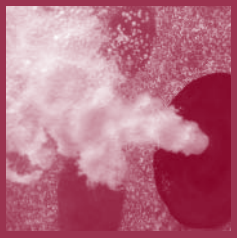





Owners Manual

North America

Arctic Spas®

engineered for the world's harshest climates®...
(wherever you happen to live)

Congratulations!

Your choice of an **Arctic Spa** indicates that you are devoted to excellence. At **Arctic Spas**® we believe a good foundation is required to build a superior product, both in design and philosophy. Canadian built with the finest materials and advanced technology to withstand even the harshest of weather conditions, **Arctic Spas**® are made to perform... wherever you happen to live. To safely and effectively use your spa, we recommend that you take the time to read this manual before you hook-up and operate the spa. This guide will acquaint you with the operating features, hook-up procedures, and the maintenance and safety procedures, ensuring an enjoyable experience right from the start.

If you require additional information, please call your local **Arctic Spas**® dealer or check our website at www.arcticspas.com.

IMPORTANT!

In most cities and counties, permits will be required for the installation of electrical circuits or the construction of exterior surfaces (decks and gazebos). In addition, some communities have adopted residential barrier codes which may require fencing and/or self-closing gates on the property to prevent unsupervised access to a pool or (spa) by children under 5 years of age. Your Arctic Spa is equipped with a locking cover that meets the ASTM F1346-91 Standard for Safety Covers and as a result, is usually exempt from most barrier requirements. As a general practice, your local Building Department will inform you of any applicable barrier requirements at the time a permit is obtained for the installation of an electrical circuit. Your Arctic Spa Dealer can provide information on which permits may be required.

Contents

Read and Follow All Instructions

It is important to inform occasional users of the spa about the **DANGERS, WARNINGS,** and **CAUTIONS** listed in this manual before they use the spa.

CAUTION!	***DANGER!***	***WARNING!***
Indicates a situation in which damage to equipment or material may occur.	Indicates risk of injury.	Indicates information of critical importance.

Important Safety Instructions:

READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY

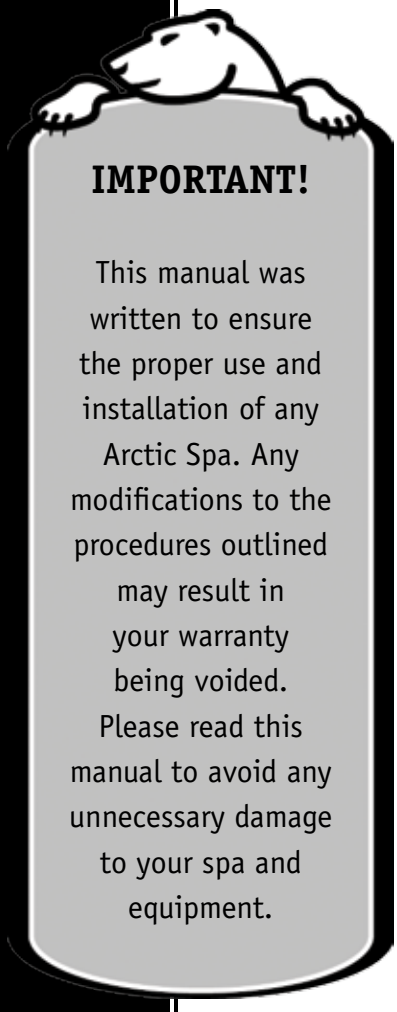
When installing and using this electrical equipment, basic safety precautions should always be followed, including:

1) **WARNING:** To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.
2) **WARNING:** A grounding wire connector is provided on this unit to connect a minimum No. 8 AWG solid copper conductor (USA) No. 6 AWG stranded (Canada) between this unit and any metal equipment, metal enclosures of electrical equipment, metal water pipe, or conduit within 5 feet (1.5 m) of the unit.
3) **DANGER:** Risk of Accidental Drowning. Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children cannot use this hot tub unless they are supervised at all times.
4) **DANGER:** Risk of Injury. The suction fittings in this hot tub 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 that the flow rates are compatible. Never operate the hot tub if the suction fittings are broken or missing. Consult your local dealer for assistance in choosing an appropriate replacement suction fitting.
5) **DANGER:** Risk of Electric Shock. Install at least 5 feet (1.5 m), from all metal surfaces. As an alternative, a hot tub may be installed within 5 feet (1.5 m) of metal surfaces if each metal surface is permanently connected (bonded) by a minimum No. 8 AWG solid copper conductor (US) No. 6 AWG stranded (Canada) attached to the wire connector on the grounding lug, inside the equipment compartment on the equipment box.
6) **DANGER:** Risk of Electric Shock. Do not permit any electrical appliance, such as a light, telephone, radio, television, etc. within 5 feet (1.5 m) of a hot tub.
7) **ELECTRICAL SUPPLY:** The electrical supply for this product must include a suitable circuit breaker to open all ungrounded supply conductors. The disconnect must be readily accessible and visible to the hot tub occupant but installed at least 5 feet (1.5 m), from the hot tub water.
8) **WARNING:** To Reduce the Risk of Injury:

a) The water in a hot tub 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 hot tub use exceeds 10 minutes.

b) Since excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy, pregnant or possibly pregnant women should limit hot tub water temperatures to 100°F (38°C). If pregnant, please consult your physician before using a hot tub.

c) The use of alcohol, drugs, or medication before or during hot tub use may lead to unconsciousness with the possibility of drowning.



d) Persons suffering from obesity or a medical history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a hot tub.
e) Persons using medication should consult a physician before using a hot tub since some medication may induce drowsiness, while other medication may affect heart rate, blood pressure, and circulation.

9) A bonding lug bar is provided on the side of your spa pack to accommodate grounding of entire spa. To reduce the risk of electric shock, connect the local common bonding grid in the area of the hot tub to these terminals with an insulated or bare copper conductor not smaller than No. 8 AWG solid (US) No. 6 AWG stranded (Canada).

10) All field-installed metal components such as rails, ladders, drains or other similar hardware within 10 feet (3 m) of the hot tub shall be bonded to the equipment grounding bus with copper conductors not smaller than No. 8 AWG solid (US) No. 6 AWG stranded (Canada).

11) Use the hot tub straps and clip tie downs to secure the cover when not in use. This will help to discourage unsupervised children from entering the hot tub. There is no representation that the cover, clip tie downs, or actual locks will prevent access to the hot tub.

SAVE THESES INSTRUCTIONS

WARNINGS!

WARNING: Children should not use hot tubs without adult supervision.
AVERTISSEMENT: Ne pas laisser les enfants utiliser une cuve de relaxation sans surveillance.
WARNING: Do not use hot tubs unless all suction guards are installed to prevent body and hair entrapment.
AVERTISSEMENT: Pour eviter que les cheveux ou une partie du corps Puissent étre aspires, ne pas utiliser une cuve de relaxation si esgrilles de prise d'aspiration ne sont pas toutes en place.
WARNING: People with infectious diseases should not use a hot tub.
AVERTISSEMENT: Les personnes atteintes de maladies infectieuses ne devraient pas utiliser une cuve de relaxation.
WARNING: To avoid injury, exercise care when entering or exiting the hot tub.
AVERTISSEMENT: Pour éviter des blessures, user de prudent en entrant dans une de cuve de relaxation et en sortant.
WARNING: Do not use drugs or alcohol before or during the use of a hot tub to avoid unconsciousness and possible drowning.
AVERTISSEMENT: Pour éviter l'évanouissement et la noyade éventuelle, ne prendre ni drogue ni alcool avant d'utiliser une cuve de relaxation ni quand on s'y trouve.
WARNING: Pregnant or possibly pregnant women should consult a physician before using a hot tub.
AVERTISSEMENT: Les femmes enceintes, que leur grossesse soit confirmée ou non, devraient consulter un médecin avant d'utiliser la cuve de relaxation.
WARNING: Water temperature in excess of 100°F (38°C) may be injurious to your health.
AVERTISSEMENT: Il peut être dangereux pour la santé de se plonger dans de l'eau a plus de 100°F (38°C).
WARNING: Before entering the hot tub, measure the water temperature with an accurate thermometer.

AVERTISSEMENT: Avant d'utiliser une cuve de relaxation mesurer la température de l'eau à l'aide d'un thermomètre précis.

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

AVERTISSEMENT: Ne pas utiliser une cuve de relaxation immédiatement après un exercice fatigant.

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

AVERTISSEMENT: L'utilisation prolongée d'une cuve de relaxation peut être dangereuse pour la santé.

WARNING: Do not permit electric appliances (such as light, telephone, radio, television, etc.) within 5 feet (1.5m) of this hot tub.

AVERTISSEMENT: Ne pas placer d'appareil éléctrique (luminaire, téléphone, radio, téléviseur, etc.) à moins de 5 feet (1.5m) de cett cuve de relaxation.

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

ATTENTION: La teneur de l'eau en matières dissoutes doit être conformé aux directives du fabricant.

WARNING: The use of alcohol or drugs can greatly increase the risk of fatal hyperthermia in hot tubs.

AVERTISSEMENT: La consommation d'alcool ou de drogue augmente considérablement les risques d'hyperthermie mortelle dans une cuve de relaxation.

WARNING: People using medications and / or having an adverse medical history should consult a physicain before using a spa or hot tub.

AVERTISSEMENT: Les personnes qui prennent des médicaments ou ont des problémes de santé devraient consulter un médecin avant d'utiliser une cuve de relaxation.

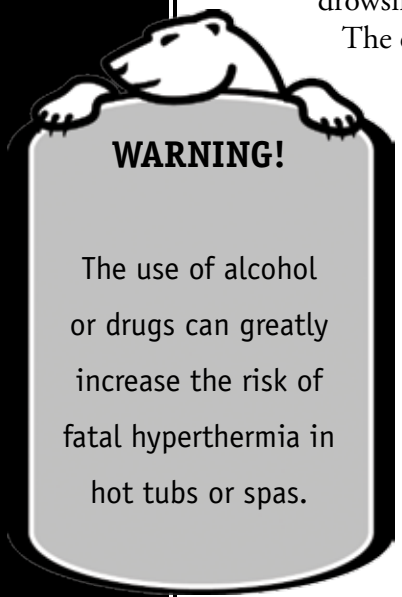
Hyperthermia

Prolonged immersion in hot water may induce hyperthermia.

Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 99ºF (37°C). The symptoms of hyperthermia include drowsiness, lethargy, and an increase in the internal temperature of the body.

The effects of hyperthermia include:

- Unawareness of impending hazard;
- Failure to perceive heat;
- Failure to recognize the need to exit hot tub;
- Physical inability to exit hot tub;
- Fetal damage in pregnant women; and
- Unconsciousness and danger of drowning.



SPA SPECIFICATIONS

	Outside Dimensions	Heights	Heater (Watts)	Water Capacity	Dry Weight	Filled Weight*	Weight per square foot	Electrical Requirements
Arctic Ocean	171" x 94.5" 434 cm x 240 cm	50.5" 128.5 cm	5500	1609 Gallons 6090 Litres	1650 Lbs 748 Kg	14,491 Lbs 6573 Kg	129 Lbs per square foot	240 Volt, 50 Amp Single Phase
Cub	85 3/4" x 85 3/4" 217 cm x 217 cm	41" 104 cm	5500	449 Gallons 1700 Litres	721 Lbs 327 Kg	5350 Lbs 2427 Kg	105 Lbs per square foot	240 Volt, 50 Amp Single Phase
Fox	85 3/4" x 68 3/4" 217 cm x 174 cm	38 3/4" 98 cm	5500	343 Gallons 1300 Litres	679 Lbs 308 Kg	4247 Lbs 1926 Kg	104 Lbs per square foot	240 Volt, 50 Amp Single Phase
Frontier	85 3/4" x 92 3/4" 217 cm x 235 cm	38 3/4" 98 cm	5500	518 Gallons 1960 Litres	935 Lbs 424 Kg	6316 Lbs 2865 Kg	121 Lbs per square foot	240 Volt, 50 Amp Single Phase
Glacier	85 3/4" x 85 3/4" 217 cm x 217cm	41" 104 cm	5500	431 Gallons 1630 Litres	743 Lbs 337 Kg	5222 Lbs 2369 Kg	102 Lbs per square foot	240 Volt, 50 Amp Single Phase
Klondiker	92 3/4" x 92 3/4" 235 cm x 235 cm	38 3/4" 98 cm	5500	478 Gallons 1810 Litres	959 Lbs 435 Kg	6006 Lbs 2724 Kg	100 Lbs per square foot	240 Volt, 50 Amp Single Phase
Kodiak	92 3/4" x 92 3/4" 235 cm x 235 cm	38 3/4" 98 cm	5500	526 Gallons 1990 Litres	961 Lbs 436 Kg	6409 Lbs 2907 Kg	107 Lbs per square foot	240 Volt, 50 Amp Single Phase
Summit	92 3/4" x 92 3/4" 235 cm x 235 cm	38 3/4" 98 cm	5500	497 Gallons 1880 Litres	968 Lbs 439 Kg	6173 Lbs 2800 Kg	103 Lbs per square foot	240 Volt, 50 Amp Single Phase
Tundra	92 3/4" x 92 3/4" 235 cm x 235 cm	38 3/4" 98 cm	5500	602 Gallons 2280 Litres	1009 Lbs 458 Kg	7267 Lbs 3289 Kg	122 Lbs per square foot	240 Volt, 50 Amp Single Phase
Yukon	85 3/4" x 85 3/4" 217 cm x 217 cm	41" 104 cm	5500	489 Gallons 1850 Litres	750 Lbs 340 Kg	6065 Lbs 2751 Kg	119 Lbs per square foot	240 Volt, 50 Amp Single Phase

*Filled weight includes weight of water and maximum recommended number of people in the spa.
Average weight per person = 80 kg (176 lbs)

Installation Instructions

Site Preparation

Please ensure the following:

- Always put your spa on a structurally sound, level surface. A filled spa can weigh a great deal. Make certain that the location you choose can support the weight of your filled spa.
- Locate your equipment compartment, which houses all of the electrical components, in a place where you will have easy access for periodic spa care and maintenance.
- Allow adequate access to all other doors for service.

Outdoor Ground Level Installation

No matter where you install your new spa, it's important that you have a solid foundation for support. If you are installing a spa with a wooden pedestal floor outdoors, we recommend you place patio stones underneath spaced out evenly. The stones should be at least two inches thick and twelve inches square (30 cm x 30 cm). Even with stones in place, the spa will possibly settle and become uneven, and may require re-leveling over time. If you are installing a spa with a Forever Floor® outdoors, you may set it on virtually any surface, as long as it is level.

Deck Installation

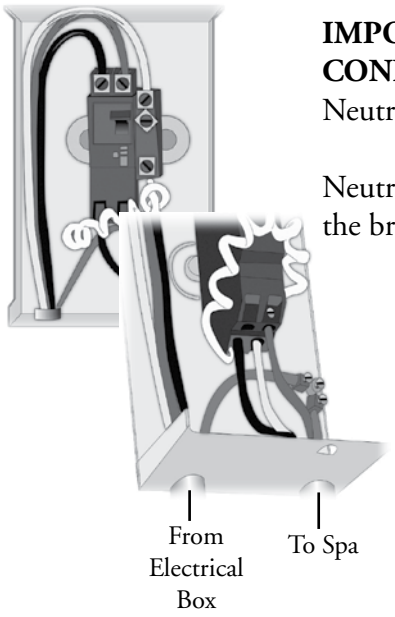
To be certain your deck can support your spa, you must know the deck's maximum load capacity. Consult a qualified building contractor or structural engineer. To find the weight of your spa, its contents and occupants, refer to the Spa Specification chart. This weight per square foot must not exceed the structure's rated capacity, or serious structural damage could result.

Your Arctic Spas® Dealer can help you with local information such as zoning regulations and building codes.

Electrical Specifications

WARNING!
All electrical hookups must be performed by a licensed electrician!

Sub Panel Wiring Diagram Example



IMPORTANT CONNECTIONS:
Neutral of the GFCI must be connected to the neutral bus.

Neutral from the spa must be connected to the breaker.

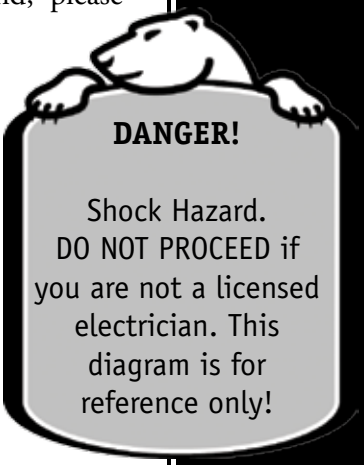
Electrical Installation Instructions

ARCTIC SPAS® MUST BE WIRED IN ACCORDANCE WITH ALL APPLICABLE LOCAL ELECTRICAL CODES. ALL ELECTRICAL WORK SHOULD BE DONE BY AN EXPERIENCED, LICENSED ELECTRICIAN AND APPROVED BY A LOCAL BUILDING/ELECTRICAL INSPECTION AUTHORITY.

The electrical supply must satisfy the requirements of the spa as marked on the certification label which is located adjacent to the spa controller (pack). If the ratings are not legible or cannot be found, please contact the factory for assistance. - DO NOT GUESS!

WARNING: Removing or bypassing any GFCI breaker will result in an unsafe spa and will void the spa's warranty.

IMPORTANT: Your Arctic Spa®has been carefully engineered to provide maximum safety against electric shock. Remember, connecting the spa to an improperly wired circuit will negate many of its safety features.



Startup Procedures

IMPORTANT:
Your Arctic Spa® has been thoroughly tested during the manufacturing process to ensure reliability and long-term customer satisfaction. Before filling the spa, wipe the spa shell clean with a soft rag.
The following instructions must be read and followed exactly to ensure a successful start-up or refill.

1) Ensure the electrical connections have been made in accordance with this manual.

2) Ensure all O-Rings have been installed into unions and unions have been tightened sufficiently.

3) Ensure all ball valves are open, and the drain has been closed.

4) Using a garden hose with a pre-filter, fill the spa with pre-filtered water to the bottom of the pillows (or approximately 6", 15 cm above the base of the floating weir).

5) Once the spa is filled to the proper level, turn the power to the spa on, by turning on the GFCI breaker in your panel.

6) The jet pump, heating system and all internal plumbing will achieve a partial prime as the spa is filled. To check the operation of the jet system and to remove any remaining air from the plumbing system, follow these steps:
a) All Models: Push the Pump 1 button a second time to turn the pump to high speed. Allow to run for 1 minute.
b) Signature, Ultra, and Legend series: Push Pump 2 button also. This pump runs at high speed only. Run for one minute.
c) Legend series only: Push Pump 3 also. This pump runs at high speed only. Run for one minute. Once the jet system is fully operational (as indicated by strong, non-surging jets), priming of the spa is complete. Push each Pump button once to turn the pumps off.

IMPORTANT: Weak or surging jets are an indication of a low water level, a clogged filter cartridge, or an improperly adjusted filter weir.

7) Adjust the chemicals and balance the water according to your dealer's instructions. A guideline is also included in this manual, under the Water Maintenance Section.

8) Set the temperature control to the desired temperature (between 100°F and 104°F (38°C and 40°C), then place the insulated cover on the spa and allow the water temperature to stabilize (approximately 16 hours). Make sure you secure the cover in place using the cover locks. Periodically check the spa water temperature.

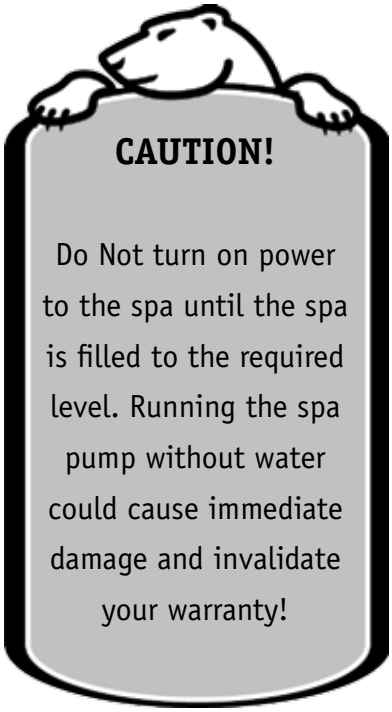
When the water temperature climbs above 85ºF (29ºC), proceed to the next step.

9) Test and Adjust Sanitizer level (Chlorine ideal 1 - 3 ppm or Bromine ideal 3 - 5 ppm).

10) Rotate diverters to centre position and press "Pump 2" button on topside control panel for 5 seconds to activate the "Boost filtration system". When this system is enabled, "BOO" is displayed on the screen. This will give 45 min of circulation and filtration to disperse the chemicals.

11) You can set the temperature (between 38°C and 40°C or 100°F to 104°F) by pressing the TEMP (^) and TEMP (v) buttons on the control panel. The spa will normally come up to temperature within 16 to 24 hours. Replace the spa cover while the temperature is reaching the set point.

IMPORTANT: For safety, you can lock your desired temperature setting. Refer to the Topside Control Panel section for details.



Fusion™ Jetting System

With your Fusion™ Jetting System, you can control the massaging action of your spa. Using the Fusion™ diverter, the jets are activated in groups, known as jet systems. The jetting systems are selected by turning the diverter from one side to the other, or select both by leaving the diverter in the middle. The number of diverters you will have will depend on the model and series of Arctic Spa you have. Feel free to consult your local dealer with any questions regarding the function of this system, or just jump in and experiment for yourself.

Venturi Controls

The Venturi Controls allow you to control the intensity of the massage at each jet by adjusting the mixture of air and water. Simply turn the venturi control lever counter clockwise for a stronger flow and clockwise for a softer flow. Most jets are adjustable by turning the face of the jet counter-clockwise for a stronger flow and clockwise for a softer flow and eventually off.

Arctic Chiller

The arctic chiller has no Freon, compressors, pumps or refrigeration mechanics.

1. Remove one access panel and attach the chiller in it's place.
2. Lower the temperature on your spa to the desired setting.

Note: Do not leave the cover off of the spa in direct sunlight, this can lead to heat distress and void your warranty.

Jets


Single Pulse

Five Inch (5") Jets

The five-inch Hydro-massage jets give a wide circular massage. These jets are adjustable by turning the face of the jet clockwise for a stronger flow and counter-clockwise for a softer flow and eventually off.


Single Pulse


Directional


Neck Jet

Three Inch (3") Jets

The three-inch hydro-massage jets have three nozzle options: The Turbo Single Pulse and the directional jets and the neck jets. The Directional nozzle allows you to aim the water in the direction that feels best. The Turbo Single jets give a wide circular massage. The 3-inch jets are designed for a thorough massage of the muscles in your upper back, shoulders and neck. These jets are adjustable by turning the face of the jet clockwise for a stronger flow and counter-clockwise for a softer flow and eventually off.

Chrome Jet Option Package

The Chrome jets are made from rust resistant stainless steel; however improper water chemistry may cause rusting. Same great massage quality in a nicer looking package.
(neck jets are not available in chrome)

Monsoon Jet

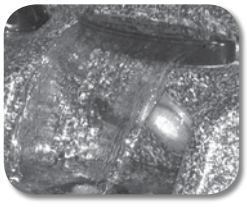
The Monsoon Jet is a large orifice hydro-massage jet designed to maximize massaging action on a specific area of the body. It is located in the lower part of the spa to allow easy access for massaging feet, legs, hips and lower back. The intensity of the Monsoon Jet can be altered using one of the Fusion™ Diverter (the location varies depending on spa model). Consult your local dealer regarding which diverter lever or just jump in and experiment for yourself.

Therapy Air Jets (*Available on Designer, Ultra, Legend Extreme and Legend SE series only)*

When the Therapy Air System is turned on (see spa control functions), soft air bubbles all around you for an exhilarating massage.

Waterfall

The waterfall is turned on and off by means of a small on/off control.
The location may vary depending on the model. (on select models)



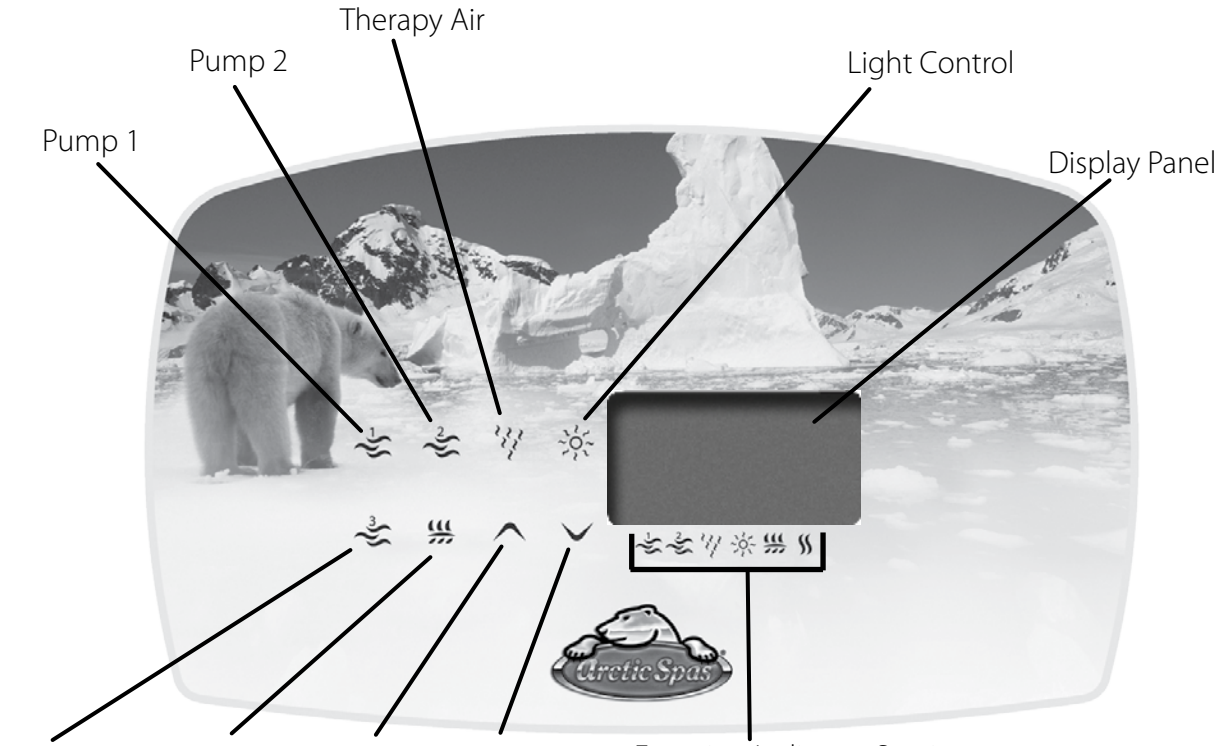
Topside Control Panel

Your spa control has been specifically designed so that by simply connecting the spa to a properly grounded source, and following the start-up procedures in this manual, the spa will automatically heat to the set temperature. Many other functions, such as filtration, safety checks and maintenance reminders have been automated so that your spa experience will be as carefree as possible.

But you're in charge! The topside control (TSC) panel allows you to set the temperature, initiate the filtration cycle, control the lights, and activate or deactivate the pump(s) and blower. The TSC display responds to let you know you have pressed a button, and that the selected function has been performed.

Power-Up Detection

After a power-up, on the first 10 seconds the display will alternate between the software number and revision, the display will then blink until somebody presses a key. This feature lets you know that a power failure has occurred and all settings have returned to default.



"Clean filter" reminder:

If enabled, the display will start flashing every 2 weeks showing the "CLE" message. This message is displayed to remind the user to clean the filter cartridge. Press any key to reset the message.

Setting the Water Temperature:

Use the Up or Down arrow key to regulate the water temperature. The temperature setting will me displayed for 5 seconds to confirm your new selection

> The "Set Point" symbol indicates the desired temperature, NOT the current water temperature!
>
> The water temperature can be adjusted by 1 degree increments from 59 to 104°F (15 to 40°C)

Starting Pump 1:

▼ Press the **Pump 1** key to turn Pump 1 on at low speed. Press a second time to turn Pump 1 to high speed. A third time turns Pump 1 off. A built-in timer automatically turns Pump 1 off after 20 minutes, unless it has been manually shut off.

The "Pump 1" indicator lights up when Pump 1 is running at high speed. It flashes when Pump 1 is on at low speed.

Note: Pushing and holding the Pump 1 button will lock the panel. See the section "Panel Lock" for details.

Starting Pump 2 *(Optional):*

▼ Press the **Pump 2** key to turn Pump 2 on. A second time turns Pump 2 off. A built-in timer automatically turns Pump 2 off after 20 minutes, unless it has been manually shut off..

The "Pump 2" indicator lights up when Pump 2 is running at high speed.

Starting Pump 3 (On/Off Button) *(Optional)*:

▼ Press the **Pump 3** key to turn Pump 3 on. Press a second time to turn Pump 3 off. A built-in timer will automatically shut Pump 3 off after 20 minutes, unless it has been manually shut off.

Note: If Pump 3 is not present, then this switch is used only for the Standby mode. (Use this when you're checking inside the equipment bay, or while you're changing a filter.)

A long press (5 seconds) on Pump 3 key puts the system on standby. In Standby mode, the display shows "OFF" for at least 10 seconds and all outputs are turned off for 30 minutes. If the heater is

on when the system is put on standby The filter cycle, the Smart Winter mode (see pg 19) and the heater can't start during this time. All keys are disabled except the On/Off key. A second long press (5 seconds) will restart the system before the 30 minutes ends.

When power is first applied to the spa, it is "On" by default.

Starting the Blower *(Optional):*

Press the **Blower** key to turn Blower on. A second press will turn Blower off. The built in timer automatically turns Blower off after 20 minutes, unless it has been manually deactivated.

The "Blower" indicator lights up when Therapy air is on.

Turning the Lights ON:

Press the **Light** button to toggle the light(s) on and off. If the lights are left on, they will automatically turn off after 2 hours, unless it has been manually deactivated. If the spa is equipped with Northern Lights™, or Northern Lights™ Deluxe, the different lighting sequences can be cycled by pressing the light key on and off repeatedly.

The "Light" indicator is displayed when the light is on.

Programming the Filter Cycle Duration:

The system will automatically perform four one-hour filtration cycles per day.
During a filter cycle:

* Pump 2, Pump 3 (on 3 pump systems) and Blower runs for 1 minute, then
* Pump 1 runs at low speed for the programmed number of hours (see below), and
* The Ozonator is turned on.

To Set the Filter Cycle Duration:

Press the Filter key. The display will show Fd XX with XX representing currently set filter cycle duration in hours.

Use the Up & Down arrow keys to change settings (from 0 to 2).
00 = no filtration
01 = 1 hour/cycle
02 = 2 hour/cycle

When the desired setting is displayed, press Filter again. The display will show FFxx, with "xx" representing the filter cycle frequency per day.

Use Up or Down arrow keys to change setting (from 1-4). When the desired setting is displayed, press Filter to confirm. A filter cycle will start immediately. The "Filter Cycle" indicator lights up when a filter cycle is on.

A flashing "Filter Cycle" indicator means that the system has stopped filtering because water temperature is 2ºF (1ºC) above the Set Point. If the temperature cools down before the scheduled end of the cycle, filtering will resume for the rest of the programmed duration. After a power failure, the first filter cycle will start 12 hours after power has been restored.

Overtemp During Filter Cycle

In order to prevent excessive water temperatures due to long Filter cycles during warm weather, the system has a special safeguard.

If the water temperature exceeds the set point by more then 2º F (1ºC), the system will cancel the Filter cycle and the Filter cycle icon will blink for the remainder of the filter cycle. The Filter cycle icon blink pattern will be: ON for 1/2 second, OFF for 1/2 second, ON for 1/2 second, then finally OFF for 1 1/2 seconds. This sequence will then repeat. The filtration cycle will automatically reset itself once the water temperature falls below the set point.

40- Minute Filter Cycle Time-out:

During a Filter cycle, if an accessory (a pump, the blower, or the light) is used manually, the Filter cycle is suspended the time the accessories are used. Once all accessories are turned off (whether manually or by built-in timer), the Filtration cycle remains suspended for an extra 40 minutes. When a Filtration cycle is suspended the Filtration cycle icon will blink.

Panel Lockout:

It is possible to lock out all the keys. This feature is helpful when young children could have access to the keypad. **To lock/unlock the keypad, simply press on the Pump #1 key for at least 5 seconds.**

There are 2 modes you can choose from, full lock, or the partial lock. Full lock means ALL keypad functions are locked. Partial lock means only the basic functions of the spa remain use able. (pumps, blower and light)

Locking Your Digital Control Pad:

Press and hold the **Pump 1** key for 5 seconds. At that point the display will show, "LocP" with the "P" representing Partial Lock. Keep key pressed for 5 more seconds, if you want to be in **Full** Lock mode. The "LocF" message will be displayed.

When the Control is locked, all automatic functions of the system run as usual. However, when a locked key is pressed, a "LocP" or "LocF" message will then be displayed for 1 second. To unlock the keypad, simply press and hold **Pump 1** key again for 5 seconds.

Inverting the Display:

It is possible to set the display so that it is readable from either inside or outside the spa. To do this, just press and hold the Filter key for 5 seconds to invert the display. If a power-up occurs, the display always returns to the default mode.

Temperature displayed in Fahrenheit or Celsius:

The temperature can be displayed in Fahrenheit or Celsius. Press and hold **Light** key for five seconds, to toggle between ºF and ºC. Note that after a power-up the system always return to default Fahrenheit display.

Boost Filtration mode:

Press and hold the **Pump 2** key for 5 seconds to enable the Boost Filtration mode, Pump 1 high speed and the ozonator will fun for 45 minutes. When enabled, the "BOO" message is displayed. This mode is used to speed-up filtration after intensive use of the spas or to help mix chemical just added in the spa.

Spa Care and Maintenance

Your Arctic Spa® is manufactured from the highest quality, most durable materials available. Even so, the spa care and maintenance program you develop will ultimately determine how long your spa and its individual components will last. Regular maintenance following the advice in this section will help you to protect your investment.

IMPORTANT: Before performing any maintenance on your spa, make a visual inspection of the spa to get an understanding of what condition it may be in and if anything looks out of the ordinary. If any part appears to be damaged, loose or missing, do not proceed. Contact your Factory Authorized Dealer immediately.

Draining the Water

Detergent residues and dissolved solids from bathing suits and chemicals will gradually accumulate in your spa's water. Normally, in about three to four months the water will become difficult to balance and should be replaced. Showering without using soap prior to entering the spa or using only the rinse cycle when laundering your bathing suit will help to reduce detergent residue in the spa water. However, foam problems are more likely to be caused by a build up of organic pollutants in the spa, mostly from body oils. If you're using your spa frequently with a high bather load the water will need to be replaced more often. Spa water gradually loses quality because of build-ups of unfilterable pollutants.

IMPORTANT: Remember to change your water every three to four months.

To Drain Your Spa:

1. Shut off the GFCI breaker located in the sub panel or the quick disconnect.
2. Locate the main drain valve for the spa, on the outside of the cabinet to the right of the equipment compartment. Attach the male threaded end of a garden hose to the drain valve, and route the other end of the hose to an appropriate draining area.
3. Open the valve by turning the large outside ring counterclockwise. The spa will drain by gravitational flow.
   Note: All Arctic Spas® models will drain through the floor drain. Equipment such as the pump(s) and heater will drain. All models will leave a small amount of water in the footwell. Any water remaining in the plumbing or equipment after draining will only need to be removed if the spa is being winterized.
4. When empty, inspect the spa shell and clean as required.
5. Close the drain valve.
6. Refill the spa BEFORE restoring power.

IMPORTANT: With reusable filters, it is necessary to rinse the filter cartridges weekly. Every month, and each time the spa is drained for cleaning, clean the cartridges in filter cleaner. (With Arctic Spas disposable filters, simply replace the cartridge whenever the spa is drained, or about every three months).

Filtration System

The use of Clarifiers and Foam inhibitors is not recommended with Micro Pure® disposable filters!

Arctic Spas® are equipped with balanced filtration, meaning that the filter cartridges are sized to meet the needs of the pump system. As with any water filtering system, the filter cartridge may become clogged, resulting in reduced water flow. It is important to maintain a clean, unobstructed filter system. We recommend that your filter cartridge be replaced with an Arctic Pure® disposable filter cartridge every three (3) months.

Filter Cartridge Removal and Installation

1. Put the spa in Standby mode using the on/off button (Pump 3 button on 3 pump systems) on the topside control panel.
2. Remove the floating weir by rotating the top outside ring counter-clockwise and lifting. The smaller second filter has a threaded cap. Lift the release tab and unscrew the cap while the pumps are off.
3. Remove the skimmer basket by lifting straight out.
4. Remove the filter cartridge.
5. To install a new filter cartridge, reverse the order of steps for removal. Clean any debris out of the skimmer basket before replacing it.

Care of Spa Pillows

The spa pillows used in many of the Arctic Spas® models will provide years of comfort if treated with care. They have been positioned above the water level to minimize the bleaching effects of chlorinated water and other spa water chemicals. To extend their life, whenever the spa shell is being cleaned, the spa pillows should be removed and cleaned. Body oils can be removed with a mild soap and water solution. ALWAYS rinse off the spa pillows thoroughly to remove any soap residue. The pillows can be conditioned with Arctic Pure® Cover Renew cleaner after cleaning. If the spa is not going to be used for a long period of time (that is, during a vacation or if the spa is being winterized), or when the spa water is being super-chlorinated, the spa pillows should be removed until the next use of the spa.

To remove and replace the spa pillows:

1. Pull the pillow directly upwards until it is fully extended. Next to the acrylic of the shell, there is a button that you press to allow you to pull the pillow upwards and out completely.
2. To reinstall the spa pillow, push the button and carefully insert pillow.

Care of the Spa Shell

Your Arctic Spa® has a fiberglass reinforced, Lucite® cast acrylic shell. Stains and dirt generally will not adhere to your spa's surface. A soft cloth or sponge should easily remove most dirt. Most household chemicals are harmful to your spa's shell.
Sodium bicarbonate (baking soda) or vinegar can also be used for minor surface cleaning. Always thoroughly rinse off any spa shell cleaning agent with fresh water.

Service Notes:

1. Iron and copper in the water can stain the spa shell if allowed to go unchecked. Your Arctic Spas® Dealer stocks Arctic Pure® Best Defence to use if your spa water has a high concentration of dissolved minerals.
2. The use of alcohol or any household cleaners other than those listed to clean the spa shell surface is NOT recommended. DO NOT use any cleaning products containing abrasives or solvents since they may damage the shell surface. Damage to the shell by the use of harsh chemicals is not covered under the warranty.

MANUAL SAFETY COVER

Care of the Spa Cover

WARNING: The cover is a manual safety cover that meets or exceeds all prevailing requirements of ASTM Standards for spa safety covers when installed and used correctly as of the date of manufacture. Non-secured or improperly secured covers are a hazard. Open the cover to its fully open position before use. Be sure to inspect the cover for premature wear or deterioration. Over time, with use, there is a chance of normal cover wear and deterioration. To properly maintain your cover see directions below.

Vinyl Cover

The vinyl spa cover is an attractive, durable foam insulation product. Monthly cleaning and conditioning is recommended to maintain its beauty.

To clean and condition the vinyl cover:

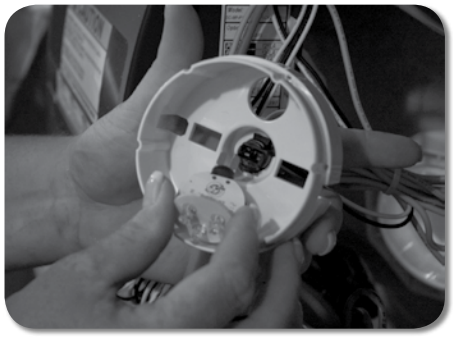
1. Remove the cover from the spa and gently lean it against a wall or fence.
2. With a garden hose, spray the cover to loosen and rinse away dirt or debris.
3. Using a large sponge and/or a soft bristle brush, and using a very mild soap solution or baking soda, scrub the vinyl top in a circular motion. Do not let the vinyl dry with a soap film on it before it can be rinsed clean.
4. Scrub the cover's perimeter and side flaps. Rinse clean with water.
5. Rinse off the underside of the cover with water only (use no soap), and wipe it clean with a dry rag.
6. To condition the cover after cleaning, apply a thin film of Arctic Pure® Cover Renew to the vinyl surface and buff.

Care of the Spa Cabinet

Cedar Cabinet: When properly cared for, the wood cabinet of your spa will maintain its beauty for many years. Your Arctic Spa cabinet has been specially treated with Olympic Maximum Wood Stain. Use this stain or a similar product on a regular basis to protect the wood of the cabinet and keep your spa looking great for years to come.

Eon Cabinet: Wash with soap and water. (no harsh chemicals)

LED Light Replacement



All Arctic Spas® come equipped with two 12 volt blue LED underwater lights for night use. The Northern Lights™ option uses two multicoloured LED assemblies. The Northern Lights™ Deluxe option comes with five lights. Should you need to change any light, follow these simple steps:

1. Make sure the lighting is turned off, by checking the topside be sure the light icon is not showing.
2. Remove the screws securing the equipment access doors; remove the doors.
3. Locate the reflector, which is secured into the light housing. Carefully rotate the reflector counter-clockwise until it comes off the light housing.
4. Carefully disconnect any cables (note the location of the cable(s), as the LED assembly has two sockets) and remove the light assembly from its socket or slot.
5. Install the new LED assembly in its slot or socket, then reconnect the cables.
6. To reinstall the underwater light, rotate the lamp assembly clockwise onto the light housing until secure.

Vacation Care Instructions

If you plan to be away from home for 7 - 14 days, follow these instructions to ensure that the water quality of your spa is maintained.

1. Adjust pH as needed.
2. Ensure you have sufficient sanitizer to last until you return.
3. Shock the spa with Arctic Pure® Boost or Refresh.
4. Lower the temperature.

Upon your return:

1. Shock the spa with Arctic Pure® Boost or Refresh.
2. Ensure you have sufficient sanitizer for regular use.
3. Return the temperature to its original setting. You can use your spa once the residual sanitizer level falls within the ideal range.

Note: If you will not be using your spa for more then 14 days and a neighbor, friend or an outside maintenance service is not available to check and balance the water chemistry, draining or winterizing (for winter only) the spa is recommended.

Winterizing Your Spa

If you plan to leave your spa unused for a long period of time in severely cold weather, you should drain the spa to avoid accidental freezing due to a power or equipment failure.

We recommend your local authorized dealer winterize your spa. Freezing can severely damage your spa. Improper winterizing of your spa can void your warranty.

Aquatremor® or Wettunes® Stereo *(Optional)*

Using the Audio Output cable provided in your spa pack, connect your own MP3 player and enjoy!

Water Maintenance

It's important to have clean water. Water maintenance is one of the least understood, but very important areas of spa ownership. Your dealer can guide you through the process of achieving and maintaining perfect water in your spa, given your local conditions. Your program will depend on your water's mineral content, how often you use your spa, and how many people use it. Here is our suggested step-by-step program:

General Information

There are three fundamental areas of water maintenance. They are (1) Water Filtration, (2) Water Sanitation, and (3) Chemical Balance/pH Control.

Before you even begin it is highly recommended to use the pre-filter when filling your spa, because tap water is not really pure water. By starting with water that is already filtered clean you will find that you have much fewer problems maintaining crystal clear water.
Although your spa's filter system is working several hours a day to remove particles from your water, it does not remove bacteria or viruses. Water sanitation is the responsibility of the spa owner. It can be achieved through the regular and periodic (daily, if necessary) addition of an approved sanitizer. The sanitizer will chemically control the bacteria and viruses present in the spa water. Bacteria and viruses can grow quickly in under sanitized spa water. The water's chemical balance and pH control are also the responsibility of the spa owner. You will have to add chemicals to maintain proper levels of Total Alkalinity (TA), Calcium Hardness (CH) and pH. Proper water balance and pH control will minimize scale buildup and corrosion of metals, extend the life of the spa, and allow the sanitizer to work at maximum efficiency.
For Onzen System: Please refer to your Onzen User Guide for direction in water maintenance.

Methods For Testing The Spa Water

Accurate water testing and analysis are an important part of effectively maintaining your spa water. To follow the Arctic Spas® recommended program, you must have the ability to test for:

- Total Alkalinity (TA)
- Calcium Hardness (CH)
- pH
- Sanitizer

Although reagent liquid test kits provide the highest level of accuracy, Test Strips are the most convenient testing method used by many spa owners. Keep in mind that test strips are susceptible to heat and moisture contamination, which will result in inaccurate readings. Very high sanitizer levels will also render test strips unreliable.

IMPORTANT: Always read and carefully follow the directions included with the Test Kit or Test Strips to ensure the accuracy of the test results.

Hints For Successful Water Testing

When using the reagent test kit:

- Always take water samples 30-45 cm (12" - 18") below the water surface.

- Rinse the test cells before and after each use.
- Do not dispose of test samples into the spa water.
- When adding drops of chemicals from the kit (the reagents) into the test block, hold the bottle vertically and add the drops slowly to be sure the correct quantity is used.
- The reagents should be replaced on a yearly basis to maintain the accuracy of the test results.

Basic Chemical Safety

When using chemicals, read the labels carefully and follow directions precisely. Though chemicals protect you and your spa when used correctly, they can be hazardous in concentrated form. Always observe the following guidelines:

- ALWAYS KEEP CHEMICALS OUT OF CHILDREN'S REACH.
- NEVER MIX CONCENTRATED CHEMICALS TOGETHER.
- ALWAYS THOROUGHLY RINSE ANY CONTAINER USED TO MIX CHEMICALS AFTER USE.
- ALWAYS RINSE OUT ANY EMPTY CHEMICAL STORAGE CONTAINER BEFORE DISPOSAL.
- Accurately measure the quantities specified. Do not overdose your spa. Amount required will vary depending on water condition, quantities to be used are only guidelines.
- Store chemicals in a cool, dry, well ventilated place.
- Always keep chemical containers closed when not in use.
- Don't inhale fumes or allow chemicals to come in contact with your eyes, nose, or mouth. Wash your hands immediately after use.
- Follow the emergency advice on the product label in case of accidental contact.
- Never smoke around chemicals. Some fumes can be flammable.
- Don't store any chemicals in the spa equipment compartment.

Adding Chemicals to the Spa

Most chemicals (does not include any slow dissolving chemicals) can be added directly to the spa while the pump(s) is running on high speed, for a minimum of 10 minutes.

IMPORTANT WHEN USING ARCTIC PURE® BOOST OR REFRESH TREATMENT

NOTE: After administering a super chlorination treatment or non-chlorine 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 warranty.

The Arctic Pure® Water Maintenance Program

Following the Arctic Pure® water maintenance program will save you time and frustration and ensure clear, clean spa water.

Remove Excess Minerals

Most tap water has minerals such as Calcium, Copper, Iron, Manganese and Sodium in it, and the

circulation of water can cause the erosion of metals from spa equipment which can present possible scaling and staining problems in your spa. Cases of source water with high minerals (such as some well water):

1. We recommend you add 3 1/2 tablespoons (48 grams) of Arctic Pure® Best Defense per 1000 litres (265 gallons) of water while filling your spa.
2. Also, as water evaporates from your spa and new water is added, the amount of dissolved minerals will increase. The spa water may eventually become "hard" (Calcium Hardness too high) enough to damage the heater by calcifying its surface. To protect against these problems add 1 tablespoon (14 grams) per 1000 litres (265 gallons) of Arctic Pure® Best Defense weekly.

Balance the Total Alkalinity (TA)

1. The recommended Total Alkalinity (TA) for your spa water is 125-150 ppm.
2. 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.
3. 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 Arctic Pure™ Perfect Balance.
4. If the Total Alkalinity is too high, the pH level will tend to be high and may be difficult to bring down. The pH can be lowered by using Arctic Pure® Adjust Down.
5. Once the TA is balanced, it normally remains stable, although some sanitizers, and the addition of more water with a high or low alkalinity will raise or lower the TA reading of the water.
6. When the Total Alkalinity is within the recommended range, proceed to the next step.

Balancing the pH

1. We recommended a pH range for your spa water of; 7.2-7.6.
2. The pH level is the measure of acidity and alkalinity. Values above 7 are alkaline; those below 7 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.
   - Preventing equipment deterioration.
   - Preventing cloudy or odorous water.
3. 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 Arctic Pure® Adjust Up to the spa water.
4. 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.

If the pH is too high, it can be decreased by adding Arctic Pure® Adjust Down to the spa water.

5. It is important to check the pH on a regular 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.
6. When the pH is within the recommended range, proceed to the final step.

Calcium Hardness (CH)

1. Most spa manufacturers recommend a Calcium Hardness (CH) level for your spa of 150-200 ppm. However, we do not recommend adding calcium to your spa if your spa water is above 100 PPM, or if your incoming water has a very low level of calcium hardness.
2. Calcium Hardness is a measure of the total amount of dissolved calcium in the water. It is believed that calcium helps control the corrosive nature of water. Calcium has a tendency to precipitate (fall out of suspension) in high temperatures and high pH levels.
   Warning: When calcium falls out of suspension it can collect on the heater and pump, and shorten their life.
3. Any natural corrosiveness in the water can be combatted by maintaining a slightly higher Total Alkalinity Level.

Sanitize the Spa

Sanitizer is extremely important for killing algae, bacteria and viruses, and preventing unwanted organisms from growing in the spa. At the same time, you don't want too high a sanitizer level, or it can irritate your skin, lungs and eyes.

1. Always maintain the sanitizer level in your spa at the recommended level for each type of sanitizer.
2. We recommend the following sanitizers:
   Chlorine System:
   - Arctic Pure® Chlorine Tablets
   - Arctic Pure® Refresh
   - Arctic Pure® Boost

   Bromine System:
   - Arctic Pure® Brominating Tablets
   - Arctic Pure® Refresh
   - Arctic Pure® Peak Boost

Important: Sanitizers are acidic and will decrease the Total Alkalinity. Regular testing and balancing of TA is extremely important with these products.

Important: Always remove the floating dispenser while the spa is in use. Remove dispensers with a plastic bucket (keeping submerged) and store out of reach of children until spa use has ended.

Using Chlorine System

CAUTION: The use of personal protective equipment (rubber/latex/vinyl gloves, eye protection) is recommended while handling the dispenser or the pucks.

Start-up:

1. Add pucks to floating dispenser and open to setting 4.
2. Add 7 tablespoons (100 grams) of Arctic Pure® Refresh per 1500 litres (396 gallons) of water.
3. Add 1 tablespoon (14 grams) of Arctic Pure® Spa Boost per 1000 litres (265 gallons) of water.
4. Test the Chlorine level. Once the chlorine reads within the ideal range (1-3 ppm) turn tablet dispenser down to 1 - 2 (more or less according to bather load).
5. Start the Boost Filtration mode to circulate the chemicals and do not use spa for two hours after the mode ends.

Note: The above example is for a spa without an ozone system. If your spa is equipped with an ozone system please contact your dealer for proper Chlorine levels.

Weekly:

1. Add pucks to floating dispenser and reset the setting if necessary.
2. Add 7 tablespoons (100 grams) of Arctic Pure® Refresh per 1500 litres (396 gallons) of water.
3. Wait at least one hour and add 1 tablespoon (14 grams) of Arctic Pure® Best Defence per 1000 litres (265 gallons) of water.

Important: Arctic Pure® Refresh significantly reduces pH and TA. One hour after adding Arctic Pure® Refresh test and adjust TA and pH as needed.

Bromine System:

Note: If you are planning to use your new spa right away, Peak Boost must be added first. Follow directions for adding Peak Boost from this page.

1. Fill floating dispenser with pucks and open to setting 7.
2. Add 7 tablespoons (100 grams) of Arctic Pure® Refresh per 1500 litres (396 gallons) of water.
3. Add 2 1/2 tablespoons (35 grams) of Arctic Pure® Peak Boost per 1000 litres (265 gallons) of water, to establish a Bromide reserve.
4. Test the Bromine level. Once bromine reads within the ideal range (3-5 ppm) turn tablet dispenser down to 2 or 3 (more or less according to bather load).

Note: The above example is for a spa without an ozone system. If your spa is equipped with an ozone system please contact your dealer for proper Bromine levels.

Weekly

1. Twice a week test and adjust Total Alkalinity, pH and Chlorine or Bromine levels.

In extreme cases of sources water with high minerals (such as some well water), add 1 tablespoon (14 grams) per 1000 litres (265 gallons) of Arctic Pure® Best Defence weekly.

Important: Arctic Pure® Refresh significantly reduces pH and TA. One hour after adding Arctic Pure® Refresh test and adjust TA and pH as needed.

The use of Clarifiers and Foam inhibitors is not recommended with Arctic Pure® Disposable filters!

IMPORTANT: Chemical doses given in this manual are for reference ONLY. ALWAYS refer to product label for instructions.

Common Spa Water Problems~Cause & Remedy

PROBLEM	POSSIBLE CAUSES
CLOUDY WATER	A. Poor Filtration B. Suspended particles C. Organic contaminants build up D. pH high E. Total alkalinity high F. Combined chlorine in the water G. High dissolved solids H. Hardness too high
COLOURED WATER	A. Dissolved metals from water source B. Low chlorine/bromine levels C. Fragrance
FOAMING	A. High concentration of oils and organics being agitated by the jets and/or Therapy Air
SCALE DEPOSITS	A. High Calcium level, high pH, high alkalinity
ODOR	A. High level of organic contaminants, combined with chlorine
EYE/SKIN IRRITATION	A. pH too low B. Combined chlorine due to high concentration of organic contaminants C. Allergic reaction to sanitizer D. Bacterial contamination
NO CHLORINE/ BROMINE READING	A. High concentration of contaminants using up sanitizers B. Test kit reagents ineffective

	SOLUTIONS
	A. Dirty filter, clean with Arctic Pure® Filter Restore (not with disposable filter). Increase Filter cycle. B. Add Arctic Pure® Easy Clear C. Shock treatment with Arctic Pure® Refresh D. Add Arctic Pure® Adjust Down until level reads 7.2-7.6 E. Add Arctic Pure® Adjust Down to adjust TA level to 100-130 ppm F. Shock treatment until combined chlorine is eliminated (see container instructions) G. Empty spa and refill H. Add Arctic Pure® Best Defence until level reads 100-280 ppm
	A. Use Arctic Pure® Best Defence and have your dealer check your water balance B. Add Arctic Pure® Boost treatment to raise chlorine levels and test chlorine levels or for Bromine system add Peak Boost & test Bromine levels C. Stop the use of fragrance
	A. Squirt Foam Dissolve™ on foam. Refer to pg 20 for more information. (not with disposable filter)
	A. Drain partially, add Arctic Pure® Best Defence, correct pH level to 7.2 - 7.6 and alkalinity to 100-130 ppm.
	A. Check pH and adjust as required. B. Shock with Arctic Pure® Refresh, add Boost or Peak Boost dependent on whether you have a chlorine or bromine system C. Dilution of water will reduce contaminants and odor. D. Check any ozone system is operational
	A. Add Arctic Pure® Adjust Up until level reads 7.2 - 7.6 ppm B. Add Arctic Pure® Refresh, add Boost or Peak Boost. C. Change from Bromine to Chlorine or vice versa. D. Drain and refill spa.
	A. Add sanitizers until levels are up to the recommended levels B. Replace test kits at least once a year C. Chlorine/Bromine level very high and is bleaching test reagent, Allow sanitizer levels to recede by opening cover and running jets.

Troubleshooting Spa Problems

1. **Nothing functions:** The GFCI Breaker has tripped or there is a power failure. Test GFCI Breaker. Turn breaker back on and see if spa powers up, if not contact your factory authorized dealer.

2. **Spa does not heat:** Check to see if the heat indicator is on or there are any error messages on the topside control panel. If the heat indicator is on and no error message appears contact your factory authorized dealer.

3. **Poor Jet Pressure:** First check to see that the jet(s) are turned on fully. Check your filter to see if it's clogged or dirty. Next, check to see if the jet(s) are obstructed or if the venturi air dial is turned on. Finally, check to see if the jet(s) are surging. If so, your pump is cavitating (sucking in air). This usually occurs when the water level is too low and can be solved by adding water to the spa. Adjust Filter Weir to increase or decrease feed flow. If the problem still persists, contact your factory authorized dealer.

4. **Light is not functioning:** Follow the LED replacement section.

5. **Spa comes on by itself:** This function is normal when heating and filtering. No action required.

6. **Spa doesn't drain completely:** The spa is drained by gravity. It will not always drain fully. It is not necessary to drain the spa in its entirety except when winterizing the spa. If you wish to remove the last little bit of water, we recommend you vacuum it out with a wet/dry vacuum.

Important

This manual and its contents are subject to change without notice. Although Blue Falls Manufacturing has prepared this manual as accurately and precisely as possible, Blue Falls Manufacturing will not be liable for loss, injury or damages caused by improper servicing or by use of spa (improper or otherwise).

Arctic Spas® are Canadian built with the finest materials and advanced technology to withstand the harshest weather conditions. Performance and Reliability is the Arctic Spas® Customer Guarantee. If your spa cannot be repaired under our extensive warranty, Arctic Spas® will provide a replacement spa equal in value to the original purchase price of the defective spa. Our philosophy Guarantees you Customer Satisfaction. These are words we will stand behind in writing.

engineered for the world's harshest climates®...

(wherever you happen to live)

www.arcticspas.com