PARAGLO
BRILLIANCE OF LED ®

3" LED NICHE LIGHT

CONCRETE POOLS

INSTALLATION & OWNER'S MANUAL

Powered by:
Paramount™
Pool Life Simplified

CONTENTS

⚠ NOTICE

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

FOR SUPPLY CONNECTION, USE ONLY AN ISOLATING LOW VOLTAGE POWER
SUPPLY WITH UNGROUNDED OUTPUT, EVALUATED FOR SWIMMING POOL USE

READ THIS FIRST

Congratulations on your purchase of a **ParaGlo** underwater lighting system. All **ParaGlo** lights are manufactured by Spa Electrics in Australia from only the highest quality materials and exclusively distributed through Paramount Pool & Spa Systems, USA.

BEFORE YOU START:

- **ParaGlo** 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 NEC wiring code.
- For safe and proper installation, ensure that only those parts supplied with the system are used.
- Maximum installation depth for the **ParaGlo** light is 1.2ft (14") below water line (to top of light).
- The **ParaGlo** 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.
- 20" 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 = 24" (18AWG & 16AWG). See Page 16 for more information].

CLEANING

- Only use warm water and a soft brush or cloth to clean **ParaGlo** 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).
- **ParaGlo** 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: +32ºF ~ +104ºF (0ºC ~ +40ºC)

⚠ IMPORTANT NOTE

The ParaGlo light must only be used with a UL listed 12V AC Class 2 power supply or a 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 **ParaGlo** 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

- No. 2 Phillips screwdriver
- Flat-blade screw driver (for light-head removal)

⚠ IMPORTANT NOTES

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

❄ WINTERIZATION

- Lights must be removed from pool wall and cable disconnected via plug connection & stored in a safe place.
- Terminal Cover must be fitted to Plug Top prior to reinstalling into niche for winter.
- Unless niche/conduit connection is adequately sealed (i.e. via included cable gland components), pool water level must be drained down 12" below the lowest light(s) position in pool wall.
- All conduits should be checked for accumulated water and drained if required.
- Consult your local pool professional for complete pool winterization process.
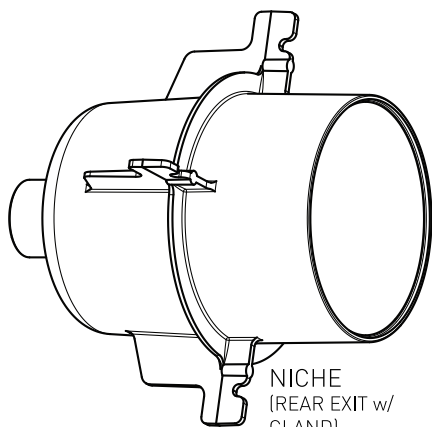
PRODUCT SUPPORT & INFORMATION
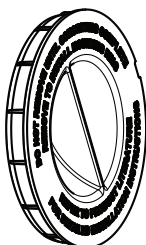
Phone: TOLL FREE 1800 621 5886

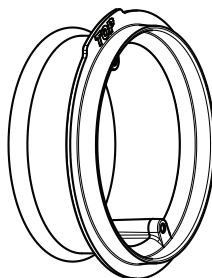**Email: paramount@1paramount.com**

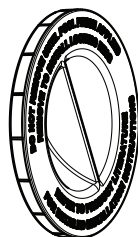**Web: www.1paramount.com**
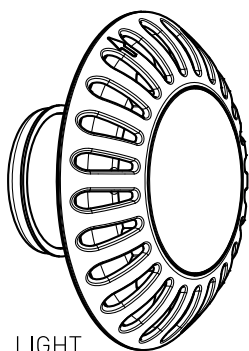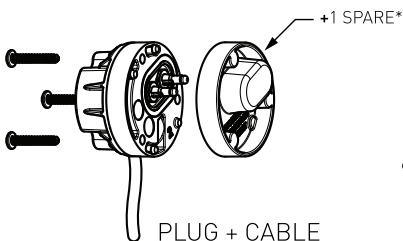
INCLUDED PARTS

NICHE
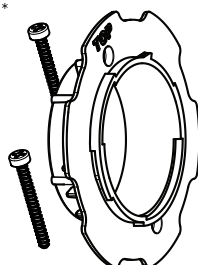(REAR EXIT w/ GLAND)

PROTECTIVE CAP

MOUNTING RING

PROTECTIVE CAP

+1 SPARE*

PLUG + CABLE

* 1 SPARE TERMINAL COVER PROVIDED FOR WINTERIZATION (SEE PAGE 4)

LOCKING RING

LIGHT

1x WARRANTY CARD

1x INSTALLATION MANUAL

⚠ REQUIRED PART (NOT INCLUDED)

UL LISTED 12V AC CLASS 2 POWER SUPPLY OR POWER SOURCE INTENDED FOR SWIMMING POOL USE.
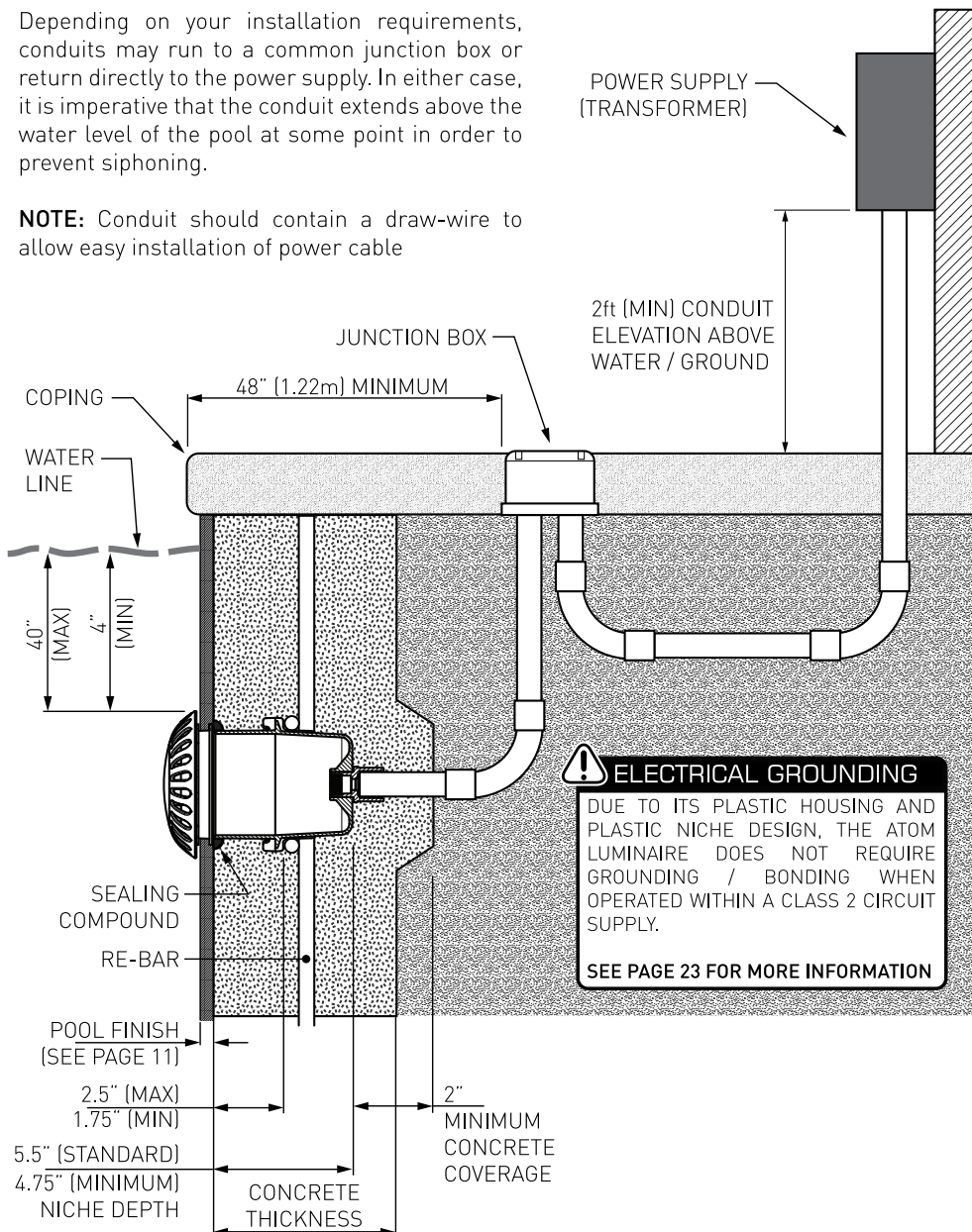Minimum power source wattage requirement – 15 Watts per light
Spa Electrics recommends "**INTERMATIC PX**" safety transformers for use with ATOM lights

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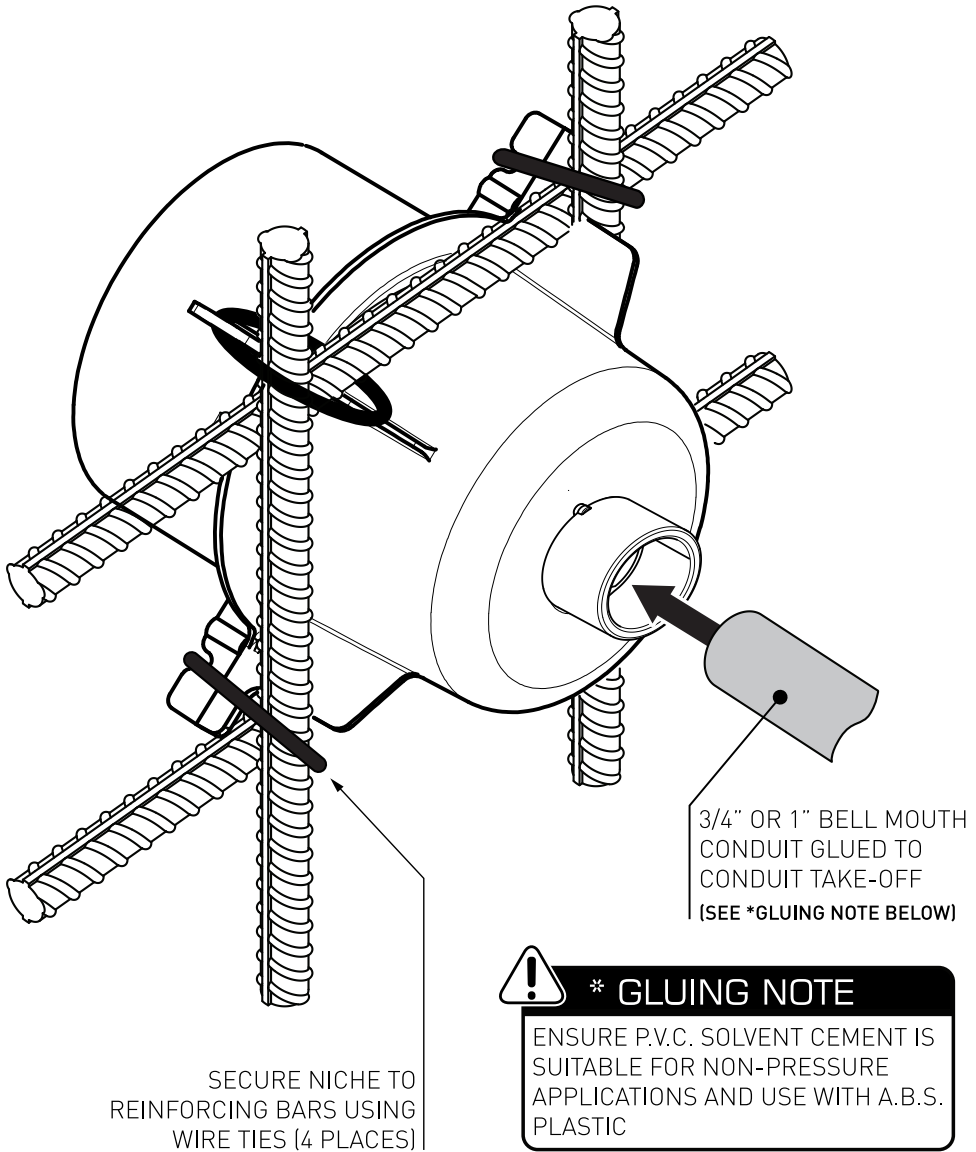
NOTE: Conduit should contain a draw-wire to allow easy installation of power cable

POWER SUPPLY
(TRANSFORMER)

2ft (MIN) CONDUIT
ELEVATION ABOVE
WATER / GROUND

JUNCTION BOX

COPING

48" (1.22m) MINIMUM

WATER
LINE

40" (MAX)

4" (MIN)

⚠ ELECTRICAL GROUNDING

DUE TO ITS PLASTIC HOUSING AND PLASTIC NICHE DESIGN, THE ATOM LUMINAIRE DOES NOT REQUIRE GROUNDING / BONDING WHEN OPERATED WITHIN A CLASS 2 CIRCUIT SUPPLY.

SEE PAGE 23 FOR MORE INFORMATION

SEALING
COMPOUND

RE-BAR

POOL FINISH
(SEE PAGE 11)

2.5" (MAX)
1.75" (MIN)

2"
MINIMUM
CONCRETE
COVERAGE

5.5" (STANDARD)
4.75" (MINIMUM)
NICHE DEPTH

CONCRETE
THICKNESS

INSTALLATION

1 NICHE & CONDUIT INSTALLATION

3/4" OR 1" 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

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

2½ in (MAX)
1¾ in (MIN)

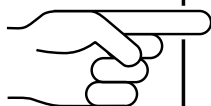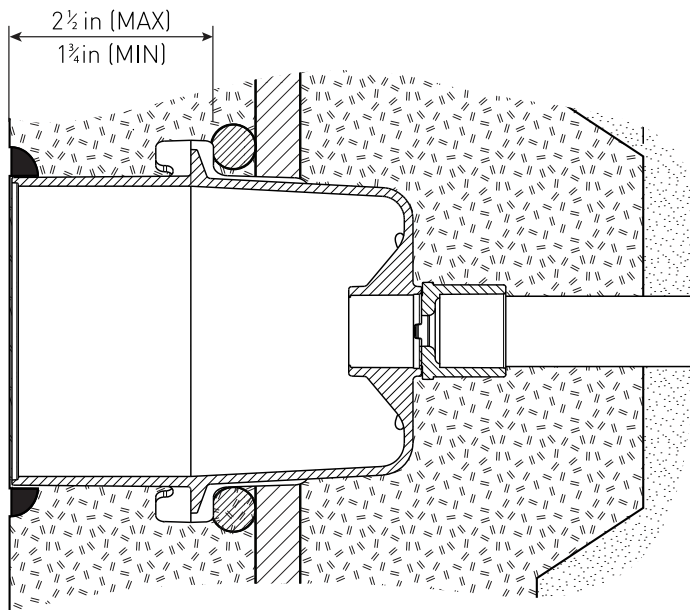### ⚠ NOTE

SCALLOP CONCRETE AROUND NICHE PERIMETER AND FILL WITH SEALING COMPOUND*
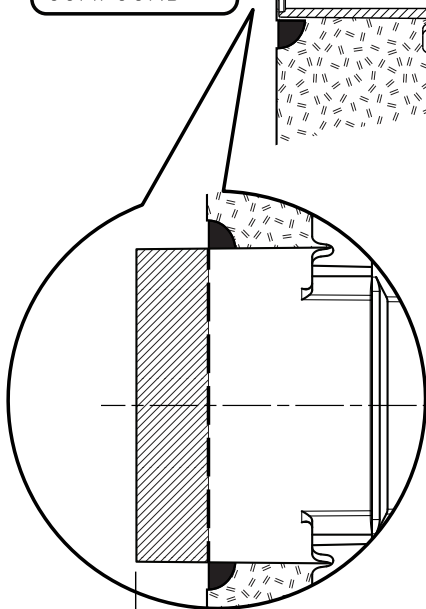
⚠ * SEALING NOTES

SEALING COMPOUND OR HYDRAULIC CEMENT REQUIRED TO PREVENT WATER EGRESS THROUGH POOL WALL.

ENSURE NICHE RIM IS CLEAN, DRY AND FREE OF DEBRIS PRIOR TO APPLICATION OF SEALING COMPOUND.

ENSURE SEALING COMPOUND IS SUITABLE FOR USE WITH A.B.S. PLASTIC
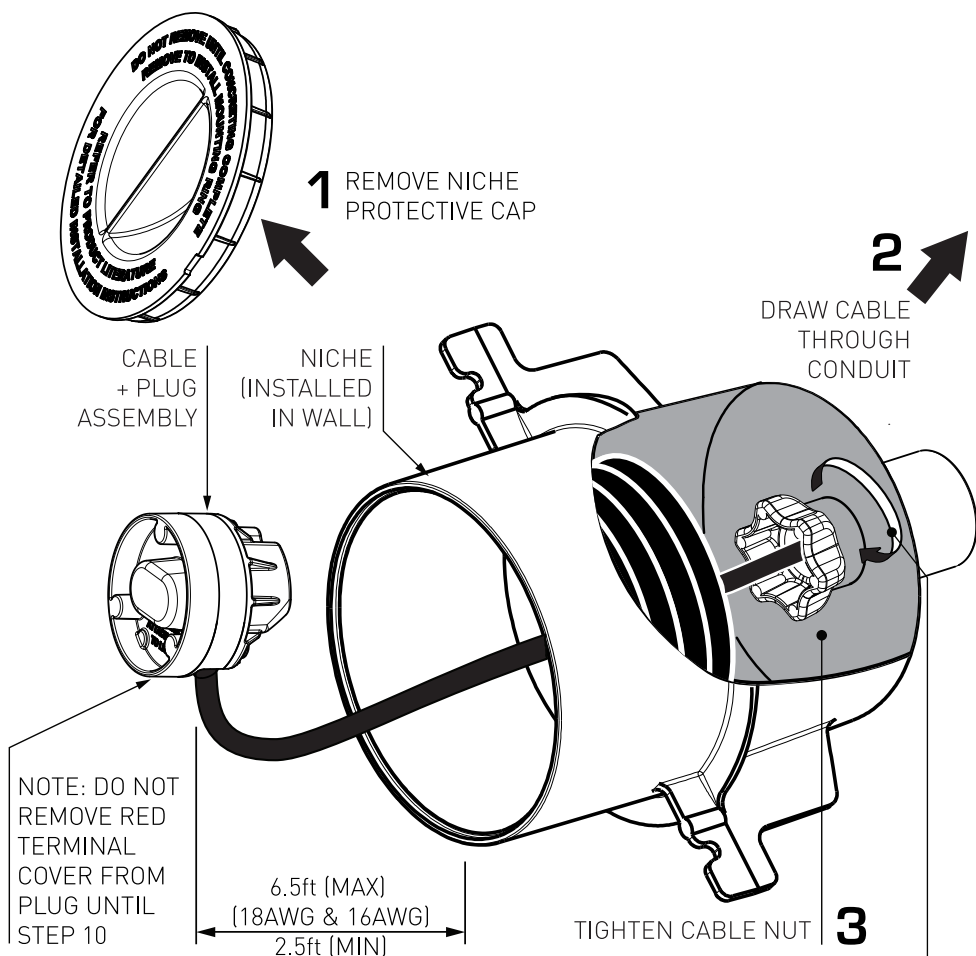
¾ in (MAX)

NICHE PROTRUDING?
NICHE CAN BE TRIMMED A MAXIMUM OF ¾ in IF IT PROTRUDES FORWARD OF FINISHED CONCRETE SURFACE

3 | INSTALL CABLE & PLUG INTO NICHE

1 REMOVE NICHE PROTECTIVE CAP

2 DRAW CABLE THROUGH CONDUIT

CABLE + PLUG ASSEMBLY

NICHE (INSTALLED IN WALL)

NOTE: DO NOT REMOVE RED TERMINAL COVER FROM PLUG UNTIL STEP 10

6.5ft (MAX) (18AWG & 16AWG)
2.5ft (MIN)
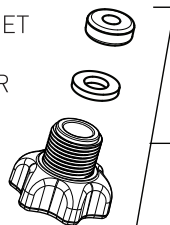
TIGHTEN CABLE NUT **3**

⚠ NOTES

- ENSURE CABLE GLAND IS ASSEMBLED AS SHOWN.
- PRIMARY SEALING POINT SHOULD BE VIA CONDUIT WITH AIR LOOP
- CABLE-GLAND COMPONENTS MAY BE OMITTED PROVIDED CONDUITS EXTEND ABOVE WATERLINE TO PREVENT SIPHONING (SEE PAGE 6)

RUBBER GROMMET

PLASTIC WASHER

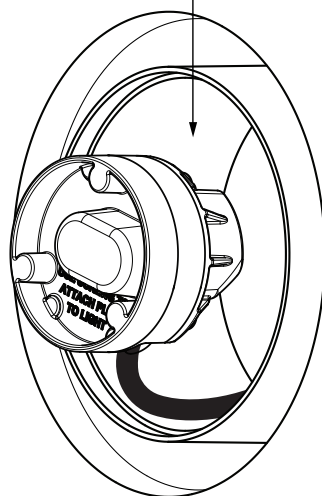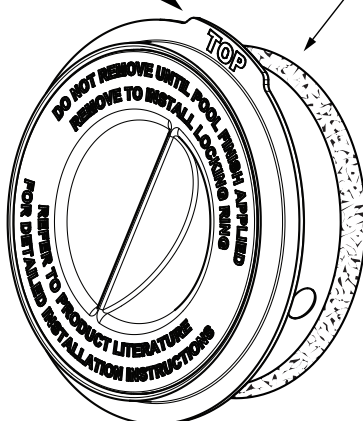CABLE NUT

4 | INSTALL MOUNTING RING INTO NICHE

NOTE

ENSURE "TOP" IS POSITIONED CORRECTLY

2 APPLY P.V.C. SOLVENT CEMENT TO MOUNTING RING

(SEE * GLUING NOTE BELOW)

1 COIL PLUG & CABLE INSIDE NICHE

3 FIRMLY PUSH MOUNTING RING INTO NICHE

NOTE

ENSURE PROTECTIVE CAP REMAINS IN MOUNTING RING (UNTIL STEP 7)

* GLUING NOTE

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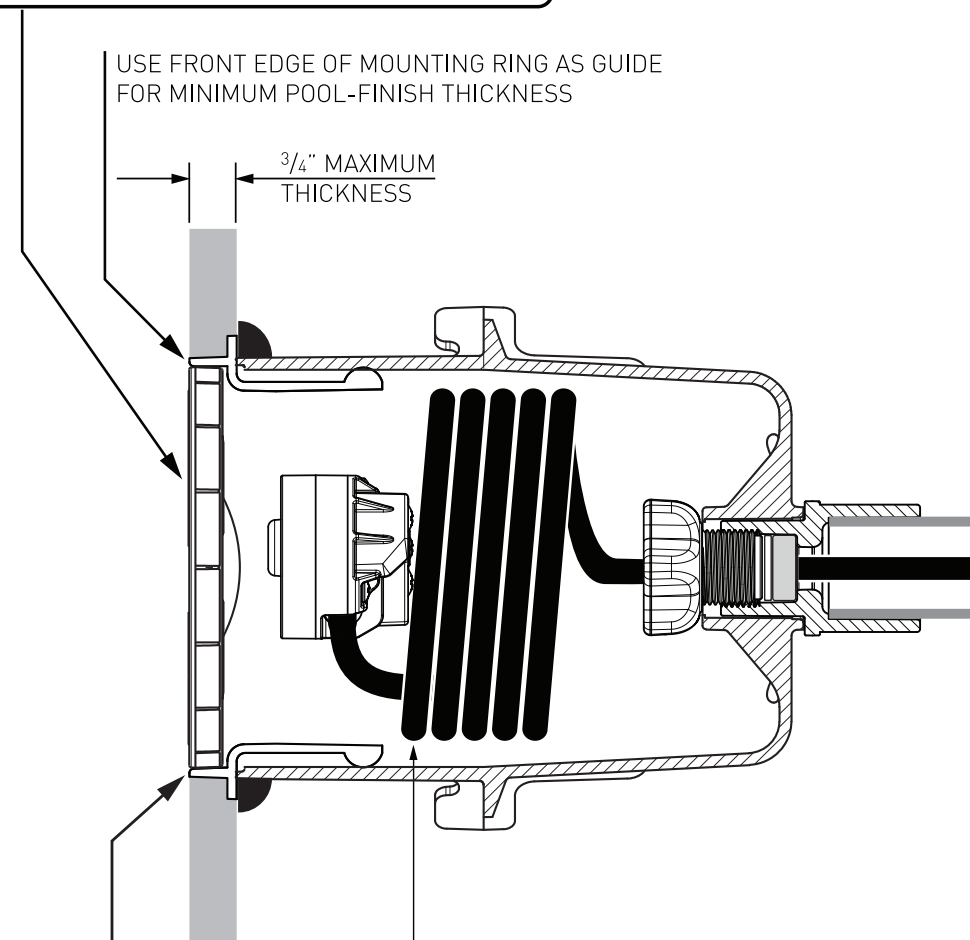
5 APPLY POOL FINISH

⚠ **NOTE**

PROTECTIVE CAP MUST REMAIN IN MOUNTING
RING DURING PLASTERING / TILING

USE FRONT EDGE OF MOUNTING RING AS GUIDE
FOR MINIMUM POOL-FINISH THICKNESS

$3/4$" MAXIMUM
THICKNESS
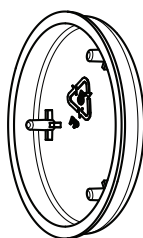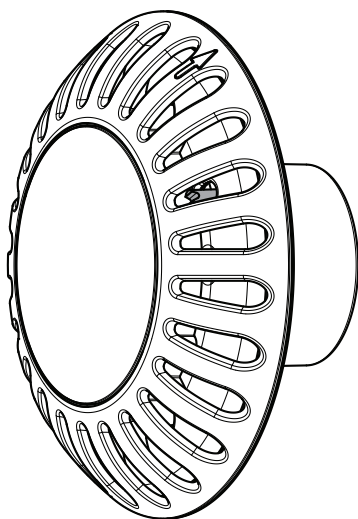
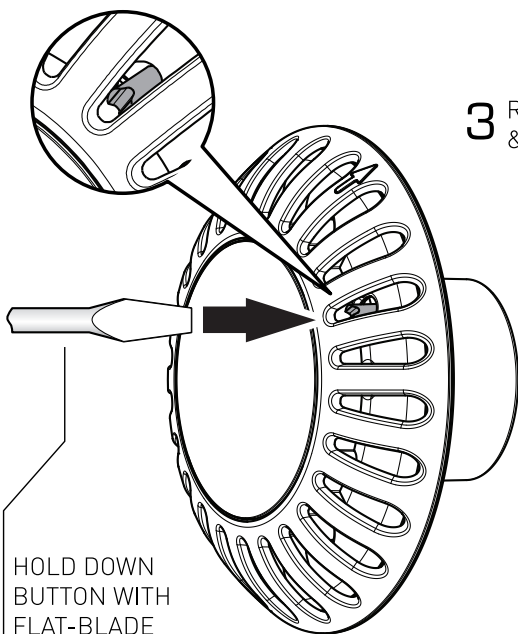CABLE COILED
WITHIN NICHE

⚠ **NOTE**

DO NOT TRIM
FRONT EDGE OF
MOUNTING RING

6 REMOVE LOCKING RING

1 REMOVE PROTECTIVE CAP

3 ROTATE COUNTER-CLOCKWISE & RELEASE LOCKING RING
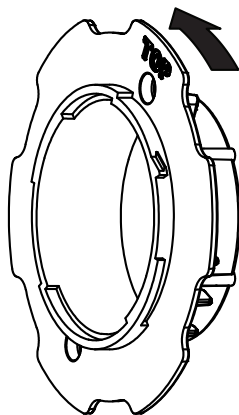
4 REMOVE LOCKING RING

2 HOLD DOWN BUTTON WITH FLAT-BLADE

1 REMOVE MOUNTING SCREWS FROM REAR OF LOCKING RING.

USE LOCKING FOR ASSEMBLY
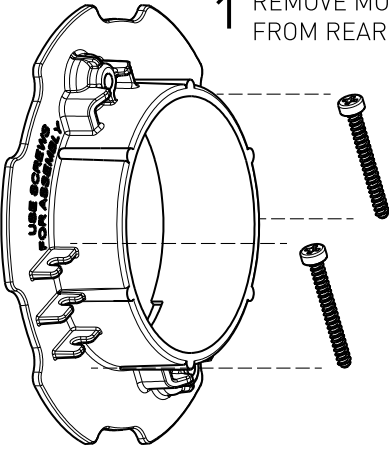
2 REMOVE PROTECTIVE CAP FROM MOUNTING RING

DO NOT REMOVE WILL VOID FINISH WARRANTY
REMOVE TO INSTALL LOCKING APPLIANCE
REFER TO DETAILED PRODUCT INSTALLATION INSTRUCTIONS
FOR DETAILED PRODUCT INSTALLATION INSTRUCTIONS
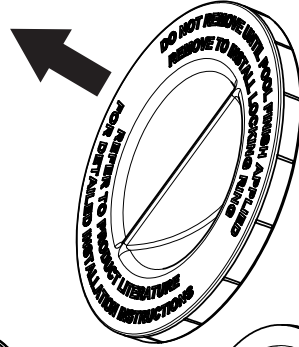
3 PULL PLUG + CABLE THROUGH LOCKING RING

TOP

TOP
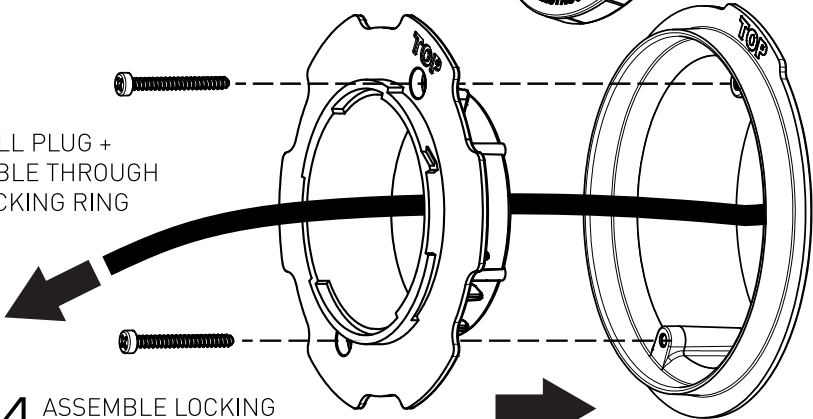
4 ASSEMBLE LOCKING RING WITH MOUNTING RING USING MOUNTING SCREWS PROVIDED.

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

⚠ NOTE
ENSURE SEAL IS
SEATED FLAT IN
PLUG BASE
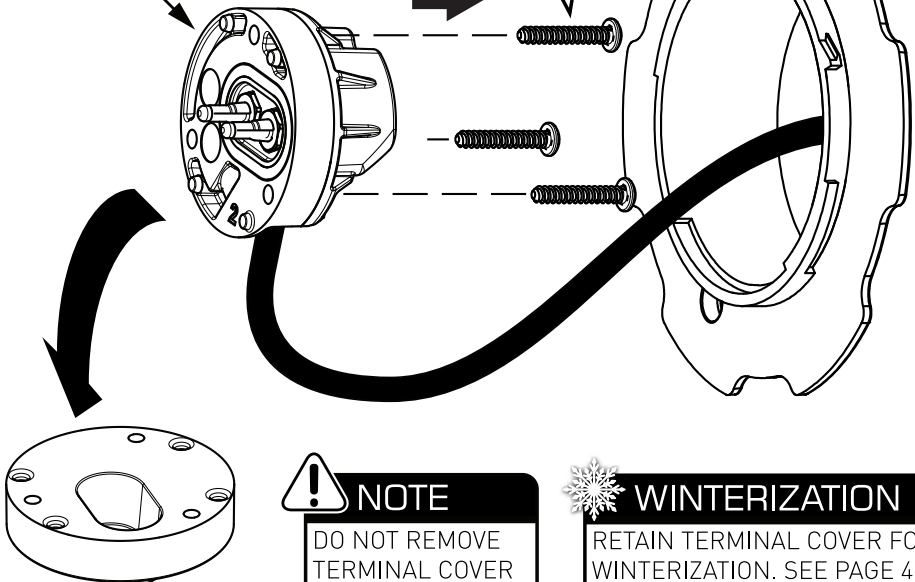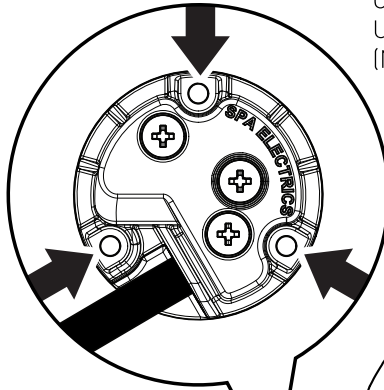
⚠ NOTE
DO NOT REMOVE
TERMINAL COVER
UNDERWATER

❄ WINTERIZATION
RETAIN TERMINAL COVER FOR
WINTERIZATION. SEE PAGE 4
FOR DETAILS

TERMINAL
COVER

9   ASSEMBLE PLUG TO LIGHT

ALIGN TERMINAL PINS
AND FIRMLY ASSEMBLE
PLUG TO LIGHT

FASTEN PLUG TO LIGHT USING
3 x (M3.5 x 21mm) FASTENERS
& NO.2 PHILLIPS-HEAD
SCREWDRIVER
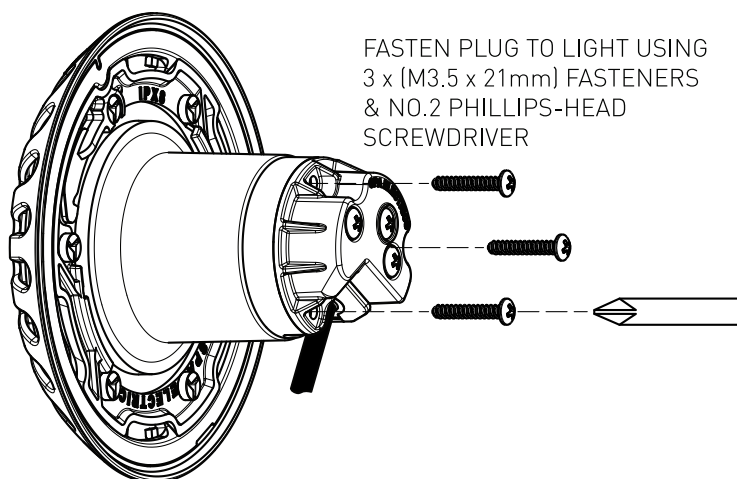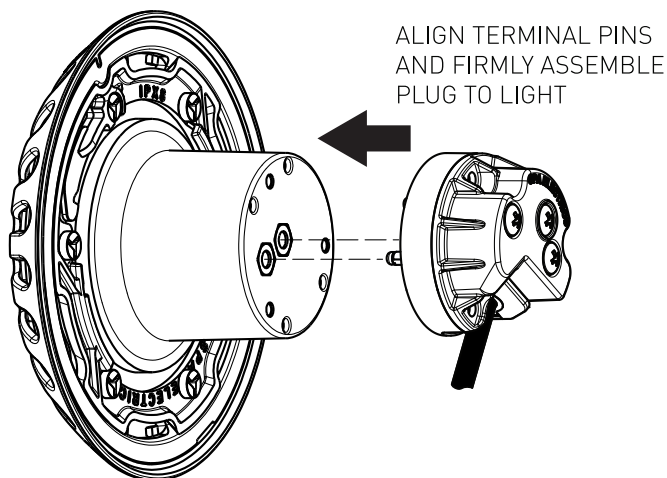
⚠ IMPORTANT NOTES

- 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**

LIGHT ASSEMBLY

1   COIL CABLE INSIDE NICHE

6.5ft (MAX)
18AWG & 16AWG
2.5ft (MIN)
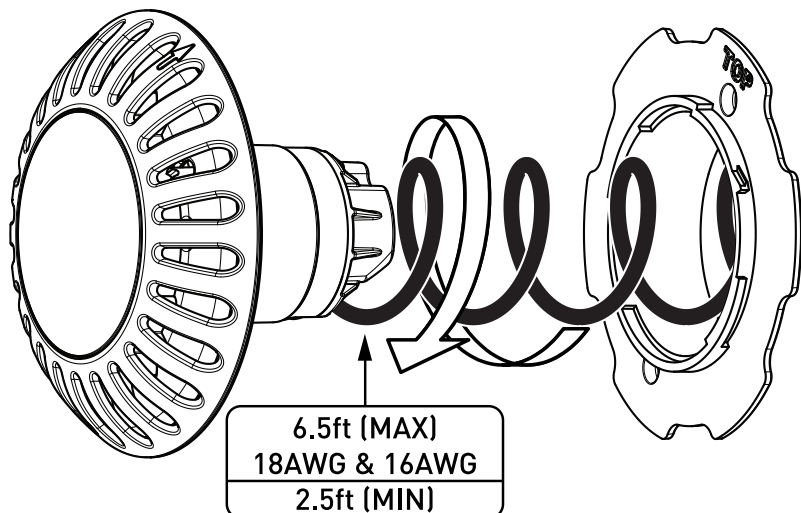
2   INSERT LIGHT INTO LOCKING RING

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

2   ROTATE CLOCKWISE TO LOCK LIGHT IN PLACE

"CLICK"
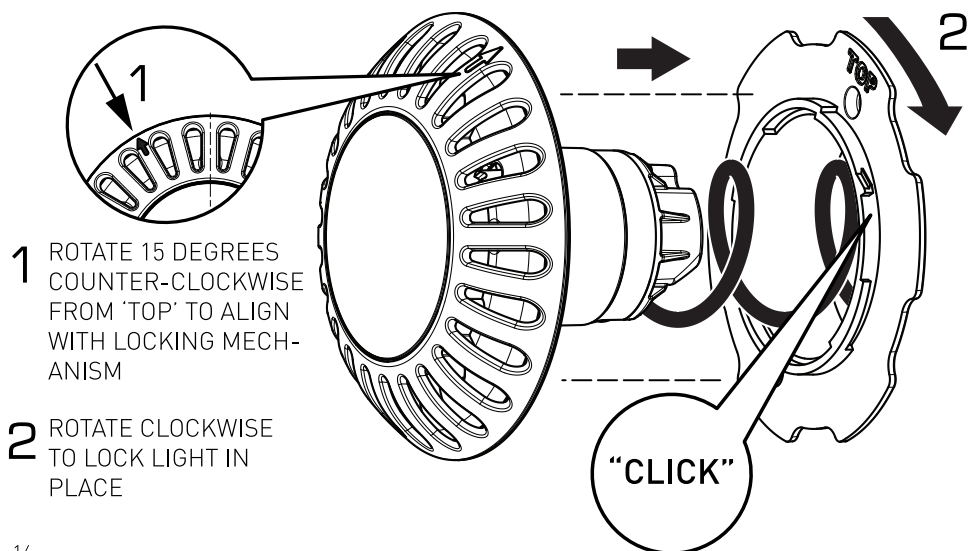
LIGHT REMOVAL

1 PUSH & HOLD BUTTON WITH FLAT BLADE
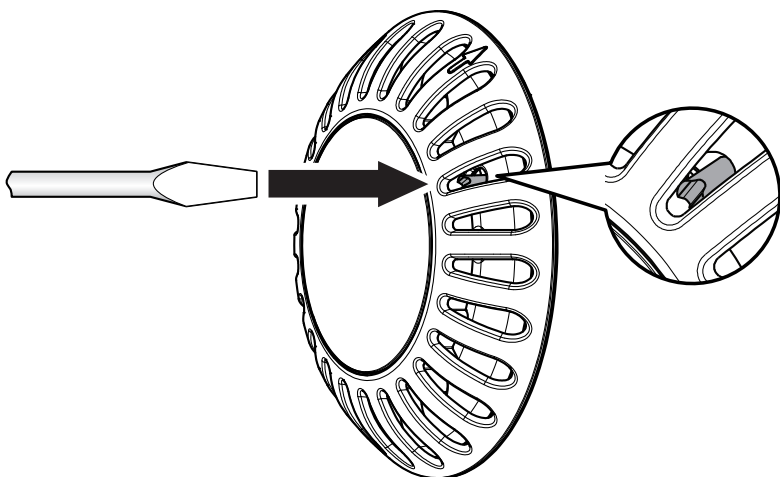
2 ROTATE COUNTER-CLOCKWISE & REMOVE FROM LOCKING RING

1

2

TOP
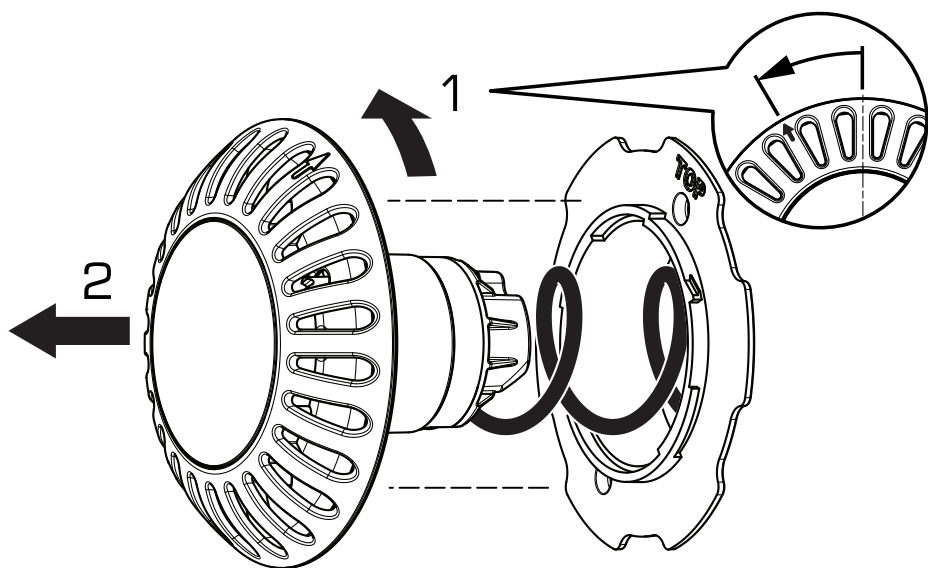
MULTI PLUS SETUP

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**
Zodiac **Aqualink TRI**	**Intellibrite**
Pentair **EasyTouch**	**Intellibrite**
Pentair **IntelliTouch**	**Intellibrite**
Hayward **Omnilogic**	**Universal Colorlogic**

*Hayward ProLogic Controllers:

Hayward Prologic controllers do not support MULTI PLUS integration. If you are using a Hayward ProLogic Controller, please leave MULTI PLUS lights programmed to (1. Manual Mode) for the best operating experience.

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 **10** SECONDS
(min 10s - max 15s)

REPEAT
x 3

2.   TURN LIGHTS **ON**

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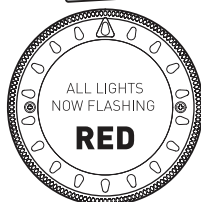
NOTE:
If ALL Lights connected to circuit are NOT continuously flashing RED, please turn Lights **OFF** & **wait 30 seconds** before repeating STEP 2

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**   TURN LIGHTS **ON**

WAIT **1** SECOND

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

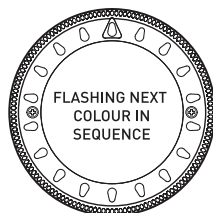| 'FLASHING' COLOUR	CONTROLLER / OPERATING TYPE	LIGHT MODEL SELECTED*
1. RED	Manual Mode (wall switch)	-
2. GREEN	Spa Electrics iRIS Controller	-
3. MAGENTA	Astral Connect 10 (2016 to current)	SLX Light
4. WHITE	Jandy Aqualink RS (F/W Rev. 'R'-Current)	Intellibrite Light
	Zodiac Aqualink TRI	Intellibrite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

Continue to STEP 4

*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 Paramount Pool Systems.

*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 or RM-2 in conjunction with a standard ParaGlo MULTI-Colour light. For more information please contact Paramount Pool Systems.

*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 a ParaGlo P-Type light.
For more information please contact Paramount Pool Systems.

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**

TURN SYSTEM **ON**

WAIT **30** SECONDS

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 pg. 14-15 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 pg. 18 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	
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

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

RGB 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

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

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	RGB WHITE
12	MAGENTA

KEY DIMENSIONS

A | NICHE

5.5" OVERALL LENGTH

4.2" OD

B | INSTALLED LIGHT

POOL WALL

4.7"

1.1"
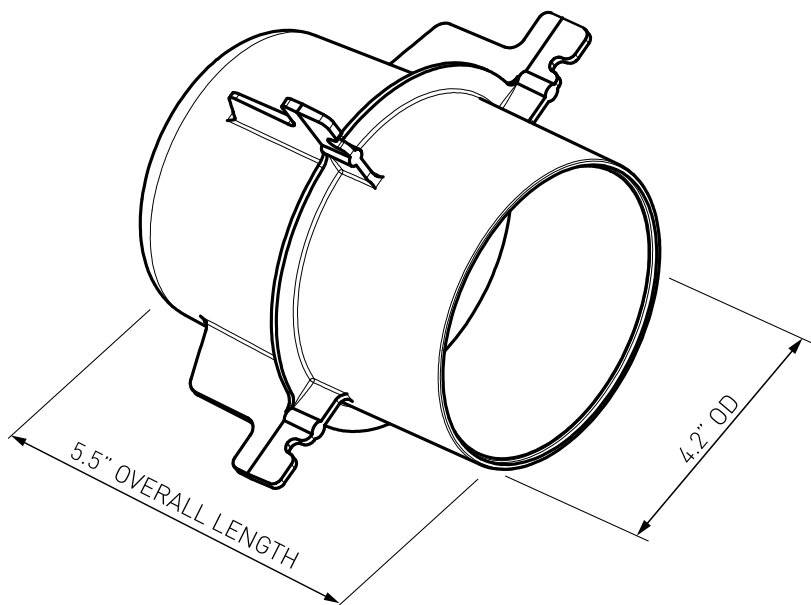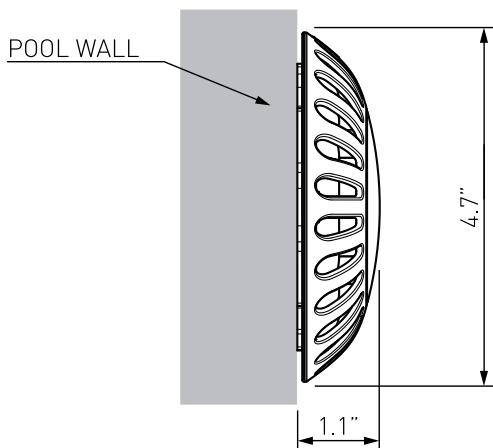
TROUBLESHOOTING

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 Paramount Pool Systems.

Phone: TOLL FREE 1800 621 5886

Email: paramount@1paramount.com

Web: www.1paramount.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 that are located in the Class 2 circuit with polymeric/non-current carrying metal parts are not required to be grounded / bonded.

Manufacturers Statement

The ParaGlo 3" & 6" (EM & WN9) luminaires with their plastic housing designs and plastic niches do not require grounding / bonding when operated within a Class 2 circuit supply.

The ParaGlo 3" & 6" (EM & WN9) 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.

⚠ **NOTE**

PLEASE STORE THIS
MANUAL IN A SAFE PLACE
FOR FUTURE REFERENCE

C (UL)® US
LISTED

Proudly manufactured by

SE Spa Electrics

Powered by:
Paramount™
Pool Life. Simplified.

www.spaelectrics.com.au

20170531