HAYWARD®

SERIES CL100/110
SERIES CL200/220
by HAYWARD®
AUTOMATIC CHLORINE FEEDERS

Owner's Manual

IMPORTANT SAFETY INSTRUCTIONS

Basic safety precautions should always be followed, including the following: Failure to follow instructions can cause severe injury and/or death.

⚠ This is the safety-alert symbol. When you see this symbol on your equipment or in this manual, look for one of the following signal words and be alert to the potential for personal injury.

⚠ **WARNING** warns about hazards that **could** cause serious personal injury, death or major property damage and if ignored presents a potential hazard.

⚠ **CAUTION** warns about hazards that **will** or **can** cause minor or moderate personal injury and/or property damage and if ignored presents a potential hazard. It can also make consumers aware of actions that are unpredictable and unsafe.

⚠ **DANGER** indicates an imminently hazardous situation which, if not avoided, **will** result in death, serious injury, or major property damage.

The **NOTICE** label indicates special instructions that are important but not related to hazards.

Hayward Pool Products
620 Division Street, Elizabeth, NJ 07207
Phone: (908) 351.5400
www.haywardpool.com

⚠ WARNING - Read and follow all instructions in this owner's manual and on the equipment. Failure to follow instructions can cause severe injury and/or death.

⚠ WARNING – Suction Entrapment Hazard.

Suction in suction outlets and/or suction outlet covers which are, damaged, broken, cracked, missing, or unsecured can cause severe injury and/or death due to the following entrapment hazards:

Hair Entrapment- Hair can become entangled in suction outlet cover.

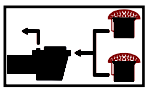
Limb Entrapment- A limb inserted into an opening of a suction outlet sump or suction outlet cover that is damaged, broken, cracked, missing, or not securely attached can result in a mechanical bind or swelling of the limb.

Body Suction Entrapment- A negative pressure applied to a large portion of the body or limbs can result in an entrapment.

Evisceration/ Disembowelment - A negative pressure applied directly to the intestines through an unprotected suction outlet sump or suction outlet cover which is, damaged, broken, cracked, missing, or unsecured can result in evisceration/ disembowelment.

Mechanical Entrapment- There is potential for jewelry, swimsuit, hair decorations, finger, toe or knuckle to be caught in an opening of a suction outlet cover resulting in mechanical entrapment.

⚠ WARNING - To Reduce the risk of Entrapment Hazards:



- When outlets are small enough to be blocked by a person, a minimum of two functioning suction outlets per pump must be installed. Suction outlets in the same plane (i.e. floor or wall), must be installed a minimum of three feet (3') [1 meter] apart, as measured from near point to near point.
- Dual suction fittings shall be placed in such locations and distances to avoid "dual blockage" by a user.
- Dual suction fittings shall not be located on seating areas or on the backrest for such seating areas.
- The maximum system flow rate shall not exceed the flow rating of as listed on Table 1.
- Never use Pool or Spa if any suction outlet component is damaged, broken, cracked, missing, or not securely attached.
- Replace damaged, broken, cracked, missing, or not securely attached suction outlet components immediately.
- In addition two or more suction outlets per pump installed in accordance with latest ASME, APSP Standards and CPSC guidelines, follow all National, State, and Local codes applicable.
- Installation of a vacuum release or vent system, which relieves entrapping suction, is recommended.

⚠ WARNING – Failure to remove pressure test plugs and/or plugs used in winterization of the pool/spa from the suction outlets can result in an increase potential for suction entrapment as described above.

⚠ WARNING – Failure to keep suction outlet components clear of debris, such as leaves, dirt, hair, paper and other material can result in an increase potential for suction entrapment as described above.

⚠ WARNING – Suction outlet components have a finite life, the cover/grate should be inspected frequently and replaced at least every ten years or if found to be damaged, broken, cracked, missing, or not securely attached.

⚠ CAUTION – Components such as the filtration system, pumps and heater must be positioned so as to prevent their being used as means of access to the pool by young children.

⚠ WARNING – Never operate or test the circulation system at more than 50 PSI.

⚠ WARNING – Never change the filter control valve position while the pump is running.

⚠ WARNING – To reduce risk of injury, do not permit children to use or climb on this product. Closely supervise children at all times. Components such as the filtration system, pumps, and heaters must be positioned to prevent children from using them as a means of access to the pool.

⚠ WARNING – Hazardous Pressure. Pool and spa water circulation systems operate under hazardous pressure during start up, normal operation, and after pump shut off. Stand clear of circulation system equipment during pump start up. Failure to follow safety and operation instructions could result in violent separation of the pump housing and cover, and/or filter housing and clamp due to pressure in the system, which could cause property damage, severe personal injury, or death. Before servicing pool and spa water circulation system, all system and pump controls must be in off position and filter manual air relief valve must be in open position. Before starting system pump, all system valves must be set in a position to allow system water to return back to the pool. Do not change filter control valve position while system pump is running. Before starting system pump, fully open filter manual air relief valve. Do not close filter manual air relief valve until a steady stream of water (not air or air and water) is discharged.

⚠ WARNING – Separation Hazard. Failure to follow safety and operation instructions could result in violent separation of pump and/or filter components. Strainer cover must be properly secured to pump housing with strainer cover lock ring. Before servicing pool and spa circulation system, filters manual air relief valve must be in open position. Do not operate pool and spa circulation system if a system component is not assembled properly, damaged, or missing. Do not operate pool and spa circulation system unless filter manual air relief valve body is in locked position in filter upper body.

⚠ WARNING – **Risk of Electric Shock.** All electrical wiring MUST be in conformance with applicable local codes, regulations, and the National Electric Code (NEC). Hazardous voltage can shock, burn, and cause death or serious property damage. To reduce the risk of electric shock, do NOT use an extension cord to connect unit to electric supply. Provide a properly located electrical receptacle. Before working on any electrical equipment, turn off power supply to the equipment.

⚠ WARNING – To reduce the risk of electric shock replace damaged wiring immediately. Locate conduit to prevent abuse from lawn mowers, hedge trimmers and other equipment.

⚠ WARNING – Electrical ground all electrical equipment before connecting to electrical power supply. Failure to ground all electrical equipment can cause serious or fatal electrical shock hazard.

⚠ WARNING – Do NOT ground to a gas supply line.

⚠ WARNING – To avoid dangerous or fatal electrical shock, turn OFF power to all electrical equipment before working on electrical connections.

⚠ WARNING – Failure to bond all electrical equipment to pool structure will increase risk for electrocution and could result in injury or death. To reduce the risk of electric shock, see installation instructions and consult a professional electrician on how to bond all electrical equipment. Also, contact a licensed electrician for information on local electrical codes for bonding requirements.

Notes to electrician: Use a solid copper conductor, size 8 or larger. Run a continuous wire from external bonding lug to reinforcing rod or mesh. Connect a No. 8 AWG (8.4 mm^2) [No. 6 AWG (13.3 mm^2) for Canada] solid copper bonding wire to the pressure wire connector provided on the electrical equipment and to all metal parts of swimming pool, spa, or hot tub, and metal piping (except gas piping), and conduit within 5 ft. (1.5 m) of inside walls of swimming pool, spa, or hot tub.
IMPORTANT - Reference NEC codes for all wiring standards including, but not limited to, grounding, bonding and other general wiring procedures.

⚠ WARNING – Risk of Electric Shock. Connect only to a branch circuit protected by a ground-fault circuit-interrupter (GFCI). Contact a qualified electrician if you cannot verify that the circuit is protected by a GFCI.

⚠ WARNING – Risk of Electric Shock . The electrical equipment must be connected only to a supply circuit that is protected by a ground-fault circuit-interrupter (GFCI). Such a GFCI should be provided by the installer and should be tested on a routine basis. To test the GFCI, push the test button. The GFCI should interrupt power. Push reset button. Power should be restored. If the GFCI fails to operate in this manner, the GFCI is defective. If the GFCI interrupts power to the electrical equipment without the test button being pushed, a ground current is flowing, indicating the possibility of an electrical shock. Do not use this electrical equipment. Disconnect the electrical equipment and have the problem corrected by a qualified service representative before using.

⚠ CAUTION – The pump is intended for use with permanently-installed pools and may be used with hot tubs and spas if so marked. Do not use with storable pools. A permanently-installed pool is constructed in or on the ground or in a building such that it cannot be readily disassembled for storage. A storable pool is constructed so that it is capable of being readily disassembled for storage and reassembled to its original integrity.

SAVE THESE INSTRUCTIONS

HAYWARD® Pool Products Limited Warranty

To original purchasers of this equipment, Hayward Pool Products, Inc. warrants its chemical feeders to be free from defects in materials and workmanship for a period of ONE (1) year from the date of purchase, when used in single family residential applications.

The limited warranty excludes damage from freezing, negligence, improper installation, improper use or care or any Acts of God. Parts that fail or become defective during the warranty period shall be repaired or replaced, at our option, within 90 days of the receipt of defective product, barring unforeseen delays, without charge.

Proof of purchase is required for warranty service. In the event proof of purchase is not available, the manufacturing date of the product will be the sole determination of the purchase date.

To obtain warranty service, please contact the place of purchase or the nearest Hayward Authorized Service Center. For assistance on your nearest Hayward Authorized Service Center please visit us at www.haywardpool.com.

Hayward shall not be responsible for cartage, removal, repair or installation labor or any other such costs incurred in obtaining warranty replacements or repair.

The Hayward Pool products warranty does not apply to components manufactured by others. For such products, the warranty established by the respective manufacturer will apply.

The express limited warranty above constitutes the entire warranty of Hayward Pool Products with respect to its' pool products and is in lieu of all other warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose. In no event shall Hayward Pool products be responsible for any consequential, special or incidental damages of any nature.

Some states do not allow a limitation on how long an implied warranty lasts, or the exclusion of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

Hayward Pool Products
620 Division Street
Elizabeth, NJ 07207

***Supersedes all previous publications.**

⚠ DANGER Mixing Chemicals or using fast dissolving chemicals may result in explosion and/or fire. To avoid death, serious injury or major property damage:

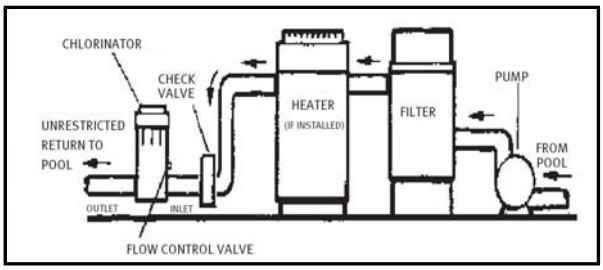
- ⚠ Use only slow dissolving Trichlor Chlorine tablets.
- ⚠ Never use fast dissolving Trichlor Chlorine tablets.
- ⚠ Never mix chemicals.
- ⚠ Never mix Trichlor Chlorine tablets with Calcium Hypochlorite, or with any other form of concentrated chlorine or other chemicals. Fire and/or explosion may result.
- ⚠ Never add any other types of chlorine, pH adjusters, shock treatments or algaecides through the skimmer. If these products must be used, they should be added directly into the pool water.
- ⚠ Never isolate chlorine feeder with valves or other devices.

⚠WARNING Wear eye and skin protection while maintaining or servicing this unit.

⚠WARNING Do not inhale fumes from the chlorinator or chemical container.

⚠WARNING Chlorine feeder may be under pressure. Use caution removing cover.

INSTALLATION:



CL–100/200

1. Your CL–100/200 automatic chlorine feeder is designed for permanent installation in the pool water return line.
2. Always install the chlorine feeder **after** the heater. If there is no heater, install **after** the filter.

⚠ CAUTION Damage to the heater or filter may result if concentrated chlorine is allowed to flow through them.

An in-line positive seal corrosion resistant check valve should be installed to reduce backflow of chlorine gas when the system is shut off. If the chlorine feeder is located below water level, you may want to install a check valve to prevent water backflow when operating/servicing the unit. The CL100 has this feature built in.

3. Both the CL–100/200 are furnished with 1 1/2" female threads. If PVC socket (solvent weld) connections are desired, order SP1500UNPAK2, socket flush union end connectors package. For threaded male and union connectors, order SP1500UNMPAK1 male union connector package (two required). Thread or socket adapters may also be used. Only use pipe sealants formulated and approved for use with ABS plastic connections (e.g. Teflon Tape, Permatex Form-A-Gasket No. 2, Laco Plasto-Joint stick). Do not over tighten pipe fitting. Proper fitting makeup is hand tight plus 1 to 1 1/2 turns maximum.

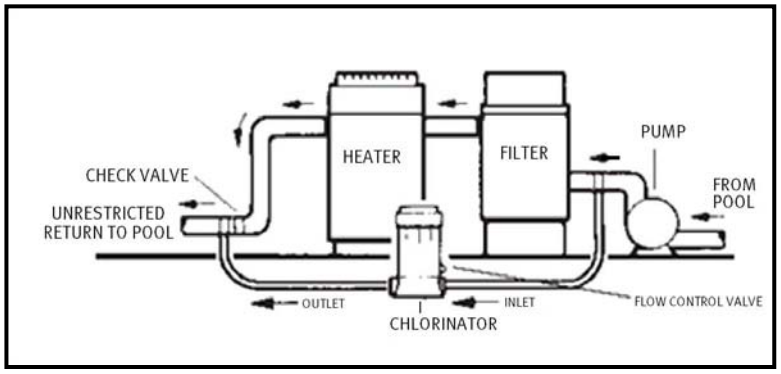
NOTICE: After starting up system, re-check all connections for leaks. Re-tighten as required.

⚠ CAUTION Never install chlorine feeder directly into copper plumbing as pipe damage may occur. If you have brass or bronze backwash valves, or other sensitive metallic components, consult your dealer for precautions or recommendations for your particular system.

CL–110/220

1. The inlet connection should be made in the piping after the pump and before the filter. Mark location on pipe.
2. The outlet connection should be made in the piping after the heater. If no heater is being used, connection should be made after the filter. Mark location on pipe.
3. Based on the locations from steps. No. 1 and No. 2, cut tubing to required lengths. Be sure ends are cut evenly and cleanly.
4. Wrap Teflon tape on larger male thread of Check Valve and thread it hand tight plus ½ turn into outlet port of chlorinator. DO NOT OVER TIGHTEN.

NOTICE: The Check Valve is marked with a "dot". It also has a ball that "clicks" when you shake it.



5. Wrap Teflon tape on larger male thread of the Inlet Fitting Adapter and thread it hand tight plus ½ turn into the inlet port of chlorinator. DO NOT OVER TIGHTEN.
6. To connect inlet tubing to chlorinator, place Compression Nut over inlet tubing and slide nut up about 2". Insert the tubing all the way into the Inlet Fitting Adapter socket and, holding tubing in place, tighten nut firmly by hand. Do not over tighten.
7. Connect outlet tubing to the Check Valve in the same manner as in step 6 above.

NOTICE: The saddle fittings and clamps are designed to fit the O.D. of 1 1/2" or 2" pipe.

8. Drill a 3/8" hole at location identified in Step 1 of Planning Installation section. Clean all burrs, shavings etc. Fit Saddle Fitting, with gasket, into oval shaped hole in clamp and insert fitting into the 3/8" hole. Secure clamp around Saddle Fitting, gasket and pipe and tighten securely to achieve a good seal. Do not over tighten clamp.
9. Drill a 3/8" hole at location identified in Step 2 of Installation section for CL-110/220. Install Saddle Fitting as in Step 8 above.
10. Connect inlet and outlet tubing to the Saddle Fittings with Compression Nuts as in Step 6 above. Do not over tighten.

⚠ CAUTION Never install chlorine feeder directly into copper plumbing as pipe damage may occur. If you have brass or bronze backwash valves, or other sensitive metallic components, consult your dealer for precautions or recommendations for your particular system.

NOTICE: After starting up system, re-check all connections for leaks. Re-tighten as required.

DIRECTIONS FOR USE:

GENERAL

Before using your chlorinator, your pool/spa water should be properly balanced and conditioned and should have a chlorine residual of approximately 1.0 to 1.5 ppm. Follow dealer and chemical manufacturer's directions and instructions.

Check chlorine residual daily and adjust the dial valve for more or less chlorine. The chlorine demand for pools and spas varies based on usage, temperature, sunlight, etc. Initially, you'll have to experiment to determine the proper amount of chlorine and the correct valve setting required for your pool and filter time cycle. Follow chemical manufacturer's instructions for proper chlorine level.

⚠ DANGER Mixing Chemicals or using fast dissolving chemicals may result in explosion and/or fire.
To avoid death, serious injury or major property damage:

- ⚠ Use only slow dissolving Trichlor Chlorine tablets.
- ⚠ Never use fast dissolving Trichlor Chlorine tablets.
- ⚠ Never mix chemicals.
- ⚠ Never mix Trichlor Chlorine tablets with Calcium Hypochlorite, or with any other form of concentrated chlorine or other chemicals. Fire and/or explosion may result.
- ⚠ Never add any other types of chlorine, pH adjusters, shock treatments or algaecides through the skimmer. If these products must be used, they should be added directly into the pool water.
- ⚠ Never isolate chlorine feeder with valves or other devices.

⚠WARNING Wear eye and skin protection while maintaining or servicing this unit.

USE ONLY GENUINE HAYWARD PARTS

⚠WARNING Do not inhale fumes from the chlorinator or chemical container.
⚠WARNING Chlorine feeder may be under pressure. Use caution removing cover.

REFILLING CHORINATOR

1. Shut off all pumps and pump timers.
2. Turn chlorine feeder flow control valve to "OFF".
3. Verify chlorine feeder return line to pool is unrestricted.
4. Wait one minute to relieve system pressure before attempting to remove cover.
5. If installed in a flooded system, shut off valves to isolate chlorinator.
6. Remove cover.
7. Refill chlorine feeder with slow dissolving Trichlor-Chlorine Tablets.
8. Secure cover to chlorine feeder.
9. If installed in a flooded system, open valves to assure flow from pump to pool.
10. Turn flow control valve on chlorinator to desired setting and restart pump.

MAINTENANCE:

TO CHANGE O-RING CL100/110

1. Read and follow instructions in Steps 1 to 5 in Refilling Chlorinator section.
2. Remove the O-Ring and replace with a Genuine Hayward Part O-Ring (part no. CLX110K).
3. Replace cover. If chlorinator needs to be refilled, read and follow instructions in Steps 6 to 8 in Refilling chlorinator section.

TO CHANGE O-RING CL200/220

1. Read and follow instructions in Steps 1 to 5 in Refilling Chlorinator section.
2. Pry off Logo Cap, located on the cover of the chlorinator. Unscrew and remove retainer screw. Cover may now be slipped free of the Cover Cap.
3. Replace O-ring with a Genuine Hayward Part O-ring (part no. CLX200K). Reassemble being sure Slip Washers are in place on stem of Cover (inside), and under head of Retaining Screw.
4. Replace cover. If chlorinator needs to be refilled, read and follow instructions in Steps 6 to 8 in Refilling Chlorinator section.

TO REMOVE FLOW CONTROL VALVE HANDLE

Set pointer to FULL. Insert screwdriver in slot opposite pointer, lift up and rotate handle counterclockwise. This allows the handle index lock tab to clear the body ridge.

TO INSTALL FLOW CONTROL VALVE HANDLE

1 The flow control valve handle Genuine Hayward Part (CLX200PA) is furnished in two pieces.
2 To install push the handle into the stem and fully install stem into body. You may have to remove handle and reposition to assure the stem is fully seated.
3 Remove handle by pulling straight out.
4 Apply a single drop of Super Glue to the end of the stem, push on handle, positioned in the OFF position. Apply pressure for 30 seconds.

WINTERIZING

Where freezing temperatures can be expected, drain all water and remove all chlorine from chlorinator. (For in-line permanently installed unit remove drain plug). Carefully remove all tablets and pieces of tablets. Rinse out chlorinator thoroughly with water. Replace cover and drain plug.

VACUUMING

When vacuuming, close flow control valve to prevent bypass of sediment and possible clogging of control valve.

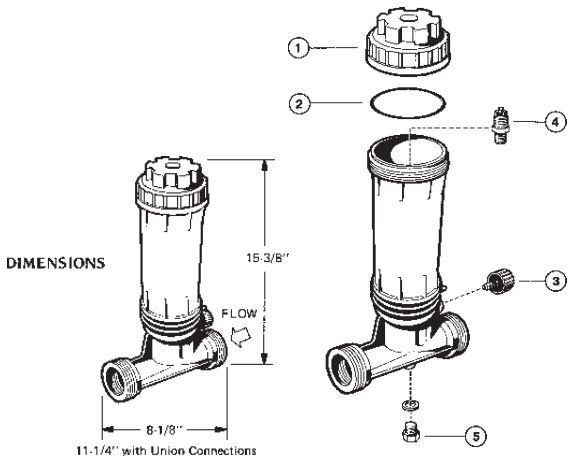
LUBRICATION

Never use petroleum type lubricants on Cover O-Ring. To lubricate use Genuine Hayward Part Jack's Lube No. 327 (Part No. SP032712).

SPARE PARTS

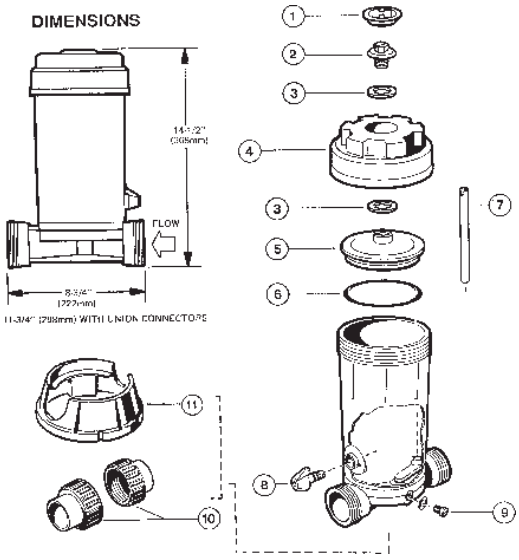
CL100

Ref No.	Part Number	Description	No. Req'd
1	CLX110C	Cover	1
2	CLX110K	O-Ring	1
3	CLX110FA	Control Knob Assembly	1
4	CLX220CV	Check Valve Assembly	1
5	SPX1700FGV	Drain Plug w/Gasket	1
	SP032712	Hayward Jack's Lub #327	1



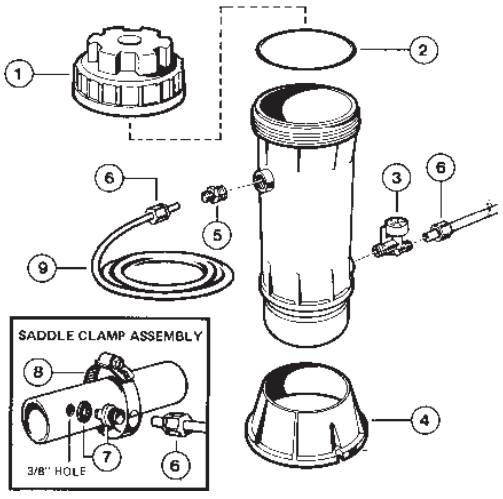
CL200

Ref No.	Part Number	Description	No. Req'd
1	CLX200E	Logo Cap	1
2	CLX200G	Cover Retaining Screw	1
3	CLX200W	Slip Washer	2
4	CLX200C	Cover Cap	1
5	CLX200B	Cover	1
6	CLX200K	O-Ring	1
7	CLX200H	Feeder Tube (some models)	1
8	CLX200PA	Control Valve Assembly	1
9	SPX1700FA	Drain Plug w/Gasket	1
10	SPX1500UNPAK	Union Connectors–Socket (2)	-
11	CLX200BS	Base	1
	SP032712	Hayward Jack's Lub #327	1



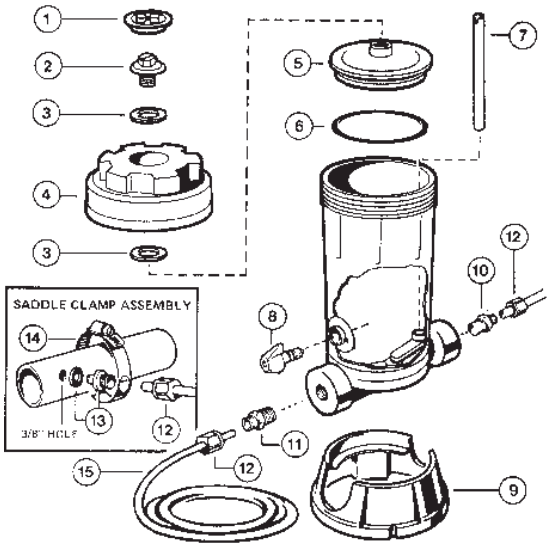
CL110

Ref No.	Part Number	Description	No. Req'd
1	CLX100C	Cover	1
2	CLX110K	O--Ring	1
3	CLX110DA	Dial Flow Valve	2
4	CLX110B	Base	1
5	CLX220CV	Check Valve Assembly	1
6	CLX220H	Compression Nuts	4
7	CLX220G	Saddle Fitting	2
8	CLX220K	Saddle Clamp	2
9	CLX220J	Plastic Tubing–8 Ft.	1
	SP032712	Hayward Jack's Lub #327	1



CL220

Ref No.	Part Number	Description	No. Req'd
1	CLX200E	Logo Cap	1
2	CLX200G	Cover Retaining Screw	1
3	CLX200W	Slip Washer	2
4	CLX200C2	Cover Cap	1
5	CLX200B	Cover	1
6	CLX200K	O-Ring	1
7	CLX200H	Feeder Tube (some models)	1
8	CLX200PA	Control Valve Assembly	1
9	CLX220B	Base	1
10	CLX220CV	Check Valve Assembly	1
11	CLX220D	Inlet Fitting Adapter	1
12	CLX220H	Compression Nuts	4
13	CLX220G	Saddle Fitting	2
14	CLX220K	Saddle Clamp	2
15	CLX220J	Plastic Tubing—8 ft.	1
	SP032712	Hayward Jack's Lub #327	1



PRODUCT REGISTRATION

(Retain For Your Records)

DATE OF INSTALLATION _____

▲Retain this Warranty Certificate (upper portion) in a safe and convenient location for your records.

DETACH HERE: Fill out bottom portion completely and mail within 10 days of purchase/installation or register online.

AUTOMATIC CHLORINE FEEDERS Warranty Card Registration

Register online at www.haywardpool.com

Please Print Clearly:

First Name_____ **Last Name**_____

Street Address_____

City_____ **State**_____ **Zip**_____

Phone Number_____ **Purchase Date**_____

E-Mail Address_____

Serial Number

Model Number_____

Pool Capacity_____(U.S. Gallons)

☐Please include me on all e-mail communications regarding Hayward® Equipment or promotions.

Mail to: Hayward Pool Products, 620 Division Street, Elizabeth, NJ 07207

Attn: Warranty Dept

Or REGISTER YOUR WARRANTY ON-LINE AT WWW.HAYWARDPOOL.COM

Years Pool has been in service

☐ < 1 year ☐ 1-3 ☐ 4-5 ☐ 6-10 ☐ 11-15 ☐ >15

Purchased from_____

☐Builder ☐Retailer ☐Pool Service ☐Internet/Catalog

Company Name_____

Address_____

City_____ State_____ Zip_____

Phone_____

Type of Pool:

☐ Concrete/Gunite ☐ Vinyl ☐ Fiberglass

☐ Other_____

☐ New Installation ☐ Replacement

Installation for:

☐ In Ground ☐ Above Ground ☐ Spa

HAYWARD®

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PENTAIR LIMITED WARRANTY

You've always been able to count on the quality and long service life of Pentair products. We use the very best standards of workmanship, materials, and manufacturing processes to deliver value and peace of mind. Please review this document for details of general warranty terms and conditions and visit *www.pentair.com/warranty* for information regarding the coverage duration and any possible warranty exceptions for your specific pool and spa equipment. Pentair offers:

- **LIMITED WARRANTY:** Pentair warrants its products to be free from defects in material and/or workmanship for a period of sixty (60) days (parts only) from the original date of purchase and/or installation. Customer agrees to prepay all shipping charges to Pentair.
- **EXTENDED WARRANTY:** To receive a product extended warranty (longer than 60 days from the original date of installation), customer must:
  1. Register the product;
  2. Provide a copy of the sales receipt; and
  3. Provide a copy of the installation invoice, provided by the qualified installer, within 60 days of installation (if required). Certain products do not require qualified installation but still require product registration and copy of the sales receipt to receive the extended warranty.
- **TRADEGRADE WARRANTY:** TradeGrade products must be purchased from a retail store (brick and mortar), pool builder or pool service company. If purchased online (via internet) the product will only receive a sixty (60) day limited warranty.

GENERAL WARRANTY TERMS AND CONDITIONS

Denial of Warranty Claim

A warranty claim may be denied under the following circumstances:

1. Damage caused by careless handling, improper repackaging, or shipping.
2. Damage due to misapplication, misuse, abuse or failure to operate equipment as specified in the owner's manual.
3. Damage caused by failure to install products as specified in the owner's manual.
4. Damage due to unauthorized product modifications or failure to use Pentair original replacement parts.
5. Damage caused by negligence, or failure to properly maintain products as specified in the owner's manual.
6. Damage caused by failure to maintain water chemistry in conformity with the standards of the swimming pool industry for any length of time.
7. Damage caused by water freezing inside the product.
8. Accidental damage, fire, acts of God, or other circumstances outside the control of Pentair.

Pentair Warranty Obligations

Should a defect in workmanship and/or material in any item covered by this warranty become evident during the term of the warranty, then upon the customer following the procedures set forth below, Pentair will, at its sole option, repair or replace such product or part of equal value, in lieu of repair.

Pentair is not, however, responsible under this warranty for any cost of shipping or transportation of the product or parts thereof to or from the Technical Service Department. Also, Pentair is not liable for any loss of time, inconvenience, incidental expenses such as telephone calls, labor or material charges incurred in connection with the removal or replacement of the equipment, or any other incidental or consequential damages.

The above mentioned warranties are void if the product is repaired or altered in any way by any persons, agents or representatives other than those authorized by Pentair. Expendables including, but not limited to refrigerant, recovery of refrigerant, or transportation for components are not covered under this limited warranty. Reasonable vehicle trip and evaluation charges may be assessed by a Pentair service representative. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

All extended warranties are applicable to the original owner only, beginning on the date of installation and are not enforceable by any third party.

- Continued on Back Side -

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Please detach along dotted line and mail this section. Keep the warranty card for your records.

PENTAIR

PRODUCT REGISTRATION CARD

Please promptly complete your product registration. In the unlikely event we must notify you of safety modifications to your product, under the Consumer Product Safety Act, this will allow us to communicate with you quickly. **Incomplete or missing information such as your serial number will prevent your product from being registered**. Your Limited Warranty is attached to this card. Please detach and review thoroughly so you are familiar with the terms of your warranty coverage. Please keep in a safe place.

TO RECEIVE EXTENDED WARRANTY: 1. REGISTER YOUR PRODUCT 2. PROVIDE SALES RECEIPT AND INSTALLATION INVOICE[1], PROVIDED BY THE QUALIFIED INSTALLER, WITHIN 60 DAYS OF INSTALLATION.

TWO WAYS TO COMPLETE YOUR PRODUCT WARRANTY REGISTRATION:

1) **ONLINE:** Visit **www.pentair.com/registration** to complete registration, upload sales receipt and installation invoice (best for registering multiple products).

2) **BY MAIL:** Complete this card and attach sales receipt, and installation invoice.

1 PRODUCT INFORMATION

Serial Number(s):_____

Product Name(s): _____

This product: ☐ Replaced an existing unit ☐ Did not replace an existing unit (New)

Where did you purchase your Pentair product(s)?

☐ Pool Builder ☐ Pool Store ☐ Pool Service Co. ☐ Mail Order ☐ Internet ☐ Other

2 POOL OWNER INFORMATION

Pool Type: ☐ Inground ☐ Inground Pool/Spa Combination ☐ Aboveground ☐ Spa Only

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Email: _____

☐ I do not wish to receive promotional emails or surveys from Pentair.

3 PURCHASE & QUALIFIED INSTALLER INFORMATION

Please attach a copy of the **sales receipt** and **qualified installer's invoice** to this card as proof of qualified installation and purchase.

Be sure your documents include the following purchase and installation information:

- Company name and location of purchase
- Date of purchase
- Name, location, and phone number of installer
- Date of installation

[1] A qualified installation invoice is not needed if your product does not require professional installation in order to receive an extended warranty. Refer to *www.pentair.com/warranty* for details.

ALL INFORMATION REQUESTED ABOVE OR ONLINE IS REQUIRED IN ORDER TO RECEIVE AN EXTENDED WARRANTY

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PENTAIR

LIMITED WARRANTY

GENERAL WARRANTY TERMS AND CONDITIONS (continued)

Warranties by Others
Some Pentair products incorporate components manufactured by other manufacturers. Some of these manufacturers provide warranties in addition to the warranty provided by Pentair herein. In all such cases, a copy of the third party manufacturer's warranty will be provided with the product. To the extent protection provided under any such third party warranty exceeds the Limited Warranty provided herein, the Customer will have to contact the specific manufacturer for the additional protection.

No Other Warranties
To the maximum extent permitted by applicable law, Pentair disclaims all other warranties, either expressed or implied, including, but not limited to, implied warranties of merchantability and fitness for a particular purpose, with regard to the product(s), part(s) and/or any accompanying written materials.

Procedure for Obtaining Performance
In order to obtain the benefits of this warranty, the consumer who made the original retail purchase must contact the Pentair Technical Service Department as soon as possible after discovery of the product related issue, but in no event later than the expiration date of the respective warranty periods provided herein. Upon receipt of this communication, Pentair will promptly notify the customer of the address to which the product may be shipped. The customer shall then ship the product, freight prepaid, to the address indicated, together with a "RETURN GOODS AUTHORIZATION" form obtained from Technical Service and a brief description of the problems encountered. Unauthorized returns will not be accepted. Freight must be prepaid by customer.

Warranties or Representations by Others
No third party has any authority to make any warranties or representation concerning Pentair or its products. Accordingly, Pentair is not responsible for any such warranties or representations.

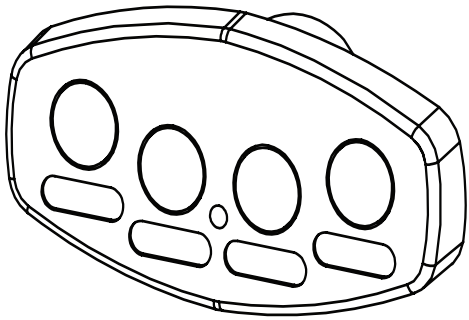
Other Rights
This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

Sole Warranty
Supersedes all previous warranty publications.

PENTAIR

iS4 SPA-SIDE REMOTE CONTROL

FOR USE WITH PENTAIR CONTROL SYSTEMS



INSTALLATION AND USER'S GUIDE

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

CUSTOMER SERVICE / TECHNICAL SUPPORT

If you have questions about ordering Pentair Aquatic Systems replacement parts, and pool products, please use the following contact information:

Customer Service
(8 AM to 4:30 PM
Eastern and Pacific Times

Phone: (800) 831-7133

Fax: (800) 284-4151

Web site

Visit www.pentairpool.com or
www.staritepool.com

Technical Support

Sanford, North Carolina
(8 A.M. to 4:30 PM ET)

Phone: (919) 566-8000

Fax: (919) 566-8920

Moorpark, California
(8 A.M. to 4:30 PM, PT)

Phone: (805) 553-5000 (Ext. 5591)

Fax: (805) 553-5515

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P/N 521639 Rev. A 4/13

IMPORTANT WARNING AND SAFETY INSTRUCTIONS

IMPORTANT NOTICE

Attention Installer: This Installation and User's Guide ("Guide") contains important information about the installation, operation and safe use of this spa side remote control. This Guide should be given to the owner and/or operator of this equipment.

Attention User: This manual contains important information that will help you in operating and maintaining this product. Please retain it for future reference.

⚠WARNING Before installing this product, read and follow all warning notices and instructions in this Guide. Failure to follow warnings and instructions can result in severe injury, death, or property damage. Call (800) 831-7133 for additional free copies of these instructions. Please refer to www.pentairpool.com for more information related to this products.

⚠DANGER This product must be installed by a licensed or certified electrician or a qualified pool professional in accordance with the current National Electrical Code (NEC), NFPA 70 or the Canadian Electrical Code (CEC), CSA C22.1.

All applicable local installation codes and ordinances must also be adhered to. Improper installation will create an electrical hazard which could result in death or serious injury to pool users, installers or others due to electrical shock, and may also cause damage to property.

⚠WARNING Before installing or servicing this product, always disconnect the main system power at the circuit breaker. Failure to do so could result in death or serious injury to service professional, pool users or others due to electrical shock.

READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL
SAVE THESE INSTRUCTIONS

0VERVIEW

iS4 Spa-Side Remote Control

The iS4 Spa-Side Control can be used with the Pentair® IntelliTouch®, EasyTouch® Control Systems and the Compool® CP series Control Systems to provide remote switching of four control circuits from the spa location. It is typically used for activating spa circulation and three auxiliary pieces of equipment (such as lights, jet pump, air blower, etc.). One iS4 spa-side control can be installed per control system. It is possible to install two iS4 remotes on a single control system, however, the two iS4 remotes will mirror each other in functionality. The iS4 spa-side remote is a double-insulated device UL and ETL listed to UL 1563. It is splash-proof and weatherproof but should not be permanently submerged below the spa water level. The iS4 remote must be installed above the highest sustained water level.

The iS4 Spa-Side Remote red LED status light functions are as follows:

Spa Mode	N/A	Steady	Steady	Steady
Heating	N/A	N/A	Flashing	Flashing

When used with any Pentair Control System:
Voltage: 5 VDC
Current: 2 mA maximum

iS4 Kit Contents

- Spa-side remote (with cable attached)
- iS4 Mounting Adapter (for acrylic spa and upgrade from SS4)
- Label Set

INSTALLATION

The iS4 spa-side remote is a double-insulated, waterproof device for installation at the water's edge. It is typically installed at the tile-line of the spa wall, or in the deck within arm's reach of a spa occupant. It can be used with a gunite spa, acrylic spa, or hot-tub. However, in order to install the spa-side remote into the wall of a gunite spa, provision must be made while the spa is being plumbed.

iS4 Required Mounting Space

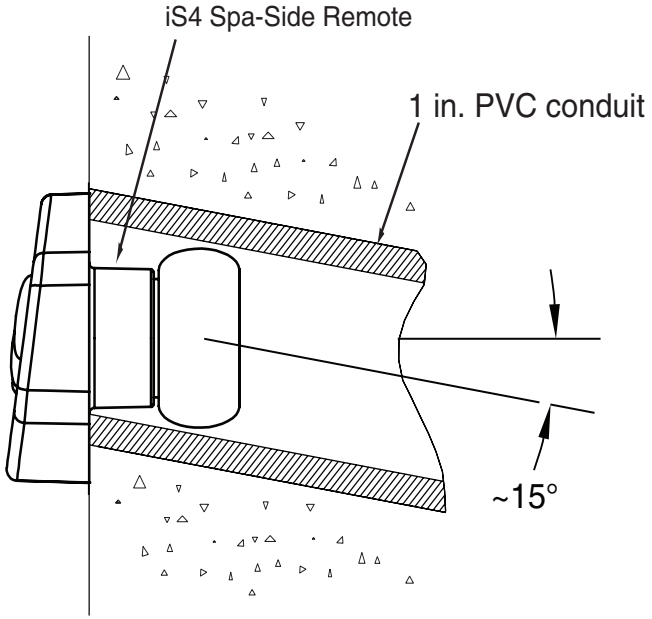
To install the iS4 Spa-Side Remote into the wall of a gunite spa, provision must be made while the spa is being plumbed. For surface mounting (protruding from deck, tile or uneven surface), When installed, the iS4 remote requires the following space:

Flat Faceplate:	6-1/2" x 3-1/2"
Skirted Faceplate:	6" x 2-5/8" x 1-1/4" high
Material:	ABS plastic

NOTE: If the Automation Load Center or Power Center to which the spa-side remote is connected is **not** located above the spa water level, a junction box should be provided (above water level).

iS4 SPA-SIDE REMOTE GUNITE INSTALLATION

1. When plumbing the spa, install a 3 in. to 6 in. length of 1 in. Sch 40 PVC pipe (perpendicular to the spa wall) to provide a receptacle for the spa-side remote. Plumb the pipes level as possible. The “eyeball” design built into the remote compensate for a discrepancy of up to 15°. See Figure 1.
2. The pipe should protrude beyond the finished surface of the spa, as it will be cut back after surface-finishing is completed. Outside the spa, the conduit size may be reduced down to ½ in. or ¾ in., and run to the Control Power/Load Center.
3. Use sweep elbows for turns.
   NOTE: For new gunite spa installations, the iS4 Mounting Adapter has no purpose and can be discarded.



NOTE: DO NOT affix unit with epoxy to enable future upgrades.

Figure 1.

GUNITE SPA INSTALLATION

1. When the spa construction is completed, cut back the 1 in. diagonal PVC conduit receptacle flush with the spa wall finish or surface of deck.
2. Run spa-side remote cable through conduit to Control Power/Load Center. Use Figure 2 and the color call-out the on back of remote to wire unit.
3. Affix remote to 1 in. diagonal PVC conduit using a small amount of silicon on back of unit. Orient unit per Figure 3 for optimum usage by spa occupant. Attach appropriate labels to remote.

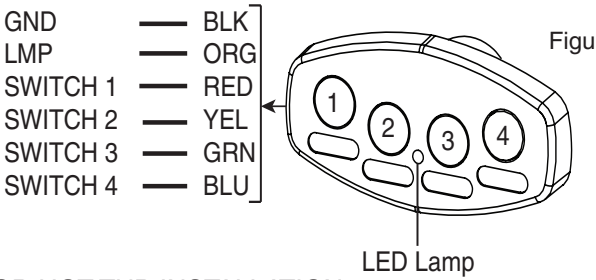


Figure 2.

ACRYLIC SPA OR HOT-TUB INSTALLATION

1. Obtain optional Spa Wall Mounting Adapter and lock-nut (P/N SSADP).
2. Drill 1-5/8 in. diagonal hole in wall of spa or hot-tub. Insert Spa Wall Mounting Adapter, and use lock-nut on external surface of wall to secure Spa Wall Mounting Adapter into place. See Figure 3.
3. Glue ½ in. PVC conduit directly into back of the Spa Wall Mounting Adapter and run conduit to the Control Power/Load Center. Use sweep elbows for turns.
4. Bond iS4 Mounting Adapter provided over Spa Wall Mounting Adapter using silicon.
5. Run spa-side remote cable through conduit to control power/load center. Affix remote to iS4 Mounting Adapter using small amount of silicon on back of unit. Attach appropriate labels (P/N 522082) to the remote.

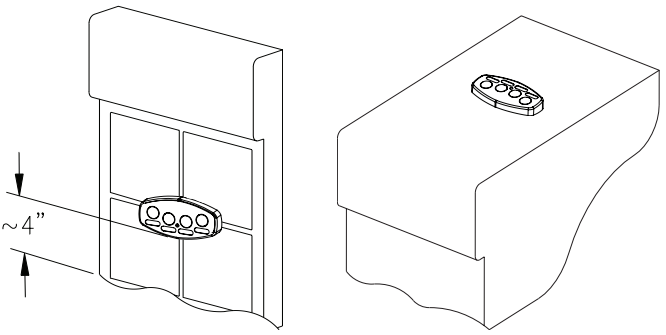


Figure 3.

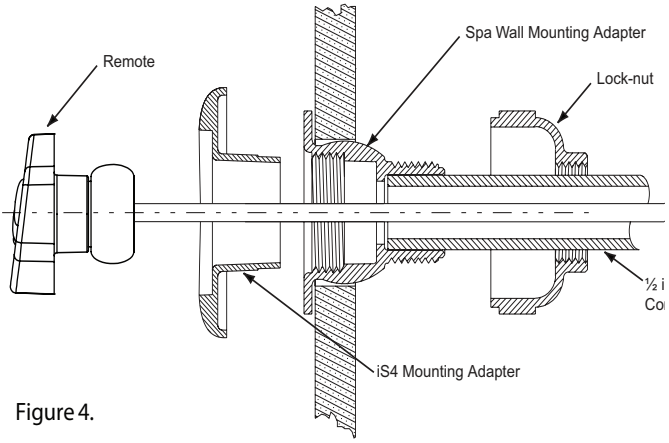


Figure 4.

UPGRADE FOR SS4 INSTALLATION

1. Remove existing SS4 making note of function and button color.
2. Orient iS4 Mounting Adapter to optimize usage by spa occupant per Figure 4.
3. Bond iS4 Mounting Adapter provided over existing Mounting Adapter using silicon. Run spa-side remote cable through conduit to Power/ Load Center. See Figure 5.
4. Use the color call-out description on back of remote to wire unit.
5. Affix remote to iS4 Mounting Adapter using small amount of silicon on back of unit.
6. Attach appropriate labels to remote.

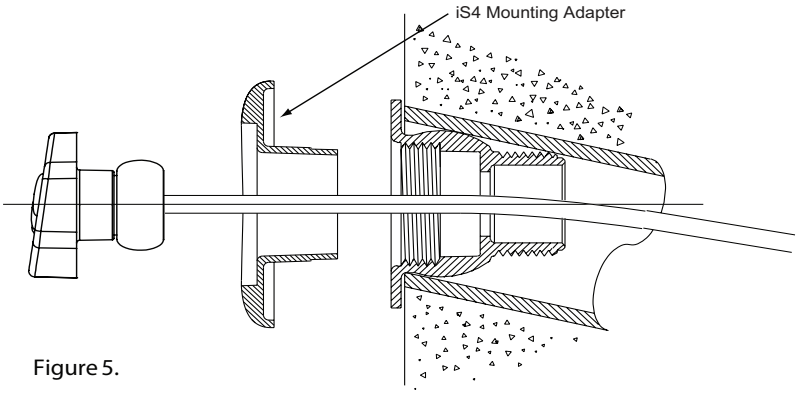


Figure 5.

PENTAIR AQUATIC SYSTEMS

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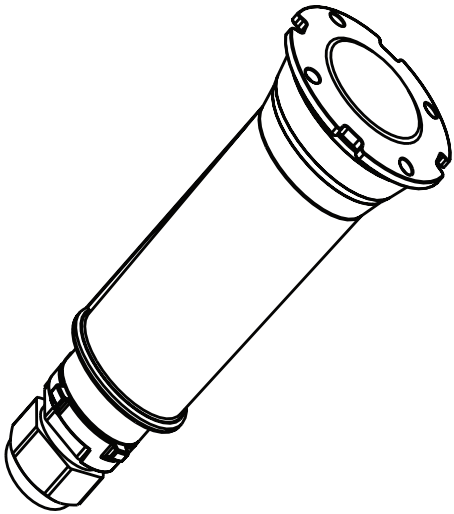
P/N 521639 REV. A 4/13

PENTAIR

GLOBRITE® COLOR CHANGING UNDERWATER LED LIGHT

FOR POOL AND SPA



INSTALLATION AND USER'S GUIDE

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

Technical Support

Phone: **(800) 831-7133 -** Fax: **(800) 284-4151**
www.pentair.com

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READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL

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IMPORTANT WARNING AND SAFETY INSTRUCTIONS

DANGER

SERIOUS BODILY INJURY OR DEATH CAN RESULT IF THIS LIGHT IS NOT INSTALLED AND USED CORRECTLY.

DANGER

INSTALLERS, POOL OPERATORS AND POOL OWNERS MUST READ THESE WARNINGS AND ALL INSTRUCTIONS BEFORE USING THE POOL AND/OR SPA LIGHT.

WARNING

Most states and local codes regulate the construction, installation, and operation of public pools and spas, and the construction of residential pools and spas. It is important to comply with these codes, many of which directly regulate the installation and use of this product. Consult your local building and health codes for more information.

IMPORTANT NOTICE - Attention Installer: This Installation and User's Guide ("Guide") contains important information about the installation, operation and safe use of this underwater pool and spa light. This Guide should be given to the owner and/or operator of this equipment.

WARNING

Before installing this product, read and follow all warning notices and instructions in this Guide. Failure to follow warnings and instructions can result in severe injury, death, or property damage.

Call (800) 831-7133 for additional free copies of these instructions. Please refer to www.pentairpool.com for more information related to this products.

DANGER

RISK OF ELECTRICAL SHOCK OR ELECTROCUTION: UNDERWATER POOL LIGHTS REQUIRE HIGH VOLTAGE WHICH CAN SHOCK, BURN, OR CAUSE DEATH.

Before working or servicing pool lights, always disconnect power to the pool and/or spa lights at the source circuit breaker. Failure to do so could result in death or serious injury to service person, pool users or others due to electric shock. When installing and using this electrical equipment, basic safety precautions should always be followed.

This underwater light must be installed by a licensed or certified electrician or a qualified pool professional in accordance with the current National Electrical Code (NEC), NFPA 70 or the Canadian Electrical Code (CEC), CSA C22.1. All applicable local installation codes and ordinances must also be adhered to. Improper installation will create an electrical hazard which could result in death or serious injury to installers or others due to electrical shock, and may also cause damage to power source. Always disconnect the power to the pool light at the circuit breaker before servicing the light. Failure to do so could result in serious injury to service person, due to electrical shock.

WARNING

For countries in compliance with International Electrotechnical Commission (IEC) regulatory standards: The light fixture must be installed by a licensed or certified electrician or a qualified pool service person, in accordance with current IEC 364-7-702 and all applicable local codes and ordinance. Improper installation will create an electrical hazard, which could result in serious injury to the installer or other due to electrical shock and may also cause damage to the property.

IMPORTANT WARNING AND SAFETY INSTRUCTIONS

INSTALLERS AND INSPECTORS

THE GLOBRITE® LED LIGHT AND PLASTIC NICHE FORM A COMPLETE NON-METALLIC LOW VOLTAGE LIGHTING SYSTEM. THIS CONFIGURATION DOES NOT REQUIRE BONDING OR GROUNDING WHEN POWERED BY A LISTED 100 WATT OR 300 WATT TRANSFORMER (LISTED ON PAGE 19) AND INSTALLED IN COMPLIANCE WITH THE CURRENT NATIONAL ELECTRIC CODE (NEC).

UNBONDED LIGHTING NEC PROVISIONS: When the UL listed non-metallic GloBrite LED Light low voltage lights are used with the GloBrite light approved niches (as listed on page 19), the current NEC provides an exception to luminaire bonding and grounding in Article 680.6 and 680.23

POOL WATER BONDING NEC PROVISIONS : For Pool Water Bonding required by NEC Article 680.26C, concrete pools are considered conductive (refer to 680.26 (b)(1) due to the porosity of concrete and the bonding of rebar. No additional bonding is required.

POOL AND SPA FIXED LUMINARIES: Follow these guidelines when installing or replacing Pentair Aquatic Systems Pool and Spa fixed luminaries:

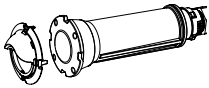
FOR LIGHT OPERATION, ONLY USE A SAFETY ISOLATION TRANSFORMER. Note: Connect both wires to the corresponding circuit wires in the Junction Box (black wire to power, and white wire to common) FIXED POOL AND SPA LUMINARIES SPECIFICATION: 12 VAC 50/60 Hz

IMPORTANT NOTICE: THE GLOBRITE COLOR LIGHT IS A NON-SERVICEABLE LIGHT. THE COMPLETE LIGHT ASSEMBLY MUST BE REPLACED.

GloBrite® Color Changing LED Pool Light Overview

This manual describes how to install and replace the GloBrite Color LED light for pool and spa. GloBrite Color LED lights provide brilliant vivid multi-colors with spectacular effects for your pool. Choose one of the seven pre-programmed color light shows or select one of the five fixed colors to create virtually endless range of dramatic underwater lighting effects for a spectacular effect in your pool and spa.

Accessory: The optional GloBrite Glare Shield (P/N 620314 - sold separately] is for use on GloBrite Color and White LED lights to reduce light glare.



Operating GloBrite Color LED Lights Using a Wall Switch

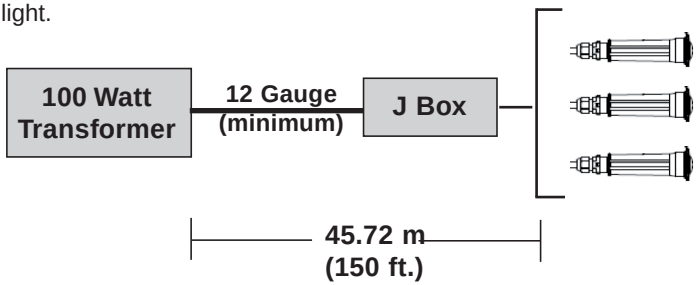
The GloBrite color light can be manually controlled using a standard wall-mount light switch. Multiple GloBrite color lights can be connected via a junction box and a 12 VAC isolation transformer to a single switch so that all lights can be switched on and off together. For wiring diagram, see page 15.

Operating GloBrite Color LED Lights Using Automation Control System

GloBrite color lights can also be automatically controlled using the Pentair IntelliTouch® Control System and the EasyTouch® Control System. For more information refer to the IntelliTouch Control System User's Guide (P/N 521075), and EasyTouch Control System User's Guide (P/N 521044).

Using an External Safety Isolation Transformer for Multiple 12 VAC GloBrite Color Lights

When using multiple GloBrite 12 VAC color lights on a **100 Watt** safety isolation transformer, it is recommended that no more than three (3) GloBrite color lights be used. For long cable lengths with a single light, It is recommended not to exceed 45.72 m (150 ft.) of total cable run between the 12 VAC isolation transformer and the GloBrite color light.



Note: If a longer cable run is necessary, it is recommended that separate **100 Watt** safety isolation transformers be used for each light with no more than 45.72 m (150 ft.) of total cable run between the transformer and lights.

Maximum Wattage Using Multiple Color LED lights (with a 300 Watt Isolation Transformer)

IMPORTANT! When using multiple 12 VAC Pentair LED pool and spa lights the total allowable light wattage is 300 Watts maximum. The individual light wattage is as follows:

- One GloBrite Color LED Pool light is 15 Watts maximum
- One GloBrite White LED Pool light is 15 Watts maximum
- One AmerBrite White LED (500W) pool light is 51 Watts maximum
- One AmerBrite White LED (400W) pool light is 44 Watts maximum
- One AmerBrite White LED (300W) pool light is 36 Watts maximum
- One AmerBrite Color LED pool light is 36 Watts maximum
- One IntelliBrite Color LED pool light is 30 Watts maximum
- One IntelliBrite Color LED spa light is 18 Watts maximum

Operating GloBrite® Color Lights Using a Wall Switch

GloBrite Color Lights can be controlled using a standard wall-mount light switch or by the IntelliBrite® Controller (see page 3). Multiple GloBrite color lights can be connected via a junction box and a 12 VAC transformer to a single switch so that all lights can be switched on and off together. GloBrite color lights are controlled by cycling AC power to the 12 VAC transformer from a standard wall switch. By turning the switch on and off a specific number of times, the light activates one of the seven light show modes, fixed colors, or enables the “Hold” and “Recall” feature.

Powering on the GloBrite Color LED Lights

When the GloBrite color light is powered on, the previously selected color is displayed, unless the HOLD or RECALL feature was previously enabled.
Note: If power to the light is off for more than five (5) seconds, the last color show mode or fixed color that was saved will be displayed.

Selecting a GloBrite Color Light Show Mode or Fixed Color using a Wall Switch

GloBrite color lights are compatible with IntelliBrite color light colors and shows and can be synchronized with IntelliBrite color lights.

First switch power on to the light. A white light will momentarily illuminate, followed by the previously selected color. To select a color show mode (1-7) or fixed color (8-12), turn the wall switch off/on a specific number of times. Each number (1-12) shown below corresponds to the number of times to power-cycle the switch to activate a color light show or fixed color. For details about saving color effects while in “show” modes, see “Hold” and “Recall” feature on page 3.

Number of times to cycle power (1-14)	
1	**SAm Mode:** Cycles through white, magenta, blue and green colors (emulates the Pentair SAm® color changing light).
2	**Party Mode:** Rapid color changing building energy and excitement.
3	**Romance Mode:** Slow color transitions creating a mesmerizing and calming effect.
4	**Caribbean Mode:** Transitions between a variety of blues and greens.
5	**American Mode:** Patriotic red, white and blue transition.
6	**California Sunset Mode:** Dramatic transitions of orange, red and magenta tones.
7	**Royal Mode:** Richer, deeper color tones.
8	**Blue:** Fixed color.
9	**Green:** Fixed color.
10	**Red:** Fixed color.
11	**White:** Fixed color.
12	**Magenta:** Fixed color.
13	**Hold:** Save the current color effect during a color light show.
14	**Recall:** Activate the last saved color effect.

Example: To select **California Sunset Mode**; turn the switch off and on six (6) successive times. During the off/on switching process, no illumination will occur, then a white light will momentarily illuminate.

> **⚠WARNING** During the off/on switching process, before the selected color is displayed, no illumination will occur. This operating mode is normal during the switching process. During this period the pool and spa will be dark and precautions should be taken to avoid unforeseen accidents. Failure to observe this warning may result in serious injury or death to pool and spa users.

Saving a Color Mode or Fixed Color

When power is switched off to the GloBrite® Color Lights, the last color show mode or fixed color will be saved. The next time the light is powered on, the previously saved color show mode or fixed color will be displayed. For example, while in “Party Mode” switch the light off. Wait more than 10 seconds, switch the light back on to resume “Party Mode.”

Selecting a GloBrite Light Color and Show Modes or Fixed Color Using an IntelliBrite® Controller

Instead of using a wall switch, GloBrite color lights can controlled with the IntelliBrite Controller (p/n 600054, sold separately). The IntelliBrite® Controller provides complete control of your GloBrite color lights. It’s easy to select a lighting feature, just dial in any one of the pre-programmed color light shows or fixed colors. Using the Hold and Recall buttons you can also create endless unique lighting effects. The IntelliBrite Controller can be connected to individual or multiple 12 VAC transformers to control GloBrite color lights. The IntelliBrite Controller can also control multiple GloBrite and IntelliBrite lights.

Note: For IntelliBrite controller wiring instructions, see page 18.

Using the IntelliBrite® Color Light Controller: GloBrite color lights are compatible with IntelliBrite colors and shows and can be synchronized with IntelliBrite color lights and landscape lights. To select a color light show mode or fixed color mode, rotate the dial so that it points to the desired selection. The color mode selections start in a clockwise direction from the 9 o’clock position.

Hold and Recall Feature

Hold button/LED: Press this button (LED on) to capture and save a color effect while displaying one of the light show modes. When the button is pressed, the LED will be on, indicating that the color effect is captured.

Recall Button/LED: Use this button (LED on) to activate the last saved color effect. When the button is pressed, the LED will be on, indicating that the color effect is being displayed.

GLOBRITE® LIGHT FIXTURE INSTALLATION (NEW POOL CONSTRUCTION - USA)

The following describes how to install the GloBrite Color Light fixture.

BEFORE STARTING: The following information describes the tasks that must be completed by the electrician *before* the light fixture is installed. See Figure 1 on page 7.

⚠ WARNING

Be sure that the pool or spa meets the requirements of the current National Electrical Code (N.E.C.) Article 680-22 and all local codes and ordinances. A licensed or certified electrician must install the electrical system to meet or exceed those requirements before the underwater light is installed. Some of the requirements of the National Electrical Code which the pool's electrical system must meet are as follows:

- The Junction Box and the low voltage transformer is located at least 4 (four) inches (10.16 cm) above ground level or eight (8) inches (20.3 cm) above maximum water level, whichever is higher. The Junction Box must be at least 48 inches (1.22 m) from the edge of the pool. See Figure 2 on page 8.
- The GloBrite light niche must be properly installed so that the top edge of the lens of the GloBrite light is at least 4 inches below (not more than 48 inches below in Canada) the surface of the water in the pool or spa. See Figure 2 on page 8.
- To be certain that the pool or spa electrical system meets all applicable requirements, the electrician should also consult the local building department.

GLOBRITE® LIGHT FIXTURE INSTALLATION (NEW POOL CONSTRUCTION - CANADA)

⚠WARNING

Be sure the electrical system of your pool conforms with the following requirements of the Canadian Electrical Code (CE), and all local codes and ordinances. A licensed or certified electrician must install the electrical system to meet or exceed those requirements before the light and (fixture-housing) is installed. Some of the CE requirements are listed below.

- The junction/deck box must be sealed to the conduit to prevent water from getting into the box, see Figure 1, below.
- The niche must be properly installed so the center line of the Underwater Light's lens is at a maximum depth of 600 mm below the surface of the water in the pool, see Figure 2 on page 8.

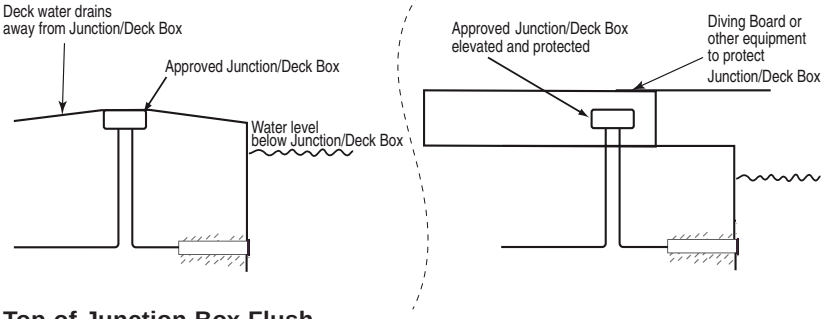
The following information is for the Junction Box and pool deck location for Canada only. Junction/Deck boxes shall be installed:

(a) above the normal water level of the pool;

(b) so that the top of the box is located at or above the finished level of the pool deck;

(c) in such a manner or location that the box will not be an obstacle; and

(d) in such a manner that any water on the deck will drain away from the box (See diagram below).



Top of Junction Box Flush with Deck

Junction/Desk Box elevated above Deck and Protected

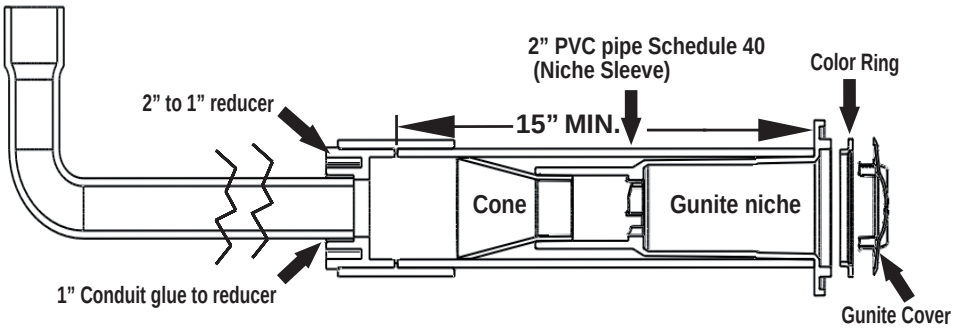
Figure 1, Canada**.**

Installing GloBrite® Light Sleeve and Niche in a Concrete/Gunite Pool - Option 1 and Option 2 (see page 7)

Option 1: Niche Sleeve with Cone (Cone is used for applications where the niche is installed after the conduit has been connected to the 2" sleeve)

1. **Install Sleeve:** Locate position on vertical pool or spa wall where light is to be installed. The top of the light lens must be a minimum of 10.2 cm (4 in) inches below normal water level. Refer to Figure 2 on page 8 for the exact depth requirements.
2. Install a 5 cm (2 in) PVC pipe Schedule 40, 38.1 cm (15 in.) long in the desired location of the light niche sleeve.
3. Allow at least 2.5 cm (1 in) of the niche sleeve 5 cm (2 in) PVC pipe to extend out on both sides of the wall during your gunite operation. Cut any excess off the pipe so that it is flush against the wall before plastering.
4. Glue a 5 cm (2 in) x 2.54 cm (1 in) reducer bushing to the back side of the niche sleeve.
5. Glue the 2.45 cm (1 in) conduit into the reducer as shown below in "Option 1 Installation Diagram". Make sure the 5 cm (2 in) PVC pipe Schedule 40. accommodates for the total length of niche/cone and reducer assembly.
6. Glue the cone into gunite niche (the cone is used to guide the fish tape from the junction box into the niche).
7. Apply PVC cement to the inside of the sleeve. Slide the gunite niche into the sleeve until it is flush with the gunite wall.
8. Install the desired color ring to the front of the niche.

   Note: If required by local codes, install the light into niche as described on page 9.
9. Using the niche cover to seal the front of the niche, snap on the gunite cover over the front of the niche. This will protect the light cooling cavity of the niche during plastering. Note: If a gunite cover is not available, use masking tape to protect lens and cooling cavity from plaster operation.
10. Apply gunite plaster to pool wall up to the outer edge of the gunite cover. The gunite cover should be the only exposed part of the niche after plastering.
11. After the plastering has been completed, remove and dispose of the gunite cover.



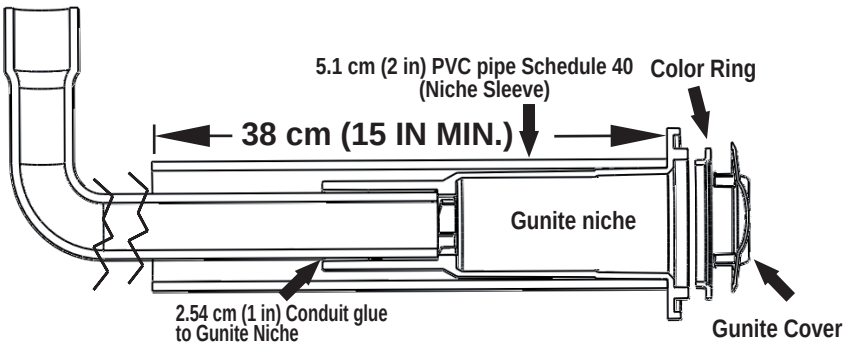
Option 1: Niche Sleeve with Cone - Installation Diagram

Option 2: Install Conduit to Light Niche

To install the conduit onto the GloBrite® Color Light niche:

1. **Install Sleeve:** Locate position on vertical pool or spa wall where light is to be installed. The top of the light lens must be a minimum of 10.2 cm (4 in) inches below normal water level. Refer to Figure 2 on page 8 for the exact depth requirements.
2. Install a 5 cm (2 in) PVC pipe Schedule 40, 38.1 cm (15 in.) long in the desired location of the light niche sleeve.
3. Allow at least 2.5 cm (1 in) of the niche sleeve 5 cm (2 in) PVC pipe to extend out on both sides of the wall during your gunite operation. Cut any excess off the pipe so that it is flush against the wall before plastering.
4. Pull the fish tape and the light power cord through the 2.5 cm (1 in) conduit and the 5 cm (2 in) PVC sleeve schedule 40.
5. Glue the 2.5 cm (1 in) conduit into the back of the conduit shown below in “Option 2 Installation Diagram”.
6. Glue the cone into gunite niche (the cone is used to guide the fish tape from the junction box into the niche).
7. Apply PVC cement to the inside of the sleeve. Slide the gunite niche into the sleeve until it is flush with the gunite wall.
8. Install the desired color ring to the front of the niche.

   Note: If required by local codes, install the light into niche as described on page 9.
9. Using the niche cover to seal the front of the niche, snap on the gunite cover over the front of the niche. This will protect the light cooling cavity of the niche during plastering. Note: If a gunite cover is not available, use masking tape to protect lens and cooling cavity from plaster operation.
10. Apply gunite plaster to pool wall up to the outer edge of the gunite cover. The gunite cover should be the only exposed part of the niche after plastering.
11. After the plastering has been completed, remove and dispose of the gunite cover.



Option 2: Conduit to Light - Installation Diagram

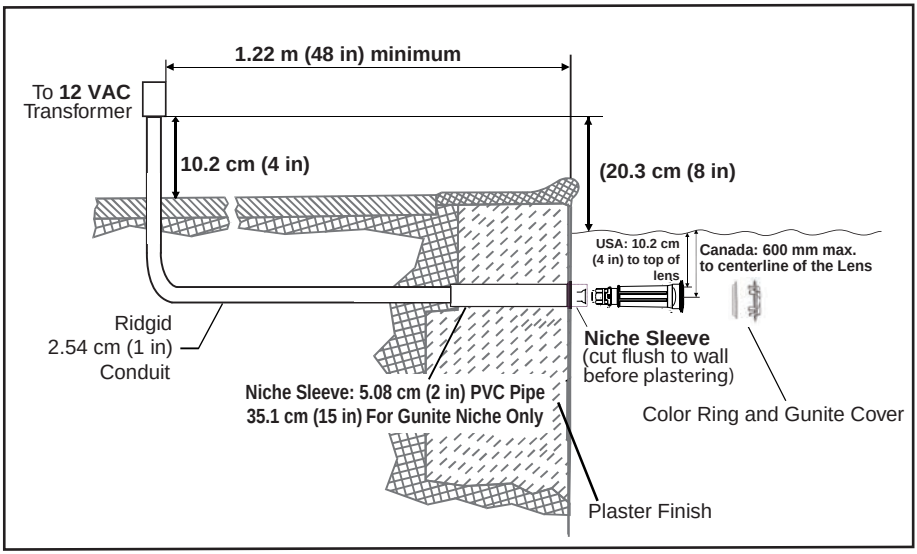
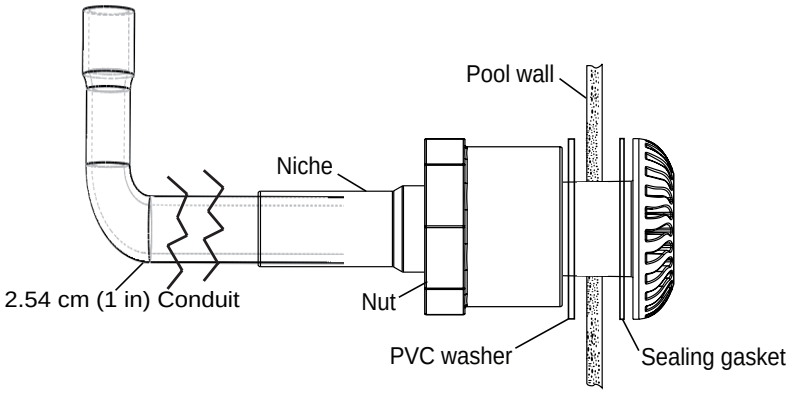


Figure 2: Gunite Light Installation Diagram

Installing GloBrite® Color Light Niche in a Fiberglass Pool

To install the GloBrite color light niche in a fiberglass pool:

1. Drill or punch a 5 cm (2 in) hole in the desired location for the GloBrite light niche.
2. Place the sealing gasket on the niche as shown below.
3. Insert the niche through the 5 cm (2 in) hole in the pool wall.
4. Install the PVC washer to the back of the niche.
5. Install the plastic nut onto the back of the niche. Hand tighten the nut to secure the niche in place.
6. Glue the 2.5 cm (1 in) conduit into back of niche.

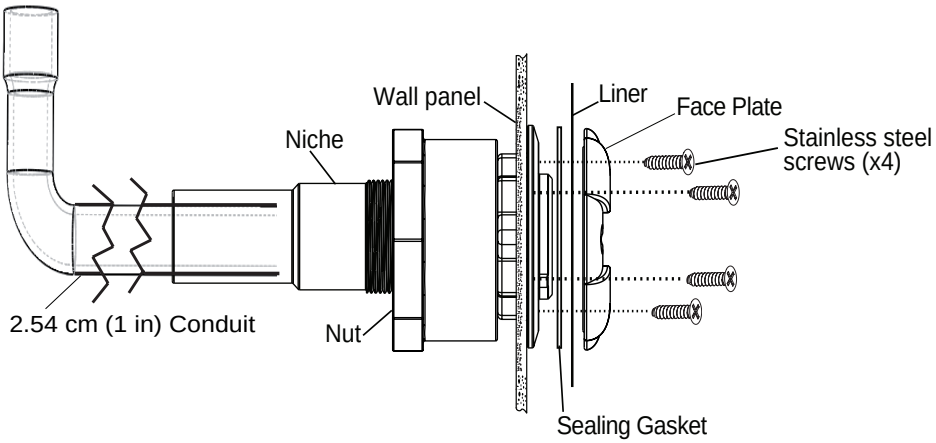


GloBrite Color Light Niche (Fiberglass pool) Installation Diagram

Installing GloBrite® Color Light Niche in a Vinyl Pool

To install the GloBrite color light niche in a vinyl liner pool:

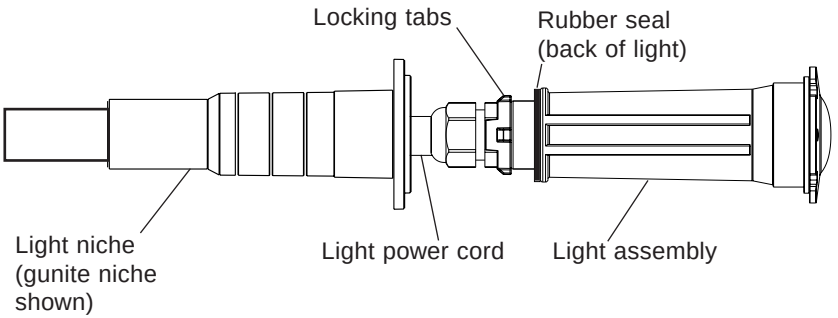
1. Drill a 7.62 cm (3 in) hole in the desired location for the light vinyl niche.
2. From the inside of the pool, insert the vinyl niche through the 7.62 cm (3 in) hole.
3. Install the plastic nut onto the back of the niche. Hand tighten the nut to secure the niche in place.
4. Place the sealing gasket onto the front of the niche as shown below.
5. Install the vinyl liner.
6. Install the conduit. See Figure 2 on page 8.
7. Using the alignment tabs on the niche, carefully align the faceplate to the niche. Once the faceplate is properly aligned, pierce liner through faceplate and install the screws one at a time.
8. Using a No. 2 Phillips head screwdriver, hand tighten each retaining screw to secure the cover. DO NOT OVER TIGHTEN THE SCREWS. DO NOT USE A POWER TOOL TO SECURE THE SCREWS. Over tightening or using a motorized screwdriver on the sealing ring screws can over torque the screw threads and damage the niche housing and/or vinyl liner seal.



INSTALLING THE GLOBRITE® WHITE LIGHT ASSEMBLY (AFTER NICHE INSTALLATION)

To install the GloBrite color light into the gunite, fiberglass or vinyl niche:

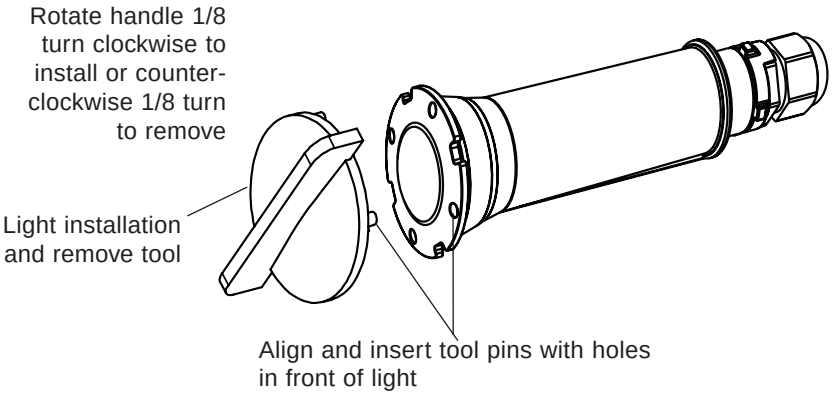
1. Route the GloBrite light power cord through the front of the niche, to the location of the 12 VAC pool transformer or junction box.
2. At the 12 VAC transformer or junction box, cut off any extra cord. Leave at least 15.2 cm (6 in) of cord in the Junction Box or transformer to facilitate the light installation, niche inspection. Cut off any extra cord. See Figure 2 on page 8. For junction box installation for Canada, see Figure 1 on page 5.
3. Strip back the outer cord jacket of the wires to expose the two (2) insulated conductors. Strip back the two conductors. Be careful not to damage the copper conductor.
4. Connect the two (2) conductors to the corresponding circuit wires in the Junction Box (black wire to power, white wire to common). Secure the Junction Box cover.
5. **Install the new GloBrite light assembly:** Push the light into the niche while pulling the power cord from the junction box or transformer, making sure the locking tabs in the back end of the light are properly aligned with the niche openings (inside the niche).



GloBrite Niche and Light

6. Place the light installation tool (P/N 620057) over the front of the light. Turn the tool and light clockwise (less than an .3175 cm (1/8th. turn), while pushing inward, until you feel the stop point. This indicates the light is properly seated, locked and the niche is completely sealed.

   Note: *If the light does not turn smoothly, pull the light slightly out and make sure that it's seated properly and the niche is free of debris, then install the light as described in step 6.*



GloBrite® Color Light Installation/Removal Tool

7. Before operating the GloBrite color light, fill the pool with water until the light is completely submerged.

   Note: *The GloBrite color light should not be powered for more than 30 seconds if is not submersed in water.*

8. **Final check for proper GloBrite light operation:** Switch on the main switch or circuit breaker to the 12 VAC transformer and the switch that operates the GloBrite light itself. The light should illuminate when the 12 VAC power is applied. If not recheck the installation steps.

REPLACING THE GLOBRITE® LIGHT ASSEMBLY (IN AN EXISTING POOL OR SPA)

Risk of Electrical Shock or Electrocution!
This underwater light must be installed by a licensed or certified electrician or a qualified pool professional in accordance with the current National Electrical Code (NEC), NFPA 70 or the Canadian Electrical Code (CEC), CSA C22.1 and all applicable local codes and ordinances. Improper installation will create an electrical hazard which could result in death or serious injury to pool users, installers or others due to electrical shock, and may also cause damage to property.

Always disconnect the power to the pool light at the circuit breaker before servicing the light. Failure to do so could result in death or serious injury to service person, pool users or others due to electrical shock.

IMPORTANT NOTICE: THE GLOBRITE LED LIGHT IS A NON-SERVICEABLE LIGHT. THE COMPLETE LIGHT ASSEMBLY MUST BE REPLACED.

WARNING

Verify that the pool and spa meets the requirements of the current National Electrical Code and all local codes and ordinances. A licensed or certified electrician must install the electrical system to meet or exceed those requirements before the underwater light is installed. Some of the requirements of the National Electrical Code which the pool's electrical system must meet are as follows:

- The Junction Box and the low voltage transformer is located at least 4 (four) inches (10.16 cm) above ground level or eight (8) inches (20.3 cm) above maximum water level, whichever is higher. The Junction Box must be at least 48 inches (1.22 m) from the edge of the pool. See Figure 2 on page 8.
- The GloBrite light niche must be properly installed so that the top edge of the lens of the GloBrite light is at least 4 inches below (not more than 48 inches below in Canada) the surface of the water in the pool or spa. See Figure 2 on page 8.
- To be certain that the pool or spa electrical system meets all applicable requirements, the electrician should also consult the local building department.

IMPORTANT NOTICE:
THE GLOBRITE® LIGHT IS A NON-SERVICEABLE LIGHT. THE COMPLETE LIGHT ASSEMBLY MUST BE REPLACED.

The following removal and installation instructions describe how to remove and install the GloBrite color light assembly.

IMPORTANT NOTICE: THE GLOBRITE LED LIGHT IS A NON-SERVICEABLE LIGHT. THE COMPLETE LIGHT ASSEMBLY MUST BE REPLACED.

⚠WARNING

Failure to bring the pool or spa's electrical system up to code requirements before installing the underwater light will create an electrical hazard which could result in death or serious injury to pool users, installers, or others due to electrical shock, and may also cause damage to property.

1. **Switch off electrical switch or circuit breaker at the source,**
2. Remove Junction Box or Transformer cover. Disconnect the light wires and attach a fish tape to the existing light power cord. *This will assist in pulling the replacement light power cord through the conduit back to the junction box.*
3. **Remove the GloBrite color light assembly from the pool or spa water:** Using the provided installation tool (P/N 620057), rotate the light assembly counter-clockwise about a 1/8th turn to release the light from the niche as shown on page 11).
4. Slowly pull the light and attached power cord (with attached fish tape) out of the niche. Pull the light's power cord and fish tape out of the niche and place the light on the deck.
5. Attach the new light power cord to the fish tape and carefully feed the fish tape and cable to the junction box.
6. **Install the light into the niche:** Place the light installation tool over the front of the light. Turn the tool and light clockwise while pushing inward, until you feel the stop point. This indicates the light is properly seated, locked and the electrical conduit, is completely sealed (see page 11).

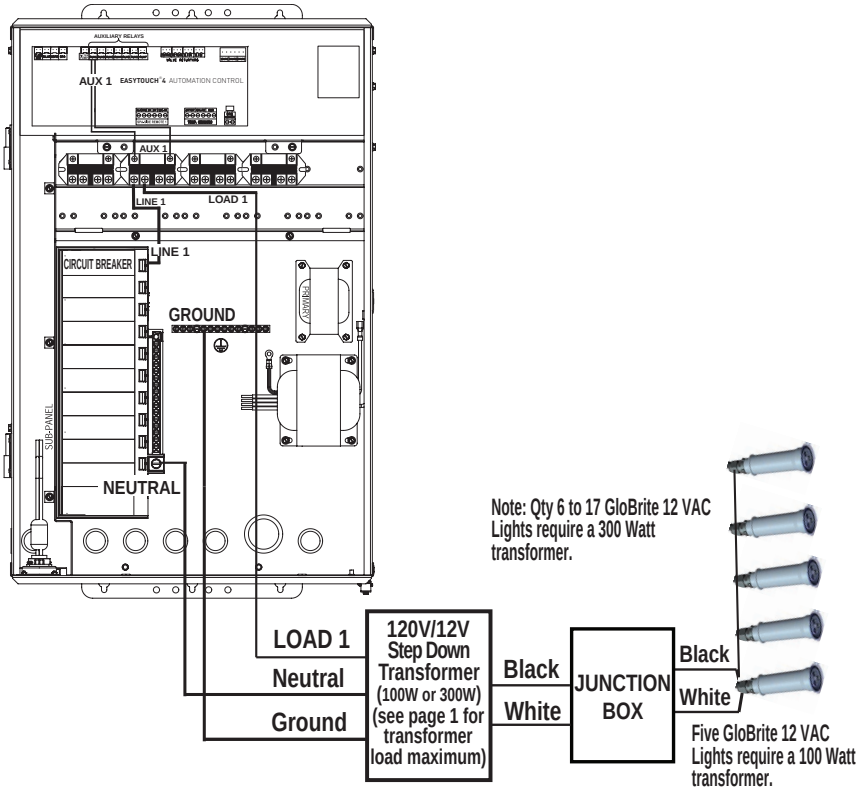
   Note: If the light does not turn smoothly, pull the light slightly out and be sure that it's seated properly and the niche is free of debris, then install the light as described in step 5.
7. Connect the two (2) conductors to the corresponding circuit wires in the Junction Box (black wire to power, white wire to common) and secure the Junction Box cover in place.
8. **Final check for proper GloBrite Color light operation:** Switch on the main switch or circuit breaker to the 12 VAC transformer and the switch that operates the light itself. The light should illuminate when 12 VAC power is applied. If not recheck the installation steps.

CONNECTING GLOBRITE® LIGHTS TO EASYTOUCH® OR INTELLITOUCH® CONTROL SYSTEM LOAD CENTER TO AN AUXILIARY RELAY

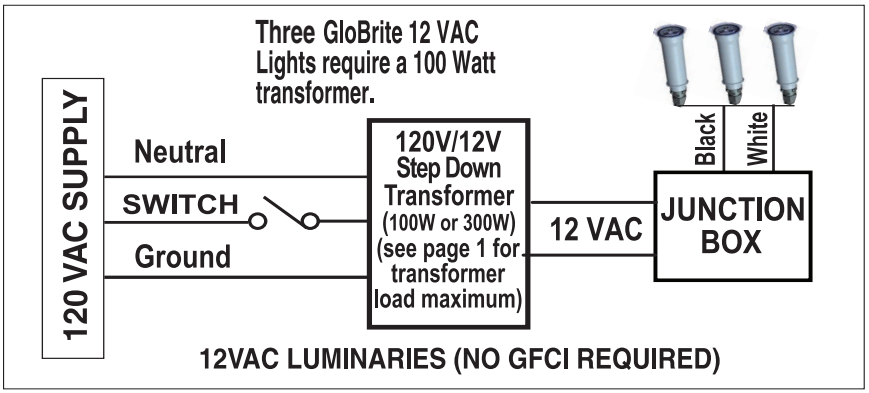
⚠DANGER **RISK OF ELECTRICAL SHOCK OR ELECTROCUTION**

Always disconnect AC power to EasyTouch and IntelliTouch control system load center at the circuit breaker before servicing, or removing the **HIGH VOLTAGE FRONT PANEL**. Failure to do so could result in death or serious injury to installer, service person, pool users, or others due to electrical shock.

1. **EasyTouch or IntelliTouch Control System Load Center:** Unlatch the enclosure door spring latch, and open the door.
2. **Discharge Electrostatic energy before removing the cover by first touching the metal part of the enclosure.**
3. Loosen the two (2) retaining screws from the HIGH VOLTAGE FRONT PANEL. Remove the panel from the enclosure.
4. Run the GloBrite color light power cord to a auxiliary relay in the EasyTouch/IntelliTouch load center.
5. Connect the 120 Volt side of a 12 VAC transformer to the LOAD SIDE of one of the auxiliary (AUX) relays in the load center.
6. Connect the Neutral conductor from the 12 VAC transformer to the Neutral bus bar in the load center.
7. After the connection has been completed, close the control panel and secure it with the two (2) retaining screws.
8. Close the load center front door. Fasten the spring latch.



EasyTouch® and IntelliTouch® Control System Load Center Wiring Diagram



GloBrite® Color Light with Wall Switch Wiring Diagram

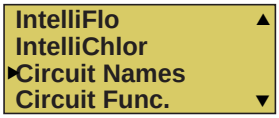
SETTING UP GLOBRITE® WHITE LIGHTS WITH EASYTOUCH® AND INTELLITOUCH® CONTROL SYSTEM

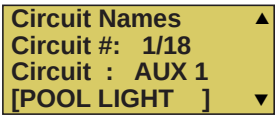
EasyTouch® Control System

The following describes how to setup the GloBrite Color Light from the EasyTouch® control system indoor control panel or the EasyTouch control system wireless control panel. From the EasyTouch control panel you can control the light shows.

To set up a GloBrite light circuit; assign the "Light Circuit Name" to the relay circuit (example; AUX 3, as "Pool Light") and "Function": assign the name "Pool Light" circuit in the Circuit Func. menu as a "light" circuit (IntelliBrite). After assigning the circuit name and function, the light circuit name "Pool Light" can be setup in the CONFIG menu for light position, color etc.

To assign a Circuit Name go to: MENU > SETTINGS > CIRCUIT NAMES





1. Press the **Up/Down button** to select a circuit number 1/18. Press the Up button two times to select **AUX 1** to choose this circuit for a light circuit On/Off button. The circuit number (1/18) corresponds to its assigned circuit name.
2. Press the **Up/Down button** to scroll through the list of preset names. Select a name such as "Pool Light." AUX 1 has now been assigned the circuit name "Pool Light."

To assign a Circuit Function go to: MENU > SETTINGS > CIRCUIT FUNC.

3. Press the Menu button to return to the Settings menu. Press the Down button to and select "Circuit Func." Press the Right button to access the Circuit Func. menu.
4. Press the **Up/Down button** to select the already assigned circuit name "Pool Light."
5. Press the **Right button** to view "Circuit Functions" to assign to light circuit "Pool Light."
6. Press the **Up/Down button** to select the type of light circuit function to use. Select "INTELLIBRITE" for the GloBrite light circuit function.
7. Press the Menu button three times to return to the main screen.

Operating the GloBrite lights: The GloBrite color light is ready to operate using the EasyTouch control panel button 1 (auxiliary 1 circuit). To access the Lights menu screen *(special Light Features)*, press **Menu > Lights**. The Lights menu settings are: MODES, COLORS, ALL ON, ALL OFF, SYNC, MAGICSTREAM, CONFIG: From the Modes screen you can control the color light shows. To access the Modes menu, press Menu > Lights > Modes. See page 2 for GloBrite color light shows.

IntelliTouch® Control System

The following describes how to setup the GloBrite® Color Light from the IntelliTouch® control system control panel. From the IntelliTouch® control system control panel you can control the light shows. To access the GloBrite light screens, from the IntelliTouch indoor control panel or the MobileTouch® Wireless Remote control panel.

Assigning a Circuit Name

To identify the GloBrite light connected to the auxiliary circuits (AUX 1, AUX 2) in the IntelliTouch load center, you need to assign the GloBrite light circuit name to the corresponding auxiliary circuits in the IntelliTouch indoor control panel. Choose a circuit name from the preset list of names for the GloBrite light connected to the auxiliary relay installed in the IntelliTouch load center.

Assigning a Circuit Name for the GloBrite Light: To assign a Circuit Name for the GloBrite light, go to: **MENU > SETUP > ADVANCED > CIRCUIT NAMES > ASSIGN CIRCUIT NAMES > DISPLAY.**
Selecting DISPLAY Screen 1, 2, 3, or 4: The auxiliary circuits that control the pool and spa equipment can be accessed from the "Display" screen on the Indoor Control Panel or MobileTouch wireless control panel. Selecting the button next to Display 1, 2, 3, or 4 displays the screen with circuits belonging to that particular expansion Load Center or Power Center. "Feature Circuits" can also be assigned from this screen.

To assign circuit names for a specific display screen:
Display #1 - This screen shows circuit names for the filter pump, pool and spa modes, and all high voltage auxiliary circuits connected to the main Load Center or Power Center. **Display #2** - This screen shows circuit names for the additional auxiliary circuits connected to the first expansion center (Load Center or Power Center).
Display #3 - This screen shows circuit names for the additional auxiliary circuits connected to the second expansion center (Load Center or Power Center)
Display #4 - This screen shows circuit names for the additional auxiliary circuits connected to the third expansion center (Load Center or Power Center).

To assign a GloBrite light circuit name for the MAIN SCREEN:

1. Select the button next to Display #1. These are the circuit names that will be displayed on the Main Screen. Note: If there is an expansion Load Center or Power Center installed, select the appropriate Display #2, #3, or #4 associated with that expansion Load Center or Power Center.
2. From the Main Display screen, press the button next to AUX 1.A small arrow pointing to AUX 1 is displayed.
3. Use the Up and Down buttons at the bottom of the screen to scroll through the alphabetical list of preset equipment names. Choose the equipment name that matches the label name for button number 1 on the Load Center Outdoor Control Panel.
4. Continue to name other auxiliary circuits (AUX2, AUX3, etc.): After selecting the equipment name you want to use for AUX 1, press the button next to the AUX 2 and choose a circuit name. The small arrow indicates which circuit is selected for naming.
5. Repeat the process to assign the other equipment to circuits on this screen.
6. When you have finished assigning equipment circuit names, press the Save button. Press the Exit button to return to the Main screen.
7. **CONTINUE TO NEXT PAGE to set up the GloBrite "Function Circuit."**

Set up a GloBrite® Color Light Circuit Function

To setup an AUX circuit to control the GloBrite color light, assign the circuit light function an auxiliary relay circuit (AUX 1), then assign the circuit name for that light circuit. The light circuit name will appear on the main screen. Each GloBrite light must also be assigned a circuit function.

To assign a Circuit Name for the GloBrite light, go to: MENU > SETUP > ADVANCED > CIRCUIT FUNCTIONS

Setup a GloBrite light function circuit: Assign each light auxiliary relay circuit a circuit name, then assign that light relay circuit in the "CIRCUIT FUNCTIONS" section, as "INTELLIBRITE."

To setup the GloBrite light circuit function (use the "IntelliBrite" circuit name):

1. Press the button next to the AUX button (the relay auxiliary circuit connected to the GloBrite (IntelliBrite) light).
2. Press the right or left side (PREV/NEXT) button next to "INTELLIBRITE." Scroll through the circuit functions until "INTELLIBRITE" is displayed.
3. Press the SAVE button on the bottom of the screen. Press the EXIT button to return to the main screen.

Assign the GloBrite light circuit to the Lights screen:

4. Press the Lights button on the bottom of the screen.
5. Press the right side button next to "CONFIGURE."
6. Press the button next to "NONE" to assign an IntelliBrite light circuit to the selected button. Light names can be setup to display on the left side for "Spa" features and on the right side for the "Pool" features.
7. Press the top left or right side button to scroll through the available light circuits which can be used for the GloBrite (IntelliBrite) lighting features. Select at the circuit name you wish to use. The displayed circuit names are circuit names that were previously assigned when assigning a circuit function.

Operating and Selecting GloBrite (IntelliBrite® Color Light) Color Modes

From the "Modes" screen you can select various preset show color lighting effects, such as "American mode" and "Sunset mode," and Pentair SAm® Color Changing Light (an emulation of the SAm color scheme). Using the "Hold" and "Recall" feature you can also capture and save a unique color effect to recall at a later time.

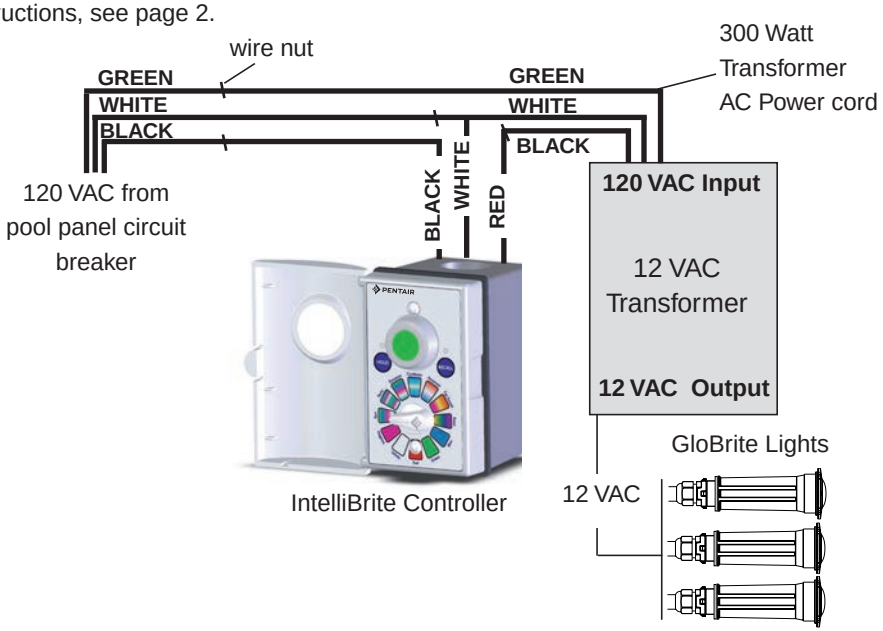
Modes screen

To access the IntelliBrite® Color Light color show "Modes" features from the Lights screen, press the Lights button on the bottom of the screen, then press the left side button next to "MODES."

Special Light Features: Up to twelve (12) IntelliBrite light circuits can be displayed on the main Lights screen (special light features). From the Lights screen you can activate the IntelliBrite lighting features (i.e., color swim, color set). Assuming each GloBrite (IntelliBrite) light has its own relay and separate circuit.

Wiring GloBrite® Color Lights to IntelliBrite® Controller and 300 Watt Transformer

The following diagram shows how to connect GloBrite® color light to an IntelliBrite Controller using a 300 Watt transformer. Note: For GloBrite light operating instructions, see page 2.



Troubleshooting (GloBrite Lights)

Both of the LEDs are flashing: Check the light wiring connection to the junction box at the pool side and to the AC power switch.
Light does not function properly: Be sure that there is proper AC power applied to the light.

Troubleshooting (IntelliBrite Controller)

Both of the LEDs are flashing: The IntelliBrite Controller has detected that the load has exceeded the maximum allowable wattage or the output is shorted out
1. Switch off the IntelliBrite Controller OFF. Remove excessive load or short.
2. Press the IntelliBrite Controller power switch to power on the unit. Verify the LEDs are no longer flashing.

GloBrite® Color Lights Parts List and Replacement Kits

GloBrite Lights

Part No.	Description
602053	GloBrite 12 VAC 30’ cord
602054	GloBrite 12 VAC 50’ cord
602055	GloBrite 12 VAC 100’ cord
602056	GloBrite 12 VAC 150’ cord

GloBrite Bundles

Part No.	Description
619993	Gunite Combo #1- 1 GloBrite 100’ w/300W transformer & Gunite niche
619994	Gunite Combo #2 - 2 GloBrite 100’ w/300W transformer & 2 Gunite niches
620051	Fiberglass combo #1- 1 GloBrite 100’ w/300W txfmr & Fiberglass niche
620052	Fiberglass combo #2 - 2 GloBrite 100’ w/300W txfmr & 2 Fiberglass niches
620080	Vinyl combo #1- 1 GloBrite 100’ w/300W txfmr and vinyl niche
620081	Vinyl combo #2 - 2 GloBrite 100’ w/300W txfmr and two vinyl niches

GloBrite Light Niches

Part No.	Description
620039	Vinyl Niche for GloBrite
620040	Gunite Niche for GloBrite
620041	Fiberglass Niche for GloBrite
620093	Fiberglass Niche for GloBrite (Blue)
620094	Fiberglass Niche for GloBrite (Gray)

GloBrite Light Replacement Kits

Part No.	Description
620054	Vinyl (gasket, front face and screws (4))
620055	Fiberglass (washer and gasket)
620056	Color Ring (color ring and plaster cover)
620057	O-Ring (o-ring, insertion tool)
620058	Nut (fiberglass/vinyl nut)
620314	Glare Shield

Notes

Notes

Notes

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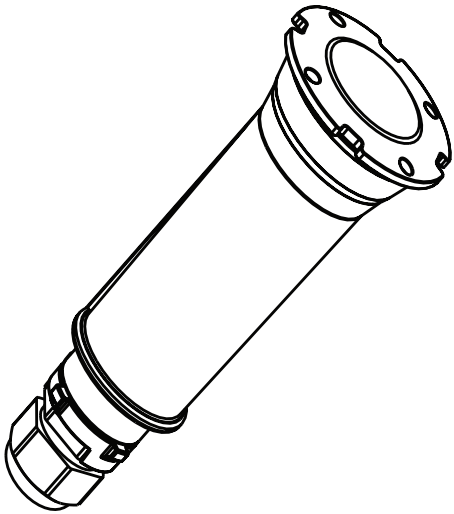
P/N 17302 REV C 1/2019

PENTAIR

LÁMPARA LED SUMERGIBLE MULTICOLOR GLOBRITE™

PARA PISCINAS Y SPA



GUÍA DE INSTALACIÓN Y DE USUARIO

INSTRUCCIONES DE SEGURIDAD IMPORTANTES
LEA Y SIGA TODAS LAS INSTRUCCIONES
GUARDE ESTAS INSTRUCCIONES

Soporte técnico

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LEA Y SIGA TODAS LAS INSTRUCCIONES DE ESTE MANUAL.

INSTRUCCIONES IMPORTANTES DE ADVERTENCIA Y SEGURIDAD

⚠ PELIGRO **NO INSTALAR Y UTILIZAR ESTA LÁMPARA CORRECTAMENTE PUEDE CAUSAR LESIONES FÍSICAS O LA MUERTE.**

⚠ PELIGRO **LOS INSTALADORES, OPERADORES Y PROPIETARIOS DE LA PISCINA DEBEN LEER ESTAS ADVERTENCIAS Y TODAS LAS INSTRUCCIONES ANTES DE USAR LA LÁMPARA DE PISCINA Y/O SPA.**

⚠ ADVERTENCIA La mayoría de los códigos regionales y estatales regulan la construcción, la instalación y la operación de spas y piscinas públicas, así como la construcción de spas y piscinas residenciales. Es importante cumplir con esos códigos, muchos de los cuales regulan directamente la instalación y el uso de este producto. Consulte sus códigos de construcción y salud regionales para obtener más información.

AVISO IMPORTANTE. Atención del instalador: Esta Guía de instalación y de usuario ("Guía") contiene información importante sobre la instalación, el funcionamiento y el uso seguros de esta lámpara sumergible para piscinas y spa. Se le debe proporcionar esta Guía al dueño u operador del equipo.

⚠ ADVERTENCIA Antes de instalar este producto, lea y siga todas las instrucciones y preste atención a las advertencias que se incluyen en esta Guía. No seguir las instrucciones ni prestar la debida atención a las advertencias puede ocasionar daños a la propiedad, lesiones graves y hasta la muerte. Llame al (800) 831-7133 para obtener copias adicionales y gratuitas de las instrucciones. Visite www.pentairpool.com para obtener más información sobre estos productos.

⚠ PELIGRO **RIESGO DE DESCARGAS ELÉCTRICAS O DE ELECTROCUCIÓN: ANTES DE TRABAJAR CON la lámpara, siempre corte la alimentación de las lámparas de la piscina o del spa en el disyuntor fuente antes de hacer el mantenimiento de la lámpara. Si incumple con esto, puede dar como resultado la muerte o lesiones serias a la persona que realiza el mantenimiento, a los usuarios de la piscina o a terceros debido a un choque eléctrico. Cuando instale y use estos equipos eléctricos, siempre se deben seguir las precauciones de seguridad básicas.**

Esta lámpara sumergible debe instalarla un electricista certificado o con licencia, o en todo caso, un equipo profesional calificado de mantenimiento de conformidad con el Código Nacional Eléctrico (NEC) vigente, NFPA 70 o con el Código Eléctrico Canadiense (CEC), CSA C22.1. Además, deben respetarse todos los códigos y las ordenanzas regionales aplicables. Una instalación incorrecta representa un peligro eléctrico que podría dar como resultado la muerte o una seria lesión a los usuarios de la piscina, instaladores u otros debido a un choque eléctrico, y también podría causar daños a la fuente de alimentación. Siempre desconecte la alimentación de la lámpara de la piscina desde el disyuntor antes de realizar el mantenimiento de la lámpara. Si incumple con esto, podría dar como resultado la muerte o lesiones serias a la persona que realiza el mantenimiento, a los usuarios de la piscina o a otros debido a un choque eléctrico.

⚠ ADVERTENCIA **Para los países que cumplen con las normas reguladoras de la Comisión Electrotécnica Internacional (IEC):** Las lámparas deben ser instaladas por un electricista certificado o con licencia, o en todo caso, una persona calificada de mantenimiento de piscinas, en conformidad con el IEC 364-7-702 actual y todos los códigos y las ordenanzas locales vigentes. Una instalación incorrecta representa un peligro eléctrico que podría dar como resultado la muerte o una seria lesión a los usuarios de la piscina, instaladores u otros debido a un choque eléctrico, y también podría causar daños a la propiedad.

INSTRUCCIONES IMPORTANTES DE ADVERTENCIA Y SEGURIDAD

INSTALADORES E INSPECTORES

LA LÁMPARA LED DE COLOR GLOBRITE® Y EL NICHO DE PLÁSTICO COMPONEN UN SISTEMA DE ILUMINACIÓN COMPLETO DE BAJO VOLTAJE Y SIN METALES. ESTA CONFIGURACIÓN NO EXIGE CONEXIÓN O PUESTA A TIERRA CUANDO RECIBE ALIMENTACIÓN DE UN TRANSFORMADOR DE 100W O 300W INCLUIDO EN LA LISTA (LISTA EN LA PÁGINA 19) Y SE INSTALA EN CUMPLIMIENTO DEL CÓDIGO NACIONAL ELÉCTRICO VIGENTE (NEC).

DISPOSICIONES DE LA NEC SOBRE ILUMINACIÓN SIN CONEXIÓN: Cuando la UL incluyó en su lista que las lámparas de color LED de bajo voltaje se utilizan con los nichos aprobados para lámparas GloBrite (como se menciona en la página 19), el NEC actual añade una excepción sobre la conexión y el cableado a tierra de las luminarias en el Artículo 680.6 y 680.23

DISPOSICIONES DE NEC SOBRE CONEXIONES EN AGUA DE PISCINA: Para las conexiones en agua de piscina exigidas por el Artículo 680.26C de NEC, se considera que las piscinas de cemento son conductoras (consulte 680.26 [b] [1]) debido a la porosidad del cemento y la unión con las varillas. No se requiere conexión adicional.

LUMINARIAS FIJAS PARA PISCINAS Y SPA: Siga estas pautas al instalar o reemplazar luminarias fijas para piscinas y spas de Pentair Water Pool and Spa, Inc.:

- PARA CONTROLAR LAS LÁMPARAS, UTILICE ÚNICAMENTE UN TRANSFORMADOR DE AISLAMIENTO DE SEGURIDAD.

Nota: Conecte los tres conductores a los cables de circuito correspondientes en la caja de conexiones (cable negro a alimentación, cable blanco a común y cable verde a tierra).

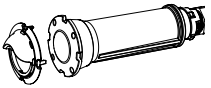
ESPECIFICACIÓN SOBRE LUMINARIAS FIJAS PARA PISCINAS Y SPA: 12 VCA 50/60 Hz

NOTA IMPORTANTE: LA LÁMPARA DE COLOR GLOBRITE NO PUEDE RECIBIR MANTENIMIENTO. SE DEBE REEMPLAZAR LA LÁMPARA EN SU TOTALIDAD.

Información general de la lámpara LED multicolor GloBrite® para piscinas

Este manual describe cómo instalar y reemplazar la lámpara LED de color GloBrite para piscinas y spas. Las lámparas LED de color GloBrite producen muchos colores vívidos y brillantes con efectos espectaculares en su piscina. El eficiente sistema productor de colores utiliza la tecnología IntelliBrite® de lámparas LED de color, que le permite variar el espectro lumínico a velocidades variables y con diferentes secuencias de color. Elija uno de los siete espectáculos de luces con programación previa o seleccione uno de los cinco colores fijos para crear una variedad casi interminable de efectos de iluminación bajo el agua que le darán una apariencia espectacular a su piscina o spa.

El accesorio de opcional GloBrite ™ antirreflejos de la pantalla (P/N 620314 - vendido por separado] es para su uso en GloBrite ™ luces LED para reducir reflejo de la luz.



Controlar las lámparas LED de color GloBrite con un interruptor de pared

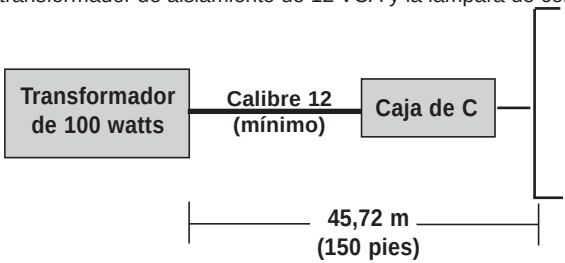
La lámpara LED de color GloBrite se puede controlar manualmente con un interruptor de luces estándar que se monta en la pared. Se pueden conectar varias lámparas de color GloBrite mediante una caja de conexiones y un transformador de aislamiento de 12 VCA a un único interruptor, de modo que se puedan encender y apagar todas las luces simultáneamente. Para ver el diagrama del cableado, consulte la página 14.

Controlar las lámparas LED de color GloBrite con el sistema de control automático

Las lámparas de color también se pueden controlar automáticamente con los sistemas de control IntelliTouch® e EasyTouch® de Pentair (ver página 14). Para más información consulte la Guía de usuario del sistema de control IntelliTouch (P/N 521075), la Guía de usuario del sistema de control EasyTouch (N/P 521044) y la Guía de usuario del sistema de control SunTouch® (N/P 520785).

Utilizar un transformador de aislamiento de seguridad externo para varias lámparas GloBrite de 12 VCA.

Cuando utiliza varias lámparas de color GloBrite de 12 VCA en un transformador de aislamiento de seguridad de **100W**, se recomienda emplear no más de tres (3) lámparas GloBrite. Para cables largos con una sola lámpara, se recomienda no superar los 45,72 m (150 pies) de cable total entre el transformador de aislamiento de 12 VCA y la lámpara de color GloBrite.



Nota: Si es necesario un cable más largo, se recomienda utilizar transformadores de aislamiento de seguridad de **100W** independientes para cada lámpara, utilizando cables de no más de 45,72 m (150 pies) entre los transformadores y las lámparas.

Máxima potencia de consumo (watts) con varias lámparas de color LED GloBrite (con un transformador de aislamiento de 300W)

¡IMPORTANTE! Cuando se utilizan varias lámparas LED blancas Pentair de 12 VCA en una piscina o en un spa, la potencia de consumo total permitida para las lámparas es 300W. La potencia de consumo individual por lámpara es la siguiente:

- Una lámpara LED GloBrite de color/blanca para piscina/spa tiene un máximo de 15 watts
- Una lámpara LED de color AmerBrite para piscina tiene un máximo de 23 watts
- Una lámpara LED AmerBrite blanca (500W) para piscina tiene un máximo de 51 watts
- Una lámpara LED AmerBrite blanca (400W) para piscina tiene un máximo de 44 watts
- Una lámpara LED AmerBrite blanca (300W) para piscina tiene un máximo de 36 watts
- Una lámpara LED AmerBrite de color para piscina tiene un máximo de 36 watts
- Una lámpara LED IntelliBrite de color para piscina tiene un máximo de 30 watts
- Una lámpara LED IntelliBrite de color para spa tiene un máximo de 18 watts

Controlar las lámparas de color GloBrite® con un interruptor de pared

Las lámparas de color GloBrite® se pueden controlar con un interruptor convencional que se monta en la pared o con el Controlador IntelliBrite® (ver página 3). Se pueden conectar varias lámparas de color GloBrite mediante una caja de conexiones y un transformador de 12 VCA a un único interruptor, de modo que se puedan encender y apagar todas las luces simultáneamente. Las lámparas de color GloBrite® se controlan enviando corriente AC al transformador de 12 VCA desde un interruptor de pared convencional. Al alternar el interruptor entre encendido y apagado un número específico de veces se activa uno de los siete modos de espectáculo de luces, colores fijos, o se habilita la función “Retener” y “Recordar”.

Encender las lámparas LED de color GloBrites

Cuando se enciende la lámpara de color GloBrite, se muestra el color seleccionado anteriormente, a menos que anteriormente se haya habilitado la función Hold (Retener) o Recall (Recordar).
Nota: Si la alimentación de la lámpara se corta por más de cinco (5) segundos, se mostrará el último modo de espectáculo de colores o color fijo que se guardó.

Seleccionar un modo de espectáculo de luces de colores o un color fijo de GloBrite con un interruptor de pared

Las lámparas de color GloBrite son compatibles con los colores y espectáculos de las lámparas de color IntelliBrite y se pueden sincronizar con las lámparas de color IntelliBrite.

Primero encienda la lámpara. Se encenderá una luz blanca momentáneamente, seguida del color seleccionado con anterioridad. Para seleccionar un modo de espectáculo de colores (1-7) o de color fijo (8-12), alterne el interruptor de pared entre encendido/apagado un número específico de veces. Cada número (1-12) que se muestra a continuación corresponde a la cantidad de veces que se debe alternar el interruptor para activar un espectáculo de luces de colores o un color fijo. Para más detalles sobre cómo guardar efectos de color durante los modos de Show (Espectáculo), consulte las funciones “Hold” (Retener) y “Recall” (Recordar) en la página 3.

Cantidad de veces para reiniciar (1-14)	
1	**SAm Mode (Modo Sam):** Recorre los colores blanco, magenta, azul y verde (emula la luz de varios colores Pentair SAm®).
2	Party Mode (Modo fiesta): Cambio de colores muy veloz que energiza y entusiasma.
3	**Romance Mode (Modo romántico):** Transición lenta entre colores para dar un efecto cautivante y relajante.
4	**Caribbean Mode (Modo caribeño):** Transición entre una variedad de azules y verdes.
5	**American Mode (Modo americano):** Transición patriota entre rojo, blanco y azul.
6	**California Sunset Mode (Modo de atardecer de California):** Transiciones espectaculares entre tonos de naranja, rojo y magenta.
7	**Royal Mode (Modo real):** Colores más ricos y profundos.
8	Blue (Azul): Color fijo.
9	**Green (Verde):** Color fijo.
10	**Red (Rojo):** Color fijo.
11	**White (Blanco):** Color fijo.
12	**Magenta:** Color fijo.
13	**Hold (Retener):** Guardar el efecto de color actual durante un espectáculo de luces de color.
14	**Recall (Recordar):** Activar el último efecto de color guardado.

Ejemplo: Para seleccionar el **California Sunset Mode** (modo Atardecer de California); alterne el interruptor entre encendido y apagado seis (6) veces consecutivas. Durante el proceso de alternación entre encendido/apagado, no habrá iluminación y luego se encenderá momentáneamente una luz blanca.

> **⚠ ADVERTENCIA** Durante el proceso de alternación encendido/apagado antes de que se visualice el color seleccionado, no se encenderá ninguna lámpara. Este modo de operación es normal durante el proceso de encendido/apagado. Durante este período, la piscina y el spa estarán oscuros y habrá que tomar precauciones para evitar accidentes imprevistos. Si no se respeta esta advertencia, los usuarios de la piscina o el spa pueden provocarse lesiones graves o la muerte.

Guardar un modo de color o color fijo

Cuando se apagan las lámparas de color GloBrite®, se guarda el último modo de espectáculo de colores o color fijo. La próxima vez que se encienda la luz, se mostrará el modo de espectáculo de colores o color fijo que se guardó anteriormente. Por ejemplo, mientras está en modo Party (Fiesta) apague la lámpara. Espere más de 10 segundos, vuelva a encender la lámpara para reanudar el modo Party (Fiesta).

Seleccionar modos de color, de espectáculo o de color fijo para las lámparas GloBrite con un controlador IntelliBrite®

En lugar de utilizar un interruptor de pared, las lámparas de color GloBrite se pueden controlar con el Controlador IntelliBrite (p/n 600054, se vende por separado). El Controlador IntelliBrite® le otorga control total sobre sus lámparas de color GloBrite. Es fácil seleccionar una función de iluminación: basta con marcar alguno de los espectáculos de luces de colores o colores fijos preprogramados en el disco selector. Con los botones Hold (Retener) y Recall (Recordar) también puede crear efectos de iluminación inigualables. El Controlador IntelliBrite se puede conectar a un transformador de 12 VCA o varios para controlar las lámparas de color GloBrite. El Controlador IntelliBrite también puede controlar varias lámparas GloBrite e IntelliBrite.
Nota: Para ver las instrucciones de cableado del controlador IntelliBrite, consulte la página 18.

Utilizar el controlador IntelliBrite® para las lámparas de colores: Las lámparas de color GloBrite son compatibles con los colores y espectáculos de IntelliBrite y se pueden sincronizar con las luces de color y paisaje de IntelliBrite. Para seleccionar un modo de espectáculo de luces de colores o un modo de color fijo, gire el disco selector de modo tal que señale la selección deseada. Las selecciones de modo de color comienzan en el sentido de las agujas del reloj a partir de la posición correspondiente a las 9 en punto.

Función Hold (Retener) y Recall (Recordar)

Botón/LED Hold (Retener): Presione este botón (LED encendido) para captar y guardar un efecto de color mientras se muestra uno de los modos de espectáculo de colores. Cuando presione el botón, se encenderá la luz LED para indicar que se capturó el efecto de color.

Botón/LED Recall (Recordar): Use este botón (LED encendido) para activar el último efecto de color guardado. Cuando presione el botón, se encenderá la luz LED para indicar que se está mostrando el efecto de color.

INSTALACIÓN DE LÁMPARA DE COLOR GLOBRITE®
(NUEVA CONSTRUCCIÓN DE PISCINA)

A continuación se describe cómo instalar la unidad de iluminación de color GloBrite.

ANTES DE COMENZAR: La siguiente información describe las tareas que el electricista debe realizar *antes* de instalar la unidad de iluminación. Vea la Figura 1 de la página 7.

⚠ ADVERTENCIA

Verifique que la piscina o el spa cumplan con los requisitos del Artículo 680-22 del Código Nacional Eléctrico (NEC) actual y todos los códigos y ordenanzas locales vigentes. Un electricista con licencia o certificado debe instalar el sistema eléctrico para cumplir o superar estos requisitos antes de instalar la lámpara sumergible. Algunos requisitos del Código Nacional Eléctrico, que el sistema eléctrico de la piscina debe cumplir, son los siguientes:

- El circuito de iluminación tiene un interruptor de circuito de tierra accidental (GFCI) para modelos con voltaje de línea de 120 VCA, y tiene un disyuntor correspondiente. Los conductores que están en el lado de carga del circuito GFCI no deben ocupar los conductos, las cajas de conexiones o los recintos que contengan otros conductores a menos que los conductores adicionales estén también protegidos por un GFCI. Consulte los códigos locales vigentes para conocer los detalles completos.
- La caja de conexiones y el transformador de bajo voltaje se encuentran a un mínimo de 20,3 cm (8") sobre el nivel del suelo y a un mínimo de 1,22 m (48") desde el borde de la piscina. Vea la Figura 1 de la página 7.
- El nicho para lámparas de color GloBrite se debe instalar correctamente de modo que el borde superior de la lente de la lámpara de color GloBrite esté a un mínimo de 10,16 cm (4") (no más de 1,22 m (48") debajo en Canadá) bajo la superficie del agua de la piscina o el spa.
- Para asegurarse de que el sistema eléctrico de la piscina o del spa cumpla con todos los requisitos vigentes, el electricista debe consultar con el departamento local de construcciones.

INSTALAR LA MANGA Y EL NICHO DE LA LÁMPARA DE COLOR GLOBRITE
(UNA VEZ QUE SE CUMPLEN LOS REQUISITOS ELÉCTRICOS)

Existen tres tipos de nichos de lámparas de color GloBrite para piscinas o spas: cemento/gunita, fibra de vidrio o recubrimiento de vinilo.

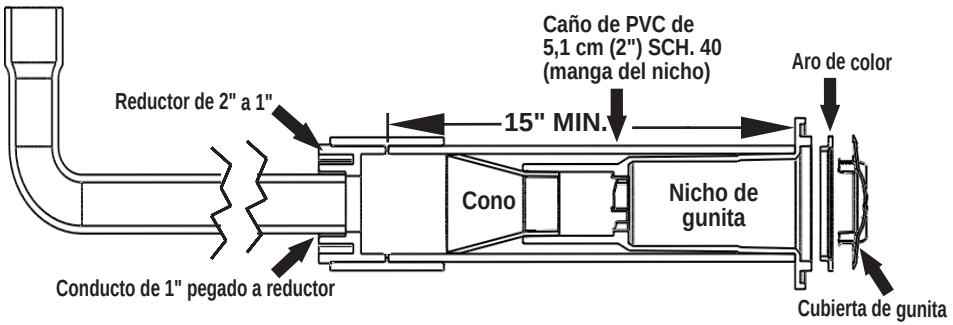
Nota: El nicho para lámparas de color GloBrite se debe instalar en la pared de la piscina (u otra instalación con agua) o sobre ella con la parte superior del lente a no menos de 10,2 cm (4") debajo del nivel de agua normal de la piscina. La lámpara de color GloBrite también se puede instalar en el fondo de la piscina.

Instalar la manga y el nicho para lámparas de color GloBrite® en una piscina de cemento/gunita: opción 1 y opción 2 (ver página 6)

Opción 1: Manga de nicho con cono **(el cono se utiliza para aplicaciones en las que se instala el nicho después de conectar el conducto a la manga de 2")**

1. **Instale la manga:** Ubique la posición vertical en la piscina o el spa donde se instalará la lámpara. La parte superior del lente de la lámpara debe encontrarse como mínimo a 10,2 cm (4") debajo del nivel de agua normal. Consulte la Figura 1 de la página 7 para ver los requisitos exactos de profundidad.
2. Instale un caño de PVC de 5 cm (2") SCH. 40, de 38,1 cm (15") de longitud en la ubicación deseada de la manga del nicho de la lámpara.
3. Permita que al menos 2,5 cm (1") de la manga del nicho del caño de PVC de 5 cm (2") se extienda hacia afuera a ambos lados de la pared durante la operación con gunita. Corte todo exceso del caño de modo que se enjuague contra la pared antes de enyesar.
4. Pegue un buje reductor de 5 cm (2") x 2,54 cm (1") en la parte trasera de la manga del nicho.
5. Pegue el conducto de 2,45 cm (1") en el reductor como se muestra a continuación en “Diagrama de instalación, opción 1". Asegúrese de que el caño de PVC de 5 cm (2") SCH. 40. se acomode en la longitud total del montaje del nicho/cono y reductor.
6. Pegue el cono en el nicho de gunita (el cono se utiliza para dirigir la cinta guía desde la caja de conexiones hacia dentro del nicho).
7. Aplique cemento de PVC en el interior de la manga. Deslice el nicho de gunita hacia dentro de la manga hasta que se encuentre al ras de la pared de gunita.
8. Instale el aro del color deseado en el frente del nicho.

   Nota: Si los códigos locales lo exigen, instale la lámpara en el nicho como se describe en la página 9.
9. Utilizando la tapa del nicho para sellar el frente del nicho, presione la tapa de gunita sobre el frente del nicho. De este modo, protegerá la cavidad de enfriamiento de la lámpara del nicho durante el enyesado. Nota: Si no dispone de una cubierta de gunita, utilice cinta de enmascarar para proteger el lente y la cavidad de enfriamiento durante la operación de enyesado.
10. Aplique yeso de gunita en la pared de la piscina hasta el borde exterior de la tapa de gunita. La tapa de gunita debería ser la única parte expuesta del nicho después de enyesar.
11. Una vez que se realizó el enyesado, retire y deseche la tapa de gunita.



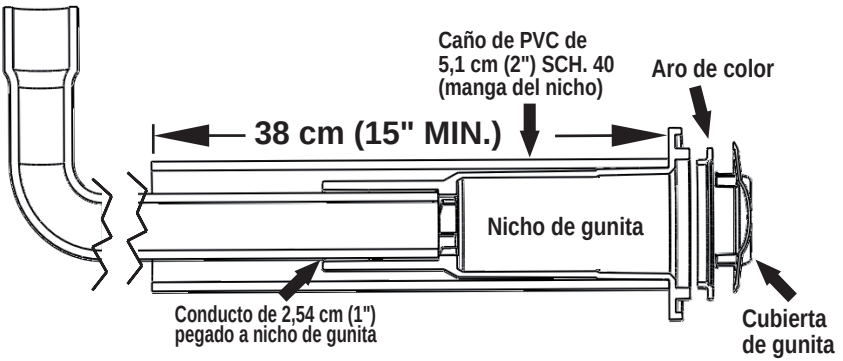
Opción 1: Diagrama de instalación de la manga del nicho con cono

Opción 2: Instale el conducto en el nicho de la lámpara

Para instalar el conducto en el nicho para lámparas de color GloBrite®:

1. **Instale la manga:** Ubique la posición vertical en la piscina o el spa donde se instalará la lámpara. La parte superior del lente de la lámpara debe encontrarse como mínimo a 10,2 cm (4") debajo del nivel de agua normal. Consulte la Figura 1 de la página 7 para ver los requisitos exactos de profundidad.
2. Instale un caño de PVC de 5 cm (2") SCH. 40, de 38,1 cm (15") de longitud en la ubicación deseada de la manga del nicho de la lámpara.
3. Permita que al menos 2,5 cm (1") de la manga del nicho del caño de PVC de 5 cm (2") se extienda hacia afuera a ambos lados de la pared durante la operación con gunita. Corte todo exceso del caño de modo que se enjuague contra la pared antes de enyesar.
4. Tire de la cinta guía y del cable de la lámpara por el conducto de 2,5 cm (1") y la manga de PVC SCH. 40 de 5 cm (2").
5. Pegue el conducto de 2,5 cm (1") en la parte trasera del conducto que se muestra a continuación en “Diagrama de instalación, opción 2".
6. Pegue el cono en el nicho de gunita (el cono se utiliza para dirigir la cinta guía desde la caja de conexiones hacia dentro del nicho).
7. Aplique cemento de PVC en el interior de la manga. Deslice el nicho de gunita hacia dentro de la manga hasta que se encuentre al ras de la pared de gunita.
8. Instale el aro del color deseado en el frente del nicho.

   Nota: Si los códigos locales lo exigen, instale la lámpara en el nicho como se describe en la página 9.
9. Utilizando la tapa del nicho para sellar el frente del nicho, presione la tapa de gunita sobre el frente del nicho. De este modo, protegerá la cavidad de enfriamiento de la lámpara del nicho durante el enyesado. Nota: Si no dispone de una cubierta de gunita, utilice cinta de enmascarar para proteger el lente y la cavidad de enfriamiento durante la operación de enyesado.
10. Aplique yeso de gunita en la pared de la piscina hasta el borde exterior de la tapa de gunita. La tapa de gunita debería ser la única parte expuesta del nicho después de enyesar.
11. Una vez que se realizó el enyesado, retire y deseche la tapa de gunita.



Opción 2: diagrama de instalación del conducto para la lámpara

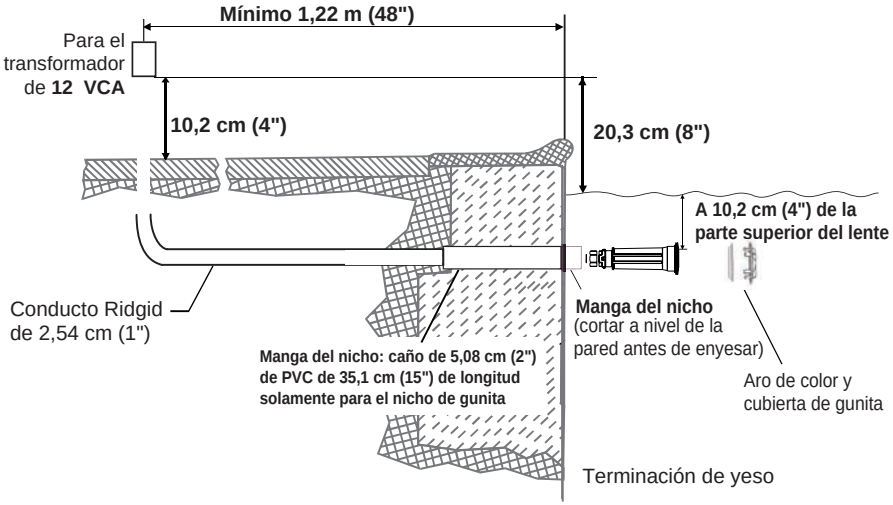


Figura 1: Diagrama de instalación de lámpara en gunita

Instalar el nicho para lámparas de color GloBrite® en una piscina de fibra de vidrio

Para instalar el nicho para lámparas de color GloBrite® en una piscina de fibra de vidrio:

1. Perfore un agujero de 5 cm (2") en el lugar deseado para el nicho de la lámpara GloBrite.
2. Ubique el empaque de sellado en el nicho como se muestra a continuación.
3. Inserte el nicho a través del agujero de 5 cm (2") en la pared de la piscina.
4. Instale la arandela de PVC en la parte trasera del nicho.
5. Instale la tuerca de plástico en la parte trasera del nicho. Ajuste la tuerca con la mano para fijar el nicho en el sitio.
6. Pegue el conducto de 2,5 cm (1") en la parte trasera del nicho.

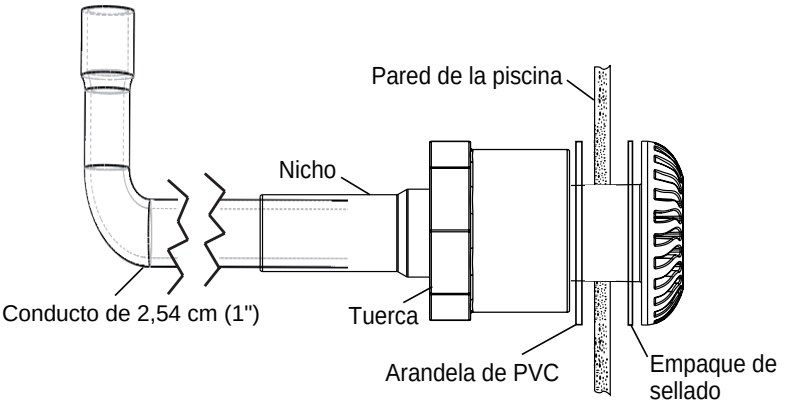
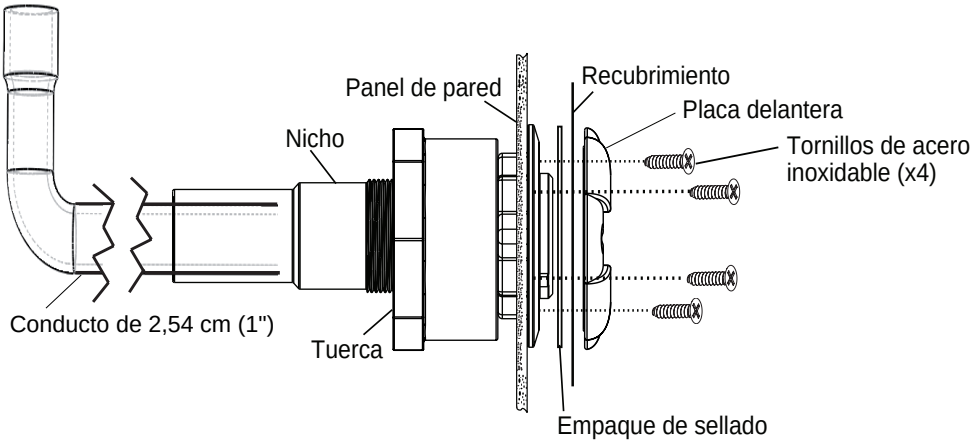


Diagrama de instalación del nicho para lámparas de color GloBrite (piscina de fibra de vidrio)

Instalar el nicho para lámparas de color GloBrite® en una piscina de vinilo

Para instalar el nicho para lámparas de color GloBrite en una piscina con recubrimiento de vinilo:

1. Perfore un agujero de 7,62 cm (3") en el lugar deseado para el nicho de vinilo de la lámpara.
2. Desde el interior de la piscina, inserte el nicho de vinilo en el agujero de 7,62 cm (3").
3. Instale la tuerca de plástico en la parte trasera del nicho. Ajuste la tuerca con la mano para fijar el nicho en el sitio.
4. Ubique el empaque de sellado en el frente del nicho como se muestra a continuación.
5. Instale el revestimiento de vinilo.
6. Instale el conducto. Vea la Figura 1 de la página 7.
7. Usando las pestañas de alineación del nicho, alinee cuidadosamente la cara frontal con el nicho. Una vez que se alinea la cara frontal correctamente, penetre el recubrimiento a través de la cara frontal e instale los tornillos uno por uno.
8. Con un destornillador con cabeza Phillips n° 2, ajuste manualmente los tornillos de retención para fijar la tapa. NO AJUSTE EXCESIVAMENTE LOS TORNILLOS. NO UTILICE UNA HERRAMIENTA ELÉCTRICA PARA AJUSTAR LOS TORNILLOS. Si ajusta excesivamente o utiliza un destornillador eléctrico en los tornillos del aro de sellado, puede exceder el torque de las cabezas de los tornillos y dañar la carcasa del nicho y/o el sello del revestimiento de vinilo.

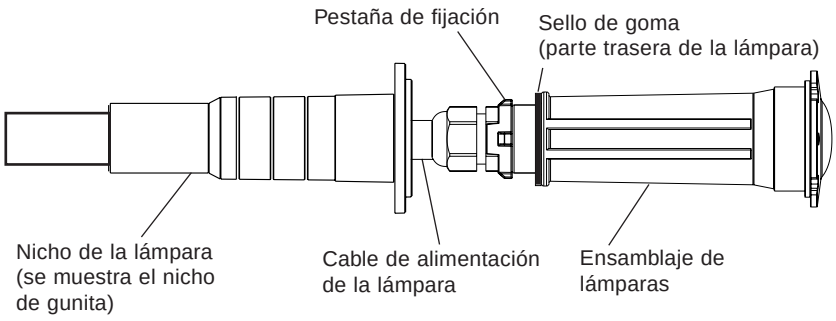


INSTALAR LA LÁMPARA DE COLOR GLOBRITE®
(DESPUÉS DE LA INSTALACIÓN DEL NICHO)

Para instalar la lámpara de color GloBrite® en el nicho de gunita, fibra de vidrio o vinilo:

1. Extienda el cable eléctrico de la lámpara GloBrite por el frente del nicho hacia la ubicación del transformador de 12 VCA de la piscina o la caja de conexiones.
2. En el transformador de 12 VAC o la caja de conexiones, corte todo el cable sobrante. Deje al menos 15,2 cm (6") de cable en la caja de conexiones o en el transformador para facilitar la instalación de la lámpara y la inspección del nicho. Corte el cable sobrante. Vea la Figura 1 de la página 7.
3. Pele el extremo del cable exterior para descubrir los dos (2) conductores aislados. Pele los dos conductores. Procure no dañar el conductor de cobre.
4. Conecte los dos (2) conductores a los cables de circuito correspondientes en la caja de conexiones (cable negro a alimentación, cable blanco a común). Fije la cubierta de la caja de conexiones.
5. **Instale la nueva lámpara GloBrite:** Presione la lámpara hacia dentro del nicho al tiempo que tira del cable desde la caja de conexiones o el transformador, asegurándose de que las pestañas de ajuste del extremo trasero de la lámpara estén alineadas perfectamente con las aberturas del nicho (dentro del nicho).

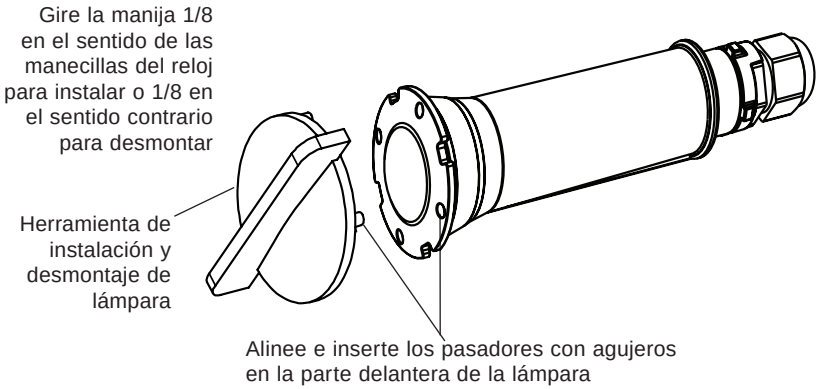
Nota: Cuando utiliza cables largos o varias lámparas por transformador, se recomienda utilizar la toma de 13 VCA o 14 VCA del transformador.



Nicho y lámpara GloBrite

6. Coloque la herramienta de instalación de la lámpara (P/N 620057) sobre el frente de la lámpara. Gire la herramienta y la lámpara en el sentido de las manecillas del reloj (menos de 0,3175 cm [1/8 de giro]), mientras empuja hacia adentro, hasta que sienta el punto en que se detiene. Esto indica que la lámpara está correctamente ubicada y ajustada y que el niche está sellado completamente.

   Nota: *Si la lámpara no gira suavemente, tire de la lámpara suavemente hacia afuera y cerciórese de que esté ubicada correctamente y de que el nicho no tenga residuos; luego, instale la lámpara como se describe en el paso 6.*



Herramienta de instalación/desmontaje de lámparas de color GloBrite®

7. Antes de utilizar la lámpara de color GloBrite, llene la piscina de agua hasta que la lámpara esté completamente sumergida.

   Nota: *La lámpara de color GloBrite no debe encenderse durante más de 30 segundos si no está sumergida en agua.*

8. **Verificación final del funcionamiento correcto de la lámpara GloBrite®:** Active el interruptor o disyuntor principal con el transformador de 12 VCA y el interruptor que enciende la lámpara GloBrite. La lámpara debería encenderse cuando se aplica energía de 12 VCA. De lo contrario, revise los pasos de la instalación.

REEMPLAZAR LÁMPARAS DE COLOR GLOBRITE®
(EN UNA PISCINA O UN SPA EXISTENTE)

⚠ PELIGRO

¡Riesgo de descargas eléctricas o de electrocución!
Esta lámpara sumergible debe instalarla un electricista certificado o con licencia, o en todo caso, un equipo profesional calificado de mantenimiento de conformidad con el Código Eléctrico Nacional (NEC) actual, NFPA 70 o con el Código Eléctrico Canadiense (CEC), CSA C22.1 y deben respetarse todos los códigos y las ordenanzas regionales aplicables. Una instalación incorrecta representa un peligro eléctrico que podría dar como resultado la muerte o una seria lesión a los usuarios de la piscina, instaladores u otros debido a un choque eléctrico, y también podría causar daños a la propiedad.

Siempre desconecte la energía de la luz de la piscina en el disyuntor antes de realizar el mantenimiento de la luz. Si incumple con esto, podría dar como resultado la muerte o lesiones serias a la persona que realiza el mantenimiento, a los usuarios de la piscina o a otros debido a un choque eléctrico.

NOTA IMPORTANTE: LA LÁMPARA DE COLOR GLOBRITE NO PUEDE RECIBIR MANTENIMIENTO. SE DEBE REEMPLAZAR LA LÁMPARA EN SU TOTALIDAD.

⚠ ADVERTENCIA

Verifique que la piscina y el spa cumplan con los requisitos del Código Eléctrico Nacional y todos los códigos y ordenanzas locales vigentes. Un electricista con licencia o certificado debe instalar el sistema eléctrico para cumplir o superar estos requisitos antes de instalar la lámpara sumergible. Algunos requisitos del Código Nacional Eléctrico, que el sistema eléctrico de la piscina debe cumplir, son los siguientes:

- El circuito de iluminación tiene un interruptor de circuito de tierra accidental (GFCI) para modelos con voltaje de línea de 120 VCA, y tiene un disyuntor correspondiente. Los conductores que están en el lado de carga del circuito GFCI no deben ocupar los conductos, las cajas de conexiones o los recintos que contengan otros conductores a menos que los conductores adicionales estén también protegidos por un GFCI. Consulte los códigos locales para conocer los detalles completos.
- La caja de conexiones y el transformador de aislamiento de bajo voltaje se encuentran al menos a 20,3 cm (8") sobre el nivel del suelo y al menos a 1,22 m (48") desde el borde de la piscina. Vea la Figura 1 de la página 7.
- El nicho para lámparas de color GloBrite se debe instalar correctamente de modo que el borde superior de la lente de la lámpara GloBrite esté al menos 10,16 cm (4") (no más de 1,22 m (48") debajo en Canadá) debajo de la superficie del agua de la piscina o del spa.
- Para asegurarse de que el sistema eléctrico de la piscina o del spa cumpla con todos los requisitos vigentes, el electricista debe consultar con el departamento local de construcciones.

REEMPLAZAR LA LÁMPARA DE COLOR GLOBRITE®
(UNA VEZ QUE SE CUMPLEN LOS REQUISITOS ELÉCTRICOS)

Las instrucciones de desmontaje e instalación a continuación describen cómo desmontar e instalar el ensamblaje de lámparas de color GloBrite.

NOTA IMPORTANTE: LA LÁMPARA DE COLOR GLOBRITE NO PUEDE RECIBIR MANTENIMIENTO. SE DEBE REEMPLAZAR LA LÁMPARA EN SU TOTALIDAD.

⚠ ADVERTENCIA

Si no se ajusta el sistema eléctrico de la piscina o del spa a los requisitos de los códigos antes de instalar la lámpara sumergible, representará un peligro eléctrico que podría dar como resultado la muerte o lesiones serias a los usuarios de la piscina, instaladores u otros debido a un choque eléctrico, y también podría causar daños a la propiedad.

1. **Gire a Off (Apagado) el interruptor eléctrico o el disyuntor en la fuente.**
2. Retire la tapa de la caja de conexiones o del transformador. Desconecte los cables de la lámpara y pegue una cinta guía al cable de alimentación de la lámpara. *De este modo, será más fácil tirar del cable de alimentación de la lámpara de reemplazo por el conducto hacia la caja de conexiones.*
3. **Retire la lámpara de color GloBrite del agua de la piscina o el spa:** Utilizando la herramienta de instalación suministrada (P/N 620057), gire el ensamblaje de lámparas en dirección contraria a las manecillas del reloj alrededor de 1/8 de vuelta para liberar la luz del nicho como se muestra en la página 10.
4. Tire lentamente de la lámpara y el cable de alimentación unido a ella (con cinta guía pegada) para sacarlos del nicho. Tire del cable de alimentación de la lámpara y la cinta de guía para retirarlos del nicho y coloque la lámpara sobre la plataforma.
5. Una el nuevo cable de alimentación de la lámpara con la cinta guía y dirija cuidadosamente la cinta guía y el cable hacia la caja de conexiones.
6. **Instale la lámpara en el nicho:** Coloque la herramienta de instalación de la lámpara sobre el frente de la luz. Gire la herramienta y la lámpara en el sentido de las manecillas del reloj mientras empuja hacia adentro, hasta que sienta el punto en que se detiene. Esto indica que la luz está correctamente ubicada y ajustada y que el conducto eléctrico está sellado completamente (consulte la página 10).

   Nota: Si la lámpara no gira suavemente, tire de la lámpara levemente hacia afuera y cerciórese de que esté ubicada correctamente y de que el nicho no tenga residuos; luego, instale la lámpara como se describe en el paso 5.
7. Conecte los dos (2) conductores a los cables de circuito correspondientes en la caja de conexiones (cable negro a energía, cable blanco a común) y fije la cubierta de la caja de conexiones en el lugar correspondiente.
8. **Verificación final del funcionamiento correcto de la lámpara de color GloBrite®:** Active el interruptor o disyuntor principal con el transformador de 12 VCA y el interruptor que enciende la lámpara. La lámpara debería encenderse cuando se aplica energía de 12 VCA. De lo contrario, revise los pasos de la instalación.

CONECTAR LÁMPARAS DE COLOR GLOBRITE® AL CENTRO DE CARGA DEL SISTEMA DE CONTROL EASYTOUCH® O INTELLITOUCH® A UN RELÉ AUXILIAR

⚠ PELIGRO

¡P E L I G R O!

RIESGO DE CHOQUE ELÉCTRICO O ELECTROCUCIÓN

Siempre desconecte desde el disyuntor la alimentación AC del centro de carga del sistema de control EasyTouch e IntelliTouch antes de realizar tareas de mantenimiento o retirar el **PANEL DELANTERO DE ALTO VOLTAJE**. Si incumple con esto, podría dar como resultado la muerte o lesiones serias al instalador, a la persona que realiza el mantenimiento, a los usuarios de la piscina o a otros debido a un choque eléctrico.

1. **Centro de carga del sistema de control EasyTouch o IntelliTouch:** Retire el pestillo de puerta con resorte del recinto y abra la puerta.
2. **Descargue la energía electrostática antes de retirar la cubierta tocando primero la parte metálica del recinto.**
3. Afloje los dos (2) tornillos de retención del PANEL DELANTERO DE ALTO VOLTAJE. Retire el panel del recinto.
4. Extienda el cable eléctrico de la lámpara de color GloBrite hacia un relé auxiliar en el centro de carga EasyTouch/IntelliTouch.
5. Conecte el lado de 120 voltios de un transformador de 12 VCA en el LADO DE CARGA de uno de los relés auxiliares (AUX) del centro de carga.
6. Conecte el conductor neutro del transformador de 12 VCA a la barra colectora neutra del centro de carga.
7. Una vez completada la conexión, cierre el panel de control y ajústelos con los dos (2) tornillos de retención.
8. Cierre la puerta delantera del centro de carga. Coloque el pestillo con resorte.

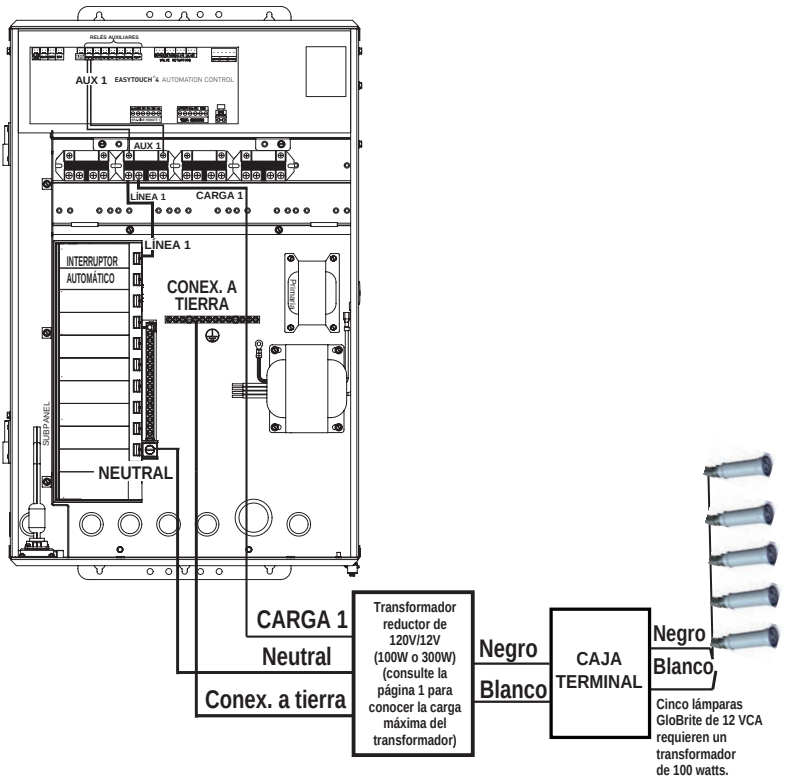


Diagrama de cableado del centro de carga del sistema de control EasyTouch® e IntelliTouch®

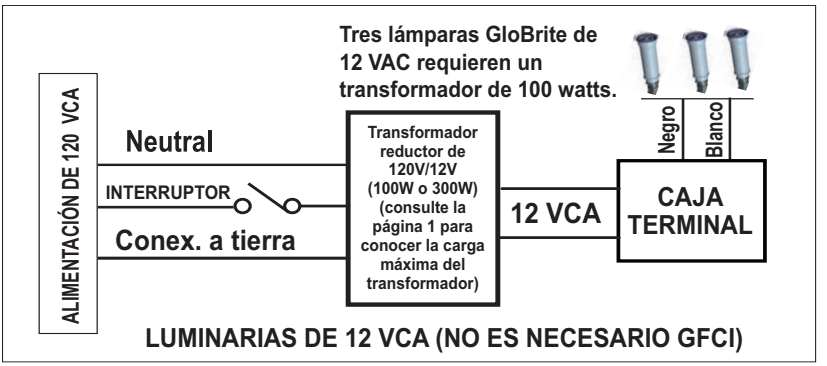


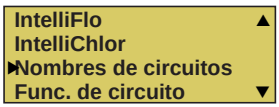
Diagrama de cableado para lámpara de color GloBrite® con interruptor de pared

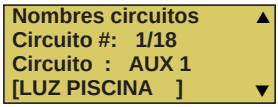
CONFIGURAR LAS LÁMPARAS DE COLOR GLOBRITE® CON EL SISTEMA DE CONTROL EASYTOUCH® E INTELLITOUCH®

Sistema de control EasyTouch®

A continuación se describe cómo configurar la lámpara de color GloBrite® desde el panel de control interno del sistema de control EasyTouch® o del panel de control inalámbrico del sistema de control EasyTouch. Desde el panel de control IntelliTouch® puede controlar los espectáculos de luces.
Para configurar un circuito de lámparas GloBrite: asigne el "Nombre de circuito de lámparas" al circuito del relé (por ejemplo: AUX 3, como "Pool Light" ["Luz de piscina"]) y "Function" ("Función"): asigne el nombre del circuito "Pool Light" ("Luz de piscina") en el menú de Circuit Func. (Func. de circuito) como circuito de "lámparas" (IntelliBrite). Después de asignar el nombre del circuito y la función, es posible configurar el nombre del circuito de luces "Pool Light" ("Luz de piscina") en el menú CONFIG para la posición de las lámparas, el color, etc.

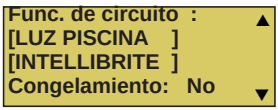
Para asignar un Nombre de circuito acceda aquí: MENU > SETTINGS > CIRCUIT NAMES (MENÚ > CONFIGURACIÓN > NOMBRES DE CIRCUITO)





1. Presione el **botón Up/Down** (Arriba/Abajo) para seleccionar un número de circuito 1/18. Presione el botón Up (Arriba) dos veces para seleccionar **AUX 1** y elegir este circuito para un botón de encendido/apagado del circuito de luces. El número de circuito (1/18) corresponde al nombre de su circuito asignado.
2. Presione el **botón Up/Down** (Arriba/Abajo) para desplazarse por la lista de nombres preestablecidos. Seleccione un nombre como "Pool Light" ("Luz de piscina"). Ahora se asignó a AUX 1 el nombre de circuito "Pool Light" (Luz de piscina).

Para asignar una Función de circuito acceda aquí: MENU > SETTINGS > CIRCUIT FUNC. (MENÚ > CONFIGURACIÓN > FUNC. DE CIRCUITOS)



3. Presione el botón Menú para regresar al menú Settings (Configuración). Presione el botón Down (Abajo) y seleccione el menú Presione el botón Right (Derecha) para acceder al menú Circuit Func. (Func. de circuitos).
4. Presione el **botón Up/Down** (Arriba/Abajo) para seleccionar el nombre de circuito "Pool Light" ("Luz de piscina") ya asignado.
5. Presione el **botón derecho** para ver "Circuit Func." ("Funciones de circuito") que puede asignar al circuito "Pool Light" ("Luz de piscina").
6. Presione el **botón Up/Down** (Arriba/Abajo) para seleccionar el tipo de función de circuito de lámparas que desea utilizar. Seleccione "INTELLIBRITE" para utilizar la función de circuito de lámparas GloBrite.
7. Presione el botón Menu (Menú) tres veces para regresar a la pantalla principal.

Utilizar las lámparas GloBrite: Las lámparas de color GloBrite® están listas para usar con el botón 1 del panel de control EasyTouch (circuito auxiliar 1). Para acceder a la pantalla Lights (Lámparas) del menú (*special Light Features* [Funciones de lámparas especiales]), presione **Menu (Menú) > Lights (Lámparas)**. Los parámetros del menú Lights (Lámparas) son las siguientes: MODES (MODOS), COLORS (COLORES), ALL ON (TODAS PRENDIDAS), ALL OFF (TODAS APAGADAS), SYNC (SINCRONIZADAS), MAGICSTREAM (FLUJO MÁGICO), CONFIG (CONFIGURACIÓN): Desde la pantalla Modes (Modos) puede controlar espectáculos de luces. Para acceder al menú Modes (Modos), presione Menu > Lights > Modes (Menú > Luces > Modos). Consulte la página 2 para leer sobre los espectáculos de luces de colores GloBrite.

Sistema de control IntelliTouch®

A continuación se describe cómo configurar las lámparas de color GloBrite® desde el panel de control del sistema de control IntelliTouch®. Desde el panel de control del sistema de control IntelliTouch® puede controlar los espectáculos. Acceder a las pantallas de la lámpara GloBrite, desde el panel de control de interior IntelliTouch o el panel de control Remoto Inalámbrico MobileTouch®.

Asignación de nombre de circuito

Para identificar la lámpara GloBrite conectada a los circuitos auxiliares (AUX 1, AUX 2) en el centro de carga IntelliTouch, debe asignar el nombre de circuito de lámparas GloBrite a los circuitos auxiliares correspondientes en el panel de control de interior IntelliTouch. Elija un nombre de circuito de la lista preestablecida de nombres para la lámpara GloBrite conectada al relé auxiliar instalado en el centro de carga IntelliTouch.

Asignar un nombre de circuito a la lámpara GloBrite: Para asignar un nombre de circuito a la lámpara GloBrite, acceda aquí: **MENÚ > CONFIGURACIÓN > AVANZADO > NOMBRES DE CIRCUITO > ASIGNAR NOMBRES DE CIRCUITO > VISUALIZACIÓN (MENU > SETUP > ADVANCED > CIRCUIT NAMES > ASSIGN CIRCUIT NAMES > DISPLAY).**

Seleccionar la pantalla de VISUALIZACIÓN 1, 2, 3 ó 4: Se puede acceder a los circuitos auxiliares que controlan los equipos de la piscina o del spa desde la pantalla de “Visualización” del panel de control de interior o del panel de control inalámbrico MobileTouch. Al seleccionar el botón próximo a Visualización 1, 2, 3 ó 4 se muestra la pantalla con los circuitos pertenecientes a ese centro de carga o centro de alimentación particular de expansión. También se pueden asignar “Circuitos de funciones” en esta pantalla.

Para asignar nombres de circuito para una pantalla de visualización específica:
Visualización N° 1: Esta pantalla muestra los nombres de circuito para la bomba de filtración, los modos de piscina y spa, y todos los circuitos auxiliares de alto voltaje conectados al principal Centro de carga o Centro de alimentación.
Visualización N° 2: Esta pantalla muestra los nombres de circuito para los circuitos auxiliares adicionales conectados al primer centro de expansión (Centro de carga o Centro de alimentación).
Visualización N° 3: Esta pantalla muestra los nombres de circuito para los circuitos auxiliares adicionales conectados al segundo centro de expansión (Centro de carga o Centro de alimentación).
Visualización N° 4: Esta pantalla muestra los nombres de circuito para los circuitos auxiliares adicionales conectados al tercer centro de expansión (Centro de carga o Centro de alimentación).

Para asignar un nombre de circuito de lámparas GloBrite para la PANTALLA PRINCIPAL:

1. Seleccione el botón próximo a Visualización n° 1. Estos son nombres de circuitos que se visualizarán en la pantalla principal. Nota: Si hay un Centro de carga o un Centro de alimentación de expansión instalado, seleccione la visualización N° 2, N° 3 o N° 4 correspondiente asociada con ese Centro de carga o Centro de alimentación de expansión.
2. En la pantalla de visualización principal, presione el botón próximo a AUX 1. Se mostrará una pequeña flecha que apunta a AUX 1.
3. Use los botones Up y Down (Arriba y Abajo) en la parte inferior de la pantalla para navegar por la lista alfabética de nombres de equipos preestablecidos. Elija el nombre del equipo que se corresponde con el nombre de la etiqueta del botón número 1 en el Panel de control de exterior del Centro de carga.
4. Continúe nombrando otros circuitos auxiliares (AUX 2, AUX 3, etc.): Después de seleccionar el nombre de equipo que quiere utilizar para AUX 1, presione el botón próximo a AUX 2 y elija un nombre de circuito. La flecha pequeña indica qué circuito se seleccionó para nombrar.
5. Repita el proceso para asignar el otro equipo a los circuitos en esta pantalla.
6. Cuando haya terminado de asignar nombres de circuito a los equipos, presione el botón Guardar. Presione el botón Exit (Salir) para regresar a la pantalla principal.
7. **CONTINÚE A LA PÁGINA SIGUIENTE para configurar el “Function Circuit” (“Circuito de función”) de GloBrite.**

Configurar una función de circuito para la lámpara de color GloBrite®

Para configurar un circuito AUX para controlar la lámpara de color GloBrite®, asigne a la función de circuito de lámparas un circuito de relé auxiliar (AUX 1); luego, asigne un nombre de circuito para ese circuito de lámparas. El nombre del circuito de lámparas aparecerá en la pantalla principal. A cada lámpara GloBrite también se le debe asignar una función de circuito.

Para asignar un Circuit Name (Nombre de circuito) a la lámpara GloBrite, acceda aquí: MENÚ > CONFIGURACIÓN > AVANZADO > FUNCIONES DE CIRCUITO (MENU > SETUP > ADVANCED > CIRCUIT FUNCTIONS)

Configure un circuito de función para una lámpara GloBrite: Asigne a cada lámpara un circuito de relé auxiliar, luego asigne ese circuito de relé de lámpara en la sección “CIRCUIT FUNCTIONS” (“FUNCIONES DE CIRCUITO”), como “INTELLIBRITE”.

Para configurar la función de circuito de lámparas GloBrite (utilice el nombre de circuito “IntelliBrite”):

1. Presione el botón próximo al botón AUX (el circuito auxiliar de relé conectado a la lámpara Globrite [IntelliBrite]).
2. Presione el botón de la derecha o izquierda (PREV/NEXT [ANTERIOR/SIGUIENTE]) próximo a “INTELLIBRITE”. Navegue por las funciones de circuito hasta encontrar “INTELLIBRITE”.
3. Presione el botón SAVE (GUARDAR) en la parte inferior de la pantalla. Presione el botón EXIT (SALIR) para regresar a la pantalla principal.

Asigne el circuito de lámparas GloBrite a la pantalla Lights (Lámparas):

4. Presione el botón Lights (Lámparas) en la parte inferior de la pantalla.
5. Presione el botón de la derecha próximo a “CONFIGURE” (“CONFIGURAR”).
6. Presione el botón próximo a “NONE” (“NINGUNO”) para asignar un circuito de lámparas IntelliBrite al botón seleccionado. Se pueden configurar los nombres de las lámparas para visualizarse en el lado izquierdo para funciones de “Spa” y en el lado derecho para funciones de “Piscina”.
7. Presione el botón lateral izquierdo o derecho superior para navegar por los circuitos de lámparas disponibles que se pueden utilizar para las funciones de iluminación GloBrite (IntelliBrite). Seleccione el nombre de circuito que desea utilizar. Los nombres de circuito que se visualizan son nombres asignados anteriormente al momento de asignar funciones de circuito.

Controlar y seleccionar modos de color de GloBrite (lámpara de color IntelliBrite®)

En la pantalla de “Modes” (“Modos”) puede seleccionar varios efectos preestablecidos de iluminación de color, como el “American mode” (“Modo americano”) y el “Sunset mode” (“Modo atardecer”), así como la luz multicolor Pentair SAm® (que emula el esquema de colores SAm). Al utilizar la función “Hold” (“Retener”) y “Recall” (“Recordar”), también puede capturar y guardar un efecto inigualable de colores para repetirlo en otro momento.

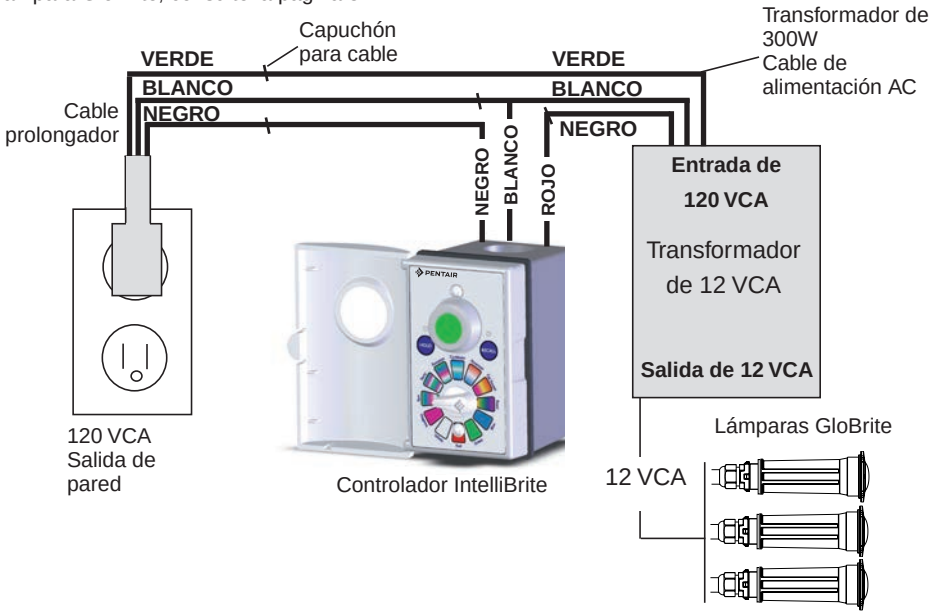
Pantalla de modos

Para acceder a las funciones de “Modes” (“Modos”) de espectáculos de luces de colores IntelliBrite® desde la pantalla “Lights” (“Lámparas”), presione el botón “Lights” (“Lámparas”) en la parte inferior de la pantalla y luego presione el botón lateral izquierdo próximo a “MODES” (“MODOS”).

Funciones de lámpara especiales: Se pueden visualizar hasta doce (12) circuitos de lámparas IntelliBrite en la pantalla principal de “Lights” (“Lámparas”) (funciones de lámparas especiales). En la pantalla “Lights” (“Lámparas”) puede activar las funciones de iluminación de IntelliBrite (es decir, nado de colores, conjunto de colores). Asumir que cada lámpara GloBrite (IntelliBrite) tiene su propio relé y circuito separado.

Conectar las lámparas de color GloBrite® al Controlador IntelliBrite y al transformador de 300 watts

El siguiente diagrama indica cómo conectar la lámpara de color GloBrite® a un Controlador IntelliBrite con un transformador de 300 watts. Nota: Para leer las instrucciones operativas de la lámpara GloBrite, consulte la página 3.



Solución de problemas (lámparas de color GloBrite®)

Problema	Causa/Acción
La lámpara no se enciende. La lámpara no funciona correctamente.	Verifique el circuito de tierra GFCI y reestablezca si es necesario. Verifique la conexión del cableado de la lámpara con la caja de conexiones en el sector de la piscina y con el interruptor de energía AC. Asegúrese de que la alimentación AC de la lámpara sea adecuada.

Solución de problemas (Controlador IntelliBrite®)

Problema	Causa/Acción
Ambos LED se encienden intermitentemente.	El Controlador IntelliBrite ha detectado que la carga superó la máxima potencia de consumo (watts) permitida o que hay un cortocircuito en la salida 1. Apague el Controlador IntelliBrite. Elimine la carga excesiva o el cortocircuito. 2. Presione el interruptor de encendido del Controlador IntelliBrite para encender la unidad. Asegúrese de que los LED ya no se enciendan intermitentemente.
La lámpara no se enciende. La lámpara no funciona correctamente.	Verifique el circuito de tierra y reestablezca si es necesario. Verifique la conexión del cableado de la lámpara con la caja de conexiones en el sector de la piscina y con el disyuntor principal. Asegúrese de que la alimentación AC de la lámpara sea adecuada.

Lista de piezas y kits de reemplazo de las lámparas de color GloBrite®

Lámparas GloBrite

N. ° de Pieza	Descripción
602053	Cable 12 VCA de 30' GloBrite
602054	Cable 12 VCA de 50' GloBrite
602055	Cable 12 VCA de 100' GloBrite
602056	Cable 12 VCA de 150' GloBrite

Paquetes GloBrite

N. ° de Pieza	Descripción
619993	Combo de gunita N° 1: 1 GloBrite de 100' con transformador de 300W y nicho de gunita
619994	Combo de gunita N° 2: 2 GloBrite de 100' con transformador de 300W y 2 nichos de gunita
620051	Combo de fibra de vidrio N° 1: 1 GloBrite de 100' con transformador de 300W y nicho de fibra de vidrio
620052	Combo de fibra de vidrio N° 2: 2 GloBrite de 100' con transformador de 300W y 2 nichos de fibra de vidrio
620080	Combo de vinilo N° 1: 1 GloBrite de 100' con transformador de 300W y nicho de vinilo
620081	Combo de vinilo N° 2: 2 GloBrite de 100' con transformador de 300W y dos nichos de vinilo

Nichos para lámparas GloBrite®

N. ° de Pieza	Descripción
620039	Nicho de vinilo para GloBrite
620040	Nicho de gunita para GloBrite
620041	Nicho de fibra de vidrio para GloBrite
620093	Nicho de fibra de vidrio para GloBrite (azul)
620094	Nicho de fibra de vidrio para GloBrite (gris)

Kits de reemplazo de lámparas GloBrite®

N. ° de Pieza	Descripción
620054	Vinilo (empaque, cara delantera y tornillos (4))
620055	Fibra de vidrio (arandela y empaque)
620056	Aro de color (aro de color y cubierta de yeso)
620057	Junta tórica (junta tórica, herramienta de inserción)
620058	Tuerca (tuerca de fibra de vidrio/vinilo)

El accesorio de opcional

GloBrite ™ antirreflejos de la pantalla (P/N 620314 - vendido por separado]

1620 HAWKINS AVE., SANFORD, NC 27330 • (919) 566-8000
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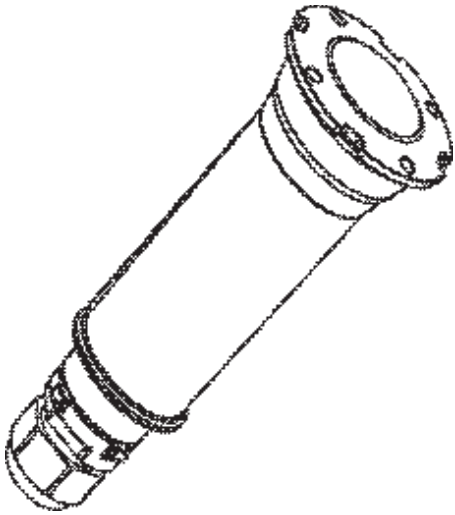
P/N 17302 REV C 1/2019

PENTAIR

LUMIÈRE DEL AQUATIQUE À COULEUR CHANGEANTE GLOBRITE®

POUR PISCINE ET SPA



GUIDE D'INSTALLATION ET DE L'UTILISATEUR

CONSIGNES DE SÉCURITÉ IMPORTANTES
LISEZ ET RESPECTEZ TOUTES LES INSTRUCTIONS
CONSERVEZ CES DIRECTIVES

Soutien technique

Téléphone : 1-800-831-7133 – Télécopieur : 1-800-284-4151

Sites Web : www.pentair.com

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LISEZ ET RESPECTEZ TOUTES LES INSTRUCTIONS DE CE MANUEL.

N/P 620128 Rév. C 1/2019

AVERTISSEMENTS IMPORTANTS ET CONSIGNES DE SÉCURITÉ

DANGER **LE NON-RESPECT DE CES CONSIGNES D'INSTALLATION ET D'UTILISATION PEUT ENTRAÎNER DES BLESSURES GRAVES OU LA MORT.**

DANGER **LES INSTALLATEURS, LES EXPLOITANTS ET LES PROPRIÉTAIRES DE PISCINE DOIVENT LIRE CES AVERTISSEMENTS ET TOUTES LES CONSIGNES AVANT D'UTILISER LA LUMIÈRE POUR PISCINE ET SPA.**

AVERTISSEMENT La plupart des codes fédéraux, provinciaux, territoriaux et locaux réglementent le secteur de la construction, de l'installation et du fonctionnement des piscines et spas publics, ainsi que la construction des piscines et spas résidentiels. Il est important de se conformer à ces codes, dont plusieurs réglementent directement l'installation et l'utilisation de ce produit. Consultez vos codes locaux de construction et de santé pour obtenir plus d'information.

REMARQUE IMPORTANTE – À l'attention de l'installateur : Ce guide d'installation et de l'utilisateur (le « Guide ») contient des renseignements importants sur l'installation, le fonctionnement et l'utilisation sécuritaire de cette lumière aquatique pour piscine et spa. Ce Guide doit être remis au propriétaire ou à l'exploitant de cet équipement.

AVERTISSEMENT Avant d'installer ce produit, lire et respecter toutes les consignes d'avertissement et les instructions de ce Guide. Le non-respect de ces consignes et instructions peut causer des blessures graves ou mortelles, ou des dommages matériels. Composez le 1-800-831-7133 pour recevoir gratuitement des manuels de consignes de sécurité supplémentaires. Consultez le site Web www.pentairpool.com pour obtenir de l'information relative à ce produit.

DANGER **RISQUE DE DÉCHARGE ÉLECTRIQUE OU D'ÉLECTROCUTION! LA LUMIÈRE DEL AQUATIQUE pour piscine nécessite une haute tension pouvant causer des décharges électriques, des brûlures ou la mort.**

AVANT D'INTERVENIR sur la lumière de couleur GloBrite, toujours couper l'alimentation des lumières de piscine ou de spa au disjoncteur source avant d'effectuer l'entretien de la lumière. Le non-respect de cette consigne peut engendrer la mort ou des blessures graves par décharge électrique au réparateur, aux utilisateurs de la piscine ou à d'autres personnes. Lors de l'installation et de l'utilisation de ce matériel électrique, les consignes de sécurité de base doivent toujours être suivies.

Cette lumière aquatique doit être installée par un électricien dûment certifié ou autorisé ou un professionnel en réparation de piscine qualifié conformément au Code national de l'électricité (NEC), au NFPA 70 ou au Code canadien de l'électricité (CEC) et au CSA C22.1. Tout code et toute ordonnance d'installation en vigueur de votre région doivent également être respectés. Une installation incorrecte constitue un danger électrique qui pourrait causer la mort ou des blessures graves pour les utilisateurs de la piscine, les installateurs ou toute autre personne en cas de décharge électrique, ainsi que des dommages matériels à la source d'alimentation. Toujours couper l'alimentation de la lumière de piscine au niveau du disjoncteur avant d'intervenir sur la lumière. Le non-respect de cette consigne peut engendrer la mort ou des blessures graves par décharge électrique au réparateur, aux utilisateurs de la piscine ou à d'autres personnes.

AVERTISSEMENT **Pour les pays respectant les normes réglementaires de la Commission électrotechnique internationale (CEI) :** Le dispositif de lumière doit être installé par un électricien dûment certifié ou autorisé ou un professionnel en réparation de piscine qualifié conformément au code CEI 364-7-702 en vigueur et à tout code ou à toute ordonnance en vigueur de la région. Une installation incorrecte constitue un danger électrique qui pourrait causer la mort ou des blessures graves pour l'utilisateur de la piscine, l'installateur ou toute autre personne en cas de décharge électrique, ainsi que des dommages matériels.

AVERTISSEMENTS IMPORTANTS ET CONSIGNES DE SÉCURITÉ

INSTALLEURS ET INSPECTEURS

LA LUMIÈRE DEL COLORÉE GLOBRITE® ET SA NICHE DE PLASTIQUE FORMENT UN SYSTÈME D'ÉCLAIRAGE COMPLET NON MÉTALLIQUE À BASSE TENSION. CETTE CONFIGURATION NE NÉCESSITE AUCUNE LIAISON ÉLECTRIQUE OU FUITE À LA TERRE LORSQU'ELLE EST ALIMENTÉE PAR UN TRANSFORMATEUR DE 100 WATTS OU DE 300 WATTS CATALOGUÉ (INDIQUÉS À LA PAGE 19) ET INSTALLÉ CONFORMÉMENT AU CODE NATIONAL DE L'ÉLECTRICITÉ (NEC) ACTUEL.

PROVISIONS DU NEC POUR LES LUMINAIRES NON LIÉS : Lorsque les lumières DEL colorées non métalliques à basse tension GloBrite classées par UL sont utilisées avec les niches approuvées pour lumières GloBrite (indiquées à la page 19), la version actuelle du NEC comprend une exception concernant la liaison électrique et la fuite à la terre des luminaires aux Articles 680.6 et 680.23.

PROVISIONS DU NEC POUR LA LIAISON ÉLECTRIQUE CONCERNANT L'EAU DE PISCINE : Pour la liaison électrique en présence d'eau de piscine, exigée par l'Article 680.26C du NEC, les piscines de ciment sont considérées comme conductrices (voir 680.26 [b][1]) en raison de la porosité du ciment et de la liaison créée par l'armature. Aucune liaison supplémentaire n'est requise.

LUMINAIRES FIXES POUR PISCINES ET SPAS : Suivez les instructions ci-dessous lors de l'installation ou du remplacement des luminaires fixes Pentair pour systèmes aquatiques de piscine ou de spa :

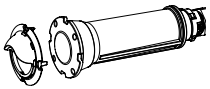
- POUR L'UTILISATION DE LA LUMIÈRE, UTILISER UNIQUEMENT UN TRANSFORMATEUR D'ISOLATION DE SÛRETÉ. Remarque : Brancher les trois fils aux fils correspondants dans la boîte de jonction (fil noir à l'alimentation, fil blanc au conducteur commun, fil vert à la mise à la terre). SPÉCIFICATIONS DES LUMINAIRES POUR PISCINES ET SPAS : 12 VCA 50/60 Hz

AVIS IMPORTANT : LA LUMIÈRE COLORÉE GLOBRITE NE PEUT PAS ÊTRE RÉPARÉE. LE DISPOSITIF COMPLET DOIT ÊTRE REMPLACÉ.

Aperçu de la Lumière DEL à couleur changeante pour piscine GloBrite®

Ce manuel décrit le processus d'installation et de remplacement de la lumière DEL colorée GloBrite® pour piscine et spa. Les lumières DEL colorées GloBrite offrent des couleurs variées et éclatantes aux effets spectaculaires pour votre piscine. Le réseau de lumières colorées écoénergétiques utilise la technologie de lumière DEL colorée IntelliBrite® et peut alterner entre différentes couleurs à la vitesse souhaitée et selon différentes séquences. Choisissez l'un des sept spectacles de lumières colorées préprogrammés ou l'une des cinq couleurs fixes pour créer une sélection presque infinie d'effets de lumières aquatiques d'ambiance pour un résultat spectaculaire dans votre piscine ou votre spa.

Accessoire GloBrite Ecran Anti-Eblouissement (P/N 620314) – Facultatif et vendu séparément, est destiné à être utilisé sur GloBrite Lumières LED Couleur et Blanches pour réduire les reflets de lumière.



Utilisation des lumières DEL colorées GloBrite avec un interrupteur mural

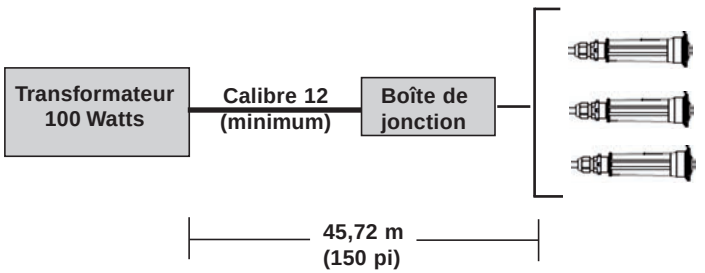
La lumière DEL colorée GloBrite peut être contrôlée manuellement à l'aide d'un interrupteur mural standard. Plusieurs lumières colorées GloBrite peuvent être branchées à l'aide d'une boîte de jonction et d'un transformateur d'isolation 12 VCA et reliées à un seul interrupteur pour allumer et éteindre toutes les lumières en même temps. Pour consulter le schéma de câblage, voir la page 14.

Utilisation des lumières DEL colorées GloBrite avec un système de contrôle automatisé

Les lumières colorées GloBrite peuvent également être contrôlées automatiquement à l'aide du système de contrôle Pentair IntelliTouch® ou du système de contrôle EasyTouch® (voir page 14). Pour obtenir plus d'information, consulter le Guide de l'utilisateur du système de contrôle IntelliTouch

Utilisation d'un transformateur d'isolation de sûreté externe pour plusieurs lumières colorées GloBrite 12 VCA

Lorsque plusieurs lumières colorées GloBrite 12 VCA sont utilisées avec un transformateur d'isolation de sûreté de **100 Watts**, il est recommandé d'utiliser au maximum trois (3) lumières colorées GloBrite. Pour les câbles longs comportant une seule lumière, il est recommandé de ne pas dépasser 45,72 m (150 pi) de câblage total entre le transformateur d'isolation 12 VCA et la lumière colorée GloBrite.



Remarque : Si un câble plus long est nécessaire, il est recommandé d'utiliser un transformateur d'isolation de sûreté de **100 Watts** distinct pour chaque lumière, avec une longueur de câble totale ne dépassant pas 45,72 m (150 pi) entre chaque transformateur et sa lumière.

Puissance maximale pour plusieurs lumières DEL colorées GloBrite (avec transformateur d'isolation de 300 Watts)

IMPORTANT! Lorsque plusieurs lumières DEL blanches 12 VCA Pentair pour piscine et spa sont utilisées, la puissance maximale autorisée est de 300 Watts. La puissance individuelle pour les lumières est la suivante :

- Maximum de 15 Watts pour une lumière de piscine DEL colorée GloBrite
- Maximum de 51 Watts pour une lumière de piscine DEL blanche AmerBrite (500 W)
- Maximum de 44 Watts pour une lumière de piscine DEL blanche AmerBrite (400 W)
- Maximum de 36 Watts pour une lumière de piscine DEL blanche AmerBrite (300 W)
- Maximum de 36 Watts pour une lumière de piscine DEL colorée AmerBrite
- Maximum de 30 Watts pour une lumière de piscine DEL colorée IntelliBrite
- Maximum de 18 Watts pour une lumière de spa DEL colorée IntelliBrite

Utilisation des lumières colorées GloBrite® avec un interrupteur mural

Les lumières colorées GloBrite® peuvent être contrôlées à l'aide d'un interrupteur mural standard ou du régulateur IntelliBrite® (voir page 3). Plusieurs lumières colorées GloBrite peuvent être branchées à l'aide d'une boîte de jonction et d'un transformateur 12 VCA et reliées à un seul interrupteur pour allumer et éteindre toutes les lumières en même temps. Les lumières colorées GloBrite sont contrôlées en alternant l'alimentation CA du transformateur 12 VCA à partir d'un interrupteur mural standard. En allumant et en éteignant l'interrupteur un certain nombre de fois, la lumière active l'un des sept modes Spectacle de lumières colorées, une couleur fixe ou les fonctions « Mémoriser » et « Rappel ».

Allumage des lumières DEL colorées GloBrite

Lorsque la lumière colorée GloBrite est allumée, la dernière couleur sélectionnée est utilisée, à moins que les fonctions MÉMORISER ou RAPPEL aient été mises en place.
Remarque : Si l'alimentation de la lumière est éteinte plus de cinq (5) secondes, le dernier mode Spectacle de lumières colorées ou la dernière couleur fixe enregistrée s'affichera.

Sélection d'un mode Spectacle de lumières colorées GloBrite ou d'une couleur fixe à l'aide d'un interrupteur mural

Les lumières colorées GloBrite sont compatibles avec les couleurs et les modes IntelliBrite et peuvent être synchronisées avec les lumières colorées IntelliBrite.

D'abord, ouvrir l'interrupteur de la lumière. Une lumière blanche s'allume brièvement, suivie de la dernière couleur sélectionnée. Pour sélectionner un mode Spectacle de couleurs (1-7) ou une couleur fixe (8-12), allumer et éteindre l'interrupteur un certain nombre de fois. Chaque nombre (1-12) indiqué ci-dessous correspond au nombre de commutations à effectuer avec l'interrupteur pour activer un spectacle de lumières colorées ou une couleur fixe. Pour obtenir des détails concernant l'enregistrement des effets de lumière durant les modes « spectacle », voir les fonctions « Mémoriser » et « Rappel » à la page 3.

Nombre de commutations de l'interrupteur (1-14)	
1	**Mode SAm :** Alterne entre le blanc, le magenta, le bleu et le vert (imite la lumière à couleur changeante Pentair SAm®).
2	**Mode Fête :** Changements de couleur rapides pour une ambiance amusante et remplie d'énergie.
3	**Mode Romance :** Transitions de couleur lentes créant un effet calme et envoûtant.
4	**Mode Caraïbes :** Transitions entre des teintes de bleu et de vert.
5	**Mode Américain :** Transitions de bleu, de blanc et de rouge patriotiques.
6	**Mode Coucher de soleil californien :** Transitions prononcées de tons orange, rouge et magenta.
7	**Mode Royal :** Couleurs plus riches et profondes.
8	**Bleu :** Couleur fixe.
9	**Vert :** Couleur fixe.
10	**Rouge :** Couleur fixe.
11	**Blanc :** Couleur fixe.
12	**Magenta :** Couleur fixe.
13	**Mémoriser :** Enregistrer l'effet de couleur actuel durant un spectacle de lumières colorées.
14	**Rappel :** Activer le dernier effet de couleur enregistré.

Exemple : Pour sélectionner le mode **Coucher de soleil californien**, éteindre et allumer l'interrupteur six (6) fois de suite. Durant la commutation, il n'y aura aucun éclairage; ensuite, une lumière blanche s'allumera temporairement.

> **⚠ AVERTISSEMENT** Durant l'allumage ou l'extinction, avant que la couleur sélectionnée ne s'affiche, il n'y aura aucun éclairage. Ce mode de fonctionnement est normal durant la commutation. Pendant ce temps, la piscine ou le spa sera dans l'obscurité et les utilisateurs devront prendre des précautions adéquates pour éviter les accidents. Le non-respect de cet avertissement pourrait causer des blessures graves ou la mort aux utilisateurs de la piscine ou du spa.

Enregistrement d'un mode de couleur ou d'une couleur fixe

Lorsque la lumière colorée GloBrite® est éteinte, le dernier mode Spectacle de lumières colorées ou la dernière couleur fixe utilisée sera mémorisée. Au prochain allumage de la lumière, le dernier paramètre utilisé s'affichera. Par exemple, éteignez la lumière pendant l'utilisation du mode « Fête ». Attendez plus de 10 secondes, rallumez l'interrupteur et le mode « Fête » est à nouveau utilisé.

Sélection d'un mode Spectacle de lumières colorées GloBrite ou d'une couleur fixe à l'aide d'un régulateur IntelliBrite®

Au lieu d'utiliser un interrupteur mural, les lumières colorées GloBrite peuvent être contrôlées à l'aide du régulateur IntelliBrite (N/P 600054, vendu séparément). Le régulateur IntelliBrite® offre un contrôle complet de vos lumières colorées GloBrite. Il est facile de sélectionner un mode de lumière; il suffit de positionner le cadran sur les options correspondant aux spectacles de lumière ou aux couleurs fixes préprogrammés. En utilisant les boutons Hold (Mémoriser) et Recall (Rappel), vous pouvez également créer une multitude d'effets de lumière uniques. Le régulateur IntelliBrite peut être branché à un seul ou à plusieurs transformateurs 12 VCA afin de contrôler les lumières colorées GloBrite. Le régulateur IntelliBrite peut également contrôler plusieurs lumières GloBrite et IntelliBrite.

Remarque : Pour consulter les instructions de câblage du régulateur IntelliBrite, voir page 18.

Utilisation d'un régulateur de lumière colorée IntelliBrite® : Les lumières colorées GloBrite sont compatibles avec les couleurs et les modes IntelliBrite et peuvent être synchronisées avec les lumières colorées et les lumières de décor IntelliBrite. Pour sélectionner un mode Spectacle de lumières colorées ou une couleur fixe, tourner le cadran pour le faire pointer dans la direction voulue. Les sélections de couleurs se font en sens horaire à partir de la position 9 heures.

Fonctions Mémoriser et Rappel

Bouton et DEL Hold (Mémoriser) : Appuyer sur ce bouton (DEL allumée) pour mémoriser et enregistrer un effet de couleur durant l'affichage de l'un des modes Spectacle de lumières colorées. Sur une pression du bouton, la DEL s'allumera pour indiquer que l'effet de couleur est mémorisé.

Bouton et DEL Recall (Rappel) : Appuyer sur ce bouton (DEL allumée) pour activer le dernier effet de couleur mémorisé. Sur une pression du bouton, la DEL s'allumera pour indiquer que l'effet de couleur est affiché.

INSTALLATION DU DISPOSITIF DE LUMIÈRE COLORÉE GLOBRITE® (PISCINE NOUVELLEMENT CONSTRUITE)

Ce qui suit décrit l'installation du dispositif de lumière colorée GloBrite®.

AVANT DE COMMENCER : Les informations qui suivent décrivent les tâches à compléter par l'électricien avant l'installation du dispositif de lumière. Voir l'Illustration 1 à la page 7.

AVERTISSEMENT

Assurez-vous que la piscine ou le spa respecte les exigences actuelles de l'Article 680-22 du Code national de l'électricité (NEC), ainsi que tous les codes et toutes les ordonnances de votre région. L'installation doit être effectuée par un électricien certifié qui devra s'assurer que les exigences réglementaires sont satisfaites, voire dépassées, avant d'installer la lampe subaquatique. Les exigences du Code national de l'électricité devant être respectées par le système électrique de la piscine incluent :

- Le circuit du luminaire dispose d'un disjoncteur de fuite à la terre pour les modèles d'une tension secteur de 120 VCA, ainsi qu'un disjoncteur de catégorie appropriée. Les conducteurs du côté charge du circuit disjoncteur de fuite à la terre n'occupent aucune conduite, boîte ou enceinte contenant d'autres conducteurs, à moins que ces autres conducteurs soient également protégés par un disjoncteur de fuite à la terre. Consulter les codes locaux en vigueur pour obtenir plus de détails.
- La boîte de jonction et le transformateur basse tension se trouvent au moins à 20,3 cm (8 po) au-dessus du sol et au moins à 1,22 m (48 po) du bord de la piscine. Voir l'Illustration 1 à la page 7.
- La niche de la lumière colorée GloBrite doit être correctement installée pour que le bord supérieur de la lentille de la lumière colorée GloBrite se trouve au moins à 10,16 cm (4 po) sous la surface de l'eau de la piscine ou du spa (sans dépasser 1,22 m [48 po] au Canada).
- Pour s'assurer que le système électrique de la piscine ou du spa respecte toutes les exigences applicables, l'électricien doit également consulter le service de la construction régional.

INSTALLATION DU MANCHON ET DE LA NICHE DE LA LUMIÈRE COLORÉE GLOBRITE (LORSQUE LES EXIGENCES ÉLECTRIQUES RESPECTÉES)

Il existe trois types de niche pour lumière colorée GloBrite pour piscine et spa : Ciment/gunite, fibre de verre ou revêtement de vinyle.

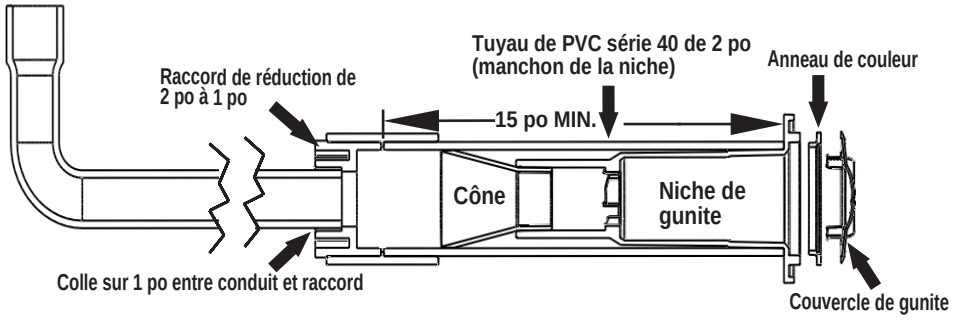
Remarque : La niche de la lumière colorée GloBrite doit être installée dans la paroi ou sur la paroi de la piscine (ou de toute autre installation aquatique) en plaçant le dessus de la lentille au moins à 10,2 (4 po) sous le niveau d'eau normal de la piscine. La lumière colorée GloBrite peut également être installée au fond de la piscine.

Installation du manchon et de la niche de la lumière colorée GloBrite® pour une piscine de ciment/gunite – Option 1 et Option 2 (voir pages 6 et 7)

Option 1 : Manchon de la niche avec cône (le cône est utilisé lorsque la niche est installée après le branchement du conduit au manchon de 2 po)

1. **Installer le manchon :** Déterminer la position sur la paroi verticale de la piscine ou du spa où la lumière doit être installée. Le sommet de la lentille de la lumière doit se trouver au moins à 10,2 cm (4 po) sous le niveau d'eau normal. Voir l'Illustration 1 à la page 7 pour consulter les exigences de profondeur exactes.
2. Installer un tuyau de PVC série 40 de 5 cm (2 po) et d'une longueur de 38,1 cm (15 po) à l'emplacement voulu du manchon de la niche de la lumière.
3. Permettre à 2,54 cm (1 po) ou plus du tuyau de PVC de 5 cm (2 po) de dépasser de chaque côté de la paroi durant l'application de gunite. Couper tout excédant du tuyau afin qu'il affleure à la paroi avant le plâtrage.
4. Coller un raccord de réduction de 5 cm (2 po) x 2,54 cm (1 po) du côté arrière du manchon de la niche.
5. Coller le conduit de 2,54 cm (1 po) dans le raccord de réduction, comme illustré ci-dessous dans le « Schéma d'installation de l'option 1 ». S'assurer que le tuyau de PVC série 40 de 5 cm (2 po) permet d'assembler la longueur totale de la niche, du cône et du raccord de réduction.
6. Coller le cône dans la niche de gunite (le cône est utilisé pour guider le fil de tirage de la boîte de jonction jusqu'à la niche).
7. Appliquer le ciment à PVC à l'intérieur du manchon. Glisser la niche de gunite dans le manchon jusqu'à ce qu'il affleure la paroi de gunite.
8. Installer l'anneau de la couleur souhaitée à l'avant de la niche.

   Remarque : Si les codes régionaux l'exigent, installer la lumière dans la niche, tel que décrit à la page 9.
9. En utilisant le couvercle de la niche pour sceller l'avant de la niche, insérer le couvercle de gunite sur l'avant de la niche. Ceci protège la cavité de refroidissement de la niche durant le plâtrage. Remarque : Si aucun couvercle de gunite n'est disponible, utiliser du ruban-cache pour protéger la lentille et la cavité de refroidissement durant le plâtrage.
10. Appliquer l'enduit de gunite sur la paroi de la piscine jusqu'au bord extérieur du couvercle de gunite. Le couvercle de gunite doit être la seule partie exposée de la niche une fois le plâtrage terminé.
11. Une fois le plâtrage terminé, retirer et jeter le couvercle de gunite.



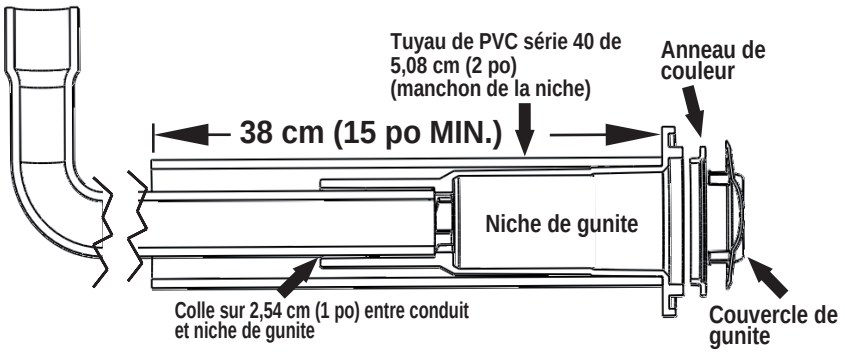
Option 1 : Manchon de la niche avec cône – Schéma d'installation

Option 2 : Installer le conduit vers la niche de la lumière

Pour installer le conduit sur la niche de la lumière colorée GloBrite® :

1. **Installer le manchon :** Déterminer la position sur la paroi verticale de la piscine ou du spa où la lumière doit être installée. Le sommet de la lentille de la lumière doit se trouver au moins à 10,2 cm (4 po) sous le niveau d'eau normal. Voir l'Illustration 1 à la page 7 pour consulter les exigences de profondeur exactes.
2. Installer un tuyau de PVC série 40 de 5 cm (2 po) et d'une longueur de 38,1 cm (15 po) à l'emplacement voulu du manchon de la niche de la lumière.
3. Permettre à 2,54 cm (1 po) ou plus du tuyau de PVC de 5 cm (2 po) de dépasser de chaque côté de la paroi durant l'application de gunite. Couper tout excédant du tuyau afin qu'il affleure à la paroi avant le plâtrage.
4. Tirer le fil de tirage et le cordon d'alimentation de la lumière dans le conduit de 2,54 cm (1 po) et le manchon de PVC série 40 de 5 cm (2 po).
5. Coller le conduit de 2,54 cm (1 po) au dos du conduit illustré ci-dessous dans le « Schéma d'installation de l'option 2 ».
6. Coller le cône dans la niche de gunite (le cône est utilisé pour guider le fil de tirage de la boîte de jonction jusqu'à la niche).
7. Appliquer le ciment à PVC à l'intérieur du manchon. Glisser la niche de gunite dans le manchon jusqu'à ce qu'il affleure la paroi de gunite.
8. Installer l'anneau de la couleur souhaitée à l'avant de la niche.

   Remarque : Si les codes régionaux l'exigent, installer la lumière dans la niche, tel que décrit à la page 9.
9. En utilisant le couvercle de la niche pour sceller l'avant de la niche, insérer le couvercle de gunite sur l'avant de la niche. Ceci protège la cavité de refroidissement de la niche durant le plâtrage. Remarque : Si aucun couvercle de gunite n'est disponible, utiliser du ruban-cache pour protéger la lentille et la cavité de refroidissement durant le plâtrage.
10. Appliquer l'enduit de gunite sur la paroi de la piscine jusqu'au bord extérieur du couvercle de gunite. Le couvercle de gunite doit être la seule partie exposée de la niche une fois le plâtrage terminé.
11. Une fois le plâtrage terminé, retirer et jeter le couvercle de gunite.



Option 2 : Du conduit à la lumière – Schéma d'installation

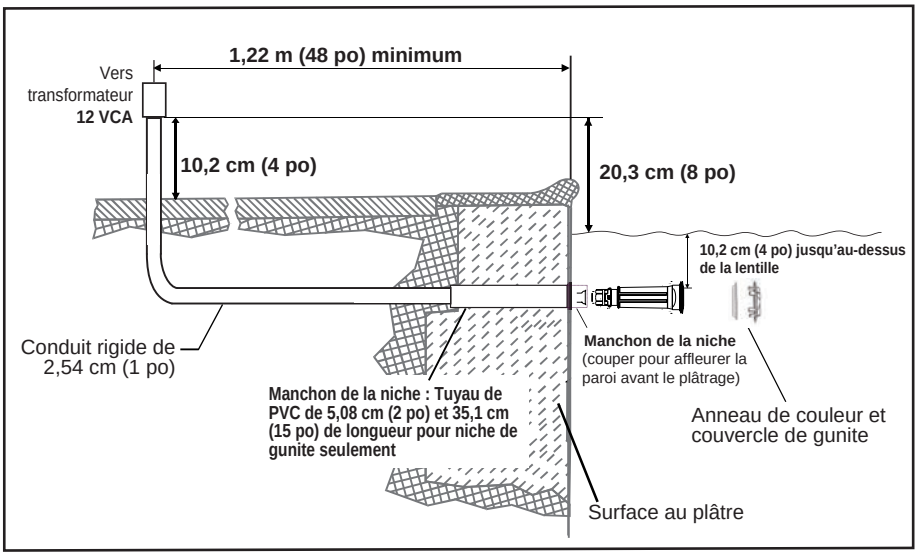


Illustration 1 : Schéma d'installation de la lumière pour gunite

Installation de la niche de la lumière colorée GloBrite® pour une piscine de fibre de verre

Pour installer la niche de la lumière colorée GloBrite® dans une piscine de fibre de verre :

1. Percer ou perforer un trou de 5 cm (2 po) à l'endroit voulu pour la niche de la lumière GloBrite.
2. Placer le joint d'étanchéité sur la niche, tel qu'illustré ci-dessous.
3. Insérer la niche dans l'ouverture de 5 cm (2 po) pratiquée dans la paroi de la piscine.
4. Installer la rondelle de PVC au dos de la niche.
5. Installer l'écrou de plastique au dos de la niche. Resserrer l'écrou à la main pour verrouiller la niche en place.
6. Coller le conduit de 2,54 cm (1 po) au dos de la niche.

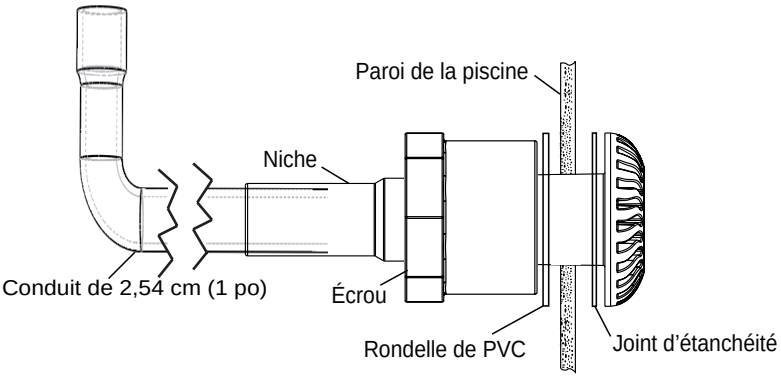
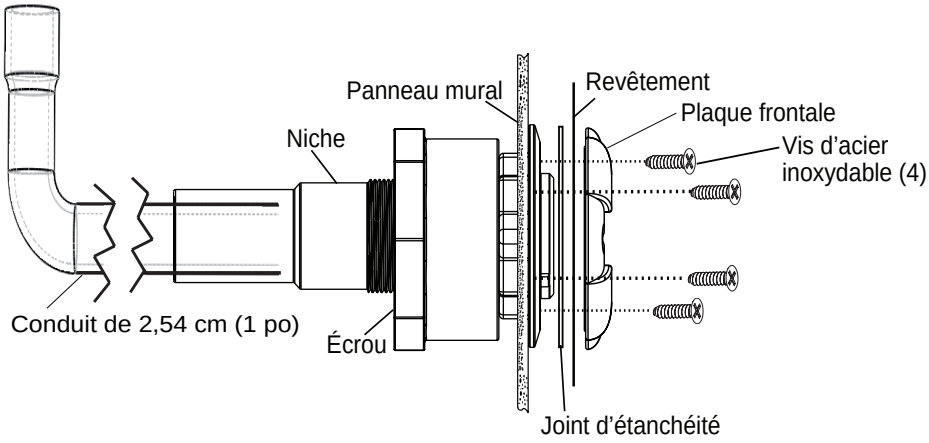


Schéma d'installation de la niche de la lumière colorée GloBrite (piscine de fibre de verre)

Installation de la niche de la lumière colorée GloBrite® pour une piscine de vinyle

Pour installer la niche de la lumière colorée GloBrite® avec une piscine au revêtement de vinyle :

1. Percer un trou de 7,62 cm (3 po) à l'endroit voulu pour la niche de vinyle de la lumière.
2. De l'intérieur de la piscine, insérer la niche dans l'ouverture de 7,62 cm (3 po).
3. Installer l'écrou de plastique au dos de la niche. Resserrer l'écrou à la main pour verrouiller la niche en place.
4. Placer le joint d'étanchéité à l'avant de la niche, tel qu'illustré ci-dessous.
5. Installer le revêtement de vinyle.
6. Installer le conduit. Voir l'Illustration 1 à la page 7.
7. À l'aide des languettes d'alignement de la niche, aligner avec soin la plaque frontale et la niche. Une fois la plaque frontale alignée, percer le revêtement à travers la plaque frontale et installer une vis à la fois.
8. À l'aide d'un tournevis cruciforme n° 2, resserrer à la main chaque vis pour fixer le couvercle en place. ÉVITER DE TROP SERRER LES VIS. NE PAS UTILISER UN OUTIL MOTORISÉ POUR SERRER LES VIS. Un serrage excessif ou l'utilisation d'un tournevis motorisé sur les vis de l'anneau d'étanchéité risque de forcer le filet des vis et d'endommager le boîtier ou le revêtement d'étanchéité de vinyle de la niche.

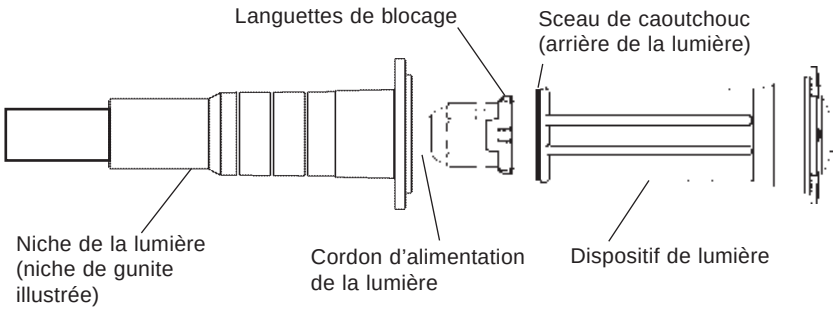


INSTALLATION DU DISPOSITIF DE LUMIÈRE COLORÉE GLOBRITE® (APRÈS L'INSTALLATION DE LA NICHE)

Pour installer la lumière colorée GloBrite® dans une niche de gunite, de fibre de verre ou de vinyle :

1. Diriger le cordon d'alimentation de la lumière GloBrite à travers l'avant de la niche, jusqu'à l'emplacement du transformateur pour piscine 12 VCA ou de la boîte de jonction.
2. Au lieu désigné, couper tout excédant du cordon. Laisser au moins 15,2 cm (6 po) de cordon dans la boîte de jonction ou dans le transformateur pour faciliter l'installation de la lumière et l'inspection de la niche. Couper tout excédant du cordon. Voir l'Illustration 1 à la page 7.
3. Retirer la gaine extérieure du cordon afin d'exposer les deux (2) conducteurs isolés. Dénuder les deux conducteurs. S'assurer de ne pas endommager le conducteur de cuivre.
4. Raccorder les deux (2) conducteurs aux fils correspondants dans la boîte de jonction (fil noir à l'alimentation, fil blanc au conducteur commun). Mettre en place le couvercle de la boîte de jonction.
5. **Installer le nouveau dispositif de lumière GloBrite :** Pousser la lumière dans la niche tout en tirant sur le cordon d'alimentation à partir de la boîte de jonction ou du transformateur, en s'assurant que les languettes de blocage à l'arrière de la lumière sont correctement alignées avec les ouvertures de la niche (à l'intérieur de la niche).

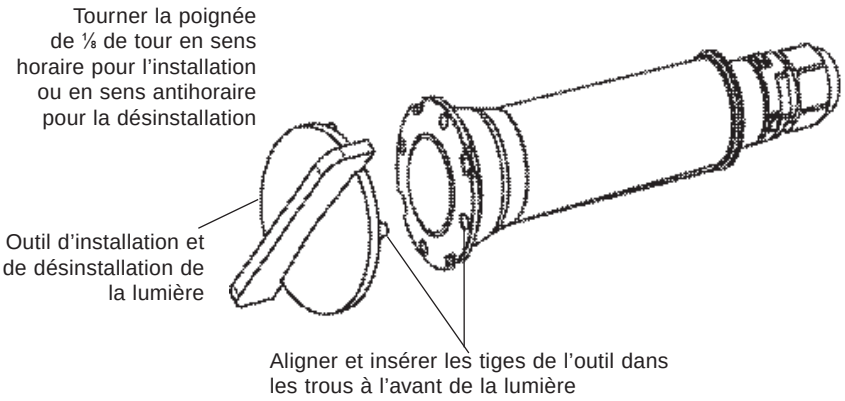
Remarque : Si vous utilisez des câbles de grande longueur ou plusieurs lumières par transformateur, il est recommandé d'utiliser la prise 13 VCA ou 14 VCA du transformateur.



Niche et lumière GloBrite

6. Placer l'outil d'installation de la lumière (N/P 620057) sur le devant de la lumière. Tourner l'outil et la lumière en sens horaire (moins de 0,3175 cm [⅛ de tour]), tout en poussant vers l'intérieur, jusqu'à ce que l'outil ne tourne plus. Ceci indique que la lumière est bien ancrée et verrouillée et que la niche est complètement scellée.

   Remarque : *Si la lumière tourne mal, tirer la lumière légèrement vers l'extérieur et s'assurer qu'elle est bien appuyée et que la niche ne présente aucun débris, puis installer la lumière comme indiqué à l'étape 6.*



Outil d'installation et de désinstallation de la lumière colorée GloBrite®

7. Avant d'utiliser la lumière colorée GloBrite, remplir la piscine d'eau jusqu'à ce que la lumière soit complètement immergée.

   Remarque : *La lumière colorée GloBrite ne doit pas être alimentée plus de 30 secondes lorsqu'elle n'est pas immergée.*

8. **Dernière vérification pour une bonne utilisation de la lumière GloBrite :** Allumer l'interrupteur principal ou le disjoncteur au transformateur 12 VCA et l'interrupteur contrôlant la lumière GloBrite elle-même. La lumière devrait s'allumer lorsque l'alimentation 12 VCA est activée. Sinon, vérifier les étapes d'installation.

REMPLACEMENT DU DISPOSITIF DE LUMIÈRE COLORÉE GLOBRITE®
(DANS UNE PISCINE OU UN SPA EXISTANT)

Risque de décharge électrique ou d'électrocution!
Cette lumière aquatique doit être installée par un électricien dûment certifié ou autorisé ou un professionnel en réparation de piscine qualifié conformément au Code national de l'électricité (NEC), au NFPA 70 ou au Code canadien de l'électricité (CEC), au CSA C22.1 et à tout code ou à toute ordonnance en vigueur de la région. Une installation incorrecte constitue un danger électrique qui pourrait causer la mort ou des blessures graves pour les utilisateurs de la piscine, les installateurs ou toute autre personne en cas de décharge électrique, ainsi que des dommages matériels.

Toujours couper l'alimentation de la lumière de piscine au niveau du disjoncteur avant d'intervenir sur la lumière. Le non-respect de cette consigne peut engendrer la mort ou des blessures graves par décharge électrique au réparateur, aux utilisateurs de la piscine ou à d'autres personnes.

AVIS IMPORTANT : LA LUMIÈRE COLORÉE GLOBRITE NE PEUT PAS ÊTRE RÉPARÉE. LE DISPOSITIF COMPLET DOIT ÊTRE REMPLACÉ.

AVERTISSEMENT

Assurez-vous que la piscine et le spa respectent les exigences actuelles du Code national de l'électricité, ainsi que tous les codes et toutes les ordonnances de votre région. L'installation doit être effectuée par un électricien certifié qui devra s'assurer que les exigences réglementaires sont satisfaites, voire dépassées, avant d'installer la lampe subaquatique. Les exigences du Code national de l'électricité devant être respectées par le système électrique de la piscine incluent :

- Le circuit du luminaire dispose d'un disjoncteur de fuite à la terre pour les modèles d'une tension secteur de 120 VCA, ainsi qu'un disjoncteur de catégorie appropriée. Les conducteurs du côté charge du circuit disjoncteur de fuite à la terre n'occupent aucune conduite, boîte ou enceinte contenant d'autres conducteurs, à moins que ces autres conducteurs soient également protégés par un disjoncteur de fuite à la terre. Consulter les codes locaux pour obtenir plus de détails.
- La boîte de jonction et le transformateur d'isolation basse tension se trouvent au moins à 20,3 cm (8 po) au-dessus du sol et au moins à 1,22 m (48 po) du bord de la piscine. Voir l'Illustration 1 à la page 7.
- La niche de la lumière colorée GloBrite® doit être correctement installée pour que le bord supérieur de la lentille de la lumière GloBrite se trouve au moins à 10,16 cm (4 po) sous la surface de l'eau de la piscine ou du spa (sans dépasser 1,22 m [48 po] au Canada).
- Pour s'assurer que la piscine ou le spa respecte toutes les exigences applicables, l'électricien doit également consulter le service de la construction régional.

REMPLACEMENT DU DISPOSITIF DE LUMIÈRE COLORÉE GLOBRITE® (LORSQUE LES EXIGENCES ÉLECTRIQUES RESPECTÉES)

Les instructions d'installation et de désinstallation qui suivent décrivent comment installer ou retirer le dispositif de lumière colorée GloBrite®.

AVIS IMPORTANT : LA LUMIÈRE COLORÉE GLOBRITE NE PEUT PAS ÊTRE RÉPARÉE. LE DISPOSITIF COMPLET DOIT ÊTRE REMPLACÉ.

⚠ AVERTISSEMENT

La mise en place d'un système électrique de piscine ou de spa respectant les exigences des codes en vigueur avant l'installation de la lumière aquatique est cruciale pour éviter un danger électrique qui pourrait causer la mort ou des blessures graves pour les utilisateurs de la piscine, les installateurs ou toute autre personne en cas de décharge électrique, ainsi que des dommages matériels.

1. **Couper le courant ou le disjoncteur à la source.**
2. Retirer le couvercle de la boîte de jonction ou du transformateur. Débrancher les fils de la lumière et fixer un fil de tirage au cordon d'alimentation de la lumière installée. *Ceci vous aidera à tirer le cordon d'alimentation de la lumière de rechange à travers le conduit jusqu'à la boîte de jonction.*
3. **Retirer le dispositif de lumière colorée GloBrite de l'eau de la piscine ou du spa :** À l'aide de l'outil d'installation fourni (N/P 620057), tourner le dispositif de lumière en sens antihoraire d'environ ⅛ de tour pour sortir la lumière de la niche (tel qu'illustré à la page 10).
4. Tirer lentement sur la lumière et son cordon d'alimentation (avec le fil de tirage fixé) pour les sortir de la niche. Retirer le cordon d'alimentation et le fil de tirage de la niche et poser la lumière sur le bord de la piscine.
5. Fixer le nouveau cordon d'alimentation au fil de tirage et insérer avec soin le fil et le cordon jusqu'à la boîte de jonction.
6. **Installer la lumière dans la niche :** Placer l'outil d'installation de la lumière sur le devant de la lumière. Tourner l'outil et la lumière en sens horaire tout en poussant vers l'intérieur, jusqu'à ce que l'outil ne tourne plus. Ceci indique que la lumière est bien ancrée et verrouillée et que le conduit électrique est complètement scellé (voir la page 10).

   Remarque : Si la lumière tourne mal, tirer la lumière légèrement vers l'extérieur et s'assurer qu'elle est bien appuyée et que la niche ne présente aucun débris, puis installer la lumière comme indiqué à l'étape 5.
7. Brancher les deux (2) conducteurs aux fils correspondants dans la boîte de jonction (fil noir à l'alimentation, fil blanc au conducteur commun) et remettre en place le couvercle de la boîte de jonction.
8. **Dernière vérification pour une bonne utilisation de la lumière colorée GloBrite® :** Allumer l'interrupteur principal ou le disjoncteur au transformateur 12 VCA et l'interrupteur contrôlant la lumière elle-même. La lumière devrait s'allumer lorsque l'alimentation 12 VCA est activée. Sinon, vérifier les étapes d'installation.

BRANCHEMENT DES LUMIÈRES COLORÉES GLOBRITE® AU CENTRE D'ALIMENTATION DES SYSTÈMES DE CONTRÔLE EASYTOUCH® OU INTELLITOUCH® ET À UN RELAIS AUXILIAIRE

⚠DANGER

D A N G E R !

RISQUE DE DÉCHARGE ÉLECTRIQUE OU D'ÉLECTROCUTION

Toujours couper l'alimentation CA vers le centre d'alimentation des systèmes de contrôle EasyTouch et IntelliTouch au disjoncteur avant l'entretien ou le retrait du **PANNEAU AVANT « HAUTE TENSION »**. Le non-respect de cette consigne peut engendrer la mort ou des blessures graves par décharge électrique à l'installateur, au réparateur, aux utilisateurs de la piscine ou à d'autres personnes.

1. **Centre d'alimentation du système de contrôle EasyTouch ou IntelliTouch :** Déverrouiller le loquet à ressort de la porte du boîtier, puis ouvrir la porte.
2. **Décharger l'énergie électrostatique avant de retirer le couvercle en touchant d'abord la partie métallique du boîtier.**
3. Desserrer les deux (2) vis de retenue du PANNEAU AVANT « HAUTE TENSION ». Retirer le panneau du boîtier.
4. Relier le cordon d'alimentation de la lumière colorée GloBrite à un relais auxiliaire du centre d'alimentation EasyTouch/IntelliTouch.
5. Brancher le côté 120 volts d'un transformateur 12 VCA au CÔTÉ CHARGE de l'un des relais auxiliaires (AUX) du centre d'alimentation.
6. Brancher le conducteur neutre du transformateur 12 VCA à la barre omnibus neutre du centre d'alimentation.
7. Une fois le raccordement complété, fermer le panneau de commande, puis le fixer solidement à l'aide des deux (2) vis de retenue.
8. Fermer la porte avant du module de charge. Fixer le loquet à ressort.

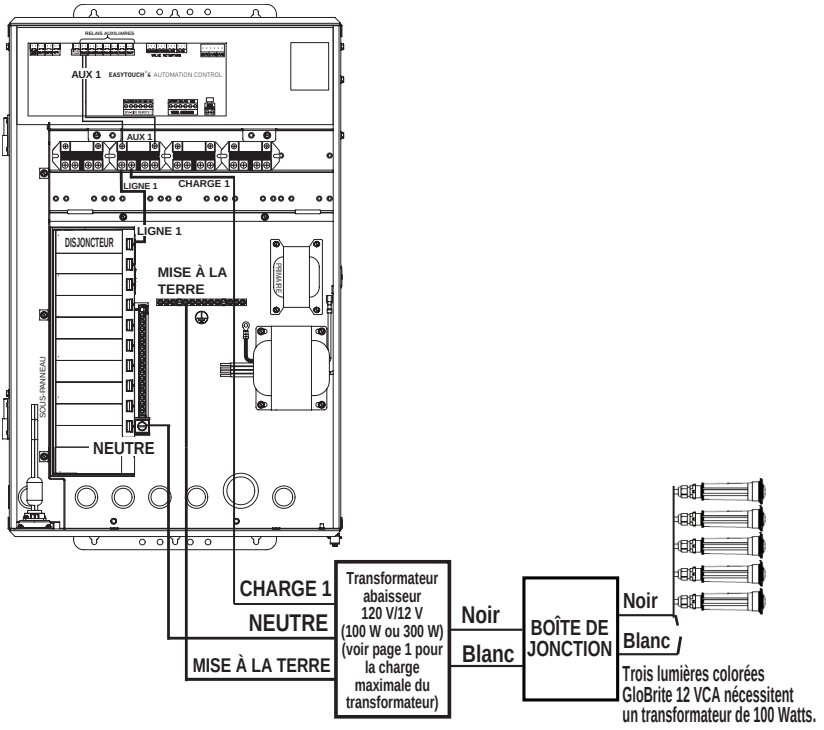


Schéma de câblage du centre d'alimentation des systèmes de contrôle EasyTouch® et IntelliTouch®

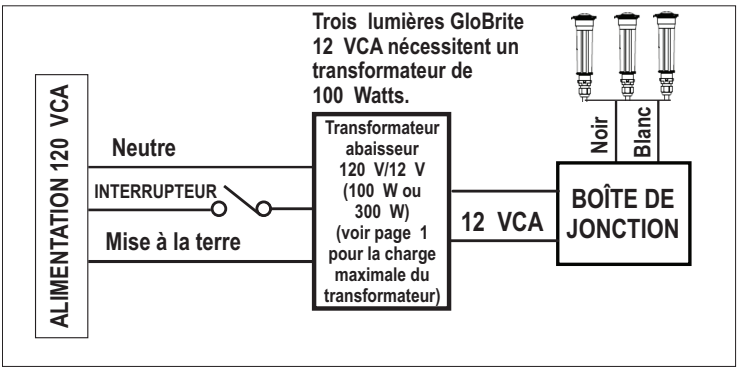


Schéma de câblage de la lumière colorée GloBrite® avec interrupteur mural

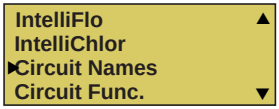
CONFIGURATION DES LUMIÈRES COLORÉES GLOBRITE® AVEC LES SYSTÈMES DE CONTRÔLE EASYTOUCH® ET INTELLITOUCH®

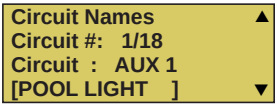
Système de contrôle EasyTouch®

Ce qui suit décrit comment configurer la lumière colorée GloBrite® à partir du panneau de commande intérieur ou du panneau de commande sans fil du système de contrôle EasyTouch®. Vous pouvez contrôler les spectacles de lumières à partir du panneau de commande du système de contrôle EasyTouch.

Pour configurer un circuit de lumière GloBrite : Assigner le « nom du circuit de lumière » au circuit relais (exemple : AUX 3 nommé « Pool Light » [Lumière piscine]) ainsi que sa « fonction ». Assigner le circuit « Pool Light » (Lumière piscine) dans le menu Circuit Func. (fonctions circuit) comme circuit « light » (de lumière) (IntelliBrite). Une fois le nom et la fonction du circuit assignés, le nom de circuit de lumière « Pool Light » (Lumière piscine) peut être configuré dans le menu CONFIG en ce qui a trait à sa position, à sa couleur, etc.

Pour assigner un nom de circuit, aller sous : MENU > SETTINGS (paramètres) > CIRCUIT NAMES (noms de circuits)





1. Appuyer sur le **bouton Haut/Bas** pour sélectionner un numéro de circuit de 1 à 18. Appuyer deux fois sur le bouton Haut pour sélectionner **AUX 1** et choisir ce circuit comme interrupteur de circuit de lumière. Le numéro de circuit (1 à 18) correspond à son nom de circuit assigné.
2. Appuyer sur le **bouton Haut/Bas** pour faire défiler la liste de noms prédéfinis. Sélectionner un nom tel que « Pool Light » (Lumière piscine). AUX 1 est maintenant assigné au nom de circuit « Pool Light » (Lumière piscine).

Pour assigner une fonction de circuit, aller sous : MENU > SETTINGS (paramètres) > CIRCUIT FUNC. (fonctions de circuits)

3. Appuyer sur le bouton Menu pour revenir au menu Settings (paramètres). Appuyer sur le bouton Bas pour sélectionner « Circuit Func. » (fonctions de circuit). Appuyer sur le bouton Droite pour accéder au menu Circuit Func. (fonctions de circuit).
4. Appuyer sur le **bouton Haut/Bas** pour sélectionner le nom de circuit déjà assigné « Pool Light » (Lumière piscine).
5. Appuyer sur le **bouton Droite** pour consulter les fonctions de circuit à assigner au circuit de lumière « Pool Light » (Lumière piscine).
6. Appuyer sur le **bouton Haut/Bas** pour sélectionner le type de fonction de circuit de lumière à utiliser. Sélectionner « INTELLIBRITE » pour la fonction du circuit de lumière GloBrite.
7. Appuyer sur le bouton Menu trois fois pour revenir à l'écran principal.

Utilisation des lumières GloBrite : La lumière colorée GloBrite® est prête à utiliser à l'aide du bouton 1 du panneau de commande EasyTouch (circuit auxiliaire 1). Pour accéder au menu Lights (lumières) pour les *caractéristiques spéciales des lumières*, appuyer sur **Menu > Lights** (lumières). Les paramètres du menu Lights (lumières) sont : MODES, COLORS (couleurs), ALL ON (toutes allumées), ALL OFF (toutes éteintes), SYNC (synchronisées), MAGICSTREAM (fontaine magique), CONFIG (configuration) : À partir de l'écran Modes, vous pouvez contrôler les spectacles de lumières colorées. Pour accéder au menu Modes, appuyer sur Menu > Lights (lumières) > Modes. Voir la page 2 pour les spectacles de lumières colorées GloBrite.

Système de contrôle IntelliTouch®

Ce qui suit décrit la configuration de la lumière colorée GloBrite® à partir du panneau de commande du système de contrôle IntelliTouch®. Vous pouvez contrôler les spectacles de lumières à partir du panneau de commande du système de contrôle IntelliTouch®. Pour accéder aux écrans de la lumière GloBrite, à partir du panneau de commande intérieur du système de contrôle IntelliTouch ou du panneau de commande du régulateur sans fil MobileTouch® :

Assignation d'un nom de circuit

Pour identifier la lumière GloBrite branchée aux circuits auxiliaires (AUX 1, AUX 2) dans le centre d'alimentation IntelliTouch, vous devez assigner le nom de circuit de lumière GloBrite aux circuits auxiliaires correspondants du panneau de commande intérieur IntelliTouch. Sélectionner un nom de circuit parmi la liste offerte pour la lumière GloBrite branchée au relais auxiliaire installé dans le centre d'alimentation IntelliTouch.

Assignation d'un nom de circuit à la lumière GloBrite : Pour assigner un nom de circuit à la lumière GloBrite, aller sous : **MENU > SETUP (configuration) > ADVANCED (avancé) > CIRCUIT NAMES (noms de circuit) > ASSIGN CIRCUIT NAMES (assigner un nom de circuit) > DISPLAY (affichage)**.

Sélectionner DISPLAY Screen (écran d'affichage) 1, 2, 3 ou 4 : Les circuits auxiliaires contrôlant l'équipement de piscine ou de spa peuvent être contrôlés à partir de l'écran « Display » (affichage) du panneau de commande intérieur ou du panneau de commande sans fil MobileTouch. Sélectionner le bouton à côté de Display (affichage) 1, 2, 3 ou 4 affichera à l'écran les circuits appartenant à ce centre d'alimentation particulier. Des circuits de caractéristique (« Feature Circuits ») peuvent également être assignés à partir de cet écran.

Pour assigner un nom de circuit à un écran d'affichage spécifique :
Écran 1 – Cet écran affiche le nom des circuits de la pompe à filtre, des modes de piscine ou de spa et de tous les circuits auxiliaires haute tension branchés au centre d'alimentation principal.
Écran 2 – Cet écran affiche le nom des circuits auxiliaires supplémentaires branchés au premier centre d'expansion (centre d'alimentation).
Écran 3 – Cet écran affiche le nom des circuits auxiliaires supplémentaires branchés au deuxième centre d'expansion (centre d'alimentation).
Écran 4 – Cet écran affiche le nom des circuits auxiliaires supplémentaires branchés au troisième centre d'expansion (centre d'alimentation).

Pour assigner un nom de circuit de lumière GloBrite pour l'ÉCRAN PRINCIPAL :

1. Sélectionner le bouton à côté de Display #1 (affichage 1). Les noms de circuit proposés sont ceux qui s'afficheront à l'écran principal. Remarque : Si un centre d'alimentation d'expansion est installé, sélectionner l'écran 2, 3 ou 4 correspondant, soit l'écran associé à ce centre d'alimentation d'expansion.
2. À partir de l'écran Main Display (affichage principal), appuyer sur le bouton à côté d'AUX 1. Une petite flèche pointant vers AUX 1 s'affiche.
3. Utiliser les boutons Haut et Bas au bas de l'écran pour faire défiler la liste alphabétique des noms d'équipement prédéfinis. Choisir le nom d'équipement correspondant à l'étiquette pour le bouton 1 du panneau de commande extérieur du centre d'alimentation.
4. Continuer à nommer les autres circuits auxiliaires (AUX 2, AUX 3, etc.) : Après avoir sélectionné le nom d'équipement à utiliser pour AUX 1, appuyer sur le bouton à côté d'AUX 2 et choisir un nom de circuit. La petite flèche indique le circuit sélectionné pour être nommé.
5. Répéter ce processus pour assigner les autres équipements aux circuits à l'écran.
6. Lorsque tous les équipements ont reçu un nom de circuit, appuyer sur le bouton Save (enregistrer). Appuyer sur le bouton Exit (quitter) pour revenir à l'écran principal.
7. **POURSUIVRE À LA PAGE SUIVANTE pour configurer les « fonctions de circuit » GloBrite.**

Configurer une fonction de circuit pour la lumière colorée GloBrite®

Pour configurer un circuit AUX afin de contrôler la lumière colorée GloBrite®, assigner à la fonction de circuit de lumière un circuit de relais auxiliaire (AUX 1), puis assigner un nom de circuit à ce circuit de lumière. Le nom du circuit de lumière apparaîtra sur l'écran principal. Chaque lumière GloBrite doit également recevoir une fonction de circuit.

Pour assigner un nom de circuit à une lumière GloBrite, aller sous : MENU > SETUP (configuration) > ADVANCED (avancé) > CIRCUIT FUNCTIONS (fonctions de circuit)

Configurer une fonction de circuit de lumière GloBrite : Assigner un nom de circuit à chaque circuit relais auxiliaire de lumière, puis assigner à ce circuit relais de lumière la fonction « INTELLIBRITE » dans la section « CIRCUIT FUNCTIONS » (fonctions de circuit).

Pour configurer la fonction de circuit de lumière GloBrite (utiliser le nom de circuit « IntelliBrite ») :

1. Appuyer sur le bouton à côté du bouton AUX (le circuit relais auxiliaire branché à la lumière GloBrite [IntelliBrite]).
2. Appuyer sur le bouton à droite ou à gauche d'« INTELLIBRITE » (PREV ou NEXT [précédent ou suivant]). Faire défiler les fonctions de circuit jusqu'à ce qu'« INTELLIBRITE » s'affiche.
3. Appuyer sur le bouton SAVE (enregistrer) au bas de l'écran. Appuyer sur le bouton EXIT (quitter) pour revenir à l'écran principal.

Assigner le circuit de lumières GloBrite à l'écran Lights (lumières) :

4. Appuyer sur le bouton Lights (lumières) au bas de l'écran.
5. Appuyer sur le bouton à droite de « CONFIGURE » (configurer).
6. Appuyer sur le bouton à côté de « NONE » (aucun) pour assigner un circuit de lumière IntelliBrite au bouton sélectionné. Les noms de lumière peuvent être configurés pour s'afficher à gauche pour les caractéristiques « spa » et à droite pour les caractéristiques « piscine ».
7. Appuyer sur le bouton en haut à gauche ou à droite pour faire défiler les circuits de lumière disponibles pour les caractéristiques d'éclairage GloBrite (IntelliBrite). Sélectionner le nom de circuit que vous souhaitez utiliser. Les noms de circuit affichés sont des noms assignés précédemment lors de la sélection de fonctions de circuit.

Utilisation et sélection des modes de couleur GloBrite (lumière colorée IntelliBrite®)

À partir de l'écran « Modes », vous pouvez sélectionner différents effets de lumière colorée prédéfinis, comme le mode « Américain » et le mode « Coucher de soleil californien », ainsi que les lumières à couleur changeante Pentair SAm® (une imitation des couleurs SAm). À l'aide des fonctions « Mémoriser » et « Rappel », vous pouvez également enregistrer un effet de couleurs unique pour le réutiliser ultérieurement.

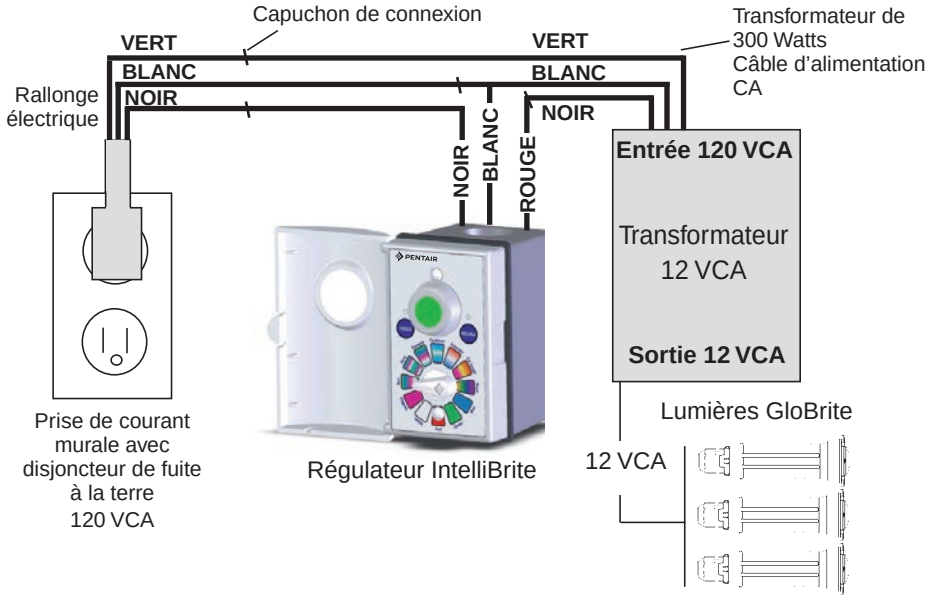
Écran Modes

Pour accéder aux caractéristiques des modes de spectacle de lumières colorées IntelliBrite® à partir de l'écran Lights (lumières), appuyer sur le bouton Lights (lumières) au bas de l'écran, puis appuyer sur le bouton à gauche de « MODES ».

Caractéristiques de lumière spéciales : Jusqu'à douze (12) circuits de lumière IntelliBrite peuvent être affichés sur l'écran Lights (lumières) principal (caractéristiques de lumière spéciales). À partir de l'écran Lights (lumières), vous pouvez activer les caractéristiques de lumière IntelliBrite (nage colorée, ensemble de couleurs, etc.), à condition que chaque lumière GloBrite (IntelliBrite) dispose de son propre relais et d'un circuit distinct.

Raccordement des lumières colorées GloBrite® au système de contrôle IntelliBrite et au transformateur 300 Watts

Le schéma suivant montre comment brancher la lumière colorée GloBrite® à un régulateur IntelliBrite à l'aide d'un transformateur de 300 Watts. Remarque : Pour consulter les directives d'utilisation de la lumière GloBrite, voir page 3.



Dépannage (lumières colorées GloBrite®)

Problème	Cause/Action
La lumière ne s'allume pas.	Vérifier le câblage du disjoncteur de fuite à la terre et réinitialiser au besoin.
La lumière ne fonctionne pas correctement.	Vérifier le raccordement électrique de la lumière à la boîte de jonction au bord de la piscine et à l'interrupteur CA. S'assurer qu'une alimentation CA adéquate est acheminée à la lumière.

Dépannage (régulateur IntelliBrite®)

Problème	Cause/Action
Les deux DEL clignotent.	Le régulateur IntelliBrite a détecté que la charge a dépassé la tension maximale permise ou que la sortie est court-circuitée. 1. Éteindre le régulateur IntelliBrite. Retirer la charge excessive ou le court-circuit. 2. Appuyer sur l'interrupteur du régulateur IntelliBrite pour allumer l'appareil. S'assurer que les DEL ne clignotent plus.
La lumière ne s'allume pas. La lumière ne fonctionne pas correctement.	Vérifier le câblage de la fuite à la terre et réinitialiser au besoin. Vérifier le raccordement électrique de la lumière à la boîte de jonction au bord de la piscine et au disjoncteur principal. S'assurer qu'une alimentation CA adéquate est acheminée à la lumière.

Liste des pièces et trousses de remplacement pour lumières de couleur GloBrite®

Lumières GloBrite

Nº de pièce	Description
602053	Cordon de 30 pi 12 VCA GloBrite
602054	Cordon de 50 pi 12 VCA GloBrite
602055	Cordon de 100 pi 12 VCA GloBrite
602056	Cordon de 150 pi 12 VCA GloBrite

Ensembles GloBrite

Nº de pièce	Description
619993	Combinaison gunite 1 – 1 GloBrite de 100 pi avec transformateur 300 W et une (1) niche de gunite
619994	Combinaison gunite 2 – 2 GloBrite de 100 pi avec transformateur 300 W et deux (2) niches de gunite
620051	Combinaison fibre de verre 1 – 1 GloBrite de 100 pi avec transformateur 300 W et une (1) niche de fibre de verre
620052	Combinaison fibre de verre 2 – 2 GloBrite de 100 pi avec transformateur 300 W et deux (2) niches de fibre de verre
620080	Combinaison vinyle 1 – 1 GloBrite de 100 pi avec transformateur 300 W et une (1) niche de vinyle
620081	Combinaison vinyle 2 – 2 GloBrite de 100 pi avec transformateur 300 W et deux (2) niches de vinyle

Niches pour lumière GloBrite®

Nº de pièce	Description
620039	Niche de vinyle pour GloBrite
620040	Niche de gunite pour GloBrite
620041	Niche de fibre de verre pour GloBrite
620093	Niche de fibre de verre pour GloBrite (bleue)
620094	Niche de fibre de verre pour GloBrite (grise)

Trousses de remplacement pour lumière GloBrite®

Nº de pièce	Description
620054	Vinyle (joint, plaque frontale et vis [4])
620055	Fibre de verre (rondelle et joint)
620056	Anneau de couleur (anneau de couleur et couvercle de plâtrage)
620057	Joint torique (joint torique, outil d'insertion)
620058	Écrou (écrou de fibre de verre/vinyle)

Accessoire: GloBrite Ecran Anti-Eblouissement (P/N 620314 – facultatif et vendu séparément)

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N/P 17302 RÉV C 1/2019

PENTAIR

HI-FLOW™
SIDE MOUNTED BACKWASH VALVE

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

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Replacement of Valve Top and Diverter Assembly **3**
Complete Disassembly **3**
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⚠WARNING Before installing this product, read and follow all warning notices and instructions accompanying this valve. Failure to follow safety warning and instructions can result in severe injury, death, or property damage. Call (800) 831-7133 for additional free copies of these instructions.

IMPORTANT NOTICE!
Attention Installer: This manual contains important information about the installation, operation and safe use of this product. This information should be given to the owner/operator of this equipment.

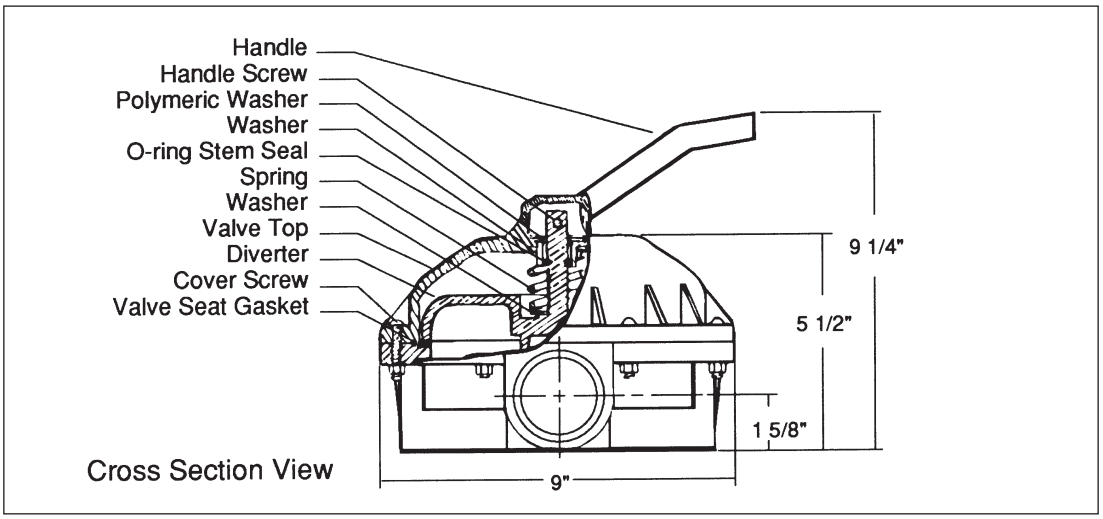
⚠ DANGER The valve must be installed by a qualified serviceman in accordance with the National Electrical Code and all applicable local codes and ordinances.

Always disconnect power to the equipment at the circuit breaker before servicing any of the equipment. Ensure that the disconnected circuit is locked out or properly tagged so that it cannot be switched on while you are working on the equipment. Failure to do so could result in serious injury or death to serviceman, operator users or others due to electric shock.

Position the filter and the air relief valve to safely direct water drainage and purged air or water. Water discharged from an improperly positioned filter or valve can create an electrical hazard that can cause severe personal injury as well as damage property.

⚠CAUTION **For Installation of Electrical Controls at Equipment Pad (ON/OFF Switches, Timers and Automation Load Center)**

Install all electrical controls at equipment pad, such as on/off switches, timers, and control systems, etc. to allow the operation (startup, shut-down, or servicing) of any pump or filter so the user does not place any portion of his/her body over or near the pump strainer lid, filter lid or valve closures. This installation should allow the user enough space to stand clear of the filter and pump during system start-up, shut down or servicing of the system filter.



FILTER OPERATES UNDER HIGH PRESSURE.

When any part of the circulating system, (e.g., clamp, pump, filter, valve(s), etc.), is serviced, air can enter the system and become pressurized. Pressurized air can cause the lid to separate which can result in severe injury, death, or property damage. To avoid this potential hazard, follow these instructions:

1. Before repositioning valve(s) and before beginning the assembly, disassembly, or adjustment of the clamp or any other service of the circulating system: (A) Turn the pump **OFF** and **shut OFF** any automatic controls to ensure the system is NOT inadvertently started during the servicing; (B) open the manual air relief valve; (C) wait until all pressure is relieved.
2. Whenever installing the filter clamp **FOLLOW THE FILTER CLAMP INSTALLATION INSTRUCTIONS EXACTLY**.
3. Once service on the circulating system is complete **FOLLOW SYSTEM RESTART INSTRUCTIONS EXACTLY**.
4. Maintain circulation system properly. Replace worn or damaged parts immediately, [e.g., clamp, pressure gauge, valve(s), o-rings, etc].
5. Be sure that the filter is properly mounted and positioned according to instructions provided.

Valve Positions Overview

SETTING	FLOW PATH Function
Filter	**Pump > Sand Top / DE Bottom > Through Filter > DE Top / Sand Bottom > Return** For normal filter action and vacuuming pool thru filter.
Backwash	**Pump > DE Top / Sand Bottom > Through Filter > Sand Top / DE Bottom > Waste** For cleaning filter by reversing flow
Rinse	**Pump > DE Top / Sand Bottom > Through Filter > DE Top / Sand Bottom > Waste** For start-up cleaning and resetting filter bed after backwashing
Waste	**Pump > Waste** For vacuuming directly to waste, lowering pool level or draining pool
Closed	**No Circulation - DO NOT USE THIS SETTING WITH PUMP OPERATING!**
Recirculate	**Pump > Return** For circulating water without going through filter

Valve Installation

⚠CAUTION This valve is available in two models for use with sand type or diatomaceous earth (DE) type pool filters. Be sure that you have the correct model for your filter. Installing the incorrect model may cause your pump to dead head, or drain the pool when in backwash position.

1. Confirm correct valve is being used; DE valves for DE filters and Sand valves for Sand filters.
2. Install valve to filter by securing bulkhead nuts on valve to fittings on the filter.

⚠CAUTION Tighten the nuts by hand only! No additional tightness is required.

3. Plumb pump piping to center pipe in valve.
4. Plumb return and waste lines.

Winterizing

1. Drain and winterize pump and filter per manufacturer's instructions.
2. Depress valve handle and rotate so pointer on handle is between any two settings.

Replacement of Valve Top and Diverter Assembly

1. Set valve handle in any setting.
2. Remove cover screws.
3. Lift off valve top and diverter assembly.
4. Install new valve top and diverter assembly. Be sure arrows on valve top and bottom are aligned.
5. Tighten cover screws evenly and alternately. Do not over tighten.

Complete Disassembly

1. Remove Handle to diverter screw. Note arrow on top of diverter stem as handle is removed.
2. Evenly and alternately loosen cover screws.

⚠CAUTION Top is under spring load. Loosen all screws before removing any of them.

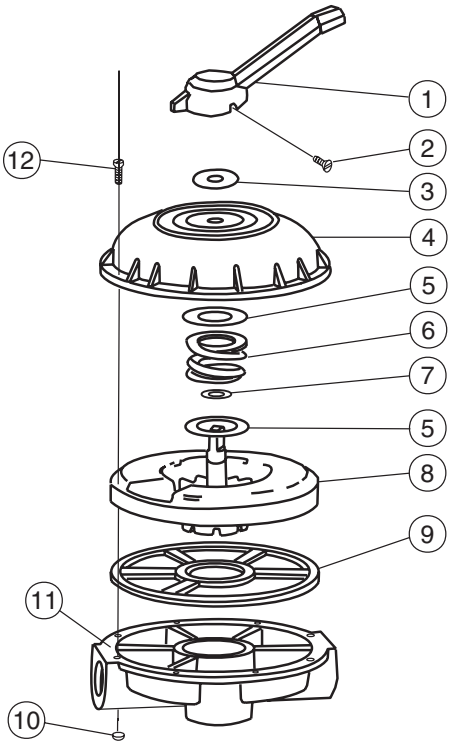
3. Remove cover screws and valve top.
4. Note location of O-ring and spring, and number of washers on diverter stem. Remove O-Ring, spring and washers.
5. Re-assemble in reverse order.

   Note: Prior to assembly, be sure bottom gasket and diverter sealing surface are clean and free from nicks to insure positive sealing.
6. When replacing valve handle, be sure arrow on diverter stem and pointer on handle are pointed in the same direction.

⚠CAUTION DO NOT over tighten the screws or use motorized screwdrivers; as this can cause damage to the threads.

Technical Data

Replacement Parts



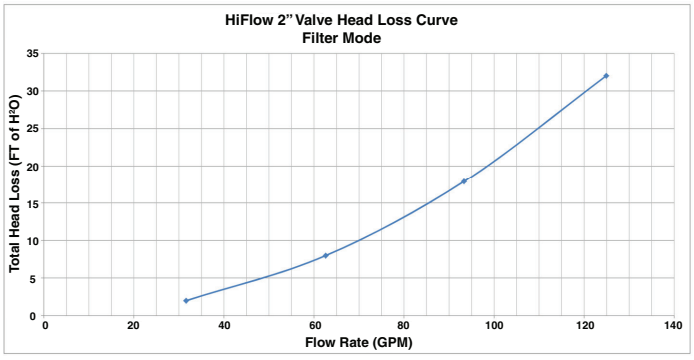
Covers Assemblies P/Ns 261049, 261050 and 261142

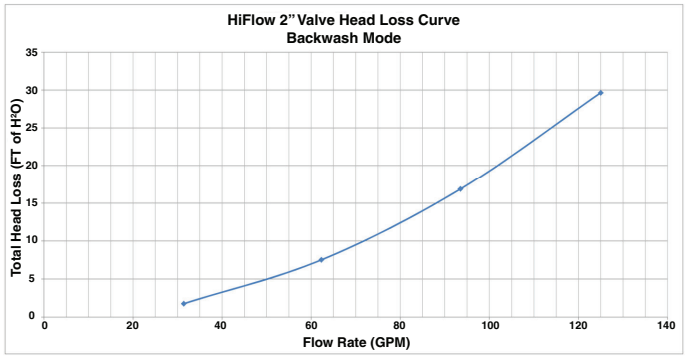
Item	P/N	Description	Qty.
1	272520	Handle	1
2	272405	Screw - Handle	1
3	272402	Washer, Plastic	1
4	272412	Valve Top	1
5	271193	Washer - 18 GA	2
6	272400	Spring - Compression	1
7	272406	O-ring - Diverter	1
8	272413Z	Diverter	1
9	272409	Seal -Diverter	1
10	98211400	Nut - 1/4" - 20 Hex	8
11	272415	Plat - 2" Valve Bottom	1
12	272403	Screw - 1/4" - 20	8
*	272422	Valve Top Assembly	1

*This part number includes items 1 thru 9

Note: When replacing gasket P/N 272409, secure it to valve bottom with an instant cyanocrylate adhesive suitable for bonding rubber to plastic.

Head Loss Curves





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P/N 272133 REV. G 11/28/18

PENTAIR

INTELLIBRITE® 5G
WHITE AND COLOR POOL AND SPA LIGHTS

INSTALLATION AND USER'S GUIDE

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

Technical Support: Phone: **(800) 831-7133 -** Fax: **(800) 284-4151**

Web sites: www.pentairpool.com and www.staritepool.com:

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Before Installing luminaries read the following:

⚠WARNING Always install a new lens gasket (see part number in this User's Guide on page 9 and 19), when ever reassembling the light. Failure to do so may permit water to leak into the assembly which could cause; (a) an electrical hazard resulting in death or serious injury to pool users, installer, or others due to electrical shock, or (b) breakage of the lamp or lens, which likewise could result in serious injury to pool user, installers, or bystanders, or in damage to property.

FOR 12 VAC LUMINARIES: ALWAYS USE A SEPARATE STEP DOWN TRANSFORMER TO POWER LUMINARIES. SEE DIAGRAM ON PAGE 7.
Note: Connect all three wires to the corresponding circuit wires in the Junction Box (black wire to power, white wire to common, and green wire to ground).
12 VAC LUMINARIES SPECIFICATION: 12 VAC, 50/60 Hz REPLACE ANY CRACKED PROTECTIVE SHIELD (CRACKED LENS) WITH NEW LENS AND GASKET.

⚠CAUTION THE INTELLIBRITE 5G LED POOL LIGHT AND SPA LIGHT *CANNOT BE USED* ON A DIMMER CIRCUIT. USING A DIMMER SWITCH WILL RESULT IN PERMANENT DAMAGE TO THE LIGHT.

P/N 619921 Rev K - 4/2015

IMPORTANT WARNING AND SAFETY INSTRUCTIONS

⚠DANGER **SERIOUS BODILY INJURY OR DEATH CAN RESULT IF THIS LIGHT IS NOT INSTALLED AND USED CORRECTLY.**

⚠DANGER **INSTALLERS, POOL OPERATORS AND POOL OWNERS MUST READ THESE WARNINGS AND ALL INSTRUCTIONS BEFORE USING THE POOL AND/OR SPA LIGHT.**

⚠WARNING Most states and local codes regulate the construction, installation, and operation of public pools and spas, and the construction of residential pools and spas. It is important to comply with these codes, many of which directly regulate the installation and use of this product. Consult your local building and health codes for more information.

IMPORTANT NOTICE - Attention Installer: This Installation and User's Guide ("Guide") contains important information about the installation, operation and safe use of this underwater pool and spa light. This Guide should be given to the owner and/or operator of this equipment.

⚠WARNING Before installing this product, read and follow all warning notices and instructions in this Guide. Failure to follow warnings and instructions can result in severe injury, death, or property damage.
Call (800) 831-7133 for additional free copies of these instructions. Please refer to www.pentairpool.com for more information related to this products.

⚠DANGER

RISK OF ELECTRICAL SHOCK OR ELECTROCUTION:
THE INTELLIBRITE® POOL AND SPA LIGHT REQUIRE HIGH VOLTAGE WHICH CAN SHOCK, BURN, OR CAUSE DEATH.
BEFORE WORKING ON POOL AND SPA LIGHTS a**lways disconnect power to the pool and/or spa lights at the circuit breaker from the light before servicing the light. Failure to do so could result in death or serious injury to service person, pool users or others due to electric shock.**

This underwater light must be installed by a licensed or certified electrician or a qualified pool professional in accordance with the current National Electrical Code (NEC), NFPA 70 or the Canadian Electrical Code (CEC), CSA C22.1. All applicable local installation codes and ordinances must also be adhered to. Improper installation will create an electrical hazard which could result in death or serious injury to pool users, installers or others due to electrical shock, and may also cause damage to property. Always disconnect the power to the pool light at the circuit breaker before servicing the light. Failure to do so could result in death or serious injury to serviceman, pool users or others due to electrical shock.

⚠WARNING **Important Safety Information for Pentair Water Pool and Spa Niche and Light Installation**

- All Niche and Light installations must conform with all codes. If local codes mandate a cord seal, use Pentair Water Pool and Spa plastic niches (P/N 79206600 and P/N 79206700) and Cord Seal Kit (P/N 670044).
- Under **no circumstances** replace lights by splicing wire under water or behind niche.

READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL.

IMPORTANT WARNING AND SAFETY INSTRUCTIONS

⚠WARNING **RISK OF ELECTRIC SHOCK AND INJURY. USE ONLY THE INSTALLATION METHOD SPECIFIED BELOW.**

Location of Luminaire Use	Pentair Water Pool and Spa Fountain Fixture* (P/N 560001 and P/N 560000)	Required Installation Method
Swimming Pool and Spa	Wet-Niche Swimming Pool (or Spa) Luminaire (Light)	Fixture Housing (Forming Shell) ONLY. DO NOT USE Fountain Fixture Stand.
Fountain	Wet-Niche Submersible Luminaire (Light) swimming Pool (or Spa) Luminair (Light)	Fixture Housing (Forming Shell) or Fountain Fixture Stand

(*) Note: Wet-niche luminaires complying with requirements for both uses may bare both the Listed Wet-Niche Submersible Luminaires UL Mark. A luminaire not bearing the corresponding UL Listing Mark is not considered by UL to have been produced under UL's Listing and Follow-Up Service for the associated usage location.

CAUTION - The IntelliBrite® 5G Light fixture must only be used with Pentair Water Pool and Spa fixture housings (niches). If the IntelliBrite light fixture is installed into other niches, the installation will not carry U.L. approval and will void all warranties.

NOTICE: The external flexible cable or cord of this luminaire cannot be replaced; if the cord is damaged, the luminaire shall be destroyed.

⚠WARNING **For countries in compliance with International Electromechnical Commission (IEC) regulatory standards:** The light fixture must be installed by a licensed or certified electrician or a qualified pool service person, in accordance with IEC 364-7-702 and all applicable local codes and ordinance. Improper installation will create an electrical hazard, which could result in death or serious injury to pool user, installer or other due to electrical shock and may also cause damage to the property.

⚠WARNING Salt is an inherently corrosive material. While the levels of salt required for proper operation of an electronic chlorine generator are relatively low when compared to sea water and other salt solutions, placing any amount of salt in your pool increases the likelihood of corrosion or other deterioration of pool equipment and any surfaces used in and around your pool. Metal parts and certain natural and man-made surfaces are particularly susceptible to corrosion and deterioration when used in and around salt water pools. Pentair does not represent or otherwise guarantee that the proper use of an electronic chlorine generator will prevent corrosion or other deterioration of pool equipment and any surfaces used in and around your pool. Consult your experienced pool professional, who should be able to advise you on the proper material selection, installation techniques for those materials, and the proper use, care and maintenance of those materials for your specific pool type and location in order to minimize the corrosion and deterioration that is inherent in and around salt water pools.

POOL AND SPA FIXED LUMINARIES: Follow these guidelines when installing, replacing or repairing Pentair Aquatic Systems Pool and Spa fixed luminaries:

- REPLACE ANY CRACKED PROTECTIVE SHIELD (CRACKED LENS) WITH NEW LENS AND GASKET. FOR MORE INFORMATION SEE PAGE 11.

- FOR LIGHT OPERATION, ONLY USE A SAFETY ISOLATION TRANSFORMER.

CAUTION! Luminaires not suitable for direct mounting on normally flammable surfaces (suitable ONLY for mounting on non-combustible surfaces.

Fixed pool and spa luminaries specification:

12 VAC 50/60 Hz - 120VAC ~ ,50/60 Hz.

Surface Mount

IntelliBrite® 5G Pool and Spa Lights Overview

This manual describes how to install the IntelliBrite 5G white and color pool light and the IntelliBrite 5G white and color spa light.

The IntelliBrite 5G white light provides a brilliant white light for a spectacular effect in your pool and spa. The IntelliBrite 5G white light lens geometry (pool light only) provides a choice between two light beam shapes; wider coverage with less intensity, or narrower coverage with more intensity.

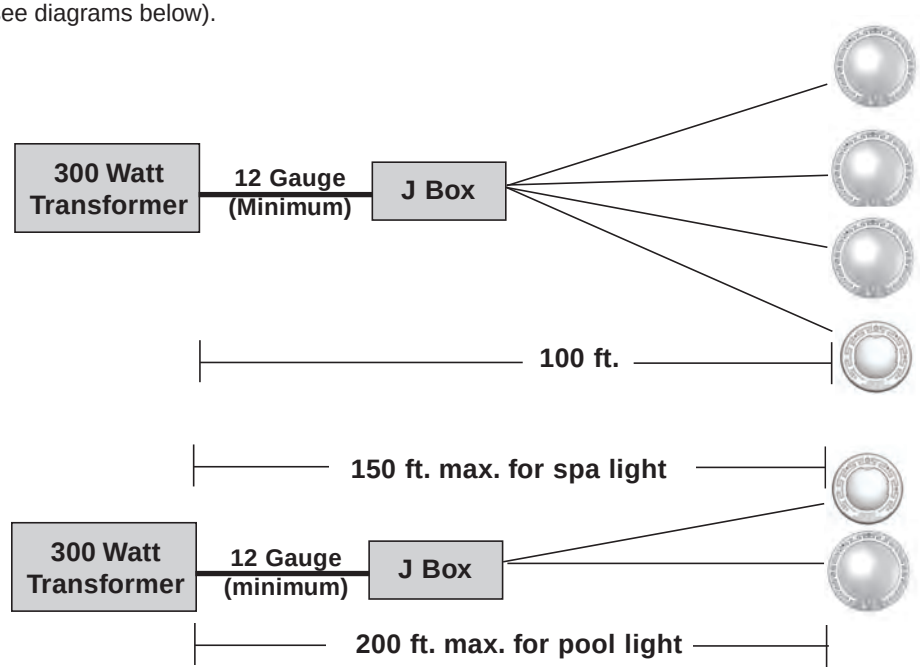
The IntelliBrite 5G color light provides brilliant vivid multi-colors with spectacular effects for your pool and spa. Choose one of the seven pre-programmed color light shows or select one of the five fixed colors to create virtually endless range of dramatic underwater lighting effects for a spectacular effect in your pool and spa.

Operating Pool and Spa Lights Using a Wall Switch (12 VAC)

IntelliBrite 5G pool and spa lights can be manually controlled using a standard wall-mount light switch. Multiple IntelliBrite lights can be connected via a junction box to a single switch so that all lights can be switched on and off together. IntelliBrite lights can also be automatically controlled via Pentair IntelliTouch®, EasyTouch® and SunTouch® Control Systems. **Note: Multiple IntelliBrite 5G pool/spa lights can also be controlled using the IntelliBrite Controller, for more information see page 2.**

Using an External Transformer for Multiple IntelliBrite 12 VAC Lights

When using multiple IntelliBrite 12 VAC lights on a **300 Watt** transformer, it is recommended that no more than three IntelliBrite pool lights and one (1) IntelliBrite Spa light be used. It is also recommended not to exceed 100 feet of total cable run between the transformer and light. Note: For long cable lengths, set transformer to 14 VAC (see diagrams below).



Powering on IntelliBrite® 5G Color Lights

When the IntelliBrite light is powered on, a momentarily white light will illuminate, followed by the previously selected color. Note: If power to the light is off for more than five (5) seconds, the last color show mode or fixed color that was saved will be displayed.

Selecting a light show mode or fixed color

Switch power on to the light. A white light will momentarily illuminate, followed by the previously selected color. To select a color show mode (1-7) or fixed color (8-12), turn the wall switch off/on a specific number of times. Each number (1-12) shown below corresponds to the number of times to power-cycle the switch to activate a color light show or fixed color. For details about saving color effects while in "show" modes, see "Hold" and "Recall" feature on page 4. Example: To select California Sunset Mode; turn the light on, then turn off and on six times. During the off/on switching process, no illumination will occur,

Number of times to cycle power (1-5)

1. SAm Mode: Cycles through white, magenta, blue and green colors (emulates the Pentair SAm® color changing light).
2. Party Mode: Rapid color changing building energy and excitement.
3. Romance Mode: Slow color transitions creating a mesmerizing and calming effect.
4. Caribbean Mode: Transitions between a variety of blues and greens.
5. American Mode: Patriotic red, white and blue transition.

Number of times to cycle power (6-14)

6. California Sunset Mode: Dramatic transitions of orange, red and magenta tones.
7. Royal Mode: Richer, deeper color tones.
8. Blue: Fixed color.
9. Green: Fixed color.
10. Red: Fixed color.
11. White: Fixed color.
12. Magenta: Fixed color.
13. Hold: Save the current color effect during a color light show.
14. Recall: Activate the last saved color effect.

Saving a Color Mode or Fixed Color: When power is switched off to the IntelliBrite color lights, the last color show mode or fixed color will be saved. The next time the light is powered on, the previously saved color show mode or fixed color will be displayed. For example, while in "Party Mode" switch the light off. Wait more than 10 seconds, switch the light back on to resume "Party Mode."

⚠WARNING During the off/on switching process, before the selected color is displayed, no illumination will occur for a brief second. This operating mode is normal during the switching process. During this period the pool and spa will be dark and precautions should be taken to avoid unforeseen accidents. Failure to observe this warning may result in serious injury or death to pool and spa users.

Using an IntelliBrite Color Light Controller

Using the IntelliBrite Controller (sold separately, P/N 600054), IntelliBrite 5G color pool/spa lights can all be synchronized so that individual or multiple IntelliBrite lights all lights can be switched on and off together.

To select a color light show mode or fixed color mode, rotate the dial so that it points to the desired selection.

Hold and Recall Feature: When IntelliBrite color lights are powered on, the previously selected color will be displayed, unless the HOLD or RECALL feature was previously enabled.

Hold button/LED: Press this button (LED on) to capture and save a color effect while displaying one of the light show modes. When the button is pressed, the LED will be on, indicating that the color effect is captured.

Recall Button/LED: Use this button (LED on) to activate the last saved color effect. When the button is pressed, the LED will be on, indicating that the color effect is being displayed.

Replacing the IntelliBrite® 5G Pool and Spa Light Assembly (in an existing pool or spa)

Risk of Electrical Shock or Electrocution!
This underwater light must be installed by a licensed or certified electrician or a qualified pool professional in accordance with the National Electrical Code and all applicable local codes and ordinances. Improper installation will create an electrical hazard which could result in death or serious injury to pool users, installers or others due to electrical shock, and may also cause damage to property. Always disconnect the power to the pool light at the circuit breaker before servicing the light. Failure to do so could result in death or serious injury to serviceman, pool users or others due to electrical shock.

Verify that the pool and spa meets the requirements of the current National Electrical Code and all local codes and ordinances. A licensed or certified electrician must install the electrical system to meet or exceed those requirements before the underwater light is installed. Some of the requirements of the National Electrical Code which the pool's electrical system must meet are as follows:

- The lighting circuit has a Ground Fault Circuit Interrupter (GFCI) for line voltage models, and has an appropriately rated circuit breaker.
- The Junction Box (or, for **12 volt models**, the low voltage transformer) is located at least eight (8) inches (20.3 cm) above ground level and at least 48 inches (1.219 m) from the edge of the pool; see Figure 1 on page 7.
- The light fixture and all metal items within five (5) feet (1.524 m) of the pool are properly electrically bonded.
- The wet niche is properly installed so that the top edge of the underwater light's lens is at least 18 inches below the surface of the water in the pool; see Figure 1 on page 7.
- The wet niche is properly electrically bonded and grounded via the No. 8 AWG ground connector located at the rear of the niche; see Figure 1 on page 7.
- To be certain that the pool's electrical system meets all applicable requirements, the electrician should also consult the local building department. Note: Use only Pentair wet niches to insure proper bonding and grounding connections.

Replacing the IntelliBrite® 5G Pool and Spa Light Assembly (After Electrical Requirements Are Met)

The following removal and installation instructions describe how to remove and install the IntelliBrite pool and spa light assembly. Also use these instructions after completing the following light replacement procedure:

- **IntelliBrite Spa Light and Face Ring Gasket and Lens Removal and Installation instructions, on page 19.**

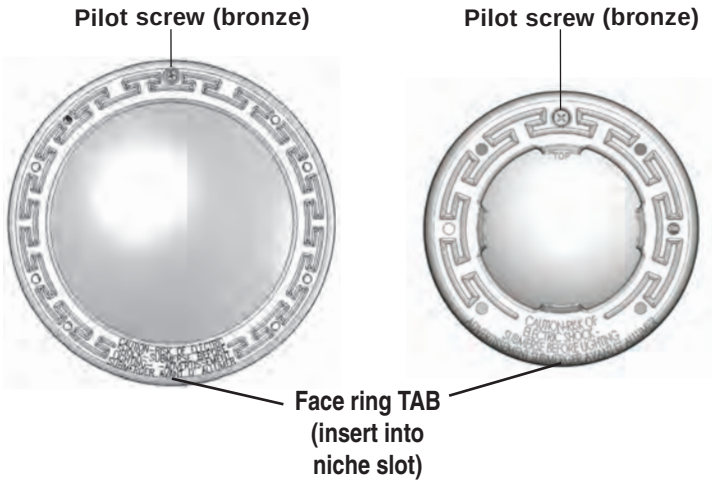
⚠WARNING

Failure to bring the pool or spa's electrical system up to code requirements before installing the underwater light will create an electrical hazard which could result in death or serious injury to pool users, installers, or others due to electrical shock, and may also cause damage to property.

1. **WARNING! Switch off main electrical switch or circuit breaker, and the switch which operates the IntelliBrite underwater light.**
2. **To remove light fixture assembly from the pool.** Remove the special bronze pilot screw at top of face ring. Remove the IntelliBrite light assembly from the niche and place it on the deck.
3. Cut the cord about 12 inches (30.5 cm) from the back of the light assembly.
4. Remove Junction Box cover, disconnect the light fixture wires, and pull the cord through the conduit. ***Tip: Before pulling the cord, tape the new cord to the existing cord, This might make it easier to feed the new cord through the conduit (see following step).***
5. Feed the new light fixture cord through the conduit from the niche to the Junction Box. **Note:** Depending on the length of the conduit, special tools may be required to pull the cord through the conduit.
6. Leave at least four (4) feet of cord to coil around the light fixture; see Figure 1 on page 6. This four (4) feet (1.2192 m) of cord coiled around the light allows the light to be serviced after the pool is filled with water.
7. Cut the cord at the Junction Box, leaving at least size (6) inches of cord to make connections.
8. Strip six (6) inches (15.2 cm) of the outer cord jacket from the cord to expose the three insulated conductors. Be careful not to damage the insulation on the three (3) inner conductors). Strip a 1/2" of insulation

9. Connect the three light wires (or two wires) to the corresponding light circuit wires in the Junction Box. For three wires; connect the black wire to power, white wire to common, and the green wire to ground.
10. For two wires connect the corresponding circuit wires (match the wire colors) in the Junction Box. Secure the Junction Box cover.
11. Install the IntelliBrite® light assembly into the pool niche. Be sure to insert the TAB on the lower part of the face ring into the niche SLOT (located on the lower part of the niche). This is important to secure the lower part of the light assembly onto the niche before tightening the pilot screw.
12. Carefully tighten the special bronze pilot screw to secure the upper part of the light assembly onto the niche.

⚠WARNING Use only the **special pilot screw provided** with this underwater light. This screw mounts and electrically grounds the housing securely to the mounting ring and wet niche. Failure to use the screw provided could create an electrical hazard which could result in death or serious injury to pool users, installers or others due to electrical shock.



IntelliBrite 5G Pool Light IntelliBrite 5G Spa Light

13. **Final check for proper IntelliBrite light operation:** Switch on the main switch or circuit breaker to the system, and the switch that operates the IntelliBrite underwater light itself. The light should illuminate when power is applied. If not recheck the installation steps starting with Step 1 (page 4).

INTELLIBRITE® 5G POOL AND SPA LIGHT FIXTURE INSTALLATION (NEW POOL CONSTRUCTION)

The following describes how to install the IntelliBrite® Pool Light fixture and the IntelliBrite Spa Light fixture. Read page 4 before starting the installation procedure.

BEFORE STARTING: The following steps 1-7 (page 7-8) describe the tasks that must be completed by the electrician before the IntelliBrite light fixture is installed. See Figure 1 diagram on page 7.

⚠WARNING

Be sure that the pool or spa meets the requirements of the current National Electrical Code (N.E.C.) Article 680-22 and all local codes and ordinances. A licensed or certified electrician must install the electrical system to meet or exceed those requirements before the underwater light is installed. Some of the requirements of the National Electrical Code which the pool's electrical system must meet are as follows:

- The lighting circuit has a Ground Fault Circuit Interrupter (GFCI) for line voltage models, and has an appropriately rated circuit breaker.
- The Junction Box (or, for **12 volt models**, the low voltage transformer) is located at least eight (8) inches (20.3 cm) above ground level and at least 48 inches (1.219 m) from the edge of the pool; see Figure 1 on page 7.
- The light fixture and all metal items within five (5) feet (1.524 m) of the pool are properly electrically bonded.
- The wet niche is properly installed so that the top edge of the underwater light's lens is at least 18 inches below the surface of the water in the pool; see Figure 1 on page 7.
- The wet niche is properly electrically bonded and grounded via the No. 8 AWG ground connector located at the rear of the niche; see Figure 1 on page 7.

Note: ***To be certain that the pool or spa electrical system meets all applicable requirements, the electrician should also consult the local building department.***

Note: Use only Pentair wet niches to insure proper bonding and grounding connections.

INSTALLING THE INTELLIBRITE® 5G POOL AND SPA LIGHT FIXTURE (AFTER ELECTRICAL REQUIREMENTS ARE MET)

To install the IntelliBrite® Pool Light and Spa Light fixture:

1. Route light cable through conduit to Junction Box, leaving at least four (4) feet of cable at the light fixture to coil around the light (this allows the light to be serviced after the pool is filled with water). See Figure 1 below.

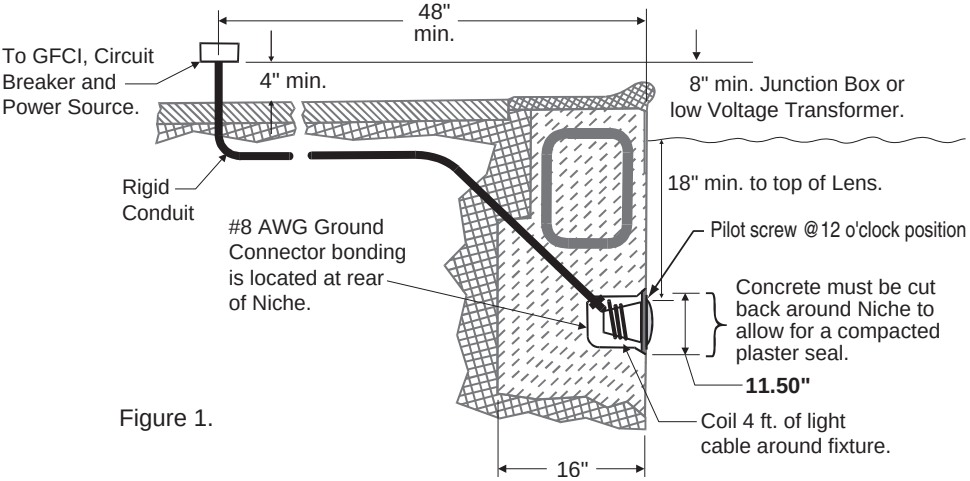
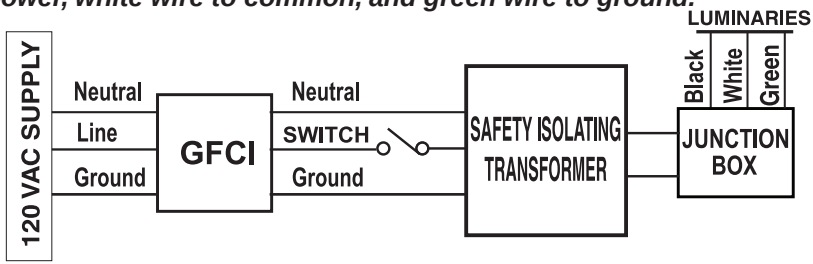


Figure 1.

2. Cut the cable at the Junction Box, leaving at least six (6) inches (2.4 cm) of cord to make connections.
3. Strip back six (6) inches (2.4 cm) of the outer cord jacket to expose the three insulated conductors (be careful not to damage the insulation on the three (3) inner conductors). Strip a 1/2" of insulation off the three conductors. Be careful not to damage the copper conductor.
4. Connect all three (3) conductors to the corresponding circuit wires in the Junction Box and secure the Junction Box cover in place.

FOR LIGHT OPERATION, ONLY USE A SAFETY ISOLATION TRANSFORMER.

Note: Connect three wires (or two wires) to the corresponding circuit wires in the Junction Box. For three wires connect: Black wire to power, white wire to common, and green wire to ground.



NOTE: FOR 120 VAC ILLUMINARIES, ISOLATION TRANSFORMER IS INCLUDED IN LIGHT FIXTURE.

5. Install the IntelliBrite® Light assembly into the niche and tighten the special bronze pilot screw.

⚠WARNING Use only the **special pilot screw provided** with this underwater light. This screw mounts and electrically grounds the housing securely to the mounting ring and wet niche. Failure to use the screw provided could create an electrical hazard which could result in death or serious injury to pool users, installers or others due to electrical shock.

Pilot screw (bronze)

IntelliBrite 5G Pool Light

Pilot screw (bronze)

IntelliBrite 5G Spa Light

6. Fill the pool until the underwater light is completely submerged in water before operating the light.

7. **Final check for proper light operation:** To check for proper operation, switch on the main switch or circuit breaker, and the switch that operates the IntelliBrite underwater light itself. The light should illuminate when power is applied. If not recheck the installation steps starting with Step 1 (page 7)

FOR INTELLIBRITE POOL AND SPA LIGHT REMOVAL AND INSTALLATION INSTRUCTIONS SEE:

- **Replacing the IntelliBrite® 5G Pool and Spa Light Assembly instructions, on page 3.**
- **Replacing the IntelliBrite Spa Light Face Ring and Gasket or Gasket and Lens instructions, on page 19.**

IntelliBrite® 5G Pool Light (12V) Fuse Harness Replacement

The following describes how to replace the IntelliBrite 5G Pool Light fuse assembly (if applicable) and the light main circuit board for the IntelliBrite 5G pool light.

IMPORTANT! Before replacing the fuse assembly note the following:

Troubleshooting

Problem	Cause/Action
Light does not function properly	Check the light wiring connection to the junction box at the pool side and to the AC power switch. Be sure that there is proper AC power applied to the light.
The light will not illuminate.	Check the GFCI ground fault wiring and reset if necessary. **IntellliBrite 5G 12 V Light with Light Fuse Assembly** Replace FUSE assembly (see page 12): **Note: Replacing the fuse assembly may or may not resolve this problem. In some instances the fuse assembly will blow, and after replacing the fuse the light's circuit board is still not functional.**

REPLACING THE INTELLIBRITE POOL LIGHT CIRCUIT BOARD ASSEMBLY (IN AN EXISTING POOL)

When replacing or reassembling the IntelliBrite Pool Circuit Board, the Gasket (P/N 79101601) or Gasket and Lens (619864Z) MUST ALSO BE REPLACED - SEE PAGE 18 FOR PART NUMBERS

Removal and Installation of IntelliBrite 5G Light Circuit Board

D A N G E R !

RISK OF ELECTRICAL SHOCK OR ELECTROCUTION

Always disconnect power to the pool light at the circuit breaker before servicing the light. Failure to do so could result in death or serious injury to installer, service person, pool users, or others due to electrical shock.

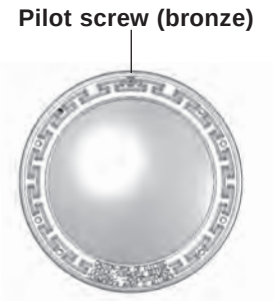
1. **Turn off main electrical switch or circuit breaker**, as well as the switch which operates the IntelliBrite light itself.
2. Before starting make sure that you have a new lens gasket (P/N 79101601) and a IntelliBrite 5G pool light circuit board assembly (P/N 619875Z - 300w, P/N 619916Z-400W, P/N 619917Z- 500w) ready to install (see page 11).

REPLACING THE INTELLIBRITE® 5G POOL LIGHT CIRCUIT BOARD ASSEMBLY (IN AN EXISTING POOL) (Continued)

⚠WARNING Replace the light circuit board assembly with the same type and wattage. Failure to replace the light circuit board assembly with the same type will damage the light assembly and may cause an electrical hazard resulting in death or serious injury to pool users, installers, or others due to electrical shock, and may also cause damage to property.

⚠WARNING Always install a new lens gasket (P/N 79101601) whenever disassembling the IntelliBrite light assembly. Failure to do so may permit water to leak into the assembly which could cause:
(a) an electrical hazard resulting in death or serious injury to pool users, installers, or others due to electrical shock, or
(b) breakage of the lens, which likewise could result in serious injury to pool users, installers, or bystanders, or in damage to property.

3. **REMOVING THE INTELLIBRITE 5G POOL LIGHT ASSEMBLY:** Remove the pilot screw at top of face ring, remove the light assembly from the niche. Place the assembly on the deck. **Note:** It is not necessary to drain down the pool.
4. Unwind the cord from the base of the light housing.



IntelliBrite 5G Pool Light

⚠WARNING Be sure to keep the pilot screw from the IntelliBrite light. This screw mounts and electrically grounds the housing securely to the mounting ring and wet niche. Failure to use the screw provided could create an electrical hazard which could result in death or serious injury to pool users, installers or others due to electrical shock.

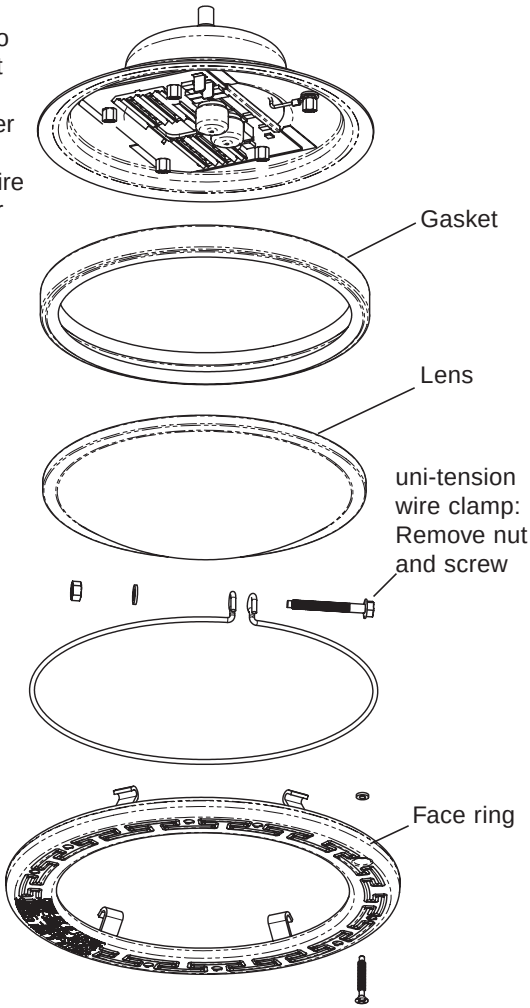
REPLACING THE INTELLIBRITE® POOL LIGHT CIRCUIT BOARD ASSEMBLY (IN AN EXISTING POOL) (Continued)

5. Place a cloth on the ground to protect the lens. Turn the light over so the lens is resting on the cloth. Using a ¼" nut driver and a #3 Phillips screwdriver, remove the nut uni-tension wire clamp. Place the nut aside for reinstallation.

6. Remove the face ring and wire clamp from the light housing.

7. With the light resting on its base, carefully pry off the gasket to remove the lens. Set the lens aside for installation later. Discard the gasket.

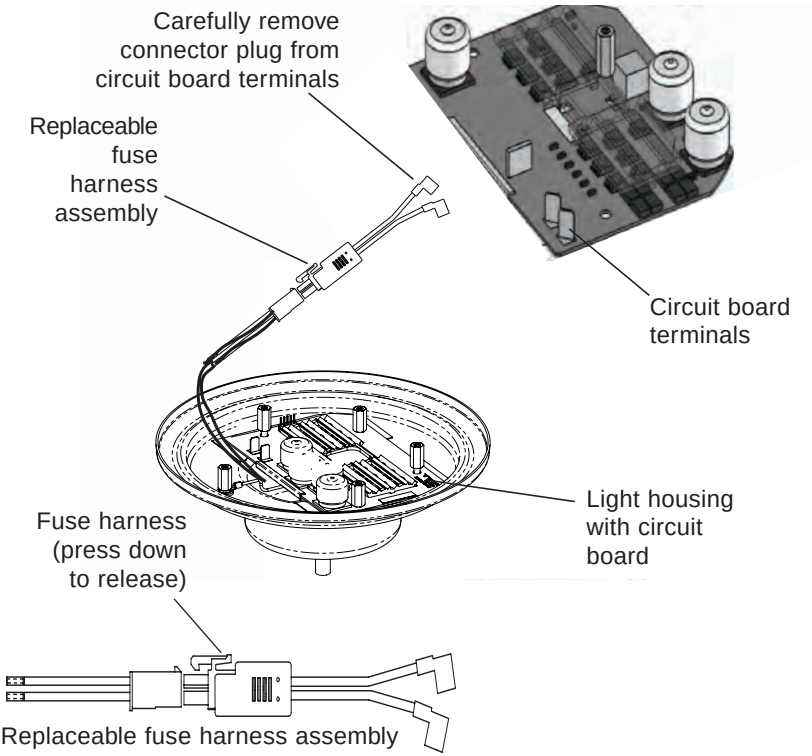
Note: A NEW LENS GASKET (P/N 79101601) MUST BE USED EACH TIME THE LIGHT IS REASSEMBLED. See page 18 for Replacement Kit part numbers.



Note: Note the current position of the lens at the pilot screw (12 o'clock) position, before removing it from the fixture. "W" on the lens indicates wide angle, "N" indicates narrow angle. For more information, see page 17.

NOTE: For a pool light (12 V only. No internal step-down transformer) that has a replacement FUSE ASSEMBLY, continue the procedure on the next page. If the light does NOT have a replacable fuse assembly, proceed to page 13.

REPLACING THE FUSE HARNESS ASSEMBLY (FOR 12 V LIGHTS ONLY)



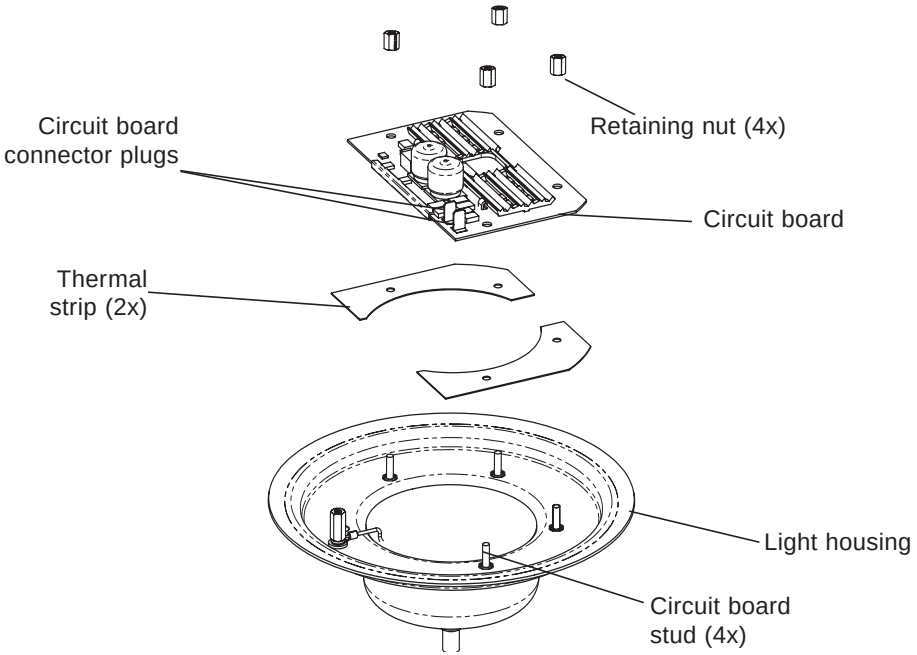
1. Using your fingers, carefully disconnect each fuse connector plug from the circuit board terminals. Carefully lift each connector plug upward, with small side-to-side movements while holding the circuit board terminals with a flat screw driver. Then gradually disconnect the connector plug from the terminal. *Note: To avoid permanent damage to the circuit board, be sure not to pull the terminals off the surface of the circuit board.*

2. Once the fuse connector plugs are removed from the circuit board terminals, separate the fuse assembly from the light wire harness by pressing down on the fuse release lever, then gently pull apart.

3. Insert the new fuse harness connector into the light cable harness plug and snap together.
4. Using your fingers to carefully connect each fuse connector plug onto the circuit board terminals. *Be sure not to press down to hard on the connector, this can damage the terminal connections on the circuit board.*
5. **Continue with "INSTALLING THE INTELLIBRITE® 5G POOL LIGHT ASSEMBLY WITH NEW GASKET" on page 13.**

REMOVING THE LIGHT CIRCUIT BOARD ASSEMBLY

1. Using a ¼" nut driver, carefully remove the four retainer nuts from the light assembly (see illustration on next page). Place the nuts aside for reinstallation.
2. Unplug the two connector plugs from the circuit board. Lift up the circuit board and remove it from the light housing base.
3. Carefully lift off the old thermal strips from the base of the light housing base and discard.

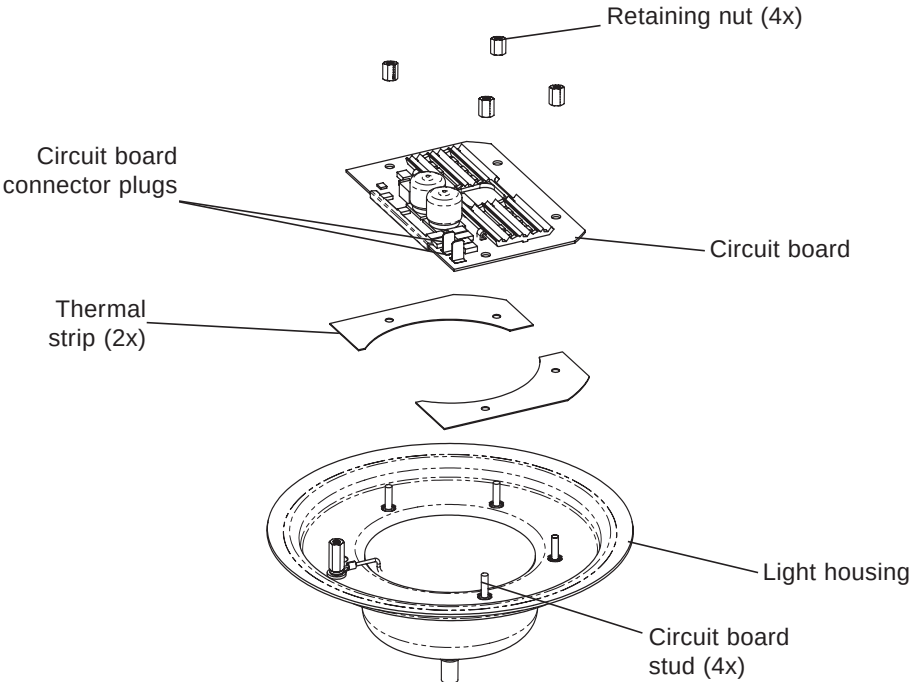


4. Place the two new thermal strips (provided) over the circuit board studs in the base of the light housing.
5. Place the light circuit board over the base studs and seat the circuit board on top of the thermal strips. Be sure the two connecting wires are not caught between the housing and the edge of the circuit board.
6. Using a ¼" nut driver, tighten each of the four (4) retaining nuts to a torque value of 6.0 (minimum) to 8.0 (maximum) in-lbs to secure the circuit board. DO NOT OVERTIGHTEN THE CIRCUIT BOARD NUTS.

INSTALLING THE INTELLIBRITE® POOL LIGHT ASSEMBLY WITH NEW GASKET (see illustration on next page)

⚠WARNING Be sure to install ALL of the four (4) retaining nuts. These nuts ensure proper electrical ground. Failure to install all of the retaining nuts could create an electrical hazard which could result in death or serious injury to pool users, installers or others due to electrical shock.

Continue on next page.

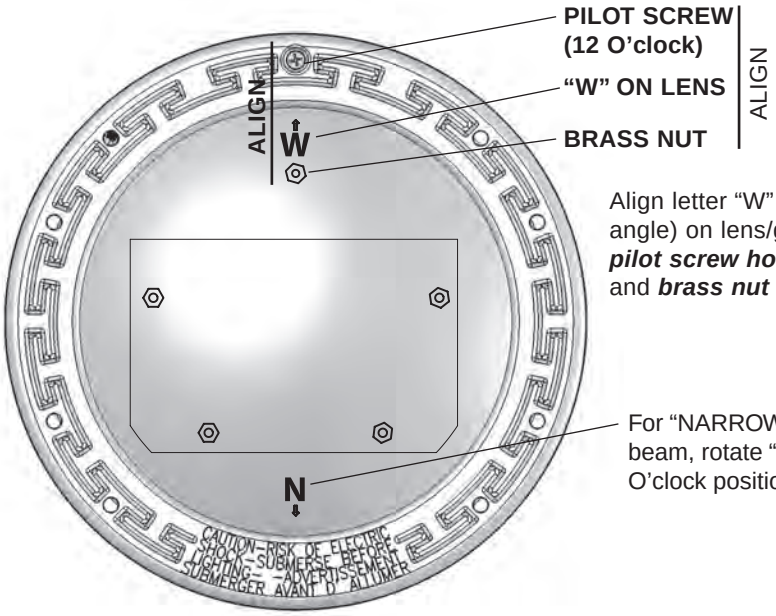


1. **Install NEW GASKET ONTO LENS:** Stretch the gasket around the circumference of the lens. Be sure the gasket is installed evenly around the lens.
2. **ALIGN LENS/GASKET ONTO LIGHT HOUSING:**

   a) With the light housing resting on its base, place the lens/gasket on top of the light housing.

   b) Rotate the lens/gasket to align the letter “W” (“WIDE” angle) on the lens with the brass nut in the housing (see diagram on page 14 for brass nut location).

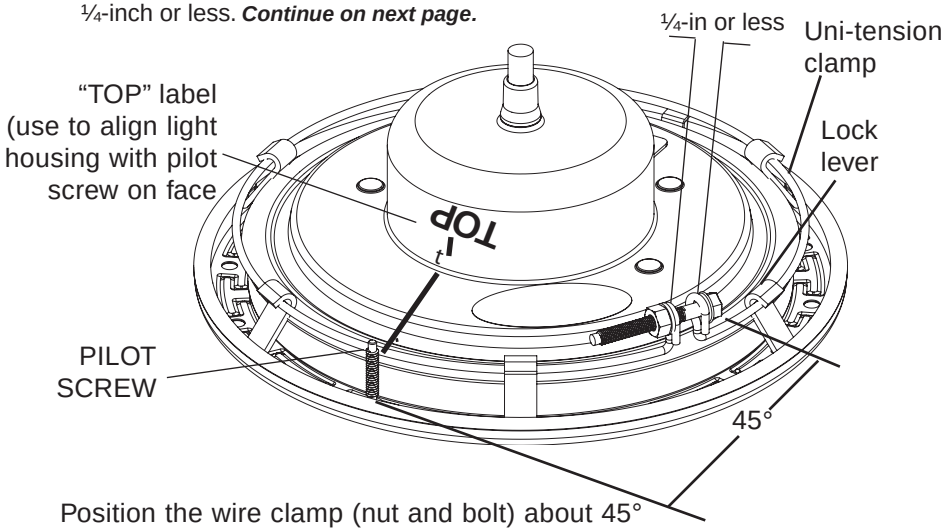
   Note: The IntelliBrite light lens ships from the factory in the ‘WIDE’ (W) angle position. The “wide” position of the lens is typically used for lights located either side of the pool. The “narrow” position of the lens is typically used for lights located either end of the pool. To use the “NARROW” angle light beam, rotate the lens/gasket to align the letter “N” on lens. Note: For more information about using the “WIDE” and NARROW angle lens, see page 17.



Align letter "W" ("WIDE" angle) on lens/gasket with ***pilot screw hole*** on face ring and ***brass nut***

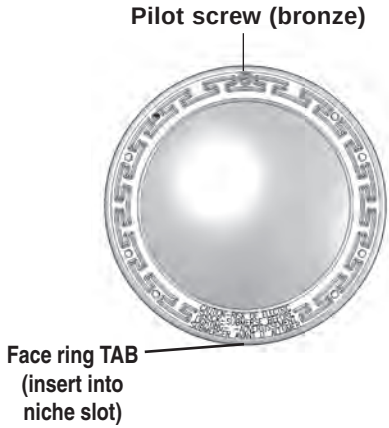
For "NARROW" angle light beam, rotate "N" to 12 O'clock position

4. **INSTALL UNI-TENSION CLAMP:** With the hook ends of the circular uni-tension clamp pointing down, spread the clamp and place it in the "U" recesses of the locking levers. Be sure the hook ends of the clamp are located between the pair of locking levers as shown below and that the wire clamp is properly engaged with all of the lock levers.
5. Place a cloth on the ground to protect the lens. Turn the light over so the lens is resting on the cloth. Be sure the orientation of the wire clamp and the bolt connection is positioned at 45°.
6. Tighten the bolt and nut until the distance between the ends of the clamp equals ¼-inch or less. ***Continue on next page.***



Position the wire clamp (nut and bolt) about 45° between the PILOT SCREW and BOLT/NUT.

7. Coil at least four (4) feet of cord around the light fixture (see Figure 1 on page 6). This allows the light to be serviced after the pool is filled with water.
8. Connect the three light wires (or two wires) to the corresponding light circuit wires in the Junction Box. For three wire connection: Connect the black wire to power, white wire to common, and the green wire to ground. Secure the Junction Box cover.
9. Install the light assembly into the pool niche. **IMPORTANT: Be sure to insert the TAB on the lower part of the face ring into the niche SLOT (located on the lower part of the niche). This is important to secure the lower part of the light assembly onto the niche before tightening the pilot screw.**
10. Carefully tighten the special bronze pilot screw to secure the upper part of the light assembly onto the niche.



IntelliBrite Pool Light

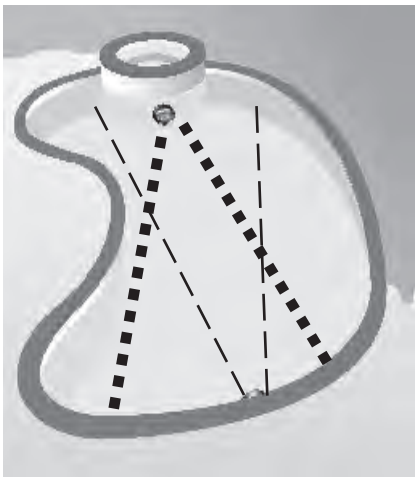
11. **Final check for proper IntelliBrite® Light operation:** Switch on the main switch or circuit breaker to the system and the switch that operates the IntelliBrite light itself. The light should illuminate when power is applied. If not recheck the installation steps starting with Step 1 (page 4).

Wide and Narrow Angle Lens Adjustment

Wide and Narrow Angle Lens Feature

The IntelliBrite light lens geometry provides a choice of “wide” or “narrow” angle light beam to suit various size pools. For lights located on either side of the pool, rotate the lens to the ‘wide’ (W) angle position, which will provide a wider angle light beam for greater underwater coverage and light reflection the width of the pool. For lights located either end of the pool, rotate the lens to the ‘narrow’ (N) angle light beam position for increased underwater light intensity and distance. Note: The IntelliBrite light lens ships from the factory in the ‘WIDE’ (W) angle position.

WIDE ANGLE LIGHT BEAM (FOR SIDES OF POOL)



NARROW ANGLE LIGHT BEAM (FOR ENDS OF POOL)

IntelliBrite® 5G Pool Light Assembly Replacement Kit Part Numbers

Note: A 120 VAC to 12 VAC external transformer is required for the 12 VAC model IntelliBrite pool white light. See page 1 for more information.

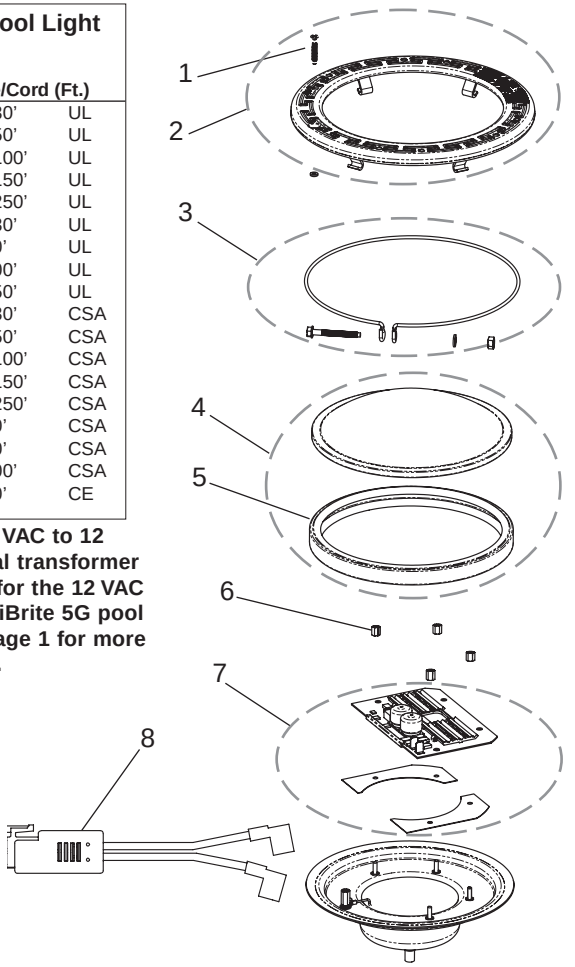
IntelliBrite 5G Pool Light Assembly (UL/CAS listing)

Product Model	Voltage	Cord Length (feet)
601105	12V	30’
601106	12V	50’
601107	12V	100’
601108	12V	150’
601205	12V	30’
601206	12V	50’
601207	12V	100’
601208	12V	150’
601300	**120V**	**30’**
601305	12V	30’
601306	12V	50’
601307	12V	100’
601308	12V	150’

IntelliBrite® Pool Light Assembly Replacement Kit Part Numbers

5G White Pool Light (UL/CSA)	5G Color Pool Light (UL/CSA)	
Model/Voltage/Cord (Ft.)	**Model/Voltage/Cord (Ft.)**	
601100/120V/30'	601000/120V/30'	UL
601101/120V/50'	601001/120V/50'	UL
601102/120V/100'	601002/120V/100'	UL
601103/120V/150'	601003/120V/150'	UL
601104/120V/250'	601004/120V/250'	UL
601105/12V/30'	601010/120V/30'	UL
601106/12V/50'	601011/12V/50'	UL
601107/12V/100'	601012/12V/100'	UL
601108/12V/150'	601013/12V/150'	UL
601200/120V/30'	602000/120V/30'	CSA
601201/120V/50'	602001/120V/50'	CSA
601202/120V/100'	602002/120V/100'	CSA
601203/120V/150'	602003/120V/150'	CSA
601204/120V/250'	602004/120V/250'	CSA
601205/12V/30'	602010/12V/30'	CSA
601206/12V/50'	602011/12V/50'	CSA
601207/12V/100'	602012/12V/100'	CSA
601208/12V/150'	602020/12V/10'	CE
601300/120V/30'		
601301/120V/50'		
601302/120V/100'		
601303/120V/150'		
601304/120V/250'		
601305/12V/30'		
601306/12V/50'		
601307/12V/100'		
601308/12V/150'		

Note: A 120 VAC to 12 VAC external transformer is required for the 12 VAC model IntelliBrite 5G pool light. See page 1 for more information.



Item No.	Kit Part No.	Description
2, 3, 5	600095	Face Ring assembly, stainless steel. - Uni-tension wire clamp assembly. - Gasket, 8-3/8 in. diameter, silicon.
4, 5	619864Z	Replacement Lens Kit. - Gasket, 8-3/8 in. diameter, off white. - Lens, IntelliBrite, Pool, 8-3/8 in. diameter, tempered.
3, 5, 7	619875Z (UL) (300W), 619916 Z (400W), 619917Z (500W) - 619818Z (color)	Replacement kit includes: Circuit Board, Thermal Strips (2x). - Uni-tension wire clamp assembly. - Gasket, 8-3/8 in. silicon diameter, off white.
1	79104800	Pilot screw, with captive gum washer.
5	79101601	Gasket, 8-3/8 in. diameter, silicone.
8	620276	Fuse Harness Kit **(For 12 V lights only)**

Note: The 120 VAC IntelliBrite pool light has an integrated 12 VAC transformer.

Replacing the IntelliBrite® 5G Spa Light Face ring and Gasket (P/N 640045) or Gasket and Lens (640046) see page 21

Note: When replacing an IntelliBrite 5G Spa light assembly, a new spa light assembly includes a light engine, lens, gasket and face ring (for part light assembly part numbers, see page 23).

⚠DANGER

D A N G E R !

RISK OF ELECTRICAL SHOCK OR ELECTROCUTION

Always disconnect power to the pool light at the circuit breaker before servicing the light. Failure to do so could result in death or serious injury to installer, pool professional, pool users, or others due to electrical shock.

1. **Turn off main electrical switch or circuit breaker**, as well as the switch which operates the IntelliBrite underwater light itself.

⚠WARNING Always install a new lens gasket (P/N 79108600). Whenever disassembling the IntelliBrite light assembly. Failure to do so may permit water to leak into the assembly which could cause: **(a)** an electrical hazard resulting in death or serious injury to pool users, installers, or others due to electrical shock, or **(b)** breakage of the lens, which likewise could result in serious injury to pool users, installers, or bystanders, or in damage to property.

Pilot screw (bronze)

IntelliBrite 5G Spa Light

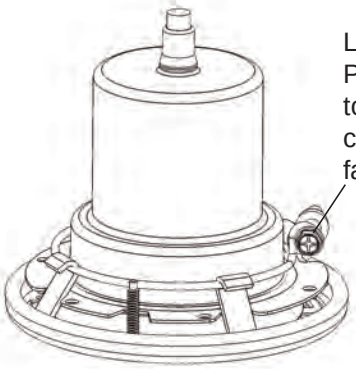
2. **REMOVING THE INTELLIBRITE SPA LIGHT:** Remove the pilot screw at top of face ring, remove the light assembly from the niche. Place the assembly on the deck. **Note:** It is not necessary to drain down the pool.

⚠WARNING Be sure to keep the pilot screw from the IntelliBrite light. This screw mounts and electrically grounds the housing securely to the mounting ring and wet niche. Failure to use the screw provided could create an electrical hazard which could result in death or serious injury to pool users, installers or others due to electrical shock.

3. Using a #3 Phillips head screwdriver, loosen the CLAMP SCREW and remove uni-tension wire clamp from the face ring.
4. Remove the face ring and wire clamp from the light housing and **set aside for installation later.**

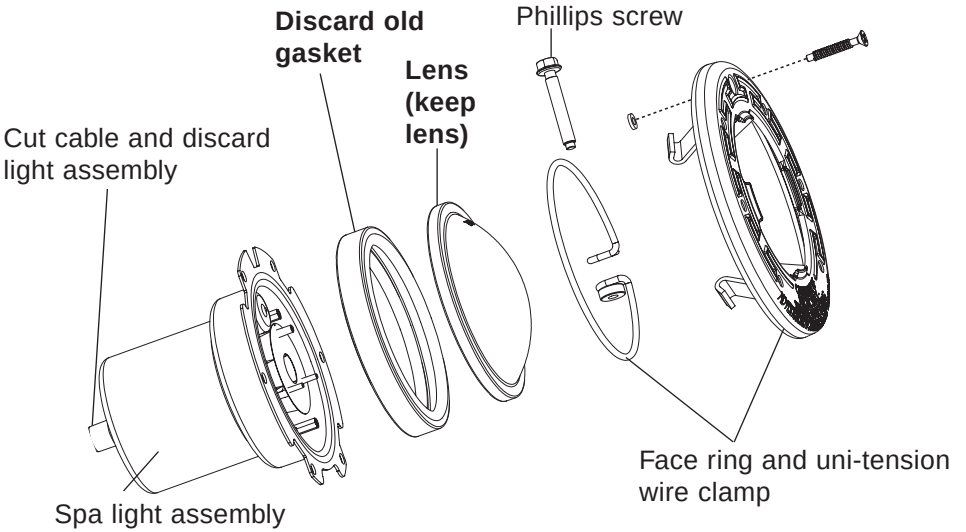
Note: A 120 VAC to 12 VAC external transformer is required for the 12 VAC model IntelliBrite® Spa Light. See page 1 for more information.

Note: *The IntelliBrite Spa Light fixture is a sealed light assembly with no replaceable circuit board assembly. Only the lens, gasket and face ring can be removed from the sealed light assembly for replacement. See page 23 for replacement kit part numbers.*

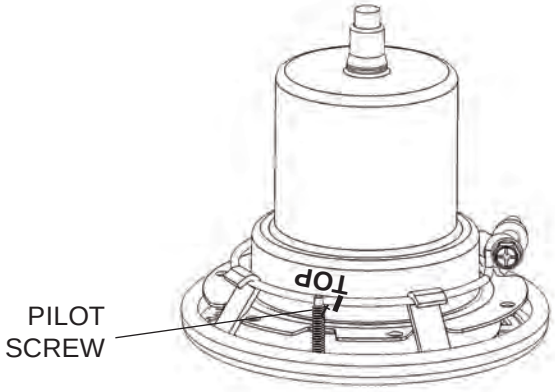


Spa light fixture with lens, gasket and face ring attached

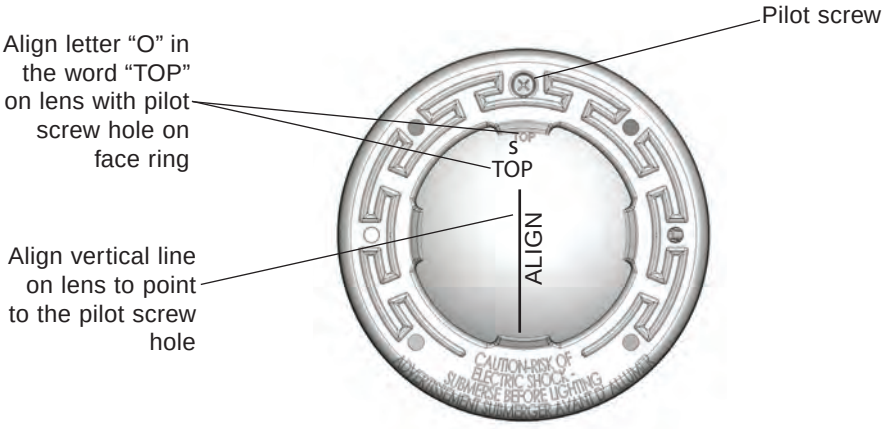
5. With the light assembly resting on its base, carefully pry off the gasket to release the lens. Discard the gasket. A NEW LENS GASKET MUST BE USED EACH TIME THE SPA LIGHT IS REASSEMBLED
6. Disconnect the IntelliBrite spa light assembly cord from the junction box. ***Cut the cord near the back of the light assembly and discard the light. See page 4 for replacement instructions for the new spa light.***



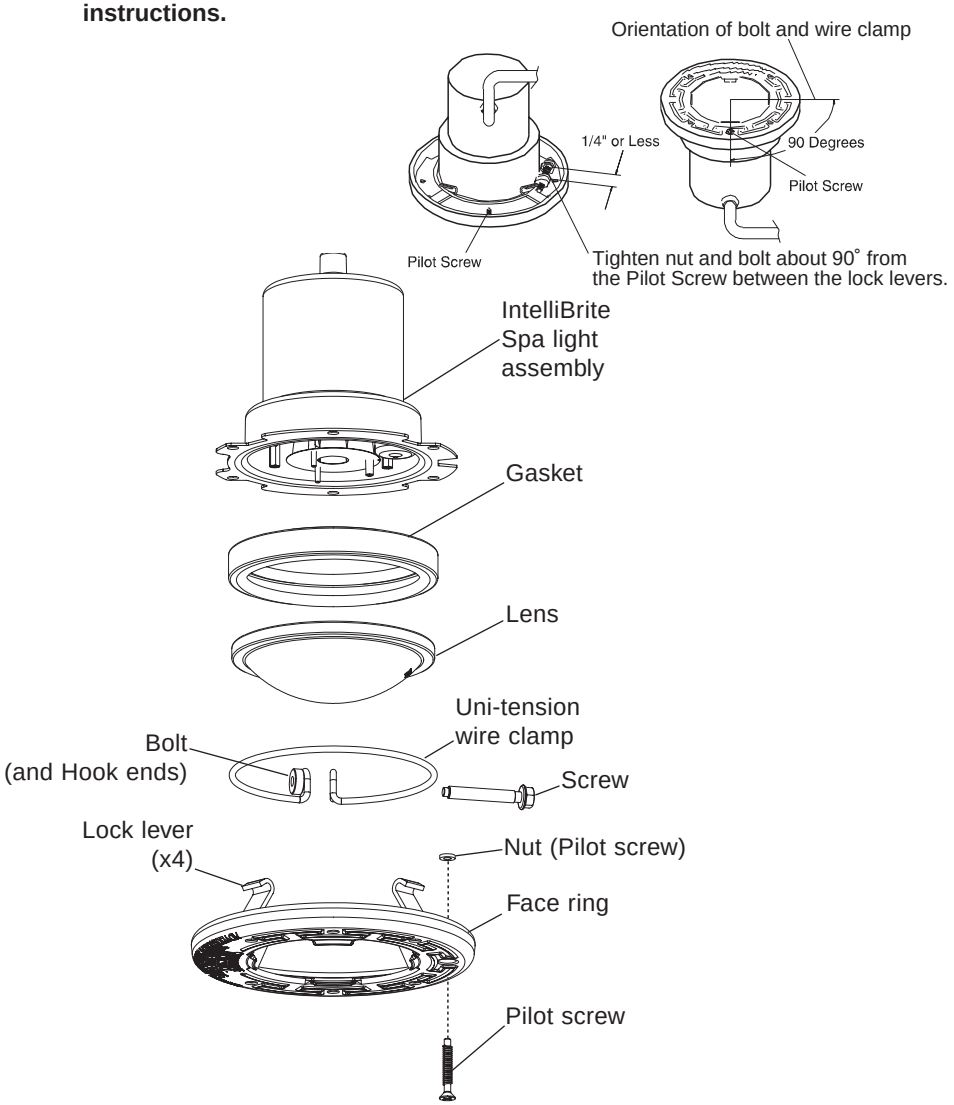
7. **INSTALLING THE INTELLIBRITE® SPA LIGHT WITH NEW GASKET:** Install a new gasket during reassembly of the IntelliBrite spa light. A NEW LENS GASKET MUST BE USED EACH TIME THE LIGHT IS REASSEMBLED.
8. **Install the new gasket onto the lens:** With the light housing resting on its base, place the lens then the gasket on top of the light housing.
9. **INSTALL FACE RING:** Place the face ring on top of the lens/gasket/housing. Rotate the light housing to align the “TOP” position arrow indicator label on the rear of the housing is aligned with the pilot screw on the face ring. Place the face ring on top of the gasket. Make sure that the lens and gasket are centered correctly on the light housing.



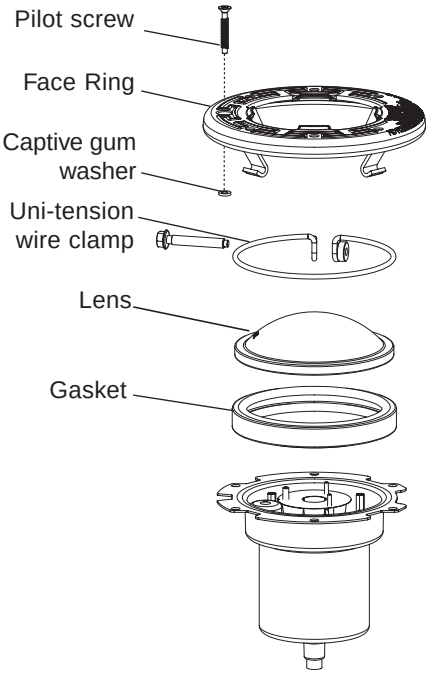
10. **Aligning the face ring and lens:** Align the face ring and vertical line on the lens so that the letter “O” in the word “TOP” and the small arrow above it) on the surface of the lens points to the 12 O’clock position and with pilot screw hole on the face ring.



11. **INSTALL UNI-TENSION CLAMP:** With the hook ends of the circular uni-tension clamp pointing down, spread the clamp and place it in the "U" recesses of the locking levers. Be sure the hook ends of the clamp are located between the pair of locking levers as shown below and that the wire clamp is properly engaged with all of the lock levers.
12. Place a cloth on the ground to protect the lens. Turn the light over so the lens is resting on the cloth. Be sure the orientation of the wire clamp and the bolt connection is positioned at 45°. Tighten the bolt and nut until the distance between the ends of the clamp equals ¼-in or less.
13. **PROCEED TO "Replacing the IntelliBrite® Spa Light Assembly (in an existing pool or spa)" on page 4 for spa light assembly installation instructions.**



IntelliBrite® 5G Spa Light Replacement Kit Numbers



IntelliBrite® 5G Color Spa Light Assembly (Listing UL/CSA)

Product Model	Voltage	Cord Length (feet)
640120	120V	30’
640121	120V	50’
640122	120V	100’
640123	120V	150’
640124	120V	250’
640130	12V	30’
640131	12V	50’
640132	12V	100’
640133	12V	150’

IntelliBrite® 5G White Spa Light Assembly (Listing UL/CSA)

Product Model	**Voltage**	**Cord Length (feet)**
640140	120V	30’
640141	120V	50’
640142	120V	100’
640143	120V	150’
640144	120V	250’
640150	12V	30’
640151	12V	50’
640152	12V	100’
640153	12V	150’

Kit Part No.	**Description**
640045	Face ring assembly, stainless steel
	- Uni-tension wire clamp assembly
	- Gasket, 4 in diameter, off white
640046	Gasket, 4 in diameter, off white
	- Lens, IntelliBrite, Spa, 4 in diameter, tempered
79104800	Pilot screw, with captive gum washer
791108600	- Gasket, 4 in diameter, silicone

Note: A 120 VAC to 12 VAC external transformer is required for the 12 VAC model IntelliBrite spa light. See page 1 for more information.

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P/N 619921 REV. K 4/2015

PENTAIR

INTELLIBRITE® 5G
LAMPE À DEL BLANCHE POUR SPA ET LAMPE À DEL COULEUR SUBMERSIBLE POUR PISCINE

GUIDE D'UTILISATION ET D'INSTALLATION

INSTRUCTIONS DE SÉCURITÉ IMPORTANTES
LISEZ ET SUIVEZ TOUTES LES INSTRUCTIONS
CONSERVEZ CES INSTRUCTIONS

Soutien technique (USA)

Téléphone : **(800) 831-7133 -** Télécopie : **(800) 284-4151**

Sites Web : www.pentairpool.com et www.staritepool.com :

Contenu

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Utilisation des lampes IntelliBrite pour piscine et spa à l'aide d'un interrupteur mural (12 V CA)....1

Utilisation d'un transformateur externe pour plusieurs lampes IntelliBrite 12 V CA.....1

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Avant l'installation des lampes, lisez ce qui suit :

⚠ AVERTISSEMENT Toujours installer un nouveau joint de lentille (voir le numéro de pièce dans le Guide de l'utilisateur aux pages 9 et 19) lors de chaque remontage de la lampe. Ne pas le faire peut permettre à l'eau d'entrer dans l'ensemble, ce qui pourrait causer : (a) un danger électrique pouvant entraîner la mort ou des blessures graves pour les utilisateurs de la piscine, l'installateur ou d'autres personnes en raison de décharges électriques; (b) un bris de la lampe ou de la lentille, ce qui pourrait entraîner des blessures graves à l'utilisateur de la piscine, aux installateurs ou à des personnes à proximité, ou encore des dommages à la propriété.

POUR LES LAMPES 12 V CA : TOUJOURS UTILISER UN TRANSFORMATEUR ABAISSEUR POUR ALIMENTER LES LAMPES. VOIR LE SCHÉMA À LA PAGE 7. Remarque : Brancher les trois fils aux fils correspondants du circuit dans la boîte de jonction (fil noir à l'alimentation, fil blanc au conducteur commun et fil vert à la mise à la terre).

SPÉCIFICATION DES LAMPES 12 V CA : 12 V CA, 50/60 Hz. REMPLACER TOUT COUVERCLE PROTECTIF FISSURÉ (LENTILLE FÊLÉE) AVEC UNE NOUVELLE LENTILLE ET UN NOUVEAU JOINT.

⚠ MISE EN GARDE LA LAMPE À DEL INTELLIBRITE 5G POUR PISCINE ET SPA *NE PEUT PAS ÊTRE UTILISÉE* AVEC UN GRADATEUR. L'UTILISATION D'UN GRADATEUR SE TRADUIRA PAR DES DOMMAGES PERMANENTS À LA LAMPE.

N/P 619921 Rév. K - 4/2015

MISES EN GARDE ET CONSIGNES DE SÉCURITÉ IMPORTANTES

⚠ DANGER **DES BLESSURES GRAVES OU LA MORT PEUVENT S'ENSUIVRE SI CETTE LAMPE N'EST PAS INSTALLÉE OU UTILISÉE CORRECTEMENT.**

⚠ DANGER **LES INSTALLATEURS, UTILISATEURS OU PROPRIÉTAIRES DE PISCINE DOIVENT LIRE CES AVERTISSEMENTS ET TOUTES LES INSTRUCTIONS AVANT D'UTILISER LA LAMPE À DEL POUR PISCINE ET/OU SPA.**

⚠ AVERTISSEMENT Les codes locaux et ceux de la majorité des provinces/états couvrent la construction, l'installation et l'utilisation des piscines et spas publiques et la construction de piscines et spas résidentiels. Il est important de ce conformer à ces codes, dont un grand nombre régissent l'installation et l'utilisation de ce produit. Consultez les codes locaux du bâtiment et de la santé pour obtenir plus d'informations.

AVIS IMPORTANT - À l'attention de l'installateur : Ce guide d'utilisation et d'installation (« Guide ») comporte des informations importantes sur l'installation, le fonctionnement et l'utilisation sûre de cette lampe pour piscine et spa. Ce Guide doit être remis au propriétaire et/ou à l'utilisateur de cet équipement.

⚠ AVERTISSEMENT Avant d'installer ce produit, lisez et respectez tous les avertissements et instructions présentés dans ce Guide. Le non respect de ces avertissements et instructions peut entraîner des blessures graves, voire mortelles ou des dommages matériels. Composez le (800) 831-7133 (USA) pour d'autres copies gratuites de ces instructions. Veuillez vous reporter à www.pentairpool.com pour obtenir plus d'informations sur ce produit.

⚠ DANGER

RISQUE DE DÉCHARGE ÉLECTRIQUE OU D'ÉLECTROCUTION :

La lampe à DEL pour spa et la lampe à DEL 5G pour piscine IntelliBrite NÉCESSITENT UNE TENSION ÉLEVÉE QUI PEUT PROVOQUER UNE DÉCHARGE ÉLECTRIQUE, DES BRÛLURES OU LA MORT.

AVANT DE TRAVAILLER SUR LES LAMPES INTELLIBRITE ! Débranchez toujours l'alimentation de l'éclairage de la piscine/du spa au niveau du disjoncteur de la lampe avant de faire l'entretien de celle-ci. Le non respect de cette consigne peut entraîner des blessures graves, voire mortelles, du réparateur, des utilisateurs de la piscine et d'autres personnes suite à une décharge électrique.

Cette lampe submersible doit être installée par un électricien agréé ou certifié ou par un professionnel compétent en piscine conformément au National Electrical Code (NEC), NFPA 70 ou au Code canadien de l'électricité (CCE), CSA C22.1. Tous les codes et règlements locaux applicables doivent être respectés. Une installation inappropriée entraînera un risque d'électrocution d'où blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique, pouvant aussi entraîner des dommages matériels. Débranchez toujours l'alimentation de l'éclairage de la piscine au niveau du disjoncteur avant de faire l'entretien de la lampe. Le non respect de cette consigne peut entraîner des blessures graves, voire mortelles des réparateurs, utilisateurs de la piscine et autres personnes suite à une décharge électrique.

⚠ AVERTISSEMENT **Informations de sécurité importantes pour l'installation de niche et de lampe Pentair**

- Toutes les installations de niches et de lampes doivent être conformes à tous les codes. Si les codes locaux exigent un joint de cordon, utilisez les niches en plastique de Pentair Water Pool and Spa (pièce nº 79206600 et pièce nº 79206700) et un nécessaire de joint de cordon (pièce nº 670044).
- En **aucun cas**, les lampes ne peuvent être remplacées en faisant un épissage de fils situés sous l'eau ou derrière une niche.

---

c UL us SP LISEZ ET SUIVEZ TOUTES LES INSTRUCTIONS DE CE MANUEL.

MISES EN GARDE ET CONSIGNES DE SÉCURITÉ IMPORTANTES

⚠ AVERTISSEMENT **RISQUE DE DÉCHARGE ÉLECTRIQUE ET DE BLESSURE. N'UTILISEZ QUE LA MÉTHODE D'INSTALLATION PRÉCISÉE CI-DESSOUS.**

Emplacement du luminaire installé	Appareil de fontaine de Pentair Water Pool and Spa* (pièces nos 560001 et 560000)	Méthode d'installation requise
Piscine et spa	Luminaire (lampe) pour piscine (ou spa) à niche humide	Boîtier d'appareil (coque de formation) SEULEMENT. **N'UTILISEZ PAS** le support d'appareil à fontaine
Fontaine	Luminaire (lampe) pour piscine (ou spa) submersible à niche humide	Boîtier d'appareil (coque de formation) ou support d'appareil à fontaine

(*) Remarque : Les luminaires à niche humide conformes aux exigences des deux types d'emploi peuvent porter les deux marques UL pour luminaires submersibles à niche humide listés. Un luminaire ne portant pas la marque d'homologation UL correspondante n'est pas considéré par UL comme étant fabriqué selon le service de suivi et la norme UL pour l'emplacement associé à l'installation.

ATTENTION - L'appareil d'éclairage à DEL IntelliBrite de Pentair Water Pool and Spa® ne doit être utilisé que dans des boîtiers (niches) Pentair Water Pool and Spa. Si l'appareil d'éclairage à DEL IntelliBrite est installé dans d'autres niches, l'installation ne portera pas l'homologation UL et les garanties seront nulles et non avenues.

AVIS : Le câble ou le cordon flexible externe de ce luminaire ne se remplace pas; si le cordon est endommagé, le luminaire doit être détruit.

⚠ AVERTISSEMENT **Pour les pays en conformité avec les normes de la Commission électrotechnique internationale :** Cet appareil d'éclairage doit être installé par un électricien agréé ou certifié ou par une personne qualifiée pour l'entretien de piscine, selon la norme IEC 364-7-702 et tous les codes et règlements locaux applicables. Une installation inappropriée créera un risque d'électrocution pouvant entraîner des blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique, pouvant aussi entraîner des dommages matériels.

⚠ AVERTISSEMENT Le sel est un matériau corrosif. Même si les niveaux de sel nécessaires pour un bon fonctionnement d'un générateur de chlore électronique sont relativement faibles comparativement à l'eau de mer et aux autres solutions salines, toute quantité de sel quelle qu'elle soit dans votre piscine augmente la possibilité de corrosion ou d'autres détériorations de l'équipement de la piscine et de toute surface de la piscine ou d'objets avoisinants. Les pièces métalliques et certaines surfaces artificielles sont particulièrement susceptibles à la corrosion et à la détérioration lorsqu'elles sont utilisées dans des piscines d'eau salée ou près de celles-ci. Pentair Water Pool and Spa ne fournit pas de garantie et ne garantit pas que l'utilisation appropriée d'un générateur de chlore électronique empêchera la corrosion ou autre détérioration de l'équipement de piscine et de toute surface de la piscine ou se trouvant proche de celle-ci. Consultez votre professionnel compétent dans le domaine des piscines qui devrait pouvoir vous donner des conseils sur le bon choix des matériaux, les techniques d'installation de ces matériaux, ainsi que sur leur entretien et utilisation appropriés selon le type et l'emplacement particuliers de votre piscine afin de minimiser la corrosion et la détérioration des piscines d'eau salée et de leurs environs.

LAMPES FIXES POUR PISCINE ET SPA : Suivez ces lignes directrices lors de l'installation, du remplacement ou de la réparation des lampes fixes pour piscine et spa Pentair :
- REMPLACER TOUT COUVERCLE PROTECTIF FISSURÉ (LENTILLE FÊLÉE) AVEC UNE NOUVELLE LENTILLE ET UN NOUVEAU JOINT. POUR OBTENIR PLUS D'INFORMATION, VOIR LA PAGE 11.
- POUR L'UTILISATION DE LA LUMIÈRE, UTILISER UNIQUEMENT UN TRANSFORMATEUR D'ISOLATION DE SÛRETÉ.

AVERTISSEMENT! Ces lampes ne conviennent pas pour un montage direct sur des surfaces normalement inflammables (elles conviennent UNIQUEMENT au montage sur des surfaces non inflammables).

Spécifications des lampes fixes pour piscine et spa :
12 V CA 50/60 Hz – 120 V CA ~ , 50/60 Hz.

Montage en surface

Présentation des lampes IntelliBrite® 5G pour piscine et spa

Ce manuel explique comment installer les lampes IntelliBrite 5G blanches et colorées pour piscine et les lampes IntelliBrite 5G blanches et colorées pour spa.

La lampe IntelliBrite 5G blanche fournit une lumière blanche brillante pour un effet spectaculaire dans votre piscine et votre spa. La lentille de la lampe IntelliBrite 5G (lumière de piscine seulement) permet de choisir entre deux formes de faisceau lumineux : une couverture plus large avec moins d'intensité ou une couverture plus étroite avec plus d'intensité.

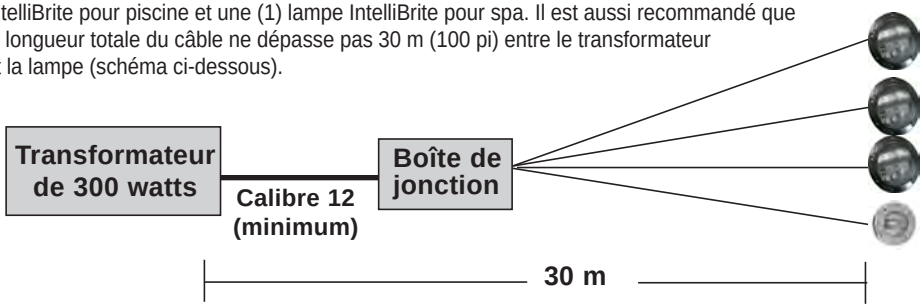
La lampe IntelliBrite 5G colorée fournit plusieurs couleurs vives et intenses avec des effets spectaculaires pour votre piscine et votre spa. Choisissez l'un des sept spectacles de lumières colorées préprogrammés ou l'une des cinq couleurs fixes pour créer une sélection presque infinie d'effets de lumières aquatiques d'ambiance pour un résultat spectaculaire dans votre piscine ou votre spa.

Utilisation des lampes pour piscine et spa avec un interrupteur mural (12 V CA)

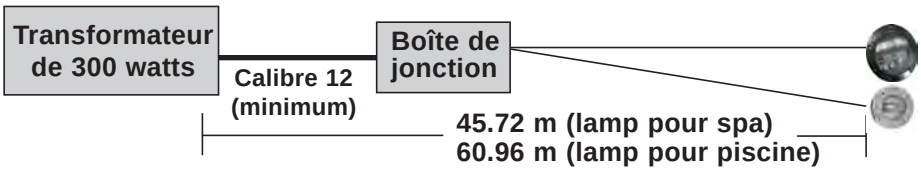
Les lampes 5G IntelliBrite pour piscine et spa peuvent être contrôlées manuellement à l'aide d'un interrupteur mural standard. Grâce à une boîte de jonction, plusieurs lampes IntelliBrite peuvent être raccordées à un seul interrupteur afin que toutes les lampes puissent être allumées et éteintes simultanément. Les lampes IntelliBrite peuvent également être contrôlées automatiquement par les systèmes de contrôle Pentair IntelliTouch®, EasyTouch® et SunTouch®. **Remarque : Plusieurs lampes IntelliBrite 5G pour piscine et spa peuvent également être contrôlées à l'aide du régulateur IntelliBrite. Pour obtenir plus d'information, voir la page 2.**

Utilisation d'un transformateur externe pour multiples lampes IntelliBrite de 12 V CA

Lors de l'utilisation de multiples lampes à DEL IntelliBrite pour piscine de 12 VCA sur un **transformateur de 300 watts**, il est recommandé de ne pas utiliser plus de deux lampes IntelliBrite pour piscine et une (1) lampe IntelliBrite pour spa. Il est aussi recommandé que la longueur totale du câble ne dépasse pas 30 m (100 pi) entre le transformateur et la lampe (schéma ci-dessous).



Si une longueur de câble plus importante est nécessaire, il est recommandé d'utiliser un transformateur de300 watts séparé pour chaque lampe avec une longueur de câble non supérieure à 61 m au total entre le transformateur et la lampe (schéma ci-dessous).



Allumage des lampes IntelliBrite 5G

Il est possible de commander les lampes à DEL IntelliBrite 5G pour piscine en utilisant un interrupteur mural standard. De multiples lampes à DEL IntelliBrite peuvent être connectées ensemble par l'intermédiaire d'une boîte de jonction à un seul interrupteur pour les allumer ou les éteindre toutes ensemble. Les lampes IntelliBrite 5G se commandent en commutant l'alimentation CA à partir d'un interrupteur mural standard. En mettant l'interrupteur sur marche et sur arrêt un certain nombre de fois, la lampe active l'un des sept modes de jeu de lumière, les couleurs fixes, ainsi que la caractéristique d'« attente » et de « rappel ».

Sélection du mode spectacle de couleurs ou couleur fixe

Alimentation de la lampe. La lumière sera momentanément couleur, puis passera à la couleur préalablement choisie. Pour sélectionner un mode de jeu de couleurs (1-7) ou une couleur fixe (8-12), mettez l'interrupteur mural sur arrêt/sur marche un certain nombre de fois. Chaque chiffre (1-12) illustré ci-dessous correspond au nombre de rallumages au niveau de l'interrupteur pour activer un certain jeu de lumière ou une couleur fixe. Pour obtenir des détails sur la sauvegarde des effets de couleur tout en étant en modes « show » (jeu de lumière), consultez la caractéristique d'« attente » et de « rappel » à la page 4.

1. **Mode SAm :** passe du blanc aux couleurs magenta, bleue et verte (imite la lampe Pentair SAm®).
2. **Mode Partie :** changement rapide des couleurs, accumulant énergie et agitation.
3. **Mode Romantique :** transitions lentes d'une couleur à une autre créant un effet tranquille et envoûtant.
4. **Mode Caraïbes :** transitions entre divers bleus et verts.
5. **Mode Amérique :** transitions entre le rouge, le blanc et le bleu patriotiques.
6. **Mode Coucher de soleil californien :** transitions dramatiques entre les tons orange, rouge et magenta.
7. **Mode Royal :** tons riches et profonds.
8. **Bleu :** couleur fixe.
9. **Vert :** couleur fixe.
10. **Rouge :** couleur fixe.
11. **Blanc :** couleur fixe.
12. **Magenta :** couleur fixe.
13. **Attente :** sauvegarde l'effet de couleur actuel pendant un jeu de lumière.
14. **Rappel :** active le dernier effet de couleur sauvegardé.

Sauvegarde d'un mode couleur ou d'une couleur fixe : Lorsque l'alimentation des lampes IntelliBrite est coupée, le dernier Mode jeu de couleurs ou la couleur fixe est sauvegardé. Lors de prochaine alimentation de la lampe IntelliBrite, le mode jeu de couleurs ou la couleur fixe sauvegardé préalablement s'affiche. Par exemple, en « Mode Partie », l'interrupteur est à l'arrêt. Attendez plus de 10 secondes, rallumez la lampe pour relancer le « Mode Partie ».

⚠ AVERTISSEMENT Lors de la commutation Arrêt/Marche, avant l'apparition de la couleur sélectionnée, il n'y a aucun éclairage. Ce mode de fonctionnement est normal lors de la commutation. Lors de cette période, la piscine et le spa ne sont pas éclairés et il faut alors prendre des précautions pour éviter des accidents inattendus. Le non respect de cet avertissement peut entraîner des blessures graves, voire mortelles des utilisateurs de la piscine et du spa.

Utilisation d'un régulateur de lampe colorée IntelliBrite

Avec le régulateur IntelliBrite (vendu séparément, N/P 600054), les lampes colorées IntelliBrite 5G pour piscine et spa peuvent être synchronisées pour allumer et éteindre simultanément une seule ou plusieurs lampes IntelliBrite.

Allumage des lampes IntelliBrite 5G (suite)

Pour sélectionner un mode Spectacle de lumières colorées ou une couleur fixe, tourner le cadran pour le faire pointer dans la direction voulue.

Fonctions Hold (Mémoriser) et Recall (Rappel) : Lorsque les lampes colorées IntelliBrite sont allumées, la dernière couleur sélectionnée sera utilisée, à moins que les fonctions MÉMORISER ou RAPPEL aient été activées.

Bouton et DEL Hold (Mémoriser) : Appuyer sur ce bouton (lumière DEL allumée) pour mémoriser et enregistrer un effet de couleur durant l'affichage de l'un des modes Spectacle de lumières colorées. Sur une pression du bouton, la lumière DEL s'allumera pour indiquer que l'effet de couleur est mémorisé.

Bouton et DEL Recall (Rappel) : Appuyer sur ce bouton (lumière DEL allumée) pour activer le dernier effet de couleur mémorisé. Sur une pression du bouton, la lumière DEL s'allumera pour indiquer que l'effet de couleur est affiché.

Allumage de la lampe -Lorsque la lampe à DEL IntelliBrite LED est allumée, une lumière couleur paraît d'abord momentanément, elle est ensuite suivie de la couleur préalablement choisie.
Remarque : *Si l'alimentation de la lampe est coupée pendant plus de cinq secondes, le dernier mode de jeu de couleurs ou la dernière couleur fixe qui était sauvegardé s'affichera.*

Diagnostic - Utilisez les astuces suivantes pour aider à la résolution de problèmes pouvant avoir lieu lors de l'utilisation de la lampe à DEL.

Fonction d'attente et de rappel -Attente : Utilisez **la fonction Attente** (13 commutations) pour capter et sauvegarder un effet de couleurs tout en affichant l'un des modes jeu de lumière. Il est plus facile de capter des effets de lumière personnalisés à partir de l'un des modes de jeu de lumière lent comme le « Mode Romantique » (nº 3).

Rappel : Utilisez la caractéristique **Rappel** pour activer le dernier effet de couleurs sauvegardé (en utilisant la caractéristique **Attente**) tout en étant en mode jeu de couleurs ou couleur fixe. Pour rappeler un effet de couleur, commutez 14 fois, et après cinq secondes, le dernier effet de couleur sauvegardé sera affiché.

Problème	Cause/Action
La lampe ne s'allume pas.	Vérifiez le câblage du disjoncteur différentiel et réenclenchez-le au besoin.
La lampe ne fonctionne pas correctement.	Vérifiez la connexion du câblage de la lampe au niveau de la boîte de jonction près de la piscine et au niveau de l'interrupteur CA. Assurez-vous qu'une alimentation CA appropriée arrive à la lampe.

Remplacement de l'ensemble de la lampe IntelliBrite 5G pour piscine et spa (dans une piscine existante)

Risque de décharge électrique ou d'électrocution!
La lampe submersible doit être installée par un électricien agréé ou certifié ou par une personne qualifiée et spécialisée en piscine, selon le National Electrical Code et tous les codes et règlements locaux applicables. Une installation inappropriée entraînera un risque d'électrocution d'où blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique, pouvant aussi entraîner des dommages matériels.

Débranchez toujours l'alimentation de l'éclairage de la piscine au niveau du disjoncteur avant de faire l'entretien de la lampe. Le non respect de cette consigne peut entraîner des blessures graves, voire mortelles des réparateurs, utilisateurs de la piscine et autres personnes suite à une décharge électrique.

Vérifiez que la piscine et le spa sont conformes aux exigences du National Electrical Code et à tous les codes et règlements locaux applicables. Un électricien agréé ou certifié doit installer le circuit électrique afin qu'il réponde à ces exigences et même les dépasse avant même que la lampe submersible ne soit installée. Certaines exigences du National Electrical Code que doit respecter le circuit électrique de la piscine sont les suivantes :

- Le circuit de l'éclairage doit être équipé d'un disjoncteur différentiel (GFCI) pour les modèles prévus pour une alimentation sur le secteur, et d'un disjoncteur de calibre approprié.
- La boîte de jonction (ou, pour **les modèles de 12 volts**, le transformateur de basse tension) est située à au moins vingt (20) centimètres (8 pouces) au-dessus du niveau du sol et à au moins 122 cm (48 po) du bord de la piscine, Figure 1 à la page 3.
- L'appareil d'éclairage et tous les articles métalliques se trouvant à moins de 1,5 mètre (5 pieds) de la piscine doivent être correctement électriquement raccordés.
- La niche humide doit être correctement installée de manière que le bord supérieur de la lentille de la lampe se trouve à au moins 46 cm (18 po) en dessous de la surface de l'eau de la piscine, Figure 1 à la page 3.
- La niche humide doit être correctement électriquement raccordée et mise à la terre via le connecteur de terre de 8 AWG situé à l'arrière de la niche, Figure 1.

Remarque : *Le circuit électrique de la piscine et du spa peut être vérifié en utilisant un nécessaire d'essai d'homologation électrique pour piscine et spa. Ce nécessaire d'essai est disponible auprès de Pentair Water Pool and Spa. L'inspection du circuit électrique à réaliser avec ce nécessaire doit être exécutée par du personnel certifié et compétent.*

Remplacement de l'ensemble de la lampe IntelliBrite 5G pour piscine et spa (après la satisfaction des exigences en matière d'électricité)

Les instructions de dépose et d'installation décrivent comment enlever et installer l'ensemble de lampe à DEL IntelliBrite pour piscine et spa. Utilisez aussi ces instructions après avoir terminé le remplacement suivant de la lampe :

- **Instructions d'installation et de dépose de la lentille, du joint de l'anneau frontal et de la lampe à DEL IntelliBrite couleur pour spa, page 17.**

⚠ AVERTISSEMENT

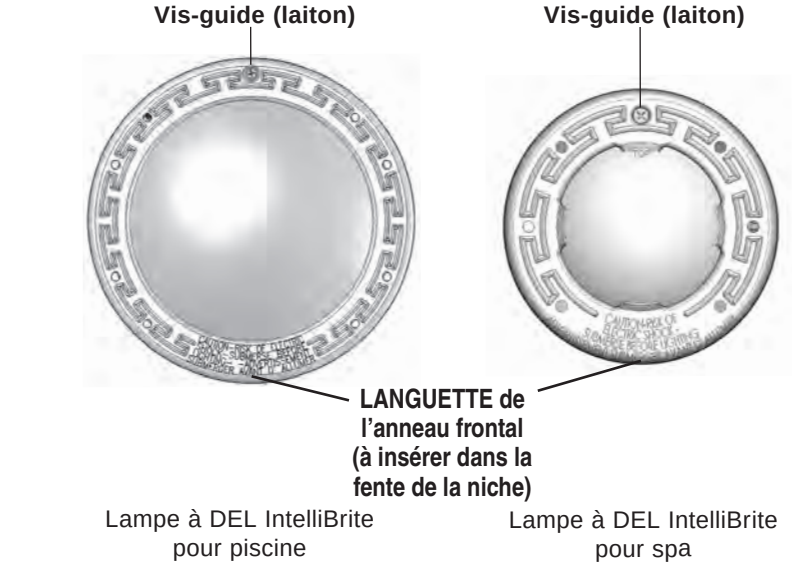
Une installation inappropriée d'un circuit électrique pour la piscine ou le spa, avant la pose de la lampe submersible, non conforme aux exigences des codes, entraînera un risque d'électrocution d'où blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique, et pouvant aussi entraîner des dommages matériels.

1. **AVERTISSEMENT ! Coupez l'alimentation au disjoncteur ou à l'interrupteur principal, et à l'interrupteur de l'alimentation de la lampe submersible IntelliBrite.**
2. **Dépose de la piscine de l'ensemble de lampe.** Retirez la vis-guide spéciale en laiton à la partie supérieure de l'anneau frontal. Retirez l'ensemble de la lampe IntelliBrite de la niche et placez-le sur le pourtour de la piscine.
3. Coupez le cordon à environ 30 cm (12 po) de l'arrière de l'ensemble de lampe.
4. Retirez le couvercle de la boîte de jonction, débranchez les fils de l'appareil d'éclairage et tirez le cordon par le conduit. ***Conseil : Avant de tirer le cordon, rubanez le cordon neuf au cordon existant, pour faciliter l'insertion du cordon neuf dans le conduit (voyez l'étape suivante).***
5. Passez le cordon neuf de la lampe dans le conduit de la boîte de jonction jusqu'à la niche. **Remarque :** Selon la longueur du conduit, des outils spéciaux peuvent être nécessaires pour tirer le cordon d'un bout à l'autre du conduit.
6. Laissez au moins 1,2 m (4 pi) de cordon enroulé(s) autour de la lampe, Figure 1 à la page 3. Ce 1,2 m de cordon enroulé autour de la lampe permettra de connecter la lampe une fois que la piscine sera remplie d'eau.
7. Coupez le cordon au niveau de la boîte de jonction en laissant une longueur de cordon d'au moins 15 cm (6 po) pour réaliser les raccordements.
8. Enlevez 15 cm de la gaine extérieure du cordon pour exposer les trois fils isolés – Faites attention de ne pas endommager l'isolant de ces trois fils.

9. Branchez les trois fils aux fils du circuit correspondant dans la boîte de jonction (le noir à la phase, le blanc au neutre et le vert à la terre) et remontez le couvercle de la boîte de jonction.

10. Installez l'ensemble de lampe IntelliBrite dans la niche et serrez la vis-guide spéciale en laiton.

⚠ AVERTISSEMENT N'utilisez que **la vis-guide spéciale fournie** avec cette lampe submersible. Cette vis fixe le boîtier à l'anneau de montage et à la niche humide et les met à la terre. Une non utilisation de la vis fournie pourrait entraîner un risque d'électrocution d'où blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique.



11. **Vérification finale du bon fonctionnement de la lampe IntelliBrite :** Établissez l'alimentation à l'interrupteur principal ou au disjoncteur du circuit, et à l'interrupteur de l'alimentation de la lampe submersible IntelliBrite. La lampe doit s'allumer lorsque l'alimentation est établie. Sinon, revérifiez les étapes de l'installation à partir de l'étape 1 (page 4).

INSTALLATION DE LA LAMPE INTELLIBRITE 5G POUR PISCINE ET SPA (DANS UNE NOUVELLE PISCINE)

Ce qui suit décrit comment installer un appareil d'éclairage à DEL IntelliBrite blanc pour piscine et spa. Lisez la page 3 avant de commencer l'installation.

AVANT DE COMMENCER : Les étapes suivantes 1-7 (pages 7-8) décrivent les tâches que l'électricien doit accomplir avant d'installer l'appareil d'éclairage IntelliBrite. Consultez le schéma de la Figure 1 à la page 7.

⚠ AVERTISSEMENT

Assurez-vous que la piscine ou le spa est conforme aux exigences du National Electrical Code (N.E.C.) actuel, Article 680-22, et à tous les codes et règlements locaux applicables. Un électricien agréé ou certifié doit installer le circuit électrique afin qu'il réponde à ces exigences et même les dépasse avant même que la lampe submersible ne soit installée. Certaines exigences du National Electrical Code que doit respecter le circuit électrique de la piscine sont les suivantes :

Le circuit de l'éclairage doit être équipé d'un disjoncteur différentiel (GFCI) pour les modèles prévus pour une alimentation sur le secteur, et d'un disjoncteur de calibre approprié.

- La boîte de jonction (ou, pour les modèles de 12 volts, le transformateur de basse tension) est située à au moins 20 cm au-dessus du niveau maximal de l'eau et à au moins 1,2 m du bord de la piscine, Figure 1.
- L'appareil d'éclairage et tous les articles métalliques se trouvant à moins de 1,5 m de la piscine doivent être correctement électriquement raccordés.
- La niche humide doit être correctement installée de manière que le bord supérieur de la lentille de la lampe submersible se trouve à au moins 46 cm en dessous de la surface de l'eau de la piscine, Figure 1. (Au Canada, pas à une profondeur de plus de 51 cm.)
- La niche humide doit être correctement électriquement raccordée et mise à la terre via le connecteur de terre de 8 AWG situé à l'arrière de la niche, Figure 1.

Remarque : Le circuit électrique de la piscine ou du spa peut être vérifié en utilisant un nécessaire d'essai d'homologation électrique pour piscine et spa. Ce nécessaire d'essai est disponible auprès de Pentair Water Pool and Spa®. L'inspection du circuit électrique à réaliser avec ce nécessaire doit être exécutée par du personnel certifié et compétent. ***Remarque : Pour vous assurer que le circuit électrique de la piscine ou du spa répond à toutes les exigences applicables, l'électricien doit aussi consulter le Service de la construction local. N'utilisez que des niches humides de Pentair Water Pool and Spa pour assurer une liaison électrique et une mise à la terre appropriées.***

INSTALLATION DE LA LAMPE INTELLIBRITE 5G POUR PISCINE ET SPA (APRÈS LA SATISFACTION DES EXIGENCES EN MATIÈRE D'ÉLECTRICITÉ)

Installation de l'appareil d'éclairage IntelliBrite :

1. Introduisez le cordon dans le conduit jusqu'à la boîte de jonction, en laissant au moins 1,2 m de cordon enroulé autour de l'appareil d'éclairage (ceci permet de connecter la lampe une fois la piscine remplie d'eau). Consultez la Figure 1 ci-dessous.

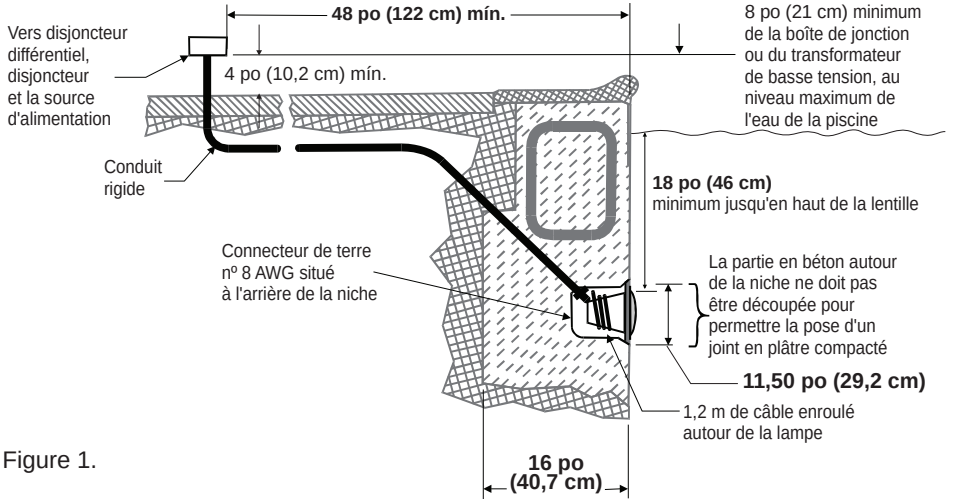
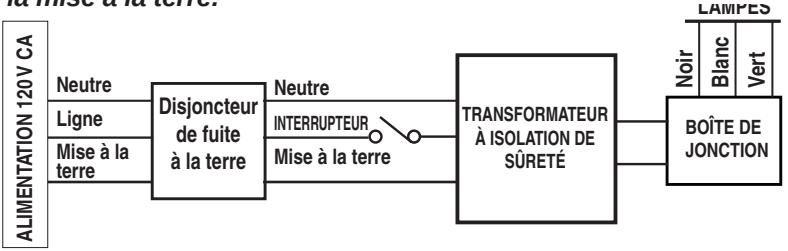


Figure 1.

2. Coupez le cordon au niveau de la boîte de jonction en laissant une longueur de cordon d'au moins 15 cm pour réaliser les raccordements.
3. Enlevez 15 cm de la gaine extérieure du cordon pour exposer les trois fils isolés (faites attention de ne pas endommager l'isolant de ces trois [3] fils).
4. Branchez les trois (3) fils aux fils du circuit correspondant dans la boîte de jonction et remontez bien le couvercle de la boîte de jonction.

POUR L'UTILISATION DE LA LUMIÈRE, UTILISER UNIQUEMENT UN TRANSFORMATEUR D'ISOLATION DE SÛRETÉ.

Remarque : Raccorder les trois (ou deux) fils aux fils correspondants du circuit dans la boîte de jonction. Pour les raccords à trois fils : Brancher le fil noir à l'alimentation, le fil blanc au conducteur commun et le fil vert à la mise à la terre.



REMARQUE : POUR LES LAMPES 120 V CA, LE TRANSFORMATEUR À ISOLATION EST INCLUS DANS LE DISPOSITIF DE RACCORDEMENT.

⚠ AVERTISSEMENT N'utilisez jamais cette lampe submersible pendant plus de dix (10) secondes sauf si elle est complètement submergée dans l'eau. S'il n'est pas entièrement sous l'eau, l'ensemble de lampe devient extrêmement chaud, et peut entraîner des brûlures graves ou une rupture de la lentille. Ceci pourrait provoquer des blessures graves des utilisateurs, installateurs ou autres personnes se trouvant dans la zone de la piscine, ou des dommages matériels.

5. Installez l'ensemble de lampe IntelliBrite dans la niche et serrez la vis-guide spéciale en laiton.

⚠ AVERTISSEMENT N'utilisez que **la vis-guide spéciale fournie** avec cette lampe submersible. Cette vis fixe le boîtier à l'anneau de montage et à la niche humide et les met à la terre. Une non utilisation de la vis fournie pourrait entraîner un risque d'électrocution d'où blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique.

Lampe à DEL IntelliBrite pour piscine

Lampe à DEL IntelliBrite pour spa

6. Remplissez la piscine jusqu'à ce que la lampe soit complètement submergée par l'eau avant d'allumer la lampe pendant plus de dix (10) secondes.

7. **Vérification finale du bon fonctionnement de la lampe :** Pour vérifier le bon fonctionnement, établissez le courant à l'interrupteur principal ou au disjoncteur, et à l'interrupteur de l'alimentation de la lampe submersible IntelliBrite elle-même. La lampe doit s'allumer lorsque l'alimentation est établie. Sinon, revérifiez les étapes de l'installation à partir de l'étape 1 (page 7).

POUR LES INSTRUCTIONS D'INSTALLATION ET DE DÉPOSE DE LA LAMPE À DEL INTELLIBRITE 5G POUR PISCINE ET SPA, CONSULTEZ :

- **Instructions d'installation et de dépose de la lampe IntelliBrite pour piscine, page 4.**
- **Instructions d'installation et de dépose de la lampe à DEL IntelliBrite pour spa, page 19.**

Remplacement de faisceau de fusible pour lampe IntelliBrite® 5G pour piscine (12 V)

Ce qui suit explique comment remplacer l'ensemble de fusible de la lampe IntelliBrite 5G pour piscine (le cas échéant) et le circuit imprimé principal intégré de la lampe IntelliBrite 5G pour piscine.

IMPORTANT! Avant de remplacer l'ensemble de fusible, notez les points suivants :

Dépannage

Problème	Cause/Action
La lampe ne fonctionne pas correctement	Vérifier le raccordement électrique de la lumière à la l'interrupteur CA. S'assurer qu'une alimentation CA adéquate est acheminée à la lumière.
La lumière ne s'allume pas	Vérifier le câblage du disjoncteur de fuite à la terre et réinitialiser au besoin. **Lampe IntelliBrite 5G 12 V avec ensemble de fusible de lampe** Remplacer l'ensemble de fusible (voir page 12) : **Remarque : Le remplacement de l'ensemble de fusible peut ne pas résoudre ce problème. Dans certains cas, l'ensemble de fusible grillera, et après avoir remplacé le fusible, le circuit imprimé de la lampe ne fonctionne toujours pas.**

REMPLACEMENT DE L'ENSEMBLE DE CIRCUIT IMPRIMÉ DE LA LAMPE INTELLIBRITE 5G POUR PISCINE (DANS UNE PISCINE EXISTANTE)

Lors du remplacement ou du remontage de la lampe IntelliBrite 5G pour piscine, le joint (pièce nº 79101600) ou le joint et la lentille (619864) DOIVENT ÉGALEMENT ÊTRE REMPLACÉS - VOYEZ LA PAGE 17 POUR LE NUMÉRO DES PIÈCES

Dépose et installation de la carte de circuit imprimé de la lampe IntelliBrite 5G

⚠DANGER

D A N G E R !

RISQUE DE DÉCHARGE ÉLECTRIQUE OU D'ÉLECTROCUTION

Débranchez toujours l'alimentation de l'éclairage de la piscine au niveau du disjoncteur avant de faire l'entretien de la lampe. Le non respect de cette consigne peut entraîner des blessures graves, voire mortelles, du réparateur, des utilisateurs de la piscine et d'autres personnes suite à une décharge électrique.

1. **Coupez l'alimentation à l'interrupteur principal ou au disjoncteur**, et à l'interrupteur de l'alimentation de la lampe IntelliBrite elle-même.
2. Avant de commencer, assurez-vous d'avoir un joint de lentille neuf (pièce nº 79101600) et un ensemble de lampe à DEL IntelliBrite 5G pour piscine (pièce nº 619818Z) prêt à être installé.

REMPLACEMENT DE L'ENSEMBLE DE CIRCUIT IMPRIMÉ DE LA LAMPE INTELLIBRITE 5G POUR PISCINE (DANS UNE PISCINE EXISTANTE) (suite)

⚠ AVERTISSEMENT Remplacez l'ensemble de lampe par un ensemble du même type et de la même puissance en watts. Un non remplacement de l'ensemble par un ensemble du même type endommagera l'ensemble de lampe à DEL et pourrait entraîner un risque d'électrocution d'où blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique, et pouvant aussi entraîner des dommages matériels.

⚠ AVERTISSEMENT Installez toujours un joint de lentille neuf (pièce nº 79101600) chaque fois que l'ensemble de lampe IntelliBrite est démonté. Sinon, de l'eau pourrait pénétrer dans l'ensemble et entraîner :
(a) un risque d'électrocution d'où blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique, ou
(b) une rupture de la lentille, qui pourrait aussi entraîner des blessures graves des utilisateurs, installateurs ou autres personnes se trouvant dans la zone de la piscine, ou des dommages matériels.

3. **DÉPOSE DE L'ENSEMBLE DE LAMPE À DEL INTELLIBRITE 5G POUR PISCINE :** Retirez la vis-guide à la partie supérieure de l'anneau frontal, retirez l'ensemble de lampe de la niche. Placez l'ensemble sur le pourtour de la piscine. **Remarque :** Il n'est pas nécessaire de vider partiellement la piscine.
4. Déroulez le cordon de la base du boîtier de la lampe.

Lampe à DEL IntelliBrite pour piscine

⚠ AVERTISSEMENT Assurez-vous de conserver la vis-guide de la lampe à DEL IntelliBrite submersible. Cette vis fixe le boîtier à l'anneau de montage et à la niche humide et les met à la terre. Une non utilisation de la vis fournie pourrait entraîner un risque d'électrocution d'où blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique.

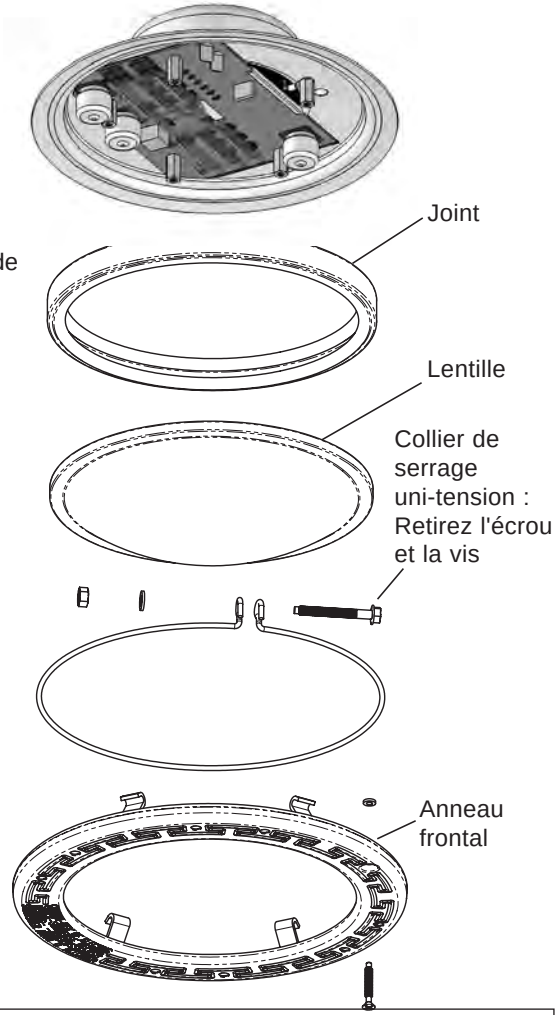
REMPLACEMENT DE L'ENSEMBLE DE CIRCUIT IMPRIMÉ DE LA LAMPE INTELLIBRITE 5G POUR PISCINE (DANS UNE PISCINE EXISTANTE) (suite)

5. Placez un chiffon sur le sol pour ne pas abîmer la lentille. Retournez la lampe pour que la lentille repose sur le chiffon. À l'aide d'un tourne-écrou de ¼ po et d'un tournevis Phillips nº 3, retirez le collier de serrage uni-tension. Mettez l'écrou de côté pour le remontage.

6. Retirez l'anneau frontal et le collier de serrage du boîtier de la lampe.

7. La lampe reposant sur sa base, enlevez soigneusement le joint pour extraire la lentille. Mettez la lentille de côté pour le remontage. Jetez le joint.

   Remarque : UN JOINT NEUF (PIÈCE Nº 79101600) DOIT ÊTRE UTILISÉ À CHAQUE REMONTAGE DE LA LAMPE. Consultez la page 15, pour le numéro de pièce des nécessaires de rechange.

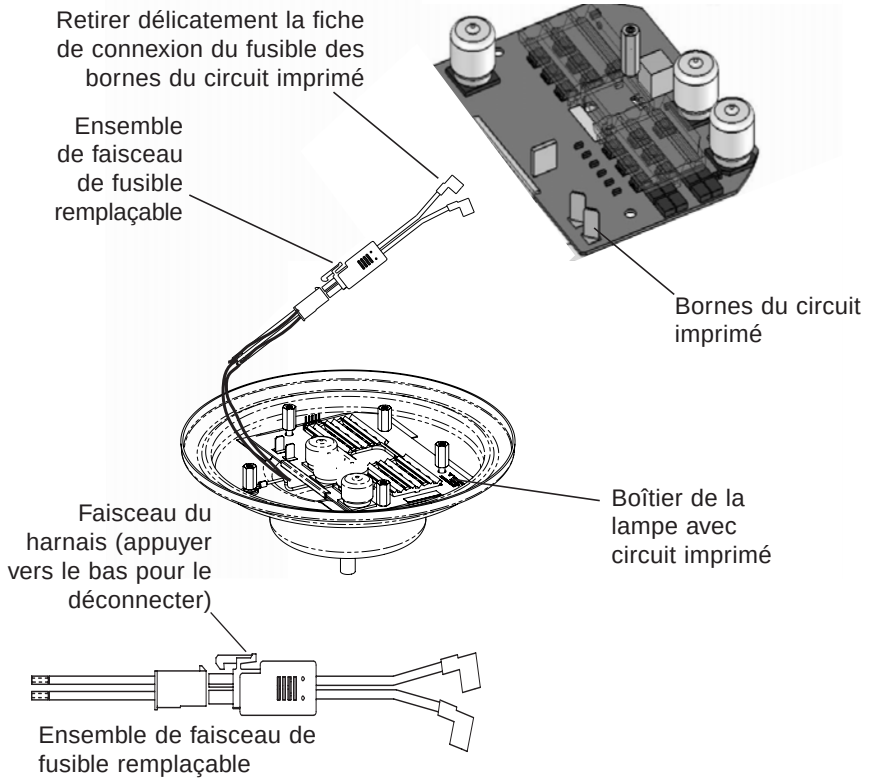


Remarque : Prenez note de la position actuelle de la lentille au niveau de la vis-guide (12 h), avant de la retirer de l'appareil d'éclairage. Un « W » sur la lentille indique un grand angle, un « N » un angle faible. Pour de plus amples renseignements, consultez la page 15.

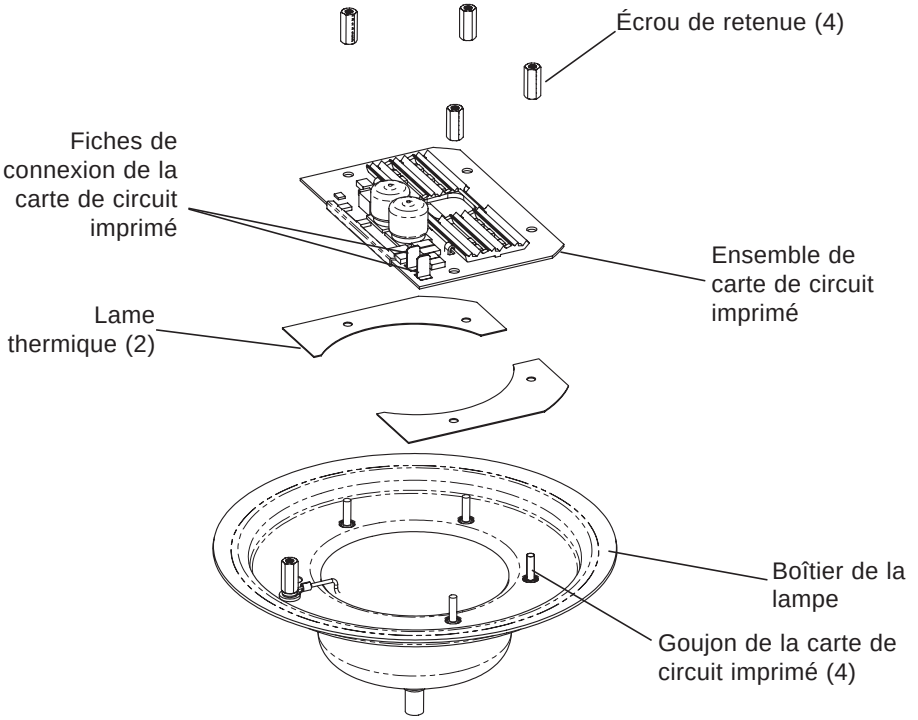
8. À l'aide d'un tourne-écrou de ¼ po, enlevez soigneusement les quatre écrous de retenue de l'ensemble de lampe à DEL (illustration à la page suivante). Mettez les écrous de côté pour le remontage.
9. Débranchez les deux fiches de la carte de circuit imprimé. Soulevez la carte de circuit imprimé et retirez-la de la base du boîtier de la lampe.
10. Soulevez soigneusement les lames thermiques du fond de la base du boîtier de la lampe.

Suite à la page suivante.

REMPLACEMENT DE L'ENSEMBLE DE FAISCEAU DE FUSIBLE (POUR LAMPES 12 V UNIQUEMENT)



1. Avec vos doigts, débranchez soigneusement chaque fiche de connexion du fusible des bornes du circuit imprimé. Soulevez délicatement chaque fiche avec de petits mouvements latéraux, tout en maintenant en place les bornes du circuit imprimé avec un tournevis plat. Par la suite, débranchez progressivement la fiche de connexion de la borne. *Remarque : Pour éviter des dommages permanents au circuit imprimé, veillez à ne pas arracher les bornes de la surface du circuit imprimé.*
2. Une fois les fiches de connexion du fusible retirées des bornes du circuit imprimé, séparez l'ensemble de fusible du faisceau de fils de la lampe en appuyant sur le levier de dégagement du fusible, puis en tirant doucement.
3. Insérez le connecteur du nouveau faisceau de fusible dans la fiche du faisceau de fils de lampes et les emboîter.
4. Avec vos doigts, raccordez soigneusement chaque fiche de connexion du fusible aux bornes du circuit imprimé. *N'appuyez pas trop fort sur le connecteur, car cela risquerait d'endommager les bornes du circuit imprimé.*
5. **Suite de l'« INSTALLATION DE L'ENSEMBLE DE LAMPE INTELLIBRITE® 5G POUR PISCINE AVEC NOUVEAU JOINT » à la page 14.**



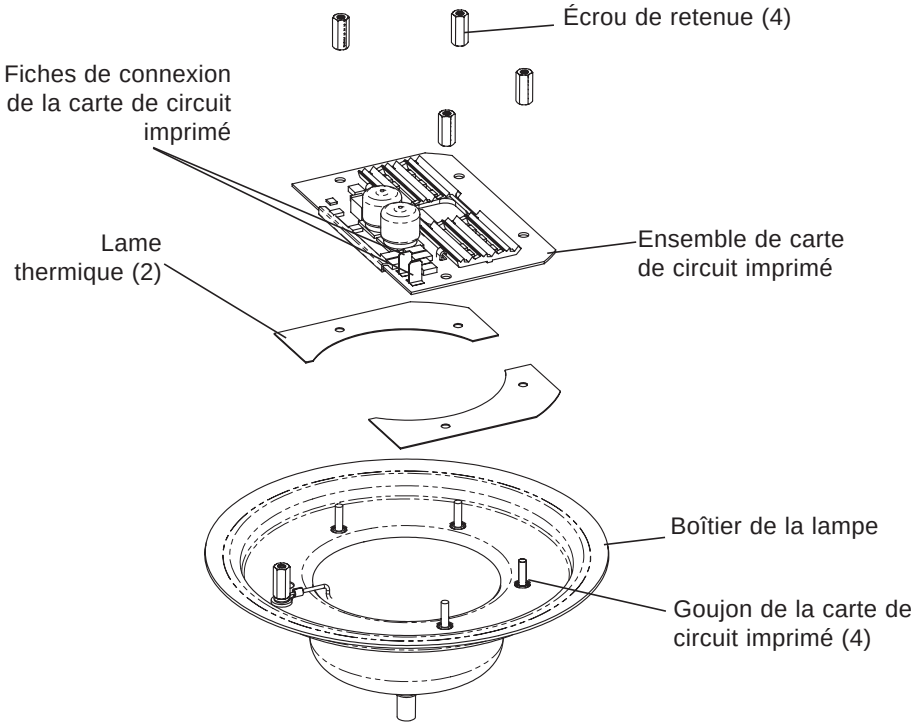
1. Placez les deux lames thermiques (fournies) sur les goujons de la carte de circuit imprimé dans la base du boîtier de la lampe (consultez l'illustration à la page suivante).
2. Placez la carte de circuit imprimé de la lampe sur les goujons de la base et logez la carte de circuit imprimé sur les lames thermiques. Assurez-vous que les deux fils de connexion ne se trouvent pas pris entre le boîtier et le bord de la carte de circuit imprimé.
3. En utilisant une clé à douille ¼ “, serrez chacun des quatre (4) en conservant les noix à une valeur de couple de 6,0 (minimum) à 8,0 (maximum) en lbs pour sécuriser le circuit. Ne serrez pas les NUTS circuit..

INSTALLATION DE L'ENSEMBLE DE LAMPE À DEL INTELLIBRITE 5G POUR PISCINE AVEC UN JOINT NEUF (consultez l'illustration à la page suivante)

> **⚠ AVERTISSEMENT** Assurez-vous d'installer TOUS les quatre (4) écrous de retenue. Ces écrous permettent d'assurer une liaison à la terre appropriée. Une non utilisation de tous les écrous de retenue pourrait entraîner un risque d'électrocution d'où blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique.

4. Branchez les deux fiches de connexion aux bornes de la carte de circuit imprimé.

Suite à la page suivante.

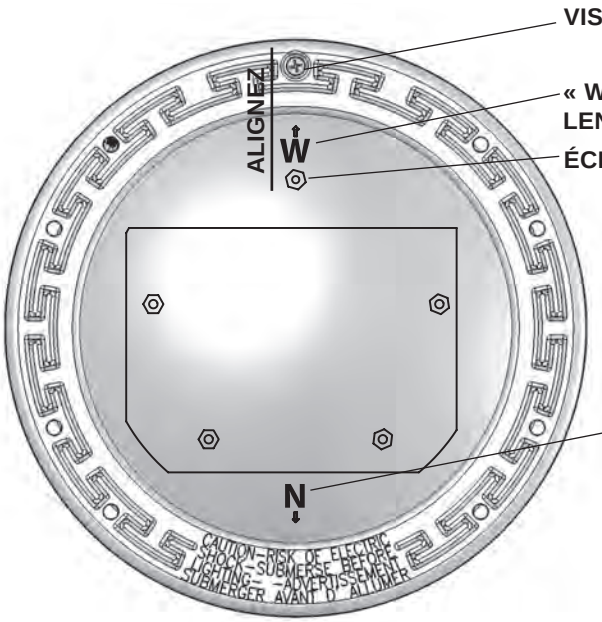


1. **Installez UN JOINT NEUF SUR LA LENTILLE (consultez l'illustration à la page suivante) :** Étirez le joint en le plaçant sur le pourtour de la lentille. Assurez-vous que le joint est installé uniformément autour de la lentille.
2. **ALIGNEZ LA LENTILLE/LE JOINT SUR LE BOÎTIER DE LA LAMPE :**

   a) Le boîtier de la lampe reposant sur sa base, placez la lentille/le joint sur le boîtier de la lampe.

   b) Tournez la lentille/le joint pour aligner la lettre « W » (« WIDE», grand angle) sur la lentille avec l'écrou en laiton dans le boîtier (consultez le schéma à la page 13 pour l'emplacement de l'écrou en laiton).

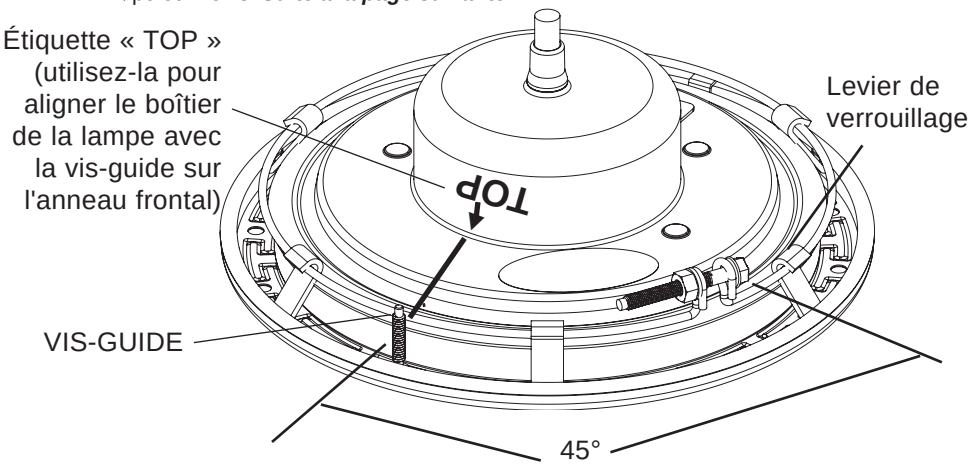
   Remarque : La lentille de la lampe IntelliBrite est expédiée de l'usine en position « WIDE » (grand angle). Pour obtenir un faisceau « NARROW/ÉTROIT » (angle faible), tournez la lentille/le joint pour l'aligner avec la lettre « N » de la lentille. Remarque : Pour de plus amples renseignements sur les angles « GRAND » et « ÉTROIT », du faisceau de la lentille, consultez la page 16.
3. **INSTALLEZ L'ANNEAU FRONTAL :** Placez l'anneau frontal sur la lentille/le joint/le boîtier. Tournez l'anneau frontal afin que ***le trou de la*** **vis-guide** s'aligne à la position 12 h, la lettre « W » (ou « N ») de la lentille et l'écrou en laiton dans le boîtier. Vérifiez aussi que l'étiquette avec flèche d'indication du haut « TOP » (page 16) à l'arrière du boîtier s'aligne avec la vis-guide de l'anneau frontal.



Alignez la lettre « W » (grand angle) sur la lentille/le joint avec ***le trou de la vis-guide*** de l'anneau frontal et ***l'écrou en laiton***

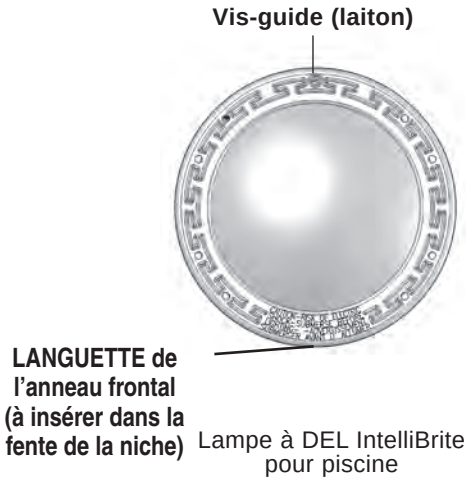
Pour le faisceau « ÉTROIT » (angle faible), tournez le « N » à la position 12 h.

4. **INSTALLEZ LE COLLIER DE SERRAGE UNI-TENSION :** Les extrémités en crochet du collier de serrage filaire uni-tension se dirigeant vers le bas, écartez ce collier de serrage et placez-le dans les évidements en « U » des leviers de verrouillage. Assurez-vous que les extrémités en crochet sont situées entre la paire de leviers de verrouillage comme il est illustré ci-dessous et que le collier de serrage est correctement engagé avec tous les leviers de verrouillage.
5. Placez un chiffon sur le sol pour ne pas abîmer la lentille. Retournez la lampe pour que la lentille repose sur le chiffon. Assurez-vous que le collier de serrage est orienté de manière que la connexion à boulon se trouve positionnée à 45°.
6. Serrez le boulon et l'écrou jusqu'à ce que la distance entre les extrémités du collier soit de ¼ po ou moins. ***Suite à la page suivante***



Positionnez le collier de serrage (écrou et boulon) à environ 45° entre la VIS-GUIDE et le LEVIER DE VERROUILLAGE

7. Enroulez au moins 1,2 m de cordon autour de la lampe (Figure 1 à la page 9). Ceci permet de faire l'entretien de la lampe une fois la piscine remplie d'eau.
8. Raccordez les trois (ou deux fils) fils de lampe aux fils de circuit de la lampe correspondante dans la boîte de jonction. Pour les raccordements à trois fils : Brancher le fil noir à l'alimentation, le conducteur blanc au fil commun et le fil vert à la mise à la terre. Mettre en place le couvercle de la boîte de jonction.
9. Installez l'ensemble de lampe dans la niche de la piscine. **IMPORTANT : Veillez à insérer la LANGUETTE sur la partie inférieure de l'anneau frontal dans la fente de la NICHE (située sur la partie inférieure de la niche). Cela est important afin de sécuriser la partie inférieure de l'ensemble de lampe dans la niche avant de serrer la vis-guide.**
10. Installez la vis-guide spéciale en laiton à la partie supérieure de l'anneau frontal pour fixer la lampe à la niche.



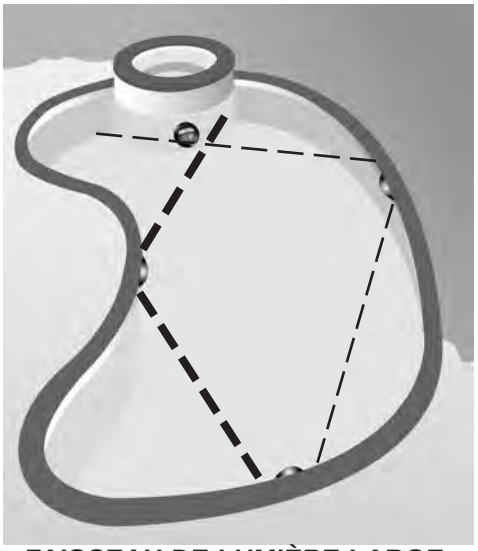
Lampe à DEL IntelliBrite pour piscine

11. **Vérification finale du bon fonctionnement de la lampe IntelliBrite :** Établissez l'alimentation à l'interrupteur principal ou au disjoncteur, et à l'interrupteur de l'alimentation de la lampe submersible IntelliBrite. La lampe doit s'allumer lorsque l'alimentation est établie. Sinon, revérifiez les étapes de l'installation à partir de l'étape 1 (page 9).

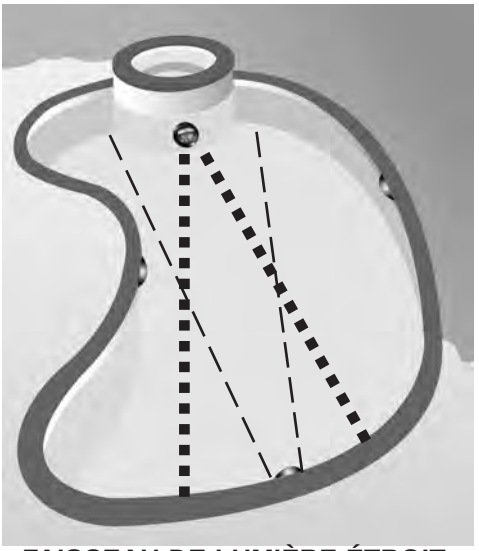
Réglage de lentille à angles large et étroit

Caractéristique unique de la lentille - à grand angle et à angle faible

La géométrie sans pareille de la lentille IntelliBrite donne un choix entre deux formes de faisceau lumineux; un à grand angle « large », ou un à angle faible « étroit » qui conviennent à des piscines de diverses dimensions. Dans le cas de lampes situées des deux côtés de la piscine, tournez la lentille à la position « WIDE » (grand angle), qui donne un faisceau de lumière plus large et une réflexion sur la largeur de la piscine. Dans le cas de lampes situées à une extrémité de la piscine, tournez la lentille à la position « N » (faisceau étroit) pour une intensité de lumière et une distance plus importantes sous l'eau. Remarque : La lentille de la lampe IntelliBrite est expédiée de l'usine en position « WIDE » (grand angle).



FAISCEAU DE LUMIÈRE LARGE (POUR CÔTÉS DE PISCINE)



FAISCEAU DE LUMIÈRE ÉTROIT (POUR EXTRÉMITÉS DE PISCINE)

Numéros de pièces de l'ensemble de remplacement de lampe IntelliBrite® 5G pour piscine

Remarque : Un transformateur externe 120 V CA à 12 V CA est nécessaire pour la lampe blanche IntelliBrite 5G pour piscine de 12 V CA. Consultez la page 1 pour obtenir plus de détails.

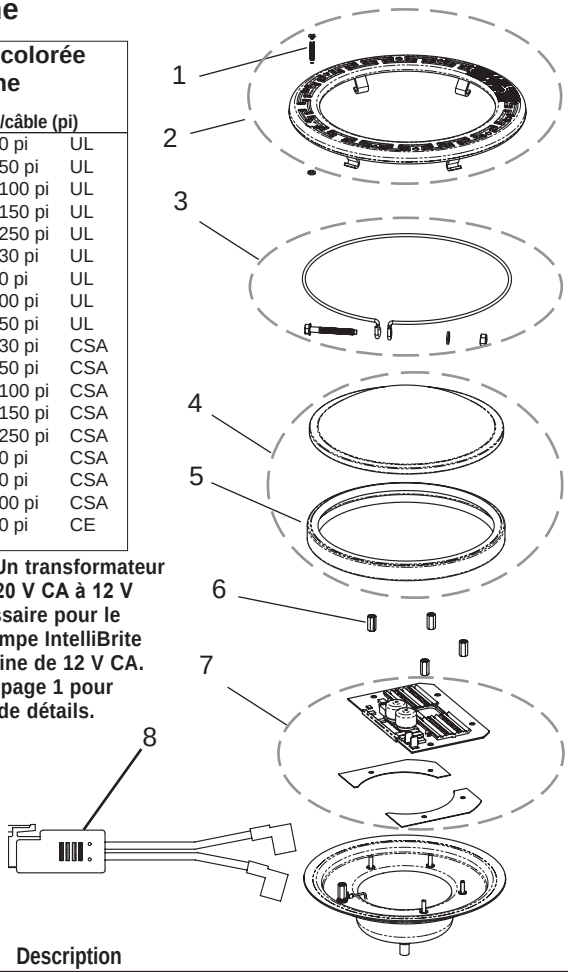
Ensemble de lampe IntelliBrite 5G pour piscine (homologation UL/CAS)

Modèle du produit	Tension	Longueur du câble (pieds)
601105	12 V	30 pi
601106	12 V	50 pi
601107	12 V	100 pi
601108	12 V	150 pi
601205	12 V	30 pi
601206	12 V	50 pi
601207	12 V	100 pi
601208	12 V	150 pi
601300	**120 V**	**30 pi**
601305	12 V	30 pi
601306	12 V	50 pi
601307	12 V	100 pi
601308	12 V	150 pi

Numéros de pièces de l'ensemble de remplacement de lampe IntelliBrite® 5G pour piscine

Lampe 5G blanche pour piscine	Lampe 5G colorée pour piscine	
Modèle/tension/câble (pi)	**Modèle/tension/câble (pi)**	
601100/120 V/30 pi	01000/120 V/30 pi	UL
601101/120 V/50 pi	601001/120 V/50 pi	UL
601102/120 V/100 pi	601002/120 V/100 pi	UL
601103/120 V/150 pi	601003/120 V/150 pi	UL
601104/120 V/250 pi	601004/120 V/250 pi	UL
601105/12 V/30 pi	601010/120 V/30 pi	UL
601106/12 V/50 pi	601011/12 V/50 pi	UL
601107/12 V/100 pi	601012/12 V/100 pi	UL
601108/12 V/150 pi	601013/12 V/150 pi	UL
601200/120 V/30 pi	602000/120 V/30 pi	CSA
601201/120 V/50 pi	602001/120 V/50 pi	CSA
601202/120 V/100 pi	602002/120 V/100 pi	CSA
601203/120 V/150 pi	602003/120 V/150 pi	CSA
601204/120 V/250 pi	602004/120 V/250 pi	CSA
601205/12 V/30 pi	602010/12 V/30 pi	CSA
601206/12 V/50 pi	602011/12 V/50 pi	CSA
601207/12 V/100 pi	602012/12 V/100 pi	CSA
601208/12 V/150 pi	602020/12 V/10 pi	CE
601300/120 V/30 pi		
601301/120 V/50 pi		
601302/120 V/100 pi		
601303/120 V/150 pi		
601304/120 V/250 pi		
601305/12 V/30 pi		
601306/12 V/50 pi		
601307/12 V/100 pi		
601308/12 V/150 pi		

Remarque : Un transformateur externe de 120 V CA à 12 V CA est nécessaire pour le modèle de lampe IntelliBrite 5G pour piscine de 12 V CA. Consultez la page 1 pour obtenir plus de détails.



Numéro d'article	Numéro de pièce de l'ensemble	Description
2, 3, 5	600095	Ensemble d'anneau frontal en acier inoxydable. - Ensemble de collier de serrage à tension uniforme. - Joint, 8 ⅜ po de diamètre, silicone.
4, 5	619864Z	Ensemble de remplacement de lentille. - Joint, 8 ⅜ po de diamètre, blanc cassé. - Lentille, IntelliBrite, piscine, 8 ⅜ po de diamètre, trempé.
3, 5, 7	619875Z (UL) (300 W), 619916 Z (400 W), 619917Z (500 W) – 619818Z (couleur)	L'ensemble de remplacement inclut : Carte de circuit imprimé, bandes thermiques (2 x). - Ensemble de collier de serrage à tension uniforme. - Joint, 8 ⅜ po de diamètre, silicone, blanc cassé.
1	79104800	Vis-guide, avec rondelle de gomme captive.
5	79101601	Joint, 8 ⅜ po de diamètre, silicone.
8	620276	Ensemble de faisceau de fusible **(pour lampes 12 V seulement)**

Remarque : La lampe pour piscine IntelliBrite 120 V CA dispose d'un transformateur 12 V CA intégré.

Remplacement de l'anneau frontal et du joint de la lampe IntelliBrite pour spa (N/P 640045) ou joint et lentille (640046)

Remarque : Lors du remplacement d'un ensemble de lampe à DEL IntelliBrite pour spa, un nouvel ensemble de lampe pour spa comprenant un moteur lumière, une lentille, un joint et un anneau frontal (consultez la page ii pour le numéro de pièce des ensembles de pièces de lampe).

⚠ DANGER

D A N G E R !

RISQUE DE DÉCHARGE ÉLECTRIQUE OU D'ÉLECTROCUTION

Débranchez toujours l'alimentation de l'éclairage de la piscine au niveau du disjoncteur avant de faire l'entretien de la lampe. Le non respect de cette consigne peut entraîner des blessures graves, voire mortelles, de l'installateur, du spécialiste en piscine, des utilisateurs de la piscine et d'autres personnes suite à une décharge électrique.

1. **Coupez l'alimentation à l'interrupteur principal ou au disjoncteur**, et aussi à l'interrupteur de l'alimentation de la lampe à DEL IntelliBrite submersible.

⚠ AVERTISSEMENT

Installez toujours un joint de lentille neuf (voir la page 15 pour les numéros de pièces des nécessaires) chaque fois que l'ensemble de lampe à DEL IntelliBrite est démonté. Sinon, de l'eau pourrait pénétrer dans l'ensemble et entraîner : **(a)** un risque d'électrocution pouvant entraîner des blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique, ou **(b)** une rupture de la lentille, pouvant aussi entraîner des blessures graves des utilisateurs, installateurs ou autres personnes se trouvant dans la zone de la piscine, ou des dommages matériels.

Lampe à DEL IntelliBrite 5G pour spa

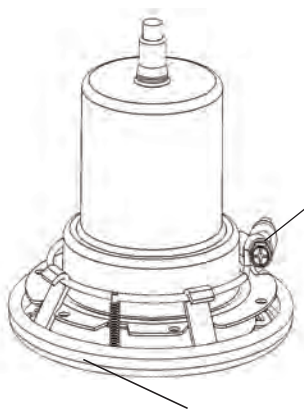
2. **DÉPOSE DE LA LAMPE À DEL INTELLIBRITE 5G POUR SPA :** Retirez la vis-guide à la partie supérieure de l'anneau frontal, retirez l'ensemble de lampe de la niche. Placez l'ensemble sur le pourtour de la piscine. **Remarque :** Il n'est pas nécessaire de vider partiellement la piscine.

⚠ AVERTISSEMENT

Assurez-vous de conserver la vis-guide de la lampe à DEL IntelliBrite submersible. Cette vis fixe le boîtier à l'anneau de montage et à la niche humide et les met à la terre. Une non utilisation de la vis fournie pourrait entraîner un risque d'électrocution d'où blessures graves, voire mortelles des utilisateurs, installateurs de la piscine ou autres personnes suite à une décharge électrique.

3. À l'aide d'un tournevis Phillips nº 3, desserrez la vis et retirez le collier de serrage filaire uni-tension de l'anneau frontal.
4. Retirez l'anneau frontal et le collier de serrage du boîtier de la lampe et conservez-le pour le montage ultérieur.

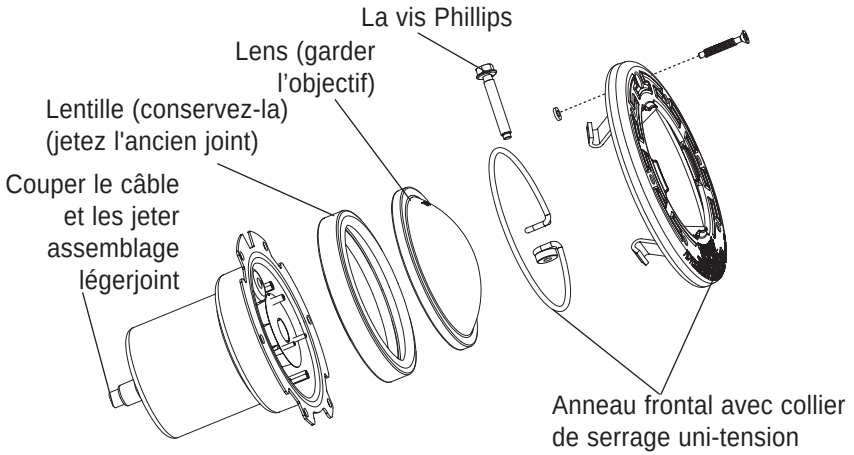
Remarque : Un transformateur externe de 120 VCA à 12 VCA est nécessaire pour le modèle de lampe à DEL IntelliBrite pour spa de 12 VCA. Consultez la page 2 pour obtenir plus de détails.



Appareil d'éclairage IntelliBrite blanc pour spa avec lentille, joint et anneau frontal fixés

Remarque : *L'appareil d'éclairage IntelliBrite pour spa est un ensemble de lampe étanche, remplaçable. La lentille, le joint et l'anneau frontal peuvent être enlevés de l'ensemble de lampe étanche pour être remplacés. Consultez la page 23, pour le numéro de pièce des nécessaires de rechange.*

5. L'ensemble de lampe reposant sur sa base, enlevez soigneusement le joint pour extraire la lentille. Jetez le joint. UN JOINT NEUF POUR LENTILLE DOIT ÊTRE UTILISÉ À CHAQUE REMONTAGE DE LA LAMPE À DEL POUR SPA.
6. Débranchez de la boîte de jonction le cordon de l'ensemble de lampe à DEL IntelliBrite pour spa. ***Coupez le cordon près de l'arrière de l'ensemble de lampe et jetez la lampe. Consultez la page 6 pour les instructions de remplacement de la lampe neuve pour spa.***



7. **INSTALLATION DE LA LAMPE À DEL INTELLIBRITE 5G POUR SPA AVEC UN JOINT NEUF :** Installez un joint neuf lors du remontage de la lampe à DEL IntelliBrite 5G pour spa. UN JOINT NEUF POUR LENTILLE DOIT ÊTRE UTILISÉ À CHAQUE REMONTAGE DE LA LAMPE.

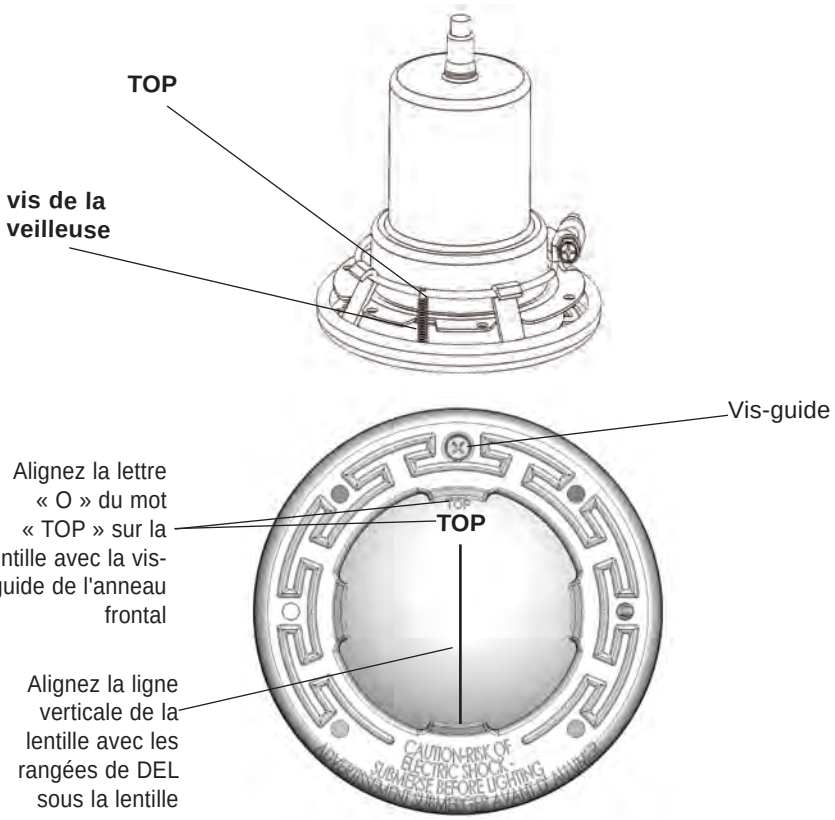
8. **Installez un joint neuf sur la lentille :**

   a) Le boîtier de la lampe reposant sur sa base, placez la lentille, puis le joint sur le dessus du boîtier de la lampe.

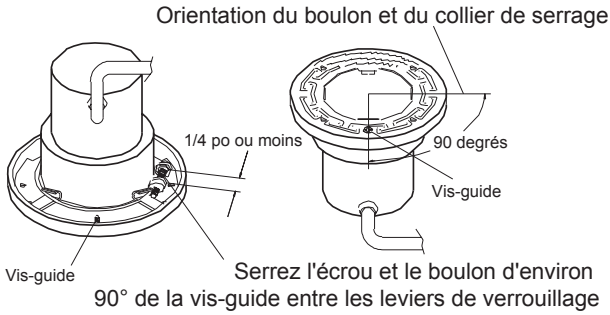
   b) Placez l'anneau frontal sur le joint. Assurez-vous que la lentille et le joint sont centrés correctement sur le boîtier de la lampe.

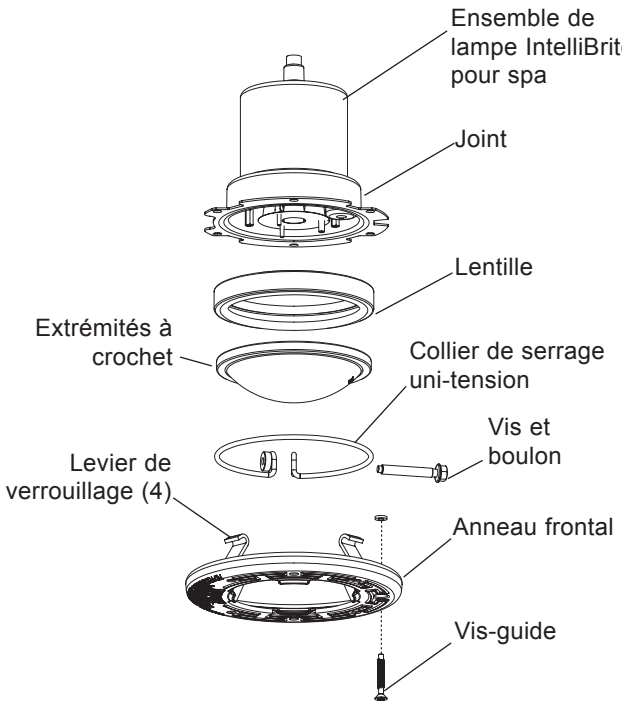
   c) **Alignement de l'anneau frontal et de la lentille :** Alignez l'anneau frontal et la lentille afin que la lettre « O » du mot « TOP » et la petite flèche au-dessus de celui-ci sur la surface de la lentille se dirigent vers le trou de la vis-guide de l'anneau frontal.

   d) **Alignement de la lentille avec les DEL :** Tout en regardant au travers du devant de la lentille, tournez légèrement la lentille jusqu'à ce que les lignes verticales de la lentille se focalisent sur les quatre rangées de DEL ci-dessous.

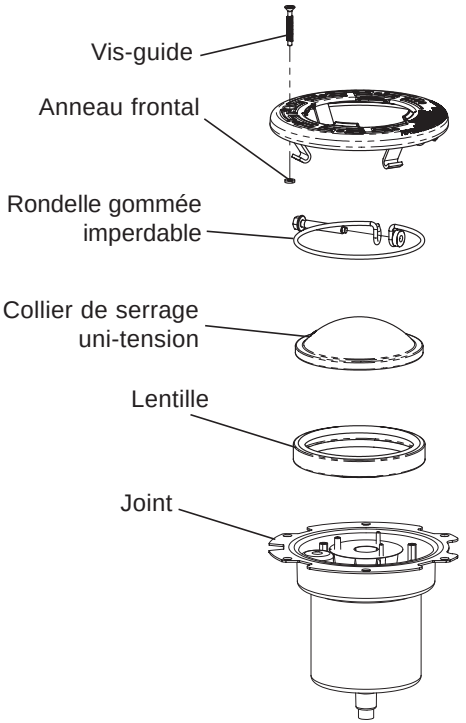


9. Les extrémités en crochet du collier de serrage filaire uni-tension se dirigeant vers le bas, écartez ce collier de serrage et placez-le dans les évidements en « U » des leviers de verrouillage. Assurez-vous que les extrémités à crochet du collier de serrage sont situées entre la paire de leviers de verrouillage comme il est illustré ci-dessous et que le collier est correctement engagé avec tous les leviers de verrouillage.
10. Placez un chiffon sur le sol pour ne pas abîmer la lentille. Retournez la lampe pour que la lentille repose sur le chiffon. Serrez le boulon et l'écrou jusqu'à ce que la distance entre les extrémités du collier soit de ¼ po ou moins.
11. **PASSEZ À « Remplacement de l'ensemble de lampe à DEL IntelliBrite pour spa (piscine ou spa existant) » à la page 4 pour les instructions d'installation de l'ensemble de lampe pour spa.**





Numéros de pièces de l'ensemble de remplacement de lampe IntelliBrite 5G pour spa



Ensemble de lampe colorée IntelliBrite® 5G pour spa (homologation UL/CSA)

Modèle du produit	Tension	Longueur du câble (pieds)
640120	120 V	30 pi
640121	120 V	50 pi
640122	120 V	100 pi
640123	120 V	150 pi
640124	120 V	250 pi
640130	12 V	30 pi
640131	12 V	50 pi
640132	12 V	100 pi
640133	12 V	150 pi

Ensemble de lampe blanche IntelliBrite® 5G pour spa (homologation UL/CSA)

Modèle du produit	Tension	Longueur du câble (pieds)
640140	120 V	30 pi
640141	120 V	50 pi
640142	120 V	100 pi
640143	120 V	150 pi
640144	120 V	250 pi
640150	12 V	30 pi
640151	12 V	50 pi
640152	12 V	100 pi
640153	12 V	150 pi

Pièce nº (néc.)	Description
640045	Ensemble d'anneau frontal, acier inoxydable
	- Ensemble de collier de serrage uni-tension
	- Joint, 4 de diamètre, blanc cassé
640046	Joint, 4 de diamètre, blanc cassé
	- Lentille, IntelliBrite, spa, 4 de diamètre, trempée
79104800	Vis-guide avec rondelle gommée imperdable
79108600	- Joint, 4 de diamètre, silicon

Remarque : Un transformateur externe de 120 VCA à 12 VCA est nécessaire pour le modèle de lampe à DEL IntelliBrite pour spa de 12 VCA. Consultez la page ii pour obtenir plus de détails.

REMARQUES

REMARQUES

REMARQUES

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PIÈCE Nº 619921 RÉVISION K 4/2015

PENTAIR

INTELLITOUCH® CONTROL SYSTEM
FOR POOL AND SPA

USER'S GUIDE

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

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IMPORTANT WARNING AND SAFETY INSTRUCTIONS

Important Notice:

Attention Installer: This manual contains important information about the installation, operation and safe use of this product. This information should be given to the owner and/or operator of this equipment.

WARNING - Before installing this product, read and follow all warning notices and instructions which are included. Failure to follow safety warnings and instructions can result in severe injury, death, or property damage. Call (800) 831-7133 for additional free copies of these instructions.

DANGER - Water temperature in excess of 100° F (37.7° C) may be hazardous to your health.

Prolonged immersion in hot water may induce hyperthermia. Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above normal body temperature of 98.6° F (37° C.). Effects of hyperthermia include: (1) Unawareness of impending danger. (2) Failure to perceive heat. (3) Failure to recognize the need to leave the spa. (4) Physical inability to exit the spa. (5) Fetal damage in pregnant women. (6) Unconsciousness resulting in danger of drowning. The use of alcohol, drugs, or medication can greatly increase the risk of fatal hyperthermia in hot tubs and spas.

WARNING - To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.

WARNING - **The use of alcohol, drugs, or medication can greatly increase the risk of fatal hyperthermia in hot tubs and spas.**

WARNING - **GAS HEATER:** The IntelliTouch® automation control system is designed to supply high voltage (120 VAC / 240 VAC) to a gas heater and override the thermostat in the heater's control circuit. This automation control system is intended to control gas heaters with a high temperature limit switch(s) safety circuit ONLY. Failure to do so may cause property damage or personal injury.

WARNING - Do not use this product to control an automatic pool cover. Swimmers may become entrapped underneath the cover.

WARNING - For units intended for use in other than single-family dwellings, a clearly labeled emergency switch shall be provided as part of the installation. The switch shall be readily accessible to the occupants and shall be installed at least (5) feet (1.52 m) away, adjacent to, and within sight of, the unit.

CAUTION - Except for listed spa-side remote controls, install a minimum of five (5) feet (1.52 m) from the inside wall of the pool and spa.

CAUTION - This product is intended for use in swimming pool applications only.

Two Speed Pump Controls Notice (Title 20 Compliance)

Please read the following important Safety Instructions. When using two-speed pumps manufactured on or after January 1, 2008, the pump's default circulation speed MUST be set to the LOWEST SPEED, with a high speed overide capability being for a temporary period not to exceed one normal cycle, or two hours, whichever is less.

IMPORTANT WARNING AND SAFETY INSTRUCTIONS

⚠ **FCC Regulatory Safety Notice** - The MobileTouch wireless control panel device has been tested and found to comply with the li**FCC Standard** - 47 CFR Part 15, Subpart C (Section 15.247). This version is limited to chapter 1 to chapter 11 by specified firmware controlled in the U.S.A.
Canada - Industry Canada (IC) - The IntelliChlor device complies with RSS210 of Industry Canada. (1999). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
Instruction to user - The IntelliChlor device 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. The IntelliChlor device 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 device does cause harmful interference to radio or television reception, which can be determined by switching the device 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 from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

General Installation Information

1. All work on the IntelliTouch® load/power center must be performed by a licensed electrician, and must conform to all national, state, and local codes.
2. Install to provide drainage of compartment for electrical components.
3. If this system is used to control underwater lighting fixtures, a ground-fault interrupter (GFCI) must be provided for these fixtures. Conductors on the load side of the ground-fault circuit-interrupter shall **not** occupy conduit, junction boxes or enclosures containing other conductors unless such conductors are also protected by a ground-fault circuit-interrupter. Refer to local codes for details.
4. A terminal bar stamped ⏚ is located inside the supply terminal box. To reduce the risk of electric shock, this terminal must be connected to the grounding means provided in the electric supply service panel with a continuous copper wire equivalent in size to the circuit conductors supplying this equipment (no smaller than 12 AWG or 3.3 mm). The bonding lug(s) provided on this unit are intended to connect a minimum of one No. 8 AWG for US installation and two No. 6 AWG for Canadian installations solid copper conductor between this unit and any metal equipment, metal enclosures or electrical equipment, metal water pipe, or conduit within 5 feet (1.5 m) of the unit.
5. The electrical supply for the IntelliTouch® load/power center must include a suitably rated switch or circuit breaker to open all ungrounded supply conductors to comply with in accordance with the National Electrical Code (NEC), NFPA 70 or the Canadian Electrical Code (CEC), CSA C22.1. All applicable local installation codes and ordinances must also be adhered to. The disconnecting means must be readily accessible to the tub occupant but installed at least 10 ft. (3.05 m) from the inside wall of the pool.
6. **GAS HEATER:** The IntelliTouch® automation control system is designed to supply high voltage (120 VAC / 240 VAC) to a gas heater and override the thermostat in the heater's control circuit. This automation control system is intended to control gas heaters with a high temperature limit switch(s) safety circuit ONLY. Failure to do so may cause property damage or personal injury.
6. Supply conductor for the IntelliTouch® load/power center must be sized to support all loads. Maximum supply conductor current must be 150 Amps at 120 VAC / 240 VAC.

For information about the Virginia Graeme Baker Pool and Spa Safety Act, contact the Consumer Product Safety Commission at (301) 504-7908 or visit www.cpsc.gov.

NOTE: Always turn off all power to the pool pump before installing the cover or working on any suction outlet.

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In this User's Guide

This User's Guide describes how to operate the IntelliTouch® pool and spa control system.

This manual consists of the following sections:

Section 1: IntelliTouch System Overview	(page 1)
Section 2: Operating the IntelliTouch System	(page 7)
Section 3: Preparing the System for Initial Start-Up	(page 23)
Section 4: Service and Maintenance	(page 81)
Section 5: Troubleshooting	(page 95)

Technical Support

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Web sites

http://www.pentairpool.com and staritepool.com

Download the IntelliTouch User's Guide (PDF) from the Web

http://www.http://www.pentairpool.com/pdfs/IntelliTouchUG.pdf

Related IntelliTouch Manuals

IntelliTouch Personality Kit User's Guide	(P/N 521074)
IntelliTouch Load Center and Power Center Installation User's Guide	(P/N 521139)
IntelliTouch i-Link Protocol Interface Adapter User's Guide	(P/N 520450)
ScreenLogic® User's Guide	(P/N 520493)
IntelliChlor Installation and User's Guide	(P/N 520589)
IntelliChem Installation and User's Guide	(P/N 521363)

Section 1

IntelliTouch® Control System Overview

Introduction

Welcome! Your IntelliTouch® Control System for Pool and Spa will change the way you view pool and spa controls. This innovation in pool and spa automation offers complete freedom for you while having full automation control over your pool, spa, lights, heater, pump, cleaners and much more. You can now schedule multiple start and stop times to control your lights, heater, spa jets, and filter pumps. Using the IntelliTouch® Indoor Control Panel or IntelliTouch MobileTouch® Wireless Controller you can control your pool, spa, and lights from anywhere inside or outside or your home. Optional controllers are also available such as the wireless Apple Watch®, Andriod interface for phone or tablet, iPhone®, or iPad® (purchased separately), and in-wall Touch Screen that can interface with your PC. IntelliTouch is a scalable system that can be upgraded to a completely integrated home automation solution including audio, security, climate, irrigation and more. For more information about using these interfaces, refer to the ScreenLogic®2 Interface Kits on page 5.

IntelliTouch Control System Overview

An IntelliTouch control system can include five (5) to 40 high voltage relays circuits that can be used to control any combination of pumps, lights, water features. A maximum of ten (10) relays can be housed in an IntelliTouch control system Load Center or Power Center. Up to three (3) Load Centers or Power Centers can be connected to a main Load Center for a maximum of 40 relays. User-configurable circuits can be used to control equipment. The “Feature Macro” circuits feature allows any number of circuits to be combined and controlled by a single button. An optional IntelliTouch control system Dimmer Module (P/N 520406) can be installed for use to dim any high voltage incandescent light such as Pentair Amerlite® and Pentair SpaBrite® Lights. The dimmer module supports multiple lights from 100 watts up to 1,000 watts and installs in a standard relay location. Any number of dimmers (up to 10 maximum) may be used with a maximum combined load of 4,000 watt in a single Load Center.

In the home

The IntelliTouch control system can utilize multiple wired and wireless controllers including the wireless Apple Watch®, Andriod interface for phone or tablet, iPhone®, or iPad® (purchased separately), Indoor Control Panel, and the wireless MobileTouch® Wireless Controller. Your existing home PC can also be used to control the IntelliTouch system via the ScreenLogic® Interfaces. A maximum of four ScreenLogic2 interfaces can be used, for example, four Tablets or four in-wall Touch Screen’s, or four PC’s in any combination.

Around the pool

The IntelliTouch control system, SpaCommand® Spa-Side Remote and iS4 Spa-Side Remote provide control buttons for various pool and spa functions. The SpaCommand spa-side remote also provides a temperature display.

At the equipment pad

The pool pump, filter, and various IntelliTouch control system remote controllers and interfaces are connected to the IntelliTouch control system Load Center and/or Power Center enclosure which are located at the equipment pad. The Load Center enclosure is where the high voltage lines from the circuit breaker panel junction box at the home are connected to. The pool service person can periodically check pool operations from the Load Center. Also at the equipment pad there are system pool and spa pipes connected to the pump, heater and filtration system. Mounted on top the valves are motorized valve actuators (with attached 25 ft cable for wiring) used to automatically change the direction flow of water through the plumbing system. There are also temperature sensors and a cable that connects to the heater.

IntelliTouch Control System Components

The main required components of an IntelliTouch system is a Load Center or Power Center, IntelliTouch Control System Personality Kit, and Interface:

- **ScreenLogic Wireless Bundle: (P/N 522104)** – Includes Protocol Interface Adapter and wireless link kit that connects to existing home router. This allows control of IntelliTouch pool and spa systems via PC (requires PC with an Ethernet connection, and Windows® operating system).

  The ScreenLogic2® Interface iOS app gives you complete control over the IntelliTouch® Control Systems. Controlling pool and spa operations couldn't be easier or more convenient. Once the software is installed, you can control everything from pool and spa temperatures, jets, lighting, water features, remote video monitoring, and more right from an Andriod interface for phone or tablet, Apple Watch®, iPhone® or iPad®. Imagine being able to:

  · Easily turn on spa and adjust the desired temperature on the way home from work.

  · Control all circuits (waterfalls, pool lights, fountains, and more) and review history of temperature, pool/spa, heater, and light operation.

  The new software is available free at the Apple App Store. Just browse the App Store on your Apple® device and type in the search term "Pentair" to quickly find.

  For new IntelliTouch Control Systems purchasers, the easiest and most cost-effective way to add control access via the Apple Watch®, Andriod interface for phone or tablet, iPhone, iPad and iPod touch is to purchase a the ScreenLogic2 Interface PC interface kit (Part # 522104).

- **Indoor Control Panel (P/N 520138)** – 3.75'' monochrome backlit LCD control panel. Connects to the IntelliTouch Personality board in the Load Center.
- **MobileTouch® Kit (P/N 520906)** – 3.75'' monochrome backlit LCD wireless control panel with Transceiver antenna. Allows any IntelliTouch wired system to also have a wireless remote with all the capabilities of the Indoor Control Panel. With an average range of 300 feet, pool owners have system control anywhere around the home or yard. Powered by a rechargeable lithium-ion battery. Includes a cradle for recharging. The MobileTouch control panel
  without the Transceiver antenna (P/N 520907) is also available.
- **QuickTouch® II (P/N 521245) and QT4 (P/N 520148) Wireless Remote:** Four-function wireless remote for pool and spa functions of your choice.
- **SpaCommand® (P/N 521176):** 10-function (SpaCommand™) and 4-function (iS4) spa-side remote controller for pool and spa functions of your choice. The controllers can operate up to 150 feet range from the Load Center or Power Center.

Requied Tools

- 3/16 in. diameter drill (for mounting Indoor Control Panel).
- 3/8 in. diameter drill (for mounting Water Temperature Sensor).

IntelliTouch System Components

The main required components of an IntelliTouch system is a Load Center or Power Center, IntelliTouch Personality Kit, and Interface:

Load or Power Center

- **Load Center:** Provides a larger footprint (26" H x 17" W x 5-1/4" D) Includes built-in sub panel (150 AMPS) capable of holding up to eight 1" breakers. Also includes five 25 AMP three HP relays, 110/240 V transformer with secondary side circuit protection. Multiple knockouts for different sizes of conduit are supplied as well as a GFCI side knockout. The Load Center provides ample space for all high and low voltage wiring needs.
- **Power Center:** Offers a smaller footprint (20" H x 17" W x 5-1/4" D) than the Load Center. The Power Center does not include a circuit breaker base. Users should choose this enclosure if they already have existing circuit breakers/sub-panel for their equipment.

IntelliTouch Personality Kits

There are several types of IntelliTouch control systems available for different pool/spa configurations:

- **Shared Equipment: Pool and spa combinations with shared filtration system** – Pool owners can enjoy the convenience of motorized valves for water flow separation between pool and spa. The Personality Kit models are:
  - **i5+3 (P/N 521219)** – Four auxiliary circuits plus filter pump operation (create a Feature circuit for valve actuators without using an existing output auxiliary circuit, and special light functions for color lighting). Five relays are included in the Load Center.
  - **i7+3 (P/N 521220)** – Six auxiliary circuits plus filter pump operation and the +3 option (create a Feature circuit for valve actuators without using an existing output auxiliary circuit, and special light functions for color lighting). Two relays are included in the kit and five in the Load Center.
  - **i9+3 (P/N 521221)** – Eight auxiliary circuits plus filter pump operation and the +3 option (create a Feature circuit for valve actuators without using an existing output auxiliary circuit, and special light functions for color lighting). Four relays are included in the kit and five in the Load Center.
- **Dual Equipment: Pool and Spa with Dual Sets of Equipment** – The IntelliTouch i10+3D (P/N 521222) is designed to operate two sets of pool equipment. Each set of a equipment (Pool or Spa) can control one temperature setting. This IntelliTouch Personality Kit can control up to 10 pumps and/or lighting circuits, plus two heater circuits. The Personality Kit includes, eight auxiliary circuits plus a filter pump.
  The +3 option (create a Feature Macro circuit for valve actuators without using an existing output auxiliary circuit). Five relays are included in the kit and five in the Load Center. You can create a Feature circuit for valve actuators without using an existing output auxiliary circuit, and special light functions for color lighting.

- **Single Equipment: Pool Only or Spa Only Applications** – The IntelliTouch i5S+3 (P/N 521219) and i9+3S provide advanced automation for a single body of water. The i5+3S (P/N 521223) and i9+3S (P/N 521224) Personality Kits includes four auxiliary circuits plus filter pump operation. Five relays are included in the Load Center. The i9+3S Personality Kits includes eight auxiliary circuits plus filter pump operation and the +3 option (create a Feature Macro circuit for valve actuators without using an existing output aux circuit). Four relays are included in the kit and five in the Load Center. You can create a Feature circuit for valve actuators without using an existing output auxiliary circuit, and special light functions for color lighting. This model also allows HI-TEMP and LO-TEMP settings.

- **Expansion Kits:** Models i5X (P/N 521225) and i10X (P/N 521226), offer five or ten additional Auxiliary Circuits for systems i9+3, i9+3S and i10+3D. Each IntelliTouch Expansion Kit requires a Load Center (P/N 521213) or Power Center (P/N 521214). Up to three Expansion Kits and Load or Power Centers may be added to a system, for control of up to 38 Auxiliary Circuits (40 auxiliary circuits for i10+3D).

IntelliTouch Personality Kit Contents

The following items are included in the IntelliTouch Personality Kit.

- An IntelliTouch interface
- Outdoor Control Panel. Includes a main controller circuit board and a Personality circuit board.
- Power Relays - (Models i5+3, i5S+3 no relays, i7+3 Qty. 2, i9+3, i9+3S Qty 4, i10+3D Qty 5, i5x (no relays, i10x (5 relays)
- Valve Actuators - Qty 2 (Models i5+3, i7+3, i9+3)
- Temperature Sensors - Water Sensor (with long cable, including o-ring and hose clamp), Air Sensors (with short cable). For i10+3D only, two Water Sensor (with long cable)
- Wiring Diagram Label for models i5S+3 and i9+3S and i10+3D. For models i5+3, i7+3, i9+3, refer to the Load Center and Power Center inside front door.
- Load Center or Power Center parts bag: Includes relay screws (see page 2).
- Label Sheet - A set of adhesive labels for custom identification (used to label the outdoor control panel buttons). Use a pair of fine-tip tweezers to remove the labels from the sheet.
- IntelliTouch Personality Kit Installation Guide (P/N 521074).

Note: *For information about the IntelliTouch Indoor Control Panel and MobileTouch® Wireless Controller, refer to the IntelliTouch System User's Guide (P/N 521075).*

Optional Equipment (IntelliChem)

- IntelliChem® no-pump (P/N 521357), one-pump (P/N 521356), two-pump (P/N 521355)
- IntelliChem Installation and User's Guide (P/N 521363)

IntelliChem® Water Chemistry Controller (P/N 521356)

ScreenLogic2 Interface Kit

ScreenLogic Wireless Bundle (P/N 522104): – Includes Protocol Interface Adapter and wireless link that connects to existing Desktop or Laptop PC. This allows control of the IntelliTouch® and EasyTouch® Control Systems via PC (requires PC with an Ethernet connection, and Windows® XP operating system or later).

IntelliTouch Accessories

521225	i5X Expansion Kit five Auxiliaries.
520906	MobileTouch Wireless Control Panel and Transceiver.
520355	Colored Faceplate Kit for surface-mount. Tan, Grey, or Black with label set.
520354	Colored Faceplate Kit for recessed-mount. Tan, Grey, or Black with label set.
520335	Mud box recessing SpaCommand into deck or tile.
520138	Indoor Control Panel, White.
520198	Two-Speed Three HP Relay up to three additional valve actuators.
520285	Valve module for controlling three additional actuators.
520106	Three HP Power Relay.
687000	Two Telephone remote control for any single circuit, usually Spa mode.
520148	QuickTouch II Four-Function Wireless Remote Kit, Transmitter and Receiver.
520406	Dimmer Module. Supports up to 4,000 Watts maximum load (four dimmers handling 1,000 Watts each).
520442	i-Link Home Automation Adapter Interface for IntelliTouch.
520403	Dual Heater Kit. Utilize a gas heater and heat pump.

IntelliTouch Control System in Your home

Personal Computer (PC): Existing home owner's PC or Laptop. Connects to a wireless router and the IntelliTouch Protocol adapter for control of IntelliTouch pool/spa systems. Requires a PC/Laptop (Windows XP) with Ethernet/RJ45 adapter installed.

Indoor Control Panel: This control panel consists of a 3.75" monochrome backlit LCD and connects to the Personality Board in the Load Center or Power Center for control of IntelliTouch pool and spa systems.

MobileTouch: This wireless control panel has a 3.75" monochrome backlit LCD. Receives and transmits commands via the Transceiver antenna located at the Load or Power Center.

Wireless router: Connects to the PC or Laptop via Ethernet connection to the Protocol adapter.

Protocol adapter: Connects to wireless router via Ethernet connection and to Personality board (Load/Power Center) via a four-wire 22-AWG cable.

Load Center or Power Center. The main control center. Includes the Outdoor Control Panel that controls pump, heater, and light relays. Receives commands via Protocol adapter, and wireless and wired control panels connected to the Personality board.

MobileTouch Transceiver antenna: Connects to the Personality circuit board. Sends and receives commands to and from the MobileTouch wireless control panel.

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Section 2

Operating the IntelliTouch® Control System

Main Screen

(Indoor Control Panel and MobileTouch® Wireless Control Panel)

Note: For information about the KEYPAD LOCK feature, see page 83

Heater Enabled Indicator (Flame): Flickers when heater is on. Sun icon indicates solar is selected in Heat menu.

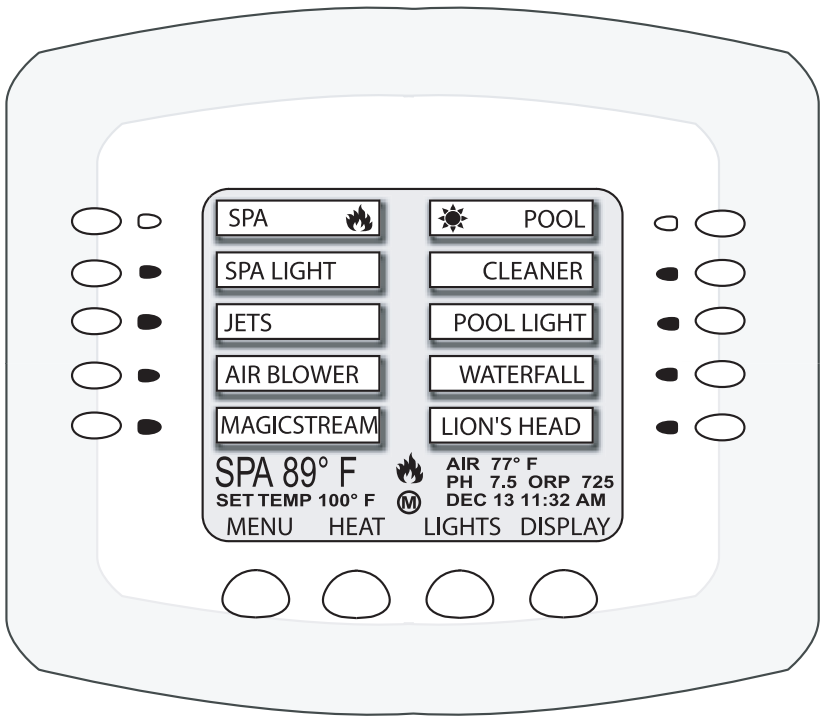
POOL or (LO-TEMP) Mode: Press POOL button to switch on filter pump and heater, (if heater is enabled). For shared equipment systems (i5+3, i7+3, i9+3); valves will rotate to pool position. for "Single Body" systems (i5S+3, i9+3S); Use this button to set pool or spa to LO-TEMP (temperature) setting.

Spa or (HI-TEMP) Mode: For shared (i5+3, i7+3, i9+3) and dual (i10+3D) equipment systems; switches on filter pump, rotate valve actuator (to isolate spa water from pool water), and fires heater. For single body equipment systems (i5S+3, i9+3S); Use this button to set pool or spa to HI-TEMP (temperature) setting.

Flame Icon: Displays when Heater is on for SPA or POOL.

SPA: Displays when SPA or POOL button is pressed to activate spa or pool mode. Displays current and actual spa or pool water tempterature setting.

Menu Button: Access IntelliTouch menu screens (see page 8).



Green LED: Circuit LED indicator illuminates when button is pressed to activate circuit.

Auxiliary (AUX) circuit Buttons (10): Use buttons to switch equipment on or off. (lighting, pump, automatic pool cleaners, jet pumps and fountains).

Day and system time. Current air temperature.

Display Button: Access the following screens:

Ⓜ **Main Screen: Displays** up to ten (10) AUX circuits for various equipment control various equipment.

① **Display #1 (#2, #3, #4):** Displays equipment circuits connected to main Load Center (1). Also can display additional installed expansion centers #2, #3, #4 (i5x, i10x).

Ⓕ **Feature Circuits:** Use "Feature" circuits to assign additional circuits to controll valve actuators for water features, spa spillway, 2-speed pump, and macro circuits.

Heat Button: Access the "HEAT" menu: Adjust pool and spa water temperature and setup heating source (see page 10).

Ⓜ Main screen indicator

① Display screen #1. (Shows AUX circuits for main Load Center.) For additional expansion centers, Display #2, #3, and #4 can be selected.

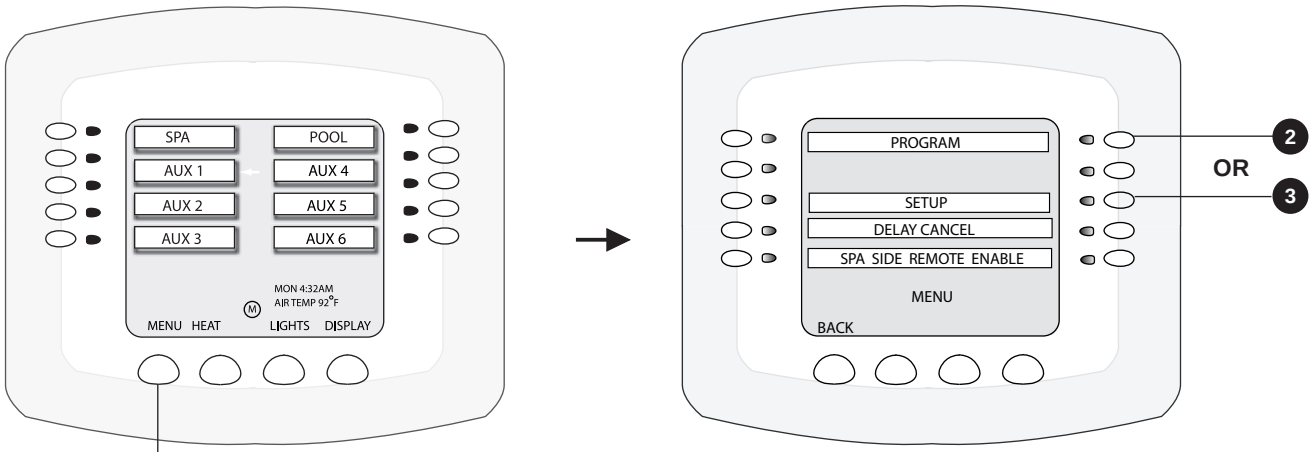
Ⓕ Feature Circuit screen.

- Press the DISPLAY button to toggle between screens.

Lights Button: Access the Lights screen. Operate and setup lighting effects using IntelliBrite, SAm, SAL, and Fiberworks colored lighting.

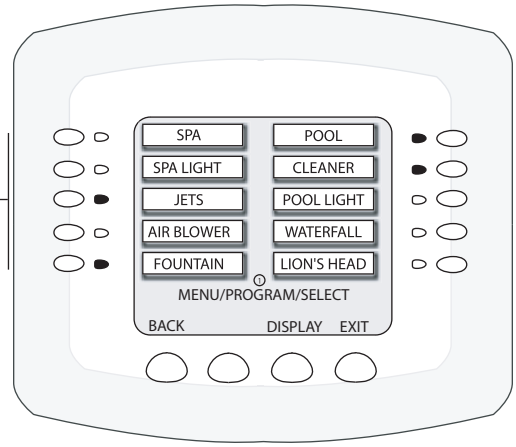
IntelliTouch® Control System Menus

The Indoor Control Panel menus provide system settings to automatically control the general day-to-day pool and spa operations. From the PROGRAM menus you can program equipment to switch on and off at specific times. From the SETUP and ADVANCED menus circuit functions, valves and other equipment can be setup.



1 Press **MENU** button

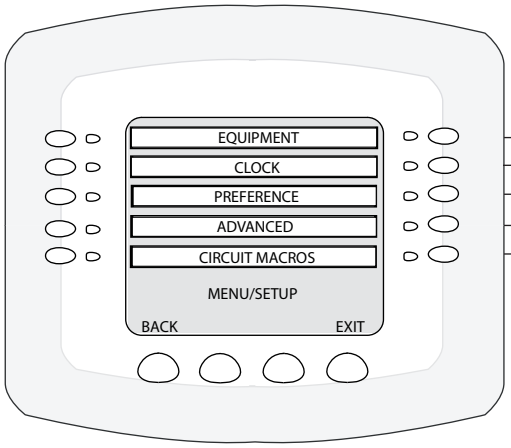
Press **PROGRAM** or **SETUP** button



SPA (other spa circuits may be displayed under on the left-side under the SPA button)

POOL (other pool circuits may be displayed under on the right-side under the POOL button) (see page 13)

2 **PROGRAM** menus

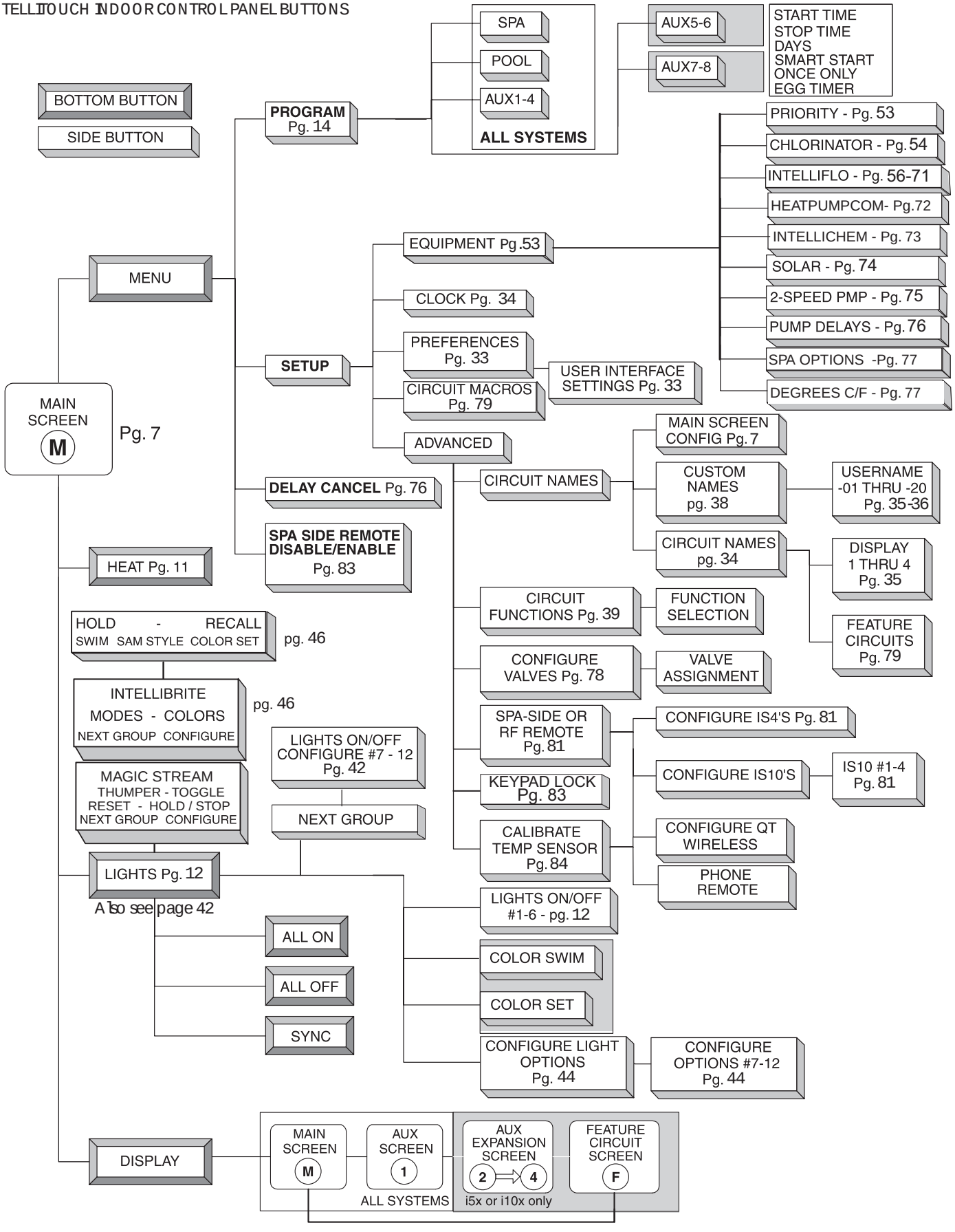


Setup equipment (page 53)
Set the system clock (page 34)
Setup control panel features, backlight, beep etc. (page 33)
Setup circuit names, functions, configure valves (pages 34-41)
Setup MACRO circuit functions (page 79)

3 **SETUP** menus

Indoor Control Panel Menus

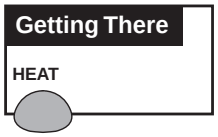
INTELLITOUCH INDOOR CONTROL PANEL BUTTONS



Heating your Spa and Pool

From the Heat screen, use **Spa** button (left side) or **Pool** button (right side) to adjust the heat temperature for your spa or pool. You can also switch the heater on or off from this screen. For single-body systems (models i5S+3 and i9+3S), spa and pool are replaced with **HI-TEMP** and **LO-TEMP** settings (for more information see page 7).

Adjust Spa or Pool Heat Settings



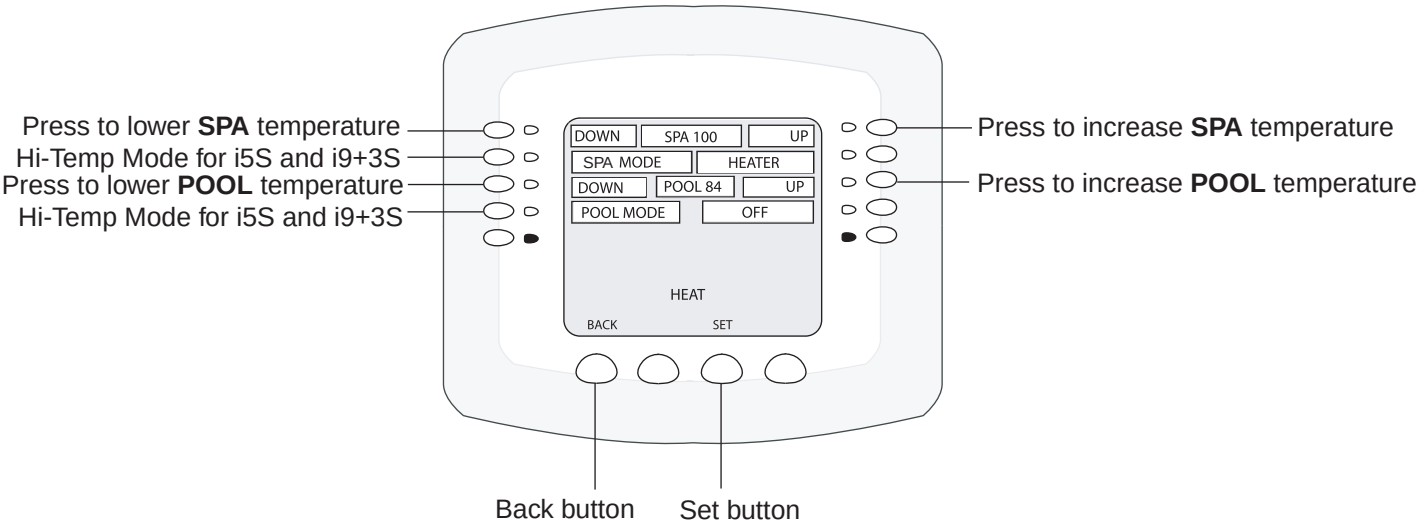
To adjust the spa or pool set point temperature, go to the **Heat** screen:

Note: *Be sure the* ***Spa Mode*** *does not display "OFF." If "OFF" is displayed, refer to "Configuring the Heating System Options," page 11, for more information.*

To adjust the spa or pool set point temperature, press the **HEAT** button at the bottom of the screen:

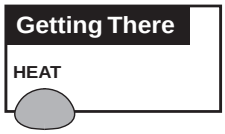
- **SPA:** Press the spa **Up** or **Down** buttons (top left and right side) to raise or lower the spa water temperature. The set point water temperature is displayed in the middle of the screen. The spa temperature setting can be adjusted from 40° F to 104° F or (4° C to 40° C).
- **POOL:** Press the pool **Up** or **Down** buttons (third down from the top, left and right side) to raise or lower the pool temperature. The set point water temperature is displayed in the middle of the screen. The pool temperature setting can be adjusted from 40° F to 104° F or (4° C to 40° C).

1. Press the **Set** button to save the set point temperature settings. The current spa and pool water temperatures are displayed on the main screen (see page 7).
2. Press the **Back** button to return to the Main screen.



Selecting the Heating System

Use the heat menu settings to specify the set point temperature and select the heat source to heat the pool and spa water. The water will begin to heat when the heater is manually switched on, by pressing the Pool, Spa button on the Indoor Control Panel or the Valves (V) button on the Outdoor Control Panel, regardless of the heater selection (off) in the Heat menu. The optional iS10 Spa-Side remote, iS4 Spa Side remote or QuickTouch QT4 wireless remote can be used to switch the heater on. The IntelliTouch system supports gas, electric and solar heating systems. IntelliTouch will use the heating source that is selected. Multiple heaters are supported. IntelliTouch automatically selects the heating system that is most effective for the user settings. The heat source selections are:



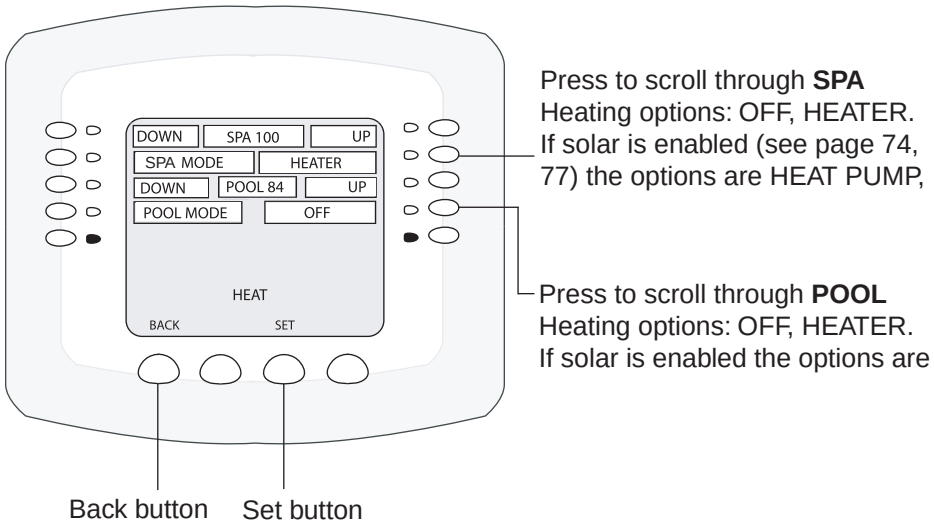
To select the heating system, press the **HEAT** button at the bottom of the screen.

- **SPA:** Press the left or right side button next to SPA MODE to select the heating mode for the spa.
- **POOL:** Press the left or right side button next to POOL MODE to select the heating mode for the spa.

1. Press the **Set** button to save the heat settings.
2. Press the **Back** button to return to the Main screen.

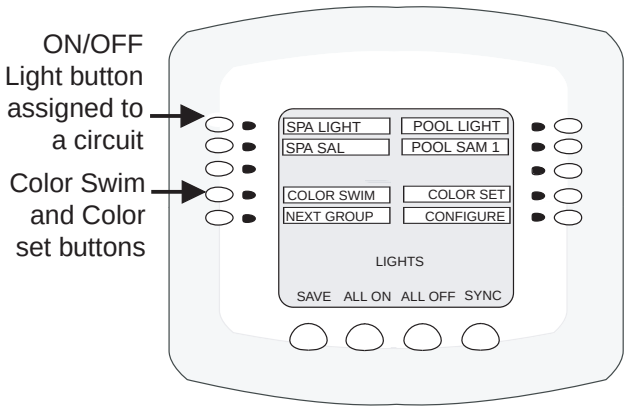
The heat options are:

- **OFF** - No heating even though pump and other circuits may be operating.
- **HEATER** - Gas heater only. When the heater is active it will continue heating the water until the heater's current highest set point temperature triggers the heater sensor (104° F or 40° C). Do not activate the heater without running the pump. The heater will not run if water flow is not detected.
- **HEAT PUMP** - Heat pump only.
- **H PUMP PREF.** - For when a heat pump is in combination with other heating systems and you want to use the heat pump only when it is most effective.

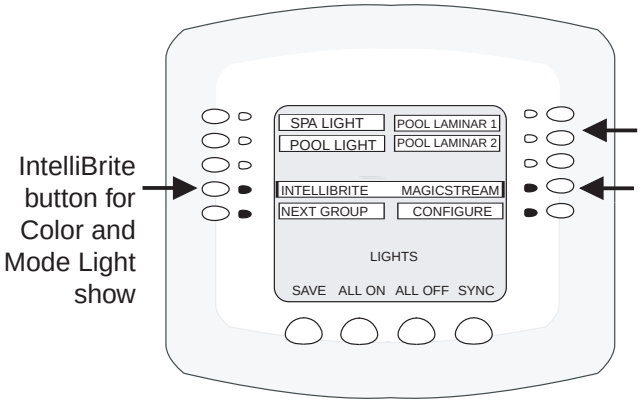


Switching on Lights Manually

Up to 12 individual lights (IntelliBrite® LED light, MagicStream® laminars, SAm® or SAL color lights) can be switched on or off from the Lights screen. There are two light screens which can display up to six light circuits. Use the "Next Group" button to access each group of six lights. You can also use the "ALL ON" or "ALL OFF" buttons to switch all lights on or off. The "SYNC" button will also switch on then sync all color changing lights to synchronize their colors when using the "Color Swim" feature. You can also configure IntelliBrite® lights, MagicStream laminar lights, and setup the *Color Swim*, and *Color Set* special lighting features from the Lights screen. Lights that have dimming functionality can be also dimmed from the Lights screen. S*Am*, S*AL*, fiber optic, Halogen lights, and IntelliBrite cannot be dimmed. For more information, refer to "Setting up Lighting Options," page 42.



Lights screen (S*Am*/S*AL* Color Swim and Color Set)



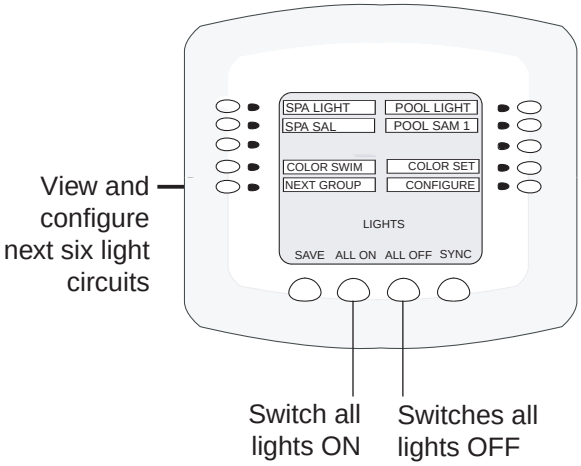
Lights screen with IntelliBrite lights and MagicStream laminars

To switch on lights, press the **Lights** button on the bottom of the Lights screen.

1. To switch a light on, press the button next to the name of the light. Up to six (6) light circuits can be displayed in the upper part of the Light screen.
2. If there are more than six (6) light circuits assigned, press the **NEXT GROUP** to see these circuits.

- Press the **All ON** button at the bottom of the screen to switch all the lights on.
- Press the **All OFF** button at the bottom of the screen to switch off the lights when you are done.

Note: *Use the SYNC button to switch ON all IntelliBrite, MagicStream laminar lights, S*Am, SAL, *or FIBER*works® *color changing lights to synchronize their colors when using the "Color Swim" lighting feature.*



Special Lighting Features

At least two (2) IntelliBrite®, SAm® and/or SAL, and/or FIBER*works*® lighting systems are required to use the Color Swim, Color Set and Sync special lighting features. Up to twelve (12) lights can be independently controlled from the **Lights** screen.

S*Am*, S*AL*, or FIBER*works* lighting special lighting features:

Note: *The IntelliBrite Color Swim and Color Set (SAm Style) feature is accessed from the Lights screen. See page 46 for more information.*

- **Color Swim** - Presets the light circuit to transition through colors in sequence. This gives the appearance of colors dancing through the water. You can adjust the delay of each light to make the colors move at different speeds. This feature requires a separate relay for each light.
- **Color Set** - Presets the light circuit to a specific colors. This feature requires a separate relay for each light.
- **Sync -** Switches on all IntelliBrite, S*Am*, S*AL*, or FIBER*works* color changing lights to synchronize their colors.

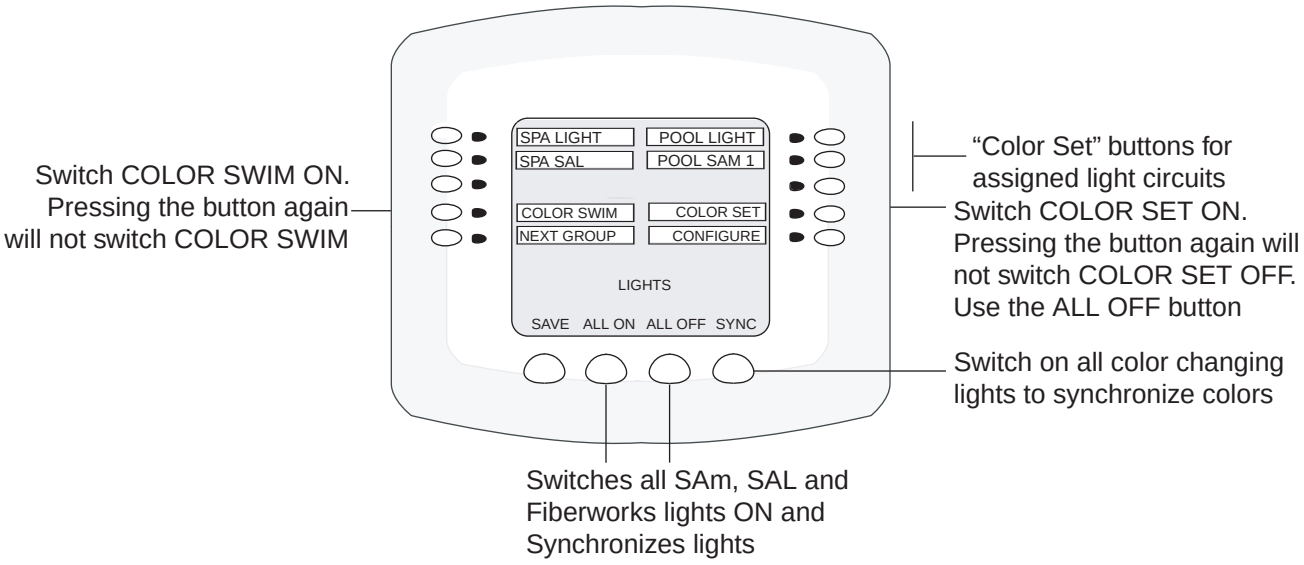
Note: *For SAm and SAL lighting setup information, see "Setting up Lighting Options," on page 42.*

To activate the special lighting features, press the **Lights** button on the bottom of the main screen.

Light buttons:

- Press the COLOR SWIM button to start the changing color lights feature.
- Press the COLOR SET button to set all lights to a pre-programmed color.
- Press the SYNC button to switch on all color changing lights to synchronize colors.
- To configure lights on this screen press the CONFIGURE button.

Note: *Depending on what kind of light is being activated and what mode it was in previously, it may take up to a minute or more after the Color Set, Color Swim, or Sync button is pressed to activate the feature.*

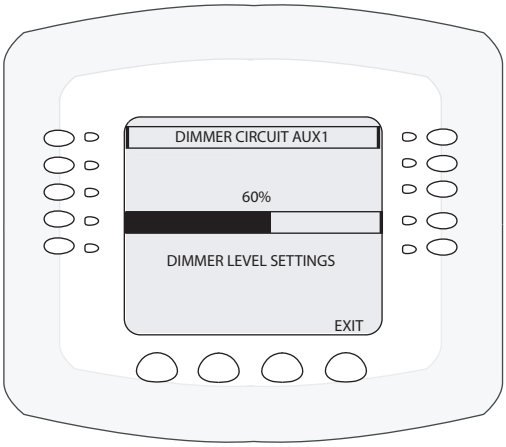


Dimming Lights

In order to dim lights, the Dimmer Module (P/N 520406) must be installed by a qualified electrician in the IntelliTouch Load Center or Power Center. Only incandescent tungsten filament lights can be dimmed (not Halogen lights). Lights that have dimming functionality can be dimmed from the Lights screen. S*Am* or S*AL* fiber optic lights, MagicStream Laminars, Halogen and IntelliBrite lights **cannot** be dimmed. For more information, refer to "Setting up Lighting Options," page 42. The circuit must be assigned to the "Dimmer" circuit function (see page 41) in order to operate correctly.

Getting There

MENU → SETUP → ADVANCED → CIRCUIT FUNCTION → (NAME)



To dim lights, go to the assigned circuit name:

1. Press the button next to the circuit name. A light should come on and be switched on at the specified dimming level.
2. To change the dimming level, hold the circuit button down until the **Dimmer Level Settings** screen displays as shown.
3. Press the button next to **Decrease** to decrease the dimming level, and the button next to **Increase** to increase the dimming level. The percent value displays the current dimming level setting.
4. Press **Save** when done. The light will adjust to the set dimming level.

Note: *Macros can turn on light dimming circuits, but lights cannot be dimmed through the macro. The dimming level must be changed for each light dimming circuit.*

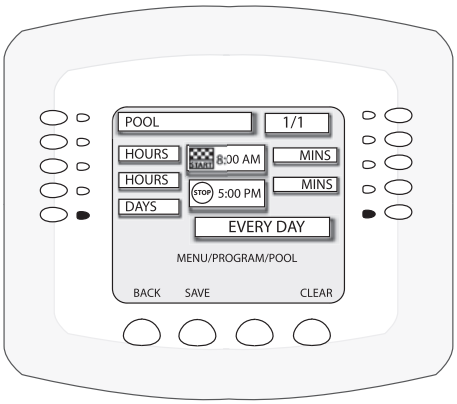
Setting ON/OFF Times for Equipment (PROGRAM)

You can create schedules to automatically run equipment like pool filtration or lights. Any circuit can be set to switch on and off on every day of the week. When a relay is switched on manually, it remains on until you either switch it off manually, or the next time the relay is scheduled to be switched off. For example, if the filter pump or any circuit is scheduled to run from 9AM to 4 PM and the programmed schedule is turned OFF at 1:00 PM and then turned on at 1:10 PM, the circuit will turn OFF at its programmed OFF time of 4:00 PM. But if the circuit is turned on after 4:00 PM, the factory set Egg Timer of 12 hours is now engaged. So if the circuit was turned on at 6:00 PM that circuit will turn off at 6:00 AM (12 hours later). If the circuit was turned ON at 5:00 PM and because a programmed OFF time had been set to turn off at 4:00 PM, the circuit would operate for 11 hours. A spa or pool program can be overridden using the Spa or Pool button to switch the circuit on.

From the "Program" screen, you can schedule IntelliTouch to automatically run equipment like pool filtration or lights. Any circuit (auxiliary, feature, or macro) can be scheduled to switch on and off at a specific time and on a any day(s) of the week. Up to 99 total programs may be created for all circuits combined.

Schedule a program: The "Program" screen displays a program counter in the upper right (1/0) side of the screen. This counter indicates the current number of scheduled programs. After setting the start and stop time and the day(s) to run the first scheduled program, press **Save** to view the first program (1/1) and increment the counter to next program. To access the next program screen, press the button next to the counter label (2/1). Set the start and stop time and the day(s) to run the second scheduled program (2/1). Repeat this process to enter another program. For example, **2/3** indicates that you are viewing **program 2 of 3** total programs saved for that circuit. 4/3 indicates that you are creating program 4 but only 3 are currently saved. After pressing the Save button, the counter updates to 4/4. Press the button to the right of the label counter to step through each program first then display the unsaved program screen. The following describes how to program equipment to run the pool filtration system. This process is the same for any installed equipment listed on the screen.

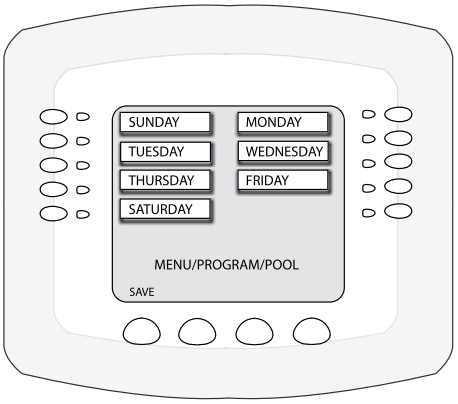
Go to the **PROGRAM/SELECT** equipment screen. From this screen you can select SPA, POOL or any of the AUX equipment circuits to program.



Getting There

MENU → **PROGRAM** → **POOL** (or any other circuit)

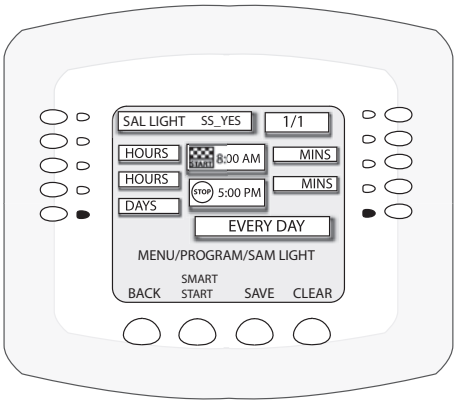
1. Press the top right button next to **POOL** to access the "Program" screen to program the pool equipment.
2. **To set the start time:** Press the left side button next to **HOURS** (and the start flag icon) to set the start hour. Press the right side button to set the minutes for the start time. To use the "EGGTIMER" feature, see page 17.
3. **To set the stop time:** Press the left side button to **HOURS** (and the stop icon) to set the hour to stop the program. Press the right side button to set the minutes for the stop time. To use the "ONCE ONLY" feature, see page 16.
4. Press the left side button next to **DAYS** to specify the day(s) to run the program one time. Choose "**EVERYDAY"** to run the program one time each day of the five days. To choose specific days to run the program, press the button next to **DAYS**. The days of the week screen displays. The LED lights next to the days of the week will all be lit. To switch off a day, press the button next to the displayed day. The light switches is off. To set all day on, all lights should be on. Press **Save** to save the setting. The previous screen will be displayed.



5. Press **Save** to save the current program. The program counter displays (1/1) indicating that you have saved one (1) program for the selected circuit. To erase a program press the **Clear** button then **Save**.
6. Press the **Back** button to return to the **SPA, POOL** and **AUX** equipment selection screen to choose other equipment. Press the **Exit** button to return to the main screen.

Smart Start (Setting up SAm, SAL and IntelliBrite lights)

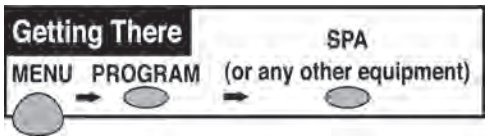
Smart Start (SS_Yes/SS_No) - When a light circuit function is setup as a SAM , SAL or IntelliBrite light, use the Smart Start feature (SS_Yes) to automatically begin changing colors when the light circuit is switch on. Smart Start can also be assigned to all other special light circuits (i.e. Color Wheel, Photon Generator®, Light, see page 41).



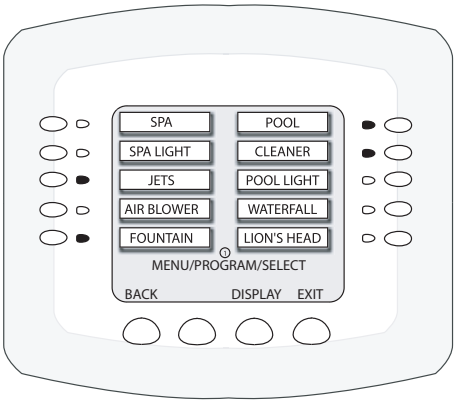
1. Press the top right button next to **SAM LIGHT** to program the light circuit. For this example the SAL LIGHT circuit name has already been selected from the Circuit Names list (see page 37).
2. **SS_Yes/SS_No** displays next to the light circuit name.
3. **Smart Start** displays at the bottom of the screen. Press the button on the bottom of the screen to toggle between SS_Yes and SS_No. Select **SS_Yes** to automatically begin changing colors when the light circuit is switch on.
4. Setup each light circuit as described above in steps 2 - 5.

Using the Once Only Timer

The “Once Only” programming feature enables IntelliTouch to automatically switch equipment on for one time only. For example, you can set to have the spa and heater switch on before you get home from work for one evening. Unlike a regular scheduled program, the “Once Only” program does not repeat.



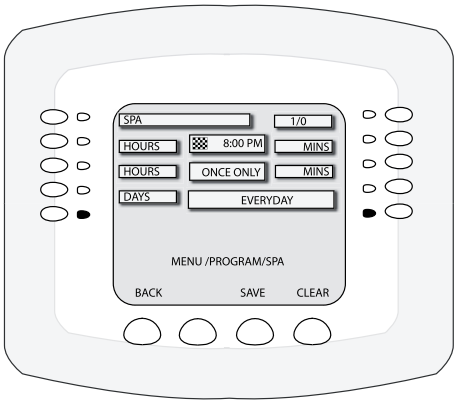
Go to the **PROGRAM/SELECT** equipment screen. From this screen you can select SPA, POOL or any of the AUX equipment circuits to program.



The following example describes how to program the spa filter pump and heater to switch on at a specific time:

1. Press the button next to **SPA** to access the “Program/Select” screen. If this is the first program, the program counter displays
(1/0). After this program is saved, (1/1) is displayed (see step 5). Up to 99 total programs may be created for all circuits combined.
2. Press the left side button next to **HOURS** and select **ONCE ONLY** (Once Only is displayed one press after 11:00 PM).
3. Press the left side button next to **HOURS** to set the start time.

   Note: *Press the button under CLEAR to reset the default settings.*



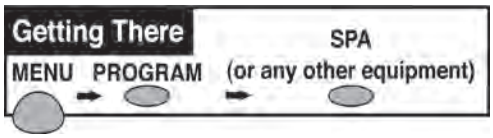
4. Press the left side button next to **DAYS** to specify the day(s) to run the program one time. Choose **EVERYDAY*** to run the program one time each day of the five days. If the time you are setting has passed for today, the **ONCE ONLY** program is set for the next day. To choose specific days to run the program, press the button next to **DAYS**. The days of the week screen displays. The LED lights next to the days of the week will all be lit. To switch off a day, press the button next to the displayed day. The light switches off. To set all days on, all lights should be on.

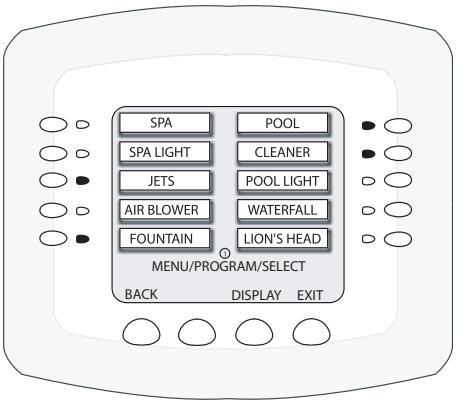
   Note (*): If you select EVERYDAY, the programmed time will occur the next day or later the same day if the time has not yet been reached. If you select a certain day of the week (only one) the programmed time will happen the next day of the week.
5. Press **Save** to save the current program. The program counter displays (1/1) indicating that you have saved one (1) program for the selected circuit.
6. Press the **Back** button to return to the **SPA, POOL** and **AUX** equipment selection screen to choose other equipment.
7. Press the **Exit** button to return to the main screen.

Setting the Egg Timer Function

The “Egg Timer” feature lets you manually switch on equipment and switch off automatically after a specified time. You can set this timer feature for other equipment such as lighting, the spa, or the spa jets. Equipment can be programmed to be switched on for one minute to 24 hours. You can also use the “Don’t Stop” feature to override the 12 hour default switch off time, and run continuously until manually switched off.. If you have never set the timer for a specific piece of equipment, the factory default time is set to 12 hours.

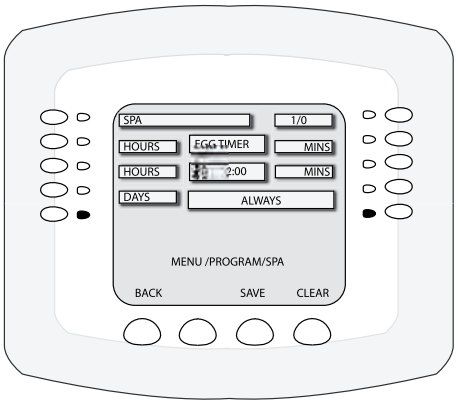
If you have a power outage, this feature will not switch the equipment back on, you need to use set the system in “Service” mode at the outdoor control panel center to switch the equipment back on. For more information, refer to “Using the Service Personnel Screen” on page 85.





Go to the **PROGRAM/SELECT** equipment screen. From this screen you can select SPA, POOL or any of the AUX equipment circuits to program. The following example describes how to program the spa equipment using the “Egg Timer” feature:

1. To program the spa filter pump and heater to switch on and off at a specific time, press the button next to **SPA** to access the “Program/Select” screen. If this is the first program, the program counter displays (1/0). After this program is saved, (1/1) is displayed (see step 6). Up to 99 total programs may be created for all circuits combined.



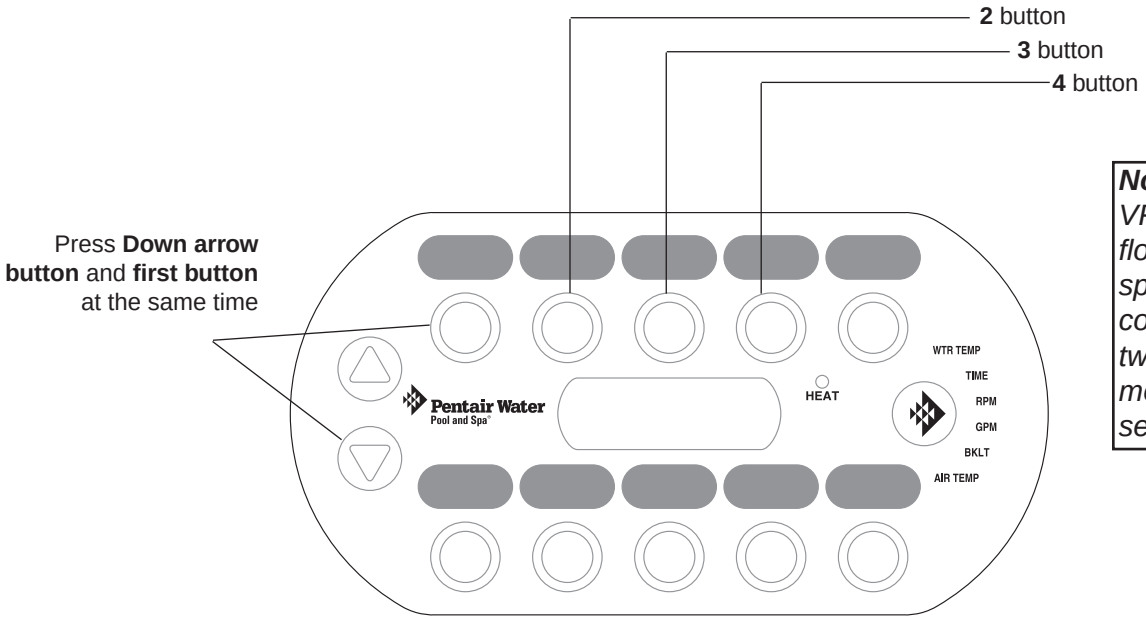
2. Press the left side button next to **HOURS** until **EGG TIMER** is displayed. (EGG TIMER is displayed one press after 11:00 PM).
3. Press the left side button next to **HOURS** (under **EGG TIMER**) to set the count down run time in hours (from 00:00 to 23:00 hours). You can also select “**DON’T STOP**” to run the circuit continuously until switched off manually. “DON’T STOP” is displayed one press after 23:00.
4. Press the right side button next to **MINS** to set the run time minutes.

   Note: *Press the button under CLEAR to reset the default settings.*

5. For the “Egg Timer” feature **ALWAYS** is displayed, indicating the program will run and automatically shut-off in the specified time.
6. Press **Save** to save the current program. The program counter displays (1/1) indicating that you have saved one (1) program for the selected circuit.
7. Press the **Back** button to return to the **SPA, POOL** and **AUX** equipment selection screen to program other equipment.
8. Press the **Exit** button to return to the main screen.

SpaCommand® Ten Button Spa-Side Remote

The SpaCommand spa side remote controller can control up to ten functions including a spa temperature adjustment. As many as four SpaCommand remotes can be installed in i5+3, i5S+3, i7+3, i9+3, i9+3S, and i10+3D systems. The remote controller is for use with the IntelliTouch systems at the water's edge. Five (5) in-line buttons control up to ten (10) system functions numbered one through five from left to right as shown (if the system allows). A label above or below the buttons identifies each circuit function. A red status LED above and below the toggle button indicates which row (Top or Bottom) is active. When one of the in-line buttons is pressed, an adjacent red status LED will be on light, indicating that the circuit has been activated. The default circuits activated by each button are shown in the table below. The remote includes an LED display shows the current spa water temperature. The spa temperature may be increased or decreased by pressing the up or down arrow button located under the display. The temperature display will blink while being changed. After setting the desired temperature, the display will return to steady and show the actual temperature as it meets the set point. The temperature set by the remote is only temporary. Any two buttons can be assigned to increase or decrease the IntelliFlo VF or VS pump's flow (GPM) rate or speed (RPM). Each press of the button increases or decreases the pump's flow rate or speed (see page 81) until the GPM or RPM is reached as specified in the IntelliFlo menu. When the Spa mode is switched OFF, the temperature set at the Indoor Control Panel will resume the next time the spa mode is activated (see "Spa Manual Heat" on page 77). The Spa Mode will automatically turn off after 24 hours. For iS10 setup and configuration information, see page 30 and 81.



iS10 Spa-Side Remote Controller

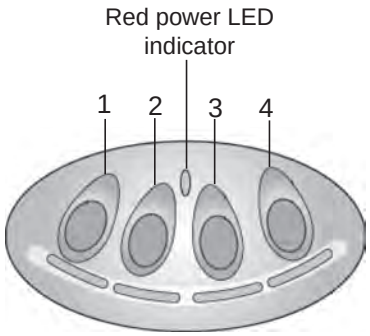
Note: *IntelliFlo VF or VS pump flow rate (GPM) or speed (RPM) can be controlled from any two iS10 buttons. For more information, see page 81.*

IntelliTouch System (adding multiple spa-side remote)

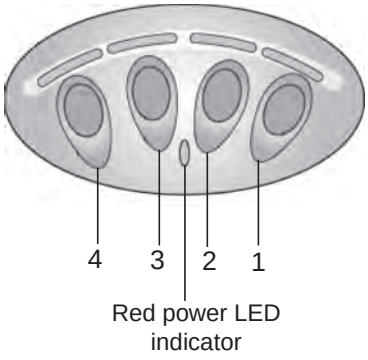
i5+3, i7+3, i9+3, -10+3D,	SPA	POOL
i5S, i9+3S	Top Row HI-TEMP	Bottom Row LO-TEMP
	AUX 1	AUX 5
	AUX 2	AUX 6
	AUX 3	AUX 7
	AUX 4	AUX 8

iS4 Spa-Side Remote Controller

The iS4 Spa-Side remote controller is a double-insulated, waterproof device that is UL (1563) listed for installation at the water's edge. The iS4 is typically installed at the tile-line of the spa wall, or in the deck within arm's reach of a spa occupant. The iS4 provides remote switching of up to four control circuits from the spa or nearby location. Use the iS4 for switching on the spa pump and heater or other auxiliary equipment (i.e., lights, jet pump, air blower, etc.). The red LED status light glows steady when in spa mode and flashes while the spa is heating. For iS4 button assignment information, see page 81.



iS4 Spa-Side Remote Controller
(Wall or tile mount)



iS4 Spa-Side Remote
Controller (Deck mount)

Note: *IntelliFlo VF or VS pump flow rate (GPM) or speed (RPM) can be controlled from any two iS4 buttons. For more information, see page 81.*

MobileTouch® Wireless Controller

The MobileTouch wireless controller provides the same functionality as the IntelliTouch Indoor Control Panel. It has an operating range of up to 300 ft. from the MobileTouch transceiver antenna (line of sight) which is typically located near the IntelliTouch load center. The optimum wireless transmit and receive range may be affected by physical obstructions, (especially those containing metal), weather conditions, and geographical features.

The MobileTouch controller screen is an LCD (liquid crystal display) which can be sensitive to sunlight. When exposed for extended periods the LCD screen will heat up and go black. If this happens, place the remote in a shaded area and allow the screen to cool down. Do not attempt to adjust the contrast or the screen will be unreadable when it eventually cools. When used outside, keep the remote covered or in a shaded area. Prolonged exposure to sunlight may permanently damage the unit.

⚠ **WARNING!** Do not plug in the AC adapter to a power source within five (5) feet of the pool and spa. Canadian installations require a minimum of (3) meters from pool water. Do not recharge outdoors. Only use Pentair Water Pool and Spa® approved AC adapter transformer.

MobileTouch Wireless
Controller

The MobileTouch wireless controller is water resistant and can be exposed to temporary splashing or wet hands. However, the controller is not intended to be submersed. Remove unit immediately if it is dropped in the water or exposed to rain. Store the unit indoors in a dry environment. Be sure the gold charging contacts are dry before charging.

MobileTouch Wireless Controller (Previous Model)

The previous model of the MobileTouch wireless controller and Transceiver antenna cannot be used with the latest model of the MobileTouch wireless controller and Transceiver antenna. Both models cannot coexist in the same IntelliTouch system.

Charging the MobileTouch® Wireless Controller

When you are not using the MobileTouch controller, place it in the cradle to recharge the battery. This allows the battery to be fully charged at all times.

To charge the MobileTouch controller battery:

- Plug the AC adapter into an AC wall outlet. Insert the AC Adapter plug into the bottom of the cradle and place the MobileTouch controller in the cradle. ***Note:*** *When the MobileTouch controller is placed in the cradle the display and backlight will be on. After five minutes the backlight will shut off. The MobileTouch controller and display are always on when seated in the cradle. To turn the backlight on, press any button.*

Charging the battery:

- If the battery screen icon displays one or no bars or the screen is blank, this may indicate that the battery cannot power the device and needs recharging. During battery recharge, the battery icon bars scroll from right to left. A complete battery charge takes about 3 to 4 hours. After a complete battery recharge, the battery icon is replaced with a **power plug** icon, indicating the battery is fully charged and is now operating on AC power from the cradle. ***Note:*** *If the battery requires replacement, only use Pentair Water Pool and Spa® replacement battery (P/N 520815Z).*

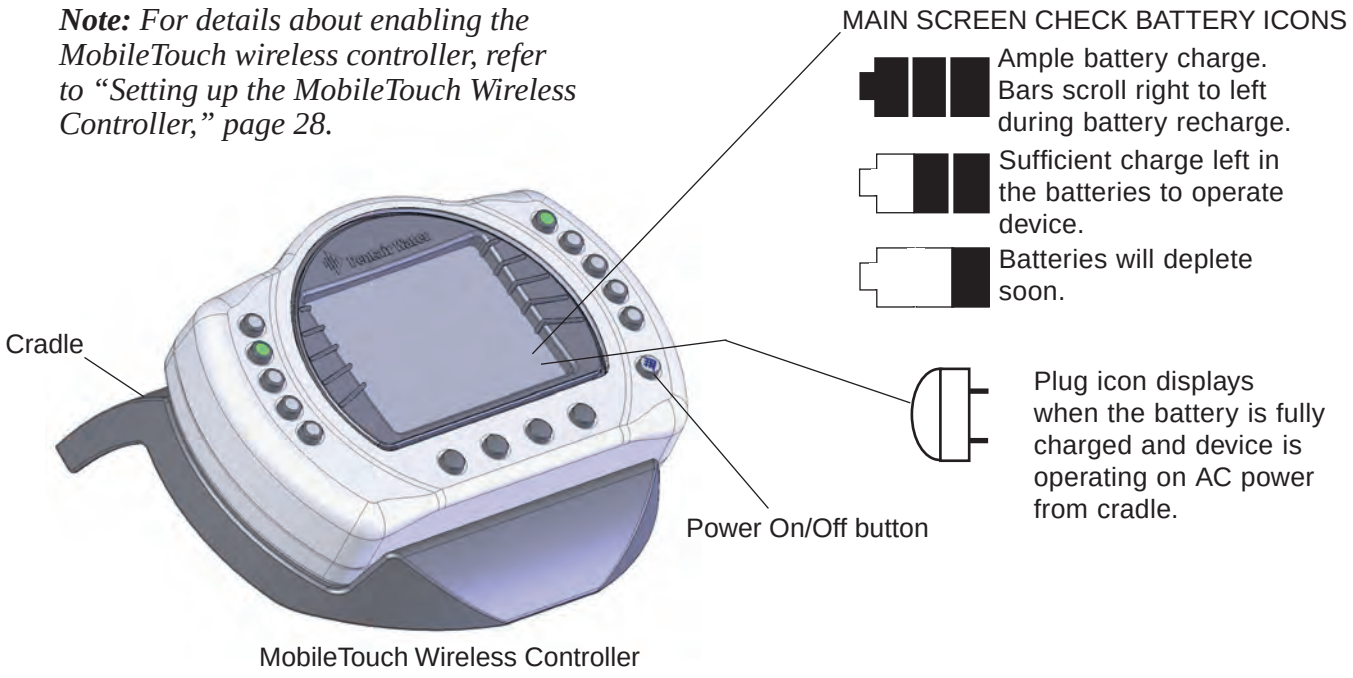
Using the MobileTouch Wireless Controller

The range of the MobileTouch wireless controller can be up to 300 feet from its transceiver antenna (line of sight). The transceiver antenna is typically located outside near the IntelliTouch Load Center. The device can be used all day at full power with a complete battery charge (3 to 4 hours).

To use the MobileTouch wireless controller:

1. Remove the MobileTouch wireless controller from the cradle. The controller can also be used while seated in the cradle with AC power connected to the cradle.
2. Press the Power button on the front right-side to switch the unit ON. The main screen is displayed. The LCD backlight will turn off in five minutes if not in use. The battery icon displays three bars, indicating the battery is fully charged. Press the controller's power switch to switch Off the device.

Note: *For details about enabling the MobileTouch wireless controller, refer to "Setting up the MobileTouch Wireless Controller," page 28.*



QuickTouch® Wireless II Remote Controller

The QuickTouch II wireless remote controller provides switching of up to four circuits. It is typically used for activating the spa circulation, and for operating three auxiliary pieces of equipment (such as lights, jet pump, air blower, waterfall, etc.).

Each of the four functions on the remote controller has an ON and an OFF button. To switch a circuit on or off, press and hold the appropriate button for at least a full second. For information about setting up the remote, see "Configuring Remote Control Button Circuits (iS4, iS10, QuickTouch II, QT4 QuickTouch, and Phone Remote), on page 81.

QuickTouch II Wireless Remote Controller

You can assign a circuit to any one of the four buttons. The factory default setup is::

- **SPA** button activates the spa circuit.
- **A** button activates **Auxiliary 1** circuit.
- **B** button activates **Auxiliary 2** circuit.
- **C** button activates **Auxiliary 3** circuit.

Note: *To control circuits other than Spa, AUX 1, AUX 2 and AUX 3, it is possible to make adjustments through the Indoor Control Panel or MobileTouch wireless control panel.*

IMPORTANT: *The QuickTouch II remote may be used with wet hands, but should never be submersed in water, as this could damage the unit. If accidental submersion occurs, dry unit out by removing battery cover and removing battery. Position unit so that water can drain out. Replace the battery cover when the unit is completely dry.*

IntelliChlor® Salt Chlorine Generator
(Accessory)

The IntelliChlor salt chlorinator uses a process known as electrolysis to produce Sodium Hypochlorite (liquid chlorine) from a low concentration of salt added to the pool water. Hypochlorite kills bacteria, oxidizes organic material, and kills algae, then reverts back to salt. IntelliChlor then reuses the salt and the process starts over again. The IntelliChlor system is comprised of the Power Center and Electrolytic Cell. The IntelliChlor Electronic Chlorine Generator system consists of one or more of the following:

IntelliChlor with Power Center

Power Center (P/N 520556): Provides power and controls to and from the IntelliChlor cell.

IC 20 Cell (P/N 520554): Designed for pools up to 20,000 U.S. gallons (75,000 liters). The cell will produce the equivalent of 0.70 pounds of pure chlorine per 24 hours of continuous pool pump run time. The IC20 cell uses two terminal blades and five bi-polar blades.

IC 40 Cell (P/N 520555): Designed for pools up to 40,000 U.S. gallons (150,000 liters). The cell will produce the equivalent of 1.40 pounds of pure chlorine per 24 hours of continuous pool pump run time. The cell uses three terminal blades and ten bi-polar blades.

IC 60 Cell (P/N 521105): Designed for pools up to 60,000 U.S. gallons (227,124 liters). The cell will produce the equivalent of 2 lbs. of pure chlorine per 24 hours of continuous pool pump run time. The IC60 cell uses a total of 15 blades (three terminal and twelve bi-polar blades).

IntelliChlor "dummy" bypass cell (P/N 520588): Recommended for new pool start-up.

Note: *For IntelliChlor SCG setup information, see "Chlorine Generator," on page 54.*

IntelliFlo® VF Variable Flow Pump (Accessory)

The IntelliFlo VF pump control system offers pool and spa filter automation and advanced features that include energy conservation and programmable scheduled water features for your pool, spa, cleaner, waterfall, and other applications.

The IntelliFlo VF pump can adapt to any application up to 130 gallons per minute, you simply program IntelliFlo to suit the application. IntelliFlo then dials in the perfect operating conditions.

IntelliFlo VF can reduce energy cost by as much as 90% based on a pool size up to 15,000 gallons, one turn per day with a 24 hour cycle.

IntelliFlo VF constantly monitors water flow and electrical current to ensure that the filtration system is operating at peak efficiency. This can result in maximum energy efficiency savings never before possible – up to 90% over conventional pumps. The system protects against loss of prime or impedance of flow, under and over voltage situations, and thermal overload or freezing.

With IntelliFlo VF there is no need for pump curves and hydraulic calculations to determine the right pump for the job. Just set the program for your pool size and desired turnover, and IntelliFlo VF does the rest.

Note: *For IntelliFlo VF setup information, see page 56.*

IntelliFlo® VS Variable Speed Pump (Accessory)

The IntelliFlo VS variable speed pump is well suited for pool, spa, cleaner, waterfall and other water applications. IntelliFlo VS operates at a maximum system flow of 160 gallons per minute (GPM). Using the IntelliFlo's control panel the pump can operate with one of the four selectable preset speeds or the adjusted speeds. IntelliFlo out performs all conventional pumps in its class. Advanced energy conservation features ensure that your filtration system is operating at peak efficiency.

The IntelliFlo variable speed pump can operate from 400 RPM to 3450 RPM with preset speeds of 750, 1500, 2350, and 3110 RPM. The pump can be adjusted from the control panel to run at any speed between 400 RPM to 3450 RPM for different applications. The IntelliFlo pump control panel alarm LED warns the user against under and over voltage, high temperature, over current and freeze protection.

IntelliFlo® VS and VSF Pump (Accessory)

The IntelliFlo VSF variable speed and frequency (RPM/GPM) pump offers the same basic feature set as the IntelliFlo VS pump with additional flow control (GPM) functionality.

Note: For IntelliFlo VSF setup information, see page 65.

IntelliFlo® Pump

Section 3

Preparing the System for Initial Start-up

Setting up the IntelliTouch System

Use the following recommended steps to configure the IntelliTouch system using the Indoor Control Panel or MobileTouch wireless controller.

1. Main screen preference settings (page 33)

Setup the Indoor Control Panel main screen. Set the system clock and what circuit names you wish to display on the main screen.

2. Assign circuit names (pages 34-37)

Assign circuit names for output auxiliary equipment.

3. Creating custom names for auxiliary circuits (page 38)

There are twenty (20) user-defined circuit names available for identifying unique equipment (see page 38).

4. Assign a circuit function to a circuit name (page 79)

From your worksheet **Programmable Settings** section, assign circuit functions to all circuits that are not marked **GENERIC**. Nothing needs to be done if the circuit is GENERIC (simple ON/OFF when the button is pushed). From the **Circuit Functions** screen, you can also assign special logic (IntelliBrite, MagicStream, SAM, Floor Cleaner etc.) to a circuit by selecting one of the circuit functions. See page 41 for the complete list of circuit functions.

5. Create and assign a feature circuit name (page 79)

Review the temporary circuit names from the worksheet (page 89), create and assign circuit names to the auxiliary (AUX) connections. On the **Assign Circuit Screen**, auxiliary circuit names are assigned through **Displays 1 through 4**. Displays 1 through 4 correspond to the main Load Center or Power Center (Display 1) to which they are wired. Display 2 through 4 may be additional Expansion Centers. Note the original names presented, **AUX 1** through **AUX 10**, correspond to the plug-in location of the relay on the Outdoor Control Panel in the main Load Center or Power Center. Feature circuits are assigned on the **Feature Circuit** screen. Select from the available list circuit names. For a complete list of circuit names see page 37. Up to 20 additional custom circuit names can may be custom created (see page 38). For **Macro** circuits see page 80.

6. Configure valve actuators controlled by AUX or feature circuit (page 78)

Assign which circuits will activate which valves (A and B or optional C, D, E). If more than one circuit must operate the same valve, then one Feature Circuit may be created and configured to activate the valve. Then create Feature Circuits for all other circuits and use the Macro function to activate the valve along with any relay connections.

7. Setting up additional equipment (pages 53)

Configure the IntelliTouch system what special equipment the system may have installed.

- Is there an IntelliFlo pump installed?
- Is there an UltraTemp heat pump installed?
- Is there an IntelliChlor salt chlorine generator installed?
- Is there an IntelliChem automatic chemical feeder installed?
- Is solar heating available? Is solar being used for a heat pump?
- What circuits will turn 2-Speed pumps to High Speed? Cool-down cycle for the heater
- Lets you set circuits that switch the filter pump to high speed - Do you want to delay turning off the filter pump for 10 minutes when the heater is turned off?
- Do you want the spa to heat whenever the Spa button is pressed?

8. Set up Solar Equipment, 2-speed pump, Set a heater cool-down cycle (page 74)

Set up additional equipment if required such as solar equipment. Set up the chlorine generator

Set up the Indoor Control Panel to operate with optional salt chlorine generators.

9. Configuring the heater system options (page 11)

Setup gas heater, heat pump or heat pump used in combination with other heating systems.

10. Create Macros and Feature Circuits (page 80)

After the main circuits are set up, you can now combine circuits (Auxiliaries and Features) to maximize the system capability. Feature circuits that are assigned as **Macros** may also have all the same Circuit Functions and Equipment capabilities as any other circuit.

11. Configure spa-side remote (iS4, SpaCommand, QT4, QTII) buttons (page 81)

Set which circuits will be operated by which button on each remote. Once you have checked all buttons operate properly, place labels on remote controls.

12. Set on/off times for circuit from the Program screen (pages 14-17)

Set times for automatic circuit activation. Each system may have up to 99 total programs. All user created programs are active all the time; so check that there are not conflicting automated times.

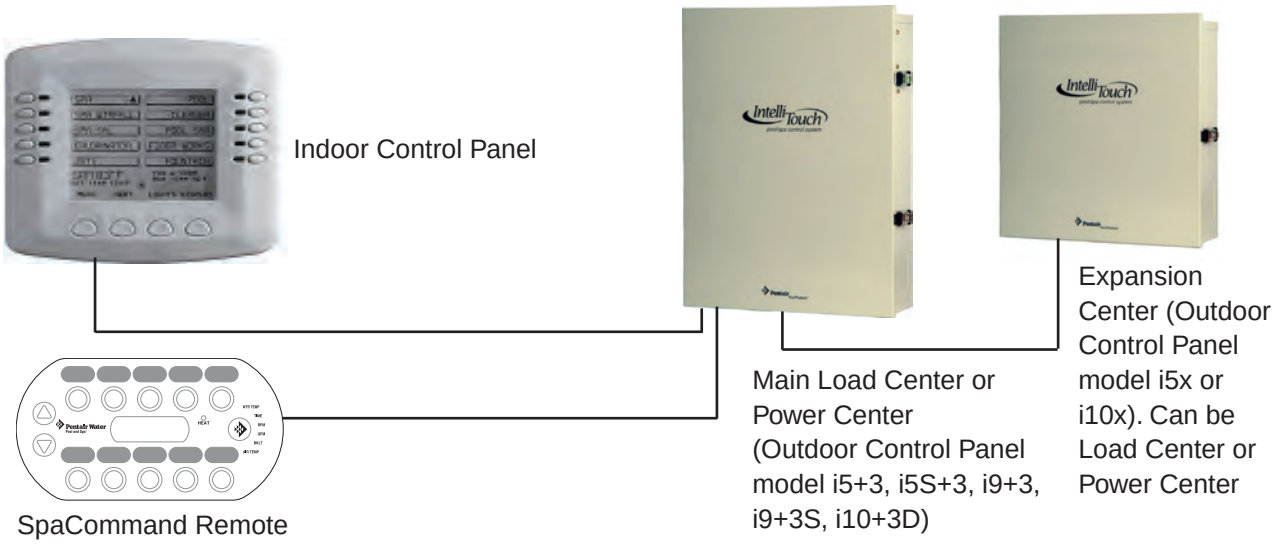
13. Set up lights from the Lights screen (pages 42-52)

From the lighting screen you can control the pool, spa and backyard lighting, such as the color IntelliBrite LED lights, synchronized color changing S*Am*, S*AL* lights, FIBER*works* lights and MagicStream laminars.

Wired Controllers (Automatically Enabled)

When powered up for the first time, the IntelliTouch system will automatically enable one each of the following wired controllers:

- Outdoor Control Panel (located in the main Load Center or Power Center)
- Indoor Control Panel (wired to the Personality board in Load Center). *Note: Additional Indoor Control Panels must be manually assignment.*
- SpaCommand Spa-Side Remote (wired to the Personality board in Load Center). *Note: Additional SpaCommand remotes must be manually assigned, see page 30).*
- Expansion Center (includes Outdoor Control Panel, model i5x or i10x). *Note: Additional Expansion centers must be manually assigned, see page 26).*



IntelliTouch System Controllers
(automatically enabled to main load center outdoor control panel)

Adding Multiple 10 button Spa-Side remotes and Expansion Centers

Additional SpaCommand spa-side remotes, and Expansion Centers need to manually enable from the Indoor Control Panel. To manually enable an additional Expansion Center, see page 26, and an SpaCommand remote, see page 30.

Adding a MobileTouch Wireless Controller

Before using a MobileTouch wireless controller with the IntelliTouch system, you must first manually enabled the wireless controller from the Outdoor Control Panel. For details, refer to “Setting up the MobileTouch Wireless Controller,” page 28.

Manually Enabling Expansion Centers

The following describes how to manually enable an additional Expansion Center containing the Outdoor Control Panel).

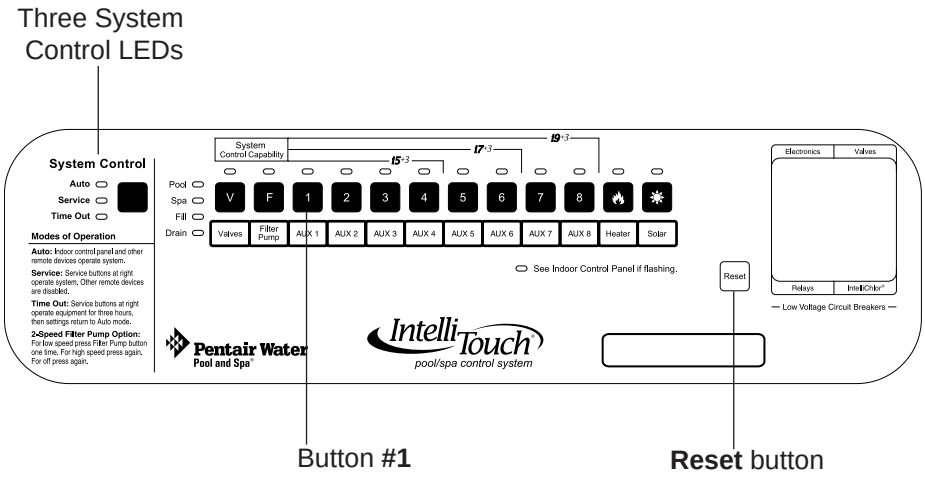
Note: *For information about how the IntelliTouch automatically enables wired controllers, refer to the "Automatically Enabled Wired Controllers," page 25.*

Up to three (3) additional Expansion Centers can be installed in the IntelliTouch system. The IntelliTouch system automatically assigns the "main" Load Center or Power Center as number 1, and other additional Expansion Centers as number 2, 3, or 4. An Expansion Center (Load Center or Power Center) includes an Outdoor Control Panel (model i5x or i10x) which is connected to the main Load Center or Power Center.

Note: If the first Expansion Center was installed at the same time as the main Load Center or Power Center, it will automatically be assigned as number 2. Other additional Expansion Centers need to be manually assigned.

To manually enable additional Expansion Centers:

1. On the Outdoor Control Panel, press the **Reset** button.
2. The three (3) red **System Control** LEDs will be lit (solid). Wait a few seconds then press auxiliary **Button 1**. The three red **System Control** LEDs will begin flashing. The system is ready to enable additional Expansion Centers.

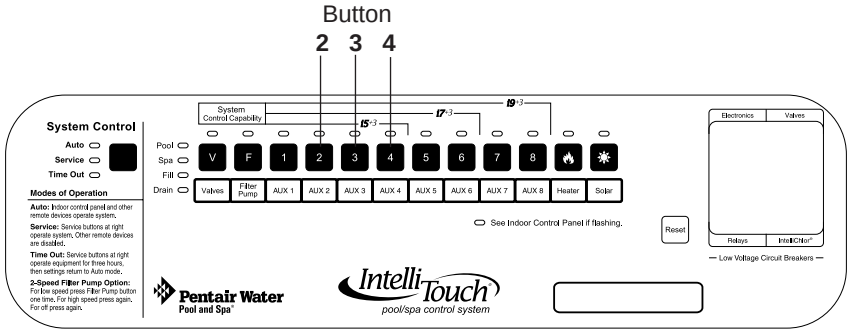


Main Outdoor Control Panel (Located in the Load Center or Power Center)

3. On the Expansion Center, press the **Reset** button and wait a few seconds, and press **Button 1**. The System Control LEDs on the Expansion Center will begin flashing.

Assigning Additional Expansion Centers

4. **Buttons 2**, **3**, and **4 LEDs** will be on. Do one of the following:
   - If this is the first Expansion Center, press **Button 2**.
   - If this is the second Expansion Center, press **Button 3**.
   - If this is the third Expansion Center, press **Button 4**.



Note: *For details about selecting the Indoor Control Panel display that are connected to additional Expansion Centers, see page 35.*

Note: *Do not set more than one Expansion Center to the same number. These numbers correspond with the numbered display screens on the Indoor Control Panel and MobileTouch wireless controller.*

5. The red LED will be on above the selected button number.
6. Repeat the steps above for each additional Expansion Center.
7. After each Expansion Center is enabled, press **Reset** on the Outdoor Control Panel. Wait until the red Auto and Pool LED is lit. The system is ready for normal operation.

Main IntelliTouch Load Center (i5+3, i5+3S, i7+3, i9+3, i9+3S, i10+3D)	Power Center (i5x or i10x), (P/N 521214 with IntelliChlor SCG transformer) (P/N 521216 without IntelliChlor SCG transformer)	Additional Expansion Center	Additional Expansion Center (3 maximum)
Number 1	**Number 2**	**Number 3**	**Number 4**

Note: *Expansion Centers may be a Load Center or Power Center. Connections from the Main Load Center to an Expansion Center is via the COM port on the Personality board.*

Setting up the MobileTouch Wireless Controller

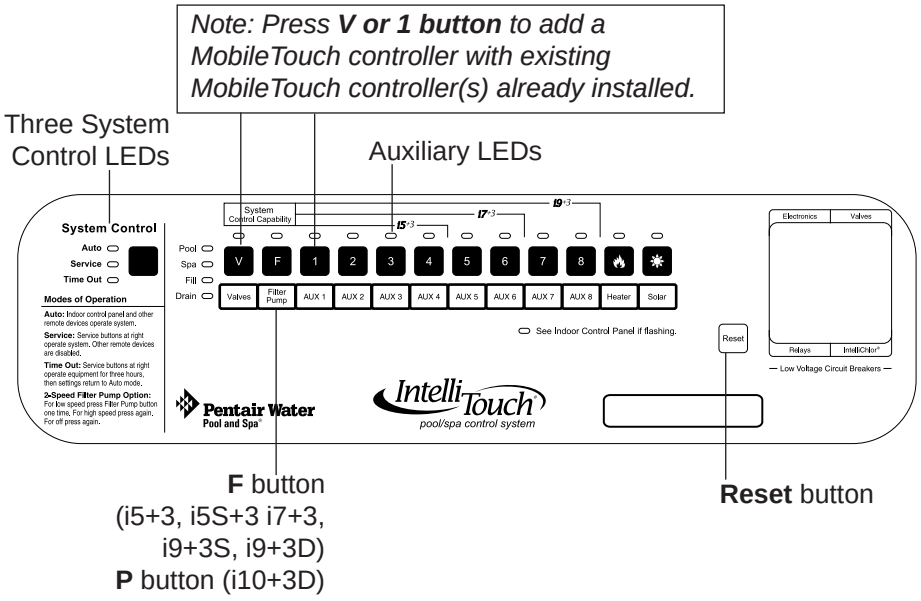
The following describes how to assign the MobileTouch wireless controller a communication address for the first time and to add a MobileTouch controller to a system with a controller already installed.

To manually setup a MobileTouch wireless controller:

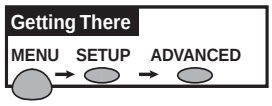
1. On the Outdoor Control Panel, press the **Reset** button.
2. **First Time MobileTouch install:** The three red **System Control** LEDs will be lit (solid). Wait a few seconds then press the **"F" Filter button**. For model i10+3 press the **"P" Pool Filter Pump** button.

   Add a MobileTouch with existing MobileTouch installed: The three red **System Control** LEDs will be lit (solid). Wait a few seconds then press the **"V" button** or **"1" button**.

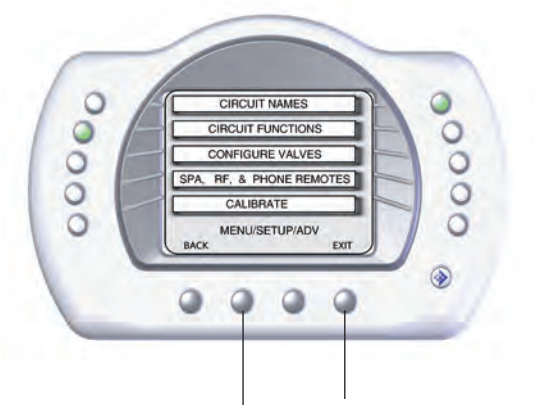
3. The three red **System Control** LEDs and the auxiliary button **LEDs** will begin cycling. ***Wait until the LEDs stop cycling.*** The three System Control LEDs will start to blink on and off. The system is ready to enable the MobileTouch wireless controller. Continue with step 4. ***See note on page 29 if using MobileTouch firmware version1.160/2.160.***



Go to the Advanced screen.



4. From the MobileTouch controller Advanced screen, press the **lower buttons 2 and 4 at the same time**. The Service Personnel screen will be displayed.



Setting up the MobileTouch Wireless Controller (Continued)

5. Press the button next to **LOCK ON ADDRESS** to access the next screen.

6. **Note: Before pressing the "Lock On Address" move at least 20 to 30 feet away from the transceiver.** Press the button next to **LOCK ON ADDRESS** to assign a unique frequency for the MobileTouch controller to avoid inference from other wireless devices within range of the MobileTouch transceiver.

Note: For MobileTouch firmware version 1.160/2.160: The "**Lock On Address"** line displays "**MAN ADDRESS LOCK AUTO**" - **Press AUTO** to lock on the address. If MobileTouch does not connect then use the MAN (manual) mode. You will notice on the IntelliTouch outdoor control panel there are three System Control LEDs flashing on and off. There are also two other LEDs going on and off. Watch these LEDs and you will see a pause, followed by one of the AUX 1 - 8 or Heater or solar LEDs flash on, then it goes off and a second LED will flash on. Then pause and repeat over and over. AUX 1 - 8 represent number 1 - 8, Heat = 9, and solar = 0. If you see Pause, AUX 2, AUX 7, see Pause, AUX 2, AUX 7, etc. This indicates CHANNEL 27. The first LED is the 10's digit, the second LED is the ones digit. Press MAN on the address lock line, a new screen will appear, displaying **ENTER LOCK CODE**. Use the **LEFT and RIGHT buttons** to decrease or increase the number (16 to 47). So in this example you would set it to 27. **Press SAVE**, you will return back to the prior screen. **Press the RESET button** on the outdoor control panel and your MobileTouch is ready to use. If the MobileTouch is not connecting check your wiring connections.

7. After selecting "Lock On Address" the MobileTouch controller is now ready to operate the IntelliTouch system. The "Service Personnel" screen will be displayed.
8. Press **Exit** to return to the main screen or proceed with **Step 9** if you are adding another MobileTouch controller while the IntelliTouch outdoor control panel LEDs are flashing.
9. **To add another MobileTouch controller at this time**, repeat Steps 4 through 8 for each controller, if not, continue with Step 10.
10. Return the Load Center or Power Center. The System Control LEDs will be flashing. Press the **Reset** button. When the "Auto" LED is illuminated the process is complete and the system is ready for operation.

Adding an 10 Buttons Spa-Side Remote

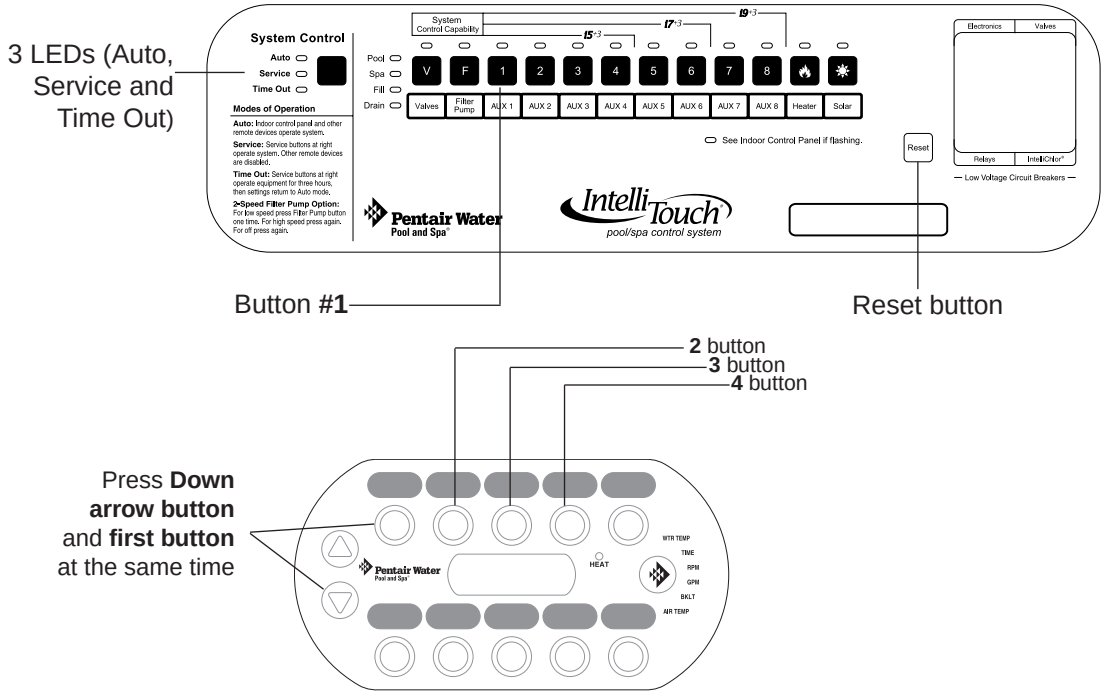
Up to four SpaCommand spa-side remote controllers can be installed to allow each SpaCommand to operate different functions or to the same functions at different locations. Each SpaCommand can be assigned as number 1, 2, 3, or 4. If a different number is not assigned to each installed SpaCommand, then all SpaCommand's are assigned as number iS1. This is useful if you wish to have the same functions available at different iS10 locations. The following steps describe how to manually assign each SpaCommand a number 2, 3, or 4 as required.

Note: *If the first SpaCommand was installed with the main Load Center or Power Center, it will automatically be assigned as number* ***IS1****. Other additional iS10 remotes need to be manually assigned.*

To assign additional SpaCommand remotes as iS2, iS3, or iS4:

1. On the IntelliTouch Outdoor Control Panel, press the **Reset** button, then press the **1** button. The three (3) System Control LEDs will start flashing.
2. On the SpaCommand remote, press Down arrow bottom and the first botton at the same time and the **1** button at the same time (while the Outdoor Control Panel LEDs are flashing).
3. **SHA** will be displayed on the remote temperature display. The four red remote LEDs adjacent to the in-line buttons will be lit.
4. Assign the remote to one of the following:
    - If this is the second remote **2** button **3** button **4** button IntelliTouch System
    - If this is the third remote, press button #**3**. The temperature display reads **IS3**.
    - If this is the fourth remote, press button #**4**. The temperature display reads **IS4**.
5. The two remote red toggle switch LEDs will start to flash.
6. On the Outdoor Control Panel, press the **Reset** button. The remote LEDs will stop flashing. Repeat steps 1-4 for additional SpaCommand remotes. To configure the SpaCommand buttons, see page 81.

Note: *To disable or enable the Spa-Side Remote from the Indoor Control Panel or MobileTouch wireless control panel, refer to "Disable/Enable Spa-Side Remote," on page 83.*



IntelliTouch System (adding multiple spa-side remote)

Prepare the System for Operation

If there are more than one Indoor Control Panel, you only need to configure one of the panels. Other Indoor Control Panels will be configured using these same settings. Before you start, make sure you have:

- Pen and paper
- Write in the circuit names in the provides labels under each button on the Outdoor Control Panel and the Circuit ID label worksheet (see page 89-94). Use a permanent marker, or other permanent means of labeling.
- If you are setting up a large system that covers a large area, ask your assistant to visually inspect the equipment while you test the circuits from the Outdoor Control Panel.

Note: *To reset the system to the factory defaults, see "Erasing Outdoor Control Panel Memory (Factory Default)," on page 97.*

Checking the Main Load Center

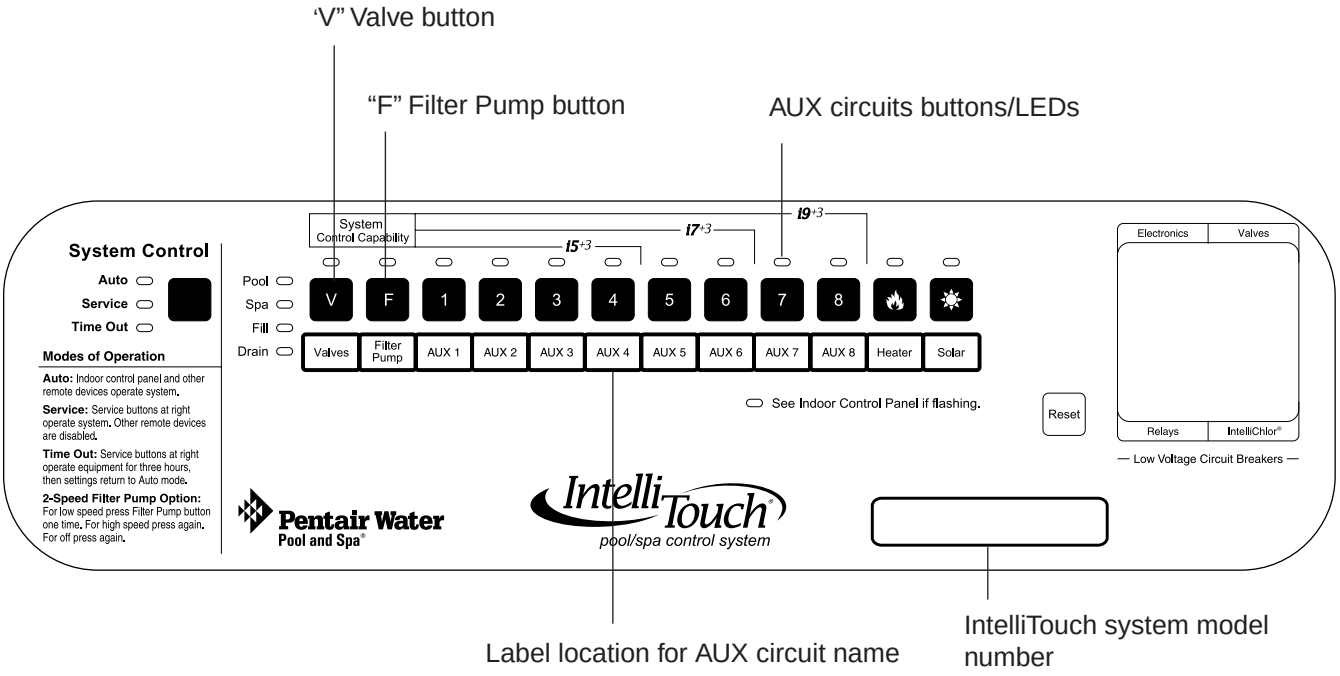
Use the following steps to check that the system is working correctly.

1. Switch on the AC electrical power at the house breaker.
2. Switch on the Load Center or Power Center. You may need to switch on the breakers on the Load Center.
3. Wait for the following:
   - On the Outdoor Control Panel check that the red **Auto** LED is on.
   - The LED next to **See Indoor Control Panel if Flashing** is not on.
4. Press the **Service** button to place the Load Center or Power Center in Service Mode for testing.

   Note: for **i5+3**, **i7+3**, or **i9+3** systems, go to step **5.** If you are working with the **i5S+3**, **i9+3S**, or **i10+3D** systems, skip step 5 and go to step 6. The IntelliTouch system model ID is located on the front of the Indoor Control Panel below the low voltage circuit breakers.
5. Press the **Valves** (V) button. Step through all four valve positions: Pool, Spa, Fill, Drain. Make sure the valves rotate to the correct position and the water is moving in the correct direction for each position. If necessary, flip the actuator toggle switch to change the direction of the water. After setting the valves and the system is in "Auto" mode, do not change the toggle switches.
6. Press the **Filter Pump** (F) button. Make sure the filter pump turns on correctly. If the pump has two speeds: Press the button one time to run the pump in low speed. Press the button again to run the pump in high speed. Press the button again to switch the pump off. A Two-Speed pump has to be configured from the EQUIPMENT screen.
7. Press each of the AUX buttons. Notice which button turns on which equipment. You may need to walk the property to find what each button turns on.

Checking the Main Load Center (Continued)

8. Press each AUX button to switch on each circuit. Affix a label under the appropriate button identifying the function and number of the circuit.
9. Repeat steps 4 through 9 for each Expansion Center. Note that **Aux 1** through **Aux 10** are used as circuit names on the Expansion Centers. Do not duplicate these circuit names with the circuit names of the main Load Center or Power Center.
10. The system is automatically configured if there is no more than one Load Center, one Expansion Center, an Indoor Control Panel, and one Spa-Side Remote. If there are additional Expansion Centers and/or controllers, then these need to be configured. For details about adding multiple Expansion Centers and controllers, see "Assigning Additional Expansion Centers" on page 27.



Setting up the IntelliTouch System using the Indoor Control Panel or MobileTouch

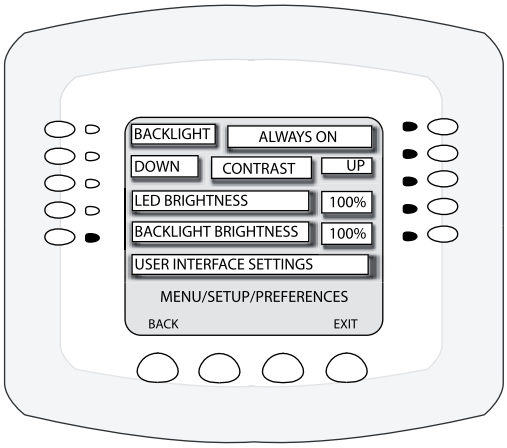
The following describes how to configure and set up the IntelliTouch system using the Indoor Control Panel or MobileTouch wireless control panel.

The Preference Screen Options

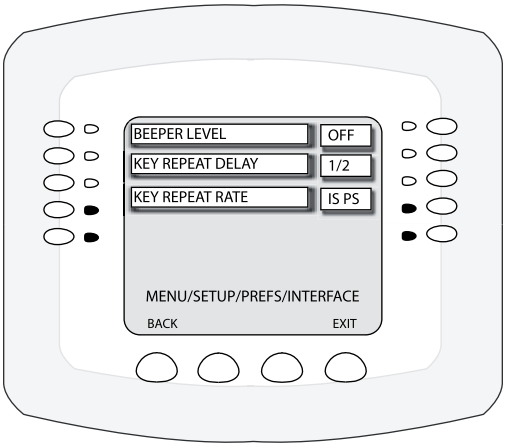
From the Preference screen you can change various screen options.

To change the screen settings go to the **Preferences** screen.

1. **To change the display backlight:** Press the top left or right side button to select the following options: **OFF IN 5 MIN**, **BLANK IN 5 MIN**, and **ALWAYS ON**.
2. **To change the display contrast:** Press the left button to decrease the display contrast level (lighter). Press the right side button to increase the display contrast level (darker).



3. **To change the brightness of the LED lights:** Press either the left or right side button to set the LED brightness level to **100%**, **75%**, **50%**, or **25%**.
4. **To change the display backlight brightness:** Press either the left or right side button to set the Backlight Brightness level to **100%**, **75%**, **50%**, or **25%**.
5. **To turn the button beeper sound off/on:** Press the button next to **User Interface**. From the next screen, press the button next to **Beeper Level** to **OFF**. To switch **ON** the sound, select **HIGH**. Press the **Back** button when finished.

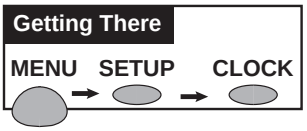


Note about Key Repeat: *It is recommended to leave the Key Repeat Delay and Rate set to the factory default setting (1/2 and 15 PS). The Key Repeat Delay adjusts the amount of time a key/button has to be held down before it starts auto-repeating. Key Repeat Rate adjusts the number of times per second (5, 10, 15, or 20 key repeats per second) the key/button repeats once it is held down.*

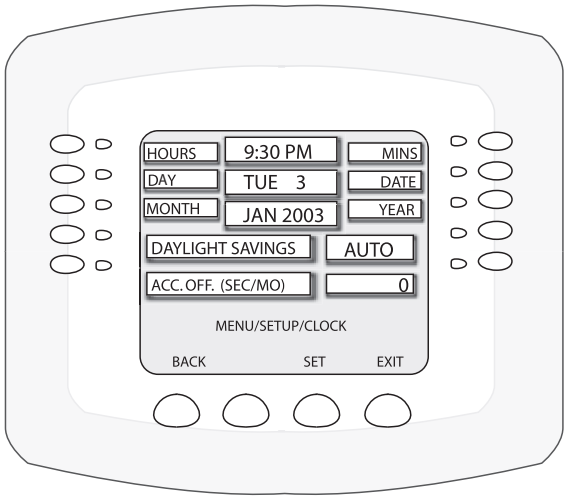
6. When finished, to save the settings press the **Exit** button to return to the main screen.

Set the System Clock

It's important to set the IntelliTouch system clock to the current time and date to ensure all automatic pool functions to work correctly.



To set the system clock, go to the **Clock** screen.



1. Use the left or right side buttons to set each of the clock settings.
2. Setting **Daylight Savings**:
   Set to **Auto** if you are in an area that observes Daylight Savings. Set to **Manual** if you are in an area that does *not* observe Daylight Savings.
3. **Setting clock accuracy offset:** To change the clock accuracy offset by seconds, press the right-side button to increase the offset and the left-side button to decrease the value. The offset value can be set from -300 to +300 seconds. If the internal system clock time is displaying ahead or behind the current time, use this the offset value to correct the clock.
4. Press the **Set** button to save the settings.
5. Press the **Exit** button to return to the main screen.

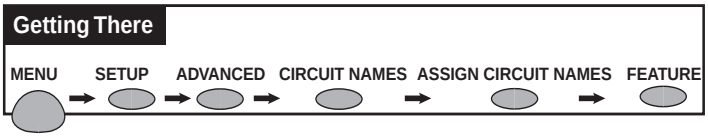
Assigning Circuit Names (for Display 1, 2, 3, and 4)

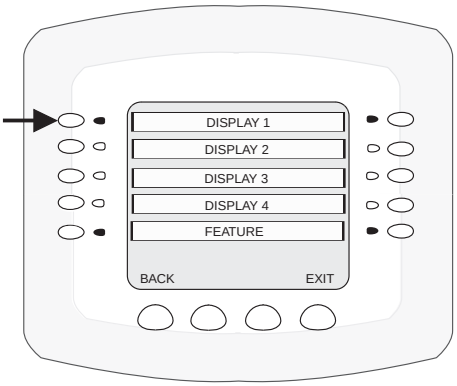
There can be up to four (4) Display screens that can be accessed, depending on the number of expansion Load Centers or Power Centers (see page 27 for more information). Assigning the system circuit names allows you to identify equipment from the Indoor Control Panel or MobileTouch wireless control panel. There are almost 100 preset equipment names to choose from (see page 37) to identify pool, spa and other related equipment. There are also 20 user-definable names to use for custom equipment if the preset circuit names are not suitable. Customizing names can also help identify unique system equipment. Assigning a custom circuit name to multiple circuits which then can be switched on or off from one button on the Indoor Control Panel or MobileTouch control panel. This method is called creating a MACRO (see page 80). For more information, refer to "Creating Custom Names for Auxiliary Circuits," page 38.

Note: *The top left and right circuit names (**SPA** and **POOL**) on the main **DISPLAY #1)** should not be changed. These circuits have special reserved functionality that cannot be changed. The default circuits may be given any name but always perform in the same manner. Be careful not to duplicate circuit names with these circuits. These circuits may also be used to activate 2-speed pumps to high speed, turn additional valves, etc.*

Selecting DISPLAY Screen 1, 2, 3, or 4

The auxiliary circuits that control the pool and spa equipment can be accessed from the "Display" screen on the Indoor Control Panel or MobileTouch wireless control panel. Selecting the button next to Display 1, 2, 3, or 4 displays the screen with circuits belonging to that particular expansion Load Center or Power Center. "Feature Circuits" can also be assigned from this screen. For more information about "Feature Circuits," see page 76.





Display #1 - This screen shows circuit names for the filter pump, pool and spa modes, and all high voltage auxiliary circuits connected to the main Load Center or Power Center.

Display #2 - This screen shows circuit names for the additional auxiliary circuits connected to the first expansion center (Load Center or Power Center).

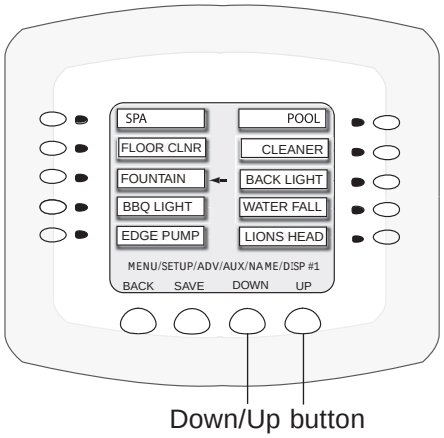
Display #3 - This screen shows circuit names for the additional auxiliary circuits connected to the second expansion center (Load Center or Power Center)

Display #4 - This screen shows circuit names for the additional auxiliary circuits connected to the third expansion center (Load Center or Power Center).

Assigning Circuit Names

In order to identify the equipment connected to the auxiliary circuits (SPA, AUX 1, AUX 2) in the Load Center, you need to assign equipment names to the corresponding auxiliary circuits in the Indoor Control Panel. Using the written list of circuit names (button 1, button 2, etc.) made while setting up the system. Match the label name that was placed under each button (1, 2, etc.) on the Load Center Outdoor Control Panel with the selected circuit name that will be displayed on the "Main Display" screen.

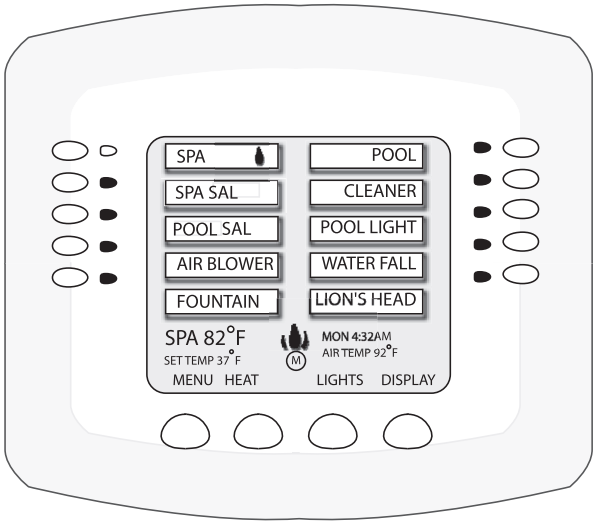
Choose a circuit name from the preset list of names (see page 37) for equipment connected to the auxiliary relays installed in the main Load Center. There are also 20 user-definable names to use for other pool and spa related equipment if the preset circuit names are not suitable (see page 38).



To assign circuit names for the MAIN SCREEN:

1. Select the button next to Display #1 (Main Display screen, see page 7). These are the circuit names that will be displayed on the Main Screen. ***Note:*** *If there is an expansion Load Center or Power Center installed, select the appropriate Display #2, #3, or #4 associated with that expansion Load Center or Power Center.*
2. From the Main Display screen, press the button next to **AUX 1**. A small arrow pointing to AUX 1 is displayed.
3. Use the **Up** and **Down** buttons at the bottom of the screen to scroll through the alphabetical list of preset equipment names. Choose the equipment name that matches the label name for button number 1 on the Load Center Outdoor Control Panel.

4. **Continue to name other auxiliary circuits (AUX2, AUX3, etc.)**: After selecting the equipment name you want to use for **AUX 1**, press the button next to the **AUX 2** and choose a circuit name. The small arrow indicates which circuit is selected for naming.
5. Repeat the process to assign the other equipment to circuits on this screen.
6. When you have finished assigning equipment circuit names, press the **Save** button.
7. Press the **Exit** button to return to the Main screen.

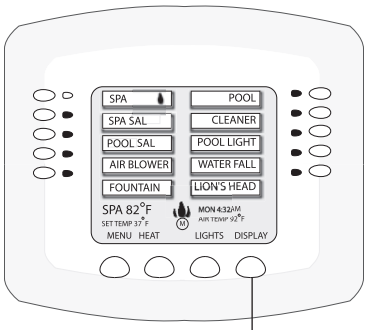


Selecting the Display Screens

There are thee (3) screens to view and setup auxiliary circuits:

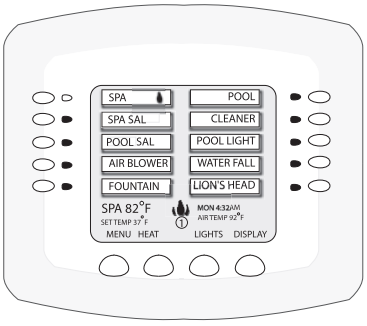
- **Main Screen:** Displays assigned auxiliary (AUX 1, AUX 2, etc.) circuit names. An Ⓜ icon located in the middle lower part of the screen indicates that the "Main Screen" is selected.
- **Display #1**: Displays the auxiliary (AUX 1, AUX 2, etc.) circuits connected to the main Load Center. The number ① icon located in the middle lower part of the screen indicates that circuits for Display #1 is selected.
- **Display #2, #3, or #4**: Displays the auxiliary circuits connected to additional expansion Load or Power Centers. The number ② icon located in the middle lower part of the screen indicates that circuits for Display #2 is selected.
- **Feature:** Displays auxiliary circuits configured as "Feature" circuits. The Ⓕ icon located in the middle lower part of the screen indicates that Feature circuits screen is selected.

To select the Display screens, press the lower right DISPLAY button to toggle through each of the screens. For more information, see page 7.

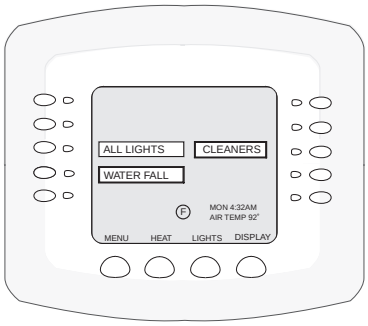


Display button

Main screen



Display #1, #2, #3, or #4 screen



Feature circuits screen

IntelliTouch Circuit Names

AERATOR
AIR BLOWER
AUX 1
AUX 2
AUX 3
AUX 4
AUX 5
AUX 6
AUX 7
AUX 8
AUX 9
AUX 10
BACKWASH
BACK LIGHT
BBQ LIGHT
BEACH LIGHT
BENCH
BLOWER
BOOSTER PUMP
BUG LIGHT
CABANA LTS
CHEM. FEEDER
CHLORINATOR
CLEANER
COLOR WHEEL
DECK LIGHT
DRAIN LINE
DRIVE LIGHT
EDGE PUMP
ENTRY LIGHT
FAN
FIBER OPTIC
FIBERWORKS
FILL LINE
FLOOR CLNR
FOGGER
FOUNTAIN
FOUNTAIN 1
FOUNTAIN 2
FOUNTAIN 3
FOUNTAINS
FRONT LIGHT
GARDEN LTS
GAZEBO LTS
HIGH SPEED
HIGH TEMP
HOUSE LIGHT
JETS
LIGHTS
LOW SPEED
LOW TEMP
MALIBU LTS
MIST
MOTOR VALVE
MUSIC
(NOT USED)
OZONATOR
PATH LIGHTS
POOL SAM 3
SECURITY LT
SLIDE
SOLAR
SPA
SPA HIGH
SPA LIGHT
SPA LOW
SPA SAL
SPA SAM
SPA WTRFLL
SPILLWAY
SPRINKLERS
STREAM
STATUE LT
SWIM JETS
WTR FEATURE
WTR FEAT LT
WATERFALL
WATERFALL 1
WATERFALL 2
WATERFALL 3
WHIRLPOOL
WTRFL LGHT
YARD LIGHT

Custom Names (11 characters maximum)

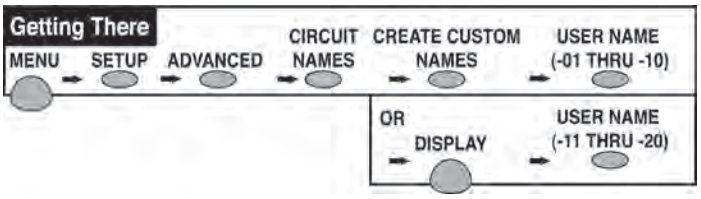
USER NAME 01 _____
USER NAME 02 _____
USER NAME 03 _____
USER NAME 04 _____
USER NAME 05 _____
USER NAME 06 _____
USER NAME 07 _____
USER NAME 08 _____
USER NAME 09 _____
USER NAME 10 _____
USER NAME 11 _____
USER NAME 12 _____
USER NAME 13 _____
USER NAME 14 _____
USER NAME 15 _____
USER NAME 16 _____
USER NAME 17 _____
USER NAME 18 _____
USER NAME 19 _____
USER NAME 20 _____

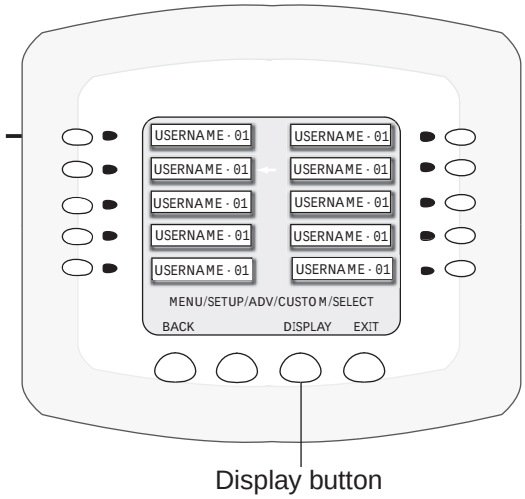
Creating Custom Names for Auxiliary Circuits

There are twenty user-definable names available to identify custom equipment if the preset circuit names are not suitable (see page 37 for the complete list of preset names). To create a custom name, choose one of the twenty user names and change it to your name of choice. For example, USER NAME-01 could be changed to LION'S HEAD for a waterfall or fountain. When assigning a Feature or Macro circuit (see page 79, 80), a user-defined circuit name can be assigned to multiple circuits which can be switched on or off from one button on the Indoor Control Panel or MobileTouch control panel.

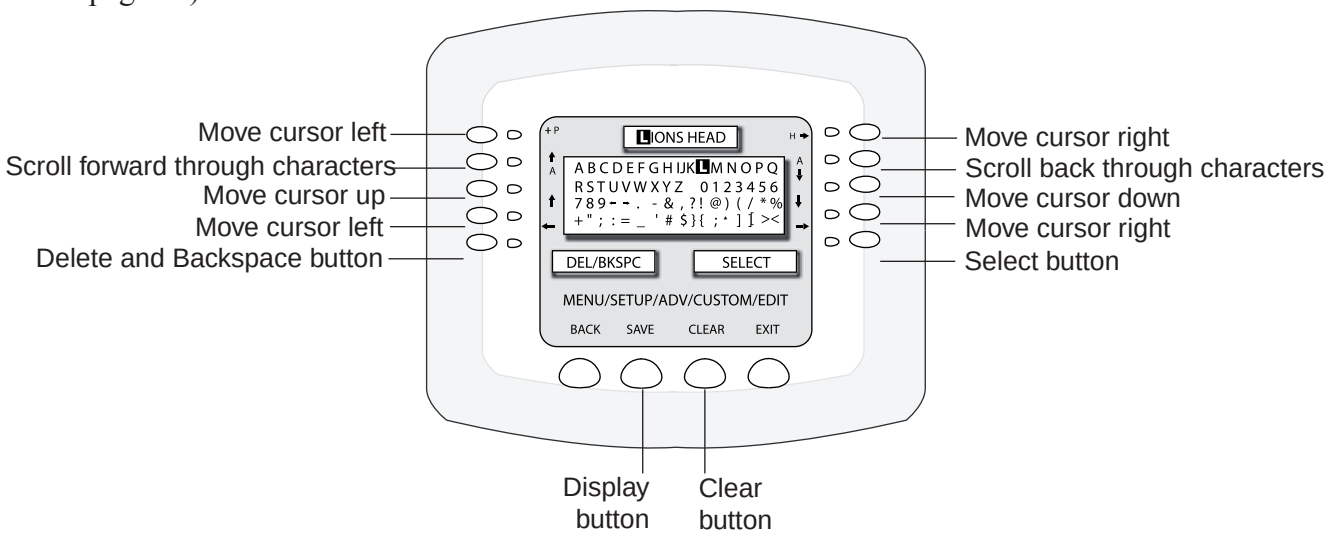
To create a custom circuit name go to the **Create Custom Names** screen.

Note: *Before creating a custom circuit name, first assign a function to the circuit (see page 39).*





1. Press the button next to **USERNAME-01** to access the next screen to create a new circuit name. Up to ten user-definable names (01-10) can be created on the first screen and ten on the next screen (11-20). Press the DISPLAY button to toggle between the two screens.
2. To navigate through the alphanumeric characters use the left and right side buttons as shown below.
3. Once a character is selected, press the SELECT button then move to the next character. Use the CLEAR button to remove all characters.
4. Press the **Save** button when done. To create another custom circuit name repeat steps 1 through 4.
5. Press the **Exit** button to return to the main screen.
6. After creating a custom name, go to ASSIGN CIRCUIT NAMES (see page 35) and assign the custom name to the auxiliary circuit. The custom name(s) will be displayed in the list of circuit names (see page 37).

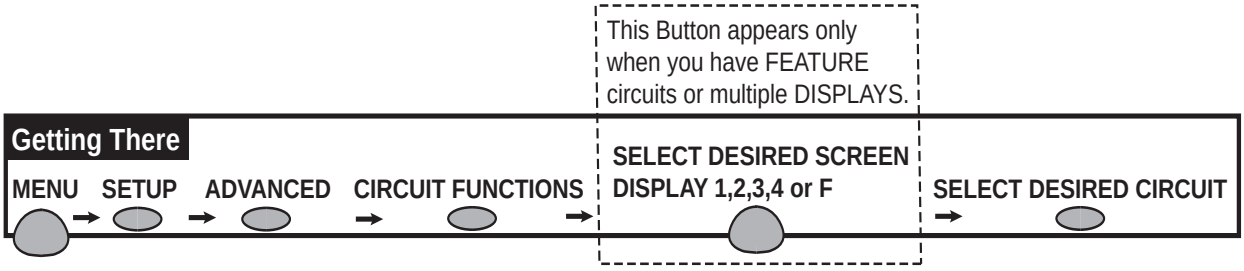


Assign Circuit Functions and Freeze Protection

Assigning a function to an auxiliary circuit allows certain type of equipment to operate in a specific way. For example, when setting up an automatic pool cleaner pump, you would assign the circuit function to MASTER CLEANER. With this “Cleaner” logic, when the circuit is switched on the cleaner pump would force the filter pump on, and start the cleaner pump after a delay of five (5) minutes. The cleaner pump would automatically shut off whenever the spa and solar is switched on with the cleaner pump (after a delay of five (5) minutes) if energy from the solar is required.

Freeze Protection

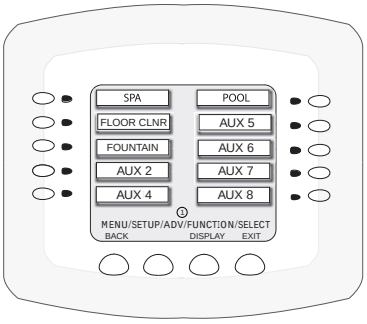
Freeze protection switches a circuit on if the outdoor air temperature sensor detects the temperature is getting close to freezing (below 36° F (2 ° C). The system switches on all circuits that have been assigned freeze protection, and switches on the filter pump to circulate water throughout the system for 15 minutes to stop the pipes from freezing. This is especially important for a pool and spa combination (dual body shared equipment). If freeze protection is set to both the spa and pool circuits, the filter pump switches on and the pool and spa valves alternate every 15 minutes to keep the water moving through both the pool and spa. This process continues until the freeze condition is over.



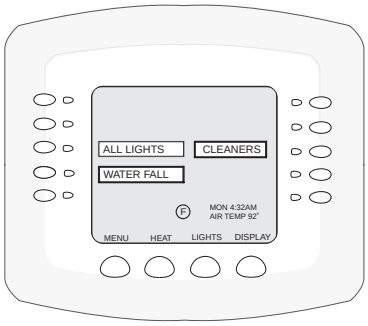
Assigning a function and freeze protection to a circuit

To assign a function to an auxiliary circuit and to add circuit freeze protection:

1. Press the button next to the circuit name that requires a function.



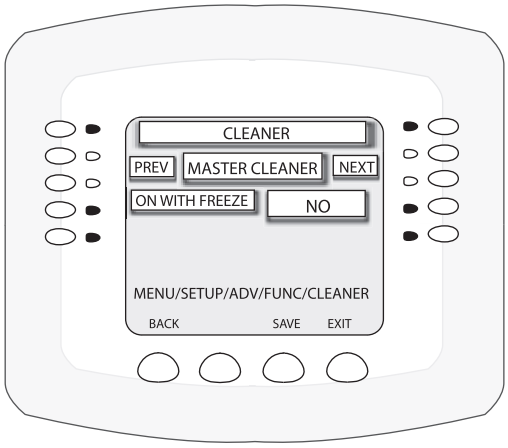
2. Press the lower DISPLAY button to view the Feature circuits. Select the Feature circuit name to assign a function to it. Use this button to toggle between the Feature circuit screen and the Circuit screen.



Assigning a function and freeze protection to a circuit (Continued)

To assign a function to an auxiliary circuit and to add circuit freeze protection:

1. Press the top right side button next to the displayed circuit names (i.e., CLEANER). The circuit displayed is selected from the previous screen.
2. Use the left and right side button next to PREV and NEXT to select the function for this circuit. For example, circuit function MASTER CLEANER selects the type of logic needed for a cleaner circuit. To assign a light function, select IntelliBrite, SAM Light or SAL Light. For the complete list of circuit functions, see Special Functions for Circuits, on page 41. ***Note:*** *When using "pressure cleaners" assign the circuit to "Master Cleaner."*
3. Use the left and right side button next to ON WITH FREEZE to select **YES** for freeze protection. This will activate the circuit if the air temperature drops below 36° F (2° C). Select NO for no freeze protection. ***Note:*** *Freeze protection is automatically enabled for SPA, POOL, HI-TEMP, and LOW-TEMP circuits.*



Note: **Spa operation and freeze protect time:** Using the "Spa Freeze Override" feature, the freeze protect default time of 30 minutes can be increase from 30 minutes to 240 minutes maximum. For more information,

4. Press the **SAVE** button when finished.
5. Press the **BACK** button to return to the Circuits screen and repeat steps 1 through 4 to assign functions to other circuits.
6. Press **EXIT** button to return to the Main screen.

Special Functions for Circuits

Generic	No special Logic. Simple On/Off control of a circuit with all the programmable capabilities.
Master cleaner	Works with automatic pool cleaner pumps or cleaner valve actuator. It does the following: - Forces the filter pump on 5 minutes before the cleaner. - Turns the cleaner off when the spa is on. - Turns the cleaner off for 5 minutes when the solar heating begins.
Light	Allows special lighting features to work, such as ALL lights on or ALL lights off.
Dimmer	Allows light dimming features to work. Dimming relay must be installed.
SAM Light	Activates special color lighting programs on other screens on the Indoor Control Panel when used with SAM pool lights. For example, you can have ALL lights on or ALL lights off, or use Color Swim, Color Set, or Color Synch.
SAL Light	Activates special color lighting programs on other screens on the Indoor Control Panel when used with SAL spa lights. For example, you can have ALL lights on or ALL lights off, or use Color Swim, Color Set, or Color Synch.
Photon Generator	The Photon Generator® light source allows the Fiberworks fiber optic bulb be operated by Color Set or Color Swim programs when used with SAM and SAL lighting.

Note: **Assigning Floor Cleaner function:** If a multi-head (six head) in-floor cleaner system or an IntelliFlo pump is being used, assign the equipment to the “GENERIC” circuit function, **not** the “Floor Cleaner” function. Assigning the “Generic” circuit function ensures that the pump will not ramp up and down every 20 minutes.

Setting up Lighting Options (Color Swim and Color Set) - Requires use of at least two SAm and/or SAL and/or Fiberworks Lighting products controlled by separate AUX circuits

There can be up to 12 light circuits on the main **Lights** screen. From this screen you can activate the "Color Swim" and Color Set" special lighting features. These special features each must have their own relay and separate circuits.

Color Swim and Color Set

Although the same screen is used to program the **Color Swim** and **Color Set** features, these two special lighting effects operate independently of each other. It may take up to a minute or more for Color Swim or Color Set to operate as programmed, depending on what kind of light you are activating and what state it was in when the effect was activated.

- **Color Swim -** Allows any combination of up to 12 S*Am*, S*AL*, and/or FIBER*works* lighting circuits to be preset to transition through colors in sequence, giving the appearance of the colors swimming across the water. The delay in sequencing each light can be adjusted to customize the display for your pool. This feature requires the use of at least two S*Am*, S*AL*, and/or FIBER*works* lighting products controlled by separate AUX circuits and relays.
- **Color Set -** Allows any combination of up to 12 S*Am*, S*AL*, and/or FIBER*works* lighting circuits to be preset to specific colors. For example, you can set the colors for red, white, and blue, or red and green.
- **Sync -** Switches all color changing lights ON to synchronize their colors.
- **Smart Start** (SS_Yes and SS_No) - The Smart Start feature allows light circuits that are programmed to switch on at a specific time, automatically begin changing their colors. For more information see page 15.

Setting up Color Swim and Color Set with S*Am*, S*AL*, or FIBER*works*

Both the **Color Swim** and **Color Set** feature can be configured and operated from the Lights screen, but operate independently of each other. Depending on what kind of light is being switched on and what state it was in when the lighting effect was activated, it may take up to a minute or more for Color Swim or Color Set to operate as programmed. The Color Swim feature creates the illusion of bands of colors moving through the water. This is accomplished by switching on each light with a specific color in a specified order at different time intervals. The order and time delay between lights can be mixed and matched to create many different effects. For example, colors moving left to right, one body of water to another, from the middle outward, etc.

To assign light circuits to the Lights screen:

Before Starting: Be sure the auxiliary circuits that control the lights have been assigned names. Then verify that S*Am* and S*AL* lights have been assigned in the "CIRCUIT FUNCTIONS" as SAM and SAL lights. If FIBER*works* lighting is being used, it also has to be set up as a PHOTON GENERATOR for the circuit controlling the light bulb, and COLOR WHEEL for the circuit controlling the color wheel (see page 41).

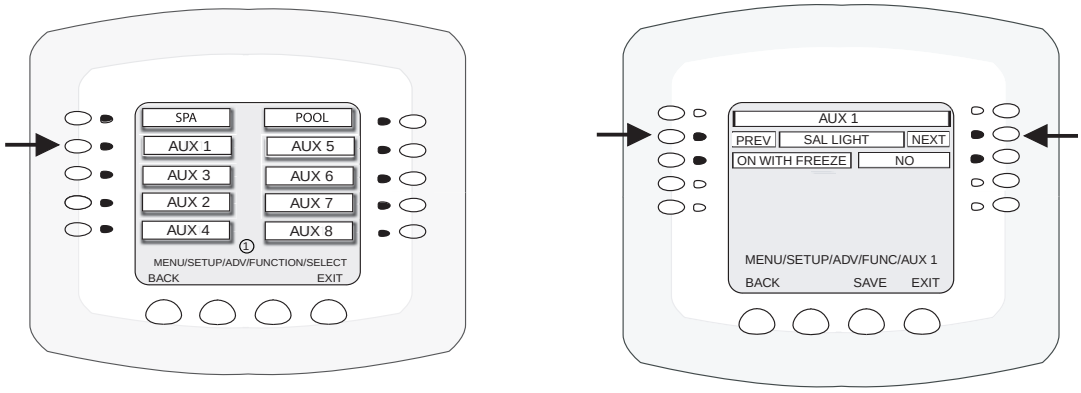
Setting up Color Swim and Color Set lights

The following steps (see next page) describes how to setup an AUX circuit to control the Color Swim and Color Set lighting features. The first step is to assign the circuit light function an auxiliary relay circuit (AUX 1), then assign the circuit name for that light circuit. The light circuit name will appear on the main screen. Each light (SAM or SAL) must also be assigned a circuit function. If the circuit function has been assigned, start at Step 5 (see next page).

Setting up Set Colors and Color Swim with S*Am*, S*AL*, or FIBER*works* (Continued)

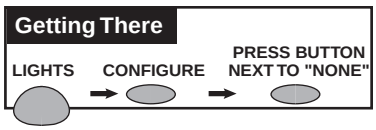
Getting There
MENU → SETUP → ADVANCED → CIRCUIT FUNCTIONS

1. Press the button next to an available **AUX (AUX 1 - AUX 8)** button to assign a light function a circuit.

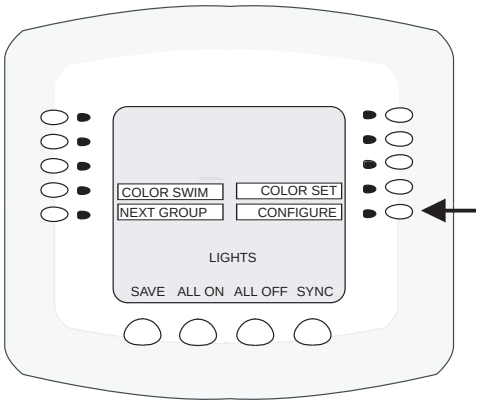


2. Press the right or left side **PREV/NEXT** button to scroll through the preset special circuit functions and choose a light selection (LIGHT, SAM LIGHT, SAL LIGHT, PHOTON GEN, COLOR WHEEL). See page 40 for the complete list of preset circuit functions. *Note: To use the Color Swim or Color Set feature you need to select SAM, SAL, Photon Generator or Color Wheel.*
3. Press the **SAVE** button on the bottom of the screen. To assign other circuits, press the **BACK** button and repeat step 2, and 3)
4. **Assign a name to the AUX circuit:** Press the **BACK** button two time until the Advanced screen is displayed..
5. Press the button next to CIRCUIT NAMES.
6. Press the button next to ASSIGN CIRCUIT NAMES to assign a name to the AUX (AUX 1-AUX) light circuit. From the Circuit Names screen you can assign circuit names for the main screen and create custom names.
7. Press the button next to DISPLAY 1. Display 1 is the main indoor control panel. If there are additional IntelliTouch Expansion Centers installed, Display 2, Display 3, and Display 4 will be displayed. Select which indoor control panel to configure. From this screen you can also configure Feature circuits.
8. Press the button next to the assigned AUX. A small arrow will appear next to the selected auxiliary circuit.
9. Use the **DOWN/UP** buttons select the name that you want to use for the light. For this example select SPA SAL for a spa light. Press the **SAVE** button on the bottom of the screen to save the name. Press the EXIT button when finished. Use this button to switch the light on and off.
10. Proceed to Step 11 to configure a SPA SAL light for the Color Swim of Color Set lighting feature.

To configure the SPA SAL light for the Color Swim of Color Set lighting feature:

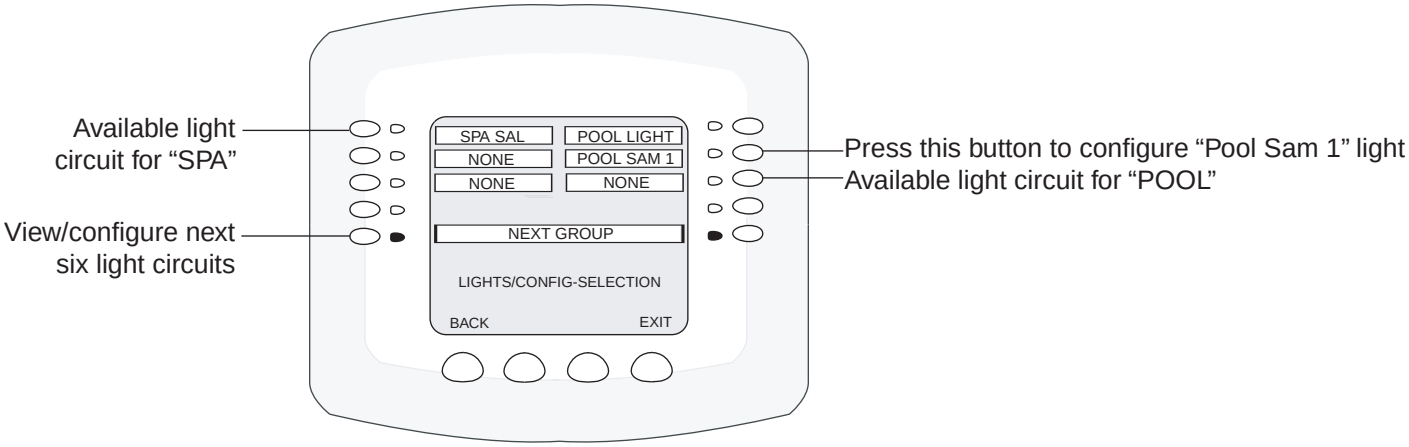


11. From the main screen, press the **Lights** button on the bottom of the screen.
12. Press the right or left side button next to CONFIGURE.



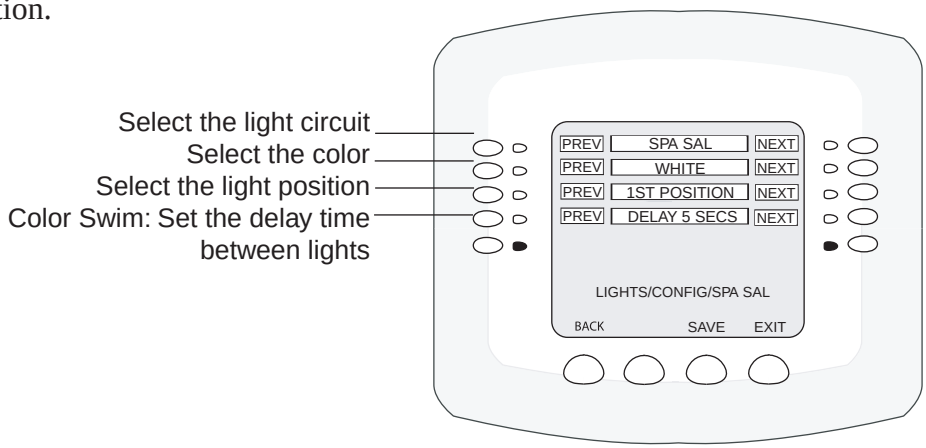
Lights

13. Press the button next to NONE to assign a light circuit to the selected button. Light names can be setup to display on the left side for “Spa” features and on the right side for the “Pool” features.



Setting up Set Colors and Color Swim with S*Am*, S*AL*, or FIBER*works* (Continued)

14. Press the top left or right side button to scroll through the available light circuits which can be used for the Color Set and Color Swim feature. Stop at the circuit name you wish to use. The displayed circuit names selections are circuit names that were previously assigned (when assigning a circuit function). If there are no circuits available for selection, refer to "Assigning Circuit Names, " on page 3, and "Assigning Circuit Functions and Freeze Protection" on pages 39 for more information.



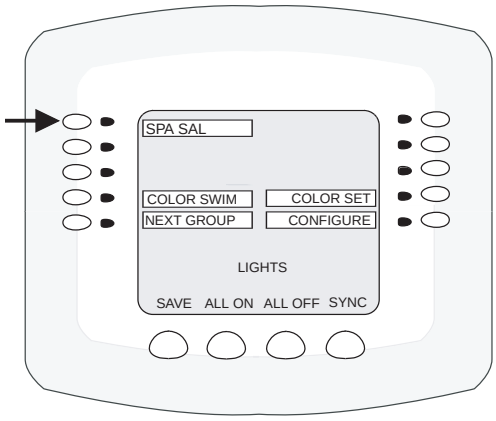
15. **Using the Color Set feature:** Press the second button down from the top to scroll through the color choices. Select the color of your choice. The selections are, White, Light Green, Cyan, Blue, Lavender, Magenta and Light Magenta.

16. **Set Light Position:** Press the third button down from the top to set the position of the first light in the sequence. **Position 1** will lead all the other lights in the color changing sequence. **Position 2** follows Position 1 and so on. There are 12 position to choose from. More than one light may be assigned to the same position number so that their colors may be synchronized. For example, to make the colors swim right to left, make your right most light POSITION 1. You may need to go back to Step 1 and scroll through your lights to find the right most light, and set it as POSITION 1.

17. **Using the Color Swim feature:** Press the forth button down from the top to set the time delay between this light and the previous position. Use a higher delay time for lights spread further apart. Try five seconds for all lights and observe the effect. Use different time settings to achieve unique lighting moods and effects.

18. Press the **Save** button to save the current setting for the first light. The previous "CONFIGURE-SELECTION" screen is displayed. Continue to setup the light circuits. Press the button next to "NEXT GROUP" to access the next screen for an additional six circuits. Repeat step 1 through 5 to set the light for POSITION 2 for Color Swim, and a new color choice for Color Set. Press Save. Repeat this process until all desired lights have set colors, positions and delays.

19. Press **Back** to view the Lights screen. "SPA SAL" on and off switch is now assigned to the AUX 1 button.



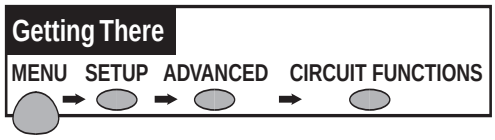
Setting up IntelliBrite LED lights

Up to twelve (12) IntelliBrite light circuits can be displayed on the main Lights screen. From the Lights screen you can activate the IntelliBrite lighting features (i.e., color swim, color set). Assuming each IntelliBrite light has its own relay and separate circuit. The IntelliBrite LED (light-emitting diode) underwater light system provides brilliant vivid colors with spectacular effects for your pool, spa and landscape lighting features. Each of the energy efficient IntelliBrite colored LED arrays can be individually controlled to custom create any color sequence of the rainbow spectrum. The IntelliBrite LEDs can be set to activate and cycle through colors at varying speeds, in different sequences of color.

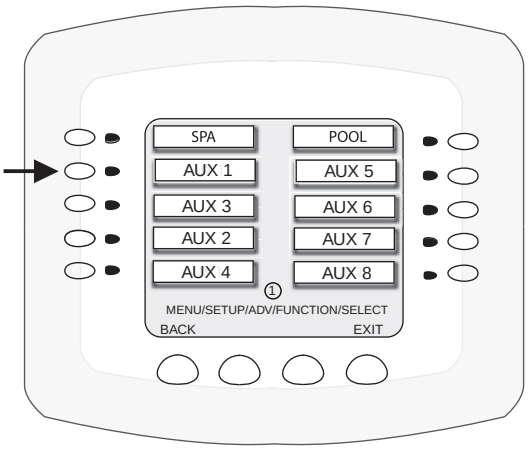
Setting up IntelliBrite Lights

To setup IntelliBrite LED light circuits, first assign each light auxiliary relay circuit a circuit name, then assign that light relay circuit in the “CIRCUIT FUNCTIONS” section, as “INTELLIBRITE.”

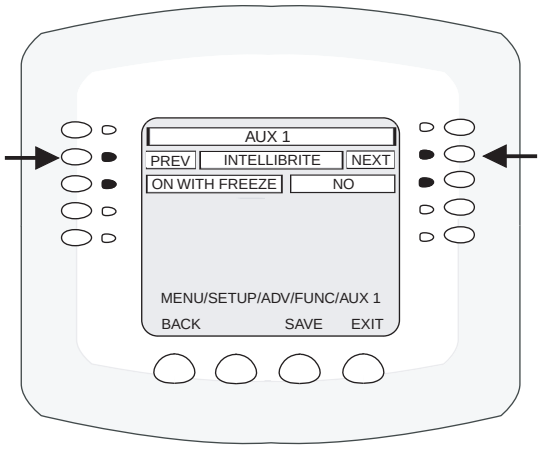
To setup the IntelliBrite light circuits:



1. Press the button next to the AUX button (the relay auxiliary circuit connected to the IntelliBrite light).

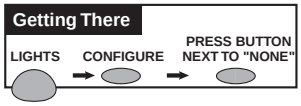


2. Press the right or left side (PREV/NEXT) button next to “INTELLIBRITE.” Scroll through the circuit functions until “INTELLIBRITE” is displayed. See page 41 for the complete list of preset circuit functions.
3. Press the SAVE button on the bottom of the screen. Press the EXIT button to return to the main screen.
4. Proceed to Step 5.



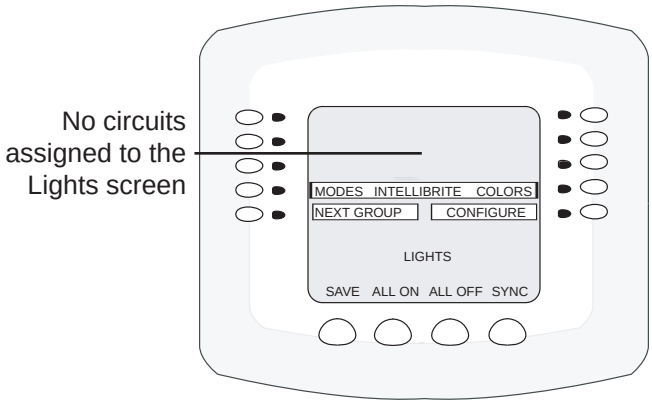
Setting up IntelliBrite LED lights (Continued)

To assign IntelliBrite light circuits to the Lights screen:



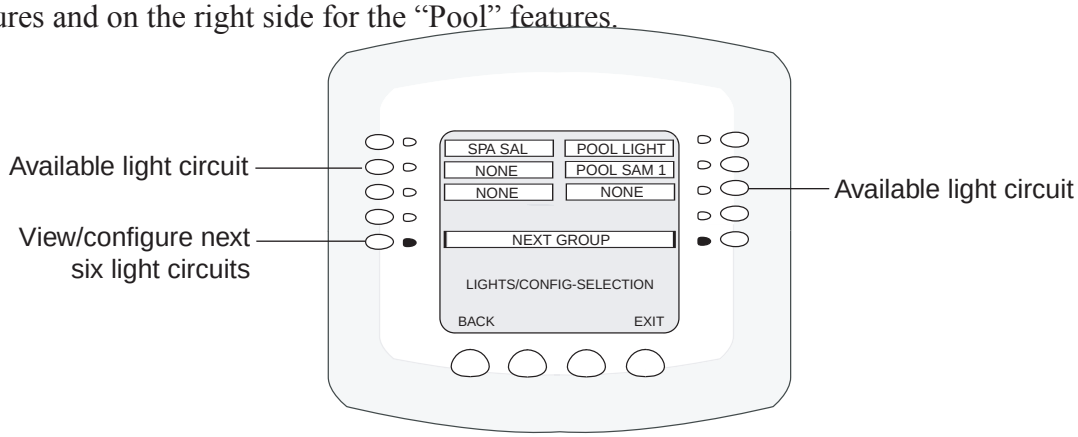
5. Press the Lights button on the bottom of the screen.

6. Press the right side button next to "CONFIGURE."

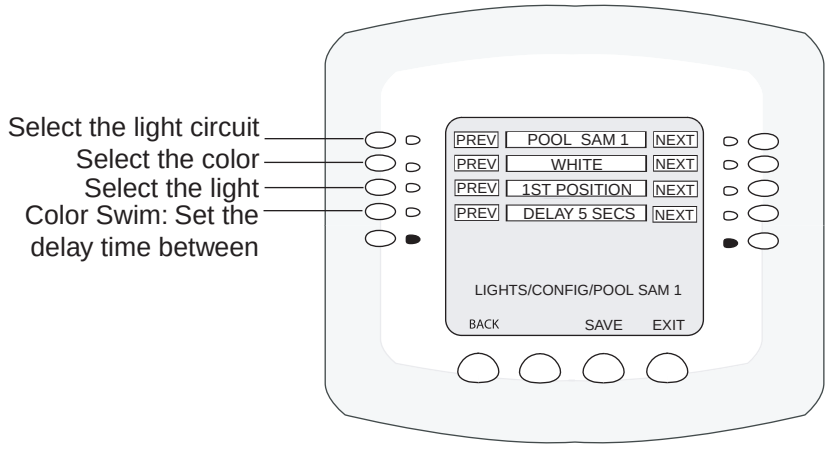


Lights screen using IntelliBrite lights

7. Press the button next to "NONE" to assign an IntelliBrite light circuit to the selected button. Light names can be setup to display on the left side for "Spa" features and on the right side for the "Pool" features.



8. Press the top left or right side button to scroll through the available light circuits which can be used for the IntelliBrite lighting features. Select at the circuit name you wish to use. The displayed circuit names are circuit names that were previously assigned when assigning a circuit function. If there are no circuits available for selection, refer to "Assigning Circuit Names, " on page 35, and "Assigning Circuit Functions and Freeze Protection" on page 39 for more information.



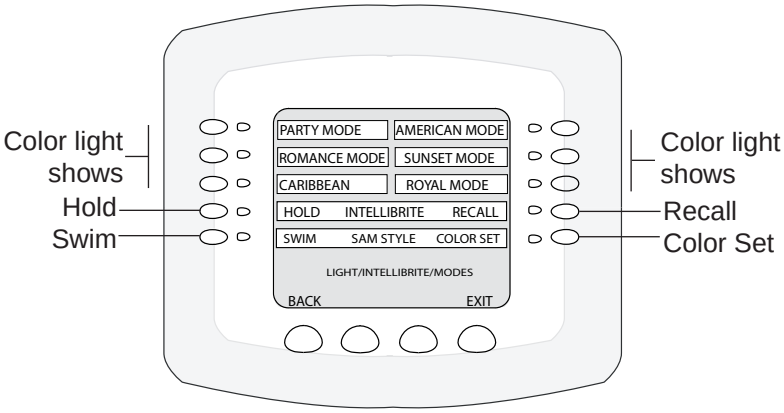
Setting up IntelliBrite LED lights (Continued)

Selecting IntelliBrite Modes

From the "Modes" screen you can select various preset show color lighting effects, such as "American mode" and "Sunset mode," and Sam Style (an emulation of the SAm color scheme). Using the "Hold" and "Recall" feature (see page 49) you can also capture and save a unique color effect to recall at a later time.

Modes screen

To access the IntelliBrite "Modes" features from the Lights screen, press the **Lights** button on the bottom of the screen, then press the left side button next to "MODES."



WARNING - During the off/on switching process, before the selected color is displayed, no illumination will occur. This operating mode is normal during the switching process. During this period the pool and spa will be dark and precautions should be taken to avoid unforeseen accidents. Failure to observe this warning may result in serious injury or death to pool and spa

Modes: Color light shows

There are six pre-programmed color light shows available to enhance your backyard pool environment.
Note: *If the light was not previously on, after pressing a color show mode button, no illumination will occur for up to ten (10) seconds (depending on the selection), then a white light will momentarily illuminate, followed by the color show mode selection. If the light was previously on, pressing the a color show mode button will momentarily illuminate the previously selected color before changing to the selected color show.*

- **SAm mode:** Emulates SAm lights color scheme
- **Party mode:** Rapid color changing building the energy and excitement
- **Romance mode:** Slow color transitions creating a mesmerizing and calming effect
- **Caribbean:** Transitions between a variety of blues and greens
- **American Mode:** Patriotic red, white and blue transition
- **Sunset Mode:** Dramatic transitions of orange, red and magenta tones
- **Royalty Mode:** Richer, deeper, color tones

Feature: Swim

The "Swim" SAm Style feature cycles through white, magenta, blue and green colors. This feature emulates the "Color Swim" feature (see page 42).
Note: *If the light was not previously on, after pressing the SWIM button, no illumination will occur for approximately six (6) seconds followed by the "COLOR SWIM" feature selection. If the light was previously on, after pressing the SWIM button, the previously selected color will momentarily illuminate, no illumination will occur for approximately six (6) seconds followed by the "COLOR SWIM" feature selection.*

Setting up IntelliBrite LED lights (Continued)

Feature: Color Set

The "Color Set" SAm Style feature allows any combination of up to 12 IntelliBrite lights, and SAm, SAL and or Fiberworks lighting (see page 42) to be preset to specific colors. To enable this feature, first select the light color from the "Colors" screen, then press the button next to "Color Set" to change the lights to the selected color. ***Note:*** *If the light was not previously on, after pressing the COLOR SET button, no illumination will occur for approximately six (6) seconds followed by the "COLOR SET" feature selection. If the light was previously on, after pressing the COLOR SET button, the previously selected color will momentarily illuminate, no illumination will occur for approximately six (6) seconds followed by the "COLOR SET" feature selection.*

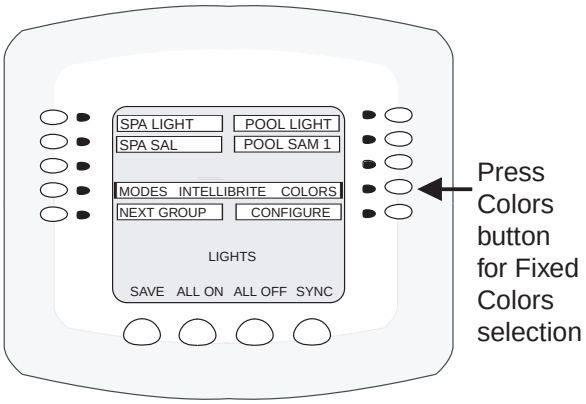
Fixed Colors Screen

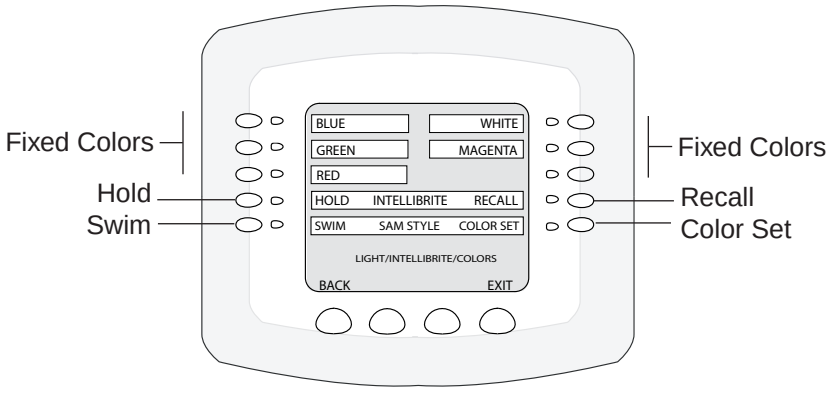
There are five (5) fixed colors to choose from to create a spectacular underwater lighting effect. The fixed colors are: **Blue, Green, Red**, **White** and **Magenta**. You can switch each light on or off from this screen (see above) by pressing the button next to the name of the color light. ***Note:*** *If the light was not previously on, after pressing a color button, no illumination will occur for up to ten (10) seconds (depending on the selection), then a white light will momentarily illuminate, followed by the color selection. If the light was previously on, pressing the color button will momentarily illuminate the previously selected color before changing to the selected color mode.*

To select a fixed color:

1. To access the IntelliBrite fixed "Colors" screen from the Main screen, press the **Lights** button on the bottom of the screen, then press the right side button next to "COLORS."

2. To activate a color, press the button next to the name of the color.





WARNING - During the off/on switching process, before the selected color is displayed, no illumination will occur. This operating mode is normal during the switching process. During this period the pool and spa will be dark and precautions should be taken to avoid unforeseen accidents. Failure to observe this warning may result in serious injury or death to pool and spa

Fixed Colors: Hold/Recall Feature

Use the "Hold" and "Recall" feature to capture and save the selected color and recall it at a later time. ***Note:*** *After pressing the HOLD or RECALL button, no illumination will occur for up to 10 seconds, then a white light will momentarily illuminate, followed by the saved color.*

Setting up MagicStream Laminars

The MagicStream Laminar provide a clear, turbulence-free stream of water that is lit with a fiber optic cable, or an LED light for a dazzling nighttime effect. The 12 VAC powered LED light can generate a series of multicolored light shows, or can be set to display a continuous, single color. If desired, the built-in solenoid "thumper" can create a random "wrinkle," in the Laminar's stream, causing it to display a brilliant spot of light that moves along the stream's arc. The light enhancer can be adjusted to maximize the light in the arc.

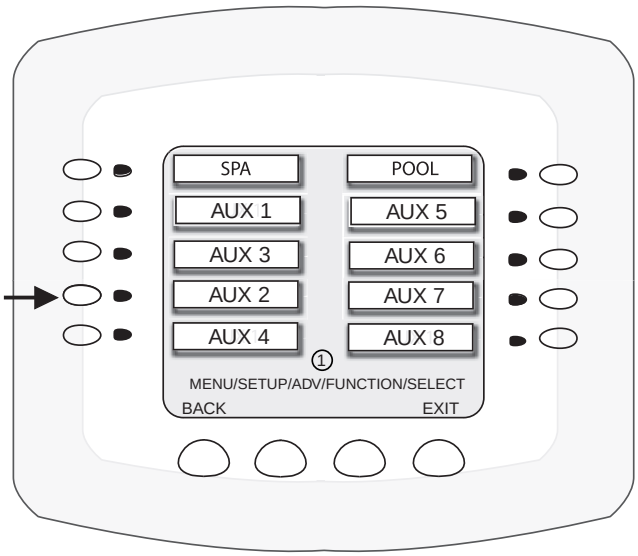
Up to twelve (12) MagicStream Laminar circuits can be displayed on the main Lights screen, assuming each laminar has its own relay and separate circuit.. From the Lights screen you can activate the MagicStream laminars (changing color modes, turn Thumper on/off, Hold and Reset). For more information, see the MagicStream Installation Guide, P/N 520969.

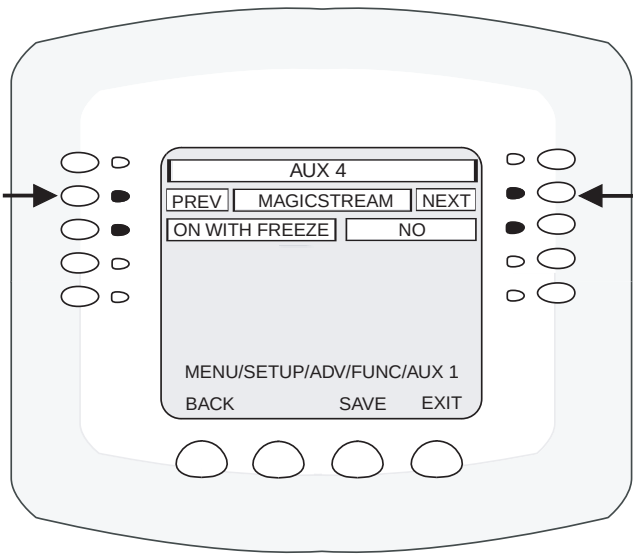
Setting up MagicStream Laminar LED Lights

To setup MagicStream laminar circuits, first assign each laminar auxiliary relay circuit a circuit name, then assigned the laminar relay circuit name in the "CIRCUIT FUNCTIONS" menu, as "MAGICSTREAM."

To setup the MagicStream laminar circuits:

1. Press the button next to the AUX button (the relay circuit connected to the laminar).
2. Press the right or left side (PREV/NEXT) button next to "MAGICSTREAM." Scroll through the circuit functions until "MAGICSTREAM" is displayed. See page 41 for the complete list of preset circuit functions.
3. Press the SAVE button on the bottom of the screen. Press the EXIT button to return to the main screen.
4. Proceed to Step 5.

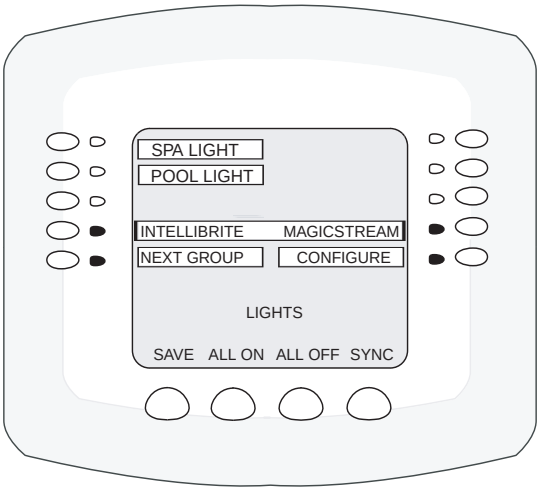




To display the assigned MagicStream circuit on the Lights screen:

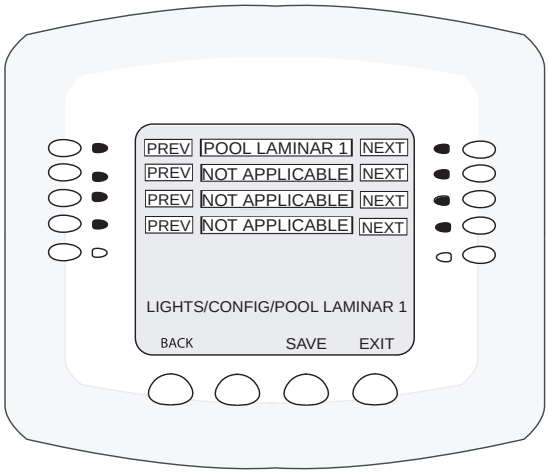
5. From the main screen, press the **Lights button** on the bottom of the screen.

6. Press the right side button next to “CONFIGURE” to assign the previously assigned MagicStream laminar circuits to the “Lights” screen. Note: The screen on right shows IntelliBrite light circuits already displayed on the “Lights” screen. The MagicStream circuits are not displayed until assigned to the “Lights” screen.



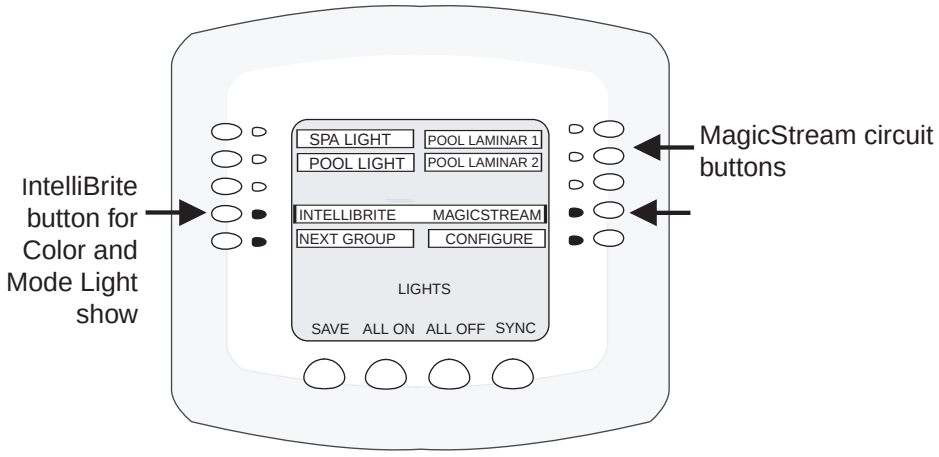
7. Press the button next to “NONE” to assign a laminar light circuit to the selected button.

8. Press the **top left or right side** button to scroll through the assigned light circuits. Select the previously assigned MagicStream circuit name (i.e. Pool Laminar 1) or AUX circuit. Repeat this step for other laminar circuits (i.e. Pool Laminar 1).
If there are no circuits available for selection, refer to “Assigning Circuit Names, ” on page 35, and “Assigning Circuit Functions and Freeze Protection” on page 39 for more information.



9. Press the **SAVE** button on the bottom of the screen. Press the **BACK** button to return to the main screen. The MagicStream laminar circuit will be displayed on the “Lights” screen, as shown below.

To activate the MagicStream features, see the next page.



Lights screen using IntelliBrite lights and MagicStream laminars

Using the MagicStream Laminar Features

The MagicStream laminar features are displayed on the MagicStream screen. Each time the MagicStream laminar is switched on using the Light screen circuit buttons, it resumes with the same features in operation as when last switched off. The MagicStream features are as follows:

Thumper - Pressing this button creates a “wrinkle” in the laminar stream, producing a brilliant spot of light in the laminar arc.

Reset - Pressing this button reverts to the **Random** color changing mode with the Thumper ON.

Toggle Mode - Pressing this button (each successive OFF/ON combination) will cycle through **Sync, Random** and **Party**. Color changing mode - The color of the light changes automatically, according to one the following three programs:

Sync - Colors will change at ten second intervals. In this mode, multiple laminars will synchronize colors together. Note: To sync multiple laminars (two or more AUX circuits), be sure to define the “MagicStream” circuits in the Circuit Functions screen and also define the AUX circuits in the Lights screen (CONFIGURE, 0-6 or 7-12).

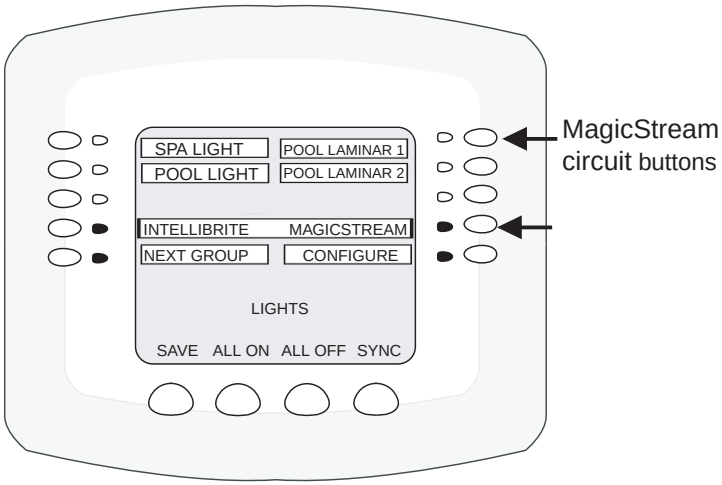
Random - Colors will change at ten second intervals in a random sequence. In this mode, multiple laminars will NOT synchronize colors together.

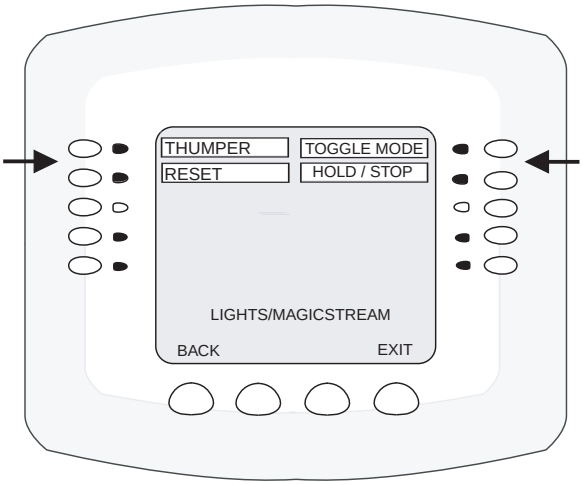
Party - Colors will change randomly and slowly at first, then speed up, until the sequence ends with quick flashes and strobes. The sequence then repeats, beginning with the slow changes. In this mode, multiple Laminars will NOT synchronize colors together.

Hold/Stop - Select Hold/Stop to capture the current color effect while colors are changing. The colors will stop changing. Selecting Hold/Stop again will resume the color changing mode.

To access the MagicStream laminar features screen:

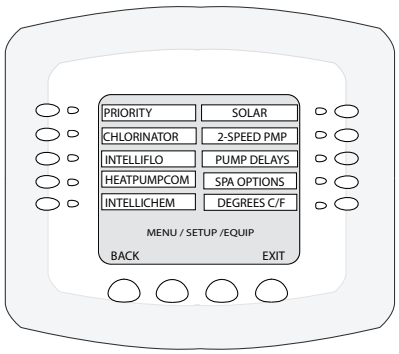
1. From the main screen, press the **Lights button** on the bottom of the screen.
2. Press the button next to MAGICSTREAM to access the laminar features screen.
3. To activate a laminar feature, press the button next to the desired feature.





Setting up Equipment (from the Equipment Screen)

If any special equipment is attached to the IntelliTouch Load Center, you need to setup IntelliTouch to recognize that equipment. From the Equipment screen you can setup:



Equipment Screen

- **Priority override** - Allows you to manually switch off a pre-programmed circuit.
- **IntelliChlor** - Setup and view the correct status of the IntelliChlor salt chlorine electronic generator.
- **IntelliFlo VF, VS and SVF pump** - Setup and view the current status of the IntelliFlo pump circuits and program the pump speed (RPM/GPM).
- **UltraTemp heat pump** - Setup UltraTemp for heating, cooling or both.
- **Solar or heat pump equipment** - Lets you adjust solar settings or setup solar as a heat pump (see page 66).
- **Two-speed pump** - Assign a circuit to switch the filter pump to high speed.
- **Pump delays: Cool-down cycle for the heater** - Assign a circuit to program a cool-down delay cycle for the heater
- **Valve delay:** Enable a delay cycle for valves.
- **Spa Options:** Automatic spa heating when the spa is manually turned on - Heats the spa using the Spa button on the Indoor Control panel or the spa-side control, even when the heater is set to OFF in the Heat screen. This allows you to heat the spa on-demand. Also, on this screen you can override the default "freeze" setting of 30 minutes to a maximum of 240 minutes. Adjustments can be set in 30 minutes increments (see page 77).
- **Fahrenheit or Celsius:** Change the temperature settings units to display either Fahrenheit or Celsius.

Manual Priority Override of Timed Program Circuits

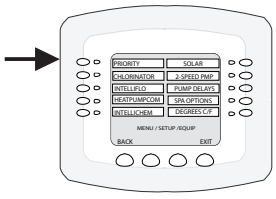
The following example describes how the "Manual Operation Priority" feature affects scheduled programs.

Manual Op Priority OFF (Default): If the filter pump circuit or any other circuit is scheduled to run from 9AM to 4 PM and the circuit is manually switched OFF and switched ON within the scheduled program, the circuit will stop at 4:00 PM as scheduled. In this example the program was not overridden and continued to operate as scheduled.

Manual Op Priority ON: If the filter pump circuit or any other circuit is scheduled to run from 9AM to 4 PM and the circuit is manually switched OFF and switched ON within the scheduled program, the circuit will continue to run for a maximum of 12 hours or whatever that Egg Timer circuit was set to. In this example the scheduled program was overridden and reverted to the default 12 hour run time.

***Note: Manual Op Priority OFF or ON**: Using the above examples, if the circuit is manually switched on before or after the scheduled run time, the circuit will run for a maximum of 12 hours or whatever the time the Egg Timer has been set to. For information about the Egg Time feature, see page 17.*

To enable Manual Op Priority press:
MENU > SETUP> EQUIPMENT > PRIORITY.



1. Press the top right or left button next to **Manual Op Priority** and select **Yes**.
2. Press **Save**.
3. Press **Exit** to return to the main screen.

Chlorine Generator

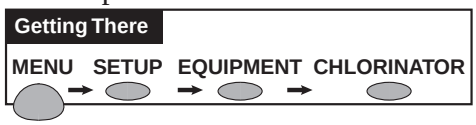
The IntelliTouch system is designed to operate with the following salt chlorine generators:

- Pentair Water Pool and Spa **IntelliChlor® SCG**
- GoldLine **Aqua Rite™**
- Clear Tech Automation **AutoClear® Plus**
- AutoPilot **Pool Pilot® Digital**

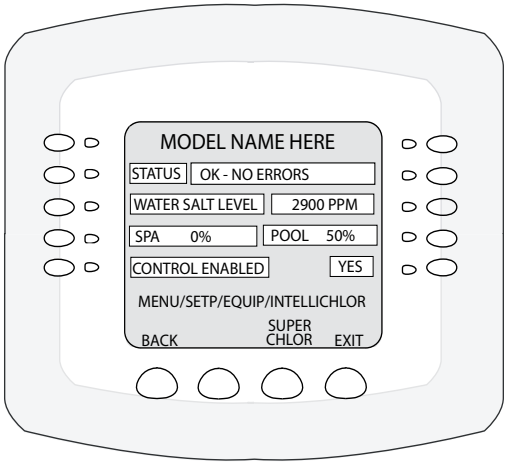
Note: *Call your manufacturer for compatibility with IntelliTouch systems.*

Activating the Chlorinator

For IntelliTouch to control and operate the chlorinator, first enable the chlorinator from the IntelliTouch Indoor Control Panel. If the chlorinator control is enabled, the controls on the chlorinator are disabled and can only be operated by IntelliTouch. When the chlorinator control is disabled from IntelliTouch, the chlorinator will still be running but must be controlled at the chlorinator control panel.

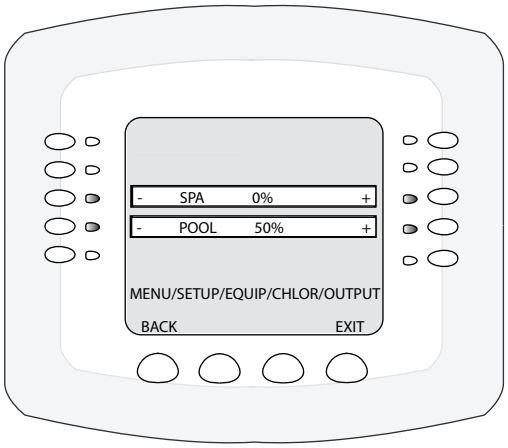


Go to the Chlorinator screen.



To view the chlorination status and adjust the spa or pool chlorination level:

- **STATUS:** Displays the current chlorinator operating condition. If a problem occurs with the chlorinator, an error codes will be displayed on the status line.
- **WATER SALT LEVEL:** Displays how much salt (in parts per million (ppm) is in the water. See chlorinator manufacturer's instructions for recommended salt levels.
- **SPA / POOL (0 -100%):** Displays the current spa and pool chlorination output level from 0 to 100%.



Spa and Pool Chlorine Output Level

- **CONTROL ENABLED:** Press the button next to **YES** until **NO** is displayed to disable the control of the chlorination interface from the Indoor Control Panel.

- **To enable or disable the chlorinator:** Press the button next to **CONTROL ENABLED** and select **YES** to allow IntelliTouch to control of the chlorinator. Select **NO** to disable IntelliTouch control. Press **Save** when done to return to the Equipment screen.

Adjusting the Chlorine Output Level

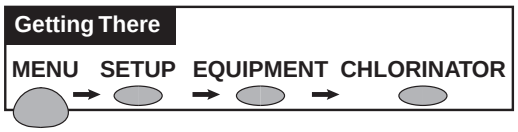
In an effort to prevent over chlorination of the spa, the IntelliTouch system will automatically drop the chlorine output levels to 1/20th of the current pool output when the spa is switched on. For example, if the pool output level is set to 60%, when the spa is switched on, the chlorination level is reduced to 3%.

- **To adjust the spa or pool chlorine output level:** Press the button next to **SPA / POOL**. Press the (-) or (+) button to decrease or increase the chlorine output level (from 0 to 100%) for the spa or pool water. Press **Save** when done to return to the Equipment screen. Press **Exit** to return to the main screen.

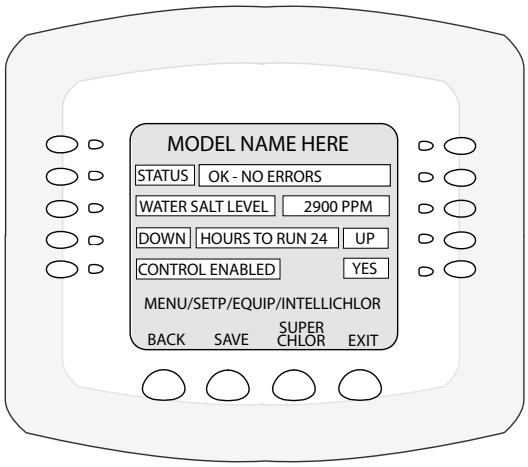
Super Chlorinate the Pool Water

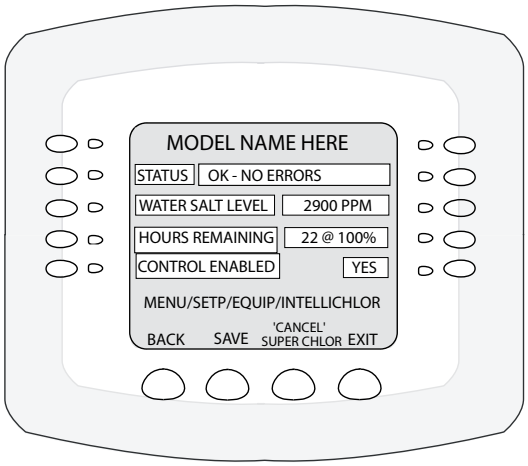
Periodically, it may be necessary to “super chlorinate” the pool and/or spa.

Go to the Chlorinator screen.



1. Press the **SUPERCHLOR** button.
2. The default run time for super chlorination is 24 hours. Press the buttons next to HOURS TO RUN to change the run time to super chlorinate.
3. Press **Save** when done. The chlorinator will start super chlorination mode (100%) and automatically switch on the filter pump. When super chlorination has been completed the system will return to normal operation.
4. **To cancel super chlorination**: Go back to the Chlorinator Screen. The time left for super chlorination is displayed.
5. Press the button under **Cancel Super Chlor**.
6. Press **Exit** to return to the main screen.





Note: *For information about wiring a salt chlorine generator to the IntelliTouch system , see “Wiring IntelliTouch to a Salt Chlorine Generator,” on page 112.*

IntelliFlo® VF, VS, and VSF Pump Setup

Setting up an IntelliFlo Pump

The IntelliFlo pump can be remotely controlled by an IntelliTouch® control System using the two-wire 50 foot RS-485 communication cable (P/N 350122). IntelliFlo operations can be adjusted from the IntelliTouch indoor control panel or MobileTouch wireless remote. For more information refer to the following manuals: IntelliFlo VF (P/N 350075), IntelliFlo VS (P/N 357269), IntelliFlo VSF (P/N 351420)

How many pumps will IntelliTouch Control System support?

IntelliTouch can support up to eight IntelliFlo VF and four IntelliFlo VS pumps in any combination with up to eight GPMs or RPMs per pump. For example pumps can be connected to IntelliTouch as follows:

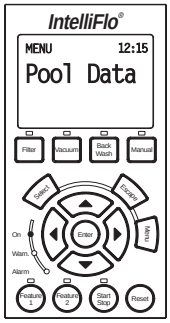
- 8 IntelliFlo VF
- 7 IntelliFlo VF + 1 IntelliFlo VS (or VSF)
- 5 IntelliFlo VF + 3 IntelliFlo VS (or VSF)
- 4 IntelliFlo VF + 4 IntelliFlo VS (or VSF) (or only 4 IntelliFlo VS pumps)

Connecting power to an IntelliFlo pump

The IntelliFlo pump is designed to be permanently connected to its power source. Typically the pump receives power directly from the circuit breaker. No contactor or motor starter is required. The drive controls the starting and stopping of the pump. If the IntelliFlo pump is connected to an automation system, such as the IntelliTouch automation system, the drive must be powered up to receive and respond to the RS-485 serial communication from the automation system. However, the pump can be operated in "stand-alone" mode, starting and stopping when power is applied or removed. When the drive powers up it will return to the mode and run status that it was in when power was removed. This setup maybe appropriate if you need to use existing relays or timers.

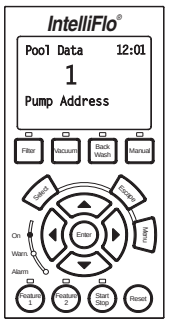
Assigning an IntelliFlo VF pump address

Before assigning a pump address in the IntelliTouch indoor control panel, first set the address **on the pump itself.** If there is only one pump, it is always seen as pump #1 by IntelliTouch. In this case you do not need to set the pump address. When using multiple IntelliFlo pumps with IntelliTouch you need to assign an address to each pump. The address can be set to #1, #2, #3, #4, #5, #6, #7, or #,8. The address set at the pump must match the IntelliFlo pump number selected in the IntelliTouch indoor control panel.



> ***Note:*** *IntelliFlo VF pumps cannot be connected in series with other pumps. Check valves must be used when a pump is used in parallel with other pumps.*

To assign an IntelliFlo VF pump address:



1. Press the **Start/Stop** button to stop the pump. Be sure that the green power LED is on and the pump is stopped.
2. Press the **Menu** button.
3. Press the **Up and Down** arrow buttons to scroll through the menu items. Press the **Select** button to access the "Pool Data" menu.
4. Press the **Select** button to access the "Pump Address" setting.
5. Press the **Select** button to change the current pump address.
6. To enter the new address number, press the **Left** and **Right** arrows to select which digit to modify, then use the **Up** and **Down** arrows to change the selected digit.
7. When you are done assigning the pump address number, press the **Enter** button to save the changes. To cancel any changes, press the **Escape** button to exit edit mode without saving.

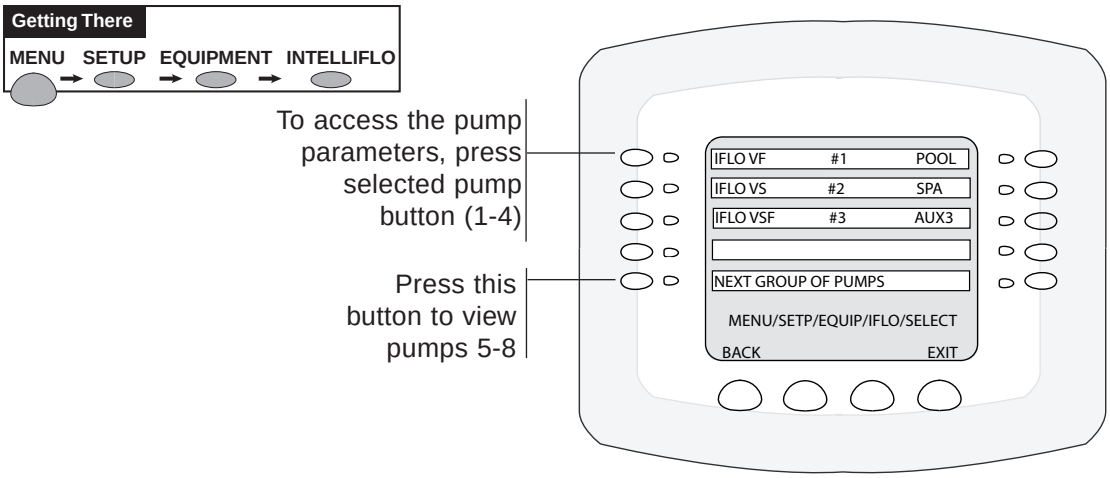
IntelliFlo® Pump menu options

To access the following IntelliFlo screens, press **MENU > SETUP >EQUIPMENT > INTELLIFLO:**

- **IntelliFlo main pump screens:** Two status screens (pumps 1-4, pumps 5-8), each displaying the IntelliFlo pump number assignments and assigned circuit name for each pump
- **IntelliFlo VF Set Parameters screen (page 58-65):** From these screens you can set up the pump parameters (filtering, priming, backwash, vacuum), assign a circuit name, assign up eight pump flows (GPM), or view the current pump status

IntelliFlo main pump screen (assign pump type, circuit, address)

From these screens you can assign the pump type, circuit name and address for each pump.



NOTE: INTELLIFLO AND CLEANER INTERLOCK: *In order to safguard the IntelliFlo pump and other equipment such as a pressure side cleaner booster pump, IntelliTouch monitors the main pump (if it is an IntelliFlo). If the pump stops, IntelliTouch will delay the cleaner function. This may take as much as 30 seconds. IntelliTouch will hold the cleaner off until the pump is running again. When the pump is running again IntelliTouch will restart the cleaner delay, as if it was just starting to insure water in the plumbing. IntelliTouch requires a bit more delay since the circulation pump may be on any address, e.g. #5, if there are four IntelliFlo VS pumps at 1 -4, and a VF at #5. So by default no pump is assigned. When you go into the menu "Circuit Functions" (see page 39, Menu>Setup>Advanced>Circuit Functions), if you assign a circuit as "Master Cleaner" an extra line will appear at the bottom of the screen. You can then select NONE if you don't have or want an IntelliFlo interlocked, or numbers 1 - 8 to identify the main circulation pump.*

NOTE: INTELLIFLO "FREEZE" PROTECTION - *If the IntelliFlo pump is on due to a freeze condition (not switch on from a relay circuit state), and if a freeze speed/flow is set in IntelliTouch, this setting takes priority even if the previous setting is lower than the default circuit speed. If no "freeze" protection is set, the pump will be forced **on** at the default circuit speed/flow. Any programmed or manual operation that actually switches on a circuit, will cause the pump to run at that speed if it is higher.*

NOTE: INTELLIFLO IN "SERVICE MODE" - *The IntelliFlo pump will STOP when IntelliTouch is in 'Service" mode. The pump will not stop if the communication cable is not connected or due to the pump's firmware.*

NOTE: INTELLIFLO VF PUMPS - *If the IntelliFlo VF pump is just starting (requiring a prime) and SOLAR is available, solar will be delayed for five (5) minutes to allow the pump to prime. This only applies for IntelliFlo pump(s) assigned as to a "pool" pump.*

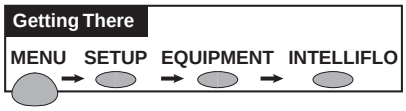
IntelliFlo® VF and VSF Pump Setup

IntelliFlo Set Parameters screens

From these screens you can assign a circuit name, set up the pump filtering, priming, backwash, vacuum features, assign up eight pump flows (GPM), or view the current pump status.

Assign or change a pump circuit name

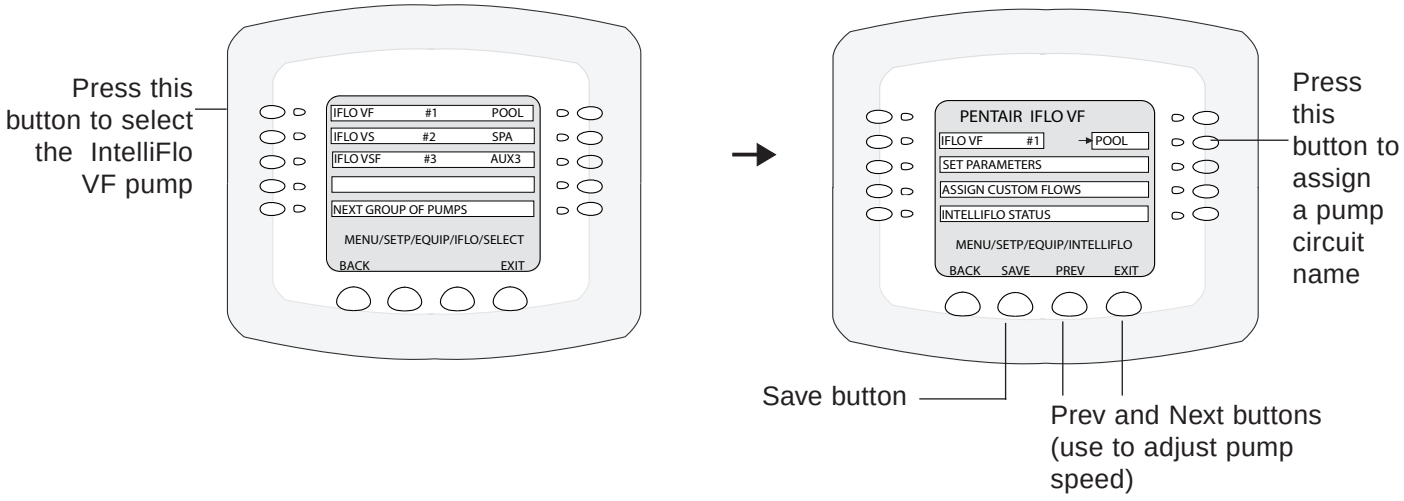
To assign a pump circuit:



1. From the main pump screen, press the left side button next to the selected IntelliFlo pump. The current circuit for the pump is displayed on the main pump screen.
2. On the next screen, press the right side button next to **NONE**. If you have already assigned a circuit the current circuit name is displayed.

> ***Note:*** *The assigned circuits for the IntelliFlo pumps displayed on this screen are tied to the IntelliFlo background "Filtering Parameters" (see page 59), which includes programmed run times, turnovers, etc. This is also the circuit which all of the "Set Parameters" are linked to.*

3. To assign a circuit name, press the **PREV** or **NEXT** lower button to select a circuit name for the pump. The selected circuit name must also be assigned a circuit function. For details about assigning a circuit function and a feature circuit, see pages 39 and 76.

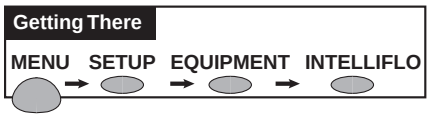


4. Press the lower **SAVE** button to save the setting. The main Equipment screen is displayed. Press the button next to **INTELLIFLO**. The main pump screen displays IntelliFlo #2 with the assigned circuit name. Select another IntelliFlo pump and repeat step 3 to assign a circuit name.
5. When finished, press the **BACK** button to return to the Equipment screen.

IntelliFlo® VF and VSF Pump Setup (Continued)

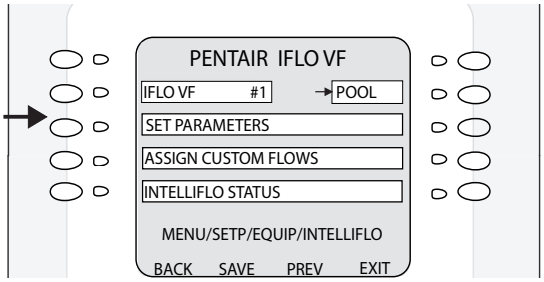
Filtering parameters

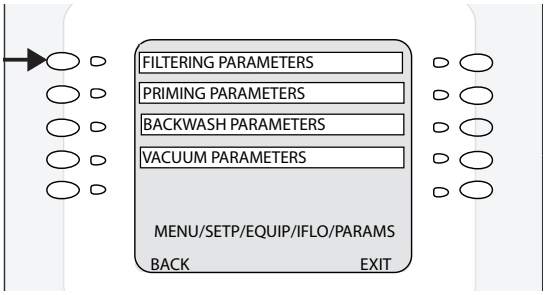
The filtering parameters (pool size, turns per day) allows IntelliFlo Pump to calculate the required flow rate which controls the motor speed to keep a constant flow. You can set up to eight turns per day. It is recommended that one turn per day for energy conservation be performed for most common residential pools. The "Manual Filter" option allows you to set the GPM to clean the filer by performing a "Backwash" cycle (see page 61).

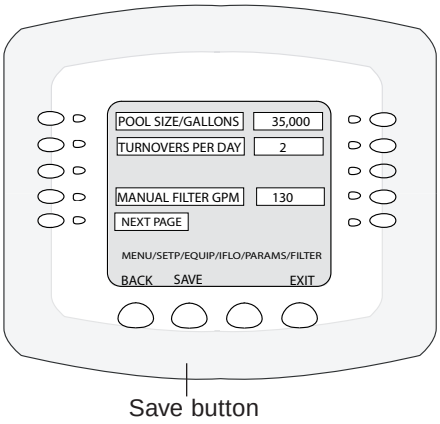


To set filtering parameters:

1. From the main pump screen, press the left side button next to the select IntelliFlo pump.
2. On the next screen, press the left side button next to **SET PARAMETERS** then on the following screen select **FILTERING PARAMETERS**.







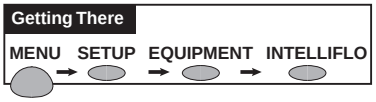
4. When finished, press the lower **SAVE** button to save the setting. The previous pump parameters screen is displayed. To modify another parameter select a feature from the parameter list. To exit, press the **EXIT** button to return to the Equipment screen.

Description	Value
Pool Size/Gallons The pool size value is expressed as 1000's of gallons (Kgal). Enter from 1 to 1000 Kgal for the pool volume. The volume number can be a close estimate, although the more accurate the better the turns will be done when employing filter mode. Filter mode uses this value in coordination with the parameters from Filter mode to sustain turn rates, flows, and times.	0-255
Turnovers per day You can set up to up to eight turns per day. It is recommended to set one turn per day for energy conservation for most common residential pools. Also, refer to your sanitizer recommendation for additional information.	1-8
Manual Filter GPM (Default is 30 GPM) Manual Filter sets the flow at which the pump will run if it is turned on manually. The IntelliFlo pump will only run in the 'Filter' mode during the programmed times. For example, if the pump is programmed (start/stop times) for the pool circuit to run from 8:00 AM to 4:00 PM everyday. This program or programs are used by IntelliFlo to calculate at what speed it must run given those 'ON' times to achieve the turnover(s) for that sized pool for the basic filter mode.	15-130

IntelliFlo® VF and VSF Pump Setup (Continued)

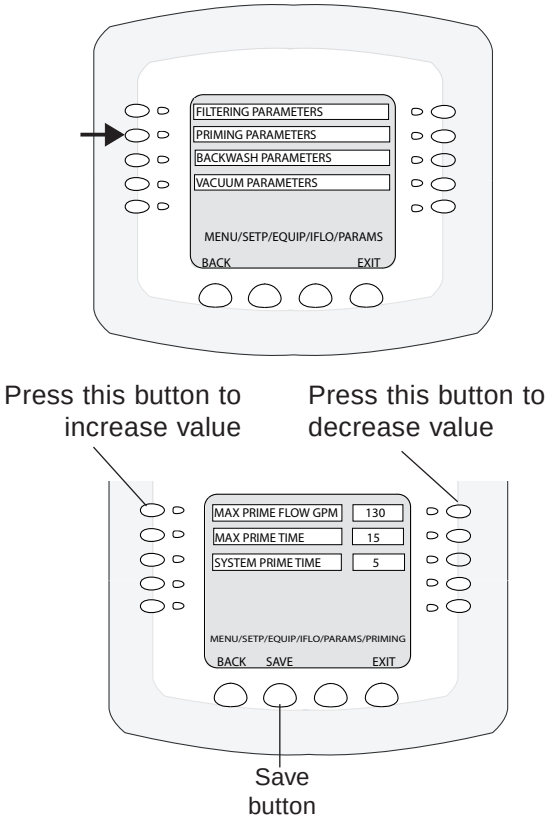
Priming parameters

To "prime" a pump means filling the pump and suction pipe with water. This process evacuates the air from all the suction lines and the pump. It may take several minutes to prime depending on the depth of water, pipe size and length. It is easier to prime a pump if you allow all the air to escape from the pump and pipes. The water cannot enter unless the air can escape. Pumps do not hold prime, the pool piping system has that task. Priming is a function used every time the motor is started with a flow as reference. The "Priming Flow" function ensures the proper operation of the pump. The "System Priming Time" function ensures proper operation of the whole pool system. When the pump is priming, the control panel LCD displays "Priming" and then for a moment displays "Primed" when priming is complete.



To set the priming parameters:

1. From the main pump screen, press the left side button next to the select IntelliFlo pump.
2. On the next screen, press the left side button next to **SET PARAMETERS** then on the following screen select **PRIMING PARAMETERS**.
3. To adjust one of the parameters, use the right button to increase and the left button to decrease the parameter value.
4. When finished, press the lower **SAVE** button to save the setting. The previous pump parameters screen is displayed. To modify another parameter select a feature from the parameter list. To exit, press the **EXIT** button to return to the Equipment screen.



Description	Value
Max Prime Flow GPM - (Default is 55 GPM) Every time the pump starts this parameter will negotiate the maximum flow of the pump. If the flow is too high, equipment damage can occur. If the flow is to low the pump will not prime. This "flow" is system dependent and may require adjustment. The pump will never flow more than this parameter is set to, however, it is common for the pump to ramp up and down quickly while priming. Always try to keep this flow as low as possible for cost savings and safety.	60-130 GPM
Max Prime Time - (Default is 15 min.) Use this parameter to set the time that you want IntelliFlo try and prime before it reports an error. Remember that the IntelliFlo will attain prime every time it starts and goes through this cycle. The IntelliFlo mechanical seal can withstand about 15 minutes before severe damage occurs. The lower the time the quicker you will get a priming error if the system is difficult to prime. A well plumbed pool without having the strainer removed should prime in less than 30 seconds. If the strainer has been removed for cleaning and a substantial amount of air is in the system it should prime in about 60 to 90 seconds on the average, however, all systems will be different.	1-15 minutes

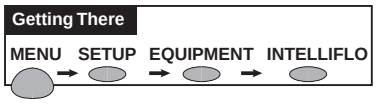
IntelliFlo® VF and VSF Pump Setup (Continued)

Backwash parameters (also see page 113)

When the pump detects that the filter differential pressure (10 PSI difference) has increased and is now at the "Clean Filter" pressure, IntelliTouch displays an alert message. This means that the filter must be cleaned (backwashed) to reduce the pressure. To do this, the pump must be stopped and the IntelliTouch outdoor control panel must be in "Service" mode (press the Auto button and select "Service" mode. To start the backwash flow operation, press the Start/Stop button on IntelliFlo, then press the Backwash button. The pump will run the preset cycle time and preset flow GPM). The flow will be adjustable to accommodate the specific filter backwash flow requirement. After the backwash cycle is finished, the "Rinse" cycle with the preset duration time will be executed. After these cycles have been completed or if the Start/Stop button is pressed to stop the process, the filter status will be recalculated and the zero-pressure measured when Filter mode is operated again.

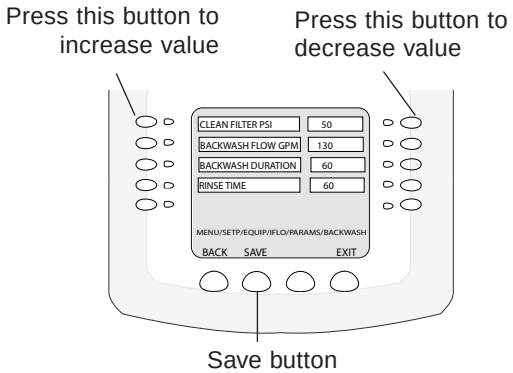
When using cartridge filters the backwash cycle must be performed when cleaning or replacing filters. This helps the IntelliFlo reset its zero head pressure level. If you are charging a DE system, charge the system first during a normal running cycle. After the filter is charged, run the pump in backwash mode with the filter valve in the filter position to reset the % clean filter status. Then run the pump in filter mode.

Note: *IntelliFlo will ramp up to full speed if necessary to achieve the commanded flow. Be sure that the system can withstand the resultant pressures.*



To set the backwash parameters:

1. From the main pump screen, press the left side button next "INTELLIFLO".
2. On the next screen, press the left side button next to **SET PARAMETERS** then on the following screen select **BACKWASH PARAMETERS**.
3. To adjust each of the parameter values, use the right button to increase and the left button to decrease the value.
4. When finished, press the lower **SAVE** button to save the setting. The previous pump parameters screen is displayed. To modify another parameter select a feature from the parameter list. To exit,



Description	Value
Clean Filter PSI - (Default is 14 PSI) The average PSI setting is between 10 PSI and 20 PSI for most pools and filters. The entered PSI value splits the percentage meter for the filter. When the "clean filter" value is reached, IntelliTouch displays an alert message and the pump stops monitoring flow rates and starts managing pressure. The value represents the change in pressure over time from start up (system clean) to present day (system getting dirty). The changes can come from anywhere in the system, for example clogged skimmers or pots in pumps. Setting this parameter at a lower level will cause the alert message to come up sooner and you will have to clean your filter (cartridge) or backwash your filter (sand or DE) sooner.	1-50 PSI
Backwash Flow GPM - (Default is 60 PSI)	15-130 GPM
Backwash Duration - (Default is 5 minutes)	1-60 minutes

IntelliFlo® VF and VSF Pump Setup (Continued)

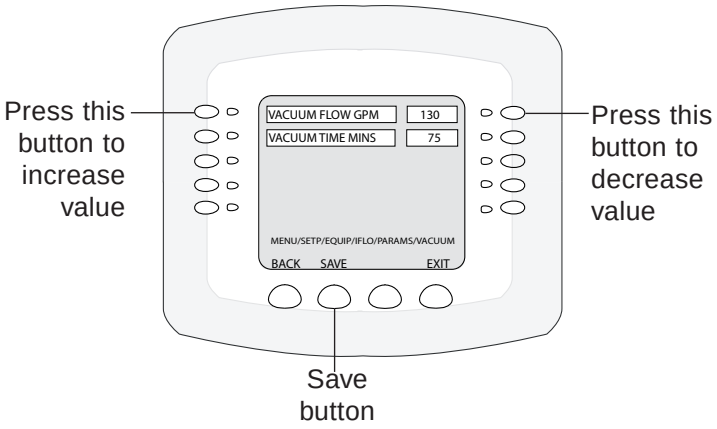
Vacuum parameters

Use the Vacuum mode to clean the pool manually. To operate the pump in Vacuum mode, place the IntelliTouch outdoor control panel in "Service Mode," and stop the IntelliFlo pump. The pool service person can then press the Vacuum button on the IntelliFlo pump. The pump would operate at the preset Vacuum parameters, then the blockage alert parameter would be cleared and the pump will stop. Vacuum mode only operates in flow control mode. Operating in Vacuum mode shuts off all of the pumps sensors. This mode is identical to IntelliFlo "Feature 1 and 2" except that you can manually start this mode using the Vacuum button. Safety considerations should be made when setting the Vacuum flow parameter.

CAUTION: Since vacuuming is manual work and the user will be at the pool, the "Blocked System" will be switched off, it is important not to use any kind of automatic cleaners, (such as Kreepy Krauly, etc.) with Vacuum mode.

To set the vacuum parameters:

1. From the main pump screen, press the left side button next to the select IntelliFlo pump.
2. On the next screen, press the left side button next to **SET PARAMETERS** then on the following screen select **VACUUM PARAMETERS**.
3. To adjust one of the parameters, use the right button to increase and the left button to decrease the parameter value.



Description	Value
Vacuum Flow GPM (50 GPM default) This setting sets the GPM that the pool vacuum will use.	15-130 GPM
Vacuum Time Mins. (10 minutes default) This parameter can be set from 1 to 600 minutes. The typical setting is 10 minutes. This setting sets the amount of time you wish to run the pool vacuum.	1-600 minutes (10 hours)

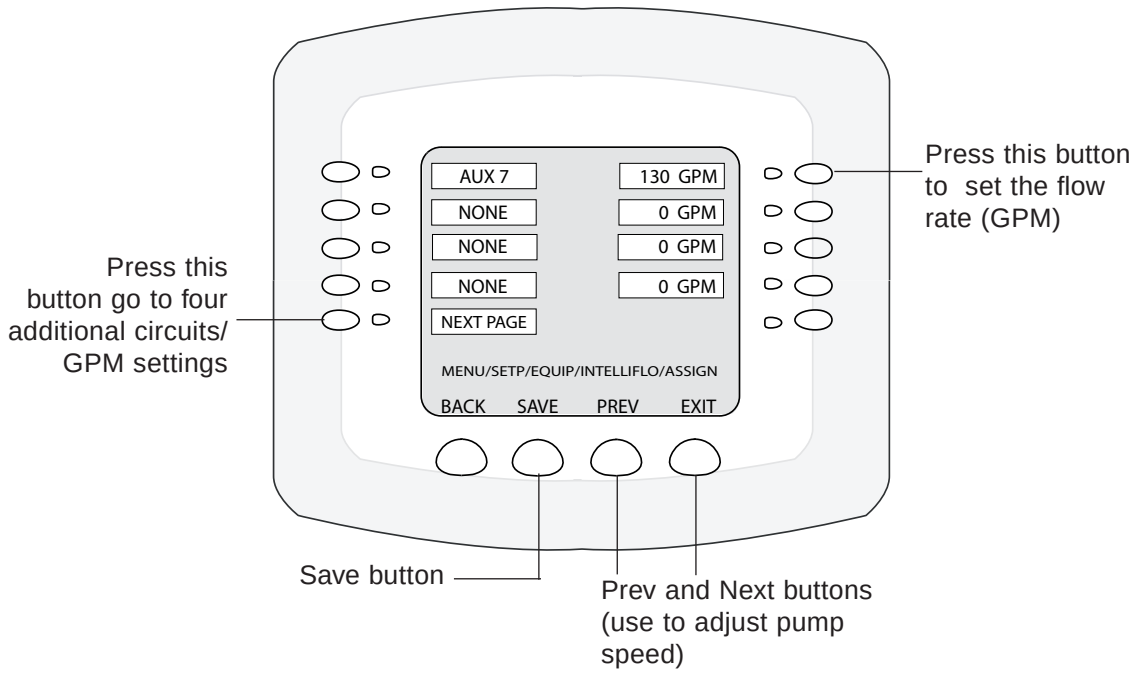
IntelliFlo® VF and VSF Pump Setup (Continued)

Assign custom flows

From the Assign Custom Flows screen you can assign different (normally higher) flows to circuits/features. For example you can set your SPA to run at 80 GPM. This way when you switch to spa mode, the pump goes from the calculated fitter rate of about 28 GPM to 80 GPM while you use the spa. You have a waterfall, and require 60 GPM when it's switched on.

To assign a specific flow to a circuit/feature:

1. From the main pump screen, press the left side button next to the select IntelliFlo pump.
2. On the next screen, press the left side button next to **ASSIGN CUSTOM FLOWS**.
3. First assign a circuit name. Press the left side button for the selected circuit. Use the **PREV** and **NEXT** button to set the circuit. Then press the right side button to set the flow rate in GPM. The selected circuit/feature must also be assigned a circuit function/feature. For details about assigning a circuit function and feature circuit, see page 39 and 79.
4. When finished, press the lower **SAVE** button to save the setting. The previous pump parameters screen is displayed. To modify another parameter select a feature from the parameter list. To exit, press the **EXIT** button to return to the Equipment screen.

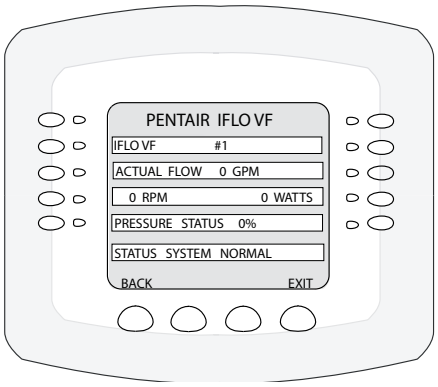


IntelliFlo® VF and VSF pump setup (Continued)

IntelliFlo VF status screen

To view the current pump status:

1. Press **MENU > SETUP > EQUIPMENT > INTELLIFLO >.** Press the left side button next to the IntelliFlo VF pump.
2. On the next screen, press the left side button next to **INTELLIFLO STATUS**.
3. To exit, press the **BACK** button to return to the previous screen or **EXIT** to return to the main screen.



IntelliFlo VF 3050 Status screen description:

IntelliFlo VF 3050 #1:
Displays the IntelliFlo VF 3050 pump assignment number
Actual Flow 0 GPM
Displays the current flow rate for the pump in GPM
RPM:
Displays the current pump speed in RPM.
Watts:
To calculate a system's "Continuous Watts" use the following formula:
Amps X Volts X Power Factor = Continuous Watts
- 1 HP E+ WhisperFlo = 7.4 amps X (230 Volt) X .90 PF = 1532 watts
- 1 HP Max – E – Pro = 8.0 amps X (230 Volt) X .87 PF = 1600 watts

Once watts are computed, convert watts to kilowatts (kilo is 1000) and multiply this number by kilowatt/hour cost.
- 1 watt = .01 Kilowatt
- 100 watts = .1 Kilowatt
- 1000 watts = 1 Kilowatt
- 1 HP E+ WhisperFlo 1532 watts or 1.532 Kilowatt x $.08 = $.122 per hour
- 1 HP Max-E-Pro 1600 watts or 1.600 Kilowatt x $.08 = $.128 per hour

The IntelliFlo does not require calculation for continuous watts since it is displayed on the screen in all modes. Just simply take the watts published on the screen, convert to kilowatts, and multiply by the kilowatt hour. The formula is:
210 watts = .210 kilowatt X $.08 = $.016 per hour
Remember to also consider the amount of water moved for the cost incurred (Water to Wire Efficiency). The IntelliFlo cannot be matched in today's industry for flow versus continuous watts at any speed by any other pump in pool. The Filter mode and flow control further assists in cost saving by always allowing the pump to do the least amount of work at all times.
Pressure Status 0%:
Displays the current filter status in percentage value. The higher the percent value the nearer the filter will require a backwash and rinse cycle. See ""Backwash Mode"" on page 61 for more information.
Communication Status:
Displays the IntelliFlo operating status

IntelliFlo® VS and VSF Pump Setup

Setting up IntelliFlo VS and VSF Pumps

IntelliFlo VS and VS pump speed can be remotely controlled an IntelliTouch system using a two-wire 50 foot RS-485 communication cable (P/N 350122) provided with the pump. The IntelliFlo VS and VSF pump speed can be adjusted from the IntelliTouch Indoor Control Panel to run at any speed between 400 RPM to 3450 RPM with preset speeds of 750, 1500, 2350, and 3110 RPM. For more information refer to the IntelliFlo VS Installation and User's Guide (P/N 357269) and the IntelliFlo and IntelliPro® VSF Installation and User's Guide (P/N 351420).

Assigning an IntelliFlo VS pump address

Before assigning a pump address in the IntelliTouch indoor control panel, first set the address **on the pump itself.** If there is only one pump, it is always seen as pump #1 by IntelliTouch. In this case you do not need to set the pump address. When using multiple IntelliFlo VS pumps with IntelliTouch you need to assign an address to each pump. The address can be set to #1, #2, #3, or #4. The address set at the pump must match the IntelliFlo pump number selected in the IntelliTouch indoor control panel.

> ***Note:*** *IntelliFlo pumps cannot be connected in series with other pumps. Check valves must be used when a pump is used in parallel with other pumps.*

To assign an IntelliFlo VS pump address:

1. Be sure that the pump is powered on and the green power LED is on.
2. Press the **Stop** buttons to stop the pump.
3. Press and hold both the **Start and Stop** buttons until the red LED will starts flashing, then press one of the four speed buttons (1-4) to select which address to assign the pump. For example, if you are assigning the pump as pump #1, then press Speed button number 1.
4. Press and hold both the **Start and Stop** buttons to save the address. Repeat the process for the other pumps.

IntelliFlo VS Speed buttons (1-4)

Assigning an IntelliFlo VSF pump address

To assign an IntelliFlo VSF pump address (1-16):

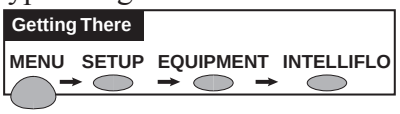
1. Press the **Start/Stop** button to stop the pump. Be sure that the green power LED is on and the pump is stopped.
2. Press the **Menu** button.
3. Press the **Up and Down** arrow buttons to scroll through the menu items. Press the **Select** button to access the "SETTINGS" menu.
4. Press the **Select** button to access the "PUMP ADDRESS" setting.
5. Press the **Select** button to change the current pump address (1-16).
6. To enter the new address number, press the **Left** and **Right** arrows to select which digit to modify, then use the **Up** and **Down** arrows to change the selected digit.
7. Press the **Enter** button to save the changes. To cancel any changes, press the **Escape** button to exit edit mode without saving.

> ***NOTE: INTELLIFLO "FREEZE" PROTECTION -*** *If the IntelliFlo pump is on due to a freeze condition (not switch on from a relay circuit), and if a freeze speed is set in IntelliTouch, this setting takes priority even if the previous setting is lower than the default circuit speed. If no "freeze" protection is set, the pump will be forced on at the default circuit speed. Any programmed or manual operation that actually switches on a circuit, will cause the pump to run at that speed if it is higher.*
>
> ***NOTE: INTELLIFLO IN "SERVICE MODE" -*** *IntelliFlo pumps will STOP when IntelliTouch is in 'Service" mode.*

IntelliFlo VS and VSF Pump Setup (Continued)

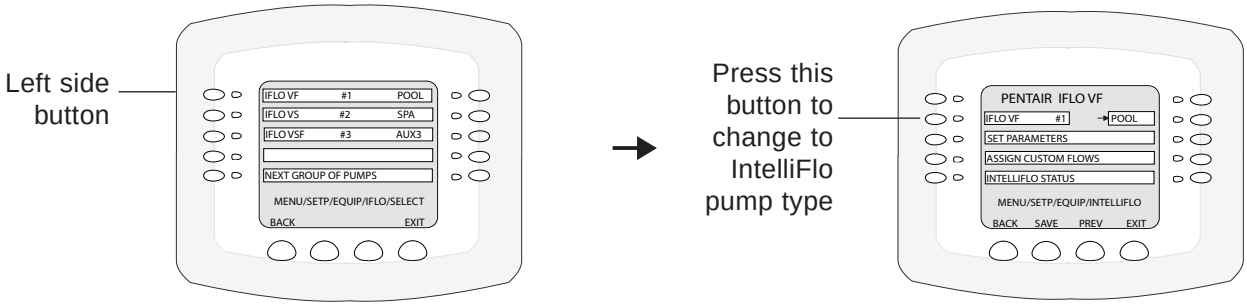
Setting up IntelliFlo VS and VSF pump from the Equipment Screen

After you have assigned the pump address on the IntelliFlo VS and VSF pump (see previous page), assign the pump type being used and the pump address in the IntelliTouch® Control System "Equipment" screen. When using a single IntelliFlo VS or VSF pump for remote control with IntelliTouch, the default address is always pump #1. When using multiple IntelliFlo VS and VSF pumps with IntelliTouch Control System assign an address to each pump. For IntelliFlo VS set the address to #1, #2, #3 or #4. For IntelliFlo VSF set the address from #1-#8. The address set at the pump must match the IntelliFlo pump number selected in the "Equipment" screen. This is also where you select the pump type being used and its address (IntelliFlo VF #1, IntelliFlo VS #2, IntelliFlo VSF #3 etc.).

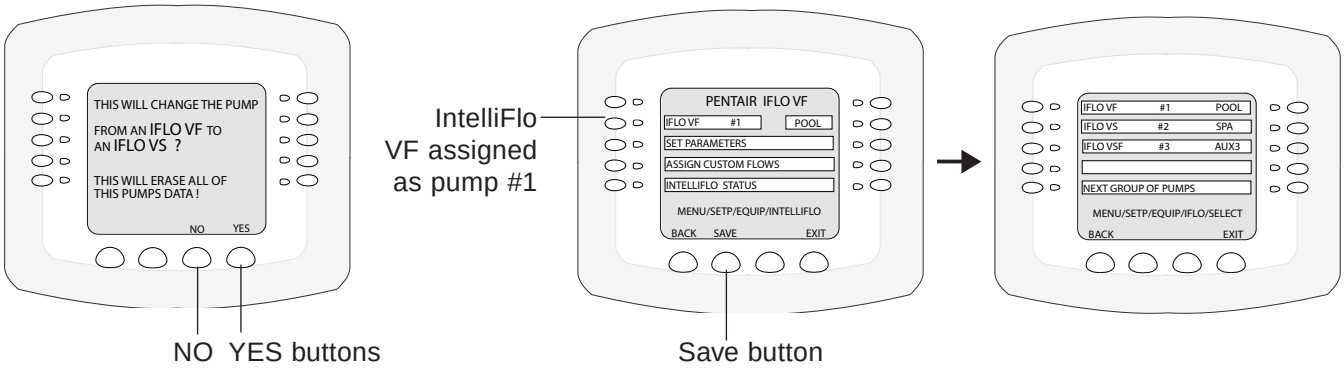


To select the pump type (IntelliFlo VS and IntelliFlo VSF) and it's address:

1. Press one of the left side buttons next to the IntelliFlo pump type and number (address) that you wish to change. **Note: IntelliFlo VS pumps can be assigned to address #1 through #4. IntelliFlo VSF pumps can be assigned to address #1 through #16.**



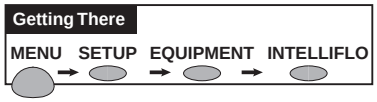
2. Press the left side button again next to the IntelliFlo pump selected in step 1. The next screen message indicates that you can change the pump type displayed or no change to the selected pump type. Pressing the lower "NO" button returns you to the previous screen. Pressing the same selected pump type again from this screen displays the next pump type. This way can scroll through the three pump types available. The three pump types to choose from are; **IFLO VS, IFLO VF and IFLO VSF.**
3. Press the lower right "YES" button to accept the pump type selection or press the "NO" button for no change. On the next screen, press the **Save** button to save the setting. The main Equipment screen is displayed. Press the button next to **INTELLIFLO**. The main pump screen displays IntelliFlo pump type assigned to pump #1. To set another IntelliFlo 4 pump, repeat steps 1-3.

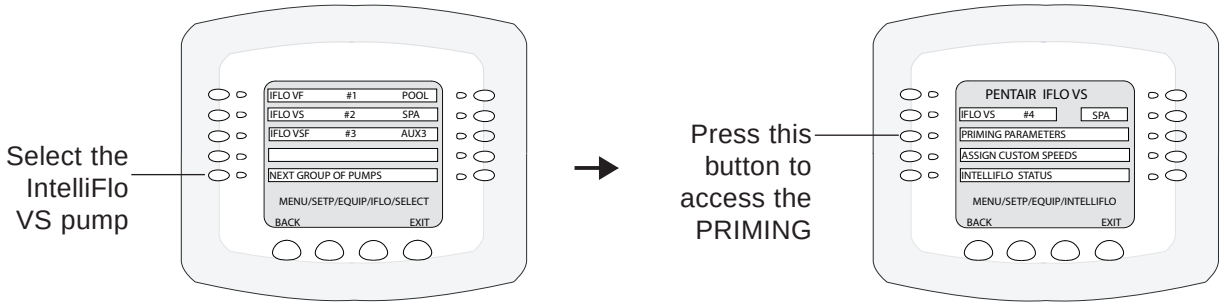


IntelliFlo VS and VSF Pump Setup (Continued)

Priming Parameters (IntelliFlo® VS)

The Intelliflo VS pump priming parameters allow the priming speed and duration length/time selection. The priming speed can be set from 400 RPM to 3450 RPM. The duration time can be set from 0 to 5 minutes, in one minute increments. ***Note:*** *If the IntelliFlo pump is powered on, and a priming parameter is set to a time greater than 0 minutes, the priming speed will be used from that period (assuming the priming speed is greater than the speed being requested).*



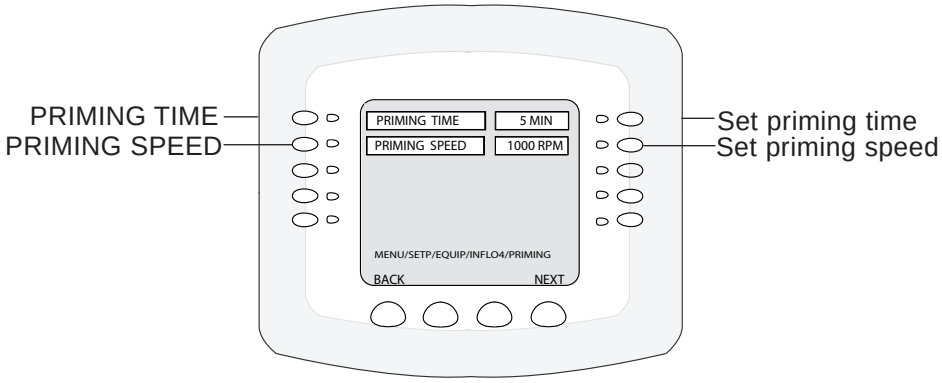


To set the IntelliFlo VS priming parameters:

1. From the main pump screen, press the left side button next to the IntelliFlo VS pump. Note: IntelliFlo VS pump can only be assigned as pump #1, #2, #3, or #4.
2. On the next screen, press the left side button next to "PRIMING PARAMETERS."
3. From the next screen you can set the pump priming time and speed:

   Set priming time: Press the top left or right side button to set the priming time from 0 to 5 minutes, in one minute increments.

   Set priming speed (RPM): Press the priming speed left or right side button to set the pump priming speed from 400 RPM to 3450 RPM.

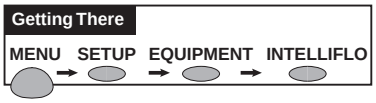


4. Press the lower **SAVE** button to save the settings.
5. Press the **EXIT** button to return to the Equipment screen. Press EXIT again to return to the main screen.

IntelliFlo® VS and VSF Pump Setup (Continued)

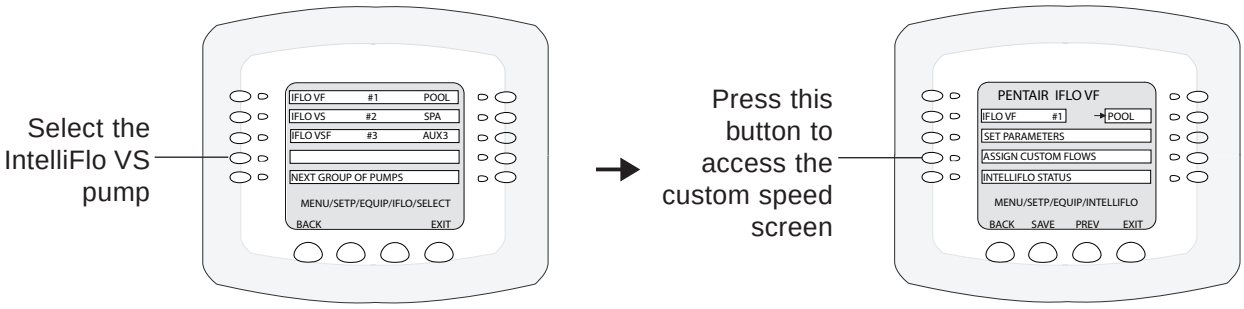
Assign custom speeds (RPM) IntelliFlo VS pump

Each Intelliflo VS pump can have a maximum of eight assigned circuits with eight preset pump speeds (RPM). The speeds can be set from 400 RPM to 3450 RPM.

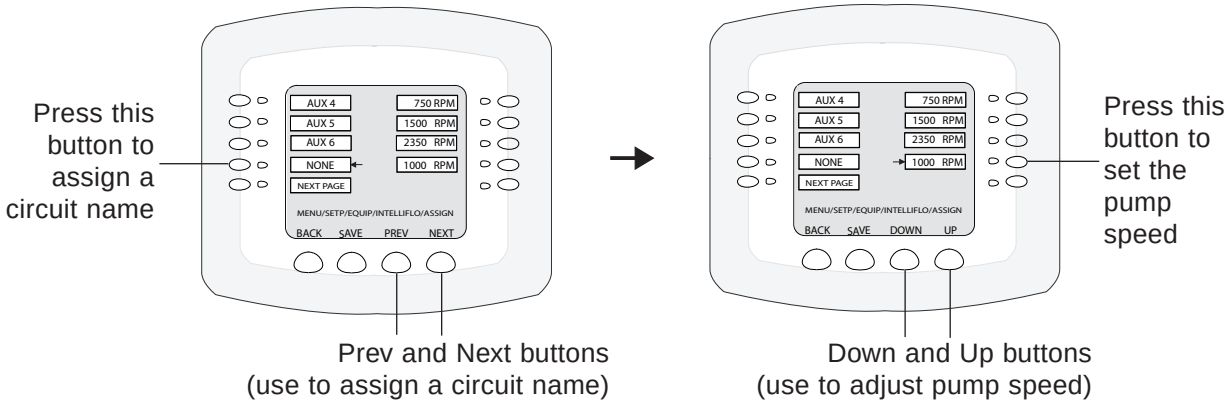


To set the IntelliFlo VS pump speed to an assigned circuit name:

1. From the main pump screen, press the left side button next to the selected IntelliFlo VS pump. *Note: An IntelliFlo VS pump can only be assigned as pump #1, #2, #3, or #4.*
2. On the next screen, press the left side button next to ASSIGN CUSTOM SPEEDS.



3. From the next screen you can assign a circuit name and set the pump speed. To assign a circuit name, press one of the left side buttons next to "NONE." Press the PREV or NEXT lower button to select a circuit name for the pump. The selected circuit name must also be assigned a circuit function. For details about assigning a circuit function, see page 39. Press the corresponding RPM button on the right side to set the speed. Use the DOWN and UP lower buttons to adjust the speed from 400 RPM to 3450 RPM.

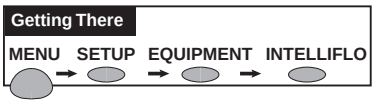


4. Press the lower **SAVE** button to save the circuit and speed setting. To set another circuit and pump speed, press the button next to ASSIGN CUSTOM SPEEDS to access the circuit and speed setup screen. If you need additional pump speed circuits, press the button next to NEXT PAGE to access an additional four circuits, then repeat step 3.
5. When finished, press the **BACK** button to return to the Equipment screen.

IntelliFlo® VS and VSF Pump Setup (Continued)

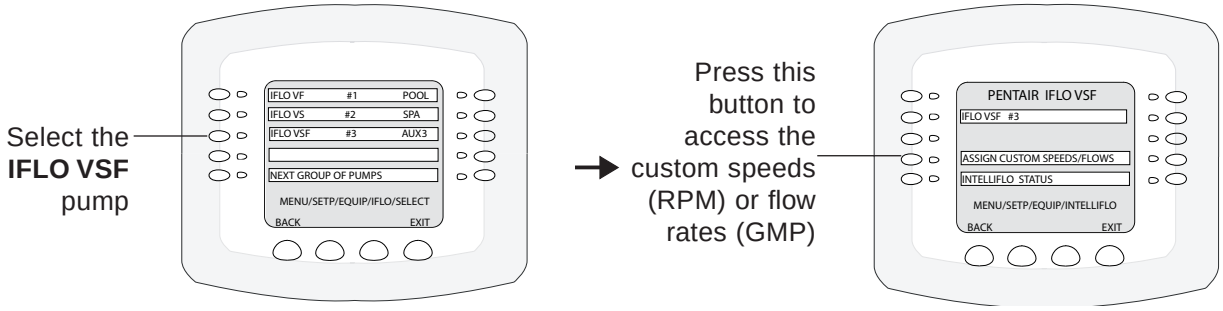
Assign custom speeds (RPM) or flow rates (GPM) - IntelliFlo VSF pump only

Each Intelliflo VSF pump can have a maximum of eight assigned circuits with eight preset pump speeds (400 - 3450 RPM) or flow rates (15 - 130 GPM).



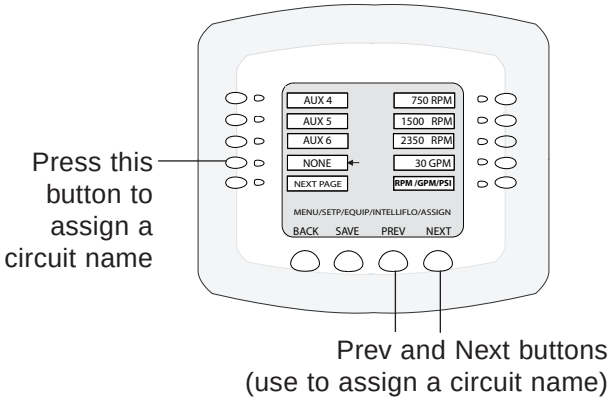
To assign a circuit name to the IntelliFlo VSF pump:

1. From the main pump screen, press the left side button next to the selected IFLO VSF pump. *Note: The IntelliFlo VSF pump can assigned as pump #1 - #8.*
2. On the next screen, press the left side button next to ASSIGN CUSTOM SPEEDS/FLOWS.



3. From the next screen you can assign a circuit name and set the pump speed or flow rate. **Assign a pump circuit name:** Press one of the left side buttons next to NONE. Press the PREV or NEXT lower button to select a circuit name for the pump. The selected circuit name must also be assigned a circuit function. For details about assigning a circuit function, see page 39.
4. Press the lower **SAVE** button to save the circuit name and return to the previous screen. To set another pump circuit, press the button next to ASSIGN CUSTOM SPEEDS/FLOWS to access the circuit and speed setup screen. Note: To display the additional four pump circuits, press the button next to NEXT PAGE.

proceed to next step..

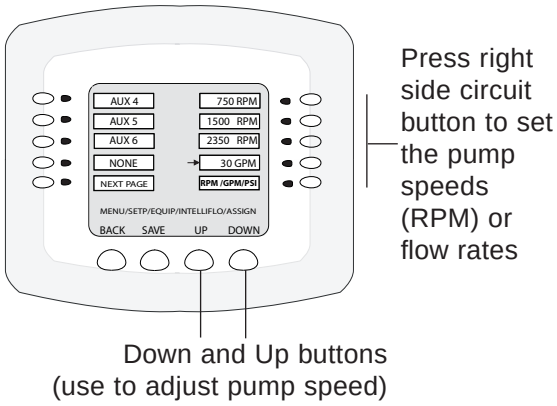


IntelliFlo® VS and VSF Pump Setup (Continued)

Assign custom speeds (RPM) or flow rates (GPM) - IntelliFlo VSF pump only

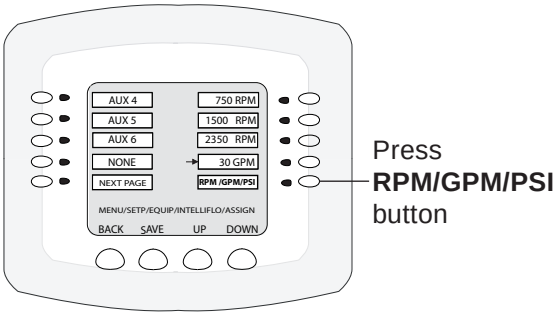
To set the IntelliFlo VSF pump speed or flow rate to an assigned circuit name:

5. **Adjust pump speed (RPM) or flow rate (GPM):** Press the ASSIGN CUSTOM SPEEDS/FLOWS button to access the pump circuit and speed screen. Press the right side button next to the pump speed (RPM) or flow rate (GPM). Use the DOWN and UP lower buttons to adjust the speed (400-3450 RPM) or flow rate (15-130 GPM).
6. Press the **SAVE** button to save the setting and return to the previous screen.

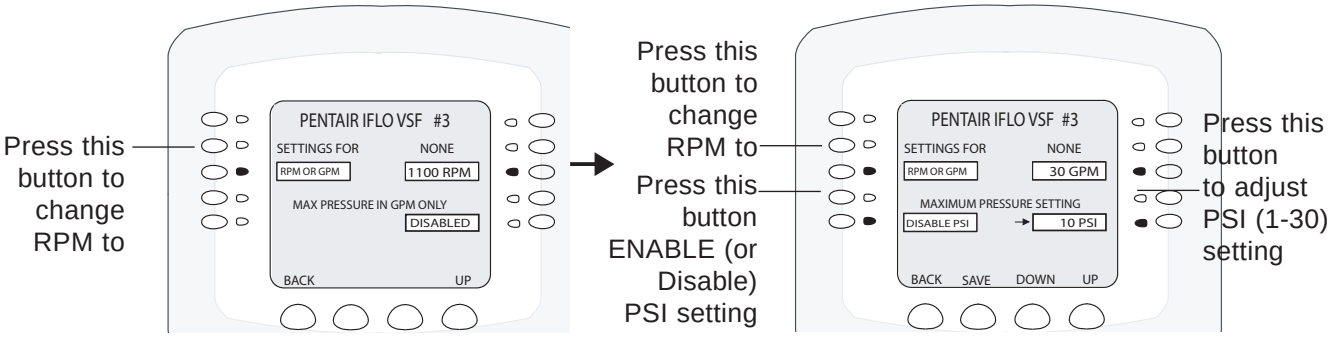


7. **Display RPM or GPM:** Pump speed can be defined on the screen as RPM or GPM (useful to determine the daily pool filter cycle).

   Toggle between RPM and GPM: To change the display from RPM to GPM, press the ASSIGN CUSTOM SPEEDS/FLOWS button to access the pump circuit and speed screen. Press the button next to a circuit that displays RPM (e.g 1110 RPM) (an indicator arrow is displayed), then press the button next to **RPM/GPM/PSI** (the display shows the GPM equivalent (e.g. 30 GPM).



8. **Adjusting the MAXIMUM PRESSURE SETTINGS (PSI) when using GPM:** Press the right side button next to the current PSI setting. Press the DOWN and UP buttons to adjust the PSI setting. Press the **SAVE** button to save the setting.

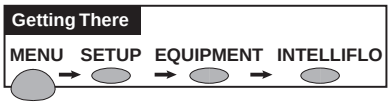


9. When finished, press the **BACK** button three times to return to the Equipment screen.

IntelliFlo® VS and VSF Pump Setup (Continued)

IntelliFlo VS and IntelliFlo VSF Status Screen

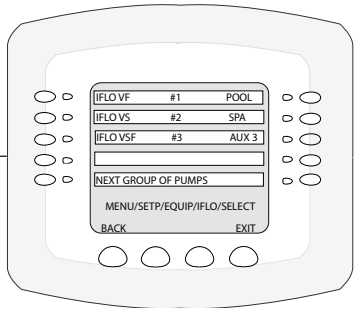
From this screen you can view the IntelliFlo pump status screen for current real-time pump operations. From this screen you can view the current speed (RPM), power usage (WATTS), and communication status for the pump.



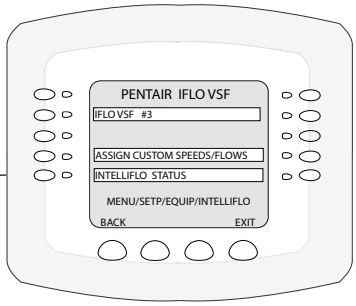
To access the IntelliFlo pump status screen:

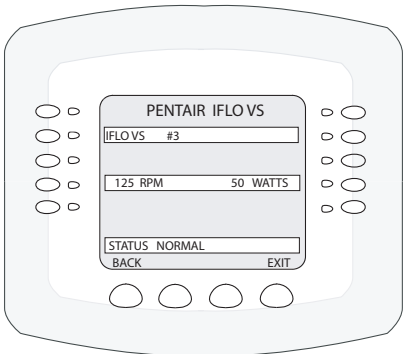
1. From the main pump screen, press the left side button next to the IntelliFlo pump that you wish view the status for.
2. On the next screen, press the left side button next to INTELLIFLO STATUS to access the status screen. This screen displays the selected IntelliFlo pump and address number, current speed (RPM/GPM), power usage and communication status.

Select the IntelliFlo VS pump to view its current status

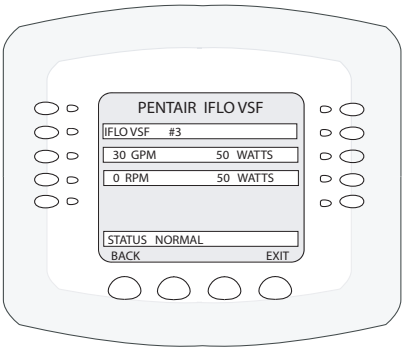


Press this button to access the INTELLIFLO STATUS screen





IntelliFlo Pump VS status screen



IntelliFlo Pump VSF status screen

IntelliFlo VS and IntelliFlo VSF status screen description:

IntelliFlo VS #1: Displays the IntelliFlo VF (and VSF) pump assignment number
RPM: Displays the current flow rate for the pump in RPM. Note: For IntelliFlo VSF pump, when in RPM mode GPM = 0.
Watts: To calculate a system's "Continuous Watts" use the following formula:
Amps X Volts X Power Factor = Continuous Watts
- 1 HP E+ WhisperFlo = 7.4 amps X (230 Volt) X .90 PF = 1532 watts
- 1 HP Max – E – Pro = 8.0 amps X (230 Volt) X .87 PF = 1600 watts

Once watts are computed, convert watts to kilowatts (kilo is 1000) and multiply this number by kilowatt/hour cost.
- 1 watt = .01 Kilowatt
- 100 watts = .1 Kilowatt
- 1000 watts = 1 Kilowatt
- 1 HP E+ WhisperFlo 1532 watts or 1.532 Kilowatt x $.08 = $.122 per hour
- 1 HP Max-E-Pro 1600 watts or 1.600 Kilowatt x $.08 = $.128 per hour

The IntelliFlo does not require calculation for continuous watts since it is displayed on the screen in all modes. Just simply take the watts published on the screen, convert to kilowatts, and multiply by the kilowatt hour. The formula is:
210 watts = .210 kilowatt X $.08 = $.016 per hour
Remember to also consider the amount of water moved for the cost incurred (Water to Wire Efficiency). The IntelliFlo cannot be matched in today's industry for flow versus continuous watts at any speed by any other pump in pool. The Filter mode and flow control further assists in cost saving by always allowing the pump to do the least amount of work at all times.
Communication Status: Displays the pump communication and operating status.

Setting up an UltraTemp Heat Pump

UltraTemp heat pump screen (HEAT PUMP COM)

From the HEATPUMPCOM screen you can view the current heat pump operation status, and set the unit to operate with for heating only, cooling only or both heating and cooling if the unit is reversible. Connection from the Pentair UltraTemp heat pump to the IntelliTouch system is via an RS-485 communication cable to a COM PORT on the IntelliTouch Personality circuit board. See page 112 for UltraTemp to IntelliTouch COM port wiring information. The UltraTemp heatpump must be set to default ADDRESS 1. One UltraTemp unit can be connected to an IntelliTouch system.

Operating UltraTemp

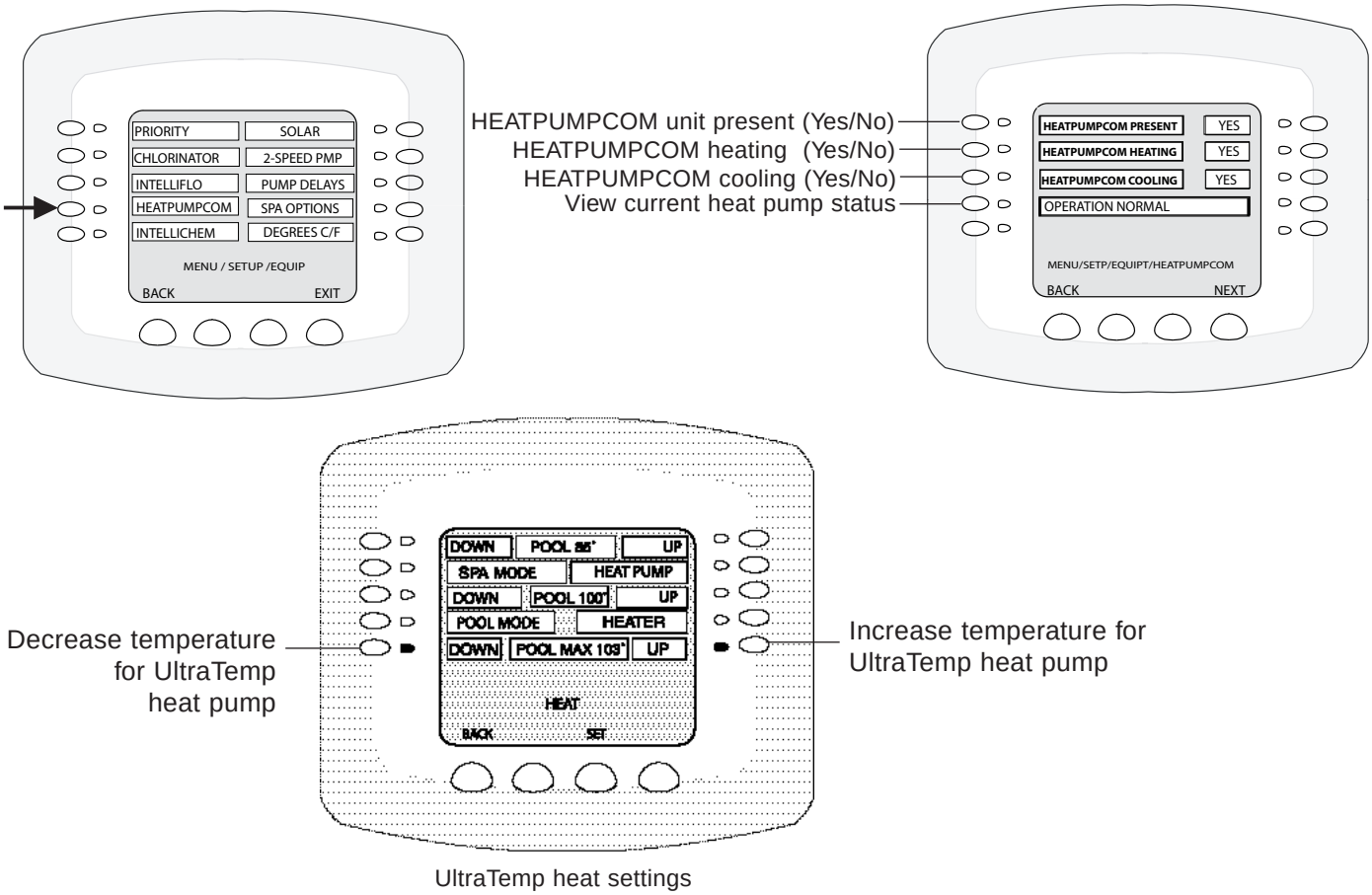
The UltraTemp heat pump is reversible, meaning it can heat or cool. When cooling is selected, an option heat control is displayed in the HEAT screen below the pool heat settings labeled as POOL MAX. This setting allows you to set the maximum heat temperature setting for the pool before the UltraTemp cooling begins.

Getting There

MENU → SETUP → EQUIPMENT → HEATPUMPCOM

To access the UltraTemp heat pump communication screen:

1. From the **EQUIPMENT** screen, press the left side button next to **HEATPUMPCOM**.



UltraTemp heat settings

Setting up IntelliChem Water Chemistry Controller

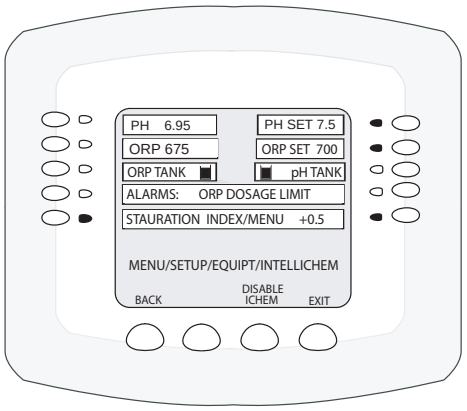
IntelliChem screen

IntelliChem provides the IntelliTouch system with continual analysis of your swimming pool water sanitation and pH levels, providing real-time status information to dispense the proper amount of muriatic acid (pH reducer) and chlorine or bromine for the correct sanitization and pH balance. IntelliChem operates with or without a salt chlorine generator to provide a self-replenishing supply of chlorine generated from salt. For more information, refer to the IntelliChem Installation and User's Guide (P/N 521363). From the IntelliChem screens you can adjust the pH and Oxidation Reduction Potential (ORP) set point values to meet pool and spa chemistry standards for your pool. To access the

Getting There

MENU → SETUP → EQUIPMENT → INTELLICHEM

The IntelliChem screen settings are displayed as follows:



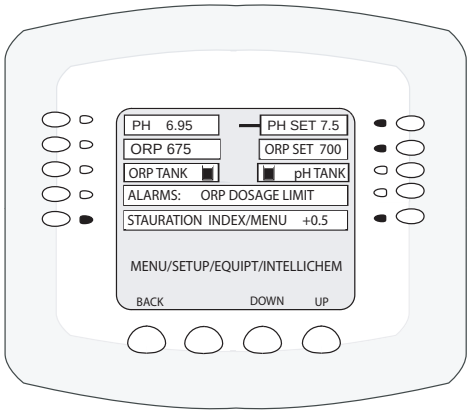
PH/ORP Values: The current pH and ORP values display next to the set point settings.

pH Set: Displays the current pH set point value. The adjustable range is from 7 to 8 in increments of 0.1. The default pH set point value is 7.5. To adjust the pH set point, press the button next to pH Set.

ORP Set: Displays the current ORP set point value. The adjustable range is from 650 to 800 in increments of 10. The default ORP set point value is 700 (chlorine level of 3.0 ppm). The ORP set point is the value that IntelliChem will try to achieve based on the actual chlorine level (ppm). To adjust the ORP set point, press the button next to ORP Set.

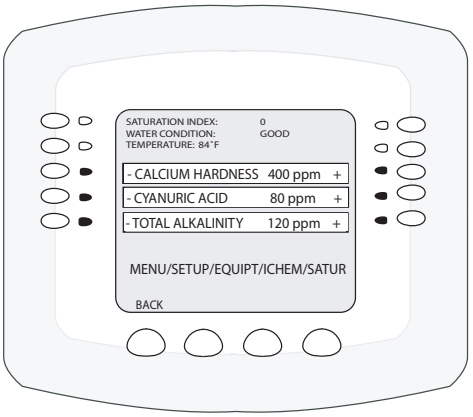
ORP/PH TANK LEVEL: The current IntelliChem ORP and pH tank level are displayed. To adjust the gauge levels, press the button next to ORP TANK or PH TANK. Press the Down/Up buttons to set the chemical levels in the containers.

ALARMS: View the current IntelliChem ORP and pH alarms. IntelliChem automatically displays a screen message indicating the pH level has reached or exceeded the **HIGH (7.8) or LOW (6.8)** pH alarm level settings. IntelliChem will automatically set a high and low alarm for the pH level. The Delay time is the amount of time between the detected alarm condition and when IntelliChem displays the alarm message on the main screen. The Delay setting is adjusted in increments of 15 seconds.



Saturation Index/Menu: To access the Saturation Index screen, press the button next to SATURATION INDEX/MENU. The current Saturation Index value, water condition, water temperature and Total Dissolved Solids (TDS) are displayed. Press the button next the following selections to adjust the levels/values: **Calcium Hardness:** Recommended range is 200-400 ppm. Levels should be tested weekly. **Cyanuric Acid:** Stabilizes chlorine in water from UV degradation. When using the IntelliChlor SCG, cyanuric acid level should be maintained between 50-80 ppm. **Total Alkalinity:** APSP's recommended ideal range for is 80 to 120 ppm for "gunite" and concrete pools and 125-170 ppm for painted, vinyl, and fiberglass pools. Test levels weekly and adjust according to your pool professional's recommendations.

Saturation Index: The saturation Index displays IDEAL (Optimum levels), CORROSIVE (pH too low) or SCALING (pH too high). For ideal Saturation Index levels and recommended pool chemistry, refer to the following values: **pH range: 7.2 to 7. ORP range: 650 to 750. Calcium Hardness: 200 - 500 ppm. Cyanuric Acid/Stabilizer: 30-50 ppm. Total Alkanlinity: 80 to 120 ppm.**



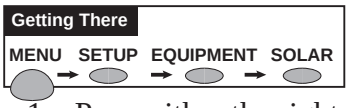
NOTE: Use a Test Kit (with fresh testing reagents) to measure the pH, alkalinity and calcium hardness of the pool water. For greater accuracy, use the AcuCheck3 Test Kit to measure pH, chlorine ppm, and alkalinity levels (P/N 7450001100). "Balanced" water has proper levels of pH, Total Alkalinity and Calcium Hardness. This "balanced" water is neither corrosive or scaling. The pH level number (0-14 with 7.0 being neutral) is the scale of relative acidity or alkalinity. Be sure the pool chlorine level is balanced. Ideal free chlorine level should be between 1.0 - 3.0 parts per million (ppm). Use the online Langelier Saturation Index (LSI) calculator to diagnose the water balance in your pool or the IntelliChem built-in LSI calculator. Refer to:http://www.pentairpool.com/pool-owner/resources/calculators/langelier/ - A Saturation Index value of 0 indicates the water is chemically in balance. If the Index is a minus (-) value, corrosive tendencies are indicated. If the Index is a plus (+) value, scale-forming tendencies are indicated.
A Saturation Index value between +0.3 to -0.3 is considered satisfactory in a swimming pool.

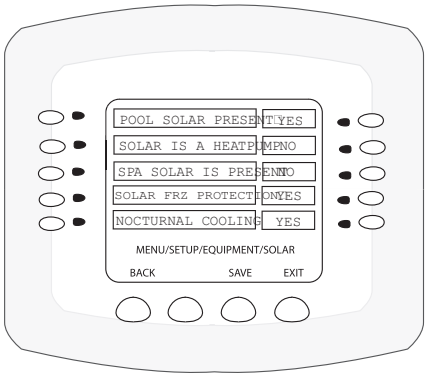
Setup Solar Equipment and Heat Pump Option

Setting up solar equipment

Note: If solar is set then the Valve A actuator will be dedicated to the solar valve actuator. Setting the system to Heat pump will free Valve A for use on other valves.

Note: Use the "Temp Diff" button at the bottom of the screen to change solar start and stop temperatures differentials (same as the solar sensor(s) temperature).





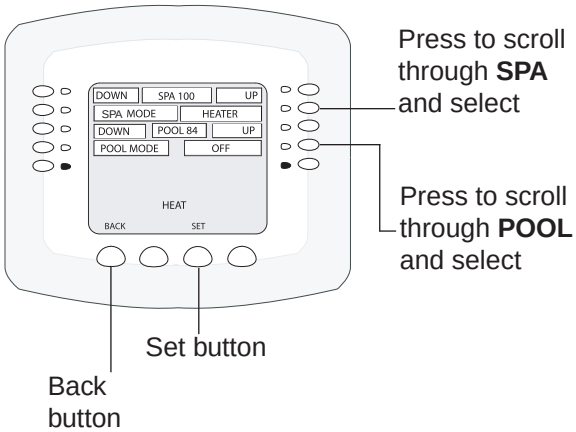
1. Press either the right or left side button next to the SOLAR selection to select YES or NO. The solar selections are:
   Pool Solar Present: Is the pool using solar heat?
   Solar is a Heat pump: Is a heat pump being used for solar heat?
   Spa solar present: Is solar heat being used for the spa water?
   Solar freeze protection: Enable freeze protection when using solar heat.
   Nocturnal Cooling: Circulate water through the system to lower the temperature during the night hours. Set the temperature in the Heat menu.
   Note: If a heat pump is being used instead of a solar heating system (see below), press the button next **Solar is a Heatpump** to **Yes**.
   *Note: For model i10+3D, press **YES** for each body of water with solar heating.*
2. Press the **Save** button when finished. Press the **Exit** button to return to the main screen.

Setting up a heat pump and gas heater

If you are using IntelliTouch with a UltraTemp® heat pump (see previous page) and a natural gas heater, the heat pump should be installed first in line, then the gas heater. The heat pump will run until the ambient air temperature is approximately 50° F, at which point the heat pump will switch off and the heater will switch on and take over. The air temperature is detected by the solar temperature sensor located on the IntelliTouch load center. The air temperature is not adjustable.

To set up the UltraTemp heat pump see the previous page.

To adjust the pool and spa temperature settings from the HEAT screen, press the **HEAT** button at the bottom of the screen.



SPA MODE: Press the button next to SPA MODE) and select the heating mode (HEATPUMP/HEATER/OFF).

POOL MODE: Press the button next to POOL MODE to select the heating mode (HEATPUMP/HEATER/OFF).

Note: Select **H PUMP PREF.** - If a heat pump is in combination with other heating systems and you want to use the heat pump only when it is most effective.

Press the **Set** button to save the settings. Press the **Back** button to return to the main screen.

NOTE: INTELLIFLO VF PUMPS - *If the IntelliFlo VF pump is just starting (requiring a prime) and SOLAR is available, solar will be delayed for five (5) minutes to allow the pump to prime. This only applies for IntelliFlo pump(s) assigned as a "pool" pump.*

Setting up a 2-Speed Pump

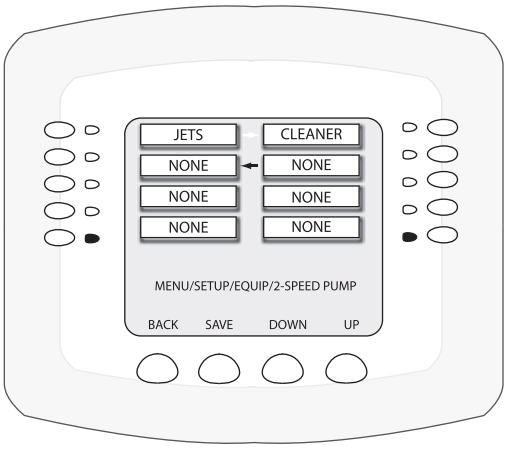
Equipment circuits displayed on this screen will automatically switch a two speed filter pump to high speed when these circuits are switched on. For example, the filter pump will switch from low speed to high speed whenever the JETS or CLEANER circuit is switched on.

Go to the **2-Speed Pump** screen to select your choice of heat options to force the pump to high speed:

Getting There

MENU → SETUP → EQUIPMENT → 2-SPEED PMP

1. Press the button next to **None**. A small arrow is pointing to the select circuit name. “NONE” indicates that the pump circuit has not been selected.
2. Use the **Up** and **Down** buttons at the bottom of the screen to scroll through the previously assigned names to add another circuit for switching filter pump to high speed. After you have found the desired circuit. To add another circuit, repeat step 1, or Press the **Save** button. A “FEATURE” circuit can be used to switch the pump from low speed to high speed
(see page 79).
3. Press the **Save** button.
4. Press the **Exit** button to return to the main screen.



Note: *With a dual equipment system i10+3D, the left column controls the spa pump and the right column controls the pool pump.*

Master Spa/Pool (Heater Cool-Down) and Delays For Valves

Master Spa/Pool

This feature keeps the pump running for ten minutes after the heater is switched off to cool down the heaters header and heat exchanger. Some heater models require this cool down period or damage will occur. This is sometime referred to as the “Fireman Switch.” for example, If you are in the spa, and you switch it off. The IntelliTouch will return the valves to “Pool” mode position. If the pool is running a cycle, or the Fireman switch (Master Spa/Pool Delay) is enabled, colder water from the pool would be pumped into the spa as the valves turn. Note: If the pool is not running a cycle, and the fireman switch is not enabled, the pump stops and no pool water would be pumped into the spa as the valves turn back to pool.

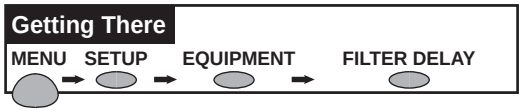
Delay For Valves

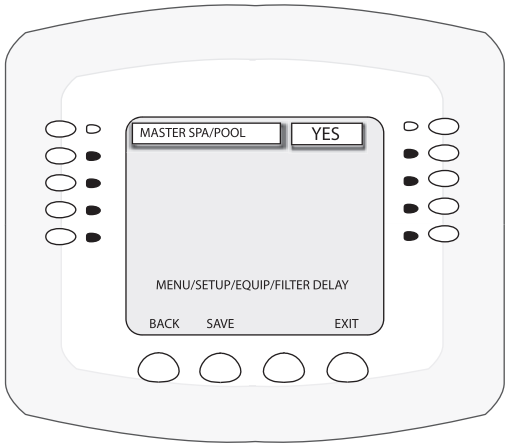
This feature creates a 30 second PUMP OFF (forced) period anytime the valves rotate. Either from pool to spa, or spa to pool. When you switch the spa off, even if the pool is running a cycle or the fireman switch is enabled, it stops the pump for 30 seconds while the valves turn, so colder water from the pool will not enter the spa. This feature prevents cold water entering the spa when you start the spa, so less heating is needed. It also stops the pump when the system is changing from pool to spa or back again in Freeze mode.

Continue on next page.

Master Spa/Pool (Heater Cool-Down) and Delays For Valves (Continued)

Go to the **Pump Delays** screen.





1. Press the button next to **Master Spa/Pool**. Press the left or right side button change the setting to **Yes**. *Note: Pentair Water Pool and Spa® heaters do not require this feature.*
2. Press the button next to **Delay For Valves**. Press the left or right side button change the setting to **Yes**.
3. Press the **Save** button.
4. Press the **Exit** button to return to the main screen.

Delay Cancel Feature

For convenience, on a one time basis, the DELAY CANCEL feature will cancel the following safety delays which can be set up in the IntelliTouch system. Please note there is generally not a need to cancel any of these delays except for servicing or testing the system.

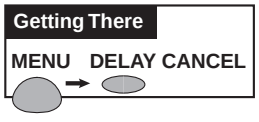
- **Heater Cool-Down Delay Cancel:** Shuts Filter Pump off immediately.
- **2-Speed Filter Pump 5 minute START on HIGH SPEED Delay Cancel:** Shifts pump to low speed.
- **Automatic Pool Cleaner START Delay:** Starts Cleaner Pump immediately. Normally there is a delay in which the filter pump first runs for 5 minutes before the cleaner pump starts.
- **Automatic Pool Cleaner-SOLAR Delay:** Allows Cleaner Pump to run even though solar delay has shut it off for 5 minutes.

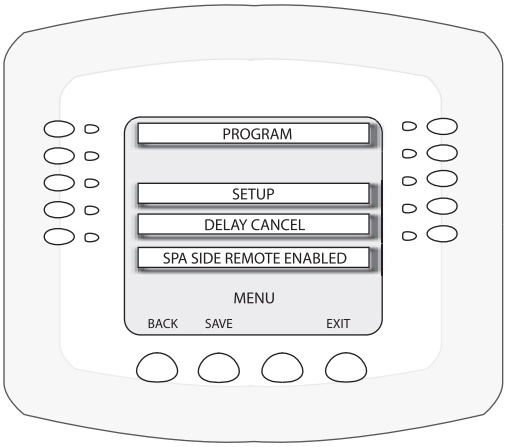
About the Heater Cool-down Cycle and Delay Cancel

Some heaters require a cool-down cycle before being turned off. This can be accomplished with a SET UP procedure in the IntelliTouch system which runs the filter pump an additional ten minutes to dissipate residual heat built up inside the heater combustion chamber. The DELAY CANCEL feature is mainly for use by service technicians when they want to shut the filter pump off immediately, and know the heater has not been running.

IMPORTANT: Heaters manufactured by Pentair Water Pool and Spa® do not require this cool-down period and do not need the delay to be set up.

To cancel a safety delay:



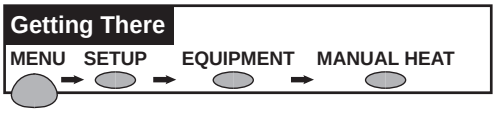


Go to Delay Cancel Screen

1. Press the button next to **DELAY CANCEL**. Equipment is switched off and ready to be serviced.

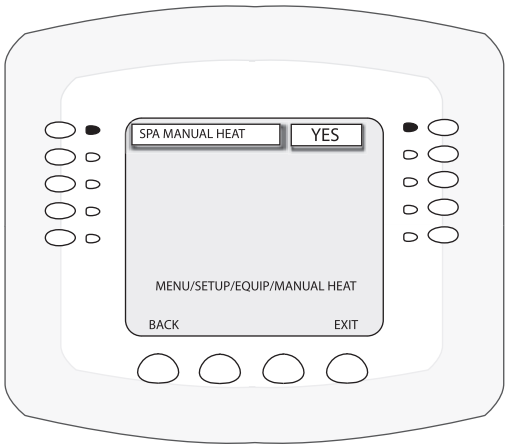
SPA Options

Set Automatic Spa Heating When the Spa is Manually Switched On



Go to the **Spa Options** screen.

1. Press the left or right side button next to **Spa Manual Heat** to change the setting to **Yes** (the default setting for Manual Heat is Yes).



Note: *If you do not want the heater to switch on when you press the SPA button, change the factory setting from YES to* ***NO****.*

Freeze Override 30-240 minutes

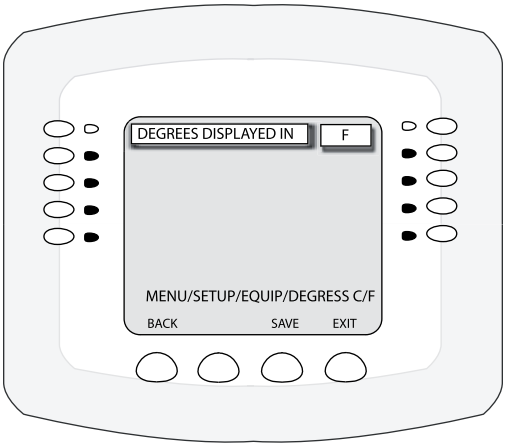
2. Press the left or right side button next to **Freeze Override Mins** to change the default freeze protection time of 30 minutes to a maximum of 240 minutes in 30 minutes increments.
3. Press the **Save** button when finished.
3. Press the **Exit** button to return to the main screen.

Changing the Display to Show Fahrenheit to Celsius

You can change the temperature settings to display either Fahrenheit or Celsius. Temperature settings can be adjusted from 40° F to 104° F or (4° C to 40° C).

To change the temperature settings go to the **Degrees C/F** screen.

1. Press the left or right side button next to **Degrees Displayed In** to select **C** (**Celsius**) or **F** (**Fahrenheit**).
2. Press the **Save** button.
3. Press the **Exit** button to return to the main screen.



Configuring Valve Actuators (Controlled by AUX or Feature Circuit)

All IntelliTouch systems can drive two auxiliary valve actuators (A and B) for applications such as solar heating and water features. With the addition of the Valve Module (P/N 520285), installed in the Load Center or Power Center, the system will accommodate up to three additional actuators (C, D, and E). An **AUX** circuit or **FEATURE** circuit can control auxiliary valve actuators. By using Feature circuits to control valve actuators, you can conserve your AUX circuits for high voltage relays for controlling pumps and lights. Use Macros to couple valve actuators with AUX circuits for specific applications.

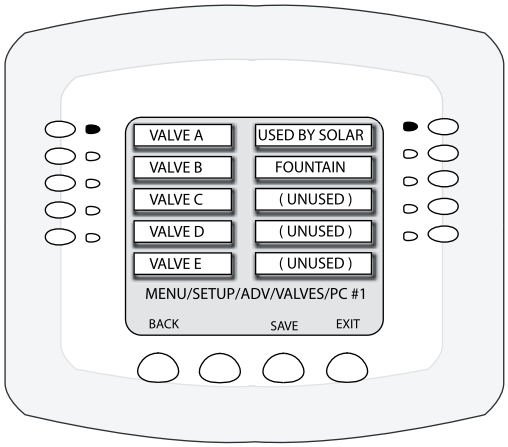
Note: *All Personality boards (including i5x and i10x) has two valve outputs A & B. With the addition of the Valve Module (P/N 520285) board that connects to the Personality board, three additional valve operators can be added to the system.*

Configuring Valve Actuators

Note: *If Expansion Centers are a part of the system, before this screen, you must select which main Load Center or Power Center you wish to configure. The Load Center or Power Center number matches display number (1 through 4).*

Go to the Configure Valves screen.

1. Select the button next to the valve actuator you wish to configure. Keep pressing the button until you find the circuit name which you would like to use to control the valve actuator.

   Valve A: Resides on the IntelliTouch Personality board. If solar heating is setup AND NOT configured as a heat pump, then this valve is dedicated for controlling the solar heating valve actuator.

   Valve B: Resides on the IntelliTouch Personality board next to Valve A.

   Valves C, D, E: Reside on the optional Valve Module board that may be plugged into the IntelliTouch Personality board in any Load Center or Power Center.

2. Repeat the above steps for each valve actuator.
3. Press **Save** when done.
4. Press **Exit** to return to main screen.

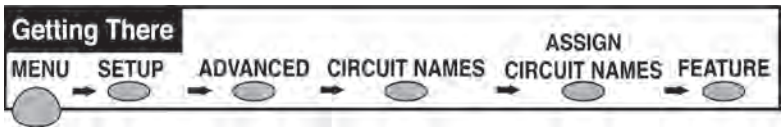
Feature Circuits

Feature Circuits provide a way to control equipment which is not controlled by an AUX circuit. Typically AUX circuits are used for high voltage equipment such as pumps and lights, whereas Feature Circuits are used for valve actuators. However, Feature Circuits can go beyond this definition, and be used in other creative ways. For example, Feature Circuits may be used to create a Macro circuit in which several other circuits can be switched on or off with the same button. This is accomplished by first choosing a name for your Macro and assigning that name to a Feature Circuit. There is a limit of 10 Feature Circuits in the system.

- **Valve Actuators** - Feature Circuits may be assigned for controlling up to five valve actuators per Load Center, which requires the installation of the optional Valve Module P/N 520285 that include three actuators outputs (C, D, and E) per Load Center. For more information about configuring valve actuators, refer to page 70.
- **2-Speed Pump** - A Feature Circuit may be assigned as a way to turn a 2-speed Filter Pump to high speed.

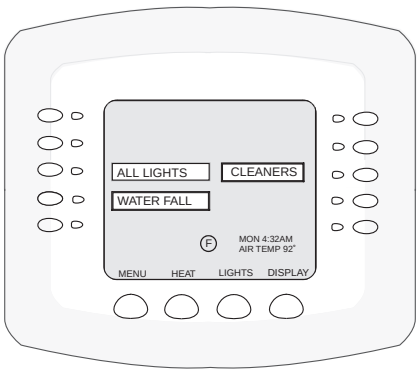
Assign a Circuit Name to a Feature Circuit

Note: *When assigning circuit names in the Indoor Control Panel, use the written list of circuit names and assigned buttons for the Outdoor Control Panel to make sure that they match.*



1. Press the button next to the circuit that you wish to assign a name to. A small arrow pointing to the name is displayed.
2. Use the **Up** and **Down** buttons to scroll through the list of preset circuit names (see page 37). If the preset circuit names are not suitable, you can create a custom name (see page 38). Press the Back button twice and select “Create Custom Names” to create a custom circuit name.
3. Press the **Save** button to save the Feature circuit name and return to the Feature screen.
4. To add another Feature circuit, press the button next to FEATURE to add another Feature circuit and repeat step 1, 2 and 3.
5. Press the **Exit** button to return to the main screen.

To view Feature circuits from the main screen: Press the DISPLAY button until the Feature circuit screen is displayed. The Ⓕ icon located in the middle lower part of the screen indicates that Feature circuits screen is selected.



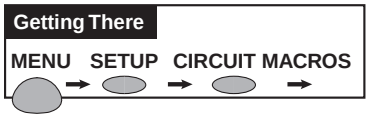
Feature circuits screen

Creating a Macro Circuit

A Macro circuit allows multiple combined circuits that can be switched on or off from a single button. For example, a Macro circuit can be assign to one button to switch on the spa, spa light, fountain, fountain light, and patio lights. The Macro circuit name (or custom name) can be added to the main list of "IntelliTouch circuit names" (see page 37). A Macro circuit also has the capability to switch a circuit off. For example, a Macro circuit named "SPA PARTY," if you wanted a spa fountain not to be on when spa is on (because it could put cold water in the spa), it can be set up in the Macro to automatically switch off when "SPA PARTY" is switched on. An "OFF" Macro can also be used to switch any number of lights off with one button.

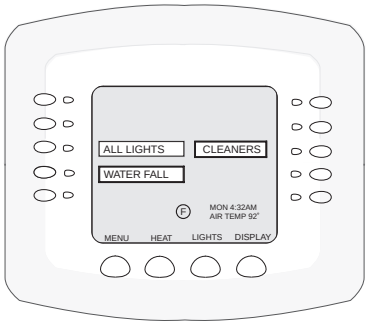
Note: *Macros may not be set as Dimmers although they can turn on light dimming circuits.*

To create a macro circuit, go to the **CIRCUIT MACRO** screen.



Note: *To create a Macro, first assign a* ***FEATURE*** *circuit name (see page 79), assign a function to the Feature circuit (see page 39), then go to the* ***Circuit Macro*** *screen and set up the Macro circuit.*

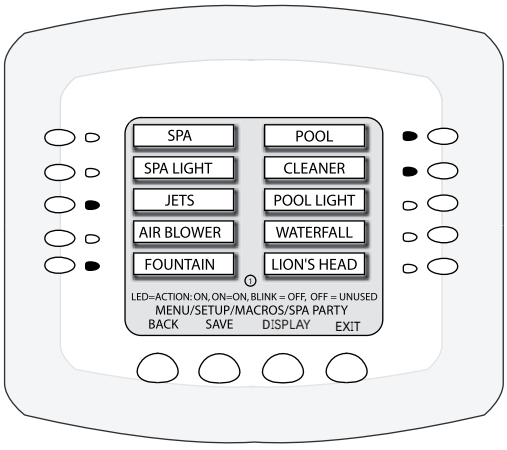
1. The already assigned Feature circuits will be displayed on the Features screen. Ten (10) Feature circuits can be displayed on this screen.
2. Press the button next to the Feature circuit name that will be the MACRO circuit to control other Feature circuits. Press the **DISPLAY** button to toggle between the Feature circuit screen and the Display #1 (1) screen.



Feature circuits screen

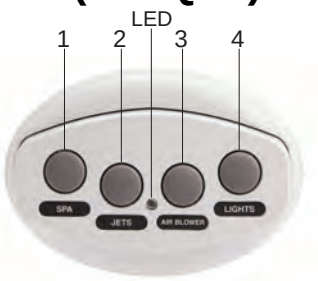
Macro Lights:

- To switch a circuit ON, press the button next to the circuit name one time. The light will be on.
- To switch a circuit OFF, press the button next to the circuit name two times. The light blinks on and off.
- To set a circuit to be unaffected by the macro, press the button next to the circuit name three times. The light is off.



Configuring Remote Control Button Circuits (iS4, iS10, SpaCommand Spa Side Remote, QuickTouch (II & QT4) and phone remote)

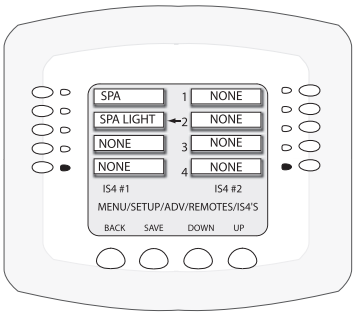
From the spa side remote screen you can configure the iS4, iS10 and SpaCommand® buttons to control different pool/spa functions, including IntelliFlo VF, VS and VSF pump speeds. Up to two iS4 remotes, and four iS10 and SpaCommand remotes can be connected to an IntelliTouch system. To assign a circuits to spa-side remote buttons:



iS4 spa side remote

1. Press the button next to **CONFIGURE iS4'S** or **CONFIGURE 10 BUTTON SS's** or **CONFIGURE QUICKTOUCH** to select the remote.

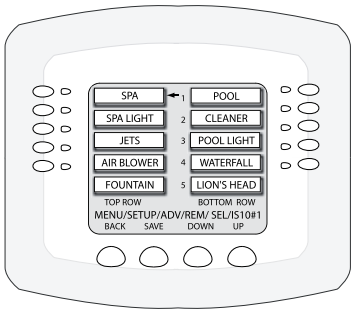
- **<u>For iS4:</u>** Press the top button to access the setup screen for **iS4 #1** and **iS4 #2** . See note below if multiple iS4 remotes are installed.
- **<u>For iS10 and SpaCommand:</u>** Press top button to select **10 BUTTON SPA SIDE #1** for the first iS10 or SpaCommand remote. Choose which one of the four remotes you are configuring, **10 BUTTON SPA SIDE #1 #2, #3 or #4**. See note below if multiple iS10 or SpaCommand remotes are installed.



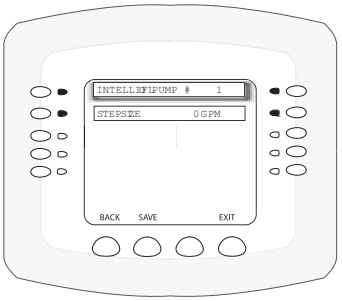
iS4 circuit/button setup

- **For QuickTouch II and QT4:** Press the button next "CONFIGURE QUICKTOUCH" to access the setup screen.

2. **On the next screen:** Press the button next to the circuit you wish to assign. A small arrow is displayed pointing to the name of that circuit. Use the **Up** and **Down** buttons at the bottom of the screen to scroll through the iS10 or iS4 circuit names (SPA, POOL, AUX 1-8, HEAT BOOST, HEAT ENABLE, **INCREASE PMP SPD**, **DECREASE PMP SPD**, NONE). **For QuickTouch II and QT4:** (SPA, POOL, AUX 1-4, POOL). ***Note: When assigning buttons to "Increase" and "Decrease" the IntelliFlo VF (GPM), VS (RPM) and VSF (RPM/GPM). Each press of the assigned button increases or decreases the pump's "step" flow rate or speed until the GPM or RPM is reached as specified in the "SPA SIDE INFLO CONTROL" screen (on the 10 Button SS screen). Be sure to set the pump address number (in the IntelliFlo screen) for the pump you wish to control.***



iS10 circuit/button setup



SPA SIDE IFLO CONTROL screen

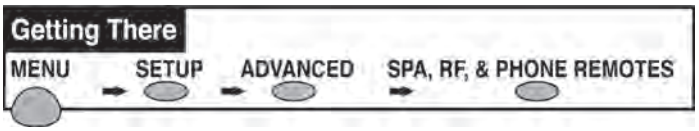
Note: For systems with four iS10/SpaCommand remotes, adding one or two iS4 remotes will affect button function assignments as follows: *Assigned button functions 1 - 4 on iS4 #1 are linked with the same functions to buttons 1 - 4 (top row) of iS10 #4. Also, buttons 1 - 4 on iS4 #2 are linked to buttons 6 - 10 (bottom row) of iS10 #4. For example, button 6 on the bottom row of iS10 #4 is linked to button 1 of iS4 #2, button 7 on iS10 #4 is linked to button 2 of iS4 #2, etc.*

Setting up the Remote Control Telephone Feature

The remote control telephone feature allows you to switch on a feature by calling the Indoor Control Panel via the telephone.

You can only use this feature the **TELSPA** needs to be connected to the Personality board COM port, and the phone line.

The following describes how to switch on your spa remotely. You can also scroll through the list of available features and set any one of them. This feature can also be used by a macro circuit (see page 80).



To setup the telephone remote control:

Go to the **Spa RF and Phone Remotes** screen.

1. Press the button next to **CONFIGURE MOD-PHONE** to access the Phone Remote setup screen.
2. Press the top left button next to NONE.
3. Press the **Up** or **Down** buttons to scroll through the available circuit names until you find the function you would like to assign to the telephone remote. Choose the function you will use most often, for example **SPA** allows you to call the system and switch on spa filtration and heating with one command.

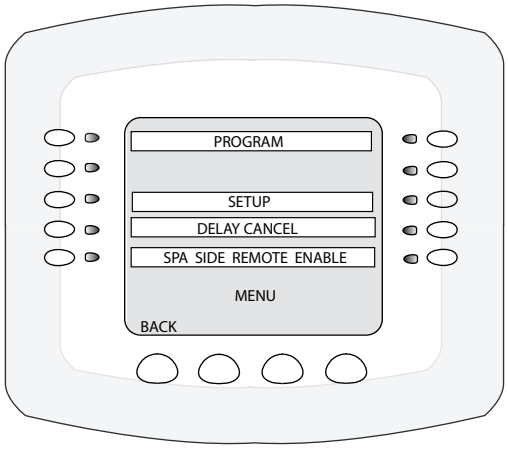
   Note: *If you are using the remote to turn on your spa, you must also enable "**MANUAL HEAT**." This allows the heater to always switch on whenever the spa is switched on via the telephone. For more information, see page 77.*

4. Press the **Save** button to save the setting and return to the remotes screen.

Disable/Enable Spa-Side Remote

This feature is useful if you wish to disable the use of the SpaCommnad and iS4 Spa-Side Remote. You can enable and disable the
spa-side remote with the same button. Each time the button is pressed it toggles between DISABLED or ENABLED.

Press the MENU button. The **Spa Side Remote Disable/Enable** screen is displayed.



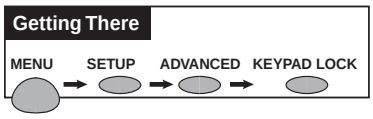
1. **To Disable:** Press the button next to SPA SIDE REMOTE ENABLED. Screen will immediately display SPA SIDE REMOTE DISABLED. Remote is now off.

   To Enable: Press the button next to SPA SIDE REMOTE DISABLED. Screen will immediately display SPA SIDE REMOTE ENABLED. Remote is now on.

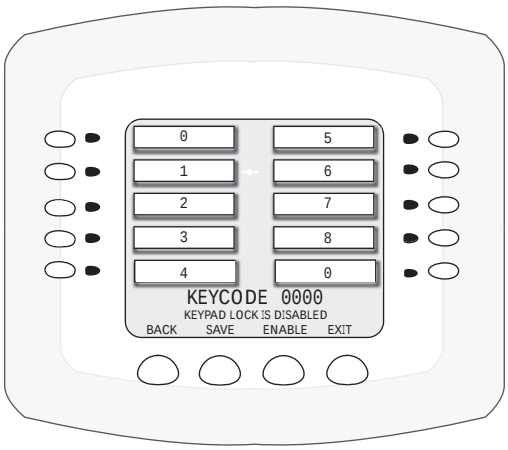
2. Press the **Back** button to return to the main screen.

Keypad Lock

If required, the IntelliTouch indoor control panel and MobileTouch wireless control panel can be passcode protected so that system settings and operations cannot be accessed. To access a 'locked" control panel, the correct previously assigned four digit passcode must been entered before access is granted.

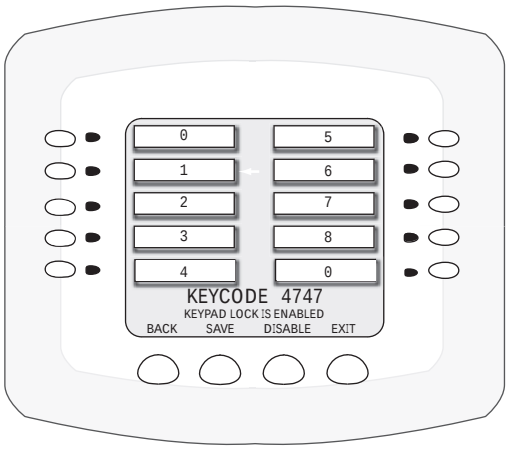


Go to the **KEYPAD LOCK** screen



To assign a four digit passcode and enable the Keypad Lock feature:

1. Press any combination of four digits using the buttons 1-9.
2. Press the ENABLE button to enable the Keypad Lock feature.
3. Press the EXIT button to return to the main screen. Providing the control panel is not active (no buttons pressed), the Keypad Lock feature will be activated in a few minutes.



Keypad Lock ENABLED

Clear Button: Press the CLEAR button to erase the previously entered four digit passcode. If the Keypad Lock feature is "Enabled," pressing Clear will erase the previously entered four digits and reset the feature to "disabled."

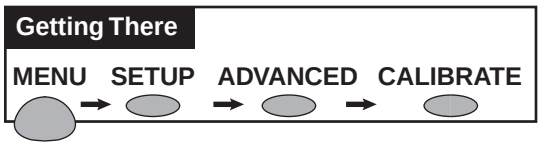
Enable/Disable button:

Enable: Pressing the ENABLE button **after** entering the four digit passcode will enable the Keypad Lock feature.

Calibrating Temperature Sensors

The IntelliTouch system includes two temperature sensors (10 kΩ) for water and ambient air temperature. You can add a third sensor for controlling solar heating systems. Note: The i10+3D system includes three sensors.

Generally, these sensors are accurate and you do not have to calibrate them. However, long plumbing runs and water features cause temperatures at a body of water to be different from the temperature sensor reading. You can manually recalibrate the sensors to adjust for this.



Before you start, you need an accurate all weather thermometer. If you are calibrating the air sensor, wait until the sensor is not in direct sunlight. Be sure that the air sensors are located in the shade for accurate freeze protection.

To calibrate the water and air sensors, go to the **Calibrate** screen.

For i10+3D systems, you will see **Spa Temp**, **Pool Temp**, and **Air Temp**. Calibrate the spa and pool water temperatures the same way as described below for the water sensor. If you have an i5+3, i5S+3, i7+3, or i9+3 system, there is a water sensor and an air sensor. Make sure to locate the air sensor in the shade for accurate readings. Make sure to locate the solar sensor in the sun for accurate readings.

To calibrate the water sensor:

1. Switch on the spa or pool filter pump.
2. Place the thermometer in the spa or pool, depending on the system model number. For shared equipment, you only need to calibrate one body of water.
3. Take an accurate temperature reading.
4. At the Indoor Control Panel, press the buttons next to the **Water Temp** label to adjust the temperature up or down. If you have an i10+3D repeat the above for the pool. The i10+3D has three sensors, one each for the spa and pool water and one for the air temperature. For the Solar option there will be one sensor for the pool solar, and one for the spa solar.
5. Press the **Exit** button when finished.

To calibrate the air sensor:

1. Place the thermometer next to the air sensor. The sensor is normally located near or under the Load Center or Power Center enclosure, not inside the enclosure.
2. Take an accurate temperature reading in the shade.
3. At the Indoor Control Panel, press the buttons next to the **Air Temp** label to adjust the temperature up or down.
4. Press the **Exit** button when finished.

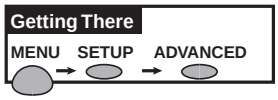
Using the Service Personnel Screen

IntelliTouch system information such as circuit configurations are stored in the outdoor control panel memory. System information relating to user interface settings and ordering of controllers is retained locally at the controller (indoor control panel, MobileTouch, iS10 etc.). All system information is backed up and updated to all indoor control panels, MobileTouch controllers, and the main outdoor control panel periodically. If required, you can upload or down load the current system configuration to and from the outdoor control panel and controllers. This feature is available from the Service Personnel

Checking Firmware Version

The IntelliTouch factory installed operating system software is known as firmware. There is a different firmware program loaded on the controllers (indoor control panel and MobileTouch) and the outdoor control panels. Every time the firmware version is changed it is assigned a new release level number (version #). Changes are made to the firmware to either add functionality or enhance performance. If you need to determine the firmware revision level on the system, perform the following steps.

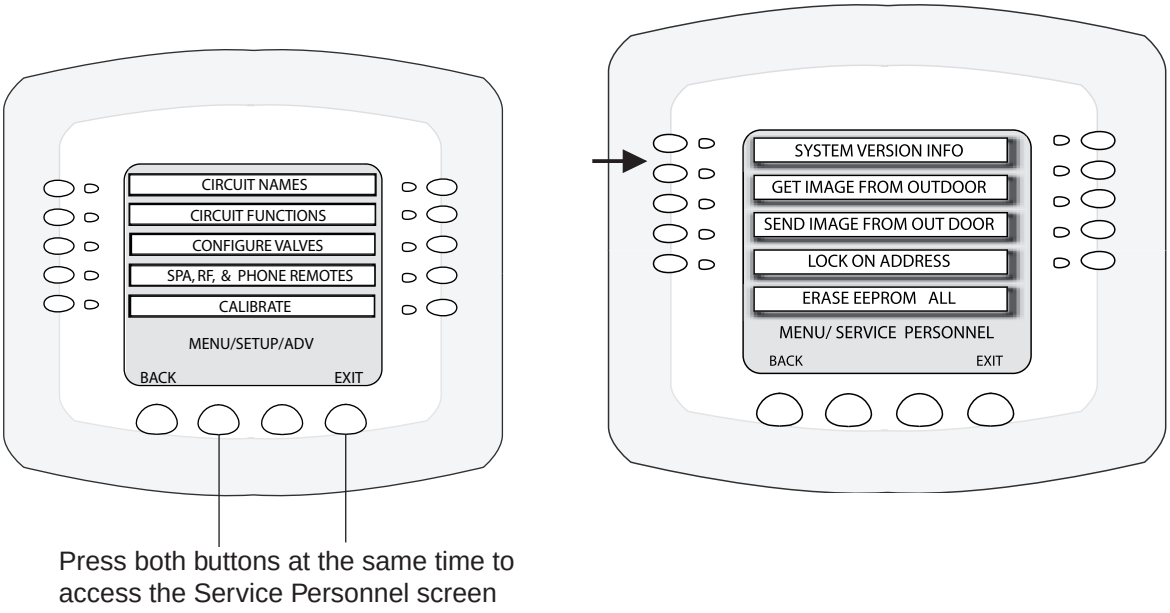
To check the system firmware version:



Go to the Advanced screen.

1. From the Advanced screen, press **buttons 2 and 4 at the same time**. The Service Personnel screen is displayed.
2. Press the button next to **System Version Info**. The firmware version is displayed for the Indoor Control Panel (UIC) and Outdoor Control Panel (UOC).
4. Press **Back** to exit.
5. Press **Exit** to return to the main screen.

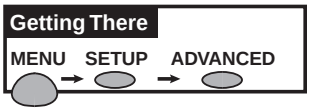
Note: *Different controllers may have different revision levels depending on when they were installed. To determine the firmware version of each controller repeat the above steps for each controller.*



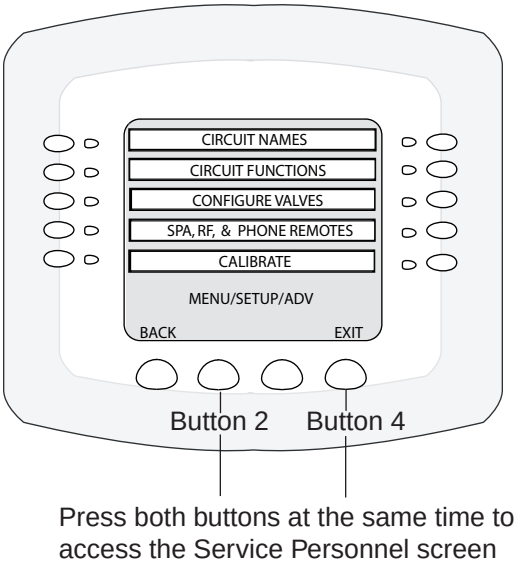
Manually Updating Between Indoor and Outdoor Control Panels

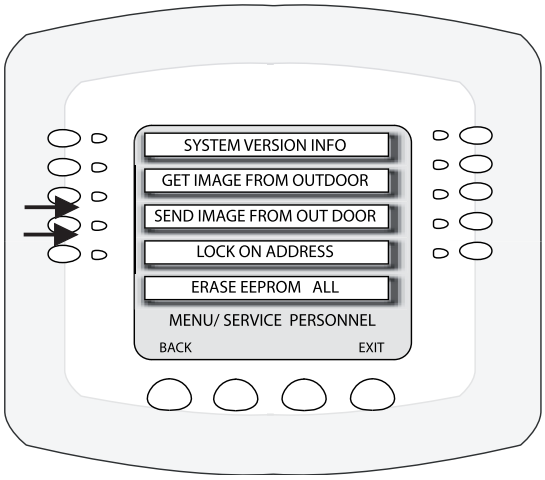
When the IntelliTouch system configuration settings are changed, or a new component is added, the updated information is automatically communicated to all of the control panels. Configuration settings reside in all the controllers and the outdoor control panel. This feature provides system backup information in the event one of the controllers or control panels is not operational. To update IntelliTouch system configuration information between the indoor and outdoor controllers:

Go to the Advanced screen.



1. From the Advanced screen, press the **2nd. and 4th. buttons at the same time**. The Service Personnel screen is displayed.
2. Press the button next to **Get Image from Outdoor** to download system configuration data residing in the outdoor control panel memory to the Indoor or MobileTouch controller.
3. Press the button next to **Send Image to Outdoor** to upload system configuration data residing in the Indoor or MobileTouch controller to the outdoor control panel. A “stopwatch ” icon flashing indicates data is being transferred.
4. When the transfer is finished, press **Back** to exit.
5. Press **Exit** to return to the main screen.





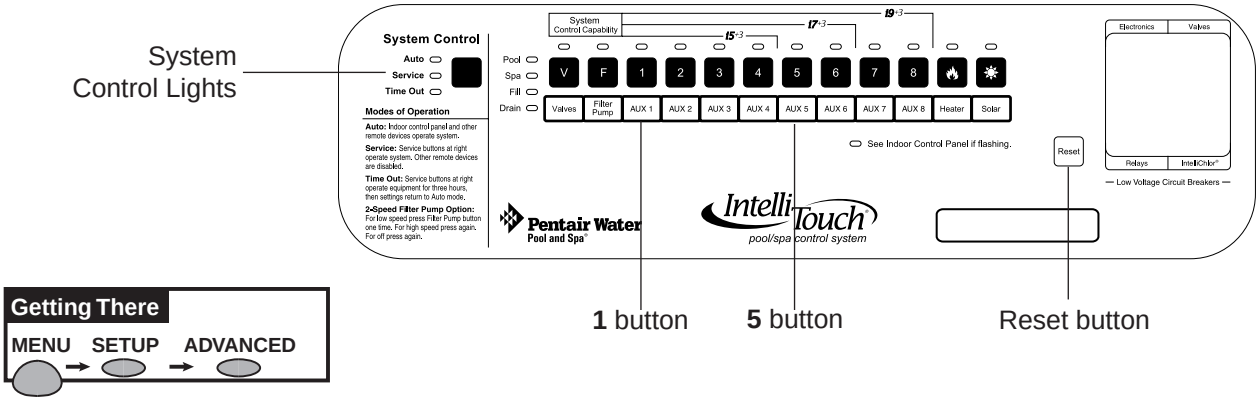
Erasing the System Memory

IntelliTouch system circuit settings, equipment setup configuration information and screen display information is stored in the main Outdoor Control Panel and the Indoor Control Panel and MobileTouch wireless control panel. The current system configuration information automatically downloads from programmed control panels to update non-programmed control panels in case of accidental memory loss. If a circuit board replacement is necessary, system programmed memory can be erased and returned to the factory default settings. Once this is done, the main Outdoor Control Panel (located in the main Load Center or Power Center) will auto-enable all connected Indoor Control Panels. If there are multiple Expansion Center, iS10's, or Indoor Control Panels or a MobileTouch control panels, each one of the controllers will need to be manually enabled (see page 26).

To reset to the system to the factory default settings:

***CAUTION:** This procedure will erase all system settings. All controllers will need to be manually enabled again. For more information, see page 26.*

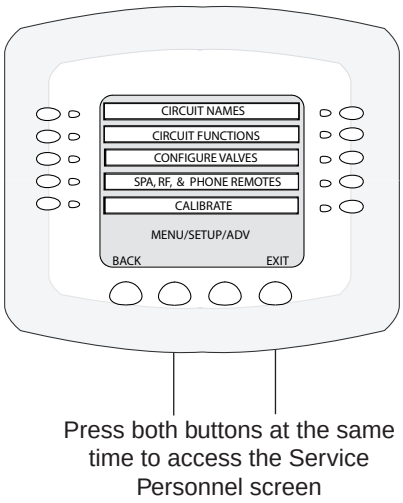
1. On the main Outdoor Control Panel (located in the main Load Center or Power Center), press the **Reset button**. The three (3) System Control lights will be lit.
2. Press the number **5** button. The System Control lights will flash OFF then back ON.
3. While the System Control LED lights are ON, press the number **1** button.
4. The System Control LED lights will begin flashing on and off.



Getting There
MENU → SETUP → ADVANCED

Go to the **Advanced** screen.

5. From the ADVANCED screen, press **Buttons 2 and 4 at the same time**. The Service Personnel screen is displayed.
6. Press the left or right side button next to **Erase EEPROM All!!**
7. At the prompt, press the lower button to select **YES**.
8. Press the **ERASE** button. The screen will blink a few times then return to the main screen. All system configuration data should now be erased and returned to the factory settings.
9. Repeat steps 5-8 for other controllers.
10. At the Outdoor Control Panel press **Reset** and wait for the system to return to "AUTO" mode.



System Worksheet Overview

System worksheets are provided to help you plan the system at start-up and to keep system records. Make copies of each system worksheet (page 86 - 91) appropriate for the system. Use a unique one for each Load Center or Power Center. Circle the Load Center or Power Center number on the top. Each worksheet is divided into a **Hardwired Connections** and a **Programmable Settings** sections. The Hardwired Connections section represents which relays, actuators, and heater have been plugged into the Personality board. Some connections are mandatory for each system as shown on the work sheet. The Programmable Settings section represents what functionality the circuit will have and from what Indoor Control Panel and/or MobileTouch control panel they are set from.

In the left-side column, write-in temporary circuit names based on the capabilities you want the system to have. For example: Spillway, Solar Heating, Cherub Fountain, etc. Eventually circuit names will be given to each of these capabilities. Although duplicate names can be used, it is best to keep each one unique. Be sure to write the circuit name on the work sheet that will have the hardwired connection.

Write down on the worksheet which Hardwired Connections (relay or valves) will be activated by the circuit. It may be helpful to fill this out at the Load Center or Power Center where the circuits and associated equipment may be quickly verified. Remember the following rules to assist in making marks:

- Assign no more than one relay connection to any auxiliary circuit (shown on Display 1 through 4) EXCEPT for 2-Speed or Feature Circuits.
- Feature Circuits may have multiple relay connections if set up as a Macro.
- Feature Circuits may have multiple valves assigned to them and 2-Speed without being set up as a Macro and with no other relay connection.
- Valves A-E may be assigned to the same auxiliary circuit as a relay connection.
- If one valve is to be turned on by more than one circuit, then it is suggested to assign a Feature Circuit to just that valve. That valve and any combination of relay connections may be activated with Macros.
- If SOLAR relay connection is checked and SOLAR is **NOT** a heat pump, also check Valve A. Valve A may not then be used with any other circuit. Valve A and the SOLAR relay are activated when solar heating is enabled.

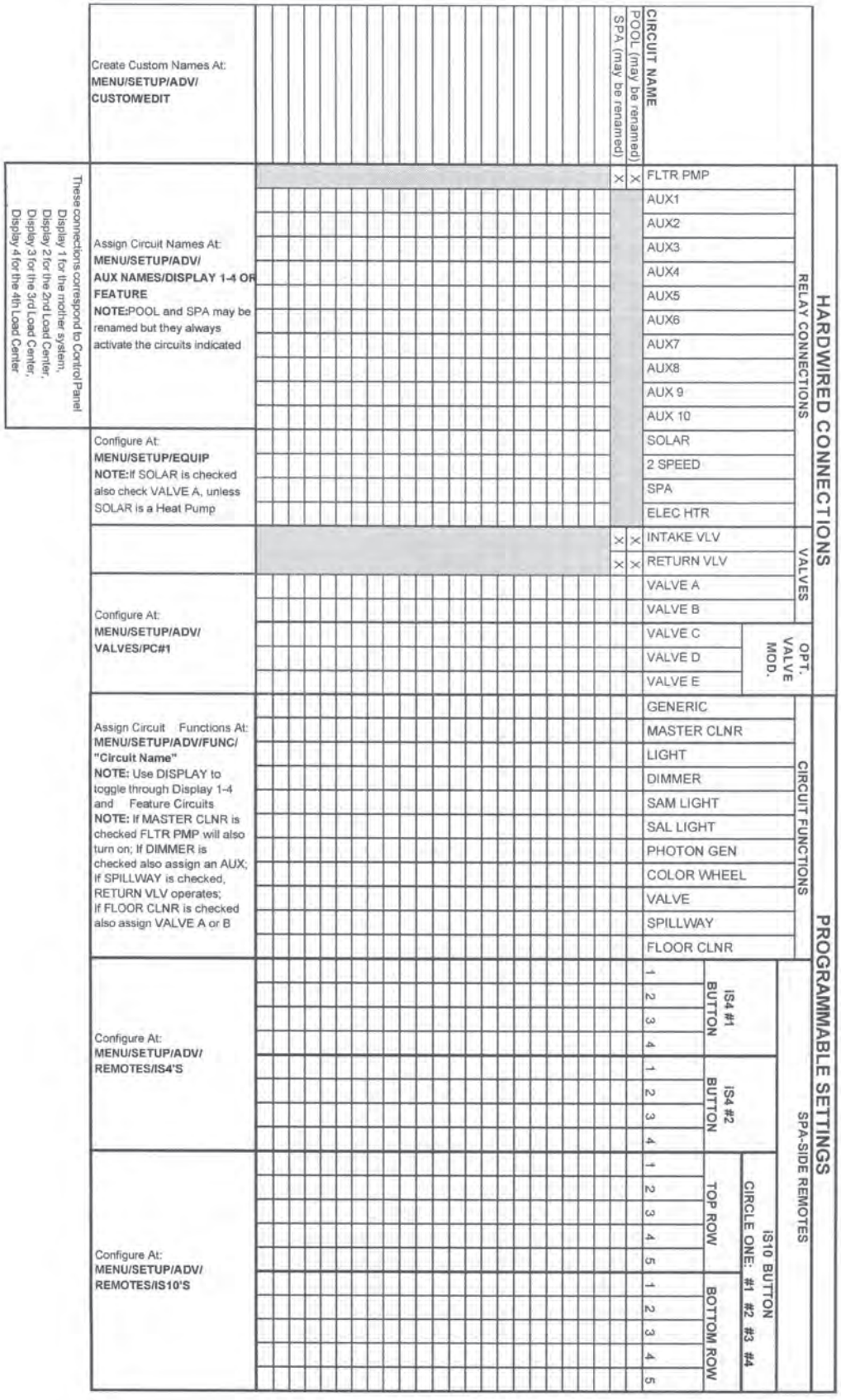
Write down Programmable Settings for each circuit, and what special Circuit Functions, if any, each circuit will have. Circuit Functions may be assigned to any number of circuits (see page 39). If Spillway is checked, the Intake and Return valves will turn to divert all the pool intake water to be returned to the spa. If "Floor Cleaner" is checked, then one or more valves must also be checked to run the floor cleaner multi-port valves. If no special function will be assigned check GENERIC.

Write-in any automatically timed programs you want for a circuit. Up to 99 total timed programs may be assigned, but only three are presented on the work sheet. Indicate start times, stop times, countdown time (called "EGG TIMER"), days to be active, and if a color changing light whether or not it should change colors when turned on (SMART START).

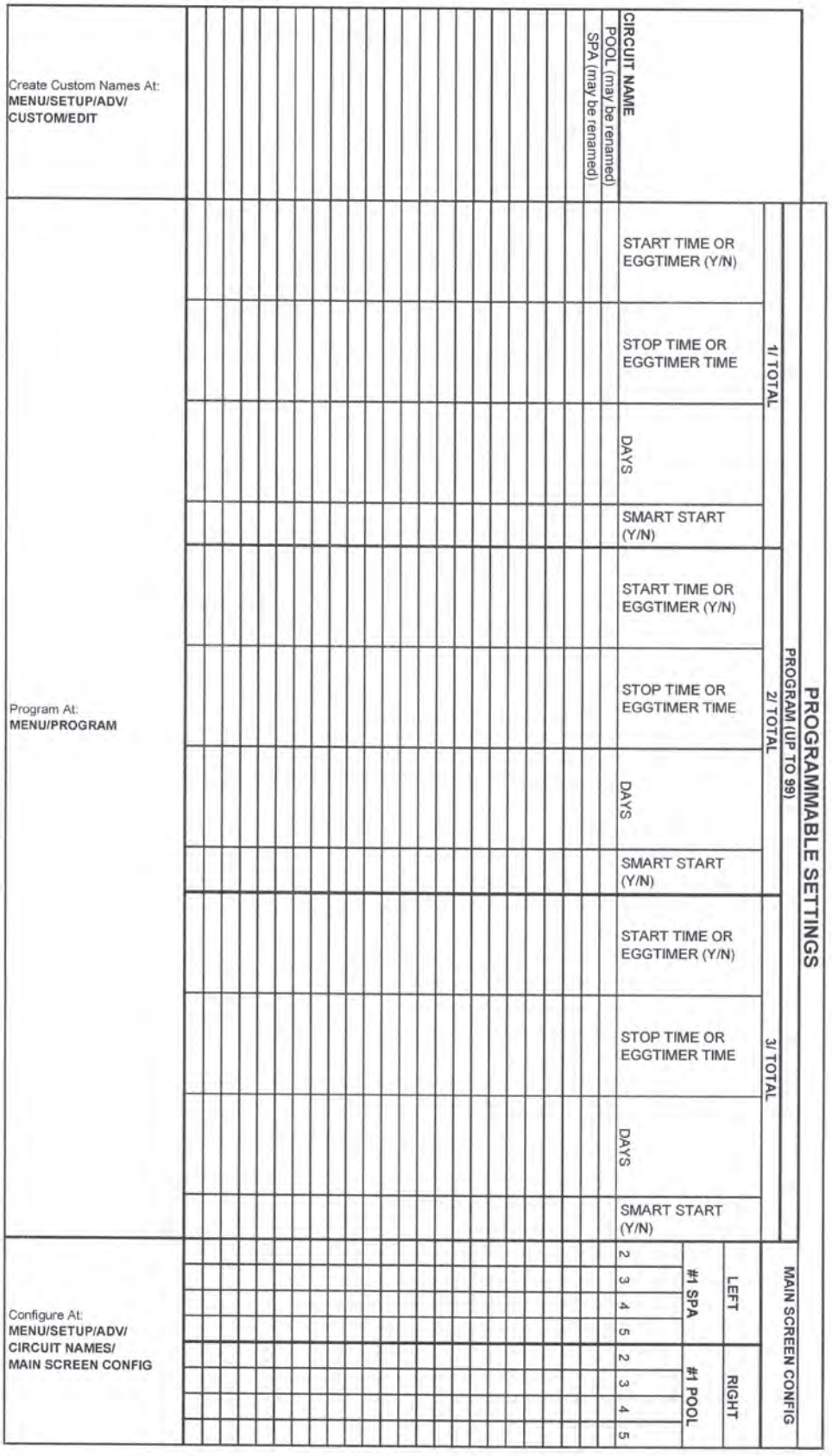
Finally, indicate what circuits you want to appear on the Indoor Control Panel main screen and what circuits you want activated by what buttons on a Spa-Side remote. The top buttons of the main screen are dedicated for Spa and Pool modes, however the lower buttons numbered downward may be configured to display any circuit.

Note: *Keep the homeowner worksheets for future reference.*

WORKSHEET FOR SHARED EQUIPMENT SYSTEMS
i5+3, i7+3, i9+3 (Sheet 1 of 2)

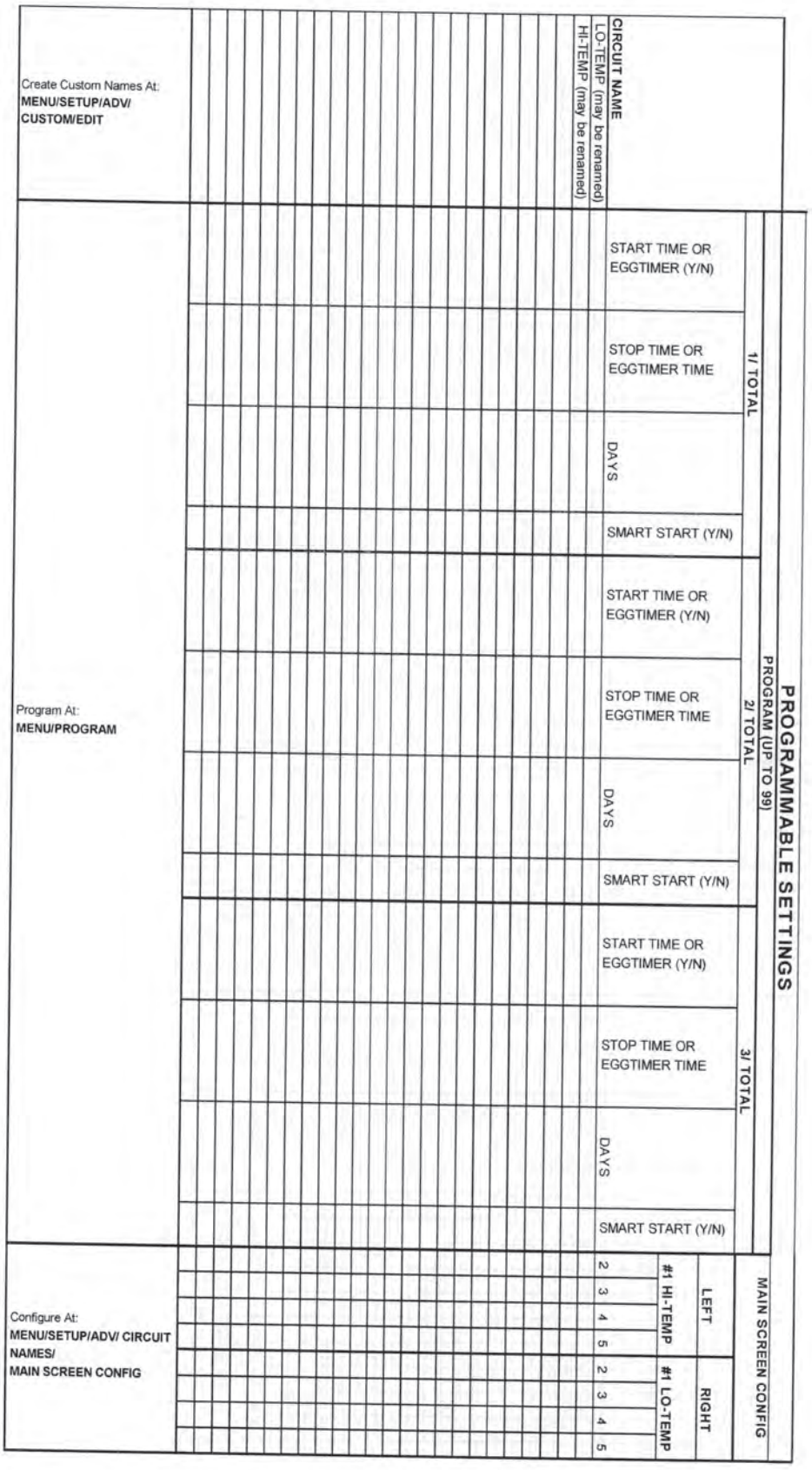


WORKSHEET FOR SHARED EQUIPMENT SYSTEMS
i5+3, i7+3, i9+3 (Sheet 2 of 2)

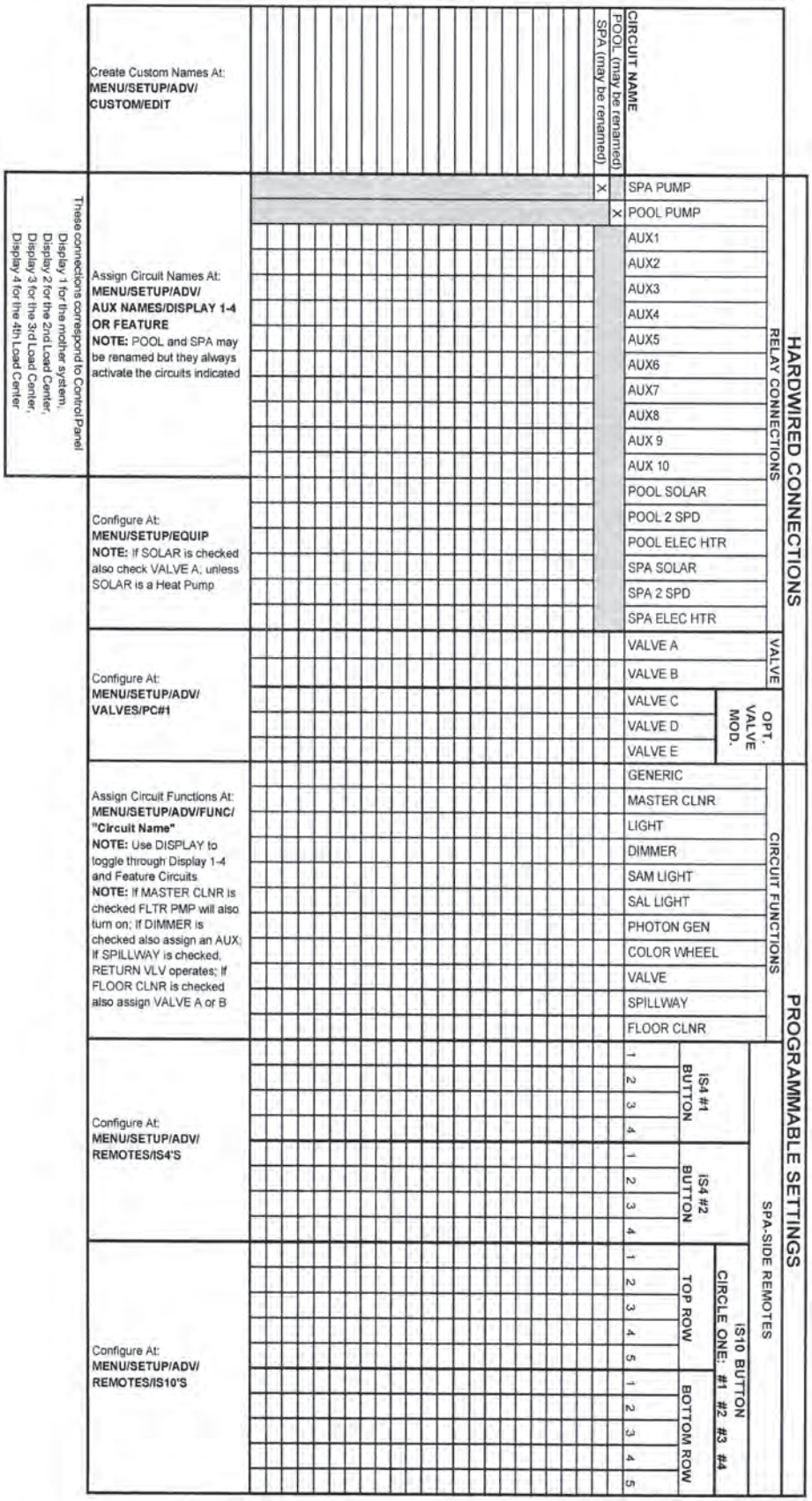


WORKSHEET FOR SINGLE BODY SYSTEMS
i5S+3, i9+3S (Sheet 1 of 2)

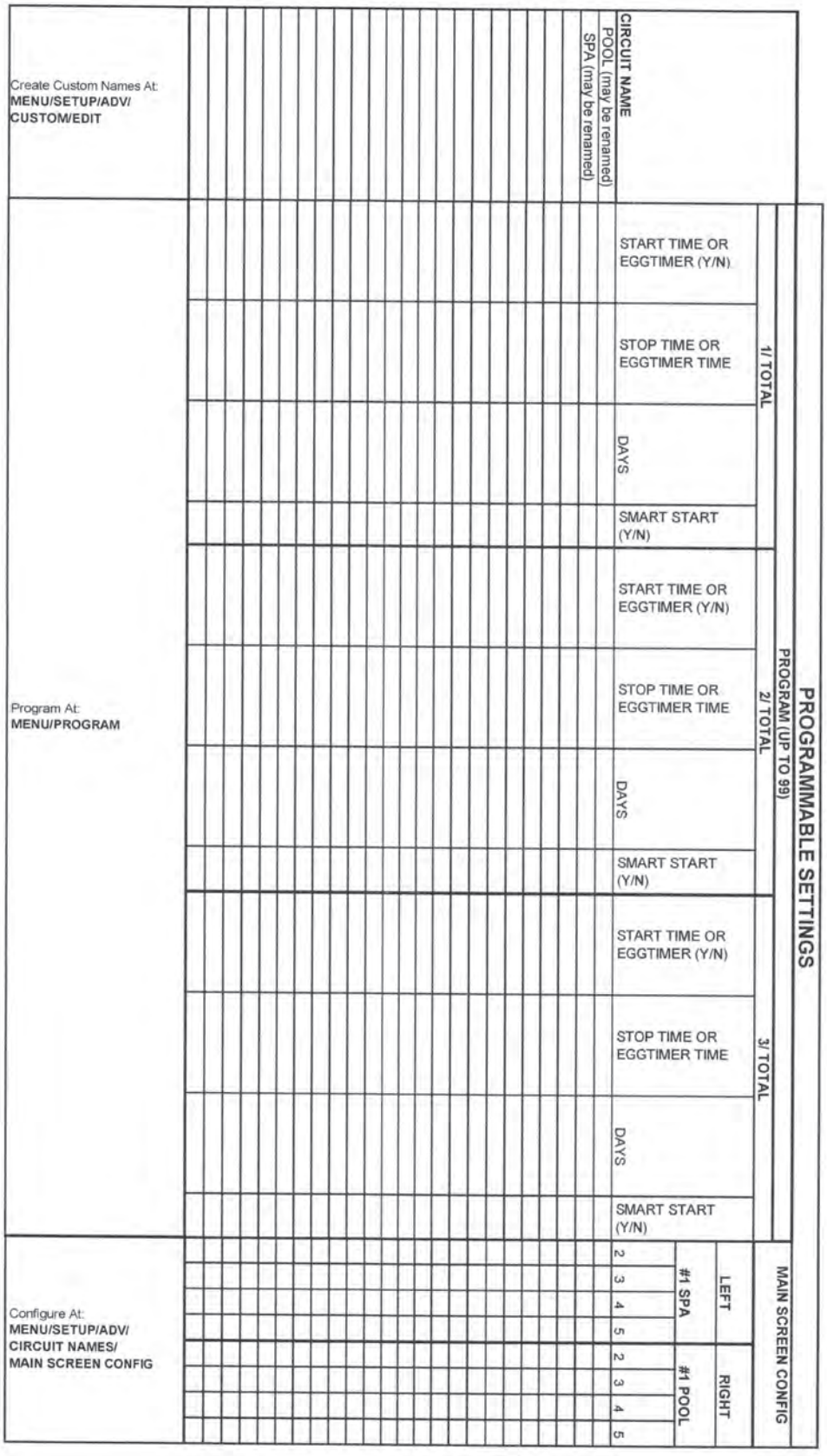
WORKSHEET FOR SINGLE BODY SYSTEMS
i5S+3, i9+3S (Sheet 2 of 2)



WORKSHEET FOR DUAL EQUIPMENT SYSTEMS
i10+3D (Sheet 1 of 2)



WORKSHEET FOR DUAL EQUIPMENT SYSTEMS
i10+3D (Sheet 2 of 2)



The Main Outdoor Control Panel

The main Outdoor Control Panel consists of the Personality board mounted onto a motherboard which is housed inside a Load Center or Power Center. The Outdoor Control Panel includes, control buttons for pumps, filters, and heater, red status lights, and a Reset button. The IntelliTouch Personality board defines the type of equipment installed. The Outdoor Control Panel can be used to override the Indoor Control Panel functions for pool service and for equipment set up. The Outdoor Control Panel is hinged to allow access the rear Personality board.

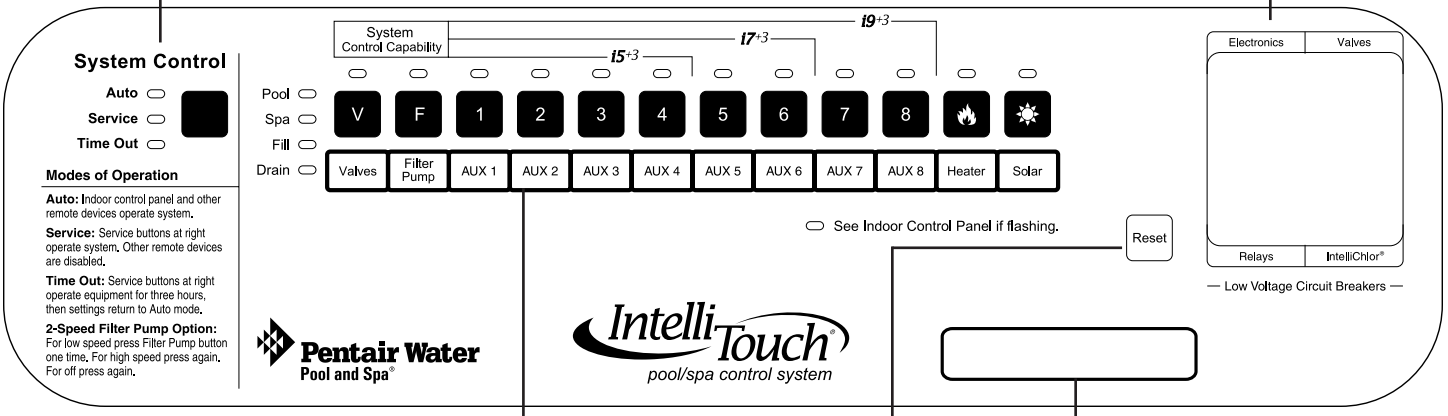
***Note:** Pressing System Control buttons at any of the Outdoor Control Panels, will affect the entire system.*

CAUTION: Be sure the **High Voltage Cover Panel** is in place over the bottom edge of the outdoor control panel. DO NOT OPERATE ANY CONTROLS BEFORE READING THE FOLLOWING INFORMATION.

Shared Equipment Systems i5+3, i7+3, i9+3

System Control
Three LED indicator lights on the far left indicate the current mode of operation.
By pressing the button adjacent to these lights you may toggle through the various modes.
AUTO mode enables all remote controls (Indoor Control Panel, spa-side remotes, radio frequency remotes, etc. Spa-side remotes may still be disabled by the Indoor Control Panel or MobileTouch).
SERVICE mode allows auxiliaries to be operated directly from the Outdoor Control Panel while disabling all other remotes.

Low Voltage Circuit Breakers
To the far right are 3 Amp circuit breakers to protect low voltage circuits.
Check these as part of any troubleshooting activity.



System Control Capability Buttons
In **SERVICE** mode, hitting any of the horizontal buttons will activate the corresponding circuit.
Some of the buttons are specially dedicated to certain functions described below.

V: This button will turn valves so that only the pool water is circulated through the system, only the spa water is circulated through the system, the spa will be filled with pool water, or the spa will be emptied of water into the pool. When the system is set to SERVICE mode the actuators will turn to Pool Mode. NOTE: a spillway effect may be simulated by setting valves to Fill. Be sure a spillway has been built into the spa.

F: This button will activate the filter pump. If your pump has been wired for two speed operation, the first time this is pressed will put the pump in LOW speed and pressing again will put it in HIGH speed. A third press will turn it off. This button also has further capability during system set-up and configuration.

Heater (Flame): This will automatically turn the heater on. NOTE: This does not activate a pump. Heaters should not be activated without running a pump and normally will not run if water flow is not detected. The heater will continue heating the water until the heater's high limit temperature sensor is triggered (approximately 106° F).

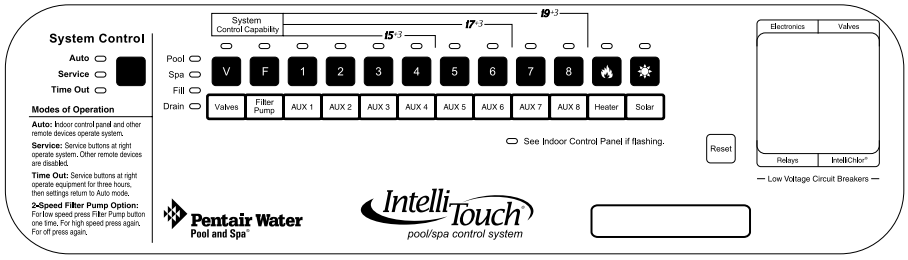
Solar (Sun): Two things happen when this is activated. (1) The solar relay is turned on to activate a booster pump if installed. (2) Valves will be turned to divert water through solar heating panels ONLY IF the system has been told the solar heating is present through the Indoor Control Panel.

System Identification Label:
System i5, System i7+3,
System i9+3: Main System

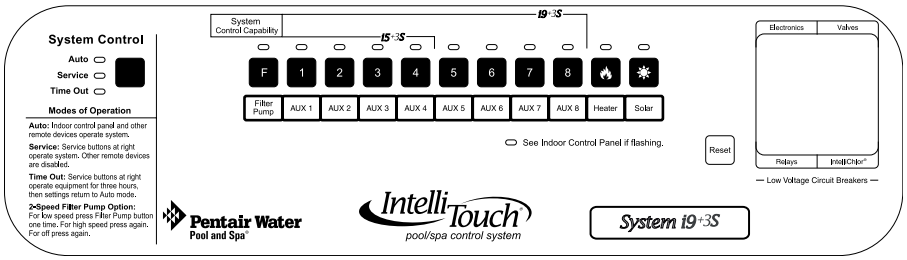
Reset
Pressing this button will restart the Outdoor Control Panel. Wait until the System Control indicator light has settled on Auto mode and the Valve indicator light has settled on Pool mode before resuming normal operation. DO NOT press any other buttons at this time or you may trigger the Advanced Set-up and Configuration functions.

IntelliTouch Outdoor Control Panels

For IntelliTouch system wiring diagrams, see pages 41-43.

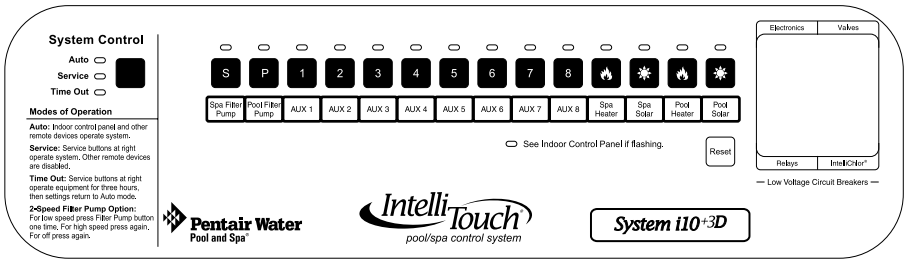


Shared Equipment Systems Model i5+3, i7+3, i9+3



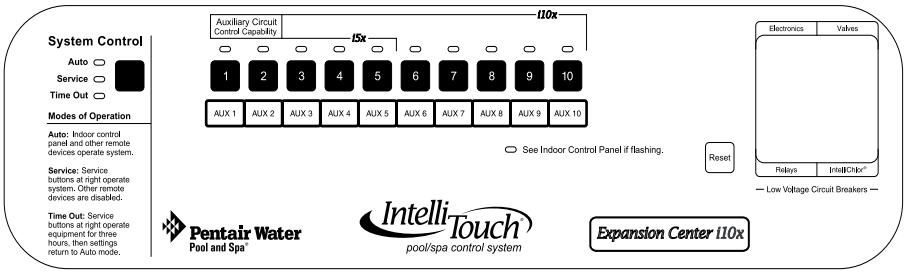
Single Body Systems Model i5+3S, i9+3S

Operates the same as i5+3, i9+3, except no valve controls.



Dual Body Dual Equipment System Model i10+3D

The i10+3D is designed to operate two sets of pool equipment. Each set of a equipment (Pool or Spa) can control one temperature setting. Operation same as i9+3 except **S** and **P** buttons operate independent filter pumps and the Heater and Solar buttons operate independent heating systems and no valve controls.



Expansion Centers Model i5x, i10x

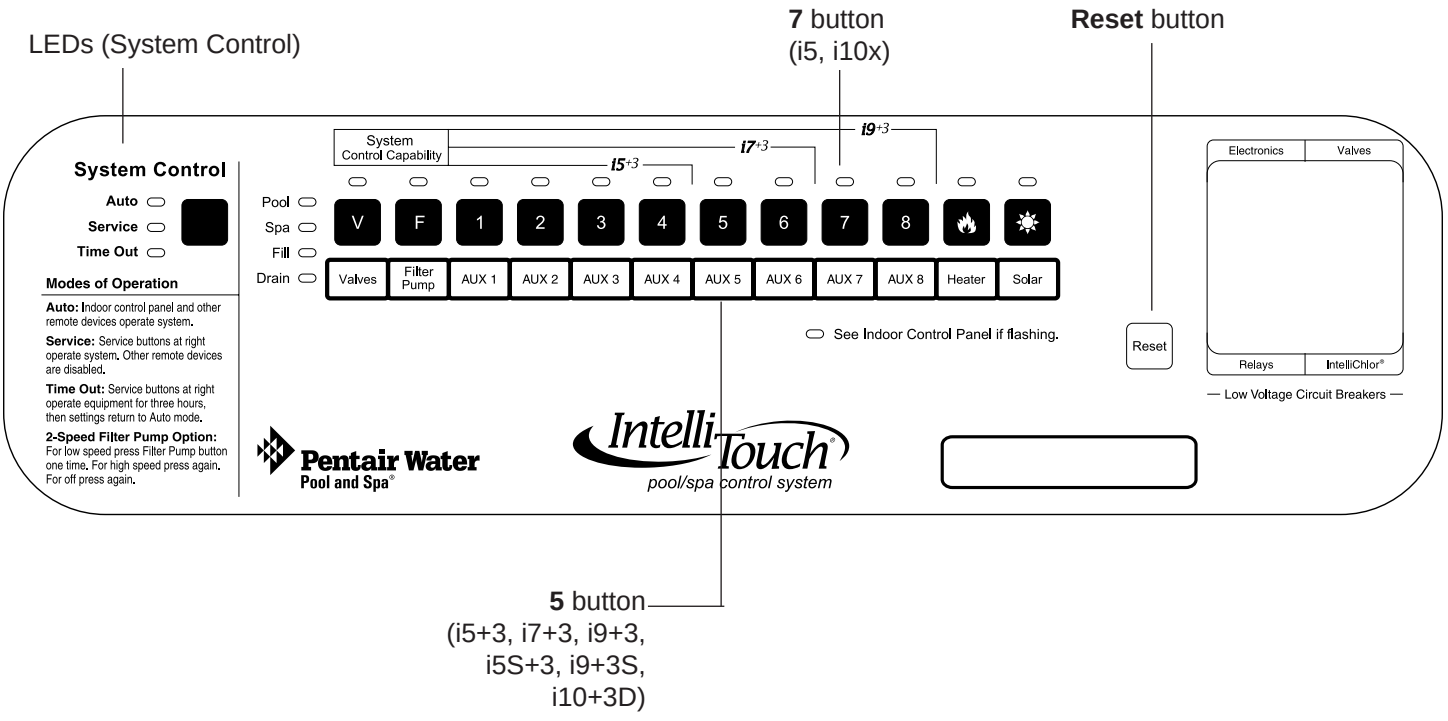
Expansion Centers provide additional valve and auxiliary circuits. They are designed to operate with base systems: i9+3, i9+3S, i10+3D. The “Auxiliary circuit control capability” buttons operate the same way as on the main base Outdoor Control Panel.

Erasing Outdoor Control Panel Memory (Factory Default)

The Outdoor Control Panel programmed memory can be erased and returned to the factory default settings. System information such as feature circuit configuration, operation and display is retained at the main Load Center Outdoor Control Panel and all Indoor Control Panels and MobileTouch controllers. If the memory is erased in the main Outdoor Control Panel (located in the Load Center or Power Center), system information retained in the Indoor Control Panel or MobileTouch is automatically downloaded. This feature is important in case of accidental memory loss and to ease board replacement. If there are multiple Expansion Center, iS10 Spa-Side remotes, or Indoor Control Panels, each one of the controllers will need to be manually enabled (see pages 26 and 27 for details). For instructions about erasing system memory from both the Outdoor Control Panel and Indoor Control Panel, refer to "Erasing the System Memory," page 87.

To reset to the factory default settings:

1. On the Outdoor Control Panel, press the **RESET** button.
2. The three red System Control LEDs are lit for about ten seconds.
3. While the red LEDs are lit, press one of the following buttons
   - For models i5+3, i7+3, i9+3, i5S+3, i9+3S, and i10+3D, press **button 5**.
   - For models i5x, i10x, press **button 7**.
4. The System Control LEDs will switch off then on completing a normal system restart. Wait until the system has returned to "AUTO" and "POOL" modes before resuming operation.



Main Outdoor Control Panel in the Load Center or Power Center

Section 5
Toubleshooting

System Start-Up

The following information describes a basic system start-up procedure. Before switching on the power to the IntelliTouch load center, first affix the auxiliary relay labels to the appropriate buttons on the Outdoor Control Panel. If necessary, write the function on the control panel.

Check Electronics

Check that the following plugs are seated correctly on the Personality board. For connector locations, refer to the System Wiring Diagrams on page 107 and 108.

- Relay connectors - **FLTR PUMP - AUX1 - AUX8**
- Temperature sensors connectors - **WATER, SOLAR, AIR**
- Transformer wire harness **- J2**
- Heater control connector **- ELEC HTR or screw terminals**

System Test

The following describes how to test the Outdoor Control Panel to activate the heater, valves and pumps. This test assumes that all system equipment has been properly installed and connected to the Load Center and Power Center.

Testing Valve Actuators and Pumps:

Use the following steps to test the valve actuators (CVA24T - P/N 263045) for proper rotation. For Outdoor Control Panel System i5+3, i7+3, i9+3 (shared equipment).

To test the valve actuators and pump:

1. Power up the load center. Press the **SYSTEM CONTROL** button on the Outdoor Control Panel until the **SERVICE** LED light is on.
3. Press the **V (Valve)** button to select **POOL.**
4. Press the **F (Filter Pump)** button to activate the filter pump. Water will be removed from the pool and returned to the pool. The bypass valve will allow some water to fall from the spa back to the pool.
5. Set both valve actuators (CVA24T - P/N 263045) for suction and return. Use the toggle switch on the rear of the CVA-24 to withdraw and return water from the pool.

   Note: With the filter pump operating, if water is not being removed and returned to the pool, it may be necessary to check the plugs on the Personality board and the toggle switches on the valve actuators.

Troubleshooting

This section provides information to help you resolve any problems that may occur during installing or using the IntelliTouch system. If by following the recommended actions you are still unable to resolve the problems please contact Technical Support, see page vii.

Frequently Asked Questions (FAQ)

What does a '+3' IntelliTouch system mean?

The first number of a "System Personality" indicates the number of high voltage (auxiliary) circuits available including the filter pump. The '+3' indicates the capability of operating additional equipment without using up high voltage circuits. Typically this refers to spillway functionality, valve control (see page 78), and feature circuits (see page 79). A '+3' system also offers moving colored lights, and the ability to create Feature and Macro circuits.

How Do I Setup/Configure/Program the 2-Speed Pump?

Two-speed pumps operate using two relays and one or more circuits with the IntelliTouch system. The first relay turns the pump on or off. Assuming this is the filter pump and depending on the system personality, this circuit is controlled by the Pool, Spa, high temp, or low temp circuits or any other circuit that may be tied to the filter pump (such as circuits with freeze protection, etc.). The second relay turns the pump from low speed to high speed. The default condition is low speed, but up to 10 circuits may be assigned to trigger the pump to high speed. ***Note:*** *These 10 circuits do NOT turn the pump on.*

To configure a two-speed pump relay, refer to "Setting Up a 2-Speed Pump," page 75. For relay location and wiring, see pages 107 and 108. The 2-Speed pump relay is plugged into the 2-SPD output on the Personality board. A circuits must be assigned to switch from low to high speed.

Can I turn the Heater On and Change the temperature from the Spa?

The heater may be turned on from the spa using one of two hard wired Spa-Side remote (iS4 or iS10) or by wireless remote controls (MobileTouch or QuickTouch). Only the iS10 or wireless controllers can change the temperature from the spa location.

How do I get Solar to switch on?

The system must first be told that solar heat is installed. Go to the Solar equipment screen (**Menu > Setup > Equipment > Solar**) and press the **YES** button to tell the system solar is present. Note: Do not set solar as a heat pump. Then the heating method must be selected for each body of water. Many options are available through the Heat screen (see page 71).

What are Color Swim and Color Set?

Color Swim: Allows any combination of up to twelve S*Am*, S*AL*, IntelliBrite, and/or FIBER*works* lighting circuits to be preset to transition through colors in sequence, giving the appearance of the colors swimming across the water. The delay in sequencing each light can be adjusted to customize the display for your pool. For more information see "Setting Up Lighting Options," page 42.

Color Set: Allows any combination of up to twelve S*Am*, S*AL*, IntelliBrite, and/or FIBER*works* lighting circuits to be preset to specific colors, such as red, white, and blue for the Fourth of July or red and green for Christmas.

Can I copy a standard configuration to all the systems I install?

Yes you can but only if you maintain a standard system configuration on a system in your headquarters. An Indoor Control Panel with a properly wired four conductor patch cable may be used to accomplish this.

CAUTION - Do NOT use the Service Panel. This accessory auto erases every time power is removed. It is for on-site work only.

1. Plug the Indoor Control Panel into a COM port on the Personality board of dedicated system at headquarters.

2. One of several things may happen at this point:

- The Indoor Control Panel may automatically download the system configuration if its own memory was erased.
- You may be prompted to update system personality, see page 86.
- You may be prompted to select Indoor or Outdoor memory. Always Select Outdoor or you will write over your dedicated set up.
- You may have to force a download to the system.

3. This same controller may then be taken to the job-site to configure the system. Switch off the system power. Open Load Center or Power Center front door, remove the two retaining screws and fold down the Outdoor Control Panel.

4. Plug in the Indoor Control Panel to one of the COM ports from headquarters.

CAUTION - Be sure to check that the wiring is matching both ends before turning system power back on. Crossed wiring may permanently damage the system.

5. The procedure is identical to Step 2 above. Plug into the COM port on the Personality board in the Load Center or Power Center. Again, several different things may happen. Check all the relevant sections to avoid any problems.

Fixing mismatched system personalities

Sometimes the Indoor Control Panel or MobileTouch will have communication problems with the Outdoor Control Panel or with each other. The possible cause may be as follows:

1. A controller is added or replaced. Accessory and replacement controllers leave the factory identified as an i9+3 system.
2. A controller's memory is erased while unplugged from the system.
3. The IntelliTouch system personality (i9+3, i10+3D etc.) was changed.

If this problem occurs a mismatched system personality message screen may be displayed. Press the NEXT button to update the controller to match the system personality. If you do not want to update the controller (most likely because you are service person using the controller for another purpose) then press IGNORE.

Indoor Control Panel and Outdoor Control Panel Connection Problem

System information relating to circuit configuration, operation and display is retained at the main Load Center Outdoor Control Panel and all Indoor Control Panels and MobileTouch. System information is automatically downloads from programmed components to non-programmed components in case of accidental memory loss and to ease board replacement.

If for some reason the controller and outdoor control panel both have user settings that conflict with each other then this must be reconciled. Such occasions include but are not limited to:

1. The MobileTouch wireless controller made changes while the system power was down.
2. A service company made a special upgrade and installed it on an existing system.

If the Service Personnel screen appears, choose Indoor to use the controller settings and Outdoor to use the Outdoor Control Panel settings. Refer to page 85 for more information.

MobileTouch Temperature Readout Not Accurate (20 to 30 Degrees off)

Problem: If the MobileTouch wireless controller LCD temperature readout displays an inaccurate reading, it may be due to wireless signal interference. In this case, the air temperature readout can be correct.

Description: Temperature sensor cables are picking up signal interference.

Solution: To prevent signal transmission interference, ensure that the temperature sensor cables that connect the sensor to the Load Center are not routed near a Florescent lighting fixture (within six (6) inches).

System Problem Diagnosis

Use the following information to resolve system problems.

Symptom	Possible Cause	Solution
Indoor Control Panel has no power - (screen, blank , no LEDs, buttons not working.	Bad wiring run from Outdoor Control Panel/Personality board in the Load Center or Power Center	Check wiring, and screw terminal connections. Ensure no wires are broken or shorted. Create/ Use a short test cable and connect the indoor panel directly to the power centerCorrect the wiring order between all units. In some cases this may cause permanent damage. If this occurs contact Technical Support for replacement PCBs.This is most effectively determined by using a spare Indoor controller or Service man's panel. Contact Technical Support for replacement PCB
	Wired incorrectly (wires not in correct order)	Correct the wiring order between all units. In some cases this may cause permanent damage. If this occurs contact tech support for replacement PCBs.
	Defective Indoor Control Panel	This is most effectively determined by using a spare Indoor controller or service man's panel. Contact tech support for replacement PCB

Problem: Indoor and Outdoor Control Panels work, but iS4 fails to operate.

Symptom	Possible Cause	Solution
iS4 Spa Side fails to operate equipment .	Spa Side Control is Disabled by main panel.	Using the indoor panel or a service man's panel. Press 'MENU' and insure the selection reads "SPA SIDE REMOTE ENABLED". If it reads "SPA SIDE REMOTE DISABLED" press the button beside the option to toggle the selection.
	Incorrect configuration or circuit to switch assignment or defective wiring.	Verify iS4 setup. Press 'MENU/SETUP/ADVANCED/SPA, RF, & PHONE REMOTES'Select 'CONFIGURE iS4's'Insure the iS4 in question has the expected circuit assignments, and is not assigned to unused circuits.
	Defective iS4	Replace defective iS4

Problem: Indoor and Outdoor Control Panels work, but iS10 fails to operate.

Symptom	Possible Cause	Solution
SpaCommand, or iS10 Spa Side fails to operate equipment .	Spa Side Control is Disabled from the main control panel.	Using the indoor panel or a serviceman's panel. Press 'MENU' and ensure the selection reads "SPA SIDE REMOTE ENABLED". If it reads "SPA SIDE REMOTE DISABLED" press the button beside the option to toggle the selection.
	Defective Wiring	Verify iS10 setup. Press 'MENU/SETUP/ADVANCED/SPA, RF, & PHONE REMOTES'Select 'CONFIGURE iS10's . Ensure the iS10 in question has the expected circuit assignments, and is not assigned to unused circuits.
	Incorrect configuration or circuit to switch assignment.	Verify iS10 setup. Press 'MENU/SETUP/ADVANCED/SPA, RF, & PHONE REMOTES'Select 'CONFIGURE iS10's' Ensure the iS10 in question has the expected circuit assignments, and is not assigned to unused circuits.
	IS10 is not correctly enabled	See page 80 to manually enable the iS10.
	Defective iS10	Replace defective iS10. Contact Technnical Support.

Problem: The Mobile Control Panel will not work, or will not work dependably.

Symptom	Possible Cause	Solution
The MobileTouch fails to operate. It does not turn on or light up.	Battery is not charged or unit is not plugged in.	Attached the AC recharger into the MobileTouch and plug into a wall outlet.
	Defective Mobile-Touch.	Replace unit. Contact Technical Support.
The MobileTouch fails to operate.	The unit has not been enabled correctly.	See page 28 to manually enable the MobileTouch.
	Defective Wiring - The Transceiver attached to the Load Center or Power Center is not correctly wired.	Verify Wiring, and wiring order. Check for broken wires and loose connections.
	Defective Transceiver at the Load Center or Power Center.	Verify that the two LEDs on the Transceiver are active as expected. The LED marked POWER should always be lit. The LED marked LINK AC-TIVITY should flash approx. every two seconds or whenever there is communication (such as when you press a button on the MobileTouch.
	Defective Mobile-Touch.	Replace unit. Contact Technical Support.
The MobileTouch fails to operate dependably.	Defective Wiring - The Transceiver attached to the Load Center ot Power Center is not correctly wired.	This is rare, and normall, only the green wire would cause this problem. Verify Connection.

Problem: The Quick Touch remote will not work, or will not work dependably.

Symptom	Possible Cause	Solution
POWER LED does not light on the Receiver PCB	IntelliTouch Load Center or Power Center does not have power.	Ensure power is being supplied and that the power center operates correctly without the receiver installed.
	Defective cable or connection to the Load Center or Power Center.	Verify the function of the board using known good cable set. Check all wiring.
	Defective Receiver board.	Contact Technical Support.
COMM LINK LED does not light or blink.In normal operation LED will blink at least every 2 seconds	Defective cable or connection to the Load Center or Power Center.	Verify the function of the board using known good cable set.
	Defective receiver board.	Replace receiver board.
Address switches are incorrectly configured	Verify that the address switches on the transmitter and handheld receiver board are correct and match.	Transmitter battery has failed.
	Replace Transmitter battery	Defective Transmitter or Receiver
	Contact Technical Support.	

Problem: The Quick Touch remote will not work, or will not work dependably (Continued).

Symptom	Possible Cause	Solution
Unit seems to turn on or off circuits without the user / transmitter	A near by home is operating a similar wireless unit	Select a an alternate address code for the transmitter and receiver. I.e. change the switches on both boards to an alternate, but matching setting.
Unit dependably turns equipment ON, but once equipment is running it does not dependably turn equipment OFF, or range is greatly reduced when equipment is running	Undue electrical noise is being produced by one or more pieces of equipment in close proximity to the receiver.	Relocate the Receiver away from equipment such as blower motorsRelocate the Receiver in a location that provides fewer obstructions to the area the user commonly operates the transmitter.

IntelliFlo Alerts and Warnings

The IntelliFlo displays all alarms and warnings on the control panel display. When an alarm or warning condition exists, the corresponding LED will be lit on the display. All control panel buttons are disabled until the alarm or warning is acknowledged with the **Enter** button. Press the **Reset** button to clear the alarm once the fault condition has been resolved. Note: The IntelliFlo pump will not start if the impeller is rotating. The alerts and warnings are:

- **Power out failure:** The incoming supply voltage is less than 170 VAC. The drive faults to protect itself from over current. The drive contains capacitors that keep it powered up long enough to save the current run parameters. If power is restored during this process, approximately 20 seconds, the drive will not restart until completed.
- **Priming error:** If the pump is not defined as primed within the "Max Priming Time" it will stop and generate a "Priming Alarm" for 10 minutes, then attempt to prime again. The "Max Priming Time" is set by the user on the priming menu as discussed on page 14. If the IntelliFlo cannot prime within five attempts it will generate a permanent alarm that must be manually reset.
- **Overheat alert:** If the drive temperature gets above 130 degrees, the IntelliFlo will slowly reduce speed until the over temperature condition clears.
- **Anti-freezing:** When active, the motor will run at 1000 rpm for 60 minutes. Only active in Filter and Manual modes. Note: The IntelliFlo's internal anti-freeze protection is disabled when connected to an IntelliTouch system. Freeze protection is provided by selecting YES at the ON WITH FREEZE portion of the IntelliTouch's appropriate circuit function menu. To re-enable the IntelliFlo's internal anti-freeze protection, the power to the drive must be cycled off then back on.
- **Blocked system:** Detects a blocked suction line. This alarm resets automatically after 30 seconds and the pump restarts.
- **System service soon:** Alerts the operator that the pump discharge pressure has reached the Clean Filter Pressure as setup in the Filter Menu. The filter status will be displayed as 100%. The yellow warning LED will be on until a backwash cycle is operated. The IntelliFlo will automatically reduce speed as necessary to not exceed the Clean Filter Pressure.
- **Over current:** Indicated that the drive is overloaded or the motor has an electrical problem. The drive will restart 20 seconds after the over current condition clears.
- **Over voltage:** Indicates excessive supply voltage or an external water source is causing the pump and motor to rotate thereby generating an excessive voltage on the drives internal DC bus. The drive will restart 20 seconds after the over voltage condition clears.

Note: For IntelliFlo troubleshooting information, see the following manuals: IntelliFlo VF (P/N 350075), IntelliFlo VS (P/N 357269) and IntelliFlo VSF (P/N 351420).

Suction Blockage

When something blocks the suction or the pump fully it will shut off immediately (within 1 second). It will also shut off after a few seconds of dead heading with the same alert. The unit will come back on in 30 seconds and ramp up slowly. This function should be tested with all new installations by directing the flow to one suction and covering it with a piece of material other than someone's hand. This alert is deactivated in Manual mode.

IntelliFlo® VS and IntelliFlo VSF Warning and Alarm Conditions

The IntelliFlo VS, IntelliFlo VS and IntelliFlo VSF alarms and warnings are indicated by flashing LEDs on the control panel. For example, if a “Drive Temperature” warning occurs, the LED will blink two times, then Off, then blink two times. This sequence is repeated until the condition is cleared.

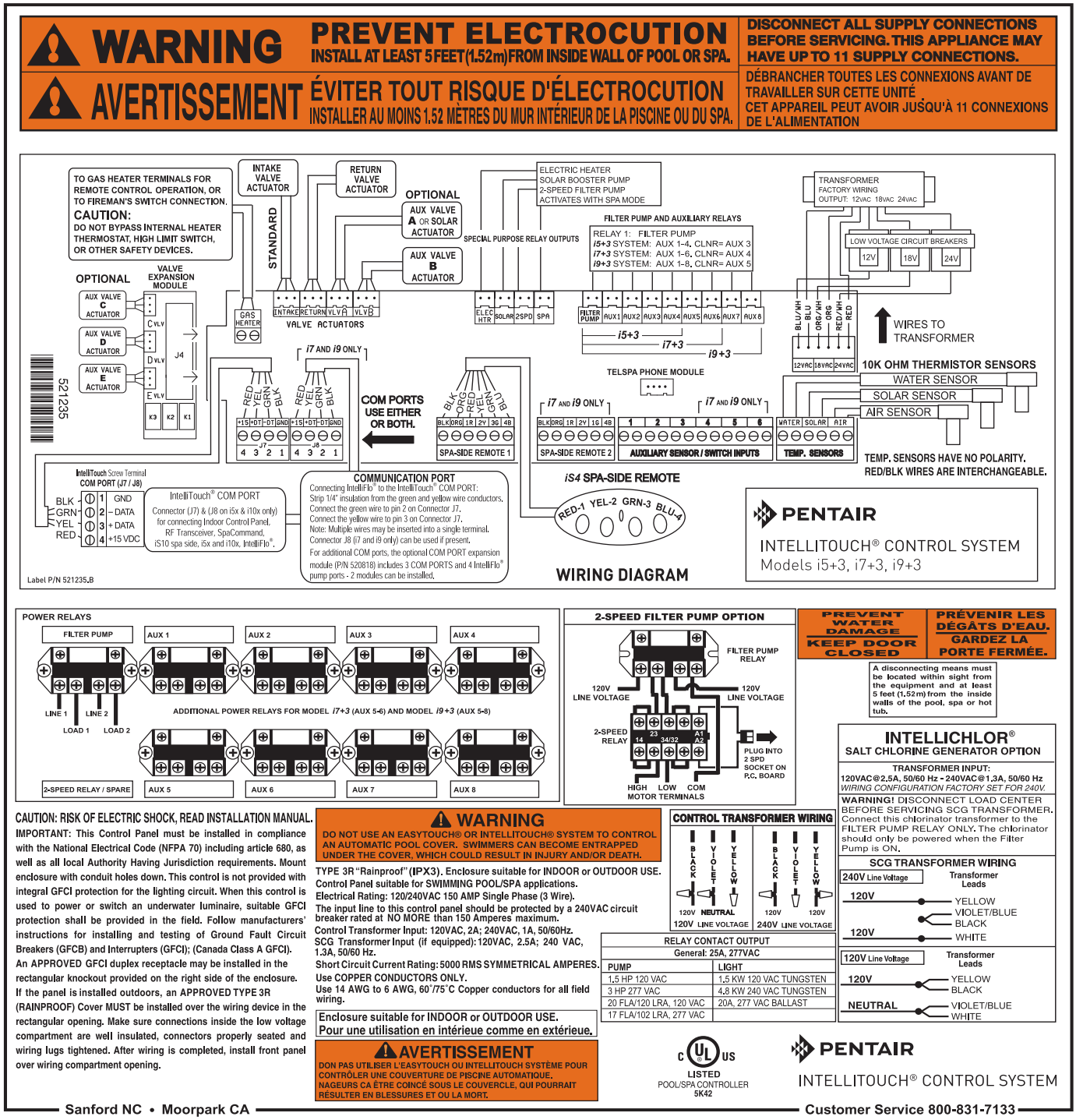
- **Warning condition:** If a warning condition occurs the pump will be continue to run but at a reduced speed. The Green LED executes a sequence of blinks to indicate which alarm or warning has occurred.
- **Alarm condition:** If an alarm condition occurs the pump will drive stop running. The red LED flashes continuously to indicate the presence of an alarm. The alarm LEDs will reset when the condition clears.

Note: For IntelliFlo troubleshooting information, see the following manuals: IntelliFlo VS (P/N 357269) and IntelliFlo VSF (P/N 351420)

Alarm and warning LED sequence

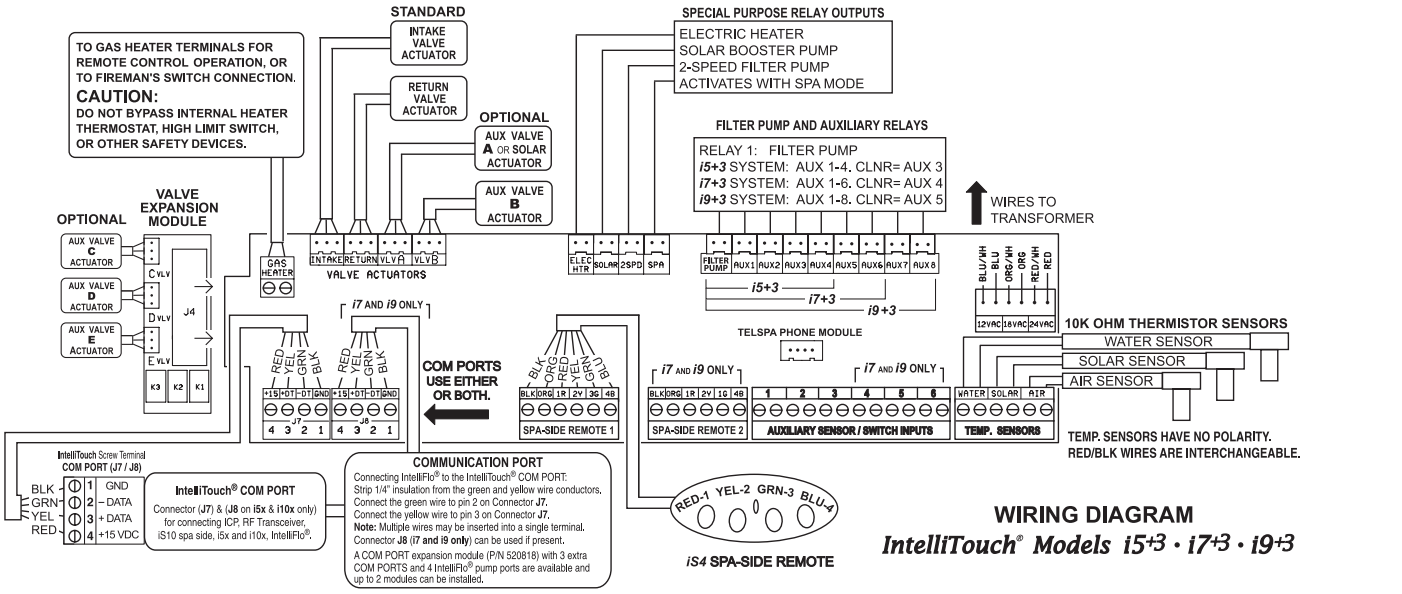
Number of time the LED will blink	Alarm	Description	Action
2	Drive Temperature Warning	Excessive drive temperature	1. Ensure the motor fan has adequate area for ventilation. 2. Stop motor and allow to cool. 3. Run motor at a higher speed to improve cooling air flow.
5	Unknown alarm	Electron failure	1. Cycle power to reset pump. 2. Replace drive.
6	Drive Temperature Alarm	Excessive drive temperature	1. Ensure the motor fan has adequate area for ventilation. 2. Run motor at a higher speed to improve cooling air flow.
7	Power Out Alarm	Supply voltage low	Ensure proper supply voltage.
8	Over current Alarm	Excessive drive current	1. Examine fluid/mechanical system for source of overload. 2. De-energize motor and determine if motor spins freely. 3. Replace drive.
9	Over voltage Alarm	Excessive volt-age on drive buss	1. Rapid switching between speeds can cause excessive voltages on the drive’s DC buss. 2. Ensure proper supply voltage.

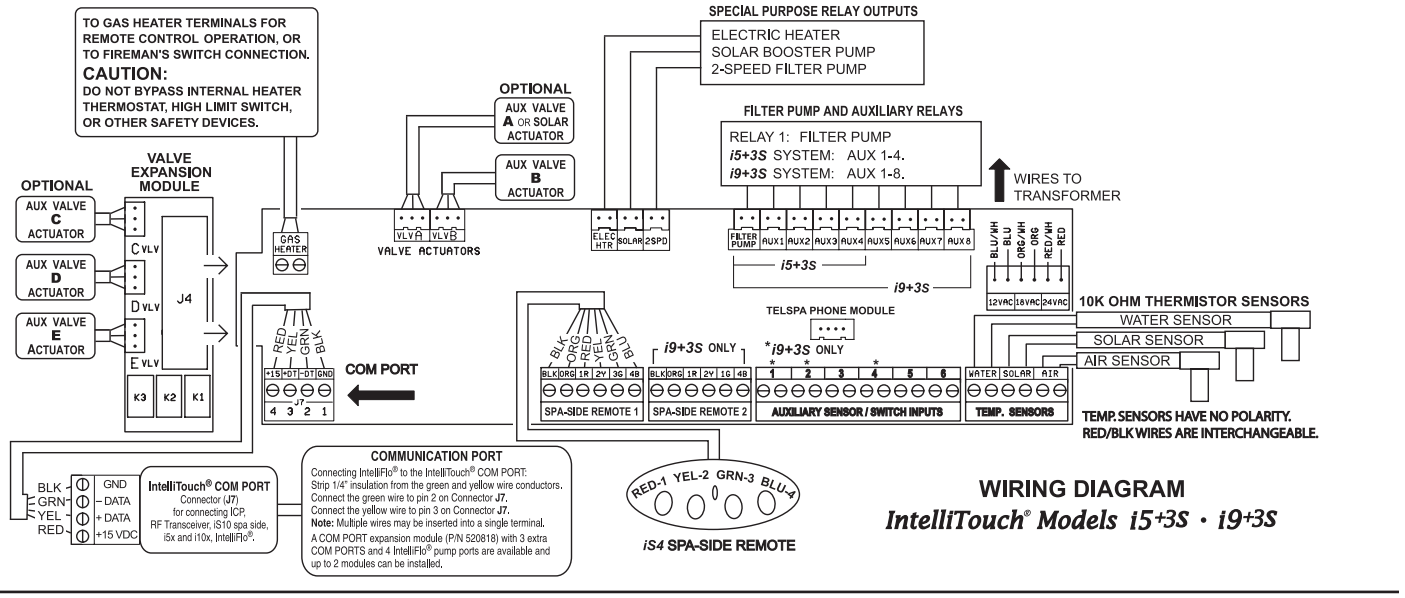
IntelliTouch System Wiring Diagram (i5+3, i7+3, i9+3)

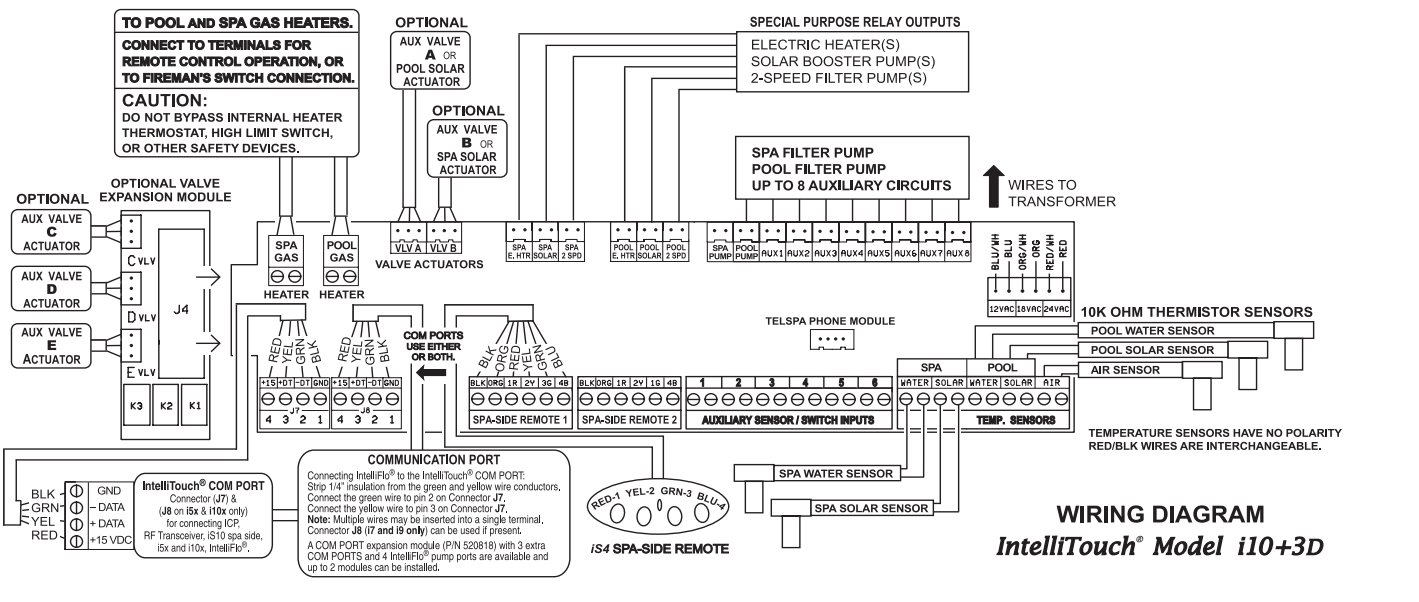


IntelliTouch Load Center System Wiring Diagram

IntelliTouch Control System Wiring Diagram (i10+3D, i5+3S, i9+3S and i10+3D)







Wiring IntelliTouch to a Salt Chlorine Generator

Be sure to check the wire color and function of the salt chlorine generator before connecting it to the IntelliTouch COM port on the Personality board. See the wiring table below for the pin configuration.

Commonly used salt chlorine generator wiring is shown but you should still verify with the manufacturers documentation.

Failure to wire the salt chlorine generator properly can permanently damage the IntelliTouch system or chlorine generator.

Wiring Description

IntelliTouch COM port wiring color connection	Descripion	Salt Chlorine Generator commonly used wire colors
PIN 4 (RED)	+15 VDC	RED
PIN 3 (YELLOW)	+ DATA	BLACK
PIN 2 (GREEN)	- DATA	YELLOW
PIN 1 (BLACK)	GROUND	GREEN

Wiring UltraTemp to IntelliTouch

Be sure to check the UltraTemp terminal block wire colors and pinouts (located on the back of the Auto Set board) before connecting it to the IntelliTouch COM port on the Personality board. The See the wiring table below for the pin configuration.

IMPORTANT: On the UltraTemp AutoSet board ONLY CONNECT PIN 3 (YELLOW) and PIN 2 (GREEN) to the IntelliTouch COM port pins YELLOW and GREEN respectively. Do not connect pin 1 or pin 4 on the AutoSet board or the IntelliTouch Personality board. These pins are not used.

Wiring Description

IntelliTouch COM port wire color	Descripion	UltraTemp pin number and wire color
PIN 4 (RED) **(DO NOT USE)**	+15 VDC	**PIN 4 (DO NOT USE)**
PIN 3 (YELLOW)	+ DATA	PIN 3 (YELLOW)
PIN 2 (GREEN)	- DATA	PIN 2 (GREEN)
PIN 1 (BLACK)	GROUND	PIN 1

How to Backwash Your Filter

When your filter pressure gauge is reads 8 - 10 lbs above the clean, starting pressure (after backwashing), it is time to backwash your filter. This process involves turning a valve so that the water will flow through the filter backwards, flushing out the dirt. Sand filters can have either a push-pull valve (also known as a slide valve) or a multiport valve. The multiport valve has multi-ports on the valve, usually six positions:

Position 1: FILTER: This is the normal operating position, except when backwashing, rinsing or wasting.

Position 2: RINSE: Position the handle in this setting for 20 seconds after backwashing to rinse tank.

Position 2: RECIRCULATE: Use position if the filter's broken (to keep pool water circulating).

Position 2: BACKWASH: Use this setting to reverse the flow in the filter and send water out of the waste line. Make sure valves are open or hoses rolled out

Position 2: CLOSED: Position the handle in this setting to close off flow from the pool, usually to work on the equipment. Do not operate pump with valve in closed position

Position 2: WASTE/DRAIN: Another filter bypass setting, but this setting sends the water out of the waste pipe (hose), instead of returning it to the pool. This setting is used to lower pool water level or to vacuum to waste.

To BACKWASH a sand filter with a multiport valve

Note: If you are using an IntelliFlo pump with IntelliTouch, first set IntelliTouch in "SERVICE" mode (press the "System Control" button adn select "Service" on the IntelliTouch outdoor control panel.

1. Shut off the power to the pump.
2. Press down on valve handle, rotate valve from FILTER to BACKWASH position.
3. Roll out any backwash hose or open any waste line valves.
4. Open air bleeder valve on filter.
5. Switch the pump ON.
6. Watch pressure gauge for backpressure and hose for kinks. Be prepared to shut off pump quickly.
7. After the hose fills up with water, run for two to three2 - 3 minutes or until the water runs clear.
8. Switch the pump OFF and reposition multiport valve handle to the RINSE position.
9. Switch the pump ON and run on rinse for 15 - 25 seconds.
9. Switch the pump OFF and move multiport valve handle to the FILTER position.
10. Switch the pump ON and note lower pressure. Roll up the backwash hose.

To BACKWASH a sand filter with a slide valve

Note: If you are using an IntelliFlo pump with IntelliTouch, first set IntelliTouch in "SERVICE" mode (press the "System Control" button adn select "Service" on the IntelliTouch outdoor control panel.

1. Switch the pump OFF, roll out backwash hose.
2. Twist to unlock plunger T-handle, pull / twist plunger upwards 2" to 3".
3. Open air bleeder assembly on filter, and switch the pump ON.
4. Watch pressure gauge for backpressure (+ 40 PSI) and hose for kinks. Be prepared to shut off pump quickly.
5. After the hose fills with water, run for 2 - 3 minutes or until water runs clear.
6. Switch the pump OFF and push T-handle back down into locked position.
7. Switch the pump ON and note lower pressure. Roll up the backwash hose.

Glossary

Actuators: Motorized accessory for turning valves and diverting water; model CVA24T.

Color Set: Allows a combination of up to 12 SAm, SAL, IntelliBrite or Fiberworks lighting circuits to be preset to specific colors.

Color Swim: Allows a combination of up to 12 SAm, SAL, IntelliBrite or Fiberworks lighting circuits to be preset to transition through colors in sequence. This gives the appearance of colors dancing across your water.

Component ID: Unique identifier that tells the system what each component is.

Controller: Indoor Control Panel or MobileTouch wireless controller.

Expansion Kit: A kit that includes additional auxiliaries to an existing Personality Kit. Requires a Load Center or Power Center for each Expansion Kit.

Feature Circuits: Programmable circuits that may control relays, macros, and/or valve actuators.

Firmware: Factory installed operating system software dedicated for use with the IntelliTouch system; each type of control panel has its own firmware and release level.

Freeze Protection: Switches on a circuit if the air temperature drops below 35° F.

High Voltage Compartment: Large lower right compartment of Load Center or Power Center for all high voltage wiring including circuit breakers, relays, and GFCI.

House Address: Signal that allows Each IntelliTouch system the ability to group all its attached components under a single system identification; prevents the system from confusing its components from components on a neighbor's system.

ICP: Indoor Control Panel.

Indoor Control Panel: Fourteen button remote controller with LCD (liquid crystal display) is wired to the Personality board in the Power/Load Center.

iS4: Four function Spa-Side remote. Wall or deck mounted.

SpaCommand: Ten function spa-side remote with temperature changing capability and display. Wall or deck mounted.

Load Center: Metal enclosure with power relays, transformer, and circuit breakers. The Load Center is Installed prior to Personality Kit installation. Used for distributing power for controlling IntelliTouch Systems. Also known as the "sub-panel."

Low Voltage Compartment: Top compartment of Load Center or Power Center for all low voltage wiring.

Low Voltage Raceway: Vertical space in the left side of Power/Load Center for low voltage cabling.

Macro: Feature circuit that allows you to combine circuits to activate together.

MobileTouch® Controller: Wireless controller for the IntelliTouch Systems with all the functionality of the Indoor Control Panel.

Mud Box: Enclosure to provide mounting features for iS10 spa-side remote that is cast into gunite, concrete, or other spa wall/deck construction.

Outdoor Control Panel: Control panel with flexible hinge installed in upper portion of Load Center or Power Center to control IntelliTouch Control Systems.

Glossary (Continued)

Personality Board: The circuit board mounted on top of the Outdoor Control Panel motherboard. The Personality board defines the system capabilities.

Personality Kit: Set of parts to define the capability of a system. Can include, temperature sensors, actuators, and additional relays, actuators.

Power Center: Same as Load Center with the exception of the circuit breaker base.

Relay Circuits: The circuits that control the relays on the Personality Board. Connectors on top edge of the circuit board.

Screw Terminal Connector: Removable connector that may attach to circuit board with multiple sockets (anywhere from 2 to 12) to receive wires from controllers and sensors; wires held by screw terminals; multiple wires of a small enough gauge (usually 22 AWG) may be coupled to a single socket of a terminal connector.

Transceiver: Circuit board with attached antenna that can send and receive radio frequency (wireless) transmissions.

Screw Terminal: Removable connector that may attach to circuit board with multiple sockets (anywhere from 2 to 12) to receive wires from controllers and sensors; wires held by screw terminals; multiple wires of a small enough gauge (usually 22 AWG) may be coupled to a single socket of a terminal connector.

System Personality: The capability of a system to operate a set of equipment, independent of the kind of controller or other accessories; system personalities include “shared equipment” (i5+3, i7+3, i9+3), “dual equipment” (i10+3D), or “single body of water” (i5S+3, i9+3S).

Temperature Sensor: Specially designed probe for measuring temperature of the air or pool water; 10k Ohm thermistor.

Terminal Connector: Removable connector that may attach to PCB with multiple sockets (anywhere from 2 to 12) to receive wires from controllers and sensors; wires held by screw terminals; multiple wires of a small enough gage (usually 22 AWG) may be coupled to a single socket of a terminal connector.

Two-Speed Pump Relay: Relay to toggle a two-speed pump from low-speed to high-speed operation; does not turn pump on or off.

Transceiver: Special printed circuit board that can send and receive radio frequency (wireless) transmissions.

QuickTouch QT4: Provides switching of up to four remote control circuits from a wireless Hand-held Remote.

Valve Module: Accessory PCB (P/N 520285) to increase auxiliary actuator outputs from two to five.

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P/N 521075 REV. C 2/2017

PENTAIR

SCREENLOGIC® INTERFACE
WIRELESS CONNECTION KIT
FOR INTELLITOUCH® AND EASYTOUCH® CONTROL SYSTEMS

INSTALLATION GUIDE

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

Technical Support

Sanford, North Carolina (8 A.M. to 4:30 P.M.)
Phone: (800) 831-7133
Fax: (919) 566-8920
Moorpark, California (8 A.M. to 4:30 P.M.)
Phone: (800) 831-7133 (Ext. 6502)
Fax: (805) 530-0194
Web sites: **visit www.pentairpool.com** and **www.staritepool.com**

Related manual: ScreenLogic® Interface User's Guide (P/N 520493)

Contents

Overview 1
Summary installation steps 1
In this Installation Guide 1
ScreenLogic Interface Wireless Connection Kit Contents 2
Step 1: Mount the Outdoor Wireless Transceiver and Connect to the IntelliTouch or EasyTouch Load Center 3
Step 2: Connect the Indoor Wireless Transceiver to the ScreenLogic Interface Protocol Adapter 8

FCC Regulatory Safety Notice - 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 from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- Modifications not expressly approved by the party responsible for FCC compliance could void the user's authority to operate the equipment.

In this Installation Guide

Use the information in this manual for installing the ScreenLogic® Interface Wireless Connection kit contents.

- For ScreenLogic Interface system operating instructions, refer to the ScreenLogic Interface User's Guide (P/N 520493)

ScreenLogic® Interface Wireless Connection Kit

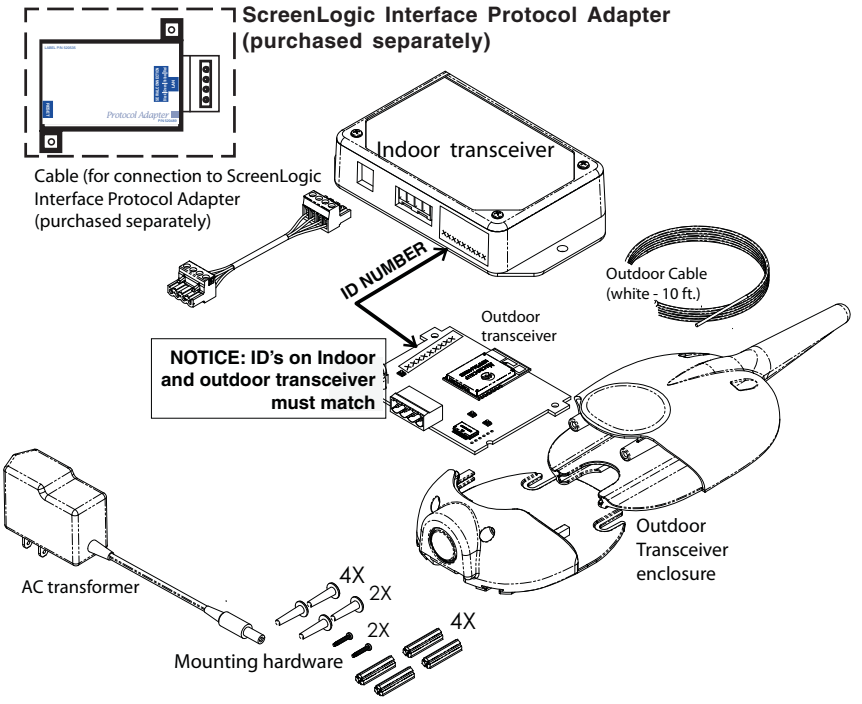
The ScreenLogic® Interface Wireless Connection interface consists of an indoor and outdoor wireless 2.4 GHz transceiver. *Note: The transceivers ship from the factory as a matched pair. The ID numbers on each transceiver must be the same number to function correctly. Transceivers are replaced as a matched pair. For more information, call Customer Support (880) 831.7133.*

The transceivers provides a wireless connection between the ScreenLogic Interface Protocol adapter and the IntelliTouch® or EasyTouch® Control System Load Center located at the equipment pad. This wireless connection eliminates the existing hard wire connection from inside your home to the equipment pad.

Wireless Connection Kit Contents

The following items are included in the Wireless Connection kit.

- One ScreenLogic Interface indoor wireless transceiver with AC power adapter and one foot connection cable with attached plugs.
- One ScreenLogic Interface outdoor wireless transceiver with 10 ft. cable, provided in kit with enclosure and mounting hardware.
- ScreenLogic Interface Wireless Connection Installation Guide (this manual)

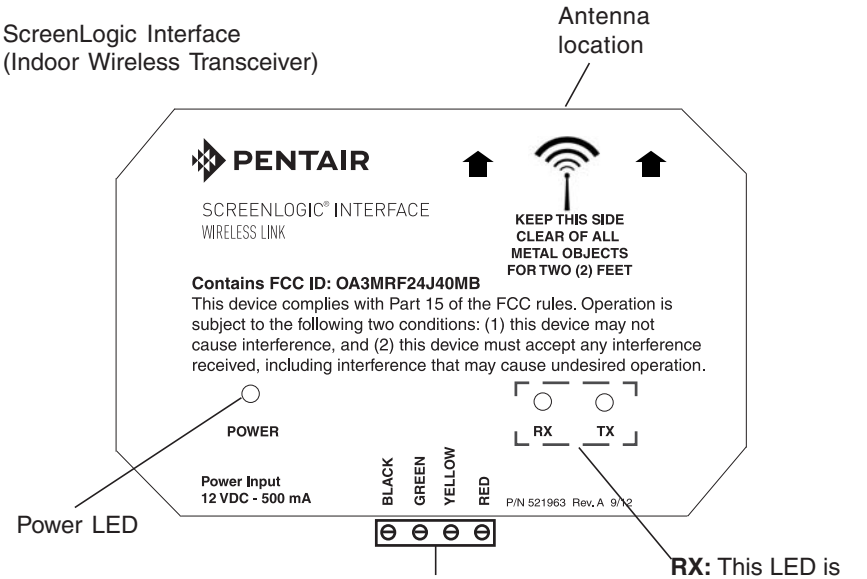


ScreenLogic Interface Wireless Connection Kit Contents

Summary installation steps

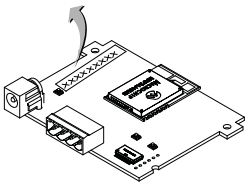
The ScreenLogic® Interface connection diagram on page 2 shows the transceiver locations and connections. To install the ScreenLogic Interface Wireless Connection kit:

- Mount the outdoor transceiver antenna near the IntelliTouch® or EasyTouch® Control System Load Center and connect the transceiver to the COM port connector located in the IntelliTouch® or EasyTouch® Control System Load Center.
- Use the supplied 12 inch cable to connect the ScreenLogic Interface indoor wireless transceiver to the ScreenLogic Interface Protocol adapter. Plug the transceiver AC power adapter into an AC wall-outlet and into the transceiver unit to power up the unit.

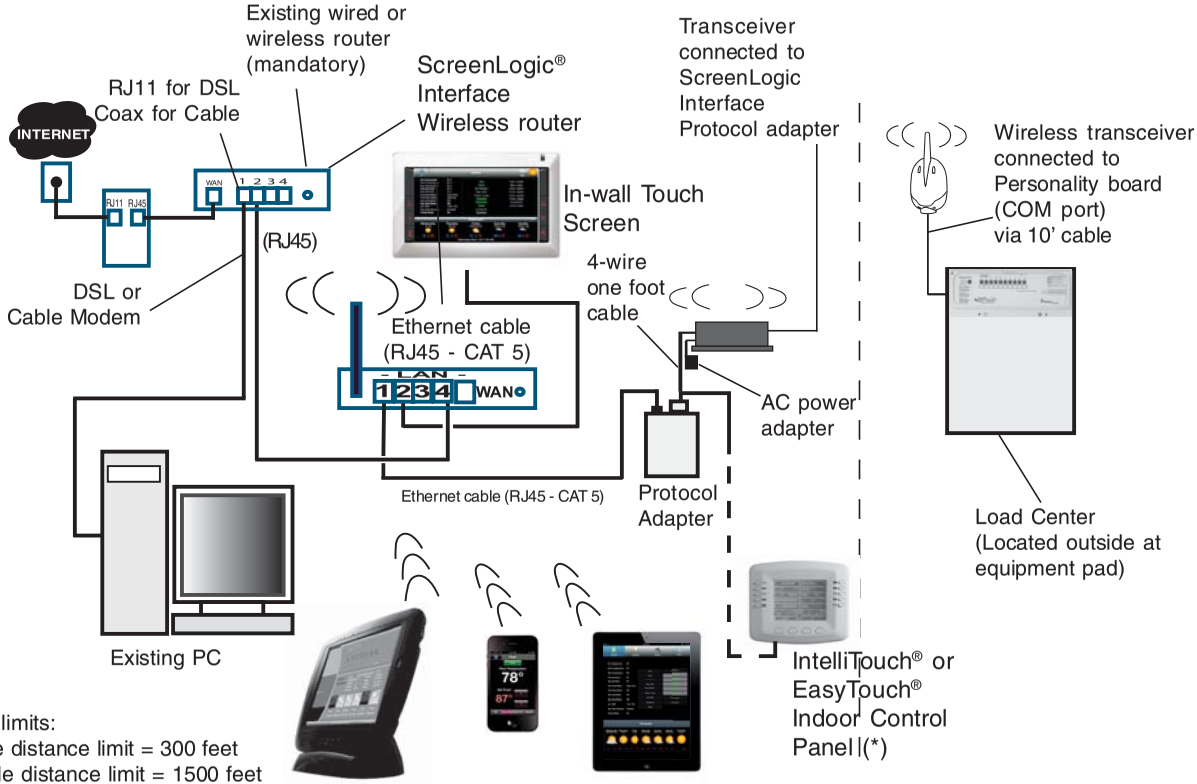


RX: This LED is on when a signal is being received from the wireless transceiver in the outdoor clam shell.
TX: This LED is on when a signal is being transmitted to the wireless transceiver in the outdoor clam shell.

ID number (Outdoor transceiver)



IMPORTANT NOTICE: Be sure the yellow ID label (9-digit ID number XXXXXXXXX) located to the right of the RS-484 connector on front side of indoor transceiver enclosure and the ID number on the ScreenLogic Interface outdoor wireless transceiver are the same. See page 1 for label location.



Cable distance limits:
- Ethernet cable distance limit = 300 feet
- Four-wire cable distance limit = 1500 feet

Note: (*) Optional wiring for existing Indoor Control Panel. Tap into the Indoor Control Panel connector or pig tail off the four-wire cable connected to the Personality board.

ScreenLogic® Interface Connection Diagram

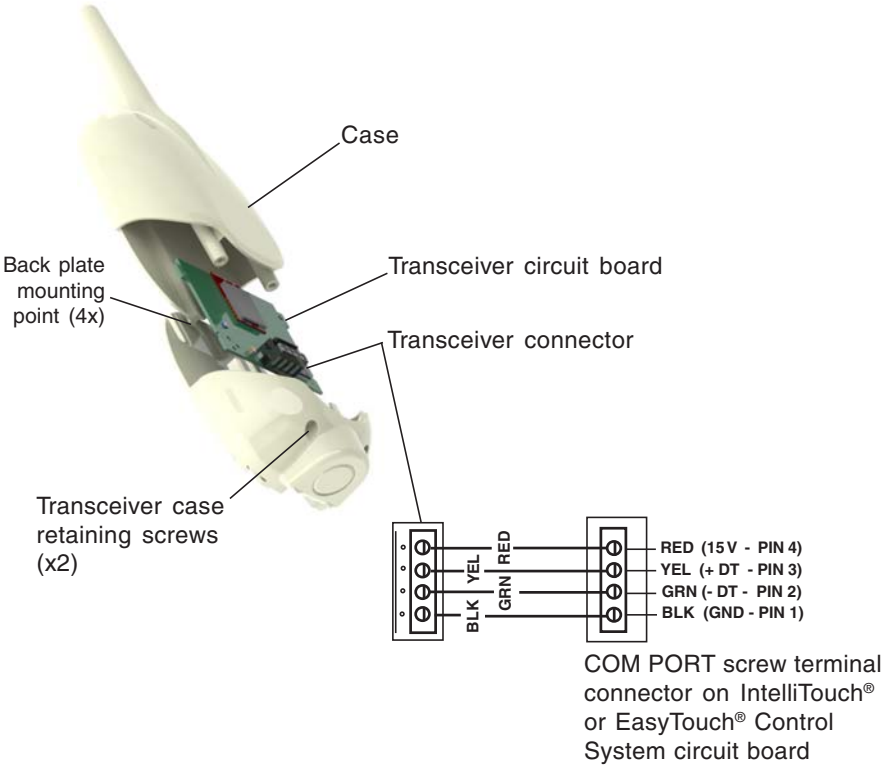
Step 1:
Mount the Outdoor Wireless Transceiver and Connect to the IntelliTouch® or EasyTouch® Control System Load Center

The following describes how to mount the transceiver to the IntelliTouch® or EasyTouch® Control System Load Center and connect the four-wire cable to the COM port connector located in the IntelliTouch or EasyTouch Control System Load Center:

Mount the Transceiver Module

The Transceiver is a two-way radio device with an attached antenna that communicates to and from the IntelliTouch or EasyTouch Control System. Mount the transceiver at a convenient location (on a flat vertical surface) near the load center at a minimum of 5 feet above ground level to optimize the transmit and receive operating range.

1. Remove the two retaining screws located on the underside of the transceiver case. Slide the case off the back plate.
2. Position the back plate against the mounting surface so that the transceiver is oriented in an upright position with the antenna pointing upwards. Use a pencil to mark the four mounting points. Drill four 3/16 in. diameter holes into the mounting surface and insert the four plastic anchors provided in the kit.
   Note: To avoid signal interference, mount the transceiver a minimum of 10 feet away from the load center, any metal surface/structure, or air blower located in the immediate area of the equipment pad.
3. Position the back plate over the mounting points and secure it with the four mounting screws provided in the kit.
4. Carefully position the transceiver circuit board into the mounted back plate. Route the connection wire down through the lower exit hole (left side) at the bottom of the back plate. Carefully pull the wire out the lower hole and position the circuit board in the back plate.
5. Position the transceiver circuit board to the left side of the back plate, and slide the case over the circuit board and antenna into the back plate. Secure the circuit board in the case using the two retaining screws.
6. Proceed to "**Connect the Transceiver connection cable to the COM Port on Control Systems Circuit Board**" on the next page.

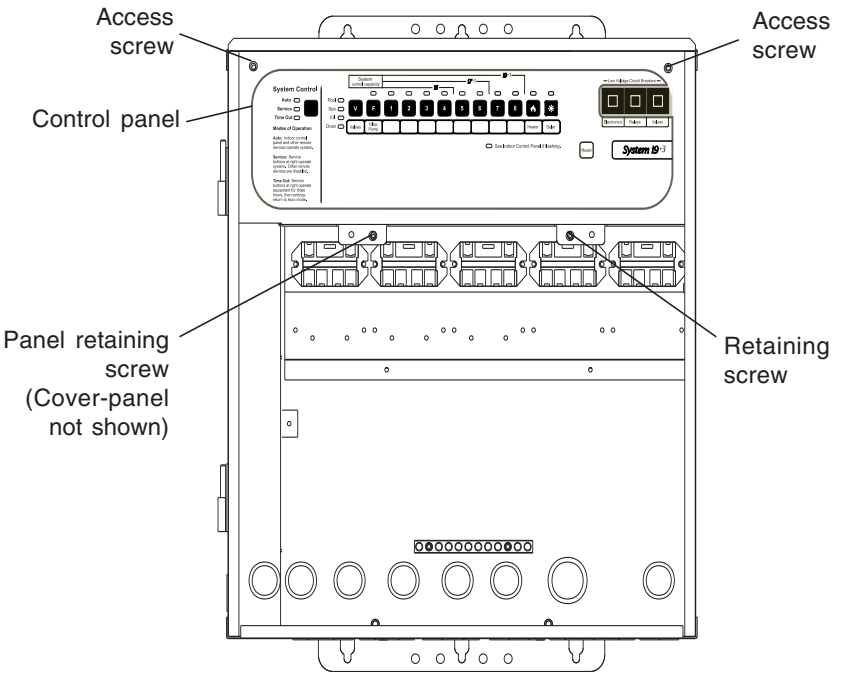


Transceiver Module Wiring

Connect the Transceiver connection cable to the COM Port on Control System Circuit Board

WARNING Switch OFF the main system power to the Load Center before making any connections.

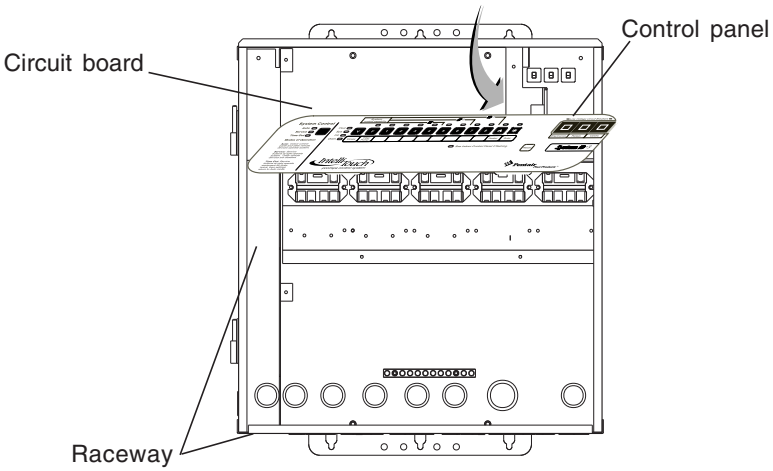
1. Unlatch the enclosure door spring latche(s), and open the door.
2. Remove the two retaining screws securing the high voltage cover-panel, and remove it from the enclosure.
3. Loosen the two access screws securing the control panel.



IntelliTouch® or EasyTouch® Load Center

4. Lower down the hinged control panel to access the circuit board.

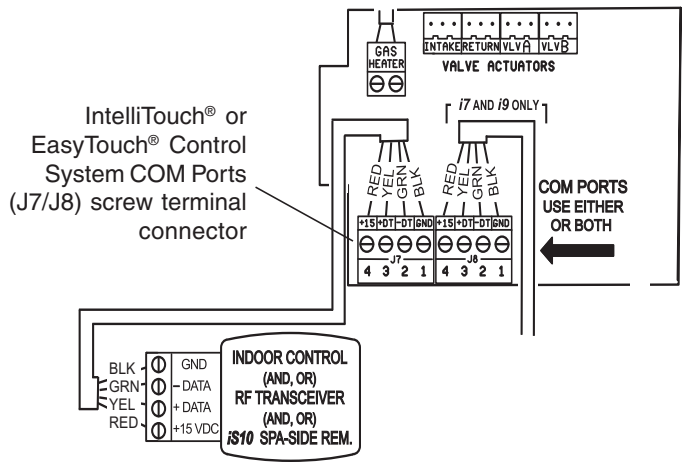
5. Route the four conductor transceiver connection cable into the lower plastic grommet, up through the low voltage raceway to the circuit board.



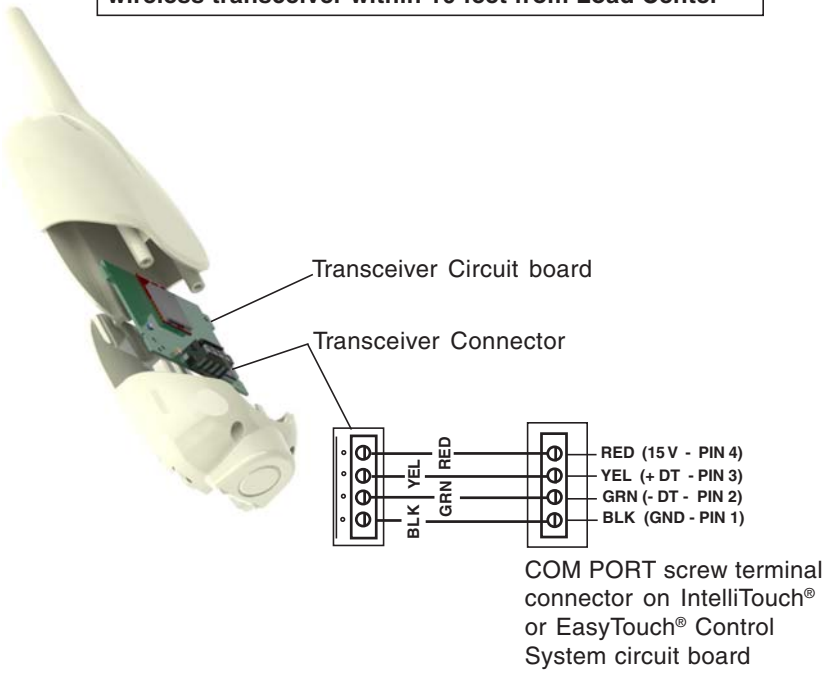
6. Insert the four wires into the screw terminals of the COM PORT plug located on the circuit board as shown on page 6. Using a small flat-blade screwdriver, secure the wires with the screws. Make sure to match the color coding of the four wires:

Pin 4 - Red = +15
Pin 3 - Yellow = +DT
Pin 2 - Green = -DT
Pin 1 - Black = GND

Note: *Multiple wires may be inserted into a single screw terminal but increases the chances of a poor or intermittent connection.*



Note: Install the ScreenLogic® Interface outdoor wireless transceiver within 10 feet from Load Center

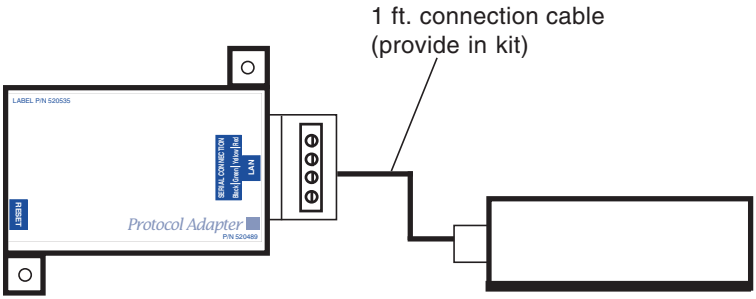


7. After the connection has been completed, close the control panel into its original position and secure it with the two access screws.
8. Install the front panel and secure it with the two retaining screws.
9. Close the Load Center front door. Fasten the spring latche(s).
10. Switch the power on to the IntelliTouch® or EasyTouch® Control System Load Center.
11. Proceed to the "**Connect the ScreenLogic Interface Indoor Wireless Transceiver to the ScreenLogic Interface Protocol Adapter**" on page 8.

Step 2:
Connect the ScreenLogic® Interface Indoor Wireless Transceiver to the ScreenLogic Interface Protocol Adapter

To connect the ScreenLogic Interface indoor wireless transceiver to the ScreenLogic Interface Protocol adapter:

1. Using the provided connection cable, connect one end of the cable to the ScreenLogic Interface Protocol adapter and the other end to the ScreenLogic Interface indoor wireless transceiver. The cable plugs are keyed for easy connection.
2. Plug the ScreenLogic Interface Wireless Connection transceiver AC adapter wall-plug into an AC grounded electrical outlet.



ScreenLogic Interface Protocol Adapter

ScreenLogic Interface Indoor Wireless Transceiver

Transceiver	<---------->	**Indoor Wireless Transceiver**
RED	<---------->	RED
YELLOW	<---------->	YELLOW
GREEN	<---------->	GREEN
BLACK	<---------->	BLACK

Wiring Configuration

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P/N 521965 REV. C 1/14

PENTAIR

TRITON®

FIBERGLASS SAND FILTER

MODELS: TR 40, TR 50, TR 60, TR 100, TR 140, TR 100HD, TR 100C, TR 140C, TR 100C-3, TR 140C-3 and TR 60 with CLEARPRO TECHNOLOGY™

ENGLISH 1
ESPAÑOL 21
FRANÇAIS 45

INSTALLATION AND USER'S GUIDE

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

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P/N 154901 Rev. H 3/18/15

IMPORTANT WARNING AND SAFETY INSTRUCTIONS

IMPORTANT NOTICE:

This guide provides installation and operation instructions for the Triton® Series Fiberglass Sand Filters. Consult Pentair Water Pool and Spa, Inc. with any questions regarding this equipment.

Attention Installer: This guide contains important information about the installation, operation and safe usage of this product. This information should be given to the owner and/or operator of this equipment after installation or left on or near the filter.

Attention User: This manual contains important information that will help you in operating and maintaining this filter. Please retain it for future reference.

⚠WARNING Before installing this product, read and follow all warning notices and instructions which are included. Failure to follow safety warnings and instructions can result in severe injury, death, or property damage. Call (800) 831-7133 for additional free copies of these instructions.

ENGLISH

Consumer Information and Safety

The Triton Series Sand Filters are designed and manufactured to provide many years of safe and reliable service when installed, operated and maintained according to the information in this manual and the installation codes referred to in later sections. Throughout the manual, safety warnings and cautions are identified by the "⚠" symbol. Be sure to read and comply with all of the warnings and cautions.

THIS FILTER OPERATES UNDER HIGH PRESSURE

⚠WARNING

When any part of the circulating system, (e.g., closure, pump, filter, valve(s), etc.), is serviced, air can enter the system and become pressurized. Pressurized air can cause the top closure to separate which can result in severe injury, death, or property damage. To avoid this potential hazard, follow these instructions:

1. If you are not familiar with your pool filtering system and/or heater:
   a. **Do NOT** attempt to adjust or service without consulting your dealer, or a qualified pool technician.
   b. Read the entire Installation & User's Guide before attempting to use, service or adjust the pool filtering system or heater.
2. Before repositioning valve(s) and before beginning the assembly, disassembly, or any other service of the circulating system: (A) Turn the pump **OFF** and **shut OFF** any automatic controls to ensure the system is NOT inadvertently started during the servicing; (B) open the manual air bleeder valve; (C) wait until all pressure is relieved.
3. Whenever installing the filter closure **FOLLOW THE FILTER CLOSURE WARNINGS EXACTLY**.
4. Once service on the circulating system is complete **FOLLOW INITIAL START-UP INSTRUCTIONS EXACTLY**.
5. Maintain circulation system properly. Replace worn or damaged parts immediately, (e.g., closure, pressure gauge, valve(s), o-rings, etc).
6. Be sure that the filter is properly mounted and positioned according to instructions provided.

IMPORTANT WARNING AND SAFETY INSTRUCTIONS

⚠WARNING

This filter must be installed by a licensed or certified electrician or a qualified pool serviceman in accordance with the National Electrical Code and all applicable local codes and ordinances. Improper installation could result in death or serious injury to pool users, installers, or others and may also cause damage to property.

Always disconnect power to the pool circulating system at the circuit breaker before servicing the filter. Ensure that the disconnected circuit is locked out or properly tagged so that it cannot be switched on while you are working on the filter. Failure to do so could result in serious injury or death to serviceman, pool users or others due to electric shock.

⚠WARNING

Do not operate the filter until you have read and understand clearly all the operating instructions and warning messages for all equipment that is a part of the pool circulating system. The following instructions are intended as a guide for initially operating the filter in a general pool installation. Failure to follow all operating instructions and warning messages can result in property damage or severe personal injury or death.

⚠WARNING

To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.

⚠WARNING

Due to the potential risk that can be involved it is recommended that the pressure test be kept to the minimum time required by the local code. Do not allow people to work around the system when the circulation system is under pressure test. Post appropriate warning signs and establish a barrier around the pressurized equipment. If the equipment is located in an equipment room, lock the door and post a warning sign.

Never attempt to adjust any closures or lids or attempt to remove or tighten bolts when the system is pressurized. These actions can cause the closure to separate and could cause severe personal injury or death if they were to strike a person.

⚠WARNING

Never exceed the maximum operating pressure of the system components. Exceeding these limits could result in a component failing under pressure. This instantaneous release of energy can cause the closure to separate and could cause severe personal injury or death if they were to strike a person.

Section 1
Introduction

Triton® Fiberglass Sand Filters Overview

Triton® II Sand Filters

The Triton II filter is the result of over 40 years of product evolution and refinement. It has set the industry standard for effectiveness, efficiency, long runs between service, and providing years of dependable, low maintenance operation.

The Triton II filter features a special internal design that keeps the sand bed level, ensuring even water flow, and resulting in the most efficient filtration possible.

The Triton II filter provides superior filtration performance and delivers a level of dependability and ease of operation and maintenance for a track record that's unsurpassed. Every design detail has been refined to make Triton II the industry standard.

Triton® C and Triton® C-3 Commercial Sand Filters

This filter series features multiple diverters for increased filtration rates in commercial applications up to 20 GPM/Sq. Ft.

Triton® HD Side Mount Sand Filters

All the same great performance and features of the original Triton's with maximum operating pressure of 75 psi for those special high pressure installations such as single pump in-floor cleaning systems.

Triton II - Residential

Triton C - Commercial

Triton C-3 - Commercial

Triton HD - Commercial

ENGLISH

General Features

Triton® II

- Time-proven internal design ensures that all water receives maximum filtration for crystal clear results
- GlasLok™ process creates a one-piece, fiberglass reinforced tank with a UV-resistant coating for years of dependable, corrosion-resistant service
- Flow system design controls filtration quality and ensures maximum run times between backwashing to save you time

Triton® C and Triton® C-3

- Maximum Operating Pressure 50 psi
- Full 2 in. drain
- 8 in. opening for easy access to sand bed
- The Triton C-3 features standard 3 in. flange connections
- TR100C & TR140C models are available in black or almond
- TR100C-3 & TR140C-3 models are available in black only

Triton® HD

- Maximum Operating Pressure 75 psi

Additional Features:

- Combination sand and water drain speeds servicing and winterizing
- All internal parts are threaded for ease of maintenance
- Swing-away water diffuser allows instant access to sand and all internal parts
- NSF-Listed

Section 2
Installation

NOTE: Before installing this product, read and follow all warning notices and instructions starting on page ii.

Installing the Triton® Fiberglass Sand Filter

Only a qualified service person should install the Triton Fiberglass Sand Filter. This filter is designed and intended for use to filter water.

Introduction

The following general information describes how to install the Triton Fiberglass Sand Filter. This filter operates under pressure and if assembled improperly or operated with air in the water circulation system, the top closure can separate and result in an accident causing property damage or serious bodily injury. A warning label has been affixed to the top of the filter and should not be removed. Keep safety labels in good condition and replace if missing or illegible.

How the Filter works

The high rate sand filter is designed to operate for years with a minimum of maintenance and when installed, operated and maintained in accordance with these instructions, it will provide years of trouble free operation.

Dirt is collected in the filter as the water flows through the control valve at the side of the filter and is directed into the top bulkhead. Dirty water flows into the diffuser at the top of the tank and is directed downward into the top surface of the filter sand bed. The dirt is collected in the sand bed and the clean water flows through the laterals and lower piping at the bottom of the filter up into the lower bulkhead. The flow then goes into the control valve at the side of the filter. Clean water is returned through the piping system into the pool.

The pressure will rise and the flow to the pool will be lowered as the dirt is collected in the filter. Eventually, the filter will become so plugged with dirt that it will be necessary to perform the backwash procedure. It is important to know when to backwash the filter. Backwashing is discussed further under the subsequent sections of this guide.

Please note that a filter removes suspended matter and does not sanitize the pool. The pool water must be sanitized and the water must be chemically balanced for sparkling clear water. Your filtration system should be designed to meet your local health codes. As a minimum, you must be sure that your system will turn over the total volume of water in your pool at least two to four times in a twenty-four hour period.

Refer to **Table 1** for Filter Operation Data.

Table 1.

FILTER MODEL MODEL	FILTER AREA (**Sq. Ft**.)	Flow Rate *(GPM) @20 GPM/FT²	Turnover Capacity (**Gallons**) (**Based on 20 GPM / Sq. Ft.**)*			
			4 TURNS PER DAY	**3 TURNS PER DAY**	**2.4 TURNS PER DAY**	**2 TURNS PER DAY**
TR40	1.92	38	13,680	18,240	22,800	27,360
TR50	2.46	49	17,640	23,520	29,400	35,280
TR60	3.14	63	22,680	30,240	37,800	45,360
TR60 ClearPro	3.14	63	22,680	30,240	37,800	45,360
TR100	4.91	74	26,640	35,520	44,400	53,280
TR100HD	4.91	74	26,640	35,520	44,400	53,280
TR100C/TR100C-3	4.91	98	35,280	47,040	58,800	70,560
TR140	7.06	106	38,160	50,880	63,600	76,320
TR140C/TR140C-3	7.06	141	50,760	67,680	84,600	101,520

***TR100, TR100HD AND TR140 ARE BASED ON 15 GPM/SQ. FT.**

⚠WARNING Failure to operate your filter system or inadequate filtration can cause poor water clarity obstructing visibility in your pool and can allow diving into or on top of obscured objects which can cause serious personal injury or drowning.

Clear water is the result of proper filtration as well as proper water chemistry. Pool chemistry is a specialized area and you should consult your local pool service specialist for specific details. In general, proper pool sanitation requires a free chlorine level of 1 to 3 PPM and a pH range of 7.2 to 7.6.

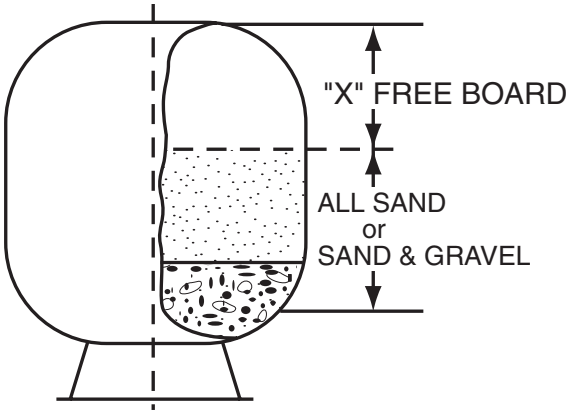
⚠WARNING Filters should never be tested or subjected to air or gas under pressure. All gases are compressible and under pressure create a danger. Severe bodily injury or property damage could occur if the filter is subjected to air or gas pressure.

1. Check carton for any evidence of damage due to rough handling in shipment. If carton or any filter components are damaged, notify the freight carrier immediately.
2. Carefully remove the accessory package and the filter tank from the carton.
3. Mount the filter on a permanent slab, preferably concrete poured in a form or on a platform constructed of concrete block or brick. DO NOT use sand to level the filter or for the pump mounting, as it will wash away.
4. Provide space and lighting for routine maintenance access. Do not mount electrical controls over the filter. One needs to be able to stand clear of the filter when starting the pump. Minimum space requirements may be found on the large nameplate on the filter.
5. Position filter so that the port locations are in the desired final positions. Follow valve installation procedures.
6. If you have a Multiport Valve, assemble the valve to the tank, being sure the o-ring on the valve fittings are in place and are clean. Use a lubricant, applied lightly, such as silicone grease, Dow #33, #40 or GE 300 or 623, or similar product on o-rings and o-ring grooves prior to assembly.
7. If you have a two position slide valve, align the valve with the tank so that the handle is toward the top of the tank, push valve into ports and turn the valve nuts snugly on the tank fittings. It is not necessary to cinch the valve nuts to the tank fitting beyond hand tightness.
8. The shipping straps used to support the TR100C-3, TR140C and the TR140C-3 multi-diffuser should be removed before loading sand and gravel in the filter.
9. Sand specifications – be certain the proper sand is used as described in Table 2. Before pouring the sand into the filter, look inside and check the lower under-drain for broken or loose laterals (or fingers), which may have been accidentally damaged by rough handling during shipment. Replace any broken parts if necessary.

NOTE: The free board distance is the most important variable and should be maintained. Sand density will vary and therefore sand amount is given as a reference.

Table 2.

MODEL	FREE BOARD "X"	ALL SAND* (POUNDS)	FILTER MEDIA† (POUNDS)	
			PEA GRAVEL ‡	SAND
TR40	8 1/4"	175	50	125
TR50	9 3/4"	225	50	175
TR60	10 1/2"	325	50	275
TR60 ClearPro	10 1/2"	325	50	275
TR100	11 1/4"	600	150	450
TR100HD	11 1/4"	600	150	450
TR100C-3	11 1/4"	600	150	450
TR140	13 1/2"	925	275	650
TR140C-3	13 1/2"	925	275	650



† Media required to meet NSF requirements.
‡ Pea Gravel to be 1/4" to 1/8" diameter.
* Sand to be No. 20 standard silica (uniformity coefficient not greater than 1.75) .018-.020 in diameter particle size.

⚠WARNING Failure to position the Automatic Air Vent inside of the Closure will allow excessive trapped air to accumulate in the filter. Trapped air and the closure not properly closed can cause the closure to seperate and could cause severe bodily injury and/or property damage.

10. Pivot the diffuser out of the center of the tank on the TR40, 50, 60, TR60 ClearPro, 100 & 140 by rotating the diffuser assembly counter clockwise. (**NOTE:** The multi-diffuser assembly should not be moved on models TR100HD, TR100C, TR100C-3 and TR140C, TR140C-3. After installing the filter media as described below, check to make sure the tops on the diffusers are parallel to the top of the sand bed.) Fill the tank about half full of water. Pour pea gravel first (if used) and then the sand into the top of the filter at a slow rate so that the impact of the filter media does not damage the laterals. See Table 2 for the proper amounts of sand and gravel. Fill filter to the proper level to maintain freeboard, as shown in Table 2. Pivot the diffuser assembly back to its vertical position if it was moved. Be certain the automatic air vent is protruding into the top of the closure as indicated below in Figure 1. Ensure that the automatic air vent is in the center of the filter closure. Wash away all sand around the threaded opening at the top of the tank.

⚠WARNING

For Threaded Closures

Use care when installing closure. The closure should turn freely in the filter, if resistance to closure insertion is felt, then slowly remove the closure by turning counter-clockwise. The starting thread of the tank and closure must engage properly in order to secure the closure. *Do not cross-thread closure.*

Failure to install the closure properly can cause the closure to seperate and could cause severe bodily injury and/or property damage.

⚠WARNING

For Oval Closures

Use care when installing closure. The closure should be inserted into the tank by placing the small diameter of the oval closure into the larger diameter of the tank opening. Insert the side of the closure that does not have the pressure gauge and air bleeder first. The closure will need to be inserted at a 30° angle. Once the closure is inside the tank, it can be rotated 90° and lifted up to seal the tank. The aluminum bridge with load spring can then be placed over the closure bolt and the hand knob tightened to load the closure properly. The knob should be tightened by hand only. DO NOT USE A WRENCH TO TIGHTEN THE KNOB. You could damage the tank or closure and cause a failure by using a wrench. Failure to install the closure properly can cause the closure to seperate and could cause severe bodily injury or property damage.

NEVER ATTEMPT TO TIGHTEN OR LOOSEN THE CLOSURE WITH THE PUMP RUNNING. Failure to follow this instruction can result in the closure seperating and causing severe bodily injury or property damage.

11. Assemble the pressure gauge and bleeder valve to the closure lid. Clean the lid o-ring and lubricate with silicone grease such as Dow #33, 40 or GE 300, 623 lubricant. Place the closure lid on the filter and tighten, making certain the air vent is up inside the dome of the closure.
12. With the plastic wrench, provided with the filter, tighten the closure as tight as possible using two hands on the wrench handles. As a minimum, the closure must be hand tight + 1/4 turn.
13. The oval closure that is used on the TR140C-3 and the TR100C-3 models will need to be installed as described in the above warning note for oval closures.
14. Assemble piping and pipe fittings to pump and valve. All piping must conform to local and state plumbing and sanitary needs.
15. Use sealant compounds on all male connections of pipe and fittings. Use only pipe compounds suited for plastic pipe. Support pipe to prevent strains on filter, pump or valve.
16. Long piping runs and elbows restrict flow. For best efficiency, use the fewest possible number of fittings, and large diameter pipe (at least 2" for TR100 and TR140, at least 3" for TR100C-3 and TR140C-3).

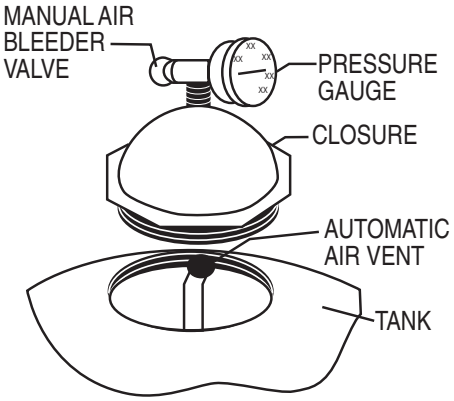


Figure 1.

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⚠CAUTION Operating at excessive vacuum levels can cause the tank to crack and could cause property damage.

17. When installing backwash lines, it is recommended that a vacuum breaker be installed on installations where the backwash line length exceeds 40 ft. or the backwash line discharges more than 10 ft. lower than the surface of the pool. Alternately a vacuum break pit should be provided.
18. A check valve is recommended between the filter and heater to prevent hot water "back-up" which will damage the filter and valve.
19. The maximum operating pressure of the unit is 50 pounds per square inch (psi) and 75 pounds per square inch (psi) for the Triton HD model (only). Never operate this filter above these pressures or attach a pump to this filter that has more than 50 psi shut off pressure or 75 psi shut off pressure for the Triton HD model (only).
20. Never install a chlorinator upstream of the filter. Always locate downstream and with a check valve between the chlorinator and filter.
21. A positive shut off valve is not recommended at the outlet of the filtering system. If the system is ever run with such a valve closed, the internal air relief system becomes inoperative and risk of tank separation could exist. Additionally, running the system with no flow will seriously damage the equipment.
22. Never store pool chemicals within 10 ft. of your pool filter. Pool chemicals should always be stored in a cool, dry well ventilated area.
23. The oval closure used on the TR100C-3 and TR140C-3 is designed to provide a vacuum relief mechanism that protects the tank from vacuum conditions. The closure will allow air to enter the tank if the tank is higher that 8 ft. above the water level. In these cases, when the filter restarts after shut down, you may observe air being returned to the pool in the return fittings. This is not unusual, it is simply the automatic air relief in the filter removing the air in the filter.

Initial Start-up

1. On a new pool, clean the pool before filling the pool with water. Excessive dirt and large particles can cause damage to the pump and filter.
2. Ensure the backwash line is open so that water is free to come from the pool and flow out the backwash line. Set the valve position as follows:
   a. If using a Multiport valve, set valve to backwash position.
   b. If using a Two Position Slide Valve, push handle down to backwash position and engage lock by twisting handle.
3. Check pump strainer pot to be sure it is full of water.

⚠WARNING Air entering a filter and tank closure not installed properly can cause the closure to seperate and could cause severe bodily injury and/or property damage.

4. Check closure on filter for tightness.
5. Open the manual air bleeder on the filter closure. Stand clear of the filter and start the pump allowing it to prime.
6. Close the air bleeder on the closure when all the air is removed from the filter and a steady stream of water emerges.

NOTE: Pool filter sand is typically pre-washed and should not require extensive backwashing. However, the shipping process may cause excessive abrasion which could require an extended backwash cycle at initial start-up; continue to backwash until the backwash water is as clear as the pool water.

⚠CAUTION To prevent equipment damage and possible injury, always turn the pump off before changing the valve position.

7. Stop the pump. Set the valve position as follows:
   a. If using a Multiport valve, set the valve to the filter position.
   b. If using the Two Position Slide Valve, raise the handle to filter position and engage valve lock by twisting handle.
8. Ensure all suction and pool return lines are open so that water is free to come from the pool and return to the pool.
9. Open the manual air bleeder on the filter closure. Stand clear of the filter and start the pump.
10. Close the air bleeder on the filter closure when all the air is removed from the filter and a steady stream of water emerges.
11. The filter has now started its filtering cycle. You should ensure that water is returning to the pool and take note of the operating pressure when the filter is clean.

Section 3
Maintenance

This section describes how to maintain your Triton® Fiberglass Sand Filter.

Filter Care

The filter is a very important part of the pool equipment and installation. Proper care and maintenance will add many years of service and enjoyment to the pool. Follow these suggestions for long trouble-free operations:

1. To clean the exterior of the filter of dust and dirt, wash with a mild detergent and water then hose off. Do not use solvents.
2. If internal maintenance is required, sand may be removed by removing the sand drain from the bottom of the filter and flushing with a garden hose. Pentair Water Pool and Spa, Inc. Sand Vacuum P/N 542090 may also be used.
3. If after a number of years, the filter tank appears foggy in color or rough in texture, the tank surface can be painted. We recommend the use of a Quick Dry Spray Enamel. **Do NOT paint the valve.**

⚠WARNING Always visually inspect filter components during normal servicing to ensure structural safety. Replace any item which is cracked, deformed or otherwise visually defective. Defective filter components can allow the filter top or attachments to seperate and could cause severe bodily injury or property damage.

4. The filter closure on your Triton Sand Filter was manufactured with high quality corrosion resistant materials. This part should be carefully inspected whenever servicing your filter. If excessive leakage is noted coming from the closure/tank interface, the closure and o-ring should be carefully inspected and replaced if any signs of deterioration exist.
5. Your filter is a pressure vessel and should never be serviced while under pressure. Always relieve tank pressure and open air bleeder on the filter closure before attempting to service your filter.
6. When restarting your filter, always open the manual air bleeder on the filter closure and stand clear of the filter.

Cleaning Frequency

1. The filter on a new pool should be backwashed, and cleaned after approximately 48 hours of operation to clean out plaster dust and/or construction debris.
2. There are three different ways to identify when the filter needs backwashing.
   a. The most accurate indicator on pool systems with a flow meter is to backwash when the flow decreases 30% from the original (clean filter) flow. For example, if the original flow was 60 GPM, the filter should be backwashed when the flow is reduced by about 20 GPM (or 30%) to 40 GPM.
   b. A more subjective and less accurate indicator is to observe the amount of water flowing from the flow directionals located in the wall of the pool. The filter should be backwashed once it is detected that the flow has been reduced by about 30%.
   c. The most commonly used but less accurate indicator is to backwash when the filter gauge reading increases 10 PSI over the initial (clean filter) reading.
3. It is important not to backwash the filter solely on a timed basis such as every three days. It is also important to note that backwashing too frequently actually causes poor filtration. Factors like weather conditions, heavy rains, dust or pollen, and water temperature all affect the frequency of backwash. As you use your pool, you will become aware of these influences.
4. If at any time the starting pressure after backwashing the filter indicates 4 to 6 PSI higher than normal starting pressure, it is time to perform a chemical cleaning procedure.

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Filter Backwash Procedure

⚠WARNING To prevent equipment damage and possible injury, always turn off pump before changing valve positions.

1. Stop the pump.
2. Ensure that the suction and backwash lines are open so that water is free to come from the pool and flow out the backwash line. Set control valve position as follows:
   a. If using a Multiport Valve, set valve to backwash position.
   b. If using a Two Position Slide Valve, push handle down to backwash position and engage lock by twisting handle.
3. **Stand clear of the filter** and start pump.
4. Backwash filter for approximately 3 to 5 minutes or until backwash water is clean.
5. Stop the pump.
   a. If using a Multiport Valve, set valve to rinse position and continue with remaining steps.
   b. If using a Two Position Slide Valve, skip to step 8.
6. **Stand clear of the filter** and start pump.
7. Rinse filter for approximately 30 seconds.
8. Stop the pump and set valve as follows:
   a. If using a Multiport Valve, set valve to filter position.
   b. If using a Two Position Slide Valve, raise handle to filter position and engage valve lock by twisting handle.
9. Ensure that pool return line is open so that water may freely flow from the pool back to the pool.
10. Open manual air bleeder on Triton closure. Stand clear of filter and start pump.
11. Close manual air bleeder of the closure when all the air is removed and a steady stream of water emerges from the bleeder.
12. The filter has now started its filtering cycle. You should ensure that water is returning to the pool and take note of the filter pressure.
13. The filter pressure, in the above Step 12, should not exceed the pressure originally observed on the filter when it was initially started. If after backwashing, the pressure is 4 to 6 PSI above the start condition, it will be necessary to chemically clean the sand bed.

Chemical Cleaning Procedure

1. It is recommended that an approved cleaner be used. Please contact your local pool chemical supplier or retail store for the proper cleaner.

   These cleaners will remove oils, scale and rust from the sand bed in one cleaning operation.
2. Mix a solution following the manufacturers instructions on the label.
3. Backwash the filter as outlined on page 8.
4. If the filter is below pool level, shut off the pump and close appropriate valving to prevent draining the pool.
5. Shut off pump, open filter drain and let filter drain. Place valve in backwash position.
6. After filter has drained, close filter drain and remove the pump strainer pot lid.
7. Ensure that the backwash lines are open.
8. Turn the pump on and slowly pour the cleaning solution into the pump strainer with the pump running.
9. Continue adding solution until the sand bed is saturated with cleaning solution. Replace lid on pump.
10. Shut off the pump and leave filter in backwash position. Allow filter to stand overnight (12 hours).
11. Replace the pump lid and follow backwash procedures on page 8.
12. Do not allow the cleaning solution to get into the pool.

Winterizing your Filter

1. In areas that have freezing winter temperatures, protect the pool equipment by backwashing the filter.
2. After backwashing, shut the pump off, open the manual air bleeder on the closure and adjust the valve as follow:
   a. On the Multiport Valves, move the handle of the valve to the Winterize Position (*).
   b. On the Two Position Slide Valve, if possible, remove the valve piston assembly; clean, lubricate and store in a dry location for the winter.

***NOTE:** The Multiport valve should be left in the winterize position during shutdown season so the valve diverter has no pressure on the rubber seal.

3. On the TR40, 50, 60, and TR60 ClearPro, remove the wing-type plug on the bottom of the filter. On the TR100, TR100HD, TR100C, TR100C-3, and TR140, TR140C, TR140C-3, remove the 1½" drain plug cap. The filter will drain very slowly, and therefore, it is recommended that the drain plug be left out.
4. Drain all appropriate system piping.
5. We recommend covering the equipment with a tarpaulin or plastic sheet to inhibit deterioration from weather. Do **NOT** wrap pump motor with plastic.

Section 4
Troubleshooting

Use the following troubleshooting information to resolve possible problems with your Triton® Filter.

⚠WARNING

THIS FILTER OPERATES UNDER HIGH PRESSURE

When any part of the circulating system, (e.g., closure, pump, filter, valve(s), etc.), is serviced, air can enter the system and become pressurized. Pressurized air can cause the top closure to separate which can result in severe injury, death, or property damage. To avoid this potential hazard, follow these instructions:

1. If you are not familiar with your pool filtering system and/or heater:
   a. **Do NOT** attempt to adjust or service without consulting your dealer, or a qualified pool technician.
   b. Read the entire Installation & User's Guide before attempting to use, service or adjust the pool filtering system or heater.
2. Before repositioning valve(s) and before beginning the assembly, disassembly, or any other service of the circulating system: (A) Turn the pump **OFF** and **shut OFF** any automatic controls to ensure the system is NOT inadvertently started during the servicing; (B) open the manual air bleeder valve; (C) wait until all pressure is relieved.
3. Whenever installing the filter closure **FOLLOW THE FILTER CLOSURE WARNINGS EXACTLY**.
4. Once service on the circulating system is complete **FOLLOW INITIAL START-UP INSTRUCTIONS EXACTLY**.
5. Maintain circulation system properly. Replace worn or damaged parts immediately, (e.g., closure, pressure gauge, valve(s), o-rings, etc).
6. Be sure that the filter is properly mounted and positioned according to instructions provided.

NOTE: Turn off power to unit prior to attempting service or repair.

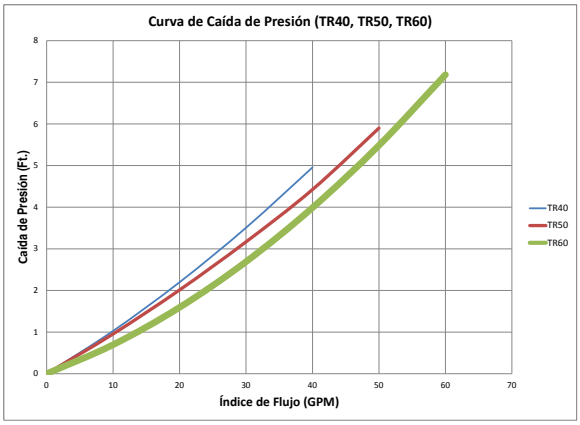
Problems and Corrective Actions

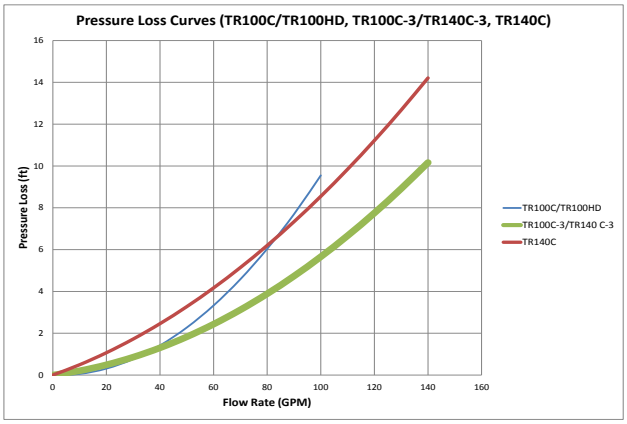
PROBLEM	CAUSE	REMEDY
Pool water not sufficiently clean	1. Pool chemistry not adequate to inhibit algae growth.	Maintain pool chemistry or consult pool service technician.
	2. Too frequent a backwash cycle.	Allow pressure to build to 10 psi above clean filter condition before backwashing.
	3. Improper amount or wrong sand size.	Check sand bed Freeboard and sand size or consult a pool service technician.
	4. Inadequate turnover rate.	Run system for longer time or consult dealer or pool service technician.
High filter pressure	1. Insufficient backwashing.	Backwash until effluent runs clear.
	2. Sand bed plugged with mineral deposits.	Chemically clean filter.
	3. Partially closed valve.	Open valve or remove obstruction in return line.
Short cycles	1. Improper backwash.	Backwash until effluent runs clear.
	2. Pool chemistry not adequate to inhibit algae growth.	Maintain pool chemistry or consult pool service technician.
	3. Plugged sand bed.	Manually remove top 1" surface of sand bed, replace with new sand and chemically clean entire sand bed as described in the Chemical Cleaning Procedure.
	4. Flow rate too high.	Restrict flow to capacity of filter.

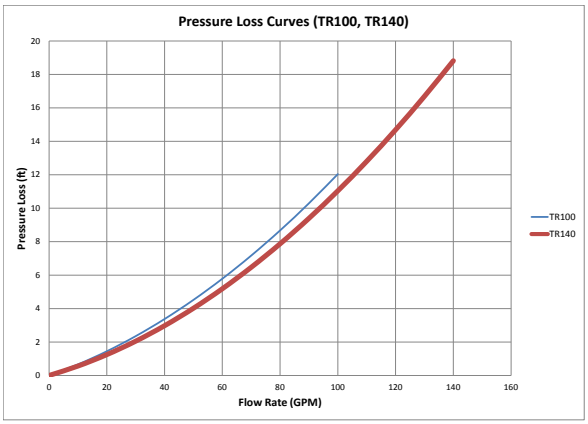
PROBLEM	CAUSE	REMEDY
Return flow to pool diminished, low filter pressure	1. Obstruction in pump hair and lint strainer.	Clean basket in pump strainer.
	2. Obstruction in pump.	Disassemble and clean pump.
	3. Obstruction in suction line to pump.	Clean skimmer basket. Remove obstruction in lines. Open valves in suction line.
Sand returning to pool	1. Broken under drain lateral.	Replace broken or damaged laterals.
Sand loss to waste	1. Backwash rate too high.	Reduce backwash flow rate.
	2. Improper sand size.	Change to proper sand.
	3. Air strainer is damaged or missing.	Replace damage components.
Leak at closure	1. Improperly tightened closure.	Shut off pump, relieve tank pressure, open air bleeder, tighten closure properly.
	2. Dirt or contamination on sealing surface.	Shut off pump, relieve tank pressure, open air bleeder, remove closure and clean all sealing surfaces. Reassemble closure properly.
	3. Damaged part.	Same as above except replace damaged o-ring, closure, tank or any combination of parts as required.
Leak at bulkhead	1. Improper tightened bulkhead assembly.	Shut off pump, relieve tank pressure, open air bleeder, remove closure and remove sand to access leaking bulkhead on TR40, 50, 60, TR60 ClearPro, 100, 100C, 140 or 140C. Hold the 2" bulkhead and tighten the 2" internal locknut. On the TR100C-3/TR140C-3, using the special wrench, P/N 154020, hold the 3" flange spacer and with wrench, P/N 154019, tighten the 3" flange adapter. Hand tighten plus 1/2 turn.
	2. Dirt or contamination on sealing surfaces.	Shut off pump, relieve tank pressure, open air bleeder, remove closure and remove sand to access leaking bulkhead. Remove attached tank internals and remove bulkhead assembly. Clean all mating surfaces and seals. Replace the bulkhead assembly, being careful to assemble properly. Tigthen assembly as indicated above.
	3. Damaged part.	Same as above except replace damaged part or combination of parts.

Section 5
Replacement Parts

Pressure Drop Curve for the Triton® Series Fiberglass Sand Filters







Installing Multiple Filters with Tandem Filter Piping Kits

CAUTION: WHEN MULITPLE FILTERS ARE INSTALLED, WE HIGHLY RECOMMEND THE USE OF A PENTAIR TANDEM FILTER PIPING KIT. THESE KITS INCLUDE PLUMBING SUPPORTS (BETWEEN INLET AND OUTLET PIPING AND BETWEEN OUTLET PIPING AND FLOOR) TO ASSURE INTEGRITY OF THE INSTALLATION. SEE FIGURE A.

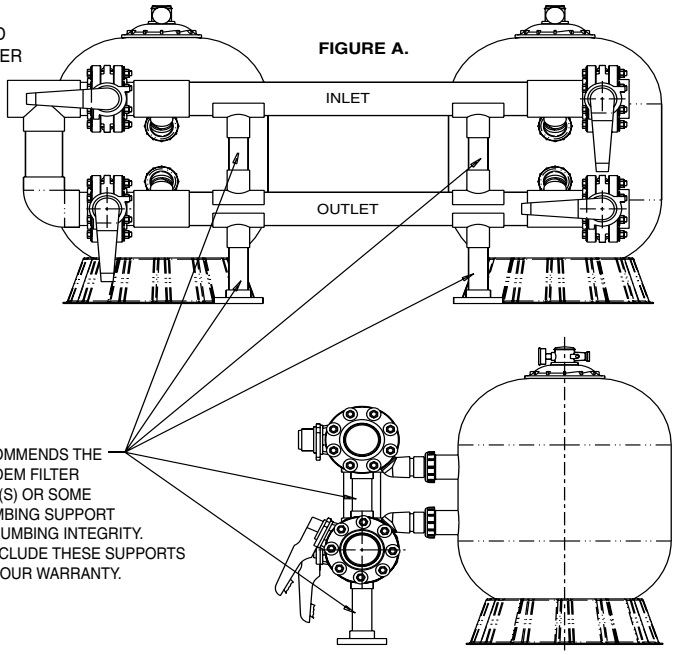


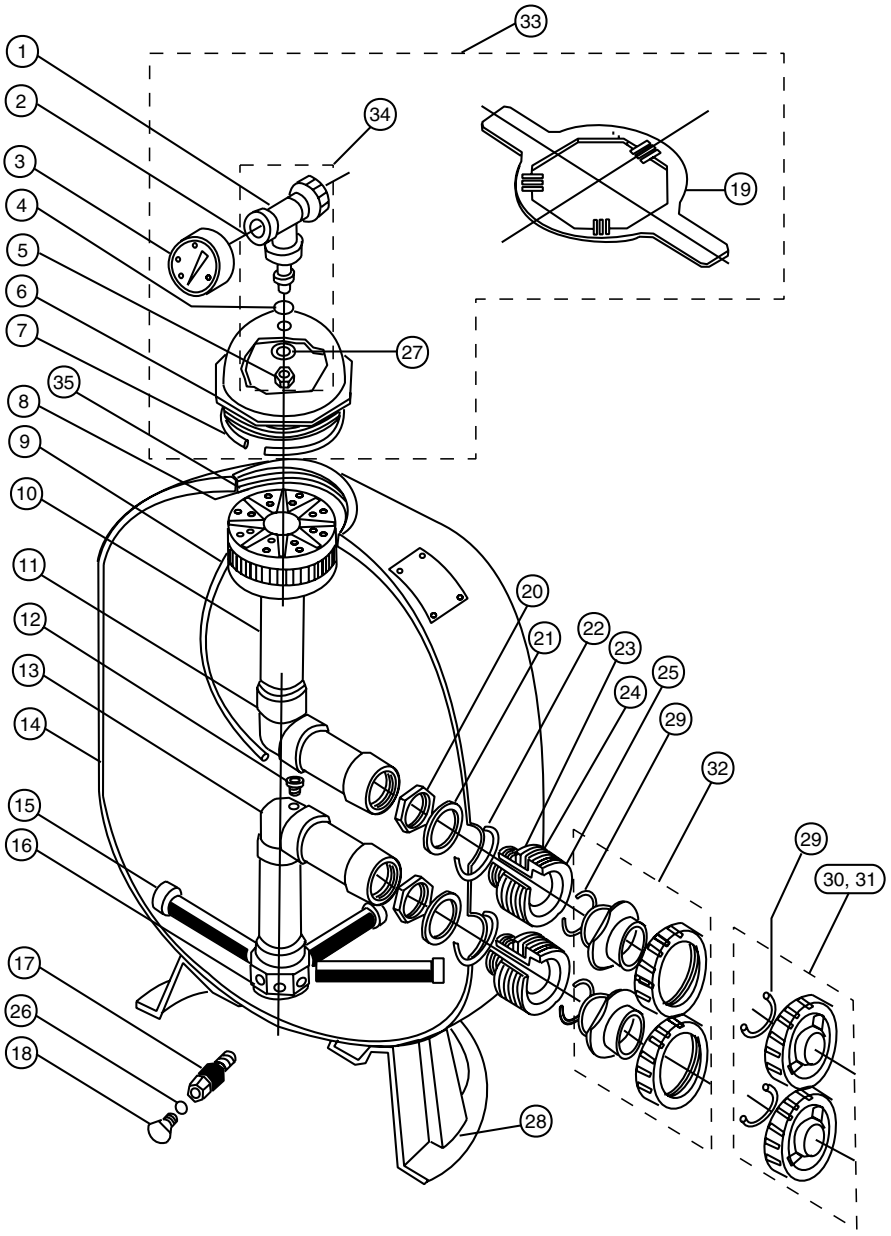
FIGURE A.

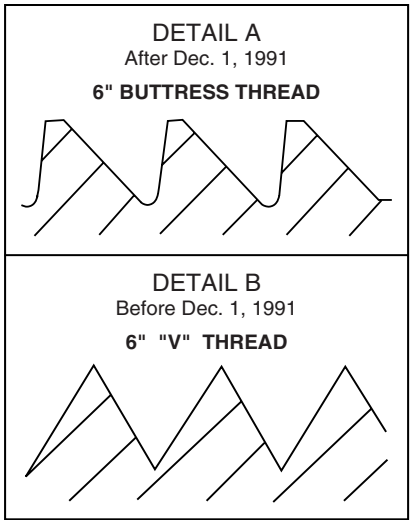
CAUTION: PENTAIR RECOMMENDS THE USE OF A TANDEM FILTER PLUMBING KIT(S) OR SOME SORT OF PLUMBING SUPPORT TO ASSURE PLUMBING INTEGRITY. FAILURE TO INCLUDE THESE SUPPORTS COULD VOID YOUR WARRANTY.

TRITON® II & TR60 CLEARPRO FIBERGLASS SAND FILTER

Replacement Parts

TR40
TR50
TR60
TR60 ClearPro
TR100
TR140

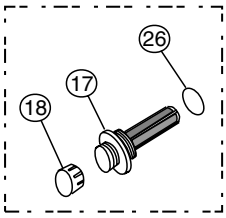




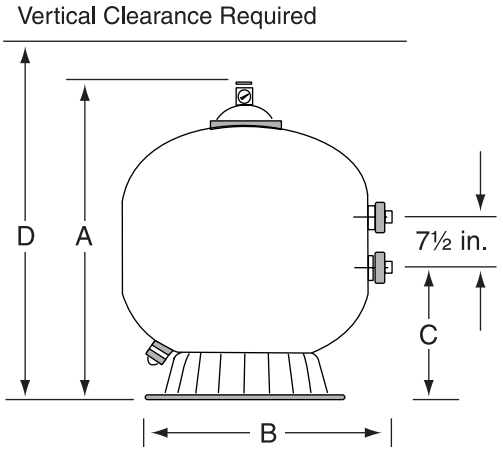
Filters manufactured after Dec 1, 1991 utilize a 6 in. buttress thread in the filter tank top opening and on the closure, see Detail A.

Filters manufactured before Dec 1, 1991 utilize a 6 in. "V" type thread, see Detail B.

6 in. closures in Detail A. and B. are NOT interchangeable.



★ Used on TR100 and TR140 filters.



MODEL	A DIM.	B DIM.	C DIM.	D DIM.
TR40	30 ½ in.	19½ in.	10 ¾ in.	32 ½ in.
TR50	34 ¾ in.	21½ in.	11-7/8 in.	36 ¾ in.
TR60	35 ½ in.	24½ in.	13-5/8 in.	37 ½ in.
TR60 ClearPro	35 ½ in.	24½ in.	13-5/8 in.	37 ½ in.
TR100	39 ¾ in.	30½ in.	16 ¼ in.	41 ¾ in.
TR140	45 ¼ in.	36½ in.	18 ¾ in.	47 ¼ in.

ENGLISH

Item No.	Part No.	TRITON II & TR60 CLEARPRO SAND FILTERS Description
1	154689	Air bleeder/tee assy.
2	154700	Adapter - brass air bleeder
3	155050	Gauge - back mount pressure
4	154661	O-ring - air bleeder adapter
5	154664	Nut - 3/8 in. - 16 s/s
6	154570	Closure - 6 in. buttress thread, see Detail A
6	154559	Closure - 6 in. “V” thread Blk., see Detail B
7	154493	O-ring closure, white
8	150035	Strainer ECL/TR
9	150039	Tube air relief TR40
9	150040	Tube air relief TR50/60
9	150041	Tube air relief TR100
9	150042	Tube air relief TR140
10	154598	Diffuser assy. TR40/50
10	154599	Diffuser assy. TR60
10	154462	Diffuser assy. TR100
10	154906	Diffuser assy. TR140
11	154803	Piping assy. upper TR40
11	156814	Piping assy. upper TR50
11	154533	Piping assy. upper TR60
11	154426	Piping assy. upper TR100
11	154500	Piping assy. upper TR140
12	150036	Connector air relief tube
13	154801	Piping assy. lower TR40
13	156816	Piping assy. lower TR50
13	154805	Piping assy. lower TR60
13	155284	Piping assy. lower TR60 ClearPro -1/4 Turn Lateral
13	154807	Piping assy. lower TR100
13	154489	Piping assy. lower TR140
14	154636	Tank & ft. assy. TR40 - 6 in. btr. thd., Detail A
14	154637	Tank & ft. assy. TR50 - 6 in. btr. thd., Detail A
14	154638	Tank & ft. assy. TR60 - 6 in. btr. thd., Detail A
14	154639	Tank & ft. assy. TR100 - 6 in. btr. thd., Detail A
14	154640	Tank & ft. assy. TR140 - 6 in. btr. thd., Detail A

TRITON® II and TR60 CLEARPRO FIBERGLASS SAND FILTER

Replacement Parts

TR40
TR50
TR60
TR60 ClearPro
TR100
TR140

NOTES

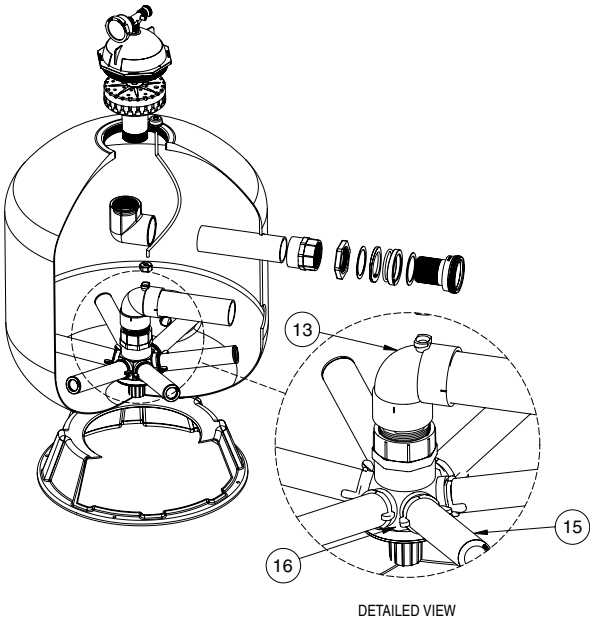
Filters manufactured after Dec 1, 1991 utilize a 6 in. buttress thread in the filter tank top opening and on the closure, see Detail A.

Filters manufactured before Dec 1, 1991 utilize a 6 in. “V” type thread, see Detail B.

6 in. closures in Detail A. and B. are NOT interchangeable.

To determine manufacture date, the first 4 digits of the serial number indicate the month and year product was manufactured.

TR60 ClearPro - 1/4 Turn Lateral for filters manufactured after May 15, 2007 utilize Lower Piping Assy. P/N 155284.



Detail for Triton® II - TR60 Filters with ClearPro Technology®

Item No.	Part No.	TRITON II & TR60 CLEARPRO SAND FILTERS Description
15	152290	Lateral - 6 11/16 in. L TR40/50/60, 8 req.
15	150085	Lateral Assy. - 1/4 turn TR60, 6 req.
15	150088	Lateral Assy. - TR60 ClearPro, 6 req.
15	152202	Lateral - 9 1/8 in. L TR100, 8 req. ❷
15	154543	Lateral - 6½ in. L TR100, 8 req. ❶
15	154540	Lateral - 12 in. L TR140, 8 req.
16	154763	Hub Lateral TR40/50/60
16	152222	Hub Assy. TR60 ClearPro
16	154453	Hub Lateral TR100/140
17	152220	Sand drain 2 in. ❻
17	154698	Spigot ¾ in. NPT sand drain ❹
17	154685	Spigot ½ in. NPT sand drain ❸
18	154871	Cap thd. 1½ in. ❻
18	357161	Plug ¼ in. NPT drain
19	154512	Wrench 6 in. closure
19	154510	Wrench closure aluminum
19	151608	Wrench 8½ in. closure aluminum
20	154412	Locknut 2 in. internal, 2 req.
21	154416	Spacer 2 in. internal, 2 req.
22	154492	O-ring 2 in. bulkhead, 2 req.
23	154408	Spacer 2 in. external, 2 req.
24	154538	Gasket 2 in. bulkhead, 2 req.
25	154405	Bulkhead 2 in., 2 req.
26	274494	O-ring 3/16 in. X 2 5/8 in. i.d. ❻
26	192115	O-ring #2-12 air adapter
27	154418	Washer 3/8 in. s/s
28	154926	Foot 16 in. dia., TR40/50 (see NOTE 1)
28	154520	Foot 19 in. dia., TR60 (see NOTE 1)
28	154596	Foot 24 in. dia., TR100/140 (see NOTE 1)
29	274494	O-ring valve adptr., 2 req.
30	271092	2 in. thd. adptr. kit ❺
31	271094	1½ in. thd. adptr. kit ❺
32	271096	1½ in. & 2 in. slip adptr. kit ❺
33	154641	Kit closure, 6 in. buttress thd., Blk., DETAIL A
33	154697	Kit closure, 6 in. "V" thd., Tan, DETAIL B
33	154856	Kit closure, 8½ in. buttress thd., Blk.
34	154687	Fitting package complete (see NOTE 2)
35	154611	Spacer air vent strainer 3¾ in. TR40
35	154612	Spacer air vent strainer 4½ in. TR50/60
35	154613	Spacer air vent strainer 5½ in. TR100
35	154614	Spacer air vent strainer 5 in. TR140
	154402	Tape ft. mounting TR40/50/60, 3 req.
	154407	Tape ft. mounting TR100/140, 3 req.
	151602	Bulkhead wrench 2 in.
	154714	Bulkhead kit, include items 20-25

TRITON® II and TR60 CLEARPRO FIBERGLASS SAND FILTER

Replacement Parts

TR40
TR50
TR60
TR60 ClearPro
TR100
TR140

NOTES

Filters manufactured after Dec 1, 1991 utilize a 6 in. buttress thread in the filter tank top opening and on the closure, see Detail A.

Filters manufactured before Dec 1, 1991 utilize a 6 in. "V" type thread, see Detail B.

6 in. closures in Detail A. and B. are NOT interchangeable.

To determine manufacture date, the first 4 digits of the serial number indicate the month and year product was manufactured.

❶ Used on Filters manufactured before 5-85.
❷ Used on Filters manufactured after 5-85.
❸ Used on Filters manufactured before 3-83.
❹ Used on Filters manufactured after 3-83 thru 3-96.
❺ For Installations w/out Valve (Pair).
❻ Used on TR100 & 140 Filters.

NOTE 1: Replacement of tank foot requires the use of foot mounting tape. See P/N's.

NOTE 2: Fitting package includes items 1, 2, 4, 5 and 27.

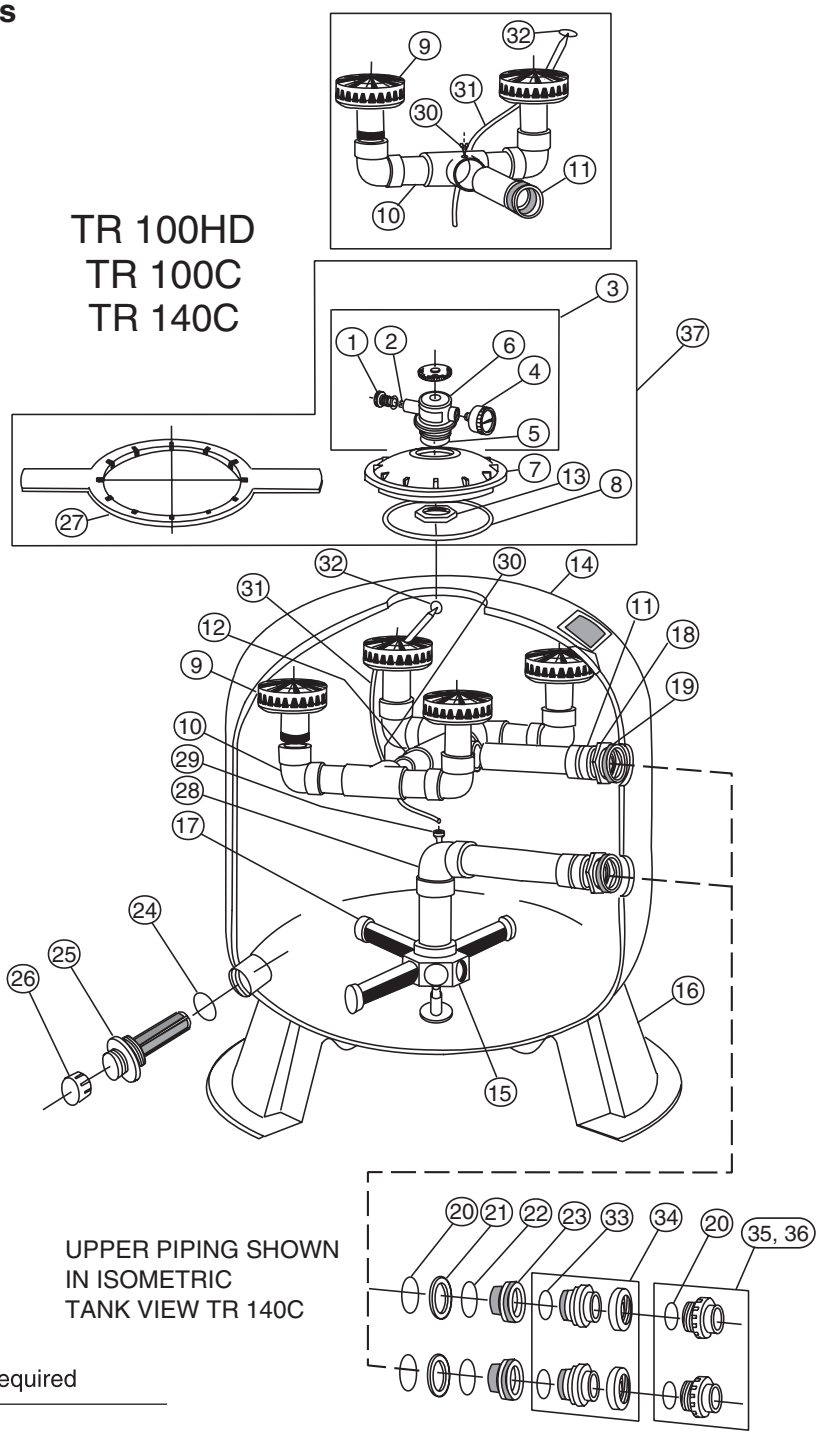
ENGLISH

TRITON® 100HD, 100C & 140C FIBERGLASS SAND FILTER

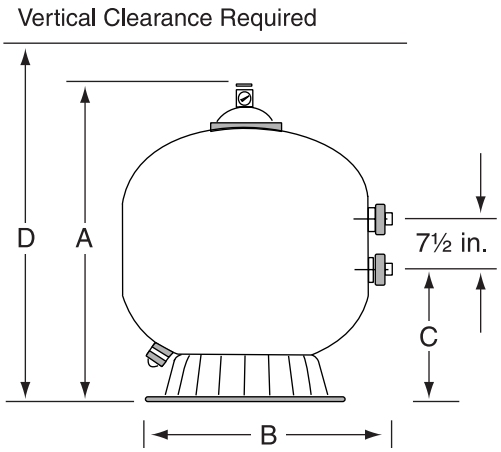
Replacement Parts

TR100HD
TR100C
TR140C

TR 100HD
TR 100C
TR 140C



UPPER PIPING SHOWN
IN ISOMETRIC
TANK VIEW TR 140C



MODEL	A DIM.	B DIM.	C DIM.	D DIM.
TR100HD	39¾ in.	30½ in.	16¼ in.	41¾ in.
TR100C	39¾ in.	30½ in.	16½ in.	43¾ in.
TR140C	45¼ in.	36½ in.	18¾ in.	49¼ in.

TRITON® 100HD, 100C & 140C FIBERGLASS SAND FILTER

Replacement Parts

TR100HD
TR100C
TR140C

Item No.	Part No.	TR100HD, TR100C & TR140C SAND FILTERS Description
1	273512	Air bleeder w/ o-ring
2	273513	O-ring air bleeder screw
3	273564	Manual air relief body assy.
4	155050	Pressure Gauge
4	991481	Pressure Gauge TR100C/TR100HD ❷
5	274494	O-ring 3/16 in. X 2-5/8 in. i.d..
6	273564	Valve body machined
7	154575	Closure 8½ in. buttress
8	152509	Square ring 8½ in.
9	154599	Diffuser TR100C/TR100HD ❶
9	154599	Diffuser TR140C ❶
10	156355	Piping assy. upper TR100C/TR100HD/ TR140C ❶
11	156344	Piping assy. upper inlet TR100C/TR100HD/ TR140C
12	156354	Piping connecting assy. upper TR140C
13	154412	Nut 2 in. internal
14	153430	Tank & ft. assy. TR100C/TR100HD - 8½ in. btr. THD. - Blk
14	153431	Tank & ft. assy. TR140C - 8½ in. btr. THD. - Blk
14	156224	Tank & ft. assy. TR100HD - btr. thd. - Blk ❷
15	154453	Hub lateral TR100C/TR100HD/TR140C
16	154596	Foot 24 in. dia. TR100C/TR100HD/TR140C
17	152202	Lateral 9 1/8 in. TR100C/TR100HD, 8 req.
17	154540	Lateral 12 in. TR140C, 8 req.
18	154412	Locknut 2 in. internal
19	154416	Spacer 2 in. internal
20	154492	O-ring 2 in. bulkhead
21	154408	Spacer 2 in. external
22	154538	Gasket 2 in. bulkhead
23	154405	Bulkhead 2 in.
24	274494	O-ring 3/16 in. X 2 5/8 in. i.d.
	154407	Tape ft. mounting
25	152220	2 in. sand drain
26	154871	Cap thd. 1½ in.
27	154527	Wrench 8½ in. closure
27	151608	Wrench 8½ in. aluminum
28	154807	Piping assy. lower TR100C/TR100HD
28	154489	Piping assy. lower TR140C
29	150036	Connector air relief tube
30	273071	Screw #14 18-8 TR100C/TR100HD ❶
31	150041	Tube air relief TR100C/TR100HD
31	150042	Tube air relief TR140C
32	150035	Strainer air relief
33	274494	O-ring valve adptr.
34	271096	1½ in. & 2 in. slip adptr. kit for inst. w/o valve (pair)
35	271092	2 in. thd. adptr. kit for inst. w/o valve (pair)
36	271094	1½ in. thd. adptr. kit for inst. w/o valve (pair)
37	154856	Kit closure 8½ in. btr. THD. - Blk.
37	155738	Kit closure 8½ ❷

NOTES

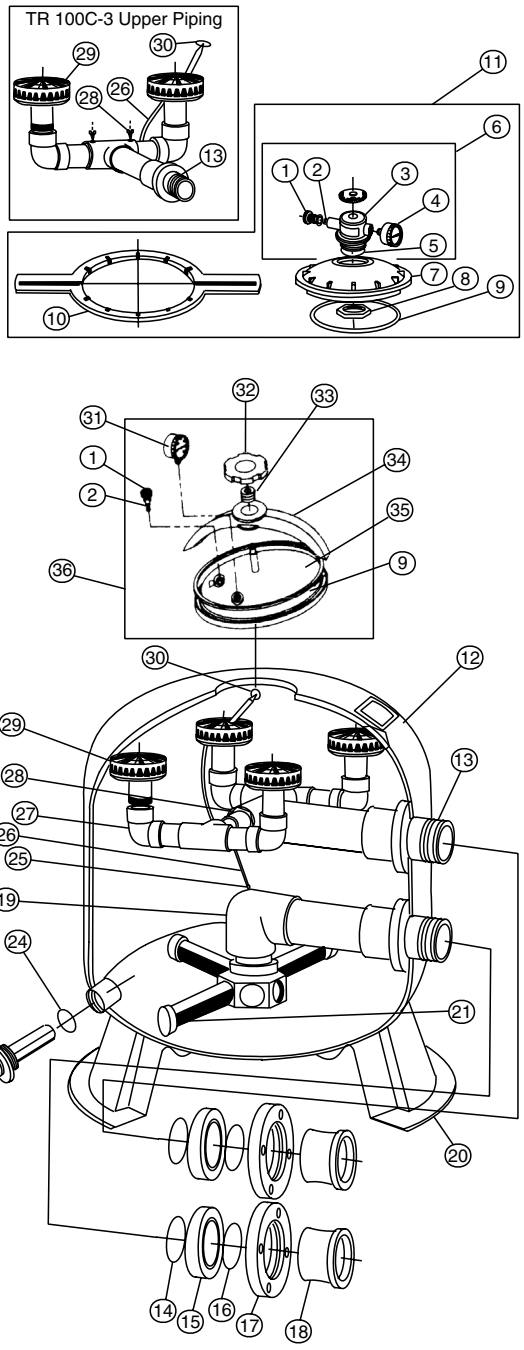
❶ Different quantities required for TR100C and TR140C Filters.
❷ Used on TR1000HD Filters

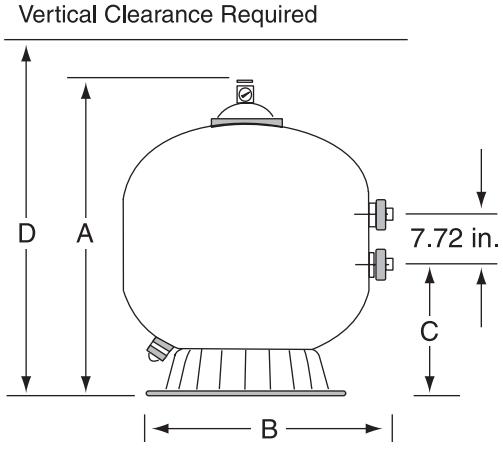
ENGLISH

TRITON® 100C-3 & 140C-3 FIBERGLASS SAND FILTER

Replacement Parts

TR100C-3
TR140C-3





MODEL	A DIM.	B DIM.	C DIM.	D DIM.
TR100C-3	39¾ in.	30½ in.	16-1/16 in.	43¾ in.
TR140C-3	45¼ in.	36½ in.	18½ in.	49¼ in.

TRITON® 100C-3 & 140C-3 FIBERGLASS SAND FILTER

Replacement Parts

TR100C-3
TR140C-3

Item No.	Part No.	TRITON 100C-3 &140C-3 SAND FILTERS Description
1	273512	Air bleed with o-ring ❷❸
2	273513	O-ring air bleeder screw ❷
3	273564	Valve body machined ❷
4	155050	Pressure gauge ❷
5	154494	O-ring adapter, 6 in. ❷
6	273564	Manual air relief assy. ❷
7	154575	Closure 8½ in. ❷
8	154412	Nut 2 in. internal ❷
9	152509	Square ring closure ❷❸
10	154527	Wrench 8½ in. closure ❷
11	154856	Kit 8½ in. closure buttress thd. ❷
11	156842	Kit 8½ in. closure w/gasket ❹
12	153430	Tank & ft. assy. TR100C-3 - buttress
12	153431	Tank & ft. assy. TR140C-3 - buttress
13	154007	Upper piping assy. TR100C-3
13	154008	Upper piping assy. TR140C-3
14	154005	O-ring Parker 2-343, 2 req.
15	154002	Spacer 3 in., 2 req.
16	154004	O-ring Parker 2-342, 2 req.
17	154003	Flange 3 in., 2 req.
18	154001	Adapter flange 3 in., 2 req.
19	154009	Lower piping assy. TR100C-3
19	154010	Lower piping assy. TR140C-3
20	154596	Foot 24 dia. TR100C-3/140C-3
21	152202	Lateral 9 in. TR100C-3, 8 req.
21	154540	Lateral 12 in. TR140C-3, 8 req.
22	154871	Cap thd. 1½ in.
23	152220	Sand drain 2 in.
24	274494	O-ring 3/16 in. X 2 5/8 in. i.d., 2 req.
25	154441	Connector air relief tube
26	150041	Tube air relief TR100C-3 (23 in.)
26	150042	Tube air relief TR140C-3 (27 in.)
27	154018	Diffuser piping assy. TR140C-3, 2 req.
28	552474	Screw - #10-1½ in. flathead phillips, 2 req.
29	154599	Diffuser - 2 req'd. for TR100C-3
29	154599	Diffuser - 4 req'd. for TR140C-3

Item No.	Part No.	TRITON 100C-3 &140C-3 SAND FILTERS Description
30	150035	Strainer ELC/TR
31	190058	Pressure Gauge, ¼ in. psi ❸
32	154581	Knob TR oval ❸
33	154582	Spring TR oval ❸
34	154579	Bridge TR oval ❸
35	154576	Closure-oval ❸
36	156841	Kit TR oval closure ❶❸

NOTES

❶ P/N 156841 includes items: 1, 9, 31 thru 35.
❷ Used on filters manufactured before 3-97.
❸ Used on filters manufactured after 3-97.
❹ Used on filters manufactured after 4-15.

ENGLISH

NOTES

SAVE THESE INSTRUCTIONS

PENTAIR

TRITON™

FILTROS DE ARENA DE FIBRA DE VIDRIO

MODELS: TR 40, TR 50, TR 60, TR 100, TR 140, TR 100HD, TR 100C, TR 140C, TR 100C-3, TR 140C-3 y TR 60 con CLEARPRO TECHNOLOGY™

ESPAÑOL

GUÍA DE USARIO E INSTALACIÓN

IMPORTANTES INSTRUCTIVOS DE SEGURIDAD

LEA Y SIGA TODOS LOS INSTRUCTIVOS

PROTEJA ESTOS INSTRUCTIVOS

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Servicio del Cliente y Soporte Técnico, USA
(de 8 a.m. a 4:30 p.m., Horario del Este y del Pacífico)

Teléfono: (800) 831-7133

Fax: (800) 284-4151

Sitio web

Visite *www.pentairpool.com* o *www.staritepool.com* para encontrar información sobre los productos Pentair.

Sanford, Carolina del Norte
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Teléfono: (919) 566-8000

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(de 8 a.m. a 4:30 p.m., Horario del Pacífico)

Teléfono: (805) 553-5000 (Ext. 5591)

Fax: (805) 553-5515

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P/N 154901 Rev. H 3/18/15

PRECAUCIONES IMPORTANTES DE SEGURIDAD

Aviso importante:

La presente guía provee instrucciones de instalación y operación para los Filtros de Arena de Fibra de Vidrio Triton®. Consulte a Pentair Aquatic Systems si tiene alguna pregunta relacionada con este equipo.

Atención Instalador: La presente guía contiene información importante acerca de la instalación, operación y uso seguro de este producto. Esta información se la debe dar al propietario y/o operador de este equipo luego de la instalación o se la debe dejar en o cerca del filtro.

Atención Usuario: El presente manual contiene información importante que lo ayudará a operar y mantener este filtro. Por favor consérvelo como futura referencia.

⚠ ADVERTENCIA Antes de instalar este producto, lea y siga todos los avisos de advertencia que están incluidos. En caso de no seguir las advertencias e instrucciones de seguridad puede resultar en lesiones severas, muerte o daño de la propiedad. Llame al (800) 831-7133 para obtener copias adicionales gratuitas de estas instrucciones.

Información y Seguridad del Consumidor

Los Filtros de Arena Series Triton® están diseñados y fabricados para proveer muchos años de servicio seguro y confiable cuando son instalados, operados y mantenidos de acuerdo con la información de este manual y en los códigos de instalación referidos en las secciones posteriores. A través de este manual, las advertencias y precauciones de seguridad están identificadas con el símbolo " ⚠ ". Asegúrese de leer y cumplir con todas las advertencias y precauciones.

ESTE FILTRO OPERA BAJO ALTA PRESIÓN

⚠ ADVERTENCIA Cuando cualquier parte del sistema de circulación es revisado (por ejemplo, tapa, bomba, filtro, válvula(s), etc.), el aire puede ingresar al sistema y volverse presurizado. El aire presurizado puede hacer que la tapa superior se separe lo cual puede resultar en lesiones severas, muerte o daño de la propiedad. Para evitar este peligro potencial, siga estas instrucciones:

1. Si no está familiarizado con su sistema de filtración y/o calentador de piscina:
   a. **NO** intente ajustar o hacer una revisión sin consultar con su distribuidor o con un técnico de piscina calificado.
   b. Lea completamente la Guía del Usuario e Instalación antes de intentar usar, hacer una revisión o ajustar el sistema o calentador de filtración de la piscina.
2. Antes de volver a colocar la(s) válvula(s) y antes de empezar el ensamblaje, desmontaje o cualquier otro servicio del sistema de circulación: (A) Apague la bomba (**TURN OFF)** y desconecte **(SHUT OFF)** cualquiera de los controles automáticos para asegurarse que el sistema NO se encienda repentinamente durante la revisión; (B) abra la válvula de purga de aire manual; (C) espere hasta que toda la presión se haya liberado.
3. Cuando instale la tapa del filtro **SIGA EXACTAMENTE LAS ADVERTENCIAS DE LA TAPA DEL FILTRO.**
4. Una vez que complete el servicio en el sistema de circulación **SIGA EXACTAMENTE LAS INSTRUCCIONES INICIALES.**
5. Mantener el sistema de circulación adecuadamente. Remplazar las partes deterioradas dañadas (Ej., tapa, indicador de presión, válvula(s), anillos "O", etc.).
6. Asegúrese que el filtro esté montado y colocado adecuadamente de acuerdo con las instrucciones provistas.

ESPAÑOL

PRECAUCIONES IMPORTANTES DE SEGURIDAD

⚠ ADVERTENCIA

Este filtro debe ser instalado por un electricista autorizado o certificado o por un técnico de servicios de piscina calificado de acuerdo con el Código Eléctrico Nacional y todos los códigos y ordenanzas locales aplicables. Una instalación inadecuada podría resultar en lesiones serias o en la muerte de los usuarios, de los instaladores de la piscina u otros, también puede causar daño a la propiedad.

Siempre desconecte la energía del sistema de circulación de la piscina del cortocircuito antes de revisar el filtro. Asegúrese que el circuito desconectado esté cerrado o adecuadamente codificado para que no se conecte cuando esté trabajando en el filtro. De lo contrario podrían resultar en lesiones serias o la muerte del técnico de servicio, de los usuarios de piscinas u otros debido a una descarga eléctrica.

⚠ ADVERTENCIA

No opere el filtro hasta que haya leído y comprendido claramente todas las instrucciones de operación y mensajes de advertencia de todo el equipo que es parte del sistema de circulación de la piscina. El propósito de las siguientes instrucciones es guiarlo para iniciar la operación del filtro en una instalación general de la piscina. En caso de no seguir todas las instrucciones de operación y mensajes de advertencia podría resultar en daño a la propiedad, lesiones personales severas o la muerte.

⚠ ADVERTENCIA

Para reducir el riesgo de lesiones, no permita que los niños usen este producto a menos que sean supervisados cuidadosamente todo el tiempo.

⚠ ADVERTENCIA

Debido al riesgo potencial que puede suceder se recomienda que la prueba de presión se mantenga al tiempo mínimo requerido por el código local. No permita que haya personas trabajando alrededor del sistema cuando el sistema de circulación esté bajo prueba de presión. Coloque adecuados avisos de advertencia y establezca una barrera alrededor del equipo presurizado. Si el equipo está ubicado en el cuarto de equipo, cierre la puerta y coloque un aviso de advertencia.

Nunca intente arreglar ninguna tapa o intente remover o ajustar los tornillos cuando el sistema esté presurizado. Estas acciones pueden causar que la tapa se descargue y puede causar severas lesiones personales o la muerte si le golpeara a una persona.

⚠ ADVERTENCIA

Nunca exceda la presión de operación máxima en los componentes del sistema. Si excede estos límites puede resultar en una falla del componente bajo presión. Esta liberación instantánea de energía podría hacer que la tapa se descargue y podría causar severas lesiones personales o la muerte si le golpeara a una persona.

Sección 1
Introducción

Información General acerca de los Filtros de Arena de Fibra de Vidrio Triton™

Filtros de Arena de Fibra de Vidrio Triton™ II

El filtro de arena que es #1 en el mundo

Triton II es el resultado de más de 40 años de evolución y refinamiento de producto. Ha establecido el estándar de la industria en cuanto a efectividad, eficiencia, largos periodos de funcionamiento antes de necesitar servicio, y el proporcionar años de operación de confianza y de bajo mantenimiento.

Triton II ofrece un diseño interno especial que mantiene nivelado el lecho de arena, asegurándose de que el agua fluya con regularidad y resultando en la filtración más eficiente posible.

La mejor reputación de la industria por las mejores razones

Además de su superior rendimiento de filtración, Triton II proporciona un nivel de confianza y facilidad de operación y mantenimiento que resultan en un historial insuperable. Cada detalle del diseño se ha refinado para hacer que Triton II sea el estándar de la industria.

Filtros de Arena Comerciales Triton™ C y Triton™ C-3

Esta serie de filtros ofrece desviadores múltiples para obtener mayores velocidades de filtración en las aplicaciones comerciales de hasta 20 GPM/Pie Cuad.

Filtros de Arena de Montaje Lateral Triton™ HD

El mismo rendimiento y todas las mismas características del Triton original con una presión de operación máxima de 75 psi para las instalaciones especiales de alta presión, tales como los sistemas de limpieza de planta de una sola bomba.

Triton II - Residencial

Triton C - Comercial

Triton C-3 - Comercial

Triton HD - Comercial

ESPAÑOL

Características Generales

Triton™ II

- El diseño interno, cuya efectividad se ha comprobado con el paso del tiempo, asegura que toda el agua recibe filtración máxima para que se obtengan resultados de absoluta claridad
- El proceso GlasLok™ crea un tanque reforzado de fibra de vidrio de una sola pieza con recubrimiento resistente a los UV para que proporcione años de servicio de confianza y de resistencia a la corrosión
- El diseño del sistema de flujo controla la calidad de la filtración y asegura tiempos de operación máximos entre retrolavados para ahorrarle tiempo

Triton™ C y Triton™ C-3

- Presión de Operación Máxima 50 psi
- Desagüe de 2 pulg. amplias
- Apertura de 8 pulg. para fácil acceso al lecho de arena
- El Triton C-3 tiene conexiones de bridas estándar de 3 pulg.
- Los modelos TR 100C y TR 140C pueden obtenerse en negro o color almendra
- Los modelos TR 100C-3 y TR 140C-3 pueden obtenerse en negro solamente

Triton™ HD

- Presión de Operación Máxima 75 psi

Características Adicionales:

- El desagüe de arena y agua combinadas hace que el trabajo de reparación/mantenimiento y el de preparación para el invierno vayan más rápido
- Todas las piezas internas son de rosca para facilidad de mantenimiento
- El difusor de agua, que puede hacerse a un lado, permite acceso instantáneo a la arena y a todas las piezas internas
- Registrado con la NSF

Sección 2
Instalación

Nota: Antes de instalar este producto, lea y siga todos los avisos e instrucciones de advertencia que empiezan en la Pág. (sp) ii.

Instalación del Filtro de Arena de Fibra de Vidrio Triton™

Sólo una persona de servicio calificada puede instalar el Filtro de Arena de Fibra de Vidrio Triton. Este filtro está diseñado y destinado para usarlo con agua de filtro.

Introducción del Triton™

La siguiente información general describe cómo instalar el Filtro de Arena de Fibra de Vidrio Triton. Este filtro opera bajo presión y si se monta mal o si se opera con aire en el sistema de circulación de agua el cierre superior se puede abrir y producir accidentes que causen lesiones graves en el cuerpo y daño a la propiedad. Se ha adherido una etiqueta de advertencia en la parte superior del filtro y no se debe remover. Mantenga las etiquetas de sequridad en buenas condiciones y ponga una nueva si falta o si no se puede leer.

Como Funciona el Filtro

Su filtro de arena de alta capacidad ha sido diseñado para operar por años con un mantenimiento mínimo y si se instala, opera y se mantiene según estas instrucciones le entregará años de operación sin problemas.

La mugre se recauda en el filtro a medida que el flujo fluye a través de la válvula de control en la parte lateral del filtro y se dirige hacia el tapón superior. El agua sucia fluye al difusor en la parte superior del estanque y se dirige hacia abajo a la superficie superior de la capa de arena del filtro. La mugre se recauda en la capa de arena y el agua limpia fluye a través de los laterales y de la tubería inferior en la parte inferior del filtro y hacia arriba al tapón inferior. El flujo luego va a la válvula de control en la parte lateral del filtro. El agua limpia se devuelve a través del sistema de tuberías a la piscina.

La presión se elevará y el flujo de la piscina se bajará a medida que se recauda mugre en el filtro. Eventualmente, el filtro se tapará tanto con la mugre que será necesario el implementar el procedimicnto de lavado por corriente. Es importante saber cuándo es necesario lavar el filtro por corriente. El lavado por corriente se trata a continuación bajo las secciones siguientes de este manual.

Haga el favor de darse cuenta que el filtro remueve los materiales suspendidos y no higieniza la piscina. El agua de la piscina tiene que ser higienizada y balanceada químicamente para conseguir agua burbujeante y transparente. Su sistema de filtración tiene que ser diseñado de modo que satisfaga sus códigos de salud locales. Como un mínimo tiene que asegurarse que su sistema va a hacer rotar el volumen de agua total en su piscina por lo menos dos a cuatro veces en un período de 24 horas.

Refiérase a la **Tabla 1** para obtener la Información de Operación del Filtro.

NUMERO DEL MODELO DEL FILTRO	AREA DEL FILTRO (pies cuadrados)	VELOCIDAD DE FLUJO *(GPM) @ 20 GPM/ PIE²	CAPACIDAD DE ROTACION (Galones) (Basado en 20 GPM/pies cuadrados) *			
			4 VUELTAS AL DIA	3 VUELTAS AL DIA	2.4 VUELTAS AL DIA	2 VUELTAS AL DIA
TR40	1,92	38	13,680	18,240	22,800	27,360
TR50	2,46	49	17,640	23,520	29,400	35,280
TR60	3,14	63	22,680	30,240	37,800	45,360
TR60 ClearPro	3,14	63	22,680	30,240	37,800	45,360
TR100	4,91	74	26,640	35,520	44,400	53,280
TR100HD	4,91	74	26,640	35,520	44,400	53,280
TR100C/TR100C-3	4,91	98	35,280	47,040	58,800	70,560
TR140	7,06	106	38,160	50,880	63,600	76,320
TR140C/TR140C-3	7,06	141	50,760	67,680	84,600	101,520

Tabla 1.

ESPAÑOL

⚠ ADVERTENCIA Si no opera su sistema de filtro o si la filtración no es adecuada se puede afectar la transparencia del agua, impidiendo la visibilidad en su piscina y puede ser que se salte dentro o sobre objetos obscurecidos que pueden producir lesiones personales graves o que la persona se ahogue.

El agua transparente es el resultado de la filtración adecuada como también del balance químico adecuado del agua de la piscina. La química de la piscina requiere conocimiento especializado y tiene que consultar con su especialista de servicios de piscinas local para los detalles específicos. En general, la higienización adecuada de la piscina necesita un nivel de cloro libre de 1 a 3 PPM y una gama de PH de 7,2 a 7,6.

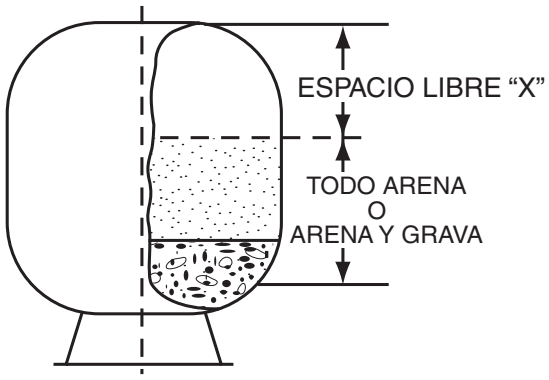
⚠ ADVERTENCIA Los filtros nunca deben ser probados o ser expuestos a aire o gas bajo presión. Todos los gases son comprimibles y bajo presión crean peligro. Se pueden producir lesiones corporales graves o daño a la propiedad si el filtro se expone a aire o gas bajo presión.

1. Revise la caja de cartón para verificar si hay evidencia de daño debido al manejo abrupto durante el envío. Si la caja de cartón o cualquier componente del filtro está dañado, avise a la compañia de transporte inmediatamente.
2. Cuidadosamente remueva el paquete del accesorio y el estanque del filtro de la caja de cartón.
3. Monte el filtro en una losa permanente, preferiblemente de concreto vaciado en un molde o en una plataforma construida de bloque de concreto o de ladrillo. NO USE arena para nivelar el filtro o para el montaje de la bomba pues se va a esparcir.
4. Proporcione espacio y luz para el acceso para el mantenimiento de rutina. No monte los controles eléctricos sobre el filtro. Es necesario el poder alejarse del filtro cuando se hace arrancar la bomba. Las necesidades mínimas de espacio se pueden encontrar en el filtro, en la placa grande del fabricante.
5. Ponga el filtro de modo que los agujeros estén en la posición final deseada. Siga el procedimiento de instalación de la válvula.
6. Si tiene una Válvula de Agujeros Múltiples, monte la válvula en el estanque, asegurándose que los anillos O en los accesorios de la válvula estén en su lugar y limpios. Use un lubricante aplicado en capas delgadas, tal como la grasa de silicona, Dow #33, #40 o GE 300 o 623, o un producto similar en los anillos O y en las ranuras de los anillos O, antes del montaje.
7. Si tiene una válvula de deslizamiento de dos posiciones, alinee la válvula con el estanque de modo que la manilla esté hacia la parte superior del estanque, empuje las válvulas en los agujeros y gire las tuercas de la válvula apretadamente en los accesorios del estanque. No es necesario asegurar las tuercas, de la válvula en el accesorio del estanque más que lo que se puede hacer manualmente.
8. Las correas del envío que se usaron para soportar el multidifusor TR100C-3, TR140C y TR140C-3 se deben remover, antes de cargar la arena y la grava en el filtro.
9. Las especificaciones de la arena - asegúrese que se use la arena adecuada tal como se ha descrito en la Tabla 2. Antes de vaciar la arena en el filtro, mire adentro y verifique el drenaje inferior para verificar si hay laterales sueltos o rotos (o dedos) los que se pueden haber dañado por accidente debido al manejo abrupto durante el manejo. Cambie las partes rotas si es necesario.

AVISO: La distancia del espacio libre es la variable de más importancia y se debe mantener. La densidad de la arena variará y por lo tanto la cantidad de arena se da como referencia.

Tabla 2.

MODELO	ESPACIO LIBRE "X"	TODO ARENA* (LIBRAS)	MATERIAL DE FILTRO † (LIBRAS)	
			GRAVILLA ‡	ARENA
TR40	8 1/4"	175	50	125
TR50	9 3/4"	225	50	175
TR60	10 1/2"	325	50	275
TR60 ClearPro	10 1/2"	325	50	275
TR100	11 1/4"	600	150	450
TR100HD	11 1/4"	600	150	450
TR100C-3	11 1/4"	600	150	450
TR140	13 1/2"	925	275	650
TR140C-3	13 1/2"	925	275	650



† Material necesario para cumplir con los requisitos de NSF.

‡ La gravilla tiene que ser de 1/4" a 1/8" dia.

* La arena tiene que ser silicea estandar #20 (el coeficiente de uniformidad no mayor que 1.75) .018-.020 en diametro tamaño de particula.

⚠ ADVERTENCIA Si no se coloca la Ventilación de Aire Automática dentro del Cierre se permitirá que se atrape aire en exceso y que se acumule en el filtro. El aire atrapado y el cierre que no está cerrado en forma adecuada pueden hacer que se produzcan fugas en el cierre y producir lesiones corporales graves y/o daño a la propiedad.

10. Pivotee el difusor fuera del centro del estanque en los TR40, 50, 60, TR60 ClearPro,100 y 140 rotando el conjunto del difusor en el sentido contrario en que giran las manillas del reloj. (***AVISO:*** El conjunto del multidifusor no se debe mover en los modelos TR100HD, TR100C, TR100C-3 y TR140C, TR140C-3. Después de instalar el material del filtro tal como se ha descrito a continuación revise para verificar que las partes superiores de los difusores estén paralelas con la parte superior de la capa do arena.) Llene el estanque con agua hasta alrededor de la mitad. Vacíe gravilla primero (si se va a usar) y luego arena en la parte superior del filtro lentamente de modo que el impacto del material del filtro no daño los laterales. Vea la información en la Tabla 2 en este manual para verificar la cantidad de arena y grava adecuada. Llene el filtro al nivel adecuado para mantener el espacio libre (vea la Tabla 2). Pivotee el conjunto del difusor de nuevo a su posición vertical si es que se movió. Asegúrese que la ventilación de aire automática está sobresaliéndose en la parte superior del cierre tal como se indica a continuación en la Figura 1. Asegúrese que la ventilación de aire automática está en el centro del cierre del filtro. Lave toda la arena alrededor de la abertura roscada en la parte superior del estanque.

⚠ ADVERTENCIA

Para Cierre Enroscado

Tenga cuidado al instalar el cierre. El cierre debe girar libremente en el filtro, si se siente resistencia a la insertión del cierre, remueva lentamente el cierre girándolo en el sentido contrario en que giran las manillas del reloj. La rosca del comienzo del estanque y el cierre tiene que engancharse en forma adecuada para poder asegurar el cierre. *No cruce las roscas del cierre.*

Si no se instala el cierre en forma adecuada se producirán fugas en el cierre y se pueden producir lesiones corporales graves y/o daño a la propiedad.

⚠ ADVERTENCIA

Del Cierre Ovalado

Tenga cuidado al instalar el cierre. El cierre se debe insertar en el estanque colocando el diámetro pequeño del cierre ovalado dentro del diámetro más grande de la abertura del estanque. Primero inserte el lado del cierre que no tiene la válvula de presión y el alivio de aire. El cierre se debe insertar en un ángulo de 30 grados. Una vez que el cierre esté dentro del estanque se puede rotar 90 grados y levantar para sellar el estanque. Ahora el puente de aluminio con resorte ya se puede colocar sobre el perno del cierre y se puede apretar la manija con la mano para colocar el cierre adecuadamente. La manija solamente se debe apretar con la mano. NO UTILICE UNA LLAVE INGLESA PARA APRETAR LA MANIJA. Si utiliza una llave inglesa puede dañar el estanque o el cierre y producir una falla. La incorrecta instalación del cierre puede ocasionar que el cierre se vuele y ésto puede producir lesiones personales graves o daño a la propiedad.

NUNCA TRATE DE APRETAR O SOLTAR EL CIERRE CON LA BOMBA FUNCIONANDO. Si no se siguen estás instrucciones se pueden producir fugas en el cierre y producir lesiones corporales graves o daño a la propiedad.

11. Monte el medidor de presión y la válvula del purgador en la tapa del cierre. Limpie el anillo O en la tapa y lubríquela con grasa de silicona tal como Dow #33, 40 o con lubricante GE 300, 623. Ponga la tapa del cierre en el filtro y apriétela, asegurándose que la ventilación de aire esté hacia arriba dentro de la cúpula del cierre.
12. Con la llave de plástico que viene incluida con el filtro, apriete el cierre lo más apretado posible usando las dos manos en los mangos de la llave. Como un mínimo, el cierre tiene que ser apretado con la mano + 1/4 de vuelta.
13. El cierre ovalado que se usa en los modelos TR140C-3 y TR100C-3 deberá instalarse según se describe en la nota de advertencia del cierre ovalado mencionada anteriorment.
14 . Monte las tuberías y los accesorios en la bomba y la válvula. Todas la tuberías tienen que cumplir con los códigos sanitarios y de plomería estatales y locales.
15. Use los compuestos de sellado en todas las conexiones de tuberías y accesorios machos. Use sólamente los compuestos de tuberías adecuados para las tuberías de plástico. Apoye las tuberías para evitar el esfuerzo en el filtro, la bomba y la válvula.
16. Las extensiones de tuberías largas y los codos restrigen el flujo. Para conseguir la mayor eficiencia, use el menor número posible de accesorios y una tubería de diámetro grande (por lo menos 2” para TR100 y TR140, por lo menos 3” para TR100C-3 y TR140C-3).

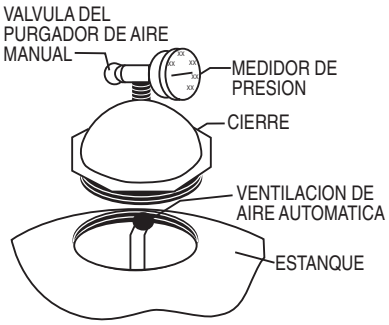


Figura 1.

ESPAÑOL

⚠ PRECAUCIÓN La operación a niveles de aspiración excesivos puede hacer que el estanque se rompa y se pueden producir daños a la propiedad.

17 . Al instalar las líneas de enjuague, se recomienda instalar un freno de vacío en las instalaciones en donde la longitud de la línea de enjuague excede los 40 pies o la línea de enjuague se vacía a más de 10 pies abajo de la superficie del depósito. Como alternativa se debe proporcionar un foso para el freno de vacío.

18. Se recomienda el uso de una válvula de retención entre el filtro y el calentador para evitar el retroceso del agua caliente que dañaría el filtro y la válvula.

19. La presión de operación máxima de la unidad es de 50 libras por pulgada cuadrada (psi) y 75 libras por pulgada cuadrada (psi) solamente para el modelo Triton HD. Nunca opere este filtro encima de éstas presiones o añada una bomba a este filtro que tiene más de 50 psi de presión de cierre o 75 psi de presión de cierre solamente para el modelo Triton HD.

20. Nunca instale el clorinador flujo arriba del filtro. Siempre ubíquelo flujo abajo y con una válvula de retención entremedio del clorinador y del filtro.

21. No se recomienda el uso de una válvula de cierre positivo en la salida del sistema de filtración. Si alguna vez el sistema se hace funcionar con tal válvula cerrada, el sistema de alivio de aire interno deja de funcionar y puede producirse una situación separación. Además, si se hace funcionar el sistema sin flujo se dañará el equipo gravemente.

22. Nunca guarde los productos químicos de la piscina dentro de 10 pies del filtro de la piscina. Los productos químicos de la piscina siempre se tienen que guardar en un área fresca, seca y bien ventilada.

23. El cierre ovalado que se usa en los modelos TR140C-3 y TR100C-3 est á diseñado para operar como un mecanismo de alivio de vacio, esto protege al estanque de condiciones al vacio. El cierre permitirá que el aire entre al estanque si el estanque se encuentra ubicado a 8 pies por encima del nivel del agua. En estos casos, cuando el filtro se arranca nuevamente después de haberlo apagado, es posible que usted observe cómo el aire regresa a la piscina por las tuberías de retorno. Esto es normal, ya que el alivio de aire automático en el filtro está sacando el aire del filtro.

Arranque Inicial

1. Limpie una piscina nueva antes de llenarla con agua. La mugre en exceso y las partículas grandes pueden hacer daño a su bomba y al sistema del filtro.
2. Asegúrese que la tubería de lavado por corriente esté abierta de modo que el agua quede libre de entrar desde la piscina y salir fuera de la tubería de lavado por corriente. Ajuste la válvula en la posición a continuación:
   a. Si se usa una válvula de Agujeros Múltiples, ajústela en la posición de lavado por corriente (BACKWASH).
   b. Si se usa una válvula de Deslizamiento de Dos Posiciones, empuje la manilla para abajo a la posición de lavado por corriente y enganche el seguro torciendo la manilla.
3. Asegúrese que el depósito del colador de la bomba esté lleno con agua.

⚠ ADVERTENCIA Si entra aire en el filtro y el cierre del estanque no está instalado en forma adecuada se pueden producir escapes en el cierre y daños corporales graves y/o daño a la propiedad.

4. Revise el cierre en el filtro para verificar si está apretado.
5. Abra el purgador de aire manual en el cierre del filtro. Aléjese del filtro y haga arrancar la bomba dejando tiempo para que se cebe.
6. Cierre el purgador de aire en el cierre cuando se haya removido todo el aire del filtro y salga un chorro de agua parejo.

AVISO: La arena de filtro de la piscina, típicamente, se prelava y no debe necesitar mucho lavado por corriente. Sin embargo, el proceso de envío puede producir una abrasión excesiva que puede exigir un ciclo de lavado por corriente largo en el arranque inicial; continúe lavando por corriente hasta que el agua observada en el tubo indicador esté tan transparente como la de la piscina.

⚠ PRECAUCIÓN Para evitar daño en el equipo y una posible lesión, siempre desconecte la bomba antes de cambiar la posición de la válvula.

7. Pare la bomba. Ajuste la posición de la válvula según to siguiente:
   a. Si se usa una válvula de Agujeros Múltiples, ajústela en la posición del filtro (FILTER).
   b. Si se usa una válvula de Deslizamiento de Dos Posiciones, levante la manilla a la posición del filtro y enganche el seguro de la válvula torciendo la manilla.
8. Asegúrese que todas las tuberías de succión y de retorno a la piscina estén abiertas de modo que el agua pueda salir y volver a la piscina libremente.
9. Abra el purgador de aire manual en el cierre del filtro. **Aléjese del filtro** y haga arrancar la bomba.
10. Cierre el purgador de aire en el cierre del filtro cuando todo el aire haya sido removido del filtro y salga un chorro de agua parejo.
11. El filtro ahora ha comenzado su ciclo de filtración. Tiene asegurarse que el agua está volviendo a la piscina y fijarse en la presión de operación cuando el filtro está limpio.

Sección 3
Mantenimiento

Esta sección describe cómo mantener su Filtro de Arena de Fibra de Vidrio Triton™.

Cuidado del Filtro

El filtro es una pane muy importante del equipo y de la instalación de su piscina. El cuidado y el mantenimiento adecuado van a agregar muchos años de servicio y de goce de su piscina. Siga estas sugerencias para contar con una operación duradera y sin problemas.

1. Para limpiar la mugre y el polvo del exterior del filtro, lávelo con un detergente suave y agua y luego mangueréelo. No use solventes.
2. Si se necesita mantenimiento interno, se tiene que remover la arena removiendo el drenaje de arena de la parte inferior del filtro y se debe lavar con una manguera de jardín. La parte Pentair Water Pool and Spa™ No. 542090 también se puede usar.
3. Si después de varios años, el estanque del filtro aparece descolorido y áspero en textura, la superficie del estanque tiene que pintarse. Recomendamos el uso de esmalte de rocío de secado rápido. **No Pinte la Válvula.**

⚠ ADVERTENCIA Siempre inspeccione visualmente los componentes del filtro durante el servicio normal para garantizar la seguridad estructural. Cambie cualquier artículo que esté partido, deformado o que en alguna otra forma se pueda percibir como defectuoso. Los componentes del filtro defectuosos pueden permitir las fugas en la parte superior del filtro o en los accesorios y producir lesiones corporales graves o daño a la propiedad.

4. El cierre del filtro en su filtro de arena Triton II se fabricó con materiales de alta calidad resistentes a la corrosión. Esta parte se debe inspeccionar cuidadosamente cuando se le da servicio a su filtro. Si ve que hay fugas excesivas que vienen de la interfase entre el cierre/estanque, el cierre y el Anillo O tienen que inspeccionarse cuidadosamente y cambiarse si hay alguna señal de deterioro.
5. Su filtro es un recipiente bajo presión y nunca debe recibir servicio cuando esté bajo presión. Siempre alivie la presión del estanque y abra el purgador de aire en el filtro antes de tratar de darle servicio.
6. Cuando vuelva a hacer arrancar el filtro siempre abra el purgador de aire manual en el cierre del filtro y aléjese del filtro.

Frecuencia de Limpieza

1. El filtro de una piscina nueva se tiene que lavar por corriente y limpiarse después de aproximadamente las primeras 48 horas de operación para limpiar el polvo de yeso y/o la basura de la construcción.
2. Hay tres maneras distintas de identificar cuándo el filtro necesita ser lavado por corriente.
   a. El indicador más preciso en los sistemas de piscina con un medidor de flujo es lavar por corriente cuando el flujo disminuye 30% comparado con el original (filtro limpio). Por ejemplo, si el flujo original era de 60 GPM, el filtro tiene que lavarse por corriente cuando el flujo se haya reducido en alrededor de 20 GPM (o 30%) a 40 GPM.
   b. Una indicación más subjetiva y menos precisa es observar la cantidad de agua que fluye de los dispositivos de dirección del flujo ubicados en la pared de la piscina. El filtro tiene que lavarse por corriente una vez que se haya detectado que el flujo se ha reducido en alrededor de 30%.
   c. La indicación que se usa más comúnmente pero es la menos precisa es lavar por corriente cuando la indicación del medidor del filtro aumenta 10 PSI sobre la inicial (filtro limpio).
3. Es importante no lavar por corriente el filtro sólamente en base a períodos de tiempo tal como cada tres días. También es importante fijarse que el lavado por corriente efectuado muy a menudo de hecho produce mala filtración. Los factores como las condiciones del tiempo, mucha lluvia, polvo y polen y las temperaturas del agua afectan la frecuencia del lavado por corriente. A medida que usa su piscina se va a dar cuenta de esas influencias.
4. Si en algún momento la presión de arranque después del lavado por corriente del filtro indica 4 a 6 PSI más alta que la presión de arranque normal, quiere decir que ha llegado el momento de lleva r a cabo el procedimiento de limpieza química.

Procedimiento de Lavado por Corriente del Filtro

⚠ ADVERTENCIA Para evitar el daño al eguipo y posibles lesiones, siempre desconecte la bomba antes decambiar las posiciones de la válvula.

1. Pare la bomba.
2. Asegúrese que la tubería de succión y la tubería de lavado por corriente estén abiertas de modo que el agua pueda entrar desde la piscina y salir pot la tubería del lavado por corriente. Ajuste la posición de la válvula según to siguiente:
   a. Si se usa una válvula de Agujeros Múltiples, ajústela en la posición de lavado por corriente (BACKWASH).
   b. Si se usa una válvula de Deslizamiento de Dos Posiciones, empuje la manilla para abajo a la posición de lavado por corriente y enganche el seguro torciendo la manilla.
3. **Aléjese del filtro** y haga arrancar la bomba.
4. Lave el filtro por corriente aproximadamente 3 a 5 minutos o hasta que el agua del lavado por corriente sale limpia.
5. Pare la bomba.
   a. Si está usando la válvula de Agujeros Múltiples, ajúste la válvula en la posición de enjuague y continúe con los pasos restantes.
   b. Si está usando la válvula de Deslizamiento de Dos Posiciones, vaya al paso 8.
6. **Aléjese del filtro** y haga arrancar la bomba.
7. Enjuague el filtro por aproximadamente 30 segundos.
8. Pare la bomba y ajuste la válvula según lo siguiente:
   a. Si está usando la válvula de Agujeros Múltiples, ajúste la válvula en la posición de filtro (FILTER).
   b. Si está usando la válvula de Deslizamiento de Dos Posiciones eleve la manilla a la posición de filtro y enganche el seguro de la válvula torciendo la manilla.
9. Asegúrese que la tubería de retorno de la piscina esté abierta de modo que el agua pueda fluir libremente de la piscina de vuelta a la piscina.
10. Abra el purgador de aire manual en el Cierre Triton II. Aléjese del filtro y haga arrancar la bomba.
11. Cierre el purgador de aire manual en el Cierre cuando se haya removido el aire y salga un chorro de agua parejo del purgador.
12. El filtro ahora ha empezado su ciclo de filtración. Tiene que asegurarse que el agua está volviendo a la piscina y tomar nota de la presión del filtro.
13. La presión del filtro en el paso 12 anterior no debe exceder la presión que se observó originalmente en el filtro cuando se hizo arrancar inicialmente. Si después de lavar por corriente, la presión está entre 4 a 6 PSI sobre la condición de arranque será necesario limpiar químicamente la capa de arena.

Procedimiento de Limpieza Química

1. Se recomienda utilizar un limpiador aprobado. Por favor comuníquese con un proveedor o un establecimiento de productos químicos para piscinas en su localidad para obtener el limpiador adecuado.

   Estos limpiadores van a remover aceites, escamas y óxido de la capa de arena en una operación de limpieza.
2. Mezcle una solución siguiendo las instrucciones del fabricante en la etiqueta.
3. Lave el filtro por corriente como se ha descrito anteriormente.
4. Si el filtro está por debajo del nivel de la piscina, desconecte la bomba y cierre la válvula apropiada para evitar que la piscina se vacíe.
5. Desconecte la bomba, abra el drenaje del filtro y permita que se vacíe el filtro. Ponga la válvula en la posición de lavado por corriente.
6. Después de que el filtro se haya drenado, cierre el drenaje del filtro y remueva la tapa del depósito del colador de la bomba.
7. Asegúrese que las tuberías de lavado por corriente estén abiertas.
8. Conecte la bomba y lentamente vacíe la solución de limpieza en el colador de la bomba con la bomba funcionando.
9. Continúe agregando solución hasta que la capa de arena esté saturada con la solución de limpieza. Vuelva a colocar la tapa en la bomba.
10. Apague la bomba y deje el filtro en la posición de lavado por corriente (BACKWASH). Permita que el filtro descanse de un día para el otro (12 horas).
11. Vuelva a colocar la tapa de la bomba y siga el procedimiento de lavado porcorriente que se ha descrito anteriormente.
12. No permita que la solución de limpieza caiga dentro de la piscina.

Preparacion del Filtro para el Invierno

1. En las áreas que tienen temperaturas de invierno que producen congelación, proteja el equipo de la piscina lavando el filtro por corriente.
2. Después de lavar el filtro por corriente,desconecte la bomba, abra el purgador de aire manual en el cierre y ajuste la válvula según lo siguiente:
   a. En las válvulas de Agujeros Múltiples, mueva la manilla a la posición de preparación para el invierno.*
   b. En la válvula de Deslizamiento de Dos Posiciones si es posible remueva el Conjunto del Pistón de la válvula, límpielo, lubríquelo y guárdelo en un lugar seco, por el invierno.
3. En los modelos TR40, 50, 60, y TR60 ClearPro, remueva el tapón tipo mariposa en la parte inferior del filtro. En el modelo TR100, TR100HD, TR100C, TR100C-3 y TR140, TR140C, TR140C-3 remueva la tapa del tapón de drenaje de 1-1/2”. El filtro se drenará muy lentamente y por lo tanto, se recomienda que el tapón de drenaje se deje afuera.

***AVISO:** La válvula de Agujeros Múltiples tiene que dejarse en la posición de preparación para el invierno durante la temporada en que la piscina no está en uso de modo que el desviador no tenga presión en el sello de caucho.

4. Drene todas las tuberías apropiadas del sistema.
5. Recomendamos que se cubra el equipo con una sábana de plástico o de lona impermeable para inhibir el deterioro debido al clima. No envuelva el motor de la bomba con el plástico.

Sección 4
Localización de Averías

Use la siguiente información de localización de averías para resolver posibles problemas con su Filtro Triton™.

ESTE FILTRO OPERA BAJO ALTA PRESIÓN

Cuando cualquier parte del sistema de circulación es revisado (por ejemplo, tapa, bomba, filtro, válvula(s), etc.), el aire puede ingresar al sistema y volverse presurizado. El aire presurizado puede hacer que la tapa superior se separe lo cual puede resultar en lesiones severas, muerte o daño de la propiedad. Para evitar este peligro potencial, siga estas instrucciones:

1. Si no está familiarizado con su sistema de filtración y/o calentador de piscina:
   a. **NO** intente ajustar o hacer una revisión sin consultar con su distribuidor o con un técnico de piscina calificado.
   b. Lea completamente la Guía del Usuario e Instalación antes de intentar usar, hacer una revisión o ajustar el sistema o calentador de filtración de la piscina.
2. Antes de volver a colocar la(s) válvula(s) y antes de empezar el ensamblaje, desmontaje o cualquier otro servicio del sistema de circulación: (A) Apague la bomba (**TURN OFF)** y desconecte **(SHUT OFF)** cualquiera de los controles automáticos para asegurarse que el sistema NO se encienda repentinamente durante la revisión; (B) abra la válvula de purga de aire manual; (C) espere hasta que toda la presión se haya liberado.
3. Cuando instale la tapa del filtro **SIGA EXACTAMENTE LAS ADVERTENCIAS DE LA TAPA DEL FILTRO.**
4. Una vez que complete el servicio en el sistema de circulación **SIGA EXACTAMENTE LAS INSTRUCCIONES INICIALES.**
5. Mantener el sistema de circulación adecuadamente. Remplazar las partes deterioradas dañadas (Ej., tapa, indicador de presión, válvula(s), anillos “O”, etc.).
6. Asegúrese que el filtro esté montado y colocado adecuadamente de acuerdo con las instrucciones provistas.

Nota: Desconecte la energía de la unidad antes de intentar hacer un servicio o reparación.

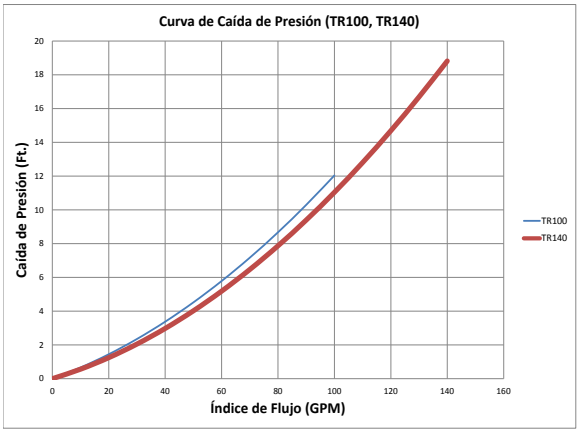
Problemas y Acciones Correctivas

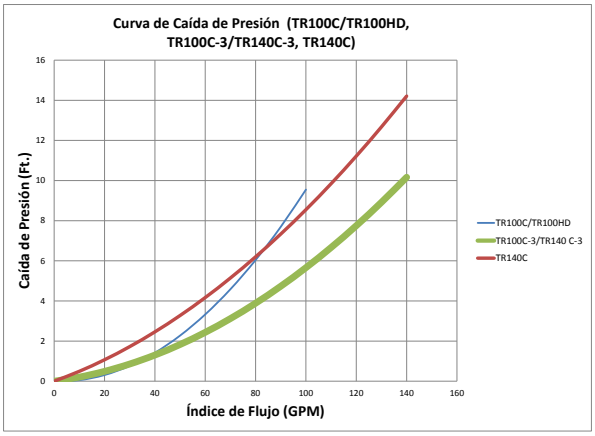
PROBLEMA	CAUSA	SOLUCIÓN
El agua de la piscina no está to suficientemente limpia.	1. La química de la piscina no es adecuada para inhibir el crecimiento de algas. 2. Lavado por corriente muy frecuente. 3. Cantidad inapropiada o tamaño de la arena equivocada. 4. Velocidad de rotación inadecuada.	Mantenga la química de la piscina o consulte con el técnico de servicio de la piscina. Permita que la presión se acumule a 10 psi sobre la condición del filtro limpio antes de hacer el lavado por corriente. Revise el espacio libre de la capa de arena y el tamaño de la arena o consulte con el técnico de servicio de la piscina. Haga funcionar el sistema por un tiempo más largo o consulte con el distribuidor o con el técnico de servicio de la piscina.
Alta presión del filtro.	1. Lavado por corriente insuficiente. 2. La capa de arena tapada con depósitos minerales. 3. La válvula está parcialmente cerrada.	Lave por corriente hasta que el agua efluente salga transparente. Limpie el filtro químicamente. Abra la válvula o remueva la obstrucción en la tubería de retorno.
Ciclos cortos.	1. Lavado por corriente inadecuado. 2. La química de la piscina no es adecuada para inhibir el crecimiento de algas. 3. La capa de arena está tapada. 4. La velocidad del fiujo demasiado alta.	Lave por corriente hasta que el agua efluente salga transparente. Mantenga la química de la piscina o consulte con el técnico de servicio de la piscina. Remueva manualmente 1” de la superficie superior de la capa de arena y cámbiela por arena nueva y limpie químicamente toda la arena según se ha descrito en la seccion Procedimiento de Limpieza Química. Restrinja el flujo a la capacidad del filtro.

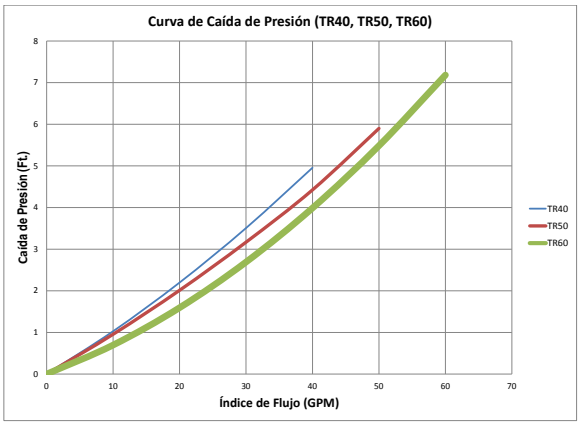
PROBLEMA	CAUSA	SOLUCIÓN
Flujo de retorno a la piscina disminuido. Presión del filtro baja.	1. Obstrucción en el colador de pelusa y cabello de la bomba. 2. Obstrucción en la bomba. 3. Obstrucción en la tubería de succión a la bomba.	Limpie el canasto en el colador. Desmonte y limpie la bomba. Limpie el canasto despumador. Remueva la obstrucción en las tuberías. Abra las válvulas en la tubería de succión.
La arena vuelve a la piscina.	1. Lateral debajo del drenaje quebrado.	Cambie el lateral dañado o roto.
La arena se pierde en el desecho.	1. Velocidad del lavado por corriente demasiado alta. 2. Tamaño de la arena inadecuado. 3. El colador de aire está dañado o falta.	Reduzca la velocidad del flujo del lavado por corriente. Cambie a la arena apropiada. Cambie los componentes dañados.
Fuga en el cierre.	1. Cierre mal apretado. 2. Mugre o contaminación en la superficie de sellado. 3. Parte dañada.	Desconecte la bomba, alivie la presión del estanque, abra el purgador de aire, apriete el cierre en forma adecuada. Desconecte la bomba, alivie la presión del estanque, abra el purgador de aire, remueva el cierre y limpie todas las superficies de sellado. Vuelva a montar el cierre en forma adecuada. Lo mismo que to anterior, excepto que cambie el anillo O dañado, el cierre, el estanque o cualquier combinación de las partes según sea necesario.
Tapón que gotea.	1. Conjunto de tapón apretado. 2. Tierra o contaminación en las superficies de sello. 3. Parte dañada.	Apague la bomba, alivie la presión del tanque, abra el purgador de aire, quite el cierre y quite la arena para accesar el tapón que gotea en el TR40, 50, 60,TR60 ClearPro, 100, 100C, 140 ó 140C. Sostenga el tapón de 2" y apriete la tuerca de seguridad interna de 2". En el TR100C-3 o TR140C-3 usando la llave especial 154020, sostenga el espaciador con brida de 3" y con la llave 154019, apriete el adaptador con brida de 3". Apriete 1/2 vuelta más manualmente. Apague la bomba, alivie la presión del tanque, abra el purgador de aire, quite el cierre y quite la arena para accesar el tapón que gotea. Quite las adherencias internas del tanque y quite el conjunto del tapón. Limpie todas las superficies de acoplamiento y los sellos. Reemplace el conjunto del tapón y tenga cuidado para instalar adecuadamente. Apriete el conjunto como se indica anteriormente. Igual que en el punto anterior, excepto que reemplace la parte o combinación de partes dañadas.

Sección 5
Partes de Repuesto

Curva de Caída de Presión para los Filtros de Arena Series Triton™

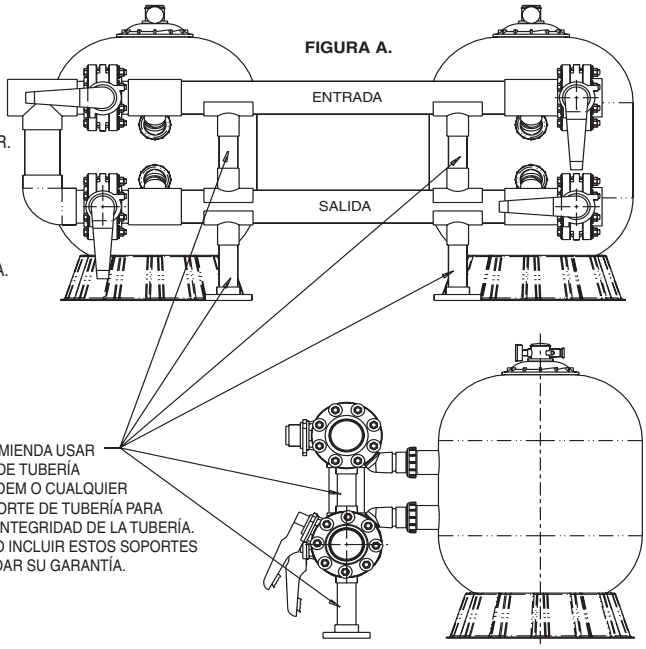






Instalación de Filtros Múltiples con Kits de Tuberías de Filtros Tandem

PRECAUCIÓN: CUANDO SE INSTALAN FILTROS MÚLTIPLES, RECOMENDAMOS AMPLIAMENTE USAR UN KIT DE TUBERÍA DE FILTRO TANDEM PENTAIR. ESTOS KITS INCLUYEN OPORTES DE CAÑERÍAS (ENTRE LA TUBERÍA DE ENTRADA Y SALIDA Y ENTRE LA TUBERÍA DE SALIDA Y EL SUELO) PARA ASEGURAR LA INTEGRIDAD DE LA INSTALACIÓN, VÉASE FIGURA A.

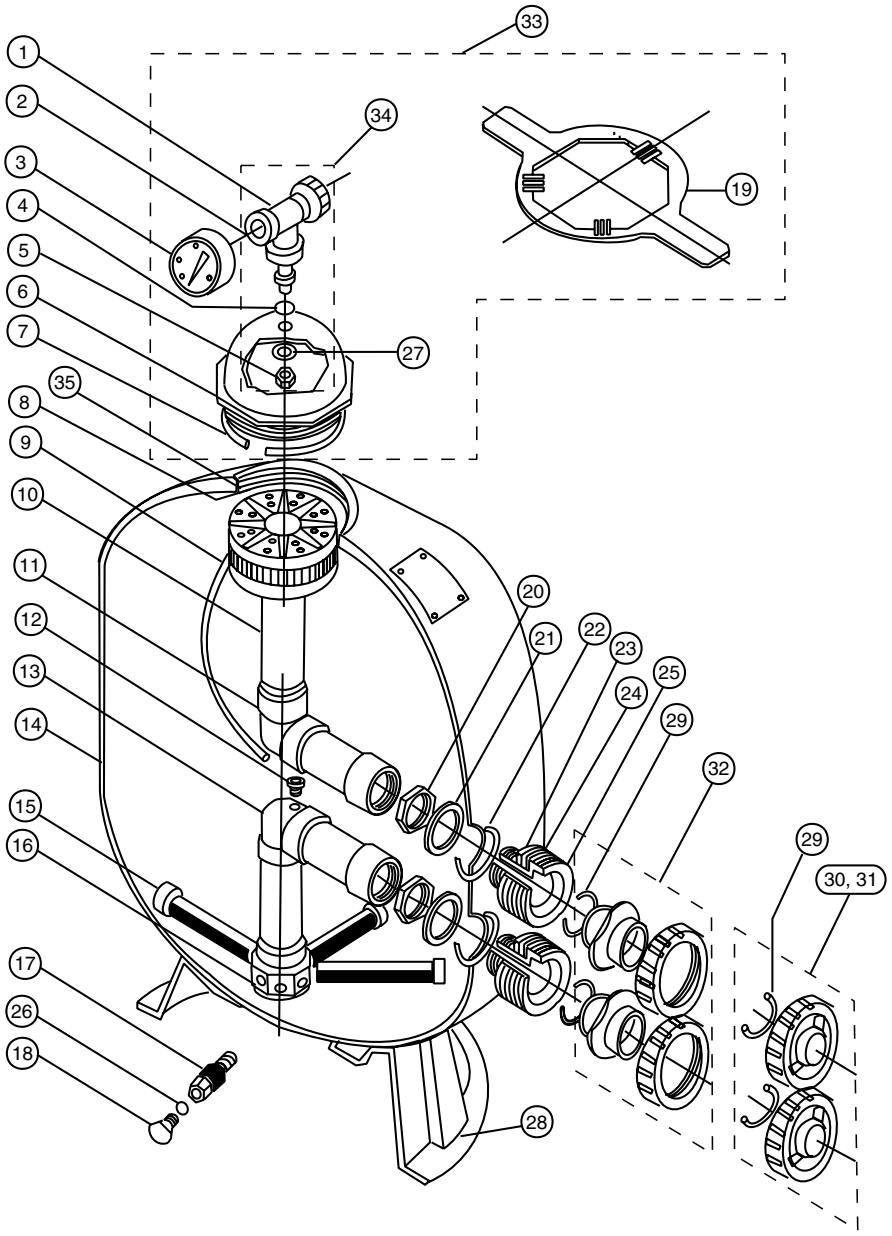


PRECAUCIÓN: PENTAIR RECOMIENDA USAR EL(LOS) KIT(S) DE TUBERÍA DE FILTRO TANDEM O CUALQUIER CLASE DE SOPORTE DE TUBERÍA PARA ASEGURAR LA INTEGRIDAD DE LA TUBERÍA. EN CASO DE NO INCLUIR ESTOS SOPORTES PODRÍA INVALIDAR SU GARANTÍA.

FILTROS DE ARENA DE FIBRA DE VIDRIO TRITON™ II Y TR60 CLEARPRO

Partes de Repuesto

TR40
TR50
TR60
TR60 ClearPro
TR100
TR140



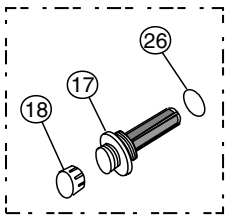
DETALLE A
Después de Dec. 1, 1991
ROSCA CONTRAFUERTE DE 6"

DETALLE B
Antes de Dec. 1, 1991
ROSCA "V" DE 6"

Los filtros fabricados después del 1 de diciembre de 1991 utilizan una rosca de contrafuerte de 6 pulg. en la apertura superior del tanque del filtro y la tapa, véase el Detalle A.

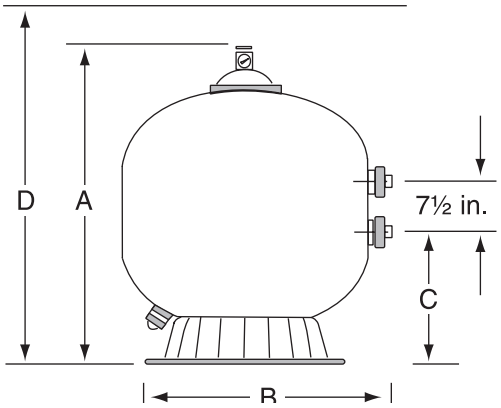
Los filtros fabricados antes del 1 de diciembre de 1991 utilizan una rosca de tipo. "V" de 6 pulg., véase el Detalle B.

Las tapas de 6 pulg. de los Detalles A. y B. NO se pueden intercambiar.



★ Usado en Filtros TR100 y TR140.

Espacio Vertical Necesario



MODELO	DIM. A.	DIM. B.	DIM. C.	DIM. D.
TR40	30½ in.	19½ in.	10¾ in.	32½ in.
TR50	34¾ in.	21½ in.	11-7/8 in.	36¾ in.
TR60	35½ in.	24½ in.	13-5/8 in.	37½ in.
TR60 ClearPro	35½ in.	24½ in.	13-5/8 in.	37½ in.
TR100	39¾ in.	30½ in.	16¼ in.	41¾ in.
TR140	45¼ in.	36½ in.	8¾ in.	47¼ in.

ARTICULO	NO. DEL REPUESTO	TRITON II Y TR60 CLEARPRO DESCRIPCION
1	154689	CONJUNTO PURGADOR DE AIRE/T
2	154700	ADAPTADOR - PURGADOR DE AIRE DE LATON
3	155050	MEDIDOR - PRESION DE MONTAJE TRASERA
4	154661	ANILLO-O - ADAPTADOR DEL PURGADOR DE AIRE
5	154664	TUERCA - 3/8"- 16 ACERO INOXIDABLE
6	154570	CIERRE - ROSCA TRAPEZOIDAL 6" - (VEA DETALLE A)
6	154559	CIERRE - ROSCA "V" 6" - NEGRO (VEA DETALLE B)
7	154493	ANILLO-O - CIERRE
8	150035	COLADOR - ECL/TR
9	150039	TUBERIA - ALIVIO DE AIRE TR40
9	150040	TUBERIA - ALIVIO DE AIRE TR50/60
9	150041	TUBERIA - ALIVIO DE AIRE TR100
9	150042	TUBERIA - ALIVIO DE AIRE TR140
10	154598	CONJUNTO DIFUSOR TR40/50
10	154599	CONJUNTO DIFUSOR TR60
10	154462	CONJUNTO DIFUSOR TR100
10	154906	CONJUNTO DIFUSOR TR140
11	154803	CONJUNTO DE TUBERIA - SUPERIOR TR40
11	156814	CONJUNTO DE TUBERIA - SUPERIOR TR50
11	154533	CONJUNTO DE TUBERIA - SUPERIOR TR60
11	154426	CONJUNTO DE TUBERIA - SUPERIOR TR100
11	154500	CONJUNTO DE TUBERIA - SUPERIOR TR140
12	150036	CONECTOR TUBERIA DE ALIVIO DE AIRE
13	154801	CONJUNTO DE TUBERIA - INFERIOR TR40
13	156816	CONJUNTO DE TUBERIA - INFERIOR TR50
13	154805	CONJUNTO DE TUBERIA - INFERIOR TR60
13	155284	CONJUNTO DE TUBERIA - INFERIOR TR60 ClearPro-1/4 Vuelta Lateral
13	154807	CONJUNTO DE TUBERIA - INFERIOR TR100
13	154489	CONJUNTO DE TUBERIA - INFERIOR TR140
14	154636	CONJUNTO TANQUE Y PIE TR40 - ROSCA TRAPEZOIDAL 6"- (VEA DETALLE A)
14	154637	CONJUNTO TANQUE Y PIE TR50 - ROSCA TRAPEZOIDAL 6"- (VEA DETALLE A)
14	154638	CONJUNTO TANQUE Y PIE TR60 - ROSCA TRAPEZOIDAL 6"- (VEA DETALLE A)
14	154639	CONJUNTO TANQUE Y PIE TR100 - ROSCA TRAPEZOIDAL 6"- (VEA DETALLE A)
14	154640	CONJUNTO TANQUE Y PIE TR140 - ROSCA TRAPEZOIDAL 6"- (VEA DETALLE A)

FILTROS DE ARENA DE FIBRA DE VIDRIO TRITON™ II y TR60 CLEARPRO

Partes de Repuesto

TR40
TR50
TR60
TR60 ClearPro
TR100
TR140

NOTAS

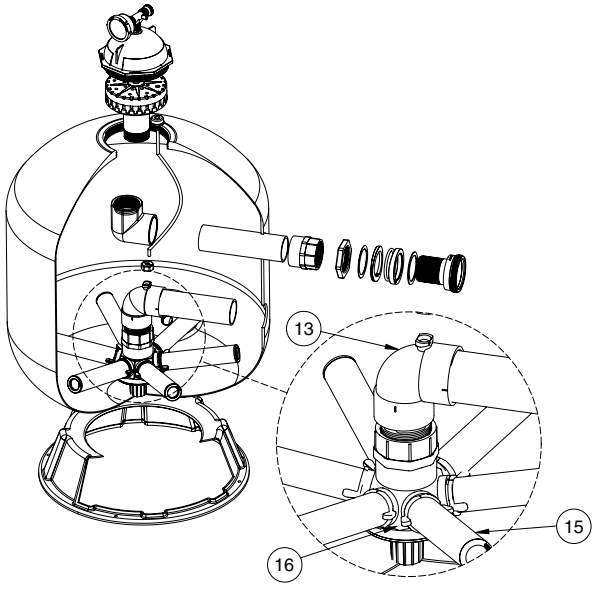
Los filtros fabricados después del 1 de diciembre de 1991 utilizan una rosca de contrafuerte de 6 pulg. en la apertura superior del tanque del filtro y la tapa, véase el Detalle A.

Los filtros fabricados antes del 1 de diciembre de 1991 utilizan una rosca de tipo. "V" de 6 pulg., véase el Detalle B.

Las tapas de 6 pulg. de los Detalles A. y B. NO se pueden intercambiar.

Para determinar la fecha de fabricación los 4 primeros dígitos del número de serie indican el mes y año en el que el producto fue fabricado.

TR60 ClearPro - 1/4 Vuelta Lateral para filtros fabricados después de que Mayo 15, 2007 utilice Conjunto de Tuberia - Inferior P/N 155284.



DETAILED VIEW

Detalle para Triton™ II - TR60 Filtros con ClearPro Technology™

ARTICULO	NO. DEL REPUESTO	TRITON II Y TR60 CLEARPRO DESCRIPCION
15	152290	LATERAL - 6-11/16" L TR/40/50/60, 8 requerir
15	150085	LATERAL - 1/4 Vuelta TR60, 6 requerir
15	150088	LATERAL - TR60 ClearPro, 6 requerir
15	152202	LATERAL - 9-1/8" L TR100, 8 requerir ❷
15	154543	LATERAL - 6-1/2" L TR100, 8 requerir ❶
15	154540	LATERAL 12" L TR140, 8 requerir
16	154763	CUBO LATERAL TR40/50/60
16	152222	CUBO LATERAL TR60 ClearPro
16	154453	CUBO LATERAL TR100/140
17	152220	DRENAJE DE ARENA 2" ❻
17	154698	GRIFO - 3/4" NPT DRENAJE DE ARENA ❹
17	154685	GRIFO - 1/2" NPT DRENAJE DE ARENA ❸
18	154871	TAPA ENROSCADA 1½" ❻
18	357161	TAPON 1/4" NPT DRENAJE
19	154512	LLAVE CIERRE 6"
19	154510	LLAVE CIERRE ALUMINIO
19	151608	LLAVE CIERRE 8½" ALUMINIO
20	154412	TUERCA DE SEGURIDAD - INTERNA 2", 2 requerir
21	154416	ESPACIADOR - INTERNO 2", 2 requerir
22	154492	ANILLO-O - TAPON 2", 2 requerir
23	154408	ESPACIADOR - EXTERNO 2", 2 requerir
24	154538	EMPAQUETADURA - TAPON 2", 2 requerir
25	154405	TAPON - 2", 2 requerir
26	274494	ANILLO-O - 3/16" X 2-5/8" i.d. ❻
26	192115	ANILLO-O - #2-12 ADAPTADOR DE AIRE
27	154418	ARANDELA 3/8" ACERO INOXIDABLE
28	154926	PIE - DIA.16", TR40/50 (NOTA 1)
28	154520	PIE - DIA.19", TR60
28	154596	PIE - DIA. 24", TR100/140 (NOTA 1)
29	274494	ANILLO-O - ADAPTADOR DE VALVULA, 2 requerir
30	271092	JUEGO - ADAPTADOR DE ROSCA 2" ROSCADO ❺
31	271094	JUEGO - ADAPTADOR DE ROSCA 1½" ROSCADO ❺
32	271096	JUEGO - ADAPTADOR DE ROSCA 2 & 1½" SLP ❺
33	154641	JUEGO CIERRE, ROSCA TRAPEZOIDAL 6" - NEGRO (VEA DETALLE A)
33	154697	JUEGO CIERRE, ROSCA "V" 6" - MARRÓN (VEA DETALLE B)
33	154856	JUEGO CIERRE, ROSCA TRAPEZOIDAL 8½" - NEGRO
34	154687	PAQUETE DE ACCESORIOS - COMPLETO (NOTA 2)
35	154611	ESPACIADOR - COLADOR VENTILACION AIRE 3-3/4" - TR40
35	154612	ESPACIADOR - COLADOR VENTILACION AIRE 4-1/2" - TR50/60
35	154613	ESPACIADOR - COLADOR VENTILACION AIRE 5-1/2" - TR100
35	154614	ESPACIADOR - COLADOR VENTILACION AIRE 5" - TR140
	154402	CINTA - MONTAJE PIE TR40/50/60, 3 requerir
	154407	CINTA - MONTAJE PIE TR100/140, 3 requerir
	151602	LLAVE TAPON 2"
	154714	JUEGO - TAPON, INCLUYE ARTICULOS 20 AL 25

FILTROS DE ARENA DE FIBRA DE VIDRIO TRITON™ II y TR60 CLEARPRO

Partes de Repuesto

TR40
TR50
TR60
TR60 ClearPro
TR100
TR140

NOTAS

Los filtros fabricados después del 1 de diciembre de 1991 utilizan una rosca de contrafuerte de 6 pulg. en la apertura superior del tanque del filtro y la tapa, véase el Detalle A.

Los filtros fabricados antes del 1 de diciembre de 1991 utilizan una rosca de tipo. "V" de 6 pulg., véase el Detalle B.

Las tapas de 6 pulg. de los Detalles A. y B. NO se pueden intercambiar.

Para determinar la fecha de fabricación los 4 primeros dígitos del número de serie indican el mes y año en el que el producto fue fabricado.

❶ Usado en Filtros fabricados antes del 5-85.
❷ Usado en Filtros fabricado después del 5-85.
❸ Usado en Filtros fabricados antes del 3-83.
❹ Usado en Filtros fabricados después del 3-83 hasta el 3-96
❺ Para Instalaciones sin Válvula (Par).
❻ Usado en Filtros TR100 y 140.

NOTA 1: Para reemplazar el pie del tanque se requiere el uso de una cinta para montaje de pie. Véase N/P.

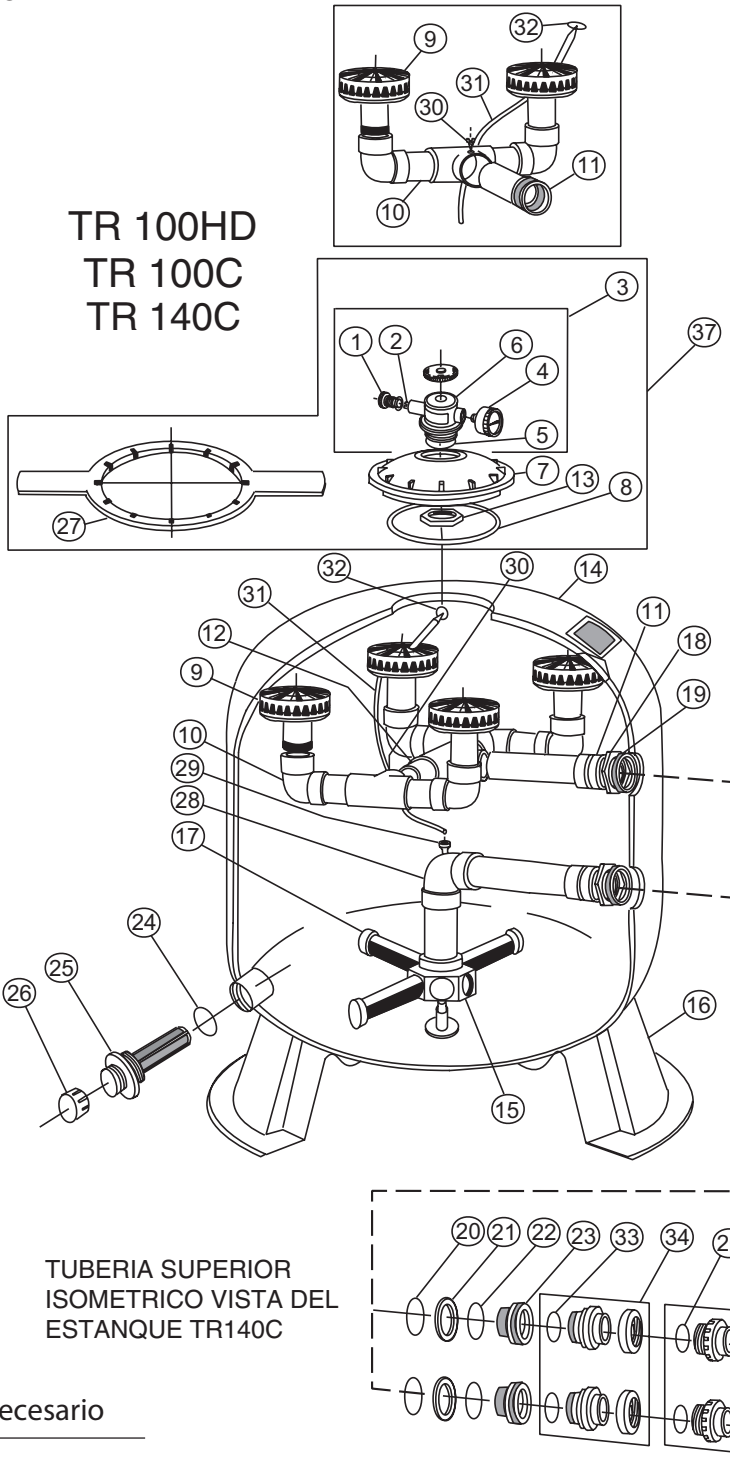
NOTA 2: El paquete de accesorios incluye artículos 1, 2, 4, 5 y 27.

FILTROS DE ARENA DE FIBRA DE VIDRIO TRITON™ 100HD, 100C y 140C

Partes de Repuesto

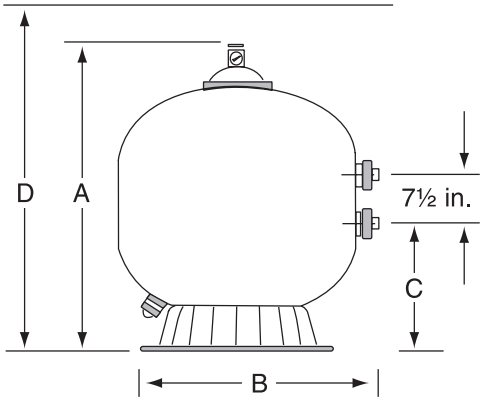
TR100HD
TR100C
TR140C

TR 100HD
TR 100C
TR 140C



TUBERIA SUPERIOR
ISOMETRICO VISTA DEL
ESTANQUE TR140C

Espacio Vertical Necesario



MODELO	DIM. A	DIM. B	DIM. C	DIM. D
TR100C	39¾ in.	30½ in.	16½ in.	43¾ in.
TR140C	45¼ in.	36½ in.	18¾ in.	49¼ in.
TR100HD	39¾ in.	30½ in.	16¼ in.	41¾ in.

ARTICULO	NO. DEL REPUESTO	TRITON 100HD, 100C Y 140C DESCRIPCION
1	273512	PURGADOR DE AIRE CON ANILLO-O
2	273513	ANILLO-O TORNILLO DEL PURGADOR DE AIRE
3	273564	CONJUNTO DE ALIVIO DE AIRE MANUAL
4	155050	MEDIDOR DE PRESION
4	991481	MEDIDOR DE PRESION TR100C/TR100HD ❷
5	274494	ANILLO-O - 3/16" X 2-5/8" i.d.
6	273564	VALVULA DE CUERPO MAQUINADO
7	154575	CIERRE ROSCA TRAPEZOIDAL 8½"
8	152509	ANILLO CUADRADO 8½"
9	154599	DIFUSOR (SE REQUIEREN 2 EN TR100C/ TR100HD) ❶
9	154599	DIFUSOR (SE REQUIEREN 4 EN TR140C) ❶
10	156355	CONJUNTO DE TUBERIA SUPERIOR TR100C/ TR100HD/TR140C ❶
11	156344	ENTRADA AL CONJUNTO DE TUBERIA SUPERIOR TR100C/TR100HD/TR140C
12	156354	CONJUNTO - CONEXION DE TUBERIA SUPERIOR TR140C
13	154412	TUERCA-2" INTERNA
14	153430	CONJUNTO TANQUE Y PIE TR100C/TR100HD ROSCA TRAPEZOIDAL 8½" NEGRO
14	153431	CONJUNTO TANQUE Y PIE TR140C ROSCA TRAPEZOIDAL 8½" NEGRO
14	156224	CONJUNTO TANQUE Y PIE TR100HD - ROSCA TRAPEZOIDAL 6"- NEGRO HD
15	154453	CUBO LATERAL TR100C/TR100HD/TR140C
16	154596	PIE - 24" DIAMETRO - TR100C/TR100HD/ TR140C
17	152202	LATERAL 9-1/8" L TR100C/TR100HD
17	154540	LATERAL 12" L TR140C
18	154412	TUERCA DE SEGURIDAD INTERNA 2"
19	154416	ESPACIADOR INTERNO 2"
20	154492	ANILLO-O TAPON 2"
21	154408	ESPACIADOR EXTERNO 2"
22	154538	EMPAQUETADURA
23	154405	TAPON - 2"
24	274494	ANILLO-O - 3/16" X 2-5/8" i.d.
	154407	CINTA MONTAJE PIE
25	152220	MONTAJE - DRENAJE DE ARENA DE 2"
26	154871	TAPA CON ROSCA
27	154527	LLAVE - CIERRE 8½"
27	151608	LLAVE - CIERRE 8½" ALUMINIO

FILTROS DE ARENA DE FIBRA DE VIDRIO TRITON™ 100HD, 100C y 140C

Partes de Repuesto

TR100C
TR140C
TR100HD

ARTICULO	NO. DEL REPUESTO	TRITON 100HD, 100C Y 140C DESCRIPCION
28	154807	CONJUNTO DE TUBERIA INFERIOR TR100C/TR100HD
28	154489	CONJUNTO DE TUBERIA INFERIOR TR140C
29	150036	TUBO CONECTOR DE ALIVIO DE AIRE
30	273071	TORNILLO #14 18-8 ❶
31	150041	TUBO ALIVIO DE AIRE TR100C/TR100HD
31	150042	TUBO ALIVIO DE AIRE TR140C
32	150035	COLADOR - ALIVIO DE AIRE
33	274494	ANILLO-O ADAPTADOR DE VALVULA
34	271096	JUEGO - ADAPTADOR SIN VALVULA 2" Y 1½" PAR SLP
35	271092	JUEGO - ADAPTADOR SIN VALVULA 2" PAR ROSCADO
36	271094	JUEGO - ADAPTADOR SIN VALVULA 1½" PAR ROSCADO
37	154856	JUEGO - CIERRE ROSCA TRAPEZOIDAL 8½" NEGRO

NOTAS

❶ Se requieren cantidades diferentes para los Filtros TR100C y TR140C.

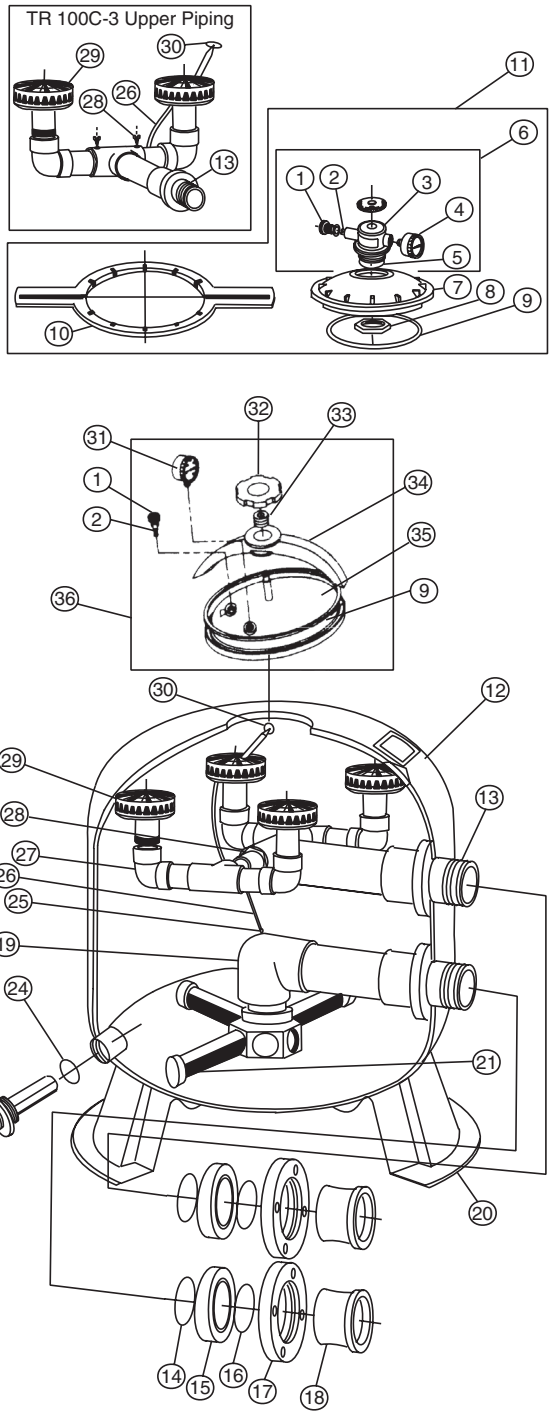
❷ Usado en Filtros TR100HD

ESPAÑOL

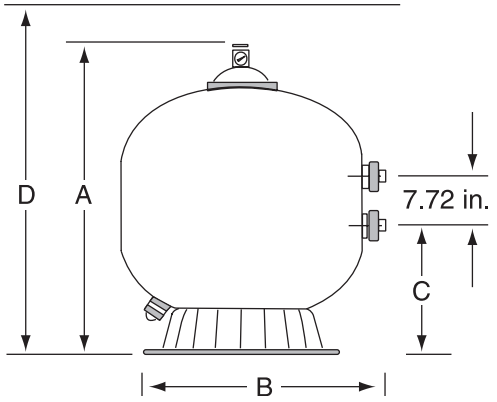
FILTROS DE ARENA DE FIBRA DE VIDRIO TRITON™ 100C-3 y 140C

Partes de Repuesto

TR100C-3
TR140C-3



Espacio Vertical Necesario



MODELO	DIM. A	DIM. B	DIM. C	DIM. D
TR100C-3	39¾ in.	30½ in.	16-1/16 in.	43¾ in.
TR140C-3	45¼ in.	36½ in.	18½ in.	49¼ in.

ARTICULO	NO. DEL REPUESTO	TRITON 100C-3 Y 140C-3 DESCRIPCION
1	273512	PURGADOR DE AIRE CON ANILLO-O ❷❸
2	273513	ANILLO-O TORNILLO DEL PURGADOR DE AIRE ❷
3	273564	VALVULA DE CUERPO MAQUINADO ❷
4	155050	MEDIDOR DE PRESION ❷
5	154494	ANILLO-O - ADAPTADOR 6" ❷
6	273564	CONJUNTO DE ALIVIO DE AIRE MANUAL ❷
7	154575	CIERRE 8½" ❷
8	154412	TUERCA-2" INTERNA ❷
9	152509	ANILLO CUADRADO - CIERRE ❷❸
10	154527	LLAVE - CIERRE 8½" ❷
11	154856	JUEGO - CIERRE ROSCA TRAPEZOIDAL 8½" ❷
11	156842	JUEGO - CIERRE CON JUNTA 8½" ❹
12	153430	CONJUNTO ESTANQUE Y PIE TR100C-3 TRAPEZOIDAL
12	153431	CONJUNTO ESTANQUE Y PIE TR140C-3 TRAPEZOIDAL
13	154007	CONJUNTO TUBERIAS SUPERIORES TR100C-3
13	154008	CONJUNTO TUBERIAS SUPERIORES TR140C-3
14	154005	ANILLO-O PARKER 2-343, 2 requerir
15	154002	ESPACIADOR DE 3", 2 requerir
16	154004	ANILLO-O PARKER 2-342, 2 requerir
17	154003	BRIDA DE 3", 2 requerir
18	154001	ADAPTADOR CON BRIDA DE 3", 2 requerir
19	154009	CONJUNTO TUBERIAS INFERIORES TR100C-3
19	154010	CONJUNTO TUBERIAS INFERIORES TR140C-3
20	154596	PIE- 24" DE DIAMETRO TR100C-3/140C-3
21	152202	LATERAL 9" TR100C-3, 8 requerir
21	154540	LATERAL 12" TR140C-3, 8 requerir
22	154871	TAPA CON ROSCA DE 1½"
23	152220	MONTAJE DRENAJE DE ARENA DE 2"
24	274494	ANILLO-O - 3/16" X 2-5/8" i.d., 2 requerir
25	154441	CONECTOR TUBO DE ALIVIO DE AIRE
26	150041	TUBO DE ALIVIO DE AIRE TR100C-3 (23")
26	150042	TUBO DE ALIVIO DE AIRE TR140C-3 (27")
27	154018	CONJUNTO TUBERIAS DEL DIFUSOR TR140C-3, 2 requerir
28	552474	TORNILLO #10-1½", 2 requerir

FILTROS DE ARENA DE FIBRA DE VIDRIO TRITON™ 100C-3 y 140C
Partes de Repuesto

TR100C-3
TR140C-3

ARTICULO	NO. DEL REPUESTO	TRITON 100C-3 Y 140C-3 DESCRIPCION
29	154599	CONJUNTO DIFUSOR (SE REQUIEREN 2 PARA TR100C-3)
29	154599	CONJUNTO DIFUSOR (SE REQUIEREN 4 PARA TR140C-3)
30	150035	COLADOR - ECL/TR
31	190058	MEDIDOR DE PRESION 1/4" psi ❸
32	154581	MANIJA - OVALADO TRITON ❸
33	154582	RESORTE - OVALADO TRITON ❸
34	154579	PUENTE - OVALADO TRITON ❸
35	154576	CIERRE - OVALADO ❸
36	156841	JUEGO DE CIERRE OVALADO TRITON ❶❸

NOTAS

❶ P/N 156841 incluye artículos: 1, 9, y 31al 35.
❷ Usado en Filtros fabricados antes del 3-97.
❸ Usado en Filtros fabricado después del 3-97.
❹ Usado en Filtros fabricado después del 4-15.

ESPAÑOL

NOTAS

CONSERVE ESTAS INSTRUCCIONES.

PENTAIR

TRITON™

FILTRES À SABLE EN FIBRE DE VERRE

MODELS: TR 40, TR 50, TR 60, TR 100, TR 140, TR 100HD, TR 100C, TR 140C, TR 100C-3, TR 140C-3 et TR 60 avec CLEARPRO TECHNOLOGY™

FRANÇAIS

MANUEL D'INSTALLATION ET D'UTILISATION

CONSIGNES DE SÉCURITÉ IMPORTANTES

PRIÈRE DE LIRE ET D'OBSERVER TOUTES LES CONSIGNES

CONSERVER CETTE NOTICE

SERVICE CLIENTS / SUPPORT TECHNIQUE

Si vous avez des questions liées aux pièces de rechange, et aux produits de piscine de Pentair Aquatic Systems, veuillez utiliser les coordonnées suivantes:

Service Clients

(8 A.M. to 4:30 P.M. — 8h00 à 17h00 heure normale du Pacifique)

Téléphone: (800) 831-7133

Télécopie: (800) 284-4151

Site web
visitez www.pentairpool.com ou www.sta-ritepool.com pour trouver des renseignements concernant Pentair.

Support Technique

Sanford, Caroline du Nord (8h00 à 17h00 heure normale de l'Est)

Téléphone: (919) 566-8000

Télécopie: (919) 566-8920

Moorpark, Californie (8h00 à 17h00 heure normale du Pacifique)

Téléphone: (805) 553-5000 (Ext. 5591)

Télécopie: (805) 553-5515

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P/N 154901 Rev. H 3/18/15

IMPORTANTES CONSIGNES DE SÉCURITÉ

Mise en Garde Importante:

Ce manuel fournit les instructions de mise en service et d'utilisation des Filtres à Sable en Fibre de Verre de la Série Triton™. Consulter Pentair Water Pool and Spa™ pour toute question relative à cet équipement.

l'Attention de l'Installateur: Ce manuel contient d'importantes informations concernant l'installation, l'exploitation et l'utilisation de ce produit de manière sûre. Cette information doit être fournie au propriétaire et/ou à l'exploitant de cet équipement après l'installation, ou doit-être laissé sur ou bien à proximité de cet équipement.

l'Attention de l'Utilisateur: Ce manuel contient d'importantes informations qui vous aideront à utiliser et entretenir ce filtre. Conservez-le pour pouvoir le consulter ultérieurement.

⚠ AVERTISSEMENT Avant l'installation de ce produit, lire et respecter la totalité des avertissements et instructions inclus. Ne pas respecter les notices de sécurité peut entrainer des blessures graves, la mort ou l'endommagement du bien. Appeler le (800) 831-7133 pour obtenir des copies supplémentaires gratuites de ces instructions.

Information et Sécurité du Consommateur

Les Filtres à Sable en Fibre de Verre de la Série Triton™ sont conçus et fabriqué pour donner de nombreuses années de fonctionnement sûr et fiable dès l'instant où sont installés, exploités et entretenus en accord avec les informations fournies dans le présent manuel et les normes d'installation référencés dans les sections suivantes. Les mises en garde concernant la sécurité et les précautions sont identifiés par le symbole " ⚠ " tout au long du manuel. Assurez-vous de lire et de respecter la totalité des avertissements et précautions.

⚠ AVERTISSEMENT

CE FILTRE EST SOUMIS À HAUTE PRESSION

Lorsque l'on intervient sur l'un ou l'autre des composants du circuit de circulation (ex : bouchon, couvercle, pompe, filtre, robinet(s) etc.), l'air peut pénétrer n'importe où dans le circuit et devenir pressurisé. L'air sous pression peut occasionner une séparation du couvercle supérieur pouvant entrainer des blessures sérieuses, la mort ou l'endommagement du bien. Pour éviter ce danger potentiel, respectez ces instructions:

1. Si vous ne connaissez pas bien votre système de filtration de piscine et/ou de réchauffage:
   a. **N'essayez Pas** de procéder à des réglages ou effectuer l'entretien sans consulter votre revendeur, ou un technicien de piscine qualifié.
   b. Lisez la totalité du Manuel d'Installation et d'Utilisation avant de tenter d'utiliser, entretenir ou régler le système de filtration ou de réchauffage.
2. Avant de remettre la (les) vanne(s) en position et avant de commencer le montage, démontage, ou toute autre intervention sur le circuit : (A) Mettre la pompe sur **ARRÊT** et mettre **HORS SERVICE** tout automatisme pour garantir que le système ne soit PAS démarré par inadvertance pendant l'opération d'entretien ; (B) ouvrir le robinet manuel de purge d'air ; (C) attendre jusqu'à ce que toute pression soit évacuée.
3. Lors du montage du couvercle de filtre **RESPECTER EXACTEMENT LES INSTRUCTIONS RELATIVES AU COUVERCLE DE FILTRE.**
4. Une fois l'intervention sur le circuit terminée, **RESPECTER EXACTEMENT LES INSTRUCTIONS DE MISE EN SERVICE.**
5. Maintenir le circuit de circulation correctement. Remplacer les pièces usées ou endommagées immédiatement (par exemple : couvercle, manomètre, vanne(s), joints toriques, etc..)
6. S'assurer que le filtre est correctement monté et positionné suivant les instructions fournies.

IMPORTANTES CONSIGNES DE SÉCURITÉ

⚠ AVERTISSEMENT

Ce filtre doit être installé par un électricien agréé ou certifié ou une personne d'entretien de piscine qualifiée en accord avec le Code Electrique National (National Electrical Code) et toute normes ou ordonnances locales applicables. Une installation incorrecte peut entrainer la mort ou des blessures graves aux utilisateurs de piscine, installateurs ou autres personnes, et peut également occasionner des dommages aux biens.

Toujours couper l'alimentation électrique du circuit de circulation de la piscine au niveau du disjoncteur électrique avant de procéder à l'entretien du filtre. S'assurer que le circuit déconnecté est verrouillé ou correctement identifié de façon à ce qu'il ne puisse être enclenché pendant que vous travaillez sur le filtre. Ne pas respecter cela peut entrainer la mort ou des blessures sérieuses aux installateurs, utilisateurs de piscine, ou autres personnes par électrocution.

⚠ AVERTISSEMENT

Ne pas mettre en fonctionnement le filtre avant que vous ayez clairement lu et compris les instructions de fonctionnement et les messages d'avertissement concernant la totalité des équipements constituant le circuit de circulation de la piscine. Les instructions suivantes sont conçues pour guider la mise en service initiale du filtre lors d'une installation générale de piscine. Un manquement au bon suivi des instructions de fonctionnement et aux messages d'avertissement peut occasionner un endommagement des biens, de sérieuses blessures aux personnes, ou la mort.

⚠ AVERTISSEMENT

Pour réduire le risque de blessure, ne pas permettre aux enfants d'utiliser ce produit, à moins qu'ils ne soient surveillés de près à tout moment.

⚠ AVERTISSEMENT

Du fait du risque potentiel pouvant exister, il est recommandé que la pression d'épreuve soit maintenue le temps minimum requis par le code local. N'autoriser quiconque à travailler autours du système quand le circuit de circulation est sous épreuve de pression. Mettre en place des signaux appropriés d'avertissement et établir une barrière autour des équipements sous pression. Si les équipements sont situés dans un local, verrouiller la porte et mettre un signal d'avertissement.

Ne jamais essayer de procéder au réglage de bouchons ou couvercles, ou tenter de retirer ou de serrer des boulons lorsque le circuit est sous pression. Ces actions peuvent occasionner l'éclatement du couvercle et pourraient occasionner de sérieuses blessures individuelles ou bien la mort s'ils venaient à heurter une personne.

⚠ AVERTISSEMENT

Ne jamais dépasser la pression d'utilisation maximum des composants du circuit. Excéder ces limites pourrait causer la détérioration d'un composant par la pression. Cette libération instantanée d'énergie peut causer l'éclatement du couvercle et pourrait occasionner de graves blessures individuelles ou bien la mort s'ils venaient à heurter une personne.

Section 1
Introduction

Filtres à sable en fibre de verre Triton™ - Généralités

Filtres à sable Triton™ II

Le numéro 1 du filtre à sable dans le monde

Triton II est le résultat de plus de 40 ans d'évolution et d'améliorations. Ce filtre est devenu la référence de l'industrie en matière de performance, d'efficacité, de durée de service entre chaque maintenance, et des années de fiabilité requérant un entretien minimal.

Le Triton II possède une conception interne qui maintient le lit de sable plat et le débit d'eau constant, assurant ainsi une filtration optimale.

La meilleure réputation de l'industrie, et à juste titre

En plus de résultats de filtration supérieurs, le Triton II s'est taillé une réputation encore inégalée pour sa fiabilité et sa facilité de fonctionnement et d'entretien. De nombreux détails dans sa conception ont été améliorés pour faire du Triton II le filtre de référence de l'industrie.

Filtres à sable commerciaux Triton™ C et Triton™ C-3

Ces filtres sont équipés de plusieurs dériveurs pour une meilleure vitesse de filtration dans des applications commerciales, jusqu'à 20 GPM/pied carré.

Filtres à sable à montage latéral Triton™ HD

Ces filtres possèdent les mêmes performances et caractéristiques exceptionnelles du premier Triton, avec une pression de service de 75 psi pour les installations sous pression, comme les systèmes de nettoyage de niveau à pompe unique.

Triton II - Résidentiel

Triton C - Commercial

Triton C-3 - Commercial

Triton HD - Commercial

FRANÇAIS

Caractéristiques générales

Triton™ II

- Sa conception interne, qui a déjà fait ses preuves avec le temps, permet de filtrer l'eau au maximum pour donner des résultats clair comme de l'eau de roche
- Le processus GlasLok® crée une cuve monocoque, renforcée de fibre de verre, avec un revêtement anti-UV qui garantit des années de service fiable et sans corrosion
- Le système de débit contrôle la qualité de la filtration et assure des durées de service maximales entre le lavage à contre courant, ce qui fait gagner du temps

Triton™ C et Triton™ C-3

- Pression de service maximum 50 psi
- Purgeur complet de 2 pouces
- Ouverture de 8 pouces pour accéder facilement au lit de sable
- Le Triton C-3 possède des joints à bride standard de 3 pouces
- Les modèles TR 100C et TR 140C sont disponibles en noir ou amande
- Les modèles TR 100C-3 et TR 140C-3 sont disponibles uniquement en noir

Triton™ HD

- Pression de service maximum 75 psi

Autres caractéristiques

- Un système combiné de drainage du sable et de l'eau facilite l'entretien et l'hivernage
- Toutes les pièces internes sont filetées pour en faciliter l'entretien
- Une tête de distribution pivotante permet un accès direct au sable et à toutes les pièces internes
- Homologué NSF

Section 2
Installation

Remarque: Avant d'installer ce produit, lire et respecter tous les avis de mise en garde et les instructions d ébutant en page (fr) ii.

Installation du Filtre à Sable en Fibre de Verre Triton™

Le Filtre à Sable en fibre de Verre Triton ne doit être installé que part un technicien d'entretien qualifié. Ce filtre est conçu et prévu pour filtrer l'eau.

Triton™ Introduction

L'information générale qui suit décrit comment installer le Filtre à Sable en fibre de Verre Triton. Ce filtre fonctionne sous pression et, s'il est mal monté ou utilisé alors que de l'air est présent dans le circuit d'eau, son couvercle risque de se désolidariser, ce qui peut avoir pour résultat un accident occasionnant des dégâts matériels importants ou blessures graves. Une étiquette d'avertissement a été collée sur le dessus du filtre et doit y rester. Maintenez les étiquettes de sécurité en bon état et remplacez-les si elles manquent ou sont illisibles.

Fonctionnement du Filtre

Ce filtre à sable à grand débit est conçu pour fonctionner pendant de nombreuses années avec un minimum d'entretien et, lorsqu'il est installé, utilisé et entretenu conformément aux présentes instructions, fonctionnera pendant de nombreuses années sans problème.

Les impuretés sont recueillies dans le filtre lorsque l'eau traverse la vanne de régulation qui se trouve sur le côté de celui-ci et sont dirigées dans la traversée de paroi étanche supérieure. L'eau sale coule dans le diffuseur qui se trouve en haut du réservoir, puis est dirigée vers le bas, jusque sur la surface supérieure du lit de sable. Les impuretés sont recueillies dans le lit de sable et l'eau propre traverse les éléments latéraux et le tuyau inférieur qui se trouve au bas du filtre, puis remonte pour pénétrer dans la traversée de paroi étanche inférieure. L'eau s'écoule ensuite dans la vanne de régulation située sur le côté du filtre. L'eau propre retourne ensuite à la piscine par la tuyauterie.

La pression s'èlévera et le débit vers la piscine s'abaissera au fur et à mesure que les impuretés s'accumulent dans le filtre. Celui-ci finira par être tellement obstrué par ces impuretés qu'il sera nécessaire de procéder à un lavage à contre-courant du filtre. Il est important de savoir quand effectuer cette opération. Celle-ci est décrite plus en détails dans les sections suivantes du présent livret.

Veuillez noter qu'un filtre élimine les particules en suspension et n'épure pas la piscine. L'eau de celle-ci doit être épurée et sa composition chimique doit être équilibrée pour qu'elle soit très claire. Votre système de filtrage doit être conçu pour respecter la réglementation sanitaire locale applicable. Vous devez au minimum veiller à ce que votre système renouvelle la totalité de l'eau de votre piscine au moins deux à quatre fois par période de vingt-quatre heures.

Reportez-vous au **Tableau 1** pour des données sur les spécifications des filtres.

Tableau 1.

NUMERO DE MODELE DE FILTRE	SURFACE DE FILTRAGE (M^2, pi^2)	DEBIT *(L/MN, GAL/MN) à 20 GAL/MN/pi^2	CAPACITE DE RENOUVELLEMENT (Litres/Gallons) (Basé sur 20 gal/mn/pi^2)*			
			4 RENOUVELLEMENTS PAR JOUR	3 RENOUVELLEMENTS PAR JOUR	2,4 RENOUVELLEMENTS PAR JOUR	2 RENOUVELLEMENTS PAR JOUR
TR40	0,18 (1,92)	144 (38)	51784 (13680)	69046 (18240)	86307 (22800)	103568 (27360)
T50	0,23 (2,46)	185 (49)	66774 (17640)	89033 (23520)	111291 (29400)	133549 (35280)
TR60	0,29 (3,14)	238 (63)	85853 (22680)	114470 (30240)	143088 (37800)	171706 (45360)
TR60 ClearPro	0,29 (3,14)	238 (63)	85853 (22680)	114470 (30240)	143088 (37800)	171706 (45360)
TR100	0,47 (4,91)	280 (74)	100843 (26640)	134457 (35520)	168072 (44400)	201686 (53280)
TR100HD	0,47 (4,91)	280 (74)	100843 (26640)	134457 (35520)	168072 (44400)	201686 (53280)
TR100C/TR100C-3	0,47 (4,91)	371 (98)	133549 (35280)	178065 (47040)	222582 (58800)	267098 (70560)
TR140	0,65 (7,06)	401 (106)	144451 (38160)	192601 (50880)	240752 (63600)	288902 (76320)
TR140C/TR140C-3	0,65 (7,06)	534 (141)	192147 (50760)	256196 (67680)	320245 (84600)	384295 (101520)

*LES CHIFFRES APPLICABLES AUX TR100 ET TR140 SONT BASES SUR 15 GAL/MN/PI²

⚠ AVERTISSEMENT Une non-utilisation de votre système de filtrage ou un filtrage insuffisant peut provoquer un manque de clarté de l'eau gênant la visibilité dans votre piscine. Quelqu'un peut ainsi plonger dans ou sur des objets qu'il ne peut voir, risquant de se blesser gravement, voire de se noyer.

L'eau claire est produite par un filtrage approprié et une composition chimique correcte de l'eau. Le traitement chimique d'une piscine est l'affaire de spécialistes et il convient que vous consultiez votre spécialiste local de l'entretien des piscines à propos de points particuliers. En règle générale, pour que l'eau d'une piscine soit correctement épurée, elle doit présenter un niveau de chloration de 1 à 3 ppm et un pH compris entre 7,2 et 7,6.

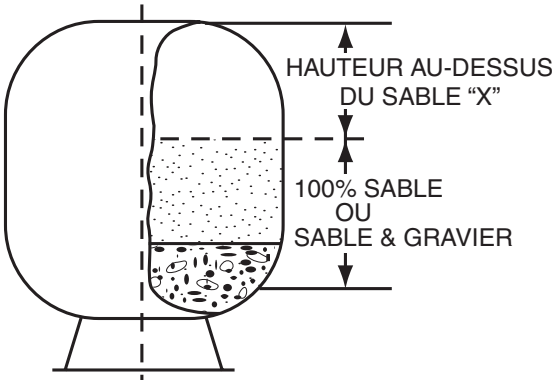
⚠ AVERTISSEMENT Les filtres ne doivent jamais subir des essais à l'air ou au gaz comprimé ni être exposés a ceux-ci. Tous les gaz sont compressibles et, lorsqu'ils sont comprimés, sont dangereux. Des blessures graves ou des dégâts matériels importants peuvent resulter de l'exposition d'un filtre à de l'air ou à du gaz sous pression.

1. Examinez le carton pour rechercher toute trace de dégâts dûs à une manutention brutale en cours de transport. Si le carton ou tout élément du filtre est endommagé, avisez-en le transporteur immédiatement.
2. Retirez avec précaution du carton les accessoires et le réservoir du filtre.
3. Montez le filtre sur une dalle fixe, consistant de préférence en béton coulé dans un coffrage, ou sur une plateforme construite en parpaings ou en briques. **N'UTILISEZ PAS** de sable pour mettre le filtre à niveau ni pour monter la pompe, car il sera emporté par l'eau.
4. Prévoyez un accés suffisamment spacieux et bien éclairé pour l'entretien. Ne montez pas de commandes électriques au-dessus du filtre. Vous devez pouvoir vous écarter de celui-ci lorsque vous mettez la pompe en marche. L'espace minimum nécessaire est indiqué sur la grande plaque signalétique du filtre.
5. Positionnez le filtre de façon à ce que les orifices soient dans la position finale désirée. Suivez les instructions de pose de la vanne.
6. Si vous disposez d'une vanne multivoie, montez-la sur le réservoir en veillant à ce que tous les joints toriques des raccords de la vanne soient propres et bien en place. Appliquez une mince couche de lubrifiant, tel que de la graisse silicone Dow no. 33 ou 40, GE 300 ou 623, ou un produit semblable, sur les joints toriques et leurs gorges avant le montage.
7. Si vous disposez d'un robinet-vanne à deux positions, alignez la vanne sur le réservoir de façon à ce que la poignée soit tournée vers le dessus du réservoir, enfoncez la vanne dans les orifices et serrez ses écrous à frottement doux sur les raccords du réservoir. Il n'est pas nécessaire de les serrer au-delà du serrage à la main.
8. Les sangles de transport utilisées pour soutenir le multidiffuseur du TR100C-3, TR140C et TR140C-3 doivent être retirées avant de charger le filtre de sable et de gravier.
9. Spécifications du sable - veillez à utiliser le sable correct, tel que le décrit le **Tableau 2**. Avant de verser le sable dans le filtre, regardez à l'intérieur de celui-ci et vérifiez le ponceau inférieur pour rechercher tout élément latéral (ou doigt) cassé ou desserré, susceptible d'avoir été endommagé accidentellement par une manutention brutale lors du transport. Remplacez toute pièce cassée si nécessaire.

REMARQUE : La hauteur au-dessus du sable est la variable la plus importante et doit rester constante. La densité du sable varie et la quantité de sable donnée l'est à titre indicatif.

Tableau 2.

MODELE	HAUTEUR AU-DESSUS DU SABLE "X"	100% SABLE* (KG)	MATERIAU DE FILTRAGE † (KG)	
			GRAVIER PISIFORME ‡	SABLE
TR40	20,9 CM	79,5	22,7	56,8
TR50	24,7 CM	102,3	22,7	79,5
TR60	26,7 CM	147,7	22,7	125
TR60 ClearPro	26,7 CM	147,7	22,7	125
TR100	28,6 CM	272,7	68,2	204,5
TR100HD	28,6 CM	272,7	68,2	204,5
TR100C-3	28,6 CM	272,7	68,2	204,5
TR140	34,3 CM	420,4	125	295,4
TR140C-3	34,3 CM	420,4	125	295,4



† MATERIAU EXIGE POUR SATISFAIRE LES SPECIFICATIONS NSF.
‡ GRAVIER PISIFORME DE 3 A 6,35 MM (1/8 A 1/4 PO.) DE CALIBRE.
* SABLE DOIT ETRE DE TYPE SILICIEUX NO.20 STANDARD (COEFFICIENT D'UNIFORMITE NE DEPASSANT PAS 1,75) DE 0,45 A 0,50 MM DE CALIBRE.

⚠ AVERTISSEMENT Le positionnement incorrect de l'évent automatique à l'intérieur du couvercle permettra la pénétration de l'excédent d'air prisonnier dans le filtre. La présence d'air prisonnier et la mauvaise fermeture du couvercle peuvent provoquer l'éclatement de celui-ci et occasionner ainsi des blessures graves et/ou des dégâts matériels importants.

10. Faites pivoter le diffuseur pour le décentrer dans le réservoir des TR40, 50, 60, TR60 ClearPro, 100 & 140 en le tournant dans le sens inverse des aiguilles d'une montre. (**REMARQUE:** Le multidiffuseur ne doit pas être déplacé sur les modèles TR100HD, TR100C, TR100C-3 et TR140C, TR140C-3. Après avoir mis en place le matériau de filtrage comme indiqué plus loin, vérifiez que le haut des diffuseurs est parallèle au lit de sable.) Remplissez à moitié le réservoir d'eau. Versez d'abord le gravier pisiforme (le cas échéant), puis le sable lentement dans le haut du filtre, pour éviter que l'impact créé par le matériau de filtrage endommagé les éléments latéraux. Voir les données figurant dans le Tableau B du présent livret pour les quantités correctes de sable et de gravier. Remplacez le filtre jusqu'au niveau permettant de maintenir une hauteur au-dessus du sable constante (voir Tableau B). Faites pivoter le diffuser pour le ramener dans sa position verticale si vous l'avez déplacé. Veillez à ce que l'évent automatique dépasse dans le haut du couvercle, comme indiqué sur la Figure 1 ci-dessous. Vérifiez que l'évent est centré dans le couvercle. Enlevez tout sable entourant l'ouverture filetée en haut du réservoir.

⚠ AVERTISSEMENT

Concernant les Couvercles Filetés

Faites attention lorsque vous mettez le couvercle en place. Celui-ci doit tourner librement dans le filtre. Si une résistance se fait sentir lors de l'insertion du couvercle, retirez celui-ci doucement en le tournant dans le sens inverse des aiguilles d'une montre. Le filet d'entrée du réservoir et du couvercle doit s'engager correctement pour assurer l'étanchéité de la fermeture. *Ne faussez pas le filetage du couvercle.*

La mise en place incorrecte du couvercle peut provoquer l'éclatement de celui-ci et occasionner ainsi des blessures graves et/ou des dégâts matériels importants.

⚠ AVERTISSEMENT

Concernant le Couvercle Ovale

Faites attention lorsque vous mettez le couvercle en place. Le couvercle doit être inséré dans le réservoir en plaçant le plus petit diamètre du couvercle ovale dans le diamètre le plus large de l'ouverture du réservoir. Insérez d'abord le côte du couvercle qui n'a pas de manomètre et de purgeur d'air. Le couvercle doit être inséré à un angle de 30°. Une fois le couvercle dans le réservoir, on peut le faire pivoter de 90° et le soulever pour assurer l'étanchéité du réservoir. Le pont en aluminium avec un ressort de charge peut ensuite être placé sur le boulon de fermeture et le bouton manuel resserré pour monter correctement le couvercle. Le bouton doit être resserré uniquement avec la main. NE PAS UTILISER UNE CLEF POUR SERRER LE BOUTON. Vous pourriez endommager le réservoir ou le couvercle et causer une défaillance en utilisant une clef. La mise en place incorrecte du couvercle peut provoquer l'éclatement de celui-ci et occasionner ainsi des blessures graves et/ou des dégâts matériels importants.

N'ESSAYEZ JAMAIS DE SERRER OU DESSERRER LE COUVERCLE ALORS QUE LA POMPE EST EN MARCHE. Le non respect de cette instruction peut entrainer l'éclatement du couvercle et occasionner ainsi des blessures graves ou dégâts matériels importants.

11. Montez le manométre et le purgeur sur le couvercle de fermeture. Nettoyez le joint torique de celui-ci et graissez-le avec du lubrifiant silicone tel que le Dow no. 33 ou 40, ou le GE 300 ou 623. Placez le couvercle de fermeture sur le filtre et serrez-le, en veillant à ce que l'évent soit vertical à l'intérieur du dôme du couvercle.
12. Serrez le couvercle autant que vous le pouvez en tenant des deux mains la clé en plastique fournie avec le filtre. Le couvercle doit être au moins serré à fond à la main, plus 1/4 de tour.
13. Le couvercle ovale qui est utilisé sur le TR140C-3 et TR 100C-3, doit être installé comme décrit ci-dessus dans le paragraphe : Avertissement concernant le couvercle oval.

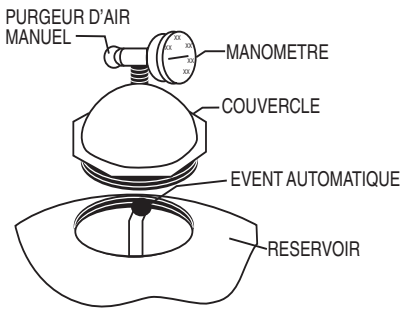


Figure 1.

14 . Branchez la tuyauterie et ses raccords à la pompe et à la vanne. L'ensemble de la tuyauterie doit être conforme à la réglementation locale et nationale concernant la plomberie et l'hygiène.
15. Utilisez du mastic d'étanchéité sur tous les accouplements mâles de la tuyauterie et des raccords. N'utilisez que des mastics d'étanchéité adaptés à la tuyauterie en plastique. Soutenez la tuyauterie pour éviter toute contrainte exercée sur le filtre, la pompe ou la vanne.
16. Les sections de tuyauterie de grande longueur et les coudes réduisent le débit. Pour obtenir le meilleur rendement, utilisez le moins possible de raccords et une tuyauterie de grand diamètre (au moins 5 cm [2 po.] pour les Modèle TR100 et TR140, au moins 3 po. pour les Modèle TR100C-3 et TR140C-3).

⚠ ATTENTION Un fonctionnement à des niveaux de dépression excessifs peut provoquer des fissures dans le réservoir et des dégâts materiéls.

17. Lors de l'installation de conduites de lavage à contre-courant, it est recommandé de poser une cassevide dans les cas ou la longueur de la conduite de lavage à contre-courant dépasse 12 m (40 pi) ou si l'évacuation de cette conduite se trouve à plus de 3 m (10 pi) en-dessous de la surface de l'eau dans la piscine. Une autre solution est de prévoir un puits pour cassevide.
18. Il est recommandé de poser une soupape de retenue entre le filtre et 1'élément chauffant pour empêcher l'eau chaude d'êrte "refoulée", ce qui endommagerait le filtre et la vanne.
19. La pression de service maximum de l'appareil est de 345 kPa (50 livres par pied carré [psi]) et 517 kPa (75 livres par pied carré [psi]) pour le modèle Triton HD (seulement). Ne jamais faire fonctionner ce filtre au-dessus de ces pressions ou raccorder à ce filtre une pompe ayant une pression de plus de 345 kPa (50 psi) à débit nul ou 517 kPa (75 psi) à débit nul pour le modèle Triton HD (seulement).
20. N'installez jamais un appareil de chloration en amont du filtre. Positionncz-le toujours en aval on posant une soupape de retenue entre lui et le filtre.
21. Il n'est pas recommandé de poser une vanne d'arret contrôlée à la sortie du système de filtrage. Si celui-ci fonctionne avec une telle vanne fermèe, le système interne de purge d'air s'arrête de fonctionner, ce qui peut présenter un risque d'séparation. D'autre part le fonctionnement du système à sec endommagera gravemcnt l'equipement.
22. N'entreposez jamais les produits chimiques destinés à la piscine à moins de 3 mètres (10 pieds) du filtre, de la pompe ou de la vanne. Ces produits doivent toujours être entreposés dans un endroit frais, sec et bien aéré.
23. Le couvercle ovale utilisé sur le TR140C-3 et le TR100C-3 est conçu avec une soupape de décharge qui protège le réservoir des dépressions. Le couvercle va permettre à l'air d'entrer dans le réservoir si celui-ci se trouve à 8 pieds au-dessus du niveau d'eau. Dans ce cas, lorsque le filtre redémarre après un arrêt vous pouvez observer l'air qui revient dans la piscine par l'installation de retour. Ce n'est pas inhabituel, c'est simplement la soupape automatique du filtre qui enlève l'air de celui-ci.

Mise en Service Initiale

1. Nettoyez une piscine neuve avant de la remplir d'eau. La présence d'un excès d'impuretés et de grosses particules peut endommager la pompe et le filtre.
2. Vérifiez que le tuyau de lavage à contre-courant n'est pas obstrué, de façon à ce que l'eau puisse librement venir de la piscine et s'écouler par ce tuyau. Placez la vanne de régulation dans la position suivante :
   a. Si vous utilisez une vanne multivoie, réglez-la en position de lavage à contre-courant.
   b. Si vous utilisez un robinet-vanne à deux positions, appuyez sur la poignée pour le mettre en position de lavage à contre-courant et verrouillez le robinet en toumant la poignée.
3. Vérifiez que la cuve de la crépine de la pompe est pleine d'eau.

⚠ AVERTISSEMENT La pénétration d'air dans le filtre et un mise en place incorrecte du couvercle du réservoir peuvent provoquer un éclatement du couvercle et occasionner des blessures graves et/ou des dégâts matériels.

4. Vérifiez le serrage du couvercle du filtre.
5. Ouvrez le purgeur d'air manuel qui se trouve sur le couvercle du filtre. Ecartez-vous de ce dernier et mettez la pompe en marche en lui laissant le temps de s'amorcer.
6. Refermez le purgeur d'air qui se trouve sur le couvercle lorsqu'il ne reste plus d'air dans le filtre et que l'eau s'écoule cn un jet continu.

AVIS: Le sable de filtrage pour piscine est généralement prélavé et ne devrait pas demander un lavage à fond à contre-courant. Il se peut toutefois que le transport provoque une abrasion excessive, ce qui pourrait imposer un cycle prolongé de lavage à contre-courant lors de la mise en marche initiale ; continuez ce lavage jusqu'à ce que l'eau observée dans le regard en verre soit aussi claire que cello de la piscine.

⚠ ATTENTION Pour éviter d'endommager l'equipement et de causer de possibles blessures, arrêtez touiours la pompe avant de changer la position de la vanne.

7. Arrêtez la pompe. Placez la vanne dans la position suivante :
   a. Si vous utilisez une vanne multivoie, réglez-la en position de filtrage.
   b. Si vous utilisez un robinet-vanne à deux positions, soulevez la poignée en position de filtrage et verrouillez le robinet en toumant la poignée.
8. Vérifiez que tous les tuyaux d'aspiration et de retour à la piscine ne sont pas obstrués, pour que l'eau puisse librement venir de la piscine et y retoumer.
9. Ouvrez le purgeur d'air manuel qui se trouve sur le couvercle du filtre. Ecartez-vous de ce dernier et mettez la pompe en marche.
10. Refermez le purgeur d'air qui se trouve sur le couvercle du filtre lorsque qu'il ne reste plus d'air dans le filtre et que l'eau s'écoule en un jet continu.
11. Le filtre a alors entamé son cycle de filtrage. Vous devez vérifier que l'eau retoume à la piscine et relever la pression de service lorsque le filtre est propre.

Section 3
Entretien

Cette section décrit la manière d'entretenir votre Filtre à Sable en Fibre de Verre Triton™.

Entretien du Filtre

Le filtre joue un rôle très important dans l'equipement et l'installation de votre piscine. Si vous lui apportez le soin et l'entretien qui conviennent, sa durée de service sera prolongée de nombreuses années pendant lesquelles vous pourrez profiter de votre piscine. Respectez les suggestions qui suivent pour que le système fonctionne pendant longtemps sans problème :

1. Pour débarrasser l'extérieur du filtre des impuretés et de la poussiére, lavez-le avec une solution de détergent doux et d'eau et rincez-le au jet. N'utilisez pas de solvants.
2. Si un entretien de l'intérieur du filtre s'avère nécessaire, vous pouvez vider le sable en enlevant l'ensemble du robinet de vidange du bas du filtre et en rinçant celui-ci au jet. Vous pouvez également vous servir d'un aspirateur à sable Pentair Water Pool and Spa, Inc. (piece no. 542090).
3. Si, au bout d'un certain nombre d'années, la couleur du réservoir du filtre semble se voiler ou sa surface devenir rugueuse, vous pouvez peindre celle-ci. Nous recommandons pour cela d'appliquer au pistolet une peinture émaillée à séchage rapide. **Ne peignez pas la vanne.**

⚠ AVERTISSEMENT Examinez toujours visuellement les éléments du filtre pendant l'entretien courant pour vérifier leur intégrité. Remplacez tout élément fêlé, déformé ou apparemment défectueux. Des éléments de filtre défectueux peuvent entraîner un éclatement du dessus ou des accessoires du filtre susceptible de provoquer des blessures graves ou dégâts matériels importants.

4. Le couvercle de votre filtre à sable Triton à été fabriqué en utilisant des matériaux anti-corrosion de haute qualité. Vous devez l'examiner soigneusement chaque fois que vous procédez à l'entretien de votre filtre. Si vous observez des fuites excessives à la jointure du couvercle et du réservoir, vous devez examiner soigneusement le couvercle et joint torque et les remplacer si un signe quelconque de détérioration apparaît.
5. Votre filtre est un réservoir sous pression et vous ne devez jamais en effectuer l'entretien lorsqu'il est pressurisé. Vous devez toujours délester la pression dans le réservoir et ouvrir le purgeur d'air qui se trouve sur le couvercle du filtre avant de procéder à l'entretien du filtre.
6. Lorsque vous remettez le filtre en marche, ouvrez toujours le purgeur d'air qui se trouve sur le couvercle du filtre et écartez-vous de celui-ci.

Frequence de Nettoyage

1. Le filtre d'une piscine neuve doit être lavé à contre-courant et nettoyé au bout des 48 premières heures de fonctionnement pour en éliminer la poudre de plâtre et/ou les débris résultant de la construction.
2. Il y trois façons de savoir quand le filtrage doit être lavé à contre-courant :
   a. L'indication la plus précise qu'un lavage à contre-courant est nécessaire est, sur les systèmes équipés d'un débitmètre, que le débit diminue de 30% par rapport au débit initial (filtre propre). Si, par exemple, le débit initial était de 227 l/mn (60 gal/mn), il convient de laver le filtre à contre-courant lorsque le débit diminue de 75,7 l/mn (20 gal/mn) pour atteindre 151,3 l/mn (40 gal/mn).
   b. Une indication plus subjective et moins précise est donnée par l'observation du débit des sorties d'eau directionnelles qui se trouvent dans la paroi de la piscine. Le filtre doit être lavé à contre-courant lorsque vous constatez que ce débit s'est réduit par 30% environ.
   c. L'indication la plus communément utilisée et la moins précise de devoir laver à contre-courant est l'augmentation de 68,9 kPa (10 psi) par rapport à la valeur initiale (filtre propre) de la pression indiquée par le manomètre du filtre.
3. Il est important de ne pas laver le filtre à contre-courant uniquement à des intervalles de temps, comme par exemple tous les trois jours. Il est également important de noter qu'un lavage à contre-courant trop fréquent provoque en fait un mauvais filtrage. Des facteurs tels que les conditions atmosphériques, de fortes pluies, de fortes concentrations de poussière ou de pollen et les températures de l'eau affectent tous la fréquence du lavage à contre-courant. Vous deviendrez conscient de ces influences lorsque vous serez familiarisé avec l'utilisation de votre piscine.
4. Si à un moment quelconque la pression de démarrage après un lavage à contre-courant du filtre dépasse de 27,6 à 41,4 kPa (4 à 6 psi) la pression de démarrage normale, it est temps de procéder à un nettoyage chimique.

Lavage a Contre-courant du Filtre

AVERTISSEMENT Pour éviter d'endommager l'équipementet de causer de possibles blessures, arrêtez toujours la pompe avant de changer la position de la vanne.

1. Arrêtez la pompe.
2. Vérifiez que les tuyaux d'aspiration et de lavage à contre-courant ne sont pas obstrués, de façon à ce que l'eau puisse librement venir de la piscine et s'écouler par le tuyau de lavage à contre-courant. Placez la vanne de régulation dans la position suivante :
   a. Si vous utilisez une vanne multivoie, réglez-la en position de lavage à contre-courant.
   b. Si vous utilisez un robinet-vanne à deux positions, appuyez sur sa poignée pour le mettre en position de lavage à contre-courant et verrouillez le robinet en toumant la poignée.
3. **Ecartez-vous du filtre** et mettez la pompe en marche.
4. Lavez le filtre à contre-courant pendant 3 à 5 minutes environ ou jusqu'à ce que l'eau de lavage à contre-courant soit propre.
5. Arrêtez la pompe.
   a. Si vous utiliscz une vanne multivoie, réglez-la en position de rinçage et passez aux opérations suivantes.
   b. Si vous utilisez un robinet-vanne à deux positions, passez à l'étape 8.
6. **Ecartez-vous du filtre** et mettez la pompe en marche.
7. Rincez le filtre pendant 30 secondes environ.
8. Arrêtez la pompe et placez la vanne dans la position suivante :
   a. Si vous utilisez une vanne multivoie, réglez-la en position de filtrage.
   b. Si vous utilisez un robinet-vanne à deux positions, soulevez sa poignée en position de filtrage et verrouillez le robinet en toumant la poignée.
9. Vérifiez que le tuyau de retour à la piscine n'est pas obstrué, pour que l'eau puisse librement venir de la piscine et y retourner.
10. Ouvrez le purgeur d'air manuel qui se trouve sur le couvercle du Triton. **Ecartez-vous du filtre et mettez la pompe en marche.**
11. Refermez le purgeur d'air qui se trouve sur le couvercle lorsqu'il ne reste plus d'air et que l'eau s'écoule en un jet continu.
12. Le filtre a alors entamé son cycle de filtrage. Vous devez vérifier que l'eau retourne à la piscine et noter la pression du filtre.
13. La pression du filtre relevée à l'étape 12 ci-dessus ne doit pas dépasser celle qui a été observée à l'origine lors de la mise en route initiale du filtre. Si, à l'issue du lavage à contre-courant, la pression est supérieure de 27,5 à 41,4 kPa (4 à 6 psi) à la pression relevée lors de la mise en route, it sera nécessaire de nettoyer chimiquement le lit de sable.

Nettoyage Chimique

1. Il est recommandé d'utiliser un produit de nettoyage agréé. Contacter votre fournisseur local de produits chimiques pour piscine ou un détaillant pour obtenir le nettoyant adéquat.

   Ces produits nettoyants élimineront l'huile, le tartre et la rouille du lit de sable en une seule opération de nettoyage.
2. Préparez une solution en suivant les instructions données par le fabricant sur l'étiquette.
3. Nettoyez le filtre à contre-courant comme indiqué plus haut.
4. Si le filtre est au-dessous du niveau de la piscine, arrêtez la pompe et fermez les vannes appropriées pour éviter de vider la piscine.
5. Arrêtez la pompe, ouvrez le robinet de vidange du filtre et laissez celui-ci se vider. Placez la vanne en position de lavage à contre-courant.
6. Une fois que le filtre s'est vidé, refermez son robinet de vidange et enlevez le couvercle de la crépine de la pompe.
7. Vérifiez que les tuyaux de lavage i contre-courant ne sont pas obstrués.
8. Mettez la pompe en marche et videz lentement la solution de nettoyage dans la crépine de la pompe alors que celle-ci tourne.
9. Continuez à ajouter de la solution de nettoyage jusqu'à ce que le lit de sable en soft saturé. Remettez le couvercle sur la pompe.
10. Arrêtez la pompe et laissez le filtre en position de lavage à contre-courant. Laissez le filtre reposer pendant la nuit (12 heures).
11. Remettez le couvercle de la pompe en place et procédez à un lavage à contre-courant comme indiqué plus haut.
12. Empêchez la solution de nettoyage de pénétrer dans la piscine.

Hivernisation du Filtre

1. Dans les régions dans lesquelles les températures hivemales descendent en-dessous de zéro, protégez l'equipement de la piscine en lavant le filtre à contre-courant.
2. Après le lavage à contre-courant, arrêtez, la pompe, ouvrez le purgeur d'air manuel qui se trouve sur le couvercle et réglez la vanne comme suit :

   a. Sur les vannes multivoies, placez la poignée de celles-ci en position d'hivernisation.*
   b. Sur le robinet-vanne à deux positions, retirez, si c'est possible, le piston aspirant ; nettoyez, graissez et rangez le robinet dans un endroit sec pendant l'hiver.
3. Sur les TR40, 50, 60 et TR60 ClearPro, retirez le bouchon du type à oreilles du bas du filtre. Sur les TR100, TR100HD, TR100C, TR100C-3 et TR140, TR140C, TR140C-3, retirez le bouchon de vidange de 38 mm (1½ po.). Le filtre se videra très lentement et il est donc recommandé de laisser le bouchon de vidange retiré pendant l'inter-saison.

***REMARQUE:** La vanne multivoie doit être laissée en position d'hivernisation pendant l'intersaison de façon à ce que son partiteur n'exerce aucune pression sur le joint en caoutchouc.

4. Vidangez toute la tuyauterie appropriée.
5. Nous recommandons de recouvrir l'équipement avec une toîle goudronnée ou une feuille plastique pour éviter toute déterioration due aux intempéries. N'enveloppez pas le moteur de la pompe avec du plastique.

Section 4
Dépannage

Utiliser les informations de dépannage suivantes pour résoudre des problèmes éventuels avec votre Filtre Triton™.

⚠ AVERTISSEMENT

CE FILTRE EST SOUMIS À HAUTE PRESSION

Lorsque l'on intervient sur l'un ou l'autre des composants du circuit de circulation (ex : bouchon, couvercle, pompe, filtre, robinet(s) etc..), l'air peut pénétrer n'importe où dans le circuit et devenir pressurisé. L'air sous pression peut occasionner une séparation du couvercle supérieur pouvant entrainer des blessures sérieuses, la mort ou l'endommagement du bien. Pour éviter ce danger potentiel, respectez ces instructions:

1. Si vous ne connaissez pas bien votre système de filtration de piscine et/ou de réchauffage:
   a. **N'essayez Pas** de procéder à des réglages ou effectuer l'entretien sans consulter votre revendeur, ou un technicien de piscine qualifié.
   b. Lisez la totalité du Manuel d'Installation et d'Utilisation avant de tenter d'utiliser, entretenir ou régler le système de filtration ou de réchauffage.
2. Avant de remettre la (les) vanne(s) en position et avant de commencer le montage, démontage, ou toute autre intervention sur le circuit : (A) Mettre la pompe sur **ARRÊT** et mettre **HORS SERVICE** tout automatisme pour garantir que le système ne soit PAS démarré par inadvertance pendant l'opération d'entretien ; (B) ouvrir le robinet manuel de purge d'air ; (C) attendre jusqu'à ce que toute pression soit évacuée.
3. Lors du montage du couvercle de filtre **RESPECTER EXACTEMENT LES INSTRUCTIONS RELATIVES AU COUVERCLE DE FILTRE.**
4. Une fois l'intervention sur le circuit terminée, **RESPECTER EXACTEMENT LES INSTRUCTIONS DE MISE EN SERVICE.**
5. Maintenir le circuit de circulation correctement. Remplacer les pièces usées ou endommagées immédiatement (par exemple : couvercle, manomètre, vanne(s), joints toriques, etc..)
6. S'assurer que le filtre est correctement monté et positionné suivant les instructions fournies.

Remarque: Préalablement isoler l'alimentation électrique de l'équipement avant de tenter une intervention ou une réparation.

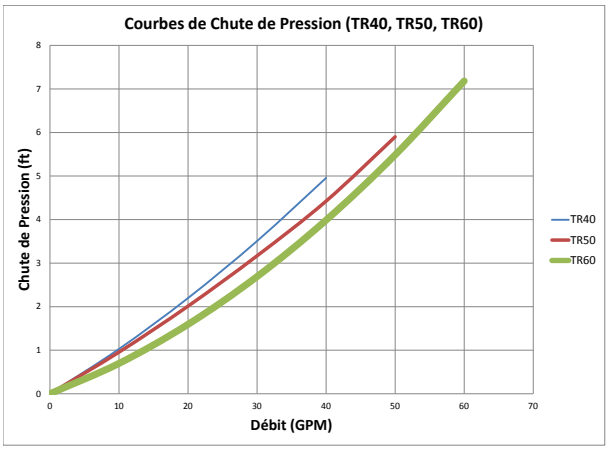
Problèmes et Actions Correctives

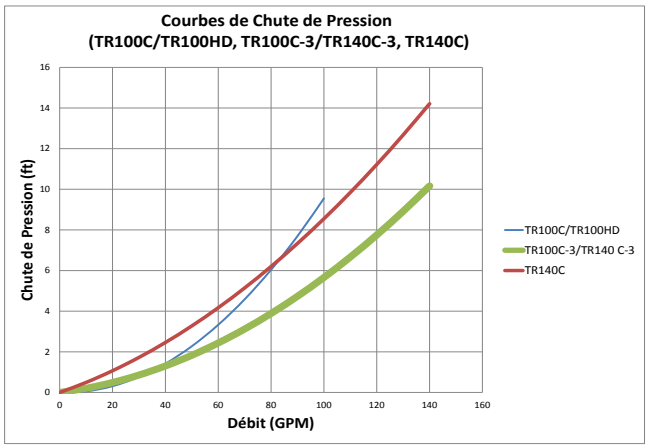
PROBLÈME	CAUSE	REMÈDE
Eau de la piscine insuffisamment propre	1. Composition chimique de l'eau de la piscine inadéquate pour empêcher la croissance des algues.	Maintenez la composition chimique correcte de l'eau de la piscine ou consultez un technicien d'entretien spécialisé.
	2. Lavage à contre-courant trop fréquent.	Laissez la pression augmenter jusqu'à 68,9 kPa (10 psi) au-dessus de la pression avec filtre propre avant de laver à contrecourant.
	3. Quantité ou calibre incorrect de sable.	Vérifiez l'épaisseur du lit de sable et le calibre de ce dernier ou consultez un technicien d'entretien spécialisé.
	4. Cadence de renouvellement inadéquate.	Faites fonctionner le système pendant plus longtemps ou consultez votre revendeur ou un technicien d'entretien spécialisé.
Pression trop élevée dans le filtre	1. Lavage à contre-courant insuffisant.	Lavez à contre-courant jusqu'à ce que l'eau de lavage soit claire.
	2. Lit de sable encombré de dépôts minéraux.	Nettoyez chimiquement le filtre.
	3. Vanne partiellement fermée.	Ouvrez la vanne ou débouchez le tuyau de retour.
Cycles trop courts	1. Lavage à contre-courant incorrect.	Lavez à contre-courant jusqu'à ce que l'eau de lavage soit claire.
	2. Composition chimique de l'eau de la piscine inadéquate pour empêcher la croissance des algues.	Maintenez la composition chimique correcte e l'eau de la piscine ou consultez un technicien d'entretien spécialisé.
	3. Lit de sable sale.	Retirez à la main une épaisseur de 25 mm (1 po.) sur le dessus du lit de sable et nettoyez chimiquement l'ensemble du lit de sable comme indiqué dans la Section G.
	4. Débit trop élevé.	Ramenez le débit à la capacité du filtre.

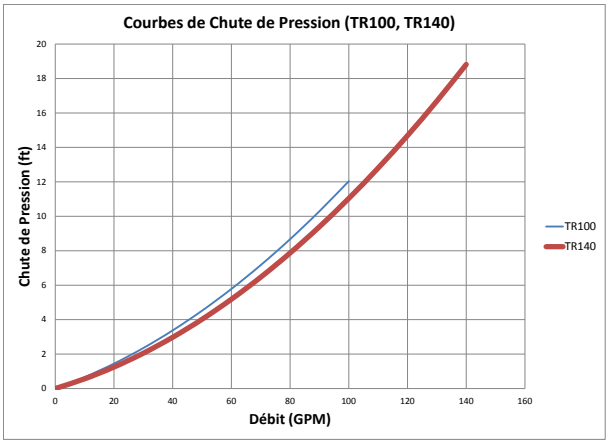
PROBLÈME	CAUSE	REMÈDE
Réduction du débit de retour de l'eau vers la piscine. Pression trop basse dans le filtre.	1. Colmatage du filtre à cheveux et peluches de la pompe.	Nettoyez le filtre.
	2. Obstruction dans la pompe.	Démontez et nettoyez la pompe.
	3. Tuyau d'aspiration de la pompe obstrué	Nettoyez le panier du collecteur. Débouchez les tuyaux. Ouvrez les vannes du tuyau d'aspiration.
Retour du sable dans la piscine.	1. Élément latéral de vidange par le bas cassé.	Remplacez les éléments latéraux cassés ou endommagés.
Perte de sable vers l'évacuation des déchets.	1. Débit de lavage à contre-courant trop élevé.	Réduisez le débit du lavage à contre-courant.
	2. Calibre de sable incorrect.	Utilisez le sable approprié.
	3. Le filtre à air est endommagé ou absent.	Remplacez les pièces endommagées.
Fuites au niveau du couvercle.	1. Couvercle mal serré.	Arrêtez la pompe, délestez la pression dans le réservoir, ouvrez le purgeur d'air, serrez bien le couvercle.
	2. Présence de saletés ou d'impuretés sur la surface d'etanchéité.	Arrêtez la pompe, délestez la pression dans le réservoir, ouvrez le purgeur d'air, retirez le couvercle & nettoyez toutes les surfaces d'étanchéité. Remettez le couvercle bien en place.
	3. Pièce endommagée.	Mêmes mesures que ci-dessus, si ce n'est que vous devez remplacer le joint torique, le couvercle, le réservoir ou toute combinaison de pièces, le cas échéant.
Fuite au niveau de la traversée de paroi étanche.	1. Ensemble de la traversée de paroi étanche mal serré.	Pour les modèles TR 40, 50, 60, TR60 ClearPro, 100, 100C, 140 ou 140C, arrêtez la pompe, délestez la pression dans le réservoir, ouvrez le purgeur d'air, retirez le couvercle, puis enlevez le sable afin d'atteindre la traversée de paroi étanche à l'origine de la fuite. En maintenant la traversée de paroi étanche de 2 po., resserrez le contre-écrou interne dont le diamètre est de 2 po. Pour les modèles TR 100C-3" et TR 140C-3", saisissez, à l'aide d'une clé spéciale no. 154020, la bague d'é-cartement de la bride de 3 po. et r esser-rez avec une clé no. 154019 l'adaptateur de la bride de 3 po. Serrez à la main d'un demi-tour supplémentaire.
	2. Saleté ou impuretés sur les surfaces d'étanchéité.	Arrêtez la pompe, délestez la pression dans le réservoir, ouvrez le purgeur d'air, retirez le couvercle, puis enlevez le sable afin d'atteindre la traversée de paroi étanche à l'origine de la fuite. Enlevez les éléments internes du réservoir et l'ensemble de la traversée de paroi étanche. Nettoyez toutes les surfaces de jointement ainsi que les surfaces d'étanchéité. Remettez en place l'ensemble de la traversée de paroi étanche, en vous assurant de bien le monter. Serrez l'ensemble en procédant de la façon indiquée ci-dessus.
	3. Pièce endommagée.	Procédez de la façon indiquée ci-dessus, en remplaçant la pièce (ou le groupe de pièces) endommagée.

Section 5
Pièces de Rechange

Courbes de Chute de Pression pour les Filtres à Sable de la Série Triton™



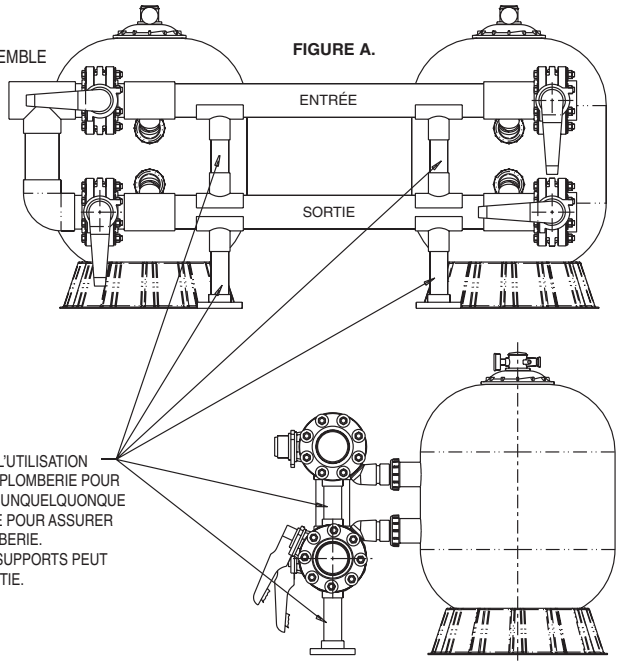




Installation des Filtres Multiples avec l'ensemble de Tuyauterie pour Filtres en Tandem

MISE EN GARDE: QUAND DE MULTIPLES FILTRES SONT INSTALLÉS, NOUS RECOMMENDONS FORTEMENT L'UTILISATION D'UN ENSEMBLE DE TUYAUTERIE POUR FILTRE EN TANDEM PENTAIR. CES ENSEMBLES COMPRENNENT DES SUPPORTS DE PLOMBERIE (ENTRE LES TUYAUTERIES D'ENTRÉE ET DE SORTIE ET ENTRE LA TUYAUTERIE DE SORTIE ET LE SOL) POUR ASSURER L'INTÉGRITÉ DE L'INSTALLATION. VOIR LA FIGURE A.

FIGURE A.

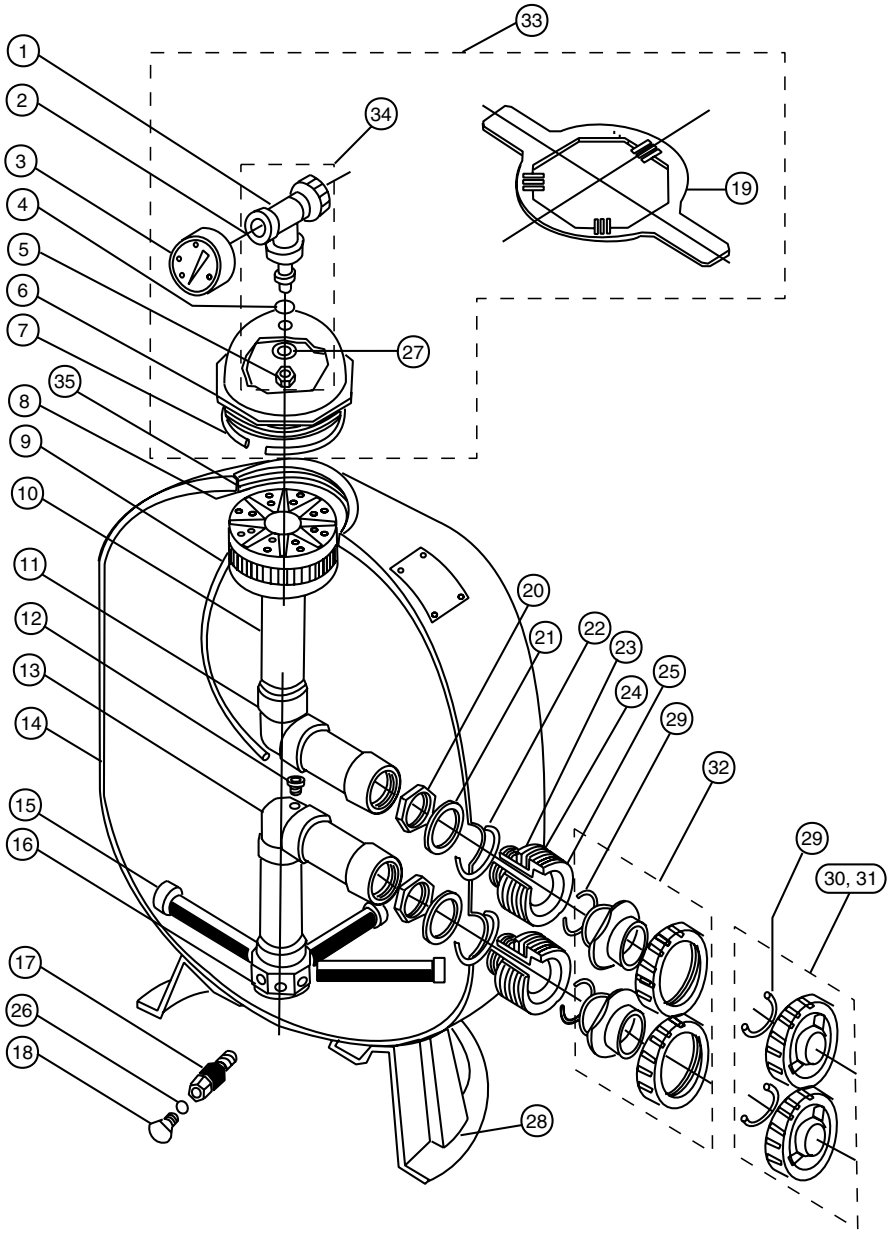


MISE EN GARDE: PENTAIR RECOMMENDE L'UTILISATION D' (UN) ENSEMBLE(S) DE PLOMBERIE POUR FILTRE EN TANDEM OU D'UNQUELQUONQUE SUPPORT DE PLOMBERIE POUR ASSURER L'INTÉGRITÉ DE LA PLOMBERIE. LA NON UTILISATION DE SUPPORTS PEUT ANNULER VOTRE GARANTIE.

FILTRE A SABLE EN FIBRE DE VERRE TRITON™ II ET TR60 CLEARPRO

Pièces de Rechange

TR40
TR50
TR60
TR60 ClearPro
TR100
TR140



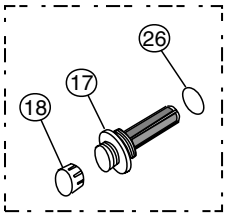
DÉTAIL A
Après 1er Déc. 1991
RACCORD FILETE 15 CM (6 PO.)

DÉTAIL B
Avant 1er Déc. 1991
FILETAGE TRIANGULAIRE 15 CM (6 PO.)

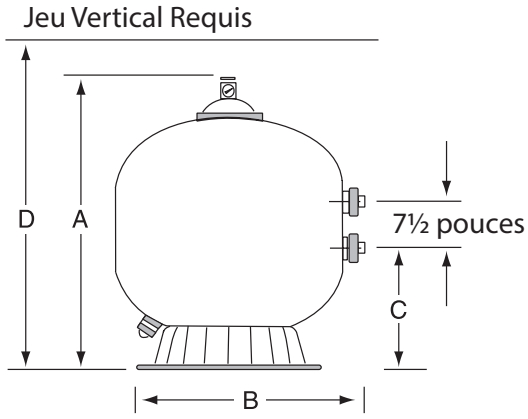
Filtres fabriqués après le 1er décembre 1991 : utiliser un filetage trapèze rectangulaire de 6 pouces pour l'ouverture supérieure du corps du filtre ainsi que pour le couvercle. Voir Détail A.

Filtres fabriqués avant le 1er décembre 1991 : utiliser un filetage en « V » de 6 pouces. Voir Détail B.

Les couvercles de 6 pouces des Détails A et B ne sont PAS interchangeables.



★ Utilisé sur les Filtres TR100 et TR140.



MODELE	DIM. A.	DIM. B.	DIM. C.	DIM. D.
TR40	77,5 cm	49,5 cm	27,3 cm	82,6 cm
TR50	88,3 cm	54,6 cm	30,2 cm	93,3 cm
TR60	90,2 cm	62,2 cm	34,6 cm	95,3 cm
TR60 ClearPro	90,2 cm	62,2 cm	34,6 cm	95,3 cm
TR100	101 cm	77,5 cm	41,3 cm	106 cm
TR140	115 cm	92,7 cm	47,6 cm	120 cm

UNITÉ	PIECE NO.	DESCRIPTION TRITON II ET TR60 CLEARPRO
1	154689	ENSEMBLE PURGEUR D'AIR/TE
2	154700	ADAPTATEUR-PURGEUR D'AIR EN LAITON
3	155050	MANOMETRE-MONTE PAR L'ARRIERE
4	154661	JOINT TORIQUE-ADAPTATEUR DE PURGEUR D'AIR
5	154664	ECROU 9,4 MM (3/8 PO.) - 16 INOX
6	154570	COUVERCLE-RACCORD FILETE 15 CM (6 PO.) (VOIR DETAIL A)
6	154559	COUVERCLE-FILETAGE TRIANGULAIRE 15 CM (6 PO.) NOIR - (VOIR DETAIL B)
7	154493	JOINT TORIQUE-COUVERCLE
8	150035	FILTRE-ECL/TR
9	150039	TUBE-PURGE D'AIR TR40
9	150040	TUBE-PURGE D'AIR TR50/60
9	150041	TUBE-PURGE D'AIR TR100
9	150042	TUBE-PURGE D'AIR TR140
10	154598	DIFFUSEUR TR40/50
10	154599	DIFFUSEUR TR60
10	154462	DIFFUSEUR TR100
10	154906	DIFFUSEUR TR140
11	154803	TUYAUTERIE-SUPERIEURE TR40
11	156814	TUYAUTERIE-SUPERIEURE TR50
11	154533	TUYAUTERIE-SUPERIEURE TR60
11	154426	TUYAUTERIE-SUPERIEURE TR100
11	154500	TUYAUTERIE-SUPERIEURE TR140
12	150036	RACCORD-TUBE DE PURGE D'AIR
13	154801	TUYAUTERIE-INFERIEURE TR40
13	156816	TUYAUTERIE-INFERIEURE TR50
13	154805	TUYAUTERIE-INFERIEURE TR60
13	155284	TUYAUTERIE-INFERIEURE TR60 ClearPro - 1/4 VIRAGE LATÉRAL
13	154807	TUYAUTERIE-INFERIEURE TR100
13	154489	TUYAUTERIE-INFERIEURE TR140
14	154636	ENSEMBLE RESERVOIR & PIED TR40-RACCORD FILETE 15 CM (6 PO.)-(VOIR DETAIL A)
14	154637	ENSEMBLE RESERVOIR & PIED TR50-RACCORD FILETE 15 CM (6 PO.)-(VOIR DETAIL A)
14	154638	ENSEMBLE RESERVOIR & PIED TR60-RACCORD FILETE 15 CM (6 PO.)-(VOIR DETAIL A)
14	154639	ENSEMBLE RESERVOIR & PIED TR100-RACCORD FILETE 15 CM (6 PO.)-(VOIR DETAIL A)
14	154640	ENSEMBLE RESERVOIR & PIED TR140-RACCORD FILETE 15 CM (6 PO.)-(VOIR DETAIL A)

FILTRE A SABLE EN FIBRE DE VERRE TRITON™ II ET TR60 CLEARPRO

Pièces de Rechange

TR40
TR50
TR60
TR60 ClearPro
TR100
TR140

REMARQUES

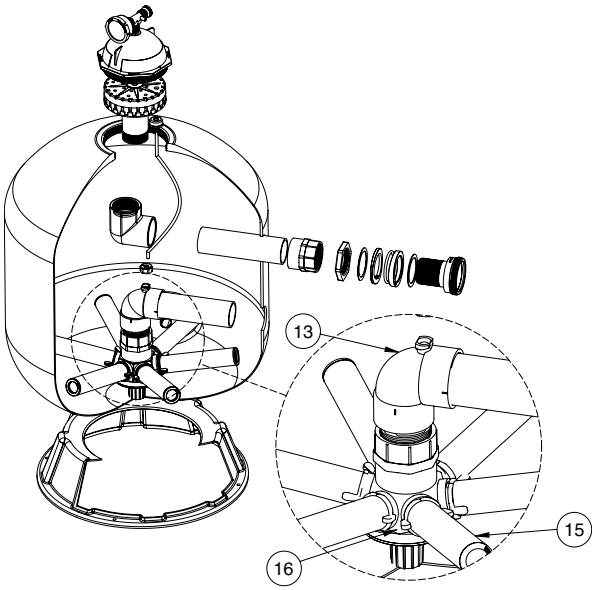
Filtres fabriqués après le 1er décembre 1991 : utiliser un filetage trapèze rectangulaire de 6 pouces pour l'ouverture supérieure du corps du filtre ainsi que pour le couvercle. Voir Détail A.

Filtres fabriqués avant le 1er décembre 1991 : utiliser un filetage en « V » de 6 pouces. Voir Détail B.

Les couvercles de 6 pouces des Détails A et B ne sont PAS interchangeables.

Pour déterminer la date de fabrication : les quatre premiers chiffres du numéro de série indiquent le mois et l'année où le produit fut fabriqué.

TR60 ClearPro - 1/4 Virage Latéral pour les filtres fabriqués après 15 Mai 2007 utilise Tuyauterie-Inferieure P/N 155284.



DETAILED VIEW

Détailler pour Triton™ II - TR60 Filtres avec ClearPro Technology™

UNITÉ	PIECE NO.	DESCRIPTION - TRITON II ET TR60 CLEARPRO
15	152290	ELEMENT LATERAL 17 CM (6 11/16 PO.) L TR40/50/60 (8 Requis)
15	150085	ELEMENT LATERAL - 1/4 VIRAGE TR60 (6 Requis)
15	150088	ELEMENT LATERAL TR60 ClearPro (6 Requis)
15	152202	ELEMENT LATERAL-23,2 CM (9 1/8 PO.) L TR100 (8 Requis) ❷
15	154543	ELEMENT LATERAL-16,5 CM (6 1/2 PO.) L TR100 (8 Requis) ❶
15	154540	ELEMENT LATERAL-30 CM (12 PO.) L TR140 (8 Requis)
16	154763	MOYEU-ELEMENT LATERAL TR40/50/60
16	152222	MOYEU-ELEMENT LATERAL TR60 ClearPro
16	154453	MOYEU-ELEMENT LATERAL TR100/140
17	152220	VIDANGE DE SABLE -5 CM (2 PO.) ❻
17	154698	ROBINET-19 MM (3/4 PO.) NPT, VIDANGE DE SABLE ❹
17	154685	ROBINET-12,7 MM (1/2 PO.) NPT, VIDANGE DE SABLE ❸
18	154871	CHAPEAU - FILETE - 3.8CM (1.1/2 PO.) ❻
18	357161	BOUCHON-6,3 MM (1/4 PO.) NPT, VIDANGE
19	154512	CLE-15 CM (6 PO.), COUVERCLE
20	154412	CONTRE-ECROU-5 CM (2 PO.) INTERNE (2 Requis)
21	154416	BAGUE D'ECARTEMENT-5 CM (2 PO.) INTERNE (2 Requis)
22	154492	JOINT TORIQUE-5 CM (2 PO.) TRAVERSEE DE PAROI ETANCHE (2 Requis)
23	154408	BAGUE D'ECARTEMENT-5 CM (2 PO.) EXTERNE (2 Requis)
24	154538	JOINT D'ETANCHEITE-5 CM (2 PO.) TRAVERSEE DE PAROI-ETANCHE (2 Requis)
25	154405	TRAVERSEE DE PAROI ETANCHE-5 CM (2 PO.) (2 Requis)
26	274494	JOINT TORIQUE-(3/16 PO. X 2-5/8 PO. - i.d.) ❻
26	192115	JOINT TORIQUE #2-12 - ADAPTATEUR DE AIR
27	154418	RONDELLE-9,4 MM (3/8 PO.) INOX
28	154926	PIED-40 CM (16 PO.) DE DIAMETRE, TR40/50 (Remarque 1)
28	154520	PIED-48.3 CM (19 PO.) DE DIAMETRE, TR 60
28	154596	PIED-60 CM (24 PO.) DE DIAMETRE, TR100/140 (Remarque 1)
29	274494	JOINT TORIQUE-ADAPTATEUR DE VANINE (2 Requis)
30	271092	KIT-ADAPTATEUR DE VANINE A FILETAGE 5CM (2 PO.) ❺
31	271094	KIT-ADAPTATEURS DE VANINE A FILETAGE 3.8CM (1.1/2 PO.) ❺
32	271096	KIT-ADAPTATEURS DE VANNE A EMBOITEMENT 5 & 3.8CM (2 & 1-1/2 PO.) ❺
33	154641	KIT-COUVERCLE, RACCORD FILETE 15CM (6 PO.)-NOIR (VOIR DETAIL A)
33	154697	KIT-COUVERCLE, FILETAGE TRIANGULAIRE 15CM (6 PO.) TAN - (VOIR DETAIL B)
33	154856	KIT-COUVERCLE, RACCORD FILETE 21,6CM (8½ PO.)-NOIR
34	154687	JEU DE RACCORDS - COMPLET (Remarque 2)
35	154611	BAGUE D'ECARTEMENT - FILTRE D'EVENT 9.4 CM (3-3/4 PO.) - TR40
35	154612	BAGUE D'ECARTEMENT - FILTRE D'EVENT 11.4 CM (4-1/2 PO.) - TR50/60
35	154613	BAGUE D'ECARTEMENT - FILTRE D'EVENT 14 CM (5-1/2 PO.) - TR100
35	154614	BAGUE D'ECARTEMENT - FILTRE D'EVENT 12.7 CM (5 PO.) - TR140
39	154492	JOINT TORQUE
–	154002	RUBAN ADHESIF-FIXATION DU PIED TR40/50/60 (3 Requis)
–	154007	RUBAN ADHESIF-FIXATION DU PIED TR100/140 (3 Requis)
–	151602	CLE POUR TRAVERSEE DE PAROI ETANCHE - 5CM (2 PO.)
–	154714	KIT-TRAVERSEE DE PAROI ETANCHE (COMPREND LES PIECES Nº 20 A 25)

FILTRE A SABLE EN FIBRE DE VERRE TRITON™ II ET TR60 CLEARPRO

Pièces de Rechange

TR40
TR50
TR60
TR60 ClearPro
TR100
TR140

REMARQUES

Filtres fabriqués après le 1er décembre 1991 : utiliser un filetage trapèze rectangulaire de 6 pouces pour l'ouverture supérieure du corps du filtre ainsi que pour le couvercle. Voir Détail A.

Filtres fabriqués avant le 1er décembre 1991 : utiliser un filetage en « V » de 6 pouces. Voir Détail B.

Les couvercles de 6 pouces des Détails A et B ne sont PAS interchangeables.

Pour déterminer la date de fabrication : les quatre premiers chiffres du numéro de série indiquent le mois et l'année où le produit fut fabriqué.

❶ Utilisé sur les Filtres fabriqués avant 5-85.
❷ Utilisé sur les Filtres fabriqués après 5-85.
❸ Utilisé sur les Filtres fabriqués avant 3-83.
❹ Utilisé sur les Filtres fabriqués après 3-83 et jusqu'en 3-96.
❺ Pour les Installations sans Vanne (Paire).
❻ Utilisé sur les Filtres TR100 et 140.

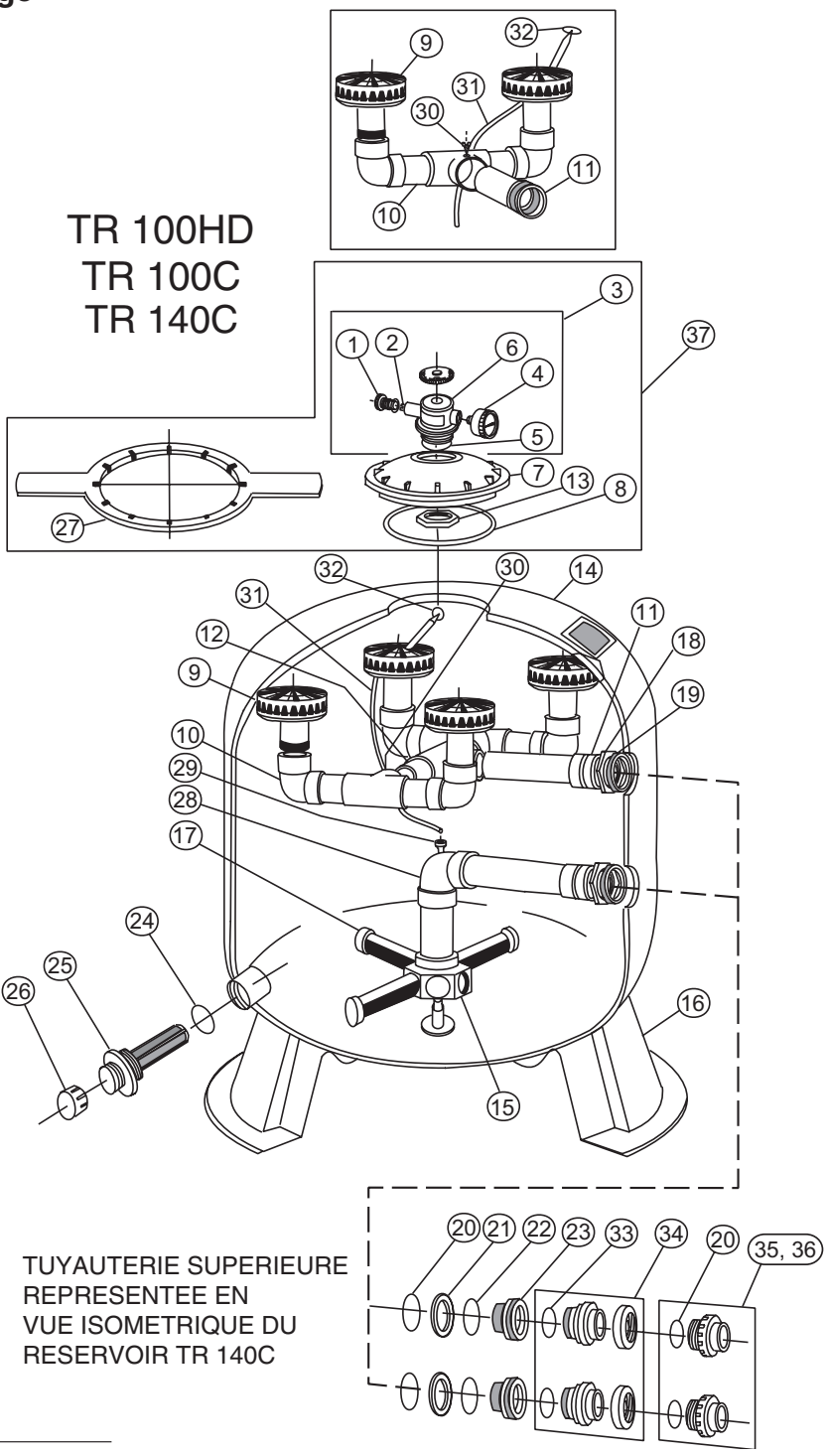
REMARQUE 1: Le remplacement du pied du réservoir exige l'utilisation d'une bande de montage de pied. Se référer aux numéros de pièces détachées.

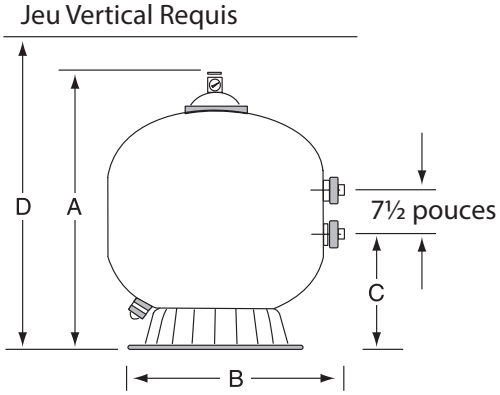
REMARQUE 2: L'ensemble des pièces de fixation inclue les articles 1, 2, 4, 5 et 27.

FILTRE A SABLE EN FIBRE DE VERRE TRITON™ 100HD, 100C ET 140C

Pièces de Rechange

TR100HD
TR100C
TR140C





MODELE	DIM. A	DIM. B	DIM. C	DIM. D
TR100C	100,9 cm	77,5 cm	41,9 cm	111,1 cm
TR140C	114,9 cm	92,7 cm	47,6 cm	125,1 cm
TR100HD	100,9 cm	77,5 cm	41,3 cm	106 cm

FILTRE A SABLE EN FIBRE DE VERRE TRITON™ 100HD, 100C ET 140C

Pièces de Rechange

TR100HD
TR100C
TR140C

UNITÉ	PIECE NO.	TRITON 100HD, 100C ET 140C DESCRIPTION
1	273512	PURGEUR D'AIR AVEC JOINT TORIQUE
2	273513	JOINT TORIQUE - VIS DE PURGEUR D'AIR
3	273564	CORPS DE PURGEUR D'AIR MANUEL
4	155050	MANOMÉTRE
4	991481	MANOMÉTRE TR100C/TR100HD ❷
5	154494	JOINT TORIQUE-(3/16 PO. X 2-5/8 PO. -i.d.)
6	273564	CORPS DE VANNE - USINÉ
7	154575	COUVERCLE - RACCORD 8-1/2 PO.
8	152509	ANNEAU CARRÉ 8-1/2 PO.
9	154599	DIFFUSEUR (2 REQUIS SUR TR100C/ TR100HD) ❶
9	154599	DIFFUSEUR (4 REQUIS SUR TR140C) ❶
10	156355	ENSEMBLE DE TUYAUTERIE SUPÉRIEURE-TR100C/TR100HD/TR140C ❶
11	156344	ENTRÉE D'EAU - TUYAUTERIE SUPÉRIEURE - TR100C/TR100HD
12	156354	ENSEMBLE RACCORD DE TUYAUTERIE SUPÉRIEURE - TR140C
13	154412	ÉCROU - 2 PO. INTERNE
14	153430	ENSEMBLE DE RÉSERVOIR ET PIED TR100C/ TR100HD RACCORD FILETÉ 8-1/2 PO. - NOIR
14	153431	ENSEMBLE DE RÉSERVOIR ET PIED TR140C RACCORD FILETÉ 8-1/2 PO. - NOIR
14	156224	ENSEMBLE DE RÉSERVOIR ET PIED TR100HD RACCORD FILETÉ 15 CM (6 PO.) - NOIR ❷
15	154453	MOYEU - ÉLÉMENT LATÉRAL TR100C/TR100HD/ TR140C
16	154596	PIED - DIAMÈTRE 24 PO. TR100C/TR100HD/ TR140C
17	152202	ÉLÉMENT LATÉRAL - LONGUEUR: 9-1/8 PO. TR100C (8 REQUIS)
17	154540	ÉLÉMENT LATÉRAL - LONGUEUR: 12 PO. TR140C (8 REQUIS)
18	154412	CONTRE-ÉCROU - 2 PO. INTERNE
19	154416	BAGUE D'ÉCARTEMENT - 2 PO. INTERNE
20	154492	JOINT TORIQUE - TRAVERSÉE DE PAROI ÉTANCHE - 2 PO.
21	154408	BAGUE D'ÉCARTEMENT - 2 PO. EXTERNE
22	154538	JOINT D'ETANCHEITE - TRAVERSÉE DE PAROI ETANCHE - 2 PO.
23	154405	TRAVERSÉE DE PAROI ETANCHE - 2 PO.
24	274494	JOINT TORIQUE-(3/16 PO. X 2-5/8 PO. -i.d.)
–	154407	RUBAN ADHÉSIF FIXATION DU PIED
25	152220	ENSEMBLE VIDANGE DE SABLE 2 PO.
26	154871	CHAPEAU - FILETÉ 1½ PO.
27	154527	CLÉ - COUVERCLE 8-1/2 PO.
27	151608	CLÉ - COUVERCLE 8-1/2 PO. ALUMINIUM
28	154807	ENSEMBLE DE TUYAUTERIE INFÉRIEURE TR100C/TR100HD
28	154489	ENSEMBLE DE TUYAUTERIE INFERIEURE TR140C
29	150036	RACCORD - TUBE DE PURGEUR D'AIR
30	273071	VIS #14 18-8 ❶

UNITÉ	PIECE NO.	TRITON 100HD, 100C ET 140C DESCRIPTION
31	150041	TUBE - PURGEUR D'AIR TR100C/TR100HD
31	150042	TUBE - PURGEUR D'AIR TR140C
32	150035	PURGEUR D'AIR DU FILTRE
33	274494	JOINT TORQUE - ADAPTATEUR DE VANNE
34	271096	KIT - PAIRE D'ADAPTATEUR SANS VANNE À EMBOÎTEMENT 2 PO. & 1-1/2 PO.
35	271092	KIT - PAIRE D'ADAPTATEURS SANS VANNE À FILETAGE 2 PO.
36	271094	KIT - PAIRE D'ADAPTATEURS SANS VANNE À FILETAGE 1-1/2 PO
37	154856	KIT - COUVERCLE, RACCORD FILETÉ 8-1/2 PO. NOIR
37	155738	KIT - COUVERCLE, RACCORD FILETÉ 8-1/2 ❷

REMARQUE

❶ Différentes quantités sont requises pour les Filtres TR100C etTR140C.

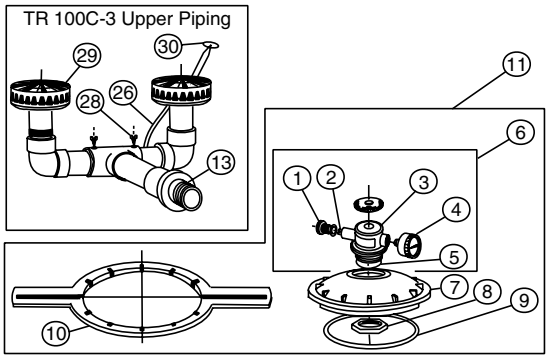
❷ Utilisé sur les Filtres TR100 HD.

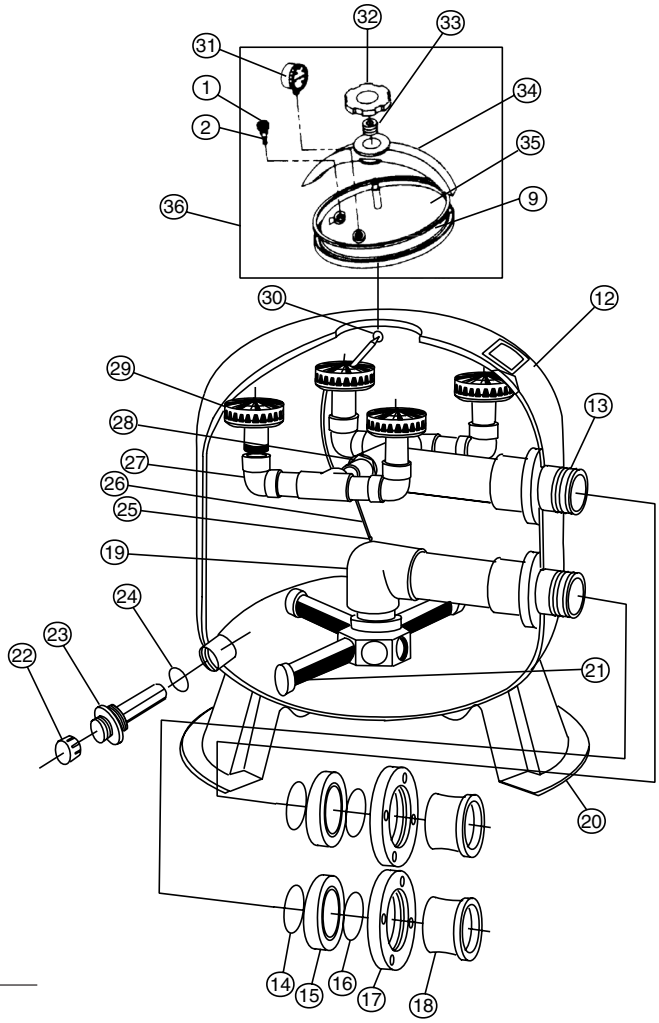
FRANÇAIS

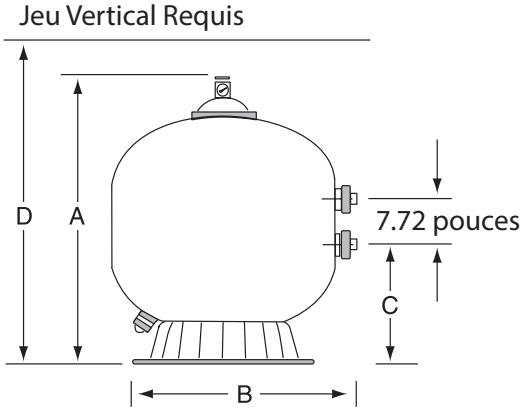
FILTRE A SABLE EN FIBRE DE VERRE TRITON™ 100C-3 ET 140C-3

Pièces de Rechange

TR100C-3
TR140C-3







MODELE	DIM. A	DIM. B	DIM. C	DIM. D
TR100C-3	100,9 cm	77,5 cm	40,8 cm	111,1 cm
TR140C-3	114,9 cm	92,7 cm	47 cm	125,1cm

FILTRE A SABLE EN FIBRE DE VERRE TRITON™ 100C-3 ET 140C-3

Pièces de Rechange

TR100C-3
TR140C-3

UNITÉ	PIECE NO.	TRITON 100C-3 ET 140C-3 DESCRIPTION
1	273512	PURGEUR D'AIR AVEC JOINT TORIQUE ❷❸
2	273513	JOINT TORIQUE -VIS DE PURGEUR D'AIR ❷
3	273564	CORPS DE PURGEUR D'AIR MANUEL ❷
4	155050	MANOMETRE ❷
5	154494	JOINT TORIQUE - (3/16 PO. X 2-5/8 PO. - i.d.) ❷
6	273564	CORPS DE VANNE - USINÉ ❷
7	154575	COUVERCLE - RACCORD 8-1/2 PO. ❷
8	154412	ÉCROU - 2 PO. INTERNE ❷
9	152509	ANNEAU CARRE - COUVERCLE ❷❸
10	154527	CLÉ - COUVERCLE 8-1/2 PO. ❷
11	154856	KIT - COUVERCLE, RACCORD FILETÉ 8-1/2 PO.❷
11	156842	KIT - COUVERCLE, AVEC LE JOINT 8-1/2 PO.❹
12	153430	ENSEMBLE DE RESERVOIR ET PIED TR 100C-3 RACCORD FILETE
12	153431	ENSEMBLE DE RESERVOIR ET PIED TR 140C-3 RACCORD FILETE
13	154007	ENSEMBLE DE TUYAUTERIE SUPERIEURE TR 100C-3
13	154008	ENSEMBLE DE TUYAUTERIE SUPERIEURE TR 140C-3
14	154005	JOINT TORIQUE - PARKER 2-343 (2 Requis)
15	154002	BAGUE D'ECARTEMENT 3 PO. (2 Requis)
16	154004	JOINT TORIQUE - PARKER 2-342 (2 Requis)
17	154003	BRIDE 3 PO. (2 Requis)
18	154001	ADAPTATEUR - BRIDE 3 PO. (2 Requis)
19	154009	ENSEMBLE DE TUYAUTERIE INFERIEURE TR100C-3
19	154010	ENSEMBLE DE TUYAUTERIE INFERIEURE TR140C-3
20	154596	PIED - 24 PO. DE DIAMETRE TR100C-3/140C-3
21	152202	ELEMENT LATERAL 9 PO. TR100C-3 (8 Requis)
21	154540	ELEMENT LATERAL 12 PO. TR140C-3 (8 Requis)
22	154871	CHAPEAU - FILETE 1-1/2 PO.
23	152220	ENSEMBLE VIDANGE DE SABLE 2 PO.
24	274494	JOINT TORIQUE-(3/16 PO. X 2-5/8 PO. -i.d.) (2 Requis)
25	154441	RACCORD - TUBE DE PURGE D'AIR
26	150041	TUBE - PURGE D'AIR TR100C-3 (23 PO.)
26	150042	TUBE - PURGE D'AIR TR140C-3 (27 PO.)
27	154018	ENSEMBLE DE TUYAUTERIE DU DIFFUSEUR TR140C-3 (2 Requis)
28	552474	VIS- #10 - 1-1/2 PO. A SIX PANS (2 Requis)
29	154599	DIFFUSEUR (2 Requis pour TR100-C3)
29	154599	DIFFUSEUR (4 REQUIS POUR TR140-C3)

UNITÉ	PIECE NO.	TRITON 100C-3 ET 140C-3 DESCRIPTION
30	150035	FILTRE - ELC/TR
31	190058	MANOMETRE, ¼ PO. PSI ❸
32	154581	BOUTON TR OVALE ❸
33	154582	RESSORT TR OVALE ❸
34	154579	PONT TR OVALE ❸
35	154576	COUVERCLE OVALE ❸
36	156841	KIT - COUVERCLE OVALE TRITON ❶❸

REMARQUE

❶ P/N 156841 inclue les articles: 1, 9, et 31 – 35.
❷ Utilisé sur les Filtres fabriqués avant 3-97.
❸ Utilisé sur les Filtres fabriqués après 3-97.
❹ Utilisé sur les Filtres fabriqués après 4-15.

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P/N 154901 REV. H 3/18/15

PENTAIR

WHISPERFLO®
HIGH PERFORMANCE PUMP

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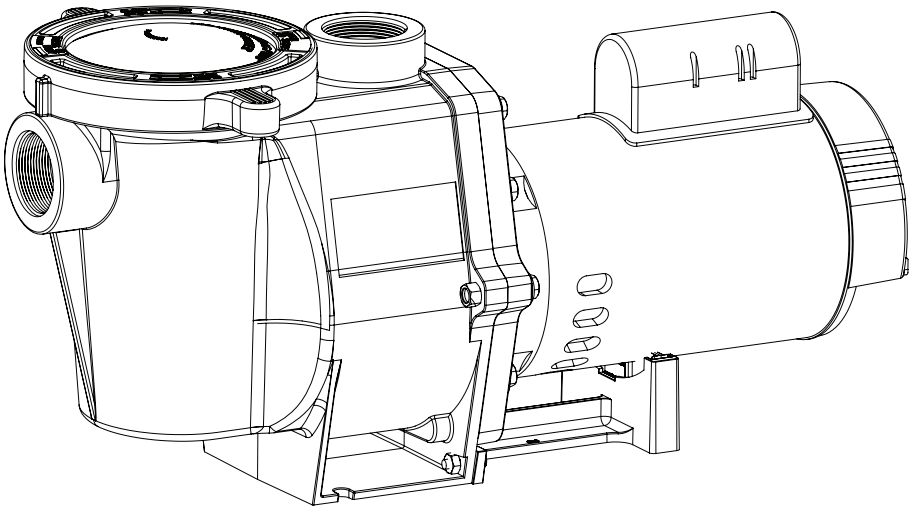
ESPAÑOL 10



INSTALLATION AND USER'S GUIDE

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

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If you have questions about ordering Pentair Aquatic Systems replacement parts, and pool products, please contact:

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Web site
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P/N 071109 Rev. J 8/29/14

IMPORTANT PUMP WARNING AND SAFETY INSTRUCTIONS

IMPORTANT NOTICE

This guide provides installation and operation instructions for this product. Consult Pentair with any questions regarding this equipment.

Attention Installer: This guide contains important information about the installation, operation and safe use of this product. This information should be given to the owner and/or operator of this equipment after installation or left on or near the pump.

Attention User: This manual contains important information that will help you in operating and maintaining this product. Please retain it for future reference.

READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

This is the safety alert symbol. When you see this symbol on your system or in this manual, look for one of the following signal words and be alert to the potential for personal injury.

DANGER Warns about hazards that can cause death, serious personal injury, or major property damage if ignored.

WARNING Warns about hazards that may cause death, serious personal injury, or major property damage if ignored.

CAUTION Warns about hazards that may or can cause minor personal injury or property damage if ignored.

NOTE indicates special instructions not related to hazards.

Carefully read and follow all safety instructions in this manual and on equipment. Keep safety labels in good condition; replace if missing or damaged.

When installing and using this electrical equipment, basic safety precautions should always be followed, include the following:

WARNING Do not permit children to use this product.

WARNING **RISK OF ELECTRICAL SHOCK.** Connect only to a branch circuit protected by a ground-fault circuit-interrupter (GFCI). Contact a qualified electrician if you cannot verify that the circuit is protected by a GFCI.

WARNING This unit must be connected only to a supply circuit that is protected by a ground-fault circuit-interrupter (GFCI). Such a GFCI should be provided by the installer and should be tested on a routine basis. To test the GFCI, push the test button. The GFCI should interrupt power. Push the reset button. Power should be restored. If the GFCI fails to operate in this manner, the GFCI is defective. If the GFCI interrupts power to the pump without the test button being pushed, a ground current is flowing, indicating the possibility of an electric shock. Do not use this pump. Disconnect the pump and have the problem corrected by a qualified service representative before using.

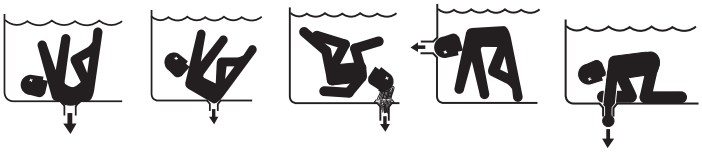
CAUTION This pump is for use with permanent swimming pools and may also be used with hot tubs and spas if so marked. Do not use with storable pools. A permanently-installed pool is constructed in or on the ground or in a building such that it cannot be readily disassembled for storage. A storable pool is constructed so that it is capable of being readily disassembled for storage and reassembled to its original integrity.

General Warnings

- Never open the inside of the drive motor enclosure. There is a capacitor bank that holds a 230 VAC charge even when there is no power to the unit.
- The pump is not submersible.
- The pump is capable of high flow rates; use caution when installing and programming to limit pumps performance potential with old or questionable equipment.
- Code requirements for the electrical connection differ from state to state. Install equipment in accordance with the National Electrical Code and all applicable local codes and ordinances.
- Before servicing the pump; switch OFF power to the pump by disconnecting the main circuit to the pump.
- This appliance is not intended for use by persons (including children) of reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety.

DANGER FAILURE TO FOLLOW ALL INSTRUCTIONS AND WARNINGS CAN RESULT IN SERIOUS BODILY INJURY OR DEATH. **THIS PUMP SHOULD BE INSTALLED AND SERVICED ONLY BY A QUALIFIED POOL SERVICE PROFESSIONAL. INSTALLERS, POOL OPERATORS AND OWNERS MUST READ THESE WARNINGS AND ALL INSTRUCTIONS IN THE OWNER'S MANUAL BEFORE USING THIS PUMP. THESE WARNINGS AND THE OWNER'S MANUAL MUST BE LEFT WITH THE POOL OWNER.**

DANGER SUCTION ENTRAPMENT HAZARD: STAY OFF THE MAIN DRAIN AND AWAY FROM ALL SUCTION OUTLETS!



THIS PUMP PRODUCES HIGH LEVELS OF SUCTION AND CREATES A STRONG VACUUM AT THE MAIN DRAIN AT THE BOTTOM OF THE BODY OF WATER. THIS SUCTION IS SO STRONG THAT IT CAN TRAP ADULTS OR CHILDREN UNDER WATER IF THEY COME IN CLOSE PROXIMITY TO A DRAIN OR A LOOSE OR BROKEN DRAIN COVER OR GRATE.

THE USE OF UNAPPROVED COVERS OR ALLOWING USE OF THE POOL OR SPA WHEN COVERS ARE MISSING, CRACKED OR BROKEN CAN RESULT IN BODY OR LIMB ENTRAPMENT, HAIR ENTANGLEMENT, BODY ENTRAPMENT, EVISCERATION AND/OR DEATH.
The suction at a drain or outlet can cause:

Limb Entrapment: When a limb is sucked or inserted into an opening resulting in a mechanical bind or swelling. This hazard is present when a drain cover is missing, broken, loose, cracked or not properly secured.

Hair Entanglement: When the hair tangles or knots in the drain cover, trapping the swimmer underwater. This hazard is present when the flow rating of the cover is too small for the pump or pumps.

Body Entrapment: When a portion of the body is held against the drain cover trapping the swimmer underwater. This hazard is present when the drain cover is missing, broken or the cover flow rating is not high enough for the pump or pumps.

Evisceration/Disembowelment: When a person sits on an open pool (particularly a child wading pool) or spa outlet and suction is applied directly to the intestines, causing severe intestinal damage. This hazard is present when the drain cover is missing, loose, cracked, or not properly secured.

IMPORTANT PUMP WARNING AND SAFETY INSTRUCTIONS

Mechanical Entrapment: When jewelry, swimsuit, hair decorations, finger, toe or knuckle is caught in an opening of an outlet or drain cover. This hazard is present when the drain cover is missing, broken, loose, cracked, or not properly secured.

NOTE: ALL SUCTION PLUMBING MUST BE INSTALLED IN ACCORDANCE WITH THE LATEST NATIONAL AND LOCAL CODES, STANDARDS AND GUIDELINES.

⚠WARNING TO MINIMIZE THE RISK OF INJURY DUE TO SUCTION ENTRAPMENT HAZARD:

- A properly installed and secured ANSI/ASME A112.19.8 approved anti-entrapment suction cover must be used for each drain.
- Each suction cover must be installed at least three (3') feet apart, as measured from the nearest point to nearest point.
- Regularly inspect all covers for cracks, damage and advanced weathering.
- If a cover becomes loose, cracked, damaged, broken or is missing, replace with an appropriate certified cover.
- Replace drain covers as necessary. Drain covers deteriorate over time due to exposure to sunlight and weather.
- Avoid getting hair, limbs or body in close proximity to any suction cover, pool drain or outlet.
- Disable suction outlets or reconfigure into return inlets.

⚠WARNING A clearly labeled emergency shut-off switch for the pump must be in an easily accessible, obvious place. Make sure users know where it is and how to use it in case of emergency.

The Virginia Graeme Baker (VGB) Pool and Spa Safety Act creates new requirements for owners and operators of commercial swimming pools and spas.

Commercial pools or spas constructed on or after December 19, 2008, shall utilize:

(A) A multiple main drain system without isolation capability with suction outlet covers that meet ASME/ANSI A112.19.8a Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs and either:

(i) A safety vacuum release system (SVRS) meeting ASME/ANSI A112.19.17 Manufactured Safety Vacuum Release systems (SVRS) for Residential and Commercial Swimming Pool, Spa, Hot Tub, and Wading Pool Suction Systems and/or ASTM F2387 Standard Specification for Manufactured Safety Vacuum Release Systems (SVRS) for Swimming pools, Spas and Hot Tubs or

(ii) A properly designed and tested suction-limiting vent system or

(iii) An automatic pump shut-off system.

Commercial pools and spas constructed prior to December 19, 2008, with a single submerged suction outlet shall use a suction outlet cover that meets ASME/ANSI A112.19.8a and either:

(A) A SVRS meeting ASME/ANSI A112.19.17 and/or ASTM F2387, or

(B) A properly designed and tested suction-limiting vent system, or

(C) An automatic pump shut-off system, or

(D) Disabled submerged outlets, or

(E) Suction outlets shall be re-configured into return inlets.

For Installation of Electrical Controls at Equipment Pad (ON/OFF Switches, Timers and Automation Load Center)

⚠CAUTION Install all electrical controls at equipment pad, such as on/off switches, timers, and control systems, etc. to allow the operation (startup, shut-down, or servicing) of any pump or filter so the user does not place any portion of his/her body over or near the pump strainer lid, filter lid or valve closures. This installation should allow the user enough space to stand clear of the filter and pump during system start-up, shut down or servicing of the system filter.

⚠DANGER HAZARDOUS PRESSURE: STAND CLEAR OF PUMP AND FILTER DURING START UP

Circulation systems operate under high pressure. When any part of the circulating system (i.e. locking ring, pump, filter, valves, etc.) is serviced, air can enter the system and become pressurized. Pressurized air can cause the pump housing cover filter lid and valves to violently separate which can result in severe personal injury or death. Filter tank lid and strainer cover must be properly secured to prevent violent separation. Stand clear of all circulation system equipment when turning on or starting up pump.

Before servicing equipment, make note of the filter pressure. Be sure that all controls are set to ensure the system cannot inadvertently start during service. Turn off all power to the pump. **IMPORTANT: Place filter manual air relief valve in the open position and wait for all pressure in the system to be relieved.**

Before starting the system, fully open the manual air relief valve and place all system valves in the "open" position to allow water to flow freely from the tank and back to the tank. Stand clear of all equipment and start the pump.

IMPORTANT: Do not close filter manual air relief valve until all pressure has been discharged from the valve and a steady stream of water appears. Observe filter pressure gauge and be sure it is not higher than the pre-service condition.

General Installation Information

- All work must be performed by a qualified service professional, and must conform to all national, state, and local codes.
- Install to provide drainage of compartment for electrical components.
- These instructions contain information for a variety of pump models and therefore some instructions may not apply to a specific model. All models are intended for use in swimming pool applications. The pump will function correctly only if it is properly sized to the specific application and properly installed.

⚠WARNING Pumps improperly sized or installed or used in applications other than for which the pump was intended can result in severe personal injury or death. These risks may include but not be limited to electric shock, fire, flooding, suction entrapment or severe injury or property damage caused by a structural failure of the pump or other system component.

⚠WARNING The pump can produce high levels of suction within the suction side of the plumbing system. These high levels of suction can pose a risk if a person comes within the close proximity of the suction openings. A person can be seriously injured by this high level of vacuum or may become trapped and drown. It is absolutely critical that the suction plumbing be installed in accordance with the latest national and local codes for swimming pools.

Warnings and safety instructions for Pentair Aquatic Systems pumps and other related products are available at: **http://www.pentairpool.com/pool-owner/safety-warnings/** or call (800) 831-7133 for additional free copies of these instructions.

Please refer to **http://www.pentairpool.com/pool-owner/safetywarnings/** for warning and safety instructions related to this product.

SAVE THESE INSTRUCTIONS

INSTALLATION

Only a qualified plumbing professional should install the WhisperFlo® High Performance Pump. Refer to *"Pump Warning And Safety Instructions"* on pages ii - iii for additional installation and safety information.

Location

Be sure the pump location meets the following requirements:

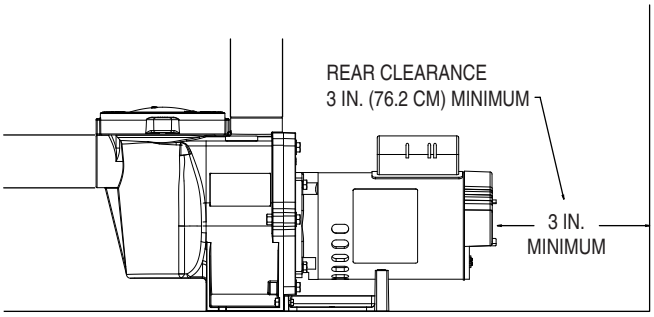
Note: Do not install this pump within an outer enclosure or beneath the skirt of a hot tub or spa unless marked accordingly.

1. Install the pump as close to the pool or spa as possible. To reduce friction loss and improve efficiency, use short, direct suction piping returns.
2. Install a minimum of 5 feet (1.52 meters) from the inside wall of the pool and spa. Canadian installations require a minimum of 9.8 feet (3 meters) from pool water level.
3. Install the pump a minimum of 3 feet (.9 meters) from the heater outlet.
4. Do not install the pump more than 10 feet (3 meters) above the water level.
5. Install the pump in a well ventilated location protected from excessive moisture (i.e., rain gutter downspouts, sprinklers, etc.)
6. Install the pump with a rear clearance of at least 3 inches (76.2 mm) so that the motor can be removed easily for maintenance and repair.

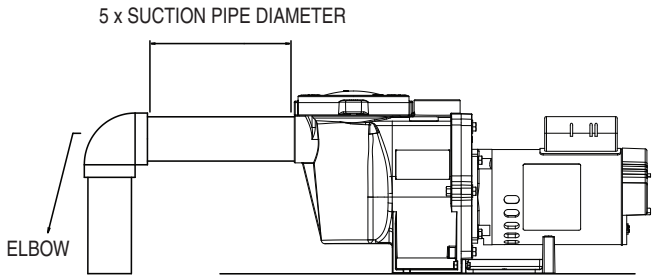
Piping

1. For improved pool plumbing, it is recommended to use a larger pipe size. When installing the inlet and outlet fittings (male adaptors), use thread sealant.
2. Piping on the suction side of the pump should be the same or larger than the return line diameter.
3. Plumbing on the suction side of the pump should be as short as possible.
4. It is recommended that a valve, elbow or tee installed in the suction line should be no closer to the front of the pump than five (5) times the suction line pipe diameter

   Example:
   A 2 inch (50.8 mm) pipe requires a 10 inch (254 mm) straight run in front of the suction inlet of the pump. This will help the pump prime faster and last longer.



Pump Rear Clearance



Recommended Piping

Fittings and Valves

1. Do not install 90° elbows directly into pump inlet.
2. Flooded suction systems should have gate valves installed on suction and discharge pipes for maintenance, however, the suction gate valve should be no closer than five times the suction pipe diameter as described in this section.
3. Use a check valve in the discharge line when using this pump for any application where there is significant height to the plumbing after the pump.
4. Be sure to install check valves when plumbing in parallel with another pump. This helps prevent reverse rotation of the impeller and motor.

⚠WARNING

RISK OF ELECTRICAL SHOCK OR ELECTROCUTION. This pump must be installed by a licensed or certified electrician or a qualified service professional in accordance with the National Electrical Code and all applicable local codes and ordinances. Improper installation will create an electrical hazard which could result in death or serious injury to users, installers, or others due to electrical shock, and may also cause damage to property.

Always disconnect power to the pump at the circuit breaker before servicing the pump. Failure to do so could result in death or serious injury to service people, pool users or others due to electric shock and/or property damage.
Read all servicing instructions before working on the pump.

Electrical Wiring Installation

1. Be sure all electrical breakers and switches are turned off before wiring motor.
2. Be sure the supply line voltage matches the motor voltage listed on the motor plate (example 230 VAC or 115 VAC). If they do not match, permanent motor damage may occur.
3. Use strain relief and be sure all electrical connections are clean and tight.
4. Cut wires to the appropriate length so they don't overlap or touch when connected to the terminal board.
5. Permanently ground the motor using the green ground terminal located on the inside of the motor canopy or access plate, see Figure 1. Use the correct wire size and type specified by National Electrical Code. Make sure the ground wire is connected to an electrical service ground.
6. Bond the motor to the pool structure in accordance with the National Electrical Code. Use a solid No. 8 AWG or larger copper conductor. Run a wire from the external bonding to the pool bonding structure.
7. Connect the wire from the accessible bonding lug on the motor to all metal parts of the swimming pool, spa, or hot tub structure and to all electrical equipment, metal conduit, and metal piping within 5 feet (1.52 meters) of the inside walls of the swimming pool, spa, or hot tub. For Canada, a 6 AWG or larger solid copper bonding conductor is required.
8. The pump should be permanently connected to either a circuit breaker, 2-pole timer or 2-pole relay. If AC power is supplied by a GFCI circuit breaker, use a dedicated circuit breaker that has no other electrical loads.

Pentair offers 2-Pole 20 Amp GFCI breakers (P/N PA220GF) which offer 6 milliamp personnel protection while meeting 2008 to current NEC Standards for Pool Pumps.

Note: When the pump is started and stopped by removing power with a relay or timer, a two-pole device should be used to apply and remove power to both POWER LINE TERMINALS.

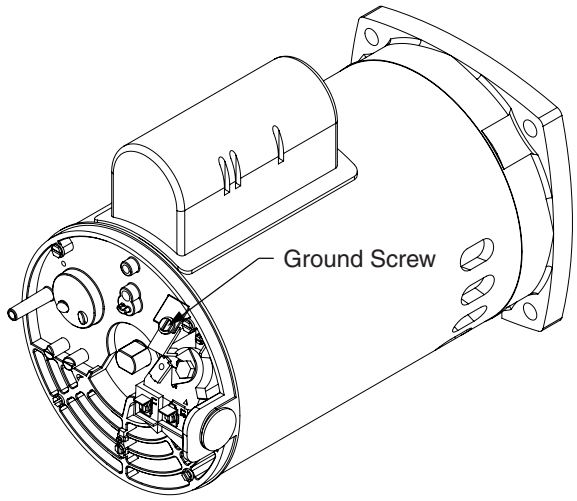


Figure 1. Field Wiring Compartment

MAINTENANCE

⚠WARNING DO NOT open the strainer pot if pump fails to prime or if pump has been operating without water in the strainer pot. Pumps operated in these circumstances may experience a build up of vapor pressure and may contain scalding hot water. Opening the pump may cause serious personal injury. In order to avoid the possibility of personal injury, make sure the suction and discharge valves are open and strainer pot temperature is cool to touch, then open with extreme caution.

⚠CAUTION To prevent damage to the pump and for proper operation of the system, clean pump strainer and skimmer baskets regularly.

Pump Strainer Basket

The pump strainer basket (or 'strainer pot', 'hair and lint pot'), is located in front of the volute. Inside the chamber is the basket which must be kept clean of leaves and debris at all times. View basket through the 'See Through Lid' to inspect for leaves and debris.

Regardless of the length of time between filter cleaning, it is most important to visually inspect the basket at least once a week. A dirty basket will reduce the efficiency of the filter and heater and also put an abnormal stress on the pump motor which would result in a costly repair bill.

Cleaning the Pump Strainer Basket

1. Turn off the pump at the circuit breaker.
2. Relieve pressure in the system by allowing the water to cool.
3. Gently tap the clamp in a counter-clockwise direction to remove the clamp and lid.
4. Remove debris and rinse out the basket. Replace the basket if it is cracked.
5. Put the basket back into the housing. Be sure to align the notch in the bottom of the basket with the rib in the bottom of the volute.
6. Fill the pump pot and volute up to the inlet port with water.
7. Clean the cover, O-ring, and sealing surface of the pump pot. ***Note:*** It is important to keep the lid O-ring clean and well lubricated.
8. Reinstall the lid by placing the lid on the pot. Be sure the lid O-ring is properly placed. Seat the clamp and lid on the pump then turn clockwise until the handles are horizontal.
9. Turn the power "ON" at the house circuit breaker. Reset the pool time clock to the correct time.
10. Open the High Flow manual air relief valve on top of the filter.
11. Stand clear of the filter. Start the pump.
12. Bleed air from the filter until a steady stream of water comes out. Close the High Flow™ Manual Air Relief Valve.

⚠WARNING **THIS SYSTEM OPERATES UNDER HIGH PRESSURE**. When any part of the circulating system (e.g., Lock Ring, Pump, Filter, Valves, etc.) is serviced, air can enter the system and become pressurized. Pressurized air can cause the lid to separate which can result in serious injury, death, or property damage. To avoid this potential hazard, follow above instructions.

Winterizing

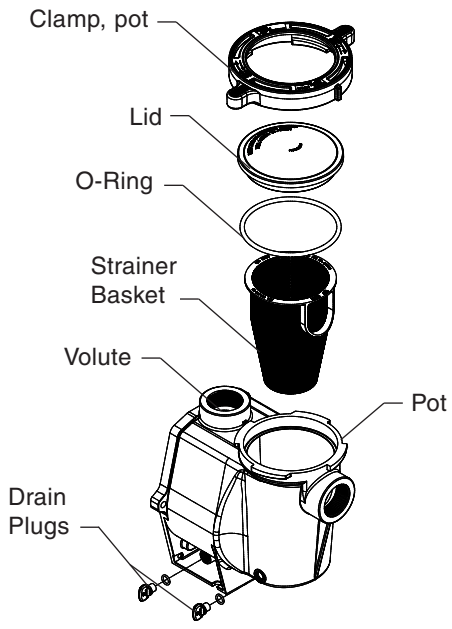
You are responsible for determining when freezing conditions may occur. If freezing conditions are expected, take the following steps to reduce the risk of freeze damage. ***Freeze damage is not covered under warranty.***

To prevent freeze damage, follow the procedures below:

1. Shut off electrical power for the pump at the circuit breaker.
2. Drain the water out of the pump housing by removing the two thumb-twist drain plugs from the housing. Store the plugs in the pump basket.
3. Cover the motor to protect it from severe rain, snow and ice.

Note: Do not wrap motor with plastic or other air tight materials during winter storage. The motor may be covered during a storm, winter storage, etc., but never when operating or expecting operation.

In mild climate areas, when temporary freezing conditions may occur, run your filtering equipment all night to prevent freezing.



Strainer Pot Assembly

ENGLISH

SERVICING

⚠WARNING Always disconnect power to the pump at the circuit breaker and disconnect the communication cable before servicing the pump. Failure to do so could result in death or serious injury to service people, users or others due to electric shock. Read all servicing instructions before working on the pump.

⚠WARNING **DO NOT** open the strainer pot if pump fails to prime or if pump has been operating without water in the strainer pot. Pumps operated in these circumstances may experience a build up of vapor pressure and may contain scalding hot water. Opening the pump may cause serious personal injury. In order to avoid the possibility of personal injury, make sure the suction and discharge valves are open and strainer pot temperature is cool to touch, then open with extreme caution.

⚠CAUTION Be sure not to scratch or mar the polished shaft seal faces; seal will leak if faces are damaged. The polished and lapped faces of the seal could be damaged if not handled with care.

Care of Electric Motor

Protect from heat

1. Shade the motor from the sun.
2. Any enclosure must be well ventilated to prevent overheating.
3. Provide ample cross ventilation.

Protect against dirt

1. Protect from any foreign matter or splashing water.
2. Do not store (or spill) chemicals on or near the motor.
3. Protect from any foreign matter or splashing water.
4. Avoid sweeping or stirring up dust near the motor while it is operating.
5. If a motor has been damaged by dirt it voids the motor warranty.
6. Clean the lid and clamp, O-ring, and sealing surface of the pump pot.

Protect against moisture

1. Protect from splashing or sprayed water.
2. Protect from extreme weather.
3. Protect from any foreign matter or splashing water.
4. If a motor has become wet - let it dry before operating. Do not allow the pump to operate if it has been flooded.
5. If a motor has been damaged by water it voids the motor warranty.

Note: When replacing the motor, be certain that the motor support is correctly positioned to support the size of motor being installed.

Shaft Seal Replacement

The Shaft Seal consists primarily of two parts, a rotating member and a ceramic seal.

The pump requires little or no service other than reasonable care, however, a Shaft Seal may occasionally become damaged and must be replaced.

Note: The polished and lapped faces of the seal could be damaged if not handled with care.

Pump Disassembly

All moving parts are located in the rear sub-assembly of this pump.

Tools required:

- 3/32 inch Allen head wrench
- 1/2 inch open end wrench
- 9/16 inch open end wrench
- Flat blade screwdriver
- #2 Phillips scewdriver

To remove and repair the motor subassembly, follow the steps below:

1. Turn off the pump circuit breaker at the main panel.
2. Drain the pump by removing the drain plugs.
3. Remove the 6 bolts that hold the main pump body (strainer pot/volute) to the rear sub-assembly.
4. GENTLY pull the two pump halves apart, removing the rear sub-assembly.
5. Use a 3/32 inch Allen head wrench to loosen the two holding screws located on the diffuser.
6. Hold the impeller securely in place and remove the impeller lock screw by using a #2 Phillips screwdriver. The screw is a left-handed thread and loosens in a clockwise direction.
7. Remove the shaft cap located at the back of the motor and hold the shaft secure with a ½ inch open-end wrench.
8. To unscrew the impeller from the shaft, twist the impeller counterclockwise.
9. Remove the four bolts from the seal plate to the motor, using a 9/16 inch wrench.

⚠CAUTION **DO NOT run the pump dry.** If the pump is run dry, the mechanical seal will be damaged and the pump will start leaking. If this occurs, the damaged seal must be replaced. ALWAYS maintain proper water level. If the water level falls below the suction port, the pump will draw air through the suction port, losing the prime and causing the pump to run dry, resulting in a damaged seal. Continued operation in this manner could cause a loss of pressure, resulting in damage to the pump case, impeller and seal and may cause property damage and personal injury.

Pump Reassembly

1. When installing the replacement shaft seal, use silicone sealant on the metal portion before pressing into the seal plate, being careful to keep off of the seal face. Ensure the seal is fully seated and allow 24 hours for sealant to cure. (Complete seal plate w/seal replacement kit available, P/N 350201/350101.)
2. Before installing the ceramic section of the seal into the impeller, be sure the impeller is clean. Use a light density soap and water to seal the seal. Press the seal into the impeller with your thumbs and wipe off the ceramic and carbon faces with a clean cloth.
3. Remount the seal plate to the motor by installing bolts in an X pattern and tightening to 70 in-lbs.
4. Clean the motor shaft thread and the impeller insert, then screw the impeller onto the motor shaft.
5. Screw in the impeller lock screw (counter-clockwise and tighten to 25 in-lbs. while holding the motor shaft with wrench).
6. Remount the diffuser onto the seal plate. Make sure the plastic pins and holding screw inserts are aligned.
7. Grease the diffuser O-ring and seal plate gasket.
8. Grease the bolt threads, assemble the motor sub-assembly to the strainer pot-pump body by using the two through bolts for proper alignment. Do not tighten the through bolts until all 6 bolts are in place and finger tightened. Torque in a cross pattern to 110 in-lbs.
9. Fill the pump with water.
10. Reinstall the pump lid and plastic clamp; see the next section, 'Restart Instructions'.
11. Reprime the system.

Restart Instructions

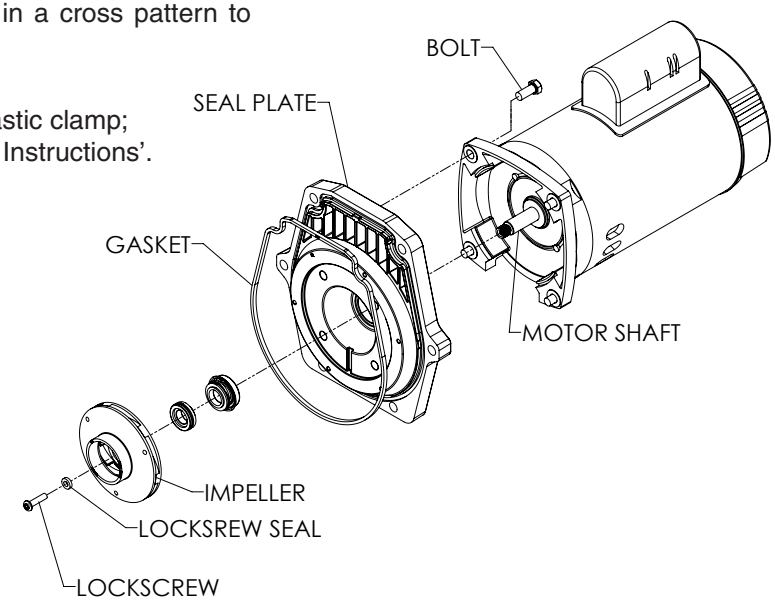
If pump is installed below the water level of the pool, close return and suction lines prior to opening hair and lint pot on pump. Make sure to re-open valves prior to operating.

Priming the Pump

The pump strainer pot must be filled with water before the pump is initially started. Follow these steps to prime the pump:

1. Remove the pump lid plastic clamp. Remove the pump lid.
2. Fill the pump strainer pot with water.
3. Reassemble the pump cover and plastic clamp onto the strainer pot. The pump is now ready to prime.
4. Open the air release valve on the filter, and stand clear of the filter.
5. Turn on the switch or time clock.
6. When water comes out of the air release valve, close the valve. The system should now be free of air and recirculating water to and from the pool.
7. For 2-speed pumps:

- Pump should run on high-speed for priming.
- The pump should not run longer than 8 minutes before priming is achieved.



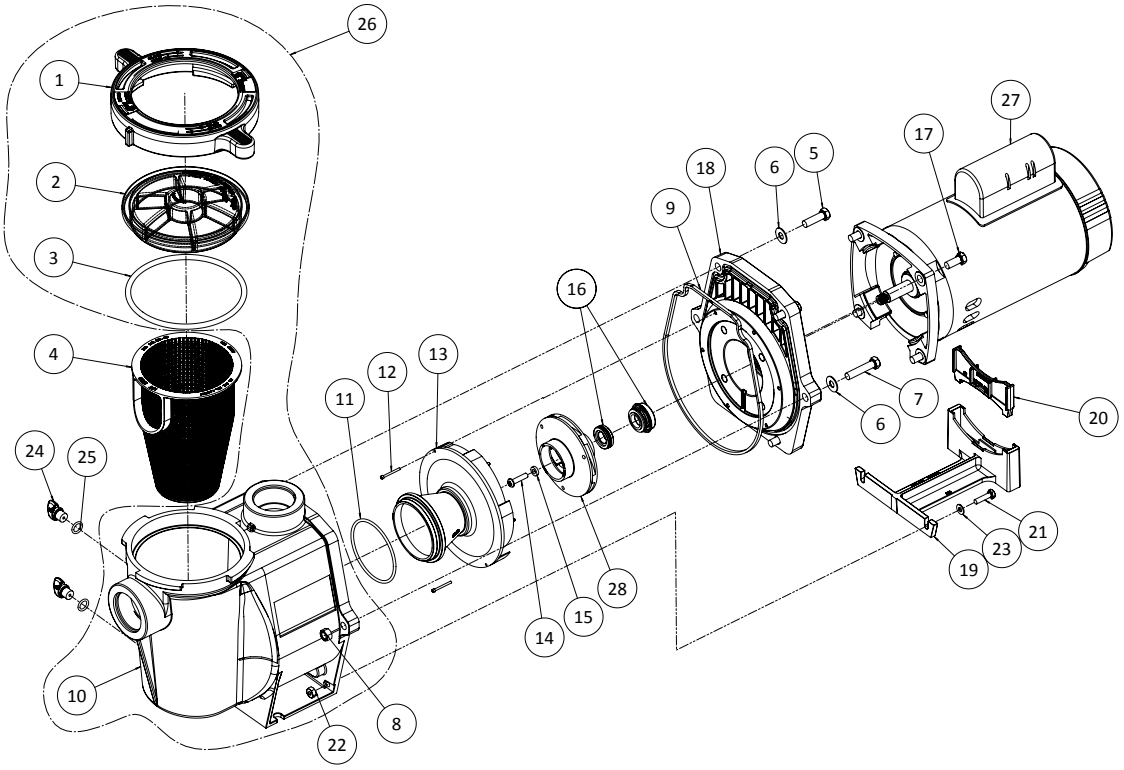
Motor Assembly

TROUBLESHOOTING

Problem	Possible Cause	Corrective Action
Pump failure.	Pump will not prime - Air leak, too much air.	Check suction piping and valve glands on any suction gate valves. Secure lid on pump strainer pot and be sure lid gasket is in place. Check water level to be sure skimmer is not drawing air.
	Pump will not prime - Not enough water.	Be sure the suction lines, pump, strainer, and pump volute are full of water. Be sure valve on suction line is working and open (some systems do not have valves). Check water level to make sure water is available through skimmer.
	Pump stainer gasket is clogged.	Clean pump strainer pot.
	Pump strainer gasket is defective.	Replace gasket.
Reduced capacity and/or head.	Air pockets or leaks in suction line.	Check suction piping and valve glands on any suction gate valves. Secure lid on pump strainer pot and be sure lid gasket is in place. Check water level to be sure skimmer is not drawing air.
	Clogged impeller.	Turn off electrical power to the pump. Disassemble (see page 4, 'Pump Disassembly') Clean debris from impeller. If debris cannot be removed, complete the following steps: 1. Remove left hand thread anti-spin bolt and o-ring. 2. Remove, clean, and reinstall impeller. Reassemble (see page 5, 'Pump Reassembly')
	Pump strainer clogged.	Clean suction trap.

REPLACEMENT PARTS

WhisperFlo® High Performance Pump Parts List



Item No.	P/N	Description
1	357199	Clamp, Cam & Ramp, Almond
1	357150	Clamp, Cam & Ramp, Black
2	357151	Cover, Clear, WFE Pump
2	357156	Cover, chemical resistant Cam & Ramp
3	350013	O-Ring, WFE Cover
4	070387	Strainer Basket, WFE
5	070430	Bolt, 3/8 - 16 x 1.25 Hex Head. SS, 4 Req.
6	072184	Washer, 3/8 x 13/16 O.D. SS, 6 Req.
7	070431	Bolt, 3/8 - 16 x 1.75 Hex Head. SS, 2 Req.
8	071403	Nut, 3/8, 16 Hex Head, 2 Req.
9	357100	Black Gasket for Seal Plate
10	357149	Volute & Seal Plate, Almond Replacement Kit
10	350015	Volute, WFE Pump & Pot, Almond
10	357157	Volute, WFE Pump & Pot, Black ❶
11	355227	O-Ring Parker No. 2-238, WFE Pump
12	071660	Set Screw, 4-40 x 1-1/8 WFE, 2 Req.
13	072928	Diffuser assembly, WFE-12, 3 HP Only
13	072927	Diffuser assembly, WFE 2-8, 1/2 HP-2.5 HP
14	071652	Set Screw, 1/4 - 20 x 1 in. Phillips

Item No.	P/N	Description
15	075713	Rubber Washer, WFE Pump
16	071734S	Seal PA-7 w/ ceramic seat, PS1000
16	071728	Seal A7 w/ ceramic seat, PS201 ❶
17	070429	Bolt 3/8 - 16 x 7/8 SS Hex Head, 4 Req.
18	350201	Seal Plate Kit WFE Almond (Includes Mechanical Seal installed) Items 9, 16 & 18
18	350101	Seal Plate Kit WFE Black (Includes Mechanical Seal installed) Items 16 & 18
19	070927	Foot, WFE Pump, Almond
19	357159	Foot, Black ❶
20	070929	Foot Insert, WFE Pump, Almond
20	357160	Foot Insert, WFE Pump, Black ❶
21	071657	Screw 1/4 - 20 x 1 In. Hex Head, SS, 2 Req.
22	071406	Nut, 1/4 - 20 Hex Head, SS, 2 Req.
23	072183	Washer, 1/4 x 5/8 OD, SS, 2 Req.
24	071131	Knob, Drain Plug, Almond, 2 Req.
24	357161	Knob, Drain Plug, Black, 2 Req. ❶
25	192115	O-Ring, Drain Plug, 2 Req.
26	357149	Volute/Seal Plate Replacement Kit, Almond (Incl. Items: 1-4, 9, 10, 16, 18, 24, and 25)
27	*See Motor Table on next page*	

Item No.	P/N	Description
		Motors
27	355008S	3/4 HP, 60 Hz, WFE-2, 3 & 24, 1 spd., almond, 31 lbs. ❷
27	355010S	1 HP, 60 Hz, WFE-4 & 26, 1 spd., almond, 33 lbs. ❷
27	355012S	1-1/2 HP, 60 Hz, WFE-6 & 28, 1 spd., almond, 39 lbs. ❷
27	355014S	2 HP, 60 Hz, WFE-8 & 30, 1 spd., almond, 40 lbs. ❷
27	355016S	3 HP, 60 Hz, WFE-12, 1 spd., almond, 40 lbs. ❷
27	356630S	1 HP, WFDS-4 & 26, 2 spd., 34 lbs. ❹
27	071320S	1-1/2 HP, WFDS-6 & 28, 2 spd., 36 lbs. ❹
27	071321S	2 HP, WFDS-8 & 30, 2 spd., 45 lbs. ❹
27	355018S	1/2 HP, WF-2 & 23, 1 spd., almond, 39 lbs. ❸
27	355020S	3/4 HP, WF-3 & 24, 1 spd., almond, 26 lbs. ❸
27	355022S	1 HP, WF-4 & 26, 1 spd., almond, 28 lbs. ❸
27	355024S	1-1/2 HP, WF-6 & 28, 1 spd., 39 lbs. ❸
27	355026S	2 HP, WF-8 & 30, 1 spd., 32 lbs. ❸
27	355033S	3 HP, WF-12, 1 spd., almond, 40 lbs. ❸
27	355203S	1 HP, WFK-4, 3 ph, 1 spd., black, 28 lbs.
27	355204S	1-1/2 HP, WFK-6, 3 ph, 1 spd., black, 30 lbs.
27	355205S	2 HP, WFK-8, 3 ph, 1 spd., black, 37 lbs.
27	355398S	3 HP, WFK-12, 3 ph, 1 spd., black, 35 lbs.
27	356626S	1 HP, WFK-4, 3 ph, 1 spd., almond, 28lbs.
27	356627S	1-1/2 HP, WFK-6, 3 ph, 1 spd., almond, 30lbs.
27	356628S	2 HP, WFK-8, 3 ph, 1 spd., almond, 37 lbs.
27	356629S	3 HP, WFK-12, 3 ph, 1 spd., almond, 35 lbs.
27	354805S	1 HP, WFK-4, TEFC, 3 ph, 1 spd., almond, 28lbs.
27	354807S	1-1/2 HP, WFK-6, TEFC, 3 ph., 1 spd., almond, 30lbs.
27	354809S	2 HP, WFK-8, TEFC, 3 ph., 1 spd., almond, 37 lbs.
27	354811S	3 HP, WFK-12, TEFC, 3 ph., 1 spd., almond, 35 lbs.

Not Shown

79129900	2-Speed Toggle Switch
350202	Seal Plate Kit: Seal plate (almond), Gasket (black), with installed Seal (Includes items: 9, 16, & 18)
350203	Seal Plate Kit: Seal plate (black), Gasket (black), with installed Seal (Includes items: 9, 16, & 18)
357244	Pot Assembly, Black NPT. (Includes items: 1-4, 10, 24 [qty. 2], 25 [qty. 2]).
357243	Pot Assembly, Almond NPT. (Includes items: 1-4, 10, 24 [qty. 2], 25 [qty. 2]).

Power End Sub-assembly

Includes Items: 12-18, 27-28

075136	WFE-2
075137	WFE-3, WFE-24
075138	WFE-4, WFE-26 ❷
075139	WFE-6, WFE-28 ❷
075140	WFE-8, WFE-30 ❷
075141	WFE-12 ❷
075145	WFDS-3, WFDS-24 ❹
075142	WFDS-4, WFDS-26 ❹
075143	WFDS-6, WFDS-28 ❹
075144	WFDS-8, WFDS-30
075251	WF-2, WF-23 ❸
075252	WF-3, WF-24 ❸
075253	WF-4, WF-26 ❸
075254	WF-6,WF-28 ❸
075255	WF-8,WF-30 ❸
075256	WF-12 ❸

Fluid Ends-All Parts, w/o Motor

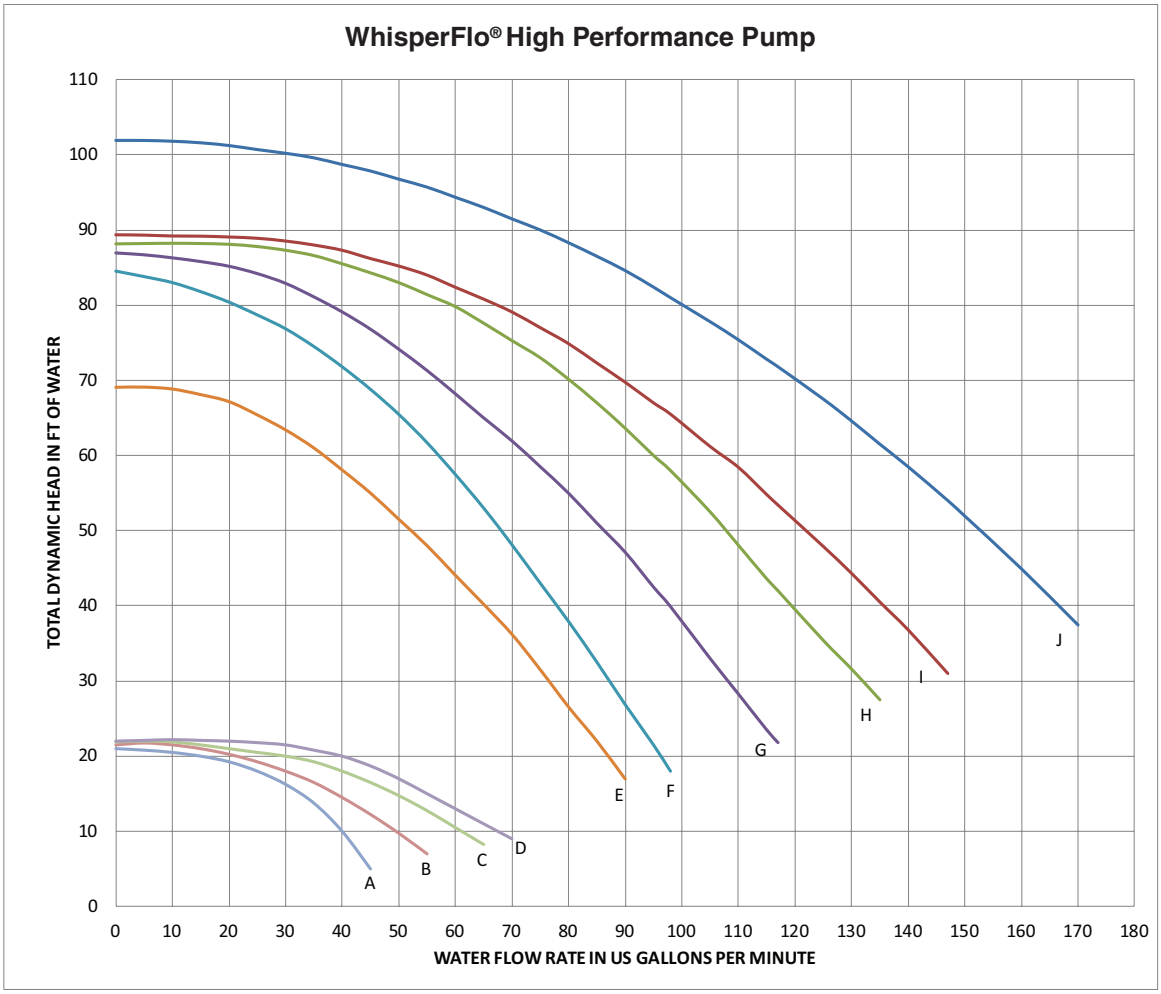
075451	WFE-2 fluid end, 1/2 HP
075452	WFE-3 fluid end, 3/4 HP
075453	WFE-4 fluid end, 1 HP
075454	WFE-6 fluid end, 1-1/2 HP
075455	WFE-8 fluid end, 2 HP
075456	WFE-12 fluid end, 3 HP

❶ CSA/CUL (only) for Canada
❷ Energy efficient, single phase
❸ Standard efficiency, single phase
❹ Two speed, single phase

Impeller Chart

HP	PUMP MODEL	STD PART NO.
1/2	WFE-2, WF-2, WF-23, WFK-2	073126
3/4	WFE-3, WFE-24, WF-3, WF-24, WFK-3, WFDS-24	073127
1	WFE-4, WFE-26, WF-4, WF-26, WFK-4, WFDS-4, WFDS-26	073128
1½	WFE-6, WFE-28, WF-6, WF-28, WFK-6, WFDS-6, WFDS-28	073129
2	WFE-8, WFE-30, WF-8, WF-30, WFK-8, WFDS-8, WFDS-30	073130
3	WFE-12, WF-12, WFK-12	073131

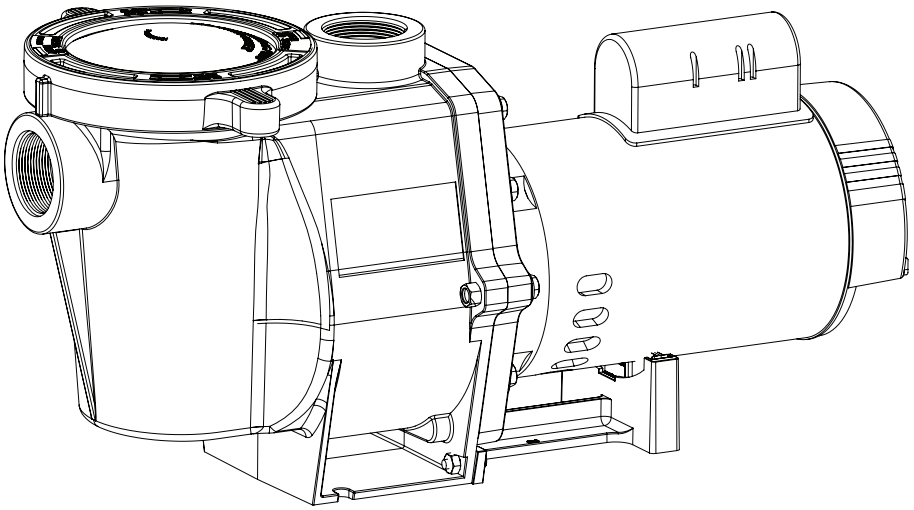
Pump Performance Curves



Curve	Model
A	WFDS-3, WFDS-24
B	WFDS-4, WFDS-26
C	WFDS-6, WFDS-28
D	WFDS-8, WFDS-30
E	WFE-2, WF-2, WF-23, WFK-2
F	WFE-3, WFE-24, WF-3, WF-24, WFK-3, WFDS-3, WFDS-24
G	WFE-4, WFE-26, WF-4, WF-26, WFK-4, WFDS-4, WFDS-26
H	WFE-6, WFE-28, WF-6, WF-28, WFK-6, WFDS-6, WFDS-28
I	WFE-8, WFE-30, WF-8, WF-30, WFK-8, WFDS-8, WFDS-30
J	WFE-12, WF-12, WFK-12

PENTAIR

WHISPERFLO®
BOMBA DE ALTO RENDIMIENTO



GUÍA DE INSTALATIÓN Y DEL USUARIO

INSTRUCCIONES IMPORTANTES DE SEGURIDAD
LEA Y SIGA TODAS LAS INSTRUCCIONES
GUARDE ESTAS INSTRUCCIONES

ATENCIÓN AL CLIENTE / SOPORTE TÉCNICO

Si tiene alguna pregunta sobre cómo realizar pedidos de piezas de repuesto de Pentair Aquatic Systems, utilice la siguiente información de contacto:

Servicio del Cliente y Soporte Técnico, USA
(de 8 a.m. a 4:30 p.m., Horario del Este y del Pacífico)

Teléfono: (800) 831-7133

Fax: (800) 284-4151

Sitio web

Visite *www.pentairpool.com* o *www.staritepool.com* para encontrar información sobre los productos Pentair.

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(de 8 a.m. a 4:30 p.m., Horario del Pacífico)

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Fax: (805) 553-5515

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P/N 071109 Rev. J 8/29/14

INSTRUCCIONES Y ADVERTENCIAS DE SEGURIDAD IMPORTANTES DE LA BOMBA

Nota Importante:

Atención Instalador: Esta guía contiene información importante sobre la instalación, el funcionamiento y el uso seguro de este producto. Esta información debe ser entregada al propietario y/o al operador de este equipo después de la instalación del limpiador de piscina. **Atención Usuario:** Este manual contiene información importante que le ayudará a utilizar y mantener este limpiador.

LEA Y SIGA TODAS LAS INSTRUCCIONES
GUARDE ESTAS INSTRUCCIONES

Éste es el símbolo de alerta de seguridad.
Cuando vea este símbolo en su sistema o en este manual, busque alguna de las siguientes palabras y esté alerta ante la posibilidad de lesiones.

⚠ PELIGRO Advierte sobre peligros que pueden causar la muerte, lesiones personales graves o daño a la propiedad si son ignorados.

⚠ ADVERTENCIA Advierte sobre peligros que podrían causar la muerte, lesiones personales graves o daño a la propiedad si son ignorados.

⚠ PRECAUCIÓN Advierte sobre los peligros que podrían o pueden causar lesiones personales menores o daños a la propiedad si son ignorados.

NOTA indica instrucciones especiales no relacionadas a peligros.

Lea cuidadosamente y siga las instrucciones de seguridad del equipo que aparecen en este manual. Mantenga las etiquetas de seguridad en buen estado; reemplácelas si faltan o están dañadas.

Cuando instale y utilice este equipo eléctrico, siempre debe respetar precauciones de seguridad básicas, incluyendo las siguientes:

⚠ ADVERTENCIA No permita que los niños utilicen este producto.

⚠ ADVERTENCIA Riesgo de choque eléctrico. Conecte sólo a un circuito eléctrico protegido por un interruptor de circuito con descarga a tierra (GFCI). Comuníquese con un electricista calificado si no puede verificar que el circuito esté protegido por un interruptor GFCI.

⚠ ADVERTENCIA Conecte sólo a un circuito eléctrico protegido por un interruptor de circuito con descarga a tierra (GFCI). Este GCFI debe ser provisto por el instalador y debe ser probado de manera rutinaria. Para probar el GFCI presione el botón de prueba. El GFCI debería interrumpir la energía eléctrica. Presione el botón de reinicio. Debería restaurar la energía. Si el GFCI no funciona de esta manera, el GFCI tiene una falla. Si el GFCI interrumpe la energía a la bomba sin que se presione el botón de prueba, hay presencia de corriente de tierra, indicando la posibilidad de un choque eléctrico. No utilice esta bomba. Desconecte la bomba y haga que un representante de servicio técnico calificado corrija el problema antes de utilizar el equipo.

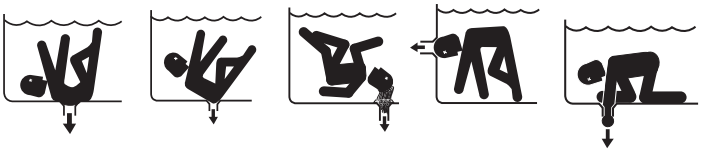
⚠ PRECAUCIÓN Esta bomba se utiliza para piscinas permanentes y también puede ser utilizada en jacuzzis o spa si está indicado. No la utilice con piscinas desmontables. Una piscina con instalación permanente es una piscina construida en el suelo o en una base de manera que no puede ser desmontada. Una piscina desmontable está construida de manera que puede ser fácilmente desmontable para su almacenamiento y rearmada de acuerdo a su formato original.

Advertencias generales

- Nunca abra el interior de la caja del motor. Hay un banco capacitor que admite una carga de hasta 230 VCA incluso cuando la unidad no tenga energía eléctrica.
- La bomba del spa no es sumergible.
- La bomba puede trabajar con flujos máximos altos; tenga cuidado cuando realice la instalación y programación para limitar el potencial de rendimiento de las bombas con equipos antiguos o de origen desconocido.
- Los requisitos de códigos para la conexión eléctrica difieren de un estado a otro. Instale los equipos de acuerdo con el Código Eléctrico Nacional y todos los códigos y ordenanzas locales aplicables.
- Antes de realizarle el servicio técnico a la bomba, APAGUE la energía a la bomba desconectando el circuito principal a la bomba.
- Este dispositivo no debe ser utilizado por personas (incluidos niños) con capacidades físicas, sensoriales o mentales reducidas, o falta de experiencia y conocimiento, a menos que hayan recibido instrucciones y sean supervisados por una persona responsable por su seguridad.

⚠ PELIGRO SI NO SE RESPETAN TODAS LAS INSTRUCCIONES Y ADVERTENCIAS LAS CONSECUENCIAS PUEDEN SER HERIDAS GRAVES O LA MUERTE. **LA BOMBA DEBE SER INSTALADA Y REVISADA ÚNICAMENTE POR UN PROFESIONAL DE SERVICIO DE PISCINAS CALIFICADO. LOS INSTALADORES, OPERADORES Y PROPIETARIOS DE LAS PISCINAS DEBEN LEER ESTAS ADVERTENCIAS Y TODAS LAS INSTRUCCIONES QUE APARECEN EN EL MANUAL DEL PROPIETARIO ANTES DE UTILIZAR ESTA BOMBA. ESTAS ADVERTENCIAS Y EL MANUAL DEL PROPIETARIO DEBEN PERMANECER CON EL PROPIETARIO DE LA PISCINA.**

⚠ PELIGRO PELIGRO DE TRAMPA DE SUCCIÓN: ¡MANTÉNGASE ALEJADO DEL DRENAJE PRINCIPAL Y DE TODAS LAS SALIDAS DE SUCCIÓN!



LA BOMBA PRODUCE ALTOS NIVELES DE SUCCIÓN Y CREA UN FUERTE VACÍO EN EL DRENAJE PRINCIPAL EN LA BASE DEL CUERPO DE AGUA. ESTA SUCCIÓN ES TAN FUERTE QUE PUEDE ATRAPAR A ADULTOS O NIÑOS DEBAJO DEL AGUA SI SE ACERCAN DEMASIADO AL DRENAJE O SI HAY ALGUNA PARTE DE LA CUBIERTA O PARRILLA DEL DRENAJE SUELTA O AVERIADA.

EL USO DE CUBIERTAS NO APROBADAS O PERMITIR EL USO DE UN SISTEMA DE ACUICULTURA CUANDO FALTAN CUBIERTAS, SE ENCUENTRAN FRACTURADAS O AVERIADAS PUEDE TENER COMO RESULTADO EL ATRAPAMIENTO DEL CUERPO O DE UN MIEMBRO, ENREDO DEL CABELLO, ATRAPAMIENTO DEL CUERPO, DESTRIPAMIENTO Y/O LA MUERTE.

La sección en el drenaje o salida puede causar:

Atrapamiento de miembros: Cuando se succiona un miembro o éste es insertado en una apertura que tiene como resultado una obstrucción mecánica o hinchazón. Este riesgo está presente cuando falta una cubierta del drenaje, o está rota, suelta, quebrada o no está bien asegurada.

Enredo del cabello: Cuando el cabello se enreda o se anuda en la cubierta del drenaje, atrapando al nadador debajo del agua. Este riesgo está presente cuando la velocidad del flujo de la cubierta es demasiado baja para la o las bombas.

Atrapamiento corporal: Cuando una porción del cuerpo queda contra la cubierta del drenaje y atrapa al nadador debajo del agua. Este riesgo existe cuando falta la cubierta del drenaje, cuando ésta está quebrada o cuando la velocidad de flujo de la cubierta no es lo suficientemente alta para la o las bombas.

Destripamiento: Cuando una persona está sentada en una piscina abierta (especialmente una piscina poco profunda para niños) o salida de un spa y se aplica la succión directamente a los intestinos, causando un daño intestinal severo. Este riesgo está presente cuando falta una cubierta del drenaje, o está suelta, quebrada o no está bien asegurada.

Atrapamiento mecánico: Cuando quedan atrapados en una entrada o en la cubierta del drenaje objetos tales como: joyas, trajes de baño, accesorios para el cabello, dedos de la mano o del pie o nudillos. Este riesgo está presente cuando falta la cubierta del drenaje, o está rota, suelta, quebrada o no está bien asegurada.

NOTA: LA INSTALACIÓN DE PLOMERÍA DE SUCCIÓN DEBE SER INSTALADA DE ACUERDO CON LOS CÓDIGOS, ESTÁNDARES Y PAUTAS NACIONALES Y LOCALES MÁS ACTUALIZADOS.

INSTRUCCIONES Y ADVERTENCIAS DE SEGURIDAD IMPORTANTES DE LA BOMBA

⚠ ADVERTENCIA PARA MINIMIZAR EL RIESGO DE LESIONES DEBIDO AL PELIGRO DE ATRAPAMIENTO POR SUCCIÓN:

- Para cada drenaje debe utilizarse una cubierta de succión anti-atrapamiento aprobada de acuerdo a ANSI/ASME A112.19.8 que debe estar correctamente instalada y asegurada.
- Cada cubierta de succión debe estar instalada al menos a tres pies (0,9 m) de distancia, medidos entre los 2 puntos más cercanos.
- Inspecciones regularmente todas las cubiertas para controlar que no existan quebraduras, daños o erosión por exposición a la intemperie.
- Si falta una cubierta o si ésta se afloja, quiebra, daña o rompe, reemplácela con una cubierta certificada adecuada.
- Reemplace las cubiertas de drenaje cuando sea necesario. Las cubiertas de drenaje se deterioran con el tiempo debido a la exposición al sol y a la intemperie.
- Evite que el cabello, los miembros o el cuerpo estén próximos a cualquier cubierta de succión, drenaje de la piscina o salida.
- Desactive las salidas de succión reconfigure las entradas de retorno.

⚠ ADVERTENCIA Debe existir un interruptor de emergencia para la bomba en un lugar fácilmente accesible y visible. Asegúrese que de los usuarios conozcan dónde está y sepan cómo usarla en caso de emergencia.

La ley de seguridad para piscinas y spa Virginia Graeme Baker (VGB) crea nuevos requisitos para los dueños y operadores de piscinas y spa comerciales.

Las piscinas y spa comerciales construidos después del 19 de diciembre de 2008 deben utilizar:

(A) Un sistema de drenaje principal múltiple sin aislación con cubiertas de salida de succión que cumplan con las características ASME/ANSI A112.19.8a para accesorios de succión en piscinas, piscinas poco profundas para niños, spas y jacuzzis ya sea:

(i) Un sistema de seguridad de alivio de vacío (SVRS) que cumpla con la normativa ASME/ANSI A112.19.17 Manufactured Safety Vacuum Release systems (SVRS) para sistemas de succión en piscinas residenciales y comerciales, spa, jacuzzis y piscinas poco profundas para niños, y/o especificaciones estándar ASTM F2387 para Manufactured Safety Vacuum Release Systems (SVRS) en piscinas, spa y jacuzzis o

(ii) un sistema de ventilación bien diseñado y con un sistema probado de limitación de succión

(iii) un sistema de apagado automático de bomba

Las piscinas o spa comerciales construidos con anterioridad al 19 de diciembre de 2008 con una salida de succión sumergida deben utilizar una salida de succión que cumpla con ASME/ANSI A112.19.8a y:

(A) un SVRS que cumpla con los requisitos ASME/ANSI A112.19.17 y/o ASTM F2387, o bien

(ii) un sistema de ventilación bien diseñado y con un sistema probado de limitación de succión o bien

(iii) un sistema de apagado automático de bomba, o

(D) salidas sumergidas desactivadas, o

(E) Salidas de succión que deben ser reconfiguradas como entradas de retorno.

Para la instalación de controles eléctricos en la superficie de apoyo del equipo (interruptores ENCENDIDO/APAGADO, relojes o centro de carga automática)

⚠ PRECAUCIÓN Instale todos los controles eléctricos en la superficie de apoyo del equipo, como interruptores de encendido/apagado y sistemas de control, etc. para permitir el funcionamiento (arranque, apagado o servicio) de cualquier bomba o filtro de manera que el usuario no coloque ninguna porción de su cuerpo por encima o cerca de la tapa del filtro de la bomba, la tapa del filtro o el cierre de la válvula. Esta instalación debería permitirle al usuario utilizar espacio suficiente para permanecer alejado del filtro y la bomba durante el arranque, apagado o servicio del filtro del sistema.

⚠ PELIGRO **PRESIÓN PELIGROSA: MANTÉNGASE ALEJADO DE LA BOMBA Y FILTRO DURANTE EL ARRANQUE**

Los sistemas de circulación operan bajo alta presión. Cuando cualquier parte del sistema de circulación (es decir anillo de seguridad, bomba, filtro y válvulas, etc) está siendo controlado por el servicio técnico, es posible que ingrese aire al sistema y que éste se presurice.

El aire presurizado puede provocar que las válvulas y la tapa del filtro de la cubierta de la caja de la bomba se separen violentamente lo cual puede tener como resultado lesiones graves o la muerte. La tapa del tanque del filtro y la cubierta del filtro deben estar correctamente aseguradas para evitar una separación violenta. Manténgase alejado del equipo del sistema de circulación cuando encienda o arranque la bomba.

Antes de realizar el servicio al equipo, tome nota de la presión del filtro. Asegúrese de que se realicen todos los controles para asegurar que el sistema no arranque sin aviso durante el servicio técnico. Desconecte la energía a la bomba. **IMPORTANTE: Coloque la válvula de alivio de aire manual del filtro en posición abierta y espere que se libere la presión del sistema.**

Antes de iniciar el sistema, abra totalmente la válvula de liberación de aire manual y ubique todas las válvulas del sistema en posición "abierto" para permitir que el agua fluya libremente desde y hacia el tanque. Aléjese de los equipos y arranque la bomba.

IMPORTANTE: No cierre la válvula de alivio de aire manual del filtro hasta que se haya descargado la totalidad de la presión de la válvula y aparezca un chorro de agua constante. Observe el indicador de presión del filtro y asegúrese de que no es más alto que el estado anterior al servicio.

Información general para la instalación

- La instalación y el servicio deben ser efectuados por un profesional de servicio calificado, y deben cumplir con todos los códigos nacionales, estatales y locales.
- En la instalación se debe colocar un drenaje en el compartimiento para los componentes eléctricos.
- Estas instrucciones contienen información para una variedad de modelos de bombas y por lo tanto algunas instrucciones pueden no aplicarse a un modelo específico. Todos los modelos deben ser utilizados en aplicaciones de piscinas. La bomba funcionará correctamente sólo si tiene el tamaño adecuado para la aplicación específica y si está correctamente instalada.

⚠ ADVERTENCIA Las bombas de tamaño incorrecto o instaladas de manera incorrecta o utilizadas en aplicaciones diferentes a aquellas para las cuales la bomba fue diseñada pueden tener como resultado daños personales severos o la muerte. Estos riesgos incluyen pero no se limitan a choque eléctrico, incendio, inundación, succión, atrapamiento, lesiones graves o daño a la propiedad causados por una falla estructural de la bomba u otro componente del sistema.

⚠ ADVERTENCIA La bomba puede producir niveles altos de succión dentro del lado de succión del sistema de plomería.

Estos altos niveles de succión pueden implicar un riesgo si una persona se acerca demasiado a los orificios de succión. Este alto nivel de vacío puede causar daños severos en personas, quienes también podrían quedar atrapadas y ahogarse. Es de primordial importancia que el sistema de plomería sea instalado de acuerdo a los más recientes códigos nacionales y locales para las aplicaciones de piscinas.

Antes de instalar este producto, lea y siga todas las advertencias e instrucciones incluidas. Llame al (800) 831-7133 para obtener copias adicionales de estas instrucciones sin costo.

Instrucciones y advertencias de seguridad y la versión en español de este manual del producto, se puede encontrar en línea a: **http://www.pentairpool.com/es/pool-owner/manuals/** o llame al (800) 831-7133 para obtener copias adicionales de estas instrucciones sin costo.

GUARDE ESTAS INSTRUCCIONES

INSTALACIÓN

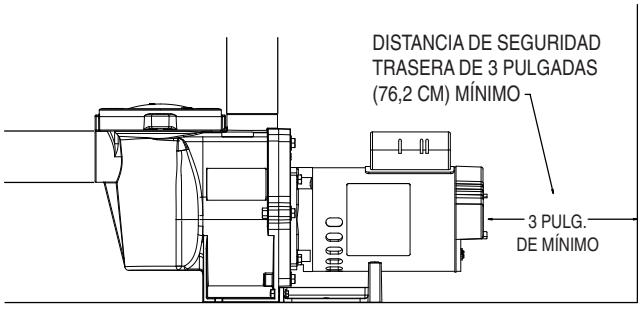
Sólo personal de servicio calificado debe instalar la bomba WhisperFlo®. Consulte la sección “Instrucciones de seguridad y advertencias de la bomba” en las páginas 11 a 12 para obtener información adicional sobre pautas para la instalación y la seguridad.

Ubicación

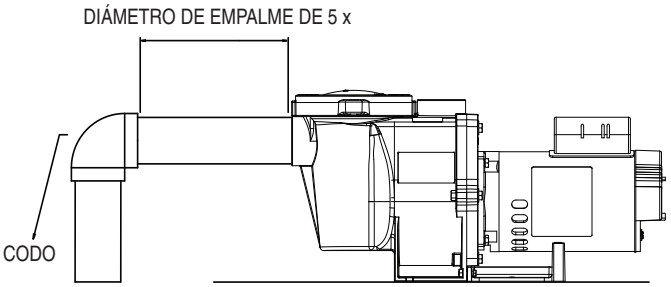
1. Instale la bomba lo más cerca posible a la piscina o spa. Para reducir la pérdida de fricción y mejorar la eficacia, use un mecanismo de succión corta y directa y retornos de tuberías.
2. Realice la instalación a un mínimo de 5 pies (1,52 m.) de la pared interior de la piscina y el spa. En Canadá, las instalaciones deben estar como mínimo a una distancia de 9,8 pies (3 metros) del agua de la piscina.
3. Instale la bomba a un mínimo de 3 pies (0,9 metros) de la salida del calefactor.
4. No instale la bomba a más de 10 pies (2,44 m) por encima del nivel del agua.
5. Instale la bomba en un área cubierta y bien ventilada para protegerla de la humedad excesiva (es decir, lluvia, sistemas de aspersión, etc.)
6. Para jacuzzis y spas, no instale dentro de una caja exterior o debajo de la base de un jacuzzi o spa.
7. Instale la bomba con una distancia de separación trasera de al menos 3 pulgadas (76,2 mm) de manera que el motor pueda ser extraído fácilmente cuando debe ser reparado y cuando se realice el mantenimiento.

Tuberías

1. Para una mejor plomería en la piscina, se recomienda utilizar un tamaño de tubería más grande. Cuando instale los accesorios para entradas y salidas (adaptadores macho), use un sellador de roscas.
2. Utilice tamaños de caños más grandes para una mejor tubería. El diámetro de empalme debe ser el mismo o mayor que el diámetro de la línea de retorno.
3. Las tuberías en el lado de succión de la bomba deben ser lo más cortas posibles.
4. Se recomienda una válvula, codo o pieza en forma de T en la línea de succión no debería estar más cerca al frente de la bomba que cinco veces el diámetro de la tubería de la línea de succión (es decir, una tubería de 2 pulgadas (5,1 cm) necesita un espacio recto enfrente de la entrada de succión de la bomba de 10 pulgadas (254 mm)). Esto ayudará a que el cebado de la bomba sea más rápido y dure por más tiempo.



Distancia de seguridad de la parte trasera de la bomba



Recomendado mínimo Diámetro de empalme

Conexiones y Válvulas

1. No instale codos de 90° directamente en la entrada de la bomba.
2. Los sistemas de succión deberían tener válvulas de compuertas instaladas en las tuberías de succión y descarga para mantenimiento; sin embargo, la válvula de compuerta de succión no debe estar más cerca que cinco veces el diámetro de la tubería de succión como se describe en el párrafo anterior.
3. Utilice una válvula de retención en la línea de descarga al utilizar esta bomba para cualquier aplicación donde hay altura significativa de la tubería después de la bomba.
4. Asegúrese de instalar las válvulas de comprobación cuando nivela en paralelo con otra bomba. Esto ayuda a evitar la rotación inversa del propulsor y el motor.

⚠ ADVERTENCIA

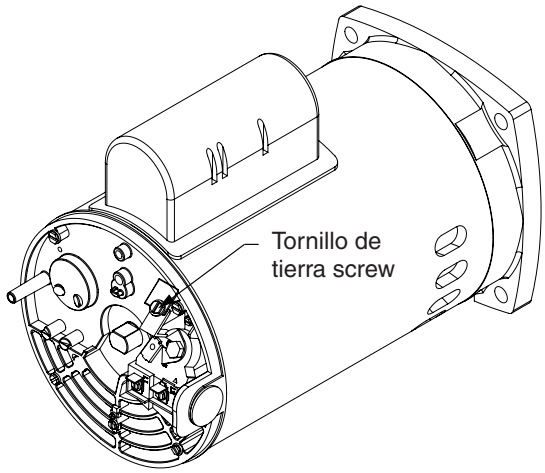
RIESGO DE CHOQUE ELÉCTRICO O ELECTROCUCIÓN. Esta bomba debe ser instalada por un electricista autorizado o matriculado o un profesional de servicio calificado de acuerdo con el Código Eléctrico Nacional y todos los códigos y ordenanzas locales aplicables. Una instalación inadecuada generará un riesgo eléctrico que puede ocasionar la muerte o lesiones graves a los usuarios, los instaladores u otras personas debido a un choque eléctrico, y también puede provocar daños a la propiedad.

Siempre desconecte la energía eléctrica a la bomba en el interruptor de circuito antes de realizar el servicio de la bomba. Si no se hace esto, las personas que realizan el servicio, los usuarios u otras personas pueden resultar muertas o con heridas de gravedad debido al electrochoque.

Lea todas las instrucciones de servicio antes de comenzar a trabajar en la bomba.

Instalación de cableado eléctrico

1. Asegúrese de que todos los interruptores y conmutadores eléctricos estén apagados antes de cablear el motor.
2. Asegúrese de que el voltaje de la línea de suministro coincida con el voltaje del motor descrito en la placa del motor (por ejemplo, 230 VCA o 115 VCA). Si no coinciden, puede ocurrir un daño permanente al motor.
3. Utilice el alivio de tensión y asegúrese de que todas las conexiones eléctricas estén limpias y ajustadas.
4. Corte los cables en la longitud adecuada, de modo de que no se superpongan o toquen cuando estén conectados.
5. Conecte el motor a tierra de manera permanente utilizando el cable a tierra verde, como se muestra a continuación. Utilice el tamaño y tipo de cable correcto especificado por el Código Eléctrico Nacional. Asegúrese de que el cable a tierra esté conectado a una conexión a tierra de servicio eléctrico.
6. Una el motor a la estructura conforme lo estable el Código Eléctrico Nacional. UL requiere el uso de un conductor de interconexión de cobre sólido de un diámetro mínimo de 8 AWG. Pase un cable desde el tornillo o terminal de interconexión externa hasta la estructura de interconexión.
7. Conecte el cable desde el conector de cable accesible en el motor hasta todas las partes metálicas de la estructura y todo el equipo eléctrico, conducto metálico y tubería metálica a 5 pies (1,5 m) de las paredes internas de la estructura. Para Canadá, se requiere un conductor de interconexión de cobre sólido de 6 AWG o más largo.
8. La bomba debe conectarse de manera permanente ya sea a un interruptor de circuito, reloj o relé de 2 polos. Si se suministra energía CA a través de un interruptor de circuito GFCI, utilice un interruptor de circuito especial que no posea otras cargas eléctricas.



Nota: *Cuando la bomba se monta permanentemente dentro de 5 pies (1.524 m) de las paredes interiores de una piscina, tiene que usar un No. 8 AWG o conductor más grande para conectar al tirón de conductor que pega.*

Nota: Cuando la bomba se arranca y detiene al desconectar la energía mediante un relé o reloj, se debe utilizar un dispositivo de dos polos para aplicar y desconectar la energía de las dos TERMINALES DE LÍNEA DE ENERGÍA.

ESPAÑOL

MANTENIMIENTO

ADVERTENCIA **NO** abra el depósito del filtro si el cebado de la bomba falla o si la bomba ha estado funcionando sin agua en el depósito del filtro. Las bombas que funcionan en estas circunstancias pueden experimentar una acumulación de presión de vapor y pueden contener agua caliente escaldada. Si abre la bomba puede resultar herido de gravedad. Para evitar la posibilidad de lesiones personales, asegúrese de que las válvulas de succión y descarga estén abiertas y la temperatura del depósito del filtro esté fría para el tacto, luego ábrala con extrema precaución.

PRECAUCIÓN Para evitar el daño de la bomba y para un adecuado funcionamiento del sistema, limpie el filtro de la bomba y las canastillas de los desnatadores con regularidad.

Canastilla del filtro de la bomba

La canastilla del filtro (o "depósito del filtro") se encuentra enfrente del alojamiento de la bomba. La canastilla del filtro debe mantenerse limpia y sin suciedad. Inspeccione la canastilla a través de la tapa en la parte superior del alojamiento.

Asegúrese de inspeccionar visualmente la canastilla del filtro cada 1 a 4 semanas. Las canastillas del filtro sucias reducen la eficiencia del filtro y del calefactor y ejercen una presión anormal sobre el motor de la bomba. La acumulación de bacterias puede ensuciar la tapa.

Limpieza de la canastilla del filtro de la bomba

1. Apague la bomba en el interruptor de circuito.
2. Libere presión en el sistema.
3. Gire la tapa y abrazadera en el sentido contrario a las agujas del reloj y retírelas de la bomba.
4. Retire los residuos y limpie la canastilla. Reemplace la canastilla si está rajada.
5. Vuelva a colocar la canastilla en la caja. Asegúrese de alinear la perforación en la parte inferior de la canastilla con el acanalado en la parte inferior del alojamiento.
6. Llene el depósito y el alojamiento de la bomba hasta el puerto de entrada con agua.
7. Limpie la tapa y la abrazadera, el anillo tórico y la superficie de sellado del depósito de la bomba.
   Nota: Es importante que mantenga el anillo tórico de la tapa limpio y bien lubricado.
8. Vuelva a instalar la tapa colocando la abrazadera y la tapa en el depósito. Asegúrese de que el anillo tórico de la tapa esté bien colocado.
   Coloque la abrazadera y la tapa sobre la bomba, luego gire en sentido de las agujas del reloj hasta que las manijas del anillo de seguridad estén horizontales.
9. Encienda la bomba en el interruptor de circuito.
10. Abra la válvula de alivio de aire manual en la parte superior del filtro. Aléjese del filtro.
11. Espere hasta que se libere toda la presión. Ponga en marcha la bomba.
12. Purgue el aire del filtro hasta que un flujo constante de agua salga de la válvula de alivio de aire del filtro. Cierre la válvula de alivio de aire manual.

ADVERTENCIA **ESTE SISTEMA OPERA BAJO ALTA PRESIÓN.**

Cuando cualquier parte del sistema de circulación (es decir anillo de seguridad, bomba, filtro, válvulas, etc.) está siendo controlado por el servicio técnico, es posible que ingrese aire al sistema y que éste se presurice. El aire presurizado puede causar que la tapa se separe, lo que puede provocar heridas graves, la muerte o daño a la propiedad. A fin de evitar este riesgo potencial, siga las instrucciones que se mencionan arriba.

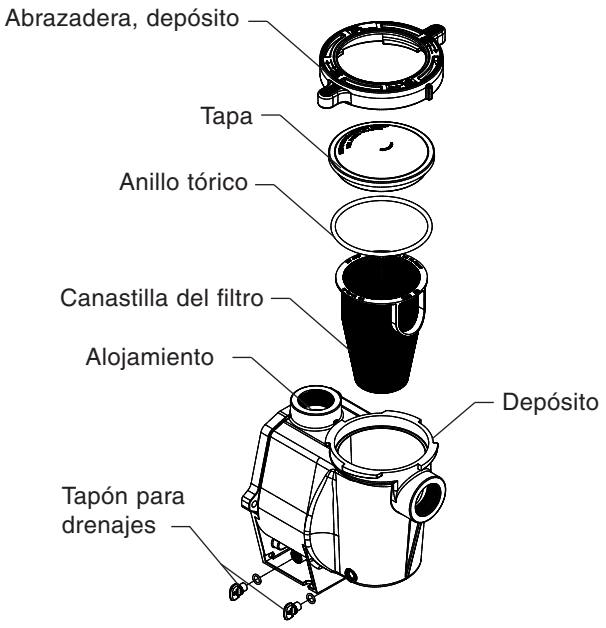
Acondicionamiento para el invierno

- En áreas de clima templado, en caso de condiciones temporales de congelamiento, haga funcionar su equipo de filtración toda la noche para evitar el congelamiento.
- Usted es responsable de determinar cuándo pueden ocurrir condiciones de congelamiento. Si se esperan condiciones de congelamiento, siga los siguientes pasos para reducir el riesgo de daño por congelamiento. El daño por congelamiento no se encuentra cubierto por la garantía.

Para evitar el daño por congelamiento, siga las instrucciones a continuación:

1. Apague el suministro eléctrico de la bomba en el interruptor de circuito.
2. Drene el agua de la caja de la bomba retirando los dos tapones de drenaje de la tapa. Guarde los tapones en la canastilla de la bomba.
3. Cubra el motor para protegerlo de la lluvia fuerte, la nieve o el hielo.

Nota: No envuelva el motor con plástico u otros materiales hermetizados durante el almacenamiento de invierno. El motor puede estar cubierto durante una tormenta, el almacenamiento de invierno, etc., pero nunca cuando esté funcionando o se espere que comience a funcionar.



Conjunto del depósito del filtro

SERVICIO

⚠ ADVERTENCIA Siempre desconecte la energía hacia la bomba en el interruptor de circuito antes de realizar el servicio a la bomba. Si no se hace esto, las personas que realizan el servicio, los usuarios u otras personas pueden resultar muertas o con heridas de gravedad debido al electrochoque. Lea todas las instrucciones de servicio antes de comenzar a trabajar en la bomba.

⚠ ADVERTENCIA **NO** abra el depósito del filtro si el cebado de la bomba falla o si la bomba ha estado funcionando sin agua en el depósito del filtro. Las bombas que funcionan en estas circunstancias pueden experimentar una acumulación de presión de vapor y pueden contener agua caliente escaldada. Si abre la bomba puede resultar herido de gravedad. Para evitar la posibilidad de lesiones personales, asegúrese de que las válvulas de succión y descarga estén abiertas y la temperatura del depósito del filtro esté fría para el tacto, luego ábrala con extrema precaución.

⚠ PRECAUCIÓN Asegúrese de no rayar o marcar las caras pulidas del sello del eje; el sello perderá si las caras se encuentran dañadas. Las caras pulidas y recubiertas del sello se podrían dañar si no son tratadas con cuidado.

Cuidado del motor

Protéjalo del calor

1. Cubra el motor del sol.
2. Cualquier caja del motor debe estar bien ventilada para evitar el sobrecalentamiento.
3. Proporcione amplia ventilación cruzada.

Protéjalo contra la suciedad.

1. Protéjalo contra cualquier materia extraña o salpicadura de agua.
2. No almacene (o derrame) químicos sobre o cerca del motor.
3. Protéjalo contra cualquier materia extraña o salpicadura de agua.
4. Evite barrer o levantar polvo cerca del motor mientras está en funcionamiento.
5. Si un motor se daña por suciedad, la garantía del motor se anula.
6. Limpie la tapa y la abrazadera, el anillo tórico y la superficie de sellado del depósito de la bomba.

Protéjalo contra la humedad

1. Protéjalo contra las salpicaduras o pulverizaciones de agua.
2. Protéjalo de las temperaturas extremas.
3. Protéjalo contra cualquier materia extraña o salpicadura de agua.
4. Si un motor se moja, déjelo secar antes de ponerlo en funcionamiento. No permita que la bomba funcione si se ha inundado.
5. Si un motor se daña por agua, la garantía del motor se anula.

Nota: Cuando está reemplazando el motor, asegúrese que el soporte de motor está colocado correctamente para soportar el tamaño del motor que se está instalando.

El sello de eje

El sello de eje consiste principalmente en dos piezas, un miembro rotativo y un sello cerámico. La bomba requiere de poco o de ningún mantenimiento además de atención razonable, sin embargo, podría ser que de vez en cuando se dañe el sello de eje y tenga que reemplazarse.

Nota: Las caras pulidas y labradas del sello se pueden dañar si no se usa con cuidado.

Desmontaje de bomba

Todas piezas móviles se encuentran en el montaje de abajo por atrás de esta bomba.

Herramientas requeridas:

- 3/ Llave de boca de 3/32 pulgada (.2381 cm)
- 1/Llave de boca de 1/2 pulgada (15.24 cm).
- 9/Llave de boca de 9/16 pulgada (1.429 cm).
- F Destornillador con cabeza plana.

Para quitar y reparar el montaje de abajo del motor ejecute los siguientes procedimientos.

1. Apague el cortacircuito de bomba en el panel principal.
2. Vacíe la bomba al quitar los tapones de drenaje.
3. Quite los 6 pernos que sujetan el cuerpo de bomba principal (olla de colador/voluta) al montaje de abajo por atrás.
4. SUAVEMENTE separe las dos mitades de bomba, quitando el montaje de abajo por atrás.
5. Use una llave de boca de 3/32 pulgada (.2381 cm) para desapretar los dos tornillos que soportan y que se encuentran en el difusor.
6. Mantenga el impulsor seguramente en lugar y quite el tornillo de llave del impulsor al usar un desarmador (desatornillador) de cruz. Este tornillo tiene rosca a mano izquierda y se desaprieta en el sentido de las agujas del reloj.
7. Quite la tapa del eje que se encuentra en la parte de atrás del motor y mantenga el eje seguro con una llave de boca de 1/2 pulgada (15.24 cm).
8. Para destornillar el impulsor del eje, déle vuelta al impulsor en el sentido opuesto de las agujas del reloj.
9. Quite los cuatro pernos de la placa de sello al motor, usando una llave de 9/16 pulgada (1.429 cm).

⚠ PRECAUCIÓN **NO haga funcionar la bomba en seco.** Si hace funcionar la bomba en seco, el sello mecánico se dañará y la bomba comenzará a perder. Si esto ocurre, deberá cambiar el sello dañado. SIEMPRE mantenga el nivel de agua adecuado. Si el nivel de agua cae por debajo del puerto de succión, la bomba extraerá aire del puerto de succión, perderá cebado y funcionará en seco, lo que dañará el sello. El funcionamiento continuo en este estado puede causar una pérdida de presión, lo que dañará la caja de la bomba, el propulsor y sello y puede provocar la pérdida de propiedad y lesiones personales.

Armar la bomba de nuevo

1. Cuando este instalando el sello mecánico de la flecha, use un sellador de silicón en la parte metálica de la flecha antes de presionar contra la placa de sello, y teniendo mucho cuidado de mantener el sellador de silicón alejado del la cara de sellado de la bomba. Asegúrese que el sello se encuentre completamente asentado y deje pasar 24 horas para permitir que el sellador seque. (Kid de remplazo completo con la placa de sello y el sello mecánico esta disponible, P/N 350201/350101.)
2. Antes de instalar la sección cerámica del sello en el impulsor, asegúrese que el impulsor está limpio. Use un jabón de poca densidad y agua para sellar el sello. Empuje el sello en el impulsor con los dedos gordos y pase un paño para limpiar las caras cerámicas y de carbón.
3. Reinstalar de nuevo la placa de sello al motor. Ajustando los Pernos, 3/8-16 x 7/8 (2,22 cm) de cabeza hexagonal, a un torque de 7,91 Nm de manera cruzada (apretar uno de los pernos y después apretar el perno opuesto y repita la misma secuencia hasta que todos los pernos estén ajustados al torque requerido).
4. Limpie la rosca de la flecha y la rosca del impulsor, después enrosque el impulsor a la flecha del motor.
5. Atornille el tornillo de cierre del impulsor (en el sentido opuesto de las agujas del reloj para apretar).
6. Monte de nuevo el difusor en la placa de sello. Asegúrese que las clavijas plásticas y las inserciones de tornillos de mantener están alineado.
7. Engrase el anillo en O del difusor y empaque de placa de sello o el anillo en O antes de armar de nuevo.
8. Engrase las roscas de perno, arme el montaje de abajo del motor al cuerpo de olla de colar y bomba al usar los dos pernos que corren a través para tener alineamiento adecuado. Colocar los Pernos, 3/8 -16 x 2 de cabeza hexagonal 18-8 acero inoxidable (se requieren 2) a través de la placa de sellado y la voluta y no los ajuste hasta que los Pernos de 3/8, 16 x 1-1/4 (3,18 cm) cabeza hexagonal 18-8 acero inoxidable (se requieren 4) estén ajustados a mano. Ajustar todos los pernos a un torque de 12,43 Nm, de manera cruzada.
9. Llene la bomba con agua.
10. Instale de nuevo la tapa de bomba y abrazadera plástica; vea INSTRUCCIONES PARA ENCENDER DE NUEVO.
11. Prepare de nuevo el sistema.

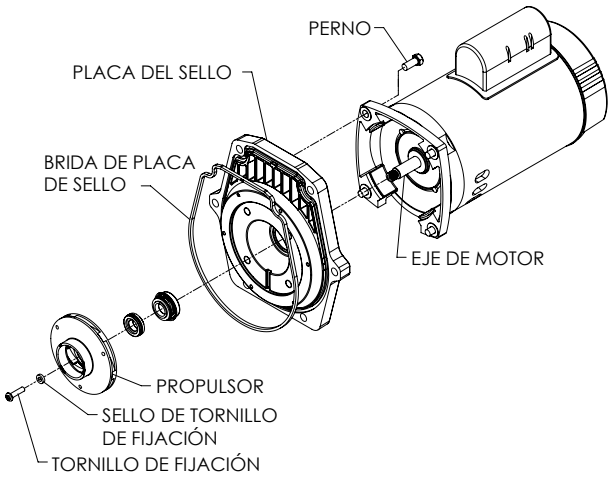
Instrucciones para encender de nuevo

Si se instala la bomba debajo del nivel de agua en la piscina, cierre las líneas de regreso y de aspiración antes de abrir la olla de pelo y pelusa en la bomba. Asegúrese de abrir de nuevo las válvulas antes de usar.

Imprimar la bomba

La olla de colador de bomba tiene que llenarse con agua antes de que se empiece la bomba incialmente. Siga estos pasos para imprimar la bomba.

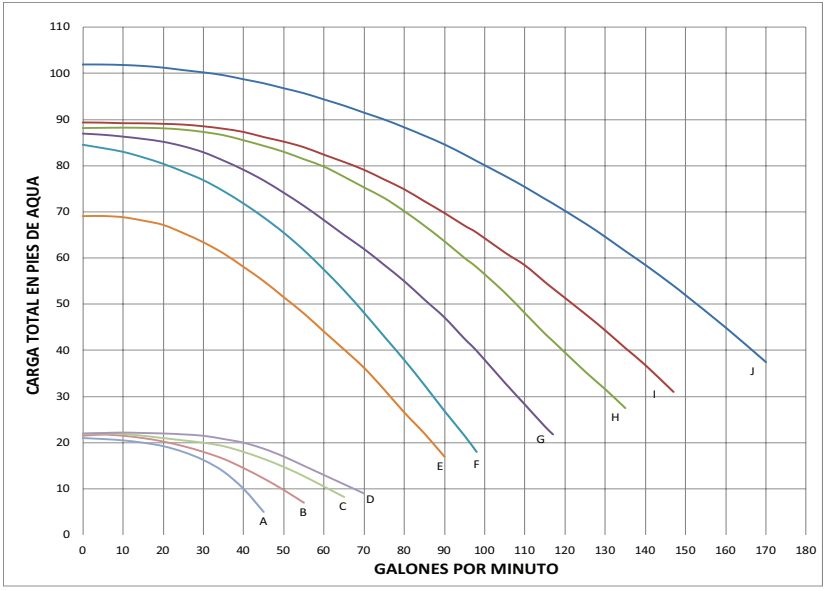
1. Quite la abrazadera plástica de la tapa de la bomba. Quite la tapa de la bomba.
2. Llene la olla de colador de bomba con agua.
3. Arme de nuevo el cubierto de bomba y abrazadera plástica en la olla de colador. Ahora la bomba está lista para imprimar.
4. Abra válvula de escape de aire en el filtro y manténgase a distancia del filtro.
5. Encienda el interruptor o reloj.
6. Cuando agua sale de la válvula de escape de aire, cierre la válvula. Este sistema ahora debe estar libre de aire y circulando agua de nuevo a la piscina y de vuelta.
7. Para bomba de 2 velocidades:
8. La bomba debe funcionar en alta velocidad para imprimar.
9. La bomba no debe funcionar por más de 8 minutos antes de que se logre imprimar.



LOCALIZADOR DE AVERÍAS

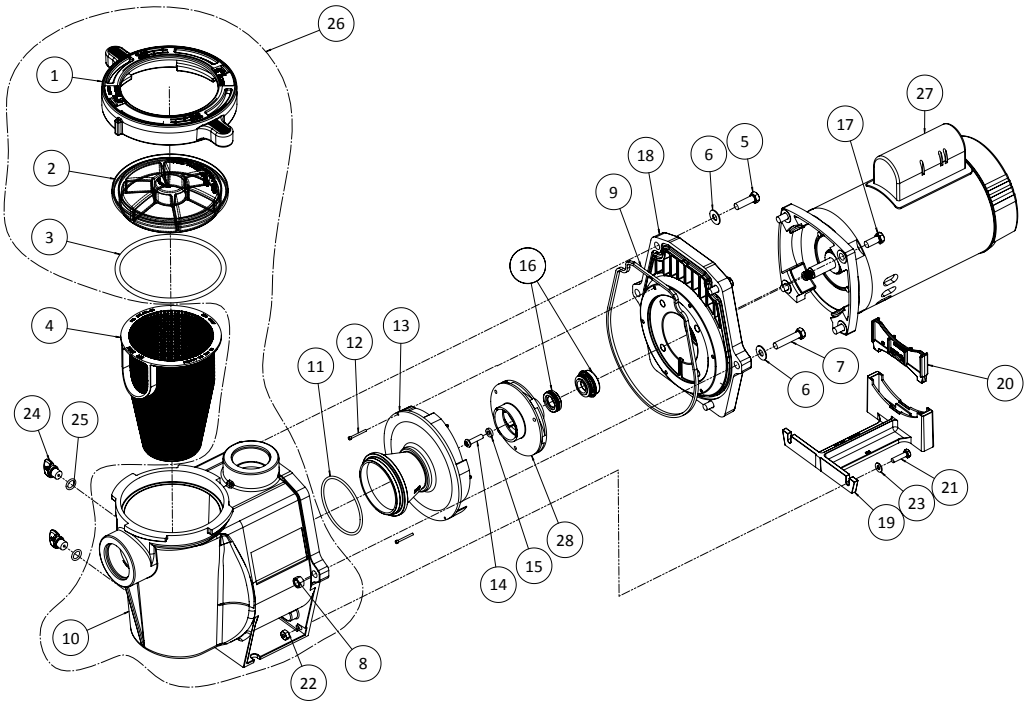
Problema	Posible causa	Medida correctiva
Si la bomba falla.	La bomba no imprima – demasiado aire.	Revise la tubería de succión y las prensastopas en cualquier válvulas de puerta de aspiración. Cierre la tapa en la olla de coladora de bomba y asegúrese que el empaque de tapa está en lugar.Revise el nivel de agua para asegurarse que la desnatadora no está jalando aire.
	La bomba no imprima—no hay agua suficiente	Asegúrese que las líneas de aspiración, el colador de bomba, y la voluta de bomba están llenas con agua. Asegúrese que la válvula en la línea de aspiración está funcionando y abierta, (algunos sistemas no tienen válvulas). Revise el nivel de agua para asegurarse que hay agua disponible a través de la desnatadora.
	El colador de bomba está atascado Empaque de colador de bomba defectuoso.	Limpie la olla de coladora de bomba. Reemplazar empaque.
Capacidad reducida y/o presión baja de agua.	Bolsas de aire o fugas en la línea de aspiración.	Revise la tubería de succión y las prensastopas en cualquier válvulas de puerta de aspiración. Cierre la tapa en la olla de coladora de bomba y asegúrese que el empaque de tapa está en lugar.Revise el nivel de agua para asegurarse que la desnatadora no está jalando aire.
	Impulsor atascado.	Apague la energía eléctrica en los interruptores de circuito de la bomba. Desensamblar (Referir a Desensamblaje de la bomba, página 16). Remover la basura del impulsor, si la basura no pueden ser removida por complete, siga las siguientes instrucciones: 1. Remueva el Tornillo de 1/4, 20x1, LH, Phillips MS 18-8 de acero inoxidable y la arandela de goma del impulsor. 2. Remueva el impulsor, termine de limpiarlo y vuelva a instalar. Reensamblar (Referir a Armar la bomba de nuevo, página 17).
	Colador de bomba atascado.	Limpie el depósito de aspiración.

Curvas de rendimiento de la bomba



Curva	Modelo
A	WFDS-3, WFDS-24
B	WFDS-4, WFDS-26
C	WFDS-6, WFDS-28
D	WFDS-8, WFDS-30
E	WFE-2, WF-2, WF-23, WFK-2
F	WFE-3, WFE-24, WF-3, WF-24, WFK-3, WFDS-3, WFDS-24
G	WFE-4, WFE-26, WF-4, WF-26, WFK-4, WFDS-4, WFDS-26
H	WFE-6, WFE-28, WF-6, WF-28, WFK-6, WFDS-6, WFDS-28
I	WFE-8, WFE-30, WF-8, WF-30, WFK-8, WFDS-8, WFDS-30
J	WFE-12, WF-12, WFK-12

PIEZAS DE REEMPLAZO



Número de artículo	P/N	Descripción
1	357199	Abrazadera, Cam & Ramp, Almendra
1	357150	Abrazadera, Cam & Ramp, Negro
2	357151	Tapa, transparente, bomba WFE
2	357156	Tapa, resistente química, Cam & Ramp
3	350013	Tapa WFE Anillo en O
4	070387	Canastilla del filtro, WFE
5	070430	Perno, 3/8 - 16 x 1,25, cabeza hexagonal acero inox, 4 Req.
6	072184	Arandelas, 3/8 x 13/16 O.D. acero inox, 6 Req.
7	070431	Perno, 3/8 - 16 x 1,75, cabeza hexagonal acero inox, 2 Req.
8	071403	Tuerca, 3/8, 16 hex hd., 2 req.
9	357100	Placa de sello de Empaque, Negro
10	357149	Voluta & placa de sello, Almendra Kit de reemplazo
10	350015	Voluta & Olla de Bomba WFE, Almendra
10	357157	Voluta & Olla de Bomba WFE, Negro ❶
11	355227	Anillo en O Parker de Bomba WFE, #2-238
12	071660	Tornillo de Tope, #4-40 X 1-1/8 SFE, 2 req.
13	072928	Montaje de Difusor, WFE- 12, Sólo 3 HP
13	072927	Montaje de Difusor, WFE- 2-8, .5 HP–2.5 HP
14	071652	Tornillo de Tope, 1/4, 20 x 1 lh. Phillips

Número de artículo	P/N	Descripción
15	075713	Arandela de Hule de Bomba WFE
16	071734S	Sello PA-7 con Asiento Ceramico, PS1000 ❶
16	071728	Sello A7 con Asiento Ceramico, PS201
17	070429	Perno, 3/8, 16 x 7/8 s/s hex hd., 4 req.
18	350201	Placa de Sello Juego WFE, Almendra (Incluye sello mecánico instalado) # 9, 16 & 18
18	350101	Placa de Sello Juego WFE, Negro (Incluye sello mecánico instalado) # 16 & 18
19	070927	Pie WFE - Bomba 4, Almendra
19	357159	Pie, Negro ❶
20	070929	Inserción de Pie de Bomba WFE, Almendra ❶
20	357160	Inserción de Pie de Bomba WFE, Negro
21	071657	Tornillo, 1/4, 20 x 1 pulg. hex hd. s/s, 2 req.
22	071406	Tuerca, 1/4, 20 hex. hd. s/s, 2 req.
23	072183	Tuerca, 1/4, 20 hex. hd. s/s, 2 req.
24	071131	Tapón con Perilla para Desagüe, Almendra 2 req.
24	357161	Tapón con Perilla para Desagüe, Negro 2 req. ❶
25	192115	Tapón de Desagüe de O-anillo, 2 req.
26	357149	Juego para Reemplazar Voluta/Placa de Sello, Almendra (Incluye #1-4, 9, 10, 16, 18, 24, and 25)
27	*Página siguiente*	

Número de artículo	Núm. de pieza	Descripción
		Motores
27	355008S	3/4 HP, 60 Hz, WFE-2, 3 & 24, 1 spd., Almendra, 31 lbs. ❷
27	355010S	1 HP, 60 Hz, WFE-4 & 26, 1 spd., Almendra,, 33 lbs. ❷
27	355012S	1-1/2 HP, 60 Hz, WFE-6 & 28, 1 spd., Almendra,, 39 lbs. ❷
27	355014S	2 HP, 60 Hz, WFE-8 & 30, 1 spd., Almendra,, 40 lbs. ❷
27	355016S	3 HP, 60 Hz, WFE-12, 1 spd., Almendra, 40 lbs. ❷
27	356630S	1 HP, WFDS-4 & 26, 2 spd., 34 lbs. ❹
27	071320S	1-1/2 HP, WFDS-6 & 28, 2 spd., 36 lbs. ❹
27	071321S	2 HP, WFDS-8 & 30, 2 spd., 45 lbs. ❹
27	355018S	1/2 HP, WF-2 & 23, 1 spd., Almendra, 39 lbs. ❸
27	355020S	3/4 HP, WF-3 & 24, 1 spd., Almendra, 26 lbs. ❸
27	355022S	1 HP, WF-4 & 26, 1 spd., Almendra, 28 lbs. ❸
27	355024S	1-1/2 HP, WF-6 & 28, 1 spd., 39 lbs. ❸
27	355026S	2 HP, WF-8 & 30, 1 spd., 32 lbs. ❸
27	355033S	3 HP, WF-12, 1 spd., Almendra, 40 lbs. ❸
27	355203S	1 HP, WFK-4, 3 ph, 1 spd., Negro, 28 lbs.
27	355204S	1-1/2 HP, WFK-6, 3 ph, 1 spd., Negro, 30 lbs.
27	355205S	2 HP, WFK-8, 3 ph, 1 spd., Negro, 37 lbs.
27	355398S	3 HP, WFK-12, 3 ph, 1 spd., Negro, 35 lbs.
27	356626S	1 HP, WFK-4, 3 ph, 1 spd., Almendra, 28lbs.
27	356627S	1-1/2 HP, WFK-6, 3 ph, 1 spd., Almendra, 30lbs.
27	356628S	2 HP, WFK-8, 3 ph, 1 spd., Almendra, 37 lbs.
27	356629S	3 HP, WFK-12, 3 ph, 1 spd., Almendra, 35 lbs.
27	354805S	1 HP, WFK-4, TEFC, 3 ph, 1 spd., Almendra, 28lbs.
27	354807S	1-1/2 HP, WFK-6, TEFC, 3 ph., 1 spd., Almendra, 30lbs.
27	354809S	2 HP, WFK-8, TEFC, 3 ph., 1 spd., Almendra, 37 lbs.
27	354811S	3 HP, WFK-12, TEFC, 3 ph., 1 spd., Almendra, 35 lbs.

No Mostrado

79129900	2-Velocidad Toggle Interruptor
350202	Placa de Sello Juego: Placa de Sello (Almendra), Empaque (Negro), con instalado Sello (Incluye Artículos: 9, 16, & 18)
350203	Placa de Sello Juego: Placa de Sello (Negro), Empaque (Negro), con instalado Sello (Incluye Artículos: 9, 16, & 18)
357243	Olla la Asamblea, Almendra NPT. (Incluye Artículos: 1-4, 10, 24 [qty. 2], 25 [qty. 2])
357244	Olla la Asamblea, Negro NPT. (Incluye Artículos: 1-4, 10, 24 [qty. 2], 25 [qty. 2])

Fondo Potencia Submontaje. Incluye Artículos: 12-18, 27-28

075136	WFE-2
075137	WFE-3, WFE-24
075138	WFE-4, WFE-26 ❷
075139	WFE-6, WFE-28 ❷
075140	WFE-8, WFE-30 ❷
075141	WFE-12 ❷
075145	WFDS-3, WFDS-24 ❹
075142	WFDS-4, WFDS-26 ❹
075143	WFDS-6, WFDS-28 ❹
075144	WFDS-8, WFDS-30
075251	WF-2, WF-23 ❸
075252	WF-3, WF-24 ❸
075253	WF-4, WF-26 ❸
075254	WF-6,WF-28 ❸
075255	WF-8,WF-30 ❸
075256	WF-12 ❸

Fondo Líquido - Todas las Partes sin el Motor

075451	WFE-2 fluid end, 1/2 HP
075452	WFE-3 fluid end, 3/4 HP
075453	WFE-4 fluid end, 1 HP
075454	WFE-6 fluid end, 1-1/2 HP
075455	WFE-8 fluid end, 2 HP
075456	WFE-12 fluid end, 3 HP

❶ CSA/CUL (sólo) para Canadá.
❷ Energía eficiente, sola fase.
❸ Eficiencia Estánder, sola fase.
❹ Dos velocidad, sola fase.

Tabla de impulsor

HP	TAMAÑO	NO. DE PIEZA STD.
1/2	WFE-2, WF-2, WF-23, WFK-2	073126
3/4	WFE-3, WFE-24, WF-3, WF-24, WFK-3, WFDS-24	073127
1	WFE-4, WFE-26, WF-4, WF-26, WFK-4, WFDS-4, WFDS-26	073128
1½	WFE-6, WFE-28, WF-6, WF-28, WFK-6, WFDS-6, WFDS-28	073129
2	WFE-8, WFE-30, WF-8, WF-30, WFK-8, WFDS-8, WFDS-30	073130
3	WFE-12, WF-12, WFK-12	073131

NOTES/NOTAS

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