ELATION
PROFESSIONAL

SMARTY HYBRID ™

User Manual

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D O C U M E N T   V E R S I O N

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

Date	Document Version	Software Version ≥	DMX Channel Modes	Notes
06/13/18	1.0	1.1.2	20 / 34	Initial release.
07/05/18	1.2	N/C	NO CHANGE	Added gobo dimensions, lamp, and road case order #, updated lamp wattage.
07/08/28	2.0	1.2.1	NO CHANGE	Updated DMX traits and system menu, and lamp module.
08/24/18	2.2	1.2.2	NO CHANGE	Added new Lamp Life Warning and text. Updated System Menu.
11/29/18	2.4	N/C	NO CHANGE	Added POTENTIAL INTERNAL FIXTURE DAMAGE FROM EXTERNAL SOURCES OF LIGHT BEAMS section.
01/02/19	2.6	1.2.4	CH 24 (Standard) CH 34 (Extended)	Updated DMX traits for CH 24 (Standard) and CH 32 (Extended).
03/12/19	2.8	NO CHANGE	NO CHANGE	Warranty and Specification update.
03/10/21	3.0	NO CHANGE	NO CHANGE	Updated sun protection, FCC, and primary/secondary modes
09/02/22	3.2	1.4.1	NO CHANGE	Added Software Updates
01/12/23	3.4	NO CHANGE	NO CHANGE	Added Handling, Software Service Port Update, FIL Dimensions, RDM, & updated Specifications
05/09/23	3.5	NO CHANGE	NO CHANGE	Added center-to-center dimension

C O N T E N T S

GENERAL INFORMATION

INTRODUCTION

Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this device. These instructions contain important safety and use information.

This device is intended for use by trained personnel only, and is not suitable for private use, for professional use only.

UNPACKING

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

BOX CONTENTS

2 Omega Brackets

1 Power Cable

CUSTOMER SUPPORT

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

Also visit forums.elationlighting.com with questions, comments or suggestions.

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

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REPLACEMENT PARTS please visit parts.elationlighting.com

ULTIMATE WARRANTY (USA ONLY)

A. This ULTIMATE WARRANTY covers the first two years of operation or 6,000 hours of use, whichever comes first, based on regular maintenance for the fixture and lamp. This comprehensive warranty for a 2-year period covers material and workmanship of the fixture, including the highly efficient Philips Platinum FLEX 200 lamp. Elation Professional warrants product rechargeable batteries to be free of manufacturing defects in material and workmanship for a period of six months (180 days) from the original date of purchase. This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.

B. For warranty service, send the product only to the Elation Professional factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, Elation Professional will pay return shipping charges only to a designated point within the United States. If any product is sent, it must be shipped in its original package and packaging material. No accessories should be shipped with the product. If any accessories are shipped with the product, Elation Professional shall have no liability whatsoever for loss and/or or damage to any such accessories, nor for the safe return thereof.

C. This warranty is void if the product serial number and/or labels are altered or removed; if the product is modified in any manner which Elation Professional concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the Elation Professional factory unless prior written authorization was issued to purchaser by Elation Professional; if the product is damaged because not properly maintained as set forth in the product instructions, guidelines and/or user manual.

D. This is not a service contract, and this warranty does not include any maintenance, cleaning, or periodic check-up. During the periods as specified above, Elation Professional will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of Elation Professional under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Elation Professional. All products covered by this warranty were manufactured after January 1, 1990, and bare identifying marks to that effect.

E. Elation Professional reserves the right to make changes in design and/or performance improvements upon its products without any obligation to include these changes in any products theretofore manufactured.

F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with the products described above. Except to the extent prohibited by applicable law, all implied warranties made by Elation Professional in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty periods set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said periods have expired. The consumer's and/or dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall Elation Professional be liable for any loss and/or damage, direct and/or consequential, arising out of the use of, and/or the inability to use, this product.

G. This warranty is the only written warranty applicable to Elation Professional products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

WARRANTY RETURNS

All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. Items returned without a R.A. number clearly marked on the outside of the package will be refused and returned at customer's expense. You may obtain a R.A. number by contacting customer support.

SAFETY GUIDELINES

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

PROTECTION CLASS 1 - FIXTURE MUST BE PROPERLY GROUNDED

THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT.
DO NOT ATTEMPT ANY REPAIRS YOURSELF; DOING SO WILL VOID YOUR 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!

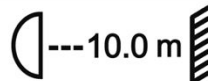NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE!
RETINA INJURY RISK - MAY INDUCE BLINDNESS!
SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK!

INDOOR / DRY LOCATIONS USE ONLY!
DO NOT EXPOSE FIXTURE TO RAIN AND MOISTURE!

WARNING 〔---10.0 m〕
Minimum distance to lighted objects 10.0 meters.
Maximum temperature of the external surface 100°C.
Minimum distance of inflammable materials from the surface 0.5m.

S A F E T Y G U I D E L I N E S

⚠ CAUTION

HIGH INTENSITY ULTRAVIOLET LIGHT ✳ UV

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 PHOTOSENSITIVE MEDICATION, MAY RECEIVE DISCOMFORT IF EXPOSED TO THE ULTRAVIOLET UV LIGHT EMITTED FROM THE UV LED.

DO NOT TOUCH the fixture housing during operation. Turn OFF the power and allow approximately 15 minutes for the fixture to cool down before serving.

DO NOT shake fixture, avoid brute force when installing and/or operating fixture.

DO NOT operate fixture if the power cord is frayed, crimped, damaged and/or if any of the power cord connectors are damaged and do not insert into the fixture securely with ease. **NEVER** force a power cord connector into the fixture. If the power cord or any of its connectors are damaged, replace it immediately with a new one of similar power rating.

DO NOT block any air ventilation slots.

All fan and air inlets must remain clean and never blocked.

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

When installing fixture in a suspended environment, always use mounting hardware that is no less than M10 x 25 mm, and always install fixture with an appropriately rated safety cable.

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
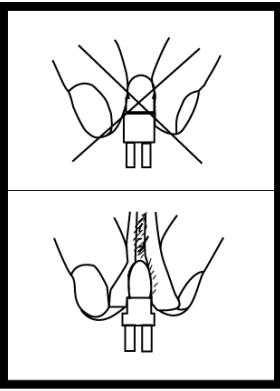
This fixture is fitted with a DISCHARGE LAMP, which is highly susceptible to damage if improperly handled. NEVER touch the lamp with your bare hands, as the oil from your hands will shorten the life of the lamp. **NEVER** move the fixture until the lamp has had ample time to cool. DISCHARGE LAMPS are 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, it **MAY EXPLODE DURING PROLONGED EXTENSIVE USE**. This risk is increased with age; added care is encouraged when dealing with older lamps. Thus, the lamp must always be replaced at the end of their recommended duty cycle. Extreme caution should be used when operating this or any fixture fitted with a gas discharge lamp.

UV RADIATION NOTICE

THIS FIXTURE EMITS INTENSE UV RADIATION, WHICH IS HARMFUL TO THE EYES AND SKIN. THE INTENSE LUMINANCE OF THE LAMP CAN CAUSE SEVERE DAMAGE TO THE RETINA. NEVER OPERATE THIS FIXTURE WITH ANY OF THE PROTECTIVE COVERS REMOVED. THESE COVERS HAVE BEEN SPECIALLY DESIGNED TO SHIELD AGAINST UV RADIATION.

LAMP REPLACEMENT

USE ONLY GENUINE ORIGINAL PHILIPS™ LAMPS. OTHER BRAND LAMPS WILL CAUSE DAMAGE AND WILL VOID FIXTURE WARRANTY!

DISCONNECT THE MAIN POWER SUPPLY BEFORE REPLACING LAMP!
FIXTURE MUST COOL FOR 60 MINUTES BEFORE REPLACING LAMP!

NEVER TOUCH LAMP WITH BARE HANDS, ALWAYS WEAR GLOVES!
OIL FROM HANDS WILL SHORTEN LIFE OF LAMP!

MAKE SURE ALL COVERS/PANELS ARE REPLACED/SECURED BEFORE OPERATING FIXTURE TO PREVENT ANY RISK AND/OR DAMAGE TO EYE RETINA FROM UV RADIATION EXPOSIURE!

M A I N T E N A N C E   G U I D E L I N E S

⚠ **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 review 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 securely tightened. Lose screws may fall out during normal operation resulting in damage or injury as larger parts could fall.

Check for any deformations on the housing, color lenses, rigging hardware and rigging points (ceiling, suspension, trussing). Deformations in the housing could allow for dust to enter the fixture. Damaged rigging points or unsecured rigging could cause the fixture to fall and seriously injure a person(s).

Electric power supply cables must not show any damage, material fatigue or sediments. **NEVER** remove the ground prong from the power cable.

FIXTURE OVERVIEW
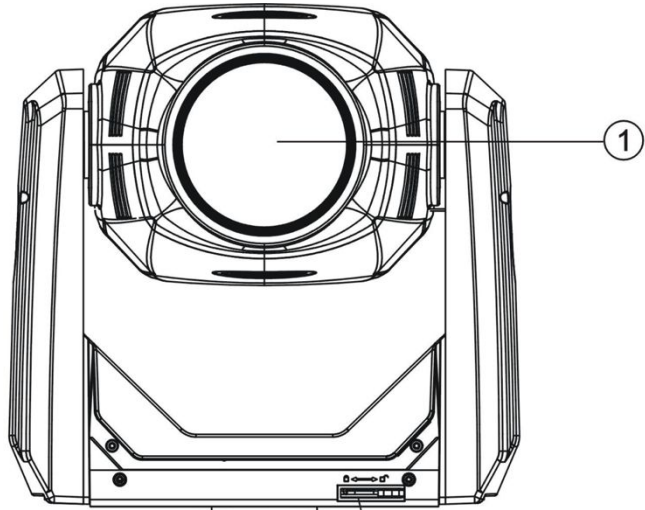
1. Lens
2. Wireless Indicator
3. LCD Control Menu Display
4. MODE/ESC Button
5. LEFT Button
6. ENTER Button
7. DOWN Button
8. RIGHT Button
9. UP Button
10. PAN Lock
11. Handle (s)
12. Lamp Access Panel
13. RJ45 Ethernet IN
14. RJ45 Ethernet OUT
15. 5pin DMX IN
16. 5pin DMX OUT
17. Power IN
18. Power OUT
19. Fuse
20. Service Port
21. TILT Lock
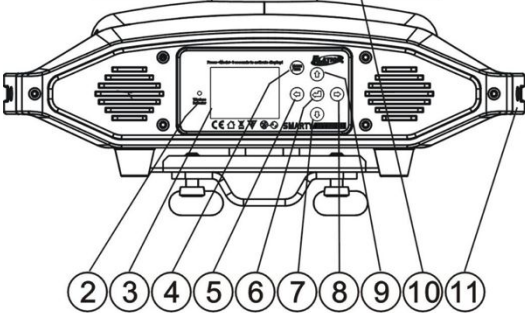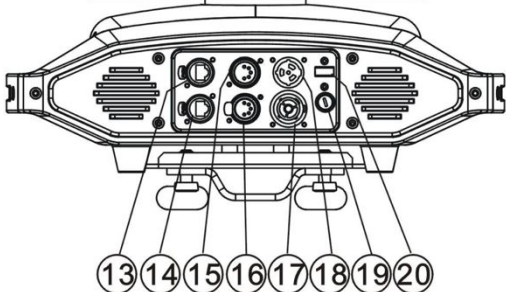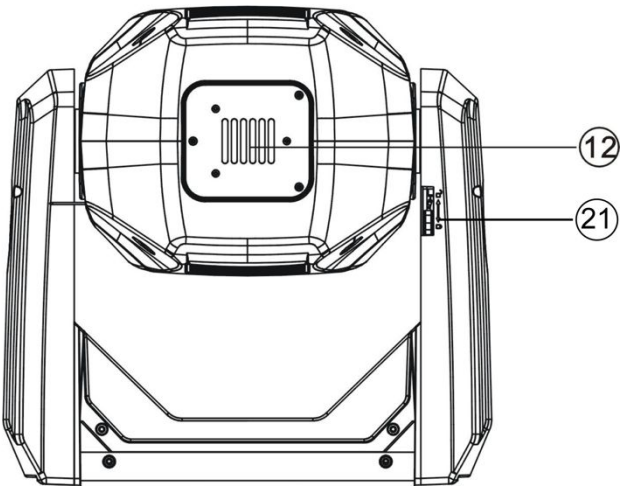
COLORS AND GOBOS

COLOR WHEEL

1 Red	2 Green	3 Yellow	4 Magenta	5 Orange	6 Aqua	7 Pink	8 Cyan	9 RYBG

10 CTB	11 UV	12 CTO	13 Blue

COLOR FLAGS

C	M	Y
CYAN	MAGENTA	YELLOW

INTERCHANGEABLE-ROTATING GLASS GOBO WHEEL 1

1	2	3	4	5	6	7	8
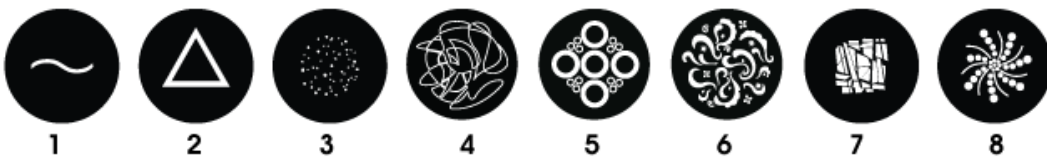
STATIC-FIXED METAL GOBO WHEEL 2

1	2	3	4	5	6	7	8	9	10	11	12
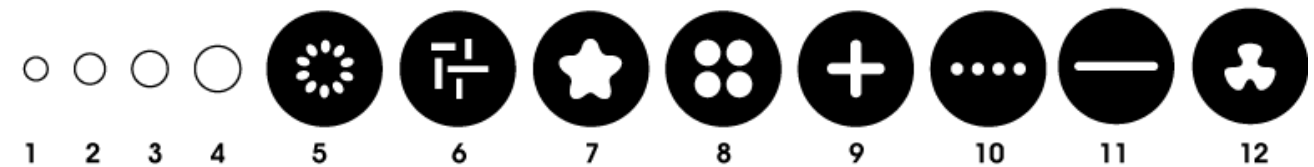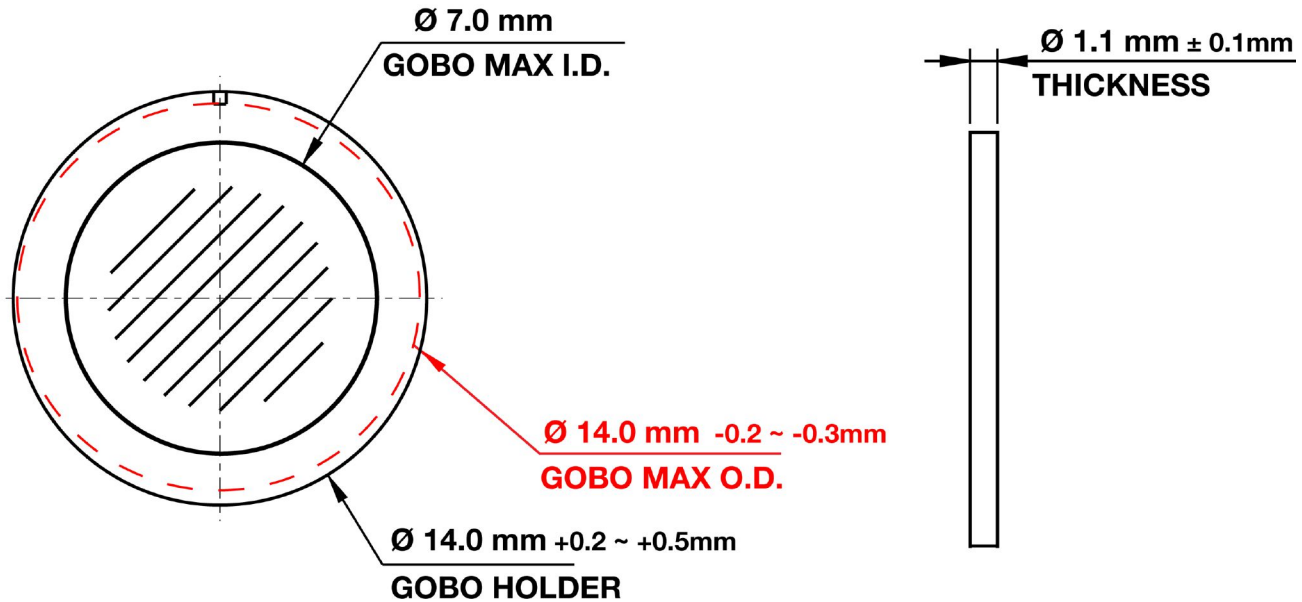
CUSTOM GOBOS

ROTATING GLASS GOBOS - WHEEL 1	
Gobo O.D. (Max. Outer Diameter)	Ø 14mm -0.2~-0.3mm
Gobo I.D. (Max. Image Diameter)	Ø 7mm
Gobo Holder Diameter	Ø 14mm +0.2~+0.5mm
Gobo Thickness	Ø 1.1mm ±0.1mm
Gobo Material	BOROFLOAT

* * * IMPORTANT NOTICE REGARDING CUSTOM GOBOS * * *

Due to the high temperature optical system, special material as listed above is required for custom gobos. Due to varying manufacturing processes and tolerances, it is highly recommended that a gobo sample and holder from the fixture be provided to the custom gobo vendor for accurate sizing. Extended testing of custom gobo designs is highly recommended prior to use. Contact ELATION SERVICE for further information.

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Voice: +31 45 546 85 30   Fax: +31 45 546 85 96
E-mail: support@elationlighting.eu

LAMP REPLACEMENT

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

USE ONLY GENUINE ORIGINAL PHILIPS™ LAMPS. OTHER BRAND LAMPS WILL CAUSE DAMAGE AND WILL VOID FIXTURE WARRANTY!

DISCONNECT THE MAIN POWER SUPPLY BEFORE REPLACING LAMP!
FIXTURE MUST COOL FOR 60 MINUTES BEFORE REPLACING LAMP!

NEVER TOUCH LAMP WITH BARE HANDS, ALWAYS WEAR GLOVES!
OIL FROM HANDS WILL SHORTEN LIFE OF LAMP!
MAKE SURE ALL COVERS/PANELS ARE REPLACED/SECURED BEFORE OPERATING FIXTURE TO PREVENT ANY RISK AND/OR DAMAGE TO EYE RETINA FROM UV RADIATION EXPOSIURE!

LAMP PROTECTION CIRCUITRY

The fixture LCD Menu Control Display will indicate the lamp life and related lamp warnings with each power ON, each lamp strike, and when specific lamp hours are reached. The table below provides details on each lamp life warning. Due to the extreme heat associated with the lamp and the nature of the internal optical system, it is **IMPERATIVE** the lamp is replaced when the LCD Menu Control Display indicates replacement is needed. This is done to protect the internal optical system as well as prevent accidental lamp explosion, which could lead to hot glass particles falling from the fixture.

Total Lamp Hours = X – 20%
LCD display will slowly blink with a YELLOW outline and the following warning for 10 mins:
"LAMP LIFE left "X" hours. Please change lamp soon"
Sending a DMX value of 250-251 in Channel 24 (Standard Mode) or Channel 34 (Extended Mode) from the lighting controller or pressing the OK button on the fixture control panel will clear this warning.
Total Lamp Hours = X up to X + 20%
LCD display will slowly blink with a RED outline and the following warning for 10 mins: **"LAMP LIFE exceeded by "X" hours. Please change lamp immediately"**
Sending a DMX value of 250-251 in Channel 24 (Standard Mode) or Channel 34 (Extended Mode) from the lighting controller or pressing the OK button on the fixture control panel will clear this warning.
Total Lamp Hours = X + 20% and higher
LCD display will slowly blink RED Outline and the following warning:
"Lamp Life "X" hours. Danger of lamp explosion and permanent fixture damage. Replace lamp immediately! User assumes all risks"
This error can ONLY be cleared when the lamp hours are reset.

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

LAMP LIFE OF PHILIPS PLATINUM 200 FLEX = UP TO 6,000 HOURS

Lamp hours are calculated in real time by a smart algorithm combining periods of full output and periods of hibernation with the shutter closed. To reach 6,000 hours the fixture must be operated in average entertainment usage patterns that contain cycles of closed shutters to enter hibernation mode. On average this will allow to the fixture to reach 6,000 hours under common entertainment operation cycles as defined by Philips as 30% operation, 70% hibernation. In the rare case that the fixture Smarty would be turned on, shutter opened and never closed again the lamp life is 2,000 hours. Lamp life idle, total time and an estimated total lamp life % are provided in the display of the fixture.

LAMP INSTALLATION PROCEDURE
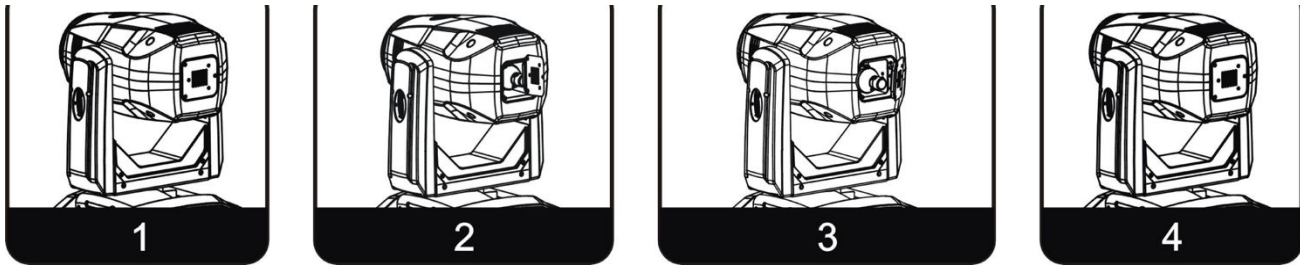
1. Place fixture on a flat surface and let cool for a minimum of **60 MINUTES**.

2. Remove (3) screws marked **"A"**, **"B"**, and **"C"** to remove lamp access panel.
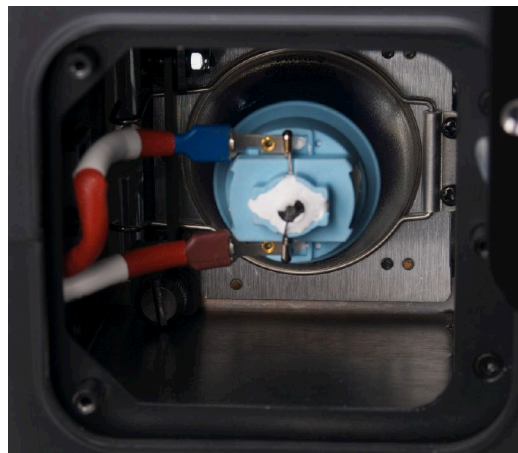
L A M P   R E P L A C E M E N T

LAMP INSTALLATION PROCEDURE [continued]

3. Unlock retention clip and pull clip towards you away from the lamp.

4. Gently grab lamp base with thumb and index finger and pull towards you.

5. Gently remove (2) Wires connected to spade terminals on lamp.

6. Gently pull lamp out towards you away from the fixture.

7. Using thumb and index finger, gently install new lamp into the fixture.

8. Gently attach (2) Wires to spade terminals on the base of the lamp. Make sure both wires are securely attached to the lamp.

9. Install and position lamp so it is seated properly, then secure retention clip.

10. Replace lamp access panel and secure (3) screws marked **"A"**, **"B"**, and **"C"**.

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

LAMP HOURS RESET PROCEDURE

1. Activate the main menu by pressing **MODE/ESC** and toggle to **"Information"**.

2. Press **ENTER** and press **UP** or **DOWN** to toggle to **"Time Information"**.

3. Press **UP** or **DOWN** to toggle to **"LampTime Password"** and press **ENTER**.

   Press **UP** or **DOWN** to enter the reset pass code, **"038"** and press **ENTER** to confirm. The display will automatically revert to **"LampTime Password"**, next press **UP** or **DOWN** to toggle down to **"Clean Lamp Time"**.
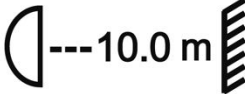
4. Press **ENTER** and select **"ON"**. The lamp timer has now been reset, press **MODE/ESC** to exit the menu and return to the home screen.

LAMP OPTIMIZATION

Unlike traditional discharge lamps the **Philips MSD Platinum 200 FLEX** lamp does **NOT** require optimization. The lamp orientation and optimization procedure has been preset during the manufacturing process of the lamp. The lamp is **NOT** a hot-restrike lamp therefore, you must wait approximately **10 minutes** before attempting to restrike once it has been turned off.

INSTALLATION GUIDELINES

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.

WARNING ◖---10.0 m

Minimum distance to lighted objects 10.0 meters.
Maximum temperature of the external surface 100˚C.
Minimum distance of inflammable materials from the surface 0.5m.

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.

Fixture ambient operating temperature range is **14° to 113°F. (-10° to 45°C)**

Do not use the fixture under or above this temperature.

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

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

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

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

INSTALLATION GUIDELINES

OMEGA BRACKETS INSTALLATION

Insert the included Omega Brackets into the matching holes on the bottom of the fixture. Secure the Omega Brackets to the fixture by turning each quick-lock fastener ¼ turn clockwise; making sure the fastener is completely locked.

SAFETY CABLE ATTACHMENT POINT

(1)Omega–holders
(2)Clamp
(3)Safety–rope
(4)Quick–lock fastener

107mm [4.2in]

284mm [11.2in]

186mm [7.3in]

107mm [4.2in]

¼ turn ¼ turn
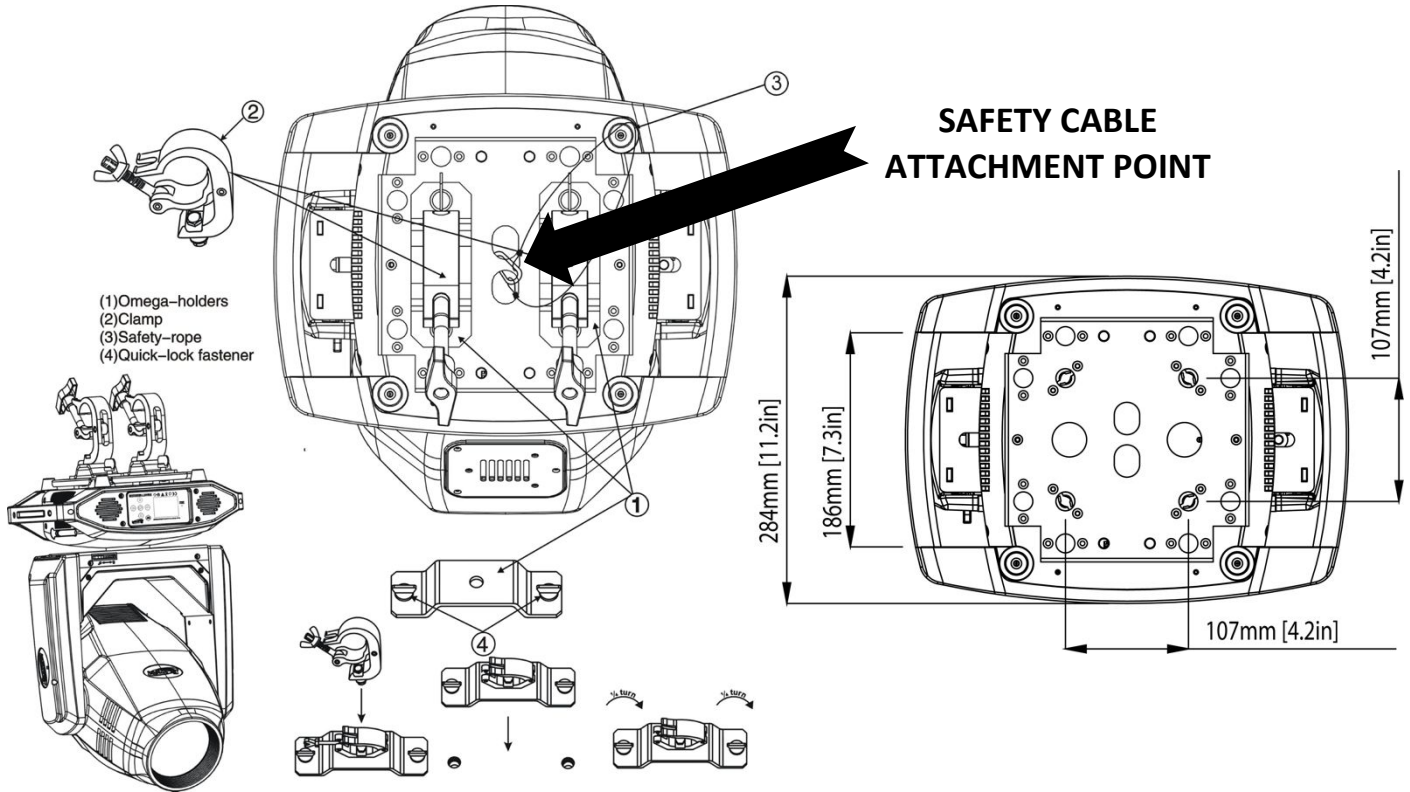
CLAMP INSTALLATION

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

INSTALLATION GUIDELINES

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.
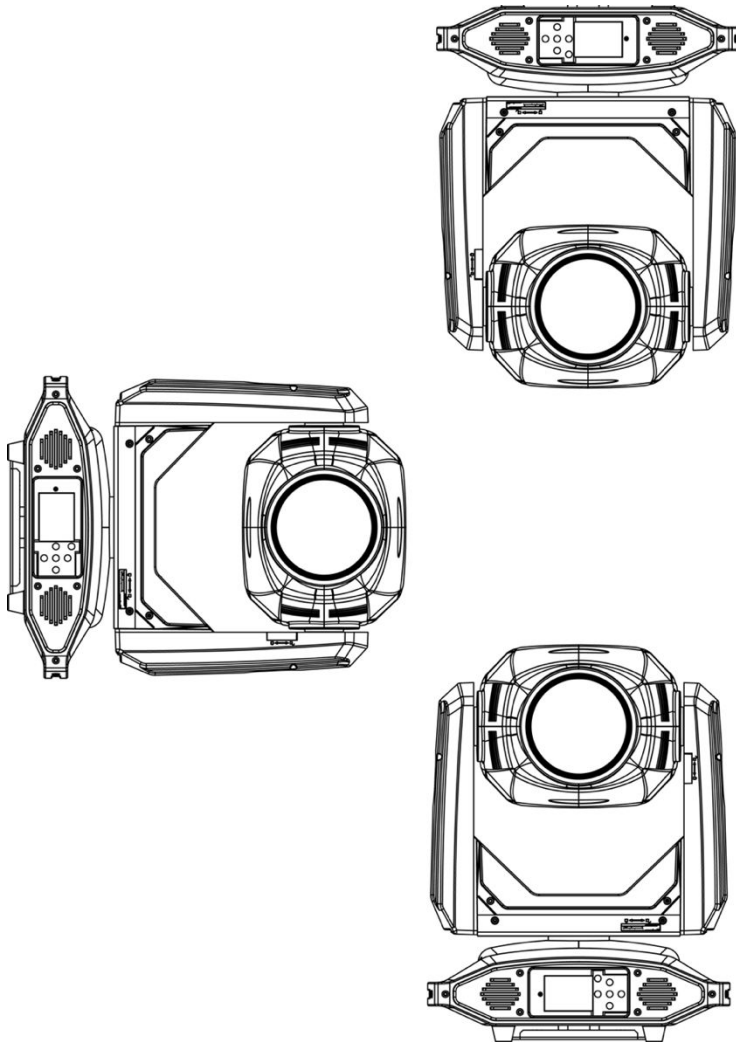
⚠️
S A F E T Y   C A B L E

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

ART-NET CONNECTION

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

Click link below for more information about IGMP.

https://en.wikipedia.org/wiki/Internet_Group_Management_Protocol

INSTALLATION GUIDELINES

POTENTIAL INTERNAL FIXTURE DAMAGE FROM EXTERNAL SOURCES OF LIGHT BEAMS

External sources of light beams from direct sunlight, lighting moving head fixtures, and lasers, which are focused directly 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.
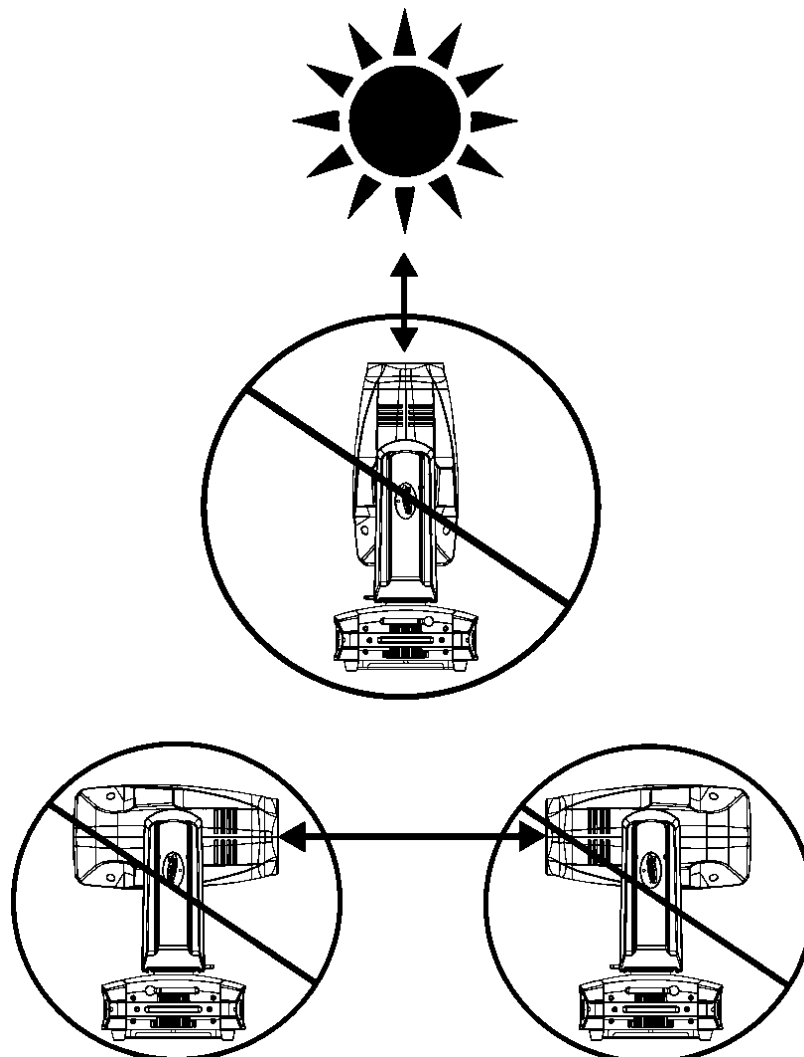
HIBERNATION MODE

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

The hibernation mode activates under the following conditions:

Loss of DMX: the fixture enters hibernation after the timeout expires. Default is 15 minutes.

Remote DMX control: Hold "Hibernate Fixture" for 3s

The hibernation mode deactivates under the following conditions:

Connect DMX Signal

Remote DMX control: Hold "Hibernate Off" for 3s

The fixture will perform a full calibration cycle, then assume the current DMX status.

Please note that the Hibernation does not change the PT position of the fixtures, allowing the user to set the desired position and then issue the Hibernate command.

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

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

SYSTEM MENU

The fixture includes an easy to navigate system menu. The control panel (see image below) located on the front of the fixture, provides access to the main system menu and is where all necessary system adjustments are made to the fixture. During normal operation, pressing **MODE/ESC** button once will access the fixture's main menu. Once in the main menu you can navigate through the different functions and access the sub-menus with the **UP, DOWN, RIGHT,** and **LEFT** buttons. Once you reach a field that requires adjusting, press the **ENTER** button to activate that field and use the **UP** and **DOWN** buttons to adjust the field. Pressing the **ENTER** button once more will confirm your setting. You may exit the main menu at any time without making any adjustments by pressing the **MODE/ESC** button.

To access the LCD Menu Control Display via the internal battery, press and hold the **MODE/ESC** button for 3 seconds. The LCD Menu Control Display will shut **OFF** automatically about 1 minute from the last button press.
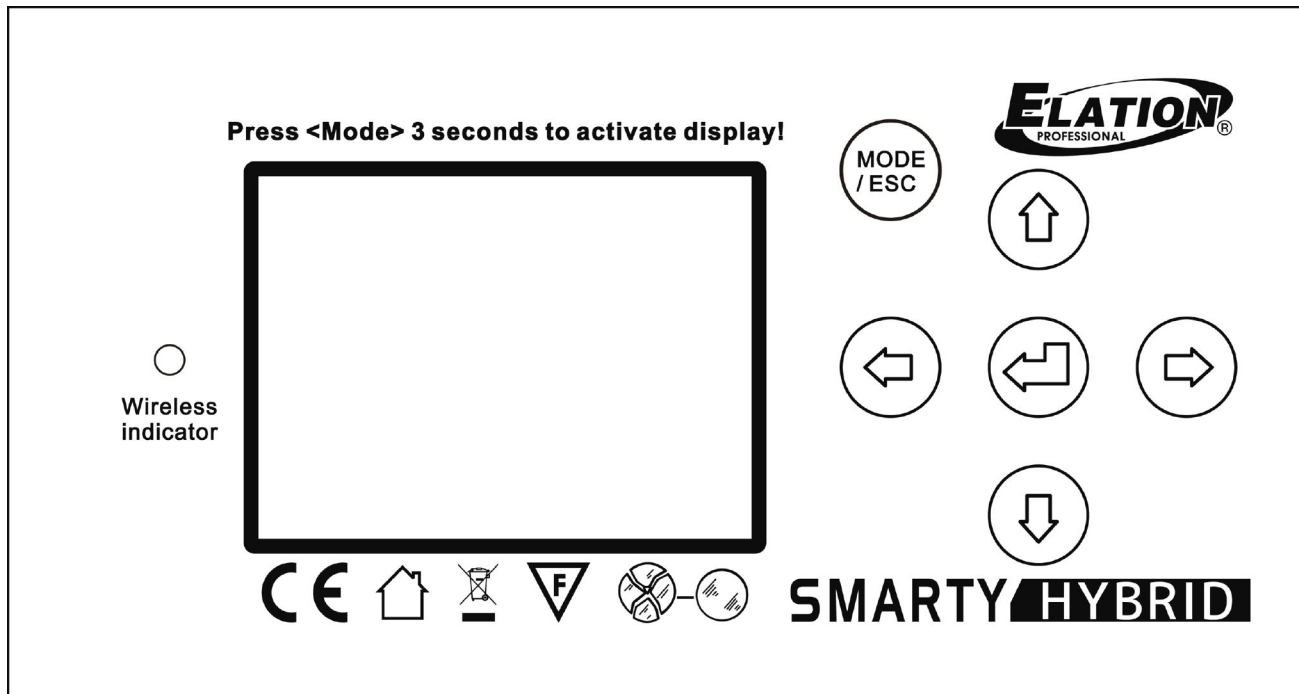
ELATION SMARTY HYBRID SYSTEM MENU – Supports Software Versions: ≥ 1.1.2

Features are subject to change without 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 **BOLD**)		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 / **Alone**		Auto Program
INFORMATION	Time Information	Current Time	xxxx(Hours)	Fixture Run Time From Power ON
		Total Run Time	xxxx (Hours)	Fixture Total Run Time
		Last Run Time	xxxx (Hours)	Fixture Last Run Time
		Lamp Hours	xxxx (Hours)	Lamp Total ON Hours
		Lamp Off Time	xxxx (Hours)	Lamp OFF Time
		LastRun Password	Password = **038**	**(PSWD Required)**
		Clear Last Run	ON / **OFF**	Clear Fixture Last Run Time
		LampTime Password	Password=**038**	**(PSWD Required)**
		Clear Lamp Time	ON / **OFF**	Clear Lamp Run Time
	Temperature Info	Head Temperature	xxx C° / **F °**	Temperature in Fixture Head
		Base Temperature	xxx C° / **F °**	Temperature in Fixture Base
	Ethernet IP	xxx . xxx . xxx . xxx	xxx . xxx . xxx . xxx	Displays Fixture Ethernet Address
	Fan Info	xxxx RPM		Speeds of Head/Base Fans
	EnCode Info	PAN: xxxx TILT:xxxx		PAN and TILT Encode Info
	Software Version	1U01: - 5U01:	**≥V1.1.2**	Software Version
	Error Info	Error Record 1 ~ Error Record 10		Fixture Last 10 Error Codes
LAMP CONTROL	Lamp On/Off	ON/**OFF**		Lamp ON/OFF
	Automatic On	ON/**OFF**		Lamp ON/OFF when Power ON
	Lamp On via DMX	**ON**/OFF		Lamp ON via DMX
	Lamp Off via DMX	**ON**/OFF		Lamp OFF via DMX
	Lamp Power Mode	190W, 240W, **280W**		Lamp Power Mode
PERSONALITY	Status Settings	Address via DMX	**ON**/OFF	Address Via DMX
		No DMX Status	Close / **Hold** / Auto	Fixture State When NO DMX Signal
		Pan Reverse	ON/**OFF**	Pan Reverse Movement
		Tilt Reverse	ON/**OFF**	Tilt Reverse Movement
		Pan Degree	630/**540**	Pan Degree Select
		Feedback	**ON**/OFF	Movement Feedback
		Hibernation	OFF, 01M~99M, **15M**	Stand By Mode
	Service Setting	Password	Password=**050**	Service Password
		RDM UID	**22A6xxxxxxxx**	RDM PID Code **(PSWD Required)**
		Clear Err. Info	ON/**OFF**	Clear Error Info **(PSWD Required)**
		DFLT Pow. LampOn	ON/**OFF**	Set Lamp Default Power State to ON
		DFLT Pow. EflyOn	ON/**OFF**	Set E-FLY Default Power State to ON
		USB Update	YES/**NO**	Update Fixture Software (see page 00)
	Display Setting	Shutoff Time	02~60m **05m**	Display Shut Off Time
		Display Reverse	**AUTO**, ON, OFF	Display Reverse 180º
		Key Lock	ON/**OFF**	Key Lock
	Temperature C/F	Celsius/**Fahrenheit**		Temperature Switch Between C°/ F°
	Initial Status	PAN =XXX		Initial Effect Position
	Select Signal	**E-FLY Off**		Disable E-FLY Wireless Transceiver
		DMX & E-FLY		Activate 5pin DMX and E-FLY
		E-FLY & Out		Activate E-FLY and 5pin DMX OUT
		Art-Net		Activate Art-Net
		sACN		Activate sACN
	Ethernet IP	XXX . XXX . XXX . XXX		Ethernet IP
	Ether Mask IP	XXX . XXX . XXX . XXX		Ethernet Mask IP
	Set Universe	**000** - 32767		Set Art-Net Universe
	Set E-FLY Chn	**00** - 14		Set E-FLY Wireless Channel
	Reset Default	ON/**OFF**	Password = **011**	Restore Factory Settings **(PSWD Required)**

ELATION SMARTY HYBRID SYSTEM MENU - Supports Software Versions: ≥ 1.1.2

Features subject to change without 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 **BOLD**)		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	PAN ······		Test function
	Manual Control	PAN =XXX, ...		Fine Adjustments
	Calibration	Calibration Password		Password **050 (PSWD Required)**
User Mode Set	User Mode	**Standard Mode**		DMX Channel Modes
		Extended Mode		
		User Mode A		User Defined Channel Assignment
		User Mode B		
		User Mode C		
	Edit User Mode	Edit User Mode A	Max Channel = XX	Edits User Defined Channel Assignments
		Edit User Mode B		
		Edit User Mode C	PAN = CH01	
Edit Program	Select Program	Auto Pro Part1 = Program 1~10 **(Program 1)**		Select Programs To Be Run
		Auto Pro Part2 = Program 1~10 **(Program 2)**		
		Auto Pro Part3 = Program 1~10 **(Program 3)**		
	Edit Program	Program 1	Program Test	Testing Program
		:	Step 01=SCxxx	Program In Loop
		Program 10	Step 64=SCxxx	Save and Exit
	Edit Scenes	Edit Scene 001 ~ Edit Scene 250	Pan,Tilt,······	Save and Automatically Return
			--Fade Time-- --Scene Time--	Manual Scenes Edit
			Input By Outside	Stores Scenes via Ext DMX Console
	Rec. Controller	XX~XX		Automatic Scenes Recorder

ELATION SMARTY HYBIRD SYSTEM MENU - UPDATE WITH SOFTWARE VERSION ≥1.2.2

Features subject to change without 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 **BOLD**)	DESCRIPTION
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 Time Info — Total Time xxxx (Hours)	Total Lamp Time Usage
		Active Time xxxx (Hours)	Active Lamp Time Usage
		Idle Time xxxx (Hours)	Idle Lamp Time
		Lamp Life (% Percent)	Lamp Life
		Lamp Off Time — xxxx (Hours)	Lamp OFF Time
		LastRun Password — Password=**038**	**(PSWD Required)**
		Clear Last Run — ON / **OFF**	Clear Fixture Last Run Time
		LampTime Password — Password=**038**	**(PSWD Required)**
		Clear Lamp Time — ON / **OFF**	Clear Lamp Run Time

PERSONALITY - Status Settings - <u>Address Via DMX</u>

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 – Service Setting - <u>Password</u> (050)
The Service Password MUST be entered in order to access the service menus.

PERSONALITY – Service Setting - <u>RDM UID</u>
Select various submenus via RDM. RDM stands for "Remote Device Management", which provides the ability to control the device remotely while connected to a DMX-bus. ANSI E1.20-2006 by ESTA specifies the RDM standard as an extension of the DMX512 protocol. Manual settings like adjusting the DMX starting address are no longer needed. This is especially useful when the device is installed in a remote area.

RDM ready and conventional DMX devices can be operated in one DMX line. The RDM protocol sends its own packages in the DMX512 data feed and does not influence conventional devices. If DMX splitters are used and RDM control is to be used, these splitters must support RDM. The number and type of RDM parameters depend on the RDM controller being used.

PERSONALITY – Service Setting – <u>USB Update</u>

To update the fixture software via the **UPDATE/SERVICE PORT**, follow steps below.

ONLY QUALIFIED TECHNICIANS SHOULD PERFORM THIS FUNCTION!
NOTE ALL MENU SETTINGS BEFORE UPDATING SOFTWARE!
FIXTURE SOFTWARE CAN NOT BE DOWNGRADED!
DOWNLOAD FIXTURE SOFTWARE TO PC ONLY! (NO MAC SUPPORT)
PLEASE CONTACT ELATION SERVICE FOR FURTHER INFORMATION.

1. Copy fixture software update file from a PC computer to a compatible USB flash drive.
   Make sure only the fixture software update file is stored on the USB flash drive.
2. Disconnect DMX, Art-Net, and E-FLY connections and power the fixture ON.
3. Insert USB flash drive into the **UPDATE/SERVICE PORT** on the rear connection panel.
4. Navigate to the **Personality** main menu **Service Setting / USB Update** sub menu.
5. Select the software file name on the menu display and press **ENTER**.
6. Select **YES** to begin update process and Updating···% will show on the menu display.
7. After file is uploaded, the fixture will check the software which will take some time.
   The fixture will perform a reset process when the software update process is complete.
8. Remove the USB flash drive and make necessary system menu setting adjustments.

PERSONALITY - Display Setting – <u>Key Lock</u>

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

PERSONALITY - <u>Reset Default</u> (011)

ONLY QUALIFIED TECHNICIANS SHOULD PERFORM THIS FUNCTION!

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 – <u>Test Channel</u>

Auto test each individual channel function independently from the DMX control board.

EFFECT ADJUST – <u>Manual Control</u>

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 – <u>Calibration</u>

⚠ ONLY QUALIFIED TECHNICIANS SHOULD PERFORM THIS FUNCTION!

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

USER MODE SET – <u>Edit User Mode</u>

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

EDIT PROGRAM – Rec. Controller

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

EDIT PROGRAM – Record Controller – Working with Built-In Programs

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

Auto Pro Part 1	Auto Pro Part 2	Auto Pro Part 3		Auto Pro Part 1	Auto Pro Part 2	Auto Pro Part 3		Auto Pro Part 1	Auto Pro Part 2	Auto Pro Part 3
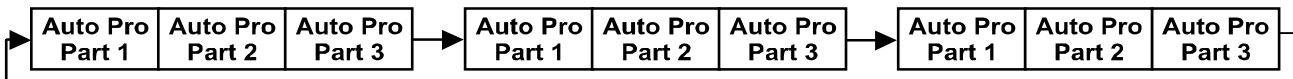
The Secondary unit receives data from the Primary unit according to the group which the Secondary unit was assigned to. If e.g. a Secondary unit is set to **"Secondary 1"** in the menu **"Set to Secondary"**, the Primary unit sends **"Auto Program Part 1"** to the Secondary unit.
If set to **"Secondary 2"**, the Secondary unit receives **"Auto Program Part 2"**.

To start an Auto Program, proceed as follows:

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

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

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

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

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

Example:
Program 2 includes scenes: 10, 11, 12, & 13
Program 4 includes scenes: 8, 9, & 10
Program 6 includes scenes: 12, 13, 14, & 15
Auto Pro Part 1 is Program 2
Auto Pro Part 2 is Program 3
Auto Pro Part 3 is Program 6

The 3 Secondary groups run the Auto Program in certain time segments. (See diagram below)

Part 1:

Scene 10	Scene 11	Scene 12	Scene 13

Part 2:

Scene 8	Scene 9	Scene 10	Scene 8

Part 3:

Scene 12	Scene 13	Scene 14	Scene 15
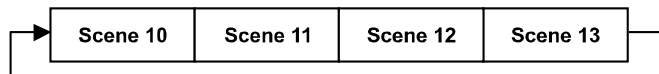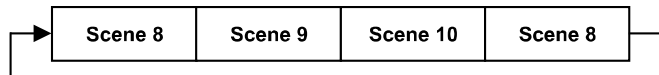
E-FLY WIRELESS DMX SET UP

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 has 0-14 wireless channels.

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.
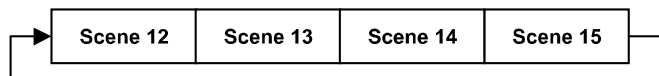
6. Repeat this process for all **E-FLY** compatible fixtures in the E-FLY wireless network, making sure all fixtures are assigned the same **E-FLY** wireless channel.

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.

E-FLY WIRELESS INSTALLATION LOCATION GUIDELINES

There are many factors that affect and/or interrupt a wireless signal such as walls, glass, metal, objects, and people. Therefore, it is highly recommended to:

- Install devices a minimum of 9.8 ft. (3m) above audiences and/or ground level
- Adjust the wireless antenna in a vertical upright position
- Position devices in direct line of sight of the controlling E-FLY device

Careful planning and testing of the selected installation location is critical to ensure optimum and reliable wireless operation.

9.8 ft (3m)
Above Ground

DMX TRAITS: CHANNEL FUNCTIONS AND VALUES

ELATION SMARTY HYBRID DMX Channel Values / Functions (34 DMX Channels)			
Supports Software Versions: ≥ 1.2.1			
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.			

MODE / CHANNEL		VALUE	FUNCTION
STANDARD	EXTENDED		
1	1		PAN MOVEMENT
		0-255	PAN Movement
2	2		PAN FINE MOVEMENT FINE
		0-255	Fine 16-bit Control of PAN Movement
3	3		TILT MOVEMENT
		0-255	TILT Movement
4	4		TILT MOVEMENT
		0-255	Fine 16-bit Control of TILT Movement
5	5		CYAN COLOR
		0-255	0-WHITE ~ 255-100% CYAN
	6		CYAN COLOR FINE
		0-255	CYAN FINE 16-bit Adjustment
6	7		MAGENTA COLOR
		0-255	0-WHITE ~ 255-100% MAGENTA
	8		MAGENTA COLOR FINE
		0-255	MAGENTA FINE 16-bit Adjustment
7	9		YELLOW COLOR
		0-255	0-WHITE ~ 255-100% YELLOW
	10		YELLOW COLOR FINE
		0-255	YELLOW FINE 16-bit Adjustment

MODE / CHANNEL		VALUE	FUNCTION
STANDARD	EXTENDED		
8	11		COLOR WHEEL
		0-10	OPEN / WHITE
		11-19	RED - [RGB = 255, 0, 0]
		20-28	GREEN - [RGB = 0, 255, 0]
		29-37	YELLOW - [RGB = 255, 255, 0]
		38-46	MAGENTA - [RGB = 255, 0, 255]
		47-55	ORANGE - [RGB = 255, 102, 0]
		56-64	AQUA - [RGB = 10, 148, 22]
		65-73	PINK - [RGB = 217, 89, 153]
		74-82	CYAN - [RGB = 53, 227, 227]
		83-91	QUAD COLOR [R=163,8,8] [Y=242, 242,5] [B=11,71,212] [G=33,181,57]
		92-100	CTB - [RGB = 134, 165, 227]
		101-109	UV - [RGB = 70, 19, 173]
		110-118	CTO - [RGB = 209, 154, 92]
		119-127	BLUE - [RGB = 0, 51, 255]
		128-189	*Clockwise COLOR Rotation from FAST to SLOW
		190-193	NO Rotation
		194-255	*Counter-Clockwise COLOR Rotation from SLOW to FAST
	12		COLOR WHEEL FINE ADJUSTMENT
		0-255	FINE 16-bit Adjustment of Color Wheel to Any Position

MODE / CHANNEL		VALUE	FUNCTION
STANDARD	EXTENDED		
9	13		ROTATING GOBOS, CONTINUOUS ROTATION [WHEEL 1]
		0-10	BEAM OPEN
		11-21	SPOT OPEN
		22-31	Rotate Gobo 1
		32-41	Rotate Gobo 2
		42-51	Rotate Gobo 3
		52-61	Rotate Gobo 4
		62-71	Rotate Gobo 5
		72-81	Rotate Gobo 6
		82-91	Rotate Gobo 7
		92-101	Rotate Gobo 8
		102-112	Shake SLOW to FAST Gobo 1
		113-123	Shake SLOW to FAST Gobo 2
		124-134	Shake SLOW to FAST Gobo 3
		135-145	Shake SLOW to FAST Gobo 4
		146-156	Shake SLOW to FAST Gobo 5
		157-167	Shake SLOW to FAST Gobo 6
		168-178	Shake SLOW to FAST Gobo 7
		179-189	Shake SLOW to FAST Gobo 8
		190-221	*Counter-Clockwise Gobo Wheel Rotation from FAST to SLOW
		222-223	RESERVED
		224-255	*Clockwise Gobo Wheel Rotation from SLOW to FAST
10	14		ROTATING GOBOS, INDEX ROTATION [WHEEL 1]
		0-127	Gobo Indexing
		128-189	*Clockwise Gobo Rotation from FAST TO SLOW
		190-193	NO Rotation
		194-255	*Counter-Clockwise Gobo Rotation from SLOW to FAST
	15		ROTATING GOBOS, FINE INDEX ROTATION [WHEEL 1]
		0-255	Gobo Rotation FINE 16-bit Indexing

MODE / CHANNEL		VALUE	FUNCTION
STANDARD	EXTENDED		
			STATIC / FIXED GOBOS [GOBO WHEEL 2]
		0-9	OPEN
		10-17	Static / Fixed Gobo 1
		18-25	Static / Fixed Gobo 2
		26-33	Static / Fixed Gobo 3
		34-41	Static / Fixed Gobo 4
		42-49	Static / Fixed Gobo 5
		50-57	Static / Fixed Gobo 6
		58-65	Static / Fixed Gobo 7
		66-73	Static / Fixed Gobo 8
		74-81	Static / Fixed Gobo 9
		82-89	Static / Fixed Gobo 10
		90-97	Static / Fixed Gobo 11
		98-105	Static / Fixed Gobo 12
11	16	106-112	Shake SLOW to FAST Gobo 1
		113-119	Shake SLOW to FAST Gobo 2
		120-126	Shake SLOW to FAST Gobo 3
		127-133	Shake SLOW to FAST Gobo 4
		134-140	Shake SLOW to FAST Gobo 5
		141-147	Shake SLOW to FAST Gobo 6
		148-154	Shake SLOW to FAST Gobo 7
		155-161	Shake SLOW to FAST Gobo 8
		162-168	Shake SLOW to FAST Gobo 9
		169-175	Shake SLOW to FAST Gobo 10
		176-182	Shake SLOW to FAST Gobo 11
		183-189	Shake SLOW to FAST Gobo 12
		190-221	*Clockwise Gobo Wheel Rotation from FAST to SLOW
		222-223	RESERVED
		224-255	*Counter-Clockwise Gobo Wheel Rotation from SLOW to FAST
	17		STATIC / FIXED GOBOS, FINE INDEX ROTATION [WHEEL 2]
		0-255	Gobo Rotation FINE 16-bit Indexing

MODE / CHANNEL		VALUE	FUNCTION
STANDARD	EXTENDED		
			ROTATING PRISMS, PRISM / GOBO MACROS
		0-31	OPEN
		32-64	16-Facet PRISM
		65- 94	4-Facet Linear PRISM
		95- 127	16 + 4 Facet PRISMS COMBINED
		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
12	18	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
			ROTATING PRISMS, PRISMS INDEX ROTATION
		0-127	Prism Indexing
13	19	128-189	*Clockwise Prism Rotation from FAST to SLOW
		190-193	NO Rotation
		194-255	*Counter-Clockwise Prism Rotation from SLOW to FAST
	20		ROTATING PRISMS, PRISMS FINE INDEX ROTATION
		0-255	Gobo Rotation FINE 16-bit Indexing
14	21		FOCUS
		0-255	Continuous Adjustment from NEAR to FAR
	22		FOCUS FINE
		0-255	Continuous FINE 16-Bit Focus Adjustment

MODE / CHANNEL		VALUE	FUNCTION
STANDARD	EXTENDED		
15	23		MOTORIZED ZOOM
		0-255	ZOOM Adjustment from SMALL to BIG
	24		MOTORIZED ZOOM FINE
		0-255	ZOOM FINE 16-bit Adjustment
	25		AUTO FOCUS
			SPOT MODE
		0-31	AUTO FOCUS OFF
		32-59	26.2 ft (8m)
		60-87	29.5 ft (9m)
		88-115	32.8 ft (10m)
		116-143	36.0 ft (11m)
		144-171	39.4 ft (12m)
		172-199	42.7 ft (13m)
		200-227	46.0 ft (14m)
		228-255	49.2 ft (15m)
			BEAM MODE
		0-21	AUTO FOCUS OFF
		22-39	26.2 ft (8m)
		40-57	29.5 ft (9m)
		58-75	32.8 ft (10m)
		76-93	36.0 ft (11m)
		94-111	39.4 ft (12m)
		112-129	42.7 ft (13m)
		130-147	46.0 ft (14m)
		148-165	49.2 ft (15m)
		166-183	52.5 ft (16m)
		184-201	55.8 ft (17m)
		202-219	59.0 ft (18m)
		220-237	62.3 ft (19m)
		238-255	65.6 ft (20m)
	26		AUTO FOCUS FINE
		0-255	Continuous FINE 16-bit Focus Adjustment

MODE / CHANNEL		VALUE	FUNCTION
STANDARD	EXTENDED		
16	27		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)
17	28		DIMMER INTENSITY
		0-255	Intensity 0 to 100%
18	29		DIMMER INTENSITY FINE
		0-255	Intensity FINE 16-bit Adjustment 0 to 100%
19	30		FROST
		0-127	DISABLE FROST
		128-255	ENABLE FROST
	31		GOBO / CMY / COLOR MACRO SPEED
		0-255	MAX to MIN Speed

MODE / CHANNEL		VALUE	FUNCTION
STANDARD	EXTENDED		
			CMY / COLOR MACROS
		0-31	OFF
		32-39	Macro 1
		40-47	Macro 2
		48-55	Macro 3
		56-63	Macro 4
		64-71	Macro 5
		72-79	Macro 6
		80-87	Macro 7
		88-95	Macro 8
		96-103	Macro 9
		104-111	Macro 10
		112-119	Macro 11
		120-127	Macro 12
	32	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
			PAN / TILT MOVEMENT SPEED
		0-225	MAX to MIN Speed
	33	226-235	Blackout by PAN/TILT Movement
		236-245	Blackout by ALL WHEEL Movement
		246-255	NO FUNCTION

MODE / CHANNEL		VALUE	FUNCTION
STANDARD	EXTENDED		
			LAMP ON/OFF, RESET, INTERNAL PROGRAMS
		0-19	COLOR Change Normal
		20-29	COLOR Change to Any Position
		30-39	RESERVED
		40-49	LAMP ON
		50-59	LAMP OFF
		60-66	LAMP POWER 190W
		67-73	LAMP POWER 240W
		74-79	LAMP POWER 280W
		80-84	All MOTORS Reset
		85-87	MOVEMENT Reset
20	34	88-90	COLOR Reset
		91-93	GOBO Reset
		94-96	DIMMER 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	RESERVED

DMX CHANNEL UPDATE WITH SOFTWARE VERSION ≥1.2.4			
See highlighted items below which have been updated with this software update.			

MODE / CHANNEL		VALUE	FUNCTION
STANDARD	EXTENDED		
20	34		LAMP ON/OFF, RESET, INTERNAL PROGRAMS
		0-19	COOR Change Normal
		20-29	COLOR Change to Any Position
		30-39	RESERVED
		40-49	LAMP ON
		50-59	LAMP OFF
		60-66	LAMP POWER 190W
		67-73	LAMP POWER 240W
		74-79	LAMP POWER 280W
		80-84	All MOTORS Reset
		85-87	MOVEMENT Reset
		88-90	COLOR Reset
		91-93	GOBO Reset
		94-96	DIMMER 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
		240-243	RESERVED
		244-246	Home Position Before Power OFF
		247-249	Home Position OFF
		250-251	Display OFF
		252-253	Display ON
		254-255	RESERVED

REMOTE DEVICE MANAGEMENT (RDM)

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

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

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

FIXTURE RDM INFORMATION:

RDM CODE	DEVICE ID	DEVICE MODEL ID	PERSONALITY ID
0X5D8	Open	1496	Open

Please be aware that not all RDM devices support all RDM features, and therefore it is important to check beforehand to ensure that the equipment that you are considering includes all the features that you require.
The following parameters are accessible in RDM on this device:

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

ERROR CODES

When fixture is powered ON, it will automatically enter a **"Reset/Test"** mode. This mode brings all the internal motors to a home position. If there is an internal problem with one or more of the motors an error code will flash in the display in the form of **"XXer"** were as XX represents a function number. For example, **"0Er"** 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 there are errors on **Channel 1, 2,** and **5** all at the same time, the error message **"01Er", "02Er",** and **"05Er"** flash repeated 5 times.

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

3 or More Errors - The fixture cannot function properly with three or more errors therefore the fixture will place itself in a stand-by mode until subsequent repairs can be made.

Less Than 3 Errors - The fixture has less than 3 errors; therefore, most other functions will work properly. The fixture will attempt to operate normally until the errors can be correct by a technician. The errors in question will remain flashing in the display as a reminder of internal errors.

Error Codes subject to change without notice.	
Ballast_Fault_1	Lamp over voltage
Ballast_Fault_2	Input voltage too high
Ballast_Fault_3	Temperature too high
Ballast_Fault_4	Asymmetry detected
Ballast_Fault_5	Lamp under voltage
Ballast_Fault_6	Input voltage too low
Ballast_Fault_8	NTC defective
Ballast_Fault_Other	These fault modes are related to driver internal software- and hardware malfunction.
BallastWasOver Hot	Record and feedback that fixture once appeared lamp off issue because of ballast temp. too high.
Ballast_Uart_Fail	
Lamp temp high	The thermal sensor detect temperature of the light source is too high.
Lamp temp high	The thermal sensor detect temperature of the light source is too high.
Base Fan1 Error	Base Fan1 Error
Base Fan2 Error	Base Fan2 Error
3U_Fan_JB1 Error	Error information from JB1 port on 3U PCB.
3U_Fan_JB3 Error	Error information from JB3 port on 3U PCB.
3U_Fan_JB4 Error	Error information from JB4 port on 3U PCB.
3U_Fan_JB5 Error	Error information from JB5 port on 3U PCB.
high base temp	Base thermal sensor detects the temperature is too high.
Base Temp Error	Heat sensor in base failed or problematic cable connection on heat sensor
Head Temp Error	Heat sensor in head failed or problematic cable connection on heat sensor
2U01 Com Fail	2U01 Communication Failed
3U01 Com Fail	3U01 Communication Failed
4U01 Com Fail	4U01 Communication Failed
5U01 Com Fail	5U01 Communication Failed
Ballast_Fault_1	Lamp over voltage
Ballast_Fault_2	Input voltage too high
Ballast_Fault_3	Temperature too high

SOFTWARE UPDATE: SERVICE PORT

ONLY QUALIFIED TECHNICIANS SHOULD PERFORM THIS FUNCTION!
NOTE ALL MENU SETTINGS BEFORE UPDATING SOFTWARE!
FIXTURE SOFTWARE CAN NOT BE DOWNGRADED!
DOWNLOAD FIXTURE SOFTWARE TO PC ONLY! (NO MAC SUPPORT)
PLEASE CONTACT ELATION SERVICE FOR FURTHER INFORMATION.

PERSONALITY – **Service Setting** – **USB Update**
To update the fixture software via the UPDATE/SERVICE PORT, follow steps below.

1. Copy fixture software update file from a PC computer to a compatible USB flash drive. Make sure only the fixture software update file is stored on the USB flash drive.
2. Disconnect DMX, Art-Net, and E-FLY connections and power the fixture ON.
3. Insert USB flash drive into the UPDATE/SERVICE PORT on the rear connection panel.
4. Navigate to the Personality main menu Service Setting / USB Update sub menu.
5. Select the software file name on the menu display and press ENTER.
6. Select YES to begin update process and Updating⋯% will show on the menu display.
7. After file is uploaded, the fixture will check the software which will take some time.
6. The fixture will perform a reset process when the software update process is complete.
7. Remove the USB flash drive and make necessary system menu setting adjustments.

PERSONALITY - **Display Setting** – **Key Lock**
When ON, Control Panel buttons lock automatically after exiting main menu for 15 seconds. To
unlock, keep MODE/ESC button pressed for 3 seconds.

SOFTWARE UPDATE: ETHERNET

Software updates for this fixture can be performed using the **Elation Ethernet Updater.** Contact Elation Service to obtain this updater device:

ELATION SERVICE USA - Monday - Friday 8:00am to 4:30pm PST
323-582-3322 | Fax 323-832-9142 | support@elationlighting.com

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

The Elation Ethernet Updater is an EXE file, which only works on a PC System. Once you've received the Elation Ethernet Updater RAR file from Elation Service via email, download and extract the EXE file. With the file extracted, click **Elation Ethernet Updater setupV100.exe** to launch the installation wizard.

Follow the prompts once the Elation Ethernet Updater EXE has launched the Setup Wizard.
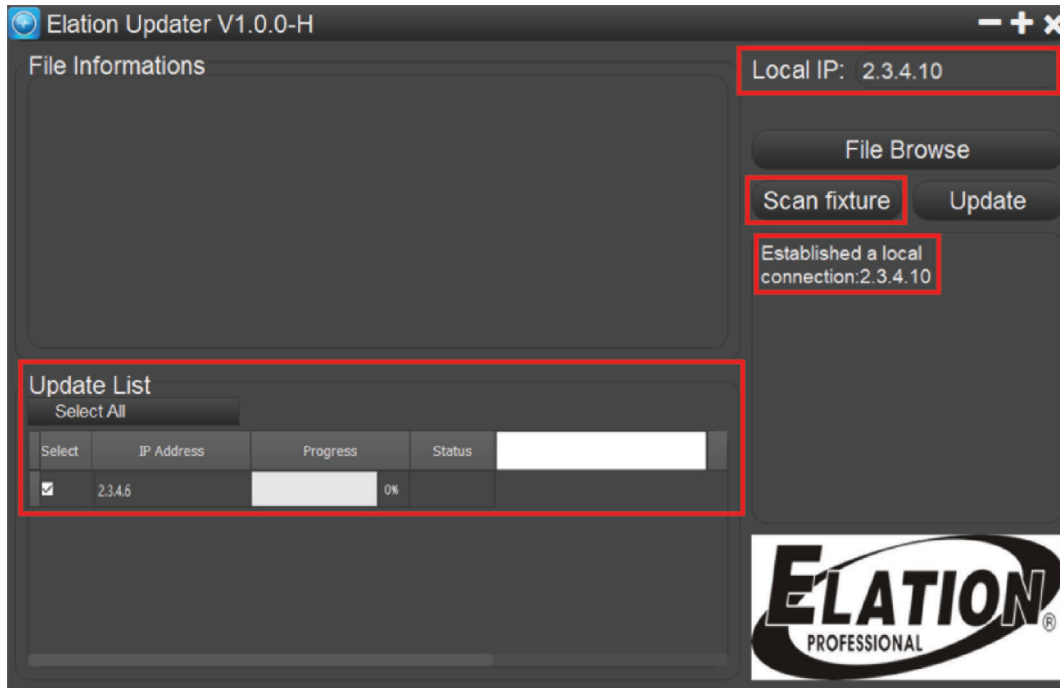
SOFTWARE UPDATE: ETHERNET
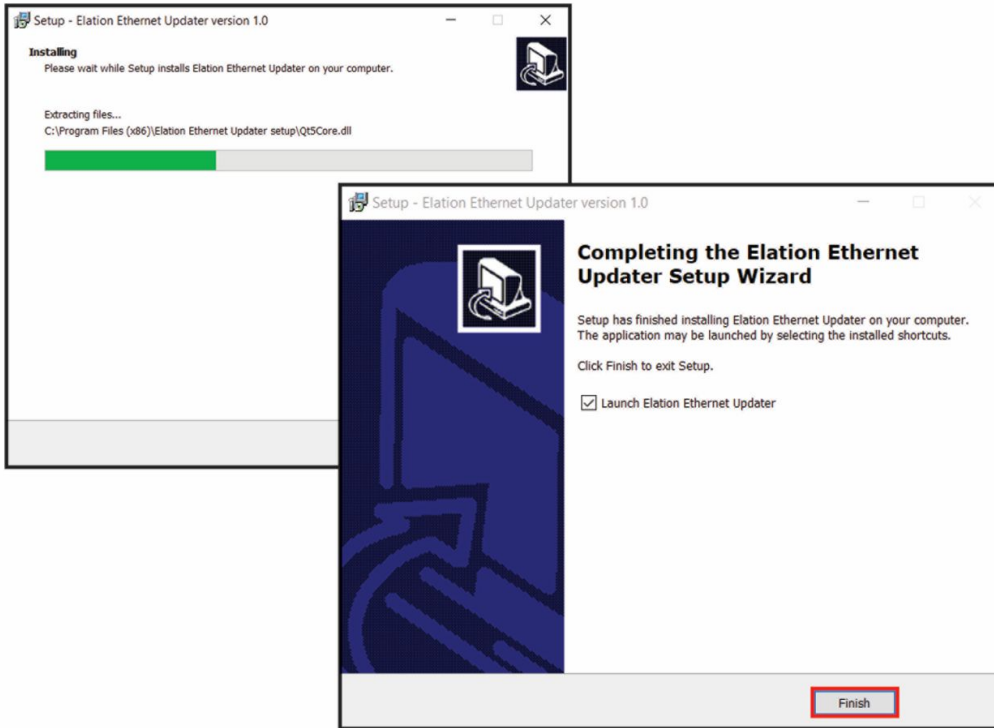
Once you have installed the Elation Ethernet Updater, it will launch automatically (unless you unchecked "Launch Elation Ethernet Updater"), or you can open it any time by clicking on the icon.
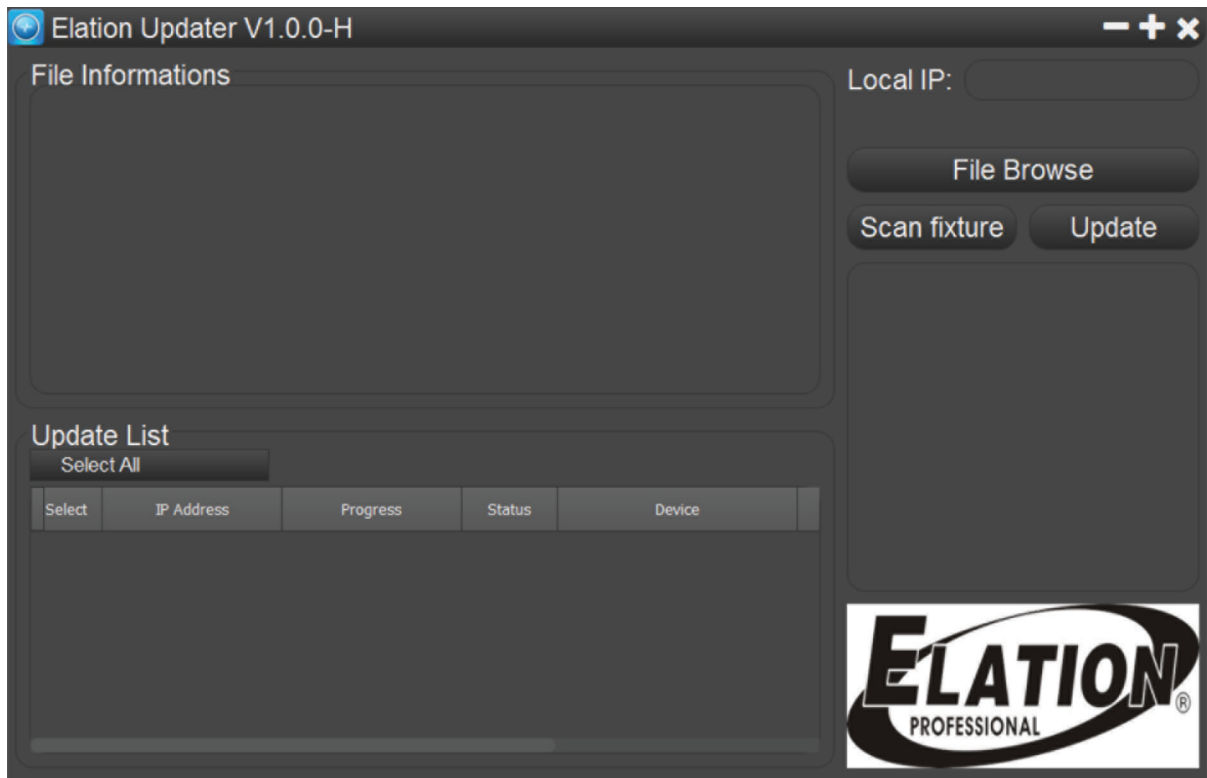
SOFTWARE UPDATE: ETHERNET

Once opened, your local IP will automatically be identified. Click "Scan fixture" and create a connection. The fixture identity will appear in the Update List on the left side of browser. A connection will fail to establish if the fixture IP and Local IP are not in the same network segment.
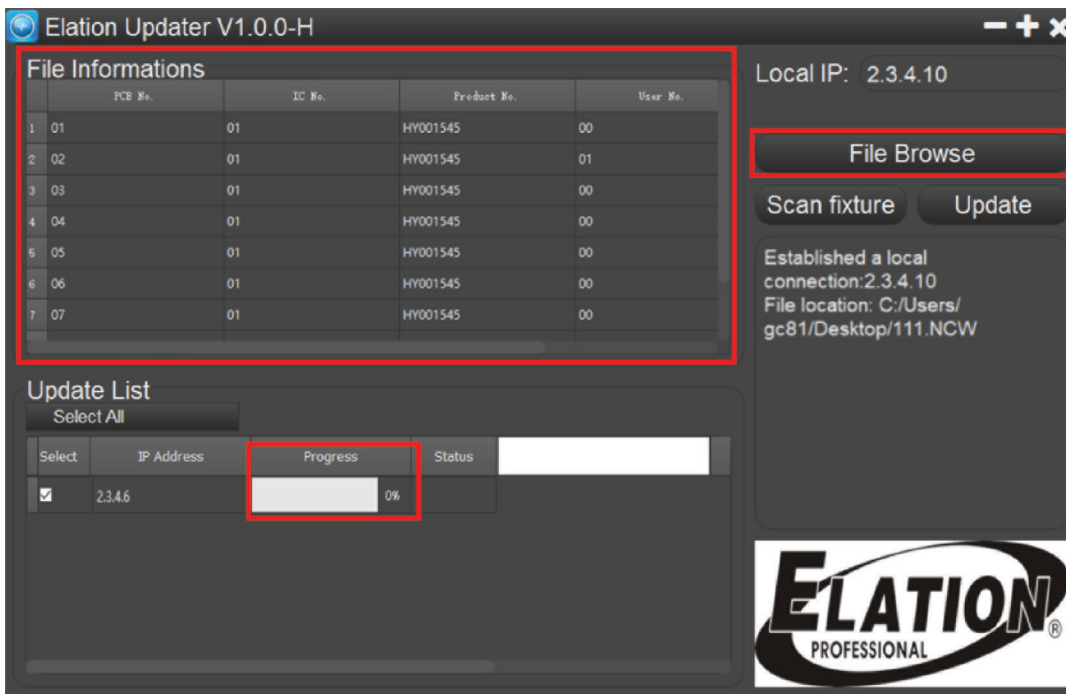
Click "File Browse" to select the files you want to download. The download Progress is displayed in the File information chart as a percentage bar graph.

SOFTWARE UPDATE: ETHERNET

Click Update, then wait for the download Progress to reach 100% before closing Updater. The Elation Ethernet Updater can update up to 31 fixtures via connection to a PC.
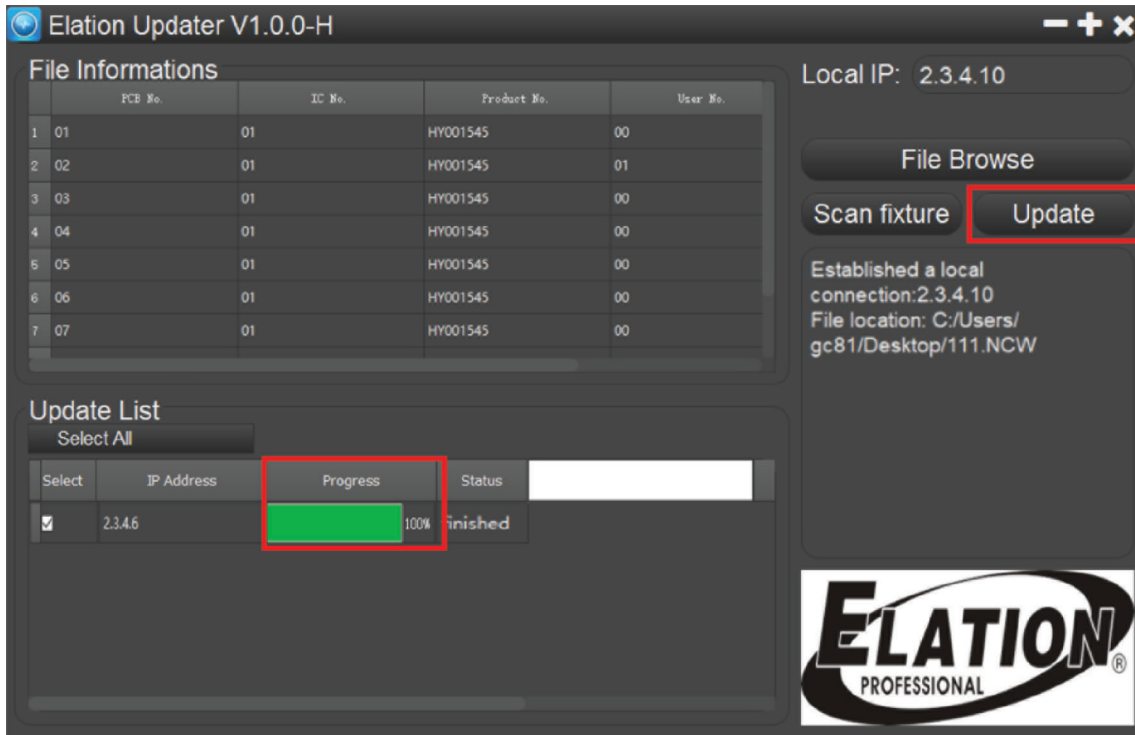
SPECIFICATIONS

SOURCE
Philips™ MSD Platinum 200 Flex 280W Lamp
Up To 6,000 Hour Lamp Life*
*May vary depending on several factors including but not limited to:
Environmental Conditions, Power/Voltage, Usage Patterns (On-Off
Cycling), Control, Dimming, and Lamp Mode.

PHOTOMETRIC DATA
11,000 Total Lumen Output
128,426 LUX 11,931 FC @49.2' (15m) (Min Zoom Beam)
135,108 LUX 12,552 FC @16.4' (5m) (Min Zoom Spot)

EFFECTS
Beam, Spot, and Wash Modes
Motorized Zoom: 1° - 18° Beam, 3° - 27° Spot, 5° - 33° Wash
Full Frost Filter for Wash Effects
16-Facet and 4-Facet Linear Rotating Prisms
CMY Color, Gobo, and Prism Macros
Motorized Focus with Auto-Focus Feature
High Speed Shutter and Strobe
Pan Angle: 540°/630°
Tilt Angle: 270°

COLOR
Full CMY Color Mixing System
13 Colors including Quad Color, CTB, CTO, and UV

GOBOS
2 Gobo Wheels
8 Interchangeable-Rotating / Indexing Glass Gobos
12 Static-Stamped Metal Gobos

CONTROL / CONNECTIONS
2 DMX Channel Modes (20/34 channels)
Full Color 180° Reversible LCD Menu Display
6 Button Menu Control Panel
16 Bit Resolution Adjustable Movement
DMX, RDM, Art-NET, and sACN Protocol Support
Elation E-FLY Internal Wireless DMX Transceiver
Hibernation Mode (Power Save)
5pin DMX In/Out
RJ45 etherCON In/Out
Neutrik TRUE1 Power In/Out
With Wired Digital Communication Network

SIZE / WEIGHT
Length: 15.2" (385mm)
Width: 15.9" (405mm)
Vertical Height: 24.0" (610mm)
Center-to-Center Spacing 19.3in (490.8mm)
Weight: 49.0 lbs. (22.2 kg)

ELECTRICAL / THERMAL
AC 100-240V - 50/60Hz
480W Max Power Consumption
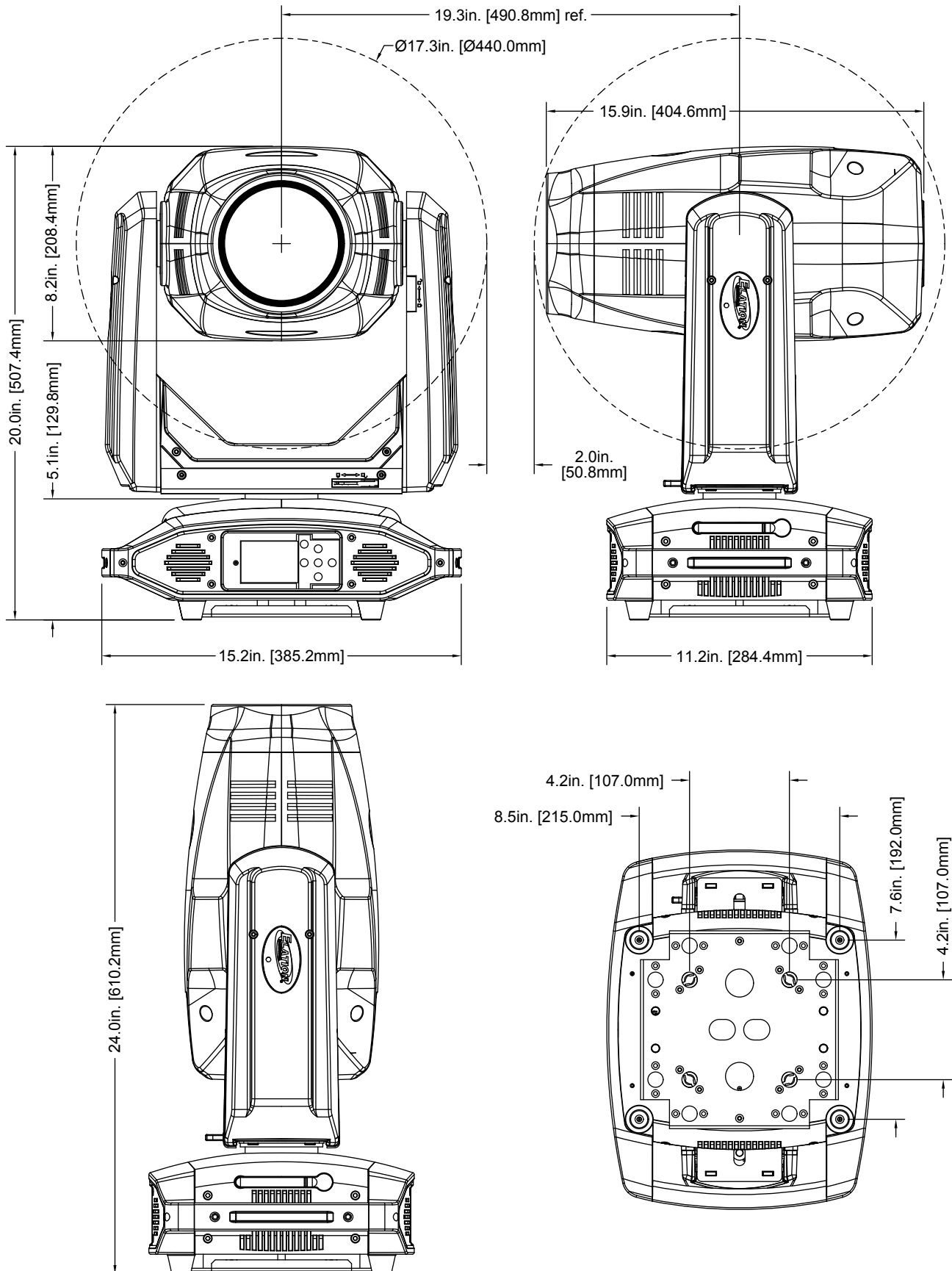14°F to 113°F (-10°C to 45°C)

APPROVALS / RATINGS
CE | cETLus | IP20

Specifications and improvements in the design of this unit and this manual subject to change without notice.
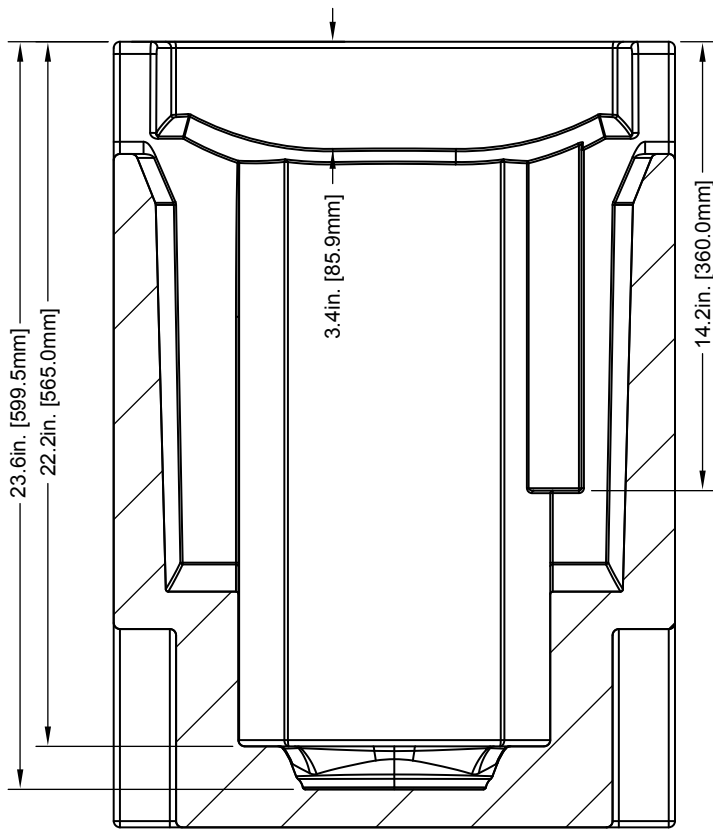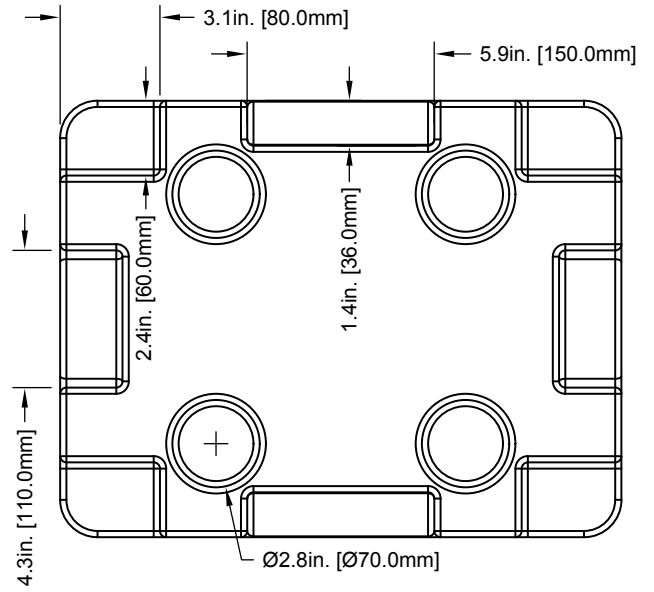
DIMENSIONAL DRAWINGS
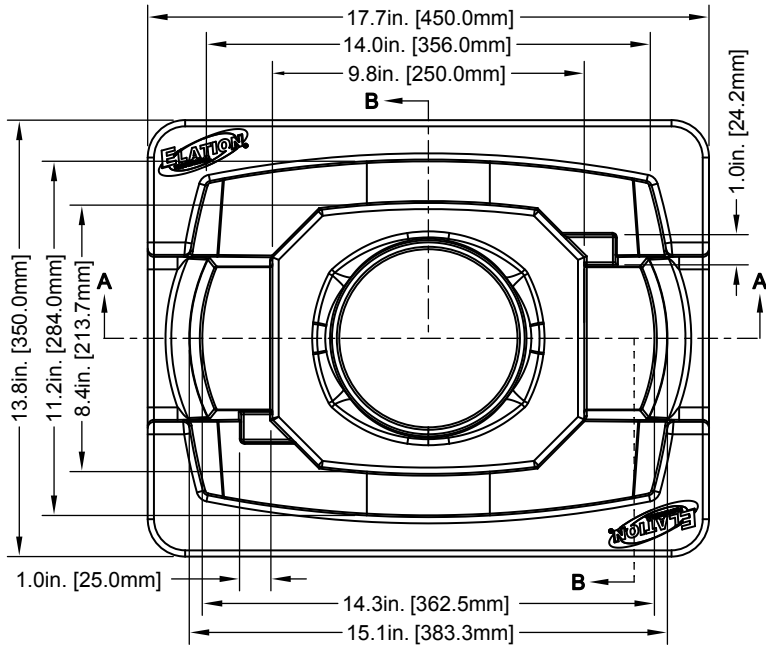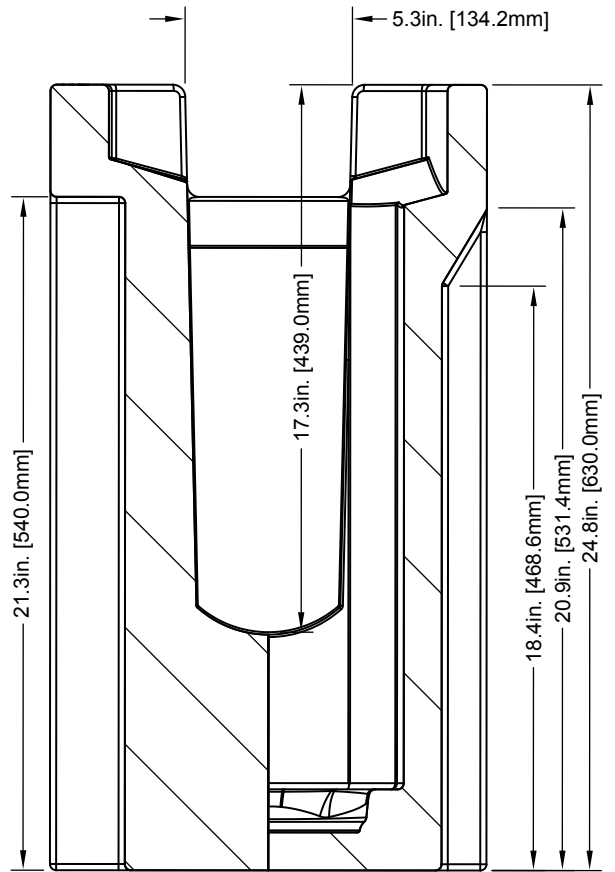
Dimension drawings not to scale.

19.3in. [490.8mm] ref.

Ø17.3in. [Ø440.0mm]

15.9in. [404.6mm]

8.2in. [208.4mm]

20.0in. [507.4mm]

5.1in. [129.8mm]

2.0in. [50.8mm]

15.2in. [385.2mm]

11.2in. [284.4mm]

24.0in. [610.2mm]

4.2in. [107.0mm]

8.5in. [215.0mm]

7.6in. [192.0mm]

4.2in. [107.0mm]

DIMENSIONAL DRAWINGS

Dimension drawings not to scale.

A-A

B-B

OPTIONAL ACCESSORIES

ORDER CODE	ITEM
ZB-MSD PLATINUM 200 FLEX	Philips MSD Platinum 200 Flex Lamp
DRCSMARTY	Dual Road Case for SMARTY HYBRID
TRIGGER CLAMP	Heavy Duty Wrap Around Hook Style Clamp
EFL001	E-FLY™ External Wireless DMX Transceiver
AC5PDMX5PRO	5 ft. (1.5m) 5pin PRO DMX Cable
CAT6PRO5	5 ft. (1.5m) CAT6 Ethernet Cable
	Additional Cable Lengths Available

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

FCC RADIO FREQUENCY INTERFERENCE WARNINGS & INSTRUCTIONS
This product has been tested and found to comply with the limits as per Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device uses and can radiate radio frequency energy and, if not installed and used in accordance with the included instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be 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