



atom



VINYL POOLS

ULTRA COMPACT NICHE LIGHT

**INSTALLATION &  
OWNER'S MANUAL**



# CONTENTS

# READ THIS FIRST

|                                 |    |
|---------------------------------|----|
| READ THIS FIRST                 | 3  |
| TOOLS REQUIRED                  | 4  |
| PRODUCT SUPPORT AND INFORMATION | 4  |
| INCLUDED PARTS                  | 5  |
| FINISHED INSTALLATION           | 6  |
| INSTALLATION PROCEDURE          | 7  |
| LIGHT ASSEMBLY                  | 13 |
| LIGHT REMOVAL                   | 14 |
| CABLE ADJUSTMENT & REMOVAL      | 16 |
| MULTI-COLOUR OPERATION          | 18 |
| KEY DIMENSIONS                  | 20 |
| TROUBLESHOOTING                 | 21 |

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](http://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<sup>2</sup>). See Page 16 for more information].

## CLEANING

- Only use warm water and a soft brush or cloth to clean **ATOM** lights. **DO NOT** use detergents or spirits as this can damage the light and void your warranty.
- **DO NOT** 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: +5°C ~ +40°C (41°F ~ +104°F)



## NOTICE

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



## 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)

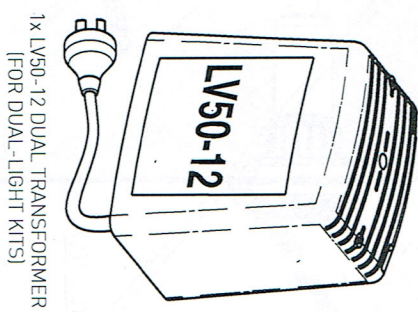
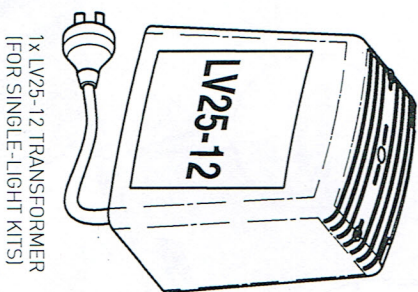
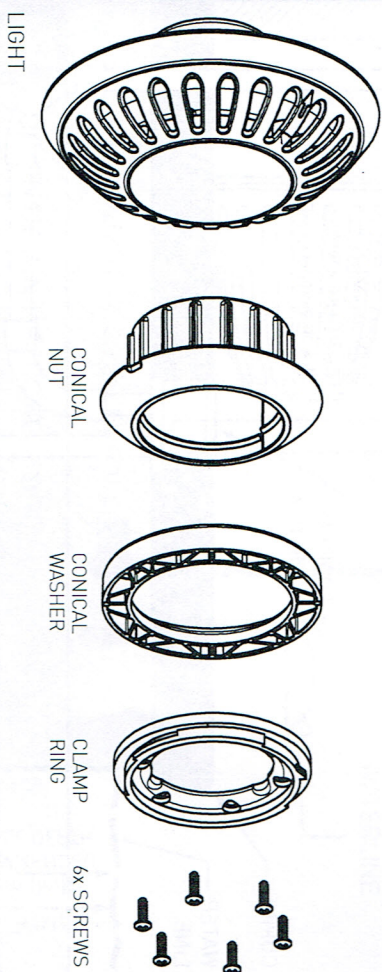
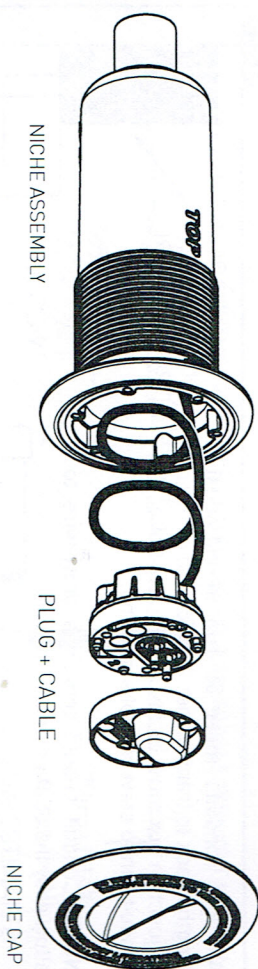
## IMPORTANT NOTES

- The use of power tools for product assembly is **NOT** 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](mailto:info@spaelectrics.com.au) (SALES enquiries)  
 Email: [tech@spaelectrics.com.au](mailto:tech@spaelectrics.com.au) (TECHNICAL support enquiries)  
 Web: [www.spaelectrics.com.au](http://www.spaelectrics.com.au)

## INCLUDED PARTS



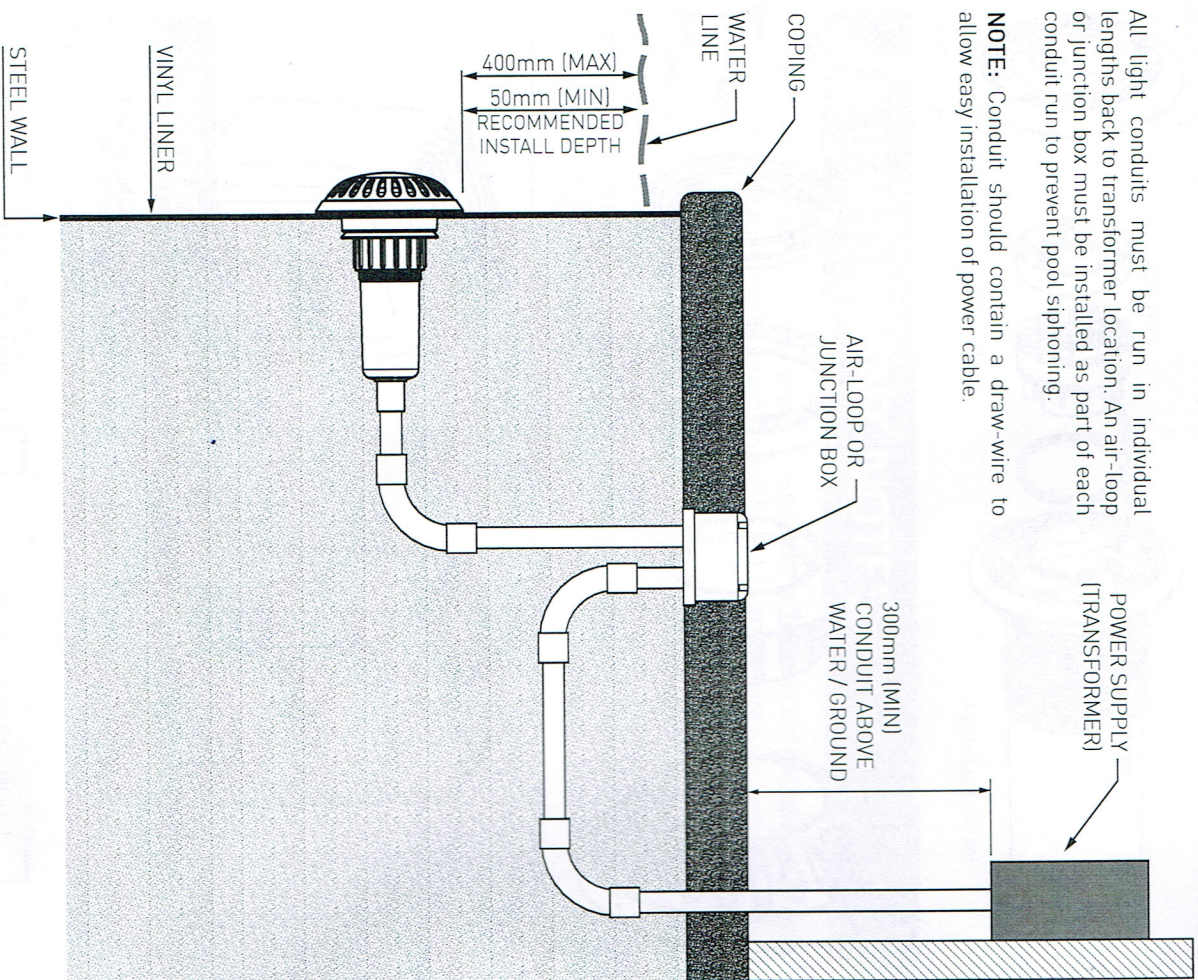


# FINISHED INSTALLATION

## 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.

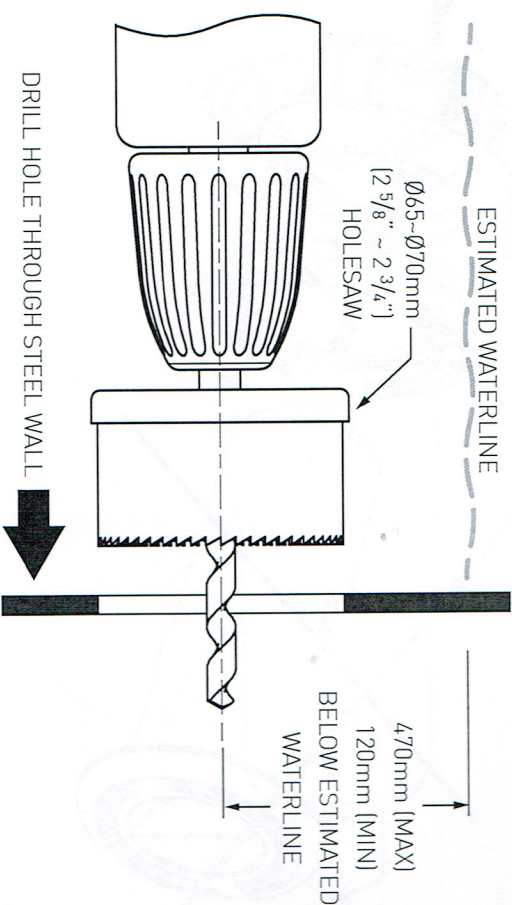
**NOTE:** Conduit should contain a draw-wire to allow easy installation of power cable.



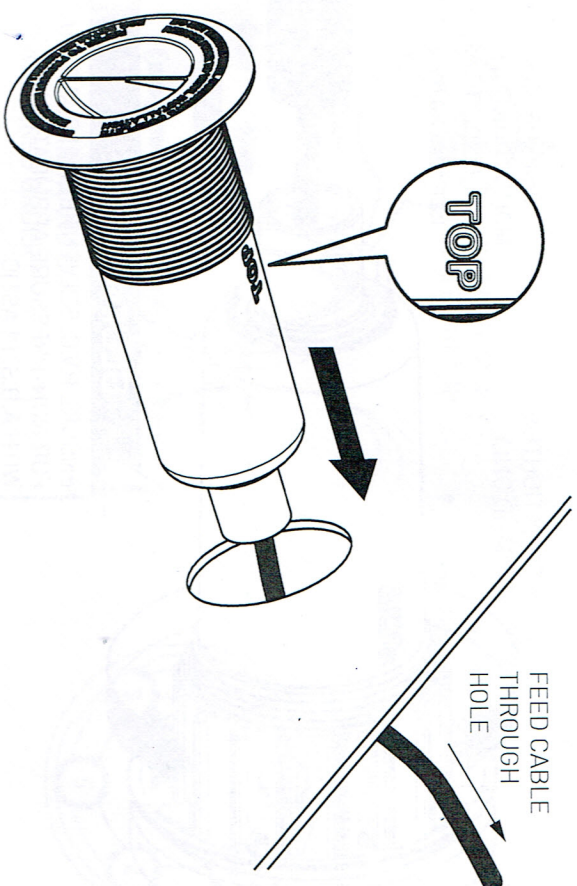
# INSTALLATION PROCEDURE

## 1 MOUNTING HOLE PREPARATION \*

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

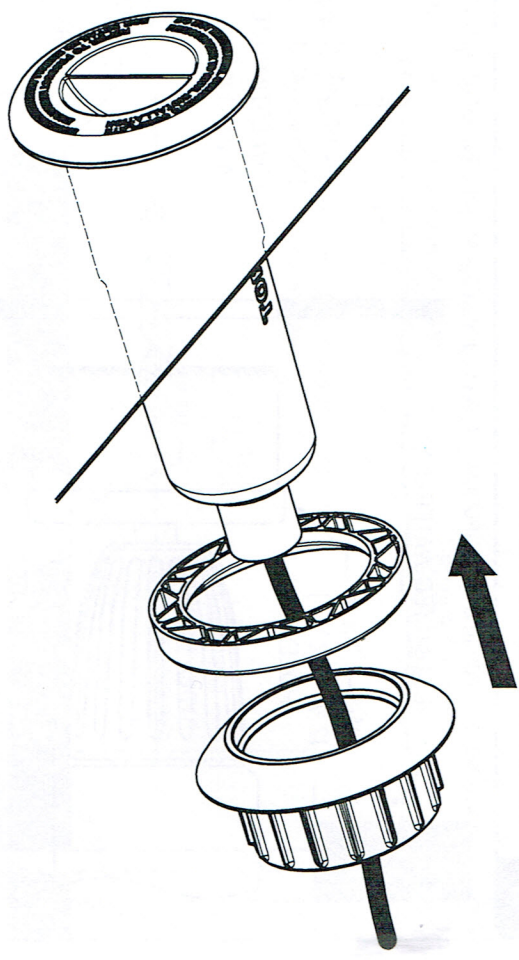


## 2 ORIENTATION OF NICHE "TOP"

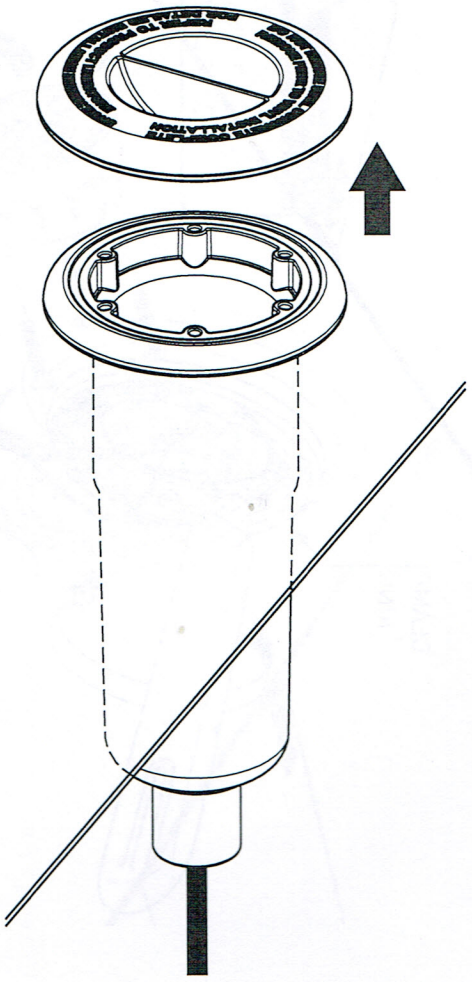




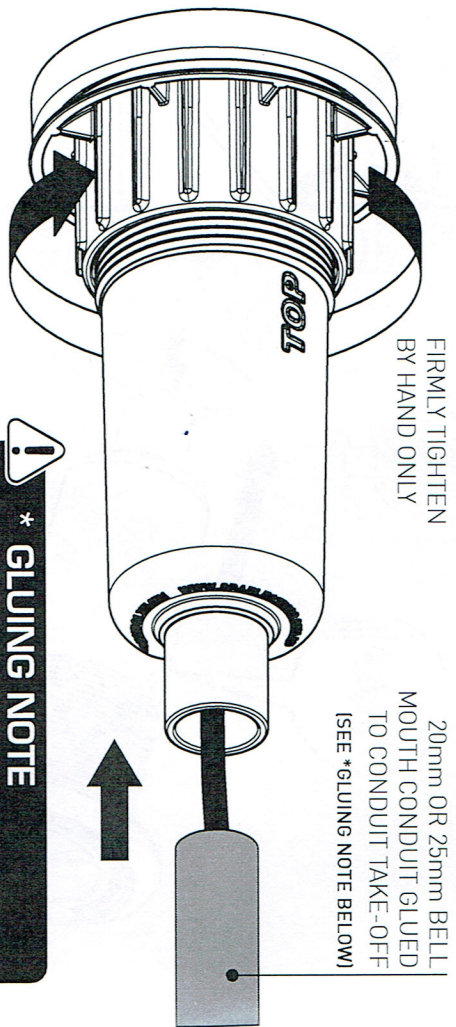
**3** ASSEMBLE WASHER AND NUT



**5** REMOVE NICHE CAP



**4** TIGHTEN NUT



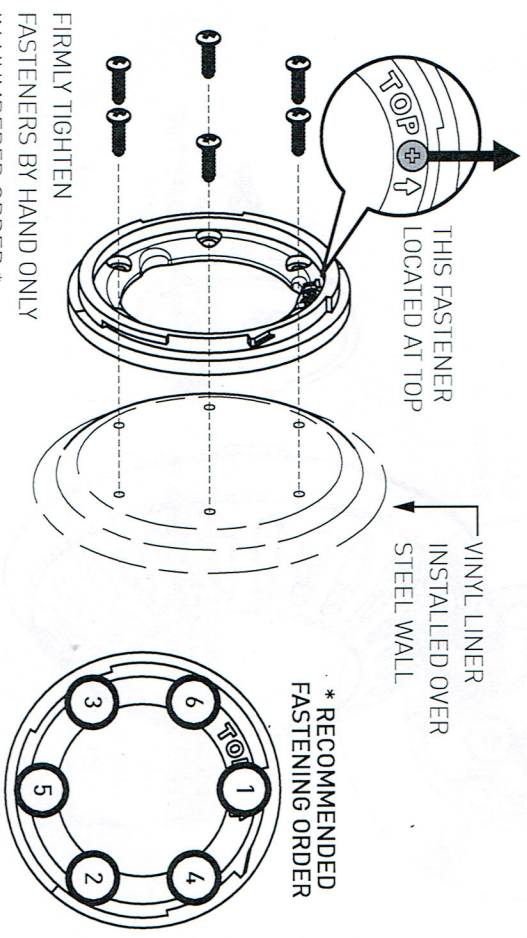
FIRMLY TIGHTEN BY HAND ONLY

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

**6** ASSEMBLE VINYL CLAMP RING



THIS FASTENER LOCATED AT TOP

VINYL LINER INSTALLED OVER STEEL WALL

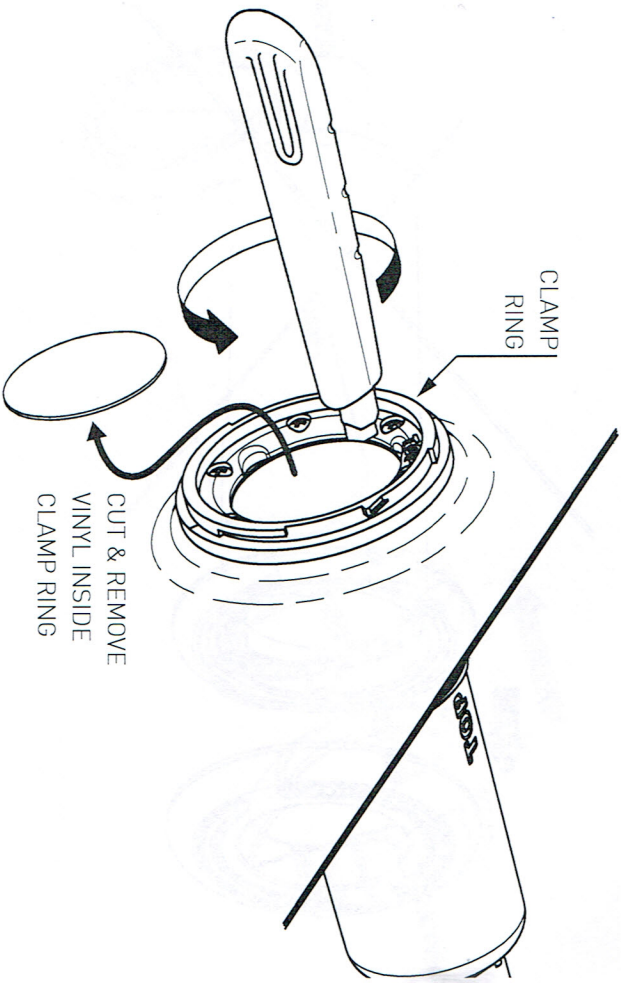
\* RECOMMENDED FASTENING ORDER \*

FIRMLY TIGHTEN FASTENERS BY HAND ONLY IN NUMBERED ORDER \*



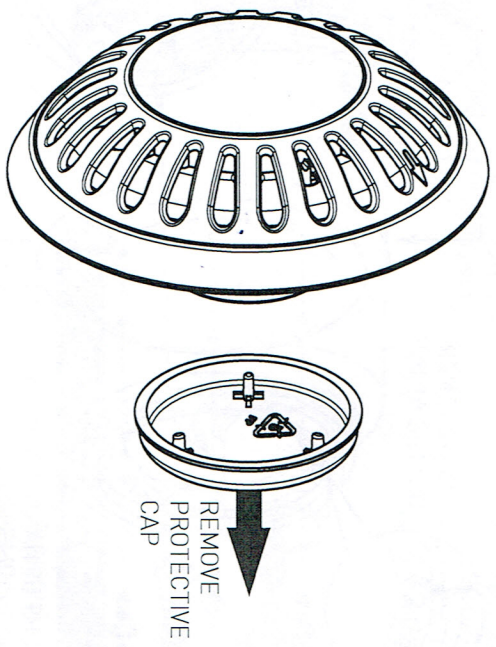
7

TRIM VINYL



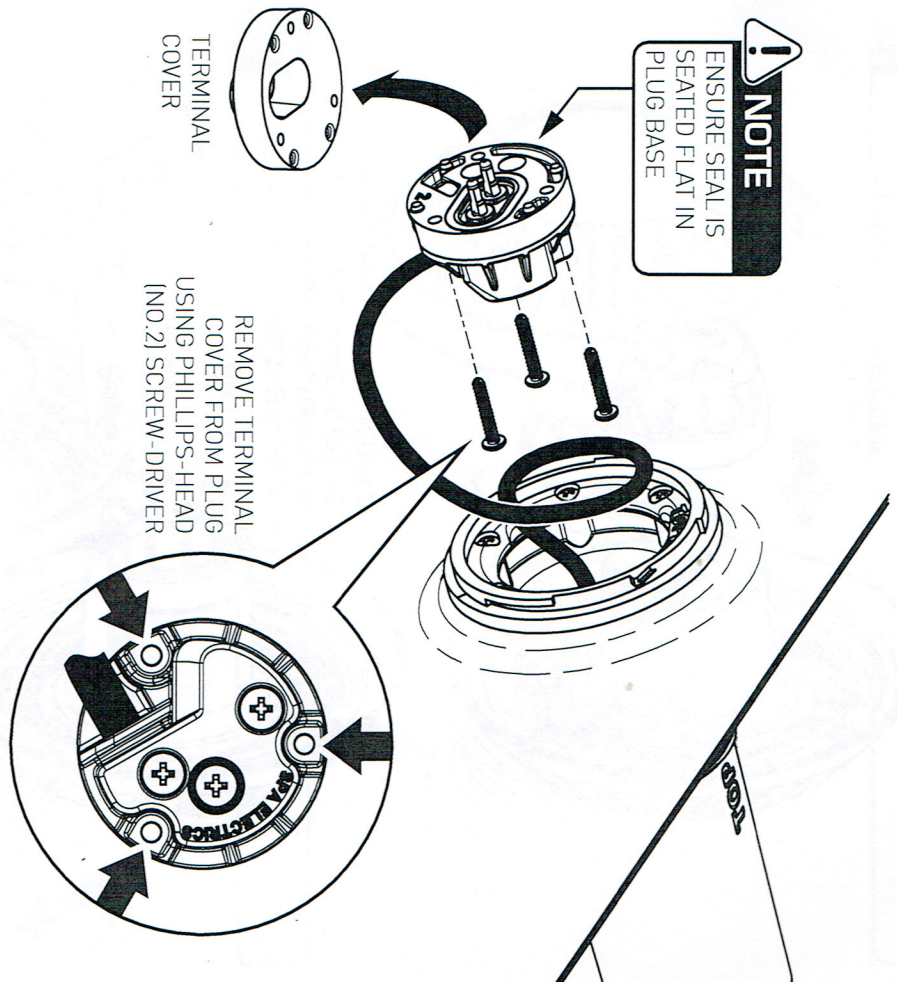
8

REMOVE PROTECTIVE CAP



9

REMOVE TERMINAL COVER



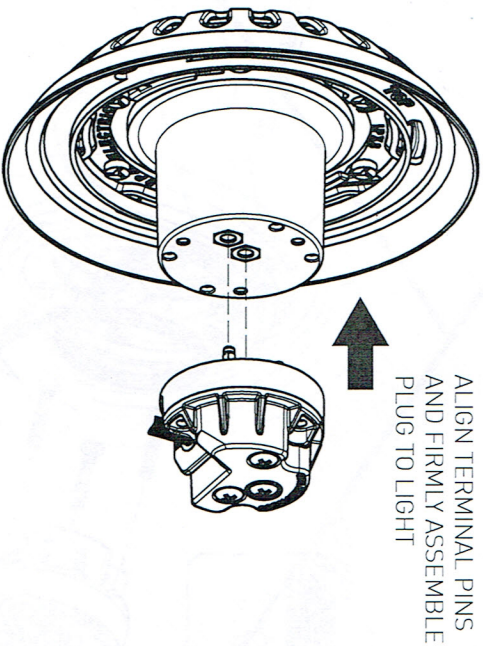
**NOTE**  
DO NOT REMOVE TERMINAL COVER UNDERWATER

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

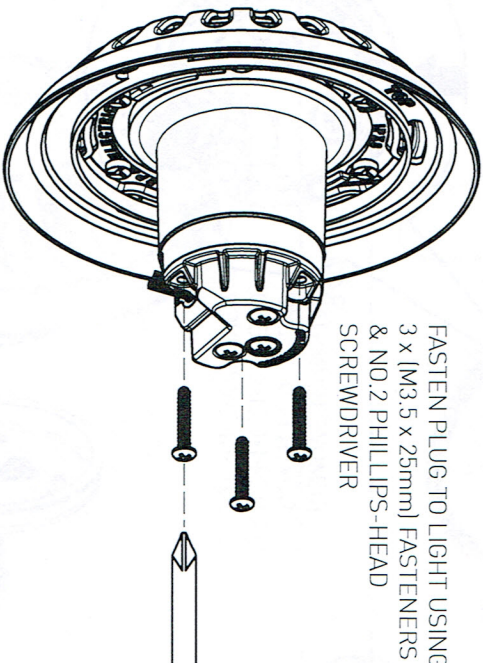


# 10

## FASTEN PLUG TO LIGHT



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

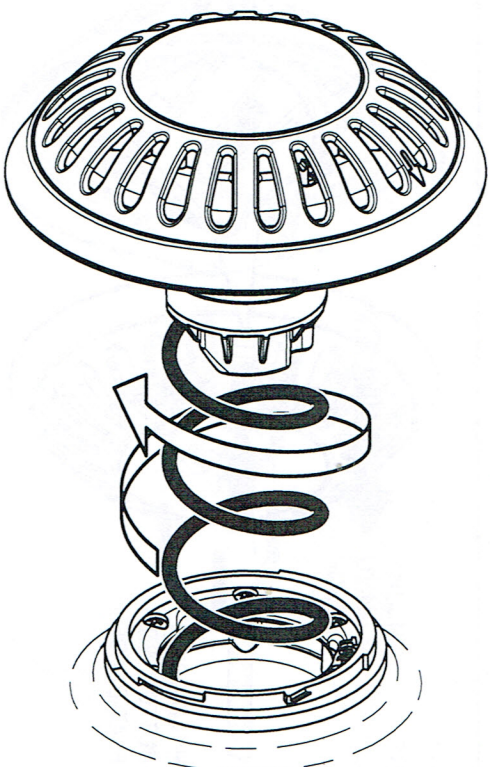


### **!** IMPORTANT NOTES

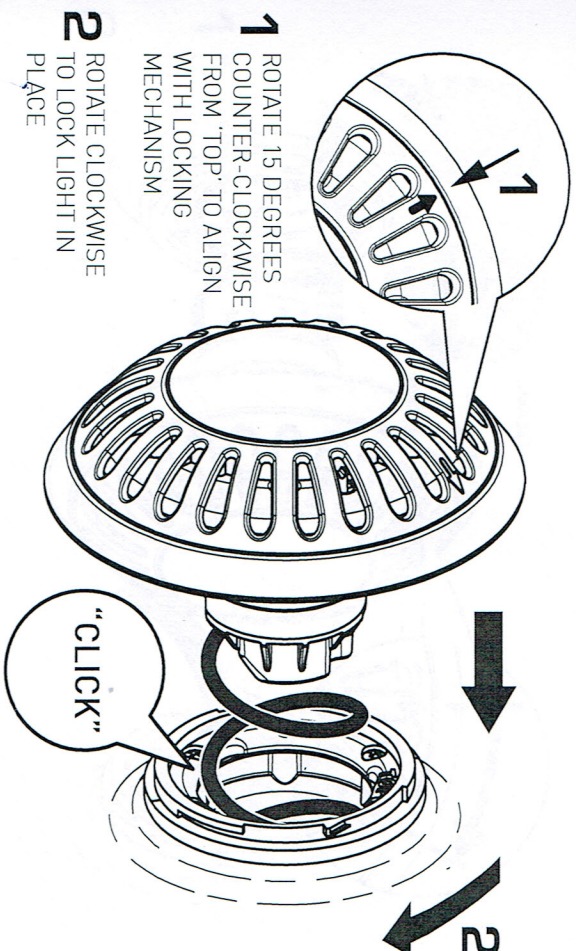
- DO NOT OVERTIGHTEN SCREWS
- DO NOT USE POWER-TOOLS
- DO NOT ADD SEALANTS, GREASES OR ADHESIVES
- ENSURE ALL SURFACES ARE CLEAN AND DRY
- DO NOT ASSEMBLE UNDERWATER

# LIGHT ASSEMBLY

## 1 COIL CABLE INSIDE NICHE



## 2 INSERT LIGHT INTO CLAMP RING



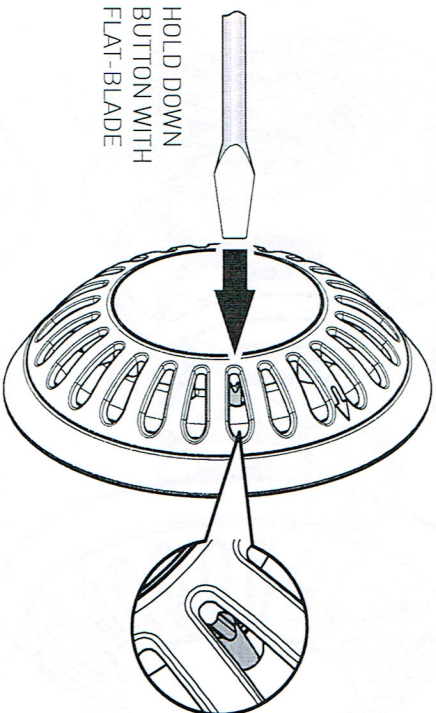
**1** ROTATE 15 DEGREES  
COUNTER-CLOCKWISE  
FROM 'TOP' TO ALIGN  
WITH LOCKING  
MECHANISM

**2** ROTATE CLOCKWISE  
TO LOCK LIGHT IN  
PLACE

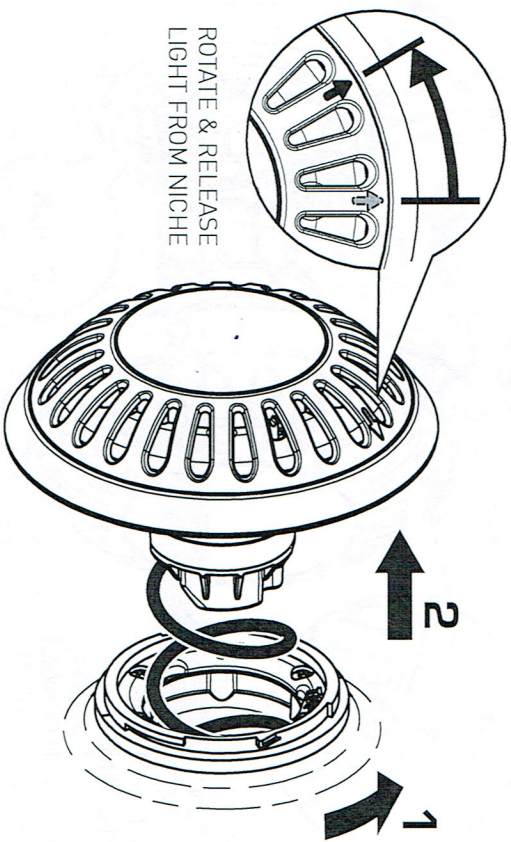


# LIGHT REMOVAL

- 1 PUSH & HOLD BUTTON WITH FLAT BLADE



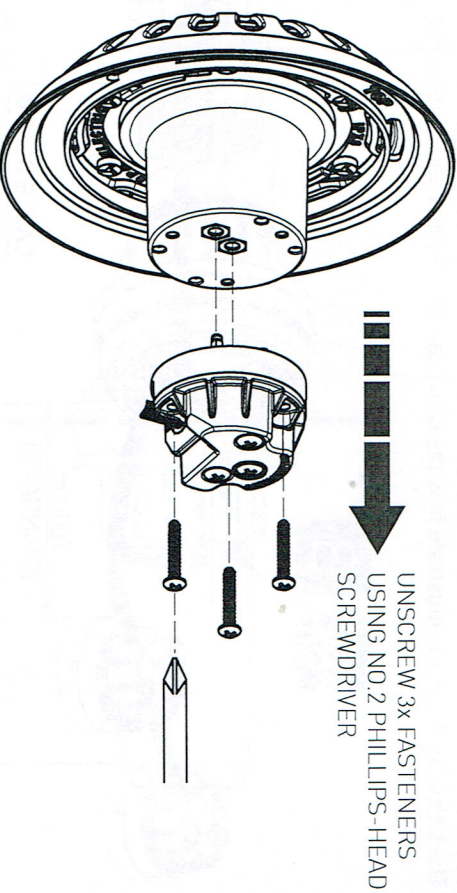
- 2 ROTATE COUNTER-CLOCKWISE & REMOVE FROM LOCKING RING



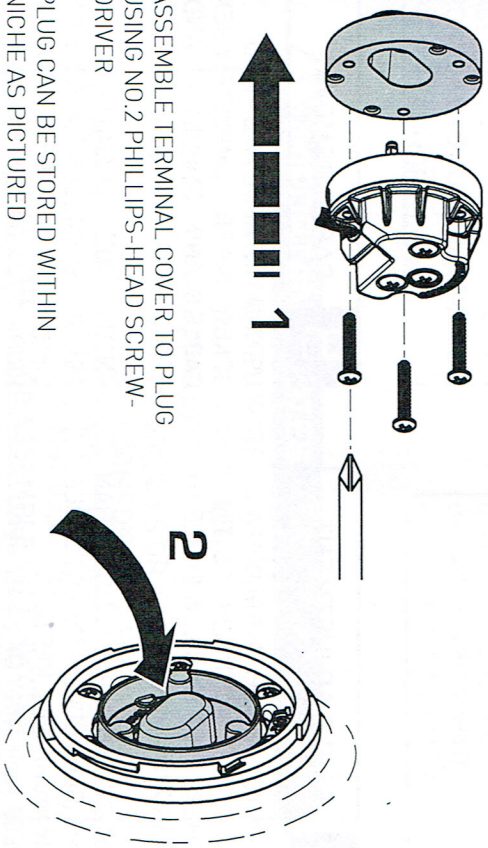
# PLUG REMOVAL

PLUG REMOVAL & TERMINAL COVER ATTACHMENT

- 1 REMOVE PLUG FROM LIGHT



- 2 ASSEMBLE TERMINAL COVER TO PLUG & STORE IN NICHE



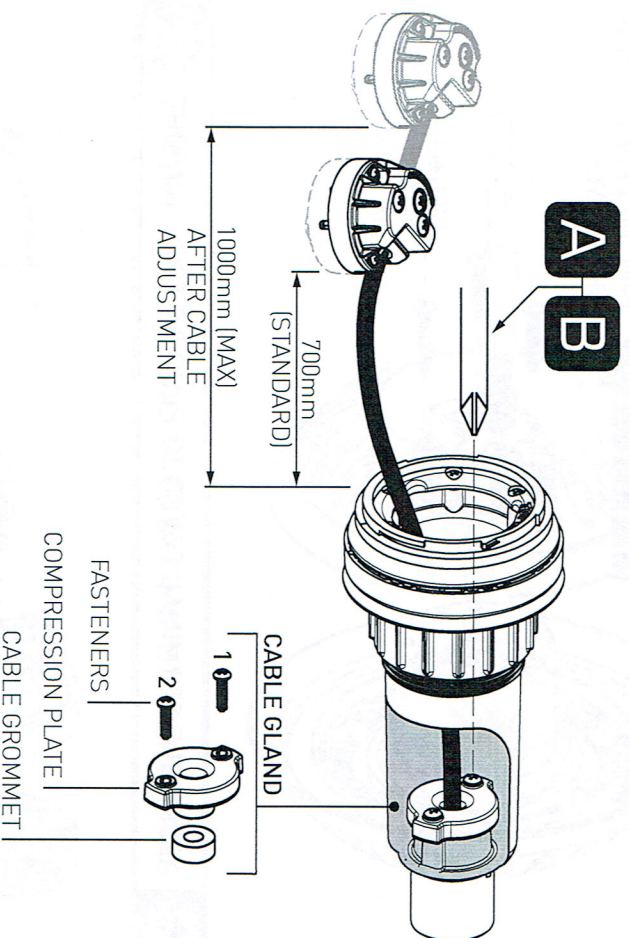
- 1 ASSEMBLE TERMINAL COVER TO PLUG USING NO.2 PHILLIPS-HEAD SCREW-DRIVER
- 2 PLUG CAN BE STORED WITHIN NICHE AS PICTURED



## 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<sup>2</sup>)

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



### A CABLE ADJUSTMENT

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

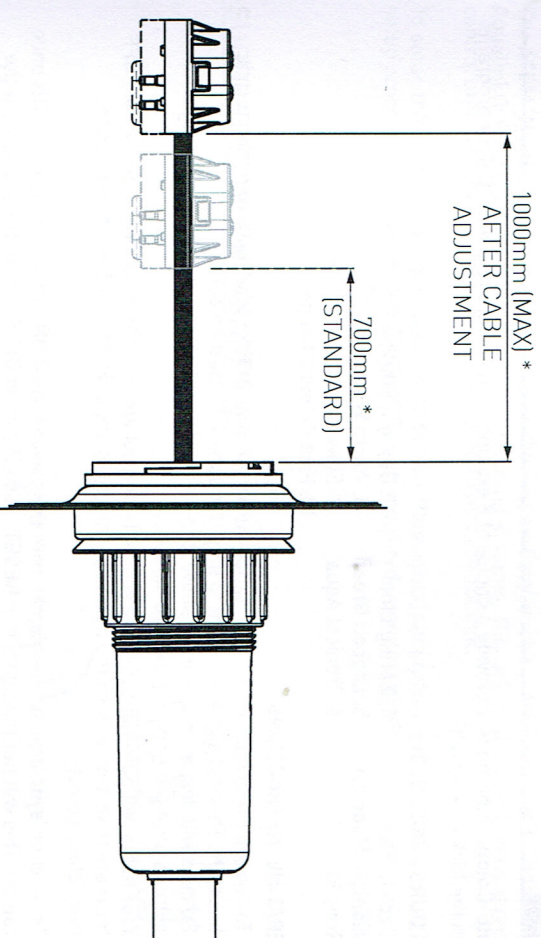
DO NOT EXTEND CABLE LONGER THAN 1000mm (SEE ABOVE) - EXCESS CABLE WITHIN NICHE WILL RESTRICT CORRECT ASSEMBLY OF LIGHT HEAD.

### 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



### \* 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-COLOUR OPERATION

## 1 STANDARD MODEL

Multi-Colour light models provide a choice of 8 exciting fixed colours & 2 Multi-Colour programs with the flick of a switch!

### COLOURS AVAILABLE:

- |                     |                  |                        |
|---------------------|------------------|------------------------|
| 1. Electric Blue    | 4. Spring Lime   | 7. Daylight White      |
| 2. Midnight Magenta | 5. Lagoon Green  | 8. Warm White          |
| 3. Ruby Red         | 6. Tropical Aqua | 9. Slow colour Blend   |
|                     |                  | 10. Fast Colour Change |

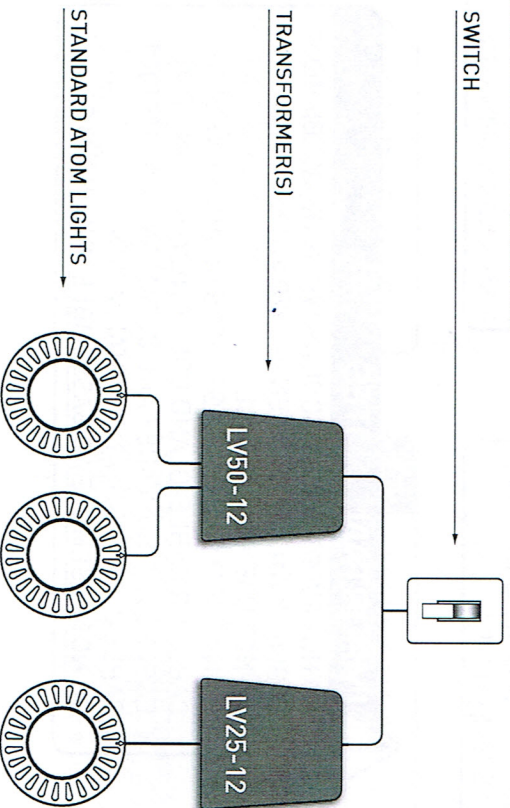
### OPERATING INSTRUCTIONS

1. To change the colour of the light, simply turn your light **OFF** for 2 seconds and then turn it back **ON**. This will signal the light to step through to the next colour. Colours will display in the order above, to select a desired colour, simply step through the colours until you find your desired selection.
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 colour selected.
3. To reset or 'synchronise' your lights; with the power turned **ON**, turn the power **OFF/ON** once rapidly. This will put the lights into **RESET** mode (flashing **BLUE**), once this occurs turn the power **OFF**, wait 2 seconds & turn the power **ON**. Your lights should now be synchronised.

### SYNCHRONISED INSTALLATION

When installing multiple lights; to ensure synchronisation and ease of operation all lights must operate from a single switch.

### SUGGESTED WIRING DIAGRAM



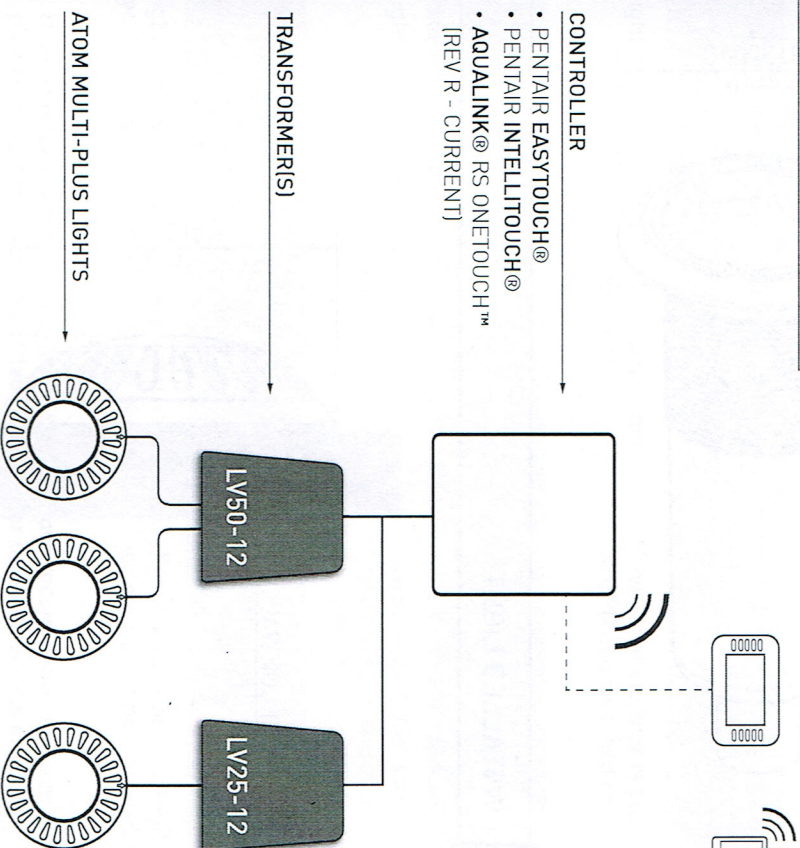
## 2 MULTI-PLUS MODEL (PENTAIR / ZODIAC COMPATIBLE)

### CONTROLLER OPERATION

The ATOM 'Multi-Plus' lights integrate with the Pentair EasyTouch®, IntelliTouch® & Zodiac Aqualink® RS OneTouch™ (Rev R - Current) Control systems. This allows the user to have direct control over colours and light shows via the intelligent control unit.

To setup the controller to operate the ATOM Multi-Plus lights, simply follow the controller setup procedure and select "INTELLIBRITE" as the desired operating mode.

### SUGGESTED WIRING DIAGRAM

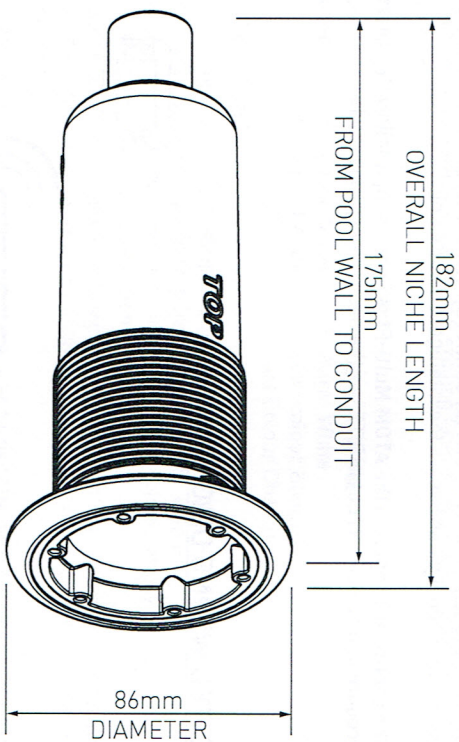


- CONTROLLER**
- PENTAIR EASYTOUCH®
  - PENTAIR INTELLITOUCH®
  - AQUALINK® RS ONETOUCH™ (REV R - CURRENT)

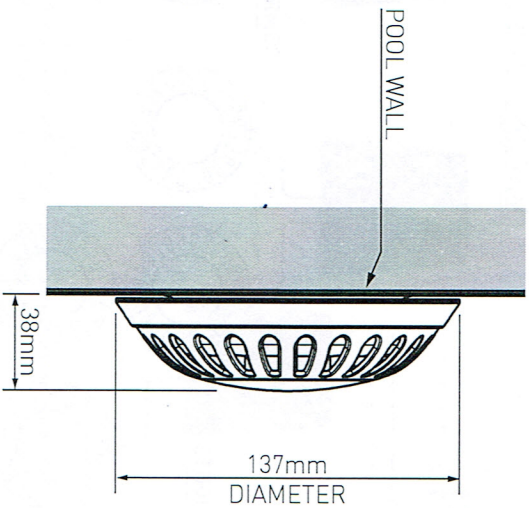


# KEY DIMENSIONS

## A NICHE



## B INSTALLED LIGHT



# TROUBLESHOOTING

| ISSUE                            | REASON   | ACTION  |
|----------------------------------|--|---|
| Light flashing Blue continuously | System is in "Reset" mode                                    | Refer to multi-colour operating instructions  |
| Light flashes 2 times            | Light over heating   | Check light is fully submerged. Check vents are not obstructed                            |
| Light flashes green              | Over-voltage detected  | Ensure transformer output voltage is between 12V ~ 13V. Replace transformer if necessary. |
| 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 not operating (5)          | Damage caused by high voltage and/or incorrect power supply. | Return product to your local Spa Electrics reseller or Spa Electrics for repair.          |
| Light colours not synchronised   | Power interruptions or lights have been used individually    | Reset lights - refer to multi-colour operating instructions                               |

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

Phone: **+61 (0)3 9793 2299** (business hours)  
 Email: [info@spaelectrics.com.au](mailto:info@spaelectrics.com.au) (SALES enquiries)  
 Email: [tech@spaelectrics.com.au](mailto:tech@spaelectrics.com.au) (TECHNICAL support enquiries)  
 Web: [www.spaelectrics.com.au](http://www.spaelectrics.com.au)





**NOTE**

PLEASE STORE THIS  
MANUAL IN A SAFE PLACE  
FOR FUTURE REFERENCE

Proudly manufactured by

**Spa Electrics**



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

© COPYRIGHT 2016 SPA ELECTRICS PTY. LTD.  
ALL RIGHTS RESERVED

20160414