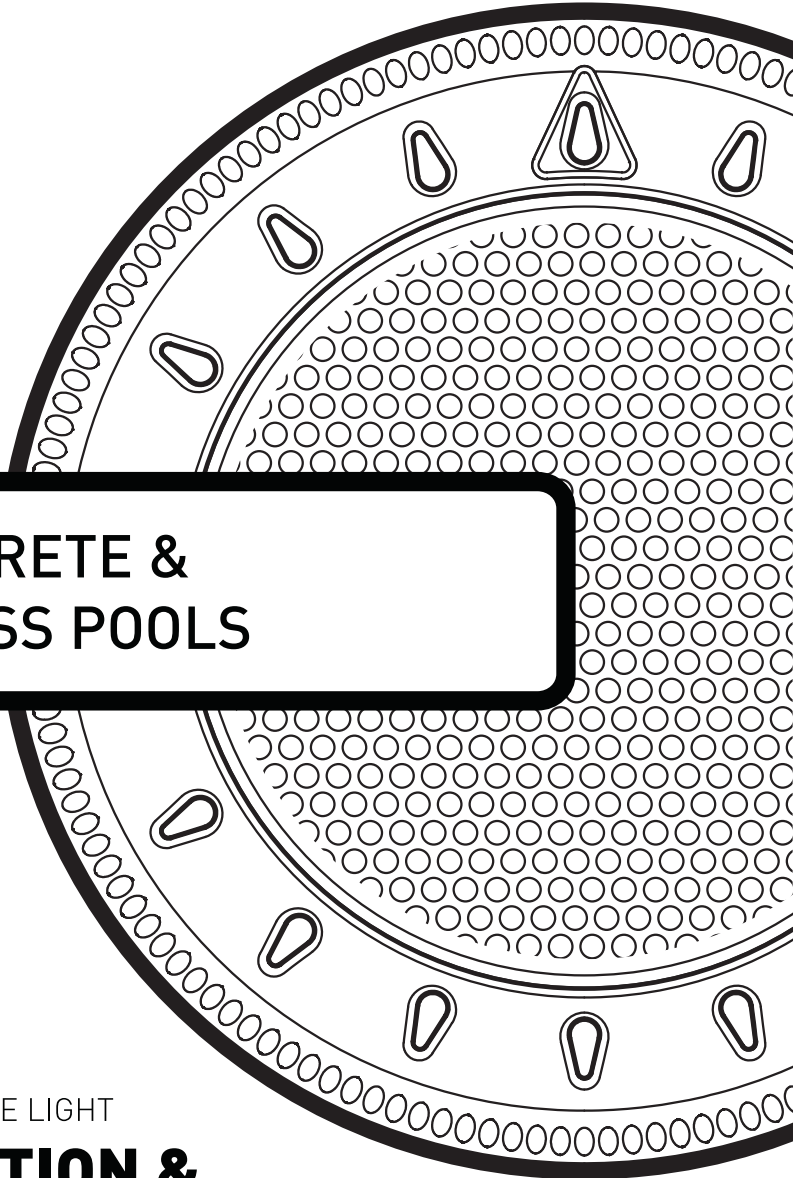




QUANTUM

WN SERIES



FOR CONCRETE &
FIBREGLASS POOLS

HIGH-OUTPUT NICHE LIGHT

**INSTALLATION &
OWNER'S MANUAL**

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WARNING

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

- DO NOT use electronic or switch-mode transformers with **WN**-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.

PRODUCT SUPPORT & INFORMATION

Phone: +61 3 9793 2299 (business hours)

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

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

Web: www.spaelectrics.com.au

INTRODUCTION



Congratulations on your purchase of a Spa Electric underwater lighting system. Spa Electric, specialists in underwater lighting have been designing and manufacturing underwater lighting systems since 1976, with a focus on quality and reliability. All Spa Electric lights are manufactured in Australia from only the highest quality materials.

In order to maintain a long product life and hassle free operation, please take the time to become familiar with the following information.

Installation:

- Ensure that the lighting system is installed by a suitably qualified persons only (eg. registered pool builder and/or qualified electrician), in accordance with AS/NZ 3000:2007 standards.
- For safe and proper installation, ensure that only those parts supplied with the system are used.
- Lights should only be installed to a maximum depth of 400mm.
- The use of power tools such as cordless / 240v drills during installation is NOT recommended as these devices can damage the light fitting.

Cleaning:

- Should you underwater light require cleaning at any stage, be sure to only use a mild detergent. Products such as methyated spirits can weaken certain parts of the fitting.

Use:

- Your underwater light must be water cooled at all times. Do not switch the light on until installation is complete and the light is fully submerged in water.
- To ensure maximum life, your light should be used regularly throughout the year, ie. once per week.
- The WN-Series has been designed for commercial use and can be operated for continuous periods of time.

INSTALLATION (CONCRETE POOLS)

1 ATTACH NICHE TO REINFORCEMENT BARS

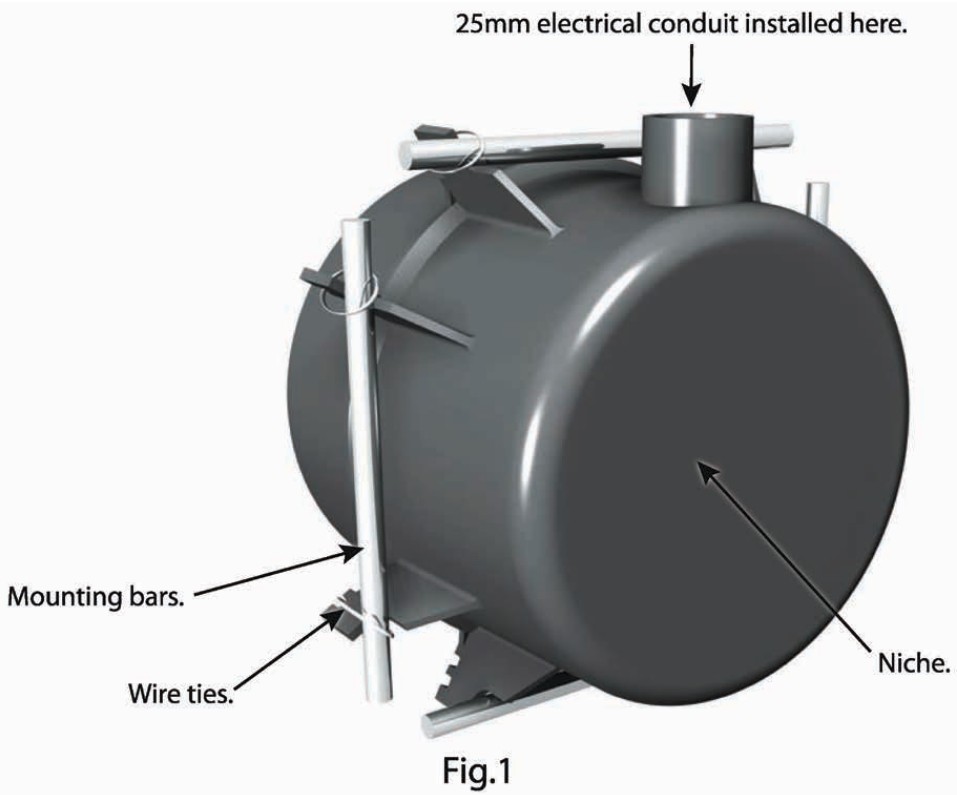
(Before spraying concrete)

Attach the niche to either horizontal or vertical steel mounting bars using wire ties or similar. Ensure conduit entry is at the top of the niche. [Fig. 1]

CAUTION:

Lights should only be submerged to a maximum depth of 400mm to the top of the light, any deeper and the warranty will be void.

These lights are not designed for horizontal mounting.



2 INSERT AND GLUE 25mm CONDUIT INTO NICHE

Glue length of 25mm electrical conduit into top of niche using PVC solvent cement. Conduit should extend above the water level of the pool.

CAUTION: Ensure that sufficient area behind the niche is dug out to allow for 50mm of concrete coverage around the entire niche.

3

INSTALL SECONDARY CONDUIT

Attach a second conduit to return below ground level and away to the location of the transformer. Conduit should contain a draw wire and be covered with a draw box (part No. SE5) or similar to allow for later access. (Fig 2)

CAUTION: If a junction box is not used, ensure that conduits are 'broken' before returning below water level, to stop siphoning of water from pool or spa.

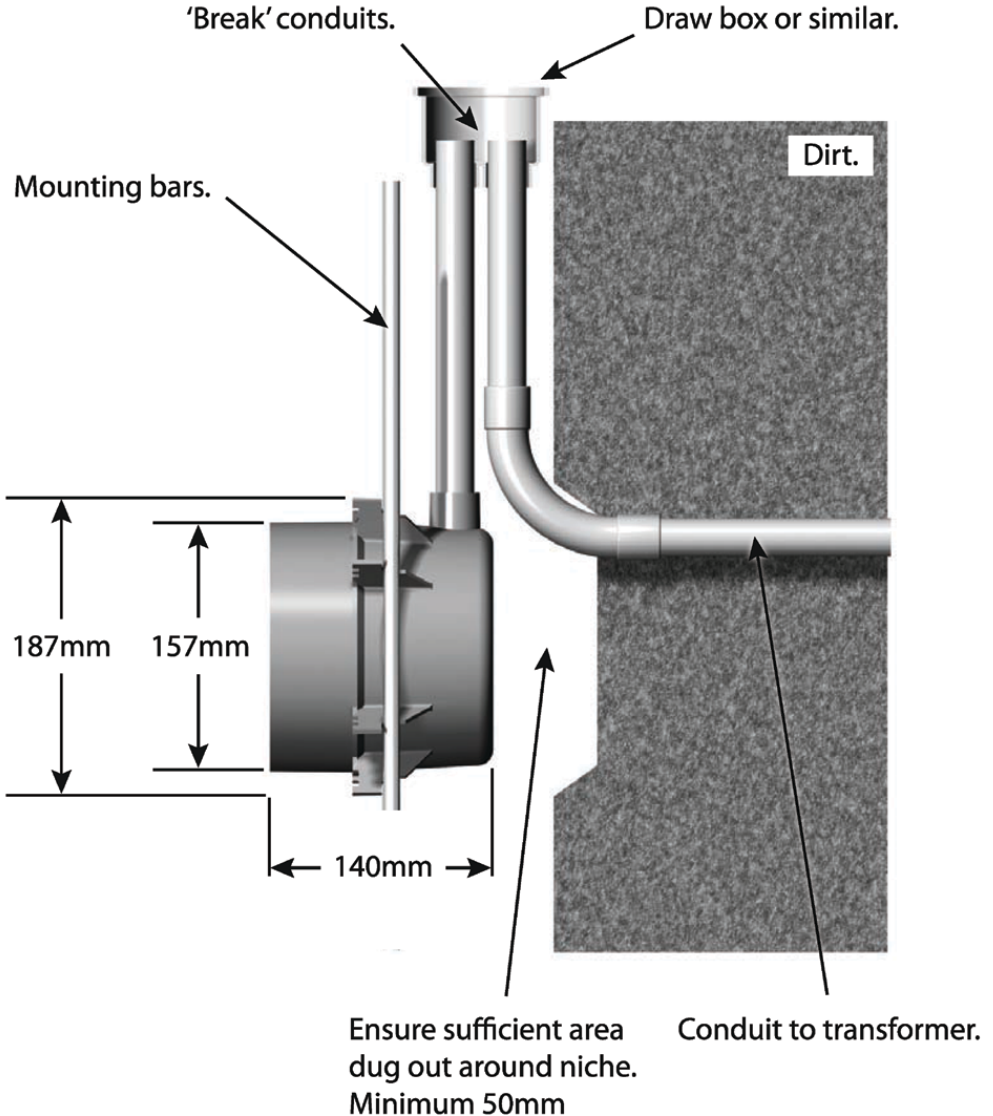


Fig.2

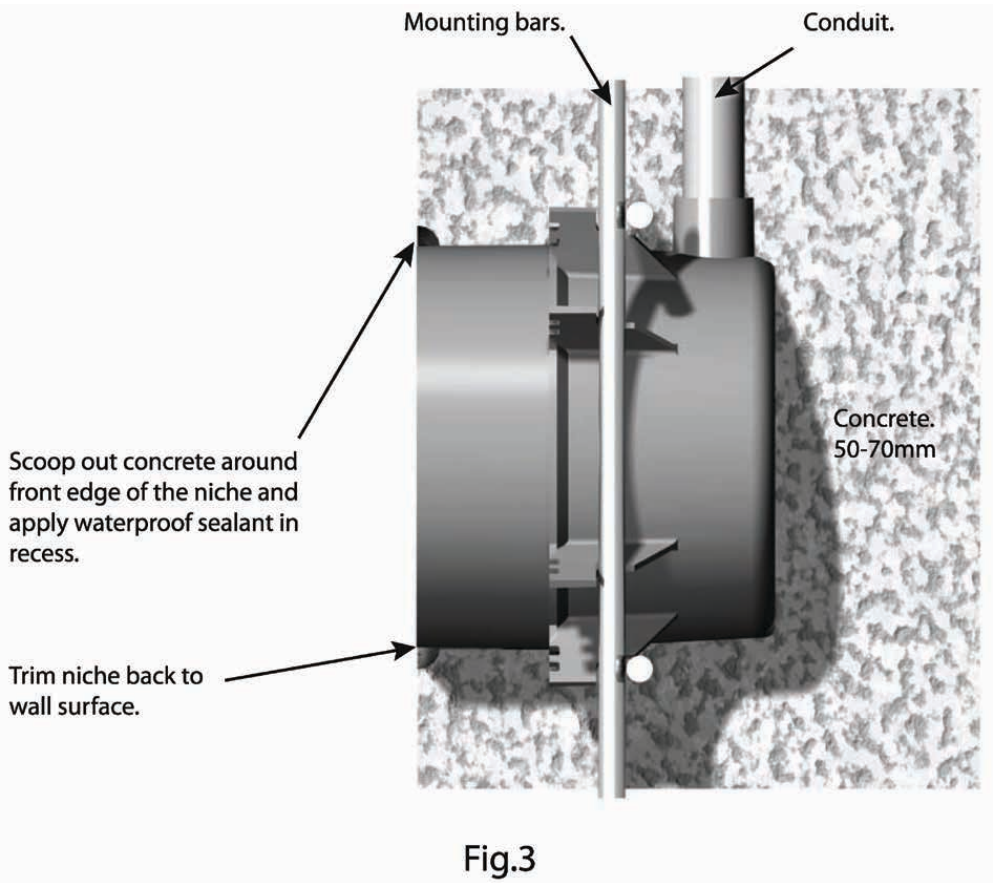
4

CONCRETE SPRAYING

Spray concrete, paying particular attention to covering the entire niche, using fingers, scoop out the concrete around the front edge of the niche. [Fig 3]

WARNING: Ensure that the concrete is well compacted around the rear and base of the niche, otherwise the pool may leak.

CAUTION: The front of the niche should not be recessed into the concrete.



5

FOAM REMOVAL

(After concrete is sprayed and dry)

Remove foam from niche and if necessary, trim niche back to wall surface. Apply a waterproof sealant in the recess between the niche and the concrete wall. [Fig 3]

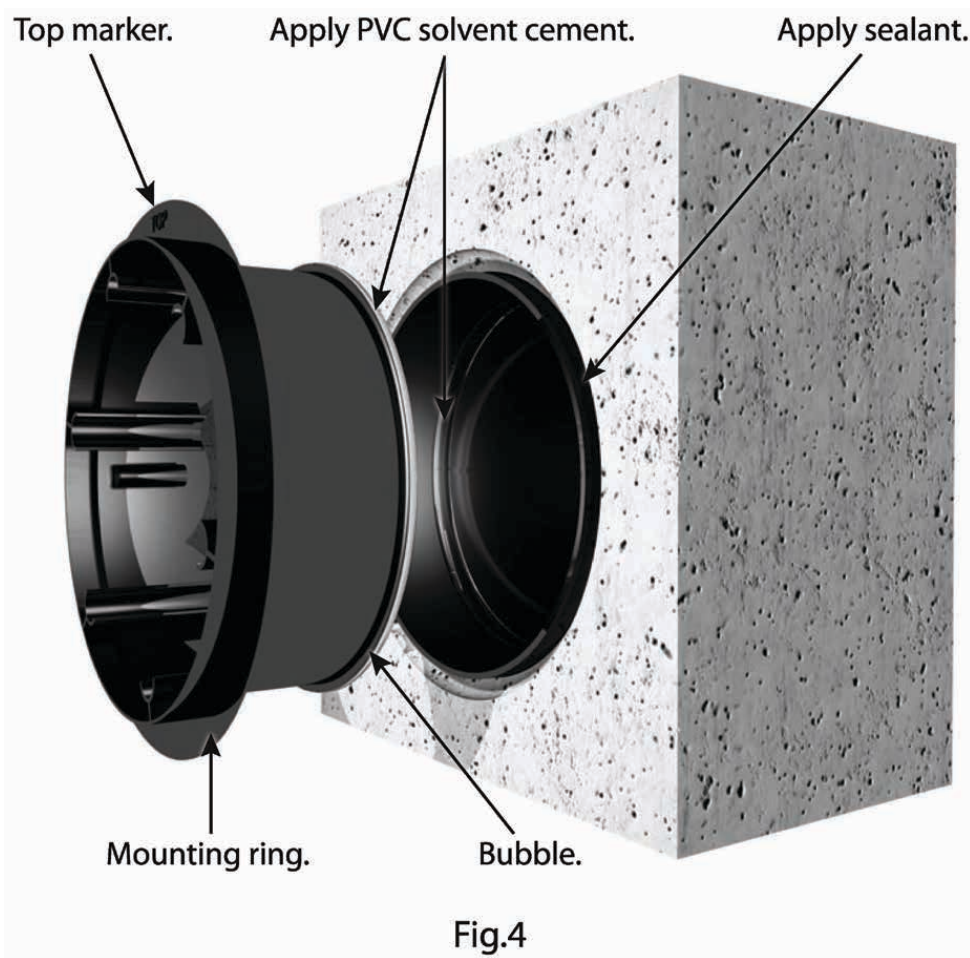
CAUTION: Do not trim more than 20mm from the front of the niche or there may not be sufficient depth remaining for inserting the light.

6

MOUNTING RING PREPARATION

Apply PVC solvent cement to bubble at rear of the mounting ring, and also to the inside of the niche where the mounting ring is likely to finish. (approximately 40mm inside niche) (Fig. 4)

WARNING: Ensure solvent cement is suitable for ABS plastics.



7

ASSEMBLE MOUNTING RING INTO NICHE

Slide mounting ring into niche, with 'TOP' arrow up; insert until flush against pool wall.

CAUTION: Ensure that the mounting ring is parallel with pool wall as the interior pool surface must be level with this ring.

8

APPLY POOL FINISH

Pebble or tile interior pool surface, level with raised edge of mounting ring.

CAUTION: Interior surface must not finish higher than raised edge of mounting ring, or the light will not be able to be mounted.

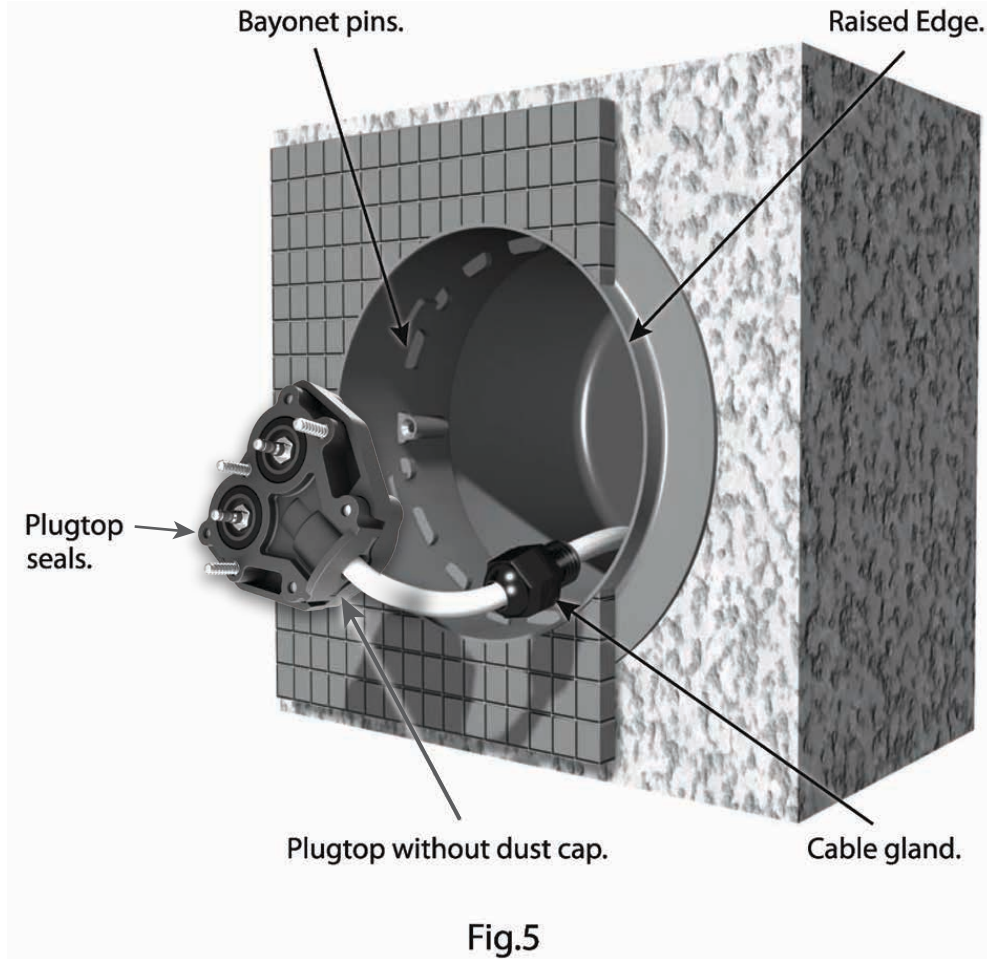


Fig.5

9

INSERT CABLING

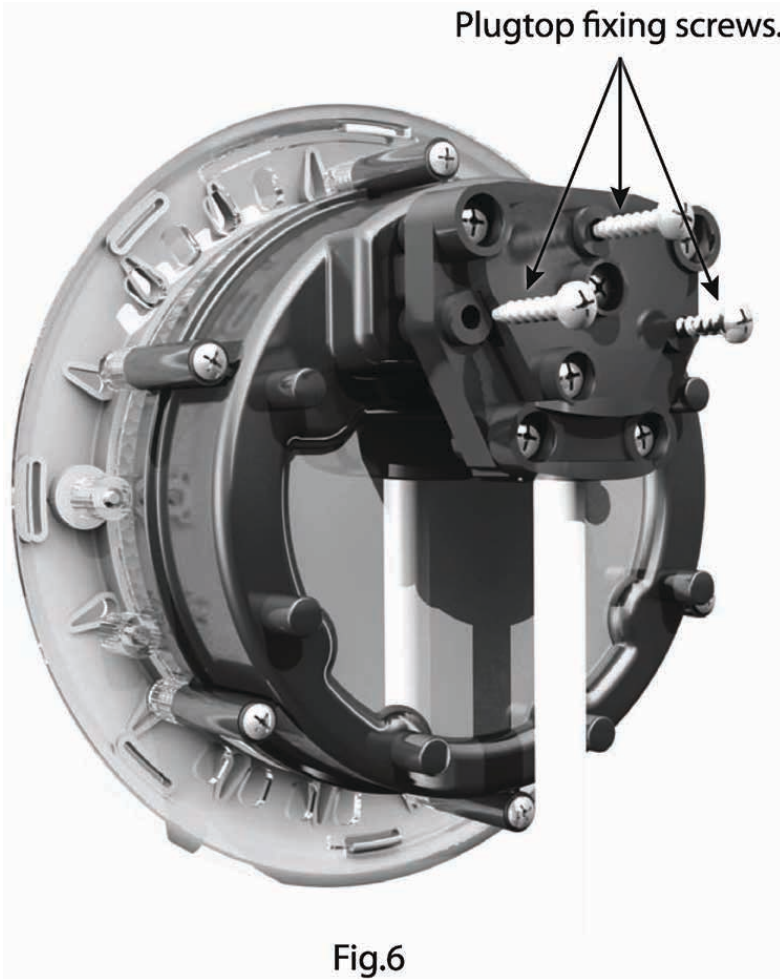
Using the draw wire, feed the cable from the pool interior, through the niche and conduit to transformer. Ensure that approximately 800mm of cable extends from the niche to the light, in order to allow the light to be lifted from the water to the pool surround for servicing. Insert and tighten the cable gland.

CAUTION: Do not install the light until after the pool has been acid washed. (Fig. 5)

10

ASSEMBLE PLUG TO LIGHT HOUSING

Remove the dust cover from both the light housing and the plugtop. Ensure both plug top seals are present and located within their grooves. Attach plug top to light housing using the three fixing screws provided and tighten firmly by hand. (Fig. 6)



11

ASSEMBLE LIGHT INTO NICHE

Coil the remaining cable into the niche (not around the light body) in a clockwise rotation. Continue turning in a clockwise direction until all cable is inside the niche and the plug top on the light is at the 12 o'clock position. Gently push the light back into the niche.

Insert the two fixing screws provided and lightly tighten.

WARNING: Ensure that the light cannot be turned on until it is fully submerged in water.

INSTALLATION (FIBREGLASS POOLS)

1 CUT HOLE IN POOL WALL

Cut a circular hole of 151mm diameter in a flat surface approximately 300mm below the water line. Check that the niche will fit through the previously cut hole without any interference. (Fig. 1)

Remove niche from the hole before continuing to step 2.

CAUTION: Niche should be installed no deeper than 400mm below the finished pool surround, to allow for servicing.

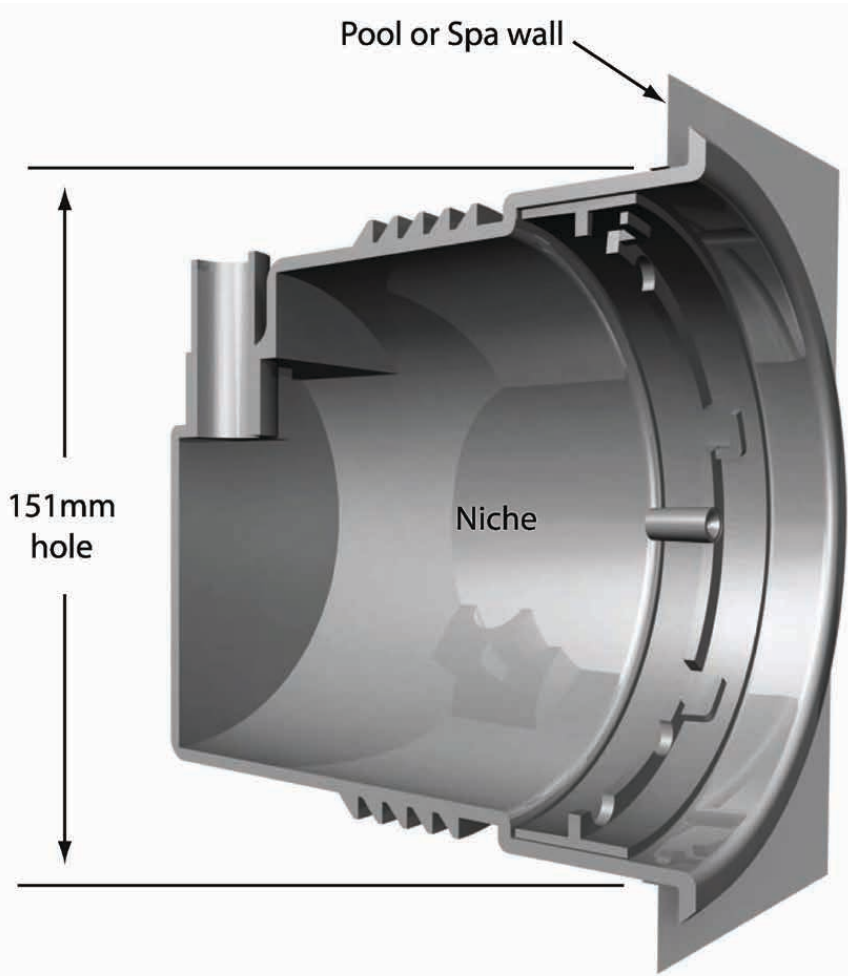


Fig.1

2

ASSEMBLE NICHE TO POOL WALL

Run a small bead of silicone around the inner edge of the niche front lip before fitting the niche through the hole, ensuring that the conduit entry is at the top position of the niche. Apply a second heavy full circle bead of silicone around the niche on the outside of the pool or spa wall. (Fig. 2)

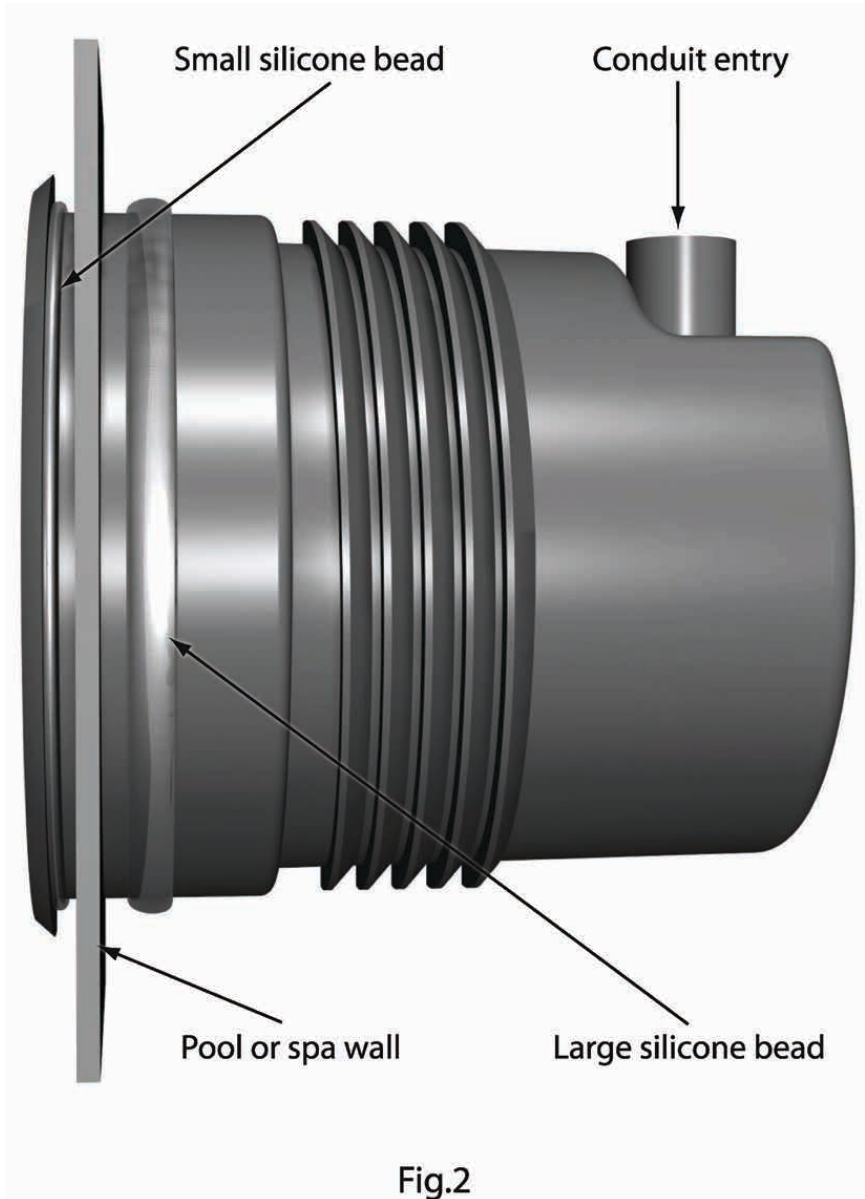
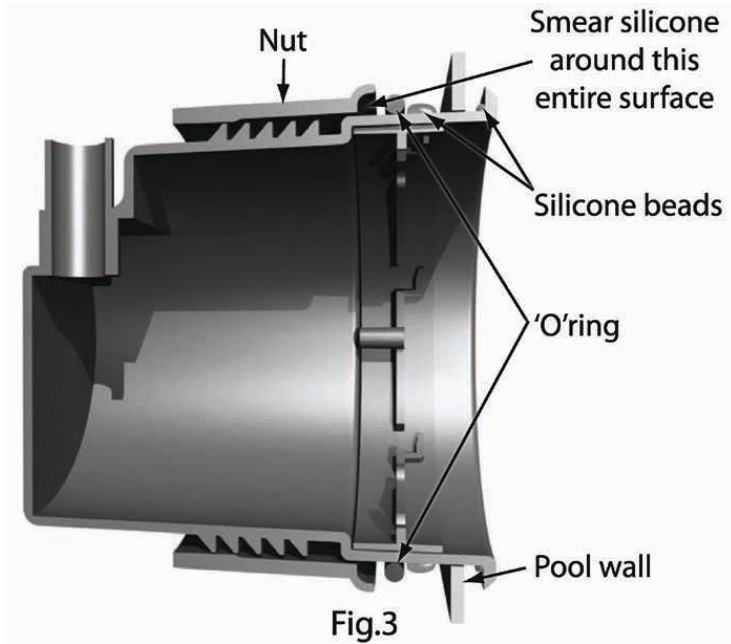


Fig.2

3

FIT COMPRESSION RING

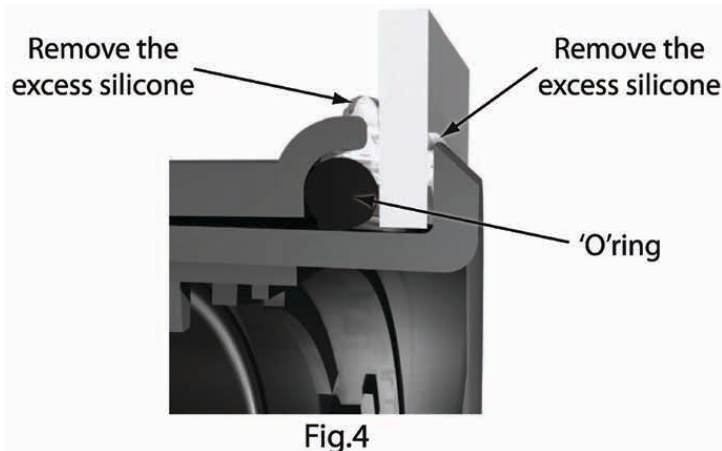
Lightly smear silicone in 'o' ring recess in the nut. Fit 'o' ring then the nut over the niche, allowing 'o' ring to push the silicone bead against the pool or spa wall. Tighten the nut firmly by hand only. (Fig. 3 & Fig. 4)



4

CLEAN-UP SILICONE AND ALLOW TO CURE

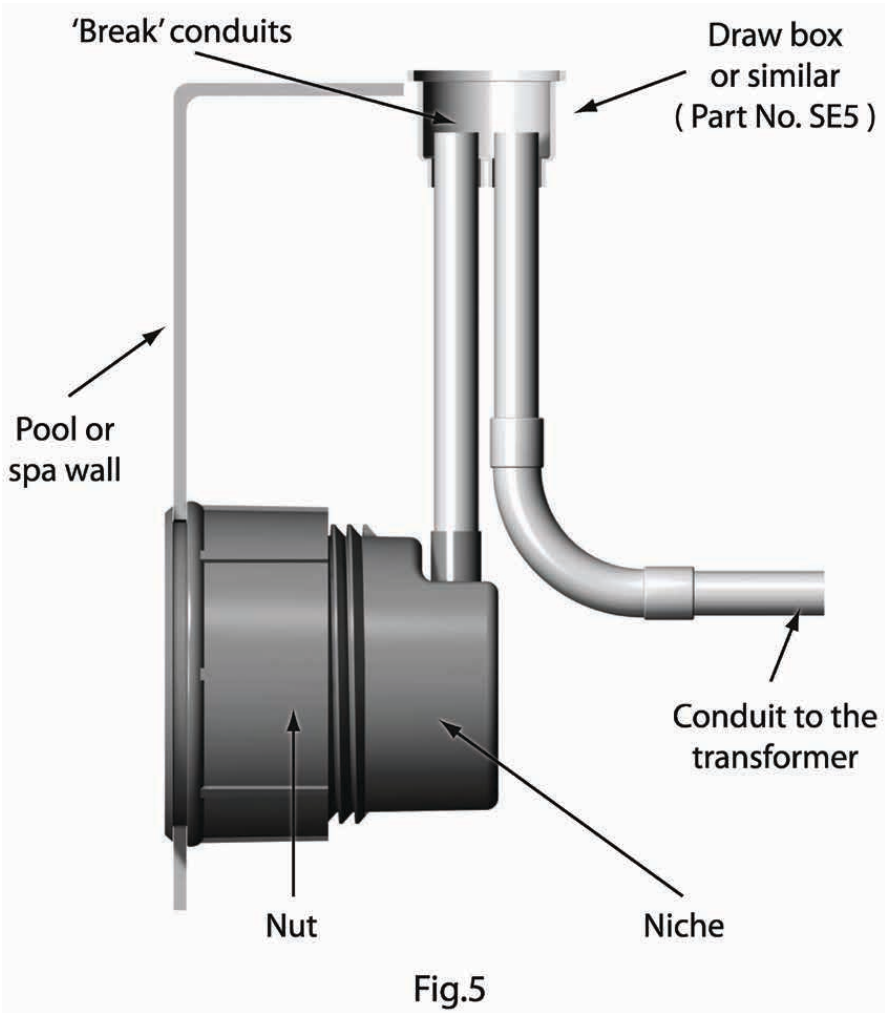
Clean excess silicone from front and rear of outer niche and allow it to cure (approx. 12 hours) before fitting the electrical conduit. (Fig. 4)



5

INSERT AND GLUE 25mm CONDUIT INTO NICHE

Glue a length of 25mm electrical conduit into the top of the niche using PVC solvent cement. The conduit should extend to above the water level of the pool.



6

INSTALL SECONDARY CONDUIT

Attach a second conduit to return below ground level and to the location of the transformer. Conduit should contain a draw wire and be covered with a draw box. (Part no. SE5) or similar, to allow access. (Fig. 5)

Ensure that conduits are 'broken' before returning below water level, to stop siphoning of water from the pool or spa.



NOTE: If your light is pre-assembled, please skip Steps 7, 8 & 9

7

INSERT CABLING

Using draw wire, feed electrical cable from the pool interior, through the niche and conduit, to the transformer. Ensure that approximately 800mm cable extends from the niche to the light before tightening the gland, in order to allow the light to be lifted to the pool surround for servicing.

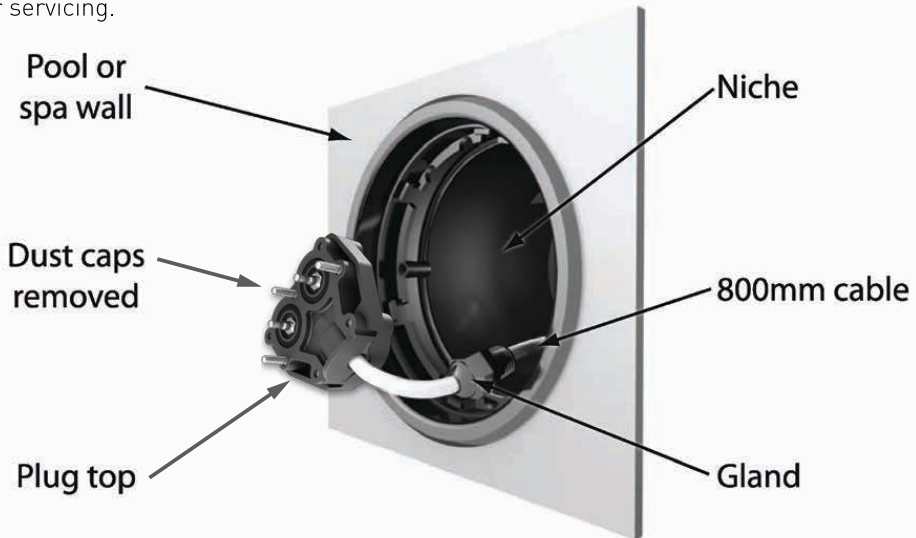


Fig.6

8

ASSEMBLE PLUG TO LIGHT HOUSING

Remove the dust covers from the plug top and the light housing. Attach the plug top to the light using the three fixing screws provided. Tighten firmly. (Fig. 7)

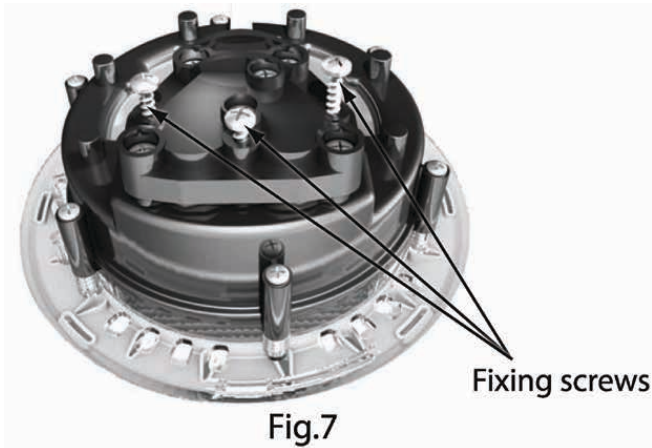


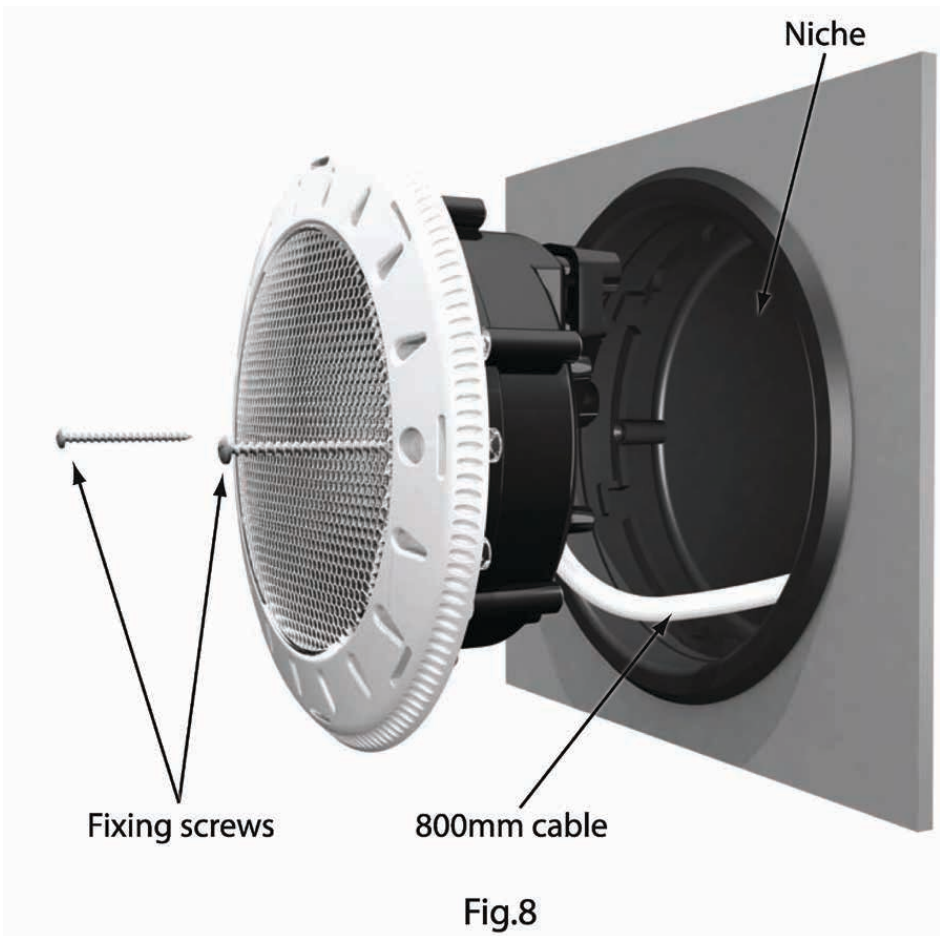
Fig.7

9

ASSEMBLE LIGHT INTO NICHE

Coil the remaining cable into the niche (not around the light body) in a clockwise rotation. Continue turning in a clockwise direction until all cable is inside the niche and the plug top on the light is at the 12 o'clock position. Gently push the light back into the niche. Insert the two fixing screws provided and lightly tighten.

WARNING: Ensure that the light cannot be turned on until it is fully submerged in water.



MULTI PLUS SETUP

READ THIS FIRST

The MULTI-PLUS light has 5 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' procedure.

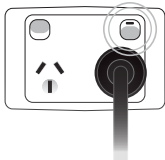
NOTE: Some older pool controllers may not support these models. Please contact the controller manufacturer for upgrade assistance.

STEP 2 - LIGHT SETUP

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

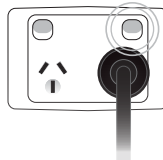
NOTE: This step can either be performed via a wall switch OR via the controller panel/Mobile App.

1. TURN LIGHTS ON



WAIT 1 SECOND

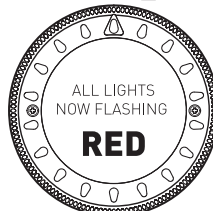
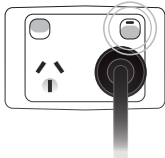
TURN LIGHTS OFF



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

[REPEAT
x 3]

2. TURN LIGHTS ON



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

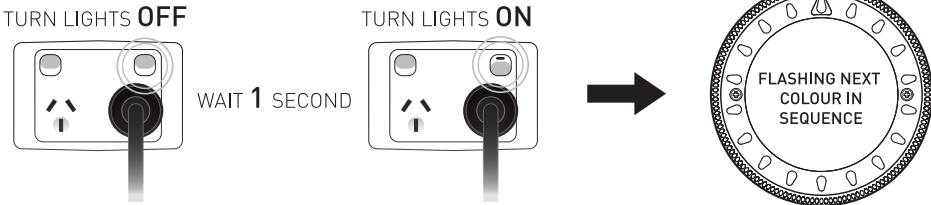


MULTI PLUS SETUP cont.

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.



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* (wall switch)	-
6. YELLOW	Hayward Omnilogic	Universal Colorlogic
7. PINK	P-TYPE Mode* (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

*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

*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.

*P-TYPE Mode:

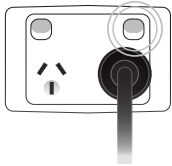
This mode allows the MULTI PLUS light to operate in the RGB P-Type Colour mode. This mode should only be used when operating a MULTI PLUS light in conjunction with an existing Spa Electrics P-Type light. For more information please contact Spa Electrics.

MULTI PLUS SETUP cont.

STEP 4 - SAVING OPERATING MODE

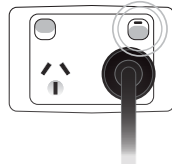
Once the desired operating mode is selected follow these steps to save the selection.

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 pg. 18 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 (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 pg. 18 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.



NOTE

PLEASE STORE THIS
MANUAL IN A SAFE PLACE
FOR FUTURE REFERENCE



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