atom

VINYL POOLS

ULTRA COMPACT NICHE LIGHT

INSTALLATION & OWNER'S MANUAL

CONTENTS

⚠ NOTICE

FRESH WATER USE ONLY
HORIZONTAL MOUNT ONLY
NOT INTENDED FOR OPERATION OUT OF WATER

READ THIS FIRST

Congratulations on your purchase of the **ATOM** underwater lighting system. All **ATOM** lights are manufactured by Spa Electrics in Australia from only the highest quality materials. For more information about Spa Electrics & our products, please visit **www.spaelectrics.com.au**

BEFORE YOU START:

- **ATOM** 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 the most current edition and/or amendment of current AS/NZS 3000 Wiring Rules.
- For safe and proper installation, ensure that only those parts supplied with the system are used.
- Maximum installation depth for the **ATOM** light is 400mm (16") below water line (to top of light).
- All lights should be mounted in a location that is easily accessible without the need for entering or lowering the pool water.
- 700mm (28") cable has been supplied pre-assembled within niche assembly, and must remain stored within the Niche to ensure the light can be accessed above the waterline. [Maximum cable within niche = 1000mm (40") (up to 1.0mm^2). See Page 16 for more information].

CLEANING

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

USE

- <u>**DO NOT**</u> operate light unless completely submerged in water.
- Operating the light for at least 15 minutes every week is advised (all year round).
- **ATOM** 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: +5ºC ~ +40ºC (+41ºF ~ +104ºF)

⚠ IMPORTANT NOTE

It is recommended that the ATOM lighting range is operated using a Spa Electrics LV25-12 or LV50-12 transformer.

- DO NOT use electronic or switch-mode power supplies with ATOM 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.

TOOLS REQUIRED

- Hole Saw - Ø65mm ~ Ø70mm (2 $^5/_8$" ~ 2 $^3/_4$" saw)
- Box cutter / knife
- No. 2 Phillips screwdriver
- Flat-blade screw driver (for light-head removal)

⚠️ IMPORTANT NOTES

- The use of power tools for product assembly is **<u>NOT</u>** recommended as these devices can cause faults and damage to light components.

- The enclosed images are for illustrative purposes only. Appearances of parts and assemblies may vary from the enclosed illustrations.

- Please contact your reseller if you have any questions regarding the correct installation of this product.

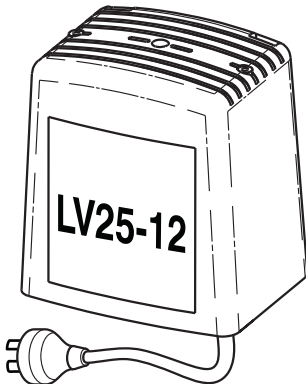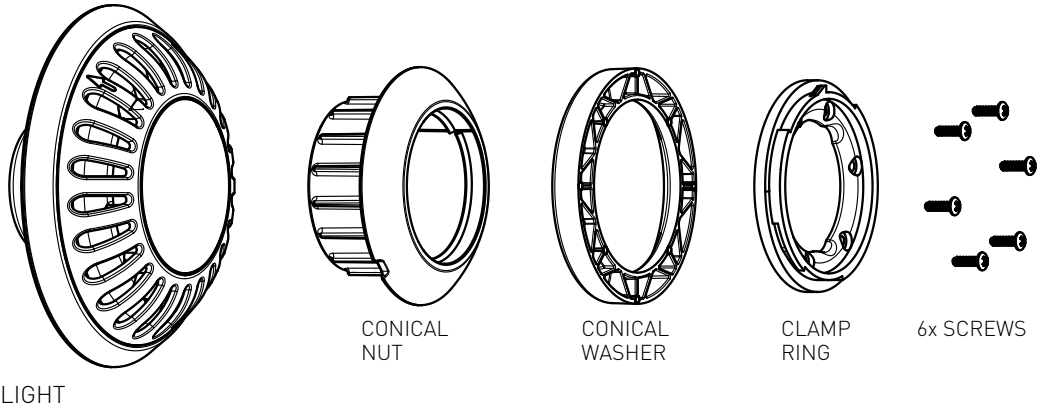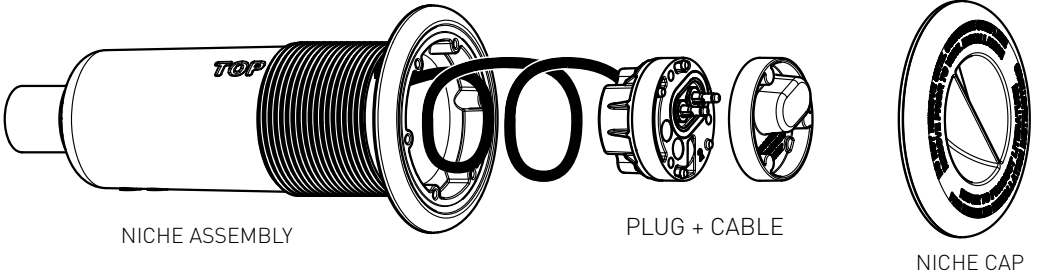# PRODUCT SUPPORT & INFORMATION

Phone: **+61 (0)3 9793 2299** (business hours)

Email: info@spaelectrics.com.au (SALES enquiries)

Email: tech@spaelectrics.com.au (TECHNICAL support enquiries)

Web: www.spaelectrics.com.au

INCLUDED PARTS

NICHE ASSEMBLY

PLUG + CABLE

NICHE CAP

LIGHT

CONICAL NUT

CONICAL WASHER

CLAMP RING

6x SCREWS

LV25-12

LV50-12

1x LV25-12 TRANSFORMER
(FOR SINGLE-LIGHT KITS)
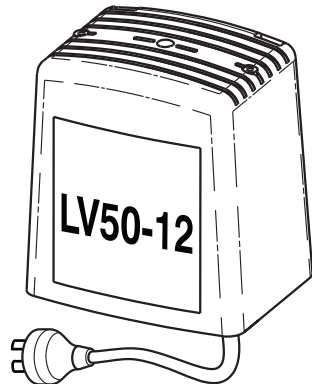
1x LV50-12 DUAL TRANSFORMER
(FOR DUAL-LIGHT KITS)
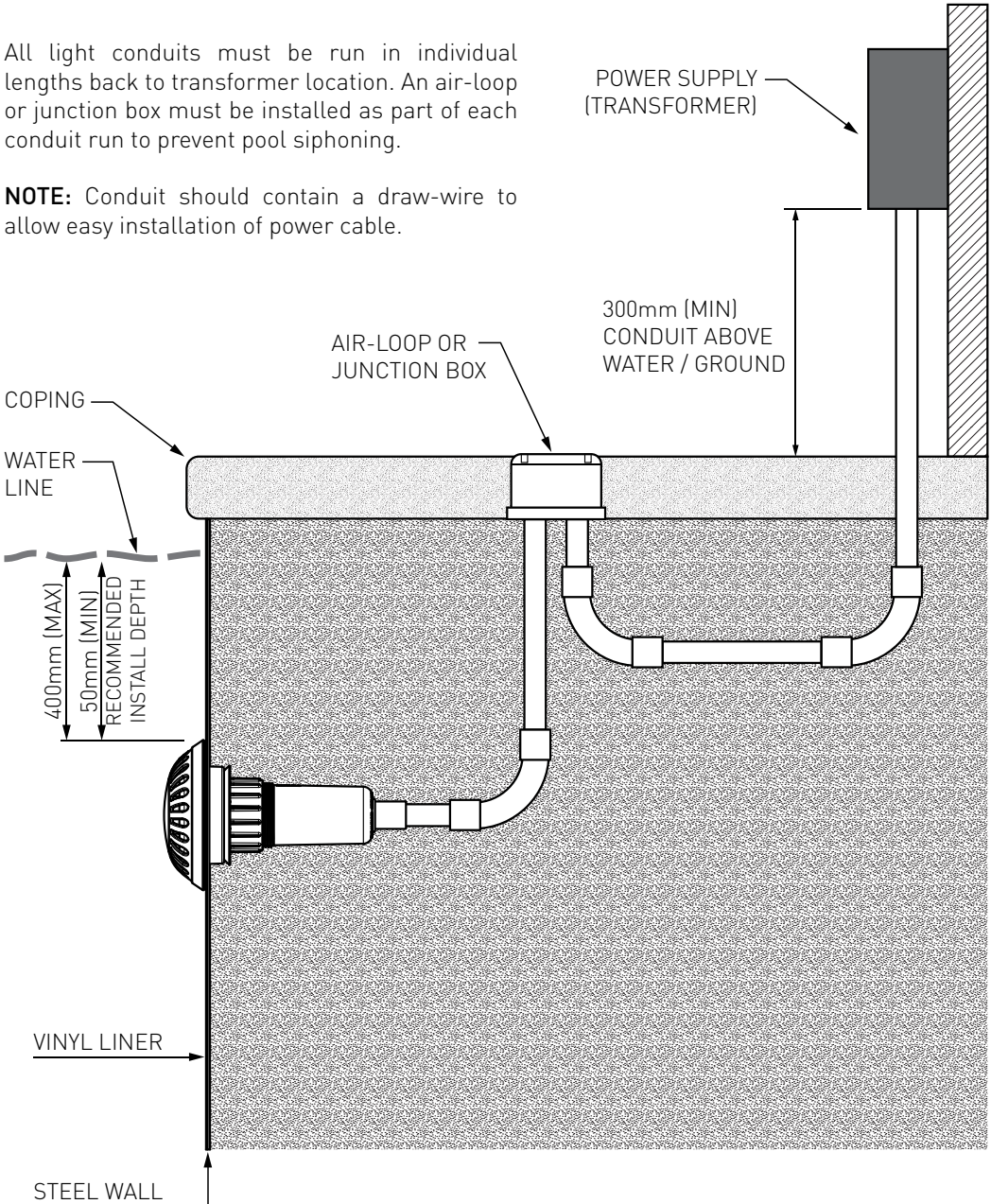
1x WARRANTY CARD

1x INSTALLATION MANUAL

FINISHED INSTALLATION

STANDARD WALL MOUNTING

All light conduits must be run in individual lengths back to transformer location. An air-loop or junction box must be installed as part of each conduit run to prevent pool siphoning.

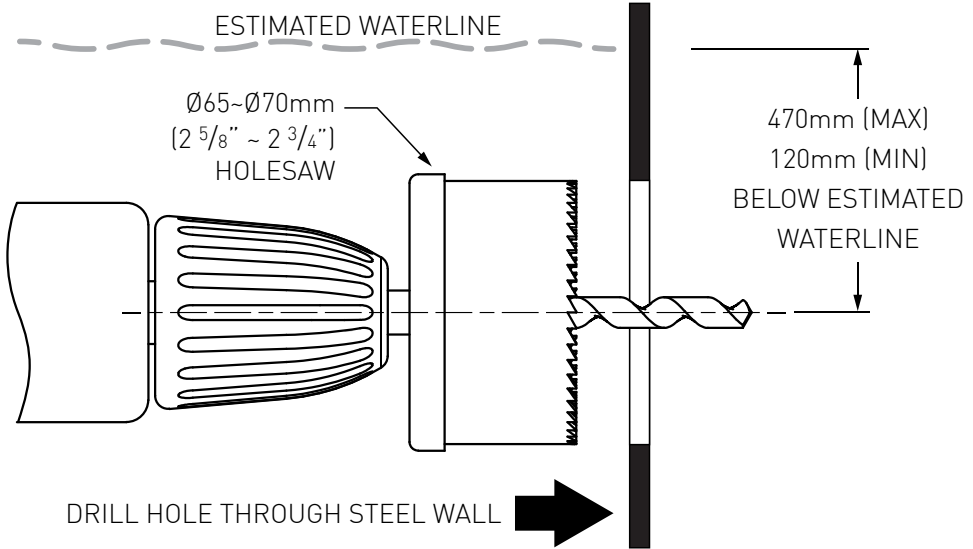**NOTE:** Conduit should contain a draw-wire to allow easy installation of power cable.

POWER SUPPLY
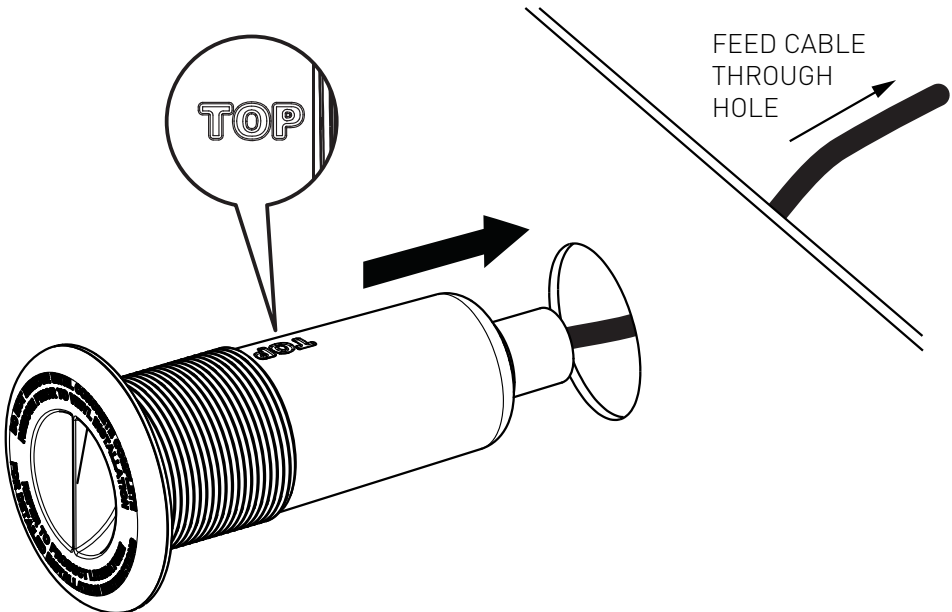(TRANSFORMER)

300mm (MIN)
CONDUIT ABOVE
WATER / GROUND

AIR-LOOP OR
JUNCTION BOX

COPING

WATER
LINE

400mm (MAX)

50mm (MIN)

RECOMMENDED
INSTALL DEPTH

VINYL LINER

STEEL WALL

INSTALLATION PROCEDURE

1 | MOUNTING HOLE PREPARATION *

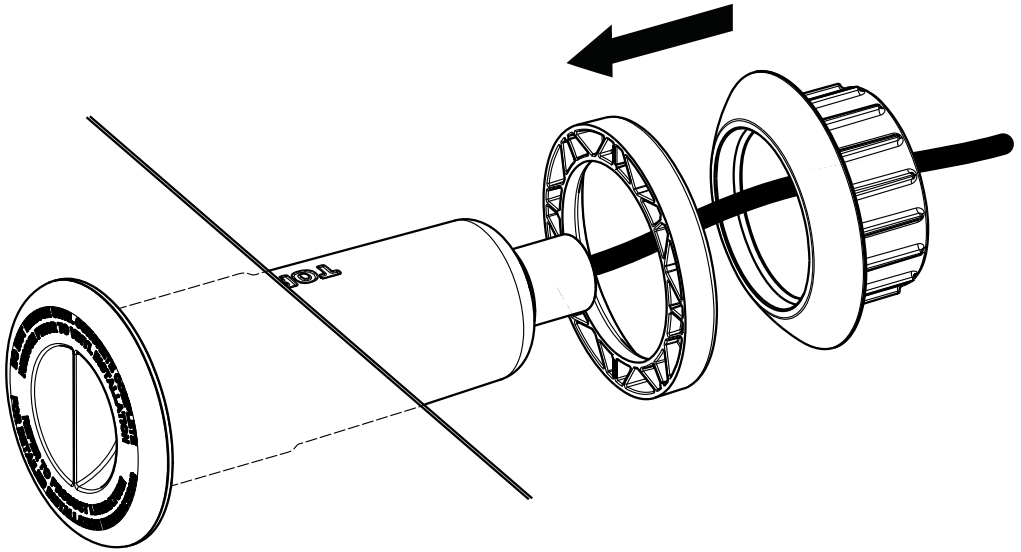* MAY NOT BE REQUIRED IF PRE-PUNCHED / DRILLED HOLES AVAILABLE FOR LIGHT MOUNTING

ESTIMATED WATERLINE
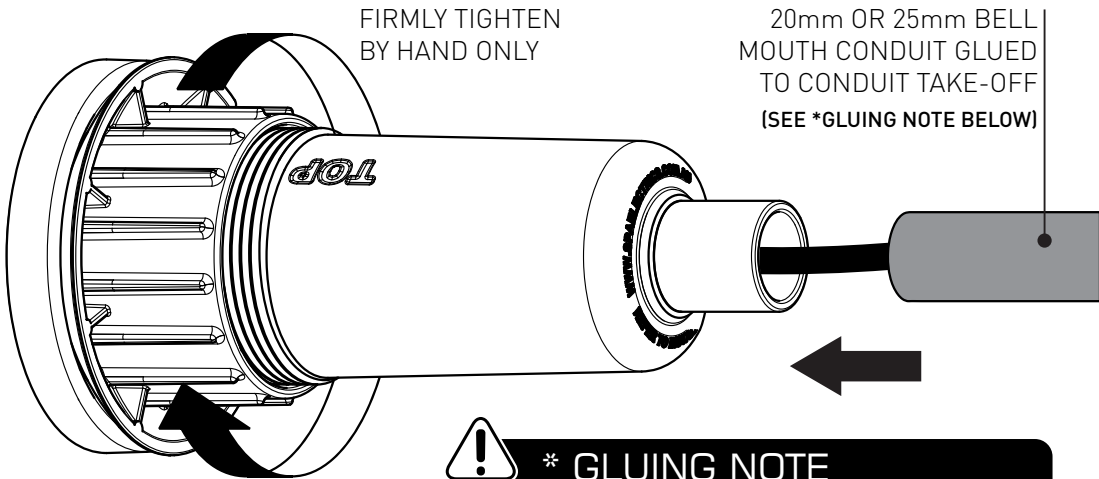
Ø65~Ø70mm
$(2\ ^5/_8" \sim 2\ ^3/_4")$
HOLESAW

470mm (MAX)
120mm (MIN)
BELOW ESTIMATED
WATERLINE

DRILL HOLE THROUGH STEEL WALL

2 | ORIENTATION OF NICHE "TOP"

TOP

FEED CABLE
THROUGH
HOLE

3   ASSEMBLE WASHER AND NUT

4   TIGHTEN NUT

FIRMLY TIGHTEN
BY HAND ONLY

20mm OR 25mm BELL
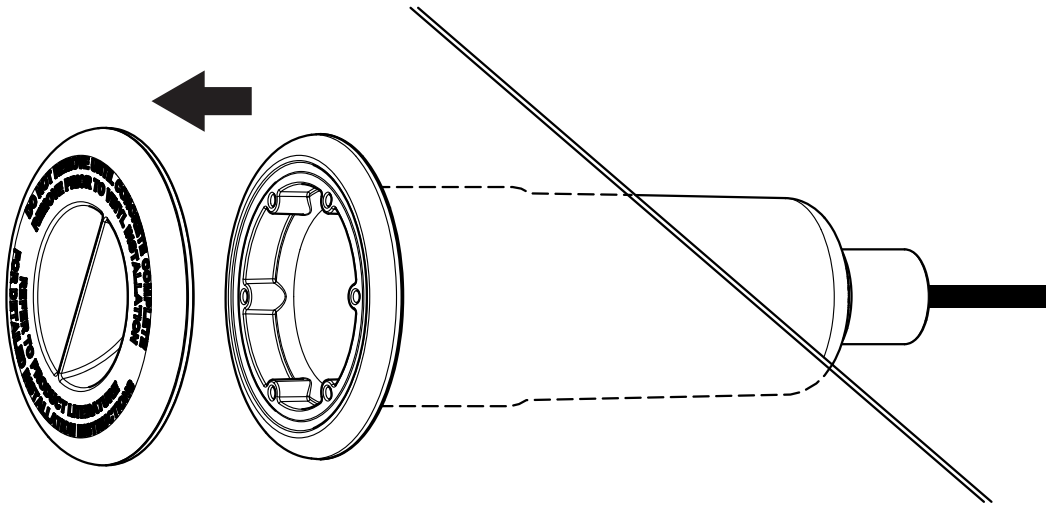MOUTH CONDUIT GLUED
TO CONDUIT TAKE-OFF
(SEE *GLUING NOTE BELOW)

⚠ * GLUING NOTE

ENSURE P.V.C. SOLVENT CEMENT IS SUITABLE
FOR NON-PRESSURE APPLICATIONS AND USE
WITH A.B.S. PLASTIC

5 | REMOVE NICHE CAP
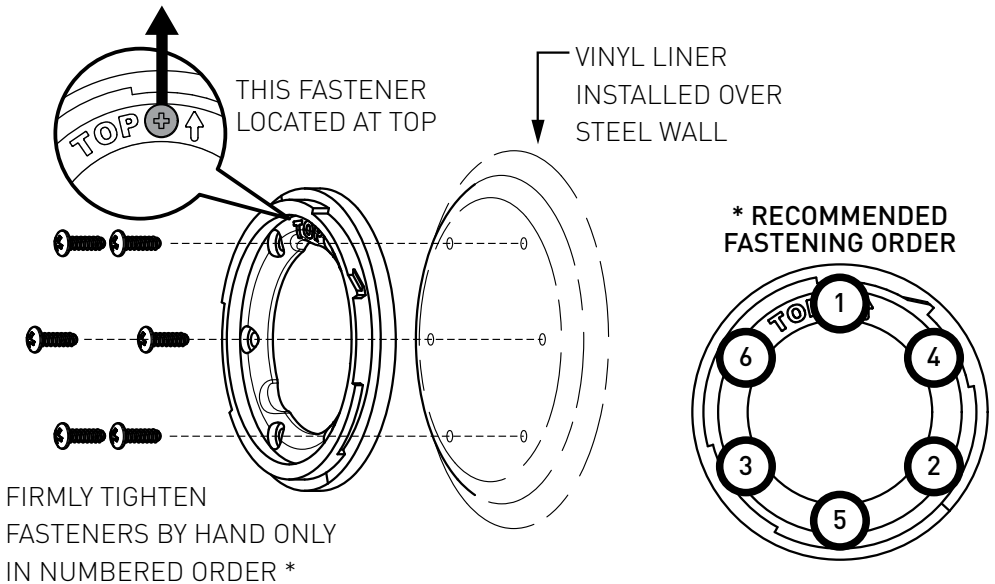

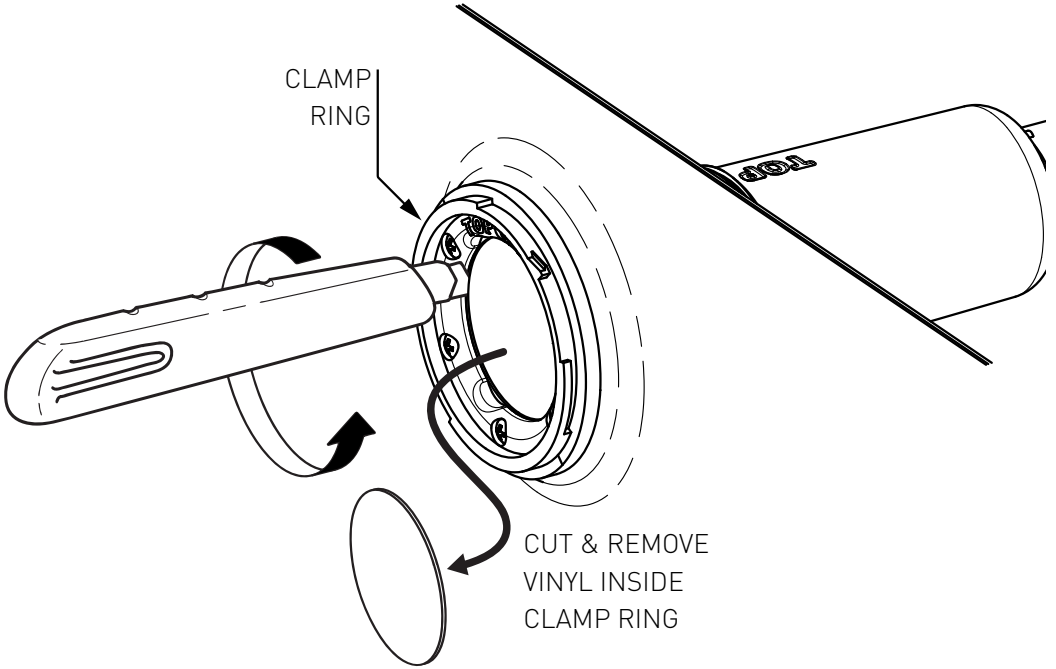## 6 | ASSEMBLE VINYL CLAMP RING

THIS FASTENER
LOCATED AT TOP

VINYL LINER
INSTALLED OVER
STEEL WALL

TOP ↑

* RECOMMENDED
FASTENING ORDER

TOP
1
4
6
2
3
5

FIRMLY TIGHTEN
FASTENERS BY HAND ONLY
IN NUMBERED ORDER *

7 TRIM VINYL

CLAMP RING

TOP

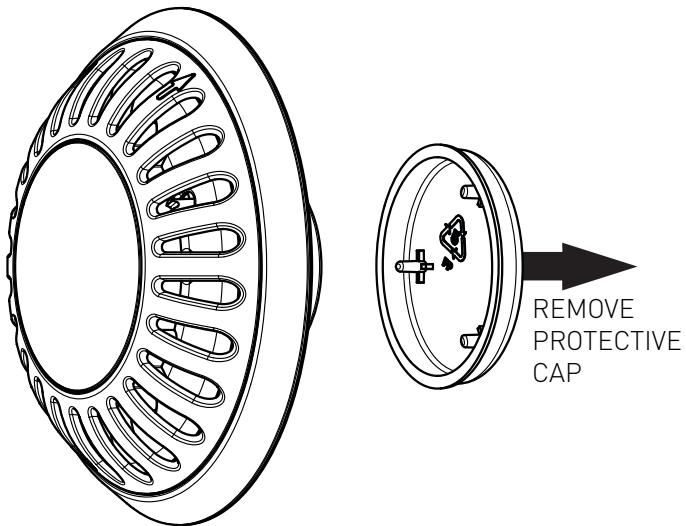CUT & REMOVE
VINYL INSIDE
CLAMP RING

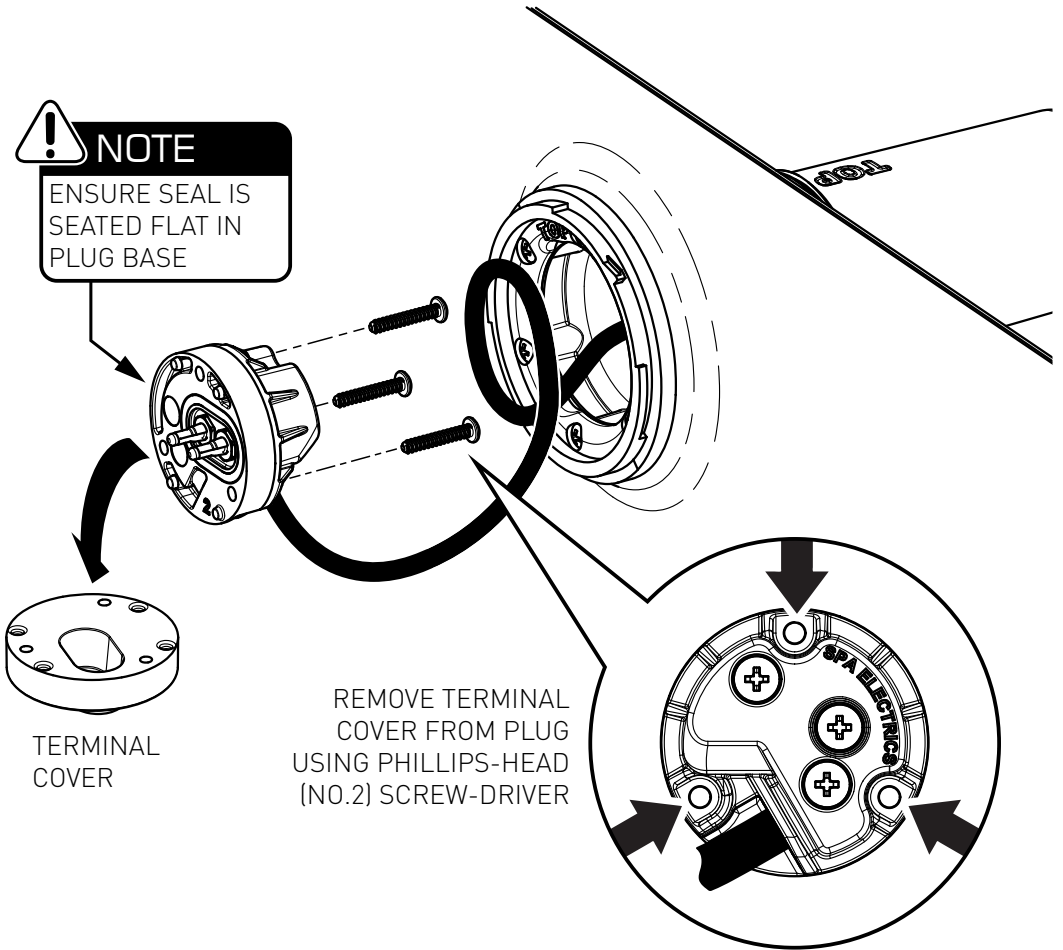# 8 REMOVE PROTECTIVE CAP

REMOVE
PROTECTIVE
CAP

9   REMOVE TERMINAL COVER

⚠ **NOTE**
ENSURE SEAL IS
SEATED FLAT IN
PLUG BASE

TERMINAL
COVER

REMOVE TERMINAL
COVER FROM PLUG
USING PHILLIPS-HEAD
(NO.2) SCREW-DRIVER

SPA ELECTRICS

⚠ **NOTE**
DO NOT REMOVE
TERMINAL COVER
UNDERWATER

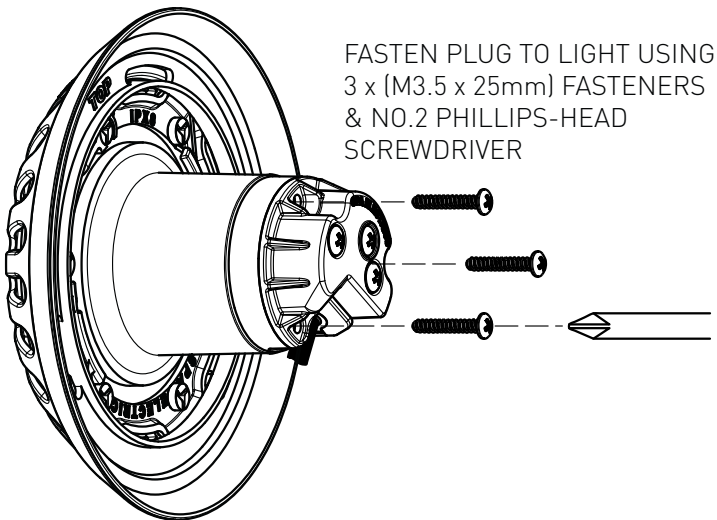⚠ **SERVICING**
RETAIN TERMINAL COVER IN
CASE LIGHT NEEDS REMOVAL.
SEE **PAGE 15** FOR MORE INFO

10   FASTEN PLUG TO LIGHT

ALIGN TERMINAL PINS
AND FIRMLY ASSEMBLE
PLUG TO LIGHT

FASTEN PLUG TO LIGHT USING
3 x (M3.5 x 25mm) FASTENERS
& NO.2 PHILLIPS-HEAD
SCREWDRIVER
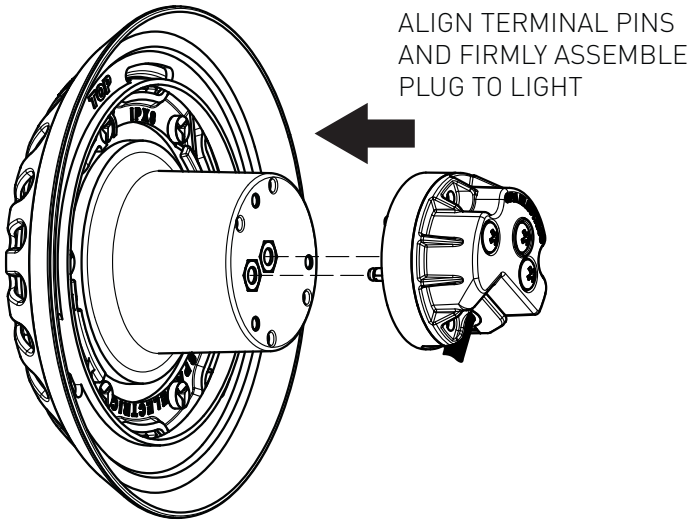
⚠ IMPORTANT NOTES

- DO NOT OVERTIGHTEN SCREWS
- DO NOT USE POWER-TOOLS
- DO NOT ADD SEALANTS, GREASES OR ADHESIVES
- ENSURE ALL SURFACES ARE CLEAN AND DRY
- **DO NOT ASSEMBLE UNDERWATER**

LIGHT ASSEMBLY
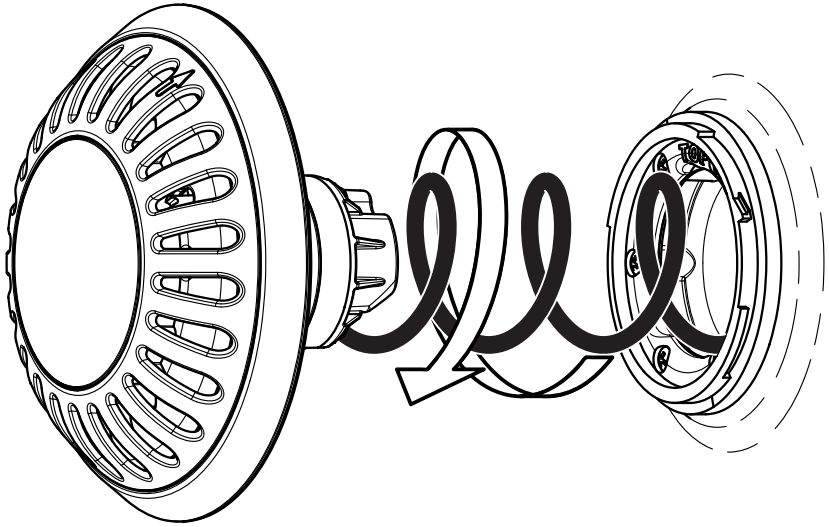
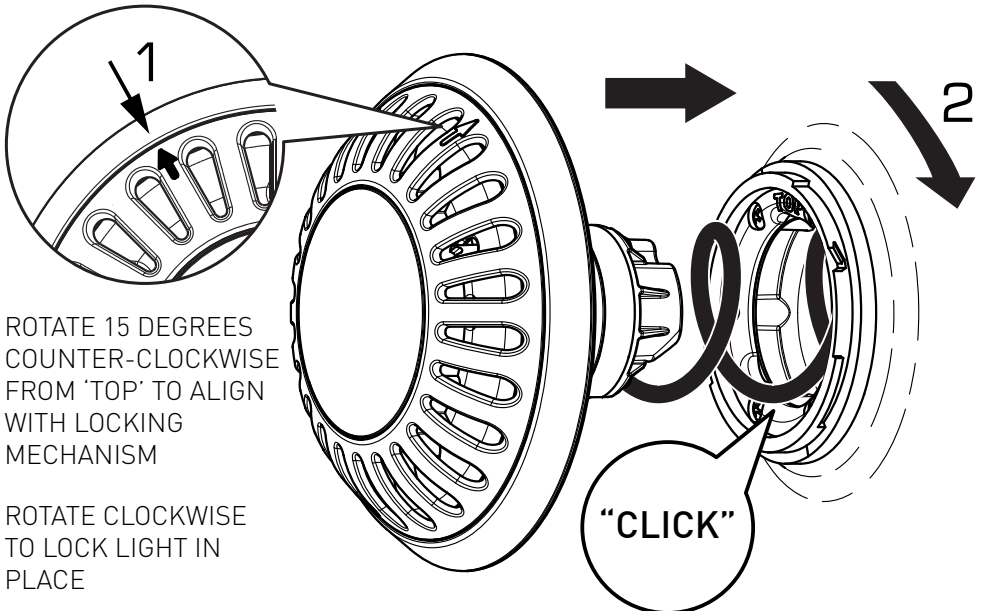**1**   COIL CABLE INSIDE NICHE
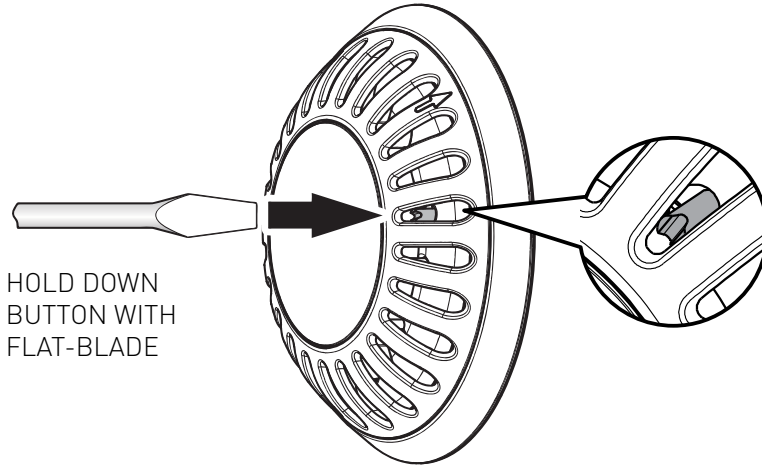

2   INSERT LIGHT INTO CLAMP RING

1   ROTATE 15 DEGREES
COUNTER-CLOCKWISE
FROM 'TOP' TO ALIGN
WITH LOCKING
MECHANISM

2   ROTATE CLOCKWISE
TO LOCK LIGHT IN
PLACE

"CLICK"

LIGHT REMOVAL

1 PUSH & HOLD BUTTON WITH FLAT BLADE

HOLD DOWN
BUTTON WITH
FLAT-BLADE

2 ROTATE COUNTER-CLOCKWISE & REMOVE FROM LOCKING RING

ROTATE & RELEASE
LIGHT FROM NICHE
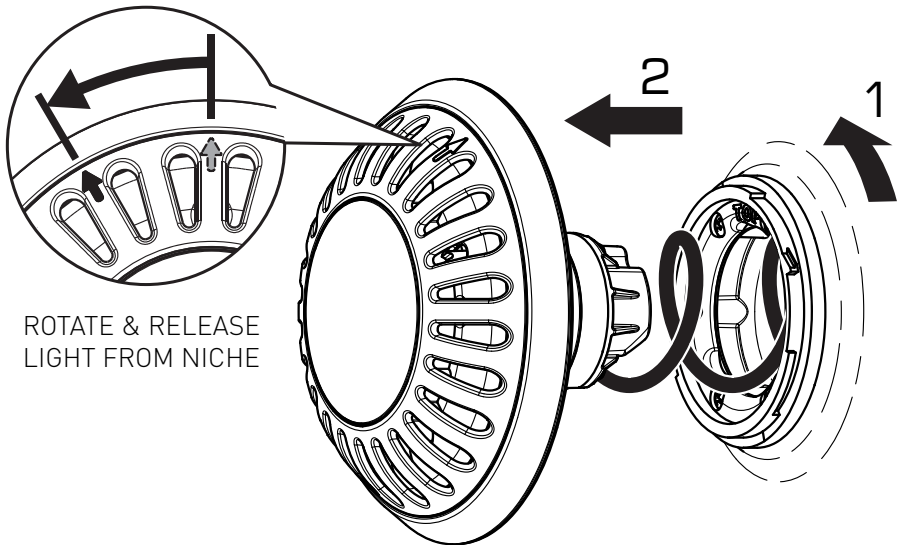
PLUG REMOVAL

PLUG REMOVAL & TERMINAL COVER ATTACHMENT

1 REMOVE PLUG FROM LIGHT

UNSCREW 3x FASTENERS
USING NO.2 PHILLIPS-HEAD
SCREWDRIVER
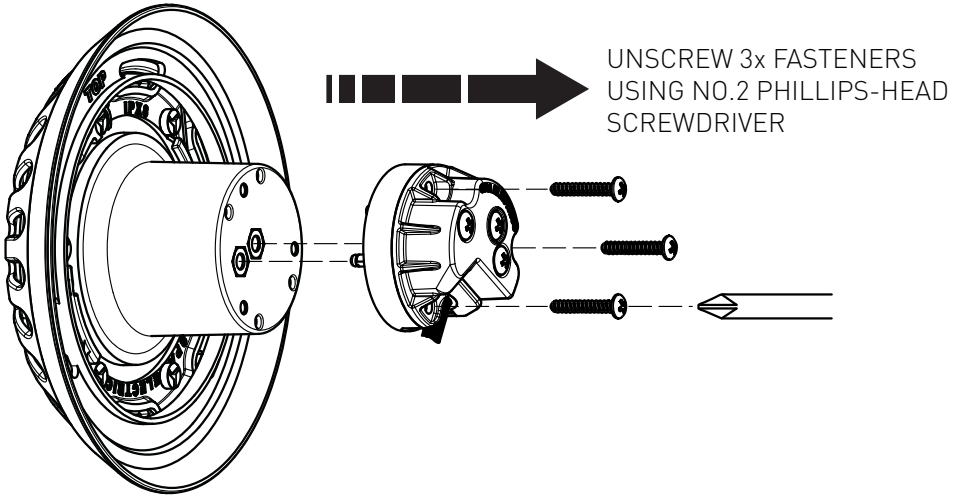
2 ASSEMBLE TERMINAL COVER TO PLUG & STORE IN NICHE

1 ASSEMBLE TERMINAL COVER TO PLUG
USING NO.2 PHILLIPS-HEAD SCREW-
DRIVER

2 PLUG CAN BE STORED WITHIN
NICHE AS PICTURED
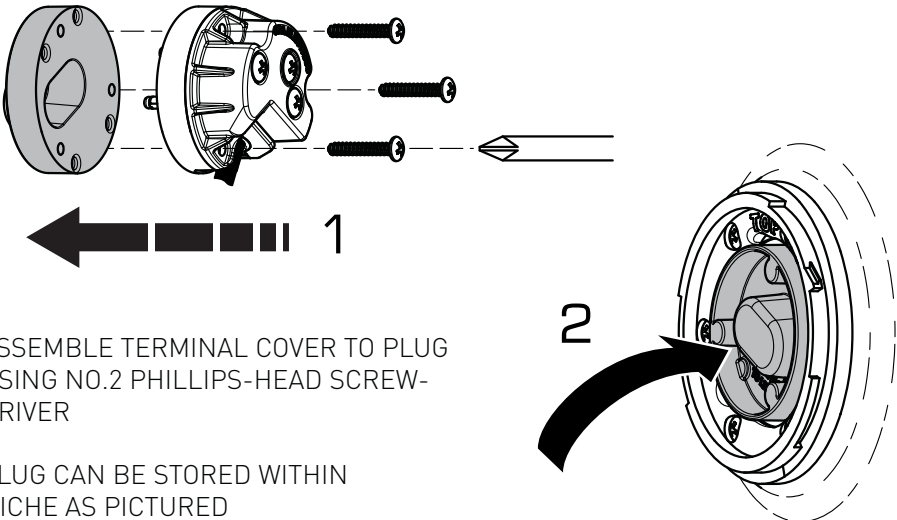
CABLE ADJUST / REMOVAL

ATOM lights (for vinyl pools) are supplied with 700mm of cable pre-installed within the niche. In circumstances where additional cable-length is required, the cable can be extended to a maximum of 1000mm and stored within the niche. (Applicable for cables up to $1.0mm^2$)

The following diagrams illustrate how the cable can be adjusted and/or removed:

700mm
(STANDARD)

1000mm (MAX)
AFTER CABLE
ADJUSTMENT

CABLE GLAND

1

2

FASTENERS

COMPRESSION PLATE

CABLE GROMMET
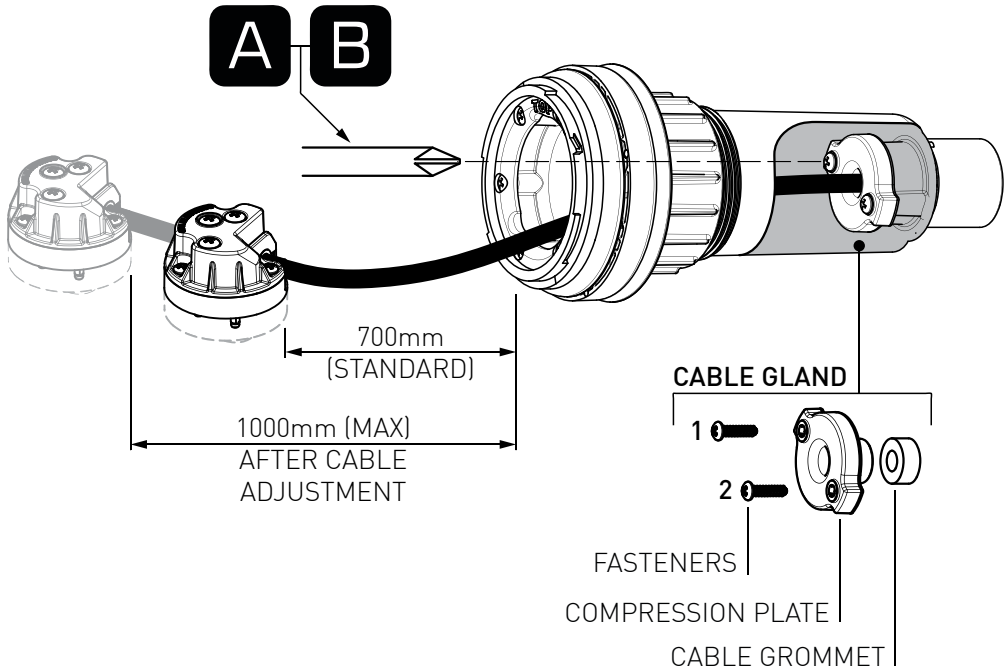
A   CABLE ADJUSTMENT

USING A NO. 2 PHILLIPS-HEAD SCREW-DRIVER, PARTIALLY LOOSEN FASTENERS **1 & 2** TO ALLOW CABLE TO SLIP THROUGH NICHE.

DO NOT EXTEND CABLE LONGER THAN 1000mm (SEE ABOVE) - EXCESS CABLE WITHIN NICHE WILL RESTRICT CORRECT ASSEMBLY OF LIGHT HEAD.

B   CABLE REMOVAL

USING A NO. 2 PHILLIPS-HEAD SCREW-DRIVER, COMPLETELY REMOVE **CABLE GLAND** COMPONENTS AND STORE SAFELY FOR LATER-USE.

ENSURE **CABLE-GLAND** COMPONENTS ARE RE-ASSEMBLED TO CABLE IN THE ORIENTATION & ORDER SHOWN ABOVE PRIOR TO FASTENING BACK INTO NICHE.

CABLE ADJUST / REMOVAL

1000mm (MAX) *
AFTER CABLE
ADJUSTMENT

700mm *
(STANDARD)
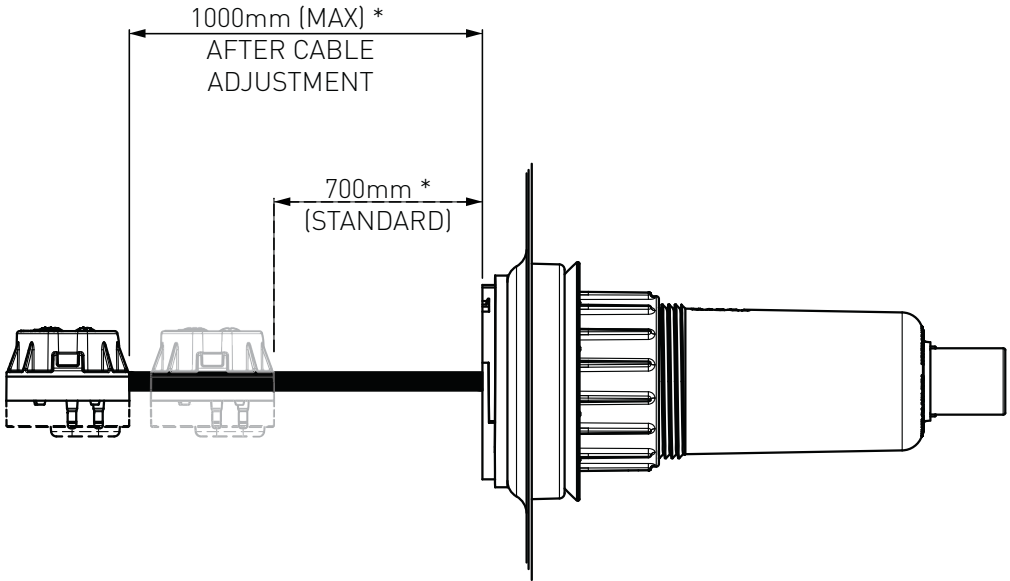
⚠ * CABLE LENGTH

CABLE LENGTH MEASURED FROM
FRONT OF CLAMP RING TO PLUG'S
CABLE-ENTRY POINT

⚠ NOTE

ALWAYS ENSURE POOL LIGHT CAN
BE RAISED ABOVE WATERLINE FOR
INSPECTION & SERVICING

⚠ IMPORTANT NOTES

- DO NOT OVERTIGHTEN SCREWS WHEN RE-ASSEMBLING
  CABLE-GLAND COMPONENTS INTO NICHE.
- DO NOT USE POWER-TOOLS
- DO NOT ADD SEALANTS, GREASES OR ADHESIVES TO
  CABLE OR CABLE-GLAND COMPONENTS AT ANY TIME.
- ENSURE ALL SURFACES ARE CLEAN AND DRY PRIOR TO
  CABLE & CABLE-GLAND INSTALLATION
- **DO NOT ASSEMBLE / DISASSEMBLE UNDERWATER**

MULTI PLUS SETUP

READ THIS FIRST

The MULTI-PLUS light has 7 inbuilt modes of operation for use on a variety of different control systems or installation types.

When you first install your MULTI-PLUS light it will operate in the default, '**Manual'** mode for use with a wall switch. In order to connect the light to a 3rd party pool controller OR change to a different operating mode please follow the below steps.

STEP 1 - POOL CONTROLLER SETUP

If connecting to a pool controller, please ensure the system is fully installed and you have completed all the relevant steps in the controller setup menu to operate the lights correctly.

During pool controller setup you will be prompted to select which light model is installed. Please use the below table to select the appropriate light for your pool controller type.

(For more information on this please refer to the pool controller installation manual).

POOL CONTROLLER	SELECT LIGHT MODEL
Astral **Connect 10** (2016 to current)	**SLX Light**
Jandy **Aqualink RS** (F/W Rev. 'R'- Current)	**Intellibrite Light**
Zodiac **Aqualink TRI**	**Intellibrite Light**
Pentair **EasyTouch**	**Intellibrite Light**
Pentair **IntelliTouch**	**Intellibrite Light**
Hayward **Omnilogic**	**(UCL)Universal Colorlogic**

iRIS Setup
If installing the MULTI PLUS with an **iRIS** remote, please see the **iRIS** installation manual for 'Quick Setup' proceedure.
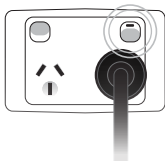
NOTE: Some older pool controllers may not support these models. Please contact the controller manufacturer for upgrade assistance.

STEP 2 - LIGHT SETUP

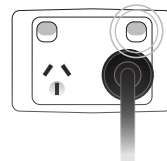**IMPORTANT:** Ensure Lights have been off for **30 seconds** prior to performing this step.

NOTE: This step can either be performed via a wall switch OR via the controller panel/Mobile App.

1. TURN LIGHTS **ON** TURN LIGHTS **OFF**

WAIT **1** SECOND WAIT **12** SECONDS (min 10s - max 15s)

[REPEAT **x 3**]

2. TURN LIGHTS **ON**

ALL LIGHTS NOW FLASHING **RED**
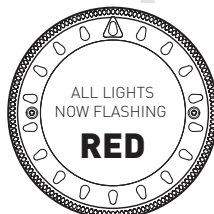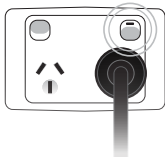
NOTE:
If ALL Lights connected to circuit are NOT continuously flashing RED, please turn Lights **OFF** & **wait 30 seconds** before repeating STEP 2

Continue to STEP 3 →

MULTI PLUS SETUP cont.

STEP 3 - SELECTING OPERATING MODE

After accessing SETUP MODE (STEP 2) the lights will **FLASH RED** continuously. This is MODE 1 (Manual mode)

Use the below process to change the operating mode to correspond to the required controller or operating type below.
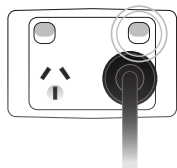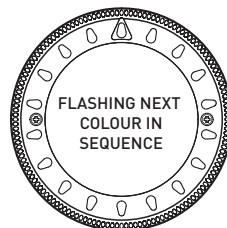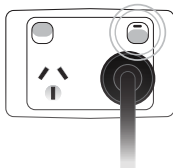
TURN LIGHTS **OFF**   WAIT **1** SECOND   TURN LIGHTS **ON**   →   FLASHING NEXT COLOUR IN SEQUENCE

IMPORTANT: Once desired mode is reached (i.e. "Flashing Green - iRIS Mode) leave power turned ON and continue to STEP 4

'FLASHING' COLOUR	CONTROLLER / OPERATING TYPE	LIGHT MODEL SELECTED[1]
1. RED	Manual Mode (wall switch)	-
2. GREEN	Spa Electrics iRIS Controller	-
3. MAGENTA	Astral Connect 10 (2016 to current)	SLX Light
4. WHITE	Jandy Aqualink RS (F/W Rev. 'R'-Current)	Intellibrite Light
	Zodiac Aqualink TRI	Intellibrite Light
	Pentair EasyTouch	Intellibrite Light
	Pentair IntelliTouch	Intellibrite Light
5. BLUE	RGB MULTI Mode[2] (wall switch)	-
6. YELLOW	Hayward Omnilogic	Universal Colorlogic
7. PINK	P-TYPE Mode[3] (Legacy)	Intellibrite Light

NOTE: **Should the lights go out of sync at any point during Step 3, turn off the lights for 30 seconds then restart the setup process from Step 2. If this issue persists contact Spa Electrics Support. (03) 9793 2299**

Continue to STEP 4   →

1- Light Model Selected:
This indicates the model of light to be selected in the Pool Controller setup menu.
Refer to STEP 1 of this manual for more information or please contact Spa Electrics. (03) 9793 2299

2- RGB MULTI Mode:
This mode allows the MULTI PLUS light to operate in the standard MULTI-Colour mode. This mode should only be used when operating a MULTI PLUS light from a wall switch with a standard Spa Electrics MULTI-Colour light. For more information please contact Spa Electrics.

3- P-TYPE Mode:
This mode allows the MULTI PLUS light to operate in the RGB P-Type Colour mode. This mode should only be used when operating a MULTI PLUS light in conjunction with an existing Spa Electrics P-Type light. For more information please contact Spa Electrics.

MULTI PLUS SETUP cont.
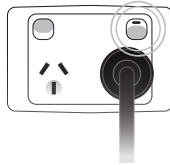
STEP 4 - SAVING OPERATING MODE

Once the desired operating mode is selected follow these steps to save the selection.

TURN SYSTEM **OFF**
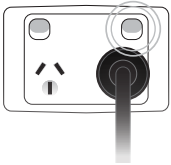
WAIT **30** SECONDS

TURN SYSTEM **ON**

Important
You must wait at least **30** Seconds prior to turning the system back **ON** or selection process will fail and setup will need to be restarted.

STEP 5 - CONFIRM OPERATION

Your setup should now be complete. To confirm the system is working correctly, select a colour via the controller or wall switch (depending on operating mode selected) and check to ensure all lights are synchronised and the correct colour is displayed.

Refer to OPERATING MODE COLOUR for available colours.

MANUAL MODE USER INSTRUCTIONS

OPERATING INSTRUCTIONS

1. To change the color of the light, simply turn your light **OFF** for **2** seconds and then turn it back **ON**. This will signal the light to proceed to the next colour in the sequence.

   Refer to OPERATING MODE COLOUR for available colours.

2. Your lights will automatically save your selected colour once the power has been turned **OFF** for more than **1** minute. So the next time the lights are used, they will illuminate on the last operated colour.
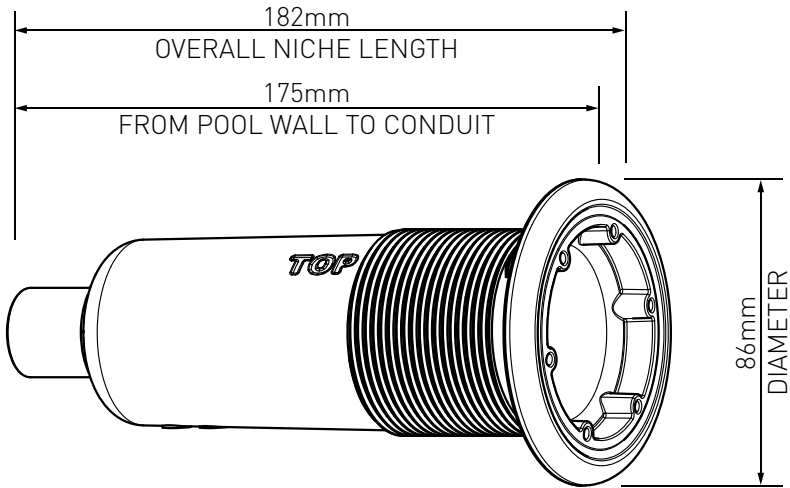
3. To reset or **'synchronize'** your lights; with the power turned **ON**, turn the power **OFF/ON** once rapidly. This will **RESET** your lights to **WHITE**

SYNCHRONIZED INSTALLATION

When installing multiple lights; to ensure synchronization and ease of operation, ALL Lights must operate from a single switch.

OPERATING MODE COLOURS

MANUAL MODE (DEFAULT)	
1	WHITE 4000K
2	AQUA
3	BLUE
4	MAGENTA
5	RED
6	LIME
7	GREEN
8	OCEANIC VIEWS
9	TRANSCENDENCE
10	OUTBACK AUSTRALIA
11	SPRING EQUINOX

iRIS MODE	
1	WHITE 4000K
2	AQUA
3	BLUE
4	MAGENTA
5	RED
6	LIME
7	GREEN
8	OCEANIC VIEWS
9	TRANSCENDENCE
10	OUTBACK AUSTRALIA
11	SPRING EQUINOX

CONNECT 10 MODE	
1	BLUE
2	MAGENTA
3	RED
4	ORANGE
5	GREEN
6	AQUA
7	WHITE
8	CUSTOMISED COLOUR
9	RAINBOW PATTERN
10	OCEAN PATTERN
11	DISCO PATTERN

UNIVERSAL COLORLOGIC MODE	
1	VOODOO LOUNGE
2	DEEP BLUE SEA
3	ROYAL BLUE
4	AFTERNOON SKIES
5	AQUA GREEN
6	EMERALD
7	CLOUD WHITE
8	WARM RED
9	FLAMINGO
10	VIVID VIOLET
11	SANGRIA
12	TWILIGHT
13	TRANQUILITY
14	GEMSTONE
15	USA
16	MARDI GRAS
17	COOL CABARET

INTELLIBRITE MODE	
1	SAM
2	PARTY
3	ROMANCE
4	CARIBBEAN
5	AMERICAN
6	CALIFORNIA SUNSET
7	ROYAL
8	BLUE
9	GREEN
10	RED
11	WHITE
12	MAGENTA

P-TYPE MODE	
1	SAM
2	PARTY
3	ROMANCE
4	CARIBBEAN
5	AMERICAN
6	CALIFORNIA SUNSET
7	ROYAL
8	BLUE
9	GREEN
10	RED
11	WHITE
12	MAGENTA

STANDARD MULTI* MODE	
1	BLUE
2	MAGENTA
3	RED
4	LIME
5	GREEN
6	AQUA
7	WHITE 1
8	WHITE 2
9	SLOW COLOUR BLEND
10	FAST COLOUR CHANGE

*Standard MULTI Mode:
This mode allows the MULTI PLUS light to operate in the standard MULTI-Colour mode. This mode should only be used when operating a MULTI PLUS light from a wall switch or RM-2, in conjunction with a standard Spa Electrics MULTI-Colour light.

For more information please contact Spa Electrics. (03) 9793 2299

STANDARD MULTI USER INSTRUCTIONS

OPERATING INSTRUCTIONS

1. To change the color of the light, simply turn your light **OFF** for **2** seconds and then turn it back **ON**. This will signal the light to proceed to the next colour.

   Refer to OPERATING MODE COLOURS for available colours. (Standard MULTI Mode)

2. Your lights will automatically save your selected colour once the power has been turned **OFF** for more than **1** minute. So the next time the lights are used, they will illuminate on the last operated colour.

3. To reset or **'synchronize'** your lights; with the power turned **ON**, turn the power **OFF/ON** once rapidly. This will put the lights into **RESET Mode** and will continually **FLASH BLUE**. Turn your lights **OFF for 2 seconds,** then turn **ON.** All lights will now be synchronized

SYNCHRONIZED INSTALLATION
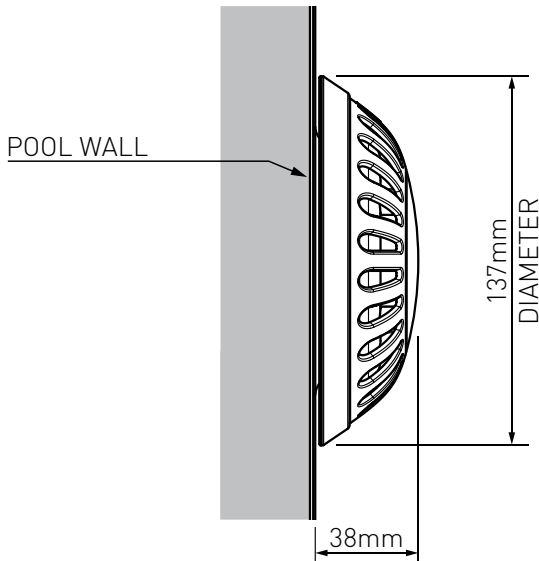When installing multiple lights; to ensure synchronization and ease of operation, ALL Lights must operate from a single switch.

KEY DIMENSIONS

A NICHE

182mm
OVERALL NICHE LENGTH

175mm
FROM POOL WALL TO CONDUIT

86mm
DIAMETER

B INSTALLED LIGHT

POOL WALL

137mm
DIAMETER

38mm

> ⚠ **NOTE**
>
> **PLEASE STORE THIS MANUAL IN A SAFE PLACE FOR FUTURE REFERENCE**

⧈ Spa Electrics

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