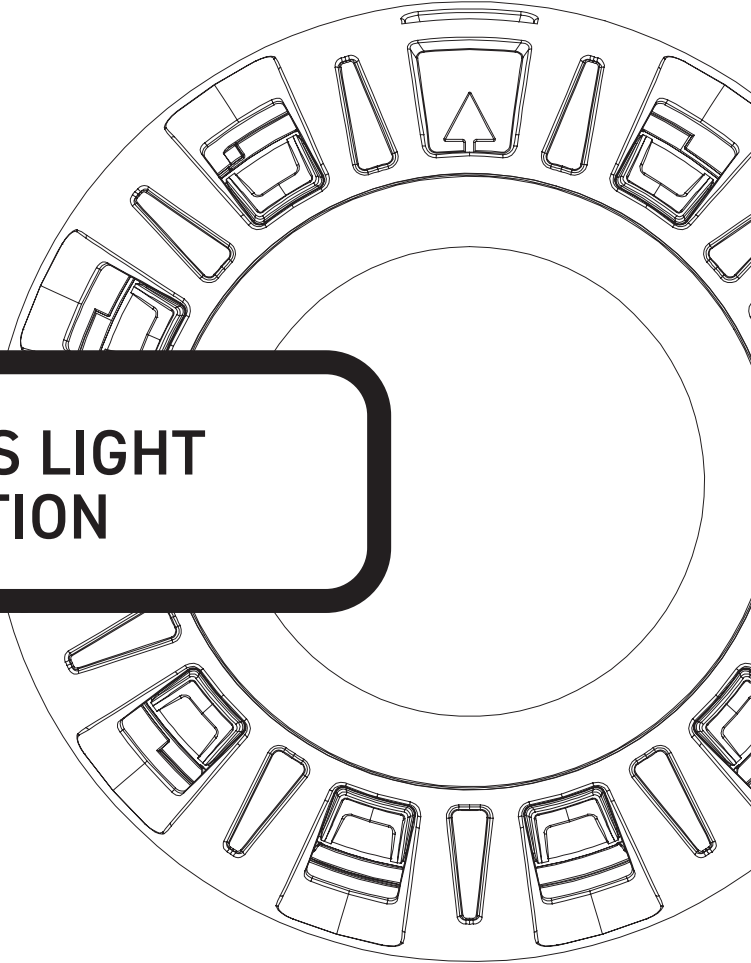


**SE Spa** Electrics®



# ARGON



## NICHELESS LIGHT INSTALLATION

# N1

**L3/L4 - CABLE INCLUDED  
INSTALLATION & OWNER'S MANUAL**

# CONTENTS

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## NOTE

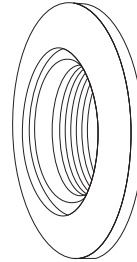


FRESH WATER USE ONLY  
NOT INTENDED FOR OPERATION OUT OF WATER

# READ THIS FIRST

Congratulations on your purchase of a Spa Electrics **Argon N1** Series Pool Light. This light has been designed in conjunction with leading pool professionals across the USA and manufactured solely in Australia.

The **Argon N1** Series Pool Light is designed to fit standard threaded 'nischeless' 1022, 1023, 1408, 1.5" F.I.P fittings.



**For safe and proper installation, please read this manual in full before commencing installation and use only the parts (screws, plugs, sealant etc) as provided.**

**For operating instructions, please refer to the MULTI PLUS Operating Manual.**

## **BEFORE YOU START:**

- Cables can be shortened to suit individual installation requirements. Spa Electrics recommends all cabling is protected by conduit and that a junction box (or similar) is incorporated into pool cabling design to avoid siphoning.
- Ensure that the lighting system is installed by a qualified person (e.g. registered pool builder and/or licensed electrician), in accordance with local, state and national regulations.
- For safe and proper installation, ensure that only those parts supplied with the system are used.
- Maximum installation depth for the **Argon N1** light is 20" below water line (to top of light).
- The **Argon N1** light must be correctly installed in or on the wall of the pool with the top of the lens no less than **4"** below the nominal water level.
- All lights should be mounted in a location that is easily accessible without the need for entering or lowering the pool water.

## **CLEANING:**

- Only use warm water and a soft brush or cloth to clean **Argon N1** lights. **DO NOT** use detergents or spirits as this can damage the light and void your warranty.

## **USE OF PRODUCT:**

- **DO NOT** operate light unless completely submerged in water.
- Operating the light for at least 15 minutes every week is advised (unless removed and stored safely for winter months).
- **Argon N1** lights are suited for both domestic and commercial installations and can be operated continuously (24/7) if required.
- Temperature range for installation, operation and servicing: +32°F ~ +104°F (0°C ~ +40°C)

## IMPORTANT NOTE



**The Argon N1 light must only be used with a UL 12v AC listed Isolating Low Voltage power source intended for swimming pool use (not included).**

**Minimum power source wattage requirement - 15 Watts per light.**

- DO NOT use electronic or switch-mode power supplies with ARGON lights. These power supplies will damage the light and void your product warranty.
- Pool chemicals & pH levels: Due to the corrosive nature of unbalanced pool chemicals, Spa Electrics strongly recommend that your pool water is balanced prior to installing your pool lights or any plastic or stainless steel components, and tested weekly to maintain these levels. pH levels should be maintained between 7.2 – 7.6 at all times to ensure the longevity of these components.
  - > Failure to do so can result in chemical damage to the light housing and pool fittings, including stainless steel components.
  - > Please note: Lights or components found to have excessive chemical damage will not be covered under our manufacturer's warranty policy.
- This light contains no user-serviceable parts; opening the light will void the product warranty.
- The use of power tools during installation is **not** recommended as these devices can cause faults and damage to light components.
- All installation steps should be carried out with manual tools only.
- The enclosed images are for illustrative purposes only. Appearances of parts and assemblies may vary from the enclosed illustrations
- Please contact Spa Electrics or contact us below if you have any questions regarding the correct installation of this product.

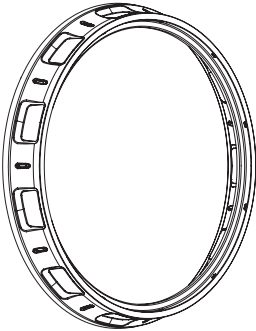
## TOOLS REQUIRED

- ✓ Small flat-blade screw driver

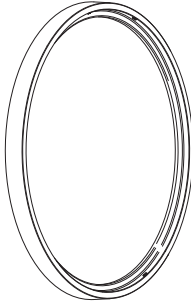
## PRODUCT SUPPORT AND INFORMATION

For the most up to date installation information and contact information for assistance in your region, please visit [www.spaelectrics.com](http://www.spaelectrics.com)

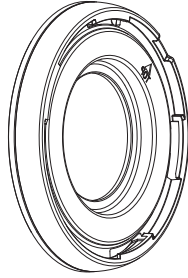
# INCLUDED PARTS



**SPACER RING**  
Fiberglass/Vinyl



**SPACER RING**  
Concrete



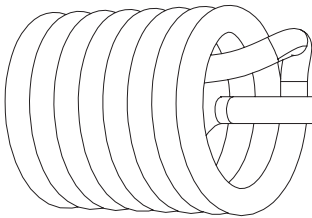
**ADAPTER PLATE**



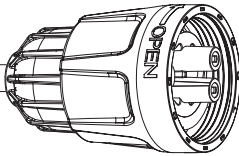
**THREADED COLLAR**



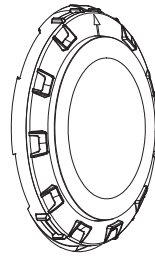
**ADAPTER TOOL**



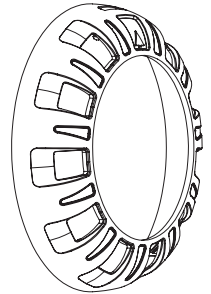
**CABLE**



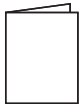
**PLUG ASSEMBLY**



**LIGHT ASSEMBLY**



**LIGHT RIM**



**1 X INSTALLATION  
MANUAL**



**1 X WARRANTY  
CARD**



**1 X MULTIPLUS  
MANUAL**

## REQUIRED PART (NOT INCLUDED)



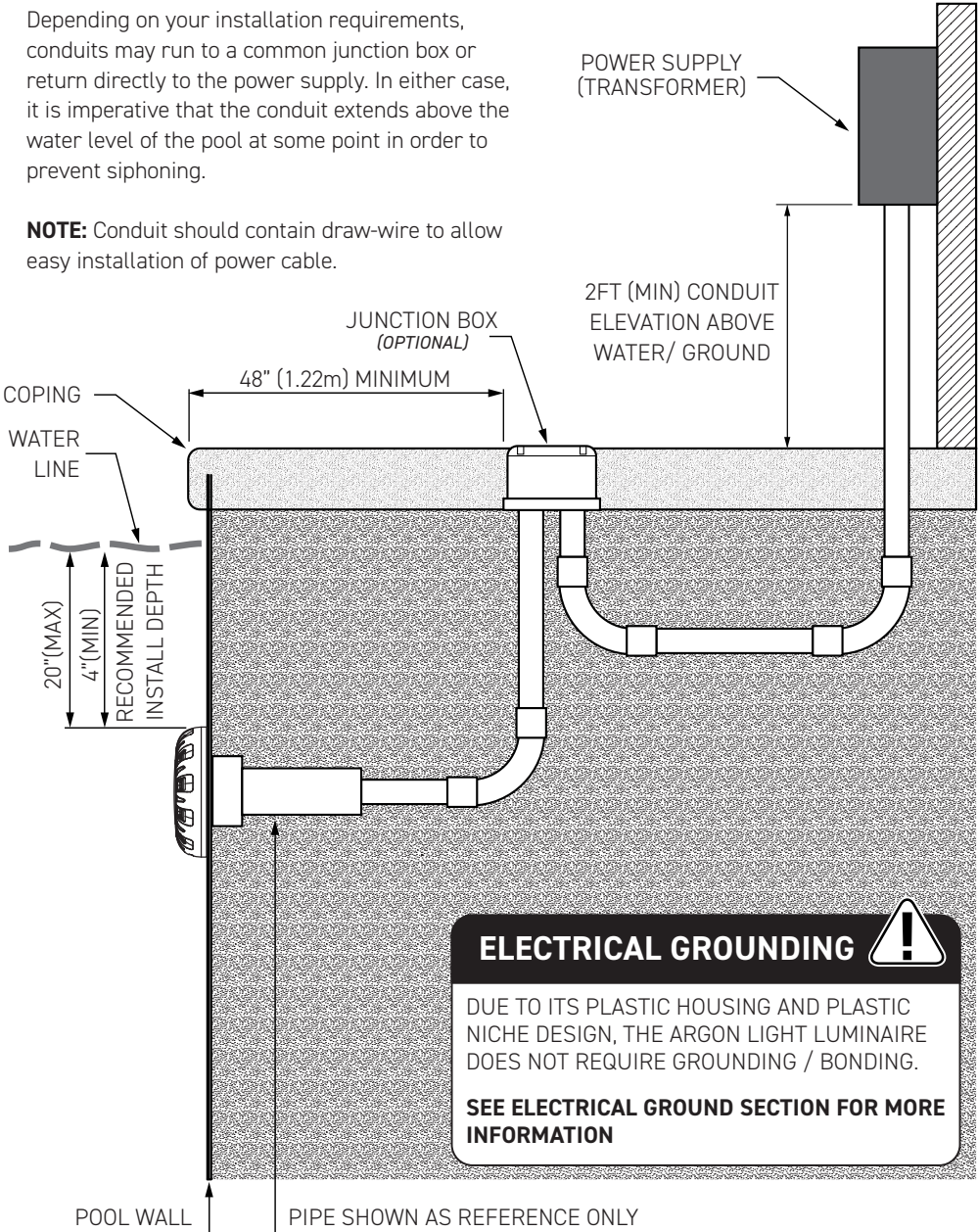
**UL LISTED ISOLATING LOW VOLTAGE POWER SUPPLY, EVALUATED FOR SWIMMING POOL USE.**

Installed as per current NEC wiring rules. 12~14v AC output. Minimum 15W per **Argon N1** Series Pool Light. Spa Electric recommends "LVX" safety transformers for use with **Argon N1** Series lights

# FINISHED INSTALLATION

Depending on your installation requirements, conduits may run to a common junction box or return directly to the power supply. In either case, it is imperative that the conduit extends above the water level of the pool at some point in order to prevent siphoning.

**NOTE:** Conduit should contain draw-wire to allow easy installation of power cable.

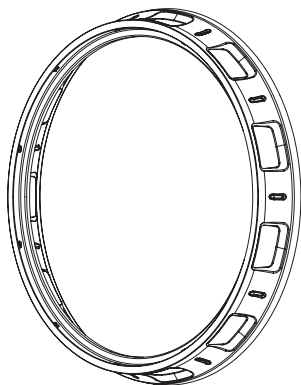


**POOL CROSS SECTION SHOWN FOR REFERENCE ONLY**

# A: ATTACH NICHE ADAPTER

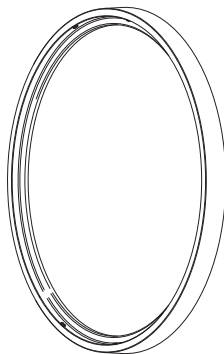
## 1 CHOOSE A SPACER RING

CHOOSE THE APPROPRIATE SPACER RING OUT OF THE TWO PROVIDED DEPENDING ON THE INSTALLATION TYPE.



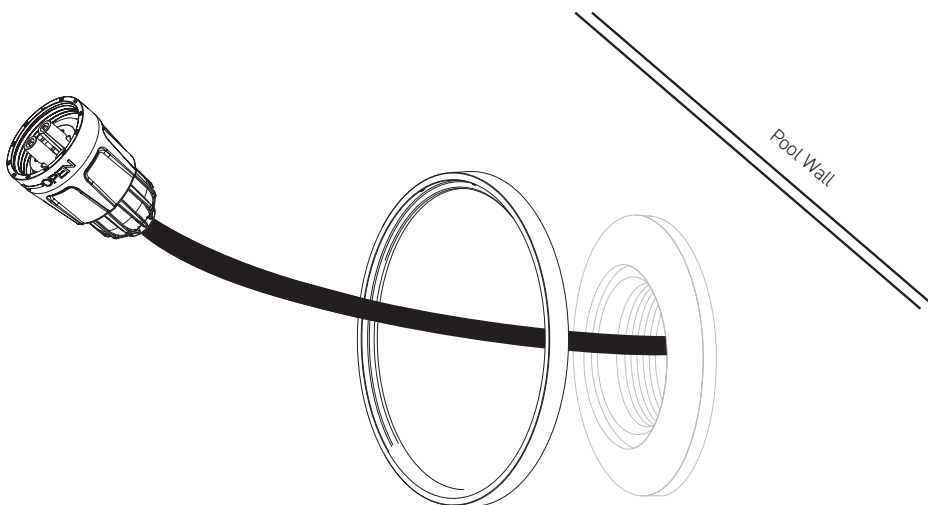
Vinyl/ Fiberglass  
Installation

**CHOOSE  
ONE (1)**



Concrete  
Installation

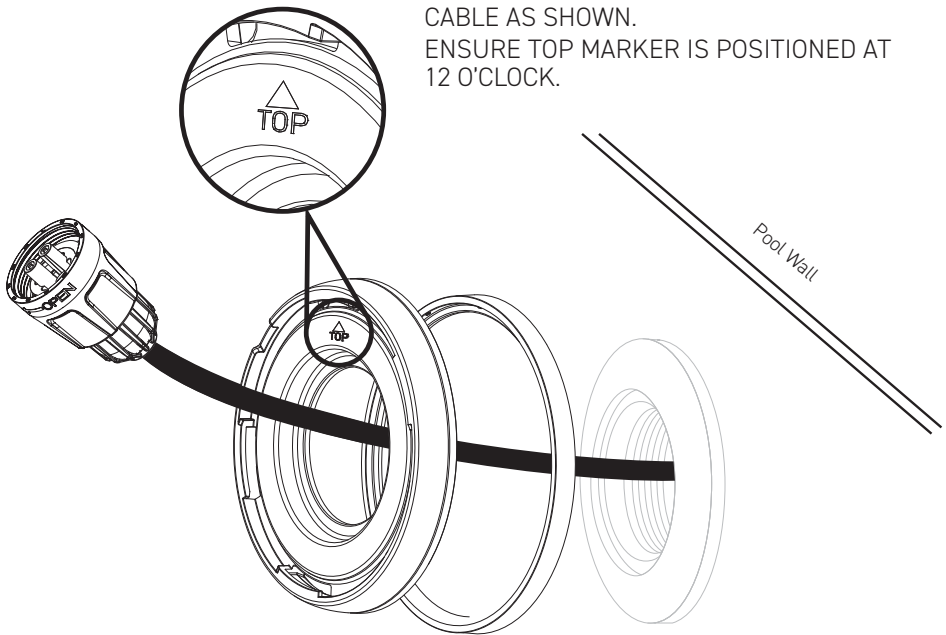
## 2 ATTACH A SPACER RING



### 3

## ATTACH ADAPTER

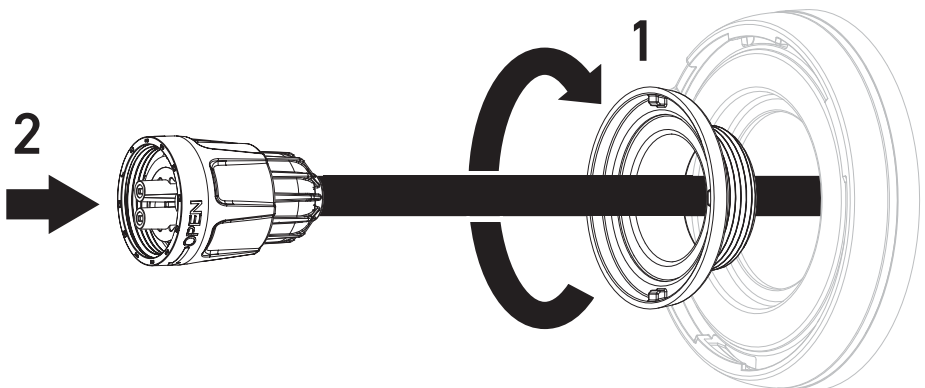
FEED THE ADAPTER PLATE ONTO THE CABLE AS SHOWN.  
ENSURE TOP MARKER IS POSITIONED AT 12 O'CLOCK.



### 4

## ATTACH THREADED COLLAR

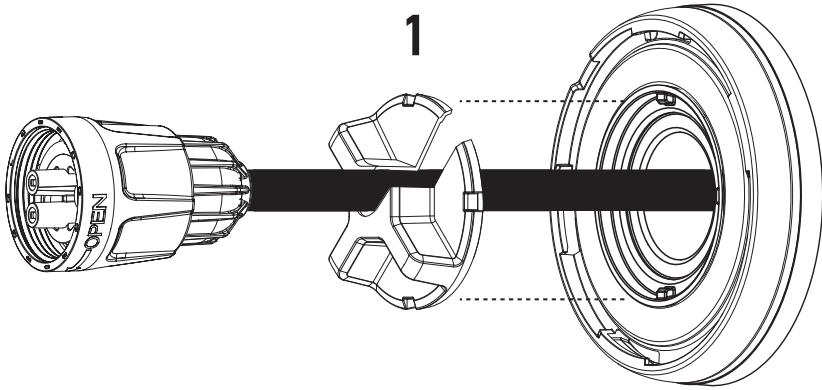
FEED THREADED COLLAR ONTO ASSEMBLY AND  
THREAD INTO COUPLING BY HAND.



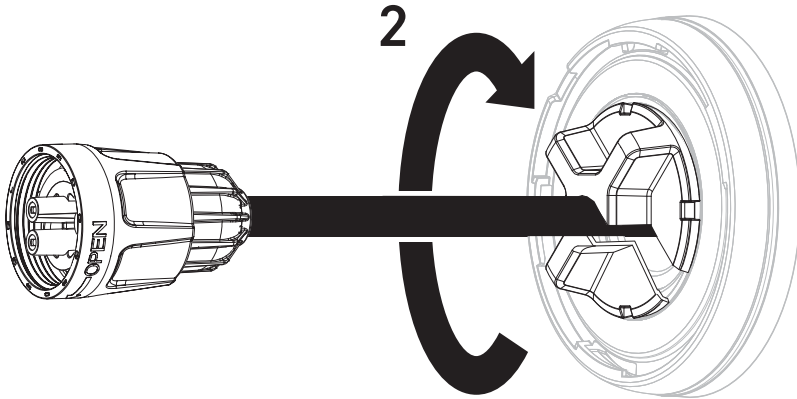
# 5

## ADD ADAPTER TOOL

ALIGN ADAPTER TOOL WITH THREADED COLLAR ENSURING THE CABLE IS PULLED THROUGH THE HOLE IN THE ADAPTER TOOL.



TIGHTEN FIRMLY BY HAND.



REMOVE ADAPTER TOOL AND STORE SAFELY FOR WINTERIZATION.

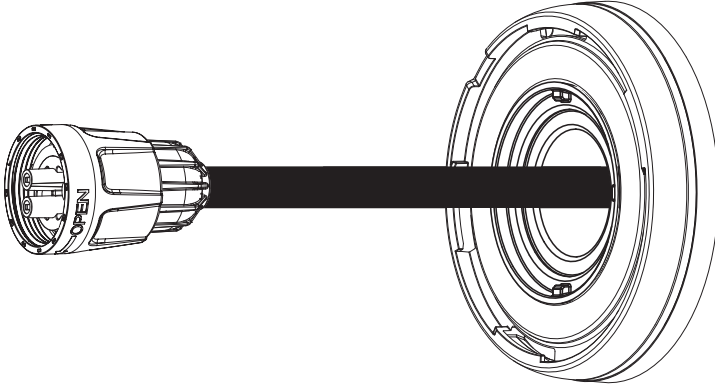
### IMPORTANT NOTES



ENSURE ADAPTER TOOL IS SAFELY  
STORED FOR WINTERIZATION

# B: LIGHT ASSEMBLY

## 1 PULL OUT PLUG AND A LENGTH OF CABLE



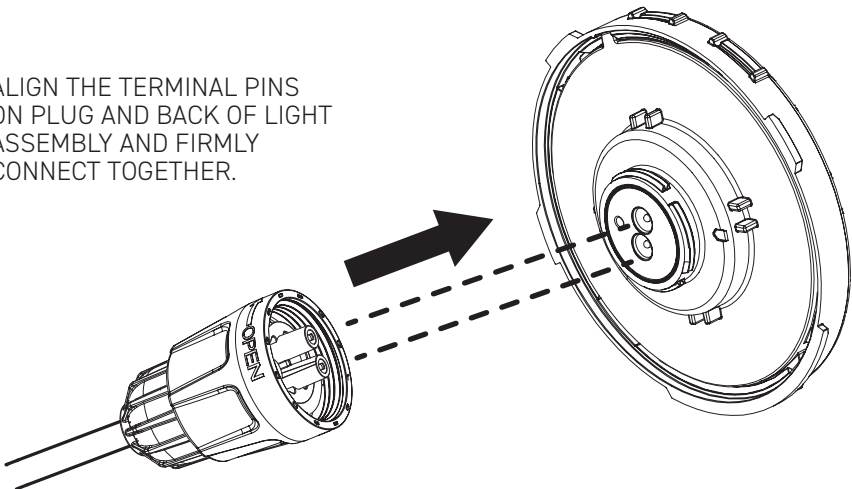
### IMPORTANT NOTES



- DO NOT ADD SEALANTS, GREASES OR ADHESIVES
- ENSURE ALL SURFACES ARE CLEAN AND DRY
- **DO NOT ASSEMBLE UNDERWATER**

## 2 CONNECT THE TERMINALS

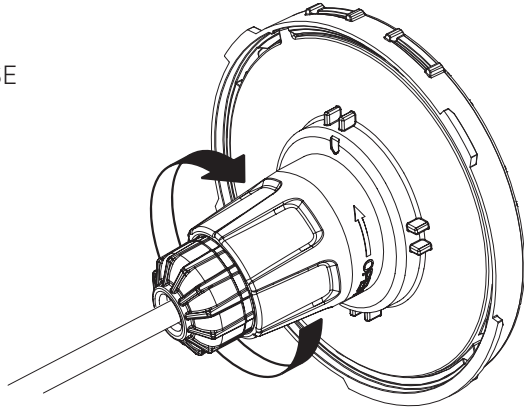
ALIGN THE TERMINAL PINS ON PLUG AND BACK OF LIGHT ASSEMBLY AND FIRMLY CONNECT TOGETHER.



### 3

## FASTEN PLUG TO LIGHT

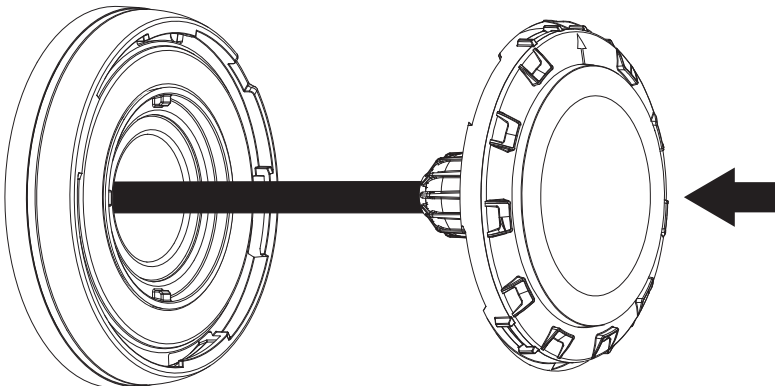
TO LOCK INTO PLACE:  
TWIST COLLAR CLOCKWISE  
A FEW TIMES UNTIL IT'S  
HAND TIGHT.



### 4

## PULL THROUGH CABLE

PULL CABLE THROUGH CONDUIT TO DRAW LIGHT INTO ADAPTER.

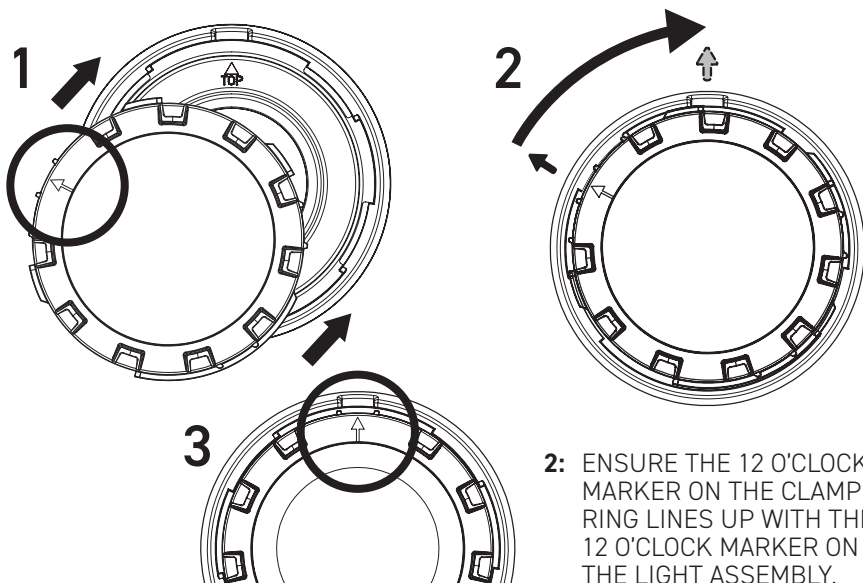


# 5

## TWIST ON THE LIGHT ASSEMBLY TO CLAMP RING

1: PLACE THE LIGHT ASSEMBLY OVER THE CLAMP RING AT 10 O'CLOCK...

2: ... AND THEN TWIST CLOCKWISE TO 12 O'CLOCK.



2: ENSURE THE 12 O'CLOCK MARKER ON THE CLAMP RING LINES UP WITH THE 12 O'CLOCK MARKER ON THE LIGHT ASSEMBLY.

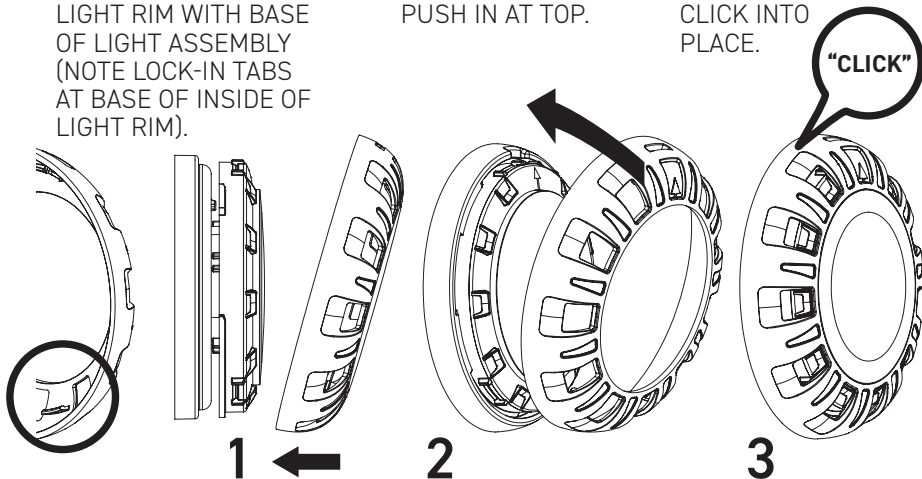
# 6

## CONNECT ON LIGHT RIM

1: LINE UP BASE OF LIGHT RIM WITH BASE OF LIGHT ASSEMBLY (NOTE LOCK-IN TABS AT BASE OF INSIDE OF LIGHT RIM).

2: CLICK ON AND PUSH IN AT TOP.

3: ENSURE LIGHT RIM CLICK INTO PLACE.



TWO LOCK-IN TABS AT BASE

# WINTERIZATION

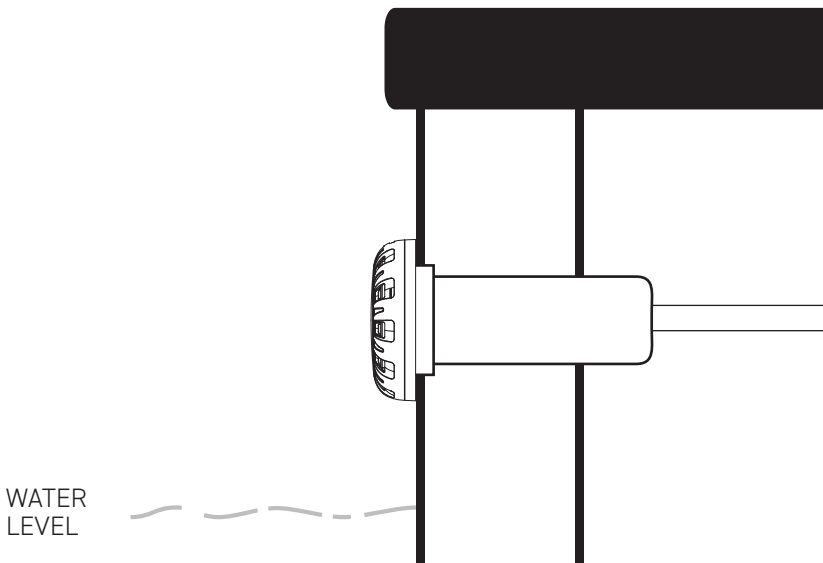
THE FOLLOWING WINTERIZATION PROCESS IS HIGHLY RECOMMENDED TO AVOID DAMAGE TO THE LIGHT ASSEMBLY AND THE SUPPORTING FIXTURES.

SELECT FROM COMMONLY AVAILABLE WINTERIZATION FITTINGS TO SEAL THE NICHELESS FITTING. IT IS IMPORTANT TO ENSURE THEY ARE APPROPRIATELY SELECTED AND FITTED TO ENSURE A WATER TIGHT SEAL IS ACHIEVED. ANY WATER IN THE PIPE MUST BE BLOWN OUT BEFORE SEALING OFF.

THIS PROCESS IS RECOMMENDED. ANY DAMAGE TO THE TERMINAL PLUG OR PIPE FITTING DUE TO INADEQUATE SEALING OF THE 1.5" WALL FITTING WILL NOT BE WARRANTED BY SPA ELECTRICS.

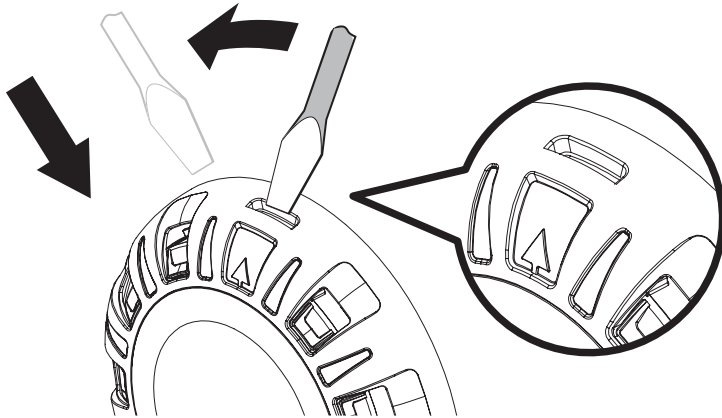
## 1 LOWER WATER LEVEL

LOWER WATER LEVEL TO BELOW THE LIGHT.

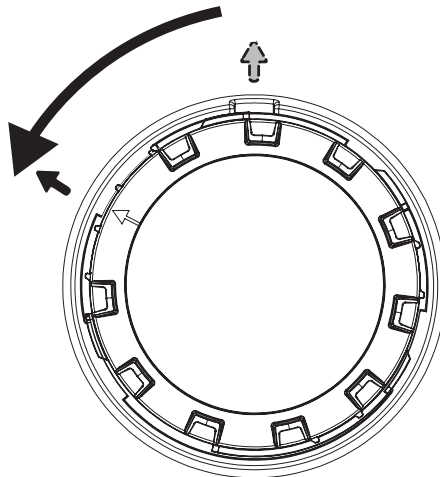


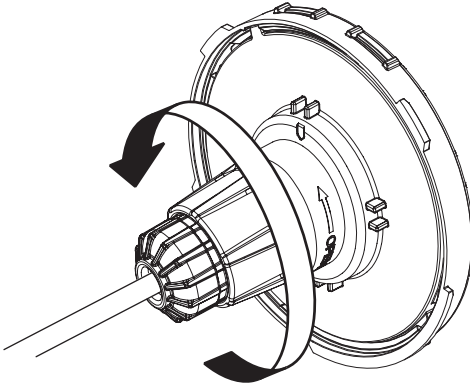
**2****PUSH AND LEVER OFF LIGHT RIM WITH FLAT BLADE**

INSERT FLAT BLADE SCREWDRIVER INTO NICHE ABOVE TOP 12 O'CLOCK ARROW AND LEVER OFF LIGHT RIM.

**3****ROTATE AND PULL OUT LIGHT ASSEMBLY**

ROTATE LIGHT ASSEMBLY COUNTER-CLOCKWISE SO THE ARROW ON THE LIGHT ASSEMBLY IS AT 10 O'CLOCK AND THEN PULL OUT THE LIGHT ASSEMBLY FROM NICHE.



**4****REMOVE PLUG FROM LIGHT**

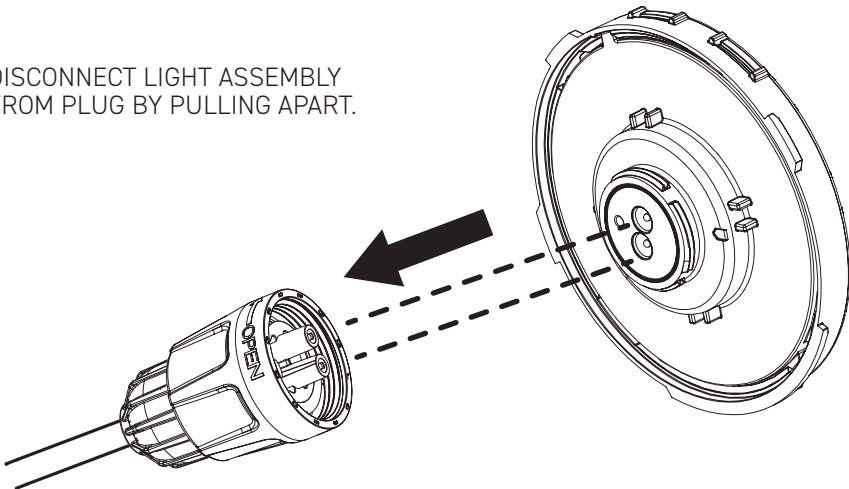
UNSCREW PLUG COLLAR  
COUNTER-CLOCKWISE  
UNTIL IT IS FREE SPINNING.

**IMPORTANT NOTES**

CABLE SHOULD BE SECURED ABOVE WATER AND  
WEATHER PROTECTED WHILE LIGHT IS DETACHED.

**5****REMOVE PLUG FROM LIGHT**

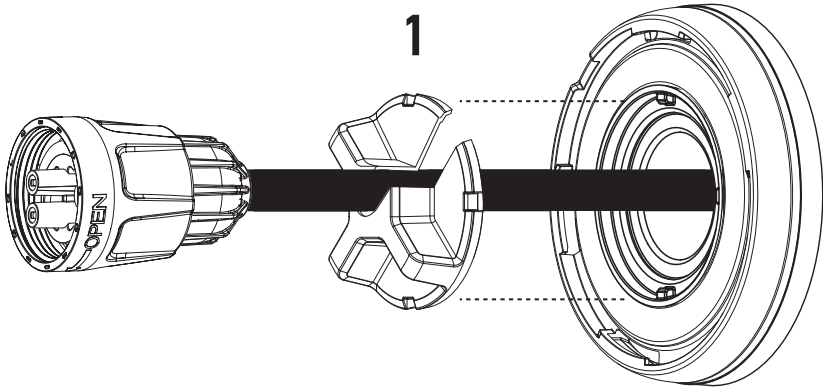
DISCONNECT LIGHT ASSEMBLY  
FROM PLUG BY PULLING APART.



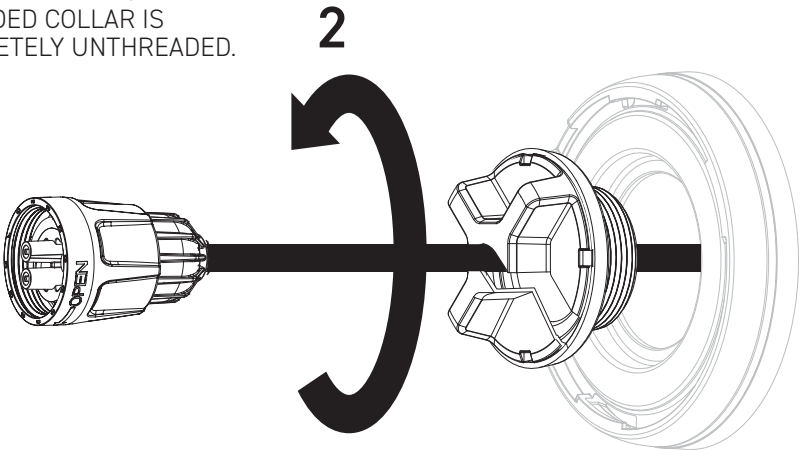
# 6

## REMOVE THREADED COLLAR

ALIGN ADAPTER TOOL WITH THREADED COLLAR ENSURING THE CABLE IS PULLED THROUGH THE HOLE IN THE ADAPTER TOOL.



LOOSEN BY HAND UNTIL THREADED COLLAR IS COMPLETELY UNTHREADED.

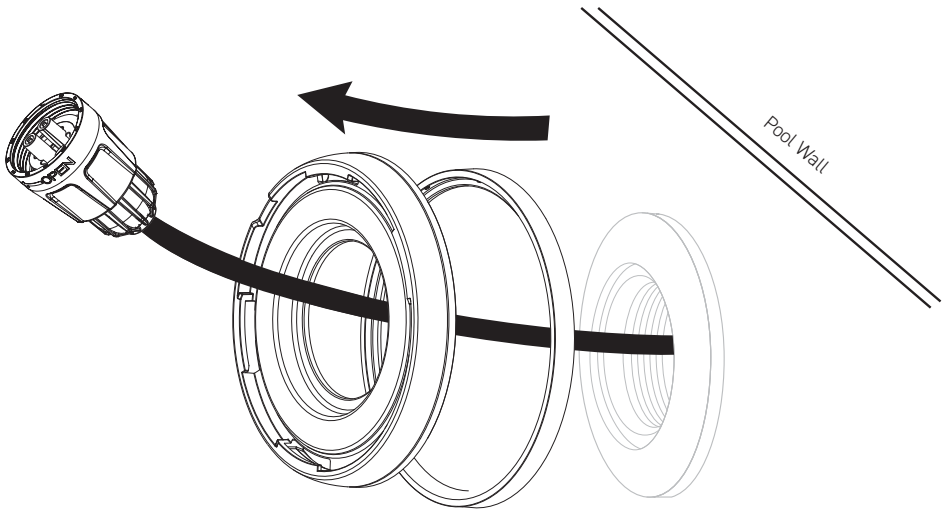


REMOVE ADAPTER TOOL AND STORE SAFELY FOR WINTERIZATION.

# 7

## REMOVE ADAPTER AND SPACER RING

REMOVE ADAPTER PLATE AND SPACER RING FROM AROUND THE CABLE AS SHOWN.



### STORAGE

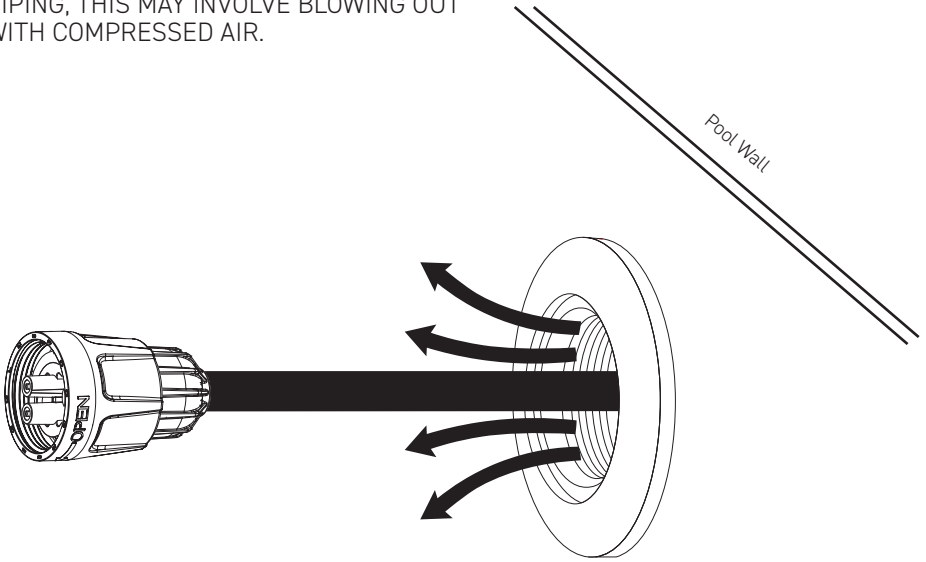


ENSURE REMOVED PARTS ARE STORED FOR USE NEXT SEASON.

# 8

## REMOVE WATER FROM PIPING

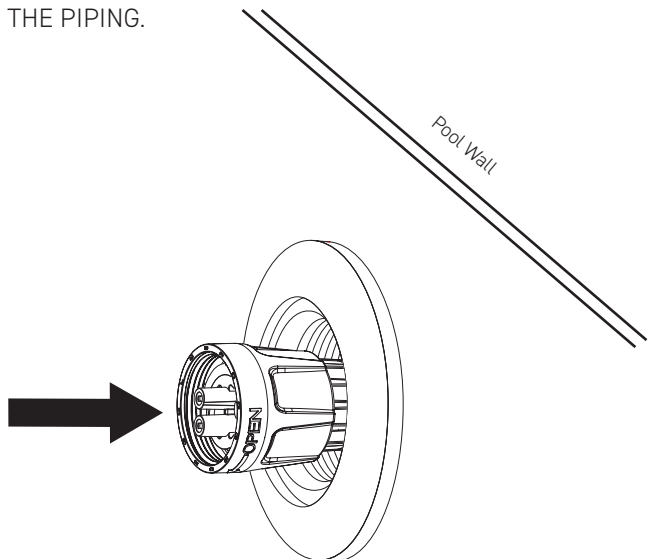
REMOVE THE REMAINING WATER FROM THE PIPING, THIS MAY INVOLVE BLOWING OUT WITH COMPRESSED AIR.



# 9

## STORE CABLE

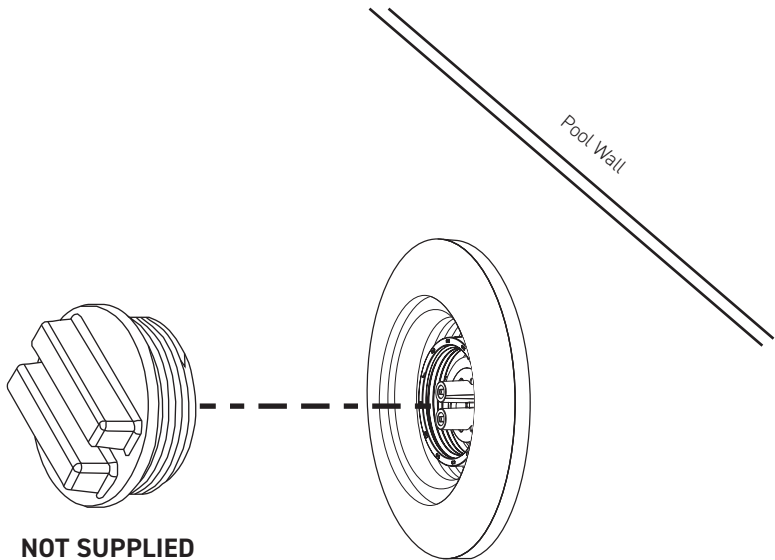
STORE CABLE BACK INTO THE PIPING.



# 10

## SEAL PIPE OPENING

SELECT FROM COMMONLY AVAILABLE WINTERIZATION FITTINGS TO SEAL OFF THE NICHELESS FITTING, IT IS IMPORTANT TO ENSURE THEY ARE APPROPRIATELY SELECTED AND INSTALLED TO ACHIEVE A WATER TIGHT SEAL.

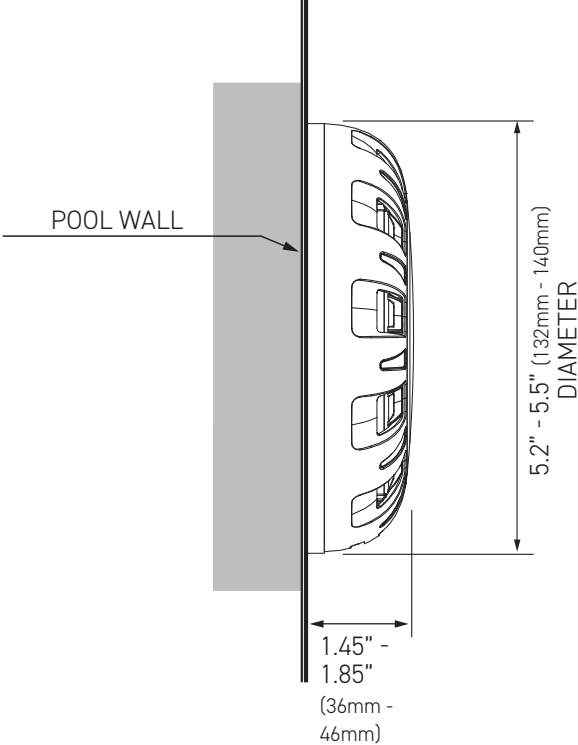


### IMPORTANT NOTE



IMAGE OF SEALED FITTING SHOWN FOR REFERENCE ONLY. ENSURE THE CORRECT TYPE IS SELECTED TO SEAL OFF NICHELESS FITTING.

# KEY DIMENSIONS



# TROUBLESHOOTING

ISSUE	REASON	ACTION
Light returns to WHITE color during manual color change	Light synchronization process has been triggered	Refer to MULTI PLUS User Guide Instructions
Light flashes 2 times (RED)	Light over heating.	Check light is fully submerged. Check vents are not obstructed
Light not operating (1)	Faulty connection to transformer	Ensure cable correctly connected to transformer terminals
Light not operating (2)	Mains power not connected	Check transformer is plugged in to GPO and switched on
Light not operating (3)	Damaged cable	Disconnect plug top and test voltage under load using multi-meter (ie. 20w 12v)
Light not operating (4)	Transformer not working	Check fuses & test transformer using multimeter under load (ie.15W 12V)
Light colors not synchronized	Incorrect operating mode selected.	Refer to MULTI PLUS setup procedure

**If these issues cannot be resolved with the above recommended actions, please contact your local Spa Electrics reseller or Spa Electrics directly.**

[www.spaelectrics.com](http://www.spaelectrics.com)

# ELECTRICAL GROUNDING

## Underwriters Laboratories (UL) Statement

Per the NEC, NFPA 70, Article 680.23 (B)(5), states that bonding shall not be required for luminaires that are listed for the application and have no non-current carrying metal parts. In addition, per Article 680.26 (B)(4), exception states that Listed low-voltage lighting systems with non-metallic forming shells shall not require bonding.

Therefore, luminaires with polymeric/non-current carrying metal parts are not required to be grounded / bonded.

## Manufacturers Statement

Spa Electrics **Retro Universal** luminaires with their plastic housing designs do not require grounding / bonding.

Spa Electrics **Retro Universal** lights have also been determined to comply with the applicable requirements for wet-niche, LED type Swimming Pool and Spa Luminaires.

# FCC COMPLIANCE STATEMENT

This device complies with part 15 of the FCC rules. Operation is subject to the following two (2) 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.

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

- **Reorient or relocate the receiving antenna.**
- **Increase the separation between the equipment and receiver.**
- **Connect the equipment into an outlet on a circuit different to that to which the receiver is connected.**
- **Consult the dealer or an experienced radio / TV technician for help.**

**Do not make any changes or modifications to the equipment unless otherwise specified in the manual.**

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## IMPORTANT NOTE

PLEASE STORE THIS MANUAL IN A SAFE PLACE  
FOR FUTURE REFERENCE



 **Spa Electrics<sup>®</sup>**

*The underwater lighting specialists*

[spaelectrics.com](https://spaelectrics.com)

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