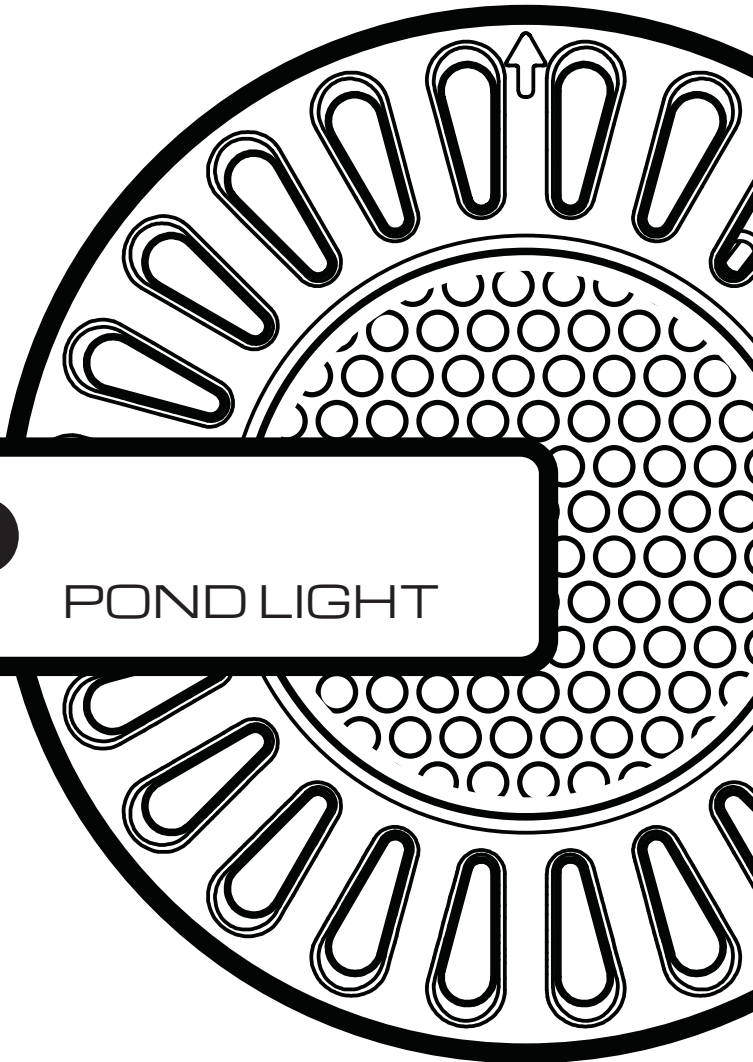




atom
emSERIES



EMP

POND LIGHT

HIGH PERFORMANCE POND LIGHT

**INSTALLATION &
OWNER'S MANUAL**

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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

- **The EM-Series light MUST be fully submerged in water at all times of operation.**
- Spa Electrics recommends all cabling between the light and transformer is protected by conduit.
- EM-Series cables can be shortened to suit individual installation requirements. 10M of cable is supplied as standard. 20M, 30M and 50M lengths are available on order from Spa Electrics or your distributor.
- The standard 10M **cable** can be extended to a maximum of 20M - Distances longer than 20M will require larger cable gauge. For more information, please contact Spa Electrics.
- Ensure that your lighting system is installed by a suitably qualified trades person (i.e. an electrician) in accordance with the most current edition and/or amendment of AS/NZS 3000:2007 electrical standard.
- For safe and proper installation - Ensure that only those parts supplied with the system are used.
- Maximum installation depth is 400mm below the waterline to allow for servicing.
- All lights should be mounted in a location that is easily accessible without the need for entering or lowering the water.
- Enough free cable must be left in the floor of the pond/water feature to allow the light to be raised above the waterline.

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/Pond chemicals & pH levels: Due to the corrosive nature of unbalanced pool/pond chemicals, Spa Electrics strongly recommend that your pool/pond water is balanced prior to installing your EM series 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/pond fittings, including stainless steel fittings.
- Please note: Lights or components found to have excessive chemical damage will not be covered under our manufacturers warranty policy.

This light contains no user serviceable parts; opening the light will void the product warranty.



AQUATIC LIFE

→ The EMP Series pond Lights produce very bright colours at specific wavelengths, specialist advice should be sort before use with aquatic life.

Wavelengths used:

BLUE: 465nm **GREEN:** 560nm **RED:** 620nm **WHITE 4000k:** 580nm (dominant)

→ Based on in-house testing it has been noted that the EMP Series pond light produces a 1°C temperature rise in 45l of water @ 25°C. This temperature rise reduces with the increase in water volume, however specialist advice should be sort before using this product for aquatic life sensitive to temperature rise.

TOOLS REQUIRED

FOR ALL INSTALLATIONS

- No. 2 Phillips screwdriver
- Power Drill (To drill holes for anchors)
- Flat-blade screw driver (for EM-light removal)

FOR CONCRETE INSTALLATION

- 4.5 - 5mm Masonry drill bit

FOR FIBREGLASS INSTALLATION

- Natural RTV Silicon
- 3mm drill bit

PRODUCT SUPPORT & INFORMATION

Phone: +61 3 9793 2299 (business hours)

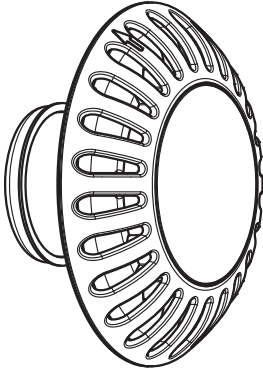
Email: sales@spaelectrics.com.au (SALES enquiries)

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

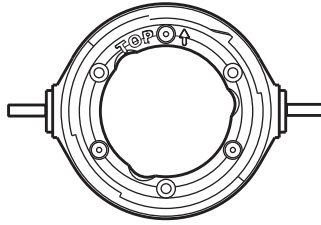
Web: www.spaelectrics.com.au

INCLUDED PARTS

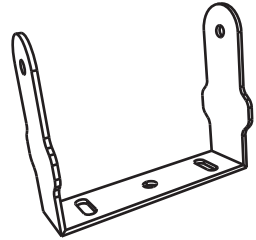
SINGLE LIGHT KIT



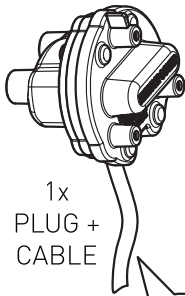
1x
LIGHT



1 X MOUNTING PLATE



1 X WALL BRACKET



1x
PLUG +
CABLE

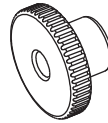
10m
0.5mm²



4 x
MOUNTING
SCREWS



4 x
SCREW
ANCHORS



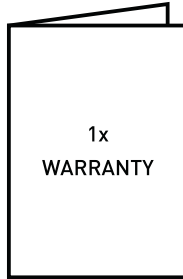
2 x
THUMB-
WHEELS



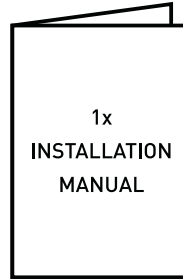
2 x
HARD
WASHERS



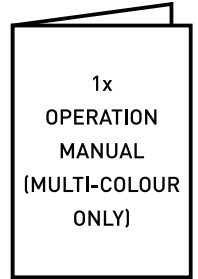
2 x
RUBBER
WASHERS



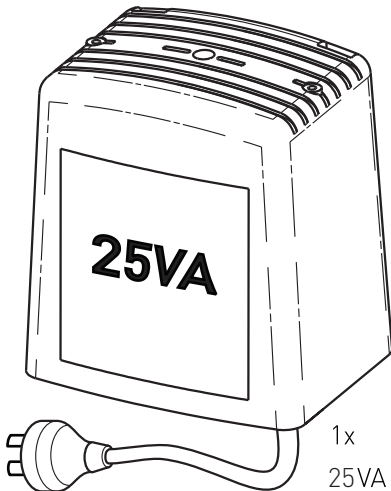
1x
WARRANTY



1x
INSTALLATION
MANUAL

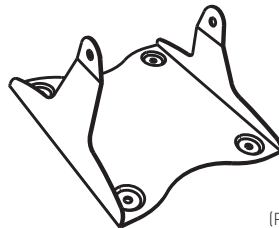


1x
OPERATION
MANUAL
(MULTI-COLOUR
ONLY)



1x
25VA TRANSFORMER

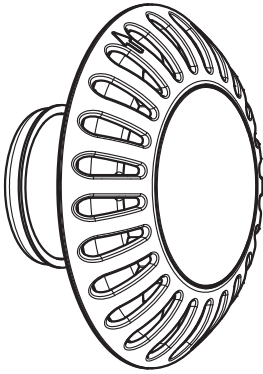
SOLD SEPERATELY



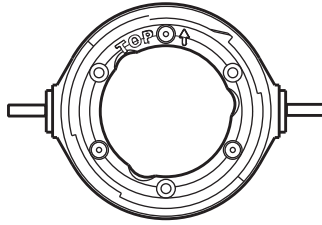
1 X FLOOR
BRACKET
(POND BASE FOOT)

INCLUDED PARTS

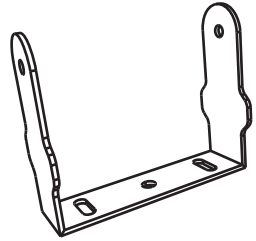
DUAL LIGHT KIT



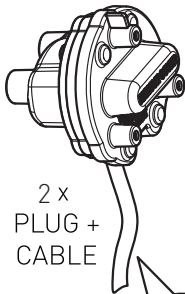
2x
LIGHT



2 X MOUNTING PLATE



2 X WALL BRACKET



2x
PLUG +
CABLE

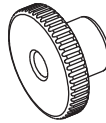
10m
0.5mm²



8 x
MOUNTING
SCREWS



8 x
SCREW
ANCHORS



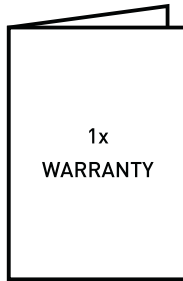
4 x
THUMB-
WHEELS



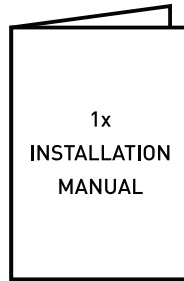
4 x
HARD
WASHERS



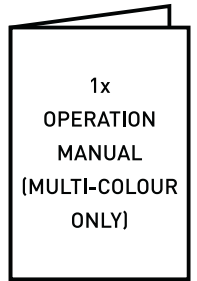
4 x
RUBBER
WASHERS



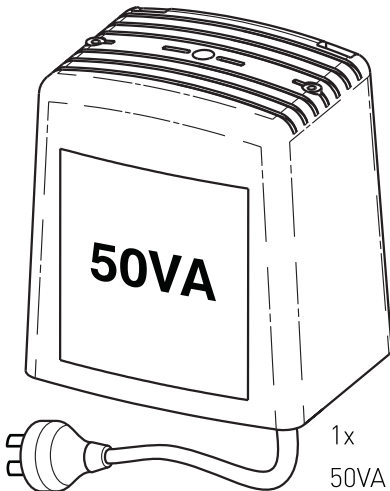
1x
WARRANTY



1x
INSTALLATION
MANUAL

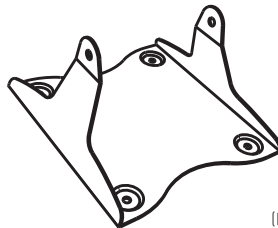


1x
OPERATION
MANUAL
(MULTI-COLOUR
ONLY)



1x
50VA TRANSFORMER

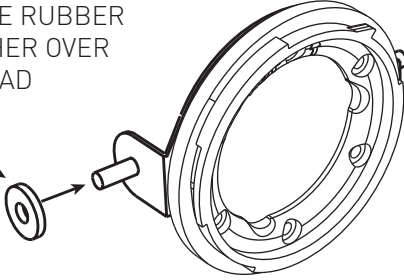
SOLD SEPERATELY



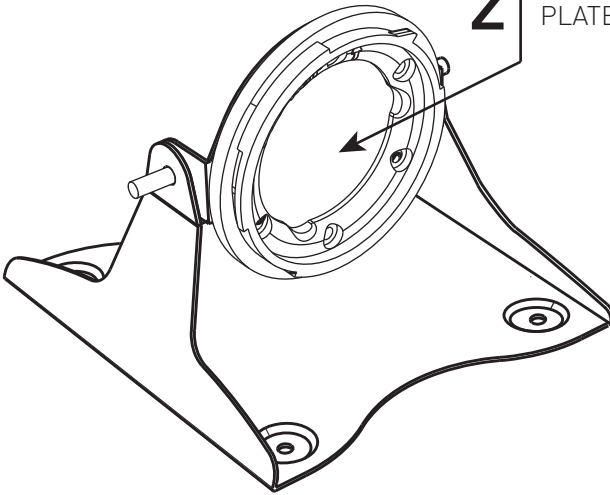
2 X FLOOR
BRACKET
(POND BASE FOOT)

ASSEMBLY

1 PLACE RUBBER WASHER OVER THREAD



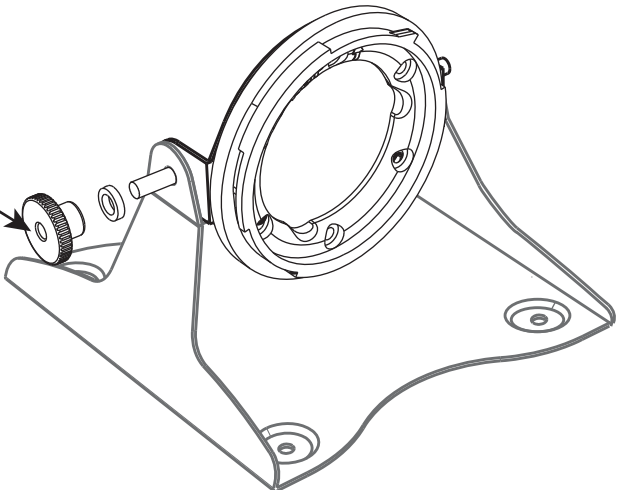
2 INSERT MOUNTING PLATE INTO BASE



NOTE
GENTLY PRY BASE ARMS APART TO FIT MOUNTING PLATE

PLACE HARD WASHER OVER THREAD & TIGHTEN THUMB-WHEEL

3



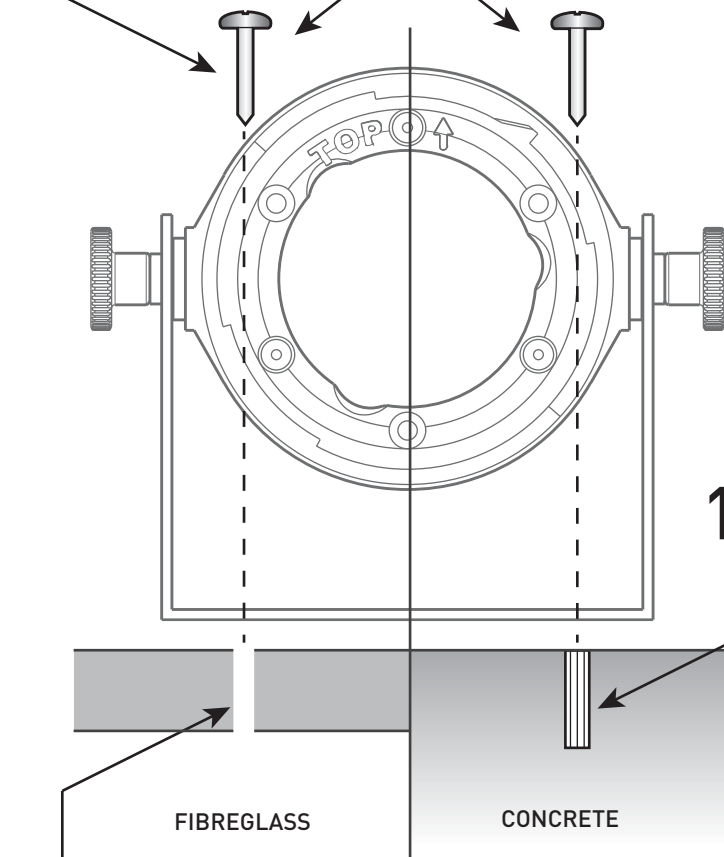
INSTALLATION

MOUNTING WALL BRACKET

1c APPLY RTV SILICON TO SCREW THREAD.

2 FASTEN BRACKET TO FLOOR USING 2 X MOUNTING SCREWS PROVIDED

NOTE
TIGHTEN SCREWS BY HAND ONLY



1a DRILL CONCRETE WALL USING 4.5-5mm MASONRY BIT AND INSERT 2 x SCREW ANCHORS.

1b DRILL FIBREGLASS WALL USING 3mm DRILL BIT.

INSTALLATION

MOUNTING FLOOR BRACKET

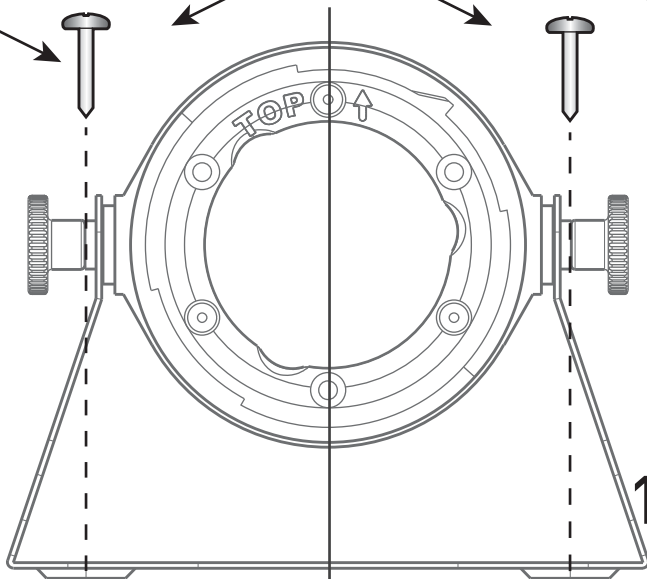
1c APPLY RTV SILICON TO SCREW THREAD.

2 FASTEN BRACKET TO FLOOR USING 4 X MOUNTING SCREWS PROVIDED



NOTE

TIGHTEN SCREWS BY HAND ONLY



1a

DRILL CONCRETE WALL USING 4.5-5mm MASONRY BIT AND INSERT 2 x SCREW ANCHORS.

FIBREGLASS

CONCRETE

1b DRILL FIBREGLASS WALL USING 3mm DRILL BIT.

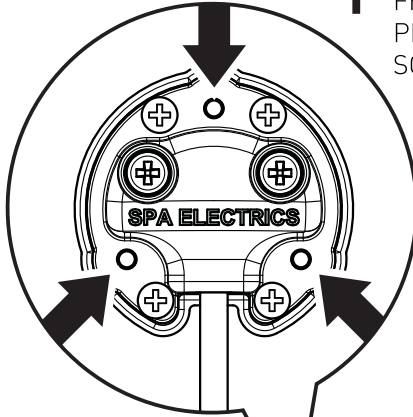
INSTALLATION

1

REMOVE PLUG DUST COVER

1

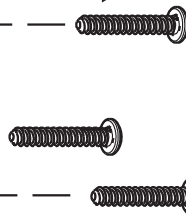
REMOVE DUST COVER FROM PLUG USING PHILLIPS-HEAD (NO.2) SCREW-DRIVER



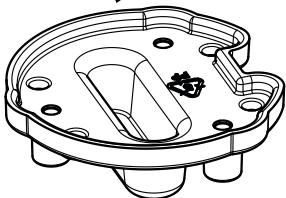
! NOTE

ENSURE SEAL IS SEATED FLAT IN PLUG BASE

2 →

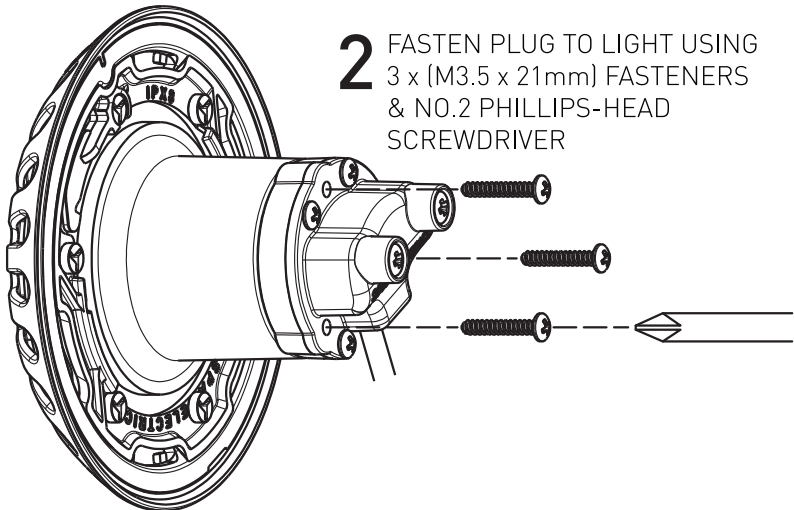
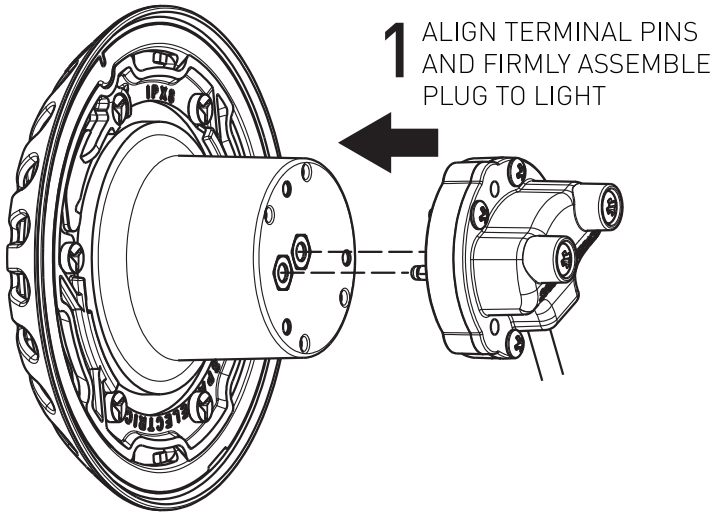


3



! NOTE

DO NOT REMOVE RED DUST COVER UNDERWATER

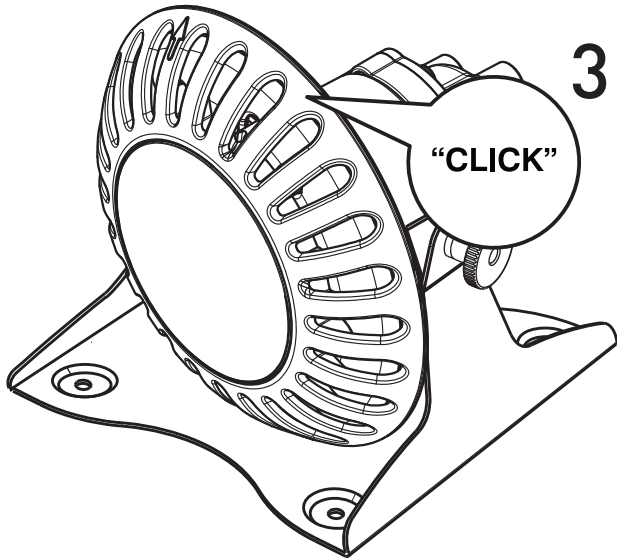
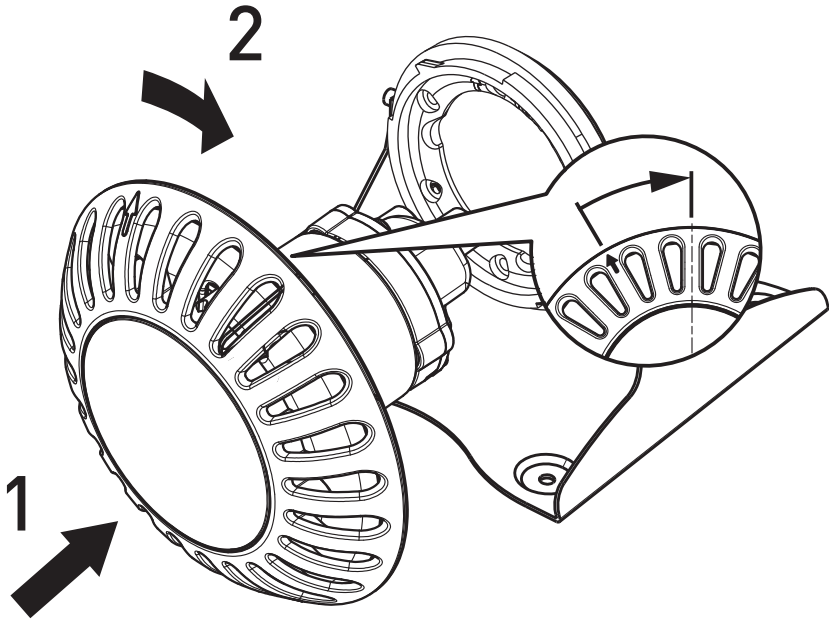


IMPORTANT NOTES

- 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**

3

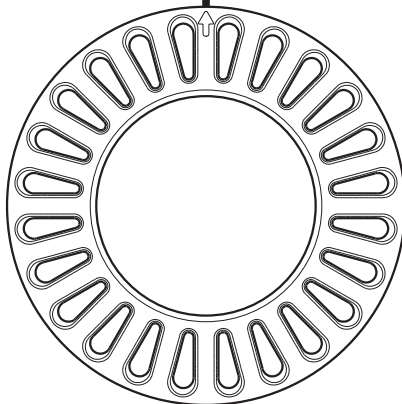
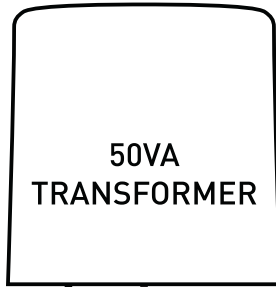
ATTACH LIGHT TO BRACKET



CONNECTIONS

HOW TO CONNECT A SINGLE EM-LIGHT

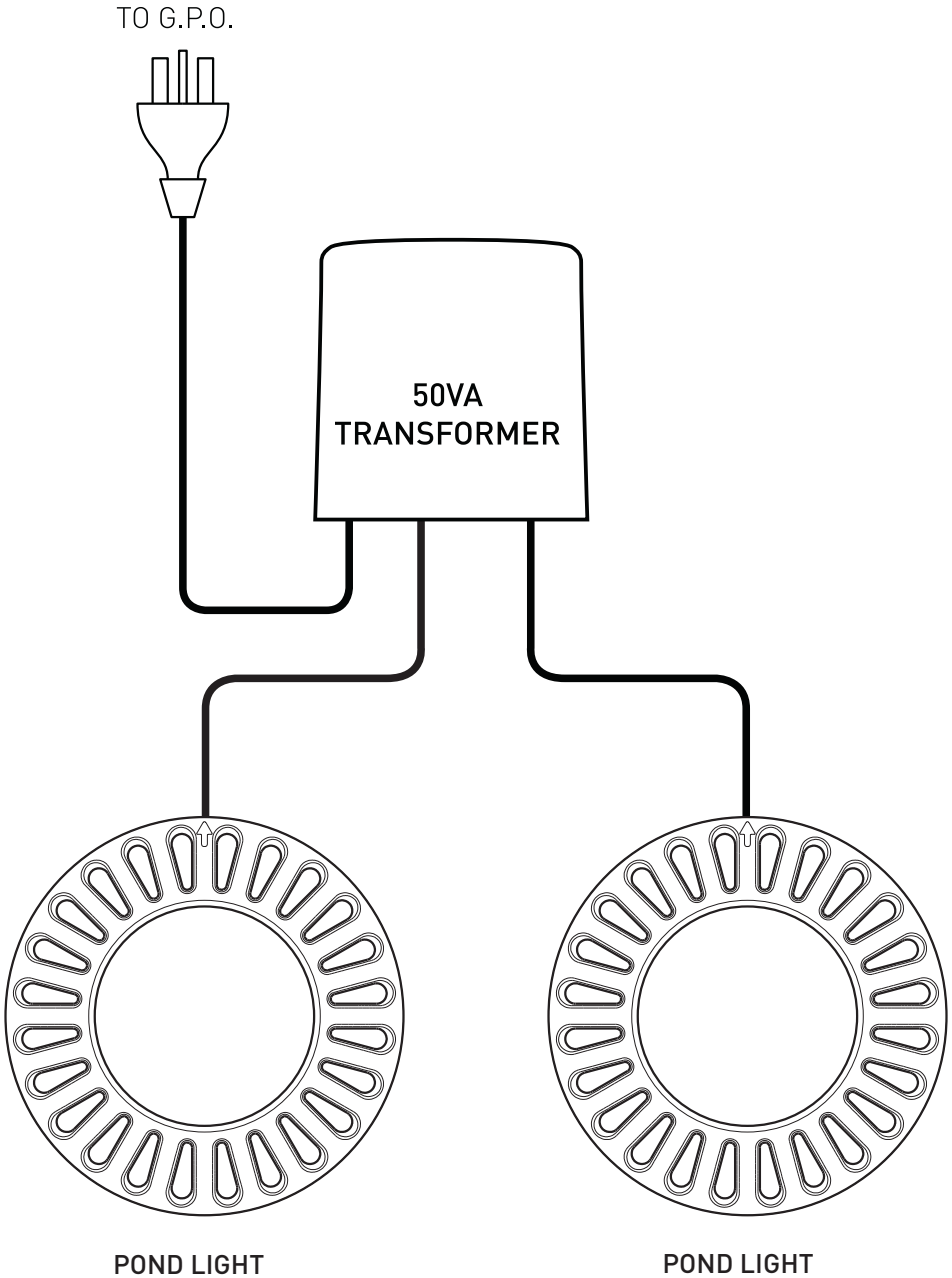
TO G.P.O.



POND LIGHT

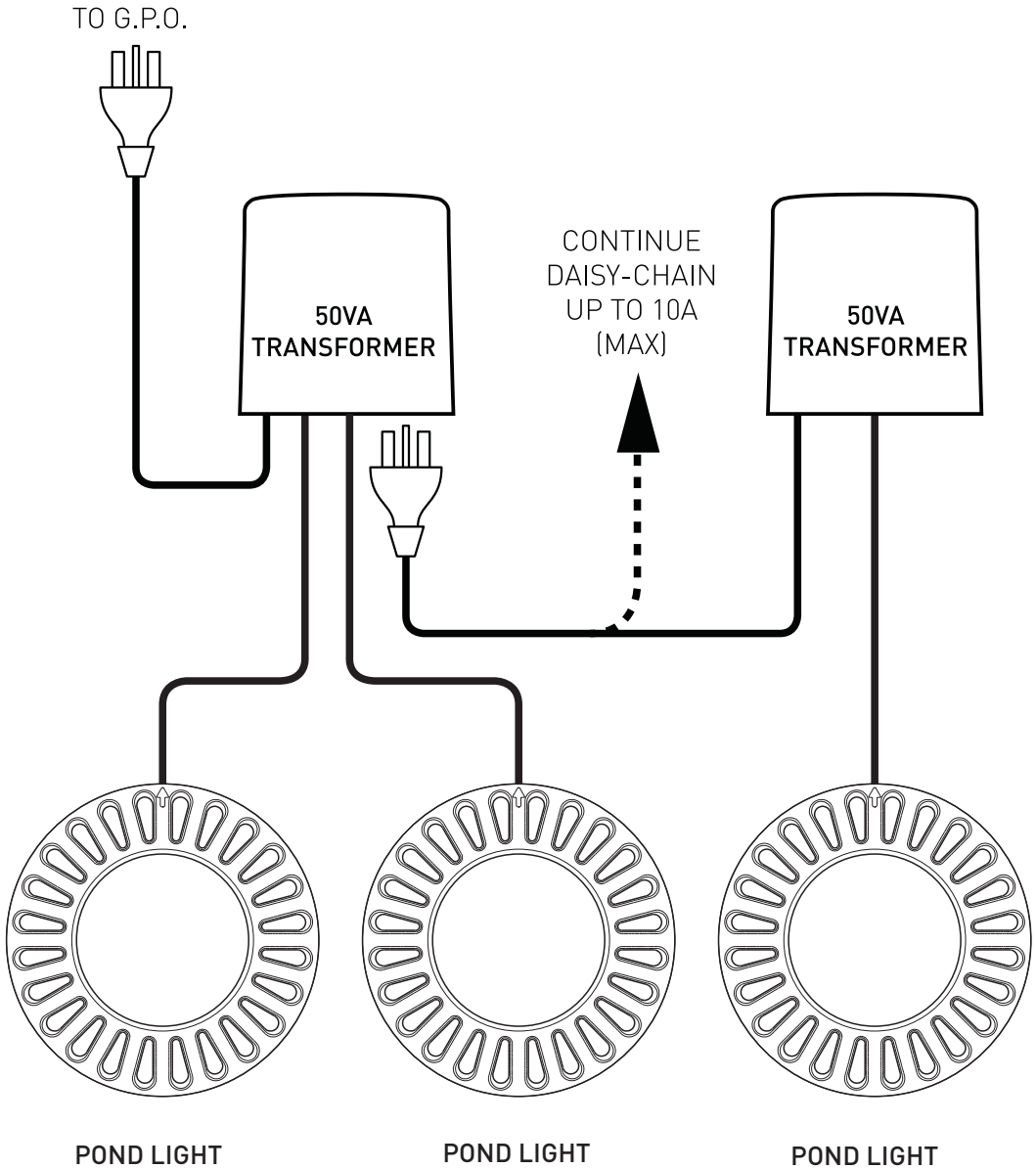
CONNECTIONS

HOW TO CONNECT MULTIPLE EM-LIGHTS



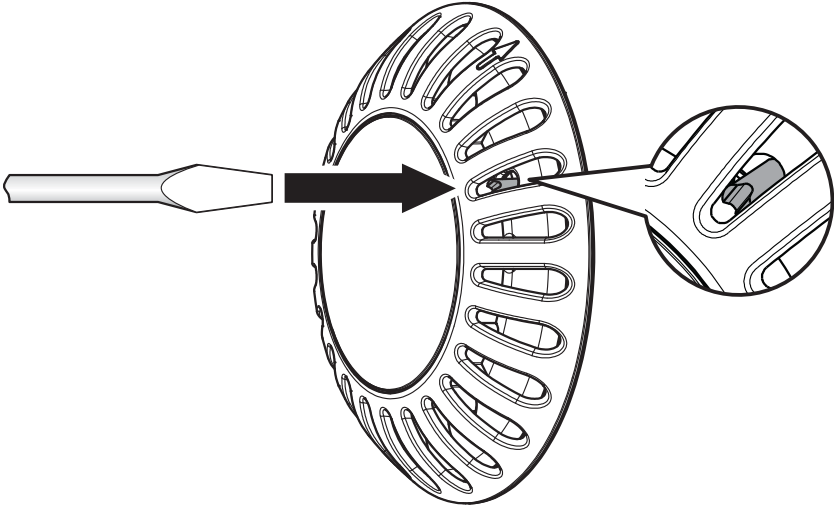
CONNECTIONS

HOW TO CONNECT MULTIPLE EM-LIGHTS

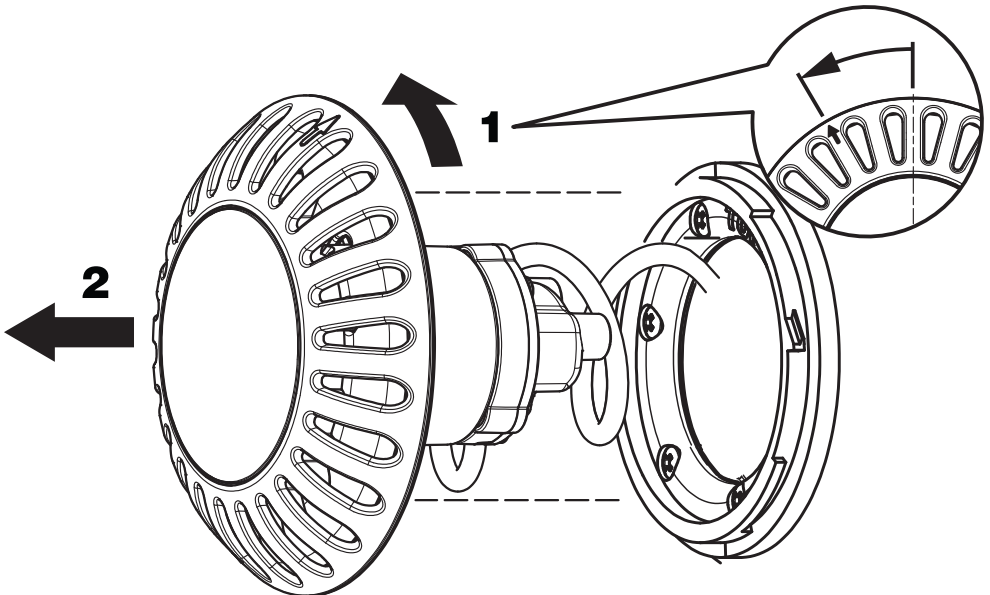


EM-LIGHT REMOVAL

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



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



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 obscured
Light not operating (1)	Faulty connection to transformer	Ensure cable correctly connected to transformer terminals as per instructions
Light not operating (2)	Mains power not connected	Check transformer is plugged in to GPO and switched on
Light not operating (3)	Damaged cable	Replace cable
Light not operating (4)	Transformer not working	Check fuses & test transformer using multimeter under load (ie. 20W 12V)
Light not operating (5)	Damage caused by high voltage and/or incorrect power supply.	Return product to 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 distributor or Spa Electrics.

YOUR INSTALLATION

PLEASE RECORD THE DETAILS OF YOUR INSTALLATION FOR FUTURE REFERENCE

DATE OF PURCHASE:

YOUR EM-LIGHT(S) WAS SUPPLIED BY:

DATE OF INSTALLATION:

INSTALLED BY:

EM-LIGHT(S) INSTALLED BY [FULL NAME]:

NOTES



NOTE

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



www.spaelectrics.com.au

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20130307