |  | 44 | 44 | 44 | 44 | 44 |  | Blue 7 | Fade | 255 |
|  |  | 44 | 44 | 44 | 44 | 44 | 0-255 | $0 \rightarrow 100 \%$ | Fade | 255 |
|  |  | 45 | 45 | 45 | 45 | 45 |  | White 7 | Fade | 255 |
|  |  | 45 | 45 | 45 | 45 | 45 | 0-255 | $0 \rightarrow 100 \%$ | Fade | 255 |
| Pixel 8 |  | 46 | 46 | 46 | 46 | 46 | 0-255 | Red 8 | Fade | 255 |
|  |  | 47 | 47 | 47 | 47 | 47 |  | Green 8 | Fade | 255 |
|  |  |  |  |  |  |  | 0-255 | $0 \rightarrow 100 \%$ |  |  |
|  |  | 48 | 48 | 48 | 48 | 48 | 0-255 | Blue 8 | Fade | 255 |
|  |  | 49 | 49 | 49 | 49 | 49 |  | White 8 | Fade | 255 |
|  |  |  |  |  |  |  | 0-255 | $0 \rightarrow 100 \%$ |  |  |
| Pixel 9 |  | 50 | 50 | 50 | 50 | 50 | 0-255 | Red 9 | Fade | 255 |
|  |  | 51 | 51 | 51 | 51 | 51 |  | Green 9 | Fade | 255 |
|  |  |  |  |  |  |  | 0-255 | $0 \rightarrow$ 100\% |  |  |
|  |  | 52 | 52 | 52 | 52 | 52 |  | Blue 9 | Fade | 255 |
|  |  |  |  |  |  |  | 0-255 | $0 \rightarrow 100 \%$ |  |  |
|  |  | 53 | 53 | 53 | 53 | 53 |  | White 9 | Fade | 255 |
|  |  |  |  |  |  |  | 0-255 | $0 \rightarrow 100 \%$ |  |  |
| Pixel 10 |  | 54 | 54 | 54 | 54 | 54 | 0-255 | Red 10 | Fade | 255 |
|  |  | 55 | 55 | 55 | 55 | 55 |  | Green 10 | Fade | 255 |
|  |  |  |  |  |  |  | 0-255 | $0 \rightarrow 100 \%$ |  |  |
|  |  | 56 | 56 | 56 | 56 | 56 | 0-255 | Blue 10 | Fade | 255 |
|  |  | 57 | 57 | 57 | 57 | 57 |  | White 10 | Fade | 255 |
|  |  |  |  |  |  |  | 0-255 | $0 \rightarrow 100 \%$ |  |  |
| Pixel 11 |  | 58 | 58 | 58 | 58 | 58 | 0-255 | Red 11 | Fade | 255 |
|  |  | 59 | 59 | 59 | 59 | 59 |  | Green 11 | Fade | 255 |
|  |  |  |  |  |  |  | 0-255 | $0 \rightarrow 100 \%$ |  |  |
|  |  | 60 | 60 | 60 | 60 | 60 |  | Blue 11 | Fade | 255 |
|  |  |  |  |  |  |  | 0-255 | $0 \rightarrow 100 \%$ |  |  |
|  |  | 61 | 61 | 61 | 61 | 61 | 0-255 | White 11 | Fade | 255 |
| Pixel 12 |  | 62 | 62 | 62 | 62 | 62 |  | Red 12 | Fade | 255 |
|  |  |  |  |  |  |  | 0-255 | $0 \rightarrow 100 \%$ |  |  |
|  |  | 63 | 63 | 63 | 63 | 63 | 0-255 | Green 12 | Fade | 255 |
|  |  | 64 | 64 | 64 | 64 | 64 | 0-255 | Blue 12 | Fade | 255 |
|  |  | 65 | 65 | 65 | 65 | 65 | 0-255 | White 12 | Fade | 255 |

DMX TRAITS: STROBELINE

| Features subject to change without notice |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MODE/CHANNEL |  |  |  |  |  |  | VALUE | FUNCTION | FADE STATUS | DEFAULT |
| FIXTURE CONTROL PART/NAM | $\begin{array}{\|l} \hline \text { STANDARD } \\ 28 C H \end{array}$ | $\begin{aligned} & \text { PIXEL } \\ & 76 \mathrm{CH} \end{aligned}$ | $\begin{aligned} & \text { PIXEL } \\ & \text { PLUS } \\ & \text { CH140 } \end{aligned}$ | $\begin{aligned} & \text { PIXEL } \\ & \text { COMP } \\ & \text { 108CH } \end{aligned}$ | PIXEL SPARK LED 120CH | $\begin{gathered} \text { EXTENDED } \\ 188 \mathrm{CH} \end{gathered}$ |  |  |  |  |
| StrobeLine | 18 | 66 | 66 | 66 | 66 | 66 |  | Strobe | Snap | 50 |
|  |  |  |  |  |  |  | 0-31 | Shutter closed |  |  |
|  |  |  |  |  |  |  | 32-63 | Shutter open |  |  |
|  |  |  |  |  |  |  | 64-95 | $\begin{aligned} & \text { Strobe (slow } \rightarrow \text { fast) } \\ & 0.289-16.67 \mathrm{~Hz} \end{aligned}$ |  |  |
|  |  |  |  |  |  |  | 96-127 | Fast Close, Slow Open |  |  |
|  |  |  |  |  |  |  | 128-159 | Fast Open, Slow Close |  |  |
|  |  |  |  |  |  |  | 160-191 | Pulse Effects |  |  |
|  |  |  |  |  |  |  | 192-222 | $\begin{aligned} & \text { Random Strobe ALL } \\ & \text { (slow } \rightarrow \text { fast) } \end{aligned}$ |  |  |
|  |  |  |  |  |  |  | 224-254 | Random Stobe Pixels |  |  |
|  |  |  |  |  |  |  |  | (slow $\rightarrow$ fast) |  |  |
|  |  |  |  |  |  |  | 255 | Sync Dim and Strobe with Main |  |  |
|  | 19 | 67 | 67 | 67 | 67 | 67 |  | Dimmer | Fade | 0 |
|  |  |  |  |  |  |  | 0-255 | $0 \rightarrow 100 \%$ |  |  |
|  | 20 | 68 | 68 | 68 | 68 | 68 |  | Dimmer Fine | Fade | 0 |
|  |  |  |  |  |  |  | 0-2 | Fine Dimming |  |  |
|  | 21 | 69 | 69 | 69 | 69 | 69 |  | Duration | Fade | 0 |
|  |  |  |  |  |  |  | 0-255 | 7-650ms |  |  |
|  | 22 | 70 | 70 | 70 | 70 | 70 |  | $\begin{aligned} & \begin{array}{l} \text { StrobeLine } \\ \text { table) } \end{array} \\ & \hline \end{aligned}$ | Snap | 0 |
|  |  |  |  |  |  |  | 0-249 | FX Selection 1-249 |  |  |
|  |  |  |  |  |  |  |  | Pixel Alignment |  |  |
|  |  |  |  |  |  |  | 250 | Full |  |  |
|  |  |  |  |  |  |  | 251 | Full Sync |  |  |
|  |  |  |  |  |  |  | 252 | Split |  |  |
|  |  |  |  |  |  |  | 253 | Left |  |  |
|  |  |  |  |  |  |  | 254 | Right |  |  |
|  |  |  |  |  |  |  | 255 | Idle |  |  |
|  | 23 | 71 | 71 | 71 | 71 | 71 |  | StrobeLine FX Speed | Fade | 160 |
|  |  |  |  |  |  |  | 0-126 | Rev Fast $\rightarrow$ Slow |  |  |
|  |  |  |  |  |  |  | 127-128 | Stop |  |  |
|  |  |  |  |  |  |  | 129-255 | Slow $\rightarrow$ Fast |  |  |
| Strobe 1 |  |  | 72 | 72 | 72 | 72 |  | Dimmer 1 | Fade | 255 |
|  |  |  |  |  |  |  | 0-255 | $0 \rightarrow 100 \%$ |  |  |
| Strobe 2 |  |  | 73 | 73 | 73 | 73 |  | Dimmer 2 | Fade | 255 |
| Strobe 3 |  |  |  |  |  |  | 0-255 | $0 \rightarrow 100 \%$ |  |  |
|  |  |  | 74 | 74 | 74 | 74 |  | Dimmer 3 | Fade | 255 |
|  |  |  |  |  |  |  | 0-255 | $0 \rightarrow 100 \%$ |  |  |
| ... |  |  |  |  |  |  |  |  |  |  |
| Strobe 32 |  |  | 103 | 103 | 103 | 103 |  | Dimmer 32 | Fade | 255 |
|  |  |  |  |  |  |  | 0-255 | $0 \rightarrow 100 \%$ |  |  |
| ... |  |  |  |  |  |  |  |  |  |  |
| Strobe 64 |  |  | 135 |  |  | 135 |  | Dimmer 64 | Fade | 255 |
|  |  |  |  |  |  |  | 0-255 | $0 \rightarrow$ 100\% |  |  |

DMX TRAITS: SPARKLED


## DMX TRAITS: COLOR TEMPERATURE

| $\begin{gathered} \text { Color } \\ \text { Temperature } \\ \hline \end{gathered}$ | DMX | $\begin{gathered} \text { Color } \\ \text { Temperature } \\ \hline \end{gathered}$ | DMX | Color Temperature | DMX |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2000 | 11 | 4700 | 65 | 7400 | 119 |
| 2050 | 12 | 4750 | 66 | 7450 | 120 |
| 2100 | 13 | 4800 | 67 | 7500 | 121 |
| 2150 | 14 | 4850 | 68 | 7550 | 122 |
| 2200 | 15 | 4900 | 69 | 7600 | 123 |
| 2250 | 16 | 4950 | 70 | 7650 | 124 |
| 2300 | 17 | 5000 | 71 | 7700 | 125 |
| 2350 | 18 | 5050 | 72 | 7750 | 126 |
| 2400 | 19 | 5100 | 73 | 7800 | 127 |
| 2450 | 20 | 5150 | 74 | 7850 | 128 |
| 2500 | 21 | 5200 | 75 | 7900 | 129 |
| 2550 | 22 | 5250 | 76 | 7950 | 130 |
| 2600 | 23 | 5300 | 77 | 8000 | 131 |
| 2650 | 24 | 5350 | 78 | 8050 | 132 |
| 2700 | 25 | 5400 | 79 | 8100 | 133 |
| 2750 | 26 | 5450 | 80 | 8150 | 134 |
| 2800 | 27 | 5500 | 81 | 8200 | 135 |
| 2850 | 28 | 5550 | 82 | 8250 | 136 |
| 2900 | 29 | 5600 | 83 | 8300 | 137 |
| 2950 | 30 | 5650 | 84 | 8350 | 138 |
| 3000 | 31 | 5700 | 85 | 8400 | 139 |
| 3050 | 32 | 5750 | 86 | 8450 | 140 |
| 3100 | 33 | 5800 | 87 | 8500 | 141 |
| 3150 | 34 | 5850 | 88 | 8550 | 142 |
| 3200 | 35 | 5900 | 89 | 8600 | 143 |
| 3250 | 36 | 5950 | 90 | 8650 | 144 |
| 3300 | 37 | 6000 | 91 | 8700 | 145 |
| 3350 | 38 | 6050 | 92 | 8750 | 146 |
| 3400 | 39 | 6100 | 93 | 8800 | 147 |
| 3450 | 40 | 6150 | 94 | 8850 | 148 |
| 3500 | 41 | 6200 | 95 | 8900 | 149 |
| 3550 | 42 | 6250 | 96 | 8950 | 150 |
| 3600 | 43 | 6300 | 97 | 9000 | 151 |
| 3650 | 44 | 6350 | 98 | 9050 | 152 |
| 3700 | 45 | 6400 | 99 | 9100 | 153 |
| 3750 | 46 | 6450 | 100 | 9150 | 154 |
| 3800 | 47 | 6500 | 101 | 9200 | 155 |
| 3850 | 48 | 6550 | 102 | 9250 | 156 |
| 3900 | 49 | 6600 | 103 | 9300 | 157 |
| 3950 | 50 | 6650 | 104 | 9350 | 158 |
| 4000 | 51 | 6700 | 105 | 9400 | 159 |
| 4050 | 52 | 6750 | 106 | 9450 | 160 |
| 4100 | 53 | 6800 | 107 | 9500 | 161 |
| 4150 | 54 | 6850 | 108 | 9550 | 162 |
| 4200 | 55 | 6900 | 109 | 9600 | 163 |
| 4250 | 56 | 6950 | 110 | 9650 | 164 |
| 4300 | 57 | 7000 | 111 | 9700 | 165 |
| 4350 | 58 | 7050 | 112 | 9750 | 166 |
| 4400 | 59 | 7100 | 113 | 9800 | 167 |
| 4450 | 60 | 7150 | 114 | 9850 | 168 |
| 4500 | 61 | 7200 | 115 | 9900 | 169 |
| 4550 | 62 | 7250 | 116 | 9950 | 170 |
| 4600 | 63 | 7300 | 117 | 10000 | 171 |
| 4650 | 64 | 7350 | 118 |  |  |

## PIXEL LAYOUTS



SparkLEDs
Row 1: 1-12
Row 2: 13-36
Row 3: 37-48

StrobeLine
Row 1: 1-32
Row 2: 33-64

## SparkLEDs

| SparkLEDs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | LEDS | LEDs | \# LeDs | \# | LEDs | \# | LEDs | \# | LEDs |  | LEDs | \# | LEDs | \# | LEDs | \# | LEDs | \# | LEDs | \# | LEDS |
|  | $1{ }^{1} 1$ | 15 | $7 \quad 17$ | 10 | 19 | 13 | 21 | 16 | 23 | 19 | 25 | 22 | 27 | 25 | 29 | 28 | 31 | 31 | 33 | 34 | 35 |
|  | 1+37 | 2+38 | $8 \quad 3+39$ | 11 | $4+40$ | 14 | 5+41 | 17 | 6+42 | 20 | 7+43 | 23 | 8+44 | 26 | 9+45 | 29 | 10+46 | 32 | 11+47 | 35 | 12+48 |
|  | 3 | $6{ }^{6} 16$ | 9 18 | 12 | 20 | 15 | 22 | 18 | 24 | 21 | 26 | 24 | 28 | 27 | 30 | 30 | 32 | 33 | 34 | 36 | 36 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ¢ | I | 2 | 3 |  | 4 |  | 5 |  | 6 |  | 7 |  | 8 |  | 9 |  | 10 |  | 11 |  | 12 |
|  | $\left(\begin{array}{c}1 \\ 1+1+ \\ 37\end{array}\right)$ | $\left(\begin{array}{c}\text { 2+ } \\ \binom{4+16+}{38}\end{array}\right.$ | $\left(\begin{array}{c}3+ \\ 17+18+ \\ 39\end{array}\right)$ |  | ( $\left.\begin{array}{c}4+ \\ 9+20+ \\ 40\end{array}\right)$ |  | $\left(\begin{array}{c}\text { 5+ } \\ 1+22 \\ 41\end{array}\right.$ |  | ( $\left.\begin{array}{c}6+ \\ 3+24 \\ 42\end{array}\right)$ |  | $7+$ $5+26$ 43 |  | $8+$ $7+28+$ 44 |  | $\left(\begin{array}{c}9+ \\ 9+30+ \\ 45\end{array}\right)$ |  | $\left(\begin{array}{c}10+ \\ 1+32+ \\ 46\end{array}\right)$ |  | $\left(\begin{array}{c}11 \\ 3+34 \\ 47\end{array}\right.$ |  | $\left(\begin{array}{c}12+ \\ 5+36+ \\ 48\end{array}\right)$ |


| Strobelines |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \# | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| LEDs | 1+33 | $2+34$ | 3+35 | $4+36$ | 5+37 | 6+38 | 7+39 | $8+40$ | 9+41 | 10+42 | $11+43$ | 12+44 | 13+45 | 14+46 | 15+47 | $16+48$ |
| Pixel Order Normal Pixel Order Inverse |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| \# | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
| LEDs | 17+49 | 18+50 | 19+51 | 20+52 | 21+53 | 22+54 | 23+55 | 24+56 | 25+57 | 26+58 | 27+59 | 28+60 | 29+61 | 30+62 | 31+63 | 32+64 |
| Pixel Order Normal <br> Pixel Order Inverse |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



Sine Wave


Step Wave
(Square)


Sawtooth Wave


Ramp Up Wave


Ramp Down Wave

| Features subject to change without notice |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TYPE | SLOT | DMX | NAME | FX ADJUSTMENT | NOTES/STEPS |
| $\begin{aligned} & E \\ & \begin{array}{l} \underline{0} \\ \stackrel{0}{y} \\ \sqrt{0} \end{array} \end{aligned}$ | 1 | 1 | $\begin{aligned} & \text { Sinewave-Cross } \\ & \text { (default) } \\ & \hline \end{aligned}$ |  | In and Out fade start at the same time |
|  | 2 | 2 | Sinewave-Full |  | In fade completes, then out fade completes |
|  | 3 | 3 | Sawtooth-Cross |  | In and Out fade start at the same time |
|  | 4 | 4 | Sawtooth-Full |  | In fade completes, then out fade completes |
|  | 5 | 5 | Ramp Up |  |  |
|  | 6 | 6 | Ramp Down |  |  |
|  | 7 | 7 | Steps |  |  |
|  | 8 | 8 |  |  |  |
|  | 9 | 9 |  |  |  |
|  | 10 | 10 |  |  |  |
|  | 11 | 11 | Single | Reverse, Stop, Forward | 1,2,3,4,5,6,7,8,9,10,11,12 |
|  | 12 | 12 | Single Bounce | Reverse, Stop, Forward | 1,2,3,4,5,6,7,8,9,10,11,12,11,10,9,8,7,6,5,4,3,2 |
|  | 13 | 13 | 2 Pixels | Reverse, Stop, Forward | Any two random pixels per step |
|  | 14 | 14 | 3 Pixels | Reverse, Stop, Forward | Any 3 random pixels per step |
|  | 15 | 15 | 4 Pixels | Reverse, Stop, Forward | Any 4 random pixels per step |
|  | 16 | 16 | 5 Pixels | Reverse, Stop, Forward | Any 5 random pixels per step |
|  | 17 | 17 | 6 Pixels | Reverse, Stop, Forward | Any 6 random pixels per step |
|  | 18 | 18 | 1,2,3,4 pixels | Reverse, Stop, Forward | Pick randomly 1, then 2 , then 3 , then 4 pixels |
|  | 19 | 19 |  |  |  |
|  | 20 | 20 |  |  |  |
|  | 21 | 21 |  |  |  |
|  | 22 | 22 |  |  |  |
|  | 23 | 23 |  |  |  |
|  | 24 | 24 |  |  |  |
|  | 25 | 25 |  |  |  |
|  | 26 | 26 |  |  |  |
|  | 27 | 27 |  |  |  |
|  | 28 | 28 |  |  |  |
|  | 29 | 29 |  |  |  |
|  | 30 | 30 |  |  |  |
|  | 31 | 31 |  |  |  |
|  | 32 | 32 |  |  |  |
|  | 33 | 33 |  |  |  |
|  | 34 | 34 |  |  |  |
|  | 35 | 35 |  |  |  |
|  | 36 | 36 |  |  |  |
|  | 37 | 37 |  |  |  |
|  | 38 | 38 |  |  |  |
|  |  |  |  |  |  |

## RGBW PIXEL FX TABLE

| Features subject to change without notice |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TYPE | SLOT | DMX | NAME | FX ADJUSTMENT | NOTES/STEPS |
| $$ | 39 | 39 |  |  |  |
|  | 40 | 40 |  |  |  |
|  | 41 | 41 |  |  |  |
|  | 42 | 42 |  |  |  |
|  | 43 | 43 |  |  |  |
|  | 44 | 44 |  |  |  |
|  | 45 | 45 |  |  |  |
|  | 46 | 46 |  |  |  |
|  | 47 | 47 |  |  |  |
|  | 48 | 48 |  |  |  |
|  | 49 | 49 |  |  |  |
|  | 50 | 50 |  |  |  |
|  | 51 | 51 |  |  |  |
|  | 52 | 52 |  |  |  |
|  | 53 | 53 |  |  |  |
|  | 54 | 54 |  |  |  |
|  | 55 | 55 |  |  |  |
|  | 56 | 56 |  |  |  |
|  | 57 | 57 | Alternate SparkLED | Reverse, Stop, Forward | Alternate evenly (tick/tock/tick/tock) between RGBW Pixel at Full and SparkLEDs @Full. Keep all colors strobes, intensities as set by DMX. |
|  | 58 | 58 | Burst SparkLED | Reverse, Stop, Forward | Toggles between RGBW Pixel at Full (long on) and SparkLEDs @Full (short flash). Keep all colors strobes, intensities as set by DMX. |
|  | 59 | 59 | Alternate SparkLED 2 | Reverse, Stop, Forward | Strobes between RGBW Pixel at Full (short, then off) and SparkLEDs @Full (short, then off). Keep all colors strobes, intensities as set by DMX. |
|  | 60 | 60 | Burst RGBW | Reverse, Stop, Forward | Toggles between RGBW Pixel at Full (short flash) and SparkLEDs @Full (long on). Keep all colors strobes, intensities as set by DMX. |
|  | 61 | 61 |  |  |  |
|  | 62 | 62 | Lens/SparkLED alternate | Reverse, Stop, Forward | Random Lens @ Full, then different Random Strobe section of 4pixels @ Full. Keep all colors strobes, intensities as set by DMX. |
|  | 63 | 63 | Alternate StrobeLED | Reverse, Stop, Forward | Alternate evenly (tick/tock/tick/tock) between RGBW Pixel at Full and Strobeline @Full. Keep all colors strobes, intensities as set by DMX. |
|  | 64 | 64 | Burst StrobeLED | Reverse, Stop, Forward | Toggles between RGBW Pixel at Full (long on) and Strobeline @Full (short flash). Keep all colors strobes, intensities as set by DMX. |
|  | 65 | 65 | Alternate StrobeLED 2 | Reverse, Stop, Forward | Strobes between RGBW Pixel at Full (short, then off) and Strobelines @Full (short, then off). Keep all colors strobes, intensities as set by DMX. |
|  | 66 | 66 | Burst RGBW | Reverse, Stop, Forward | Toggles between RGBW Pixel at Full (short flash) and Strobelines @Full (long on). Keep all colors strobes, intensities as set by DMX. |
|  | 67 | 67 |  |  |  |
|  | 68 | 68 |  |  |  |
|  | 69 | 69 |  |  |  |
|  | 70 | 70 |  |  |  |
|  | 71 | 71 |  |  |  |
|  | 72 | 72 |  |  |  |
|  | 73 | 73 |  |  |  |
|  | 74 | 74 |  |  |  |
|  | 75 | 75 |  |  |  |
|  |  |  |  |  |  |

## RGBW PIXEL FX TABLE

| Features subject to change without notice |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TYPE | SLOT | DMX | NAME | FX ADJUSTMENT | NOTES/STEPS |
|  | 76 | 76 |  |  |  |
|  | 77 | 77 |  |  |  |
|  | 78 | 78 |  |  |  |
|  | 79 | 79 |  |  |  |
|  | 80 | 80 |  |  |  |
|  | 81 | 81 |  |  |  |
|  | 85 | 85 |  |  |  |
|  | 86 | 86 |  |  |  |
|  | 87 | 87 |  |  |  |
|  | 88 | 88 |  |  |  |
|  | 89 | 89 |  |  |  |
|  | 90 | 90 |  |  |  |
|  | 91 | 91 |  |  |  |
|  | 92 | 92 |  |  |  |
|  | 93 | 93 |  |  |  |
|  | 94 | 94 |  |  |  |
|  | 95 | 95 |  |  |  |
|  | 96 | 96 |  |  |  |
|  | 97 | 97 |  |  |  |
|  | 98 | 98 |  |  |  |
|  | 99 | 99 |  |  |  |
|  | 100 | 100 |  |  |  |
| $\begin{aligned} & \text { n } \\ & \frac{0}{0} \end{aligned}$ | 101 | 101 |  |  |  |
|  | 102 | 102 |  |  |  |
|  | 103 | 103 |  |  |  |
|  | 104 | 104 |  |  |  |
|  | 105 | 105 |  |  |  |
|  | 106 | 106 |  |  |  |
|  | 107 | 107 |  |  |  |
|  | 108 | 108 |  |  |  |
|  | 109 | 109 |  |  |  |
|  | 110 | 110 |  |  |  |
|  | 111 | 111 |  |  |  |
|  | 112 | 112 |  |  |  |
|  | 113 | 113 |  |  |  |
|  | 114 | 114 |  |  |  |
|  | 115 | 115 |  |  |  |
|  | 116 | 116 |  |  |  |
|  | 117 | 117 |  |  |  |
|  | 118 | 118 |  |  |  |
|  | 119 | 119 |  |  |  |
|  | 120 | 120 |  |  |  |
|  | 121 | 121 |  |  |  |
|  | 122 | 122 |  |  |  |
|  | 123 | 123 |  |  |  |
|  | 124 | 124 |  |  |  |
|  | 125 | 125 |  |  |  |
|  | 126 | 126 |  |  |  |
|  |  |  |  |  |  |

## RGBW PIXEL FX TABLE

| Features subject to change without notice |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TYPE | SLOT | DMX | NAME | FX ADJUSTMENT | NOTES/STEPS |
| $\frac{\text { n }}{0}$ | 127 | 127 |  |  |  |
|  | 128 | 128 |  |  |  |
|  | 129 | 129 |  |  |  |
|  | 130 | 130 |  |  |  |
|  | 131 | 131 | RGBW Cells | Reverse, Stop, Forward | Every Pixel Randomly picks a Red, Green, Blue or White on every step |
|  | 132 | 132 | RGBWCMY Cells | Reverse, Stop, Forward | Every Pixel Randomly picks a Red, Green, Blue, White, Cyan, Magenta, Yellow on every step |
|  | 133 | 133 | Color Wheel Cells | Reverse, Stop, Forward | Every Pixel Randomly picks a color from the color wheel on every step |
|  | 134 | 134 | Red White Cells | Reverse, Stop, Forward | Every Cell Randomly picks White or Red on every Step |
|  | 135 | 135 | Green White Cells | Reverse, Stop, Forward | Every Cell Randomly picks White or Green on every Step |
|  | 136 | 136 | Blue White Cells | Reverse, Stop, Forward | Every Cell Randomly picks White or Blue on every Step |
|  | 137 | 137 | Red Green Cells | Reverse, Stop, Forward | Every Cell Randomly picks Red or Green on every Step |
|  | 138 | 138 | Red Blue Cells | Reverse, Stop, Forward | Every Cell Randomly picks Red or Blue on every Step |
|  | 139 | 139 | Blue Green Cells | Reverse, Stop, Forward | Every Cell Randomly picks Blue or Green on every Step |
|  | 140 | 140 |  |  |  |
|  | 141 | 141 | Random White Cell | Reverse, Stop, Forward | RGBW @ Full randomly is set to one cell at a time over the currently mixed color |
|  | 142 | 142 | Random White Row | Reverse, Stop, Forward | RGBW @ Full randomly is set to one row at a time over the currently mixed color |
|  | 143 | 143 | Random White Column | Reverse, Stop, Forward | RGBW @ Full randomly is set to one column at a time over the currently mixed color |
|  | 144 | 144 | White Flash | Reverse, Stop, Forward | RGBW @ Full flashes once over the current mixed color on all Cells |
|  | 145 | 145 | Red Flash | Reverse, Stop, Forward | Red @ Full flashes once over the current mixed color on all Cells |
|  | 146 | 146 | Green Flash | Reverse, Stop, Forward | Green @ Full flashes once over the current mixed color on all Cells |
|  | 147 | 147 | Blue Flash | Reverse, Stop, Forward | Blue @ Full flashes once over the current mixed color on all Cells |
|  | 148 | 148 | Color Wheel Flash | Reverse, Stop, Forward | Current Color Wheel Color @ Full flashes once over the current mixed color on all Cells |
|  | 149 | 149 | Alternate Color | Reverse, Stop, Forward | Alternates between mixed color and Color Wheel Color on all cells |
|  | 150 | 150 |  |  |  |
|  | 151 | 151 |  |  |  |
|  | 152 | 152 |  |  |  |
|  | 153 | 153 |  |  |  |
|  | 154 | 154 |  |  |  |
|  | 155 | 155 |  |  |  |
|  | 156 | 156 |  |  |  |
|  | 157 | 157 |  |  |  |
|  | 158 | 158 |  |  |  |
|  | 159 | 159 |  |  |  |
|  | 160 | 160 |  |  |  |
|  | 161 | 161 |  |  |  |
|  | 162 | 162 |  |  |  |
|  | 163 | 163 |  |  |  |
|  | 164 | 164 |  |  |  |
|  | 165 | 165 |  |  |  |
|  | 166 | 166 |  |  |  |

RGBW PIXEL FX TABLE

| Features subject to change without notice |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TYPE | SLOT | DMX | NAME | FX ADJUSTMENT | NOTES/STEPS |
| $\begin{aligned} & \stackrel{n}{0} \\ & \frac{0}{0} \end{aligned}$ | 167 | 167 |  |  |  |
|  | 168 | 168 |  |  |  |
|  | 169 | 169 |  |  |  |
|  | 170 | 170 |  |  |  |
|  | 171 | 171 |  |  |  |
|  | 172 | 172 |  |  |  |
|  | 173 | 173 |  |  |  |
|  | 174 | 174 |  |  |  |
|  | 175 | 175 |  |  |  |
|  | 176 | 176 |  |  |  |
|  | 177 | 177 |  |  |  |
|  | 178 | 178 |  |  |  |
|  | 179 | 179 |  |  |  |
|  | 180 | 180 |  |  |  |
|  | 181 | 181 |  |  |  |
|  | 182 | 182 |  |  |  |
|  | 183 | 183 |  |  |  |
|  | 184 | 184 |  |  |  |
|  | 185 | 185 |  |  |  |
|  | 186 | 186 |  |  |  |
|  | 187 | 187 |  |  |  |
|  | 188 | 188 |  |  |  |
|  | 189 | 189 |  |  |  |
|  | 191 | 191 |  |  |  |
|  | 192 | 192 |  |  |  |
|  | 193 | 193 |  |  |  |
|  | 194 | 194 |  |  |  |
|  | 195 | 195 |  |  |  |
|  | 196 | 196 |  |  |  |
|  | 197 | 197 |  |  |  |
|  | 198 | 198 |  |  |  |
|  | 199 | 199 |  |  |  |
|  | 200 | 200 |  |  |  |
|  | 201 | 201 |  |  |  |
|  | 202 | 202 |  |  |  |
|  | 203 | 203 |  |  |  |
|  | 204 | 204 |  |  |  |
|  | 205 | 205 |  |  |  |
|  | 206 | 206 |  |  |  |
|  | 207 | 207 |  |  |  |
|  | 208 | 208 |  |  |  |
|  | 209 | 209 |  |  |  |
|  | 210 | 210 |  |  |  |
|  | 211 | 211 |  |  |  |
|  | 212 | 212 |  |  |  |
|  | 213 | 213 |  |  |  |
|  | 214 | 214 |  |  |  |
|  | 215 | 215 |  |  |  |
|  | 216 | 216 |  |  |  |
|  |  |  |  |  |  |

RGBW PIXEL FX TABLE

| Features subject to change without notice |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TYPE | SLOT | DMX | NAME | FX ADJUSTMENT | NOTES/STEPS |
| $\frac{\stackrel{n}{0}}{0}$ | 217 | 217 |  |  |  |
|  | 218 | 218 |  |  |  |
|  | 219 | 219 |  |  |  |
|  | 220 | 220 |  |  |  |
|  | 221 | 221 |  |  |  |
|  | 222 | 222 |  |  |  |
|  | 223 | 223 |  |  |  |
|  | 224 | 224 |  |  |  |
|  | 225 | 225 |  |  |  |
|  | 226 | 226 |  |  |  |
|  | 227 | 227 |  |  |  |
|  | 228 | 228 |  |  |  |
|  | 229 | 229 |  |  |  |
|  | 230 | 230 |  |  |  |
|  | 231 | 231 |  |  |  |
|  | 232 | 232 |  |  |  |
|  | 233 | 233 |  |  |  |
|  | 234 | 234 |  |  |  |
|  | 235 | 235 |  |  |  |
|  | 236 | 236 |  |  |  |
|  | 237 | 237 |  |  |  |
|  | 238 | 238 |  |  |  |
|  | 239 | 239 |  |  |  |
|  | 240 | 240 |  |  |  |
|  | 241 | 241 |  |  |  |
|  | 242 | 242 |  |  |  |
|  | 243 | 243 |  |  |  |
|  | 244 | 244 |  |  |  |
|  | 245 | 245 |  |  |  |
|  | 246 | 246 |  |  |  |
|  | 247 | 247 |  |  |  |
|  | 248 | 248 |  |  |  |
|  | 249 | 249 |  |  |  |
|  | 250 | 250 |  |  |  |
|  | 251 | 251 |  |  |  |
|  | 252 | 252 |  |  |  |
|  | 253 | 253 |  |  |  |
|  | 254 | 254 |  |  |  |
|  | 255 | 255 |  |  |  |

## SPARKLED FX TABLE



Sine Wave



Ramp Up Wave


Ramp Down Wave

| Features subject to change without notice |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TYPE | SLOT | DMX | NAME | FX ADJUSTMENT | NOTES/STEPS |
| $\begin{aligned} & \text { E } \\ & \stackrel{0}{0} \\ & \stackrel{y}{0} \\ & \sqrt{0} \end{aligned}$ | 1 | 1 | $\begin{aligned} & \text { Sinewave-Cross } \\ & \text { (default) } \\ & \hline \end{aligned}$ |  | In and Out fade start at the same time |
|  | 2 | 2 | Sinewave-Full |  | In fade completes, then out fade completes |
|  | 3 | 3 | Sawtooth-Cross |  | In and Out fade start at the same time |
|  | 4 | 4 | Sawtooth-Full |  | In fade completes, then out fade completes |
|  | 5 | 5 | Ramp Up |  |  |
|  | 6 | 6 | Ramp Down |  |  |
|  | 7 | 7 | Steps |  |  |
|  | 8 | 8 |  |  |  |
|  | 9 | 9 |  |  |  |
|  | 10 | 10 |  |  |  |
|  | 11 | 11 | Starfield | Reverse, Stop, Forward | Pixels randomly go on and off with random lengths of on and off times |
|  | 12 | 12 | 1 Pixel | Reverse, Stop, Forward | Random 1 Pixel per step |
|  | 13 | 13 | 2 Pixels | Reverse, Stop, Forward | Random 2 Pixel per step |
|  | 14 | 14 | 3 Pixels | Reverse, Stop, Forward | Random 3 Pixel per step |
|  | 15 | 15 | 4 pixels | Reverse, Stop, Forward | Random 4 Pixel per step |
|  | 16 | 16 | 5 pixels | Reverse, Stop, Forward | Random 5 Pixel per step |
|  | 17 | 17 | 7 pixels | Reverse, Stop, Forward | Random 7 Pixel per step |
|  | 18 | 18 | 8 pixels | Reverse, Stop, Forward | Random 8 Pixel per step |
|  | 19 | 19 | Single Row | Reverse, Stop, Forward | One single row per step |
|  | 20 | 20 | Single Column | Reverse, Stop, Forward | Single column per step |
|  | 21 | 21 | 3 Column | Reverse, Stop, Forward | Three columns per step |
|  | 22 | 22 | Pixel Ring Chase | Reverse, Stop, Forward | In every RGBW lens one Sparkled at a time. E.g. Lens 1, |
|  | 23 | 23 | Pixel Row Chase | Reverse, Stop, Forward | In every RGBW pixel one Sparkled at a time. E.g. Lens 1, <br> Sparkled $1,3+4,8$ at the same time Lens 2, 2, 5+6, 10 |
|  | 24 | 24 | Pixel Ring Chase 2 | Reverse, Stop, Forward | For one RGBW pixel after another turn on one SparkLeds per step, e.g. Lens $1,1,4,8,3$, then Lens $2,2,6,10,5$ etc $\cdot$ |
|  | 25 | 25 | Center Out | Reverse, Stop, Forward | Turn on all Sparkleds in Lens $3+4$, then step from the center out to the edge |
|  | 26 | 26 | Fireworks | Reverse, Stop, Forward | Replicate an exploding firework rocket |
|  | 27 | 27 | Ring | Reverse, Stop, Forward |  |
|  | 28 | 28 | Row | Reverse, Stop, Forward |  |
|  | 29 | 29 | Snake | Reverse, Stop, Forward |  |
|  | 30 | 30 |  |  |  |
|  | 31 | 31 |  |  |  |
|  | 32 | 32 |  |  |  |
|  | 33 | 33 |  |  |  |
|  | 34 | 34 |  |  |  |
|  | 35 | 35 |  |  |  |
|  | 36 | 36 |  |  |  |
|  | 37 | 37 |  |  |  |
|  | 38 | 38 |  |  |  |

## SPARKLED FX TABLE

| Features subject to change without notice |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TYPE | SLOT | DMX | NAME | FX ADJUSTMENT | NOTES/STEPS |
| $\begin{aligned} & x \\ & \stackrel{x}{u} \\ & \text { ü } \\ & \stackrel{\rightharpoonup}{\grave{0}} \\ & \text { in } \end{aligned}$ | 39 | 39 |  |  |  |
|  | 40 | 40 |  |  |  |
|  | 41 | 41 |  |  |  |
|  | 42 | 42 |  |  |  |
|  | 43 | 43 |  |  |  |
|  | 44 | 44 |  |  |  |
|  | 45 | 45 |  |  |  |
|  | 46 | 46 |  |  |  |
|  | 47 | 47 |  |  |  |
|  | 48 | 48 |  |  |  |
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|  | 50 | 50 |  |  |  |
|  | 51 | 51 |  |  |  |
|  | 52 | 52 |  |  |  |
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|  | 57 | 57 |  |  |  |
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|  | 60 | 60 |  |  |  |
|  | 61 | 61 |  |  |  |
|  | 62 | 62 |  |  |  |
|  | 63 | 63 |  |  |  |
|  | 64 | 64 |  |  |  |
|  | 65 | 65 |  |  |  |
|  | 66 | 66 |  |  |  |
|  | 67 | 67 |  |  |  |
|  | 68 | 68 |  |  |  |
|  | 69 | 69 |  |  |  |
|  | 70 | 70 |  |  |  |
|  | 71 | 71 |  |  |  |
|  | 72 | 72 |  |  |  |
|  | 73 | 73 |  |  |  |
|  | 74 | 74 |  |  |  |
|  | 75 | 75 |  |  |  |
|  | 76 | 76 |  |  |  |
|  | 77 | 77 |  |  |  |
|  | 78 | 78 |  |  |  |
|  | 79 | 79 |  |  |  |
|  | 80 | 80 |  |  |  |
|  | 81 | 81 |  |  |  |
|  | 82 | 82 |  |  |  |
|  | 83 | 83 |  |  |  |
|  | 84 | 84 |  |  |  |
|  | 85 | 85 |  |  |  |
|  | 86 | 86 |  |  |  |
|  | 87 | 87 |  |  |  |
|  | 88 | 88 |  |  |  |
|  | 89 | 89 |  |  |  |
|  | 90 | 90 |  |  |  |

## SPARKLED FX TABLE



## SPARKLED FX TABLE

| Features subject to change without notice |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TYPE | SLOT | DMX | NAME | FX ADJUSTMENT | NOTES/STEPS |
|  | 149 | 149 |  |  |  |
|  | 150 | 150 |  |  |  |
|  | 151 | 151 |  |  |  |
|  | 152 | 152 |  |  |  |
|  | 153 | 153 |  |  |  |
|  | 154 | 154 |  |  |  |
|  | 155 | 155 |  |  |  |
|  | 156 | 156 |  |  |  |
|  | 157 | 157 |  |  |  |
|  | 158 | 158 |  |  |  |
|  | 159 | 159 |  |  |  |
|  | 160 | 160 |  |  |  |
|  | 161 | 161 |  |  |  |
|  | 162 | 162 |  |  |  |
|  | 163 | 163 |  |  |  |
|  | 164 | 164 |  |  |  |
|  | 165 | 165 |  |  |  |
| ᄃ | 166 | 166 |  |  |  |
|  | 167 | 167 |  |  |  |
|  | 168 | 168 |  |  |  |
|  | 169 | 169 |  |  |  |
|  | 170 | 170 |  |  |  |
|  | 171 | 171 |  |  |  |
|  | 172 | 172 |  |  |  |
| $\pm$ | 173 | 173 |  |  |  |
|  | 174 | 174 |  |  |  |
|  | 175 | 175 |  |  |  |
|  | 176 | 176 |  |  |  |
|  | 177 | 177 |  |  |  |
| V | 178 | 178 |  |  |  |
|  | 179 | 179 |  |  |  |
|  | 180 | 180 |  |  |  |
|  | 181 | 181 |  |  |  |
|  | 182 | 182 |  |  |  |
|  | 183 | 183 |  |  |  |
| $\frac{\stackrel{9}{\Phi}}{\overline{\overline{3}}}$ | 184 | 184 |  |  |  |
|  | 185 | 185 |  |  |  |
|  | 186 | 186 |  |  |  |
|  | 187 | 187 |  |  |  |
|  | 188 | 188 |  |  |  |
|  | 189 | 189 |  |  |  |
|  | 190 | 190 |  |  |  |
|  | 191 | 191 |  |  |  |
|  | 192 | 192 |  |  |  |
|  | 193 | 193 |  |  |  |
|  | 194 | 194 |  |  |  |
|  | 195 | 195 |  |  |  |
|  | 196 | 196 |  |  |  |
|  | 197 | 197 |  |  |  |
|  | 198 | 198 |  |  |  |
|  | 199 | 199 |  |  |  |
|  |  |  |  |  |  |

## SPARKLED FX TABLE

| Features subject to change without notice |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TYPE | SLOT | DMX | NAME | FX ADJUSTMENT | NOTES/STEPS |
|  | 200 | 200 |  |  |  |
|  | 201 | 201 | Row 1 | disabled |  |
|  | 202 | 202 | Row 2 | disabled |  |
|  | 203 | 203 | Row 3 | disabled |  |
|  | 204 | 204 | Column 1 | disabled |  |
|  | 205 | 205 | Column 2 | disabled |  |
|  | 206 | 206 | Column 3 | disabled |  |
|  | 207 | 207 | Column 4 | disabled |  |
|  | 208 | 208 | Column 5 | disabled |  |
|  | 209 | 209 | Column 6 | disabled |  |
|  | 210 | 210 | Column 7 | disabled |  |
|  | 211 | 211 | Column 8 | disabled |  |
|  | 212 | 212 | Column 9 | disabled |  |
|  | 213 | 213 | Column 10 | disabled |  |
|  | 214 | 214 | Column 11 | disabled |  |
|  | 215 | 215 | Column 12 | disabled |  |
|  | 216 | 216 | Column 13 | disabled |  |
|  | 217 | 217 | Column 14 | disabled |  |
|  | 218 | 218 | Column 15 | disabled |  |
|  | 219 | 219 | Column 16 | disabled |  |
|  | 220 | 220 | Column 17 | disabled |  |
|  | 221 | 221 | Column 18 | disabled |  |
|  | 222 | 222 | Column 19 | disabled |  |
|  | 223 | 223 | Column 20 | disabled |  |
|  | 224 | 224 | Column 21 | disabled |  |
|  | 225 | 225 | Column 22 | disabled |  |
|  | 226 | 226 | Column 23 | disabled |  |
|  | 227 | 227 | Column 24 | disabled |  |
|  | 228 | 228 | Column 25 | disabled |  |
|  | 229 | 229 | Column 26 | disabled |  |
|  | 230 | 230 | Column 27 | disabled |  |
|  | 231 | 231 | Column 28 | disabled |  |
|  | 232 | 232 | Column 29 | disabled |  |
|  | 233 | 233 | Column 30 | disabled |  |
|  | 234 | 234 | Column 31 | disabled |  |
|  | 235 | 235 | Column 32 | disabled |  |
|  | 236 | 236 | Column 33 | disabled |  |
|  | 237 | 237 | Column 34 | disabled |  |
|  | 238 | 238 | Column 35 | disabled |  |
|  | 239 | 239 | Column 36 | disabled |  |
|  | 240 | 240 | Lens 1 | disabled |  |
|  | 241 | 241 | Lens 2 | disabled |  |
|  | 242 | 242 | Lens 3 | disabled |  |
|  | 243 | 243 | Lens 4 | disabled |  |
|  | 244 | 244 | Lens 5 | disabled |  |
|  | 245 | 245 | Lens 6 | disabled |  |
|  | 246 | 246 | Lens 7 | disabled |  |
|  | 247 | 247 | Lens 8 | disabled |  |
|  | 248 | 248 | Lens 9 | disabled |  |
|  | 249 | 249 | Lens 10 | disabled |  |
|  | 250 | 250 | Lens 11 | disabled |  |
|  | 251 | 251 | Lens 12 | disabled |  |
|  | 252 | 252 |  |  |  |
|  | 253 | 253 |  |  |  |
|  | 254 | 254 |  |  |  |
|  | 255 | 255 |  |  |  |

STROBELINE FX TABLE


Sine Wave



Ramp Up Wave


Ramp Down Wave

| Features subject to change without notice |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TYPE | SLOT | DMX | NAME | FX ADJUSTMENT | NOTES/STEPS |
| $\begin{aligned} & E \\ & \end{aligned}$ | 1 | 1 | $\begin{aligned} & \text { Sinewave-Cross } \\ & \text { (default) } \end{aligned}$ |  | In and Out fade start at the same time |
|  | 2 | 2 | Sinewave-Full |  | In fade completes, then out fade completes |
|  | 3 | 3 | Sawtooth-Cross |  | In and Out fade start at the same time |
|  | 4 | 4 | Sawtooth-Full |  | In fade completes, then out fade completes |
|  | 5 | 5 | Ramp Up |  |  |
|  | 6 | 6 | Ramp Down |  |  |
|  | 7 | 7 | Steps |  |  |
|  | 8 | 8 |  |  |  |
|  | 9 | 9 |  |  |  |
|  | 10 | 10 |  |  |  |
|  | 11 | 11 |  |  |  |
|  | 12 | 12 |  |  |  |
|  | 13 | 13 |  |  |  |
|  | 14 | 14 |  |  |  |
|  | 15 | 15 |  |  |  |
|  | 16 | 16 |  |  |  |
|  | 17 | 17 |  |  |  |
|  | 18 | 18 |  |  |  |
|  | 19 | 19 |  |  |  |
|  | 20 | 20 |  |  |  |
|  | 21 | 21 |  |  |  |
|  | 22 | 22 |  |  |  |
|  | 23 | 23 |  |  |  |
|  | 24 | 24 |  |  |  |
|  | 25 | 25 |  |  |  |
|  | 26 | 26 |  |  |  |
|  | 27 | 27 |  |  |  |
|  | 28 | 28 |  |  |  |
|  | 29 | 29 |  |  |  |
|  | 30 | 30 |  |  |  |
|  | 31 | 31 |  |  |  |
|  | 32 | 32 |  |  |  |
|  | 33 | 33 |  |  |  |
|  | 34 | 34 |  |  |  |
|  | 35 | 35 |  |  |  |
|  | 36 | 36 |  |  |  |
|  | 37 | 37 |  |  |  |
|  | 38 | 38 |  |  |  |
|  | 39 | 39 |  |  |  |
|  | 40 | 40 |  |  |  |

## STROBELINE FX TABLE

| Features subject to change without notice |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TYPE | SLOT | DMX | NAME | FX ADJUSTMENT | NOTES/STEPS |
|  | 41 | 41 |  |  |  |
|  | 42 | 42 |  |  |  |
|  | 43 | 43 |  |  |  |
|  | 44 | 44 |  |  |  |
|  | 45 | 45 |  |  |  |
|  | 46 | 46 |  |  |  |
|  | 47 | 47 |  |  |  |
|  | 48 | 48 |  |  |  |
|  | 49 | 49 |  |  |  |
|  | 50 | 50 |  |  |  |
|  | 51 | 51 |  |  |  |
|  | 52 | 52 |  |  |  |
|  | 53 | 53 |  |  |  |
|  | 54 | 54 |  |  |  |
|  | 55 | 55 |  |  |  |
|  | 56 | 56 |  |  |  |
|  | 57 | 57 |  |  |  |
|  | 58 | 58 |  |  |  |
|  | 59 | 59 |  |  |  |
|  | 60 | 60 |  |  |  |
|  | 61 | 61 |  |  |  |
|  | 62 | 62 |  |  |  |
|  | 63 | 63 |  |  |  |
|  | 64 | 64 |  |  |  |
|  | 65 | 65 |  |  |  |
|  | 66 | 66 |  |  |  |
|  | 67 | 67 |  |  |  |
|  | 68 | 68 |  |  |  |
|  | 69 | 69 |  |  |  |
|  | 70 | 70 |  |  |  |
|  | 71 | 71 |  |  |  |
|  | 72 | 72 |  |  |  |
|  | 73 | 73 |  |  |  |
|  | 74 | 74 |  |  |  |
|  | 75 | 75 |  |  |  |
|  | 75 | 75 |  |  |  |
|  | 76 | 76 |  |  |  |
|  | 77 | 77 |  |  |  |
|  | 78 | 78 |  |  |  |
|  | 79 | 79 |  |  |  |
|  | 80 | 80 |  |  |  |
|  | 81 | 81 |  |  |  |
|  | 82 | 82 |  |  |  |
|  | 83 | 83 |  |  |  |
|  | 84 | 84 |  |  |  |
|  | 85 | 85 |  |  |  |
|  | 86 | 86 |  |  |  |
|  | 87 | 87 |  |  |  |
|  | 88 | 88 |  |  |  |
|  | 89 | 89 |  |  |  |
|  | 90 | 90 |  |  |  |
|  |  |  |  |  |  |

## STROBELINE FX TABLE



STROBELINE FX TABLE

| Features subject to change without notice |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TYPE | SLOT | DMX | NAME | FX ADJUSTMENT | NOTES/STEPS |
|  | 146 | 146 |  |  |  |
|  | 147 | 147 |  |  |  |
|  | 148 | 148 |  |  |  |
|  | 149 | 149 |  |  |  |
|  | 150 | 150 |  |  |  |
|  | 151 | 151 |  |  |  |
|  | 152 | 152 |  |  |  |
|  | 153 | 153 |  |  |  |
|  | 154 | 154 |  |  |  |
|  | 155 | 155 |  |  |  |
|  | 146 | 146 |  |  |  |
|  | 147 | 147 |  |  |  |
|  | 148 | 148 |  |  |  |
|  | 149 | 149 |  |  |  |
|  | 150 | 150 |  |  |  |
|  | 151 | 151 |  |  |  |
|  | 152 | 152 |  |  |  |
|  | 153 | 153 |  |  |  |
|  | 154 | 154 |  |  |  |
|  | 155 | 155 |  |  |  |
|  | 156 | 156 |  |  |  |
|  | 157 | 157 |  |  |  |
|  | 158 | 158 |  |  |  |
|  | 159 | 159 |  |  |  |
|  | 160 | 160 |  |  |  |
|  | 161 | 161 |  |  |  |
|  | 162 | 162 |  |  |  |
|  | 163 | 163 |  |  |  |
|  | 164 | 164 |  |  |  |
|  | 165 | 165 |  |  |  |
|  | 166 | 166 |  |  |  |
|  | 167 | 167 |  |  |  |
|  | 168 | 168 |  |  |  |
|  | 169 | 169 |  |  |  |
|  | 170 | 170 |  |  |  |
|  | 171 | 171 |  |  |  |
|  | 172 | 172 |  |  |  |
|  | 173 | 173 |  |  |  |
|  | 174 | 174 |  |  |  |
|  | 175 | 175 |  |  |  |
|  | 176 | 176 |  |  |  |
|  | 177 | 177 |  |  |  |
|  | 178 | 178 |  |  |  |
|  | 179 | 179 |  |  |  |
|  | 180 | 180 |  |  |  |
|  | 181 | 181 |  |  |  |
|  | 182 | 182 |  |  |  |
|  | 183 | 183 |  |  |  |
|  | 184 | 184 |  |  |  |
|  | 185 | 185 |  |  |  |
|  | 186 | 186 |  |  |  |
|  | 187 | 187 |  |  |  |
|  | 188 | 188 |  |  |  |
|  | 189 | 189 |  |  |  |
|  | 190 | 190 |  |  |  |
|  |  |  |  |  |  |

## STROBELINE FX TABLE



## STROBELINE FX TABLE

| Features subject to change without notice |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TYPE | SLOT | DMX | NAME | FX ADJUSTMENT | NOTES/STEPS |
|  | 238 | 238 | Lens 1 | disabled | Strobe LEDs above and below the lens |
|  | 239 | 239 | Lens 2 | disabled | Strobe LEDs above and below the lens |
|  | 240 | 240 | Lens 3 | disabled | Strobe LEDs above and below the lens |
|  | 241 | 241 | Lens 4 | disabled | Strobe LEDs above and below the lens |
|  | 242 | 242 | Lens 5 | disabled | Strobe LEDs above and below the lens |
|  | 243 | 243 | Lens 6 | disabled | Strobe LEDs above and below the lens |
|  | 244 | 244 | Lens 7 | disabled | Strobe LEDs above and below the lens |
|  | 245 | 245 | Lens 8 | disabled | Strobe LEDs above and below the lens |
|  | 246 | 246 | Lens 9 | disabled | Strobe LEDs above and below the lens |
|  | 247 | 247 | Lens 10 | disabled | Strobe LEDs above and below the lens |
|  | 248 | 248 | Lens 11 | disabled | Strobe LEDs above and below the lens |
|  | 249 | 249 | Lens 12 | disabled | Strobe LEDs above and below the lens |
|  | 250 | 250 |  |  |  |
|  | 251 | 251 |  |  |  |
|  | 252 | 252 |  |  |  |
|  | 253 | 253 |  |  |  |
|  | 254 | 254 |  |  |  |
|  | 255 | 255 |  |  |  |

## REMOTE DEVICE MANAGEMENT (RDM)

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

Remote Device Management (RDM) is a protocol that sits on top of the DMX512 data standard for lighting, allowing the DMX systems of the device to be managed, modified, and monitored remotely (hence, remote device management). This protocol is ideal for fixtures installed in locations that are not easily accessible.

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

## FIXTURE RDM CODES:

| Model ID | RDM Code | Personality ID | Device ID |
| :---: | :---: | :---: | :---: |
| 1756 | $0 x 6 D C$ | 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 |
| Comms Status |
| Status ID Description |
| Clear Status ID |
| Device Power Cycles |
| Tilt Invert |
| Display Invert |
| Display Level |
| Realtime Clock |
| Power State |
| Preset Playback |
| Default Slot Value |
| Language |
| Language Capabilities |
| Boot Software Version Label |
| Boot Software Version ID |
| Product Detail ID List |
| Status Messages |

## ERROR CODES

When power is applied, the unit will automatically enter a "Reset/Test" mode. This mode brings all the internal motors to a home position. If there is an internal problem with one or more of the motors an error code will flash in the display in the form of "XXer" were as XX will represent a function number. For example, when the display shows "OEr" it means there is some type of error with the Pan motor. If there are multiple errors during the start-up process they will all flash in the display. For example: if the fixtures has errors on Channel 1, 2, and 5 all at the same time, you will see the error message "01Er", "02Er", and "05Er" flash repeated 5 times.

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

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

| Error Codes subject to change without prior written notice |  |
| :--- | :--- |
| ERROR CODES | DESCRIPTION |
| Lamp Temp High |  |
| Lamp Temp Error |  |
| Base Temp High |  |
| Base Temp Error |  |
| Head Temp High |  |
| Head Temp Error |  |
| Head Humity High |  |
| Head Humity Warning |  |
| Base Humity High |  |
| Base Humity Warning |  |
| Base Fan1 Error |  |
| Base Fan2 Error |  |
| Base Fan3 Error |  |
| Base Fan4 Error |  |
| 3U2JB1 LEDFan1Error |  |
| 3U2JB2 LEDFan2Error |  |
| 3U2JB3 LEDFan3Error |  |
| 3U2JB4 LEDFan4Error |  |
| 3U2JB5 FogFan1Error |  |
| 3U2JB6 FogFan2Error |  |
| 3U2JB7 FogFan3Error |  |
| 2U01 Com Fail |  |
| 3U01 Com Fail |  |
| 3U02 Com Fail |  |
| 3U03 Com Fail |  |
| $4 U 01$ Com Fail |  |
| $5 U 01$ Com Fail |  |
| 5U02 Com Fail |  |

## MAINTENANCE GUIDELINES

## DISCONNECT POWER BEFORE PERFORMING ANY MAINTENANCE!

## CLEANING

Frequent cleaning is recommended to insure proper function, optimized light output, and an extended life. The frequency of cleaning depends on the environment in which the fixture operates: damp, smoky or particularly dirty environments can cause greater accumulation of dirt on the fixture's optics. Clean the external lens surface at least every 20 days with a soft cloth to avoid dirt/debris accumulation.
NEVER use alcohol, solvents, or ammonia-based cleaners.

## MAINTENANCE

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

Please refer to the following points during routine inspections:

- A detailed electric check by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating.
- Be sure all screws and fasteners are securely tightened at all times. Lose screws may fall out during normal operation resulting in damage or injury as larger parts could fall.
- Check for any deformations on the housing, color lenses, rigging hardware and rigging points (ceiling, suspension, trussing). Deformations in the housing could allow for dust to enter into the fixture. Damaged rigging points or unsecured rigging could cause the fixture to fall and seriously injure a person(s).
- Electric power supply cables must not show any damage, material fatigue or sediments.
- NEVER remove the ground prong from the power cable.


## FIXTURE DISASSEMBLY

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

- After the unit has been reassembled, open the valve, and allow the light to run for approximately 2 hours 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.


## SPECIFICATIONS

## SOURCE

(12) 60W Osram RGBW LEDs
(48) 2W White SparkLED™
(256) 1W Strobe LED

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

11,000 Total Lumen Output (RGBW)
CRI 80
Zoom Range $6^{\circ}-45^{\circ}$
Colortemperature SparkLED 4000K
Colortemperature Strobe Line 6500K

## EFFECTS

Motorized Zoom
Linear Color Temperature Presets (2700-8000K)
RGBW Color Mixing and Pixel Control
White SparkLED Lens Effect
Dual White Strobe Lines (128 pixels per side)
Color Presets and Macros
Electronic Strobe and Variable Dimming Curves
16-bit Dimming
Tilt Angle: $192^{\circ}$

## CONTROL / CONNECTIONS

6 DMX Channel Modes (28/76/140/108/120/188 channels)
Pixel controlled Wash, SparkLED and Strobe LED
DMX Adjustable Refresh Rate (900-25000 Hz)
(6) Button Touch Panel

Full Color $180^{\circ}$ 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

## SIZE / WEIGHT

Length: 39.5 in (1004mm)
Width (Base): 7.6 in (194mm)
Width (Head): 6.1 in (155mm)
Height (head up): 13.2 in (336mm)
Height (head 90 degree): 11.3in (288mm)
Weight: 72.7 lbs . (33kg)

## ELECTRICAL / THERMAL

AC 100-240V 50/60Hz
1400W Max Power Consumption
Ambient Temperature Range: $-4^{\circ} \mathrm{F}$ to $113^{\circ} \mathrm{F}\left(-20^{\circ} \mathrm{C}\right.$ to $\left.45^{\circ} \mathrm{C}\right)$

## APPROVALS / RATINGS

CE |cETLus | IP65


## intertek <br> 4010832

Specifications and documentation subject to change without notice.

## DIMENSIONS-FIXTURE

*Drawings not to scale. Specifications and improvements in the design of this unit and this manual are subject to change without notice.


## DIMENSIONS-FIL

*Drawings not to scale. Specifications and improvements in the design of this unit and this manual are subject to change without notice.


## OPTIONAL ACCESSORIES

| ORDER CODE | ITEM |
| :--- | :--- |
| TRIGGER CLAMP | Heavy Duty Wrap Around Hook Style Clamp |
| SIP126 | $5 \mathrm{ft} .(1.5 \mathrm{~m})$ IP65 Power Link Cable |
| AC5PDMX5PRO | $5 \mathrm{ft} .(1.5 \mathrm{~m})$ 5pin PRO DMX Cable |
|  | Additional Cable Lengths 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 deter- mined 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.
- $\quad$ ncrease the separation between the device and the receiver.
- Connect the device to an electrical outlet on a circuit different from which the radio receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.


## 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!


