



OWNER'S MANUAL

ESCAPE & ESCAPE PLUS
PLATINUM

2020



© 2020 LMS



www.calspas.com

Table of Contents

Preparing for Your New Portable Spa

| | |
|---|----|
| Pre-Delivery Checklist | 3 |
| Planning the Best Location | 3 |
| Clearance for Service Access | 4 |
| Preparing a Good Foundation | 4 |
| 240 Volt Electrical Installation | 4 |
| Wiring Requirement/GFCI Wiring Diagram for US & Canada | 5 |
| Adjusting Date-Time and Filtration Settings | 16 |
| Electrical Power Efficiency | 23 |
| Jets | 23 |
| LED Lighting | 23 |
| Diverter Knobs | 24 |
| Air Venturis | 24 |
| Waterfalls | 24 |
| ATS Plus Therapy System | 25 |
| Aquatic Air Therapy™ (AAT) | 26 |

Water Clarity

| | |
|--|----|
| The Key to Clear Water | 27 |
| Testing and Adjusting Spa Water | 28 |
| Sanitation | 29 |
| Bather Load | 30 |
| Filter Cleaning | 30 |
| Ozonator | 30 |
| Bromine Generator | 31 |
| Maintenance Schedule | 33 |
| Troubleshooting Water Clarity Problems | 33 |

Cleaning and Maintenance

| | |
|--|----|
| Removing and Reseating the Pillows | 35 |
| Jet Removal and Replacement | 35 |
| Spa Cover and Locking System Installation | 35 |
| Draining Your Portable Spa | 37 |
| Winterizing (Cold Climate Draining) | 38 |
| Cleaning and Replacing the Filter | 38 |
| Vacation Care | 38 |
| Cleaning Your Spa | 39 |
| Using the Freedom Sound System | 39 |

Appendix

| | |
|---------------------------------|----|
| Replacement Parts | 40 |
| Basic Troubleshooting | 50 |
| “Thermal Creep” | 52 |
| Limited Warranty | 53 |

Copyright 2020 LMS. All rights reserved. Duplication without written consent is strictly prohibited.

Cal Spas®, Adjustable Therapy System™, ATS™, Cal Premium™, Cal Select™, Cal Stone™, XL™ Heater, and Ultimate Fitness Spa Series™ are registered trademarks.

Due to continuous improvement programs, all models, operation, and/or specifications are subject to change without prior notice.

LTR20201010_NEO, Rev. N
4/22/21

CONTACT INFORMATION

For customer service, please contact your authorized dealer immediately. If you need additional information and/or assistance, contact:

LMS Customer Service Department
1462 East Ninth Street
Pomona, CA 91766.

Toll Free: 1-800-CAL-SPAS
Fax: 1-909-629-3890

Important Safety Instructions

READ AND FOLLOW ALL INSTRUCTIONS.

DANGER -- Risk of accidental drowning:

Do not allow children to be in or around a spa unless a responsible adult supervises them. Keep the spa cover on and locked when not in use. See instructions enclosed with your cover for locking procedures.

DANGER -- Risk of injury:

The suction fittings in this spa are sized to match the specific water flow created by the pump. Should the need arise to replace the suction fittings, or the pump, be sure the flow rates are compatible.

Never operate the spa if the suction fitting or filter baskets are broken or missing. Never replace a suction fitting with one that is rated less than the flow rate marked on the original suction fitting.

DANGER -- Risk of electric shock:

Install the spa at least 5 feet (1.5 meters) from all metal surfaces. As an alternative, a spa may be installed within 5 feet of metal surfaces if each metal surface is permanently bonded by a minimum #8 AWG solid copper conductor to the outside of the spa's control box.

Do not permit any external electrical appliances, such as lights, telephones, radios, televisions, and etc., within five feet (1.5 meters) of the spa. Never attempt to operate any electrical device from inside the spa.

Replace a damaged power cord immediately.

Do not bury the power cord.

Connect to a grounded, grounding-type receptacle only.

WARNING -- To reduce the risk of injury:

The spa water should never exceed 104°F (40°C). Water temperatures between 100°F (38°C) and 104°F (40°C) are considered safe for a healthy adult. Lower water temperatures are recommended for young children and when spa use exceeds 10 minutes.

High water temperatures have a high potential for causing fetal damage during pregnancy. Women who are pregnant, or who think they are pregnant, should always check with their physician prior to spa usage.

The use of alcohol, drugs or medication before or

during spa use may lead to unconsciousness, with the possibility of drowning.

Persons suffering from obesity, a medical history of heart disease, low or high blood pressure, circulatory system problems or diabetes should consult a physician before using the spa.

Persons using medications should consult a physician before using the spa since some medications may induce drowsiness while others may affect heart rate, blood pressure and circulation.

HYPERTHERMIA DANGER:

Prolonged exposure to hot air or water can induce hyperthermia. Hyperthermia occurs when the internal temperature of the body reaches a level 3°F to 6°F above the normal body temperature of 98.6°F (or 2°C to 4°C above 37°C). While hyperthermia has many health benefits, it is important not to allow your body's core temperature to rise above 103°F (39.5°C).

Symptoms of excessive hyperthermia include dizziness, lethargy, drowsiness and fainting. The effects of excessive hyperthermia may include:

- Failure to perceive heat
- Failure to recognize the need to exit spa or hot tub
- Unawareness of impending hazard
- Fetal damage in pregnant women
- Physical inability to exit the spa
- Unconsciousness

WARNING: The use of alcohol, drugs, or medication can greatly increase the risk of fatal hyperthermia.

WARNING: People with infectious diseases should not use a spa or hot tub.

WARNING: To avoid injury, exercise care when entering or exiting the spa or hot tub.

WARNING: Do not use drugs or alcohol before or during the use of a spa or hot tub to avoid unconsciousness and possible drowning.

WARNING: Do not use a spa or hot tub immediately following strenuous exercise.

WARNING: Prolonged immersion in a spa or hot tub may be injurious to your health.

CAUTION: Maintain water chemistry in accordance with manufacturer's instructions.

SAVE THESE INSTRUCTIONS.

Preparing for Your New Portable Spa

Pre-Delivery Checklist

Most cities and counties require permits for exterior construction and electrical circuits. In addition, some communities have codes requiring residential barriers such as fencing and/or self-closing gates on property to prevent unsupervised access to the property by children. Your dealer can provide information on which permits may be required and how to obtain them prior to the delivery of your spa.

| Before Delivery | |
|-----------------|--|
| | Plan your delivery route |
| | Choose a suitable location for the spa |
| | Lay a 5 - 8 cm concrete slab |
| | Install dedicated electrical supply |
| After Delivery | |
| | Place spa on slab |
| | Connect electrical components |

Planning the Best Location

Safety First

Do not place your spa within 10 feet (3 m) of overhead power lines.

Consider How You Will Use Your Spa

How you intend to use your spa will help you determine where you should position it. For example, will you use your spa for recreational or therapeutic purposes? If your spa is mainly used for family recreation, be sure to leave plenty of room around it for activity. If you will use it for relaxation and therapy, you will probably want to create a specific mood around it.

Plan for Your Environment

If you live in a region where it snows in the winter or rains frequently, place the spa near a house entry. By doing this, you will have a place to change clothes and not be uncomfortable.

Consider Your Privacy

In a cold-weather climate, bare trees won't provide much privacy. Think of your spa's surroundings during all seasons to determine your best privacy options. Consider the view of your neighbors as well when you plan the location of your spa.

Provide a View with Your Spa

Think about the direction you will be facing when sitting in your spa. Do you have a special landscaped area in your yard that you find enjoyable? Perhaps there is an area that catches a soothing breeze during the day or a lovely sunset in the evening.

Keep Your Spa Clean

In planning your spa's location, consider a location where the path to and from the house can be kept clean and free of debris.

Prevent dirt and contaminants from being tracked into your spa by placing a foot mat at the spa's entrance where the bathers can clean their feet before entering your spa.

Allow for Service Access

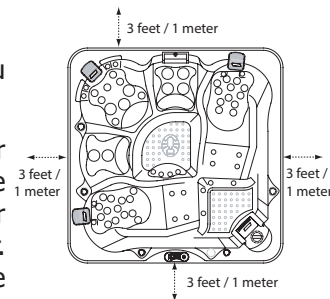
Make sure the spa is positioned so that access to the equipment compartment and all side panels will not be blocked.

Many people choose to install a decorative structure around their spa. If you are installing your spa with any type of structure on the outside, such as a gazebo, remember to allow access for service. It is always best to design special installations so that the spa can still be moved, or lifted off the ground.

Clearance for Service Access

While you are planning where to locate your spa, you need to determine how much access you will need for service.

All spa models require a minimum of three feet / one meter access to all sides of the spa for potential service. For this reason, the spa should never be placed in a manner where any side is permanently blocked. Examples include placing the spa against a building, structural posts or columns, or a fence. Spa models require access to all sides in case they need service or repair. See the figure to the right. If you are planning to enclose or surround your spa with a deck, make sure there is easy access for service or repair. **Spas require clearance on all sides of the spa.**



Preparing a Good Foundation

Your spa needs a solid and level foundation. The area that it sits on must be able to support the weight of the spa, with water and the occupants who use it. If the foundation is inadequate, it may shift or settle after the spa is in place, causing stress that could DAMAGE YOUR SPA SHELL AND FINISH.

Damage caused by inadequate or improper foundation support is not covered by the warranty. It is the responsibility of the spa owner to provide a proper foundation for the spa.

Place the spa on an elevated 3 to 4" / 30 cm concrete slab. Pavers, gravel, brick, sand, timbers or dirt foundations are **not** adequate to support the spa.

We strongly recommend that a qualified, licensed contractor prepare the foundation for your spa.

If you are installing the spa indoors, pay close attention to the flooring beneath it. Choose flooring that will not be damaged or stained.

If you are installing your spa on an elevated wood deck or other structure, it is highly recommended that you consult a structural engineer or contractor to ensure the structure

will support the weight of 150 pounds per square foot (732 kg / m²).

To properly identify the weight of your new spa when full, remember water weighs 8.33 lbs. per gallon, or 1 kg per liter. For example, an average 8' spa holds approximately 500 gallons, or 1892 liters, of water. Using this formula, you will find that the weight of the water alone is 4,165 lbs, or 1892 kg. Combined with the dry weight of the spa you will note that this spa will weigh approximately 5,000 lbs, or 2267 kg, when full of water.



240 Volt Electrical Installation

All 240V spas must be permanently connected (hard wired) to the power supply.

Use one 50 amp GFCI with four #6 AWG copper wires. See the wiring diagram on page 5.

These instructions describe the only acceptable electrical wiring procedure. Spas wired in any other way will void your warranty and may result in serious injury.

When installed in the United States, the electrical wiring of this spa must meet the requirements of NEC 70 and any applicable local, state, and federal codes.

The electrical circuit must be installed by an electrical contractor and approved by a local building or electrical inspector.

Failure to comply with state and local codes may

result in fire or personal injury and will be the sole responsibility of the spa owner.

The power supplied to the spa must be on a dedicated GFCI protected circuit as required by NEC 70 with no other appliances or lights sharing the power.

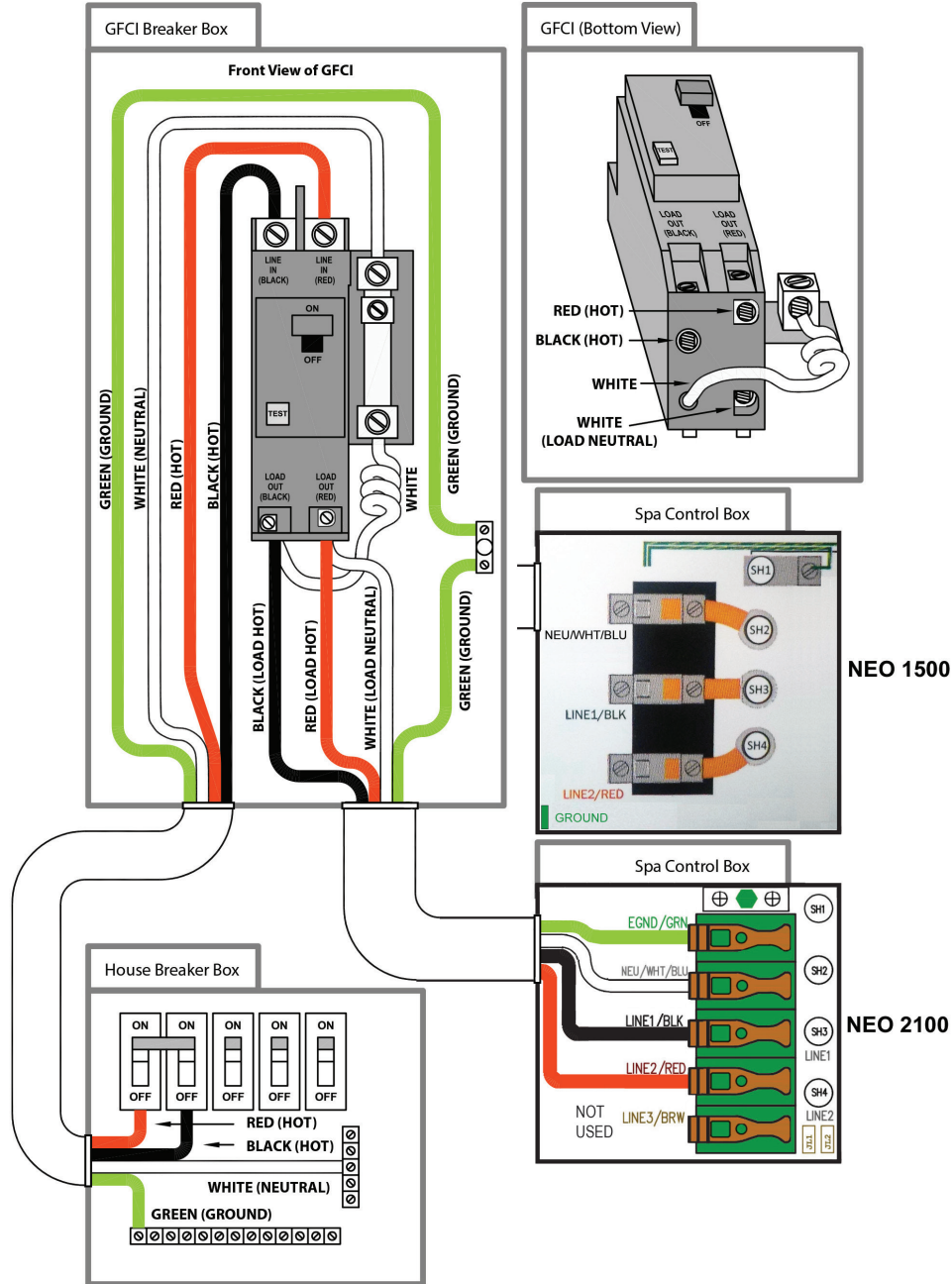
Use copper wire with THHN insulation. Do not use aluminum wire.

Use the table below and on the next page to determine your GFCI and wiring requirements.

Wires that run over 100 feet must increase wire gauge to the next lower number. For example: A normal 50 amp GFCI with four #6 AWG copper wires that run over 100 feet would require you to use four #4 AWG copper wires.

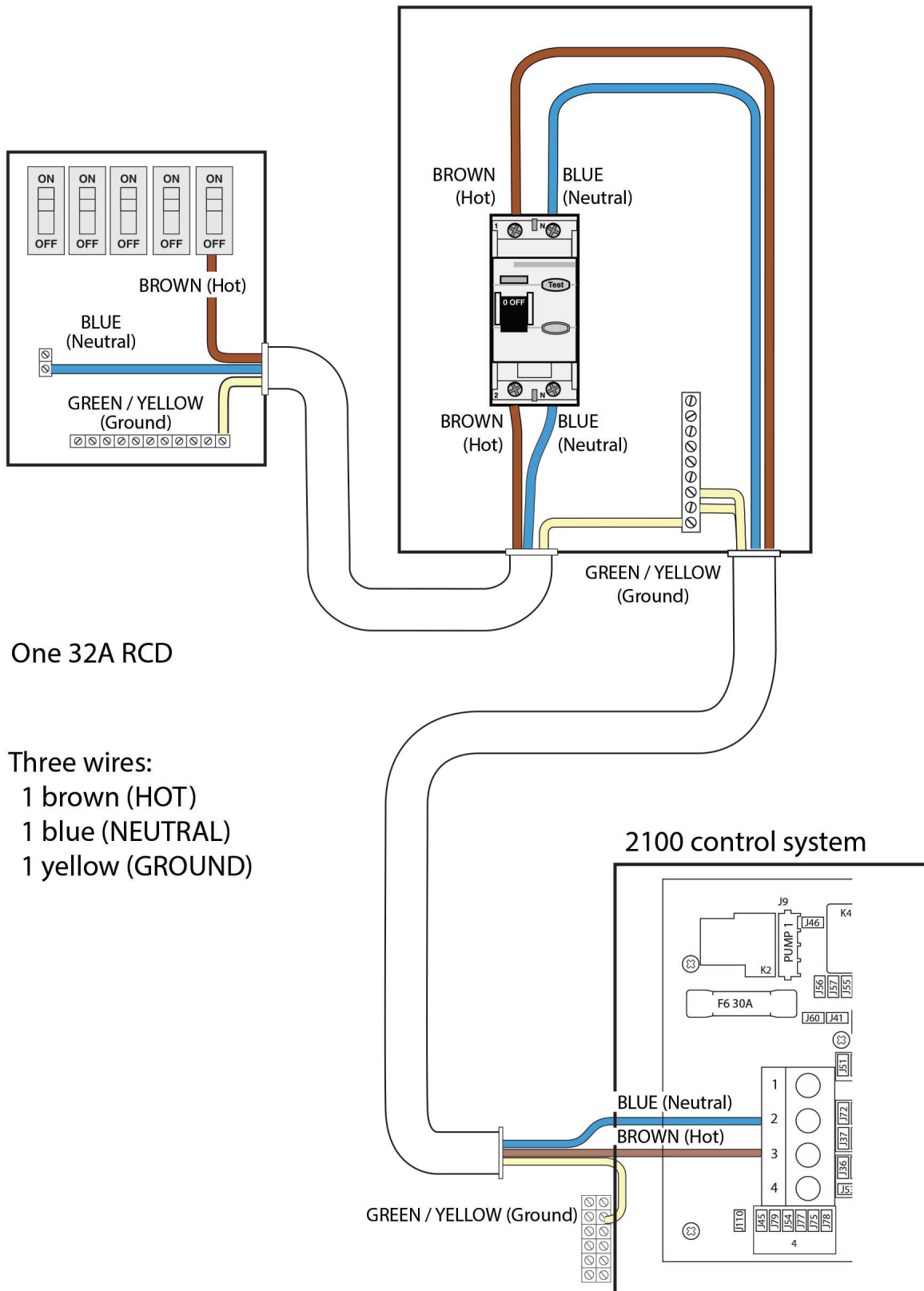
Wiring Requirement/GFCI Wiring Diagram for US & Canada

| Control System | GFCI Required | Wires Required |
|-------------------|-----------------|--------------------------|
| NEO 1500/NEO 2100 | One 50 amp GFCI | Four #6 AWG copper wires |



See the Cal Spas Pre-Delivery Guide for more information on spa placement for service access and electrical service.
www.calspas.com/manuals

European Wiring Configuration



One 32A RCD

Three wires:

- 1 brown (HOT)
- 1 blue (NEUTRAL)
- 1 yellow (GROUND)

120 Volt Electrical Installation

Always follow applicable local, state and federal codes and guidelines.

Use only a dedicated electrical line with a 15 amp breaker.

Cord-and-plug connections may not use a cord longer than 15 feet (4.6 m) and must be plugged into a dedicated 15 amp GFCI connection (NEC 680.42(A)(2)). Do not use extension cords!

Always use a weatherproof-covered receptacle.

Receptacle shall be located not less than 5 feet (1.5 m) from and not exceeding 10 feet (3.0 m) from the inside wall of the spa. (NEC 680.43(A))

Do not bury the power cord. If your cord becomes damaged, replace it before next usage.

All 120V spas must have a GFCI. This can be either a 15 amp GFCI receptacle or a 15 amp GFCI cord and plug kit as shown (CKIT110 - P/N ELE09700086).

Testing the GFCI plug

Test the GFCI plug prior to first use and periodically when the spa is powered.

1. Plug in the GFCI into the power outlet. The indicator should turn on.
2. Press the TEST button. The GFCI will trip, the indicator will turn off, and the spa will stop operating.
3. Press the RESET button. The GFCI will reset, the indicator will turn on again, and the spa will turn back on.



The spa is now safe to use.

If the GFCI trips while the spa is in use, press the RESET button. If the GFCI does not reset, unplug the spa and call your local Cal Spas dealer for service. DO NOT USE THE SPA!

Testing the 240 Volt GFCI Breaker

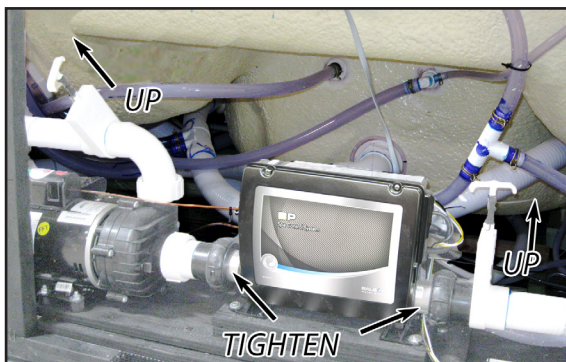
Test the GFCI breaker prior to first use and periodically when the spa is powered. To test the GFCI breaker follow these instructions (spa should be operating):

1. Press the TEST button on the GFCI. The GFCI will trip and the spa will shut off.
2. Reset the GFCI breaker by switching the breaker to the full OFF position, wait a moment, then turn the breaker back on. The spa should have power again.

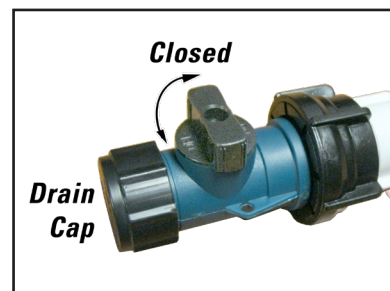
Filling and Powering Up Your Portable Spa

Inspect the spa equipment.

Inspect all plumbing connections in the equipment area of your spa.



- Make sure unions in the equipment pack are tight. (Be careful not to over-tighten the plumbing fittings.)
- If your spa has gate valves, make sure they are all in the UP or OPEN position.
- Make sure the drain valve is closed and capped. (See page 37 for a description of drain valves.)



Never run the spa with the gate valves closed or without water circulating for long periods of time.

1. Remove the cartridge from filter canister.

If you have a skimmer like this:

Grip the filter by the handle and unscrew it from the canister. Never try to pull the filter cartridge while the spa is running in low or high speed (i.e., any speed).



If you have a skimmer like this:

Remove the black skimmer cap and barrel, grip the filter by the handle and unscrew it from the canister.



Teleweir Mega filter skimmer

- 75 square feet filtration
- Smooth cap

If you have a skimmer like this:

Rotate and remove the black locking ring. Remove the black skimmer cap and barrel, grip the filter by the handle and unscrew it from the canister.

Replace and lock the locking ring and slide the skimmer cap and barrel back in the canister.

Note: The skimmer cap and barrel were locked in place at the factory to prevent damage during shipment. It must be unlocked and replaced in the filter canister so that it can float when the spa is filled. If you do not remove the cap and barrel, your spa's filtration system will not perform as it was designed to.



Teleweir filter skimmer

- 50 square feet filtration
- Spoked cap



After you remove the filter, remove the plastic wrapper and soak it in water for 30 minutes before you replace it. A dry filter can allow air into the filtration system which can cause the pump to fail to prime.

2. Fill the spa.

Place a garden hose in the filter canister and fill your spa.

Always fill the spa through the filter canister. Failure to do so may cause air to be trapped in the filtration system and prevent the pumps from operating properly.

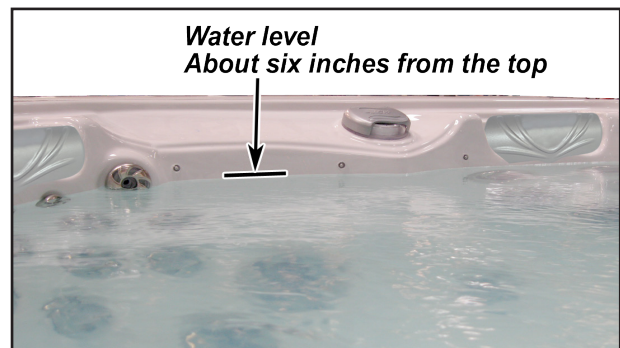


Never fill your spa with soft water.

Soft water makes it impossible to maintain the proper water chemistry and may cause the water to foam, which will ultimately harm the finish of the spa and void your warranty. You may fill your spa

Fill the spa until water level is about six inches from the top.

If the water level is too low or too high, your spa will not operate properly.



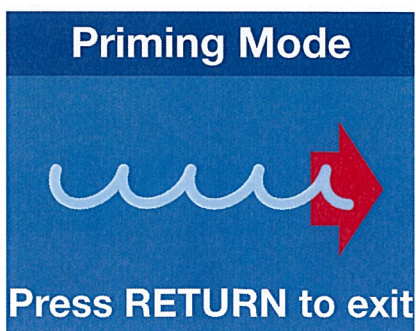
with **well water provided the following conditions are met:** 1) Purchase and use a pre-filter to run the well water through on the fill-up. The pre-filter will be placed before the spa filter in the fill-up flow of water. 2) Have a Total Dissolved Solids (TDS) and metals test performed by a qualified person after the fill-up process but before any spa use.

3. Turn on power to the spa.



When the spa is filled to the correct level, turn on the power at the GFCI breaker. (Ensure that the 120V spas are connected to the proper electrical outlet.)

4. Prime the pump.



The system will enter the priming mode. **Priming Mode** will display on the control panel. In Priming Mode, all devices such as jets and lights are operable. Jets can be turned on and off to help prime the pump. The system will exit Priming Mode and go to the Main display when the RETURN button is pressed, or after four minutes of inactivity.

5. Install the filter into the filter canister.



Make sure the filter has soaked at least 30 minutes before you install it. Insert the filter all the way and screw it in. Do not over-torque the cartridge during installation, just hand tighten gently.



6. Adjust water chemistry.

Test and adjust the water chemistry.

See the section on page 27 for instructions on keeping your water clear.

Spa owners with the bromine generator need to follow the instructions on page 31.

7. Let the spa heat up.

When the spa has finished priming, the heater will activate. Put the cover on and let the spa heat to the set temperature.

Priming the Pump

New spa owners often have difficulty the first time they start their spa and the pump fails to prime. This can be frustrating, but these simple instructions can help you.

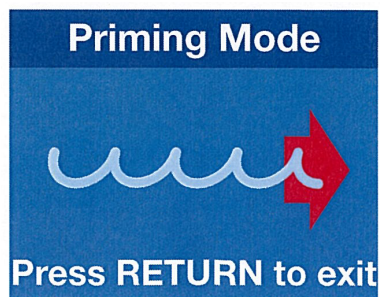
Sometimes air can become trapped in the pump while filling the spa. You will know this has happened when after you have filled and started the spa, the pump does not seem to function. You will hear the pump operating, but no water will be moving.



The pump will not work properly while air is trapped in it. Continuing to operate the pump in this way will cause damage.

Starting Up: Priming Mode for NEO-Pack Systems

The system will enter the priming mode. **Priming Mode** will display on the control panel. In Priming Mode, all devices such as jets and lights are operable. Jets can be turned on and off to help prime the pump. The system will exit Priming Mode and go to the Main display when the RETURN button is pressed, or after four minutes of inactivity.



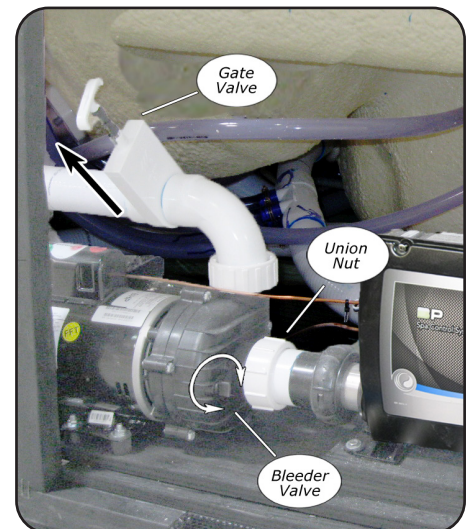
Exiting Priming Mode for NEO-Pack Systems

You can manually exit Priming Mode by pressing the RETURN button. Note that if you do not manually exit the priming mode, the priming mode will be automatically terminated after 4 to 5 minutes. Be sure that the pumps have been primed by this time.

Bleeding Air from the Pump

If you have tried priming the pump several times unsuccessfully using the control panel, you can bleed the air from the pump manually.

1. Shut off the power to the spa.
2. Using a Phillips screwdriver, remove the front panel from the spa and locate the pump.
3. Close the gate valve on the discharge side of the pump (if your spa is installed with one.)
4. Turn the bleeder valve counter clockwise with a small pair of pliers until the air has been released from the pump.
5. If this is unsuccessful, loosen the union nut on side of the pump with channel locks. When air is bled out, tighten the nut.
6. Turn on power to the spa and press the **JETS** button. If there is still air trapped in the pump, repeat steps 2 through 5 until the pump primes.



Operating Your Spa

NEO Control Panel Operation

Primary Navigation and Functions of NEO One and Two-pump Systems

NEO 1100 Wave



Two-pump system

NEO 2100 2-Pump



NEO 2100 3-Pump

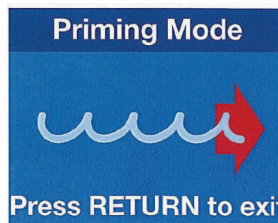


MAIN SCREEN:

The main screen displays current time, water temperature, and status of the system accessories. The screen below from bottom, left to right indicates LIGHT ON, BLOWER ON, JET 1 at low speed.

PRIMING MODE:

When power is ON, the system will enter a priming mode with priming screen display on the panel. In this mode, all devices such as JETS, BLOWERS or LIGHT are operable. JETS can be turned on and off to prime the pump. System will exit priming mode and go to MAIN display when RETURN button is pushed, or after 4 minutes of inactivity.



SPA OPERATION:

Turn system accessories ON and OFF by pushing appropriate button on the right side of panel (LIGHT, JET 1, BLOWER, JET 2...) These accessories have timeout defaults from the manufacturer and will turn OFF automatically after the time has expired. Timeout time for LIGHT default is 60 minutes; BLOWER default is 15 minutes; JET at low speed default is 60 minutes; and JET at high speed is 15 minutes. User can change these default times in "DEVICE TIMEOUT" setting menu.

MENU NAVIGATING:

- MENU button: use to enter setting menu and sub-menu screens. For screens with several settable fields (example: DATE-TIME screen), use MENU button to navigate between different fields within the screen.
- UP and DOWN button: use to navigate between different options or changing values of a field.
- RETURN button: use to confirm the setting and goes back to previous screen.

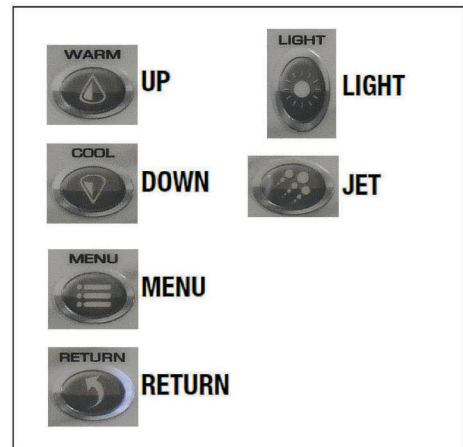
SETTING TEMPERATURE:

To change water set temperature, use UP and DOWN buttons to set the desired temperature. The screen will display "SET TEMP" with the current set temperature. After 5 seconds without any change to the set temperature, the screen will reverse back to MAIN screen with current water temperature display. Changing set temperature will make heat pump turn on to get accurate water temperature to determine if water needs to be heated up.






















Control Panel Quick Reference

1. Press **UP** button to set desired temperature. If in a **MENU** mode, then the **UP** to navigate the screen up.
2. Press **DOWN** button to set desired temperature. If in a **MENU** mode, then the **DOWN** to navigate the screen down.
3. Press **MENU** button to get into the **MENU** for setting. Use **UP** or **DOWN** button to navigate, press **MENU** button then **UP** or **DOWN** button to set your desire. Refer to your Instruction Manual for additional details.
4. Press **RETURN** button to activate or back to previous setting.
Optional: The **RETURN** button can be used for **BLOWER, JET** or **AUX**
5. Press **LIGHT** button, the Spa Light turns **ON**, press **LIGHT** button again, the Spa Light turns **OFF**.



Default Timeout setting: Spa **LIGHT** is 60 minutes; **BLOWER** is 15 minutes, **JET** at low speed is 60 minutes; and **JET** at high speed is 15 minutes. User can change these default times in **DEVICE TIMEOUT** setting menu.

SELECTION ICONS:

-  FILTER CYCLE 1
-  FILTER CYCLE 2
-  FILTER CYCLE 3
-  FILTER CYCLE 4
-  LIGHT ON
-  HEATER ON
-  HEATER START-UP
-  ENERGY SAVING HEAT MODE
-  VACATION HEAT MODE
-  CLEANER CYCLE
-  POLLING CYCLE
-  TEMPERATURE LOCK
-  PANEL LOCK
-  OZONE ON
-  JET ON LOW SPEED
-  JET ON HIGH SPEED
-  BLOWER ON
-  SPECIAL TEMP SELECT
-  OPTION

PANEL TIMEOUT:

If user is in Setting Menus and no button is pushed within 15 seconds, the screen will timeout, current screen setting will be lost and panel reverts back to MAIN screen.

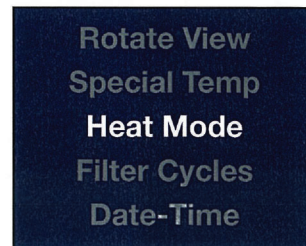
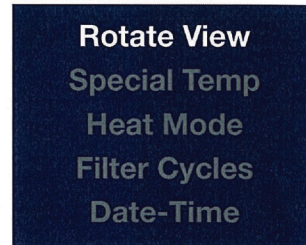
In MAIN screen, if no buttons is pushed within 60 minutes, all LED and LCD lights will turn off and panel goes to sleep. Any button pushed in this time will wake the panel up, LED and LCD lights will turn back on and panel will poll for water temperature.

ENTER SETTING SCREENS:

Press MENU button to display a list of set up screens.

Use UP and DOWN to navigate between various set up screens.

Press MENU again to enter a particular set up screen or press RETURN to goes back to MAIN screen.



Settings Screens

- **ROTATE VIEW:** rotate the view 180 degrees, the UP and DOWN buttons also swap when rotated. With ROTATE VIEW highlighted, press MENU to enter ROTATE VIEW setting. Use UP/DOWN to select desired setting and RETURN to exit and confirm the setting.
- **SPECIAL TEMP:** to temporarily heat spa to 105°F or 106°F once, and return to previous temperature setting. With SPECIAL TEMP highlighted, press MENU to enter SPECIAL TEMP setting. Use UP/DOWN to select the desired setting and RETURN to exit and confirm the setting.
- **HEAT MODE:** select STANDARD heating mode for most users or ENERGY SAVING mode (reduces polling for water temperature) or VACATION mode (set temp set to 60°F). With HEAT mode highlighted, press MENU to enter HEAT mode setting. Use UP/DOWN to select the desired setting and RETURN to exit and confirm the setting.
- **FILTER CYCLES:** set up filter cycle START TIME, DURATION and DATE for filtering the spa. For FILTER CYCLE 1 and 2, if DURATION is set to ZERO the system will do a purge cycle at the start time setting. With FILTER CYCLE highlighted, press MENU to enter FILTER CYCLE 1, 2, 3, or 4 setting. Select a FILTER CYCLE and press MENU again to enter TIME/DURATION setting screen. In this screen, press MENU to move between HOURS, MINUTES and DAYS setting; use UP/DOWN to change the values and RETURN to exit and confirm the setting. FILTER CYCLES 3 & 4 default OFF. To select it, enter START TIME, DURATION and enable ALL DAY or specific day for both FILTER CYCLES 3 & 4.
- **DATE-TIME:** set up date and time for the spa. With DATE-TIME highlighted, press MENU to enter DATE-TIME setting. In this screen, pressing MENU will move and highlight various fields that can change the setting; UP/DOWN to change the values and RETURN to exit and confirm the setting.
- **DEGREE F/C:** displays spa temperature in Celsius or Fahrenheit. This option is only available for 60 Hz countries. Unit automatically displays Celsius for 50 Hz. With DEGREE F/C highlighted, press MENU to enter DEGREE F/C setting. Use UP/ DOWN to select the desired setting and RETURN to exit and confirm the setting.
- **TIME DISPLAY:** displays spa time in AM/PM or 24 hours time. With TIME DISPLAY highlighted, press MENU to enter TIME DISPLAY setting. Use UP/DOWN to select the desired setting and RETURN to exit and confirm the setting.
- **DEVICES TIMEOUT:** allows changes to timeout setting for various devices. LIGHT can be set to a maximum of 4 hours; PUMP in high speed and BLOWER can be set to a maximum of 1 hour; and PUMP in low speed can be set to a maximum of 2 hours. With DEVICES TIMEOUT highlighted, press MENU to enter and select various devices setting. Use UP/DOWN to select the desired time setting and RETURN to exit and confirm the setting.
- **PANEL LOCK:** provides a choice to lock out panel buttons.
 - 1) Press MENU
 - 2) Use COOL (also known as Down button) to get to the PANEL LOCK option
 - 3) Press MENU button to select, then scroll down to the MENU option
 - 4) Press RETURN button to confirm this selection
 - 5) Press RETURN button again – to resume to the Temperature screen.

At this point, the spa user is locked out of changing menu options.

To cancel MENU LOCK and resume all spa control functions, perform the following procedure:

- 1) Turn off the circuit breaker supplying mains power to the SpaPak and wait 10 seconds
- 2) Turn back on the circuit breaker supplying mains power to the SpaPak.
- 3) Wait for the topside to start up.
- 4) When the screen displays, "Priming Mode Press Return to exit", **do not press Return; press the Menu button instead.**
- 5) Step through the menu to the Panel Lock entry. (The screen should now show Panel Lock at the top, and Menu Lock highlighted below).
- 6) Press the WARM (also known as Up button) until **Off** is highlighted.
- 7) Press the RETURN button.

MENU LOCK is now cancelled.

- **NO HEAT TIME:** set the time frame for not allowing heater to turn on. With NO HEAT TIME highlighted, press MENU to enter NO HEAT TIME setting. In this screen, pressing MENU will move and highlight various fields that can change the setting; use UP/DOWN to change the values and RETURN to exit and confirm the setting.
- **SERVICE MODE:** *only available for Authorized Dealers and Spa Manufacturer.*
- **DEMO MODE:** to demonstrate all device capabilities of the spa. With DEMO MODE highlighted, press MENU to enter MODE setting. Use UP/DOWN to select the desired setting and RETURN to exit and confirm the setting.
- **GENERAL INFORMATION:** displays general information for the spa. With GENERAL INFORMATION highlighted, press MENU to enter GENERAL INFORMATION menu. Use UP/DOWN to view different pages and information and RETURN to exit the page. Screen will indicate which plug should be inserted to correct side connector.
- **LANGUAGES:** to select various languages for the spa display. With LANGUAGES highlighted, press MENU to enter and select a specific language. Use UP/DOWN to select the desired setting and RETURN to exit and confirm the setting.
- **SERENITY MODE:** set to turn off all outputs and provide quiet while in spa. With SERENITY MODE highlighted, press MENU to enter and select a specific time. Use UP/DOWN to select the desired time setting. Press MENU again to navigate to EXIT/START. Select the desired option and RETURN to exit and confirm the setting.
- **ENERGY INTERVAL:** *only available for Non-Circ systems.* With ENERGY INTERVAL highlighted, press MENU to enter ENERGY INTERVAL setting. Use UP/DOWN to select the desired minutes setting and RETURN to exit and confirm the setting.
- **CLEANER CYCLE:** *only available for Non-Circ systems.* To turn on filtration after using the spa for short cleaning period. With CLEANER CYCLE highlighted, press MENU to enter and select a specific duration. Use UP/DOWN to select the desired time setting. Press Menu again to navigate to Exit/Start. Select the desired option and RETURN to exit and confirm the setting.
- **Reset Wi-Fi:** only available with Wi-Fi module in the system. To reset Wi-Fi network setting in Wi-Fi module. With RESET Wi-Fi highlighted, press MENU to enter. Use UP/DOWN to select the desired setting and RETURN to exit and confirm the setting.

Error Screens

Plumbing Error

Press RETURN to clear

← Error caused when SENSOR 1 and SENSOR 3 have been plugged in incorrectly. Swap the SENSOR 1 and SENSOR 3 plug in controller to correct this problem.

Check SENSOR 1 connection. ▶

Sensor 1 open

Press RETURN to clear

Insufficient Flow

Press RETURN to clear

← Error caused by no water flow through heater or no water in heater. Check to be sure there is enough water flow through heater.

Check SENSOR 1 connection or replace SENSOR 1. ▶

Sensor 1 short

Press RETURN to clear

Low Flow

Press RETURN to clear

← Check to be sure there is enough water flow through heater.

Check SENSOR 2 connection. ▶

Sensor 2 open

Press RETURN to clear

Water Overheat

Press RETURN to clear

← Wait for water temperature to cool down.

Check SENSOR 2 connection or replace SENSOR 2. ▶

Sensor 2 short

Press RETURN to clear

Heater Overheat

Press RETURN to clear

← Wait for water temperature to cool down. Check to be sure there is enough water flow through heater.

Check SENSOR 3 connection. ▶

Sensor 3 open

Press RETURN to clear

Potential Freeze

Press RETURN to clear

← Error caused when SENSOR 1, 2, or 3 detects low temperature. All JETS and BLOWERS will turn on automatically to protect plumbing from freezing. JETS and BLOWERS will shut down when all 3 SENSORS reach a desired temperature.

Check SENSOR 3 connection or replace SENSOR 3. ▶

Sensor 3 short

Press RETURN to clear

Adjusting Date-Time and Filtration Settings

Shown below is the default topside screen. (Your temperature setting may vary according to your preferences.) In order to access and change the internal clock of your spa, first press MENU.



That action will take you to this screen



Use the COOL (Down arrow) to highlight the Date-Time option (which is now highlighted in white).



Press the MENU button to select the option.



Press the UP-DOWN buttons to increase or decrease the value of each highlighted field.



Press the MENU button to advance to the next field you wish to change.



Press RETURN when you have finished setting date and time to save your chosen settings.



Once the screen has reverted back to temperature, you can now adjust Filter Cycles. **NOTE: You do not necessarily have to adjust the Filter Cycles because the default factory settings give you two Filter Cycles per day automatically.** In any case, to access the Filter Cycles, press the MENU button.



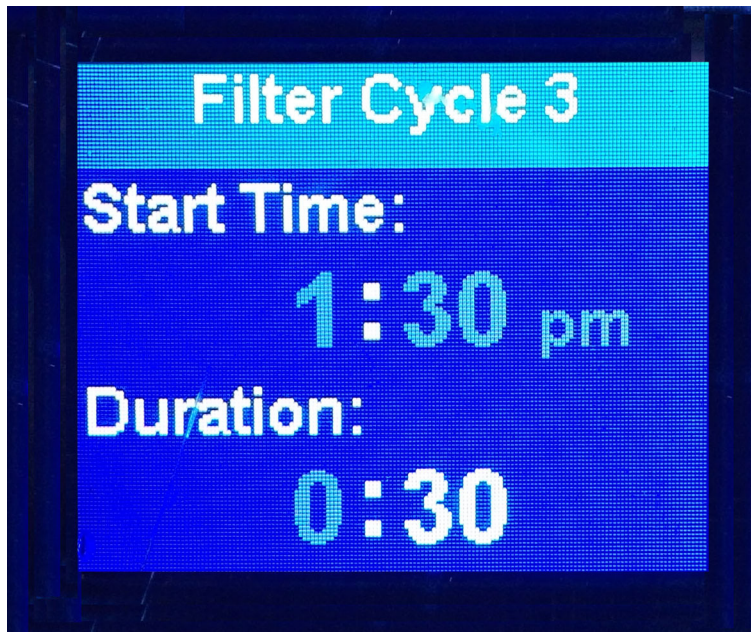
This time select Filter Cycles. (Press the MENU button to access the sub-menus.)



Filter Cycles 1 and 2 are the factory-programmed defaults. These may be satisfactory for your needs, but can be customized if you wish. **If you leave the Filter Cycles option untouched, you will still have Filter Cycles 1 and 2 working for you every day.** Filter Cycles 3 and 4 can also be employed in addition to Filter Cycles 1 and 2 and these Cycles allow full customization as well.

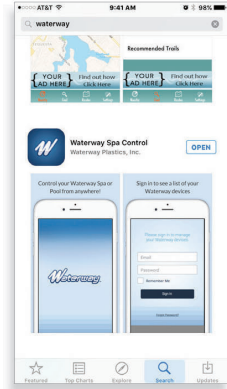


Filter Cycles 1, 2, 3 and 4 can all be adjusted in 15 minute increments. Use the MENU button to move from field to field, use the UP and DOWN arrows to make adjustments and then press RETURN once you're satisfied with your selections for all Cycles. Please note that the system will not allow you to set overlapping or contradictory Cycles.

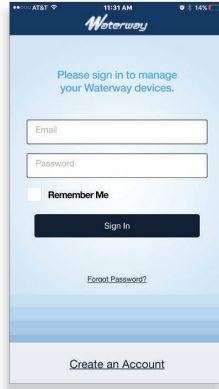


Operating the NEO Wi-Fi App

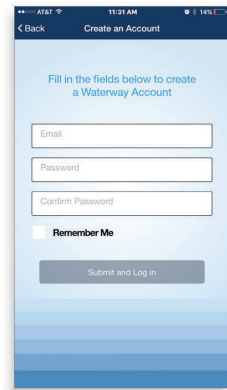
To connect and operate your Smart Device with Waterway Spa Pack WiFi please follow these instructions:



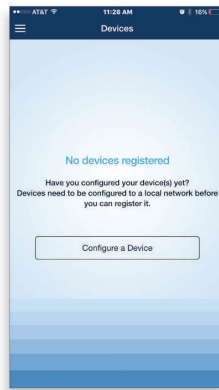
1



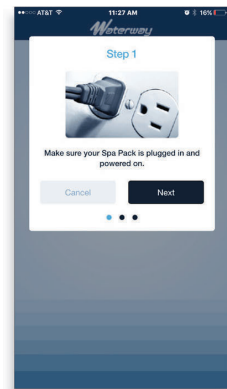
2



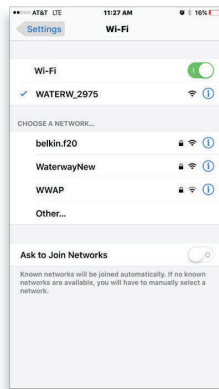
3



4



5



6

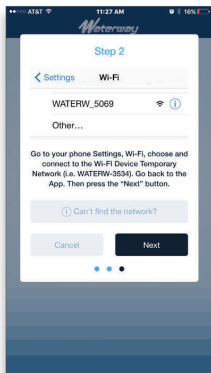
1. Download and install the App from App Store or Google Store.
2. Click on Create an Account .

3. Enter your email address, password, confirm and submit.

4. Click on Configure a Device.

5. Make sure your Spa Control pack is powered on and press Next.

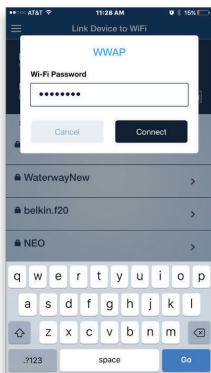
6. Go to your phone setting, WiFi, and connect to the Waterway Wi-Fi device temporary network. For example: WATERW-XXXX.



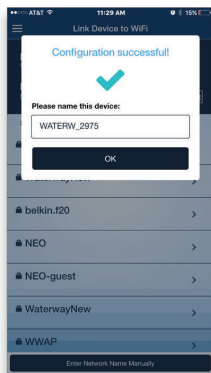
7



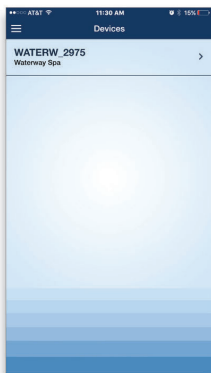
8



9



10



11



12

7. Go back to the App, press Next .
8. Select your home network from the list (If your network name is not on the listed, it can be entered manually).
9. Enter your home network password and press Connect .
10. Then the device will configure and connect to your home WiFi network and the Worldwide Web, Press OK .
11. Click on configured Waterway Wi-Fi device, i.e. WATERW-XXXX .
12. Now you can control your spa from anywhere in the world using your smart phone. You can set the temperature, heating operation mode and turn the light ON/OFF. In order to access the application menu press ON in top left corner



Connecting to a Device or Network

1 Direct connection

Range: About 20 feet
Range limit: Limited to the range of the wi-fi module



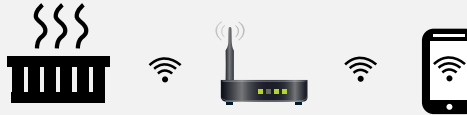
HOW TO CONNECT TO IT:

Install the app on your phone or device -- see the following section "Installing the app".

2 Through home network with no internet access

Allows one local connection at a time

Range: About 50 feet
Range limit: Limited to the range of your home router's signal



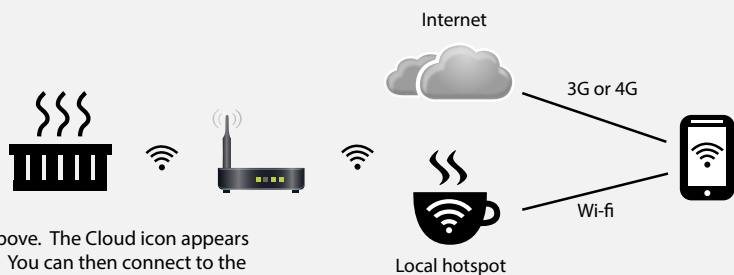
HOW TO CONNECT TO IT:

1. Install the app on your phone or device.
2. Exit the app and go to wi-fi settings on your phone or device.
3. Select and enable your local router.
4. Start the app. After you connect, select Settings on the home screen.
5. On the Settings screen, select Advanced, then on the Advanced screen, select Wi-fi Settings.
6. On the Wi-fi screen, select WPA. Then select the name of your home router from the drop-down menu.
7. Enter the SSID and Key for your router, then tap Save and select OK twice.
8. Close the app and re-start it to connect to your home network.

3 Through a network with internet access, using Cloud connection or other hotspot connection

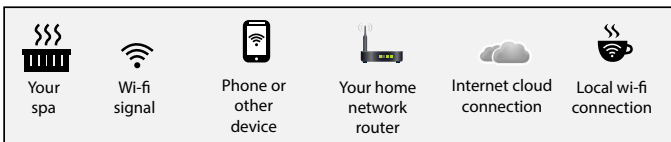
Allows unlimited simultaneous connections

Range: Worldwide
Range limit: Limited to 3G / 4G / hotspot availability



HOW TO CONNECT TO IT:

Follow connection instructions from section (2) above. The Cloud icon appears automatically when network connection is made. You can then connect to the spa's wi-fi module.



Electrical Power Efficiency

Your new spa comes equipped with an electric heater. Following the directions listed below will ensure the most efficient operation:

NOTE: This method is only for spa usage under two hours a week.

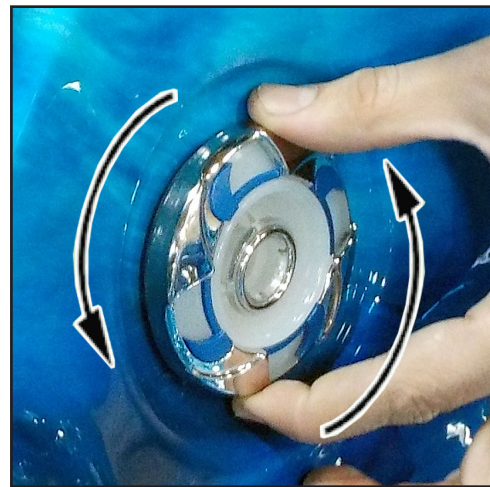
- Keep the spa's operating temperature 5°F below the desired usage temperature when not in use. One or two hours before use, set the temperature to the desired temperature.
- If the spa usage exceeds two hours a week, the set temperature should remain at the desired usage temperature.
- The air venturis should be used sparingly. When open, water temperature drops quite rapidly and can also dissipate chemicals.

Allowing the water temperature to lower more than 10°F below the desired usage temperature and reheating it prior to usage will cause the heater to operate longer than it normally would maintaining the desired temperature. Doing this will increase your operating cost and makes your heater work more than necessary.

Jets

Almost all of the jets in your spa are adjustable. Rotating the face of an adjustable jet to the left (counter-clockwise) will decrease the amount of water flow through the jet. Rotating the face of an adjustable jet to the right (clockwise) will increase the amount of water flow through the jet. (See example shown below.)

Neck jets adjust in the opposite directions (counter-clockwise to increase, clockwise to decrease).



LED Lighting

Press the LIGHT button on the topside control panel to turn the spa light on. If your spa has perimeter LED lights, they will also light up at the same time as the spa light.

The LEDs operate in three modes:

1. Cycle: When you continually press the LIGHT button, the LEDs will cycle through the three main LED colors (Red, Green, and Blue) or combinations of the three that produce the following colors: light green, purple, light blue, yellow, etc.

Each time you press the button, you immediately advance to the next color in sequence or eventually a different light pattern.

2. Flashing: When you are cycling through all the colors, the next time you push the LIGHT button, the LED lights may start flashing. This is another normal operational pattern option.

3. Fading cycle: The next phase of operation when you push the LIGHT button is a slow and/or fast fade random transition from one color to the next.

- If a spa is equipped with more than 100 points of light, the Slow Fading Cycle will flicker during a color change.
- Every air valve and water valve is equipped with 4 LED points.
- Every jet is equipped with 2 LED points.
- Perimeter LEDs take 9 points of light.
- The waterfall takes 4 points of light.

Spas with exterior corner LED lighting generally work in the same mode as described above. The variations in color and patterns provide you with multiple options to suit almost any lighting preference.

Diverter Knobs

Diverter knobs are 1" and 2" knobs located around the top of your spa. They allow you to divert water through jets from one side of the spa to the other, or in most cases from floor jets to wall jets. This is accomplished by rotating the diverter knob to the left (counterclockwise), decreasing the amount of water flow through a section of jets. To increase the amount of water flow through the other section of jets, rotate the handle to the right (clockwise).



Air Venturis

Air venturis are the 1" knobs located around the top of your spa. Each one will let you add a mixture of air with the jet pressure. This is accomplished by rotating the air venturi knob to the left (counterclockwise) to increase the amount of airflow through the jets. To decrease the amount of airflow through the jets, rotate the handle to the right (clockwise).



Waterfalls

Some spa series include optional waterfalls. When the booster pump is on, rotate the dial on top (for the cascade waterfall) or turn the knob (for the hydro streamer -- see below).



ATS Plus Therapy System



Adjustable Therapy System

Pump On / Off Button:

Press this button once to turn on the ATS pump. The pump will turn on full speed with letter "H" displayed in the seven segment LED, the Pump LED light on the control panel will appear and the back light will turn on if it was off previously. Press this button a second time to turn off the ATS pump, the Pump LED light, and clear the seven segment display. The ATS pump must be on before you can use any other features of this system.

Pulse Mode Button:

Press this button once to turn on the pulse mode. The last pulse mode number will be displayed and the ATS pump will run in the pulse mode that it displays. There are total of 9 pulse modes and user can choose the Up or Down button to select the desired pulse mode. Press this button a second time to turn off pulse mode and return to normal pump on with letter "H" displayed. See the image for 9 pulse mode descriptions.

Up / Down Buttons:

These buttons only activate when pulse mode is on. They allow you to cycle through 9 pulse modes. At the end of pulse mode 9, if the Up button is pushed the system will go to "DEMO" mode. In DEMO mode, the system will cycle through all 9 pulse modes with 30 seconds for each mode and flashing letter "d1" through "d9" while cycling through each pulse mode. At the end of demo pulse mode 9, the system will exit the demo mode and return to normal Pump On with letter "H" displayed.

Time Out:

The Pump On will run for 15 minutes, then automatically shut off. If the Pulse Mode button is pressed during this time, the timer will reset and allow Pulse Mode to run for 15 minutes, then automatically shut off. For another 15 minutes session, press the Pump On and the Pulse Mode button. Back light will timeout 30 minutes after Pump Off.

Pump Protection:

If the pump is getting too hot during pulse mode (or after stop), the Pulse Mode will stop and ATS system will automatically go to a cool down cycle. During cool down cycle, the pump will turn on full speed with flashing letter "C" displayed in the panel. The ATS system will run 5 minutes and then turn off. Pulse Mode is disabled during cool down cycle.










Pump Purge:

To prevent water stagnation for a long time in the ATS system, the ATS system will purge water once a day. Every 24 hours from the last system run, the ATS system will turn on full speed for 20 seconds with flashing letter "P" displayed in the panel.

ATS Sensor:

ATS sensor is used to monitor temperature to prevent ATS system from freezing or getting too hot. If temperature is too cold, the ATS system will turn on full speed with flashing letter "F" displayed in the panel. If it is too hot, the system will turn on full speed with flashing letter "C" displayed in the panel. In these cases, it will run until pump temperature goes back to normal and the system will shut down automatically. If ATS sensor is not connected or not mounted to the system correctly, a flashing letter "E" will display in the panel when system is not running. With sensor error (flashing "E"), ATS system is still be able to operate normally but after the first 15 minutes of pulse mode, a flashing "L" will display in the panel. After the second 15 minutes of pulse mode, the system will force a cool down cycle for 30 minutes before user can use it again. There will be no freeze protection for sensor error and in some pulse modes the system will run very hot so user should fix the problem as soon as they can to enhance the pump life.



- 1  Low rolling bursts
- 2  Medium continuous bursts
- 3  Accelerated continuous bursts
- 4  Swift rolling bursts
- 5  3 gentle bursts followed by 1 vigorous burst
- 6  Quick, powerful continuous bursts
- 7  Gentle, powerful alternating bursts
- 8  Medium low rolling bursts
- 9  Extended low rolling bursts

Aquatic Air Therapy™ (AAT)

AQUATIC AIR THERAPY™ JETS

The Aquatic Air Therapy™ (AAT) Jets in conjunction with the massage ring provides a massage therapy experience for sore muscles or aching joints (Available only in select areas of spa).



FLEX JET™

The Flex Jet™ delivers a gentle but strong stream of water to more delicate areas of the body including wrists, joints and extra sensitive muscles. Experience immediate alleviation from the massage ring included on the Flex Jet™.



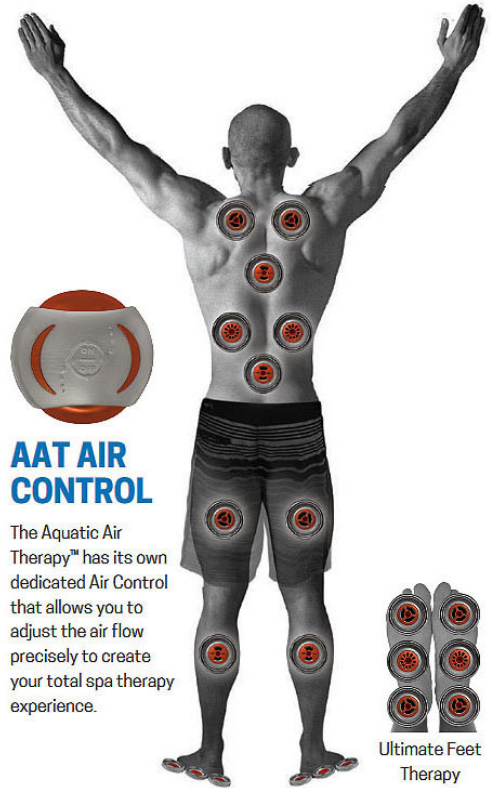
DUO JET™

The Duo Jet™ is perfect for larger parts of your body including lower back, legs and shoulders. Place your back on the the Duo Jet™ for a complete rehabilitating massage therapy experience.



PRECISION JET™

The Precision Jet™ emits the perfect combination of air and water to target specific problematic areas while a soft massage ring provides relief on contact. Relieve muscle tension and soreness with the Precision Jet™.



AAT AIR CONTROL

The Aquatic Air Therapy™ has its own dedicated Air Control that allows you to adjust the air flow precisely to create your total spa therapy experience.

Ultimate Feet
Therapy

Water Clarity

This section is intended for new spa owners with no experience with water chemistry. Everyone's experience with maintaining water quality is different, but there are some general concepts you need to know.

Water maintenance is not difficult, although it requires regular attention. The most important thing to understand about taking care of your spa water is that preventive action is much easier than correcting water quality issues.

The Key to Clear Water

Excellent water quality is a simple matter of four things:

Chemical Balance

You will need to test and adjust the chemical balance of your spa water. Although this is not difficult, it needs to be done regularly.

Depending on your choice of sanitizer, you need to test the level of calcium hardness, total alkalinity, and pH. Spa owners with a Cal Clarity II bromine generator also need to check total dissolved solids and phosphates.

See page 28 to learn how to balance your spa water.

Sanitation

Sanitizers kill bacteria and viruses and keep the water clean. A low sanitizer level will allow microbes to grow quickly in the spa water. We recommend using either chlorine or bromine as your sanitizer.

Spa owners with an ozonator also need to add sanitizer, although their requirements are different.

See page 29 to learn how to use sanitizer.

The Cal Pure Salt System bromine generator does NOT require sanitizer. See page 31 for a description of its use.

Filtration

Cleaning your filter regularly is the easiest and most effective single thing you can do to keep your water clear.

A clogged or dirty filter will cause the heater and pump to work harder than they need to, possibly causing them to fail.

The spa's heating system will only function with the proper amount of water flow through the system.

See page 30 for filter cleaning instructions.

Regularity

Clear water requires regular maintenance. Establish a routine based on a regular schedule for your spa water maintenance.

Maintaining your water quality helps the enjoyment of your spa and extends your spa's life by preventing damage from neglect and chemical abuse.

See page 33 for the schedule of recommended maintenance.



Testing and Adjusting Spa Water

You have two types of testing methods to choose from:

- **The reagent test kit** is a method which provides a high level of accuracy. It is available in either liquid or tablet form.
- **Test strips** are a convenient testing method commonly used by spa owners.

Balancing the Total Alkalinity

Total alkalinity (TA) is the measure of the total levels of carbonates, bicarbonates, hydroxides, and other alkaline substances in the water. TA can be considered a “pH buffer”. It is the measure of the ability of the water to resist changes in pH level.

The recommended total alkalinity is 80 - 120 ppm.

If the TA is too low, the pH level will fluctuate widely from high to low. Low TA can be corrected by adding an alkalinity increaser

If the TA is too high, the pH level will tend to be too high and may be difficult to bring down. High TA can be corrected by adding an alkalinity decreaser.

When the TA is balanced, it normally remains stable, although adding water with high or low alkalinity will raise or lower the TA level.

Balancing the Calcium Hardness

Calcium hardness (CH) is a measure of the total amount of dissolved calcium in the water. Calcium helps control the corrosive nature of the spa’s water and is why soft water is not recommended. The low calcium content of soft water is very corrosive to the equipment and can cause staining of the spa shell.

The recommended calcium hardness is 150 - 200 ppm.

If the CH is too low, add a calcium hardness increaser.

If the CH is too high, dilute the spa water with soft water.

When the CH is balanced, it normally remains stable, although adding soft water or very hard water will raise or lower the CH level.

Balancing the pH

The pH level is the measure of the balance between acidity and alkalinity.

If the pH is too low, it can cause corrosion of metal fixtures and the heating element. Low pH can be corrected by adding a pH increaser.

If the pH is too high, it can cause scaling by allowing metals or minerals to form deposits and stain spa surfaces. High pH can be corrected by adding a pH decreaser.

Ideal Water Chemistry

| Testing For: | Ideal Range (ppm) | |
|------------------|-------------------|---------|
| | Minimum | Maximum |
| Total Alkalinity | 80 | 120 |
| Calcium Hardness | 150 | 200 |
| pH | 7.2 | 7.6 |

Sanitation

Sanitizers kill bacteria and other organic waste by breaking them down to non-harmful levels and are filtered out. Before you fill your spa, you need to decide which chemical sanitizer you wish to use. Consult your Cal Spas dealer for the right decision with regards to your lifestyle and spa usage.

We recommend either **bromine** or **chlorine** as your sanitizer. Both work well when maintained regularly.

Do not use a sanitizer with the Cal Pure Salt System bromine generator. See page 31 for instructions on its use.



DO NOT use trichlor. Trichlor is very acidic and the hot temperature of the spa causes it to dissolve too quickly. It will cause damage to your spa and will void your warranty.

Whichever plan you decide on, follow it completely and don't take shortcuts. It will provide you with clean, safe, clear spa water with a minimum of effort. Spa owners with an ozonator still need to use a chemical sanitizer. See page 30 for a description of how the ozonator works.

Using Chlorine as a Sanitizer

If you choose to use chlorine as a sanitizer, only use granulated chlorine, not liquid chlorine.

Once a week, check the chlorine level using either a test strip or a reagent kit. See the table on the following page for the ideal range.

Add one or two tablespoons granulated chlorine to the spa water weekly. Note that chlorine dissipation rate will be faster at higher water temperatures and slower at lower temperatures.

When you add chlorine, open all of the jets and run the spa at high speed with the cover open for at least 30 minutes.

Follow the maintenance schedule on page 33.

Using Bromine as a Sanitizer

Bromine is a very effective sanitizer that produces low chemical odors. Unlike chlorine, it can break down bacteria and other impurities to a safe level with a low burn-out rate.

Use granulated sodium bromide to establish your bromine base.

When you begin with fresh water, add two ounces of granulated bromide. Open all of the jets and run the spa at high speed with the cover open for at least 30 minutes.

Follow the maintenance schedule on page 33.

Shocking the Water

In addition to using a chemical sanitizer, you will periodically need to shock the water. Shocking the water helps remove burned-out chemicals, bacteria, and other organic material from your spa's water and improves your sanitizer's effectiveness.

Do not use chlorinating shock, which will damage your spa's jets and pump seals. Only use an oxidizer shock. It can be used with either chlorine or bromine sanitizers.

Add two ounces of oxidizer shock per 500 gallons once a week, after heavy bather loads, or if water has a strong odor.

Spa must be running with all of the jets on high for 30 minutes with the cover open. If necessary, repeat oxidizer shock in 30 minute intervals.

Do not use shock with the Cal Pure Salt System bromine generator. See page 31 for instructions on its use.

| Testing For: | Ideal Range (ppm) | |
|-----------------------|-------------------|---------|
| | Minimum | Maximum |
| Chlorine level | | |
| Without ozonator | 3.0 | 5.0 |
| With ozonator | 2.0 | 4.0 |
| Bromine level | | |
| Without ozonator | 6.7 | 11.0 |
| With ozonator | 5.7 | 10.0 |

Bather Load

“Bather Load” is the term used to describe the number of people using a spa, combined with the length of usage, and the frequency of usage. All these factors have a great effect on the spa water. The higher the bather load, the more chemicals need to be added and a longer filtration time will be needed.

Recommendations are designed for spas with average bather load (3 to 4 people, 15 minutes of usage, three times a week at 100 degrees) If your bather load exceeds these guidelines, and you experience water quality problems, increase the amount of filtration first, (go to the next higher filtration number) then if water quality is still not adequate, consult the advice of your Cal Spas dealer for additional chemical or system recommendations. Be sure to give them your bather load information.

Filter Cleaning

The filter is the part of your spa that removes the debris from the water and needs to be cleaned on a regular basis to maximize your spa’s filtering performance and heating efficiency.

In addition to spraying off the filter weekly to remove surface debris, your filter should be deep cleaned periodically to dissolve scale and particles that get lodged deep within the filter fibers and impede the filtration process. Even if the filter looks clean, scale and particles can clog the fibers and prevent water from flowing through the filter resulting in the most common spa problem—no heat, caused by a dirty filter.

We recommend you clean your filter once a month and replace it once a year or as necessary.

It is extremely important that you never run the spa without a filter. There is a possibility that debris may be sucked into the plumbing through the filter well.

Set the spa in SERENITY MODE before you remove the filter. SERENITY MODE pauses all spa operations for 60 minutes for service functions like cleaning or replacing the filter. See page 14 for instructions on using SERENITY MODE.

Cleaning the filter

1. Remove the filter by unscrewing it and pulling it up and out.
2. Place the dirty filter into a bucket of water deep enough to cover the filter. Add 8 oz. of liquid filter cleaner to the bucket of water.

Note: It is a good idea to keep a spare filter to use in the spa while the dirty filter is being deep cleaned. This way, you can rotate the filters and both will last longer.

3. Soak the filter for a minimum of 24 hours.
4. Spray the filter with a water hose. Spray each pleat carefully.
5. Reinstall the filter. Do not overtighten.

Ozonator

The ozone generator releases ozone into the spa water. You will still need to test for chlorine or bromine and occasionally replenish it to return the sanitizer level to the baseline.

For spas without a circulation pump, pump 1 will run at low speed and the ozonator will run during filtration.

For spas with a circulation pump, the ozonator will run with the circulation pump.

The spa’s control system is factory-programmed with one filter cycle that will run in the evening when energy rates are often lower. The time and duration of the filter cycle can be set according to your needs. In addition, a second filter cycle can be enabled. Filtration time may need to be increased with heavy bather load.

See instructions for setting filtration cycles on page 19.

Bromine Generator

The bromine generator automatically generates and releases free bromine into the spa water. You will still need to test for bromine and occasionally adjust it to return the bromine level to the baseline.

Start-up/Operating Instructions

Be certain that you start with a clean spa. It should be free of contaminants and other residues that can accumulate on the sides and/or around the jets. It is also important to only use spa cleaning products that have **no phosphates** or phosphonic acids since phosphates will deplete free bromine and are super-food for algae. Always start your spa with a clean filter before filling with water.

If the water source is "well water" or a non-municipal water source, have your water tested for Total Dissolved Solids (TDS) and metals. Water with high TDS is likely to have higher metal content and will need a metal remover to decrease the metals and ensure a successful start. This test can be done by your local spa dealer. The ideal range for your start-up TDS is between 50 and 200 ppm - mg/L. If TDS from your source water is above 500 ppm, a metal remover is strongly recommended.

DO NOT FILL THE SPA WITH SOFT WATER.

- Using your PURE FILL Spa Pre-Filter, fill your spa with water to the recommended level (six inches below the lip of the spa) and **DO NOT FILL WITH WATER FROM A "RESIDENTIAL WATER SOFTENER."**
- Before starting the system, balance your water chemistry to ensure a successful start up. Ideal ranges are as follows:

| | Ideal Range | |
|------------------|-------------|---------|
| | Minimum | Maximum |
| pH | 7.2 | 7.6 |
| Total alkalinity | 80 ppm | 120 ppm |
| Calcium hardness | 150 ppm | 250 ppm |
| Phosphates | 0 ppb | 30 ppb |



Use the phosphate test kit included with your system. Bromide residuals will be significantly reduced if phosphate levels are high. If phosphates are detected, purchase a phosphate remover and follow the directions accordingly. **Any** phosphates in your spa will reduce bromine levels.

- Determine the level of "NaBr" (Sodium Bromide) required for your spa size. NaBr should be added at a rate of 1.2 lbs per 100 gallons or approximately 1300-1500 ppm.

Example: For a 500 gallon spa add approximately 6 lbs of NaBr. **1.2 lbs x (5) 500 gallons = 6lbs NaBr.**

- Turn the jets on high speed. Sprinkle the NaBr across the surface of the water to evenly distribute the NaBr in the spa and circulate for 30 minutes.
- Test the Sodium Bromide concentration with the Tru-Blu NaBr test kit. The correct amount of NaBr will secure a reading of between 1300-1500 ppm.
- Adjust the filtration time to circulate for 8 hours every 24 hours on a 2 speed pump.
- For a spa between 300-500 gallons, start at a power level of "6" and then press the "boost" feature. This will accelerate the production of bromine for 8 hours. Wait for proper bromine levels before entering the spa.
- Always keep your bromine level between 3-5ppm. Test the bromine level after 24 hours and adjust the power setting accordingly. An occasional heavier bather load may require the "boost" feature.

Maintaining the Bromine Level

Always keep your spa or hot tub water in balance. Maintaining the pH and the alkalinity is part of being a spa owner.

The bromine generator requires you to determine your power setting based upon your circulation time and your spa usage. It requires a minimum of eight hours of circulation per day. If the spa is not circulating, the bromine generator is not generating bromine. If you find that you are having trouble maintaining the desired level, make sure the spa is circulating the required amount.

A spa that is frequently used will require a higher power setting. If you have a bromine reading that is too high or too low, adjust the **DECREASE / INCREASE** control accordingly. Depending on the amount usage, circulation time, and type of spa, each spa owner's setting will be different.

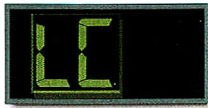
The bromine generator can go up to 12 months before a drain and fill is required, unlike non-equipped spas that require it every three months. This is because the bromine generator does not add unwanted chemical bi-products like traditional chemicals do.

Sodium bromide is not the only contributor to the TDS count in your water. Over time, the TDS count in your water will rise (from such things as residuals from other chemicals and minerals, and unfilterable material). Test the TDS every few months to make certain it stays within range.

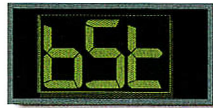
Shower prior to entering any hot tub or spa. This will help prevent phosphate contamination and reduce the demand on the bromine.

Shocking your tub is recommended after heavy bather load.

Intelligent Controller Codes for the Bromine Generator



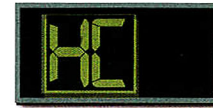
LC (Low Conductivity) will appear when the unit detects that the conductivity is below the minimum level. At start-up, you will experience this if you have not added the Sodium Bromide. Check the Sodium Bromide level in the water and add the appropriate amount per your spa. If the NaBr level is correct, the cell may be experiencing scaling. In this case, you will want to clean the cell. Please consult with your spa dealer for further information.



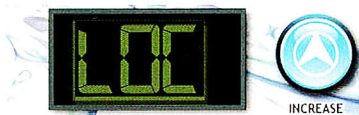
bSt (Boost) will appear when the BOOST feature is on. Depressing this key once will increase the bromine production to twice that of the last bromine production setting for the next *accumulated eight hours of pump circulation time*. The BOOST cycle should be depressed after heavy bather load or usage.



OE (Open Element) will appear if the system controller is unable to detect a connection to the electrode cell. You may see this if the electrode is not connected properly, there is inadequate water flow, or the cell is not functioning due to unknown circumstances. This may require that the cell be evaluated and possibly cleaned of scale build-up or even replaced. If this happens, please consult with your spa dealer.



HC (High Current) will appear when the TDS (Total Dissolved Solids) is too high resulting in High Current at the electrode cell. If this reading appears at or near start up of your system, check your source water for TDS and proper NaBr readings. If this reading appears after an extended period of operation, draining 25% of the water and refilling can help reduce TDS levels. If "HC" remains present, consult with your spa dealer for a comprehensive water analysis and recommended course of action.



LOC: Press increase for 3 seconds to unlock

LOC (Locked) Your TopSide controller includes a "LOC" feature which ensures that the system is "Locked" when not being utilized to manage your Spa's water. Your system will automatically produce bromine when necessary. This feature is simply for your protection. In order to "Unlock" simply depress the "increase" key on your unit for 3 seconds.

Maintenance Schedule

| | |
|-------------------------------------|---|
| Each time you refill the spa | Follow the section "Filling and Powering Up Your Portable Spa" on page 7. |
| Prior to each use | Test the spa water using either test strips a reagent test kit. Adjust chemical levels as necessary. |
| Once a week | Test the spa water using either test strips a reagent test kit. Adjust chemical levels as necessary. If your water source is high in calcium, add stain and scale preventer. |
| Once a month | Deep clean your spa's filter. (Follow filter cleaning instruction at beginning of this section) |
| Every two to four months | Change the spa water. How often you change the water depends on how much you use the spa. When you change the water, you will need to: <ul style="list-style-type: none"> • Clean and polish the acrylic surface (see page 39) • Clean and treat the spa cover and pillows (see page 39) • Deep clean the filter (see page 30) • Refill your spa (see page 7) |
| Once a year | Replace filter cartridges if the pleats appear frayed. |

Troubleshooting Water Clarity Problems

| Problem | Probable Causes | Possible Solutions |
|----------------|---|--|
| Cloudy Water | <ul style="list-style-type: none"> • Dirty filter • Excessive oils / organic matter • Improper sanitization • Suspended particles / organic matter • Overused or old water | <ul style="list-style-type: none"> • Clean filter • Shock spa with sanitizer • Add sanitizer • Adjust pH and/or alkalinity to recommended range • Run jet pump and clean filter • Drain and refill the spa |

| Problem | Probable Causes | Possible Solutions |
|--|---|---|
| Water Odor | <ul style="list-style-type: none"> Excessive organics in water Improper sanitization Low pH | <ul style="list-style-type: none"> Shock spa with sanitizer Add sanitizer Adjust pH to recommended range |
| Chlorine Odor | <ul style="list-style-type: none"> Chloramine level too high Low pH | <ul style="list-style-type: none"> Shock spa with sanitizer Adjust pH to recommended range |
| Musty Odor | <ul style="list-style-type: none"> Bacteria or algae growth | <ul style="list-style-type: none"> Shock spa with sanitizer – if problem is visible or persistent, drain, clean and refill the spa |
| Organic buildup / scum ring around spa | <ul style="list-style-type: none"> Buildup of oils and dirt | <ul style="list-style-type: none"> Wipe off scum with clean rag – if severe, drain the spa, use a spa surface and tile cleaner to remove the scum and refill the spa |
| Algae Growth | <ul style="list-style-type: none"> High pH Low sanitizer level | <ul style="list-style-type: none"> Shock spa with sanitizer and adjust pH Shock spa with sanitizer and maintain sanitizer level |
| Eye Irritation | <ul style="list-style-type: none"> Low pH Low sanitizer level | <ul style="list-style-type: none"> Adjust pH Shock spa with sanitizer and maintain sanitizer level |
| Skin Irritation / Rash | <ul style="list-style-type: none"> Unsanitary water Free chlorine level above 5 ppm | <ul style="list-style-type: none"> Shock spa with sanitizer and maintain sanitizer level Allow free chlorine level to drop below 5 ppm before spa use |
| Stains | <ul style="list-style-type: none"> Total alkalinity and/or pH too low High iron or copper in source water | <ul style="list-style-type: none"> Adjust total alkalinity and/or pH Use a stain and scale inhibitor |
| Scale | <ul style="list-style-type: none"> High calcium content in water – total alkalinity and pH too high | <ul style="list-style-type: none"> Adjust total alkalinity and pH – if scale requires removal, drain the spa, scrub off the scale, refill the spa and balance the water Use a stain and scale inhibitor |

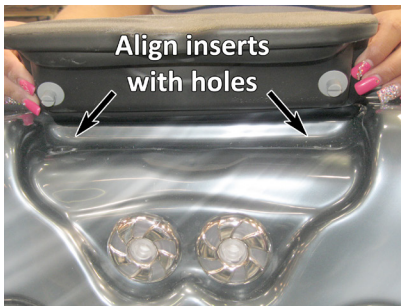
Cleaning and Maintenance

Removing and Reseating the Pillows

You can remove the pillows for cleaning and maintenance quickly and easily. This method works for all types of pillows.

Grab the lower edge of the pillow with both hands firmly and pull up. As you do this, the pillow inserts will pop out of the holes.

Reseat the pillows by aligning the pillow inserts with the holes and striking the pillow hard enough to insert the pegs back into the holes.



Jet Removal and Replacement

Jets can be easily removed for cleaning.

Grasp the outer rim of the jet and turn it counter-clockwise until it completely stops. You may feel it slightly loosen pop out a bit from the fixture. Pull the jet out from the jet fixture. The jet will be very snug and may require some force to remove it. **DO NOT PRY OUT JETS.**

To replace the jet, place it in the fitting and turn it clockwise until it snaps in and can be rotated freely about half a turn.



Spa Cover and Locking System Installation

Important! Keep the spa covered when not in use!

- Covered spas will use less electricity in maintaining your set temperature.
- Covering your spa will protect your spa's finish from the sun's ultraviolet rays.
- You are required to keep the spa covered to maintain warranty coverage.

- Covering your spa helps prevent children from drowning in the spa.

In addition, while the spa cover is rigid, it is not designed to support any weight. Therefore, as a safety precaution and to preserve the life of your cover, you must not sit, stand, or lie on it, nor should you place objects of any kind on top of it.

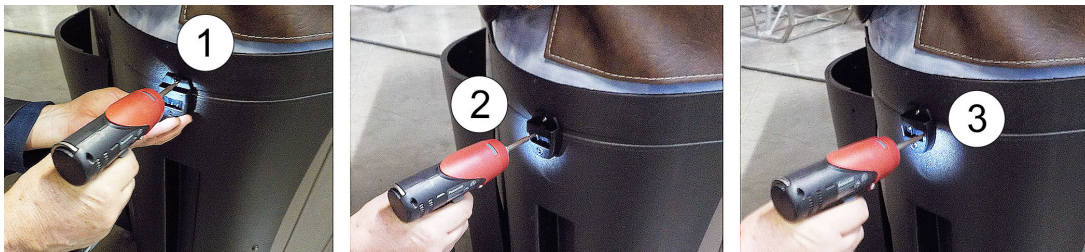
Step 1 - Place cover on spa. Make sure it is correctly positioned.



Step 2 - Position the tie-down hardware (attached to the straps of your cover) on the side of the spa so they are easily reached by the cover tie-down straps.



Step 3 - With the straps pulled taut (but not overly tight), lightly drill the location for screw placement. Gently drill 3 holes - one for each screw slot in the lock. (If you do not have a low torque drill, use the lowest torque setting on the drill you have.) DO NOT drill all the way in but instead just make a guide for starters.



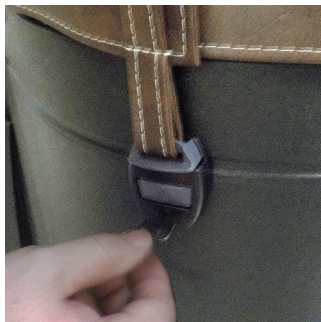
Step 4 - Use a screwdriver to finish screwing in the 3 screws. (Repeat this process for the other 3 corners.)



Step 5 - Keep the cover fastened down at all times when not in use. Locking hardware may be locked with a key (which is provided).



Step 6 - The provided key will allow you to lock down spa access.



**WARNING
AVOID
DROWNING
RISK**

FAILURE TO FOLLOW INSTRUCTIONS MAY RESULT IN INJURY OR DROWNING
NON-SECURED OR IMPROPERLY SECURED COVERS ARE A HAZARD.
REMOVE COVER COMPLETELY BEFORE ENTRY OF BATHERS.
ENTRAPMENT POSSIBLE.
KEEP COVER ON SPA AND LOCKED WHEN NOT IN USE

Draining Your Portable Spa

Your spa should be drained every four to six months for cleaning and maintenance and refilled with fresh tap water. See page 39 for instructions on cleaning the shell, cover, and pillows. See page 7 for instructions on refilling your spa. Before you begin, turn off power to the spa at the breaker and remove all filters.

1. Locate your drain.

Pull the knob out of the cabinet. The cabinet drain is screwed into the drain pull knob.



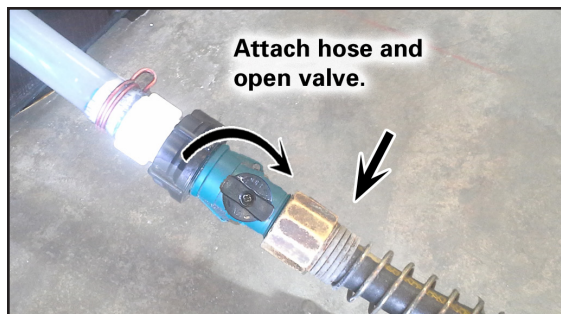
2. Remove the cap

Make sure the valve is in the closed position, then unscrew and remove the cap. Unscrew the cap.



3. Connect valve to a garden hose.

Attach a garden hose to the hose-bib fixture. Place the other end of the garden hose where you would like the water to drain.



4. Drain the spa.

Turn the valve on the hose-bib fixture to open the drain. When the spa has drained completely, turn the valve on the hose-bib fixture, remove garden hose, and replace the cap.

Winterizing (Cold Climate Draining)

In many areas of the country, the temperature drops below 32°F (0°C). We recommend that you always have your spa full of water and running at normal spa temperatures (80°F to 100°F, 26.7°C to 37.8°C). This will help reduce the risk of freezing in your spa and your spa's equipment.

Warning: If you find the need to drain your spa, be aware of the potential of freezing in your spas equipment and plumbing. Even if the directions below are followed perfectly, there is no guarantee that your spa will not suffer freeze damage. Freeze damage is not covered by your warranty.

1. Open all filter covers.
2. Remove the filter baskets and filters.
3. Drain your spa completely as described in the instructions above.
4. Vacuum water from the spa's main drain fitting with a wet/dry vacuum.
5. Open the bleeder valves on the pumps.
6. For spas with the UV lamp chamber mounted flat on the equipment floor:
Loosen the quartz tube nut at the top of the UV lamp chamber and pull up the quartz tube to let the water drain from the UV lamp chamber.
7. Disconnect the unions from both sides of the pump.
8. Blow any remaining water out of the jets and equipment area with the wet/dry vacuum.
9. When it has completely finished draining, replace the quartz tube in the UV lamp chamber and retighten the nut. Close the bleeder valves and re-connect the unions on the pumps. Replace the filter baskets and filters.
10. Cover your spa with a good spa cover and an all-weather tarp to ensure that neither rain nor snow enters the spa.

Cleaning and Replacing the Filter

Filtration is one of the most important steps you can take to ensure clean, clear water. It is far less expensive to fix water clarity problems by filtering your spa than by using excessive amounts of chemicals, excessive filtration times, or by water replacement.

See the section "Filter Cleaning" on page 30 for more information.

Vacation Care

You can leave your spa unattended for up to two weeks if you follow these instructions.

ALWAYS lock your cover using the cover locks if you plan to be away from home and the spa is filled with water.

1. Select the Low Range temp choice used for vacation mode. (See instructions on page 13 for vacation setting.)
2. Following the water quality instructions starting on page 27, adjust the pH.
3. Shock the water (add either chlorine or bromine sanitizer).
4. When you return, check and adjust the pH and shock the water.

If you will not be using your spa for longer than 14 days and a spa maintenance service is not available, we strongly recommend you drain or winterize your spa.

Cleaning Your Spa

Spa Cover and Pillows

Due to the constant punishment your spa cover and pillows receive, you should protect them by applying a vinyl and leather cleaner as part of your monthly maintenance plan. Use a product that is specifically designed to protect spa covers and pillows from chemical and ultraviolet light damage without leaving an oily residue behind that is normally associated with common automotive vinyl protectants.

Warning: Do not use automotive vinyl protectants on spa covers or pillows. These products are generally oil-based and will cause severe water clarity issues that are difficult to correct.

Spa Shell

Each time you drain your spa, before you refill it you should clean your spa shell with an all-purpose cleaner and apply a coat of surface protectant.

Use a low detergent, non-abrasive cleaner specifically formulated to clean the spa without damaging its acrylic finish.

Use a non-oil based surface protectant that is specifically formulated to protect the spa's finish from the chemicals and minerals associated with normal spa use.

Using the Freedom Sound System

The Freedom Sound System™ entertainment option contains a Bluetooth-enabled speaker system that is available for certain Cal Spa models. Any Bluetooth-enabled device can be used to play audio through your spa.

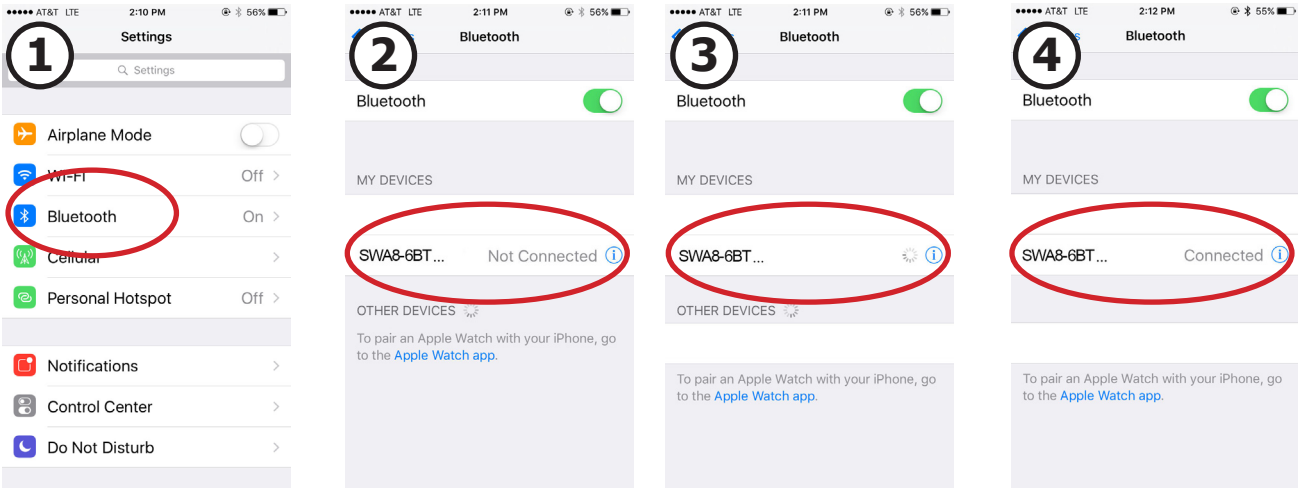
Before you can use the sound system, you need to pair the Bluetooth module with your device. The Bluetooth module is installed within the spa cabinet. Everything can be done with your device. The example shown below is from an iPhone device. Your device may appear differently. Before you begin, make sure Bluetooth is enabled on your device.

1. Select Bluetooth from your device's option list.
2. Select **SWA8-6BT...** from the list of available devices to pair.
3. Your iPhone device will ask for a code: the code is **0000**.
4. Allow your device to pair with the spa's Bluetooth module.
5. When the devices have been connected, the device **SWA8-6BT...** will be highlighted.

Only one Bluetooth device can be paired with the Freedom Sound System™ at any time.

(For Android users, the systems will pair automatically - no code is needed.)

Once your device is paired and connected, all sounds from your device will be played through the sound system, including system sounds and telephone.



Appendix

Please visit www.quickspaparts.com to order your replacement parts.

Replacement Parts

Snap-in SQR Jet Inserts

Velocity 5VTX Blue Jet

Symbol: 5VTX

Part #: PLU29950-011-400

Size: 5"D x 5.5"L



Velocity 5VTX LED Jet

Symbol: 5VTX

Part #: PLU29950-011-100

Size: 5"D x 5.5"L

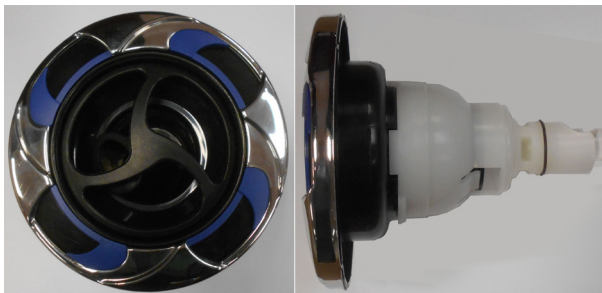


Velocity Roto Blue Jet

Symbol: 5R

Part #: PLU29950-081-400

Size: 5"D x 5.5"L



Snap-in SQR Jet Inserts

Velocity Roto LED Jet

Symbol: 5R

Part #: PLU29950-081-100

Size: 5"D x 5.5"L



Velocity Directional Blue Jet

Symbol: 5D

Part #: PLU29950-012-400

Size: 5"D x 5.5"L



Velocity Directional LED Jet

Symbol: 5D

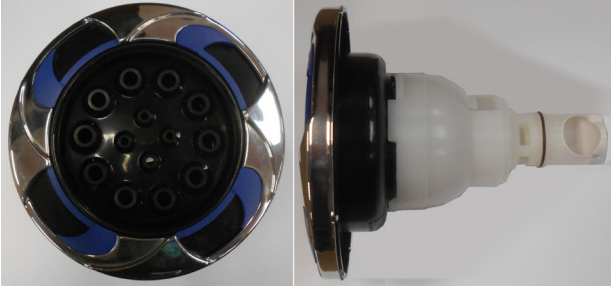
Part #: PLU29950-012-100

Size: 5"D x 5.5"L



Please visit www.quickspaparts.com to order your replacement parts.

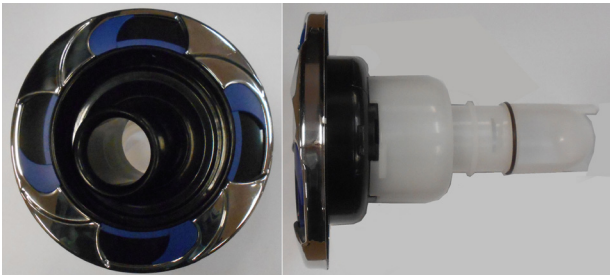
Snap-in SQR Jet Inserts
Velocity Massage-14 Blue Jet
Symbol: 5MM
Part #: PLU29950-071-400
Size: 5"D x 5.5"L




Velocity Massage-14 LED Jet
Symbol: 5MM
Part #: PLU29950-071-100
Size: 5"D x 5.5"L



Velocity Tornado/WP Blue Jet
Symbol: 5T
Part #: PLU29950-501-400
Size: 5"D x 5.5"L



Snap-in SQR Jet Inserts
Velocity Tornado/WP LED Jet
Symbol: 5T
Part #: PLU29950-501-100
Size: 5"D x 5.5"L



Velocity Double Roto Blue Jet
Symbol: 5DR
Part #: PLU29950-032-400
Size: 5"D x 5.5"L



Velocity Double Roto LED Jet
Symbol: 5DR
Part #: PLU29950-032-100
Size: 5"D x 5.5"L



Please visit www.quickspaparts.com
to order your replacement parts.

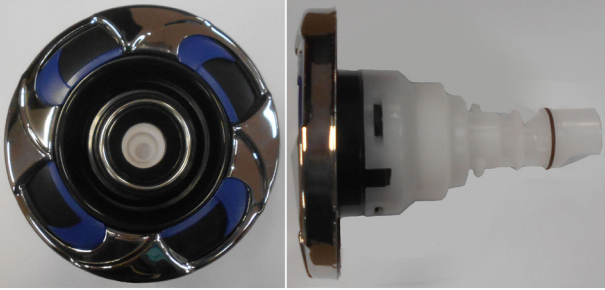
Snap-in SQR Jet Inserts

Velocity Directional Blue Jet

Symbol: 4D

Part #: PLU29940-112-400

Size: 4"D x 4.5"L



Velocity Directional LED Jet

Symbol: 4D

Part #: PLU29940-112-100

Size: 4"D x 4.5"L

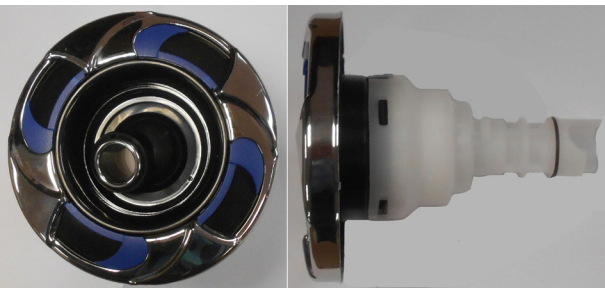


Velocity Roto Blue Jet

Symbol: 4R

Part #: PLU29940-122-400

Size: 4"D x 4.5"L



Snap-in SQR Jet Inserts

Velocity Roto LED Jet

Symbol: 4R

Part #: PLU29940-122-100

Size: 4"D x 4.5"L



Velocity Double Roto Blue Jet

Symbol: 3DR

Part #: PLU29930-191-400

Size: 3"D x 3.25"L



Velocity Double Roto LED Jet

Symbol: 3DR

Part #: PLU29930-191-100

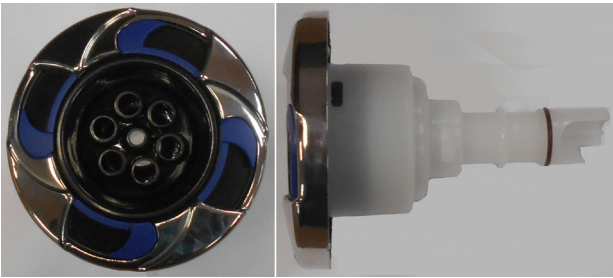
Size: 3"D x 3.25"L



Please visit www.quickspaparts.com to order your replacement parts.

Snap-in SQR Jet Inserts

Velocity Massage-7 Blue Jet
Symbol: 3M
Part #: PLU29930-142-400
Size: 3"D x 3.25"L



Velocity Massage-7 LED Jet
Symbol: 3M
Part #: PLU29930-142-100
Size: 3"D x 3.25"L



Velocity Directional Blue Jet
Symbol: 3D
Part #: PLU29930-112-400
Size: 3"D x 3.25"L

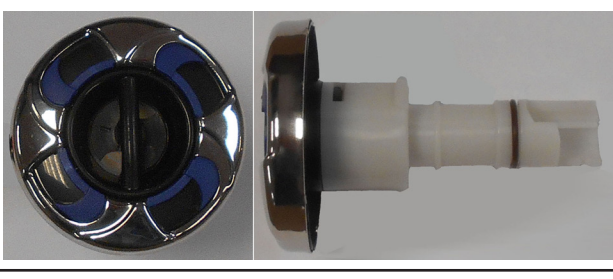


Snap-in SQR Jet Inserts

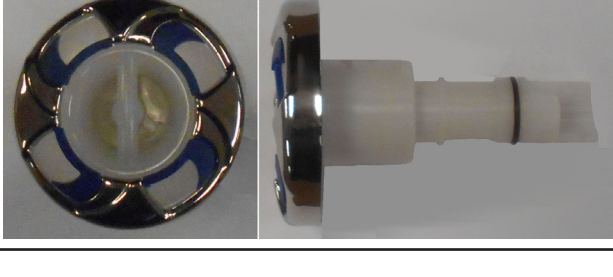
Velocity Directional LED Jet
Symbol: 3D
Part #: PLU29930-112-100
Size: 3"D x 3.25"L



Velocity Roto Blue Jet
Symbol: 2R
Part #: PLU29920-022-400
Size: 2"D x 3"L



Velocity Roto LED Jet
Symbol: 2R
Part #: PLU29920-022-100
Size: 2"D x 3"L



Please visit www.quickspaparts.com to order your replacement parts.

| Snap-in SQR Jet Inserts | |
|--|--|
| Velocity Directional Blue Jet Symbol: 2D Part #: PLU29920-012-400 Size: 2"D x 3"L | |
|  | |
| Velocity Directional LED Jet Symbol: 2D Part #: PLU29920-012-100 Size: 2"D x 3"L | |
|  | |

| Jets | |
|--|---|
| Flex Jet PLU23512-311-700 |  |
| Duo Jet PLU23512-321-700 |  |
| Precision Jet PLU2312-331-700 |  |
| Air X Therapy Ring PLU23512-331-100 |  |
| Pillows | |
| Cascade Pillow No Insert Black ACC01401031 |  |
| Y Pillow recess ACC01401101 |  |


Please visit www.quickspaparts.com to order your replacement parts.

Velocity Diverter Valves

Velocity
1" Blue Diverter Valve
Symbol: D1
Part #: PLU25056-202-400
Size: 2.5" x 5"L



Velocity
1" LED Diverter Valve
Symbol: D1
Part #: PLU25056-202-100
Size: 2.5" x 5"L



Velocity Air Control Blue
Symbol: A
Part #: PLU25059-202-400
Size: 3.125" x 5"L



Velocity Diverter Valves

Velocity Air Control LED
Symbol: A
Part #: PLU25059-202-100
Size: 3.125" x 5"L

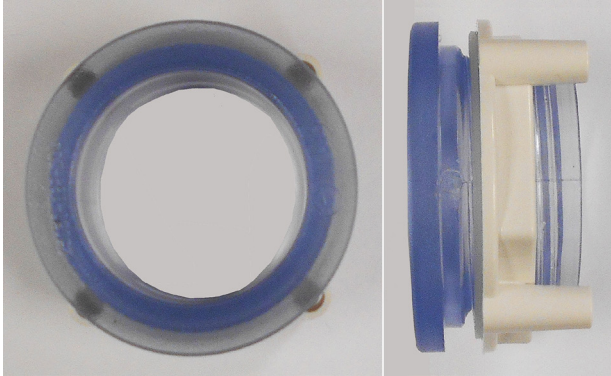
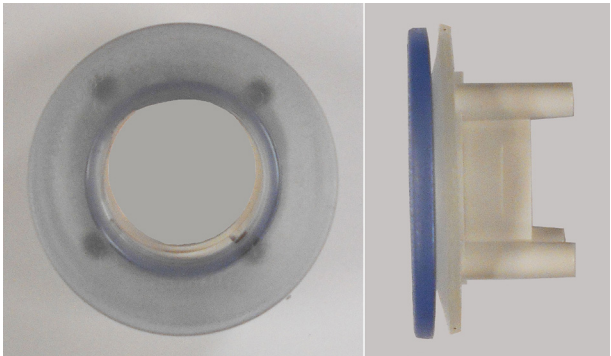


Velocity
2" Diverter Valve Blue
Symbol: D2
Part #: PLU25058-202-400
Size: 4.5" x 7.75"L



Velocity
2" Diverter Valve LED
Symbol: D2
Part #: PLU25058-202-100
Size: 4.5" x 7.75"L




| Velocity Diverter Valves |
|---|
| <p>Velocity Underwater 2" Diverter Valve Blue Symbol: D2 Part #: Size:</p> |
| <p>Velocity Underwater 2" Diverter Valve LED Symbol: D2 Part #: Size:</p> |
| <p>Velocity 1" Diverter Valve Wall Fitting LED Part #: PLU25030-089-200</p>  |
| <p>Velocity Air Control Wall Fitting LED Part #: PLU25090-089-200</p>  |



| Velocity Diverter Valves |
|--|
| <p>Velocity 2" Diverter Valve Wall Fitting LED Part #: PLU25048-089-200</p>  |
| <p>Velocity Wall Fitting 2" Black (#25048-004-200) (for Diverter Valve) Part #: PLU21701738</p>  |
| <p>Velocity Wall Fitting 1" Black (#25030-004-200) (for On-Off Valve) Part #: PLU21701739</p>  |





Please visit www.quickspaparts.com to order your replacement parts.

| Air Control Valve | |
|---|---|
| Aquatic Air Therapy (AAT) Air Control PLU25059-211-00 |  |


| Waterfalls | |
|--|---|
| Cascade II Waterfall Curved Black Textured with Valve and Logo 12-3/8" x 14" PLU21800828 |  |

| Accessories | |
|------------------------------------|--|
| Cup Holder LIT25241-114-949 |  |


| Drains | |
|---|---|
| Drain Super Hi Flo Suction 2 1/2" Black (640-3581LGV) PLU21400146 |  |
| Low Profile Drain 3/4" Black (640-0511) PLU21400401 |  |

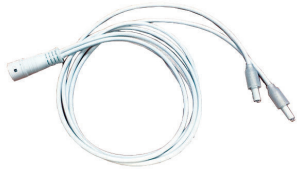
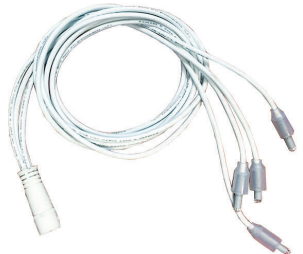



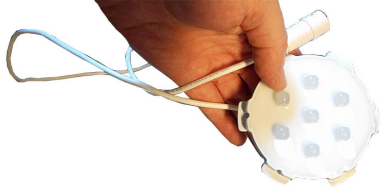
| Filters | |
|--|---|
| Filter Cartridge Anti-bacterial - 50 sq. ft. FIL50-5D13H15FCT-3 |  |
| Filter Cartridge Anti-bacterial - 75 sq. ft. Mega FIL75-7D155H2MCT-3 |  |
| Filter Cartridge Anti-bacterial - 75 sq. ft. FIL75-5D17H15FCT-3 |  |
| Filter Cartridge Anti-bacterial - 75 sq. ft. FIL75-5D145H2OE-3 |  |

Please visit www.quickspaparts.com to order your replacement parts.


| Filters | |
|--|---|
| <p>DYNA FLO XTRA Lo-Pro 75 SQ. Ft. 2" CV, 4 SCALLOP (less cartridge)</p> <p>FIL11703305</p> |  |

| Teleweir Skimmers | |
|--|---|
| <p>50 square foot teleweir skimmer:</p> |  |
| <p>Filter attaching cap assembly</p> <p>FIL11700013</p> | |
| <p>Filter skimmer inner pipe</p> <p>FIL11700012</p> | |
| <p>75 square foot teleweir mega skimmer:</p> |  |
| <p>Filter attaching cap assembly</p> <p>FIL11700025</p> | |
| <p>Filter skimmer inner pipe</p> <p>FIL11700026</p> | |

| LED Lights | |
|---|---|
| <p>1-LED light string</p> <p>LIT16100330</p> |  |

| LED Lights | |
|---|---|
| <p>2-LED light string</p> <p>LIT16100331</p> |  |
| <p>4-LED light string</p> <p>LIT16100332</p> |  |
| <p>1 to 3 ext. cord</p> <p>LIT16100335</p> |  |
| <p>1 to 1 port ext. cord</p> <p>LIT16100338</p> |  |
| <p>Interior light with logic (7 LED)</p> <p>LIT16100333</p> |  |
| <p>Interior light without logic (7 LED)</p> <p>LIT16100337</p> |  |

Please visit www.quickspaparts.com to order your replacement parts.

| LED Lights | |
|--|---|
| <p>Main light housing, LED lens, fitting nut</p> <p>LIT16100336</p> |  |

| Cover Lock and Keys |
|--|
|  |
| ACC01800026 |

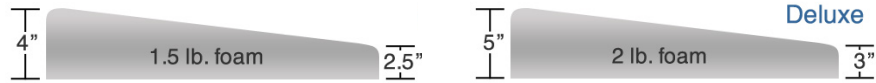
| Replacement Cabinet Panels |
|---|
| <p>The complete selection of replacement cabinets for all models is very extensive and too lengthy for this owner's manual. To order replacement panels for your spa, visit www.quickspaparts.com.</p> |

Covers

All spa covers are designed with a tapered height, angling downward from the center to the sides to drive off rain and prevent water from pooling. The covers listed below are filled with either 1 lb., 1.5 lb., or 2.0 lb. foam.

Basic
4" - 2.5"
1.5 Lb. foam

Deluxe
5" - 3"
2.0 Lb. foam



84" x 84" (7 foot spas)

Fits spa models: PL-760L, PL760B, PPL7B

| | Basic | Standard |
|-------|--------------|--------------|
| Black | COV8484BBK-3 | COV8484SBK-3 |
| Gray | COV8484BG-3 | COV8484SG-3 |
| Brown | COV8484BDB-3 | COV8484SDB-3 |

93" x 93" (8 foot spas)

Fits spa models: PL-860L, PL-861B, PL-880L, PL-881B, PPL8B

| | Basic | Standard | Deluxe |
|-------|--------------|--------------|--------------|
| Black | COV9393BBK-3 | COV9393SBK-3 | COV9393DBK-3 |
| Gray | COV9393BG-3 | COV9393SG-3 | COV9393DG-3 |
| Brown | COV9393BDB-3 | COV9393SDB-3 | COV9393DDB-3 |

Basic Troubleshooting

The troubleshooting guidance provided here is intended to cover the most common problems a spa owner may encounter. For more in-depth troubleshooting, go to www.calspas.com/troubleshooting.

| Symptom | Possible Solutions |
|---|---|
| Problems starting up | |
| Pump won't prime | See priming instructions on page 9. |
| Breaker keeps shutting off | Reset the GFCI breaker. If this continues, contact your dealer or a qualified spa technician. |
| Power and system problems | |
| System won't start up or breaker keeps shutting off | Power may be shut off. Turn on GFCI circuit breaker. If this continues, contact your dealer or a qualified spa technician. |
| Control panel doesn't respond | Turn on or reset the GFCI circuit breaker. If this does not solve the problem, contact your dealer or a qualified spa technician. If you hear the pump running but the control panel doesn't respond, contact your dealer |
| Spa does not turn off | Spa may be trying to heat up. Check if spa is in Ready or Rest mode (see page 14) In cold climates, if spa is not equipped with full foam or any kind of insulation, it will try to maintain the set temperature. Set the spa to low temperature range and set the temperature to 80°F. Spa may be in filter cycle. If it is, this is normal and no adjustment is necessary. |
| Message on the control panel | There may be a problem. See Diagnostic Messages on page 15. |
| Heat problems | |
| Spa water does not get hot | Spa may be in low temperature range. Set the spa to high temperature range. The filter may be dirty or may need to be replaced. Clean or replace the filter. The water level may be too low. Fill the spa with water level at 4 to 6 inches from the top. The temperature is not turned up high enough. Raise temperature on topside control. Cover the spa. The cover will keep heat in the spa and help keep heat from escaping. Make sure cover is on at all times when spa is not in use. The heater element may be old, deteriorated, coated with scale, or defective. Contact your dealer for more assistance. The gate valves may be partially or completely closed. NEVER OPERATE YOUR SPA WITH THE GATE VALVES CLOSED! |

| Symptom | Possible Solutions |
|---|--|
| Spa overheats - temperature greater than 110°F / 43°C | <p>Overheating can occur during summer months and may not necessarily indicate a malfunction. When it occurs, a message code may also appear on the control panel.</p> <p>Temperature may be set too high. Turn the set temperature down to a lower temperature.</p> <p>Filtration time may be too long. Turn the filtration cycles down during the warm months.</p> <p>The spa may not be properly ventilated. Make sure the front of the spa is not blocked to allow air flow.</p> <p>High speed pumps may have been running too long. Limit pump running time to no more than 15 to 30 minutes.</p> |

Water pressure problems

| | |
|--------------------|--|
| Low water pressure | <p>Jet valves may be partially or fully closed. Open the jet valves.</p> <p>Filter cartridge may be dirty. Clean or replace the filter.</p> <p>Pump may have airlock. Remove airlock by priming spa (page 9)</p> <p>The suction fittings may be blocked. Remove any debris that may be blocking them.</p> <p>The filter skimmer may be blocked. Remove the blockage.</p> <p>Gate valves may be closed. Open gate valves. Note: Never operate your spa with the gate valves closed!</p> <p>Spa may be running in filtration mode. Press JETS or JETS 1 button to turn on high speed pump.</p> |
|--------------------|--|

| Symptom | Possible Solutions |
|---|---|
| No water pressure (no water stream from any jets) | <p>Power may be switched off. Turn the power back on.</p> <p>The pump may be defective. After you have tried all other troubleshooting, contact your dealer for assistance.</p> |
| Jets surge on and off | Water level may be too low. Add water to normal level. |

Pump problems

| | |
|--|--|
| Pump runs constantly – will not shut off | There may be a problem with circuit board. Contact your dealer. |
| Noisy pump | <p>The water level may be too low. Fill the spa with water level at 4 to 6 inches from the top.</p> <p>Filter cartridge may be dirty. Clean or replace the filter.</p> <p>Pump may have airlock. Remove airlock by priming spa (page 9)</p> <p>The suction fittings may be blocked. Remove any debris that may be blocking the suction fittings.</p> <p>Gate valves may be closed. Open gate valves. Note: Never operate your spa with the gate valves closed!</p> <p>Air may be leaking into the suction line. Contact your dealer for assistance.</p> <p>Debris may be inside the pump. Contact your dealer for assistance.</p> <p>Noise may be a sign of damage. Contact your dealer for service.</p> |

| Symptom | Possible Solutions |
|--|--|
| Pump turns off during operation | Automatic timer may have completed its cycle. Press JETS or JETS 1 button to start the cycle again. Pump may have overheated due to the vents on the equipment door being blocked. Make sure the front of the spa is not blocked to allow air flow. The pump motor may be defective. Contact your dealer for assistance. |
| Pump has a burning smell while running | A burning smell may be a sign of damage. Contact your dealer for service. |
| Pump does not run | Pump may have over heated. Let it cool for an hour and try operating the spa for a shorter time. Power to the spa may be shut off. Turn on or reset the GFCI circuit breaker. If this does not solve the problem, contact your dealer or a qualified spa technician. |

“Thermal Creep”

Cal Spas are designed with energy-efficient components and systems that are meant to sustain heat generated by the equipment, which is then cycled back into the spa water. In hot weather or in situations where the spa is set to extended run times, Thermal Creep may occur. Thermal Creep is a condition where the measured water temperature can be higher than the set temperature. To manage Thermal Creep you may:

Vent your cover. This means placing a folded cloth about $\frac{3}{4}$ " (2cm) thick under all four corners of the cover before you lock the cover down.

Open your cover. Opening the cover at night will also quickly cool the water down if desired.

Open all air controls. Set your filtration cycles to run during the cooler times of the day or night.

Reduce the length of your filter cycles.

Visit your local dealer for additional guidance.

Since Thermal Creep only occurs in well-insulated hot tubs, it is not indicative of something that is wrong with your spa or its equipment.

LIMITED WARRANTY

This Limited Warranty is extended to the original purchaser of a Cal Spa brand portable spa manufactured after January 1, 2020 and installed for residential use in the United States of America and Canada. This warranty begins on the date of delivery of the spa, but in no event later than one year from the date of manufacture.

Shell Structural 10 years
Warranted against water loss due to defects in the spa shell.

Shell Finish 7 years
Warranted against blistering, cracking, or delaminating of the interior surface of the spa shell.

Equipment and Controls 5 years
Electrical equipment components – specifically limited to the pumps, standard titanium heater, and control system – are warranted against malfunctions due to defects in workmanship or materials.

Plumbing 5 years
Warranted against leaks due to defects in workmanship or materials.

Cabinet - synthetic or fiberglass 5 years
Warranted against defects in workmanship or materials. Normal wear and weathering of the finish will occur naturally over time and are not defects.

Warranties for Other Components

The fuses, headrests, cabinet finish, cal grip, labels, and filters are warranted to be free of defects in workmanship and material at the time of delivery. The factory installed water purification system is warranted against malfunction due to defects in workmanship or material for one year from the original date of delivery, except for the UV bulb and quartz tube, which are warranted for 90 days from the original date of the spa delivery. All stereo-related components (receiver, speakers, sub-woofer, stereo media locker, power supply, wireless remote control etc.) are warranted against malfunction due to defects in workmanship or material for one year from the original date of delivery. All other factory-installed components not mentioned specifically, including, but not limited to the wood frame, jets, diverter valves, LED lighting systems, filter lids, and mechanical components, are warranted against malfunction due to defects in workmanship and material for two years from the original date of delivery. The insulating spa cover delivered with the spa is warranted to be free of defects in workmanship and materials on Platinum and Escape Plus spas for one year - 90 days for Escape spas.

Genuine Cal Spas Parts & Accessories

This Limited Warranty is void if Cal Spas (the "Manufacturer") or its designated representative determines that the spa has been subjected to damage or failure due to installation of aftermarket parts that are not genuine Cal Spas branded parts and accessories. This disclaimer includes, but is not limited to filters, UV bulbs, ozone systems, salt systems, repair parts and other accessories. Genuine Cal Spas brand parts and accessories are built to our highest standards of quality, durability and performance, and they are designed to work with your spa to ensure optimal performance and function.

Performance

This warranty begins on the date of delivery of the spa, but in no event later than one year from the date of manufacture.

To obtain service in the event of a defect covered by this Limited Warranty, notify your Cal Spa dealer or Cal Spas as soon as possible and use all reasonable means to protect the spa from further damage. Upon proof of purchase, a designated service representative will correct the defect subject to the terms and conditions contained in this Limited Warranty. There will be no charge for parts or labor to repair the defect, although providing access to affect the repair is your responsibility as the spa owner. Freight charges for replacement parts is the responsibility of the spa owner. You may be assessed reasonable repairman travel mileage charges.

In the event that the spa is removed to a repair facility for repair and reinstalled, the cost of removal and reinstallation will be your responsibility as the spa owner. If the Manufacturer determines that repair of the covered defect is not feasible, it reserves the right to provide a replacement spa of equal value to the original purchase price. In such an event, reasonable costs for removal of the original spa, shipping costs from the factory for the replacement spa and delivery and installation of the replacement will be your responsibility as the spa owner. The replacement spa will carry the balance of the original spa's warranty. Spa covers are not included.

This warranty ends either by specified time frame, owner-transfer, relocation, or installation of any component other than by manufacturer.

Warranty Limitations

This Limited Warranty is void if Cal Spas or its designated representative determines that the spa has been subjected to alteration, neglect, misuse or abuse, or freight damage caused by the common carrier; any repairs have been attempted by anyone other than a designated representative; the failure is caused by accident, acts of God or other causes beyond the control of the Manufacturer; neglect, misuse and abuse include any installation, operation or maintenance of the spa other than in accordance with the instructions contained in the owner's manual provided with the spa, including but not limited to the failure to maintain proper water chemistry and chemical balance and the use of abrasive or improper cleaners or non-genuine parts and accessories. This Limited Warranty does not provide coverage for any item attached to or installed on the spa after the date of manufacture or for gaining access to any component for repair or replacement. Spa units in commercial use are excluded from any coverage whatsoever. The spa owner accepts liability for repair work performed by anyone other than the Manufacturer or a designated Cal Spa representative. This Limited Warranty is void if damage occurs to the spa shell because of excessive heat buildup due to failure to cover a spa that is empty of water while exposed to direct sunlight.

Proration of Warranty

Units determined by the Company to be non-repairable will be replaced on a prorated basis with the same or a comparable unit. The user will be charged one percent of the current retail cost for each full month of ownership from the date of purchase through the date failure is determined to be non-repairable. This charge will be waived during the first twelve months of ownership.

Limitations

The Manufacturer disclaims all warranties, expressed or implied, in fact or in law, to the extent allowed by your State's Law, including the warranty of merchantability and fitness for use, except as stated specifically herein. All warranty service must be performed by the Manufacturer or its designated representative using authorized Cal Spa parts. No agent, dealer, distributor, service company or other party is authorized to change, modify or extend the terms of this limited warranty in any manner whatsoever. The Manufacturer will not be responsible for any statements or representations made in any form that go beyond, are broader than, or are inconsistent with any authorized literature or specifications furnished by Cal Spas.

Disclaimers

The Manufacturer and its representatives shall not be liable for any injury, loss, cost or other damage, whether incidental or consequential, arising out of any defect covered by this limited warranty, including without limitation, loss of use of the spa and cost for removal of defective product even if the Manufacturer was advised of the possibility of damage. The liability of the Manufacturer under this limited warranty, if any, shall not exceed the original amount paid for the defective product. Coverage under this limited warranty shall commence as of the original date of delivery and the duration of such coverage shall not extend for any reason whatsoever beyond the stated time periods. These disclaimers shall be equally applicable to any service provided by the Manufacturer and its designated representatives.

Legal Rights

This Limited Warranty gives you specific legal rights. You may also have other rights that vary from state to state. Some states do not allow limitations on how long an implied warranty lasts, so this limitation may not apply to you.

Locating the product serial number

The serial number of your spa is located on a metal plate attached to the right side of the spa panel. You will need this number to properly register your spa and activate coverage. Write this information in the space provided below.

Spa Model: _____

Spa Serial Number: _____

Date Purchased: _____

Date Installed: _____

Dealer's Phone Number: _____

Dealer's Address: _____

It is important that you register your Cal Spas product as soon as possible. By taking just a few quick minutes to register, you can enjoy product alerts, more efficient support, and quicker service. Go to <https://calspas.com/register-your-spa.php>. Fill in your information and click "SEND WARRANTY INFO"

Please write a review to let us know how you feel about your spa. To post your review, go to www.calspas.com.

Enjoy your new Cal Spas hydrotherapy experience. Cal Spas would like to ask you to leave us a 5 star review. Thank you!



email press@calspas.com and let us know you left a review!

