

Coyote Spas Owner's Manual

Intergalactic



Table Of Contents

Important Safety Instructions	2
Placement Information & Access	4-5
Spa Specifications	6
Electrical Specifications	7
Electrical Instructions	7
Start Up Instructions	8
Spa Care & Maintenance	10-13
Quick Reference Guide	14-20
Water Maintenance	21-24
Troubleshooting	25-26
Warranty	27-28

DISCLAIMER

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).

CAUTION!

Indicates a situation in which damage to equipment or material may occur.

DANGER!

Indicates risk of injury.

WARNING!

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 8.4mm solid copper(EU), No.8 AWG solid copper conductor (US) No. 6 AWG stranded (CND) 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 8.4mm solid copper(EU), No.8 AWG solid copper conductor (US) No. 6 AWG stranded (CND) 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 no smaller than 8.4mm solid copper(EU), No.8 AWG solid copper conductor (US) No. 6 AWG stranded (CND)
 - 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 no smaller than 8.4mm solid copper(EU), No.8 AWG solid copper conductor (US) No. 6 AWG stranded (CND)
 - 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.

IMPORTANT!

This manual was written to ensure the proper use and installation of any Coyote Spa. Any modifications to the procedures outlined may result in your warranty being voided. Please read this manual to avoid any unnecessary damage to your spa and equipment.

WARNINGS!

WARNING: Children should not use hot tubs without adult supervision.

AVERTISSEMENT: Ne pas laisser les enfants utiliser le spa sans surveillance.

WARNING: Do not use hot tubs unless all suction guards are installed to prevent body and hair entrapment.

AVERTISSEMENT: Ne pas utiliser la cuve de relaxation si esgrilles de prise d'aspiration ne sont pas toutes en place, pour éviter que les cheveux ou une partie du corps soient aspirés.

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

AVERTISSEMENT: Les personnes atteintes de maladies infectieuses ne devraient pas utiliser la cuve de relaxation.

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

AVERTISSEMENT: Pour éviter des blessures, soyez prudent en entrant et sortant de la cuve de relaxation.

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 la 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 à 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 la cuve de relaxation immédiatement après un exercice fatigant.

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

AVERTISSEMENT: Rester trop longtemps dans la cuve de relaxation peut être dangereux pour la santé.

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

AVERTISSEMENT: Ne pas placer d'appareil électrique (luminaire, téléphone, radio, téléviseur, etc.) à moins de 5 feet (1.5 m) du spa.

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

ATTENTION: La teneur de l'eau en matières dissoutes doit être conforme 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 physician before using a spa or hot tub.

AVERTISSEMENT: Les personnes qui prennent des médicaments ou ont des problèmes 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 99°F (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.

WARNING!

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

Placement Information

Congratulations on the purchase of your Coyote spa. Here are a few helpful tips to assure you of the ease of placement and use of your spa.

Curbside Delivery or Self Delivery.

The Coyote spa you have purchased is constructed to be very durable. However, during transportation care must be given to not damage the spa exterior or structural components. The spa will weigh in excess of 800 lbs so appropriate methods must be used for transporting and positioning the spa.

It is highly recommended that you consult your local Coyote dealer to arrange backyard placement. However, if you plan to move the spa yourself:

Helpful Tips

1. More help is better than not enough. We recommend 2-3 adults with our 2 man delivery team.
2. Check that the area that you intend to install the spa has sufficient access as well as adequate drainage and room to position the spa as you would like.
3. The use of a flat deck trailer or similar is recommended. Be sure that the trailer is rated for the load you intend to transport.
4. Firmly secure the spa with tie-downs, taking care to protect the surface from abrasions from the straps.
5. The spa has a durable ABS plastic floor so that it is possible to slide the spa off the trailer gently, with assistance.
6. Once in position, lower the spa gently, again with assistance.

Placement of your Coyote spa.

Your spa must be properly situated and supported to ensure longevity of the cabinet, acrylic shell, and its components. It is mandatory that your spa sit on a flat, hard, unitized surface that is level to within one inch over 8 feet of a slope. Hard and unitized means that the surface must be a stable, tied together platform that will withstand the rigors of use and your local climate extremes. Examples of the above would be: a 10 cm reinforced concrete pad, a wood deck built to local building codes, or an engineered stage platform built to our Coyote Spa's standards. It is important to note that when spas are placed on soft surfaces, or platforms that are not integrated, the ground may settle. This leaves a void in the structural integrity of the platform and could cause damage to the spa shell, cabinet or structure. This damage is not covered by your Limited Warranty. Contact your local Coyote Spas outlet with any concerns or questions before installing your Coyote spa.

Wood decking requires that the deck be constructed to support at least 100 pounds per square foot. Individual spa weights vary.

Check with your Coyote Spas outlet for specific model weights. You may also use the chart on page 7 for your model's estimated average weight.

The spa settles into the original pad that it is placed in and if the spa is moved distortion within the shell and cabinet should be expected.

Equipment Panels and Access

When considering an installation site, always allow for a minimum of 76 cm (30") of clearance for the front equipment panel. It is also recommended to allow at least 50 cm (20") of minimum clearance for the remaining sides. Contact your local Coyote Spa outlet for further information when enclosing or recessing your spa.

SPA SPECIFICATIONS

	Outside Dimensions	Heights	Heater (Watts)	Water Capacity	Dry Weight	Electrical Requirements	Electrical Requirements Europe
Tucson	89" x 93" 226 cm x 236 cm	35" 89 cm	4000	375 Gallons 1420 Litres	1000 Lbs 454 Kg	240 Volt, 40 Amp Single Phase	1Øx32Amp, 3Øx16Amp
Mesa	86.5" x 46.75" 220 cm x 119 cm	29.5" 75 cm	4000	163 Gallons 317 Litres	400 Lbs 181 Kg	240 Volt, 40 Amp Single Phase 110V,20 Amp Option available	1Øx32Amp, 3Øx16Amp
Durango	89" x 93" 226 cm x 236 cm	35" 89 cm	4000	375 Gallons 1420 Litres	1000 Lbs 454 Kg	240 Volt, 40 Amp Single Phase	1Øx32Amp, 3Øx16Amp
Laredo	81" x 81" 206 cm x 206 cm	39.25" 99.75 cm	4000	400 Gallons 1515 Litres	800 Lbs 363 Kg	240 Volt, 40 Amp Single Phase	1Øx32Amp, 3Øx16Amp
Maricopa	81" x 81" 206 cm x 206 cm	39.25" 99.75 cm	4000	362 Gallons 1370 Litres	800 Lbs 363 Kg	240 Volt, 40 Amp Single Phase	1Øx32Amp, 3Øx16Amp
*Havasú	79" x 79" 201 cm x 201 cm	37" 94 cm	4000	200 Gallons 757 Litres	600 Lbs 272 Kg	240 Volt, 40 Amp Single Phase 110V,20 Amp Option available	1Øx32Amp, 3Øx16Amp
*Amarillo	81" x 81" 206 cm x 206 cm	37.5" 95.25 cm	4000	300 Gallons 1136 Litres	700 Lbs 318 Kg	240 Volt, 40 Amp Single Phase 110V,20 Amp Option available	1Øx32Amp, 3Øx16Amp
*Reno	81.25" x 81.25" 206 cm x 206 cm	97" 94 cm	4000	340 Gallons 1287 Litres	900 Lbs 408 Kg	240 Volt, 40 Amp Single Phase	1Øx32Amp, 3Øx16Amp
*Outlaw	87" Round 221 cm	39" 100 cm	4000	400 Gallons 1514 Litres	700 Lbs 318 Kg	240 Volt, 40 Amp Single Phase 110V,20 Amp Option available	1Øx32Amp, 3Øx16Amp
*Tempe	81" x 81" 206 cm x 206 cm	37.5" 95.25 cm	4000	341 Gallons 1291 Litres	700 Lbs 318 Kg	240 Volt, 40 Amp Single Phase 110V,20 Amp Option available	1Øx32Amp, 3Øx16Amp

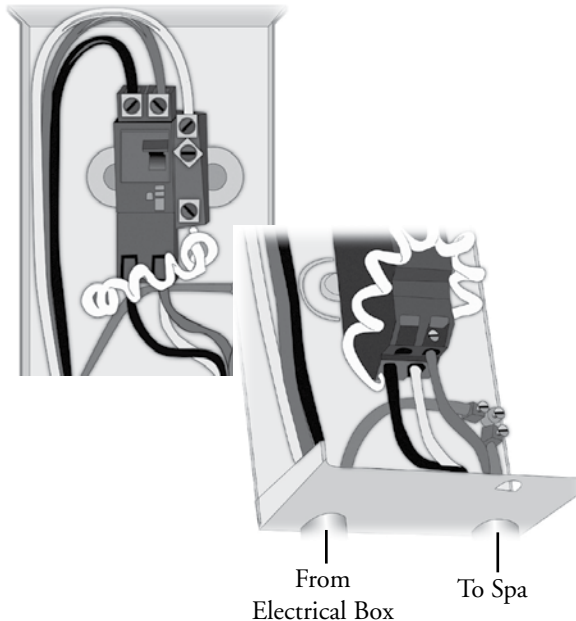
Spas with a * next to the name come equipped with the YE series spa control system.

Electrical Specifications

WARNING!

All electrical hookups must be performed by a licensed electrician! There is a shock hazard. **DO NOT PROCEED** with connecting this spa unless you are a licensed electrician. Any and all information contained herein is for reference only.

Sub Panel
Wiring Diagram
Example



IMPORTANT CONNECTIONS:

Neutral of the GFCI/RCD must be connected to the neutral bus

Neutral from the spa must be connected to the breaker.

Electrical Installation Instructions

COYOTE 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 /RCD breaker will result in an unsafe spa and will void the spa's warranty.

IMPORTANT: Should you ever find the need to move or relocate your Coyote spa, it is essential that you understand and apply these installation requirements. Your Coyote 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.

Start-Up Instructions

Once the spa is placed on a solid foundation and supplied with power, the spa should be filled and prepared for use. For the best results, read each step completely before proceeding with the following steps.

1. Prepare the spa for filling.

Clear all the debris from the inside of the tub.

Wipe off and clean the acrylic with a wet towel to remove dust.

Remove the service door and tighten all the hand unions at the pump(s) and heater.

Ensure all the knife valves are in the open (**UP**) position.



2. Fill the spa.

A. Front Access Skim Filter (Mesa)

Fill the spa through the opening until the water submerges all of the jets excluding the neck jets and 1/2 way up the opening of the weir gate. **DO NOT** let the water go below 1/2 of the way up the weir gate assembly.

B. Pressure Filter Canister Assembly (Vegas)

Locate the filter canister. Remove the lock ring and the filter lid. Remove the filter element. Insert the garden hose into the filter canister and begin to fill the spa. Once the water has filled the foot-well, add Stain & Scale Defense (refer to the directions on the product label). Insert the hose into the foot-well and continue to fill until the water is 2.5 cm (1") above the wall jets (excluding the neck jets) or covering 2/3 of the skimmer. Reinstall the filter, lid and lock ring. The lock ring should spin and then lock into place.



Fill the tub with the garden hose until all jets excluding the neck jets are submerged.

C. Floating Weir Filter Assembly

(Durango, Santa Fe, Tucson, Reno, Outlaw, Amarillo, Tempe, Laredo, Maricopa, Pomona, Escondido)

Using a garden hose with a pre-filter, fill the spa with pre-filtered water to the bottom of the pillows



3. Turn on the power.

Engage the breaker at the main panel, and then the GFCI /RCD sub panel and other switching devices installed by your electrician. If wired correctly, the control panel will blink, showing the current water temperate. At this time you should also see water movement through jets, if not you may have an air lock in the pump. The quickest way to rid an air lock is to turn power off, then locate pump one and loosen the top union to let the air bleed out. When you see a steady stream of water retighten the union and turn power back on.

4. Activate the jets.

Ensure all jet faces are in the full “open” position (clockwise). Set all the Venturi valves to the “open” position to more clearly see water coming from all the jets. Press the **PUMP 1** button to engage the lowest speed. While the low speed is running slowly, locate the filter canister, and remove the black circular cover and locate the “Air Vent Bleeder” inside. Turn the “Air Vent Bleeder” until you hear air movement. Once the air is escaping, stop unscrewing until the water bleeds out for a few seconds. Then, slowly and gently screw the “Air Vent Bleeder” back down until the water stops coming from the valve. Press the **PUMP 1** and **PUMP 2** buttons (if equipped). You should see and be able to feel water coming from all of the jets. This will show that there isn't any air trapped within the system. If water is not exiting from the jets, see the troubleshooting section of this guide or call your Coyote Spas outlet.

5. Add the Start-Up Chemicals

Add the spa chemicals as directed by your Coyote Spas salesperson, as per the instructions within this manual, or after reading the chemical supply bottles in your Start-Up kit.

6. Set the Temperature.

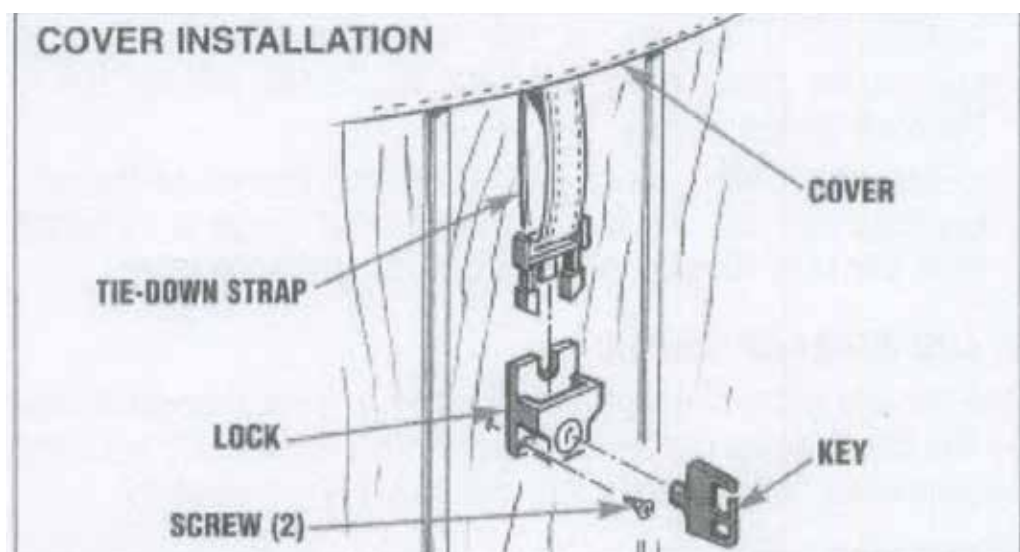
Your spa has a standard temperature range of 59-104°F, 15-40°C. You may adjust these settings using the **UP** or **DOWN** buttons on your spa side control. Simply press and hold the button until the correct setting is reached and release. See the Quick Reference Card (**QRC**) provided with your spa for specific controller information.

7. Set the Filtration.

Please refer to the Quick Reference Card (**QRC**) provided with your spa for assistance in setting the filtration.

8. Install the Hardcover.

Place the cover on your spa, ensuring that it sits squarely around the corners. Position the locking straps on the cabinet walls and attach them with the screws that have been supplied. Allow some slack in the tie downs for shrinkage in cold weather.



Note: Having a hardcover on whenever the spa is not in use will greatly reduce the cost of operating the spa. When the spa is not in use, the cover must be in place at all times. This reduces the risk of thermal distress. This is caused by leaving the spa uncovered in the sunlight. Which allows the spa to absorb the heat, causing damage to the surface of the spa. This form of damage is not covered under your Limited Warranty.

Spa Care & Maintenance

Your Coyote 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.

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 /RCD breaker located in the sub panel or the quick disconnect.
2. All Coyote spas have an external drain that can be attached to a typical garden hose for convenient draining. Simply locate the drain on the side of the floor, pull the nozzle out, remove cap, and attach your hose. Once the hose is attached, push the nozzle in slightly to open the internal valve and the spa will start draining.

Note: All Coyote 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.

3. When empty, inspect the spa shell and clean as required.
4. Close the drain valve.
5. Refill the spa BEFORE restoring power.

IMPORTANT: With reusable filters, it is necessary to rinse the filter cartridges as often as weekly depending on your bather load. Every month, and each time the spa is drained for cleaning, clean the cartridges in filter cleaner. Or, if using disposable filters change as needed or every 3 months otherwise.

Ozone Mixing Chamber (Tucson, Santa Fe, Mesa, Durango, Laredo, Maricopa, Pomona, Escondido)

This chamber mixes the ozone into the water, rather than a standard ozone unit that merely produces gas bubbles that float to the top of the water and does little to assist in sanitization. The chamber prolongs the interaction of ozone in the water to increase the effectiveness and requires no maintenance.

Filtration System

Coyote 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 filtration system, the filter cartridge may become clogged, resulting in reduced water flow. It is important to maintain a clean, un-obstructed filter system.

Cleaning a Reusable Filter/Replacing a Disposable Filter (Vegas)

NOTE: The Vegas is compatible with either a reusable or disposable filter. If you are using a reusable filter, please read the note above and then follow the steps listed below.

Disposable filter cartridges are a great option to reusable filters. They typically filter down to a smaller particle size and never require cleaning. They have a lifespan of 3 or 4 months. The use of Clarifiers and Foam inhibitors is not recommended with disposable filters! Consult Customer Care for more information on disposable filter cartridges.

1. Turn the power to the spa OFF.
2. Open the AIR VENT BLEEDER, remove the FILTER NICHE COVER (plastic disk-shaped piece)
3. Lift the grey lock tab and remove the lock ring by turning it counter-clockwise.
4. Pull the FILTER LID up and remove it.
5. Rinse the element using a garden hose with a pressure nozzle. Rotate and separate the filter pleats while spraying in an up/down motion. Let the filter dry, and then inspect the pleats for calcium build up or and oily sheen. If either are present, consider soaking or replacing the element.
6. Replace the FILTER CARTRIDGE in the opposite order it was removed. The LOCK RING should easily snap into place. DO NOT turn it past the grey LOCK TAB position (the first click).
7. Turn the power to the spa ON. With the spa operating on the low speed, slowly unscrew the AIR VENT BLEEDER until the air bleeds out and you have allowed water to bleed out for a few seconds.
8. Then slowly and gently screw the AIR VENT BLEEDER back down until the water stops coming from the valve.
9. Replace the FILTER NICHE COVER.
10. Run the jets on HIGH speed until you can see, and feel that the water is coming from all the jets.
11. Revert to low speed and set temperature to desired setting.

Cleaning a Reusable Filter/Replacing a Disposable Filter (Mesa)

1. Turn the power to the spa OFF.
2. Open skimmer door.
3. Remove basket.
4. Remove water valve.
5. Remove filter.
6. Spray till clean.
7. Install in reverse order.

Disposable Filter Replacement

(Durango, Santa Fe, Tucson, Reno, Outlaw, Amarillo, Tempe, Laredo, Maricopa, Pomona, Escondito)

1. Turn the spa off using the on/off button on the topside control panel.
2. Remove the telescoping filter cylinder
3. Unscrew the filter cartridge and either clean the reusable filter or discard the disposable filter.
4. Re-thread the clean or new filter.
5. Replace the telescoping filter cylinder.

Care of the Spa Shell

Your Coyote Spa has a Polyurethane reinforced, 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 Coyote Spas® Dealer stocks Stain and Scale Inhibitor 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 are **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

 WARNING	 AVERTISSEMENT
AVOID DROWNING RISK	ÉVITEZ DE NOYER LE RISQUE
<small>KEEP CHILDREN AWAY. CHILDREN OR OBJECTS CANNOT BE SEEN UNDER COVER. REMOVE COVER COMPLETELY BEFORE ENTRY - BATHERS ENTRAPMENT POSSIBLE. NON-SECURED OR IMPROPERLY SECURED COVERS ARE A HAZARD. FAILURE TO FOLLOW ALL INSTRUCTIONS MAY RESULT IN INJURY OR DROWNING.</small>	<small>ENFANTS DE SUBSISTANCE PARTIS, DES ENFANTS OU LES OBJETS NE PEUVENT PAS ÊTRE VUS SOUS LA COUVERTURE. ENLEVEZ LA COUVERTURE COMPLÈTEMENT AVANT L'BAIGNEUR - OCCLUSION D'ENTRÉE POSSIBLE. LES COUVERTURES NON-FIXÉES OU INCORRECTEMENT FIXÉES SONT UN RISQUE. LE MANQUE DE SUIVRE TOUTES LES INSTRUCTIONS PEUT AVOIR COMME CONSÉQUENCE LES DOMMAGES OU LA NOYADE.</small>

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.

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. Use a vinyl protector on the vinyl at least twice a year to maintain the life of the vinyl. We recommend a vinyl and cabinet restore product.

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 a non chlorine oxidizer.
4. Lower the temperature.

Upon your return:

1. Shock the spa with a non chlorine oxidizer.
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 than 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.

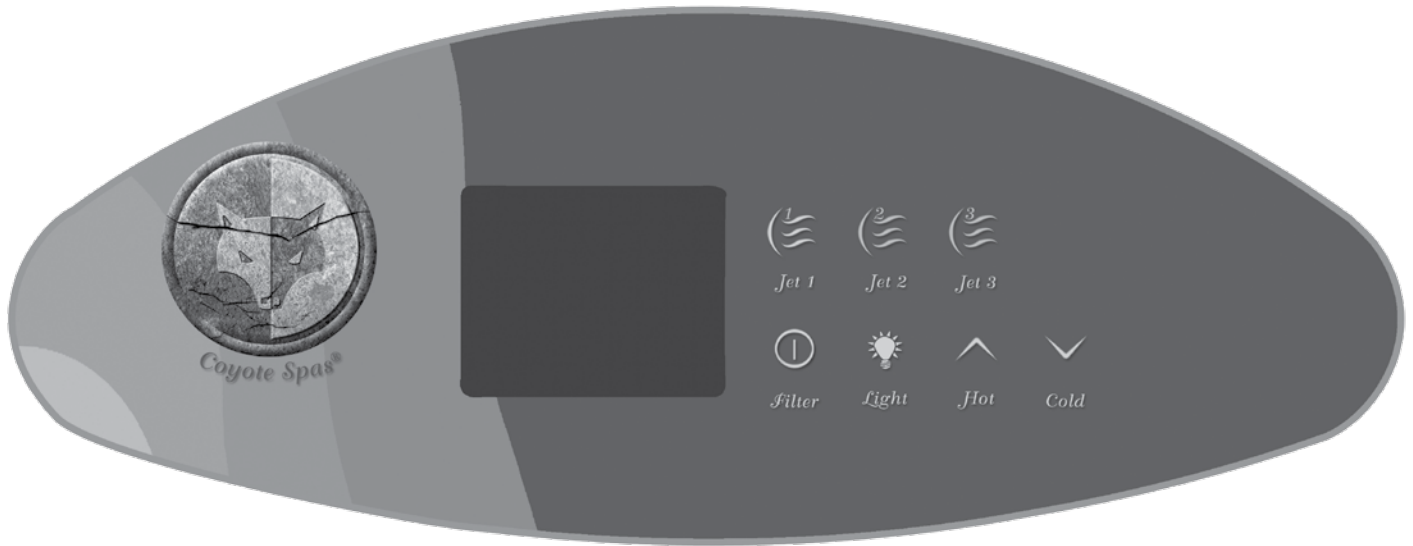
Winterizing Your Spa

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 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.

Quick Reference Guide

Tucson, Santa fe, Mesa, Durango, Laredo, Maricopa, Pomona, Escondido



The Quick Reference Guide provides a quick overview of your spa's main functions and the operations accessible with your digital control pad.

Quick Reference Guide



Starting Pump 1


Press **Jet 1** button 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 deactivated.

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



Starting Pump 2

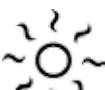
Press the **Jet 2** to turn Pump 2 on. Pressing a second time to turn Pump 2 off. A built-in timer automatically turns Pump 2 off after 20 minutes, unless it has been manually deactivated first.

 The Pump 2 indicator lights up when Pump 2 is on.



Starting Pump 3

Press the **Jet 3** to turn Pump 3 on. Pressing a second time to turn Pump 3 off. A built-in timer automatically turns Pump 3 off after 20 minutes, unless it has been manually deactivated first.



Turning The Light On:


Press the **Light** key to turn light on. Press a second time to turn light off. A built in timer automatically turns the light off after 2 hours, unless it has been manually deactivated.



The "Light" icon lights up when light is on.

Automatic Water Heater Start:

When water temperature is 1°F (0.5°C) lower than the Set Point, the heater will automatically turn on until water temperature reaches Set Point plus 1°F (0.5°C).

 The "Heater" indicator lights up with the heater is on.

Setting Water Temperature

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

The "Set Point" symbol indicates the desired tempera-



ture, NOT the current water temperature!
Water temperature can be adjusted by 1- degree increments from 59° to 104°F (15° to 40°C).

Temperature unit:

Press and hold the **light** button for 5 seconds to toggle between °F and °C.

Standby mode:

Press and hold **Jet 3** button for 5 seconds to enter standby mode. The "stby" message is displayed and heating & filtering will be disabled for 30 minutes. Pressing any button will exit standby.

Note: If the system is turned down while the heater is on, Pump 1 will run for an additional 3 minutes.

Pad Lockout:

There are two modes you can choose from: Full or partial lock. Full lock means that all keypad functions are locked. Partial lock means that only the basic functions will remain accessible (pumps, blower, light).

Locking your digital control pad:

Press and hold **Jet 1** for 5 seconds. The display will show "LocP", with "P" representing partial lock. Release the button and the keypad will be in Partial lock mode. Keep button pressed down for 5 more seconds if you want to be in Full lock mode. The "LocF" message will then be displayed. When control pad is locked, all automatic functions will run as usual. If a button is pressed down, a "LocP" or "LocF" message will be displayed for 1 second. To unlock the keypad, simply press and hold Jet 1 button again for 5 seconds.

Boost Mode:

Press and hold **Jet 2** button for 5 seconds to enable Boost mode. In this mode, Pump 1 high speed and the ozonator will run for 45 minutes. When enabled, "boo" message is displayed. This mode is used to speed up filtration after intensive use of the spa or to help mix chemicals just added to the spa. Pressing any button will exit boost mode.



Quick Reference Guide

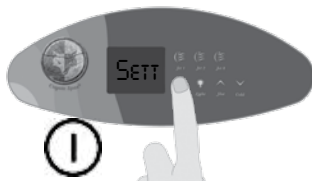
PROGRAMMING THE FILTER CYCLES

During a filter cycle:

- Pump 2 & 3* run for 20 seconds, then:
- Pump 1 runs at low speed for the programmed number of hours (see below), and
- The ozonator is turned on.

*if installed

To set the filter cycle duration (please note you can press pump 1 to exit at any time without saving):



Press the Filter button to enter into your filtration options. Your display will show "Sett" and from here you will be able to choose your settings.



Press your Filter button again to display your first option. This is your Filter Cycle Duration.



Use your arrow buttons to select your Filter Cycle Duration. You can select from 0 to 6 hours.



Press your Filter button again. Your display will now show the settings for your Filtration Frequency.



Use your arrow buttons to adjust your Filtration Frequency. You can choose from 1-4 times per day.

You can move backwards through the programming steps by pressing your pump 3 button.

When you have reached the end of the programming options you can press your program button one last time to exit the programming and begin a filter cycle immediately or simply not press any further buttons to save your new settings and start the first filtration cycle at the designated time.

45 Minute Filter Cycle Time-Out:

If you turn on a pump, blower, or light during a filter cycle the cycle will be interrupted and will only resume 45 minutes after you (or the system) have turned the last active output off.

Quick Reference Guide

Havasu, Vegas, Amarillo, Reno, Outlaw, Tempe

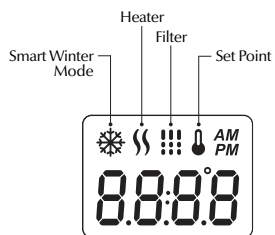


in.k300™

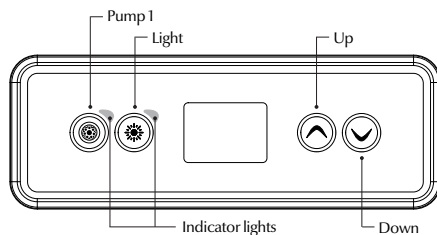
Compact full-function keypad

The Quick Reference Card provides an overview of your spa's main functions and the operations accessible from your digital keypad. This QRC depicts a generic overlay, custom versions may vary.

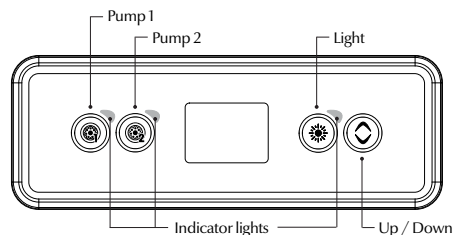
Description



1 Pump Model



2 Pump Model



TROUBLESHOOTING

Water temperature regulation

In a regulation cycle, the system first generates water flow through the heater housing and the plumbing, in order to ensure accurate water temperature readings as well as avoiding heater activation in dry conditions.

After verifying pump activation and taking a water temperature reading if required, the system automatically turns the heater on to reach and maintain water temperature at Set Point.

☺ The "Heater" indicator lights up when the heater is on. It flashes when there is a request for more heat but the heater has not yet started.





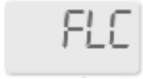

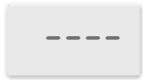

Smart Winter Mode

Our Smart Winter Mode protects your system from the cold by turning pumps on several times a day to prevent water from freezing in pipes.

☼ The "Smart Winter Mode" indicator lights up when the Smart Winter Mode is on.

Cooldown

While performing this task, the heater is not allowed to turn on and its icon flashes.

	"Hr" error message displayed.	An internal hardware error has been detected in .xe. Contact dealer or service supplier.
	"HL" error message is displayed. "HL" error message is flashing.	The system has shut the heater down because the temperature at the heater has reached 119°F (48°C). Do not enter the water! Remove spa cover and allow the water to cool down, then reset the breaker to reset the system. The system has shut down because the water temperature in the spa has reached 112°F (44°C). Only the Smart Winter Mode remains active. Do not enter the water! Remove spa cover and allow the water to cool down to 109°F (43°C). Call your dealer or service supplier if problem persists.
	"AOH" error message is displayed.	Temperature inside the spa skirt is too high, causing the internal temperature in the in.xe to increase above normal limits. Open skirt and wait until error clears.
	"FLO" error message is displayed.	The system detects no water pressure while a pump is running. Check and open water valves. Check water level. Clean filter or replace. Call your dealer or service supplier if problem persists.
	"FLC" error message is displayed.	A problem has been detected with the pressure switch. Call your dealer or service supplier.
	"Prr" error message is displayed.	A problem has been detected with the temperature probe. Call your dealer or service supplier.
	4 dashes are displayed.	The Processor has been damaged... DO NOT ENTER THE WATER ... this is usually caused by abnormal power fluctuations, call your dealer or service supplier.
	"OH" error message is displayed.	The water temperature in the spa has reached 108°F (42°C). DO NOT ENTER THE WATER! Remove the spa cover and allow the water to cool down to a lower temperature. Call your dealer or service supplier if problem persists

*If activated in Low-level programming the lights will flash when there is an error code present.

Spa Functions



Off Mode

Pressing **Pump 1** for 5 seconds will enable the Off mode. This mode allows you to stop all outputs including automatic functions such as filter cycle, heat request and smart winter mode for 30 minutes to perform quick spa maintenance. When Off mode is active, the display will toggle between the "OFF" message, the clock and the water temperature. The spa light will flash for a few seconds before the end of the 30 minutes to warn you that the system is about to resume its normal operation. Press **Pump 1** or **Pump 2** (if available) to restart the system before the expiration of the 30 minute delay. When the system resumes its normal operation, the display shows "On" for 3 seconds.



Pump 1

Press **Pump 1** key to turn Pump 1 on at low speed. Press a second time to turn pump to high speed (with a dual-speed pump*). A third time turns pump off. A built-in timer automatically turns pump off after 20 minutes, unless pump has been manually deactivated first.

The "Pump 1" indicator lights up when Pump 1 is on. With a dual-speed pump, the indicator will flash when pump 1 is on at low speed.



Pump 2 key

Not available on all models

Press **Pump 2** key to turn Pump 2 on at low speed. Press a second time to turn pump to high speed (with a dual-speed pump*). A third time turns pump off. A built-in timer automatically turns pump off after 20 minutes, unless pump has been manually deactivated first.

The "Pump 2" indicator lights up when Pump 2 is on. With a dual-speed pump, the indicator will flash when pump 2 is on at low speed.



Light key

Press **Light** key to turn light on. A second press turns light off. A built-in timer automatically turns light off after 2 hours, unless it has been manually deactivated first.


The "Light" indicator lights up when light is on.



Up/Down keys

Use **Up** or **Down** key to set desired water temperature. The temperature setting will be displayed for 2 seconds to confirm your new selection.

2 pump spas have a combined **Up/Down** key. Hold the button to increase the parameter and release the button to stop. Hold the button again to decrease the parameter.

 The "Set Point" icon indicates that the display shows the desired temperature, NOT the current water temperature!

* If single speed pump; press Pump key to turn pump on. Press Pump key again to turn pump off.

Programming Steps



Program menu

The program menu is accessible by holding down the **Light** key for 5 seconds. In the program menu the following parameters can be set: clock, the filter or purge cycles, economy mode and temperature units. While you are in the program menu, use the **Up** or **Down** key to adjust the parameters and use the **Light** key to jump to the next parameter. The changes will be saved after the confirmation of

the last parameter only. If there is no action taken for 10 seconds, the system will exit the program menu without saving any changes.



Setting the clock

Enter the program menu by holding down the **Light** key for 5 seconds. The display will show the current clock setting with the hour flashing.

Depending on factory settings your system may be set to 24-hour time or 12-hour time.

Setting the hour: Use the **Up** or **Down** keys to adjust the hours. Press the **Light** key to jump to the next parameter, the minutes.

Setting the minutes: Use the **Up** or **Down** keys to adjust the minutes. Press the **Light** key to jump to the next parameter, the filter or purge start time (FS).

Programming the filter/purge cycles

Depending on system configuration your spa will perform either a filter or a purge cycle. The filter cycle menu consists of the following parameters: the start time (FS), the duration (Fd) and the frequency (FF). The purge cycle menu consists of the following parameters: the start time (FS) and the frequency (FF).

A filter cycle consists of starting all the pumps and blower in high speed for 1 minute (purge step) then, the pump associated with the filter will run in low speed for the remaining duration of the filter cycle (clean step).

A purge cycle is used when the spa is equipped with a 24 hour circulation pump which provides a continuous clean step. It consists of starting all the pumps and blower in high speed for 1 minute.



Setting filter or purge cycle start time

The display will show FSxx, "xx" representing the starting hour of the cycle. Use the Up or Down key to adjust the hours. Use the Light key to jump to the next parameter, filter duration (Fd).



Setting filter cycle duration

(not available on purge systems)

The display will show Fdxx, "xx" representing the duration in hours of the filter cycle. Use the Up or Down key to adjust the duration. Use the Light key to jump to the next parameter, filter or purge frequency (FF).

0 = no filtration
24 = continuous filtration

It is not recommended to set this to "0".



Setting filter or purge cycle frequency

The display will show FFxx, "xx" representing the number of cycles per day. Use the Up or Down key to adjust the frequency. Use the Light key to jump to the next parameter, economy mode (EP).

The "Filter cycle" indicator lights up when filter is on and flashes when suspended.



Setting economy mode

This mode allows you to lower the temperature set point of the spa by 20 °F (11 °C) during a certain period of the day.

The display will show EPx, "x" representing the state of the programmed economy (0 = disabled, 1 = enabled). Use the arrow keys to enable or disable economy mode. Use the Light key to jump to the next parameter, economy start time (ES).



Setting economy start time

The display will show ESxx, "xx" representing the hour at which the economy mode will become active. Use the Up or Down key to adjust the hour. Use the Light key to jump to the next parameter, economy duration (Ed).

When the Economy mode is ON, the display will toggle between the "Eco" message, the time, and the water temperature.



Setting economy duration

The display will show Edxx, "xx" representing the duration in hour of the economy mode. Use the Up or Down key to adjust the hour. Use the Light key to jump to the next parameter, temperature unit.

24 = continuous economy



Setting temperature unit

Water temperature can be displayed in either Fahrenheit (°F) or Celsius (°C). The display will show F or C.

Use the Up or Down key to change the setting. Use the Light key to save all the parameters.



Smart Winter Mode

Our Smart Winter Mode protects your system from the cold by turning pumps on several times a day to prevent water from freezing in pipes.


The "SWM" indicator lights up when freezing is detected and flashes when the purge is active.

Cooldown

After heating the spa water to the desired Set Point, the heater is turned off, but its associated pump (Pump 1 low-speed or CP) remains on for a predetermined period of time to ensure adequate cooling of the heating element, prolonging its useful life.

Water temperature regulation

Every 15 to 90 minutes the pump will run to ensure accurate water temperature readings as well as avoid heater activation in dry conditions. After verifying pump activation and taking a water temperature reading if required, the system automatically turns the heater on to reach and maintain water temperature at Set Point.

 Indicator flashes when taking water temperature reading.

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 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.

Methods For Testing The Spa Water

Accurate water testing and analysis are an important part of effectively maintaining your spa water. To follow the 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.

IMPORTANT "SUPER CHLORINATION / NON-CHLORINE SHOCK 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.

Balance the Total Alkalinity (TA)

1. The recommended Total Alkalinity (TA) for your spa water is 80-120 ppm.

Balancing the pH

1. The recommended pH range for your spa water is; 7.2-7.6.

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.

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:
 - For a Chlorine System: Chlorine Tablets, Refresh, Spa Boost.
 - For a Bromine System: Bromine Tablets, Refresh, Peak Boost.

IMPORTANT: Sanitizers are acidic and will decrease the Total Alkalinity. Regular testing and balancing of TA is extremely important with these products. This is why Perfect Balance is part of the system.

IMPORTANT: Always remove floating dispenser while the spa is not in use. Remove dispenser with a plastic bucket (keeping submerged) and store out of reach of children until spa use has ended.

Using Chlorine System

Start-Up:

1. Let water reach 33°C (90°F).
2. Add 1 tablespoons (14 grams) of Chlorine Granules per 758 litres (200 gallons) of water.
3. Add 1 tablespoon (14 grams) of Refresh per 758 litres (200 gallons) of water.
4. Wait 24 hours and then test and balance Alkalinity and pH levels of the water using Alkalinity Increaser, pH Up or pH Down respectively.

Note: Have jets on high speed for 1-2 minutes when adding chemicals to mix the chemicals through the water more effectively. Circulate water using filtration mode for two additional hours.

After Each Use:

1. If you have an ozonator and/or use a Silver Sentinel Filter, add 1 teaspoon (4.75 grams) of Chlorinating granules per person to the spa water (again, this is when you get out).
2. If you do not have an ozonator and/or use a Silver Sentinel Filter, add two teaspoons (9.5 grams) of Chlorine Granules to the spa water.
3. If you do not use your spa for 3-4 days, add 1-2 tablespoons (4.75 - 9.5 grams) of Chlorine Granules to the spa water for maintenance purposes.

Note: Have jets on high speed each time you add Chlorine to better mix it into the water.

Weekly:

1. Test water for Alkalinity and pH. Adjust as needed.
2. Add two (2) tablespoons (28 grams) of Refresh to spa water. Leave cover open and jets on high speed for 20 minutes.

IMPORTANT: Shock significantly reduces pH and TA. One hour after adding Refresh test and adjust pH and TA as needed.

Using Bromine System:

Start-Up:

1. Fill floating dispenser with pucks and open setting #7.
2. Add 2 tablespoons (28 grams) of Refresh per 1000 litres (265 gallons) of water.
3. Add 2 1/2 tablespoons (35 grams) of Peak Boost per 1000 litres (265 gallons) of water, to establish a Bromide reserve.
4. Test the Bromide level. Once bromine reads within the ideal range (3-5 ppm) turn tablet dispenser down to 2 or 3 or more depending on bather load.

Weekly:

1. Fill floating dispenser with pucks and reset the setting if necessary.
2. Add 2 tablespoons (28 grams) of Refresh per 1000 litres (265 gallons) of water.
3. Wait at least one hour and add 1 tablespoon (14 grams) of Best Defense per 1000 litres (265 gallons) of water.

IMPORTANT: Refresh significantly reduces pH and TA. One hour after adding Refresh test and adjust pH and TA as needed.

The use of Clarifiers and Foam inhibitors are not recommended with a disposable filter.

Common Spa Water Problems - Cause & Remedy

PROBLEM	POSSIBLE CAUSES	SOLUTIONS
CLOUDY WATER	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> A. Dirty filter, clean with Arctic Pure® Filter Restore (not with disposable filter). 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
COLOURED WATER	<ul style="list-style-type: none"> A. Dissolved metals from water source B. Low chlorine/bromine levels C. Fragrance 	<ul style="list-style-type: none"> A. Use Arctic Pure® Best Defense 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
FOAMING	<ul style="list-style-type: none"> A. High concentration of oils and organics being agitated by the jets and/or Therapy Air 	<ul style="list-style-type: none"> A. Squirt Foam Dissolve™ on foam. Refer to pg 20 for more information. (not with disposable filter).
SCALE DEPOSITS	<ul style="list-style-type: none"> A. High Calcium level, high pH, high alkalinity 	<ul style="list-style-type: none"> A. Drain partially, add Arctic Pure® Best Defence, correct pH level to 7.2 - 7.6 and alkalinity to 100-130 ppm.
ODOR	<ul style="list-style-type: none"> A. High level of organic contaminants, combined with chlorine 	<ul style="list-style-type: none"> 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
EYE/SKIN IRRITATION	<ul style="list-style-type: none"> A. pH too low B. Combined chlorine due to high concentration of organic contaminants C. Allergic reaction to sanitizer D. Bacterial contamination 	<ul style="list-style-type: none"> 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.
NO CHLORINE/ BROMINE READING	<ul style="list-style-type: none"> A. High concentration of contaminants using up sanitizers B. Test kit reagents ineffective 	<ul style="list-style-type: none"> 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 /RCD Breaker has tripped or there is a power failure. Test GFCI /RCD 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. **Spa comes on by itself:** This function is normal when heating and filtering. No action required.
5. **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.



Warranty

Spa Shell ~ 7 years

Coyote spas® warrants the spa shell to the customer against water loss due to structural failure for a period of seven years.

Equipment & Plumbing ~ 3 year parts and 1 year labour

Coyote spas® warrants the spa's electrical equipment components ~ specifically the pump(s) *(please refer to detailed pump warranty below), factory installed ozone system, heater (including the Tru-Guard™ Heater) and control system against malfunctions due to defects in materials and workmanship for a period of three years to the original purchaser from the original date of delivery. Includes parts necessary to repair. Labour is included for a period of one year.

Other Components ~ 3 years

Coyote spas® warrants the fuses, lights, filter covers, jet inserts, o-rings, topside control overlays, cabinet material, filter baskets and weir assemblies, diverter handles and caps, air control handles and caps, plastic cover clips, chrome trim and all other unmentioned components to be free of defects in workmanship and materials for a period of three years to the original purchaser from the original date of delivery. Includes only parts necessary to repair.

Shell Surface ~ 3 years

Coyote spas® warrants the interior surface to the customer against water loss due to material failure including cracks, blisters, peeling and delaminating for a period of three years to the original purchaser from the original date of delivery. Includes parts and labour necessary to repair.

Arroyo, Otero Series Cover ~ 1 year

Coyote spas® warrants the standard Coyote cover against malfunctions due to defects in materials and workmanship for one year to the original owner from the original date of delivery. Includes parts necessary to repair.

Terrace Series Cover ~ 3 years

Coyote spas® warrants the VACSEAL™ cover against malfunctions due to defects in materials and workmanship for three years to the original owner from the original date of delivery. Includes parts necessary to repair.

Stereo ~ 1 year

Coyote spas® warrants factory installed entertainment systems against malfunctions due to defects in materials and workmanship for one year to the original owner from the original date of delivery. Includes parts and labour necessary to repair.

Coyote spas® extends this limited warranty solely to the original purchaser of any Coyote self-contained spa, installed by an approved Coyote Spas Dealer, for three years of delivery date or four years from the manufacturer's ship date, whichever comes first. For the purpose of this document "customer" shall mean the original purchaser of the spa.

PERFORMANCE

To obtain service in the event of a defect or malfunction covered by this Limited Warranty, notify your Coyote Spa dealer as soon as possible and use all reasonable means to protect the spa from further damage. Upon proof of purchase, Coyote spas®' agent or its designated service representative will correct the defect subject to the terms and conditions continued in this Limited Warranty. *Please note that union connection leaks are considered to be user serviceable and are expressly excluded from the Limited Warranty. Damage resulting from union connection leaks is expressly excluded from the Limited Warranty. There will be no charge for on site labor to the customer for a period of one year from the date of original delivery or two years from the manufacturer's ship date, whichever comes first. This will apply specifically to equipment, plumbing, shell surfaces or shell structure against malfunctions due to defect in the material and workmanship and within the Limited Warranty. Any costs associated with service and/or travels outside of the designated service area are the responsibility of the customer. If Coyote spas® determines that repair of the covered defect is not feasible; we reserve the right to instead provide a replacement spa equal in value to the original purchase price as of the defective spa. Spa replacement is done only at the discretion of Coyote spas®. Reasonable costs for the removal of the defective spa, and delivery and installation will be the responsibility of the spa owner. Freight will be paid to the nearest Coyote spas® distribution center. Cover seam damage is considered normal wear and rear when used with a cover lifting device.

CONDITIONS OF WARRANTIES

All warranties provided hereunder extend only to the original purchaser of the spa if purchased and originally installed within the boundaries of the country where it was originally purchased. All warranties hereunder terminate upon transfer of ownership of a spa from the original consumer purchaser. Your limited warranty does not include repair travel mileage or for shipping cost assessed by your Factory Authorized Dealer or service agents. All events covered by this Limited Warranty hereunder must be repaired by a Factory Authorized Dealer of Coyote spas®. The warranties will not include any costs of repair incurred by a non-factory authorized agent. To obtain service, the customer must contact the Factory Authorized Dealer in his area. In the event that a spa or component thereof must be returned to Coyote spas® distribution center, all freight costs are the responsibility of the spa customer. After 30 days from delivery, a deductible or "excess" fee will be applied to all warranty costs. This fee will be a maximum of \$75 CAD or equivalent local currency, and may be applied to the parts or labour component costs associated with each separate job covered by the warranty. Charges not covered by the warranty or after the warranty period expires are not affected by this condition. To obtain this Limited Warranty hereunder the spa must be purchased by a Factory Authorized Dealer of Coyote spas®.

EXCLUSIONS

All warranties hereunder are void if the spa has been subject to alterations, misuse or abuse or any repair of the spa has been attempted by anyone other than a Factory Authorized Dealer of Coyote spas®. Alterations include but not limited to, any change to the components, replacement of components or addition of components without the written authorization from Coyote spas®. Misuse includes damages caused by improper and/or non-certified electrical hook-ups, failure to operate the spa in accordance with the instructions contained in the owner's manual provided with the spa, including incorrect start-up procedures or dry firing of the spa, any use of the spa or any of its components in an application for which it was not designed, and damage caused by improper chemical balance, ice in the spa, overheating the spa or spa water or damage to the spa surface by allowing undissolved sanitizing chemicals to lie on the surface. Spa covers are not warranted against chemical burn or discoloration. Spa covers are not warranted against water absorption or any damage resulting from water absorption. Any damage resulting from the misuse or improper installation of a cover lifter, or use of a cover lifter without a Coversaver is excluded from warranty coverage. Any damage resulting from the mishandling of the spa cover in any way is not covered under warranty. Any damage caused by moving of the spa or improper installation (including insufficiently prepared or unlevelled ground) is considered abuse and any damage to the material or workmanship of the spa cabinetry and floor in shipping or handling are expressly excluded from the Limited Warranty.

Damage to pillows reported beyond the day of delivery will not be covered under warranty

Coyote spas® expressly excludes warranty coverage on any of the following: Acts of nature including but not limited to damage resulting from lightning, tornados, hurricanes, flooding, freezing, fire and any other acts of nature. Any spa installed in a commercial application. Any failure caused by improper cover use or failure to use cover when the spa is unattended. Any item(s) attached to or installed onto the spa, including but not limited to gazebos, cover lifters and cedar accessories. Any options or additional components that are not factory installed. Any damage or failure due to spa winterization.

Coyote spas® expressly excludes warranty coverage on splitting, fading or warping of the cabinet beyond the date of delivery. Any damage resulting from handling of the cabinet is excluded from this warranty.

* Pump(s) are warranted against material and component failure. The pump shaft seal is covered under warranty. Damage resulting from a neglected leaking shaft seal is not covered under warranty. This includes but is not limited to bearing seizure, end bell failure, start switch failure, impeller failure and capacitor failure. It is the responsibility of the customer to report shaft seal failure before further damage can occur. Any pump component failure determined to be the result of defective material will be replaced under warranty. Coyote spas® reserves the right to replace pump components, rather than the complete pump assembly. Vibration noise associated with normal pump operation is excluded under this warranty.

DISCLAIMERS

Coyote spas® will not be liable for loss of use of the spa or other incidental or consequential costs, expenses or damages that may include but not limited to, the removal of a permanent sun deck, sunroom, gazebo, or other custom fixture, any crane costs associated with the removal of the spa for service or replacement. Coyote spas® shall not be liable for costs arising from water, filter cartridges and chemical loss. Under no circumstances shall Coyote spas® or any of its representatives be liable for any injury to any person or damage to any property, howsoever arising from the spa. Coyote spas® warranties are limited to a maximum amount of moneys received by Coyote spas® with respect to the sale of the spa

ALL WARRANTIES

The warranties enclosed herein are all of the warranties provided by Coyote spas® to the customer, and to the extent permitted by law. Spa registration (within 30 days of delivery) is the responsibility of the customer and is a condition of warranty coverage. Coyote spas® expressly excludes any warranties granted to the customer express or implied by statute or common law which exceed or conflict with the warranties set out herein. All warranties herein require that any claim must be submitted to Coyote spas® within ten days of the time the defect is discovered, and must be accompanied by the original customer's receipt confirming purchase of the spa, which indicated the date the purchase occurred. All valid warranty claims must be submitted within the warranty period upon pending warranty expiration. Failure to provide such notice and information invalidates all warranties provided thereunder. Coyote spas® reserves the right to repair or replace components or materials at their option. In certain cases, pictures may be required for proper evaluation before warranty coverage is determined. In the event a customer is unable to either obtain parts or satisfactory service from a Factory Authorized Dealer of Coyote spas®, notice should be given immediately to the service department of the agent where the spa was purchased and to Coyote spas®.





*Enjoy your
Coyote Spa!*

Coyote Spas may make product modifications and enhancements without notice.
Specifications and dimension are approximate and for reference only.

11.01

Coyote Spas



#16575