

PROTEUS HYBRID &  
PROTEUS HYBRID WMG

User Manual

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**Elation Professional USA** | 6122 S. Eastern Ave. | Los Angeles, CA. 90040  
323-582-3322 | 323-832-9142 fax | [www.elationlighting.com](http://www.elationlighting.com) | [info@elationlighting.com](mailto:info@elationlighting.com)

**Elation Professional B.V.** | Junostraat 2 | 6468 EW Kerkrade, The Netherlands  
+31 45 546 85 66 | +31 45 546 85 96 fax | [www.elationlighting.eu](http://www.elationlighting.eu) | [info@elationlighting.eu](mailto:info@elationlighting.eu)

**Elation Professional Mexico** | AV Santa Ana 30 | Parque Industrial Lerma, Lerma, Mexico 52000  
+52 (728) 282-7070

## DOCUMENT VERSION



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

| Date     | Document Version | Software Version ≥ | DMX 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.   |
| 07/27/18 | 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.  |

# CONTENTS

|                                  |    |
|----------------------------------|----|
| General Information              | 4  |
| Warranty Returns (USA Only)      | 5  |
| Safety Guidelines                | 6  |
| Discharge Lamp Warning           | 8  |
| Overview                         | 9  |
| Lamp Installation                | 10 |
| Gobo Installation                | 17 |
| Fixture Installation             | 26 |
| System Menu                      | 31 |
| E-FLY Wireless DMX Set Up        | 37 |
| DMX Channel Functions And Values | 39 |
| Error Codes                      | 47 |
| Maintenance                      | 52 |
| Specifications                   | 53 |
| Optional Accessories             | 56 |

# 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.

## 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](https://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](mailto: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](mailto:support@elationlighting.eu)

**REPLACEMENT PARTS** please visit [parts.elationlighting.com](https://parts.elationlighting.com)



## **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

## **CAUTION**

**HIGH  
INTENSITY  
ULTRAVIOLET  
LIGHT**



AVOID DIRECT EYE & SKIN EXPOSURE.  
WEAR PROPER EYE & SKIN PROTECTION.  
SEE MANUAL FOR SAFETY INSTRUCTIONS.

**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 PHOTSENSITIVE 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.

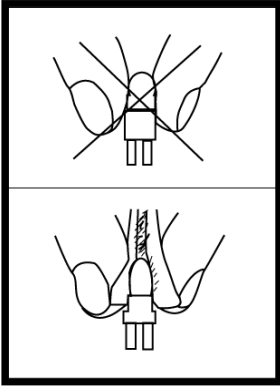
Always disconnect fixture from main power source before performing any type of service and/or cleaning procedure. Only handle the power cord by the plug end, never pull out the plug by tugging the wire portion of the cord.

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.

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



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

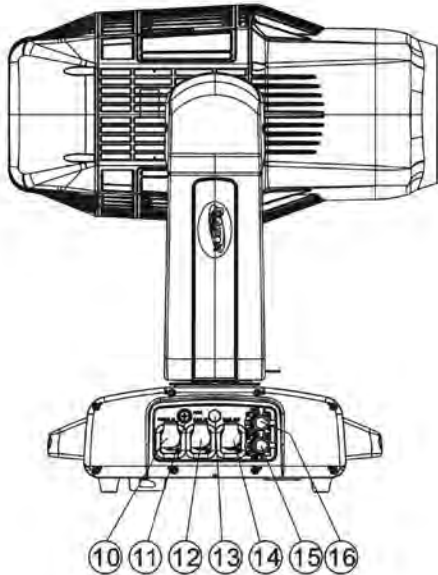
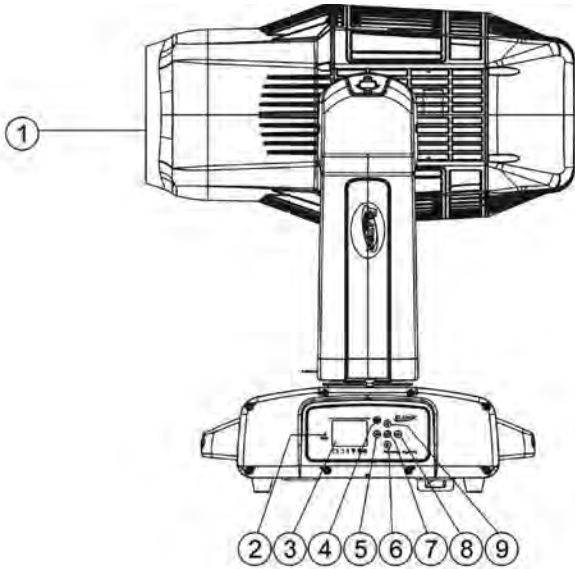
## L A M P R E P L A C E M E N T



Please note that due to the nature of the 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 INSTALLATION



## 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.

# LAMP INSTALLATION



**WARNING! LAMP REPLACEMENT SHOULD ONLY BE DONE BY 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.



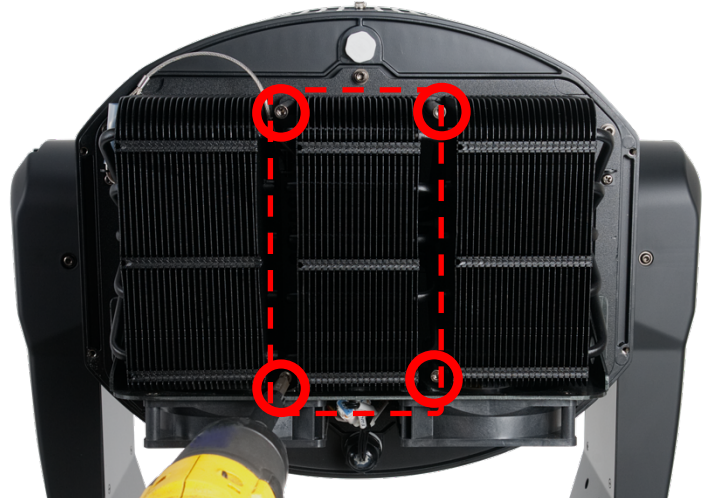
3. Remove (4x) 3mm hex-head screws to remove rear cover.



# LAMP INSTALLATION



4. Unclip the rear cover safety cable.



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

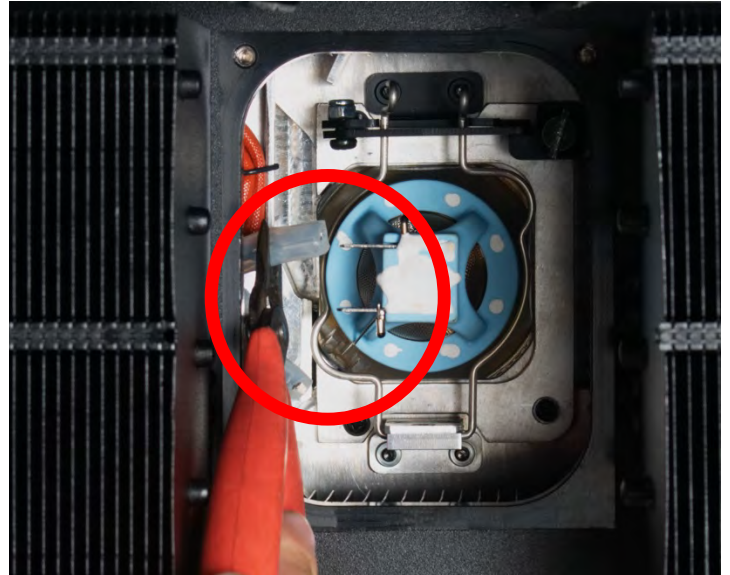
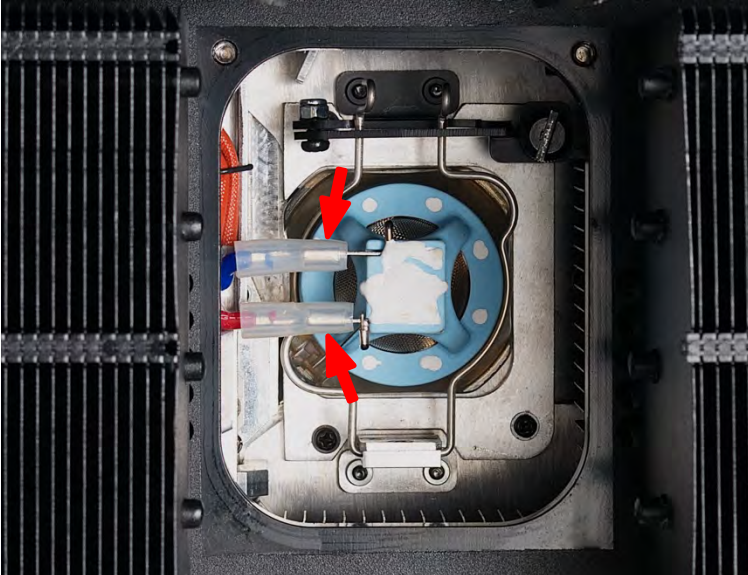


6. Unclip the center heatsink module safety cable.

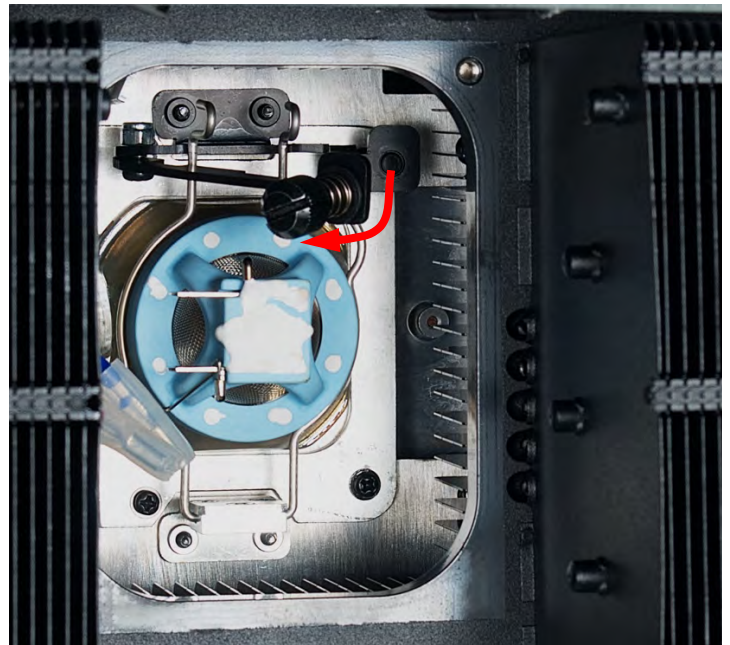
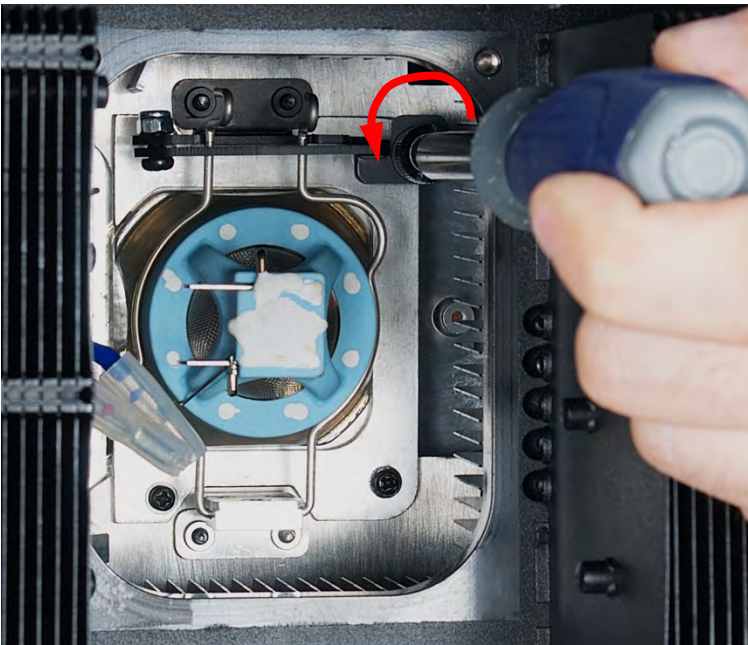




# LAMP INSTALLATION



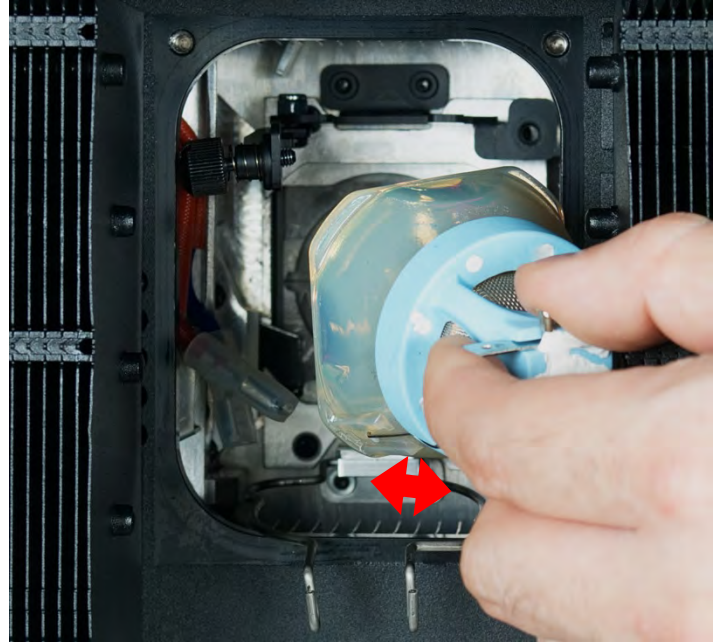
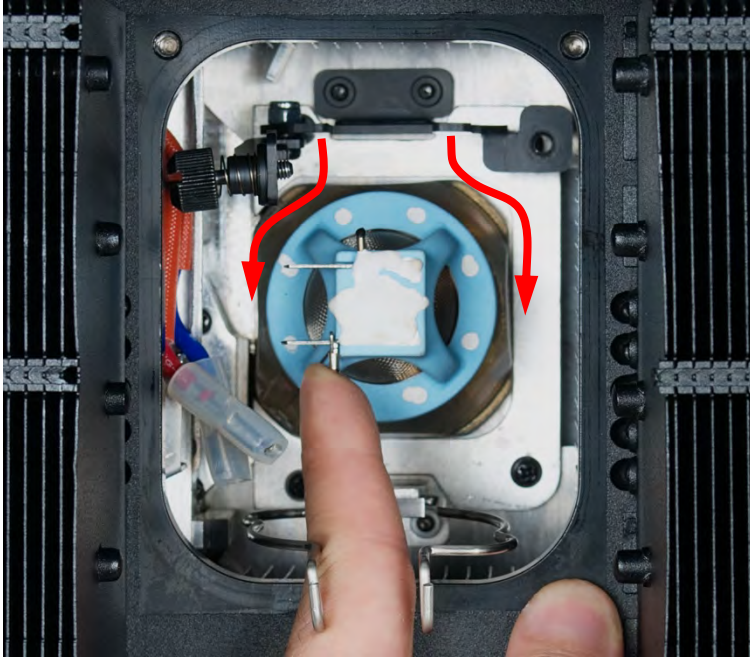
7. Gently remove the (2x) spade terminals connected to the lamp.



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

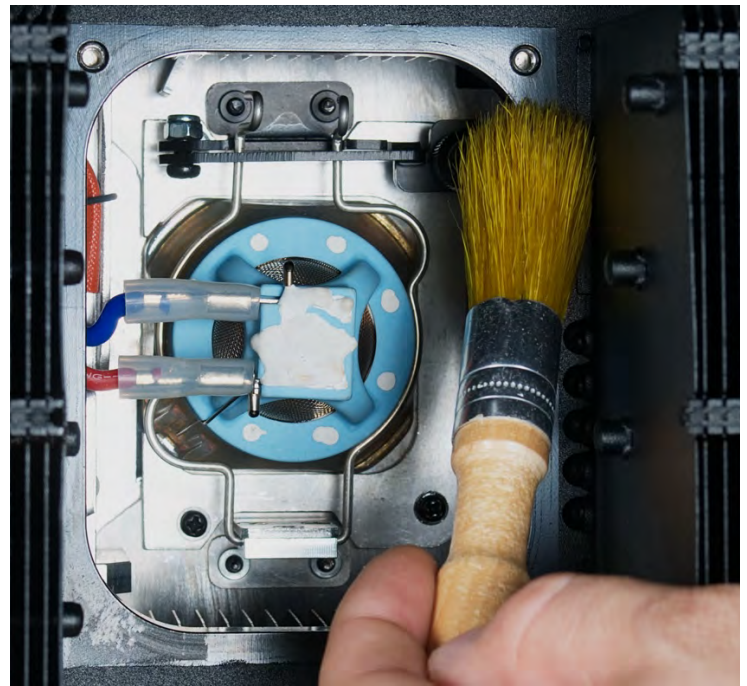
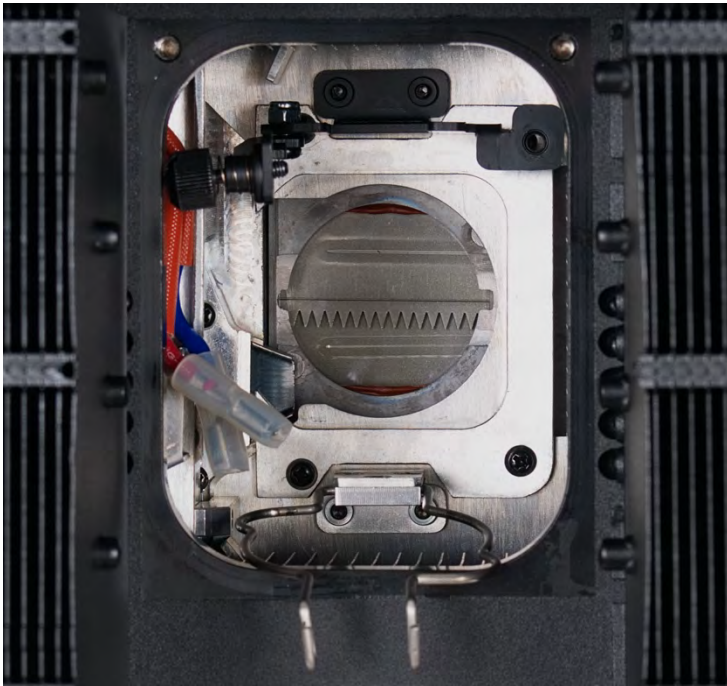


# LAMP INSTALLATION



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.**

# LAMP INSTALLATION

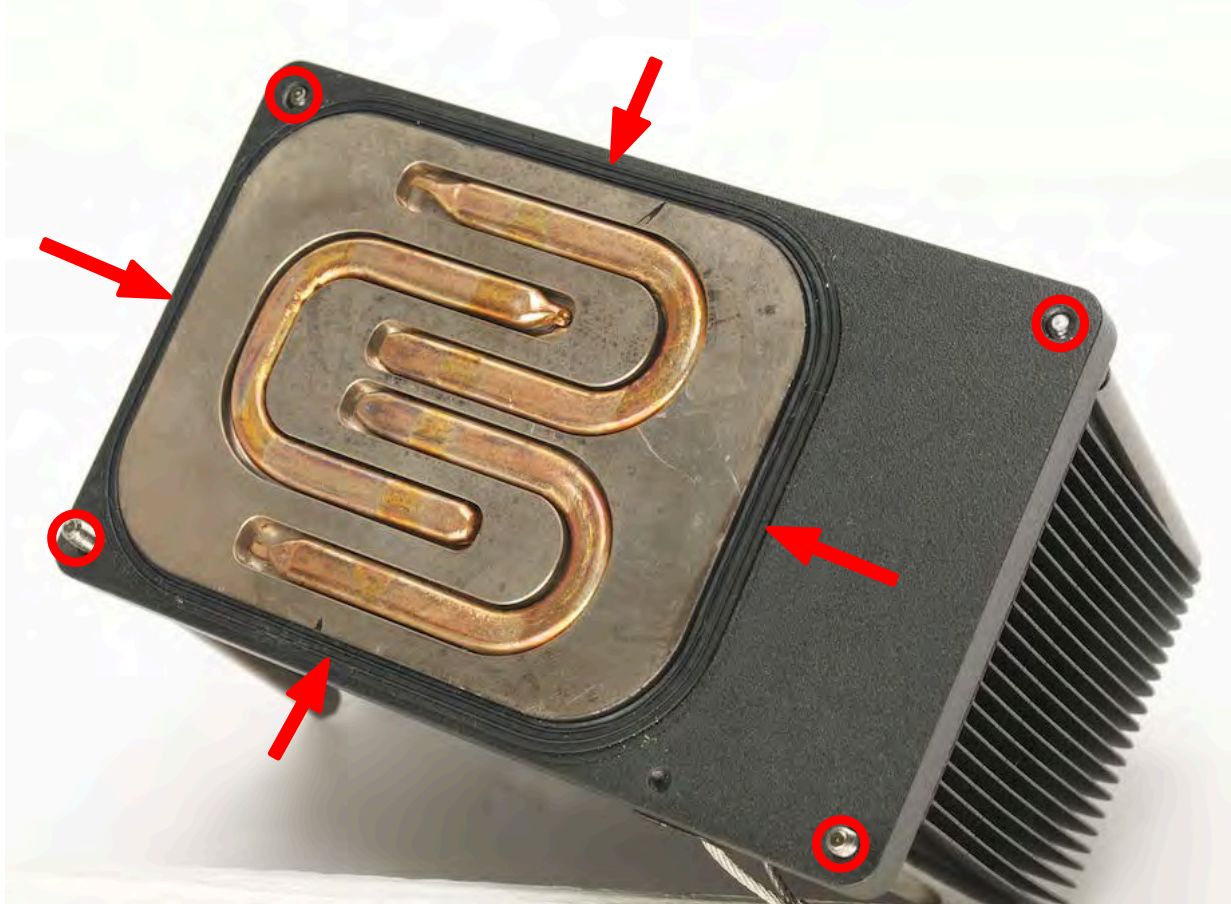


## GASKET INSPECTION

**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.**





# LAMP INSTALLATION

## 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) \***

**\* 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 LAMP REPLACEMENT, TEST FIXTURE USING THE ELATION IP TESTER. CONTACT ELATION SERVICE FOR MORE DETAILS.**



# GOBO INSTALLATION



**WARNING! GOBO REPLACEMENT SHOULD ONLY BE DONE BY A TRAINED TECHNICIAN.**

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



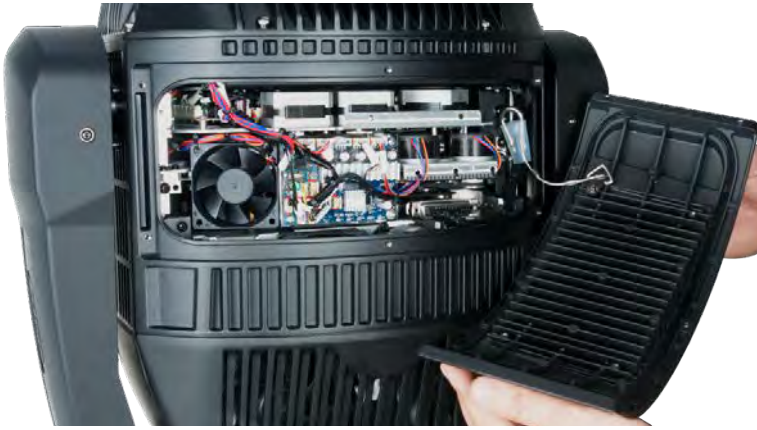
2. Place the head in an upright vertical position and engage both the **PAN** and **TILT** locks for added stability while replacing the gobo.



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



# GOBO INSTALLATION



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



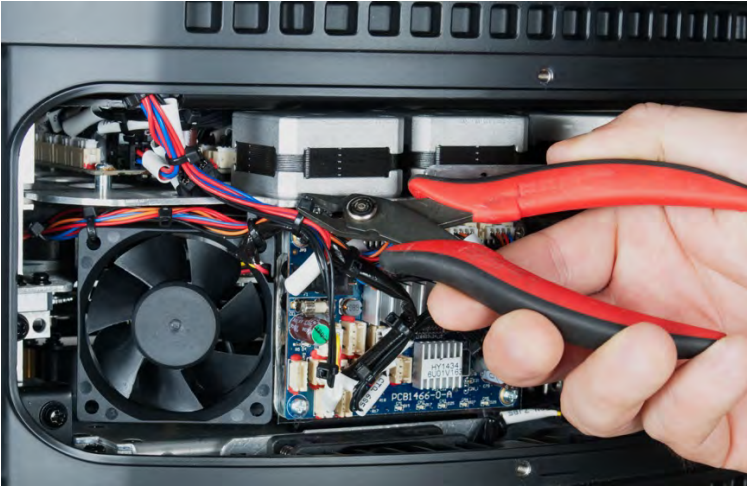
5. Unclip the panel safety cable on the opposite side of the head.



# GOBO INSTALLATION

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

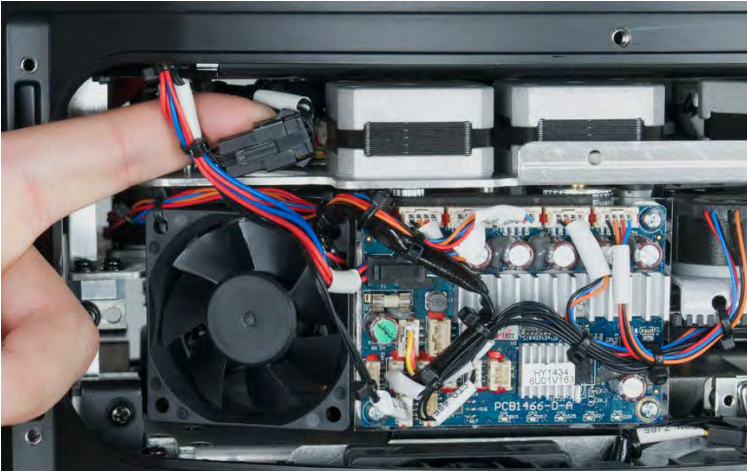
6a



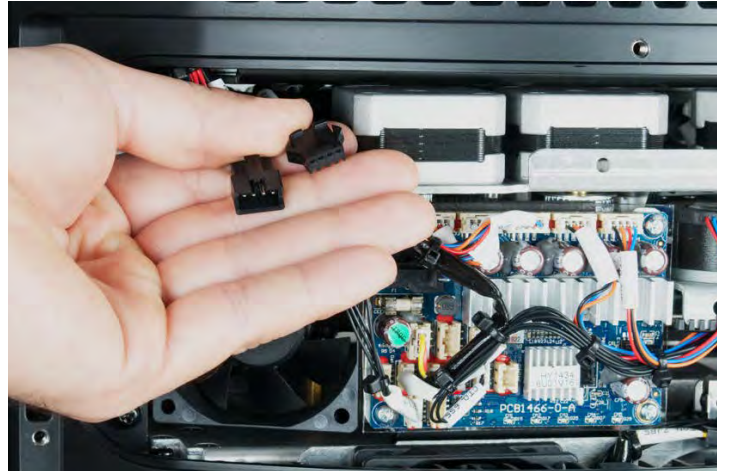
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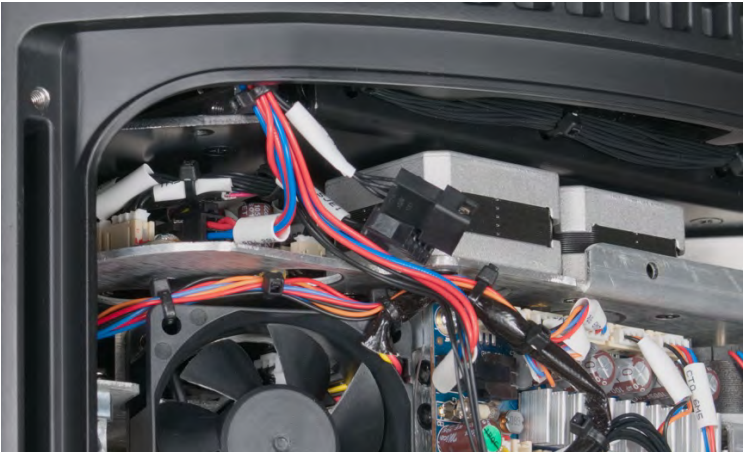
6c



6d



6e

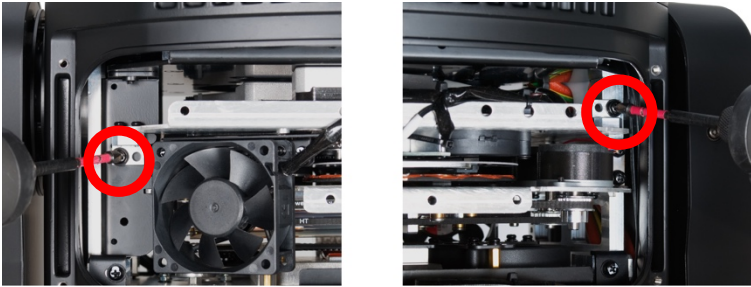


6f

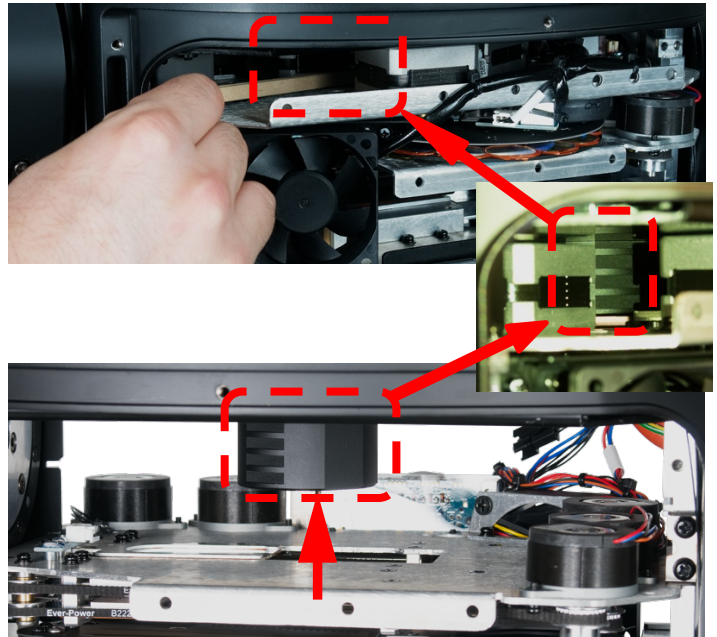




# GOBO INSTALLATION



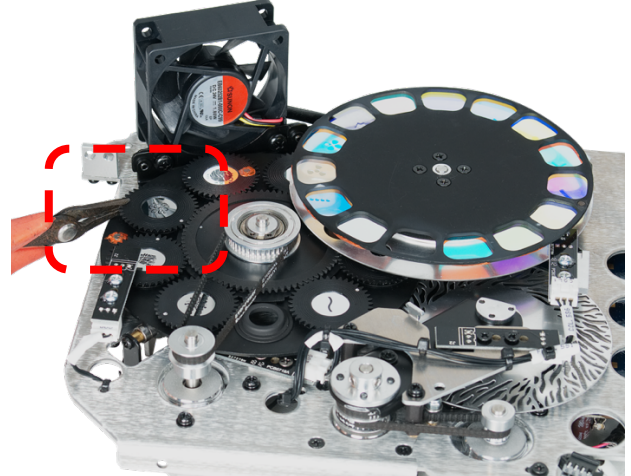
7. Remove (2x) #2 Philips screws securing effect module.



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 pliers.



**CAUTION! DO NOT SCRATCH GOBO AND HOLDER WHEN REPLACING!**

# GOBO INSTALLATION



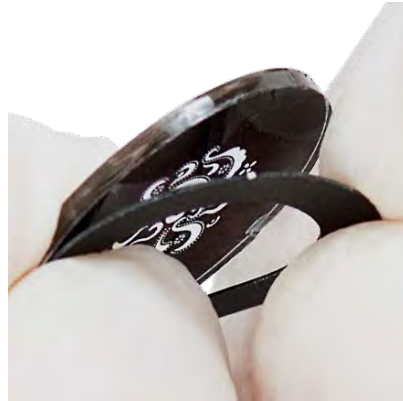
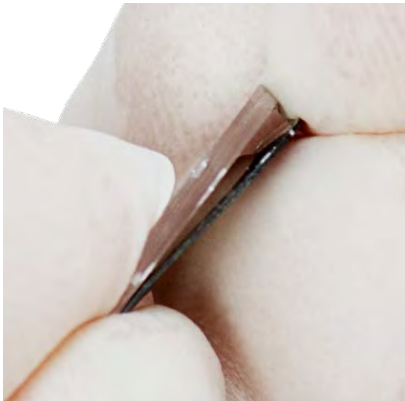
12. Carefully remove retaining spring.




**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

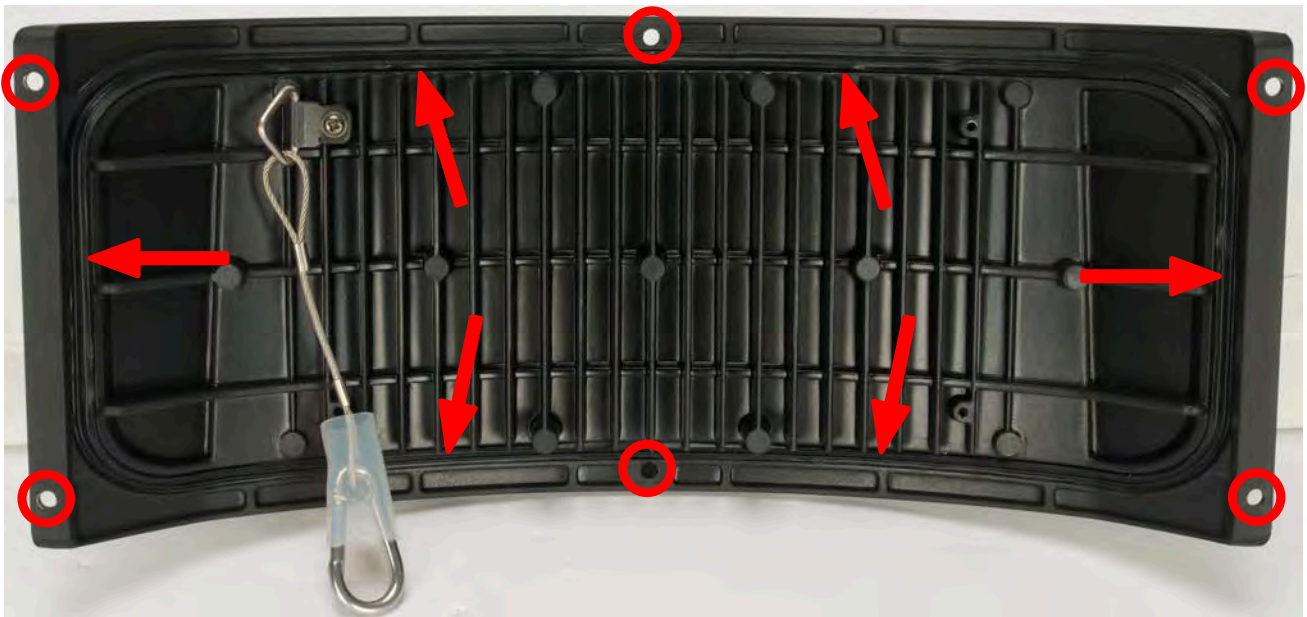


## GASKET INSPECTION

**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.**



# GOBO INSTALLATION

## 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.**



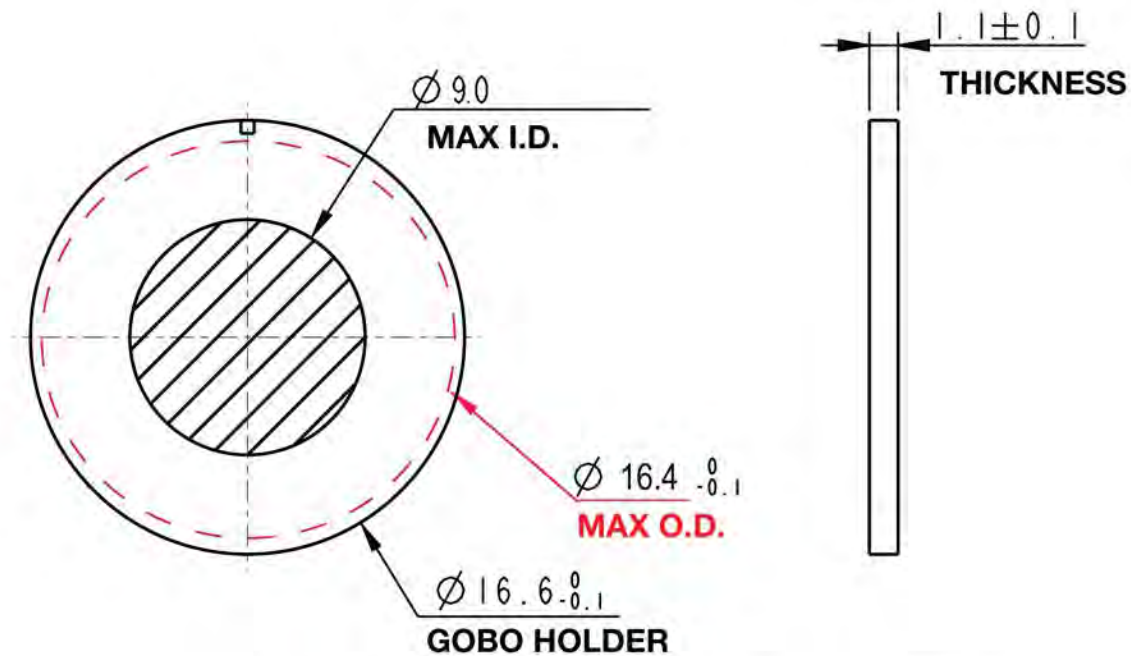
# GOBO INSTALLATION

## 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.<br>(Max. Outer Diameter) | $\phi 16.4\text{mm}$            |
| I.D.<br>(Max. Image Diameter) | $\phi 9\text{mm}$               |
| Gobo Holder<br>Diameter       | $\phi 16.6\text{mm}$            |
| Thickness                     | $1.1\text{mm} \pm 0.1\text{mm}$ |
| Material                      | <b>BOROFLOAT<br/>GLASS</b>      |

# GOBO INSTALLATION

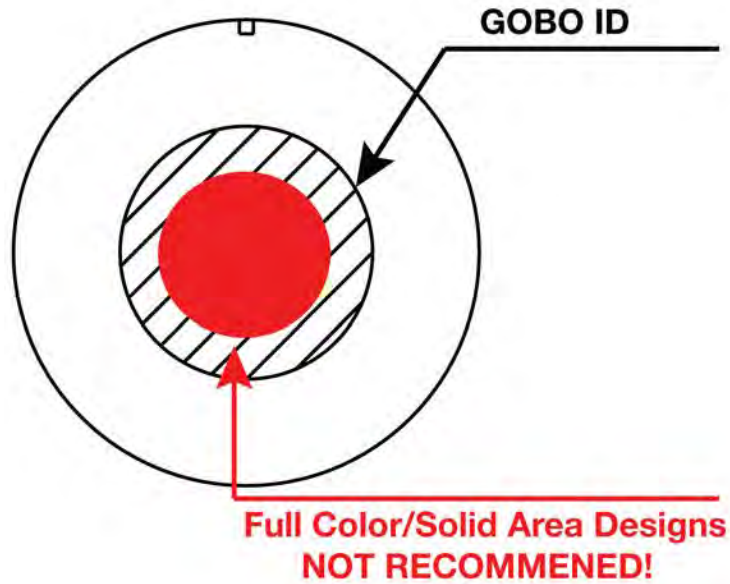
## CUSTOM GOBO DESIGN GUIDELINES

### \* \* \* 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**





# FIXTURE INSTALLATION



## **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.

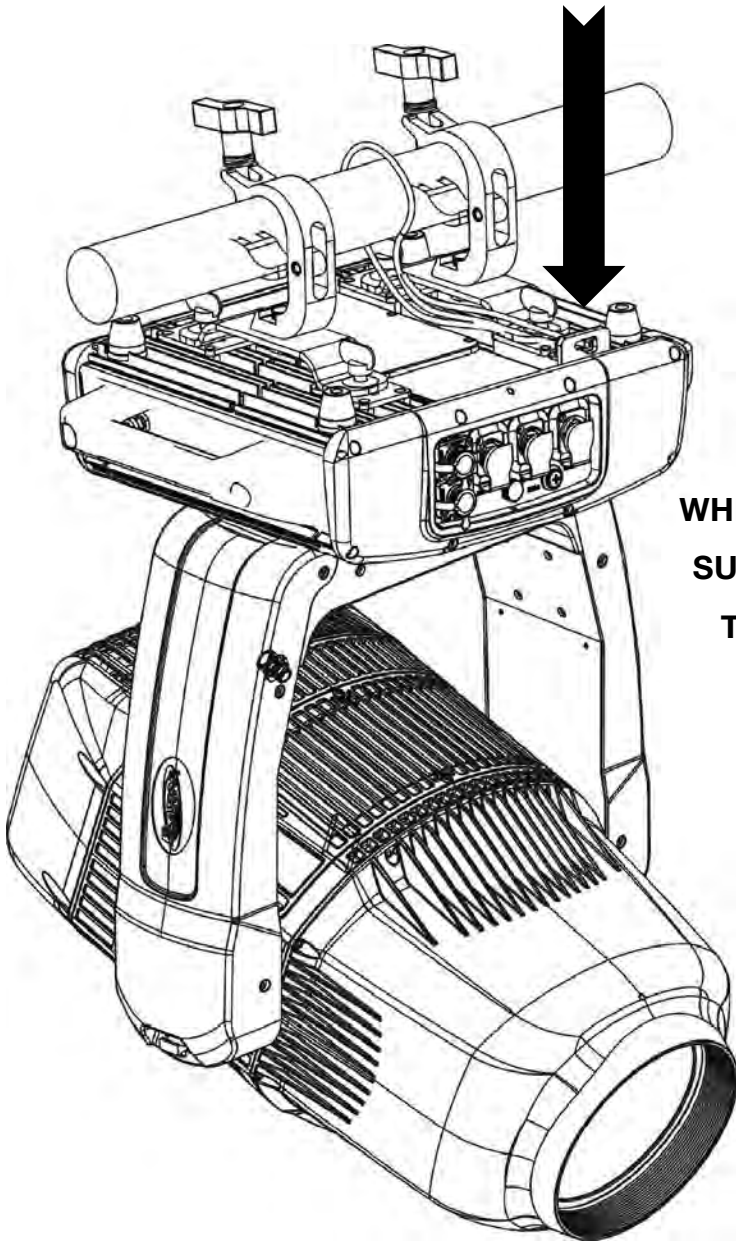
Allow approximately 15 minutes for the fixture to cool down before serving.

# FIXTURE INSTALLATION

## 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



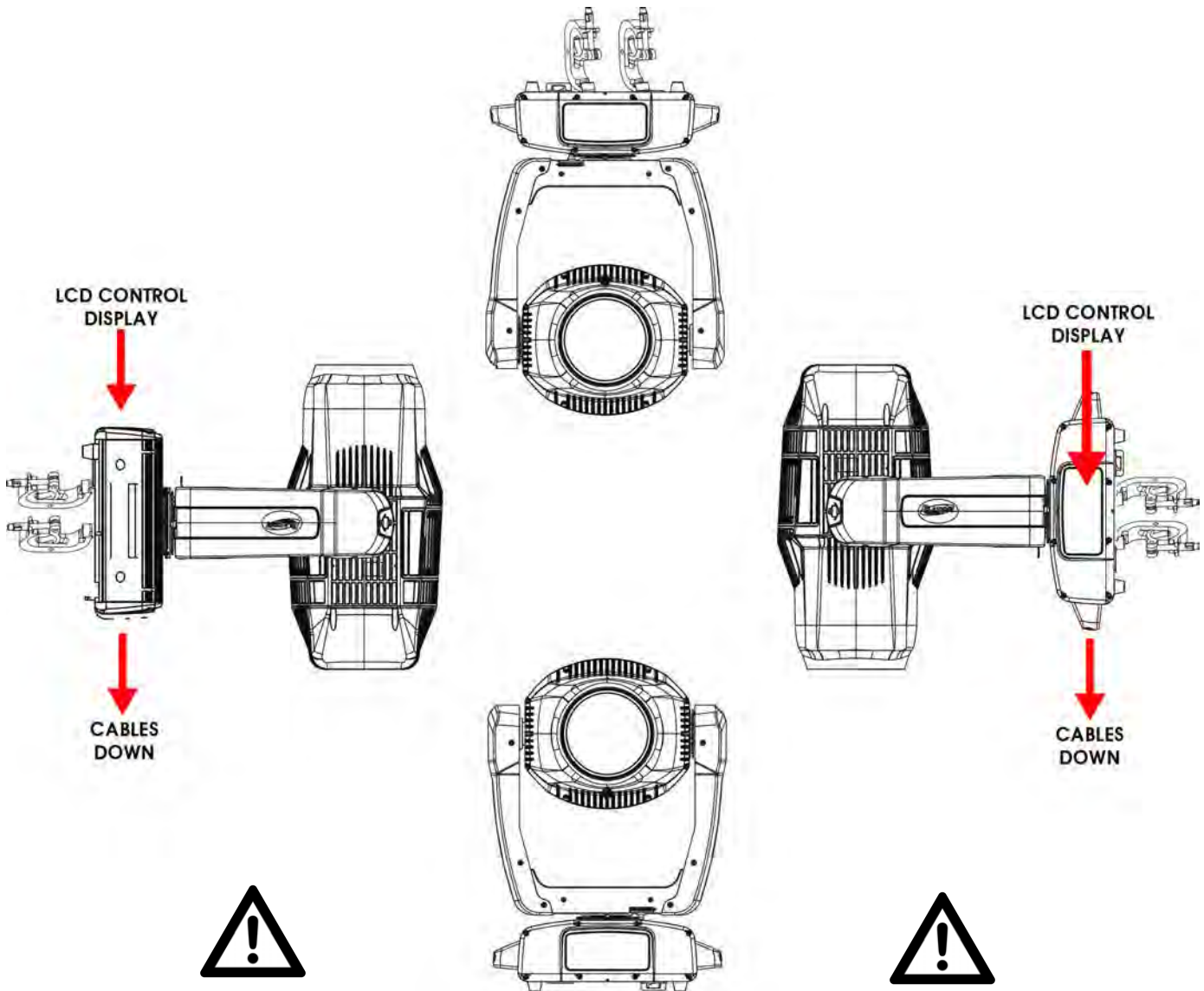
**S A F E T Y C A B L E**  
**ALWAYS ATTACH A SAFETY CABLE**  
**WHENEVER INSTALLING THIS DEVICE IN A**  
**SUSPENDED ENVIRONMENT TO ENSURE**  
**THE FIXTURE WILL NOT DROP IF THE**  
**CLAMP FAILS.**

# FIXTURE INSTALLATION

## 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.

### \* SAFETY CABLE

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

# FIXTURE INSTALLATION

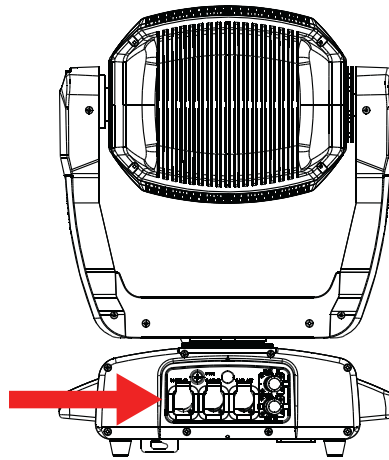
## CONNECTIONS



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.



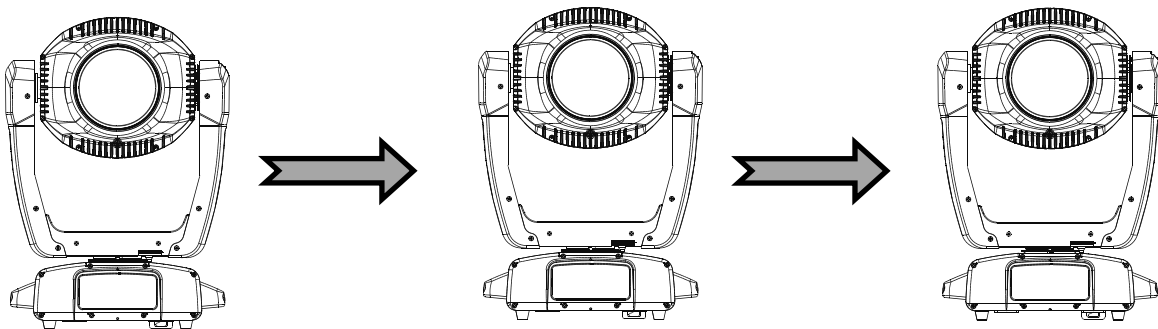
TO MAINTAIN IP65 RATING INTEGRITY, AND PREVENT WATER FROM ENTERING THE FIXTURE, ALL UNUSED CONNECTION RUBBER CAPS MUST BE SEALED.



## 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.

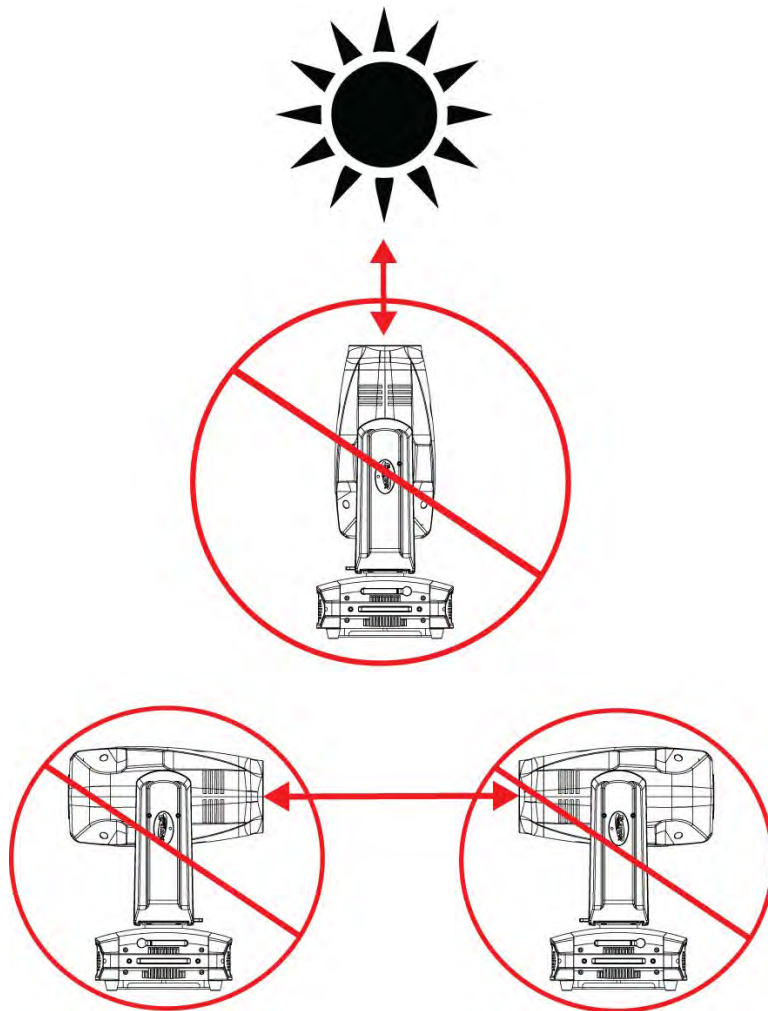


# FIXTURE INSTALLATION

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

When the unit is in the 'sun protection state', it uses its accelerometer sensors (X-Y-Z) (only present on discharge units and IP units) to position the front lens downwards, even when the unit(s) 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 incredibly old feature that puts the unit into a 'sleep state' to save power (this is a state whereas 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).

# 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

## Supports Software Versions: $\geq 1.3.1A$

Features are 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.

| MAIN MENU      | SUB MENU                         | OPTIONS / VALUES (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, Secondary2, Secondary3                       |                             | Secondary Setting                 |
|                | Auto Program                     | Primary / <b>Alone</b>                                   |                             | 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= <b>038</b>        | <b>(PSWD Required)</b>            |
|                |                                  | Clear Last Run   | ON / <b>OFF</b>             | Clear Fixture Last Run Time       |
|                |                                  | LampTime Password  | Password= <b>038</b>        | <b>(PSWD Required)</b>            |
|                | 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% <b>RH</b>              | Humidity In Fixture Base          |
|                |                                  | Head Humidity  | XXX% <b>RH</b>              | Humidity in Fixture Head          |
|                | Ethernet IP                      | XXX . XXX . XXX . XXX                                    | XXX . XXX . XXX . XXX       | Displays Fixture Ethernet Address |
|                | Fan Info                         | 1U_FAN1....  |                             | RPM Speeds of Fans                |
|                | Encode Info                      | PAN ENCODE:, TILT ENCODE:...                             |                             |                                   |
|                | Software Version                 | $\geq$ <b>V1.3.1A</b>                                    |                             | Software Version                  |
| Error Info     | Error Record 1 ~ Error Record 10 |  | Fixture Last 10 Error Codes |                                   |
| Lamp Error log | Error Record 1 ~ Error Record 10 |  | Lamp Last 10 Error Codes    |                                   |
| LAMP CONTROL   | Lamp ON/OFF                      | <b>ON/OFF</b>  |                             | Lamp ON/OFF                       |
|                | Automatic ON                     | <b>ON/OFF</b>  |                             | Lamp ON/OFF when Power ON         |
|                | Lamp ON via DMX                  | <b>ON/OFF</b>  |                             | Lamp ON via DMX                   |
|                | Lamp OFF via DMX                 | <b>ON/OFF</b>  |                             | Lamp OFF via DMX                  |
|                | Max ON at Temp                   | 20~79°C ( <b>45°C</b> ) / 68 ~ 174°F ( <b>113°F</b> )    |                             | Lamp Restart at Temp              |
|                | MaxOnatHumidity                  | 20~100%RH, <b>70%RH</b>                                  |                             | Fixture Restart at Humidity       |
|                | Lamp OFF Temp                    | 80~139°C ( <b>130°C</b> ) / 176 ~ 282°F ( <b>266°F</b> ) |                             | Lamp OFF at Temp                  |

## SYSTEM MENU CHANGE WITH SOFTWARE UPDATE VERSION $\geq 1.6.4$

- Reset behavior changed with dim up/down.
- End of lamp life behavior changed without a strobing light
- RDM over artnet change bug solved (channel mode switched back after a powercycle).
- Lamp on/Off temp settings removed and set to max 135C off temp.
- When lamp off 4 internal fans keep running to cool the unit internally and avoid condensation on inner lens. (in hibernation mode fans stop running).

See highlighted menu items below which have been updated with this software update.

|              |                  |                         |                             |
|--------------|------------------|-------------------------|-----------------------------|
| LAMP CONTROL | Lamp ON/OFF      | <b>ON/OFF</b>           | Lamp ON/OFF                 |
|              | Automatic ON     | <b>ON/OFF</b>           | Lamp ON/OFF when Power ON   |
|              | Lamp ON via DMX  | <b>ON/OFF</b>           | Lamp ON via DMX             |
|              | Lamp OFF via DMX | <b>ON/OFF</b>           | Lamp OFF via DMX            |
|              | MaxOnatHumidity  | 20~100%RH, <b>70%RH</b> | Fixture Restart at Humidity |

## **SYSTEM MENU CHANGE WITH SOFTWARE UPDATE VERSION $\geq$ 1.6.5**

- RDM issues solved and break time changed.
- Special “Home Position” (Sun Protection) settings added in the “speed pan/tilt movement” channel to avoid sun coming into the lens and destroy the fans, sliders, belts etc:
- The lens will be pointed down as best as possible.

This "Home position"(sun-protection) will be active in the following situations:

1. when it is set to ON in the "Speed Pan/Tilt movement" channel.
2. when the unit loses DMX, it will enter the homing position after 3-minutes.
3. when the lamp is set OFF.

## **SYSTEM MENU CHANGE WITH SOFTWARE UPDATE VERSION $\geq$ 1.6.6**

- Sun-Protection Active added to display
- Hibernation-Active added to display
- Sun-protection manual overwrite added
- Sun-Protection pan/tilt movement slowed down during activation
- Display lock count-up added to the display



# SYSTEM MENU

Supports Software Versions:  $\geq 1.3.1A$

Features are 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.

| MAIN MENU     | SUB MENU        | OPTIONS / VALUES (Default Settings in <b>BOLD</b> ) |   | DESCRIPTION                       |   |
|---------------|-----------------|---|---|-----------------------------------|---|
| PERSONALITY   | Status Settings | Address via DMX                                     | <b>ON/OFF</b>                                     | Address Via DMX                   |   |
|               |                 | No DMX Status                                       | Close / <b>Hold</b> / Auto                        | Fixture State When NO DMX Signal  |   |
|               |                 | Pan Reverse   | <b>ON/OFF</b>                                     | Pan Reverse Movement              |   |
|               |                 | Tilt Reverse  | <b>ON/OFF</b>                                     | Tilt Reverse Movement             |   |
|               |                 | Pan Degree  | 630/ <b>540</b>                                   | Pan Degree Select                 |   |
|               |                 | Feedback  | <b>ON/OFF</b>                                     | Movement Feedback                 |   |
|               |                 | Movement Speed                                      | <b>NormalSpeed</b><br>SlowSpeed                   | Select Movement Speed             |   |
|               |                 | Hibernation   | OFF, 01M~99M, <b>15M</b>                          | Stand By Mode                     |   |
|               | Service Setting | Password  | Password= <b>050</b>                              |                                   | Service Password                          |
|               |                 | RDM PID   | <b>22A6xxxxxxxx</b>                               |                                   | RDM PID Code ( <b>PSWD Required</b> )     |
|               |                 | Clear Err. Info                                     | <b>ON/OFF</b>                                     |                                   | Clear Error Info ( <b>PSWD Required</b> ) |
|               |                 | DFLT Pow. LampOn                                    | <b>ON/OFF</b>                                     |                                   | Set Default Lamp Power State to ON        |
|               | Display Setting | Shutoff Time  | 02~60m <b>05m</b>                                 |                                   | LCD Display Shut Off Time                 |
|               |                 | Display Reverse                                     | <b>AUTO/ON/OFF</b>                                |                                   | LCD Display Reverse 180°                  |
|               |                 | Key Lock  | <b>ON/OFF</b>                                     |                                   | LCD Control Panel Lock Out                |
|               | Temperature C/F | <b>Celsius/Fahrenheit</b>                           |   | Temperature Switch Between C°/ F° |   |
|               | Initial Status  | CONTROL =XXX  |   | Initial Effect Position           |   |
|               | Select Signal   | E-FLY Off   |   |                                   | Control via DMX ONLY                      |
|               |                 | <b>DMX &amp; E-FLY</b>                              |   |                                   | 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                 |
|               | Set Universe    | <b>000</b> - 32767                                  |   | Set ArtNet Universe (Art-Net 4)   |   |
| Ethernet IP   | XXX.XXX.XXX.XXX |   | Set Fixture IP Address                            |                                   |   |
| Ether Mask IP | XXX.XXX.XXX.XXX |   | Set Fixture Subnet Mask Address                   |                                   |   |
| Set E-FLY Chn | <b>00</b> - 15  |   | Set E-FLY Wireless Channel                        |                                   |   |
| Reset Default | <b>ON/OFF</b>   | Password= <b>011</b>                                | Restore Factory Settings ( <b>PSWD Required</b> ) |                                   |   |

## SYSTEM MENU CHANGE WITH SOFTWARE UPDATE VERSION $\geq 1.6.0$

See highlighted menu items below which have been updated with this software update.

| MAIN MENU   | SUB MENU        | OPTIONS / VALUES (Default Settings in <b>BOLD</b> ) |  | DESCRIPTION               |   |
|-------------|-----------------|---|--|---------------------------|---|
| PERSONALITY | Status Settings | Movement Speed                                      | <b>HighSpeed</b><br>MiddleSpeed<br>SlowSpeed | Select Movement Speed     |   |
|             |                 | FocusZoom Speed                                     | <b>HighSpeed</b><br>Slow Speed               | Select Focus Zoom Speed   |   |
|             | Service Setting | Password  | Password= <b>050</b>                         |                           | Service Password                          |
|             |                 | RDM UID   | <b>22A6xxxxxxxx</b>                          |                           | RDM PID Code ( <b>PSWD Required</b> )     |
|             |                 | Clear Err. Info                                     | <b>ON/OFF</b>                                |                           | Clear Error Info ( <b>PSWD Required</b> ) |
|             |                 | Clear Error code                                    | <b>ON/OFF</b>                                |                           | Clear Error Code ( <b>PSWD Required</b> ) |
|             | Initial Status  | Control =XXX  |  | Initial Effect Position   |   |
|             | Select Signal   | <b>E-FLY Off</b>                                    |  |                           | Control via DMX ONLY                      |
|             |                 | <b>DMX &amp; E-FLY</b>                              |  |                           | Control via DMX and E-FLY                 |
|             |                 | <b>E-FLY &amp; OUT</b>                              |  |                           | Control via E-FLY and sends DMX Out       |
|             |                 | <b>Art-Net</b>                                      |  |                           | Control via Art-Net Protocol              |
| <b>sACN</b> |                 |   |  | Control via sACN Protocol |   |

# SYSTEM MENU

**Supports Software Versions: ≥ 1.3.1A**

Features are 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.

| MAIN MENU        | SUB MENU         | OPTIONS / VALUES (Default Settings in <b>BOLD</b> ) |                      | DESCRIPTION                            |                                   |
|------------------|------------------|---|----------------------|--|-----------------------------------|
| Reset Function   | Reset All        |   |                      | Reset All Motors                       |                                   |
|                  | Reset Pan&Tilt   |   |                      | Reset Pan/Tilt                         |                                   |
|                  | Reset Colors     |   |                      | Reset Color Wheel                      |                                   |
|                  | Reset Gobos      |   |                      | Reset Gobos                            |                                   |
|                  | Reset Shutter    |   |                      | Reset Shutter                          |                                   |
|                  | Reset Others     |   |                      | Reset Other Motors                     |                                   |
| Effect Adjust    | Test Channel     | CONTROL .....                                       |                      | Test function                          |                                   |
|                  | Manual Control   | CONTROL =XXX, .....                                 |                      | Fine Adjustments                       |                                   |
|                  | Calibration      | Calibration Password                                | Password= <b>050</b> | Password <b>050 (PSWD Required)</b>    |                                   |
| User Mode Set    | User Mode        | Basic Mode  |                      | DMX Channel Modes                      |                                   |
|                  |                  | <b>Standard Mode</b>                                |                      |  |                                   |
|                  |                  | Extended Mode                                       |                      |  |                                   |
|                  |                  | User Mode A   |                      | User Defined Channel Assignment        |                                   |
|                  |                  | User Mode B   |                      |  |                                   |
|                  |                  | User Mode C   |                      |  |                                   |
|                  | Edit User Mode A | Max Channel = XX                                    |                      | Edits User Defined Channel Assignments |                                   |
| Edit User Mode B | PAN = CH01       |   |                      |  |                                   |
| Edit User Mode C |                  |   |                      |  |                                   |
| Edit Program     | Select Program   | Auto Pro Part1 = Program 1~10 ( <b>Program 1</b> )  |                      | Select Programs To Be Run              |                                   |
|                  |                  | Auto Pro Part2 = Program 1~10 ( <b>Program 2</b> )  |                      |  |                                   |
|                  |                  | Auto Pro Part3 = Program 1~10 ( <b>Program 3</b> )  |                      |  |                                   |
|                  | Edit Program     | Program 1   | Program Test         |  | Testing Program                   |
|                  |                  | :   | Step 01=SCxxx        |  | Program In Loop                   |
|                  |                  | Program 10  | Step 64=SCxxx        |  | Save and Exit                     |
|                  | Edit Scenes      | Scene 001<br>~<br>Scene 250                         | Pan,Tilt,.....       |  | Save and Automatically Return     |
|                  |                  |   | --Fade Time--        |  | Manual Scenes Edit                |
|                  |                  |   | --Scene Time--       |  |                                   |
|                  |                  |   | Input By Outside     |  | Stores Scenes via Ext DMX Console |
| Rec. Controller  | XX~XX            |   |                      | Automatic Scenes Recorder              |                                   |

## 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 wear or in the event a sensor has been knocked slightly out of place. Because improper use of this function can result in undesired operation this function has been password protected. The password is **050** and must be entered each time the calibration menu function is entered. Because calibration is an extremely delicate procedure, instructions on performing this action are left out of this manual. For a first-time calibrator, please contact our customer support team for step-by-step instructions.

# 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.
5. 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

## RELATION PROTEUS HYBRID DMX Channel Values / Functions (37 DMX Channels)

Supports Software Versions:  $\geq 1.3.1$

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 |  |        | VALUE   | FUNCTION                      |
|----------------|--|--------|---------|-------------------------------|
| BASIC          | STAND  | EXTEND |         |                               |
| 1              | 1  | 1      |         | PAN MOVEMENT                  |
|                |  |        | 0-255   | PAN Movement                  |
|                | 2  | 2      |         | PAN FINE MOVEMENT [16 BIT]    |
|                |  |        | 0-255   | Fine Control of PAN Movement  |
| 2              | 3  | 3      |         | TILT MOVEMENT                 |
|                |  |        | 0-255   | TILT Movement                 |
|                | 4  | 4      |         | TILT MOVEMENT [16 BIT]        |
|                |  |        | 0-255   | Fine Control of TILT Movement |
| 3              | 5  | 5      |         | CYAN COLOR                    |
|                |  |        | 0-255   | 0-WHITE ~ 255-100% CYAN       |
|                |  | 6      |         | CYAN COLOR FINE [16 BIT]      |
|                |  |        | 0-255   | CYAN FINE Adjustment          |
| 4              | 6  | 7      |         | MAGENTA COLOR                 |
|                |  |        | 0-255   | 0-WHITE ~ 255-100% MAGENTA    |
|                |  | 8      |         | MAGENTA COLOR FINE [16 BIT]   |
|                |  |        | 0-255   | MAGENTA FINE Adjustment       |
| 5              | 7  | 9      |         | YELLOW COLOR                  |
|                |  |        | 0-255   | 0-WHITE ~ 255-100% YELLOW     |
|                |  | 10     |         | YELLOW COLOR FINE [16 BIT]    |
|                |  |        | 0-255   | YELLOW FINE Adjustment        |
| 6              | 8  | 11     |         | CTO COLOR                     |
|                |  |        | 0-255   | 0-WHITE ~ 255-100% CTO        |
|                |  | 12     |         | CTO COLOR FINE [16 BIT]       |
|                |  |        | 0-255   | CTO FINE Adjustment           |
| 7              | 9  | 13     |         | COLOR WHEEL                   |
|                |  |        | 0-15    | OPEN / WHITE                  |
|                |  |        | 16-23   | RED                           |
|                |  |        | 24-31   | BLUE                          |
|                |  |        | 32-39   | GREEN                         |
|                |  |        | 40-47   | YELLOW                        |
|                |  |        | 48-55   | PURPLE                        |
|                |  |        | 56-63   | AQUA                          |
|                |  |        | 64-71   | ORANGE                        |
|                |  |        | 72-79   | LIGHT PINK                    |
|                |  |        | 80-87   | LIME GREEN                    |
|                |  |        | 88-95   | LIGHT YELLOW                  |
|                |  |        | 96-103  | MAGENTA                       |
|                |  |        | 104-111 | CTB                           |
|                |  |        | 112-119 | CTO                           |
|                |  |        | 120-127 | UV                            |
| 128-189        | *Counterclockwise COLOR Rotation from FAST to SLOW |        |         |                               |
| 190-193        | NO Rotation  |        |         |                               |
| 194-255        | *Clockwise COLOR Rotation from SLOW to FAST        |        |         |                               |

**Supports Software Versions:  $\geq$  1.3.1**

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 |   |        | VALUE   | FUNCTION   |
|----------------|---|--------|---------|--|
| BASIC          | STAND   | EXTEND |         |  |
|                |   | 14     |         | <b>COLOR WHEEL FINE ADJUSTMENT [16 BIT]</b>                        |
|                |   |        | 0-255   | FINE Adjustment of Color Wheel to Any Position                     |
| 8              | 10  | 15     |         | <b>ROTATING GOBOS, CONTINUOUS ROTATION [GOBO WHEEL 1]</b>          |
|                |   |        | 0-10    | BEAM MODE OPEN   |
|                |   |        | 11-21   | SPOT MODE OPEN   |
|                |   |        | 22-31   | Rotating Gobo 1  |
|                |   |        | 32-41   | Rotating Gobo 2  |
|                |   |        | 42-51   | Rotating Gobo 3  |
|                |   |        | 52-61   | Rotating Gobo 4  |
|                |   |        | 62-71   | Rotating Gobo 5  |
|                |   |        | 72-81   | Rotating Gobo 6  |
|                |   |        | 82-91   | Rotating Gobo 7  |
|                |   |        | 92-101  | Rotating Gobo 8  |
|                |   |        | 102-112 | Gobo 1 Shake SLOW to FAST  |
|                |   |        | 113-123 | Gobo 2 Shake SLOW to FAST  |
|                |   |        | 124-134 | Gobo 3 Shake SLOW to FAST  |
|                |   |        | 135-145 | Gobo 4 Shake SLOW to FAST  |
|                |   |        | 146-156 | Gobo 5 Shake SLOW to FAST  |
|                |   |        | 157-167 | Gobo 6 Shake SLOW to FAST  |
|                |   |        | 168-178 | Gobo 7 Shake SLOW to FAST  |
|                |   |        | 179-189 | Gobo 8 Shake SLOW to FAST  |
|                |   |        | 190-221 | *Clockwise Gobo Wheel Rotation from FAST to SLOW                   |
| 222-223        | NO Rotation   |        |         |  |
| 224-255        | *Counterclockwise Gobo Wheel Rotation from SLOW to FAST |        |         |  |
| 9              | 11  | 16     |         | <b>ROTATING GOBOS, INDEX ROTATION [GOBO WHEEL 1]</b>               |
|                |   |        | 0-127   | Gobo Indexing  |
|                |   |        | 128-189 | *Clockwise Gobo Rotation from FAST TO SLOW                         |
|                |   |        | 190-193 | NO Rotation  |
|                |   |        | 194-255 | *Counterclockwise Gobo Rotation from SLOW to FAST                  |
|                |   | 17     |         | <b>ROTATING GOBOS, FINE INDEX ROTATION [GOBO WHEEL 1] [16 BIT]</b> |
|                |   |        | 0-255   | Gobo Rotation FINE Indexing  |

**Supports Software Versions:  $\geq$  1.3.1**

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 |   |         | VALUE                                     | FUNCTION   |
|----------------|---|---------|---|--|
| BASIC          | STAND   | EXTEND  |   |  |
| 10             | 12  | 18      |   | <b>STATIC / FIXED GOBOS [GOBO WHEEL 2]</b>                               |
|                |   |         | 0-7                                       | OPEN   |
|                |   |         | 8-14                                      | Static / Fixed Gobo 1  |
|                |   |         | 15-21                                     | Static / Fixed Gobo 2  |
|                |   |         | 22-28                                     | Static / Fixed Gobo 3  |
|                |   |         | 29-35                                     | Static / Fixed Gobo 4  |
|                |   |         | 36-42                                     | Static / Fixed Gobo 5  |
|                |   |         | 43-49                                     | Static / Fixed Gobo 6  |
|                |   |         | 50-56                                     | Static / Fixed Gobo 7  |
|                |   |         | 57-63                                     | Static / Fixed Gobo 8  |
|                |   |         | 64-70                                     | Static / Fixed Gobo 9  |
|                |   |         | 71-77                                     | Static / Fixed Gobo 10   |
|                |   |         | 78-84                                     | Static / Fixed Gobo 11   |
|                |   |         | 85-91                                     | Static / Fixed Gobo 12   |
|                |   |         | 92-98                                     | Static / Fixed Gobo 13   |
|                |   |         | 99-105                                    | Static / Fixed Gobo 14   |
|                |   |         | 106-111                                   | Shake SLOW to FAST Static / Fixed Gobo 1                                 |
|                |   |         | 112-117                                   | Shake SLOW to FAST Static / Fixed Gobo 2                                 |
|                |   |         | 118-123                                   | Shake SLOW to FAST Static / Fixed Gobo 3                                 |
|                |   |         | 124-129                                   | Shake SLOW to FAST Static / Fixed Gobo 4                                 |
|                |   |         | 130-135                                   | Shake SLOW to FAST Static / Fixed Gobo 5                                 |
|                |   |         | 136-141                                   | Shake SLOW to FAST Static / Fixed Gobo 6                                 |
|                |   |         | 142-147                                   | Shake SLOW to FAST Static / Fixed Gobo 7                                 |
|                |   |         | 148-153                                   | Shake SLOW to FAST Static / Fixed Gobo 8                                 |
|                |   |         | 154-159                                   | Shake SLOW to FAST Static / Fixed Gobo 9                                 |
|                |   |         | 160-165                                   | Shake SLOW to FAST Static / Fixed Gobo 10                                |
|                |   |         | 166-171                                   | Shake SLOW to FAST Static / Fixed Gobo 11                                |
|                |   |         | 172-177                                   | Shake SLOW to FAST Static / Fixed Gobo 12                                |
|                |   | 178-183 | Shake SLOW to FAST Static / Fixed Gobo 13 |  |
|                |   | 184-189 | Shake SLOW to FAST Static / Fixed Gobo 14 |  |
| 190-221        | *Clockwise Gobo Wheel Rotation from FAST to SLOW        |         |   |  |
| 222-223        | NO ROTATION   |         |   |  |
| 224-255        | *Counterclockwise Gobo Wheel Rotation from SLOW to FAST |         |   |  |
|                |   | 19      |   | <b>STATIC / FIXED GOBOS, FINE INDEX ROTATION [GOBO WHEEL 2] [16 BIT]</b> |
|                |   |         | 0-255                                     | Gobo Rotation FINE Indexing  |



**Supports Software Versions:  $\geq 1.3.1$**

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 |                       |        | VALUE   | FUNCTION                                   |
|----------------|-----------------------|--------|---------|--|
| BASIC          | STAND                 | EXTEND |         |  |
| 11             | 13                    | 20     |         | <b>ROTATING PRISM, PRISM / GOBO MACROS</b> |
|                |                       |        | 0-31    | OPEN                                       |
|                |                       |        | 32-63   | 8-FACET PRISM                              |
|                |                       |        | 64-95   | LINEAR PRISM                               |
|                |                       |        | 96-127  | 8-FACET + LINEAR PRISMS                    |
|                |                       |        | 128-135 | Prism / Gobo Macro 1                       |
|                |                       |        | 136-143 | Prism / Gobo Macro 2                       |
|                |                       |        | 144-151 | Prism / Gobo Macro 3                       |
|                |                       |        | 152-159 | Prism / Gobo Macro 4                       |
|                |                       |        | 160-167 | Prism / Gobo Macro 5                       |
|                |                       |        | 168-175 | Prism / Gobo Macro 6                       |
|                |                       |        | 176-183 | Prism / Gobo Macro 7                       |
|                |                       |        | 184-191 | Prism / Gobo Macro 8                       |
|                |                       |        | 192-199 | Prism / Gobo Macro 9                       |
|                |                       |        | 200-207 | Prism / Gobo Macro 10                      |
|                |                       |        | 208-215 | Prism / Gobo Macro 11                      |
|                |                       |        | 216-223 | Prism / Gobo Macro 12                      |
| 224-231        | Prism / Gobo Macro 13 |        |         |  |
| 232-239        | Prism / Gobo Macro 14 |        |         |  |
| 240-247        | Prism / Gobo Macro 15 |        |         |  |
| 248-255        | Prism / Gobo Macro 16 |        |         |  |

**DMX CHANGE WITH SOFTWARE UPDATE VERSION  $\geq 1.5.0$**

See highlighted items below which have been updated with this software update.

**Supports Software Versions:  $\geq 1.5.0$**

Features subject to change without any prior written notice.

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

| MODE / CHANNEL |                       |        | VALUE   | FUNCTION                                   |
|----------------|-----------------------|--------|---------|--|
| BASIC          | STAND                 | EXTEND |         |  |
| 11             | 13                    | 20     |         | <b>ROTATING PRISM, PRISM / GOBO MACROS</b> |
|                |                       |        | 0-31    | OPEN                                       |
|                |                       |        | 32-64   | 8-FACET PRISM                              |
|                |                       |        | 65-94   | LINEAR PRISM                               |
|                |                       |        | 95-127  | 8-FACET + LINEAR PRISMS                    |
|                |                       |        | 128-135 | Prism / Gobo Macro 1                       |
|                |                       |        | 136-143 | Prism / Gobo Macro 2                       |
|                |                       |        | 144-151 | Prism / Gobo Macro 3                       |
|                |                       |        | 152-159 | Prism / Gobo Macro 4                       |
|                |                       |        | 160-167 | Prism / Gobo Macro 5                       |
|                |                       |        | 168-175 | Prism / Gobo Macro 6                       |
|                |                       |        | 176-183 | Prism / Gobo Macro 7                       |
|                |                       |        | 184-191 | Prism / Gobo Macro 8                       |
|                |                       |        | 192-199 | Prism / Gobo Macro 9                       |
|                |                       |        | 200-207 | Prism / Gobo Macro 10                      |
|                |                       |        | 208-215 | Prism / Gobo Macro 11                      |
|                |                       |        | 216-223 | Prism / Gobo Macro 12                      |
| 224-231        | Prism / Gobo Macro 13 |        |         |  |
| 232-239        | Prism / Gobo Macro 14 |        |         |  |
| 240-247        | Prism / Gobo Macro 15 |        |         |  |
| 248-255        | Prism / Gobo Macro 16 |        |         |  |

## Supports Software Versions: $\geq 1.3.1$

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 |       |        | VALUE   | FUNCTION   |
|----------------|-------|--------|---------|--|
| BASIC          | STAND | EXTEND |         |  |
| 12             | 14    | 21     |         | ROTATING PRISM, PRISM INDEX ROTATION               |
|                |       |        | 0-127   | Prism Indexing                                     |
|                |       |        | 128-189 | *Clockwise Prism Rotation from FAST to SLOW        |
|                |       |        | 190-193 | NO Rotation  |
|                |       |        | 194-255 | *Counterclockwise Prism Rotation from SLOW to FAST |
|                |       | 22     |         | ROTATING PRISM, PRISM FINE INDEX ROTATION [16 BIT] |
|                |       |        | 0-255   | Gobo Rotation FINE Indexing                        |
| 13             | 15    | 23     |         | FOCUS  |
|                |       |        | 0-255   | Continuous Adjustment from NEAR to FAR             |
|                |       | 24     |         | FOCUS FINE [16 BIT]                                |
|                |       |        | 0-255   | Continuous FINE Adjustment                         |
| 14             | 16    | 25     |         | ZOOM   |
|                |       |        | 0-255   | Continuous Adjustment from NEAR to FAR             |
|                |       | 26     |         | ZOOM FINE [16 BIT]                                 |
|                |       |        | 0-255   | Continuous FINE Adjustment                         |
| 15             | 17    | 27     |         | AUTO FOCUS   |
|                |       |        | 0-50    | Auto Focus OFF                                     |
|                |       |        | 51-150  | 49 feet   15m                                      |
|                |       |        | 151-255 | 65 feet   20m                                      |
| 16             | 18    | 28     |         | AUTO FOCUS FINE [16 BIT]                           |
|                |       |        | 0-255   | Auto Focus Continuous FINE Adjustment              |
| 17             | 19    | 29     |         | SHUTTER, STROBE                                    |
|                |       |        | 0-31    | Shutter CLOSED                                     |
|                |       |        | 32-63   | NO Function (Shutter OPEN)                         |
|                |       |        | 64-95   | Strobe Effect SLOW to FAST                         |
|                |       |        | 96-127  | NO function (Shutter OPEN)                         |
|                |       |        | 128-159 | Pulse Effect In Sequences                          |
|                |       |        | 160-191 | NO Function (Shutter OPEN)                         |
|                |       |        | 192-223 | Random Strobe Effect SLOW to FAST                  |
|                |       |        | 224-255 | NO Function (Shutter OPEN)                         |
| 18             | 20    | 30     |         | DIMMER INTENSITY                                   |
|                |       |        | 0-255   | Intensity 0 to 100%                                |
|                |       | 31     |         | DIMMER INTENSITY FINE [16 BIT]                     |
|                |       |        | 0-255   | Intensity 0 to 100%                                |
| 19             | 21    | 32     |         | FROST  |
|                |       |        | 0-127   | Disable FROST                                      |
|                |       |        | 128-255 | Enable FROST                                       |
| 20             | 22    | 33     |         | ANIMATION WHEEL                                    |
|                |       |        | 0-7     | CLOSE  |
|                |       |        | 8-127   | *Clockwise Rotation FAST to SLOW                   |
|                |       |        | 128-135 | NO ROTATION  |
|                |       |        | 136-255 | *Counterclockwise from SLOW to FAST                |
| 21             | 23    | 34     |         | CMY SPEED  |
|                |       |        | 0-255   | Speed MAX to MIN                                   |

**Supports Software Versions:  $\geq$  1.3.1**

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 |            |        | VALUE   | FUNCTION                         |
|----------------|------------|--------|---------|----------------------------------|
| BASIC          | STAND      | EXTEND |         |                                  |
| 22             | 24         | 35     |         | <b>CMY MACROS</b>                |
|                |            |        | 0-31    | OFF                              |
|                |            |        | 32-39   | Macro 01                         |
|                |            |        | 40-47   | Macro 02                         |
|                |            |        | 48-55   | Macro 03                         |
|                |            |        | 56-63   | Macro 04                         |
|                |            |        | 64-71   | Macro 05                         |
|                |            |        | 72-79   | Macro 06                         |
|                |            |        | 80-87   | Macro 07                         |
|                |            |        | 88-95   | Macro 08                         |
|                |            |        | 96-103  | Macro 09                         |
|                |            |        | 104-111 | Macro 10                         |
|                |            |        | 112-119 | Macro 11                         |
|                |            |        | 120-127 | Macro 12                         |
|                |            |        | 128-135 | Macro 13                         |
|                |            |        | 136-143 | Macro 14                         |
|                |            |        | 144-151 | Macro 15                         |
|                |            |        | 152-159 | Macro 16                         |
|                |            |        | 160-167 | Macro 17                         |
|                |            |        | 168-175 | Macro 18                         |
|                |            |        | 176-183 | Macro 19                         |
|                |            |        | 184-191 | Macro 20                         |
|                |            |        | 192-199 | Macro 21                         |
| 200-207        | Macro 22   |        |         |                                  |
| 208-215        | Macro 23   |        |         |                                  |
| 216-223        | Macro 24   |        |         |                                  |
| 224-231        | Macro 25   |        |         |                                  |
| 232-239        | Macro 26   |        |         |                                  |
| 240-247        | Macro 27   |        |         |                                  |
| 248-255        | Random CMY |        |         |                                  |
| 23             | 25         | 36     |         | <b>PAN / TILT MOVEMENT SPEED</b> |
|                |            |        | 0-225   | MAX to MIN Speed                 |
|                |            |        | 226-235 | Blackout by Movement             |
|                |            |        | 236-245 | Blackout by ALL Wheel Movement   |
|                |            |        | 246-255 | NO FUNCTION                      |

**Supports Software Versions:  $\geq$  1.3.1**

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 |                    |        | VALUE   | FUNCTION                                    |
|----------------|--------------------|--------|---------|---|
| BASIC          | STAND              | EXTEND |         |   |
| 24             | 26                 | 37     |         | LAMP ON/OFF, RESET, INTERNAL PROGRAMS       |
|                |                    |        | 0-19    | COLOR Change Normal                         |
|                |                    |        | 20-29   | COLOR Change to Any Position                |
|                |                    |        | 30-39   | COLOR and FIXED GOBO Change to Any Position |
|                |                    |        | 40-59   | LAMP ON                                     |
|                |                    |        | 60-79   | LAMP SWITCH OFF                             |
|                |                    |        | 80-84   | ALL Motors Reset                            |
|                |                    |        | 85-87   | SCAN Motor Reset                            |
|                |                    |        | 88-90   | COLOR Motors Reset                          |
|                |                    |        | 91-93   | GOBO Motors Reset                           |
|                |                    |        | 94-96   | SHUTTER and DIMMER Motor Reset              |
|                |                    |        | 97-99   | OTHER Motors Reset                          |
|                |                    |        | 100-119 | Internal Program 1                          |
|                |                    |        | 120-139 | Internal Program 2                          |
|                |                    |        | 140-159 | Internal Program 3                          |
|                |                    |        | 160-179 | Internal Program 4                          |
|                |                    |        | 180-199 | Internal Program 5                          |
|                |                    |        | 200-219 | Internal Program 6                          |
| 220-239        | Internal Program 7 |        |         |   |
| 240-255        | NO FUNCTION        |        |         |   |



### DMX CHANGE WITH SOFTWARE UPDATE VERSION ≥1.6.2

See highlighted items below which have been updated with this software update

Supports Software Versions: ≥ 1.6.2

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 |       |        | VALUE   | FUNCTION                                    |
|----------------|-------|--------|---------|---|
| BASIC          | STAND | EXTEND |         |   |
| 24             | 26    | 37     |         | LAMP ON/OFF, RESET, INTERNAL PROGRAMS       |
|                |       |        | 0-19    | COLOR Change Normal                         |
|                |       |        | 20-29   | COLOR Change to Any Position                |
|                |       |        | 30-39   | COLOR and FIXED GOBO Change to Any Position |
|                |       |        | 40-59   | LAMP ON                                     |
|                |       |        | 60-79   | LAMP SWITCH OFF                             |
|                |       |        | 80-84   | ALL Motors Reset                            |
|                |       |        | 85-87   | SCAN Motor Reset                            |
|                |       |        | 88-90   | COLOR Motors Reset                          |
|                |       |        | 91-93   | GOBO Motors Reset                           |
|                |       |        | 94-96   | SHUTTER and DIMMER Motor Reset              |
|                |       |        | 97-99   | OTHER Motors Reset                          |
|                |       |        | 100-119 | Internal Program 1                          |
|                |       |        | 120-139 | Internal Program 2                          |
|                |       |        | 140-159 | Internal Program 3                          |
|                |       |        | 160-179 | Internal Program 4                          |
|                |       |        | 180-199 | Internal Program 5                          |
|                |       |        | 200-219 | Internal Program 6                          |
|                |       |        | 220-239 | Internal Program 7                          |
|                |       |        | 240-241 | DIMMING STANDARD                            |
|                |       |        | 242-243 | DIMMING LINEAR                              |
|                |       |        | 244-245 | DIMMING SQUARE                              |
|                |       |        | 246-247 | DIMMING INVERSE SQUARE                      |
|                |       |        | 248-249 | DIMMING S-CURVE                             |
|                |       |        | 250-255 | RESERVED                                    |
|                |       |        | 240-255 | NO FUNCTION                                 |

### DMX CHANGE WITH SOFTWARE UPDATE VERSION ≥1.6.5

See highlighted items below which have been updated with this software update

Supports Software Versions: ≥ 1.6.5

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 |       |        | VALUE   | FUNCTION                       |
|----------------|-------|--------|---------|--------------------------------|
| BASIC          | STAND | EXTEND |         |                                |
| 23             | 25    | 36     |         | PAN / TILT MOVEMENT SPEED      |
|                |       |        | 0-225   | MAX to MIN Speed               |
|                |       |        | 226-235 | Blackout by Movement           |
|                |       |        | 236-245 | Blackout by ALL Wheel Movement |
|                |       |        | 246-248 | Home Position Before Power Off |
|                |       |        | 249-251 | Home Position Off              |
|                |       |        | 252-255 | No Function                    |

### DMX CHANGE WITH SOFTWARE UPDATE VERSION ≥1.6.6

See highlighted items below which have been updated with this software update

Supports Software Versions: ≥ 1.6.6

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.

- Hibernation ON/OFF added to the DMX traits

# ERROR CODES

When power is applied, the unit will automatically enter a **“Reset/Test”** mode. This mode brings all the internal motors to a home position. If there is an internal problem with one or more of the motors an error code will flash in the display in the form of **“XXer”** where as XX will represent a function number. For example, when the display shows **“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 corrected 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

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

| ERROR CODES                   | DESCRIPTION  |
|-------------------------------|--|
| <b>PAN Er</b>                 | 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. |
| <b>TILT Er</b>                | 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.           |
| <b>Cyan Wheel Er</b>          | 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).   |
| <b>Magenta Wheel Er</b>       | 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).   |
| <b>Yellow Wheel Er</b>        | 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).   |
| <b>Color Wheel Er</b>         | 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).  |
| <b>CTO Wheel Er</b>           | 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).   |
| <b>Rotating Gobo Wheel Er</b> | 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

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

| ERROR CODES                      | DESCRIPTION   |
|----------------------------------|---|
| <b>Rotating Gobo Rotation Er</b> | 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). |
| <b>Fixed Gobo Wheel Er</b>       | 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).       |
| <b>Prism Wheel 1 Er</b>          | The Prism Wheel 1 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).          |
| <b>Prism Rotation Wheel 1 Er</b> | 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). |
| <b>Prism Wheel 2 Er</b>          | 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).          |
| <b>Prism Rotation Wheel 2 Er</b> | 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). |
| <b>Focus Er</b>                  | 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).                |
| <b>Zoom Er</b>                   | 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

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

| ERROR CODES                | DESCRIPTION  |
|----------------------------|--|
| <b>Animation Wheel Er</b>  | 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. |
| <b>Dimmer Er</b>           | 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.                     |
| <b>Frost Wheel Er</b>      | 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).  |
| <b>Fan Moving Wheel Er</b> | 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).   |
| <b>Array Lens Wheel Er</b> | 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).   |
| <b>1U_FanJB1Fault</b>      | Error information from JB1 port on 1U01 PCB.   |
| <b>1U_FanJB2Fault</b>      | Error information from JB2 port on 1U01 PCB.   |
| <b>3U_FanJB1Fault</b>      | Error information from JB1 port on 3U PCB.   |
| <b>3U_FanJB2Fault</b>      | Error information from JB2 port on 3U PCB.   |
| <b>4U_FanJB2Fault</b>      | Error information from JB2 port on 4U PCB.   |
| <b>5U_FanJB1Fault</b>      | Error information from JB1 port on 5U PCB.   |
| <b>6U_FanJB1Fault</b>      | Error information from JB1 port on 6U PCB.   |
| <b>7U_FanJB1Fault</b>      | Error information from JB1 port on 7U PCB.   |
| <b>7U_FanJB2Fault</b>      | Error information from JB2 port on 7U PCB.   |

## ERROR CODES

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

| ERROR CODES                   | DESCRIPTION   |
|-------------------------------|---|
| <b>Accelerometer Err</b>      | Accelerometer calibration failure.  |
| <b>Accelerometer ID Error</b> | Accelerometer fail to read ID information.  |
| <b>Ballast Fault_1</b>        | Lamp over voltage. (See BALLAST ERROR NOTE page 36)   |
| <b>Ballast Fault_2</b>        | Input voltage too high. (See BALLAST ERROR NOTE page 36)  |
| <b>Ballast Fault_3</b>        | Temperature too high. (See BALLAST ERROR NOTE page 36)  |
| <b>Ballast Fault_4</b>        | Asymmetry detected. (See BALLAST ERROR NOTE page 36)  |
| <b>Ballast Fault_5</b>        | Lamp under voltage. (See BALLAST ERROR NOTE page 36)  |
| <b>Ballast Fault_6</b>        | Input voltage too low. (See BALLAST ERROR NOTE page 36)   |
| <b>Ballast Fault_8</b>        | NTC defective. (See BALLAST ERROR NOTE page 36)   |
| <b>Ballast Fault_Other</b>    | These fault modes are related to driver internal software and hardware malfunction.             |
| <b>BallastWasOver Hot</b>     | Record and feedback that fixture once appeared lamp off issue because of ballast temp too high. |
| <b>Ballast_Uart_Fail</b>      |   |
| <b>ShiftFanFault</b>          |   |
| <b>Pan Reset Fail</b>         |   |
| <b>Tilt Reset Fail</b>        |   |
| <b>REPLACE THE LAMP</b>       |   |
| <b>Excess Humidity</b>        | Humidity >85%   |
| <b>Humidity Warning</b>       | Humidity=70%  |
| <b>2U01 Com Fail</b>          | IC Chip failure.  |
| <b>3U01 Com Fail</b>          | IC Chip failure.  |
| <b>4U01 Com Fail</b>          | IC Chip failure.  |
| <b>5U01 Com Fail</b>          | IC Chip failure.  |
| <b>6U01 Com Fail</b>          | IC Chip failure.  |
| <b>7U01 Com Fail</b>          | IC Chip failure.  |
| <b>8U01 Com Fail</b>          | IC Chip failure.  |
| <b>9U01 Com Fail</b>          | 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. Loose screws may fall out during normal operation resulting in damage or injury as larger parts could fall.

Check for any deformations on the housing, color lenses, rigging hardware and rigging points (ceiling, suspension, trussing). Deformations in the housing could allow for dust to enter 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.

# 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 not limited to:  
Environmental Conditions, Power/Voltage, Usage Patterns (On-Off Cycling), Control, and Dimming.

## PHOTOMETRIC DATA

80CRI | >23,000 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)  
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

## 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  
14 Static-Stamped Metal Gobos

## CONTROL / CONNECTIONS

(3) DMX Channel Modes (24 / 26 / 37)  
6 Button Touch Control Panel  
Full Color 180° Reversible LCD Menu Display  
8 / 16 Bit Resolution Adjustable Movement  
DMX, RDM, Art-NET, and sACN Protocol Support  
Elation's E-FLY™ 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



# COLORS AND GOBOS

## COLOR FLAGS



CYAN MAGENTA YELLOW CTO

## COLOR WHEEL



RED 1 BLUE 2 GREEN 3 YELLOW 4 PURPLE 5 AGUA 6 ORANGE 7 LT PINK 8 LIME 9 LT YELLOW 10 MAGENTA 11 CTO 12 CTB 13 UV 14

## INTERCHANGEABLE-ROTATING GOBO WHEEL 1



1 2 3 4 5 6 7 8

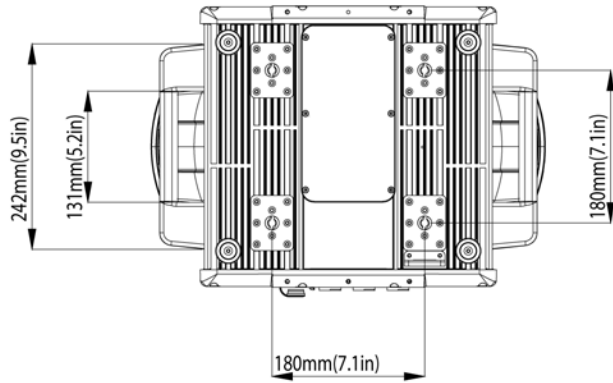
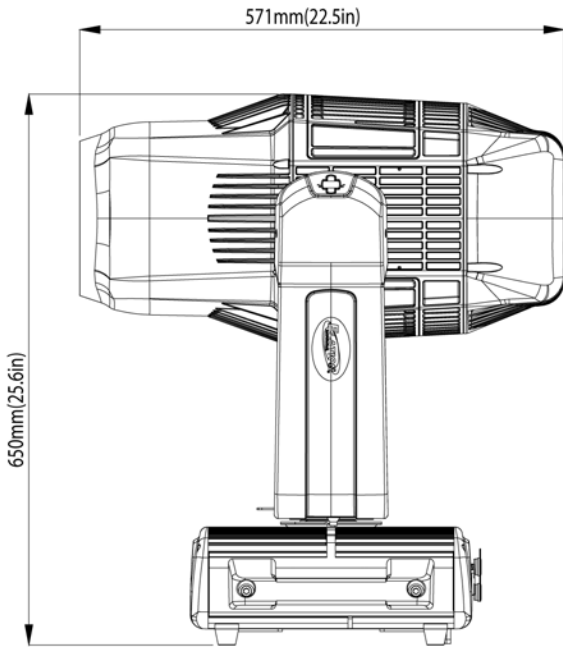
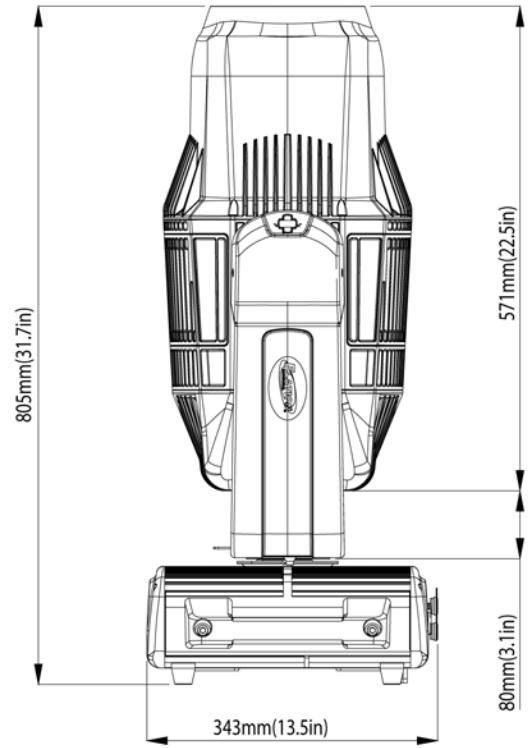
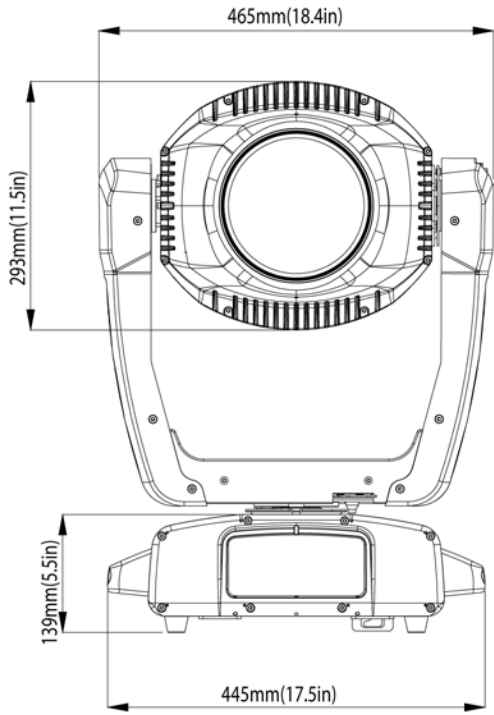
## STATIC-FIXED GOBO WHEEL 2



1 2 3 4 5 6 7 8 9 10 11 12 13 14



# 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





