

**Cal Spas**<sup>®</sup>  
SINCE 1978

## THE CHILL SPA



**Platinum™ Series**  
**Escape™ Series**

**2024**  
Owner's Manual

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Congratulations! You are now the owner of the finest chill spa built. Now you will experience health benefits and relaxation as you never had before. We at Cal Spas focus on quality, design and comfort in order to create a truly luxurious experience like no other.

Welcome to the Cal Spas® family.

It is important that you register your Chill Spa 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"

#### 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: \_\_\_\_\_

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**LTR20241170**

#### CONTACT INFORMATION

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

Lloyd's Material Supply Inc.  
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 CAREFULLY!

When using installing and using this spa, basic safety precautions should always be followed, including:

**KEEP UNIT UPRIGHT, DO NOT STORE OR MOVE UPSIDEDOWN OR ON ITS SIDE.**

1.  **DANGER: RISK OF SEVERE INJURY OR 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.
  
2.  **DANGER: RISK OF SEVERE INJURY OR DROWNING!**
  - 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.
  
3.  **DANGER: RISK OF SEVERE INJURY FROM ELECTRIC SHOCK OR DEATH FROM ELECTROCUTION!**
  - 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 (1.5 meters) 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 5 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.
  
4.  **WARNING: RISK OF HYPERTHERMIA (OVER-HEATING) CAUSING SEVERE INJURY, BURNS, WELTS OR DEATH!**
  - Water temperature in excess of 104°F (40°C) may be injurious to your health.
  - 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.
  - Before using the spa, the user should measure the water temperature since the tolerance of water temperature-regulating devices varies.
  
5.  **WARNING: TO REDUCE RISK OF INJURY**
  - Prolonged exposure to hot air or water can induce hyperthermia. Hyperthermia occurs when the internal temperature of the body reaches a level between 3°F (2°C) to 6°F (4°C) above the normal body temperature of 98.6°F (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).
  - High water temperatures have a high potential for causing fetal damage during pregnancy. Women who are pregnant, or 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.



**⚠ 5.5 Hypothermia** Hypothermia occurs when the body's temperature drops below 95° F (35° C).

Signs of mild hypothermia (95° F to 89.6° F // 35° C to 32° C ) include:

- Shivering and chattering teeth
- Exhaustion
- Clumsiness, slow movements and reactions; prone to falling
- Sleepiness
- Weak pulse
- Fast heart rate (tachycardia)
- Rapid breathing (tachypnea)
- Pale skin color
- Confusion and poor judgment/loss of awareness

**DO NOT USE THE CHILL SPA FOR EXTENDED PERIODS OF TIME**

Extended use of the chill spa in temperatures below 60F can increase your risk of hypothermia.

Contact medical services if symptoms of hypothermia arise.

Call 911 in a medical emergency.

**6 ⚠ Proper Ventilation: Proper ventilation of the Chill Spa is necessary for optimal operation.**

The chill spa uses a water chiller which will generate warm exhaust air from the cooling of the Chill Spa. The Chill Spa is designed for outdoor use only, for proper air flow a minimum of 3'-5' feet of space around the unit without obstructions. DO NOT OBSTRUCT THE EXHAUST VENTS, blocking these vents will be detrimental to the operation of the Chill Spa, with higher energy consumption and slower cooling speeds.

**Never install the unit in a closed room with limited air volume**, in which the exhaust air expelled from the unit will be reused, or close to shrubbery that could block the air inlet. Such locations impair the continuous supply of fresh air, resulting in reduced efficiency and possibly preventing sufficient cooling/heating output.

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

- 7. ⚠ DANGER: RISK OF ELECTRIC SHOCK**  
Do not permit any electric appliance, such as a light, telephone, radio, or television within 5 feet (1.5 m) of a spa.
- 8. ⚠ WARNING:** people with infectious diseases should not use a spa or hot tub.
- 9. ⚠ WARNING:** to avoid injury exercise care when entering or exiting the spa or hot tub.
- 10. ⚠ WARNING:** Do not use spa or hot tub immediately following strenuous exercise.
- 11. ⚠ WARNING:** Prolonged immersion in a spa or hot tub may be injurious to your health.
- 12. ⚠ CAUTION:** Maintain water chemistry in accordance with manufacturer's instructions.

**SAVE THESE INSTRUCTIONS.**

# Electrical Requirements

In order to ensure proper operation of the Chill Spa, the unit must operate on a dedicated electrical circuit. Avoid connecting the Chill Spa on a circuit connected to other appliances or light fixtures. Failure to do so may result in poor operation of the chill spa, and damage to the chiller unit within the chill spa.

The Chill Spa when installed in the United States must meet the requirements of the NEC 70 and any applicable local, state, and federal codes. The spa must operate on an independent circuit as required by NEC 70 with no other appliances or lights sharing the power within that circuit. Use copper wire with THHN insulation only, **do not use aluminum wire.**

*Cal Spas is not responsible for damages or injury caused by not following the recommended table below. Follow all national & local codes when installing the spa.*

## Imperial Measurements

Distance	Gauge Wire	Amperage
Up to 25' Feet	14 Gauge	15 Amps
Up to 50' Feet	12 Gauge	15 Amps
Up to 100' Feet	8 Gauge	15 Amps

## Metric Measurements

Distance	Gauge Wire	Amperage
Up to 7.50 meters	2.5 mm <sup>2</sup>	15 Amps
Up to 15.25 meters	4 mm <sup>2</sup>	15 Amps
Up to 30.50 meters	10 mm <sup>2</sup>	15 Amps

**Any modification done to the provided GFCI cable or removal or replacement of the provided cable must be done by a certified electrician/technician. Failure to properly follow the electrical requirements stated by Cal Spas poses the risk to cause damage or injury to persons operating the spa. Failure to follow these requirements will void your warranty.**

# 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 the Chill Spa.

### Before Delivery

- Plan your delivery route
- Choose a suitable location for the spa
- Lay a 3-4 inches concrete slab
- Install dedicated electric supply **After**

### Delivery

- Place spa on Slab
- Connect electrical components

## Planning the Best Location

### Safety First

Do not place your spa within 10 feet (3m) of overhead power lines. **The Chill Spa requires proper ventilation for cooling efficiency, failure to do so will lead to raised ambient air temperatures near the spa.**

The Chill Spa is designed for outdoor use only.

### 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 Chill Spa.

### Provide a View with Your Chill 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 Chill 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 Chill 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

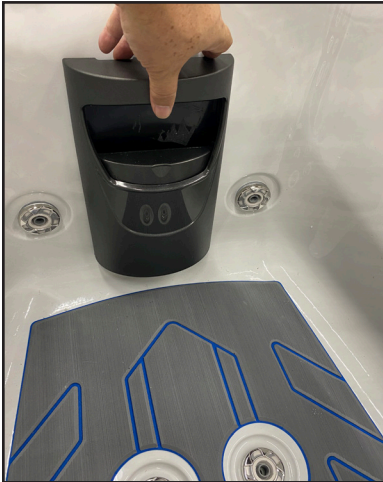
Make sure the Chill Spa is positioned so that access to the equipment compartment and all side panels will not be blocked. Providing 3 feet of clearance on each side.

The Chill Spa requires a 3-4 inch cement slab as a foundation to support the unit. The cement foundation must be level.

Foundations not built within this specification can cause cracking, damage to the spa shell and frame, and cause issues with the pumps and cooling system. If wood or other organic/inorganic porous material is used, it may lead to damage of the foundation, and harbor other issues including mold, rotting foundation, and algae.

**Foundation Requirements:** The Chill Spa must be built on a level cement slab of 3-4 inch thickness. The Chill Spa generates condensation when operating, Do not use materials such as wood, porous rock, rubberized flooring, or materials where algae and mold can accumulate. CalSpas is not responsible for damages caused by condensation of the Chill Spa unit. **Vinyl Flooring and other synthetic materials can be used at your own risk.**

## Chill Spa Quick Start Guide



### 1. Remove Filter Skimmer.

Remove the Skimmer from the filter housing by gently pulling upward, this must be reinstalled after the spa has been filled up and primed.



### 2. Remove The Filter .

Once the skimmer is removed, the filter can be removed by holding the filter by the tab, turning counter-clockwise. Once the filter is removed, soak the filter in water for about 15 minutes before re-installation.



### 3. Filling the Chill Spa.

Preventing airpockets in the plumbing is essential, for this reason insert the hose through the filter canister to prevent air pockets from forming. failure to do so can cause damage to the refrigeration system.

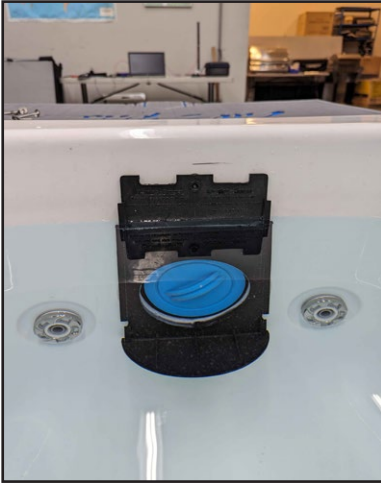
**NOTE:** Never fill your spa with soft water.

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 fill your spa with well water provided the following conditions are met: Have a Total Dissolved Solids (TDS) and metals test performed by a qualified person after the fill-up process but before any spa use



# Chill Spa Quick Start Guide



## 4. Water level

Fill the spa up to 4" from the rim of the spa. Once the Chill Spa is filled reinstall the filter clockwise. **DO NOT OVER TORQUE/TIGHTEN** this can damage the filter housing over time. Once the filter is back in its place you can slide the skimmer back onto the filter housing. The skimmer slides into the filter housing with two sliding tabs on the top of the skimmer.



The water level will shift once a person enters the Chill Spa, adjust your water level based on the shift of the waterline once the unit is being used.



## 5. Connect the Chill Spa to power.

Using the supplied 15 amp GFCI plug, connect it to the outlet running from the dedicated 15 amp circuit. Once connected press the "jets" button to prime the internal pump.

## 6. Programing the Cooling unit.

Begin by using the main spa controls and hold the  button for 2 seconds and the temperature will appear on the display. Once it does you may let go of that button and press the cool button  to lower the spa to 39 F, once that is done press the "Set" button to save the desired temperature. Additional programing may be needed.

Refer to page 35 if after one hour has passed and the temperature has not lowered, and page 15 for chiller programming.



## 7. Open Air Vents.

Once water is circulating, press the switch on the left hand side of the Chill spa to open and close the air vent. When the air vents are opened this allows more pressure to exit the jets for a deeper massage. this will assist in clearing the plumbing of any air pockets.

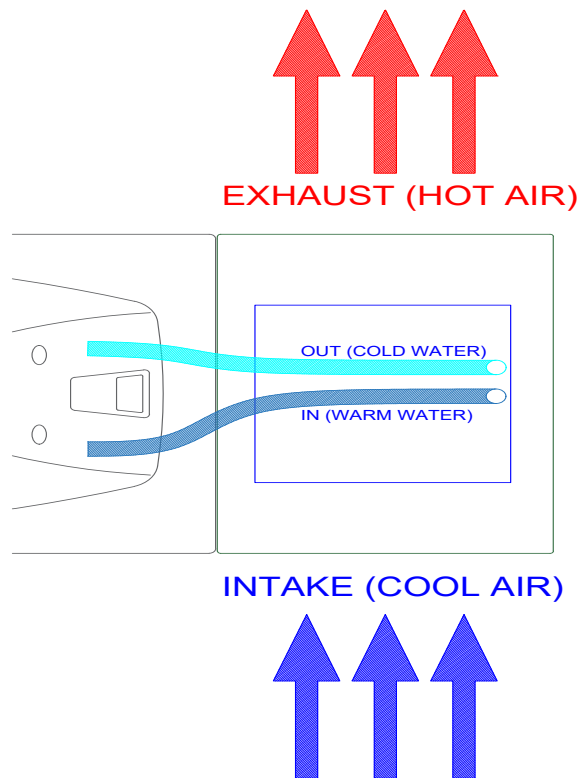
**Note:** The Chill Spa uses a condensation drain hose to prevent moisture from collecting inside of the spa shell while in operation. pooling of water is normal near this clear vinyl hose.

Note: Calspas is not liable for any damages caused by condensation generated by this unit, if foundation requirements are not followed. This includes wooden floor foundations, rubber composite, and synthetic turfs.

# Chill Spa Rate of Cooling

The Chill Spa uses a water chiller to lower the water temperature within the Chill Spa. The chiller operates similarly to a HVAC system. The chiller operates efficiently when ambient temperature is at or below 90°F, when the ambient temperature is above 90°F the heat generated by the condenser has nowhere to go. This causes the cooling capability of the chiller to go down.

In optimal conditions the chill spa can bring room temperature water to 39°F within 8-10 hours. With Chill Spas that have heating capabilities, it takes about 3-4 hrs to heat up from room temperature to reach 104°F. When water within the chill spa is cooling from 104°F to 39°F, the expected waiting time can be anywhere between 8-16 hours. This figure varies based on ambient temperature, and ventilation.



With any chiller or refrigeration system, when the ambient temperature is above a certain threshold, the heat generated by the refrigeration system has no where to go. This causes a problem where hot air is being used to cool down the unit when it is operating. When this occurs the water within the chill spa will still cool, but the rate of cooling is less than when the chill spa is operating in its ideal conditions below 90°F.

**Note: If the Chill Spa is filled and activated during a heatwave or a sudden hot weather event, the rate of cooling will decrease exponentially, in some cases the lowest temperature the chiller can achieve during a heatwave can be around 45-55°F after continuous operation.**

**Note: The Chill Spa is designed to maintain the cold water within the spa, if heatwave conditions are occurring the chill spa will cool the fastest during the evening/night. The chill spa may take up to 24-36hrs to properly cool when it is first filled. In optimal conditions**

# Control Panel



**TEMP :** The temp button works to navigate and set the temperature of the Chill Spa. Hold the button for 2 seconds and it will flash the current set temperature. Once this appears on screen you can use the **“Temp”** and **“Time”** buttons to raise or lower the desired temperature.

**Time:** The time button is a dual function button, used to adjust the time and to navigate through options. To set the time hold the button for 2 seconds, the display will show **“12:00”** once this appears you may use both the **“Temp”** and **“Time”** button to adjust the time.

**Light:** Switches perimeter and internal lights on. Pressing the button repeatedly will cycle different modes, these modes include strobe, slow transition, fast transition, and “rave” mode. Repeated presses afterward will allow you to select a solid color of your choice. Starting from Red, Green, Blue, Yellow, Aqua, Orange, Violet, and White.

**Jets:** Press once to activate the jets, press it again to turn the jets off. The pump is always running in circulation mode.

**Set:** This is used to select and to confirm temperature or options.

# Setting Temperature and Time

## This Chill Spa is equipped with a SmarTouch Control System

SmarTouch Digital comes to you with a universal set of default settings. If you choose to keep these settings, then you only need to remember 2 things: how to set the spa temperature and to press the SET key whenever you are done using the spa.

### Setting Temperature

The **UP**(TEMP) & **DOWN**(TIME) arrows.



Both buttons are used to select, increase or decrease temperature or time setting.

*Note: Both keys are active when pressed individually and held down 2 seconds, to eliminate accidental changes.*

Press and hold for 2 sec. the UP (TEMP) arrow key.



Controller will display current spa temperature. Use the UP or DOWN arrow keys to select desired temperature.



\*To enter new temperature press → SET key.

The controller will:

- Lock-in the new temperature.
- Display current spa temperature.

**IMPORTANT:** Always turn down the heat before you drain the spa.

\*Note:

If no buttons are pressed, the screen will reset within 30 seconds the controller reverts to the previous setting, and the change will not take effect.

### The SET Key

After using the spa, press the SET key to tell the micro controller you are done using the spa. It will then take over the spa's management, including the different filtration cycles, heat maintenance, economy modes and protection against freezing.





# Setting Temperature and Time

## SETTING TIME-OF-DAY

### Setting Time-Of-Day

Press and hold for 2 sec. the DOWN (Time) arrow key. 

Controller will display 12:00 noon. Use  OR  to set the correct time-of-day.

\*After every selection "Hours , Minutes" press → SET key. 

### Cool-Down Timer

A 30-second timer keeps the low speed jets, ON, after the heater turns OFF, to remove all residual heat from the heater element.

### User Timer

A built-in, 20 minutes elapsed-time clock switches off any active function.

### Economy mode. Water & Energy Management.

The **Economy** mode manages water temperature, filtration and energy consumption knowing "when" to heat to maintain water temperature.

The Economy mode starts when the heater is turned off and the spa is not in use.

Upon entering the ECONOMY mode the message "**ECON**" is displayed. During the Economy mode the spa controller is in stand-by, three hours at a time, monitoring and sampling the water temperature.

At the end of every Economy period which is 3 hours the controller activates the low jets only for 5 minutes to perform the following:

- 1-Filter and sanitize the water. Check your spa manual for the type of sanitizer in your spa.
- 2- Stabilize the water temperature and heat if necessary, in that case the low jets run more than 5 minutes for the duration of the heating cycle.

Important: Tie down your spa cover to minimize heat loss and to conserve energy.

Note: The message "**ECON**" is not an error code.

# Additional Programming

## Filtration

The Chill Spa is equipped with a low amperage 24hr circulation pump. The spa will always be filtering at a low flow rate whenever the Chill Spa is not in use. The programming option for the spa will appear in the settings as FP1-FP4 but they will NOT apply for the Chill Spa

## Vacation Mode

### Start Time:


- Press the DOWN arrow and SET keys together at the same time. Code FP1 is displayed.
- Press the UP arrow 2 times and proceed to code "Hibr" then press SET. Using the UP or DOWN arrow keys change the start time if you choose to. Press SET to enter the hours and SET again to enter the minutes. Default start time is 12:00 noon.
- Once you have set the start time press the UP arrow to continue with the procedure to set the duration.

### Duration:


- Proceed and press the UP arrow 5 times to code "Hibrd" then press SET to extend the duration or filtration time from 60 minutes up to 240 minutes then press SET.
- Press the UP arrow button 8 times and proceed to code SEND. Press SET to exit and to save the new settings. The controller will default to the new settings.
- If power is turned off or interrupted the new settings are not affected, however the controller will exit vacation mode and reverts to the standard or original settings once power is restored.

# Additional Programming

## Flip Screen

The display on the control panel of the chill spa can be flipped to be controlled from the inside of the spa. To flip the display press the  button and the **"SET"** button at the same time. To flip it back press the same two buttons together again.

## Menu Navigation

The control system inside of the Chill Spa has several menu options that do not apply to the operation of the chill spa. This is due to the construction and design of the chill spa. If accidental activation of an option occurs, you can use the  key to find option **"CAnC"** and press set to revert to previous settings. you may also wait until the display times out and return to its default temperature display.

**The Unused software settings include: FP1, FP2, FP3, FP4, FP1d, FP2d, FP3d, FP4d, CLdn, ECL, CHCL, Uto, PUF, and CALb.**

Many of these modes do not apply for the Chill Spa: If accidental activation occurs scroll to the CAnC option and press set to cancel any modifications done.

## Condensation Drainage

The Chill Spa has an external drain for collected condensation from within the chiller. Accumulation of water near the drain, or the base of the spa is considered normal. The amount of collected condensation may vary based on ambient temperature and weather.



# WIFI - Connectivity (option)

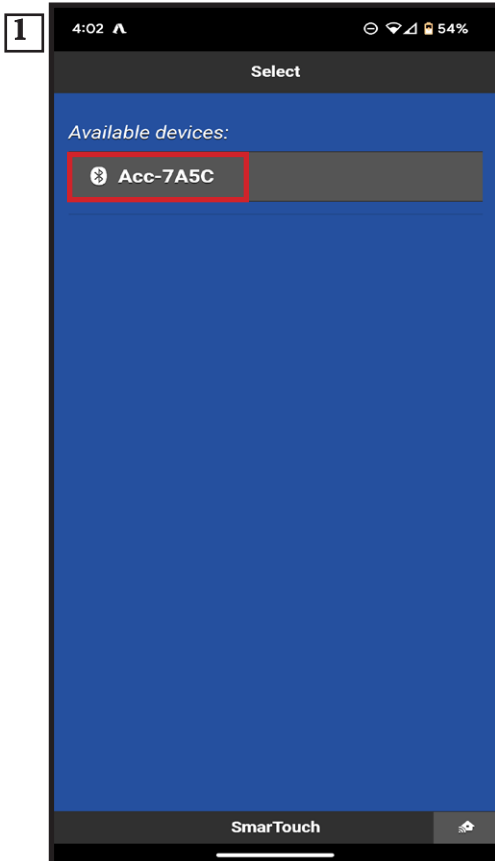
**Connecting the Chill Spa:** The Chill Spa has the ability to connect to a residential local wifi network. If the Chill Spa was purchased with the optional wifi module. This module allows you to adjust the spa temperature, activate the LED lights and check the current temperature of the water. The module is already connected from factory and will require a quick set up.

The Chill Spa may need to be powered down at the breaker, and powered back up to go back into discovery mode.

Download the “SmarTouch Digital” app from the App Store or Google Play store.

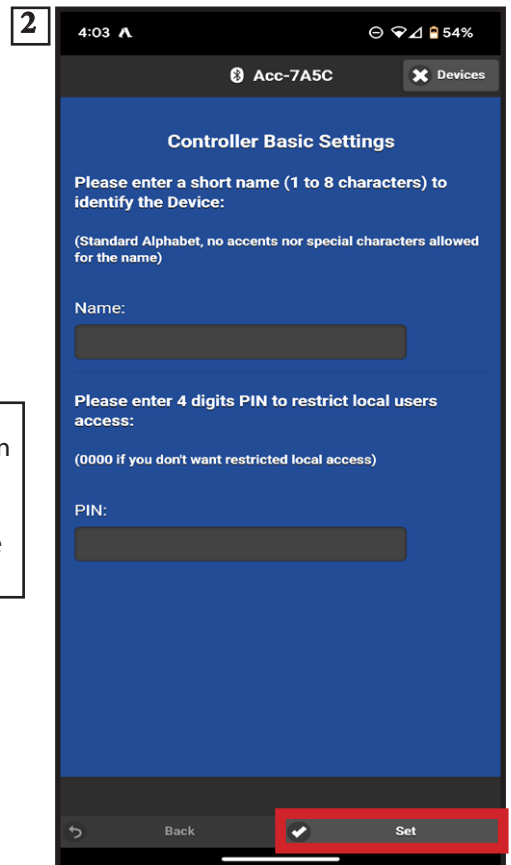
- It is very important to ensure you have strong wifi signal available from your preferred wireless router. Test your wifi router’s signal strength with your mobile phone or tablet while standing right next to the spa and right next to the wifi module installation location. **This device does NOT support the 5 ghz spectrum** due to range limitations that exist within that spectrum. The 2.4GHz spectrum is more reliable over greater distances. If you have a lot of devices sharing your network, it’s important to connect as many wireless devices using your network, that are 5ghz capable, to that spectrum instead of the 2.4GHz spectrum. The more devices sharing 2.4Ghz the slower that spectrum performs. An overloaded network in the 2.4Ghz spectrum will cause connectivity issues and result in unreliable remote access to your spa.

1. First disconnect and reconnect your Chill Spa, this will send the module into a temporary discovery mode. Make sure both bluetooth and Wifi are turned on inside your mobile device.



2. Observed networks will appear. the name of the module would be ACC-XXXX or ESP32. Select it and name the network with a password pin of your choice.

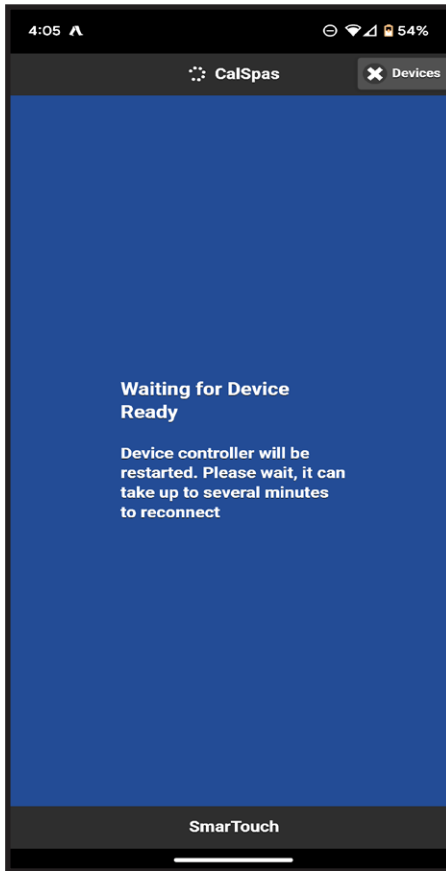
3. Once the name and pin have been created, tap the “SET” option at the bottom of the screen.





# WiFi - Connectivity

3



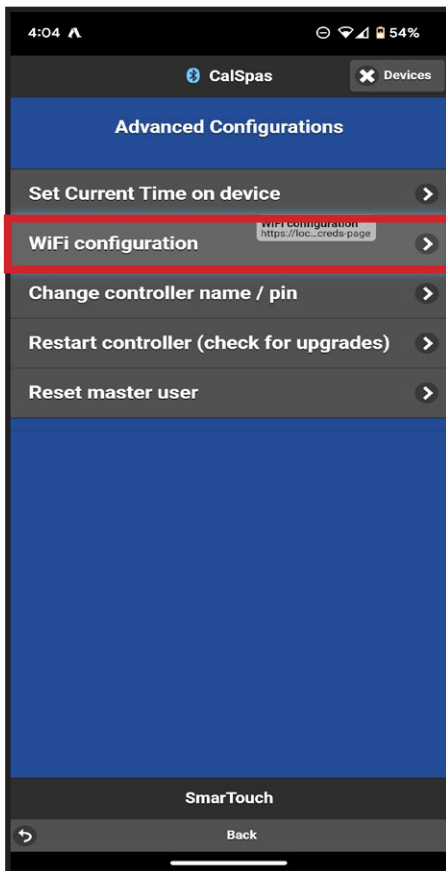
3. Once "waiting for device" appears, in about 1 minute the temperature of the spa will show on your display.

4



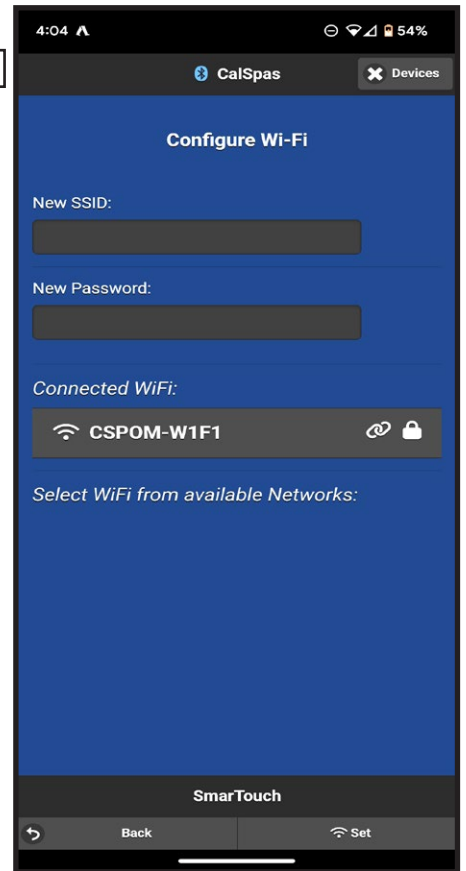
4. The screen will show two buttons for the Light and Set options. The device is currently communicating with your phone via Bluetooth. The next step is to connect it to your local network. To begin select "Config"

5



5. Once config is selected it will send you to an options menu. Select "WiFi Configuration" to select your network.

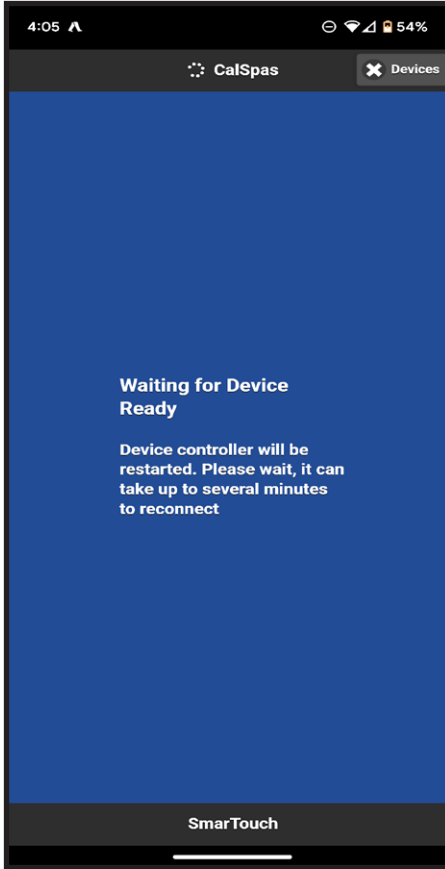
6



6. You can select from your "connected wifi" if the mobile device is already connected to wifi. you may also type in the SSID of your wifi with its password to manually connect the module.

# WIFI - Connectivity

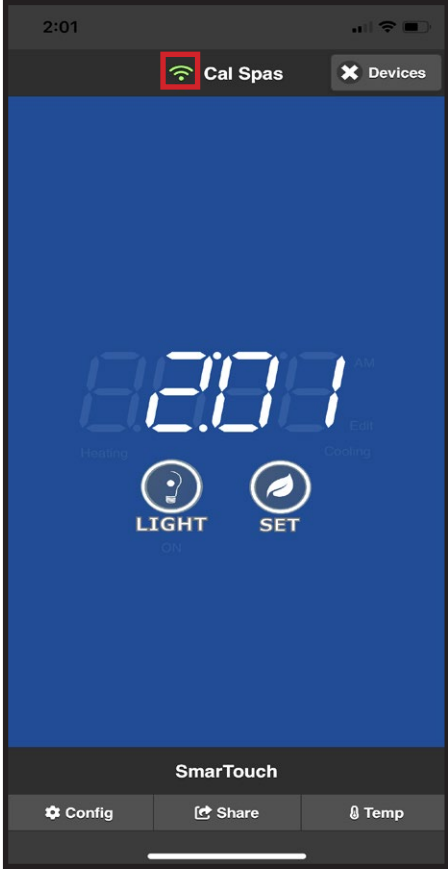
7



7. Once a network is selected it will return to its pairing screen. this process can take up to 5 minutes. Time needed to finish pairing varies based on router signal strength, number of devices on the network, and available network bandwidth.

8

8. The wifi module is now paired. The green signal icon will appear on the top of the screen.



# Water Clarity

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

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

Before you begin, we recommend you become familiar with some water quality terms and their definitions (see the section below).

## 1. 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.

You need to test the level of calcium hardness, total alkalinity, and pH.

## 2. Sanitation and Shock

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.

You also need to add shock to the water to stimulate the chemical sanitizer. How much you use and how often depend on frequency and intensity of use.

## 3. 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.

## 4. 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.

## Water Quality Terms and Definitions

The following chemical terms are used in this section. Understanding their meaning will help you to better understand clear water maintenance. Words in bold type are defined in this table.

<b>Bromine / Bromamines</b>	<p><u>Bromine</u> is an efficient sanitizer chemical for spas. When used as a <b>sanitizer</b>, bromine forms compounds called bromamines. Bromine can be added to the spa or automatically generated.</p> <p><u>Bromamines</u> are compounds formed when bromine combines with nitrogen from body oils, perspiration, etc. Unlike chloramines, bromamines have no pungent odor and are effective sanitizers.</p>
<b>Chlorine / Chloramines</b>	<p><u>Chlorine</u> is an efficient sanitizing chemical for spas. We recommend using sodium dichlor-type granulated chlorine because it is totally soluble and nearly <b>pH</b> neutral. When used as a <b>sanitizer</b>, chlorine forms compounds called chloramines.</p> <p><u>Chloramines</u> are compounds formed when chlorine combines with nitrogen from body oils, perspiration, etc. Chloramines can cause eye irritation as well as having a strong odor. Unlike <b>bromamines</b>, chloramines are weaker, slower <b>sanitizers</b>. To remove chloramines, see the description of <b>shock</b> below.</p>
<b>Calcium Hardness</b>	Abbreviated as CH. Calcium hardness is a measure of the total amount of dissolved calcium in the water. Calcium helps control the <b>corrosive</b> nature of the spa's water and is why soft water is not recommended. The low CH level can cause <b>corrosion</b>
<b>Corrosion</b>	The gradual wearing away of metal spa parts, usually caused by chemical action. Generally, corrosion is caused by low <b>pH</b> or by water with levels of <b>TA, CH, pH</b> or sanitizer which are outside the recommended ranges.
<b>Dichlor</b>	Also called sodium dichlor. It is a type of chlorine and is frequently used when <b>shocking the water</b> . An effective <b>chlorine</b> -based powdered <b>oxidizer</b> and <b>sanitizer</b> . Dichlor works by oxidizing waste product in the water such as <b>bromamines</b> and <b>chloramines</b> and causing them to burn off.
<b>Monopersulphate or MPS</b>	Frequently used when <b>shocking the water</b> . An effective non-chlorine-based powdered <b>oxidizer</b> that works well with both <b>chlorine</b> and <b>bromine</b> . It works by oxidizing waste product in the water such as <b>bromamines</b> and <b>chloramines</b> and causing them to burn off.
<b>Oxidizer</b>	<b>Shocking the water</b> with an oxidizing chemical prevents the buildup of contaminants, maximizes <b>sanitizer</b> efficiency, minimizes combined <b>chlorine</b> and improves water clarity.
<b>Ozone</b>	Ozone is a powerful oxidizing agent which is produced in nature and artificially. Ozone forms no by-products of <b>chloramines</b> (ozone actually oxidizes chloramines) and will not alter the water's <b>pH</b> .
<b>pH</b>	The pH level is the measure of the balance between acidity and alkalinity. Low pH causes the water to be too acid, which will cause <b>corrosion</b> , whereas high pH causes the water to be too alkaline, which will cause <b>scaling</b>
<b>ppm</b>	The abbreviation of "parts per million", the standard measurement of chemical concentration in water. Identical to mg/l (milligrams per liter).
<b>Sanitizer</b>	Sanitizer is a chemical added to the water to kill bacteria and viruses and keep the water clean. The two sanitizers we recommend are <b>chlorine</b> and <b>bromine</b>

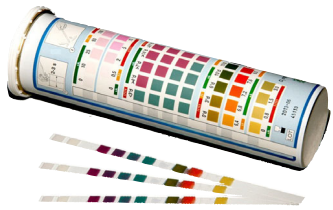


<b>Scale</b>	Rough calcium-bearing deposits that can coat spa surfaces, heaters, plumbing lines and clog filters. Generally, scaling is caused by mineral content combined with high <b>pH</b> . Additionally, scale forms more readily at higher water temperatures.
<b>Shock</b>	Also called shocking the water, shock treatment, or superchlorination. Shocking the water is adding significant doses of <b>dichlor</b> or <b>MPS</b> to <b>oxidize</b> non-filterable organic waste and to remove <b>chloramines</b> and <b>bromamines</b> . Shock treatment breaks down organic waste contaminants which cause odor and cloudy water.
<b>Total Alkalinity</b>	Abbreviated as TA. Total alkalinity is the measure of the total levels of carbonates, bicarbonates, hydroxides, and other alkaline substances in the water. TA is important for <b>pH</b> control. If the TA is too low, the <b>pH</b> will fluctuate out of control, and if it is too high, the <b>pH</b> becomes difficult to stabilize
<b>Trichlor</b>	Used as a pool <b>sanitizer</b> . NEVER use trichlor in a spa. Trichlor is extremely acidic and will lower the <b>pH</b> , causing corrosion to equipment. Using trichlor will void your warranty.

## Water Testing Methods

There are two testing methods to choose from:

Test strips are a convenient testing method commonly used by spa owners.



The reagent test kit is a method which provides a high level of accuracy but is more expensive and more difficult to use.



## Adding Chemicals to the Spa Water

**IMPORTANT:** All spa water chemicals, including MPS (shock), chlorine, granulated pH increaser or decreaser, granulated total alkalinity increaser, calcium hardness increaser, liquid stain and scale inhibitor, and liquid de-foamer must always be added directly into or in front of the filter compartment while a jet pump is running, and it must run for a minimum of ten minutes.

1. Fold back the cover.
2. Press the Jets or Jets 1 button.
3. Carefully measure the recommended amount of chemical and slowly pour it into the filter area. Use care not to splash chemicals on your hands, in your eyes, on the spa surface, or on the siding.
4. Close the spa cover.

**Warning:** High sanitizer levels can cause discomfort to the user's eyes, lungs and skin. Always allow the sanitizer level to fall to the recommended range before using the spa.

**IMPORTANT NOTE REGARDING SHOCK TREATMENT:** After administering shock to your spa, leave the cover open for a minimum of 20 minutes to allow the oxidizer gas to vent. A high concentration of trapped oxidizer gas which may exist as a result of the shock treatment (not daily sanitation) may eventually cause discoloration or vinyl degradation to the bottom of the cover. This type of damage is considered chemical abuse and is not covered under the terms of the limited warranty.

# Balancing the Water Chemistry Levels

Maintaining spa water chemistry can be tricky, especially since there are many methods of keeping your water clear and clean

**NOTE: We do not recommend any brand of chemical.**

**See a spa dealer for guidance and recommendations on spa chemicals and supplies. Various chemicals often sold under brand names, but a spa dealer can advise you on generic chemicals that are often much less costly than proprietary brands.**

## Balancing the Total Alkalinity (TA) >>

Total Alkalinity is a measure of the total levels of carbonates, bicarbonates, hydroxides, and other alkaline substances in the water. TA is referred to as the water's "pH buffer". In other words, it's a measure of the ability of the water to resist changes in pH level.

If the TA is too low, the pH level will fluctuate widely from high to low. Fluctuations in pH can cause corrosion or scaling of the spa components. Low TA can be corrected by adding sodium carbonate (pH/Alkalinity Up).

If the Total Alkalinity is too high, the pH level will tend to be high and may be difficult to bring down. It can be lowered by using sodium bi-sulfate (pH/Alkalinity Down).

Once the TA is balanced, it normally remains stable, although the addition of more water with a high or low alkalinity will raise or lower the TA reading of the water.

When the Total Alkalinity is within the recommended range, proceed to the next step.

TA balance	TA too high pH will be too high and may be difficult to stabilize pH	180 160 140	↓ Add an alkalinity decreaser
		120 100 80	Ideal TA balance
	TA too low pH will fluctuate wildly	60 40 20	↑ Add an alkalinity increaser

## Balancing the Calcium Hardness (CH) >>

Calcium Hardness is a measure of the total amount of dissolved calcium in the water. Calcium helps control the corrosive nature of the spa's water. That's why calcium-low water (commonly known as "soft" water) is not recommended. It is very corrosive to the equipment, and can cause staining of the spa shell.

If the CH is too high (commonly known as "hard water"), formation of scale on the spa's shell surface and equipment can result. You can use a generic calcium remover to remove hardness from water. CH can also be decreased by dilution – a mixture of 75% hard and 25% soft water will usually yield a reading within the correct range. If soft water is not available or practical for you, a stain and scale inhibitor should be added to the spa water, according to label instructions.

If the CH is too low add CH Increaser.

Once the CH is balanced, it normally remains stable, although the addition of more water with a high or low calcium content will raise or lower the CH reading of the water.

When the CH is within the recommended range, proceed to the next step.

CH balance	CH too high Causes scale to deposit on spa and equipment	275 250 225	↓ Dilute the spa with soft water
		200 175 150	Ideal CH balance
	CH too low Causes equipment corrosion	125 100 75	↑ Add a calcium hardness increaser

## Balancing the pH

The pH level is the measure of acidity and alkalinity. Values above 7.8 are alkaline; those below 7.2 are acidic. Maintaining the proper pH level is extremely important for optimizing the effectiveness of the sanitizer, maintaining water that is comfortable for the user, and preventing equipment deterioration.

If the spa water's pH level is too low, the following may result:

- The sanitizer will dissipate rapidly.
- The water may become irritating to spa users.
- The spa's equipment may corrode.

If the pH is too low, it can be increased by adding sodium hydrogen carbonate (pH/Alkalinity Up) to the spa water.

If the pH level is too high, the following may result:

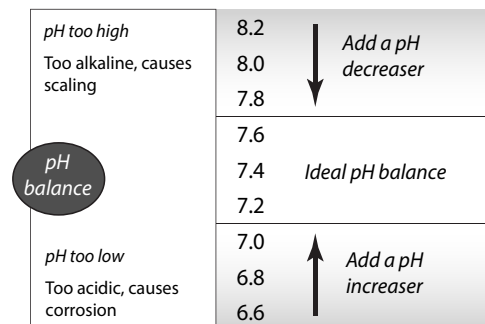
- The sanitizer is less effective.
- Scale will form on the spa shell surface and the equipment.
- The water may become cloudy.
- The filter cartridge pores may become obstructed.

If the pH is too high, it can be decreased by adding sodium bi-sulfate (pH/Alkalinity Down) to the spa water.

**NOTE: After adding sodium hydrogen carbonate or sodium bi-sulfate, wait two hours before testing the water for pH. Measurements taken too soon may not be accurate.**

It is important to check the pH on a regular (weekly) basis. The pH will be affected by the bather load, the addition of new water, the addition of various chemicals, and the type of sanitizer used.

When the pH is within the recommended range, proceed to sanitation.



## 4.5 Sanitation and Shock

Sanitizers kill bacteria and other organic waste by breaking them down to non-harmful levels which 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

**NOTE: 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

Whenever you test your chemical levels, your test strip will likely have a test for chlorine or bromine. Make sure your sanitizer falls within the range shown on the next page.

Testing For:	Ideal Range (ppm)	
	Minimum	Maximum
<b>Chlorine Level</b>		
Without ozonator	3.0	5.0
With ozonator	2.0	4.0
<b>Bromine Level</b>		
Without ozonator	6.7	11.0
With ozonator	5.7	10.0

## Starting and Maintaining Sanitizer levels >>

Sanitizing your spa with chlorine or bromine is very similar. Each sanitizer has its advantages and disadvantages.

**Bromine:** Whereas chlorine can sometimes cause offensive odors and skin irritation, bromine is less likely to do so. Additionally, unlike chlorine, when bromine combines with bather waste and other contaminants in the water, it remains a very effective sanitizer. Bromine is also far less pH-dependent than chlorine. **Always remember that bromine by itself is not a sanitizer, and it needs to be activated by shock in order to be effective.**

**Chlorine:** The most commonly recognized sanitizer is chlorine. However, the effectiveness of chlorine depends heavily on the pH level of the spa water. In order to get the most effective and economical benefit of chlorine, you must maintain a consistent pH level of between 7.2 to 7.6. A disadvantage of using chlorine is that when chlorine combines with bather waste and other contaminants in the water, not only does it lose its sanitizing ability, it can cause odors and irritate eyes and skin.

After you choose a sanitizer, you will need to establish a baseline and maintain it regularly.

Starting with fresh water:

1. Establish a baseline by adding either granulated chlorine or bromine.
  - Use half an ounce of chlorine for every 500 gallons of water.
  - Use half an ounce of bromine for every 100 gallons of water.
2. Run the jets for 10 minutes.
3. Test the water. Make sure the pH, TA, and CH levels all fall within the ranges shown on the previous page. Make adjustments where they are needed.
4. At this point, if you use bromine, it is not yet activated and it will not sanitize the water. You need to shock-oxidize the spa water. Depending on the size of your spa, add one to two ounces of shock. You can use any kind of shock you want.
5. Test the water again. When the water is balanced, your spa is ready to use.

**Note: If you choose to use bromine, we do not recommend using a floater. You have more control over the bromine level by adding bromine as needed**

## Cleaning the Filter

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 at least once a month, possibly every two weeks depending on how frequently you use your spa, and replace it once a year or as necessary.

### 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 8oz. 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 over-tighten.

## CalSpas UV Filtration System

The UV water sanitizer is an optional water purification system installed at the factory. It eradicates germs in the water that are resistant to chlorine-based chemicals using high intensity UV light. Although the water sanitizer works automatically with your spa, you will still need to test for chlorine or bromine and replenish it to return the sanitizer level to the baseline.

The Chill Spa contains a circulation pump, the UV water sanitizer will run with the circulation pump. The spa's control system is factory-programmed with 24/7 filtration.

The water sanitizer is virtually maintenance-free. Once a year the UV light needs to be replaced.

The water sanitizer is not a user-serviceable item and **maintenance must be performed by a spa technician**. Have your service technician consult the manufacturer.



## General Maintenance Schedule

<b>Prior to each use</b>	Test the spa water. Adjust chemical levels as necessary. Shock the water by adding 1/4 teaspoon of sodium dichlor per 150 gallons or 1 teaspoon of MPS per 250 gallons.
<b>After each use</b>	Add an ounce of oxidizer after heavy bather loads
<b>Once a week</b>	Check the filter well and inside the filter pipe for leaves and foreign matter. Test the spa water. Adjust chemical levels as necessary. Shock the water
<b>Every two to four weeks</b>	If your water source is high in calcium, add stain and scale preventer. Deep clean your spa's filter. How often you clean your filter depends on how much you use your spa. There is no harm in frequently cleaning your filter and will only help your spa's efficiency.
<b>Every two to four months</b>	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"> <li>• Clean and polish the acrylic surface</li> <li>• Clean and treat the spa cover and pillows</li> <li>• Deep clean the filter</li> <li>• Refill your spa</li> </ul>
<b>Each time you refill the spa</b>	Refill through the filter canister using a prefilter attached to the hose.

## Generic Names for Chemicals

Water Chemistry		
Common name	Usual chemical name	Common brand names
pH Up	sodium hydroxide	pH Increaser, pH Up, pH Plus, pH Booster
pH Down	sodium bisulfate sodium bicarbonate (baking soda) sodium carbonate	pH Decreaser, pH Down, pH Minus, pH Subtractor, Dry Acid
Alkalinity increaser	sodium carbonate sodium bicarbonate (baking soda)	Alkalinity Increaser, Alkaline Up
Alkalinity decreaser	sodium bisulfate	Alkalinity Decreaser, Alkaline Down
Calcium increaser	calcium chloride	Calcium Increaser, Calcium Up, Calcium Plus, Hardness Increaser
Calcium decreaser	N/A To decrease calcium hardness, drain several gallons of water from the spa and refill using a mixture of 75% hard water and 25% soft water, or use a stain and scale inhibitor.	

# Cover and Locking System

Important! Keep the Chill Spa covered when not in use!

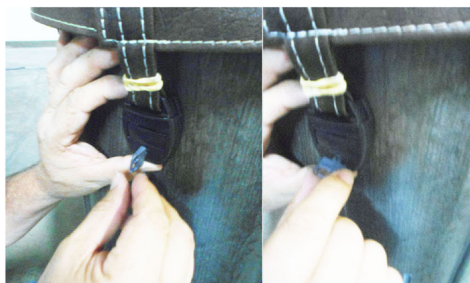
- Covered spas will use less electricity in maintaining your set temperature.
- Covering your spa will protect your spa's finish from the sun's ultraviolet rays.
- You are required to keep the spa covered to maintain warranty coverage.
- Covering your spa helps prevent children from drowning in the spa.

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.



## IMPORTANT! LOCKING HARDWARE ENCLOSED Parts Installation Instructions:

- 1.- Place cover on spa. Be sure it is correctly positioned.
- 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-downs straps.
- 3.- With the straps pulled taut (not overly tight) mark the location for screw placement.
- 4.- Attach hardware with the screws provided.
- 5.- Keep cover fastened down at all times when not in use. Locking hardware may be locked with a key (provided).



**UNLOCKED  
POSITION**

**LOCKED  
POSITION**



**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

# Vacation Care

You can leave your Chill 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 60-70 F
2. Adjust the pH.
3. Shock the water (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 Chill 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 Chill 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 2.0

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.

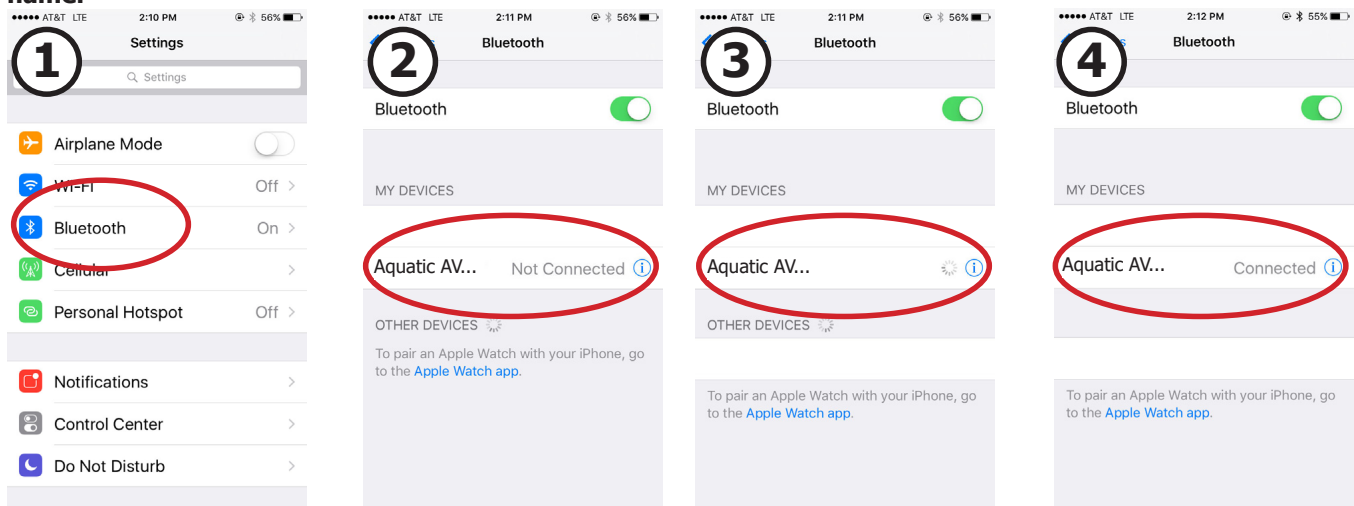
Before you can use the sound system, you need to pair the Bluetooth module with your device. The Bluetooth module is installed within the spa cabinet. Everything can be done with your device. The example shown below is from an iPhone device. Your device may appear differently. Before you begin, make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

1. Select Bluetooth from your device's option list.
2. Select **AQUATIC AV...** 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 **AQUATIC AV...** 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. **The sound system can also appear as SWA8-6BT, its factory default name.**



## 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.



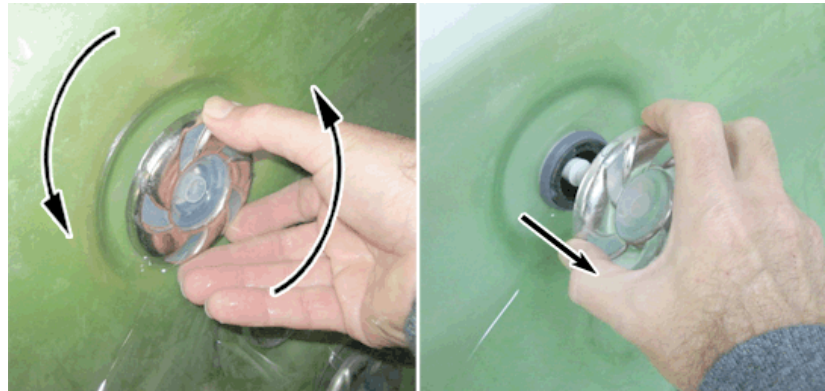
## Jet Removal and Replacement

Jets can be easily removed for cleaning.

### Screw-in jet removal

Grasp the outer rim of the jet and turn it counter-clockwise. The jet will unscrew from the fitting until it is free.

To replace the jet, place it in the fitting and turn it clockwise until it is snug in place and it can be rotated freely about half a turn. Do not overtighten the jet.



### Snap-in SQR jet removal

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 any jet, place it in the fitting and turn it clockwise until it snaps in and can be rotated freely about half a turn. Do not overtighten the jet.





## Winterizing (Cold Climate Draining)

In many areas in the country, during the winter ambient temperatures can fall below 32°F (0°C) we recommend that you always have your spa full of water and running at a higher than normal Chill Spa temperature (set chiller temp to 60°F or higher). In setting the chiller at a higher temperature, the water movement and heat generated from the circulation pump will prevent the water inside of the spa from freezing. Keep the lid of your chill spa closed during this climate.

**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.
6. Disconnect the unions from both sides of the pump.
7. Blow any remaining water out of the jets and equipment area with the wet/dry vacuum.
8. 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.
9. Cover your spa with a good spa cover and an all-weather tarp to ensure that neither rain nor snow enters the spa.

## Do's and Dont's of Spa Water Care

- DO add all chemicals slowly into or in front of the filter compartment with the jet pump operating for ten minutes.
- DO use special care if using baking soda to clean either the interior or exterior plastic surfaces.
- DO use only a granular form of bromine sanitizer.
- DON'T use swimming pool (muriatic) acid to lower pH.
- DON'T splash pH increaser additives on the siding.
- DON'T use compressed sanitizers.  
The use of bromine sticks or tablets in floaters, which may become trapped in a lounge or cooling seat (or sink to the spa floor), have been shown to cause discoloration of or surface distress to a spa's shell.
- DON'T use a floater type sanitization system as a low or no maintenance solution to your spa maintenance program. Floating dispensers can become trapped in one area and cause an over-sanitization (or chemical burn) of that particular area.  
If the dispenser setting is too high, the high concentration can discolor the spa shell and damage the underside of the cover.

Automatic floating dispensers have a tendency to either over-brominate or under-brominate as the rate of erosion varies greatly. Damage to the spa and cover can occur very quickly.

- DON'T use a sanitizer which is not designed for spas.
- DON'T use household bleach (liquid sodium hypochlorite).
- DON'T broadcast or sprinkle the chemicals onto the water surface. This method may cause chemically-induced spa surface blistering (chemical abuse).

## Preventing Freeze Damage

**Winter Weather Care:** The chill spa is designed to operate year round, the insulated chill spa is able to resist changes in ambient temperature in most climates. As long as the unit is running during the cold months of the year the spas internal pump and heater will maintain a steady temperature. To ensure the chill spa is prepared for a period of nonuse, first rinse your filter with running water or use a filter cleaner if needed, reinstall the filter, sanitize and balance your spa water, and lastly secure the your spa cover over the chill spa to maintain spa temperature.

**Winter Weather Care:** First, rinse your filter with running water, reinstall filter, sanitize and balance your spa water, and lastly secure the your spa cover over the chill spa to maintain spa temperatures. Raise the temperature of your chill spa to 50F if not in use. If you prefer, you can keep the spa operating at 39F as the pumps will maintain flow in the plumbing system, preventing water from freezing inside of the cooling system and hoses.

**Long Term Storage:** If the spa needs to be stored away for an extended period of time during the winter, we do not recommend "Winterizing" your chill spa as damage resulting from winterization is not covered under warranty.

For further instruction on the typical "winterization" method you may reference page 31.

**Lowering Compressor Activation:** to prevent operation of the chiller during the winter or an extended period of time without use, you can raise your temperature, we would recommend to keep it around the 40-50F range to allow a faster cool down once you choose to use the chill spa again.



# Draining Your Chill Spa

Your Chill Spa should be drained based on usage, a good rule of thumb is to drained and refilled when the spa water is cloudy or emitting an odor, even with proper chemical balancing you should drain the spa water after three to six months. **Before draining, power down the unit and remove the spa filter.**

## 1. Locate your drain.

### *For spas with cabinet-mounted 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.

### *For spas with cabinet-mounted drain*



## 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.



## Troubleshooting & Q and A

**The Chill Spa has not gone down in temperture in over an hour:** The Chill Spa's cooling system may require additional programming. removal of the left side exhaust panel will be necessary to confirm the cooler is in the correct low temperture range. The use of a philips screwdriver or electric drill is needed.

- First set the chill spa to 39F, next remove the left exhaust side panel on the filter canister side.
- Remove the screws from the exhaust panel to access the water cooler.
- Press the "SET" button on the cooler, once the display lights up, use the down arrow to lower its maximum threshold to 39F
- Once the water cooler screen reads 39F press "SET" again. This gives permission to the watercooler to lower the water up to 39F. Close up the exhaust panel and close the insulated spa cover.

**My Chill Spas water is cloudy:** The chill spa is set to constantly filter, although the filter will absorb most of the contaminants this can occur once the water is saturated in contaminants or if the filter is dirty.

- First inspect the filter, and clean thoroughly with a spa filter cleaner. Following the instructions of the filter cleaning chemical as all procedures vary based on product used.
- Change the water inside of the Chill Spa and refill using tapwater filtered through a carbon spa prefilter. Follow your water treatment procedure using pages 14-19 as refrence. all water chemistry is unique, further guidance can be found through your dealer or local pool/spa supply store.

**Question:** When I open my spa, I smell chlorine. How do I get rid of this smell?

**Answer:** There are two types of chlorine in your spa. The first is the Free Available Chlorine, which is the chlorine available to sanitize your spa. This free Available Chlorine does not have an odor. The second is Chloramine, which is residue from chlorine already expended. Chloramines have a strong chlorine odor. The smell from Chloramines can be eliminated by shocking the water. If you smell chlorine in the water, your spa is reminding you to add a shock treatment.

**Question:** Why can't I fill my spa with soft water?

**Answer:** Soft water is essentially the same as regular water, except that most or all of the calcium has been replaced by sodium. Soft water may be corrosive to the heater and other components. Replacement of spa components damaged by soft water is extremely expensive.

**Question:** I am trying to reduce the number of chemicals to which my family is exposed. Do I really need to use so many chemicals and in such large amounts?

**Answer:** While over-exposure to any chemical can be unhealthy, many low levels of chemicals are effective and beneficial. In the case of spa water, the chemicals we recommend are needed to protect the user from water-borne pathogens (disease-causing microbes) and to prevent corrosion of spa components.

**Question:** Why isn't water chemistry damage covered by the warranty?

**Answer:** The chemical levels and water quality of the water in the spa are under your direct control. With proper basic care, the spa will provide many years of hot water relaxation. If you are unsure about any chemical or its usage in the spa, contact your spa dealer.

# LIMITED WARRANTY

This Limited Warranty is extended to the original purchaser of the spa produced by Lloyd's Material Supply company, Inc. Which Manufactures the Cal Spas brand portable spa manufactured after January 1st, 2025 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.

## Chill Spas

<b>Structural</b>	Warrantied against spa shell collapse, leaks caused by the shell, or dangers of structural integrity due to defects in the spa shell.	<b>10 Years</b>
<b>Shell Surface</b>	Warrantied against spontaneous blistering, cracking, or delaminating of the interior spa shell.	<b>7 Years</b>
<b>Equipment &amp; Controls</b>	Electrical Equipment- limited to spa pumps, standard heater, and control system/panels, are warrantied against malfunction due to defects in workmanship or materials.	<b>5 Years</b>
<b>Plumbing</b>	Warrantied against leaks/cracks due to defects in workmanship or materials	<b>5 Years</b>
<b>Spa Cabinet</b>	Warrantied against defects in workmanship or materials. Normal wear and weathering of the finish will occur naturally over time and are not defects.	<b>5 Years</b>
<b>Sanitation</b>	Salt cells & bromine generators are warrantied against defects in workmanship or materials, this includes sanitation control panels & electrical.	<b>1 Year</b>
<b>Ozone/UV</b>	Ozone Generators and UV treatment systems are warrantied against defects in workmanship and materials. (Excluding UV bulbs older than one year)	<b>2 Years</b>
<b>LED Lighting</b>	LED lights are warrantied against malfunction due to defects in workmanship and materials	<b>2 Years</b>
<b>Sound System</b>	The Freedom Sound System is warrantied against malfunction due to defects in workmanship and materials. This does not cover normal wear and tear.	<b>1 Year</b>
<b>Spa Cover</b>	The spa cover is warrantied against malfunction due to defects in workmanship and materials. This does not cover normal wear and tear.	<b>3 Years</b>

## Warranty for Other Components

The fuses, headrests, cal grip, labels, and filters are warrantied to be free of defects in workmanship and material at the time of delivery. All other factory-installed components not mentioned specifically, including, but not limited to the wood frame, jets, diverter valves, filter lids, and other mechanical components, are warrantied against malfunction due to defects in workmanship and material for two years from the original date of delivery. This warranty is void if the spa has endured neglect, chemical abuse, or use of unapproved chemicals or components.

## Structural

This limited warranty covers defects within the spas fiberglass structural shell. This includes sudden spa shell collapse, leaking through the shell, and separation between the spa shell and spa acrylic, caused by faulty bonding. This does not include separation due to micro-abrasions, pin holes in the shell, or warping/bubbling due to sun exposure. This limited warranty does not apply when abuse of the spa shell is evident. This includes but is not limited to, heavy impact craters, fractures on the spa surface due to poor spa care, sun exposure, or reckless use of the spa, and chemical abuse of the spa. This warranty does not cover damage caused by unlevelled ground. Spas must rest on level ground, ideally on a cement slab of 3-6" of thickness depending on the spa weight. Spas that are not placed on a leveled foundation are prone to cracks, delamination, and compromised structural rigidity of the spa. It is the responsibility of the spa owner to ensure that the spas foundation is leveled and inspected before placing the spa.

## Shell Surface

This limited warranty covers defects on the spas acrylic surface due to workmanship or materials. This covers wrinkles on the acrylic, blistering, peeling, delamination, or spontaneous cracking. This warranty does not cover shell damage caused by chemical abuse, improper water chemistry, excessive sun exposure, micro-abrasions, or damage caused by impacts or sharp objects. This warranty does not cover discoloration, or deterioration of the spa shell when exposed to improper chemistry levels, hard water, soft water, or chemical abuse.

## Equipment and Controls

This limited warranty covers malfunction of factory installed spa control systems, spa control panels, spa heater, and spa pumps due to defects in workmanship or materials. This covers sudden control box failure, malfunction of control panels or control boxes, malfunctioning heaters, and malfunctioning spa pumps. This warranty coverage is void if the electrical installation of the spa does not follow the outlined diagrams and specifications, mentioned in this manual. Failure to properly follow the specified GFCI requirements, wire type, wire thickness, compliance with NEC guidelines and local codes will void your warranty. This warranty does not cover acts of god or nature that can damage spa equipment, such examples are flooding, lighting strikes, wildfires, or other scenarios out of the control of the manufacturer.

## Plumbing

This limited warranty covers leaking of water through plumbing joints, tees, hoses, water features, and jet body grommets due to defects in workmanship and materials. This warranty does not cover damage caused by chemical abuse, improper water chemistry, or use of unapproved chemicals/sanitizers. This warranty does not cover freeze damage caused by frozen water expanding within the plumbing of the spa. The winterization procedure within this manual does not guarantee freeze damage prevention. The best method to ensure the spa does not encounter frozen water within the plumbing is to have the spa operating during the colder months of the year. This warranty does not cover freeze damage or damage to the plumbing due to acts of god and/or nature including but not limited to snowstorms, blizzards, power outages, etc. This warranty does not cover oxidation or warping of jets due to chemical abuse or exposing an empty spa to the elements with no secured cover.

## Spa Cabinet

This limited warranty covers defects in workmanship and materials of spa cabinet panels. This warranty applies for warping of spa panels, cracking of corners and panels without clear impact markers, and buckling of spa panels. This warranty does not cover natural wear and tear, which occurs with plastics exposed to the sun. This warranty does not cover panel damage from excessive heat sources, calcium/water-spot build up from sprinklers or irrigation systems, or impact damage. Each claim for spa cabinets are evaluated on a case by case basis, it is the responsibility of the spa owner to acknowledge environmental factors, that can affect the maintenance of the spas cabinet panels. Using plastic spa protectants can prolong the life of your spa panels is highly recommended in high UV index climates. Deterioration/fading of color, natural wear and tear of plastic materials is expected over time, and is not considered a defect in materials. This coverage does not extend nor cover acts of god or nature that can damage spa panels, such examples are flooding, high winds, wildfires, tornadoes or other scenarios out of the control of the manufacturer

## Sanitation

This limited warranty covers malfunctions of factory installed Salt Systems and Bromine generators, which are warranted against malfunction due to defects in workmanship or materials. This includes the salt cell, sanitizer control panels, bromine generator, and power supplies for Cal Salt systems. This warranty does not cover negligent operation of sanitizer systems, chemical abuse, damage caused by improper water chemistry, or disregard of specified data points for safe operation; including but not limited to, incorrect ppm levels of salts, excess operating hours of the Cal Salt cell, or improper maintenance of sanitation components. The spa filter is not a part of this warranty, and is considered a disposable item subject to regular wear and tear.

## Ozone/UV Systems

This limited warranty covers malfunctions of factory installed Ozone and/or UV water treatment systems. This includes leaks through welded components, water back-flow into the ozone generator, and short circuited Ozone or UV systems. This warranty does not cover UV bulbs that are older than 10 months, the UV light must be replaced every 10-12 months as this is normal wear and tear of component. This warranty is voided if alterations/modifications of these systems are evident, or if the spa electrical connections were not installed in accordance to defined specifications within this manual, evidence of chemical abuse, and acts of god and/or nature.

## Sound System

This limited warranty covers malfunctions of factory installed sound system components. This includes the sub-woofer/amplifier, speakers, speaker grills, power supply, or Bluetooth antenna. Natural wear and tear of speaker cones is not covered by this warranty, nor are deterioration of speakers exposed to chemical abuse.

## Spa Cover

The spa cover is warranted against defects of materials and workmanship for the defined period mentioned in this warranty. Exposure to UV rays on untreated or poorly maintained spa covers are not covered by this warranty. It is the responsibility of the spa owner to use spa UV plastic protectants on their spa covers, especially in high UV index climates. Exposure to UV light without proper treatment leads to problems such as cracking/peeling of vinyl covers, and sudden fading of color. This warranty does not warrant against damage caused by chemical abuse, nor yellowing or oxidation of the spa cover when exposed to excess sanitizer. If a defect is found within the first 90 days of ownership, your Cal Spas dealer and Cal Spas can directly assist the spa owner filing a claim and replacing the spa cover if deemed necessary. Spa owners with spa covers past the 90 day period that are discovered to have a defect, can contact your Cal Spa dealer to begin the process of filing a claim. When filing a claim of a spa cover than is older than 90 days, this warranty will cover the material cost of issuing a new vinyl sleeve for the cover, and/or replacement foam for your cover. Shipping/freight costs are not covered in this warranty, and are the sole responsibility of the spa owner. Images of the cover from all sides including the top and underside are necessary to file a claim.

## Genuine Cal Spas Parts & Accessories

This Limited Warranty is void if Lloyd's Material Supply Company, Inc., Manufacturer of the Cal Spas brand 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, replacement 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. Only parts/components approved by Cal Spas should used when performing a warranty repair. If parts are required to complete a warranty claim, the cost of the parts are covered by this warranty. Approved labor and genuine part costs are covered when a warranty claim is approved, the cost of shipping parts/components is not covered by this warranty, and its the sole responsibility of the spa owner.



## 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 Spas 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. Parts and components can be shipped to the servicing dealer or to the customer. The servicing dealer may charge the owner a travel/service fee as well as a diagnose fee if the cause of the issue is unknown, these charges are not covered under warranty. Your spa dealer nor Cal Spas is responsible for damages or costs to rebuild decks, cement structures, or other decor/structures placed against the sides of the spa. Minimum clearance of 3 feet on each side is mandatory for all spas. In the event that the spa is removed to a repair facility for repair and reinstalled, the cost of removal and re-installation will be your responsibility as the spa owner. If Lloyd's Material Supply Company Inc., The manufacture of the Cal Spa brand determines that repair of the covered defect is not feasible, it reserves the right to provide a replacement spa of equal or lesser 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 spa will be the responsibility of 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 of the spa, relocation, or installation of any component other than by the manufacture. If the desired spa is more expensive than what the spa owner originally financed or paid for, the price difference shall be paid by the spa owner. Additional costs can be incurred if the use of heavy machinery such as a crane, bulldozer, etc, is considered necessary to access, remove, or perform a repair/correction to the affected spa.

## 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; or if the failure is caused by accident, acts of God or other causes beyond the control of the Manufacturer including acts of nature (damage caused by animals, rodents, or other pests) are not covered by this warranty. Additionally; the limited warranty is void for spas that were subject to neglect, misuse and abuse including 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, chemical balancing, the use of abrasives or improper cleaners, and the use of 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 Lloyd's Material Supply Company Inc, or a designated Cal Spas 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 manufacture to be non-repairable will be replaced on a prorated basis with the same or a comparable unit. The owner will be charged 1% 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 6 months of ownership. [example]: Product failure is determined during seven months of ownership. Owner will be responsible to pay for 7% of the products current cost. As the spa owner you have the choice to replace the spa, with a spa equal to or less than the value of the originally financed/purchased spa; if the desired replacement spa is of a higher cost than the originally financed/purchased spa, the spa owner will pay the difference of price, including any percent value lost over time through the spas proration period. The cost of shipping a new spa and its installation is not covered by this warranty as stated in the "Performance" section of this warranty.



## Limitations

The manufacture 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 manufacture or its designated representative using authorized Cal Spas 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 manufacture 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. Extended warranties or care plans offered to you by a spa dealer is an agreement strictly between the spa owner and the spa dealer, out of the control of the manufacture of Cal Spas.

## Disclaimers

Lloyd's Material Supply Company, Inc., Manufacture of Cal Spas brand 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 produce even if the manufacture was advised of the possibility of damage. The liability of the manufacture 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 manufacture 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 depending on consumer regulations. Some states do not allow limitations on how long an implied warranty lasts, so this time limitation may not apply to you.

## Chemical Abuse

Chemical abuse is defined as negligent/careless use of both recommended spa chemicals, and use of prohibited chemicals. When the shell is exposed to excessive chemicals, or improper chemical application; this can cause reactions on the shell that can cause pitting, cracks, bubbling, and other blemishes on the shell. Spa jets, pillows, and other components are designed to withstand sanitizer levels within the range mentioned in this manual. Excessive sanitizer use will cause oxidation of the interior of the spas metals and other components, which can cause rust/oxidation of jets, deterioration of spa pillows, speakers and plastics, and damage/oxidation of the spa cover. Components & materials damaged by chemical abuse are not covered under warranty. Depending on the extent of damage the entire spa warranty can be voided, as stated in the limited warranty.

## Additional Disclaimers

Spa owners who have purchased a Cal Spa, and the spas final resting place is not in the United States or Canada, Cal Spas will be able to send components and parts directly to the spa customer if the original Cal Spa dealer is not within range of the spa. It is the responsibility of the spa owner to find a experienced electrician, plumber, or technician to perform the necessary repairs. A preliminary over the phone technical meeting with a Cal Spas representative is necessary, to ensure the experienced laborer is familiar with the spas operation, and recommended repair methods. Labor costs of a repair in such circumstances must be first approved by a Cal Spas representative, before moving forward with any repairs covered in this warranty. It is advised to request a labor quote from said experienced laborer, and to send this quote to a Cal Spas representative. If all prerequisites are met and the repair is approved, Cal Spas will reimburse the cost of labor directly to the spa owner upon completion of repairs. Reimbursements of charged labor will be given as a written check to be delivered to the spa owners residence, with a varying estimated disbursement window.

For all repairs/warranty claims within the United States and Canada and other nations, may be required to send parts/components back to Cal Spas when deemed necessary. In some circumstance where shipping the component/part is necessary, Cal Spas will provide a shipping label to send the affected or requested components/parts. It is the responsibility of the spa owner to properly package and secure the package for shipping. In some circumstances only images and proof of purchase would be necessary to file a warranty claim, in such circumstances if a Cal Spas representative deems that the parts do not have to be returned, follow all local regulations and laws to properly dispose of said components.

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# Part Numbers

**2" Jet Insert:**  
PLUCS2441009S-CDCL

**2" Jet Body/Housing:**  
PLU21702560



**Filter Assembly With Weir:**  
FIL11700322



**Optional Item**

**Wifi Module:**  
ELE09000100



**Main LED Light:**  
LIT16100333



**15 Sqft Filter:**  
FIL11703155



**Calspas Carbon Fiber Finish Pillow:**  
ACC01401102



**Chill Spa Control Panel:**  
ELE-LX1015P (Controller)  
ELE-LX1005-OL (Overlay)



**Optional Item**

**UV Sanitation System:**  
LIT16000386



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# Cal Spas<sup>®</sup>

SINCE 1978

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1462 East Ninth Street  
Pomona, CA 91766

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