



atom  
EMC SERIES

A technical cross-section diagram of a light fixture. The outer ring contains several U-shaped components. The inner part features a grid of small circles, with an upward-pointing arrow indicating light emission. A horizontal bar with the text 'CONCRETE INSTALLATION' is overlaid on the diagram.

CONCRETE INSTALLATION

ULTRA COMPACT NICHE LIGHT

# **INSTALLATION & OWNER'S MANUAL**



# CONTENTS

READ THIS FIRST	2
TOOLS REQUIRED	3
PRODUCT SUPPORT AND INFORMATION	3
INCLUDED PARTS	4
FINISHED INSTALLATIONS 1-2 (DIAGRAMS)	5
INSTALLATION INSTRUCTIONS (STEPS 1-10)	7
EM-LIGHT ASSEMBLY (TO NICHE)	17
EM-LIGHT REMOVAL (FROM NICHE)	18
MULTI-PLUS SETUP	19
OPERATING MODE COLOURS	22
STANDARD MULTI USER INSTRUCTIONS	23
KEY DIMENSIONS	24

# READ THIS FIRST

This booklet contains important information about the correct installation and handling of EM-series lights. Please read this booklet carefully before commencing installation to familiarise yourself with the included parts, accessories and correct installation procedures.

## BEFORE YOU START:

- EM-series cables can be shortened to suit individual installation requirements. Spa Electrics recommends all cabling is protected by conduit and that a conduit draw-box (or similar) is incorporated into pool cabling design to avoid siphoning. 20m cable is supplied as standard; 30m & 50m cable lengths are available to order from Spa Electrics or your distributor.
- Ensure that the lighting system is installed by a suitably qualified person (e.g. registered pool builder and/or qualified electrician), in accordance with the most current edition and/or amendment of AS/NZS 3000:2007 standards.
- For safe and proper installation, ensure that only those parts supplied with the system are used.
- Maximum installation depth for EM-Series lights is 400mm below coping (to centre of light)
- All lights should be mounted in a location that is easily accessible without the need for entering or lowering the pool water.
- At least 700mm cable must remain stored within the Niche to ensure the light can be accessed above the waterline. (Maximum cable within niche = 2 metres).
- EM-series lights can be mounted at any angle provided the installation conforms to the above items.

## CLEANING

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

## USE

- Do not operate light unless completely submerged in water.
- Operating the light for at least 15 minutes every week is advised (all year round).
- EM-series lights are suited for both domestic and commercial installations and can be operated continuously (24/7) if required.



## WARNING

The EM series light must only be powered by the supplied 12V AC SPA ELECTRICS transformer.

- DO NOT use electronic or switch-mode transformers with EM-series lights. These transformers 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

- No. 2 Phillips screwdriver
- 13mm open-ended spanner
- Flat-blade screw driver (for EM-light removal)



## IMPORTANT NOTE

The use of power tools (such as 240V and cordless drills) 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.

## PRODUCT SUPPORT & INFORMATION

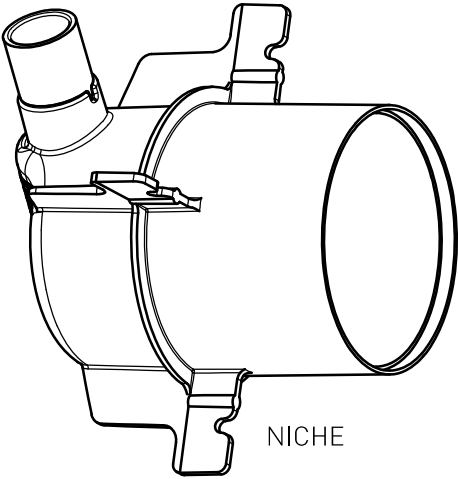
Phone: +61 3 9793 2299 (business hours)

Email: [sales@spaelectrics.com.au](mailto:sales@spaelectrics.com.au) (SALES enquiries)

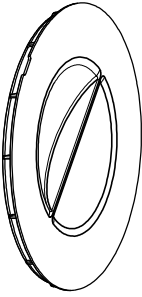
Email: [tech@spaelectrics.com.au](mailto:tech@spaelectrics.com.au) (TECHNICAL support enquiries)

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

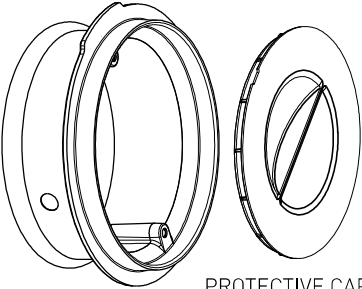
# INCLUDED PARTS



NICHE

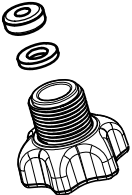


PROTECTIVE CAP

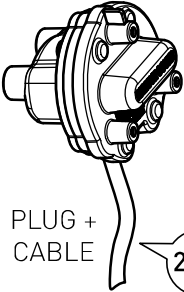


MOUNTING RING

PROTECTIVE CAP

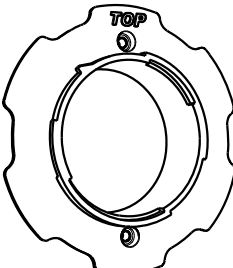


CABLE GLAND

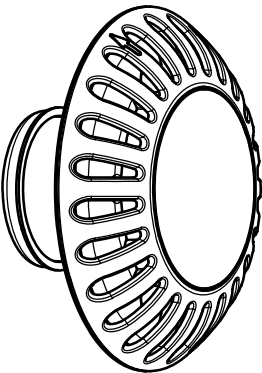


PLUG + CABLE

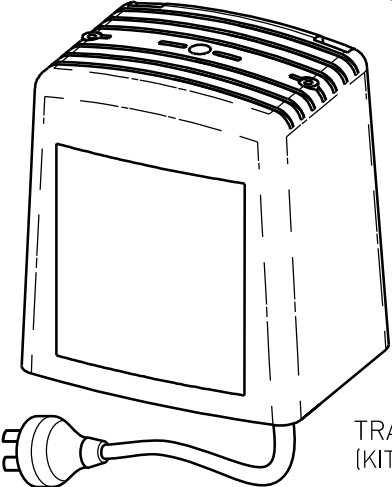
20m



LOCKING RING  
(INC 2 X SCREWS)



LIGHT



TRANSFORMER  
(KITS ONLY)



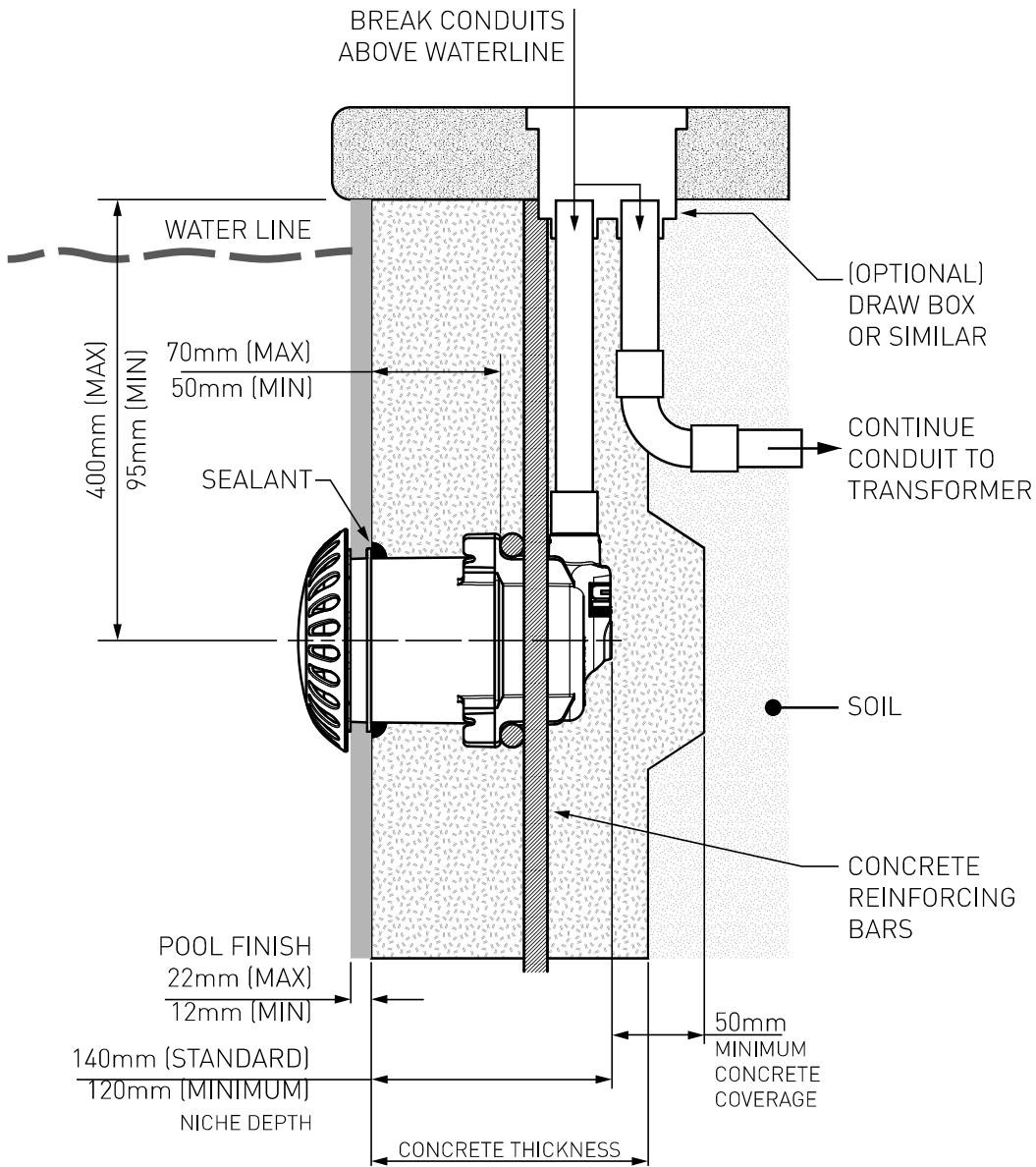
1x  
WARRANTY



1x  
INSTALLATION  
MANUAL

# FINISHED INSTALLATION

## OPTION 1: STANDARD WALL MOUNTING

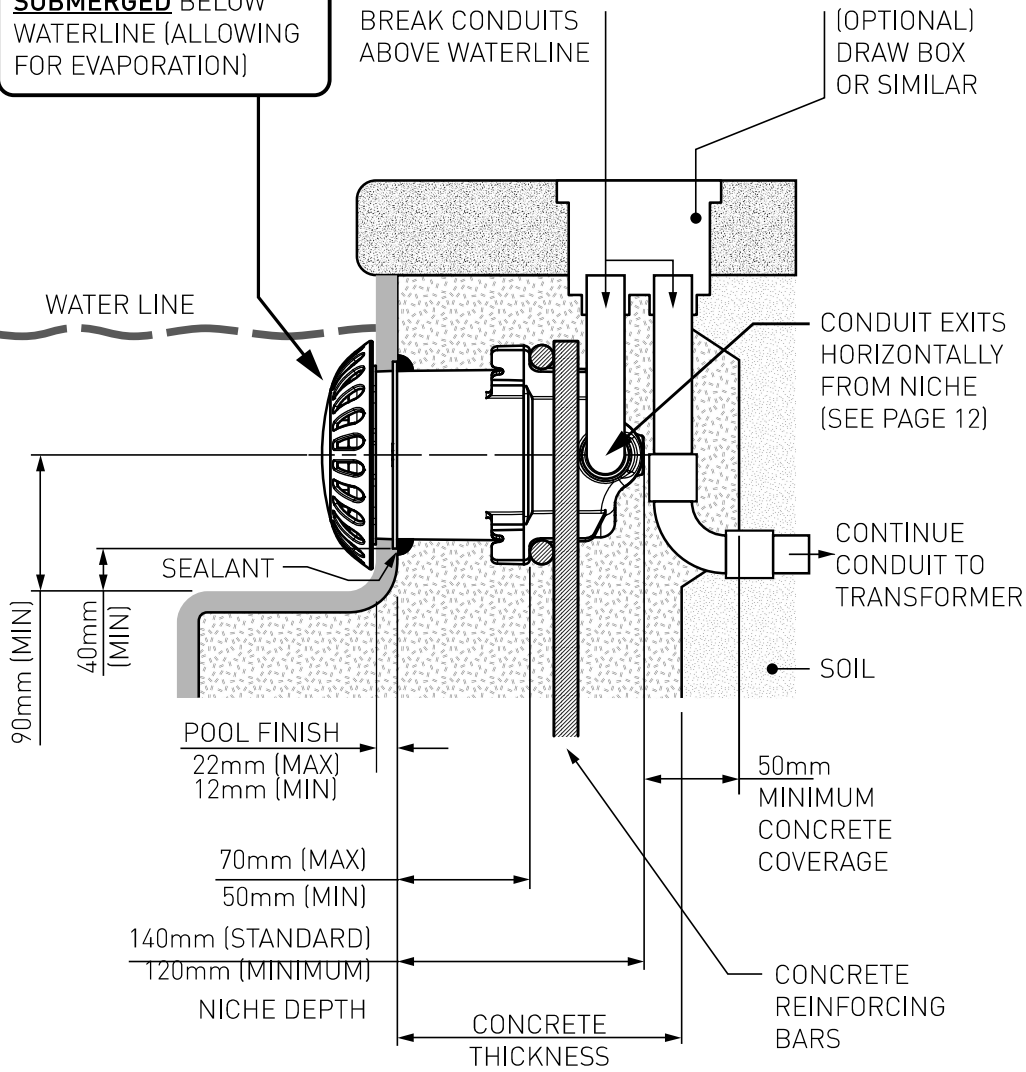


# FINISHED INSTALLATION

## OPTION 2: STEP MOUNTING

### NOTE

ENSURE INSTALLED LIGHT IS **FULLY SUBMERGED** BELOW WATERLINE (ALLOWING FOR EVAPORATION)

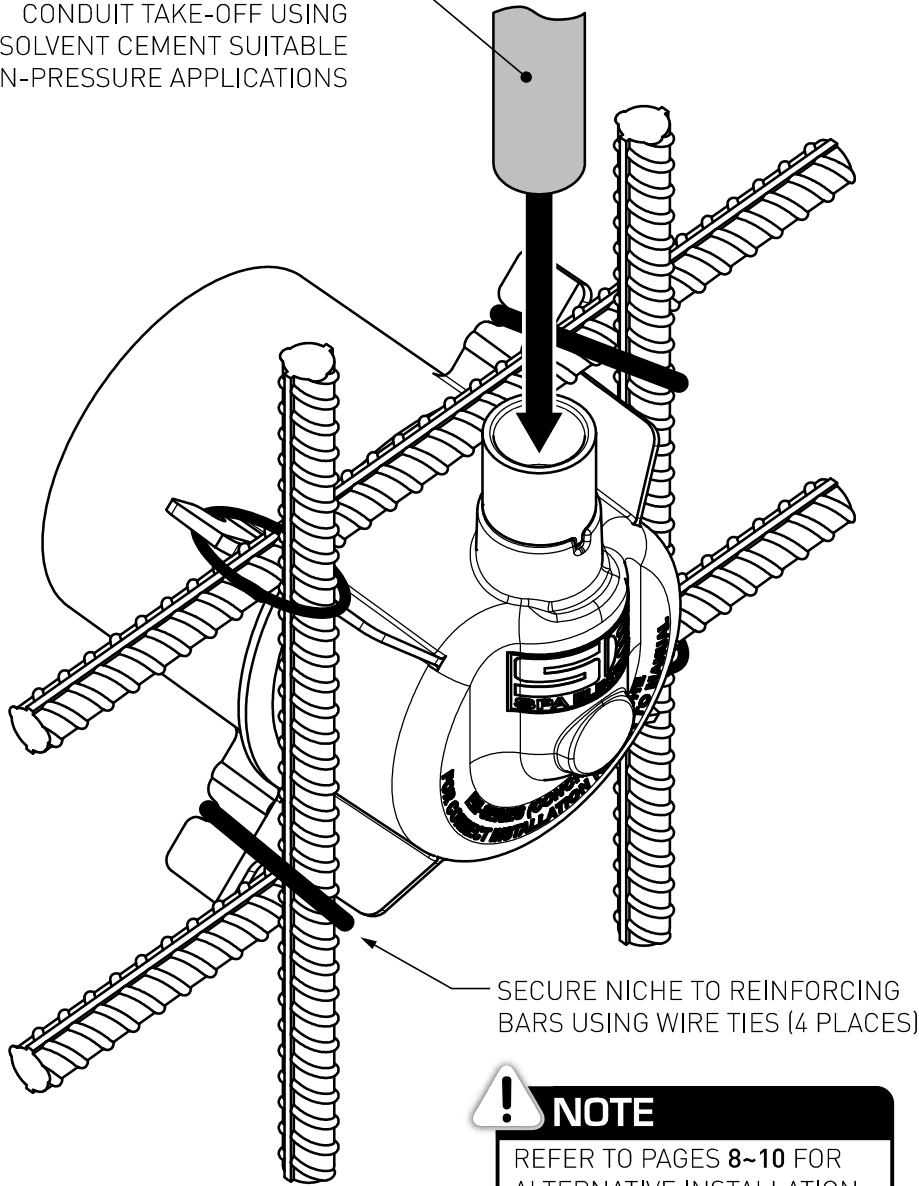




# INSTALLATION

## 1 VERTICAL CONDUIT INSTALLATION

20mm CONDUIT GLUED INTO  
CONDUIT TAKE-OFF USING  
PVC SOLVENT CEMENT SUITABLE  
FOR NON-PRESSURE APPLICATIONS

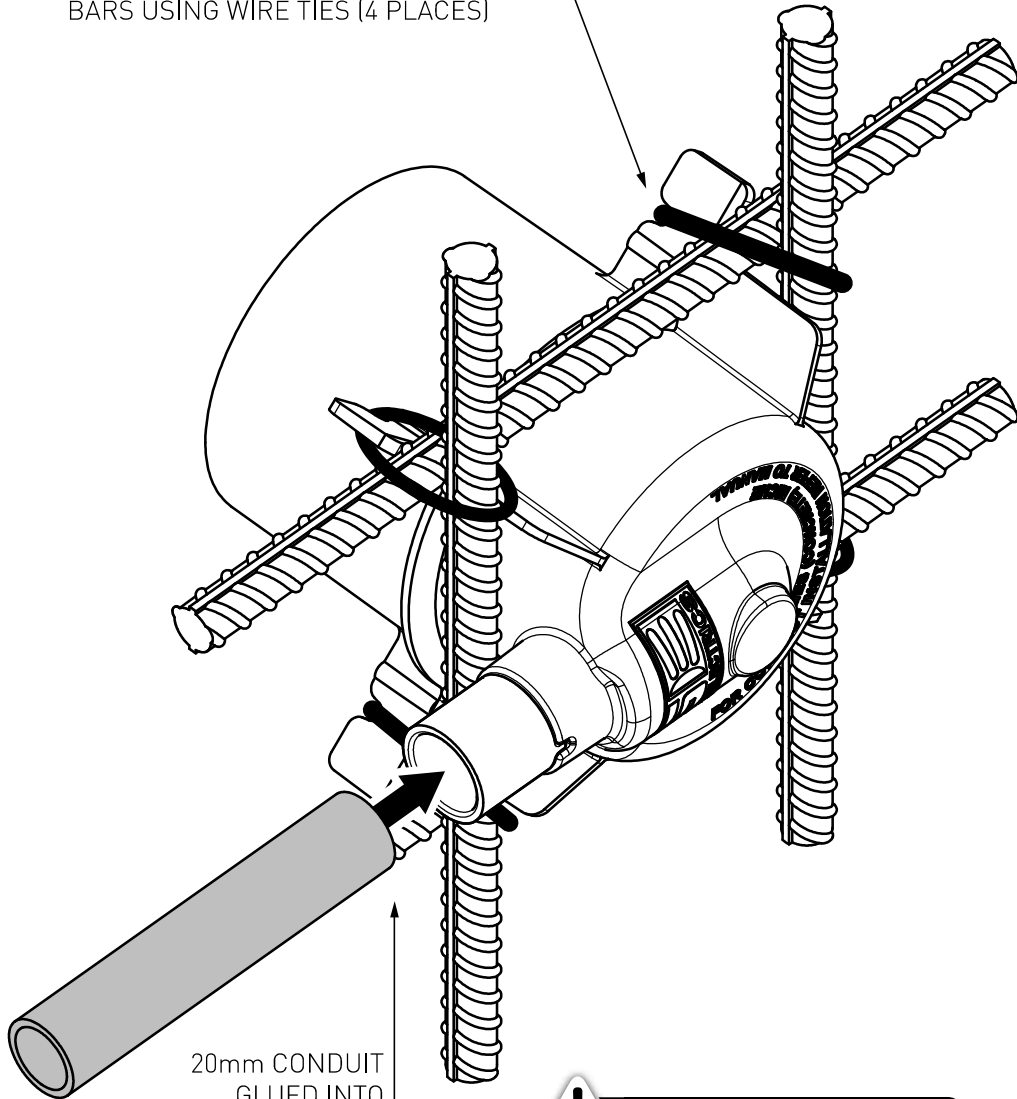


SECURE NICHE TO REINFORCING  
BARS USING WIRE TIES (4 PLACES)

### ! NOTE

REFER TO PAGES 8~10 FOR  
ALTERNATIVE INSTALLATION  
CONFIGURATIONS

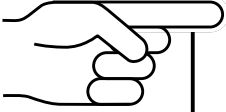
SECURE NICHE TO REINFORCING BARS USING WIRE TIES (4 PLACES)



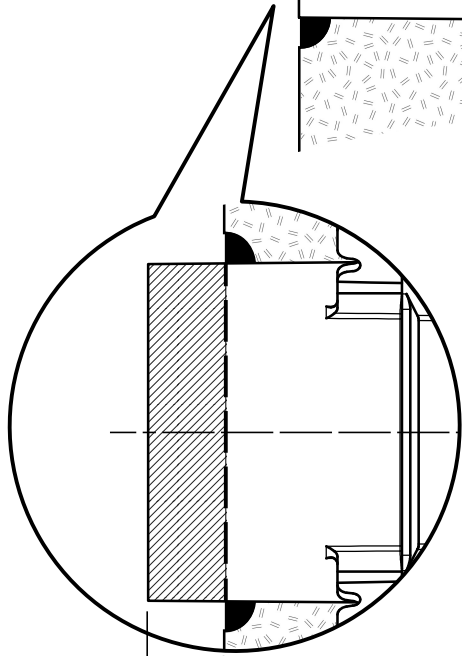
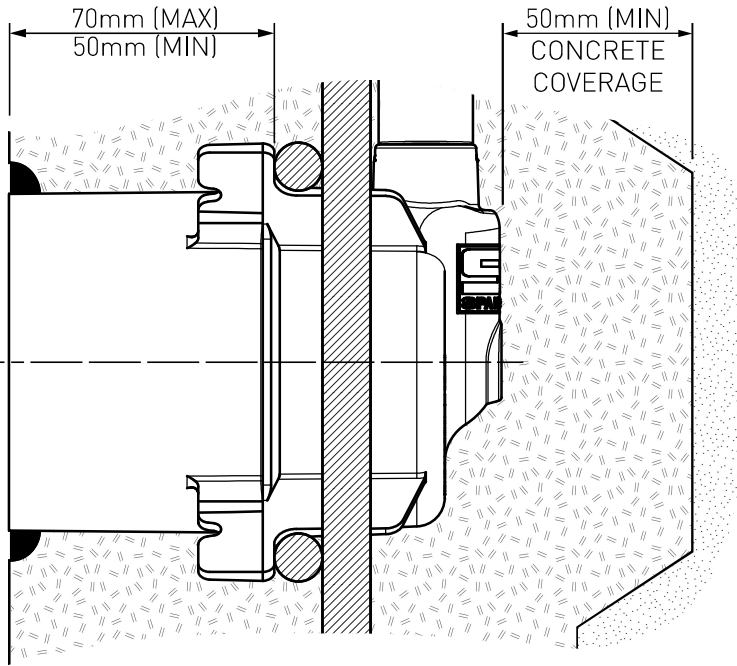
20mm CONDUIT  
GLUED INTO  
CONDUIT TAKE-OFF  
USING APPROVED  
PVC SOLVENT  
CEMENT

**!** **NOTE**  
REFER TO PAGES 8~10 FOR  
ALTERNATIVE INSTALLATION  
CONFIGURATIONS

**NOTE**



SCALLOP CONCRETE AROUND NICHE PERIMETER AND FILL WITH SEALANT

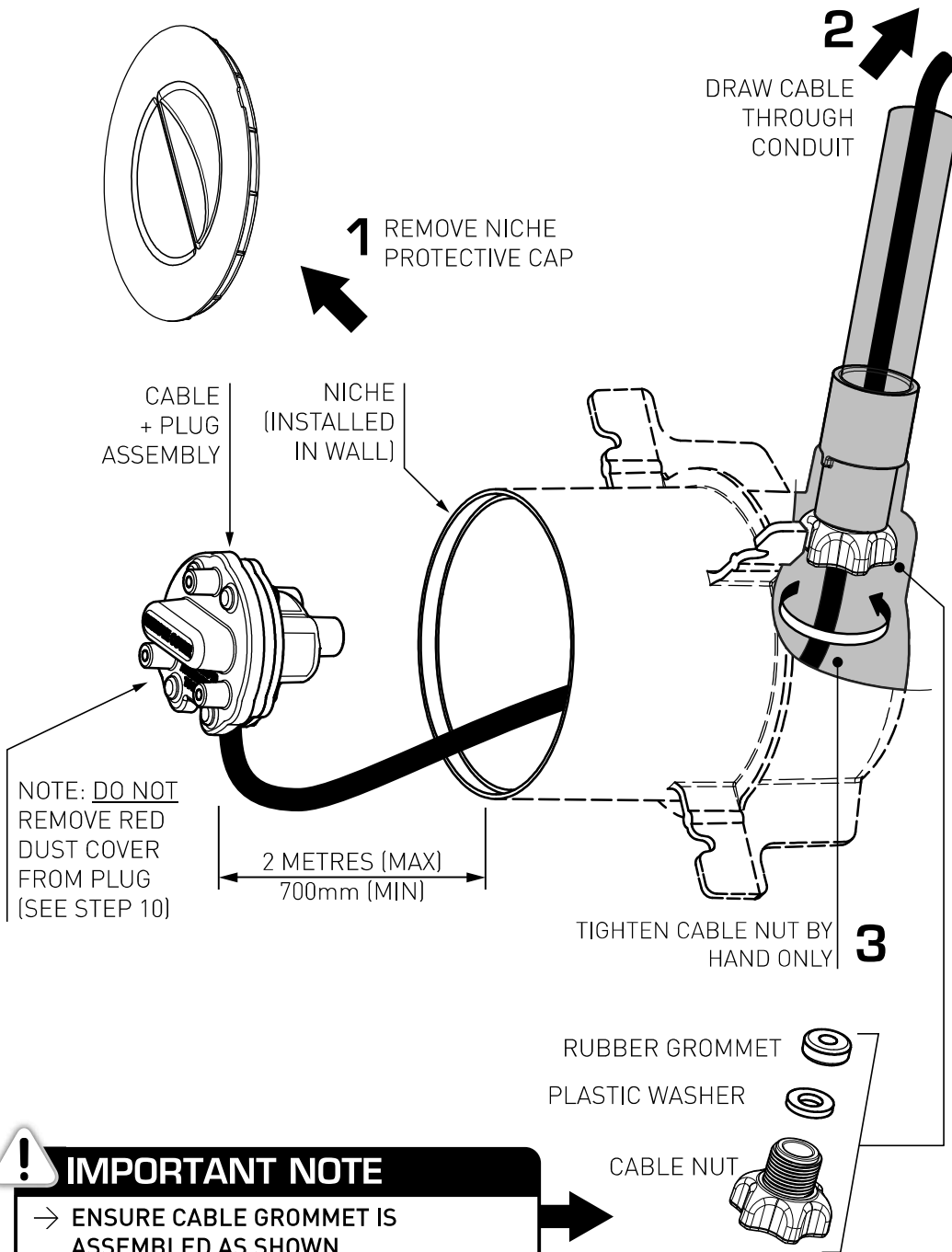


20mm  
(MAX)

**NICHE PROTRUDING?**  
 NICHE CAN BE TRIMMED A  
 MAXIMUM OF 20mm IF IT  
 PROTRUDES FORWARD OF  
 FINISHED CONCRETE SURFACE

# 4

## INSTALL CABLE & PLUG INTO NICHE



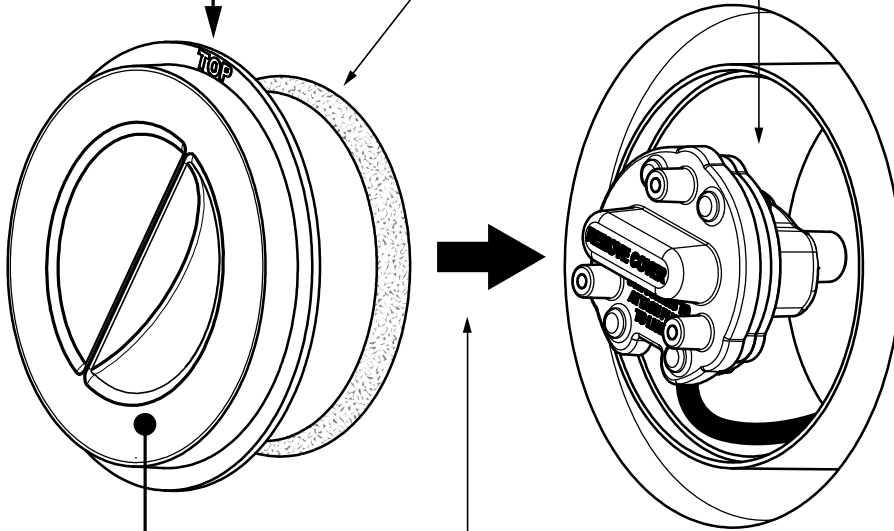
# 5

## INSTALL MOUNTING RING INTO NICHE

**NOTE**  
ENSURE "TOP" IS POSITIONED CORRECTLY

**2** APPLY PVC SOLVENT CEMENT TO MOUNTING RING

**1** COIL PLUG & CABLE INSIDE NICHE



**3** FIRMLY PUSH MOUNTING RING INTO NICHE

**NOTE**  
ENSURE PROTECTIVE CAP REMAINS IN MOUNTING RING (UNTIL STEP 8)

# 6

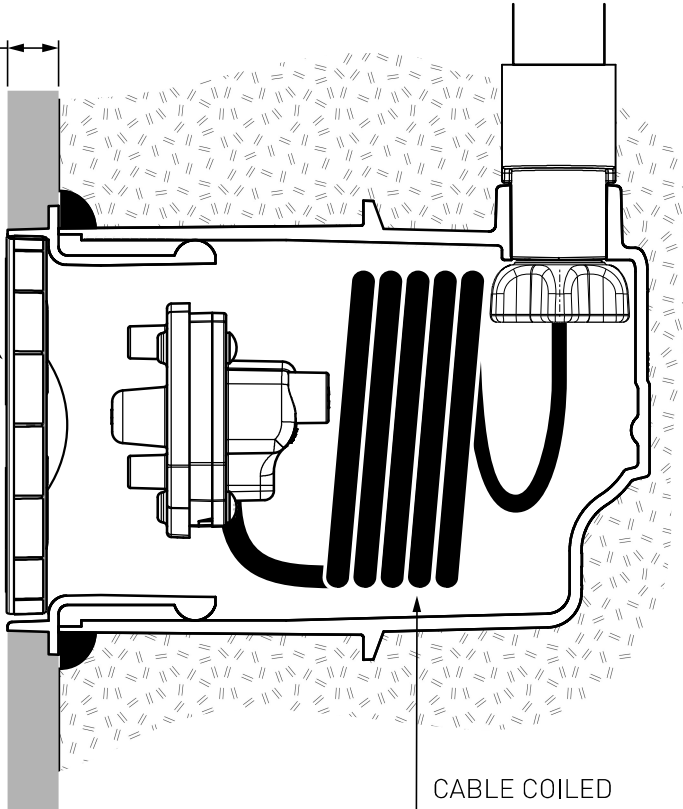
## APPLY POOL FINISH



### NOTE

PROTECTIVE CAP MUST REMAIN IN MOUNTING RING DURING RENDERING / TILING

POOL FINISH  
22mm (MAX)  
12mm (MIN)



CABLE COILED WITHIN NICHE

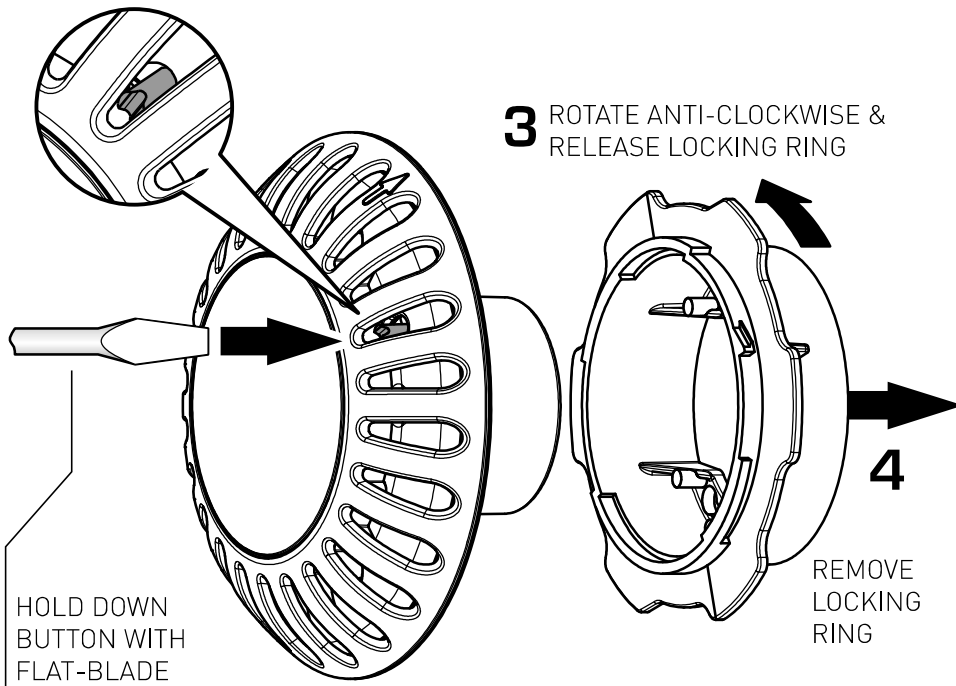
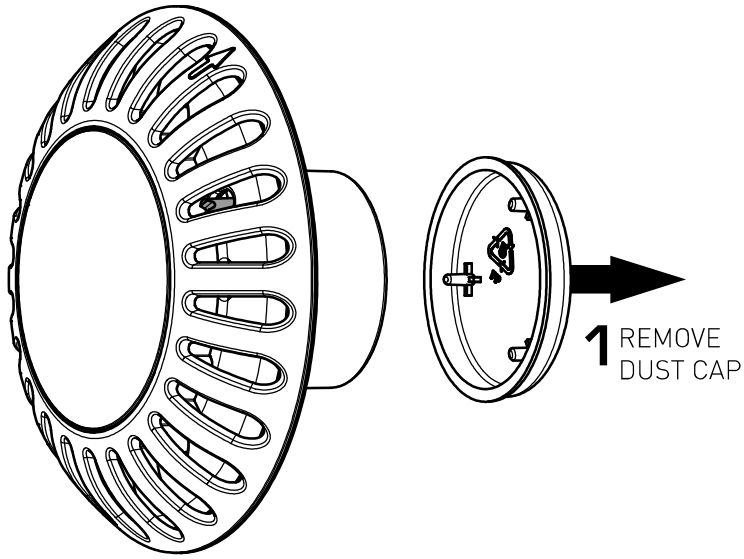


### NOTE

DO NOT TRIM FRONT EDGE OF MOUNTING RING

# 7

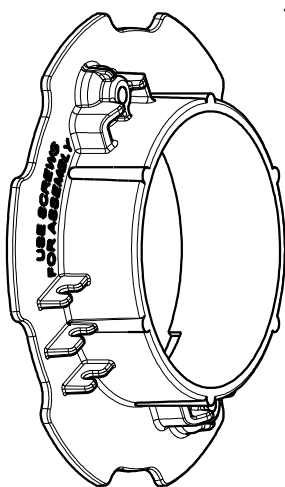
## REMOVE LOCKING RING



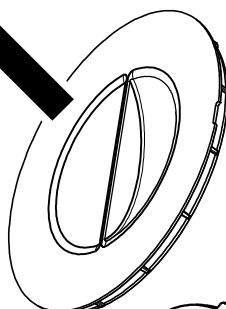
# 8

## ASSEMBLE LOCKING RING TO MOUNTING RING

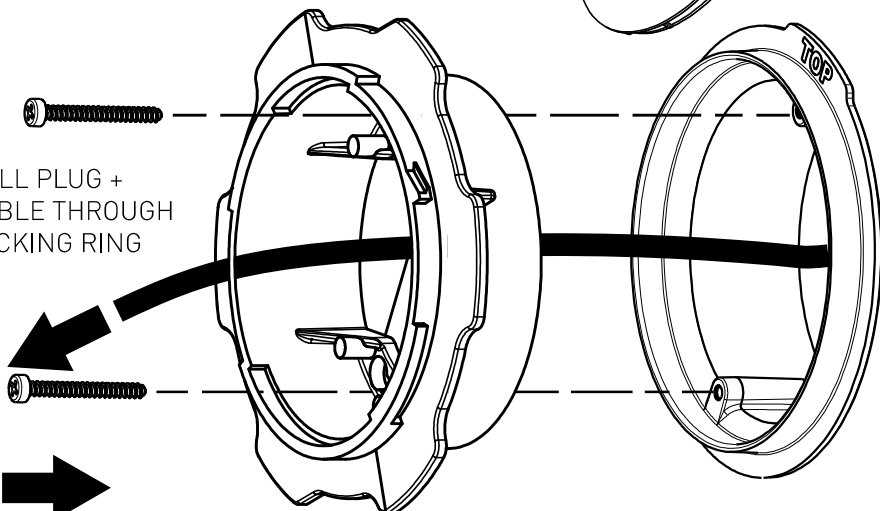
1 REMOVE MOUNTING SCREWS FROM REAR OF LOCKING RING



2 REMOVE PROTECTIVE CAP FROM MOUNTING RING



3 PULL PLUG + CABLE THROUGH LOCKING RING

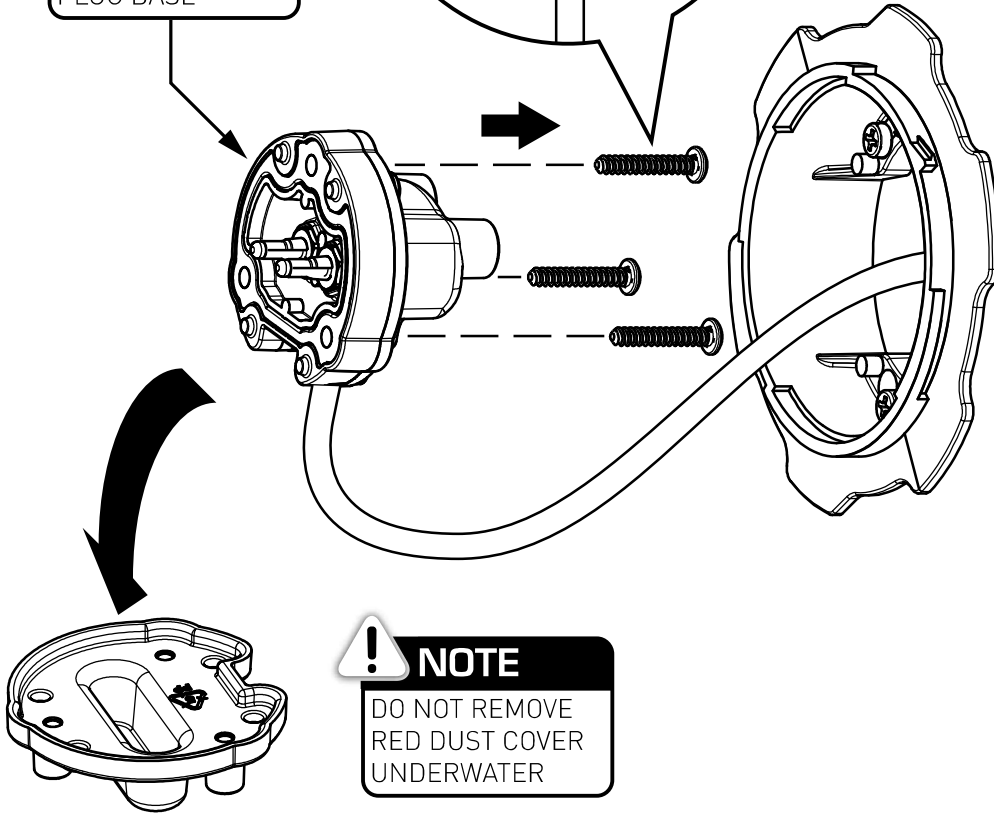
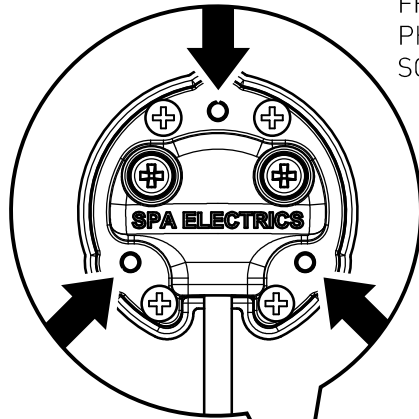


4 ASSEMBLE LOCKING RING WITH MOUNTING RING USING MOUNTING SCREWS PROVIDED

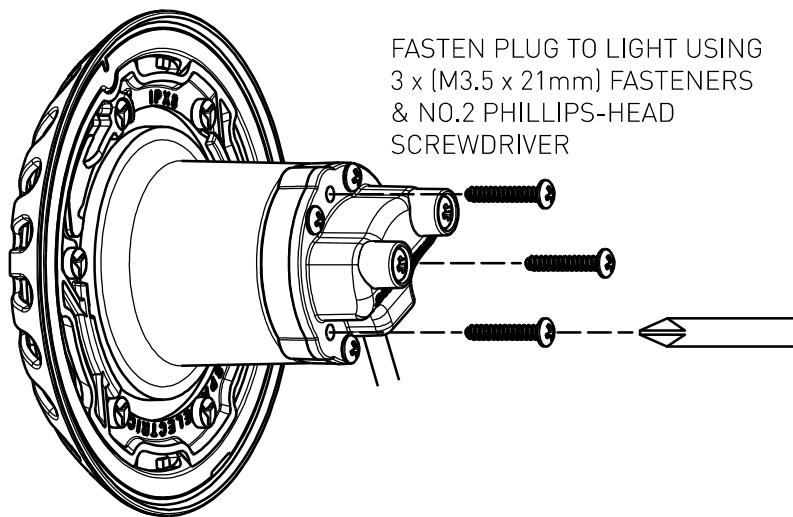
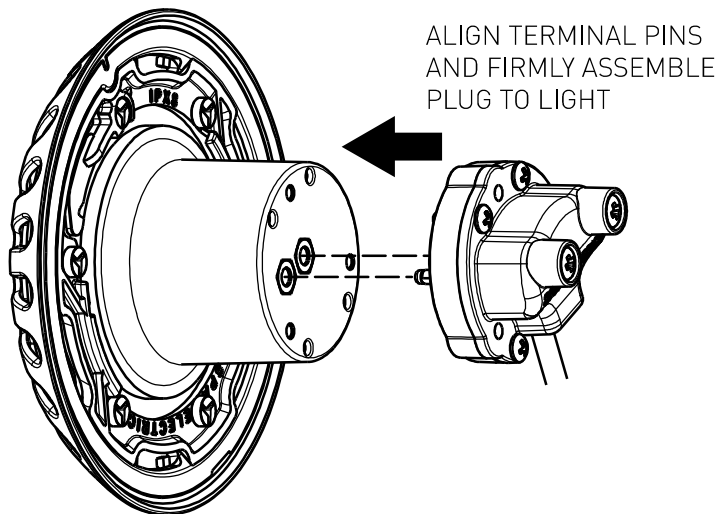


REMOVE DUST COVER FROM PLUG USING PHILLIPS-HEAD (NO.2) SCREW-DRIVER

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



**NOTE**  
DO NOT REMOVE RED DUST COVER UNDERWATER

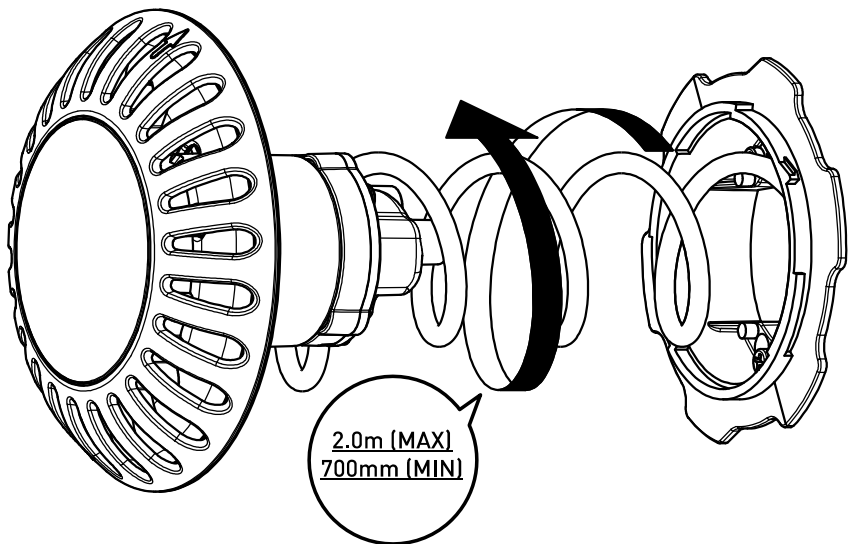


### ! IMPORTANT NOTES

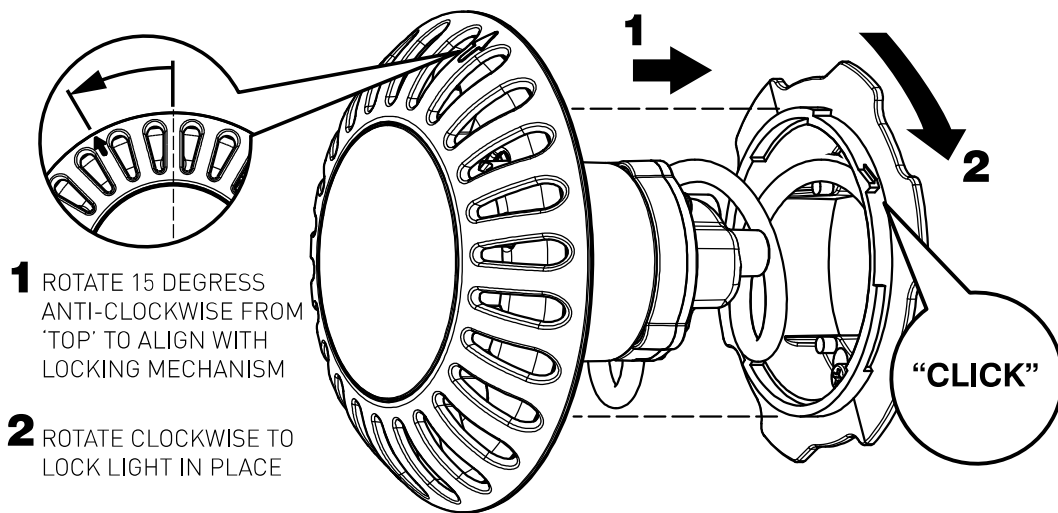
- DO NOT OVERTIGHTEN SCREWS
- DO NOT USE POWER-TOOLS
- DO NOT ADD SEALANTS OR GREASES
- ENSURE ALL SURFACES ARE CLEAN AND DRY
- **DO NOT ASSEMBLE UNDERWATER**

# EM-LIGHT ASSEMBLY

## 1 COIL CABLE INSIDE NICHE

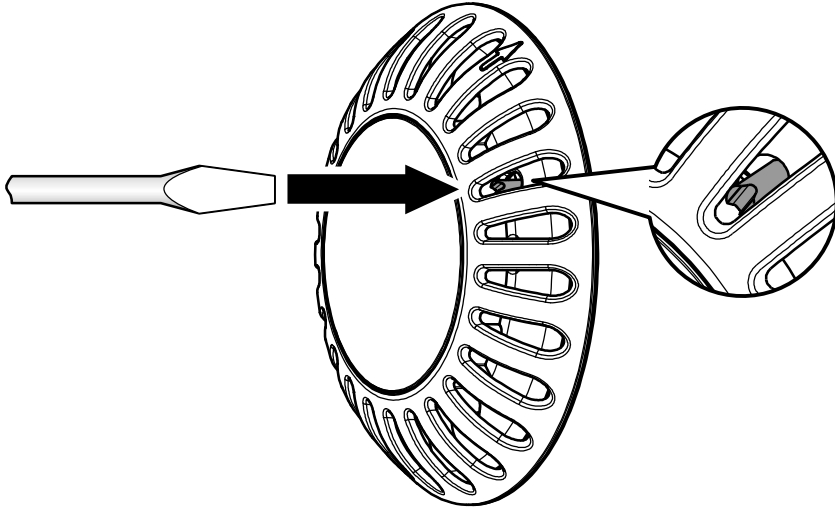


## 2 INSERT LIGHT INTO LOCKING RING

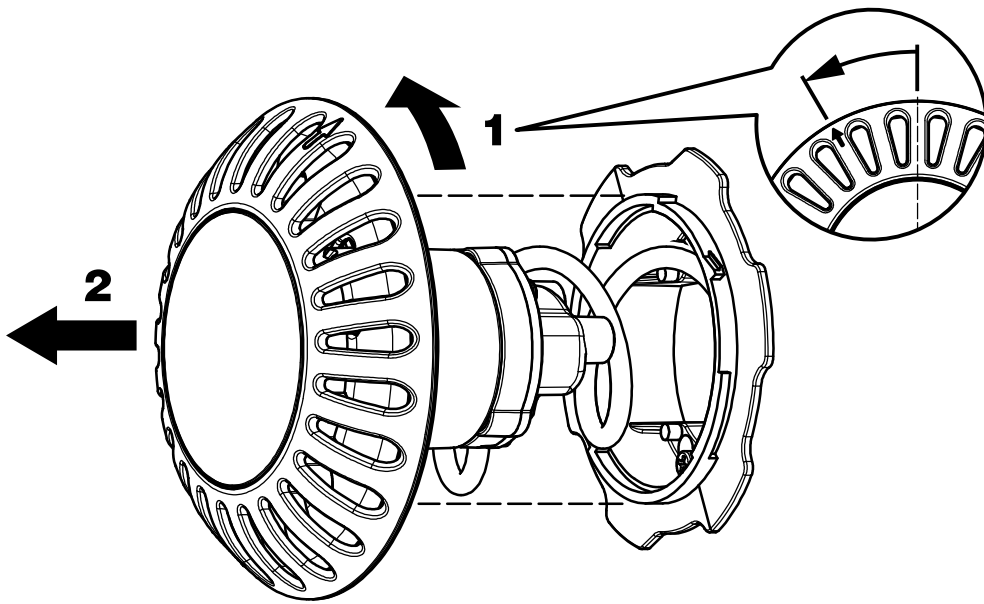


# EM-LIGHT REMOVAL

**1** PUSH DOWN BUTTON WITH FLAT BLADE & HOLD



**2** ROTATE ANTI-CLOCKWISE & RELEASE FROM LOCKING RING



# 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 <b>Connect 10</b> (2016 to current)	SLX Light
Jandy <b>Aqualink RS</b> (F/W Rev. 'R' - Current)	Intellibrite Light
Zodiac <b>Aqualink TRI</b>	Intellibrite Light
Pentair <b>EasyTouch</b>	Intellibrite Light
Pentair <b>IntelliTouch</b>	Intellibrite Light
Hayward <b>Omnilogic</b>	(UCL)Universal Colorlogic

#### iRIS Setup

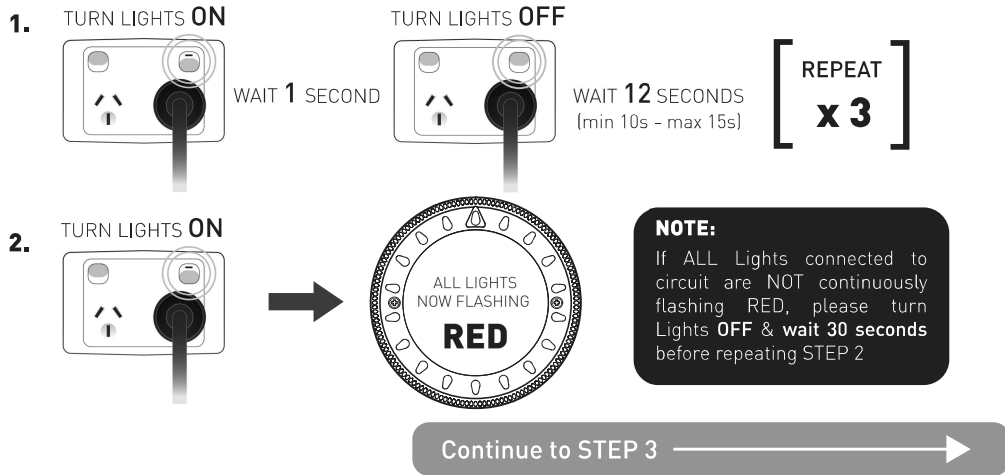
If installing the MULTI PLUS with an iRIS remote, please see the iRIS installation manual for 'Quick Setup' procedure.

**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.



# 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.



**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 <sup>1</sup>
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 <sup>2</sup> (wall switch)	-
6. YELLOW	Hayward Omnilogic	Universal Colorlogic
7. PINK	P-TYPE Mode <sup>3</sup> (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:

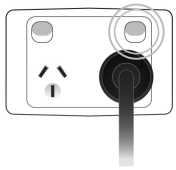
This mode allows the MULTI PLUS light to operate in the RGB P-Type Colour mode. This mode should only be used when operating a MULTI PLUS light in conjunction with an existing Spa Electrics P-Type light. For more information please contact Spa Electrics.

# 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 COLOURS** 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 COLOURS** 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.

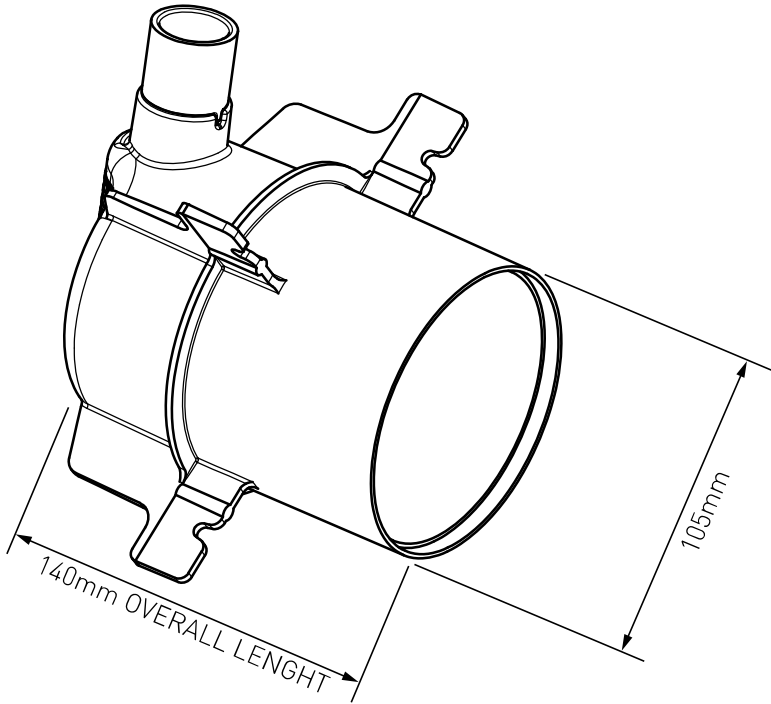
3. To reset or '**synchronize**' your lights; with the power turned **ON**, turn the power **OFF/ON** once rapidly. This will put the lights into **RESET Mode** and will continually **FLASH BLUE**. Turn your lights **OFF for 2 seconds**, then turn **ON**. All lights will now be synchronized

## SYNCHRONIZED INSTALLATION

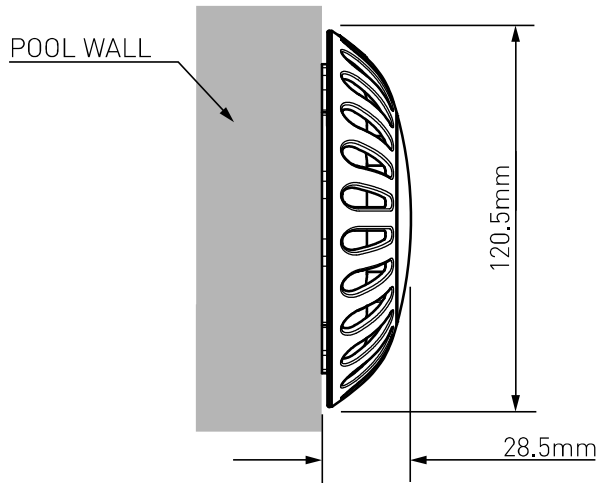
When installing multiple lights; to ensure synchronization and ease of operation, ALL Lights must operate from a single switch.

# KEY DIMENSIONS

## A NICHE



## B INSTALLED LIGHT







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IntelliBrite® is a registered trademark of Pentair Water Pool and Spa, Inc and/or its affiliated companies in the United states or other countries.  
Colorlogic® is a registered trademark of Hayward Industries Inc. and/or its affiliated companies in the United states or other countries.  
Aqualink® is a registered trademark of Zodiac group Australia and/or its affiliated companies in the United states or other countries.  
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