

PROTEUS HYBRID &
PROTEUS HYBRID WMG
User Manual

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### DOCUMENT VERSION



Due to additional product features and/or enhancements, an updated version of this document may be available online. Please scan the QR Code with your mobile device or visit <a href="https://www.elationlighting.com">www.elationlighting.com</a> for the latest revision/update of this manual, before installation and/or programming.

Date	Document Version	Software Version ≥	DMX Channel Modes	Notes
07/07/17	1	1.3.1A	24 / 26 / 37	Initial release.
08/17/17	1.2	N/C	N/C	Updated error codes, rigging illustration.
12/03/17	1.4	N/C	N/C	Updated installation, E-Fly, and gobo sections.
01/03/18	1.6	1.6.0	N/C	Updated System Menus and added Movement and Focus Zoom Speed controls.
07/2718	1.8	1.6.2	N/C	Added dimming curves to DMX channels 24/26/37.
08/15/18	1.9	N/C	N/C	Added POTENTIAL INTERNAL FIXTURE DAMAGE FROM EXTERNAL SOURCES OF LIGHT BEAMS section.
9/24/18	2.0	1.64	N/C	Updated LAMP CONTROL system menu.
11/25/18	2.2	N/C	N/C	Added LAMP and GOBO replacement instructions.
10/10/19	2.4	N/C	N/C	Included RJ45 data cable note added.
09/29/20	2.6	N/C	N/C	Updated specifications
02/15/21	2.8	1.6.7	N/C	Updated primary/secondary modes. Added Baking Test update. Hibernation / Sun protection warning and information. Added V1.6.4, V1.6.5, & V1.6.6 additions/changes to DMX traits.
03/24/21	3.0	N/C	N/C	Updated General Information and Maintenance, Added Proteus Hybrid WMG to cover title.
05/20/21	3.2	N/C	N/C	Updated Maintenance.
01/17/22	3.4	1.7.0	N/C	Updated General Information and Specifications
08/23/22	3.6	N/C	N/C	Updated Lamp Installation, Fixture Installation, added RDM
11/23/22	3.8	1.8.0	N/C	Update System Menu & DMX Traits

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# **GENERAL INFORMATION**

### **INTRODUCTION**

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

#### COOLING

After usage, the lamp may be switched off, but the fixture should remain connected to power in order to allow the fan time to cool down the fixture.

#### **IP65 RATED**

An IP rated lighting fixture is one, which is commonly installed in outdoor environments and has been designed with an enclosure that effectively protects the ingress (entry) of external foreign objects such as dust and water. 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 one, which has been designed and tested to protect against the ingress of dust **(6)** and low-pressure water jets from any direction **(5)**.

### **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 Cable (Fixture to Fixture Interconnect Use Only!) IP65 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

ELATION SERVICE EUROPE - Monday - Friday 08:30 to 17:00 CET +31 45 546 85 63 | Fax +31 45 546 85 96 | support@elationlighting.eu

REPLACEMENT PARTS please visit parts.elationlighting.com

# 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 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 (USA ONLY)

To obtain warranty service, a Return Materials Authorization (RMA) number must first be obtained from ELATION. It is the Customer's responsibility to provide product proof of purchase and serial number by acceptable evidence such as an invoice copy or an approved ELATION Extended Warranty Certificate ("EWC") and any relevant maintenance records at the time warranty service is sought. Failure to provide acceptable evidence of product proof of purchase or EWC and any relevant maintenance records may be cause for denial of warranty service.

Products returned for warranty service must be sent without any accessories (i.e., power, data, and safety cables, brackets, clamps, rigging hardware, frost filters, gel frames, barn doors, lens, hoses, nozzles, rack mounting hardware, etc.), must be boxed using the original and/or suitable packaging materials (double-box and foam) that provides ample product protection for ground and/or air freight transit, and must be shipped freight pre-paid and insured to ELATION in Los Angeles, CA or an ELATION Authorized Service Center. The RMA number must be clearly written on the outside of the return box, and a brief description of the problem and the RMA number must be documented and included in the box.

Products returned for warranty service without an RMA number clearly marked on the outside of the package will be refused and returned to the shipper at the Customer's expense. Products returned for warranty service, which are received damaged due to inadequate and/or improper packaging and/or due to damage caused by shipping carrier, may incur additional repair charges before warranty service begins and/or may void this warranty. If any product accessories (included and/or optional) are shipped with the product, ELATION and/or the ELATION Authorized Service Center shall have no liability whatsoever for the loss and/or damage to any such accessories, nor the safe return thereof. If the requested warranty repairs or service (including parts replacement) are within the terms of this warranty, ELATION will pay return ground transportation shipping charges to a single designated point within the United States.

### SAFETY GUIDELINES

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 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
MANUFACTURES WARRANTY. DAMAGES RESULTING FROM
MODIFICATIONS TO THIS FIXTURE AND/OR THE DISREGARD OF SAFETY
INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE
MANUFACTURES WARRANTY AND ARE NOT SUBJECT TO ANY WARRANTY
CLAIMS AND/OR REPAIRS.



DO NOT PLUG FIXTURE INTO A DIMMER PACK!

NEVER OPEN THIS FIXTURE WHILE IN USE!

UNPLUG POWER BEFORE SERVICING FIXTURE!

NEVER TOUCH FIXTURE DURING OPERATION, AS IT MAY BE HOT!

KEEP FLAMMABLE MATERIALS AWAY FROM FIXTURE!



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.



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 40 FEET (12 METERS)
MAXIMUM TEMP OF EXTERNAL SURFACE 212° F (100°C)
MINIMUM DISTANCE OF INFLAMMABLE MATERIALS
FROM THE SURFACE 5.0 FEET (1.5 METER)

### SAFETY GUIDELINES



RISK GROUP 3 - RISK OF EXPOSURE TO ULTRAVIOLET UV RADIATION! FIXTURE EMITS HIGH INTENSITY WAVELENGTH OF ULTRAVIOLET UV LIGHT FROM THE UV COLOR FILTER. WEAR PROPER EYE AND SKIN PROTECTION. AVOID PROLONGED PERIODS OF EXPOSURE TO UV COLOR FILTER. AVOID WEARING WHITE COLOR CLOTHING AND/OR USING UV PAINTS ON SKIN. AVOID DIRECT EYE AND/OR SKIN EXPOSURE AT DISTANCES LESS THAN 11 feet (3.3m). DO NOT OPERATE FIXTURE WITH DAMAGED/MISSING EXTERNAL COVERS. DO NOT LOOK DIRECTLY

INTO THE UV LIGHT AND/OR VIEW UV LIGHT DIRECTLY WITH OPTICAL INSTRUMENTS THAT MAY CONCENTRATE THE LIGHT/RADIATION OUTPUT. INDIVIDUALS SUFFERING FROM A RANGE OF EYE CONDITIONS, SUNLIGHT EXPOSURE DIS-ORDERS, OR INDIVIDUALS USING PHOTOSENSITIVE MEDICATION, MAY RECEIVE DISCOMFORT IF EXPOSED TO THE ULTRAVIOLET UV LIGHT EMITTED FROM THE UV LED.

**DO NOT TOUCH** the fixture housing during operation. Turn OFF the power and allow approximately 60 minutes for the fixture to cool down before serving.

**DO NOT** shake fixture, 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.

Allow approx. 6" (15cm) between fixture and other devices or a wall for proper cooling.

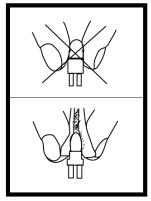
Always disconnect fixture from main power source before performing any type of service and/or cleaning procedure. Only handle the power cord by the plug end, never pull out the plug by tugging the wire portion of the cord.

During the initial operation of this fixture, a light smoke or smell may emit from the interior of the fixture. This is a normal process and is caused by excess paint in the interior of the casing burning off from the heat associated with the lamp and will decrease gradually over time.

Consistent operational breaks will ensure fixture will function properly for many years.

**ONLY** use the original packaging and materials to transport the fixture in for service.

### DISCHARGE LAMP WARNING



This fixture is fitted with a DISCHARGE LAMP, which is highly susceptible to damage if improperly handled. NEVER touch the lamp with your bare hands, as the oil from your hands will shorten the life of the lamp. Also, NEVER move the fixture until the lamp has had ample time to cool. Lamps are NOT covered under warranty conditions. Avoid switching the fixture ON and OFF repeatedly in short intervals, as this will reduce lamp life and intensity. To achieve the intensity associated with discharge lamps, these lamps use gas sealed in a high-pressure environment to emit a brilliant output.

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

### UV RADIATION NOTICE



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

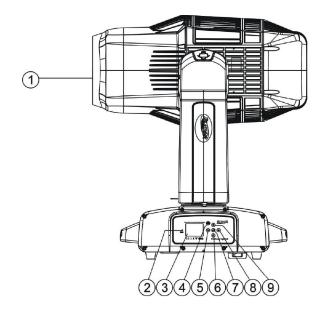
# LAMP REPLACEMENT

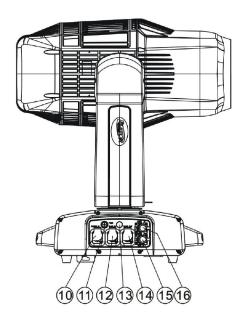


Please note that due to the nature of the Philips™ Platinum 21R Lamp and the optical path of the fixture, the lamp MUST BE replaced at 1,500 hours.

Use only Genuine Original Philips™ Platinum 21R Lamps. Other brand lamps may cause damage and void warranty!

# OVERVIEW





- 1. Lens
- 2. E-FLY Wireless DMX Indicator LED
- 3. LCD Menu Control Display
- 4. MODE/ESC Button
- 5. LEFT Button
- 6. DOWN Button
- 7. ENTER Button
- 8. RIGHT Button
- 9. UP Button
- 10. Power IN
- 11. Fuse
- 12. RJ45 Ethernet IN
- 13. Gore Valve
- 14. RJ45 Ethernet OUT
- 15. 5pin DMX IN



### LAMP REPLACEMENT

Please note that due to the nature of the Philips™ Platinum 21R Lamp and the optical path of the fixture, the lamp MUST BE replaced at 1,500 hours.

Use only Genuine Original Philips™ Platinum 21R Lamps. Other brand lamps may cause damage and void warranty!

### INSTALLING OR REPLACING THE LAMP

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

### LAMP PROTECTION CIRCUITRY

Because of the nature of the extreme heat associated with the **Philips™ Platinum 21 R** lamp and the unique IP65 rated sealed optical system, it is **IMPERATIVE** that the lamp be replaced at **1,500 Hours** or sooner. This is done to protect the internal sealed optical system as well as prevent accidental lamp explosion, which could lead to hot glass particles falling from the fixture.

# FAILURE TO CHANGE THE LAMP WITHIN 300 HOURS of the 1,500 HOUR RATED LIFE, WILL CAUSE THE FIXTURE TO AUTOMATICALLY SHUT DOWN!

At **1,500** Hours the LCD control display will begin to flash, "Replace The Lamp" and the lamp will flicker for the first five minutes of operation. At this point the lamp has reached the maximum rated life and should be replaced immediately. After the lamp has flickered for about five minutes it should strike normally allowing the fixture to be used temporarily until a replacement lamp can be installed. The fixture will continue to operate for an additional 300 hours; however, the "Replace the Lamp" warning will continue to flash in the display. Keep in mind that the flicker protection circuitry will only work for about 300 Hours (lamp clock life of 1,500-1,800 Hours).

After 1,800 Hours the fixture will no longer respond to DMX commands and immediately enter a hibernation mode that will electronically discontinue all fixture functionality with the exception of a few menu commands. The fixture will continue to enter hibernation mode until the lamp is replaced and the lamp clock has been reset. To replace the lamp, follow the safety guidelines and procedures listed on the next page.



### WARNING! LAMP REPLACEMENT SHOULD ONLY BE DONE BE A TRAINED TECHNICIAN.

1. Turn OFF power and allow approximately 60 minutes for the fixture to cool down.



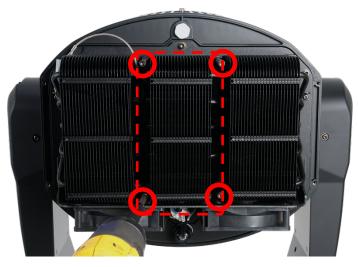
2. Place head in a right-angle horizontal position and engage both the **PAN and TILT** locks for added stability while replacing the lamp.



3. Remove (4x) 3mm hex-head screws to remove rear cover.



4. Unclip the rear cover safety cable.

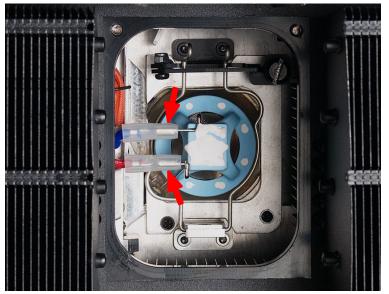


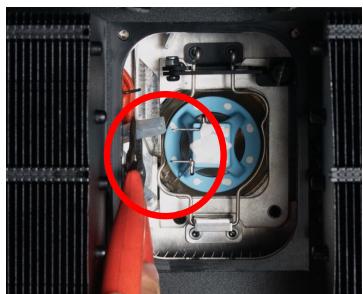
5. Remove (4x) 3mm hex-head screws holding the center heatsink module.



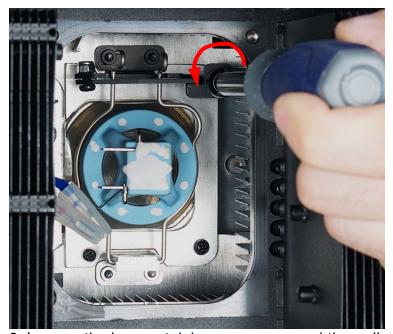
6. Unclip the center heatsink module safety cable.

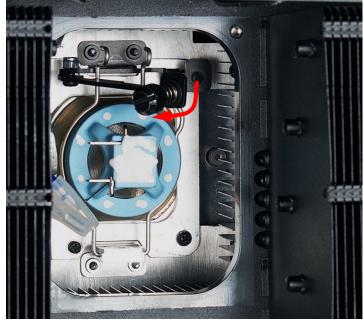




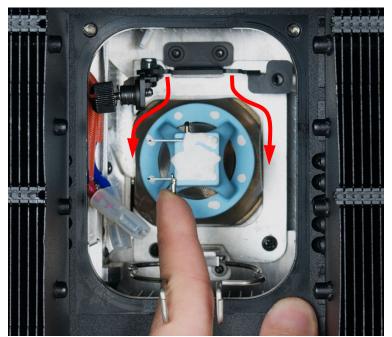


7. Gently remove the (2x) spade terminals connected to the lamp.





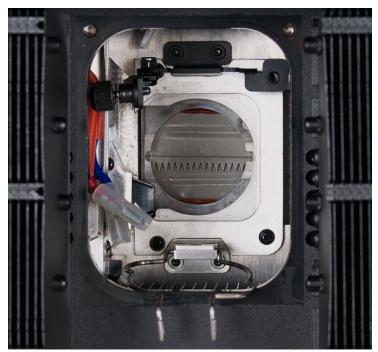
8. Loosen the lamp retaining arm screw and the pull arm out. Then unclip the lamp retaining clip

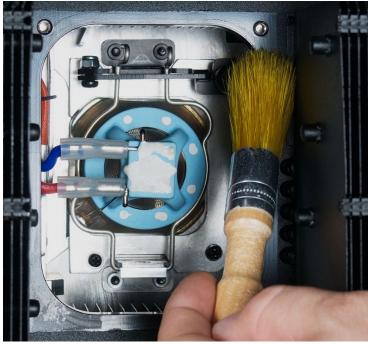




9. Swing the lamp retaining clip out, then carefully remove the lamp.

WARNING! LAMP MAY BE HOT. USE CAUTION WHEN TOUCHING LAMP WITH BARE HANDS.





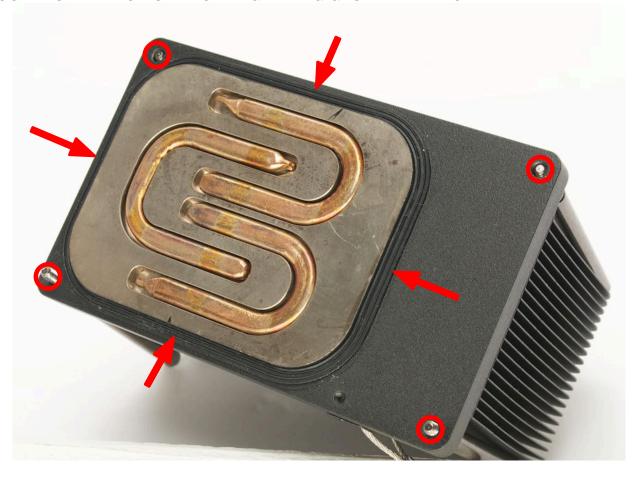
10. Carefully install the new lamp then follow the removal instruction steps in reverse order. NOTE: Brush away any debris using a nonabrasive brush before replacing the heatsink.



CAREFULLY REMOVE ANY DEBRIS FOUND ON GASKET AND SCREW HOLES OF THE HEATSINK MODULE USING A NONABRASIVE BRUSH BEFORE INSTALLING!

CAREFULLY INSPECT HEATSINK GASKET FOR SIGNS OF WEAR SUCH AS CRACKING OR HARDENING, DEFORMITIES, OR ALIGNMENT ISSUES BEFORE INSTALLING!

ITEMS ABOVE CAN IMPEDE THE IP65 INTEGRITY AND/OR CAUSE INTERNAL DAMAGE. CONTACT ELATION SERVICE REGARDING GASKET REPLACEMENT IF NEEDED.



### TORQUE SETTINGS FOR SCREWS



HEATSINK MODULE SCREWS MUST BE TIGHTENED WITH A TORQUE WRENCH.



The (4x) hex-head screws holding the heatsink module MUST be tightened with a torque wrench. (not included) TORQUE SETTING = 11 lbf-in. (12.7kgf-cm) \*

\* Ibf-in = Pound Force Inches | kgf-cm = Kilogram Force Centimeters



CAUTION! DO NOT OVER TORQUE SCREWS AS THIS CAN CAUSE LEAKAGE ISSUES!

### IP TESTING



TO CONFIRM THE IP65 INTEGRITY AFTER A LAMP REPLACEMENT, TEST FIXTURE USING THE ELATION IP TESTER. CONTACT ELATION SERVICE FOR MORE DETAILS.



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

IP TESTING PARAMETERS				
Test	Minimum Pressure	Maximum Pressure	Steady/Hold Time	
Vacuum	-4.35 psi (-30.00 Kpa)	-5.08 psi (-35.00 Kpa)	10 sec	
Pressure	3.62 psi (25.00 Kpa)	4.35 psi (30.00 Kpa)	10 sec	



**WARNING! GOBO REPLACEMENT SHOULD ONLY BE DONE BE A TRAINED TECHNICIAN.**1. Turn OFF power and allow approximately 60 minutes for the fixture to cool down.





2. Place the head in an upright vertical position and engage both the PAN and TILT locks for added stability while replacing the gobo.





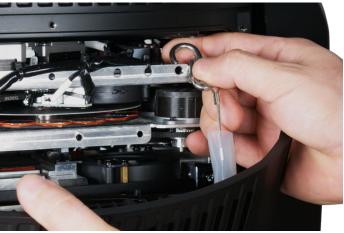
3. Remove (12x) 3mm hex-head screws (6x per panel) to remove both center panels.





4. Unclip the panel safety cable one side of the head.





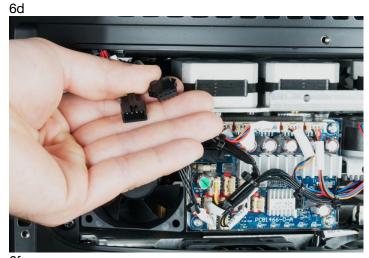
5. Unclip the panel safety cable on the opposite side of the head.

6. Cut the plastic cable-ties holding wires and disconnect connectors attached to the effect module.







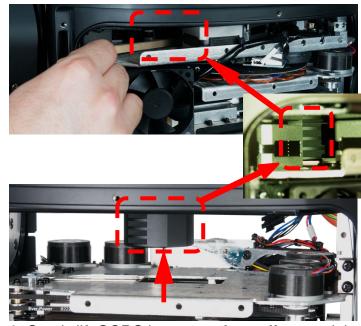












7. Remove (2x) #2 Philips screws securing effect module. 8. Gently lift GOBO lens away from effect module.



9. Carefully remove the effect module from fixture.



10. Place the effect module on firm clean surface and locate GOBO to replace.



11. Carefully lift the GOBO Holder up and out from the GOBO wheel using small needle nose plyers.



CAUTION! DO NOT SCRATCH GOBO AND HOLDER WHEN REPLACING!







12. Carefully remove retaining spring.

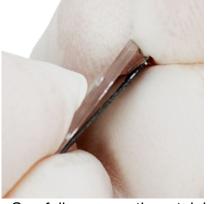
CAUTION! DO NOT SCRATCH GOBO OR GOBO HOLDER!







13. Carefully separate the GOBO disc from the GOBO Holder.







14. Carefully remove the retaining ring washer attached to the GOBO.

SAVE RETAINING RING WASHER FOR USE WITH THE NEW REPLACEMENT GOBO! RETAINING RING MUST BE USED IN ORDER TO PREVENT GOBO BURNING!

15. Carefully replace the GOBO and GOBO Holder following the instruction steps in reverse order.

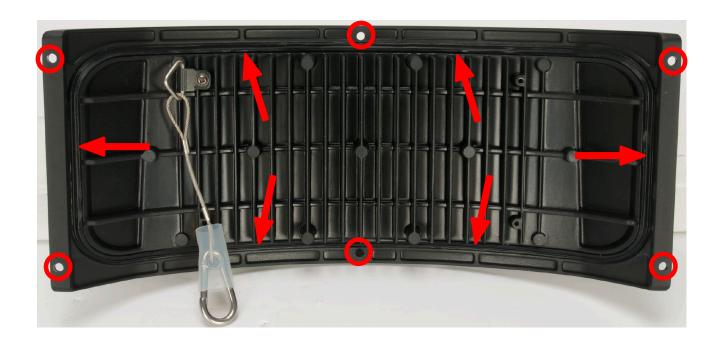
NOTE: Brush away any debris using a nonabrasive brush before installing the effect module.

# GOBO INSTALLATION GASKET INSPECTION

CAREFULLY REMOVE ANY DEBRIS FOUND ON GASKET AND SCREW HOLES OF BOTH CENTER PANELS USING A NONABRASIVE BRUSH BEFORE INSTALLING!

CAREFULLY INSPECT GASKETS FOR SIGNS OF WEAR SUCH AS CRACKING OR HARDENING, DEFORMITIES, OR ALIGNMENT ISSUES BEFORE INSTALLING!

ITEMS ABOVE CAN IMPEDE THE IP65 INTEGRITY AND/OR CAUSE INTERNAL DAMAGE. CONTACT ELATION SERVICE REGARDING GASKET REPLACEMENT IF NEEDED.



TORQUE SETTINGS FOR SCREWS

PANEL SCREWS MUST BE TIGHTENED WITH A TORQUE WRENCH.



The (12x) hex-head screws holding the panels MUST be tightened with a torque wrench. (not included) TORQUE SETTING = 11 lbf-in. (12.7kgf-cm) \*

\* lbf-in = Pound Force Inches | kgf-cm = Kilogram Force Centimeters

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

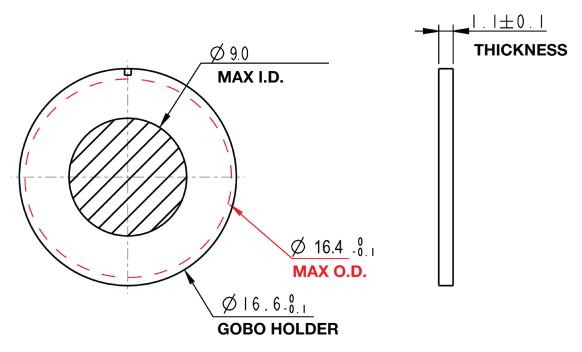


### **ROTATING GOBO SPECIFICATIONS**

### \* \* \* IMPORTANT NOTICE REGARDING CUSTOM GOBOS \* \* \*

Due to the extreme high temperature optical system, which can reach up to 842°F (450°C), special BOROFLOAT glass material and design requirements are required. Due to varying gobo manufacturing processes and tolerances, it is highly recommended to provide a gobo sample from the fixture to the custom gobo vendor for accurate sizing. Extended testing of custom gobo designs is highly recommended prior to using.

### PLEASE CONTACT ELATION CUSTOMER SUPPORT FOR FURTHER INFORMATION



O.D. (Max. Outer Diameter)	ф16.4mm	
I.D. (Max. Image Diameter)	ф9mm	
Gobo Holder Diameter	ф16.6mm	
Thickness	1.1mm±0.1mm	
Material	BOROFLOAT GLASS	

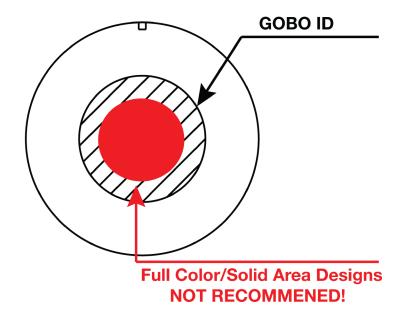
### **CUSTOM GOBO DESIGN GUIDELINES**

### \* \* \* IMPORTANT NOTICE REGARDING CUSTOM GOBO DESIGNS\* \* \*

Full Color / Solid Area custom gobo designs are **NOT RECOMMENDED** due to the extreme high temperature optical system which can reach up to **842°F (450°C)**.

Custom gobo designs as illustrated below can burn during extended use periods.

### PLEASE CONTACT ELATION CUSTOMER SUPPORT FOR FURTHER INFORMATION





### FLAMMABLE MATERIAL WARNING

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



# ELECTRICAL CONNECTIONS

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



MINIMUM DISTANCE TO OBJECTS/SURFACES
MUST BE 40 FEET (12 METERS)



MAXIMUM TEMPERATURE OF EXTERNAL SURFACE

212° F (100°C)

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

Fixture MUST be installed following all local, national, and country commercial electrical and construction codes and regulations. Before rigging/mounting 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 fixture installation must always be secured with a secondary safety attachment, such as an appropriately rated safety cable that meets all local, national, and country codes and regulations.

Fixture ambient operating temperature range is -4° to 113°F. (-20° to 45°C)

Do not use this fixture outside this temperature range.

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

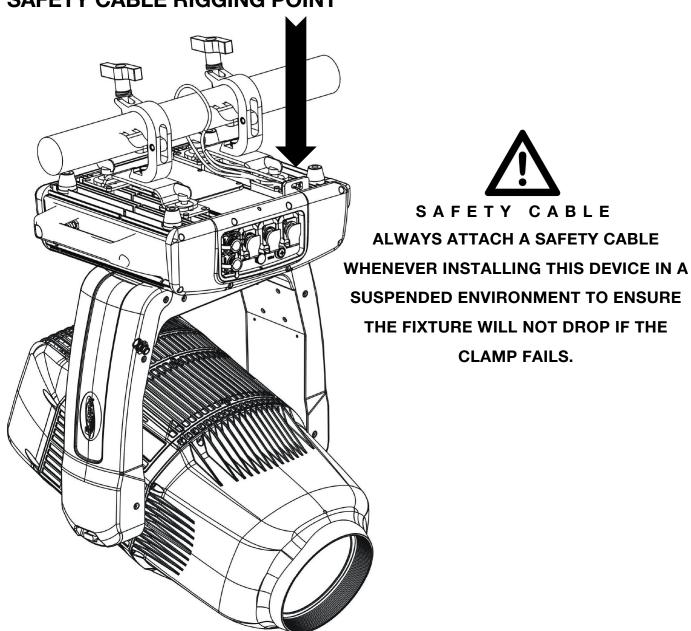
NEVER stand directly below the fixture when rigging, removing, or servicing.

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

### **CLAMP INSTALLATION**

The fixture can be attached to a metal truss/structure using. When mounting this fixture to truss be sure to secure (2) appropriately rated clamps (not included) to the (2) Omega Brackets (included) Be sure to attach the Safety Cable (included) to the fixture using the safety cable rigging point integrated into the bottom of the fixture. (See image below)

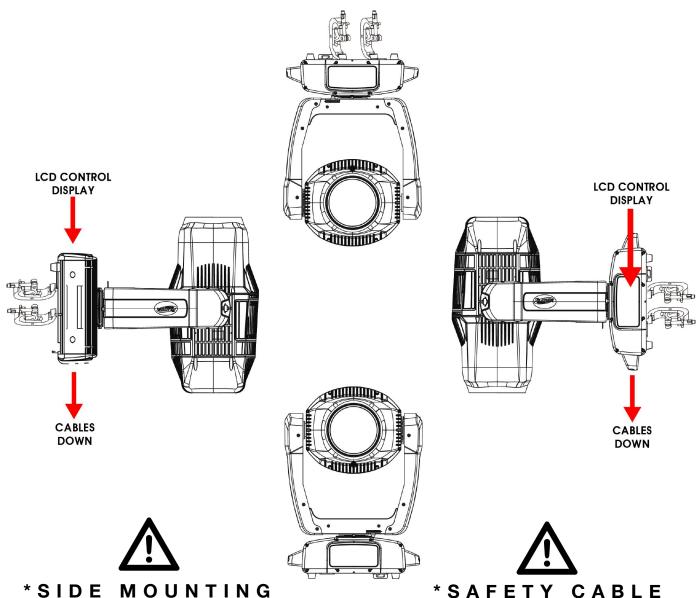
### SAFETY CABLE RIGGING POINT



### **OVERHEAD RIGGING**

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 is fully operational in the specific mounting positions illustrated below.



\*SIDE MOUNTING

TO MAINTAIN IP65 RATING INTEGRITY, FIXTURE MUST BE INSTALLED WITH CABLES FACING DOWN TOWARDS THE GROUND AT ALL TIMES. WATER MUST EASILY RUN OFF AND NOT COLLECT AROUND CABLE CONNECTIONS.

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

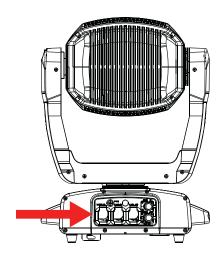
### **CONNECTIONS**



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



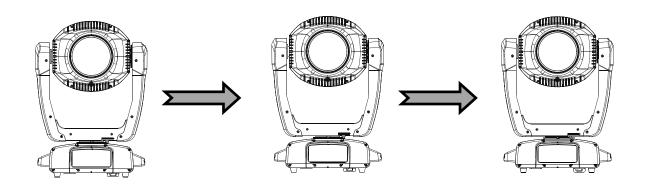
TO MAINTAIN IP65 RATING INTEGRITY, AND PREVENT WATER FROM ENTERING THE FIXTURE, ALL UNUSED CONNECTION RUBBER CAPS MUST BE SEALED.



### **INCLUDED RJ45 DATA CABLE**



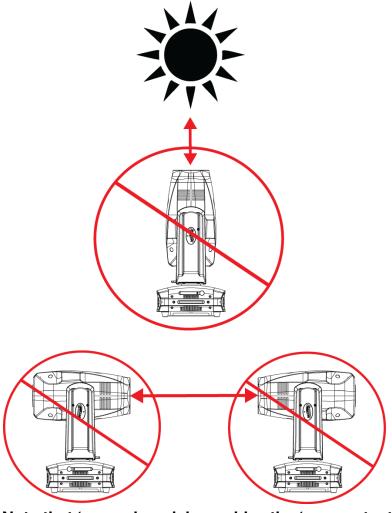
THE INCLUDED RJ45 DATA CABLE IS FOR FIXTURE-TO-FIXTURE INTERCONNECT ONLY! THE RJ45 CABLE CONNECTORS MAY NOT BE COMPATIBLE WITH OTHER RJ45/ETHERCON TYPE CONNECTORS.



# 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 on 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.

#### SUN PROTECTION MODE/HIBERNATION MODE

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

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

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

### Note that 'manual mode' overrides the 'sun-protection mode'.

The hibernation function is an existing feature that puts the unit into a 'sleep state' to save power (this is a state where only the electronics remain on, and all other functions are turned off, functions such as motors lamps etc). This state is automatically activated when no DMX signal is present for the set time (1-99min or off).

# REMOTE DEVICE MANAGEMENT (RDM)

NOTE: In order for RDM to work properly, RDM enabled equipment must be used through-out 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 stan-dard for lighting, allowing the DMX systems of the fixtures to be modified and monitored remotely. This protocol is ideal for instances in which a unit is installed in a location that is not easily accessible.

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

### FIXTURE RDM INFORMATION:

Device Model ID
1434 (0x59A)

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

The following parameters are accessible in RDM on this device:

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

### SYSTEM MENU

The fixture includes an easy to navigate system menu control panel display where all necessary setting adjustments are made. (See image below) 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 60 seconds from the last button press.



# **SYSTEM MENU**

MAIN MENU	SUB MENU	<b>OPTIONS / VALUES</b>	(Default Settings in <b>BOLD</b> )	DESCRIPTION
FUNCTION	Set Dmx Address	A001~AXXX		DMX Address Setting
	Dmx Value	ALL		DMX Value Display
	Secondary Mode	Secondary1, Secondary	y2, Secondary3	Secondary Setting
	Auto Program	Primary / Alone		Auto Program
INFORMATION	Time Information	Current Time	XXXX (Hours)	Fixture Run Time From Power ON
		Total Run Time	XXXX (Hours)	Fixture Total Run Time
		Last Run Time	XXXX (Hours)	Fixture Last Run Time
		Lamp Hours	XXXX (Hours)	Lamp Running Time
		Lamp Off Time	XXXX (Hours)	Lamp Off Time
		LastRun Password	Password=038	(PSWD Required)
		Clear Last Run	ON / OFF	Clear Fixture Last Run Time
		LampTime Password	Password=038	(PSWD Required)
		Clean Lamp Time	ON / OFF	Clear Lamp Last Run Time
	Temperature Info	Head Temperature	XXX C° / <b>F</b> °	Temperature in Fixture Head
		LAMP Temperature	XXX C° / <b>F</b> °	Temperature of LAMP
		Base Temperature	XXX C° / <b>F</b> °	Temperature in Fixture Base
	Humidity Info	Base Humidity	XXX%RH	Humidity In Fixture Base
		Head Humidity	XXX%RH	Humidty in Fixture Head
	Ethernet IP	XXX . XXX . XXX	XXX . XXX . XXX	Displays Fixture Ethernet Address
	Fan Info	1U_FAN1		RPM Speeds of Fans
	Encode Info	PAN ENCODE:, TILT EI	NCODE:	
	Software Version	≥VX.X.X		Software Version
	Error Info	Error Record 1 ~ Error I	Record 10	Fixture Last 10 Error Codes
LAMP	Lamp ON/OFF	ON/OFF		Lamp ON/OFF
CONTROL	Automatic ON	ON/OFF		Lamp ON/OFF when Power ON
	Lamp ON via DMX	ON/OFF		Lamp ON via DMX
	Lamp OFF via DMX	ON/OFF		Lamp OFF via DMX
	MaxOnatHumidity	20~100%RH, <b>70%RH</b>		Fixture Restart at Humidity

//AIN MENU	SUB MENU	OPTIONS / VALUES (Default Settings in BOLD)		DESCRIPTION	
	Status Settings	Address via DMX	ON/OFF	Address Via DMX	
		No DMX Status	SunProt/Close/Hold/Auto	Fixture State When NO DMX Signal	
		Pan Reverse	ON/ <b>OFF</b>	Pan Reverse Movement	
		Tilt Reverse	ON/ <b>OFF</b>	Tilt Reverse Movement	
		Pan Degree	630/ <b>540</b>	Pan Degree Select	
		Feedback	ON/OFF	Movement Feedback	
		Movement Speed	High Speed NormalSpeed SlowSpeed	Select Movement Speed	
		FocusZoom Speed	High Speed NormalSpeed		
		Idle Position	ON/OFF	Idle Position Enable	
		Hibernation	OFF, 01M~99M, <b>15M</b>	Stand By Mode	
		FollowSpot Mode	ON/ <b>OFF</b> /Close Menu	Manual Scan Mode (hide menu)	
		Password	Password= <b>050</b>	Service Password	
		Clear Error Info	ON/ <b>OFF</b>	Clear Error Info (PSWD Required)	
	Service Setting	Clear Error code	ON/ <b>OFF</b>	Clear Error Info (PSWD Required)	
ERSONALITY		DFLT Pow. LampOn	ON/ <b>OFF</b>	Set Default Lamp Power State to ON	
ERSONALITY		DFLT Pow. E-Fly On	ON/ <b>OFF</b>	·	
	Display Setting	Shutoff Time	02~60m <b>05m</b>	LCD Display Shut Off Time	
		Display Reverse	AUTO/ON/OFF	LCD Display Reverse 180°	
		Key Lock	ON/OFF	LCD Control Panel Lock Out	
	Temperature C/F	Celsius/ <b>Fahrenheit</b>		Temperature Switch Between C°/ F°	
	Initial Status	PAN=XXX,		Initial Effect Position	
	Select Signal	E-FLY Off		Control via DMX ONLY	
		DMX & E-FLY		Control via DMX and E-FLY	
		E-FLY & OUT		Control via E-FLY and sends DMX Out	
		Art-Net		Control via Art-Net Protocol	
		sACN		Control via sACN Protocol	
	Ethernet IP	XXX.XXX.XXX		Set Fixture IP Address	
	Ether Mask IP	XXX.XXX.XXX		Set Fixture Subnet Mask Address	
	Set Universe	<b>000</b> - 65535		Set ArtNet Universe (Art-Net 4)	
	Set E-FLY Chn	<b>00</b> - 15		Set E-FLY Wireless Channel	
	Dimming Curves	Standard, Linear, Square, Inverse Square, S-Square			
	Reset Default	ON/ <b>OFF</b>	Password= <b>011</b>	Restore Factory Settings (PSWD Required)	

		nout any prior written	notice. tation of the fixture head and Pan/Tilt	settings
MAIN MENU	SUB MENU	<u> </u>	<b>ES</b> (Default Settings in <b>BOLD</b> )	DESCRIPTION
	Reset All			Reset all lights
	Reset Pan&Tilt			Reset single scan
Danat Franctica	Reset Colors			Reset partial color
Reset Function	Reset Gobos			Reset partial pattern
	Reset Shutter			Reset partial strobe
	Reset Others			Reset the rest
	Test Channel	PAN		Channel test
Etteral Aultura	Manual Control	PAN = XXX :		Manual adjustment
Effect Adjust	Calibration	Calibrate Password Pan=XXX :		Data Channel Calibration Password (050)
	User Mode	Basic Mode		Basic Channel Mode (8bit)
		Standard Mode		Standard Channel Mode (16bit)
		Extended Mode		Extended Channel Mode
		User Mode A		User Edit Channel Mode A
Users Mode Set		User Mode B		User Edit Channel Mode B
		User Mode C		User Edit Channel Mode C
	Edit User Mode	Max Channel = XX PAN = CH01 :		Edit User Mode A, B, C
	Select Program	Auto Pro Part 2 = Pr	rogram 1 ~ 10 Program 1 rogram 1 ~ 10 Program 1 rogram 1 ~ 10 Program 1	Select Automated program
	Edit Program 1	Program 1	Program Test Step 01=SCxxx	Test Program Program Start Scene
Edit Program	15	Program 10	Step 64=SCxxx	Program End Scene
		Edit Scene 001	Pan, Tilt, Fade Time—	Manually Operate Scene Input Manually modify fade time
		Edit Scene 250	Scene Time— Input By Out	Manually modify scene time External console scene input
	Rec. Conroller	XX~XX		Automatically record 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 1** on the controller to **(7)**.
- 3. Set the DMX value of **Channel 2** on the controller to **(7)** or **(8)**. When set to **(7)**, the DMX address can be set between **(1)** and **(255)**. When set to **(8)**, the DMX address can be set between **(256)** and **(511)**.
- 4. Using **Channel 3** on the controller set the desired DMX address of the fixture.
  - **Example 1:** If the desired DMX address is **57**, set **Channel 1** to a value of **(7)**, set **Channel 2** to a value of **(7)**, and then set **Channel 3** to a value of **(57)**.
  - **Example 2:** If the desired DMX address is **420**, set **Channel 1** to a value of **(7)**, set **Channel 2** to a value of **(8)**, and then set **Channel 3** to a value of **(164)**. (256+164=420)
- 5. After setting **Channel 3** to the desired DMX address value, wait for approximately 20 seconds (some fixtures may require a longer time) for the fixture to complete the address reset function.

# PERSONALITY - Reset Default (011)

## 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.

## **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.

# E-FLY WIRELESS DMX SET UP



# BEFORE SETTING THE WIRELESS CHANNEL ON ANY E-FLY FIXTURE, MAKE SURE THE SOURCE E-FLY WIRELESS DMX TRANSCEIVER DEVICE IS OFF. TO CONTROL FIXTURE WITH E-FLY WIRELESS DMX SIGNAL

- 1. Ensure the source **E-FLY** wireless DMX Transceiver device is powered **OFF**.
- 2. Power **ON** fixture and from the LCD control panel select **DMX & E-FLY** or **E-FLY & OUT** in the **Select Signal** sub menu of the **PERSONALITY** main system menu.
- 3. From the LCD control panel set the **E-FLY** wireless channel to the same wireless channel of the source **E-FLY** DMX Transceiver device in the **Set E-FLY** Chn sub menu of the **PERSONALITY** main system menu.

**NOTE:** Erratic fixture movement may occur if other **E-FLY** wireless DMX products are in use in the same area and are using the same **E-FLY** wireless channel. The fixture may immediately start to respond to the DMX wireless signal from another **E-FLY** wireless DMX Transceiver immediately when **E-FLY** is enabled. Make sure to know what **E-FLY** wireless channels are being used in the area where the fixture is being installed.

## ELATION E-FLY WIRELESS TRANSCEIVER only has 0-14 wireless channels, NO CH 15.

- 4. Set fixture DMX address in the **Set Dmx Address** sub menu of the **FUNCTION** main system menu.
- The E-FLY signal Indicator on the fixture LCD control display will illuminate GREEN if a successful wireless DMX
  connection has been made or illuminate RED for NO connection. If no connection is made, repeat steps 1-4
  above.
- 6. Repeat this process for all **E-FLY** compatible fixtures in the E-FLY wireless network, making sure all fixtures are assigned the same **E-FLY** wireless channel.
- 7. After all fixtures in the **E-FLY** wireless network have been set to the same **E-FLY** wireless channel and powered ON, now power ON the source **E-FLY** DMX Transceiver device.
- 8. Test all fixtures connected to the E-FLY wireless network to confirm proper functionality.

## **WIRELESS E-FLY INSTALLATION LOCATION GUIDELINES**

Wireless DMX signal can penetrate walls, glass, metal, and most objects. However, there are many factors that can affect and/or interrupt the wireless DMX signal, one of which is people. Therefore, it is highly recommended to position the wireless antenna a minimum of 9.8 ft. (3m) above audiences and/or above ground level. Careful planning and testing of the selected installation location is critical to ensure optimum and reliable wireless DMX operation.

9.8 ft (3m)
Above Ground

# DMX CHANNEL FUNCTIONS AND VALUES

DMX Channel Values / Functions (26, 24, 37 DMX Channels)

Supports Software Versions: ≥ 1.8.0

Features subject to change without any prior written notice.

\*Rotation direction (Clockwise or Counterclockwise) of effects depends on orientation of the fixture head and Pan/Tilt settings.

MODE / CHANNEL		,	reflects depends on orientation of the fixture head and Pan/Tilt settings.	
BASIC	STAND	EXTEND	VALUE	FUNCTION
4	4	4		PAN Movement 8bit:
1	1	1	0-255	Pan Movement
	_			Pan Fine 16bit
	2	2	0-255	Fine control of Pan movement
0	0	0		TILT Movement 8bit :
2	3	3	0-255	Tilt Movement
	4	4		Tilt Fine 16bit
	4	4	0-255	Fine control of Tilt movement
3	5	5		Cyan Color:
3	3	3	0-255	Cyan (0-white, 255-100% Cyan)
		6		Cyan Color Fine:
		U	0-255	Cyan Fine
4	6	7		Magenta Color:
4	U	,	0-255	Magenta (0-white, 255-100% magenta)
		8		Magenta Color Fine:
		0	0-255	Magenta Fine
5	7	9		Yellow Color:
<u> </u>	,	J	0-255	Yellow (0-white, 255-100% Yellow)
		10		Yellow Color Fine:
			0-255	Yellow Fine
6	8	11		CTO Color:
0	0		0-255	CTO (0-white, 255-100% CTO)
		12		CTO Color Fine:
		12	0-255	CTO Fine
				Color Wheel:
			0-15	Open / white
			16-23	Red
			24-31	Blue
			32-39	Green
			40-47	Yellow
			48-55	Purple
			56-63	Cyan
			64-71	Orange
7	9	13	72-79	Pink
			80-87	Light Green
			88-95	Light Yellow
			96-103	Magenta
			104-111	CTB
			112-119	СТО
			120-127	V67
			128-189	Clock-wise scroll from fast to slow
			190-193	No rotation
			194-255	Counter clock-wise scroll from slow to fast

MODE /	MODE / CHANNEL		V/ALLIE	FUNCTION		
BASIC	STAND	EXTEND	VALUE	FUNCTION		
		14		Color Wheel Fine:		
		14	0-255	Color Wheel colour change to any position Fine		
				Rotating gobos, cont. rotation:		
			0-10	Beam open		
			11-21	Spot open		
			22-31	Rot. gobo 1		
			32-41	Rot. gobo 2		
			42-51	Rot. gobo 3		
			52-61	Rot. gobo 4		
			62-71	Rot. gobo 5		
			72-81	Rot. gobo 6		
			82-91	Rot. gobo 7		
8	10	15	92-101	Rot. gobo 8		
8	10	15	102-112	Rot. gobo 2 shake		
			113-123	Rot. gobo 3 shake		
			124-134	Rot. gobo 4 shake		
			135-145	Rot. gobo 5 shake		
			146-156	Rot. gobo 6 shake		
			157-167	Rot. gobo 7 shake		
			168-178	Rot. gobo 8 shake		
1			179-189	Rot. gobo 9 shake		
			190-221	Clock-wise scroll from fast to slow		
			222-223	Reserved		
			224-255	Counter clock-wise scroll from slow to fast		
				Rotating gobo index, rotating gobo rotation:		
		16	0-127	Gobo indexing		
9	11		128-189	Clock-wise rotation from fast to slow		
			190-193	No rotation		
			194-255	Counter clock-wise rotation from slow to fast		
		17		Rotating gobo indexing Fine		
		17	0-255	Fine indexing		

Table   Stand   Stan	МО	DE / CHA	NNEL	\/ALLIE	FUNCTION
10	BASIC	STAND	EXTEND	VALUE	FUNCTION
8-14   Gobo 1     15-21   Gobo 2     22-28   Gobo 3     29-35   Gobo 4     36-42   Gobo 5     43-49   Gobo 6     50-56   Gobo 7     57-63   Gobo 8     64-70   Gobo 9     71-77   Gobo 10     78-84   Gobo 12     92-98   Gobo 13     99-105   Gobo 14     106-111   Gobo 1 shake slow to fast     112-117   Gobo 2 shake slow to fast     112-118   13-123   Gobo 3 shake slow to fast     130-135   Gobo 5 shake slow to fast     142-147   Gobo 6 shake slow to fast     142-147   Gobo 7 shake slow to fast     142-147   Gobo 8 shake slow to fast     142-147   Gobo 9 shake slow to fast     142-147   Gobo 1 shake slow to fast     154-159   Gobo 9 shake slow to fast     160-165   Gobo 10 shake slow to fast     160-165   Gobo 10 shake slow to fast     178-183   Gobo 13 shake slow to fast     178-184   Gobo 14 shake slow to fast     178-185   Gobo 15 shake slow to fast     178-186   Gobo 10 shake slow to fast     178-187   Gobo 13 shake slow to fast     178-188   Gobo 13 shake slow to fast     178-189   Gobo 14 shake slow to fast     178-180   Gobo 13 shake slow to fast     178-181   Gobo 15 shake slow to fast     178-183   Gobo 15 shake slow to fast     178-184   Gobo 15 shake slow to fast     178-185   Gobo 15 shake slow to fast     178-186   Gobo 15 shake slow to fast     178-187   Gobo 15 shake slow to fast     178-188   Gobo 15 shake slow to fast     178-189   Gobo 15 shake slow to fast     178-180   Gobo 15 shake slow to fast     178-181   Gobo 15 shake slow to fast     178-185   Gobo 15 shake slow to fast     178-186   Gobo 15 shake slow to fast     178-187   Gobo 15 shake slow to fast     178-188   Gobo 15 shake slow to fast     178-189   Gobo 15 shake slow to fast     178-180   Gobo 15 shake slow to fast     189-221   Clock-wise scroll from slow to fast     189-221   Clock-wise scro					Fixed Gobos:
15-21 Gobo 2 22-28 Gobo 3 29-35 Gobo 4 36-42 Gobo 5 43-49 Gobo 6 50-56 Gobo 7 57-63 Gobo 8 64-70 Gobo 9 71-77 Gobo 10 78-84 Gobo 11 35-91 Gobo 12 92-98 Gobo 13 99-105 Gobo 14 112-117 Gobo 1 shake slow to fast 112-117 Gobo 2 shake slow to fast 112-117 Gobo 3 shake slow to fast 130-135 Gobo 5 shake slow to fast 130-135 Gobo 5 shake slow to fast 130-135 Gobo 5 shake slow to fast 142-147 Gobo 6 shake slow to fast 142-147 Gobo 7 shake slow to fast 142-147 Gobo 8 shake slow to fast 166-171 Gobo 10 shake slow to fast 166-171 Gobo 11 shake slow to fast 172-177 Gobo 12 shake slow to fast 184-189 Gobo 10 shake slow to fast 178-183 Gobo 10 shake slow to fast 178-183 Gobo 11 shake slow to fast 178-183 Gobo 12 shake slow to fast 178-183 Gobo 13 shake slow to fast 184-189 Gobo 13 shake slow to fast 184-189 Gobo 13 shake slow to fast 184-189 Gobo 13 shake slow to fast 180-221 Clock-wise scroll from fast to slow 222-223 No rotation 224-255 Counter clock-wise scroll from slow to fast Fixed gobo indexing Fine				0-7	Open/hole
10   12   18   22-28   Gobo 3				8-14	Gobo 1
10   12   18   18   19   29-35   Gobo 4   36-42   Gobo 5   43-49   Gobo 6   50-56   Gobo 7   57-63   Gobo 8   64-70   Gobo 9   71-77   Gobo 10   78-84   Gobo 11   38-91   Gobo 12   92-98   Gobo 13   99-105   Gobo 14   112-117   Gobo 2 shake slow to fast   112-117   Gobo 2 shake slow to fast   112-117   Gobo 2 shake slow to fast   130-135   Gobo 3 shake slow to fast   130-135   Gobo 4 shake slow to fast   130-135   Gobo 5 shake slow to fast   142-147   Gobo 6 shake slow to fast   142-147   Gobo 6 shake slow to fast   142-147   Gobo 7 shake slow to fast   142-147   Gobo 8 shake slow to fast   142-149   Gobo 9 shake slow to fast   142-147   Gobo 19 shake slow to fast   142-147   Gobo 19 shake slow to fast   160-165   Gobo 10 shake slow to fast   160-165   Gobo 10 shake slow to fast   160-165   Gobo 10 shake slow to fast   172-177   Gobo 12 shake slow to fast   178-183   Gobo 13 shake slow to fast   178-183   Gobo 13 shake slow to fast   184-189   Gobo 14 shake slow to fast   184-				15-21	Gobo 2
36-42   Gobo 5     43-49   Gobo 6     50-56   Gobo 7     57-63   Gobo 8     64-70   Gobo 9     71-77   Gobo 10     78-84   Gobo 11     85-91   Gobo 12     92-98   Gobo 13     99-105   Gobo 14     112-117   Gobo 2 shake slow to fast     118-123   Gobo 3 shake slow to fast     124-129   Gobo 4 shake slow to fast     130-135   Gobo 5 shake slow to fast     136-141   Gobo 6 shake slow to fast     142-147   Gobo 7 shake slow to fast     148-153   Gobo 8 shake slow to fast     148-154   Gobo 8 shake slow to fast     148-155   Gobo 9 shake slow to fast     148-156   Gobo 10 shake slow to fast     160-165   Gobo 10 shake slow to fast     160-165   Gobo 11 shake slow to fast     160-165   Gobo 10 shake slow to fast     160-165   Gobo 10 shake slow to fast     160-17   Gobo 11 shake slow to fast     172-177   Gobo 12 shake slow to fast     178-183   Gobo 13 shake slow to fast     184-189   Gobo 14 shake slow to fast     190-221   Clock-wise scroll from fast to slow     222-223   No rotation     Fixed gobo indexing Fine				22-28	Gobo 3
43-49   Gobo 6				29-35	Gobo 4
10   12   18   18   18   18   19   19   19   19				36-42	Gobo 5
10   12   18   18   18   19   19   19   19   19				43-49	Gobo 6
10   12   18   18   18   19   19   19   19   19				50-56	Gobo 7
71-77 Gobo 10 78-84 Gobo 11 85-91 Gobo 12 92-98 Gobo 13 99-105 Gobo 14 106-111 Gobo 1 shake slow to fast 112-117 Gobo 2 shake slow to fast 118-123 Gobo 3 shake slow to fast 124-129 Gobo 4 shake slow to fast 130-135 Gobo 5 shake slow to fast 136-141 Gobo 6 shake slow to fast 142-147 Gobo 7 shake slow to fast 142-153 Gobo 8 shake slow to fast 160-165 Gobo 10 shake slow to fast 160-165 Gobo 10 shake slow to fast 172-177 Gobo 12 shake slow to fast 172-177 Gobo 12 shake slow to fast 184-189 Gobo 14 shake slow to fast 184-189 Gobo 14 shake slow to fast 190-221 Clock-wise scroll from fast to slow 222-223 No rotation 224-255 Counter clock-wise scroll from slow to fast Fixed gobo indexing Fine				57-63	Gobo 8
10   12   18     18     36-91     Gobo 12     92-98   Gobo 13     99-105   Gobo 14     106-111   Gobo 1 shake slow to fast   112-117   Gobo 2 shake slow to fast   112-117   Gobo 3 shake slow to fast   124-129   Gobo 4 shake slow to fast   130-135   Gobo 5 shake slow to fast   130-135   Gobo 5 shake slow to fast   136-141   Gobo 6 shake slow to fast   142-147   Gobo 7 shake slow to fast   142-147   Gobo 7 shake slow to fast   148-153   Gobo 8 shake slow to fast   154-159   Gobo 9 shake slow to fast   160-165   Gobo 10 shake slow to fast   160-165   Gobo 10 shake slow to fast   166-171   Gobo 11 shake slow to fast   172-177   Gobo 12 shake slow to fast   184-189   Gobo 13 shake slow to fast   184-189   Gobo 14 shake slow to fast   190-221   Clock-wise scroll from fast to slow   222-223   No rotation   224-255   Counter clock-wise scroll from slow to fast   Fixed gobo indexing Fine				64-70	Gobo 9
10   12   18   106-111   Gobo 1 shake slow to fast				71-77	Gobo 10
10   12   18   18   106-111   Gobo 1 shake slow to fast   112-117   Gobo 2 shake slow to fast   118-123   Gobo 3 shake slow to fast   124-129   Gobo 4 shake slow to fast   130-135   Gobo 5 shake slow to fast   136-141   Gobo 6 shake slow to fast   142-147   Gobo 7 shake slow to fast   148-153   Gobo 8 shake slow to fast   148-153   Gobo 8 shake slow to fast   154-159   Gobo 9 shake slow to fast   160-165   Gobo 10 shake slow to fast   166-171   Gobo 11 shake slow to fast   172-177   Gobo 12 shake slow to fast   178-183   Gobo 13 shake slow to fast   184-189   Gobo 14 shake slow to fast   184-189   Gobo 14 shake slow to fast   190-221   Clock-wise scroll from fast to slow   222-223   No rotation   224-255   Counter clock-wise scroll from slow to fast   Fixed gobo indexing Fine   190-221   Fixed gobo indexing Fixe				78-84	Gobo 11
10				85-91	
10				92-98	Gobo 13
112-117 Gobo 2 shake slow to fast  118-123 Gobo 3 shake slow to fast  124-129 Gobo 4 shake slow to fast  130-135 Gobo 5 shake slow to fast  136-141 Gobo 6 shake slow to fast  142-147 Gobo 7 shake slow to fast  148-153 Gobo 8 shake slow to fast  154-159 Gobo 9 shake slow to fast  160-165 Gobo 10 shake slow to fast  166-171 Gobo 11 shake slow to fast  172-177 Gobo 12 shake slow to fast  178-183 Gobo 13 shake slow to fast  184-189 Gobo 14 shake slow to fast  190-221 Clock-wise scroll from fast to slow  222-223 No rotation  224-255 Counter clock-wise scroll from slow to fast  Fixed gobo indexing Fine				99-105	Gobo 14
118-123   Gobo 3 shake slow to fast     124-129   Gobo 4 shake slow to fast     130-135   Gobo 5 shake slow to fast     136-141   Gobo 6 shake slow to fast     142-147   Gobo 7 shake slow to fast     148-153   Gobo 8 shake slow to fast     154-159   Gobo 9 shake slow to fast     160-165   Gobo 10 shake slow to fast     166-171   Gobo 11 shake slow to fast     172-177   Gobo 12 shake slow to fast     178-183   Gobo 13 shake slow to fast     184-189   Gobo 14 shake slow to fast     190-221   Clock-wise scroll from fast to slow     222-223   No rotation     224-255   Counter clock-wise scroll from slow to fast     Fixed gobo indexing Fine	10	12	18	106-111	Gobo 1 shake slow to fast
124-129 Gobo 4 shake slow to fast 130-135 Gobo 5 shake slow to fast 136-141 Gobo 6 shake slow to fast 142-147 Gobo 7 shake slow to fast 148-153 Gobo 8 shake slow to fast 154-159 Gobo 9 shake slow to fast 160-165 Gobo 10 shake slow to fast 166-171 Gobo 11 shake slow to fast 172-177 Gobo 12 shake slow to fast 178-183 Gobo 13 shake slow to fast 184-189 Gobo 14 shake slow to fast 190-221 Clock-wise scroll from fast to slow 222-223 No rotation 224-255 Counter clock-wise scroll from slow to fast Fixed gobo indexing Fine					Gobo 2 shake slow to fast
130-135   Gobo 5 shake slow to fast     136-141   Gobo 6 shake slow to fast     142-147   Gobo 7 shake slow to fast     148-153   Gobo 8 shake slow to fast     154-159   Gobo 9 shake slow to fast     160-165   Gobo 10 shake slow to fast     166-171   Gobo 11 shake slow to fast     172-177   Gobo 12 shake slow to fast     178-183   Gobo 13 shake slow to fast     184-189   Gobo 14 shake slow to fast     190-221   Clock-wise scroll from fast to slow     222-223   No rotation     224-255   Counter clock-wise scroll from slow to fast     Fixed gobo indexing Fine					Gobo 3 shake slow to fast
136-141 Gobo 6 shake slow to fast 142-147 Gobo 7 shake slow to fast 148-153 Gobo 8 shake slow to fast 154-159 Gobo 9 shake slow to fast 160-165 Gobo 10 shake slow to fast 166-171 Gobo 11 shake slow to fast 172-177 Gobo 12 shake slow to fast 178-183 Gobo 13 shake slow to fast 184-189 Gobo 14 shake slow to fast 180-221 Clock-wise scroll from fast to slow 222-223 No rotation 224-255 Counter clock-wise scroll from slow to fast Fixed gobo indexing Fine					Gobo 4 shake slow to fast
142-147 Gobo 7 shake slow to fast 148-153 Gobo 8 shake slow to fast 154-159 Gobo 9 shake slow to fast 160-165 Gobo 10 shake slow to fast 166-171 Gobo 11 shake slow to fast 172-177 Gobo 12 shake slow to fast 178-183 Gobo 13 shake slow to fast 184-189 Gobo 14 shake slow to fast 190-221 Clock-wise scroll from fast to slow 222-223 No rotation 224-255 Counter clock-wise scroll from slow to fast Fixed gobo indexing Fine				130-135	Gobo 5 shake slow to fast
148-153 Gobo 8 shake slow to fast 154-159 Gobo 9 shake slow to fast 160-165 Gobo 10 shake slow to fast 166-171 Gobo 11 shake slow to fast 172-177 Gobo 12 shake slow to fast 178-183 Gobo 13 shake slow to fast 184-189 Gobo 14 shake slow to fast 190-221 Clock-wise scroll from fast to slow 222-223 No rotation 224-255 Counter clock-wise scroll from slow to fast Fixed gobo indexing Fine					
154-159   Gobo 9 shake slow to fast				142-147	Gobo 7 shake slow to fast
160-165 Gobo 10 shake slow to fast 166-171 Gobo 11 shake slow to fast 172-177 Gobo 12 shake slow to fast 178-183 Gobo 13 shake slow to fast 184-189 Gobo 14 shake slow to fast 190-221 Clock-wise scroll from fast to slow 222-223 No rotation 224-255 Counter clock-wise scroll from slow to fast Fixed gobo indexing Fine					Gobo 8 shake slow to fast
166-171   Gobo 11 shake slow to fast     172-177   Gobo 12 shake slow to fast     178-183   Gobo 13 shake slow to fast     184-189   Gobo 14 shake slow to fast     190-221   Clock-wise scroll from fast to slow     222-223   No rotation     224-255   Counter clock-wise scroll from slow to fast     Fixed gobo indexing Fine		154-159 Gobo 9 shake slow to fast	Gobo 9 shake slow to fast		
172-177 Gobo 12 shake slow to fast 178-183 Gobo 13 shake slow to fast 184-189 Gobo 14 shake slow to fast 190-221 Clock-wise scroll from fast to slow 222-223 No rotation 224-255 Counter clock-wise scroll from slow to fast  Fixed gobo indexing Fine					
178-183 Gobo 13 shake slow to fast 184-189 Gobo 14 shake slow to fast 190-221 Clock-wise scroll from fast to slow 222-223 No rotation 224-255 Counter clock-wise scroll from slow to fast Fixed gobo indexing Fine					Gobo 11 shake slow to fast
184-189 Gobo 14 shake slow to fast 190-221 Clock-wise scroll from fast to slow 222-223 No rotation 224-255 Counter clock-wise scroll from slow to fast Fixed gobo indexing Fine				172-177	
190-221 Clock-wise scroll from fast to slow 222-223 No rotation 224-255 Counter clock-wise scroll from slow to fast Fixed gobo indexing Fine				178-183	Gobo 13 shake slow to fast
222-223 No rotation 224-255 Counter clock-wise scroll from slow to fast Fixed gobo indexing Fine				184-189	Gobo 14 shake slow to fast
224-255 Counter clock-wise scroll from slow to fast Fixed gobo indexing Fine				190-221	Clock-wise scroll from fast to slow
Fixed gobo indexing Fine				222-223	No rotation
				224-255	Counter clock-wise scroll from slow to fast
0-255 Fixed gobo Fine indexing			10		Fixed gobo indexing Fine
			18	0-255	Fixed gobo Fine indexing

МС	MODE / CHANNEL			
BASIC	STAND	EXTEND	VALUE	FUNCTION
				Rotating prism, Prism / Gobo macros:
			0-31	Open position (hole)
			32-64	8 Prism
			65- 94	Line Prism
			95- 127	8/Line Prism
			128-135	Macro 1
			136-143	Macro 2
			144-151	Macro 3
			152-159	Macro 4
			160-167	Macro 5
11	13	20	168-175	Macro 6
			176-183	Macro 7
			184-191	Macro 8
			192-199	Macro 9
			200-207	Macro 10
			208-215	Macro 11
			216-223	Macro 12
			224-231	Macro 13
			232-239	Macro 14
			240-247	Macro 15
			248-255	Macro 16
		1 21		Rotating 8/Line prism:
			0-127	Prism indexing
12	14		128-189	Clock-wise rotation from fast to slow
			190-193	No rotation
			194-255	Counter clock-wise rotation from slow to fast
		22		Rotating 8/Line prism indexing Fine
		22	0-255	Fine indexing
13	15	00		Focus:
2	15	23	0-255	Continuous adjustment from near to far
		24		Focus Fine:
		24	0-255	Continuous adjustment Fine
14	16	25		Zoom:
14		25	0-255	Zoom adjustment from small to big
		26		Zoom Fine:
		20	0-255	Zoom adjustment Fine

МО	MODE / CHANNEL		\/A	FUNCTION	
BASIC	STAND	EXTEND	VALUE	FUNCTION	
				Auto Focus:	
15	17	27	0-50	Auto Focus Off	
15	17	21	51-150	15m	
			151-255	20m	
16	18	28		Auto Focus adjustment:	
10	10	20	0-255	Continuous adjustment	
				Shutter, strobe:	
			0-31	Shutter closed	
			32-63	No function (shutter open)	
			64-95	Strobe effect slow to fast	
17	19	29	96-127	No function (shutter open)	
			128-159	Pulse-effect in sequences	
			160-191	No function (shutter open)	
			192-223	Random strobe effect slow to fast	
			224-255	No function (shutter open)	
18	20	20 30		Dimmer intensity:	
10	20		0-255	Intensity 0 to 100%	
		31		Fine Dimmer intensity:	
		01	0-255	Dimmer intensity fine	
	21			Frost:	
19		21	21	32	0-127
			128-255	Enable frost	
				wheel Animation :	
	20 22	33	0-7	Close	
20			8-127	Clock-wise scroll from fast to slow	
			128-135	No rotation	
			136-255	Counter clock-wise scroll from slow to fast	
21	23	34		Speed of CMY Speed:	
	21 20	04	0-255	Speed Max —>Min	

	DE / CHA	NNEL	\/A1.11E	ELINCTION
BASIC	STAND	EXTEND	VALUE	FUNCTION
				CMY macros:
			0-31	OFF
			32-39	Macro1
			40-47	Macro2
			48-55	Macro3
			56-63	Macro4
			64-71	Macro5
			72-79	Macro6
			80-87	Macro7
			88-95	Macro8
			96-103	Macro9
			104-111	Macro10
			112-119	Macro11
			120-127	Macro12
22	24	05	128-135	Macro13
22	24	35	136-143	Macro14
			144-151	Macro15
			152-159	Macro16
			160-167	Macro17
			168-175	Macro18
			176-183	Macro19
			184-191	Macro20
			192-199	Macro21
			200-207	Macro22
			208-215	Macro23
			216-223	Macro24
			224-231	Macro25
			232-239	Macro26
			240-247	Macro27
			248-255	Random CMY
				Speed Pan/Tilt movement:
		36	0-225	max to min speed
			226-235	blackout by movement
23	24		236-245	blackout by all wheel changing
20	24		246-248	Sun Protection On
			249-251	Sun Protection Off
			252-253	Idle Position On
			254-255	Idle Position Off

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 "0Er" 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 have 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.



## **BALLAST ERROR NOTE**

IF A BALLAST ERROR MESSAGE APPEARS, TURN THE LAMP OFF FOR 3-5 MINUTES TO RESET THE BALLAST. IF AFTER 5-MINUTES A BALLAST ERROR STILL APPEARS, TURN THE FIXTURE OFF TO RESET THE BALLAST. IF A BALLAST MESSAGE STILL APPEARS, PLEASE CONSULT ELATION CUSTOMER SUPPORT.

Error Codes are subject to change without any prior written notice.

ERROR CODES	DESCRIPTION
PAN Er	The PAN movement is not located in the default position after the reset. This message will appear after a fixture reset if the magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a motor failure (defective motor or a defective motor IC drive on the main PCB). This error may also be displayed if the head/yoke was blocked during a reset function.
TILT Er	The TILT movement is not located in the default position after the reset.  This message will appear after a fixture reset if the magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a motor failure (defective motor or defective motor IC drive on main PCB). This error may also be displayed if the head was blocked during a reset function.
Cyan Wheel Er	The Cyan Color Wheel is not located in the default position after the reset.  This message will appear after the reset of the fixture reset if the magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or defective motor IC drive on main PCB).
Magenta Wheel Er	The Cyan Color Wheel is not located in the default position after the reset. This message will appear after the reset of the fixture reset if the magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or defective motor IC drive on main PCB).
Yellow Wheel Er	The Yellow Color Wheel is not located in the default position after the reset. This message will appear after the reset of the fixture reset if the magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or defective motor IC drive on main PCB).
Color Wheel Er	The Color Wheel is not located in the default position after the reset. This message will appear after the reset of the fixture reset if the magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or defective motor IC drive on main PCB).
CTO Wheel Er	The CTO Color Wheel movement is not located in the default position after the reset. This message will appear after a fixture reset if the gobo wheel's magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or defective motor IC drive on main PCB).
Rotating Gobo Wheel Er	The Rotating Gobo Wheel movement is not located in the default position after the reset. This message will appear after a fixture reset if the gobo wheel's magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or defective motor IC drive on main PCB).

Error Codes are subject to change without any prior written notice.

ERROR CODES	DESCRIPTION
Rotating Gobo Rotation Er	The Rotating Gobo rotation movement is not located in the default position after the reset. This message will appear after a fixture reset if the gobo wheel's magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or defective motor IC drive on main PCB).
xed Gobo Wheel Er	The Fixed Gobo Wheel movement is not located in the default position after the reset. This message will appear after a fixture reset if the gobo wheel's magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or defective motor IC drive on main PCB).
Prism Wheel 1 Er	The Prism Wheel 1movement is not located in the default position after the reset. This message will appear after a fixture reset if the gobo wheel's magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or defective motor IC drive on main PCB).
Prism Rotation Wheel 1 Er	The Prism Wheel 1 rotation movement is not located in the default position after the reset. This message will appear after a fixture reset if the gobo wheel's magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or defective motor IC drive on main PCB).
Prism Wheel 2 Er	The Prism Wheel 2 movement is not located in the default position after the reset. This message will appear after a fixture reset if the gobo wheel's magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or defective motor IC drive on main PCB).
Prism Rotation Wheel 2 Er	The Prism Wheel 2 rotation movement is not located in the default position after the reset. This message will appear after a fixture reset if the gobo wheel's magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or defective motor IC drive on main PCB).
Focus Er	The Focus movement is not located in the default position after the reset. This message will appear after the reset of the fixture reset if the magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or defective motor IC drive on main PCB).
Zoom Er	The Zoom movement is not located in the default position after the reset. This message will appear after a fixture reset if the gobo wheel's magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or defective motor IC drive on main PCB).

Error Codes are subject to change without any prior written notice.

ERROR CODES	DESCRIPTION
Animation Wheel Er	The Animation Wheel movement is not located in the default position after the reset. This message will appear after a fixture reset if the magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a motor failure (defective motor or a defective motor IC drive on the main PCB). This error may also be displayed if the head/yoke was blocked during a reset function.
Dimmer Er	The Dimmer movement is not located in the default position after the reset. This message will appear after a fixture reset if the magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a motor failure (defective motor or defective motor IC drive on main PCB). This error may also be displayed if the head was blocked during a reset function.
Frost Wheel Er	The Frost Wheel is not located in the default position after the reset.  This message will appear after the reset of the fixture reset if the magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or defective motor IC drive on main PCB).
Fan Moving Wheel Er	The Fan Moving Wheel is not located in the default position after the reset. This message will appear after the reset of the fixture reset if the magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or defective motor IC drive on main PCB).
Array Lens Wheel Er	The Array Lens Wheel is not located in the default position after the reset. This message will appear after the reset of the fixture reset if the magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or defective motor IC drive on main PCB).
1U_FanJB1Fault	Error information from JB1 port on 1U01 PCB.
1U_FanJB2Fault	Error information from JB2 port on 1U01 PCB.
3U_FanJB1Fault	Error information from JB1 port on 3U PCB.
3U_FanJB2Fault	Error information from JB2 port on 3U PCB.
4U_FanJB2Fault	Error information from JB2 port on 4U PCB.
5U_FanJB1Fault	Error information from JB1 port on 5U PCB.
6U_FanJB1Fault	Error information from JB1 port on 6U PCB.
7U_FanJB1Fault	Error information from JB1 port on 7U PCB.
7U_FanJB2Fault	Error information from JB2 port on 7U PCB.

ERROR CODES				
Error Codes are subject to change without any prior written notice.				
ERROR CODES	DESCRIPTION			
Accelerometer Err	Accelerometer calibration failure.			
Accelerometer ID Error	Accelerometer fail to read ID information.			
Ballast Fault_1	Lamp over voltage. (See BALLAST ERROR NOTE page 36)			
Ballast Fault_2	Input voltage too high. (See BALLAST ERROR NOTE page 36)			
Ballast Fault_3	Temperature too high. (See BALLAST ERROR NOTE page 36)			
Ballast Fault_4	Asymmetry detected. (See BALLAST ERROR NOTE page 36)			
Ballast Fault_5	Lamp under voltage. (See BALLAST ERROR NOTE page 36)			
Ballast Fault_6	Input voltage too low. (See BALLAST ERROR NOTE page 36)			
Ballast Fault_8	NTC defective. (See BALLAST ERROR NOTE page 36)			
Ballast Fault_Other	These fault modes are related to driver internal software and hardware malfunction.			
BallastWasOver Hot	Record and feedback that fixture once appeared lamp off issue because of ballast temp too high.			
Ballast_Uart_Fail				
ShiftFanFault				
Pan Reset Fail				
Tilt Reset Fail				
REPLACE THE LAMP				
Excess Humidity	Humidity >85%			
Humidity Warning	Humidity=70%			
2U01 Com Fail	IC Chip failure.			
3U01 Com Fail	IC Chip failure.			
4U01 Com Fail	IC Chip failure.			
5U01 Com Fail	IC Chip failure.			
6U01 Com Fail	IC Chip failure.			
7U01 Com Fail	IC Chip failure.			
8U01 Com Fail	IC Chip failure.			
9U01 Com Fail	IC Chip failure.			

# MAINTENANCE



# 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 your local Elation dealer.

Please refer to the following points during routine inspections:

A detailed electric check by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating.

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

## SPECIFICATIONS

**SOURCE** 

Philips MSD 21R 470W 8,000K Lamp 1,000 Hour Average LAMP Life\*

\*LAMP Life may vary depending on several factors including but 14 Static-Stamped Metal Gobos not limited to:

Environmental Conditions, Power/Voltage, Usage Patterns (On-Off Cycling), Control, and Dimming.

## PHOTOMETRIC DATA

CRI 80 | >14,000 Lumens 13,375 LUX 1,243 FC @49.2' (15m) (3.0° Spot) 233,000 LUX 21,646 FC @49.2' (15m) (2.0° Beam) DMX, RDM, Art-NET, and sACN Protocol Support

11,500 LUX 1,068 FC @16.4' (15m) (4.0° Wash) Zoom Range

Beam 2.1° - 21.5° Spot: 2.8° - 28.6° Wash: 4° - 31.2°

#### **EFFECTS**

Full 360° Bi-Directional Animation Wheel Rotating Prisms and Prism Macros Frost Filter Hybrid Wash Effect Motorized Focus and Auto-Focus High Speed Mechanical Shutter and Strobe

Pan Angle: 540°/630°

Tilt Angle: 265°

#### COLOR

14 Dichroic Colors Including CTB, CTO, and UV Full CMY Color Mixing and Linear CTO Color Correction

#### **GOBOS**

8 Interchangeable Rotating / Indexing Glass Gobos

## **CONTROL / CONNECTIONS**

(3) DMX Channel Modes (24 / 26 / 37)

**Button Touch Control Panel** 

Full Color 180° Reversible LCD Menu Display 8 / 16 Bit Resolution Adjustable Movement

E-FLY<sup>TM</sup> Elation's Internal Wireless DMX

Transceiver

IP65 5pin DMX In/Out IP65 RJ45 ethernet In/Out IP65 Locking Power Cable In

With Wired Digital Communication Network

#### SIZE / WEIGHT

Length: 18.45" (465mm) Width: 22.5" (571mm)

Vertical Height: 37.1" (805mm)

Weight: 84.0 lbs. (38 kg)

## **ELECTRICAL / THERMAL**

AC 100-240V - 50/60Hz 700W Max Power Consumption 14°F to 113°F (-10°C to 45°C)

## APPROVALS / RATINGS

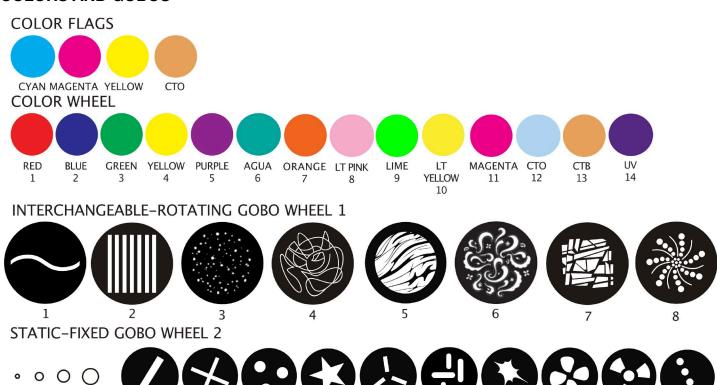
CE | cETLus | IP65



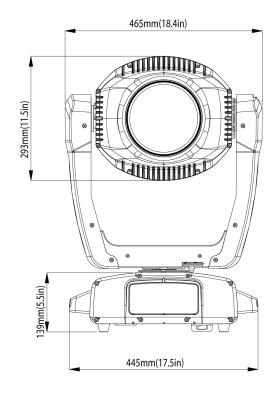
Specifications and documentation subject to change without notice.

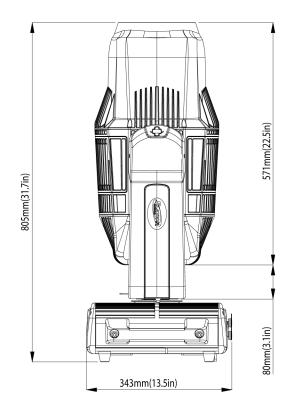
## **COLORS AND GOBOS**

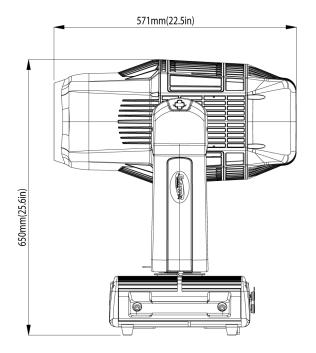
1 2

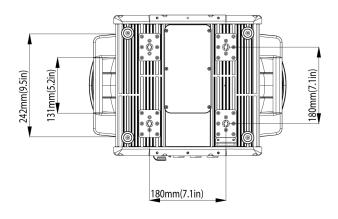


# **DIMENSIONAL DRAWINGS**









# OPTIONAL ACCESSORIES

ORDER CODE	ITEM		
TRIGGER CLAMP	Heavy Duty Wrap Around Hook Style Clamp		
ELF001	E-FLY™ Wireless DMX Transceiver		
DRCPROHYBRID1	Single Road Case for PROTEUS HYBRID		
DRCPROHYBX2W	Dual Road Case for PROTEUS HYBRID		
IP TESTER	IP Fixture Vacuum and Pressure Leak Tester		

#### **FCC STATEMENT**

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

#### FCC RADIO FREQUENCY INTERFERENCE WARNINGS & INSTRUCTIONS

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

- Reorient or relocate the device.
- Increase the separation between the device and the receiver.
- Connect the device 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.

Europe Energy Saving Notice

Energy Saving Matters (EuP 2009/125/EC)

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