

CRYSTAL
COVE SPAS

2024



Chill Spa

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CRYSTAL COVE SPAS

Congratulations! You are now the owner of the next era of spa excellence with the Crystal Cove chill spa. Now you will experience true ice bath therapy benefits to help with work out recovery and general well being, from the comfort of your backyard. We at Crystal Cove focus on quality, design, and purpose in order to create a truly unique experience like no other.

Welcome to the Crystal Cove Family!

It is important to register your Crystal Cove spa as soon as possible. By taking just a few quick minutes to register can enjoy product alerts, more efficient support and quicker service.

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

Contact Information

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


www.heritagepoolsupplygroup.com


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 you 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 Chill Spa 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, for proper airflow allow up to 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 a 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 can hinder 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.

Note: The Crystal Cove Chill Spa can only cool down, not raise in temperature. It is only designed to stay cold and within its selected range.

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.

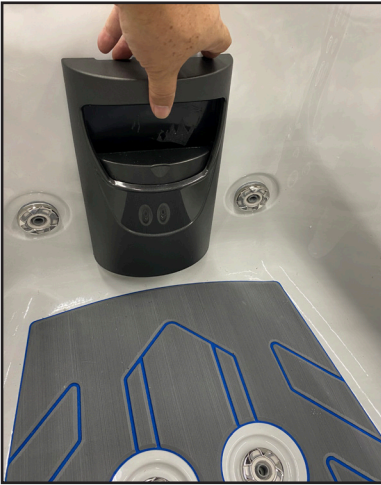
Allow for Service Access

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.

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 reinstallation.



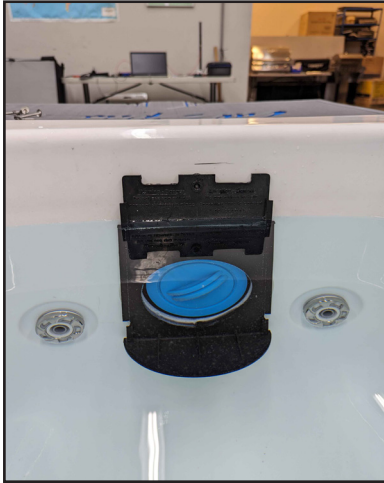
3. Filling the Chill Spa.

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 spa use.

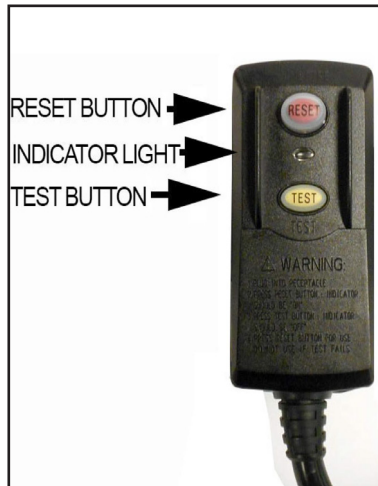
Chill Spa Quick Start Guide



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 OVERTORQUE/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.



LED Light Control Button:

The Chill Spa has an external LED button to activate and cycle through different light modes.

Press once to turn on repeatedly to cycle through all colors, and modes, then press one again to turn off.

This light button is located on the right hand side of the Chill Spa near the headrest.

Note: The Chill Spa has several paths for condensation to exit. A small pool of water forming at the base of the spa is considered normal. The amount of condensation varies based on the weather and humidity

InkBird Smart Control

The Chill Spa is designed to be a fully wireless experience. The spa can be controlled and monitored anywhere using Wifi or mobile data.

With the Ink-Bird app you can monitor and lower your Chill Spas temperature through the app.

QR Code Ink Bird Google Play.



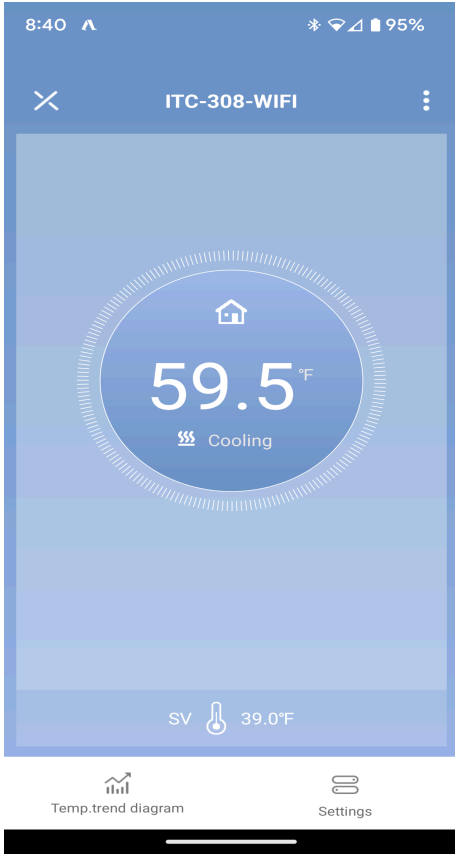
QR Code Ink Bird Apple App Store.



Download the app off of the App Store or the Google Play Store.

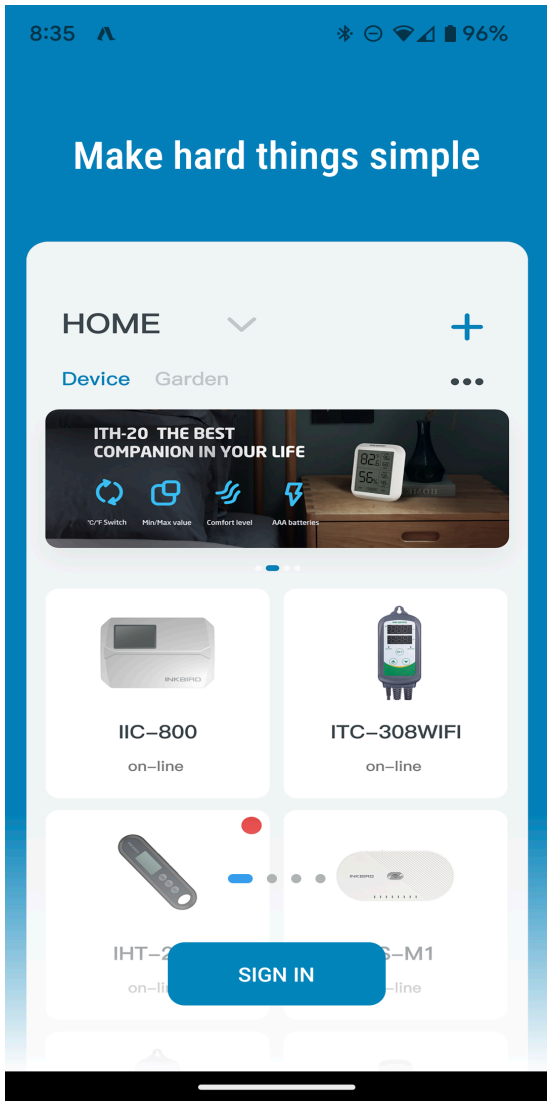
Insure that you are connected to your home Wifi network before opening the app for the first time.

To begin the process of pairing the Wifi control, ensure that the chill spa is powered on.



Note: The Chill Spa can only cool down water, not raise it's temperature. It is only designed to stay cold within its selected range.

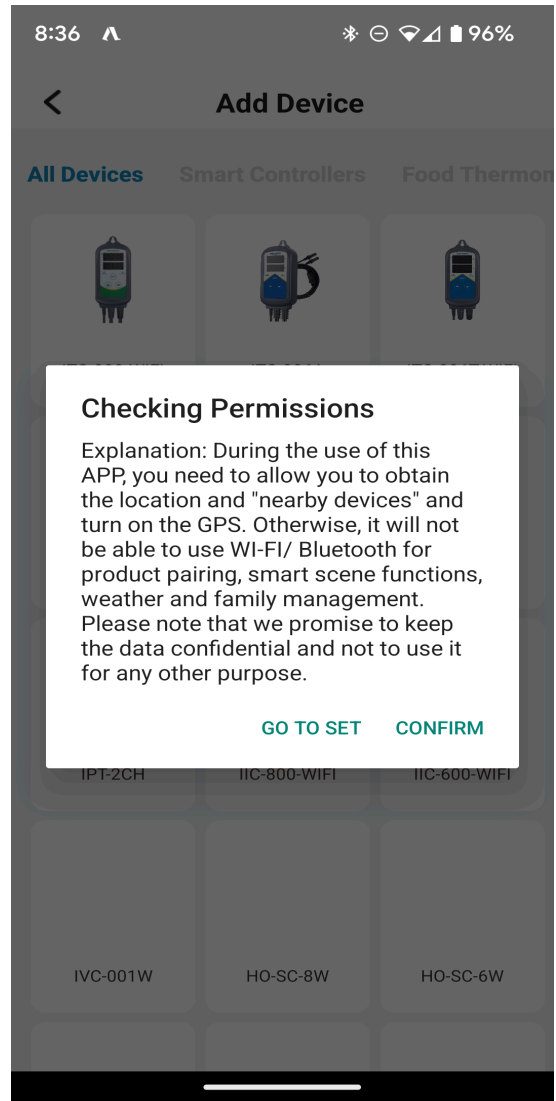
Wifi Control Initial Set Up



Once the app is launched you will be shown an example screen of the main page of the app.

Select "Sign In" as you will now make an account to control the device.

Depending on the device used you can create an account using your google information or using your current Apple ID for seamless registration.

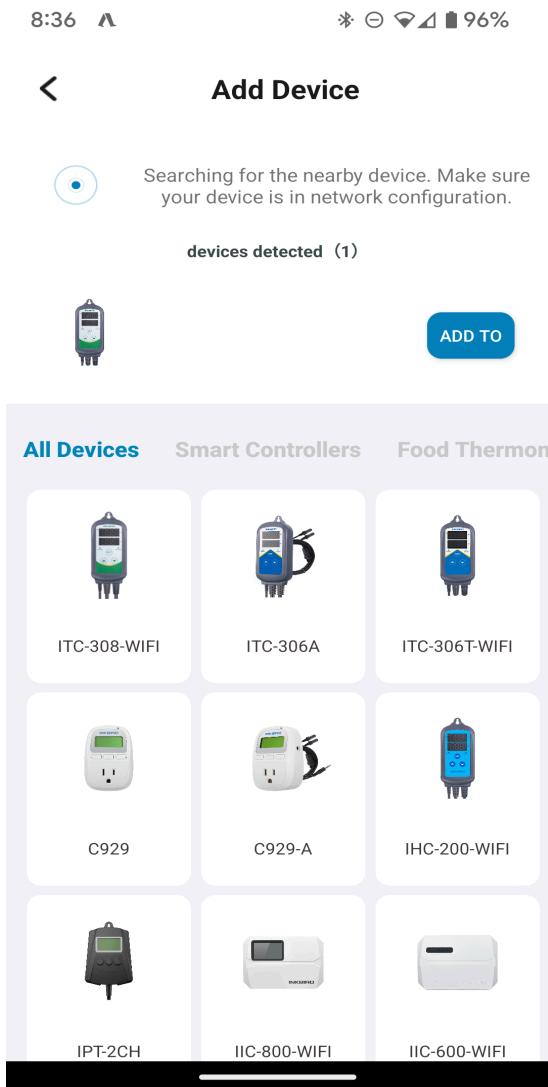


Once the app is launched you will be shown an example screen of the main page of the app.

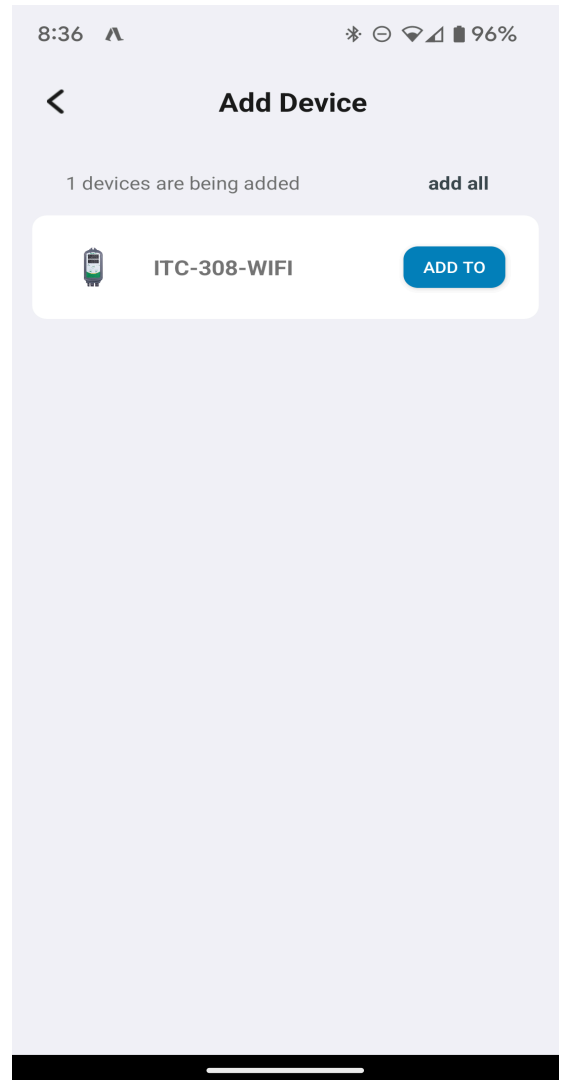
Select "Sign In" as you will now make an account to control the device.

Depending on the device used you can create an account using your google information or using your current Apple ID for seamless registration.

Wifi Control Initial Set Up



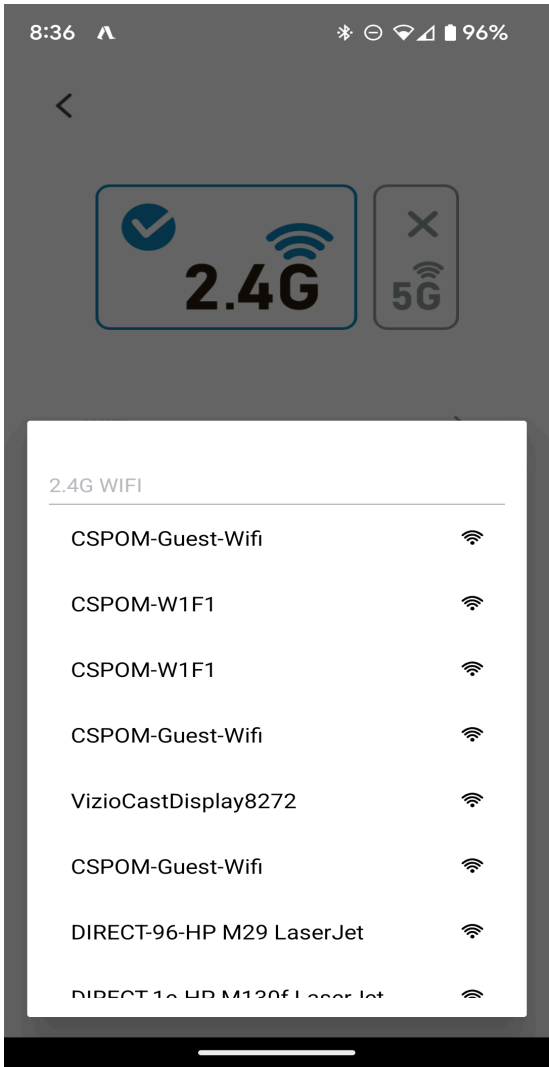
Selecting the “+” symbol on the main page. You can begin searching for new devices. Make sure that the chill spa is powered on and filled with water following the procedure mentioned on Pg 7



Once the device is discovered select “add to”. This will add it to your app controller.

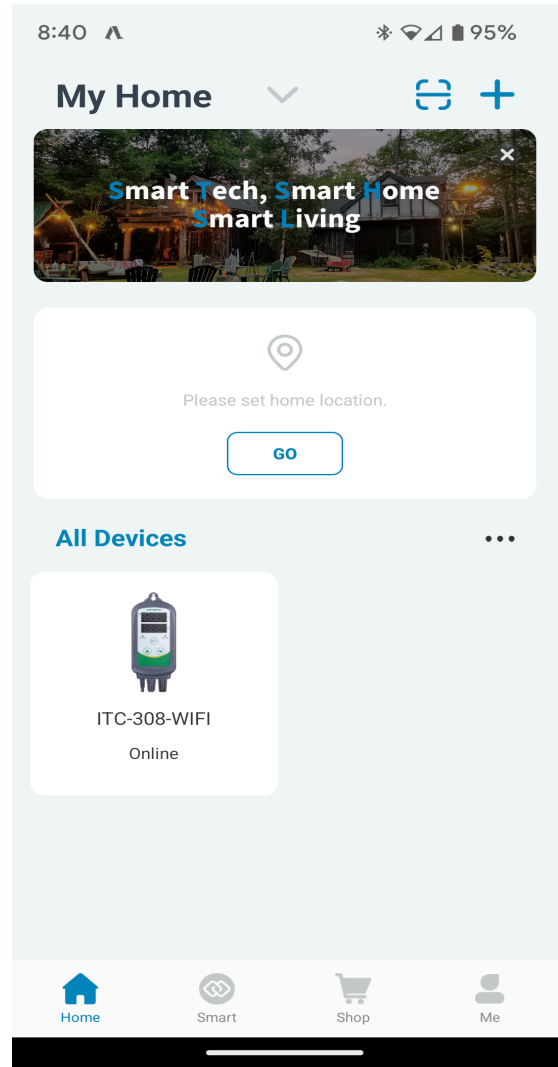
In the following screen you will be requested to select your main Wifi network and confirm the networks password.

Wifi Control Initial Set Up



Select the main wifi network used in the residence and enter the password of the network.

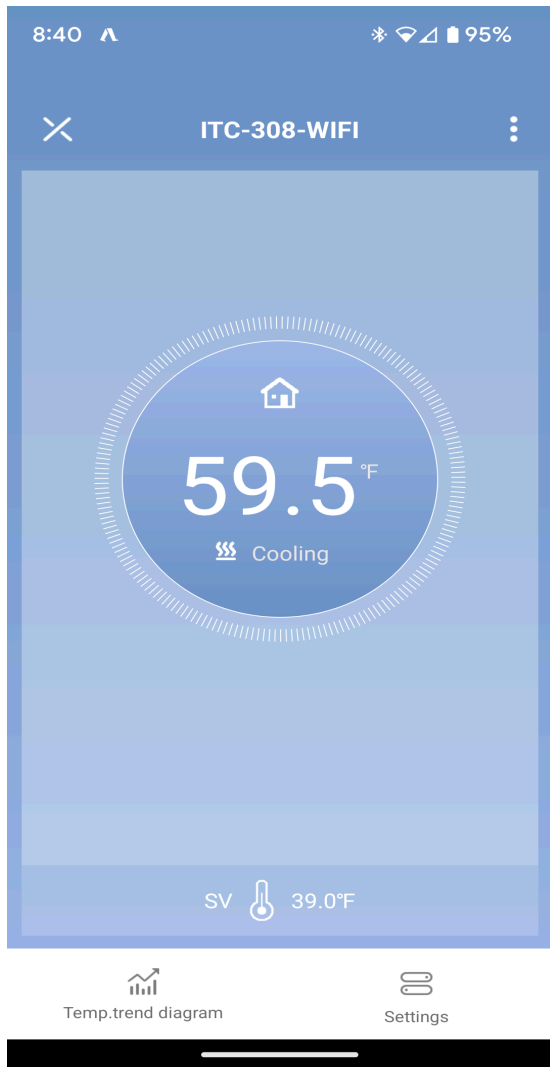
Note: The Wifi controller only functions on 2.4G signal, Most mesh routers will have initial discovery issues. Consult your ISP or vendor of your home router to determine if your mesh router can send both a 5g signal and a 2.4g signal.



Selecting the "+" symbol on the main page. You can begin searching for new devices. Make sure that the chill spa is powered on and filled with water following the procedure mentioned on Pg 7

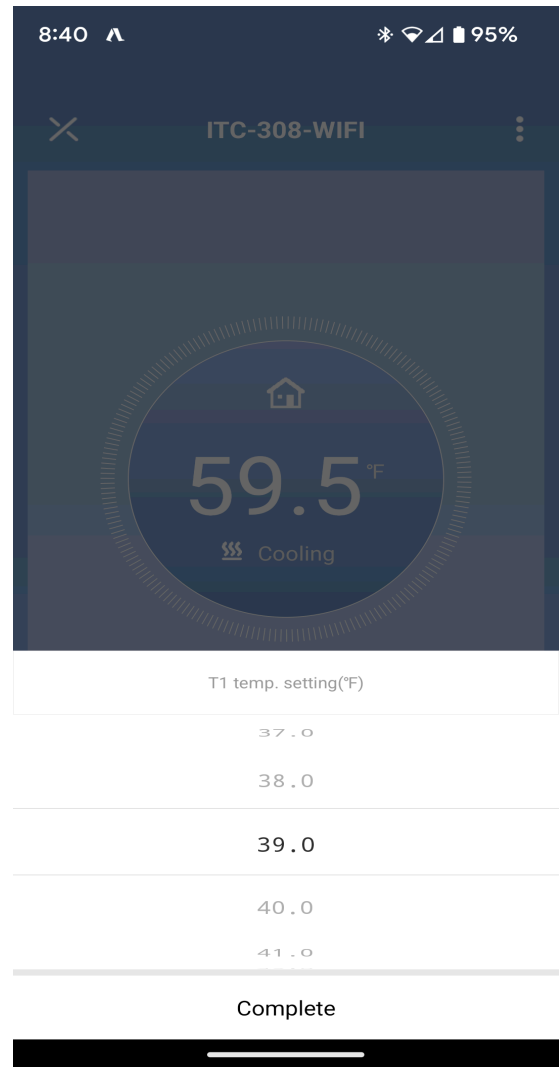
Once the device is found tap "add too" to add it to your app controller.

Set Preferred Cold Temperature



Once paired with the app you will be able to see the current set temperature of the Chill Spa.

Tapping the Highlighted section will bring up a temperature toggle and allow you to lower the temperature further to be ready for your next near ice cold water plunge.



Selecting the "+" symbol on the main page. You can begin searching for new devices. Make sure that the Chill Spa is powered on and filled with water following the procedure mentioned on Pg 7

Once the device is found tap "add too" to add it to your app controller.

Manual Temperature Selection



Remove the rear panel directly underneath the headrest area, you may use a #2 philips head screwdriver or a power drill to remove.



Once the unit is removed use the ink-bird temperature control unit and press and hold the set button



Select your lowest temperature, use the up or down arrows to adjust set point, the lowest the unit can support is 39F°. Once set press "set" to save the adjustment a HD will appear after a successful temperature adjustment.



Reinstall the rear panel. Starting from the upper center drill point.

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.

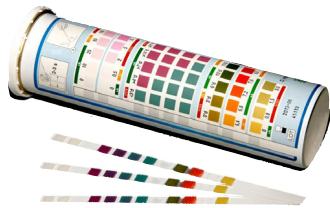
Bromine / Bromamines	<p><u>Bromine</u> is an efficient sanitizer chemical for spas. When used as a sanitizer, bromine forms compounds called bromamines. Bromine can be added to the spa or automatically generated.</p> <p><u>Bromamines</u> are compounds formed when bromine combines with nitrogen from body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

Scale	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 pH . Additionally, scale forms more readily at higher water temperatures.
Shock	Also called shocking the water, shock treatment, or superchlorination. Shocking the water is adding significant doses of dichlor or MPS to oxidize non-filterable organic waste and to remove chloramines and bromamines . Shock treatment breaks down organic waste contaminants which cause odor and cloudy water.
Total Alkalinity	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 pH control. If the TA is too low, the pH will fluctuate out of control, and if it is too high, the pH becomes difficult to stabilize
Trichlor	Used as a pool sanitizer . NEVER use trichlor in a spa. Trichlor is extremely acidic and will lower the pH , 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) >>

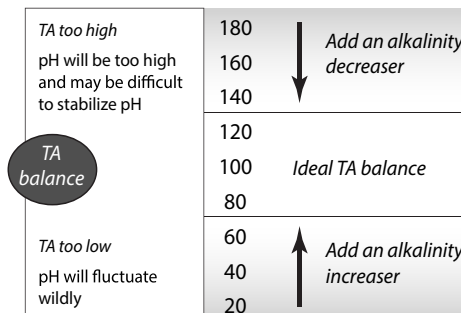
Total Alkalinity is a measure of the total levels of carbonates, bicarbonates, hydroxides, and other alkaline substances in the water. TA is referred to as the water's "pH buffer". In other words, it's a measure of the ability of the water to resist changes in pH level.

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.



Balancing the Calcium Hardness (CH) >>

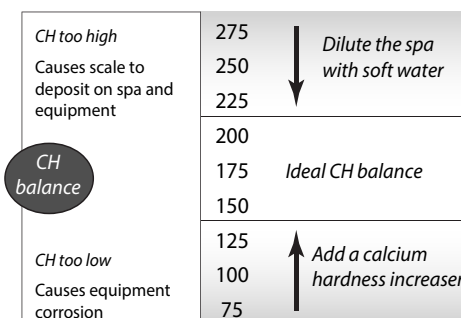
Calcium Hardness is a measure of the total amount of dissolved calcium in the water. Calcium helps control the corrosive nature of the spa's water. That's why calcium-low water (commonly known as "soft" water) is not recommended. It is very corrosive to the equipment, and can cause staining of the spa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



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.

<i>pH too high</i> Too alkaline, causes scaling	8.2	↓ Add a pH decreaser
	8.0	
	7.8	
<i>pH balance</i>	7.6	Ideal pH balance
	7.4	
	7.2	
<i>pH too low</i> Too acidic, causes corrosion	7.0	↑ Add a pH increaser
	6.8	
	6.6	

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

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.

UV Filtration System (optional)

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.

Balancing the Water Chemistry Levels

Prior to each use	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.
After each use	Add an ounce of oxidizer after heavy bather loads
Once a week	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 If your water source is high in calcium, add stain and scale preventer.
Every two to four weeks	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.
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 • Clean and treat the spa cover and pillows • Deep clean the filter • Refill your spa
Each time you refill the spa	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 Subtracter, 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.

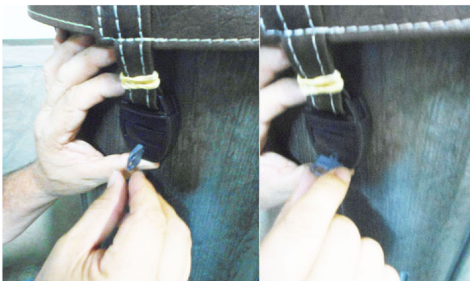
- Covering your spa helps prevent children from drowning in the spa.

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.

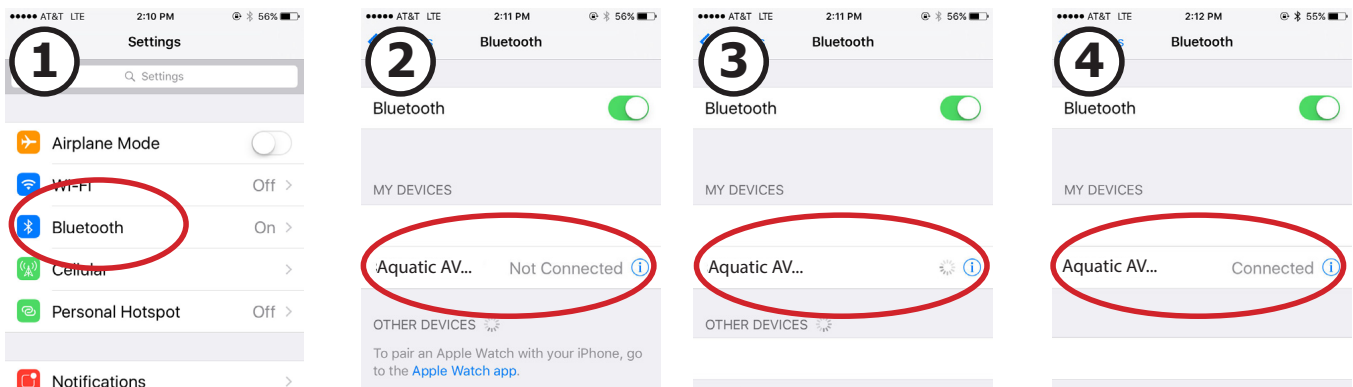
Sound System (optional)

The factory installed optional sound system contains a Bluetooth receiver that is able to play music or sound from any Bluetooth enabled device.

Before using the sound system, you need to pair the Bluetooth module with your device. The Bluetooth module is installed from factory within the spa cabinet. Everything can be done from 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 option list.
2. Select **Aquatic AV...** from the list of available devices to pair
3. Your device may ask for a pairing code, the system default code is "0000"
4. Allow your device to pair with the Bluetooth module.
5. When the devices have been connected, the device **Aquatic AV...** will be highlighted. Only one Bluetooth device can be paired to the sound system at a time.

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 system can also appear as SWA8-6BT as a 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.



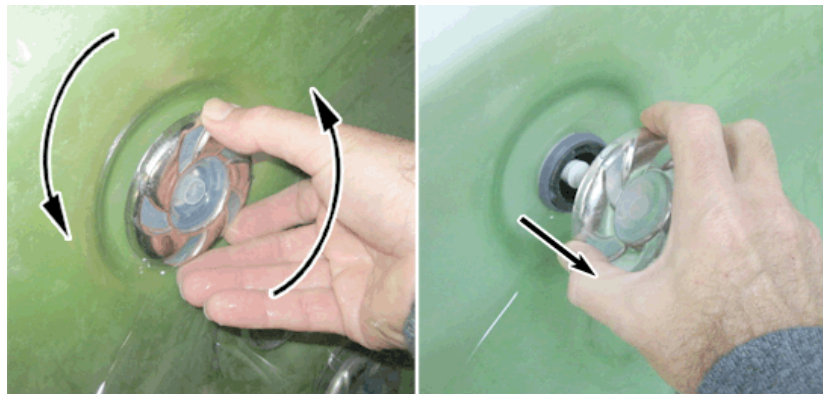
Jet Removal and Replacement

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 of the country, the ambient temperature drops below 32°F (0°C). We recommend that you always have your spa full of water and running at temperatures of 40-50°F (4.5-10°C), this can help prevent freeze damage.

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).

Draining Your Chill Spa

Your Chill Spa should be drained every three to six months for cleaning and maintenance and refilled with fresh tap water.

Before you begin, turn off power to the spa at the breaker and remove all filters.

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.



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 will maintain a steady temperature. To ensure the Chill Spas can maintain temperature 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.

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. The spa will maintain flow in the plumbing system preventing water from freezing inside of the cooling system.

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 26.

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

You can follow the procedure on page 14 if you choose to manually adjust the temperature, and press the up arrow instead and set within the recommended range.

If this is done we recommend making a note of this on the back of the user manual. You will need to adjust this again to your preferred temperature.

NOTE: Do not set temperature below 39F

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

Appendix

The Limited Warranty is extended to the original purchaser of a Crystal Cove Chill Spa, manufactured after January 1st 2024 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.

This warranty applies only to these spa lines:  **Chill Spa**

Shell Structural

Warranted against water loss due to defects in the spa shell.

2 Years

Shell Finish

Warranted against blistering, cracking, or delaminating of the interior surface of the spa shell.

2 Years

Equipment and Controls

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.

1 Year

Plumbing

Warranted against leaks due to defects in workmanship or materials.

1 Year

Cabinet - Synthetic or Fiberglass

Warranted against defects in workmanship or materials. Normal wear and weathering of the finish will occur naturally over time and are not defects.

1 Year

Warranties for Other Components

The Fuses, headrests, cabinet finish, and filters are warranted to be free of defects in workmanship and material at the time of delivery. All stereo-related components (Bluetooth receiver, speakers, power supply, 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 one year from the original date of delivery. The Chill Spa cover delivered with the spa is warranted for 90 days.

Genuine Parts & Accessories

This Limited Warranty is void if Crystal Cove, 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 Crystal Cove parts and accessories. This disclaimer includes, but is not limited to filters, UV bulbs, ozone systems, salt systems, repair parts and other accessories. Genuine 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 dealer or Crystal Cove 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 mentioned in this Limited Warranty. There will be no charge for parts or labor to repair the defect, although providing access to conduct the repair is the spa owners responsibility. Freight charges for replacement parts is the responsibility of the spa owner. The servicing dealer may charge the owner a travel/service fee and/or a diagnose fee, these fees may vary based on several factors, these fees are not covered under the Limited Warranty.

The costs for removal of the original spa, shipping costs from the factory for the replacement spa and delivery and installation if the replacement will be your responsibility as the spa owner. The replacement spa will carry the balance of the original spas warranty, not including spa covers. This warranty ends either by specified time frame, owner transfer, relocation, or installation of any component other than the manufacture

Warranty Limitations

This limited warranty is void if Crystal Cove 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 attempted by anyone other than a designated representative; the failure is cause by an accident, acts of God or other causes beyond the control of the manufacture including acts of nature (damage caused by animals, rodents, or any other pests) are not covered by this warranty. Neglect, misuse, and abuse include any installation, operation, or maintenance other than in accordance with the instructions contained within the owners 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. Chill Spa's warranty is void if used for commercial purposes. The Chill Spa owner accepts liability for repair work performed by anyone other than the manufacture or a designated Crystal Cove representative. This Limited warranty is void if damage occurs to the spa shell because of excessive heat build up due to failure to cover a spa that is empty of water while exposed to direct sunlight.

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 from 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

Crystal Cove and its manufacture disclaims all warranties, expressed or implied in fact or in law, the extent allowed by your State/Province law, including the warranty of merchantability and fitness for use, except as state specifically herein. All warranty service must be performed by Crystal Cove or a designated representative using authorized Crystal Cove parts. No agent, dealer, distributor, service company, or other party is authorized to change, modify, or extend the terms of the limited warranty in any manner whatsoever. The manufacture will not be responsible for any statement or representations made in any form that go beyond, are broader than, or are inconsistent with any authorized literature or specifications by Crystal Cove.

Disclaimers

The manufacture 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 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, 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. Some states do not allow limitation on how long an implied warranty lasts, so this limitation may not apply to you.

Part Numbers

2" Jet Insert:
PLUCS2441009S-CDCL

2" Jet Body/Housing:
PLU21702560



Filter Assembly With Weir:
FIL11700322



Optional Item

UV Sanitation System:
LIT16000386



Main LED Light:
LIT16100333

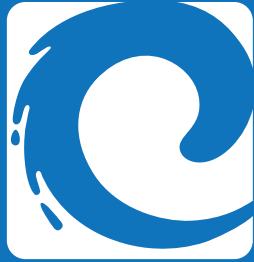


15 Sqft Filter:
FIL11703155

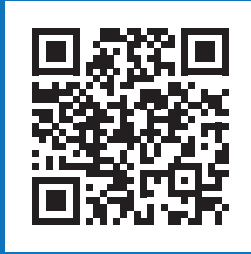


Black Finish Foam Pillow:
ACC01401101-1





**CRYSTAL
COVESPAS**



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