



# TRADITIONAL SPAS

APEX ELEMENT OMEGA

Coast Spas Manufacturing
6315 202 Street, Langley BC Canada
604 514 8111
info@coastspas.com
www.coastspas.com



# Thank you for choosing us!

Here at Coast Spas we have over 20 years of experience crafting the World's Best Built Spas®. Our mission is to deliver the highest quality spas with exceptional performance to help improve your overall wellness. We are so glad you've chosen a Coast Spa and we hope you, your family and friends all enjoy it for years to come.

Sincerely,

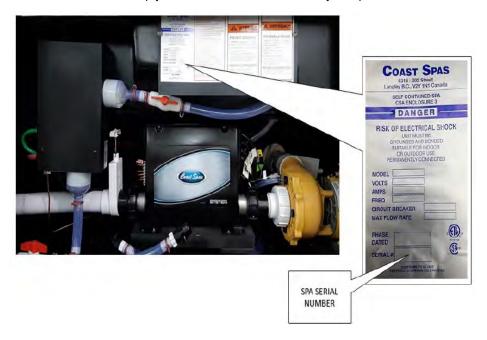
Patricia Diamente, CEO & President



#### **CONGRATULATIONS!**

#### YOU'RE ALMOST READY TO ENJOY YOUR NEW SPA!

Before you begin to enjoy your spa, please take a moment to submit your spa warranty. For registering your spa, you will need the spa serial number. Picture below will help you locate the serial number on your spa.



You can register your spa by using below link. https://coastspas.microsoftcrmportals.com/

#### FOR YOUR REFERENCE

Spa owner name:	
Address:	
Contact:	Email:
Spa Serial number:	Purchase Date:
Delivery Date:	Dealer Name:
Contact your spa selling dealer if you have any	queries related to your Traditional Spa. Coast spas authorized dealers

are trained professionals who can assist you with spa parts, setup, operations, maintenance, and technical support.

#### **TABLE OF CONTENTS**

Letter from Coast Spas Manufacturing Inc.	Page	2
Registering your spa	Page	3
Table of contents	Page	4
Basic information	Page	5
Important safety instructions and glossary of terms	Page	6-8
Traditional Spa general layout	Page	9
Traditional spa collection	Page	10-13
Traditional spa features	Page	14
Start Up Guide— Patio Series	Page	15
Start Up Guide— Classic   Elite Series	Page	16
Traditional Spa Care Guide	Page	17-18
Basic Installation and Configuration Guidelines : Electrical Requirements	Page	19-20
Traditional Spa Maintenance Procedures	Page	20-22
Water Clarity Troubleshooting	Page	23
Troubleshooting Guide	Page	24-25
Draining & Winterizing	Page	26
Traditional Spa Controls	Page	27-33
Traditional Spa Jet Operations	Page	34-57
Traditional Spa Specifications	Page	58
Balboa Wi-Fi module	Page	59
PRV19 stereo system	Page	60
DM6 Instructions	Page	61
AQ-DM-6UBT- Digital media locker	Page	62
Del Ozone operation	Page	62
In.Clear Instructions	Page	63
Traditional Spa Service Log	Page	64-65





#### PLEASE READ YOUR ENTIRE OWNER'S MANUAL BEFORE SPA OPERATION

#### **Basic Information**

#### ----- Water Care

IMPORTANT: Caring for your water by ensuring proper chemical usage is the single most important thing you can do to keep your Traditional Spa in good condition.

WARNING: Improper chemical usage and maintenance will quickly lead to severe issues with your spa and can effect the spa equipment, jets, pumps, and all other components in contact with the spa water. All Traditional Spas are susceptible to damage from unbalanced spa water.

Always maintain your water chemistry within the following parameters.

pH	7.2 - 7.8
Chlorine	1.0 - 3.0 ppm
Bromine	2.0 - 5.0 ppm
Total Alkalinity	100 - 120 ppm
Calcium Hardness	150 - 250 ppm

#### ——— Electrical

All self contained spas use 120VAC or 240VAC electrical spa packs.

**120VAC:** requires an isolated 15 Amp circuit breaker, an isolated circuit with no other appliances or lights on the circuit at any time. Extension cords are not to be used in conjunction with the operations of the spa. Low voltage damage could result and this is not covered under warranty.

IMPORTANT: Traditional Spas with 110V means that the jets and heater will not work at the same time.

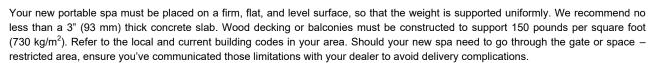
NOTE: All components must be 120V. No 240V components allowable.



**240VAC:** Depending on the model of the spa, it will require either a 40, 50, or 60 Amp dedicated circuit breaker with the proper wire size (gauge) based on the length of the run.

The electrical circuit must be installed by a certified electrician and approved by a local building or electrical inspector.

 Qurface	,
Suriace	ē



NOTE: Damage caused by alternate decking methods may avoid the spa warranty. Contact your dealer if you have any questions regarding spa location and placement.

 Transport	

Your new spa has left the factory cleaned and polished and ready to begin operation after passing our many quality and operational tests. However, depending on your location in the world, your spa may have spend days or even weeks in transit before arriving at your home. Please ensure that before filling or operating your Traditional Spa that you check all electrical and plumbing connections are securely connected in the equipment area as they might have loosened during shipping. If any dirt has accumulated, you will want to remove with a clean cloth or sponge using warm water.

#### IMPORTANT SAFETY INSTRUCTIONS

#### READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY

**DANGER:** Risk of Injury. The suction fittings in this Traditional Spa are sized to match the specific water flow created by the pump. Should the need arise to replace the suction fittings or the pump, be sure that the flow rates are compatible. Never operate the Traditional Spa if the suction fittings are broken or missing. Never replace a suction fitting with one rated less than the flow rate marked on the original suction fitting.

**DANGER:** Risk of Accidental Drowning. Do not allow children to be in or around the spa without adult supervision. Keep the spa cover on and locked when not in use. See instructions enclosed with the cover for locking procedures.

**DANGER:** Risk of Electrical Shock. The electrical supply for this product must include a suitably rated switch or circuit breaker to open all ungrounded supply conductors to comply with section 422-20 of the National Electrical Code, ANSI/NFPA 70. The disconnect must be readily accessible and visible to the Traditional Spa occupant but installed at least 5 feet (1.5 m) from the Traditional Spa water.

#### READ, FOLLOW AND SAVE THESE INSTRUCTIONS

- a) A green colored terminal or a terminal marked G, Gr, Ground, Grounding or the symbol \* is located inside the supply terminal box or compartment. To reduce the risk of electric shock, this terminal must be connected to the grounding means provided in the electric supply service panel with a continuous copper wire equivalent in size to the circuit conductors that supply this equipment.
- b) At least two lugs marked "Bonding Lugs" are provided on the external surface or on the inside of the supply terminal box compartment. To reduce the risk of electric shock, connect the local common bonding grid in the area of the Traditional Spa to these terminals with an insulated or bare copper conductor not smaller than No. 6 AWG.
- c) All field-installed metal components such as rails, ladders, drains or other similar hardware within 5 feet (1.5 m) of the Traditional Spa shall be bonded to the equipment grounding buss with copper conductors not smaller than No. 6 AWG.

WARNING: To Reduce the Risk of Injury. The water in a Traditional Spa 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 Traditional Spa use exceeds 10 minutes.

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 Traditional Spa water temperatures to 100 °F (38 °C). If pregnant, please consult your physician before using a Traditional Spa. Before entering the Traditional Spa, the user should measure the water temperature with an accurate thermometer since the tolerance of water temperature regulating devices may vary as much as +/- 5 °F (2 °C). 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 Traditional Spa.

**CAUTION:** Risk of Hyperthermia. Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6 °F (37 °C). The symptoms of hyperthermia include drowsiness, lethargy, and an increase in the internal temperature of the body. Prolonged immersion in hot water may induce hyperthermia. A description of the causes, symptoms, and effects of hyperthermia are as follows:

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

**WARNING:** Children should not use Traditional Spas without adult supervision.

**WARNING:** Do not use Traditional Spas unless all suction guards are installed to prevent body and hair entrapment.

**WARNING:** People with infectious diseases should not use a Traditional Spa.

**WARNING:**To avoid injury, exercise care when entering or exiting the Traditional Spa.

**WARNING:** Do not use drugs or alcohol before or during the use of Traditional Spa to avoid unconsciousness and possible drowning. The use of alcohol or drugs can greatly increase the risk of fatal hyperthermia in Traditional Spas.

**WARNING:** Pregnant or possibly pregnant women should consult a physician before using a Traditional Spa.

**WARNING:** Water temperature in excess of 38 °C (100 °F) may be injurious to your health. Before entering the Traditional Spa, measure the water temperature with an accurate thermometer.

**WARNING:** Prolonged immersion in a Traditional Spa may be injurious to your health.

**WARNING:** Do not permit electric appliances (such as 5 lights, telephone, radio, television, etc.) within feet (1.5m) of this Traditional appliances Spa unless such are built-in by the manufacturer.

**WARNING:** People using medication and/or having an adverse medical history should consult a physician before using a spa or Traditional Spa.

**WARNING:** People with infectious diseases should not use a spa or Traditional Spa.

**WARNING:** To avoid injury, exercise care when entering or exiting the spa or Traditional Spa.

**WARNING:** Do not use a spa or Traditional Spa immediately following strenuous exercise.

**WARNING:** Prolonged immersion in a spa or Traditional Spa may be injurious to your health.

**WARNING:** Maintain water chemistry in accordance with the Manufacturers instructions.

**WARNING:** The equipment and controls shall be located no less than 1.5 meters horizontally from the spa or Traditional Spa.

CAUTION: Observe a reasonable time limit when using the Traditional Spa. Long exposures at higher temperatures can cause high body temperature. Symptoms may include dizziness, nausea, fainting, drowsiness, and reduced awareness. These effects could possibly result in drowning.

**CAUTION:** Enter and exit the Traditional Spa slowly. Wet surfaces can be very slippery.

**CAUTION:** Proper chemical maintenance of Traditional Spa water is necessary to maintain safe water and prevent possible damage to Traditional Spa components. Maintain water chemistry in accordance with manufacturer's instructions.

CAUTION: Use the straps and clip tie downs to secure the cover when not in use. This will help to discourage unsupervised children from Traditional entering the Spa and keep the Traditional Spa secure cover hiahconditions. There is no representation that the cover, clip wind tie-downs, or actual locks will prevent access to the Traditional Spa.

**CAUTION:** For exercise, the water should not exceed 90 °F (32 °C).

#### **GLOSSARY OF TERMS**



AIR CONTROL: Mounted generally on the lip of the spa, it induces warm air from the equipment enclosure into the jet stream through venturi action.



**WATER DIVERTER:** The large diverter is used to divert water to various seats in the spa.



**FILTER AIR RELIEF VALVE:** Located on top of dome filter lid. Used to release air from the filter.



**SKIMMER BLEEDER VALVE:** Located in the skimmer area, needs to be loosened while filling the spa. This will help eliminate air from being trapped in the spa equipment.



**OZONATOR:** Available as an option. The ozonator produces natural ozone through the Corona Discharge process. Continuous use of an ozonator can dramatically reduce sanitizer consumption.



**CONTROL BOX (Pack):** Basically the "heart" of the spa. Power is distributed to any/all functions of the spa: pumps, ozonator, LED lighting, heater element, etc.



**TOPSIDE CONTROL:** Mounted on the top lip of the spa and controls the functions of the spa.



**EQUIPMENT ENCLOSURE:** An enclosure that houses the control box, pump(s) and other electrical components.



**FILTER:** The filter cleans the spa by passing water through a filter cartridge where debris and impurities are removed. Top load filter means the filter cartridge is accessible through the top of the spa. Front access skimmer means cartridge is accessed through door of skimmer.



**FLOOR DRAIN:** The floor drain is covered by a grate-type cover and is utilized when draining the spa. It also acts as the return for the ozonator. You will see bubbles emitted from this drain, which is the result of water mixing with the ozone output.



**GATE VALVES:** Red with a grey handle is located at the inlet and outlet of the pumping system. Used while servicing the spa equipment, the valves open or close the water flow to the equipment. To remain open for normal use, turn fully counterclockwise.



**KNIFE VALVES:** A white "T"-handled valve, same functions as Gate valve (see above), except to open them you pull up on handle.



**HEATER:** The electronically controlled heater raises the temperature of the spa to the desired setting.



**LEDs:** LEDs and their special lenses can be used to achieve the desired mood lighting in the spa and spa jets.



**SKIMMER:** This is the rectangular outlet at the water level. The skimmer removes surface debris to the filter. The water level in the spa should be kept  $\frac{1}{2}$  to  $\frac{3}{4}$  up on the skimmer for optimum operation.



**SUCTION:** During operation of the equipment, the suction works in conjunction with the skimmer to draw water from the bottom of the spa through the filter, keeping the spa sparkling clean.



**NECK JET:** Direction-controllable jet for soothing neck massage.



**ADJUSTABLE CLUSTER JET:** Our adjustable, high-intensity hydrotherapy jet.



**DIRECTIONAL JET:** Provides a straight flow for a therapeutic massage



**ROTATIONAL JET:** Provides a Unidirectional circular therapeutic massage.



**MASSAGE JET:** Delivers massage in staccato bursts over a narrow, focused area.



**VOLCANO/WHIRLPOOL JET:** high-output jet designed for foot and leg massage.



**LAMINAR FLOW:** A thin stream of water that arcs from the spa lip.

## PREPARATION, SET-UP AND LOCATION FOR YOUR NEW SPA:

- You want to keep in mind how you intend to use the spa and plan the location accordingly.
- How close is the spa from the exit or entrance to your house?
   (consider the cold weather)
- Is the path to your spa clean of debris, sand, grass? (so as not to track into the spa)
- · Is there protection from wind, inclement weather?
- · Can neighbors or passersby see the spa?

**NOTE:** Allow for service access: Many spa owners enjoy placing their spa in a decorative enclosure or a deck. Keep in mind that you need to have access to the equipment for maintenance and the spa should be able to be moved or lifted without destroying the special enclosure or its surroundings. You should discuss this with your dealer when designing the location. Extension cords are not to be used in conjunction with the operations of the spa. Low voltage damage could result and this is not covered by warranty.

**NOTE:** All components must be 120V; No 240V components allowable.

**240VAC:** Depending on the model of spa, it will require either a 40 Amp, 50 Amp, or 60 Amp dedicated circuit breaker, GFCI, with the proper wire size based on the length of the run. The electrical circuit must be installed by a certified electrician and approved by a local building or electrical inspector.

DISCLAIMER: The pictures displayed above are for reference purpose only. Some parts may be different depending upon the spa model.

# TRADITIONAL SPA GENERAL LAYOUT (Your spa may look different)



- 1. Pillows
- 2. Air Control
- 3. Extreme XL Water Diverters
- 4. Laminar Jets
- 5. Hydro Cyclonic Water Filtration System
- 6. Poly Jets
- 7. Cluster Jets
- 8. Neck Jets
- 9. Control Panel
- 10. Skimmer

- 11. Laminar Jet Shut Off
- 12. Coast Connect Shut Off
- 13. Coast Connect
- 14. Carousel Jet
- 15. Volcano Jet
- 16. Spa Drain
- 17. Spa Lights
- 18. Suction
- 19. 3" Spa Light
- 20. Sweeper Jet

#### TRADITIONAL APEX SPA COLLECTION



Traditional Elite Apex Bench



Traditional Elite Apex Lounge



Traditional Classic Apex Bench



Traditional Classic Apex Lounge

#### TRADITIONAL ELEMENT SPA COLLECTION



Traditional Elite Element Bench



Traditional Elite Element Lounge



Traditional Classic Element Bench

Traditional Classic Element Lounge

#### TRADITIONAL OMEGA SPA COLLECTION





Traditional Patio Omega Bench

Traditional Classic Omega Bench



Traditional Elite Omega Bench

#### TRADITIONAL OMEGA SPA COLLECTION





Traditional Patio Omega Lounge

Traditional Classic Omega Lounge



Traditional Elite Omega Lounge

#### THE TRADITIONAL COLLECTION INCLUDES

Choose model to see specific features and options. All features below may not be included with all models.



**Extreme XL Water Diverters** LED. Divert the flow of water to specific seats in your Spa.



**Air Controls**. Allow air to mix with the water being supplied to your massage jets.



Our **Luxury Trillium Jets** are made to deliver the ultimate hydrotherapy experience.



The Coast Spas Volcano Jet is installed near the of the Spa and points upward surface. This jet is powerful that SO comes standard with its very own diverter valve that power can be diverted to adjust the intensity.



Coast Spas developed the Hydro Cyclonic Filtration System®. Not only is it more efficient and faster than a skim filtration system but it also removes the dirty filter canisters from the bathing area.



Your Spa has the ability to be equipped with the **Worldwide Spa Remote** hardware that is required to take advantage of nearly limitless control and monitoring of your Spa.



Coast Spas trouble and saves you all the Self-Cleaning monev with the Sweeper Jet. The Sweeper Jet is positioned near the spa floor with fan-like nozzle aimed downwards, and is automatically activated on daily filtration cycles.



**Shiatsu Massage Nodules.** Formed right into your spas acrylic. The size and spacing of these ingenious nodules create a unique hydrotherapy experience that is more like resting on a cloud as our massage jets melt away the tension in your muscles.



**Streaming Water Ropes - Laminars.** Provides the soothing sound of running water. Adds a stunning look to the profile of the Spa.

#### **SPA COMFORTS**

- Plush Headrests
- Beverage Holders
- Anti-Slip Textured Floor
- Ergonomic Seating
- Multi-Level Seating
- Stainless Steel Oversized Monster<sup>TM</sup> Skimmer

#### **BUILT TO LAST®**

- Programmable Filtration
- Freeze Protection
- Owens Corning® Fiberglass Shell with 1 1/4" Steel Reinforcement
- Steel Reinforced Spa Acrylic
- Pressure Treated Frame
- Quick Access Gate Valves
- Recessed Floor Drain
- Recessed Thread-In Jet-Pockets™
- Super-Sealed™ Barb & Clamp Plumbing

**DISCLAIMER:** The pictures displayed above are for reference purpose only. Some parts may be different depending upon the spa model.



## START UP GUIDE

Patio Spas

#### PREP FOR FILLING

# 1 OPEN

Using a cloth and water, wipe away any dirt/dust collected from transport. Ensure all jets are open by turning the face counter clockwise.



Ensure all plumbing and electrical connections are securely connected and tightened as they can come loose during transit.

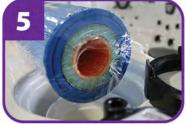


PLEASE READ ALL INSTRUCTIONS BELOW BEFORE FILLING

Ensure that any gate/knife valves are fully open.



Remove the filter lock ring and lid.



Remove filter and take it out of the plastic transport bag. Leave filter canister open when filling.



Loosen (do not remove) the air bleeder valve by turning counterclockwise.

#### **FILLING YOUR SPA**



Place fill hose into open filter canister and fill hot tub until water is 2/3 of the way up the skimmer opening.

#### DO NOT USE HOT WATER TO FILL YOUR



When filled all massage jets (excluding neck jets) should be under water.



Remove fill hose from filter canister.



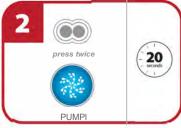
DO NOT USE WATER FROM A WATER

Put filter back into filter canister. Then put back on the filter canister lid and tighten locking ring.

#### **POWERING UP YOUR SPA**



Turn power on at the main breaker.



Turn pump 1 on high speed for 20 seconds by pressing the pump icon twice.



Turn pump 1 off by pressing the pump one icon once. Repeat steps 2 and 3 until air is removed from pump 1 and water is coming from jets.



Tighten the air bleeder valve located in the skimmer cavity. Set your hot tub temperature. Get ready to enjoy!



### START UP GUIDE

Classic | Elite Series

#### PREP FOR FILLING

Using a cloth and water, wipe away any dirt/dust collected from transport. Ensure all jets are open by turning the face counter clockwise.

#### PLEASE READ ALL INSTRUCTIONS BELOW BEFORE FILLING THE SPA



Ensure all plumbing and electrical connections are securely connected and tightened as they can come loose during transit.



Ensure that any gate/knife valves are fully open.



Remove the filter lock ring and lid.



Remove filter and take it out of the plastic transport bag. Leave filter canister open when filling.



Remove skimmer cavity grate cover by sliding it upwards.



Loosen (do not remove) the air bleeder valve located in the skimmer cavity.

#### FILLING YOUR SPA

Place fill hose into open filter canister and fill hot tub until water is 2/3 of the (excluding neck jets) should be under way up the skimmer opening.

#### DO NOT USE HOT WATER TO FILL YOUR SPA



When filled all massage jets



Remove fill hose from filter canister.



DO NOT USE WATER FROM A WATER SOFTENER

Put filter back into filter canister. Then put back on the filter canister lid and tighten locking ring.

#### POWERING UP YOUR SPA



Turn power on at the main breaker.



Turn pump 1 on high speed for 20 seconds by pressing the pump icon twice.



Turn pump 1 off by pressing the pump one icon once. Repeat steps 2 and 3 until air is removed from pump 1 and water is coming from jets.



Tighten the air bleeder valve located in the skimmer cavity. Set your hot tub temperature. Get ready to enjoy!

#### **SPA CARE GUIDE**

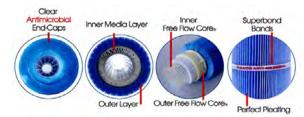
Your Authorized Dealer carries a wide variety of care and maintenance products. For more information please contact your Dealer.

#### REQUIRED FILTER MAINTENANCE

Your new Traditional Spa is equipped with a filter cartridge. To ensure maximum water quality at all times, you should replace the filter cartridge every six months, or earlier as necessary. The filter cartridge is designed to be thrown away! Attempts to re-use the filter cartridge may result in the rerelease of unwanted particles back into the Traditional Spa.

#### PLEATCO DUAL CORE FILTERS

Your Traditional Spa/spa comes with a premium filter. Most come with equipped with a Pleatco DualCore Filter, which does a better job of cleaning your spa water than any other filter cartridge. The DualCore filter has two layers of filtration media, the outer layer and the inner layer. Both are engineered to remove different particles from your water.



The outer core is similar to a traditional filter which traps larger debris, while the inner core filters the water for particles down to 3 microns in size. The inner core is easily removed and both filter media can be cleaned. Keeping your spa water clean and refreshing is extremely important for your enjoyment of your Traditional Spa. Our Traditional Spas come with only the best filters available in order to ensure your satisfaction.

#### REQUIRED WATER REPLACEMENT

You should replace the Traditional Spa's water every 3-6 months. The frequency will depend on a number of variables including frequency of use, number of bathers and attention paid to the water quality maintenance. You will know it is time for a change when you can no longer get the normal feel or sparkle to the water, even though the key water balance measurements are all within the recommended ranges.

#### **HEADREST / PILLOW CARE**

The pillows can be removed for easy cleaning and maintenance. All pillows have plugs within the pillow itself. To remove the pillow, grab the bottom edge firmly and pull outward.

This will allow the pillows to pop-out from the receptacle in the spa shell. To reinstall the pillow you will align the pillow plug with the receptacle. Press/hit the front side of the pillow firmly, which will insert the plug back into the receptacle.

- Proper water chemistry must be maintained. Your Traditional Spa pillows are easily and quickly damaged when exposed to unbalanced spa water. If you suspect that your chemicals may be unbalanced, remove your pillows immediately until the water has been restored to suggested conditions.
- Do not sit on the pillows
- Do not pull on the pillows
- Pillows should be cleaned using a soft cloth and mild soap, then wiped with a conditioner. We recommend that pillows be washed each time you drain you spa.

This Limited Warranty is void if failure is caused by accident, acts of nature, acts of God, or other causes beyond the control of Coast Spas Manufacturing. Neglect, misuse and abuse include any installation, operation, or maintenance of the spa other than in accordance with the instructions contained in the owner's manual provided with the spa, including, but not limited to damage caused by operation outside the range of 34° F and 116° F or 1° C and 47° C.

Please be advised that the Spa Warranty will become void if Coast Spas or any of its selling or servicing agents determines that the spa has been exposed to Hydrogen Peroxide, TriChlor or any substance using it as an ingredient proven to be dangerous to the Spa. Any condition arising from the use of Hydrogen Peroxide or TriChlor on the spa is not a warrantable defect.

#### TRADITIONAL SPA INTERIOR

Your Traditional Spa has a fiberglass reinforced acrylic shell. Generally dirt and stains will not adhere to the surface. To properly clean the surface, we recommend wiping it with a soft damp cloth (or sponge) using a low sudsing household soap or liquid detergent and rinsing thoroughly with fresh water. Stubborn dirt or stains may be removed by using Spic & Span adequately dissolved in water. Contact your dealer and inquire about maintenance packages.

**DO NOT** use any cleaning products containing abrasives or solvents, since these could damage the surface. Harsh chemicals should never be used on acrylic surfaces. Damage to the shell due to the use of harsh chemicals is not covered under the warranty.

DO NOT leave your Traditional Spa drained and in direct Dry, brittle vinyl can also tear at the seams and stress points. sunlight for extended periods of time. Extreme heat could cause damage to the acrylic surface and may induce an effect known as "crazing".

#### STAINLESS STEEL CONTROLS AND COMPONENTS ABOVE THE WATER LINE

To preserve the stainless steel finish of the controls and components above the water line, we recommend they be wiped with a dry soft cloth after each use of your Traditional Spa. In addition, off-gas your spa by removing cover for approximately 30 minutes multiple times per week (if not in use) and after every shock treatment.

#### **CABINET CARE**

Never spray cabinets with a high-pressure garden hose or pressure washer for any reason. This action may induce an electrical short in the Traditional Spa's electrical equipment.

#### **CEDAR CABINET**

Our cedar cabinets are made from top quality Western Cedar and manufactured and stained at our factory. With proper care and maintenance, your cedar cabinet should maintain its beauty for many years. Manufacturer recommends touch-up or re-staining of the cabinet every three to four years depending on your environment. Contact your Dealer for re-staining procedures.

#### **VINYL CABINET**

Vinvl cabinets are made of rigid polymer that а combines the durability of plastic with the beauty of real wood. This cabinet is manufactured so that it won't crack, peel, blister or delaminate even after prolonged exposure to the elements. We recommend wiping the cabinet with a soft damp cloth (or sponge) using household soap or liquid detergent and rinsing with fresh water thoroughly. DO NOT use abrasive cleansers or material as this may damage the surface.

#### **SLATE CABINETS**

Optional Slate cabinets are custom-built and painted in our factory. We recommend lightly brushing the cabinet with a SOFT bristle brush to remove any dirt or stains. For more information on the care of your Slate cabinet, please contact your Local Dealer.

#### **COVER CARE**

A well cared for spa cover is a thing of beauty in its own right. Be sure to clean and condition your cover at least once a month (more often if needed). Your cover needs to be cleaned and conditioned because vinyl can be dry and become brittle, spoiling your spa's appearance.

Quality materials, internal sewn reinforcing and careful workmanship can only go so far against the ravages of Mother Nature. See the specific Warranty card enclosed with your cover for further details.

- When you shock your spa you need to remove the cover for a minimum of 30 minutes to ensure that the chemical gas off can escape from the spa.
- You are required to keep the spa covered at all time when not in use to protect the shell from harmful UV rays.
- A covered spa will use less electricity when maintaining the desired water temperature.
- See the manual that comes with the cover for proper mounting of the cover locks.
- The cover should remain locked at all times to prevent unauthorized entry into the spa and potential drowning.
- Do not Sit, Stand or Lie on your cover. Nor should you place any heavy object on top of the cover as this may damage the structure.

VERY IMPORTANT: We recommend a vinyl conditioner for your spa cover. Your local dealer carries a wide variety of care and maintenance products. Choose a pleasant day each month to remove your cover from the spa and lay it on a flat surface accessible by garden hose. Douse the cover with a healthy amount of water from the hose or a bucket to rinse away loose dirt or debris. Using a soft bristle brush and a mild solution of dishwashing liquid (about one teaspoon of detergent to two gallons of water), and with a gentle circular motion, scrub the cover clean. Be careful not to let any areas of the cover dry before they're thoroughly rinsed. Now apply the vinyl conditioner as directed on the container. Massage the conditioner into the cover in a gentle but firm manner. Before replacing the cover on your spa, wipe and rinse any dirt from the bottom of the cover. When you are ready, put the cover on the spa.

NOTE: To remove tree sap, use lighter fluid (not charcoal lighter but the fluid used in cigarette lighters). Use sparingly, then immediately apply conditioner to that area. All waterfalls and laminar flow water features should be turned off when the spa is not in use to avoid heat and water loss.



## BASIC INSTALLATION AND CONFIGURATION GUIDELINES

WARNING! Qualified Technician Required for Service and Installation

#### **ELECTRICAL REQUIREMENTS**

All self contained spas use 120VAC or 240VAC electrical spa packs. These instructions describe the only acceptable electrical wiring procedures. Spas wired in any other way will void your warranty and may result in serious injury. All installations should be completed by a certified electrician. Failure to comply with state and local codes may result in fire or personal injury and will be the sole responsibility of the spa owner.

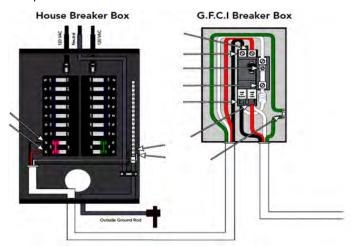
**120VAC:** This requires an isolated 15 Amp circuit breaker. This needs to be an isolated circuit with no other appliances or lights on this circuit at any time. Extension cords are not to be used in conjunction with the operations of the spa. Low voltage damage could result and this is not covered by warranty.

**NOTE:** All components must be 120V; No 240V components allowable.

**240VAC:** Depending on the model of spa, it will require either a 40 Amp, 50 Amp, or 60 Amp dedicated circuit breaker, GFCI, with the proper wire size based on the length of the run. The electrical circuit must be installed by a certified electrician and approved by a local building or electrical inspector.

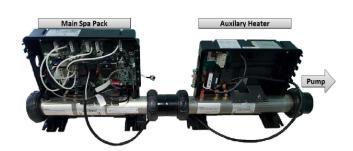
Use minimum 6AWG copper conductors only. Torque field connections between 21 and 23 in lbs. Readily accessible disconnecting means to be provided at time of installation. Permanently connected power supply.

Connect only to a circuit protected by a Class A Ground Fault Circuit Interrupter (GFCI) or Residual Current Device (RCD) mounted at least 5' (1.52M) from the inside walls of the spa/ Traditional Spa and in line of sight from the equipment compartment.



#### OPTIONAL AUXILIARY HEATER

Your spa (if opted) may be equipped with two heater assemblies (main heater and auxiliary heater). Auxiliary heater requires a separate 30 AMP breaker service.



SERIES	JETS	PUMPS	VOLTAGE	AMPERAGE	FREQUENCY	CIRCUIT BREAKER	MAX FLOW RATE
Patio Series	21	1 x 1.5HP	120/240	12/20/32	60	15/25/40	91
Classics Series	30	1 x 4HP	240	32/40	60	40/50	91
Classics Series	50	2 x 4HP	240	40	60	50	91
Elite Series	50	1 x 5HP	240	40	60	50	91
Elite Series	50	1 x 4HP + 1x 5HP	240	40	60	50	91

**DISCLAIMER:** There are no user serviceable parts in the GFCI compartment. All the services and repairs should be performed by certified electrician.

#### CSA ENCLOSURE: TYPE 2

Refer to Wiring Diagram inside the cover of the control enclosure. Refer to Installation and Safety Instructions provided by the spa manufacturer.

#### WARNING! GFCI OR RCD PROTECTION.

The Owner should test and reset the GFCI or RCD on a regular basis to verify its function.

#### WARNING! SHOCK HAZARD! NO USER SERVICEABLE PARTS.

Do not attempt service of this control system. Contact your dealer or service organization for assistance. Follow all owner's manual power connection instructions. Installation must be performed by a licensed electrician and all grounding connections must be properly installed. Disconnect the electric power before servicing. Keep access door closed.

#### **CSA COMPLIANCE**

#### **CAUTION:**

- Test the ground fault circuit interrupter before each use of the spa.
- · Read the instruction manual.
- Adequate drainage must be provided if the equipment is to be installed in a pit.
- For use only within an enclosure rated CSA Enclosure 3.
- Connect only to a circuit protected by a Class A ground fault circuit interrupter or residual current device.
- To ensure continued protection against shock hazard, use only identical replacement parts when servicing.
- Install a suitably rated suction guard to match the maximum flow rate marked.

#### **WARNING:**

- Water temperature in excess of 38°C (100.4°F) may be injurious to your health.
- Disconnect the electrical power before servicing.

**CAUTION:** When using this electrical equipment, basic safety precautions should always be followed.

#### TRADITIONAL SPA MAINTENANCE PROCEDURES

#### FILTER MAINTENANCE

The spa filter is one of the most important maintenance items of a Cascade Spa. The filter is there to remove debris from the water and needs to be cleaned on a regular basis. Failure to do so may result in poor performance, poor water clarity and could prevent the spa from heating. Filtration starts as soon as flow is steady through the filter. As the filter cartridge removes the debris from the spa water, the accumulated debris causes flow resistance.

#### **CLEANING AND REPLACING FILTER CARTRIDGE**

Your spa filter has been designed for quick and easy maintenance. The filter cartridge should be rinsed by hose once a week and cleaned with a cartridge cleaner once a month. A second filter cartridge is recommended and will speed up this process. This can be purchased from your local dealer.



#### **TOP LOAD FILTERS**

- Turn power OFF at the breaker.
- · Loosen air relief valve, then remove retainer ring.
- · Pull filter lid straight up to remove.
- Do not twist or pull the filter lid up on an angle. This
  could cause damage to the filter canister, especially in
  freezing conditions.
- Remove filter cartridge and clean with a garden hose and a high-pressure nozzle. Periodically you may need to soak your filter in a "cartridge filter cleaner" to remove excess minerals and/or oils.
- Rinse filter thoroughly before installing. Clean O-ring on filter lid and apply a light film of silicone lubricant to the Oring. Do not use a petroleum-based lubricant as it could damage the
- ring. Consult your dealer to purchase suitable lubricant.
- Place clean Cartridge in filter canister.
- Replace filter lid and re-tighten retaining ring (finger tight only)

**NOTE:** Make sure the O-ring is on the air relief valve, and is finger tight prior to starting the pump. This O-ring should periodically be lubricated with a silicone lubricant.

- There is a 3/8" clear line coming from the filter area and this goes to the bottom corner of the spa. This drains all the water from around the filter canister.
- This is a good time to check the skimmer basket.
   Bring skimmer door (weir) forward and unscrew basket.
   Clean out debris and reinstall.

#### WATER QUALITY MAINTENANCE

Maintaining the quality of the water within the specified limits will serve to enhance your enjoyment and prolong the life of the Cascade Spa's equipment. It is a fairly simple task, but it requires regular attention because the water chemistry involved is a balance of several factors. There is no simple formula, and there is no avoiding it. An indifferent approach to water maintenance will result in poor and potentially harmful conditions for soaking and even damage to your Cascade Spa investment. The most important thing to keep in mind is that *preventing* poor water chemistry is much easier than *correcting* poor water chemistry. For specific guidance on maintaining water quality, consult your Authorized Dealer who can recommend appropriate chemical products for sanitizing and maintaining your Cascade Spa.

#### MAINTAIN HEALTHY SPA WATER

Important! When maintaining your Cascade Spa's water chemistry, ensure that your cover is removed during any aggressive treatments to allow for dissipation into the air. Take care to remove the cover slowly and let chemicals deplete if you are uncertain if your water is properly balanced. Always maintain your Traditional Spa's water chemistry within the following parameters:

pH: pH is a measure of relative acidity or alkalinity of water and is measured on a scale of 0 to 14. The midpoint of 7 is said to be neutral, above which is alkaline and below which is acidic. In Cascade Spa water, it is very important to maintain a slightly alkaline condition of 7.2 to 7.8. Problems become proportionately severe the further outside of this range the water gets. A low pH will be corrosive to metals in the Cascade Spa equipment. A high pH will cause minerals to deposit on the interior surface (scaling). In addition, the ability of the sanitation agents to keep the Cascade Spa clean is severely affected as the pH moves beyond the ideal range. That is why almost all Cascade Spa water test kits contain a measure for pH as well as sanitizer.

Sanitizer (Chlorine or Bromine): To destroy bacteria and organic compounds in the Cascade Spa water by breaking them down into non-harmful levels which get filtered out. A sanitizer must be used regularly, either chlorine or bromine. Sanitizing your spa water is the most important spa maintenance you can do for yourself.

**Total Alkalinity:** This refers to the ability of the Cascade Spa water to resist changes in pH. Controlling alkalinity can help keep your pH in the appropriate range thereby lessening the need for pH balancing. If the TA is too low the pH level will fluctuate rapidly from high to low. If the TA is too high the pH will tend to be too high and will be very difficult to bring back down.

**Calcium Hardness:** This is a measurement of dissolved calcium in the water. Calcium will help control the corrosive nature of the spa's water.

**WARNING:** Never store chemicals inside the equipment area of your spa.

**IMPORTANT:** Do not use Hydrogen Peroxide based sanitizers in your spa. When using Chlorine or Bromine tablets you must use a floating dispenser. These chemicals can have an extremely corrosive effect on certain materials in the spa. Damage caused by use of these chemicals, or improper use of any chemicals, is not covered under the spa's warranty.

**OTHER ADDITIVES:** Many other additives are available for your spa. Some are necessary to compensate for out-of-balance water, some aid in cosmetic water treatment and others simply alter the feel or smell of the water. Your Authorized Dealer can advise you on the use of these additives.



Look for these specialized cleaning attachments at your local dealership.

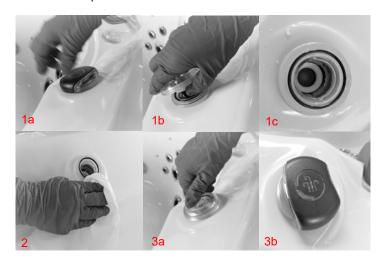
#### **WATER DIVERTER MAINTENANCE**

**CAUTION:** Turn off the spa from main GFCI breaker to carry out any maintenance procedures.

Steps to clean water diverters

- Pull the diverter cap off and rotate the diverter body counter clock wise and pull out the assembly (Picture 1a to 1c).
- Using clean piece of cloth, remove the dust particles or depositions (Picture 2).

 Assemble the diverter body by inserting the body back by rotating the jet body clock-wise (Picture 3a and 3b). Attach the diverter cap.



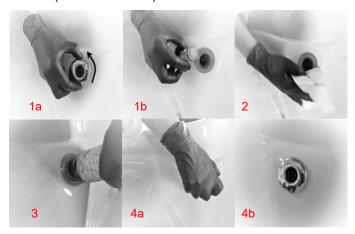
#### **JET MAINTENANCE**

**CAUTION:** Turn off the spa from main GFCI breaker to carry out any maintenance procedures.

It is important to regularly clean the jets to prevent any unwanted depositions and potential damage to the plumbing. It is the responsibility of the customer to regularly perform the maintenance procedures. To clean and maintain optimum jet functions, follow the maintenance instructions below.

#### LAMINAR FLOW JET MAINTENANCE INSTRUCTIONS

- 1. Rotate counter clock wise and pull out the jet body (Picture 1a and 1b).
- 2. Using clean piece of cloth, remove the dust particles or depositions (Picture 2).
- 3. Remove the unreachable debris with the help of vacuum cleaner (Picture 3).
- 4. Assemble the jet insert back by rotating the jet body clockwise (Picture 4a and 4b).



**OWNER'S MANUAL** 

#### WATER CLARITY TROUBLESHOOTING

PROBLEM	PROBABLE CAUSE	POTENTIAL SOLUTIONS
Water Odor	<ul><li>Improper sanitization</li><li>Excessive organics in water</li><li>pH is too low</li></ul>	<ul><li>&gt; Add sanitizer</li><li>&gt; Shock spa with sanitizer</li><li>&gt; Adjust pH</li></ul>
Chlorine Odor	<ul><li>Chloramines are too high</li><li>pH is too low</li></ul>	<ul><li>Shock spa with sanitizer</li><li>Adjust pH</li></ul>
Musty Odor	Bacteria or Algae growth	Shock spa with sanitizer     Drain and refill spa water
Scale	<ul><li>Total alkalinity is too high</li><li>pH is too high</li><li>High calcium content in water</li></ul>	<ul> <li>&gt; Adjust total alkalinity</li> <li>&gt; Adjust pH</li> <li>&gt; Use stain and scale product</li> </ul>
Stains	<ul><li>Total alkalinity is too low</li><li>pH is too low</li><li>High metal content in water</li></ul>	<ul> <li>&gt; Adjust alkalinity</li> <li>&gt; Adjust pH</li> <li>&gt; Use stain and scale product</li> </ul>
Cloudy Water	<ul> <li>Poor filtration</li> <li>pH is too high</li> <li>Hardness is too high</li> <li>Total alkalinity is too high</li> <li>Suspended particles</li> </ul>	<ul> <li>Clean filter cartridge</li> <li>Adjust pH</li> <li>Adjust hardness</li> <li>Adjust total alkalinity</li> <li>Drain and refill spa water</li> </ul>
Algae Growth	<ul><li>pH is too high</li><li>Sanitizer is too low</li></ul>	<ul><li>&gt; Adjust pH</li><li>&gt; Shock spa with sanitizer</li><li>&gt; Adjust sanitizer level</li></ul>
Eye Irritation	<ul><li>pH is too low</li><li>Sanitizer is too low</li></ul>	<ul><li>&gt; Adjust pH</li><li>&gt; Shock spa with sanitizer</li><li>&gt; Adjust sanitizer level</li></ul>
Skin Rash/Irritation	Free chlorine level too high     Unsanitary water	<ul><li>&gt; Adjust chlorine level</li><li>&gt; Shock spa with sanitizer</li><li>&gt; Adjust sanitizer level</li></ul>

#### TROUBLESHOOTING GUIDE

#### **SPA SYSTEM**

SYMPTOM	PROBABLE CAUSE	RECOMMENDED ACTION
Spa does not work	Power is turned off	> Reset GFCI
No display on the control panel	<ul><li>Power is turned off</li><li>Defective topside control</li></ul>	> Reset GFCI > Contact your Dealer
Letters on the control panel	An error has been found	> Refer to the Reference Card for your control panel to verify the error. Contact your Dealer for service

#### **PUMP PROBLEMS**

SYMPTOM	PROBABLE CAUSE	RECOMMENDED ACTION
Noisy/Loud motor	<ul><li> Air trapped in the pump</li><li> Low water level</li><li> Worn pump seal</li><li> Defective pump</li></ul>	<ul> <li>Open bleed valve in the skimmer</li> <li>Add water to the spa</li> <li>Contact your Dealer</li> <li>Contact your Dealer</li> </ul>
Pumps power down on their own	<ul> <li>Set temperature has been reached</li> <li>Filtration cycle has ended</li> <li>Automatic time out</li> <li>Overheat safety protection</li> </ul>	<ul> <li>No problem</li> <li>No problem</li> <li>Pumps are set to run for a predetermined time while the spa is in use (15-20 Mins)</li> <li>The pumps have a thermal overload which will prevent them from running for extended periods of time. Wait until pumps have cooled down (1+ hrs). If problem persists, contact your Dealer.</li> </ul>
Pump running constantly, will not turn off	<ul><li>Filter cycle set to 24 hours</li><li>Problem with the circuit board</li></ul>	> Turn off 24 hour filtration > Turn power off at GFCI and contact your Dealer
Pump will not turn on	<ul> <li>GFCI tripped</li> <li>Motor has overheated</li> <li>Not plugged in</li> <li>Damaged plug</li> <li>Seized motor</li> <li>Blown fuse</li> <li>Motor vent is blocked</li> </ul>	<ul> <li>Reset the GFCI</li> <li>Let cool for 1+ hour</li> <li>Plug in to the board</li> <li>Contact your Dealer</li> <li>Contact your Dealer</li> <li>Check fuse or contact your Dealer</li> <li>Clear debris from the vent</li> </ul>

HEAT PROBLEMS	PROBABLE CAUSE	RECOMMENDED ACTION
Water will not heat	<ul> <li>Error message on control panel</li> <li>Spa is in a different Heat Mode</li> <li>Water level is too low</li> <li>Poor water flow</li> </ul>	<ul> <li>Refer to the Reference Card for your control panel to verify the error</li> <li>Set spa to "Standard Mode"</li> <li>Add water to the spa</li> <li>Clean filter &amp; check valves</li> </ul>
	<ul><li>Closed valves</li><li>Pump 1 is not running</li></ul>	<ul><li>Open all valves</li><li>Contact your dealer</li></ul>
Water is too hot	<ul><li>Incorrect reading</li><li>Filter cycle duration is too long</li><li>Pump speeds reversed</li></ul>	<ul> <li>Verify temperature with thermometer</li> <li>Reduce duration of the filter cycle</li> <li>Contact your dealer</li> </ul>
Water will not maintain heat	<ul> <li>Cover is off for extended periods of time in cold weather / cold wind.</li> <li>Hot tub is wired for 110V and jets are on.</li> </ul>	<ul> <li>Put cover back onto hot tub and allow for heat to regenerate. Call your dealer if temperature does not increase.</li> <li>Hot tubs wired for 110V only have enough power to heat or operate pumps. Turn off jets to power heater.</li> </ul>

LIGHTING ISSUES	PROBABLE CAUSE	RECOMMENDED ACTION
Standard light will not come on	Bulb has burnt out	> Replace the light bulb
LED lighting not in sync	Burnt out bulb/connection	> Contact your dealer
LED lighting won't come on	Incorrect settings	> Contact your dealer

PUMPS WILL NOT PRIME	PROBABLE CAUSE	RECOMMENDED ACTION
Pump on but no water flow	<ul><li> Air trapped in pump</li><li> No water in the pump</li><li> Closed valves</li></ul>	<ul><li>Loosen bleed valve in skimmer</li><li>Check the fill level in the spa</li><li>Open all valves</li></ul>

HYDROTHERAPY JETS	PROBABLE CAUSE	RECOMMENDED ACTION
	Jets turned off	> Open jet by turning the face counter clockwise
	Pump not primed	> Reset breaker to allow for the spa to prime the
Little to no water flowing from		pump. Open bleed valve in the skimmer area
jets	Valves are closed	> Open valves
	Diverter set to a different seat	> Switch diverter
	Dirty filter	> Remove and clean filter cartridge

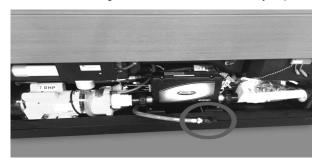
PLUMBING SYSTEM	PROBABLE CAUSE	RECOMMENDED ACTION
Water around base of spa	<ul><li>Loose connections</li><li>Leak from internal fitting</li></ul>	<ul> <li>Hand tighten all quick disconnects and fittings.</li> <li>Check gaskets and O-rings</li> <li>Contact your dealer</li> </ul>

#### **DRAINING AND WINTERIZING**

#### DRAINING YOUR SPA

After a period of 3-4 months, detergent residues from bathing suits and soap film will build up in your spa water. Once this happens, your spa water will appear cloudy and should probably be replaced.

- · Turn power OFF at the breaker.
- Locate the drain valve (usually in the equipment area).
- · Remove the safety cap and attach garden hose.
- Drain water to a convenient area. (Spa water may harm grass or plants if sanitizer levels are high.)
- When water begins to flow out of the hose, open the air relief valve located on filter lid (Hydro-Cyclonic Filtration) or Air Bleeder Valve (Skim Filtration).
- Your spa will drain except for a small portion left in the foot well. This can be removed with a sponge and pail.
- · Once empty, clean as required.
- To finish, remove garden hose and attach safety cap.



#### WINTERIZING YOUR SPA

In many areas of the world the temperature may drop below 32°F (0°C). We recommend the spa is always filled with water and running at normal spa temperatures. By doing this you will minimize the risk of freezing within your spa. If it is necessary to leave your spa unattended for long periods of time during cold weather conditions. vou should drain your spa to avoid accidental freezing caused by power outages.

Your local dealer can perform the following winterizing procedures, if you are not completely comfortable with them.

- Ensure that you have fully drained the spa (Refer to the DRAINING YOUR SPA section)
- After draining, your spa may still have water remaining in the equipment and plumbing fittings. Disconnect the hand-tightened union fittings going to and from the jet pumps. Be careful not to lose the O-rings between the unions and pump housing.

- Leave drain valve in the open position and safety cap off .
- To completely drain the plumbing lines, a wet/dry shop vacuum can be used to draw out any remaining water. Place the vacuum hose over the jet fittings in the spa as well as the plumbing lines in the equipment area. You should also disconnect the plug on the crystal clear inspection tube (if installed)
- Remove the filter cartridge and store in a warm, dry area.
- Clean the spa shell and place spa cover on spa. Be sure to lock the cover in place in case of high winds or rain.

**WARNING:** The instructions above should be followed accordingly when winterizing your spa however they are guidelines and potential freeze damage may still occur. All freeze damage is the sole responsibility of the spa owner and will not be covered by the warranty should it occur.

**EMERGENCY SITUATIONS:** To eliminate freezing in the event of equipment failure, use a 100-watt light bulb or small heater via extension cord and place it in the equipment area, keeping it away from plumbing lines. This will help for a short period of time until proper service can be rendered.



#### DRAINING INSTRUCTIONS

- On the control panel (settings) select hold. This will suspend all functions so that the spa can start to be drained.
- 2. Remove the false bottom in cabinet area.
- Connect your hose to the hose bib located in the lower compartment. Open the hose bib valve until water starts coming out of the drain hose.
- Turn evacuation pump power switch ON located at the top left of the enclosure.
- The length of time it will take to drain depends on the size of your spa. On average it will take approximately 1 hour.

If you have an Infinity Edge Spa allow it to drain for 30 minutes and then take it off of *hold*. Pump 1 will run on low speed to drain the tank into the main body of the spa.

Let pump 1 run on low speed until the water stops coming out of the jets/waterfall and immediately put the system back into *hold* (refer to step one).

- Allow spa to finish draining. When fully drained, switch off the evacuation pump and close the hose bib valve.
- Switch off power to the spa via the main GFCI Breaker.
- 8. You may have to use a shop vacuum to remove any excess water. Clean the spa before refilling. Refer to your Owner's Manual for proper filling instructions. Once the spa is filled, prior to adding chemicals, open the hose bib valve for approx. 15 seconds to allow fresh water to flush the Water-Vac™ System then close the hose bib valve.

#### IMPORTANT PLEASE READ

Do not leave your spa unattended while draining. After 90 minutes the hold function is disabled and will allow your spa pumps to activate. This could cause damage to your equipment.

#### **ELITE SERIES TOPSIDE CONTROL PANEL**





Temperature Up



Light



Temperature Down

Menu/Select



Pump



Auxiliary

#### **Navigation**

Navigating the entire menu structure is done with 2 or 3 buttons on the control panel. Some panels have separate UP and DOWN buttons, while others have a single Temperature button. In the navigation diagrams Temperature buttons are indicated by a single button icon. Panels that have two Temperature buttons (Up and Down) can use both of them to simplify navigation and programming where a single Temperature icon is shown. The MENU/SELECT Button is used to choose the various menus and navigate each section. Typical use of the Temperature button(s) allows changing the Set Temperature while the numbers are flashing in the LCD. The menus can be exited with certain button presses. Simply waiting for a few seconds will return the panel operation to normal.

#### **Priming Mode**

This mode will last for 4-5 minutes or you can manually exit the priming mode after the pump(s) have primed.

Regardless of whether the priming mode ends automatically or you manually exit the priming mode, the system will automatically starts normal heating and filtering at the end of the priming mode. During the priming mode, the heater is disabled to allow the priming process to be completed without the possibility of energizing the heater under low-flow or no-flow conditions. Nothing comes on automatically, but the pump(s) can be energized by pushing the "Jets" or "Aux" buttons.

#### **Priming the Pumps**

As soon as the above display appears on the panel, push the "Jets" button once to start Pump 1 in low-speed and then again to switch to high-speed. Also, push the "Jets 2" or "Aux" button, if you have a 2nd pump, to turn it on. The pumps will now be running in high-speed to facilitate priming. If the pumps have not primed after 2 minutes, and water is not flowing from the jets in the spa, do not allow the pumps to continue to run. Turn off the pumps and repeat the process. **Note:** Turning the power off and

will initiate back on again а new pump priming session. Sometimes momentarily turning the pump off and on will help it to prime. Do not do this more than 5 times. If the pump(s) will not prime, shut off the power to the spa and call for service. Important: A pump should not be allowed to run without priming for more than 2 minutes. Under NO circumstances should a pump be allowed to run without priming beyond the end of the 4-5 minute priming mode. Doing so may cause damage to the pump and cause the system to energize the heater and go into an overheat condition.

#### **Dual Temperature Ranges**

This system incorporates two temperature range settings with independent set temperatures. The High Range designated in the display by a thermometer and an "Up" arrow, and the Low Range designated in the display by a thermometer and "Down" arrow. These ranges can be used for various reasons, with a common use being a "ready to use" setting vs. a "vacation" setting. The Ranges are chosen using the menu structure below. Each range maintains its own set temperature as programmed by the user. This way, when a range is chosen, the spa will heat to the set temperature associated with that range.

#### For example:

- High Range might be set between 80°F and 104°F.
- Low Range might be set between 50°F and 99°F.

#### Changing the Temp Range:

Press and release the "Menu" button until "TEMP" is on the screen, Press and release the "Up" or "Down" button to adjust High Range "▲" or Low Range "▼". Press and release the "Menu" button to save the Temp Range.

#### Mode - Ready and Rest

In order for the spa to heat, a pump needs to circulate water through the heater. The pump that performs this function is known as the "primary pump."

If the primary pump is a 2-Speed Pump 1, Ready Mode (indicated by R) will circulate water periodically, using Pump 1 Low, in order to maintain a constant water temperature, heat as needed, and refresh the temperature display. This is known as "polling."

**Rest Mode** (indicated by **R**) will only allow heating during programmed filter cycles. Since polling does not occur, the temperature display may not show a current temperature until the primary pump has been running for a minute or two.

In **Rest Mode**, the spa will only heat to set temperature during programmed filter times, even though the water is being filtered constantly when in Circulation Mode.

#### **Changing the Mode**

Press and release the "Menu" button until "MODE" appears. Press and release the "Up" or "Down" button to switch the Mode to "Ready" or "Rest". Press and release the "Menu" button to save the

#### Ready-in-Rest

Mode appears in the display if the spa is in Rest Mode and "Jets" is pressed. It is assumed that the spa is being used and will heat to set temperature. The primary pump will run until set temperature is reached, or 1 hour has passed. After 1 hour, the System will revert to Rest Mode. This mode can also be reset by entering the Mode Menu and changing the Mode.

#### Show and Set Time-of-Day

Be sure to set the Time-of-Day Setting the time-of-day can be important for determining filtration times and other background features. When in the TIME menu, SET TIME will flash on the display if no time-of-day is set in the memory.

#### Setting the Time

Press and release the "Menu" button until "TIME" appears. Press and release the "Up" or "Down" to adjust the Hour. Press the "Menu" button to save the hour and move on to the Minutes. Press and release the "Up" or "Down" to adjust the Minutes. Press the "Menu" button to save the Minutes.

**Note:** If Time of Day is not actually programmed due to a power cycle, SET TIME will appear in the menu instead of just TIME.

#### Hold (Standby)

Hold Mode is used to disable the pumps during service functions like cleaning or replacing the filter. Hold Mode will last for 1 hour unless the mode is exited manually.

#### **Selecting Hold Mode**

Press and release the "Menu" button until "HOLD" is on the screen. Press and release the "Up" or "Down" button to activate "Hold Mode". The screen will display HOLD, ING, FOR, and the time remaining.

#### Flip (Invert Display)

#### **Changing the Screen Orientation**

Press and release the "Menu" button until "FLIP" is on the screen. Press and release the "Up" or "Down" button to invert the display. Press and release the menu button to save this setting.

#### **Restricting Operation**

The control can be restricted to prevent unwanted use or temperature adjustments. Locking the panel prevents the controller from being used, but all automatic functions are still active. Locking the Temperature allows Jets and other features to be used, but the Set Temperature and programmed settings cannot be adjusted. Temperature Lock allows access to a reduced selection of menu items. These include Set Temperature, FLIP, UTIL, INFO and FALT LOG.

#### **Restricting Operation**

Press and release the "Menu" button until "LOCK" is on the screen. Press and release the "Up" or "Down" button to enter the menu. Press and release the "Menu" button to switch from "TEMP" to "PANL". **Note:** Pressing and releasing the "Menu" button again will take you back to the beginning of the "LOCK" menu. With "TEMP" or "PANL" selected press and release the "Up" or "Down" button to change the menu selection to the "OFF"/"ON" option. Press and release the "Up" or "Down" button to change the menu option from "OFF" to "ON" to lock either the "TEMP" to "PANL". Press and release the "Menu" button to save the "LOCK" setting.

#### Unlocking

This Unlock sequence may be used from any screen that may be displayed on a restricted panel.

#### **Unlocking instructions**

While pressing and holding the Temperature Button (UP button or Up button), slowly press and release the "Menu" button two times.

#### **Adjusting Filtration**

Filter cycles are set using a start time and a duration. Start time is indicated by an "A" or "P" in the bottom right corner of the display. Duration has no "A" or "P" indication. Each setting can be adjusted in 15-minute increments. The panel calculates the end time and displays it automatically.

#### How to adjust the Filtration

Press and release the "Menu" button until "FLTR" 1 or 2 appear on the screen. Press and release the "Up" or "Down" button to enter the menu, "BEGN" should appear. Press and release the "Up" or "Down" button to set the start time (Option 1) or Press and release the "Menu" button to set the duration (Option 2).

Pressing and releasing the "Menu" Button again during the "RUN"-"HRS" will display which filter cycle is being set and the end time. Press and release the "Menu" once more to save the settings.

**Option 1:** Setting the Start Time With "BEGN on the screen press and release the "Up" or "Down" button, use the "Up" or "Down" buttons to adjust the starting hour. When satisfied press the "Menu" to proceed to the Minutes. Use the "Up" or "Down" buttons to adjust the starting Minutes. When complete press the "Menu" button to save the starting time.

**Option 2:** Setting the Duration With "BEGN on the screen press and release the "Up" or "Down" button to set the starting time (Option 1, please see above) or press the "Menu" button to proceed to "RUN"-"HRS". Use the "Up" or "Down" buttons to adjust the hours of duration. Press the "Menu" button to start the minutes. Use the "Up" or "Down" buttons to adjust the duration minutes. When complete press the "Menu" button to save the duration time.

#### Filter Cycle 2 - Optional Filtration

Filter Cycle 2 is OFF by default. It is possible to overlap Filter Cycle 1 and Filter Cycle 2, which will shorten overall filtration by the overlap amount.

#### **Purge Cycles**

In order to maintain sanitary conditions, secondary Pumps and/ or a Blower will purge water from their respective plumbing by running briefly at the beginning of each filter cycle. If Filter Cycle 1 is set for 24 hours, enabling Filter Cycle 2 will initiate a purge when Filter Cycle 2 is programmed to begin.

#### **Additional Information**

#### **Preferences**

Press and release the "Menu" button until "PREF" appears. Press and release the "Up" or "Down" button to enter the Preferences menu. Use the "Menu" button to scroll through the options (listed ahead) and the "Up" or "Down" buttons to enter that section. While in a section use the "Up" or "Down" buttons to toggle the options and the "Menu" button set each option in the memory.

#### F/C (Temp Display)

Change the temperature between Fahrenheit and Celsius.

#### 12/24 (Time Display)

Change the clock between 12 hr and 24 hr display.

#### RE-MIN-DERS (Reminders)

Turn the display of reminder messages (like "Clean Filter") On or Off. Note: Reminders continue to run in the background even when not displayed. So turning the display of Reminders On or Off does not reset any Reminder counts.

#### **CLN-UP** (Cleanup)

Cleanup Cycle Duration is not always enabled, so it may not appear. When it is available, set the length of time Pump 1 will run after each use. 0-4 hours are available.

#### **M8**

(This message may not appear on all systems.) On systems that have M8, it is enabled by default. It can be disabled (or re-enabled) here. M8 reduces polling intervals when the water temperature in the spa is steady.

#### DOL-PHIN-AD-DRES (Dolphin II and Dolphin III)

Applies to RF Dolphin only. (This message may not appear depending on the configuration) When set to 0, no addressing is used. Use this setting for a Dolphin Remote which is factory set for no address by default. When set between 1 and 7, the number is the address. (See the Dolphin manual for details.)

#### **Utilities and Information**

Press and release the "Menu" button until "UTIL" appears. Press and release the "Up" or "Down" button to enter the Preferences menu. Use the "Menu" button to scroll through the options (listed ahead) and the "Up" or "Down" buttons to enter that section. While in a section use the "Up" or "Down" buttons to toggle the options and the "Menu" button set each option in the memory.

#### INFO (System Information sub-menu)

The System Information Menu displays various settings and identification of the particular system.

#### SSID (Software ID)

Displays the software ID number for the System. MODL (System Model) Displays the Model Number of the System. SETP (Current Setup) Displays the currently selected Configuration Setup Number.

#### Heater Voltage (Feature not used on CE rated systems)

Displays the operating voltage configured for the heater.

## Heater Wattage as Configured in Software (CE Systems Only)

Displays a heater kilowatt rating as programmed into the control system software (1-3 or 3-6).

#### H \_ (Heater Type)

Displays a heater type ID number.

#### SW \_ (Dip Switch Settings)

Displays a number that represents the DIP switch positions of S1 on the main circuit board.

#### **PANL** (Panel Version)

Displays a number of the software in the topside control panel.

#### **GFCI (GFCI Test)**

#### (Feature not available on CE rated systems.)

GFCI Test is not always enabled, so it may not appear. This screen allows the GFCI to be tested manually from the panel and can be used to reset the automatic test feature. If the GFCI Test Feature is reset, the device will trip within 7 days.

#### A/B (A/B Sensor Temperatures)

When this is set to On, the temperature display will alternate to display temperature from Sensor A and Sensor B in the heater.

#### FALT LOG (Fault Log)

The Fault Log is a record of the last 24 faults that can be reviewed by a service tech.

#### **DEMO (Demo Mode)**

Demo Mode is not always enabled, so it may not appear. This is designed to operate several devices in a sequence in order to demonstrate the various features of a particular Traditional Spa.

#### **CLASSIC SERIES TOPSIDE CONTROL PANEL**



#### **INITIAL START-UP**

Your spa will enter Priming Mode (PR) when it is energized. During Priming Mode, press "Jets" button repeatedly and be sure the pump is free of air. Priming Mode lasts less than 5 minutes. Press "Warm" or "Cool" to exit. After Priming Mode, the spa will run in Standard Mode (see Mode section).

#### **TEMP CONTROL**

(80°F - 104°F / 26°C - 40°C). The last measured water temperature is constantly dis-played. The water temperature displayed is current only when the pump has been running for at least 1 minute. To display the set temperature, press "Temp" once. To change the set temperature, press the temperature button again before the display stops flashing and hold. The set temperature will begin to rise, release the button at the desired set temperature. To decrease the set temperature, press and hold the "temp" button again and the set temperature will decline, release at the de-sired set temperature. After three seconds, the display will stop flashing and begin to display the current spa temperature. The spa will then begin heating (or cooling) in order to reach the set temperature that you have selected.

#### **PUMP**

Press "Pump" to turn the pump on or off, and to shift between low and high speeds (if equipped). If left running, the pump will turn off after a preset length of time. Low speed may run automatically at times as part of your spas filtration cycles, during which it cannot be deactivated from the panel, however you will still be able to control the high speed setting. The ozone generator (if installed) will activate anytime low speed is running.

#### **AUX (PUMP 2)**

If an additional pump or blower is installed. Press "Aux" to turn the device on. If your additional device is a dual speed pump, pressing "Aux" again will activate the pumps high speed. Pressing "Aux" again will turn off the device/pump.

#### **LIGHT**

Press "Light" to operate the spa light. Turns off after 4 hours. If your hot tub is equipped with a multicolor lighting package, then pressing the "Light" button con-secutively will toggle the lights through different colors modes.

#### MODE

Mode is changed by pressing "Temp" then "Light'. Continue Pressing the "Temp" then "Light' button to toggle through the available modes. Leave the control for 10 seconds to exit.

**Standard Mode** maintains set temperature. "St" will be displayed momentarily when you switch into Standard Mode.

**Economy Mode** heats the spa to the set temperature only during filter cycles. "Ec" will display when water temp is not current, and will alternate with water temp when the pump is running.

**Sleep Mode** heats the spa to within 20°F/10°C of the set temperature only during filter cycles. "SL" will display when water temp is not current, and will alternate with water temp when the pump is running.

#### PRESET FILTER CYCLES

The first preset filter cycle begins 6 minutes after the spa is energized. The second preset filter cycle begins 12 hours later. Filter duration is programmable for 2, 4, 6, 8 hours, or C for Continuous (all day). The default filter time is 2 hours. To program, press "Temp" then "Pump". Press "Temp" to adjust. Press "Pump" to exit programming.

#### PATIO SERIES TOPSIDE CONTROL PANEL



#### **INITIAL START-UP**

Your spa will enter Priming Mode (PR) when it is energized. Primina Mode. press "Jets" button repeatedly and be sure the pump is free of air. Priming Mode lasts less than 5 minutes. Press "Warm" or "Cool" to exit. After Priming Mode, the spa will run in Standard Mode (see Mode section).

#### **TEMP CONTROL**

(80°F - 104°F / 26°C - 40°C) The last measured water temperature is constantly dis-played. The water temperature displayed is current only when the pump has been running for at least 1 minute. To display the set temperature, press "Temp" once. To change the set temperature, press the temperature button again before the display stops flashing and hold. The set temperature will begin to rise, release the but-ton at the desired set temperature. To decrease the set temperature, press and hold the "temp" button again and the set temperature will decline, release at the desired set temperature. After three seconds, the display will stop flashing and begin to display the current spa temperature. The spa will then begin heating (or cooling) in order to reach the set temperature that you have selected.

#### **PUMP**

Press "Pump" to turn the pump on or off, and to shift between low and high speeds (if equipped). If left running, the pump will turn off after a preset length of time. Low speed may run automatically at times as part of your spas filtration cycles, during which it cannot be deactivated from the panel, however you will still be able to control the high speed setting. The ozone generator (if installed) will activate anytime low speed is running.

#### **AUX (PUMP 2)**

If an additional pump or blower is installed. Press "Aux" to turn the device on. If your additional device is a dual speed pump, pressing "Aux" again will activate the pumps high speed. Pressing "Aux" again will turn off the device/pump.

#### **LIGHT**

Press "Light" to operate the spa light. Turns off after 4 hours. If your hot tub is equipped with a multicolor lighting package, then pressing the "Light" button consecutively will toggle the lights through different colors modes.

#### MODE

Mode is changed by pressing "Temp" then "Light'. Continue Pressing the "Temp" then "Light' button to toggle through the available modes. Leave the control for 10 seconds to exit.

**Standard Mode** maintains set temperature. "St" will be displayed momentarily when you switch into Stand-ard Mode.

**Economy Mode** heats the spa to the set temperature only during filter cycles. "Ec" will display when water temp is not current, and will alternate with water temp when the pump is running.

**Sleep Mode** heats the spa to within 20°F/10°C of the set temperature only during filter cycles. "SL" will dis-play when water temp is not current, and will alternate with water temp when the pump is running.

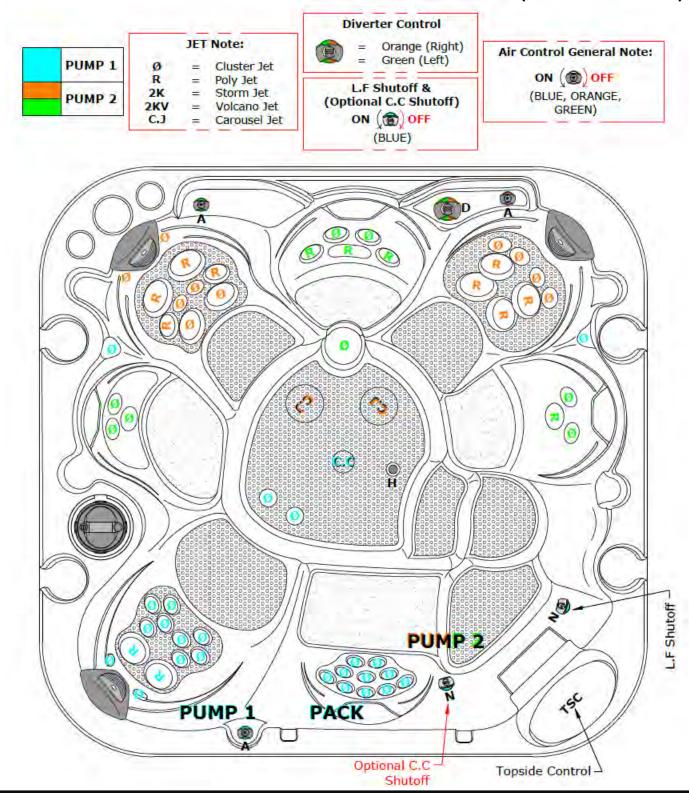
#### PRESET FILTER CYCLES

The first preset filter cycle begins 6 minutes after the spa is energized. The second preset filter cycle begins 12 hours later. Filter duration is programmable for 1, 2, 3, 4, 5, 6, 7, or 8 hours. The default filter time is 1 hour. To program, press "Temp," then "Jets." Press "Temp" to adjust. Press "Jets" to exit programming.

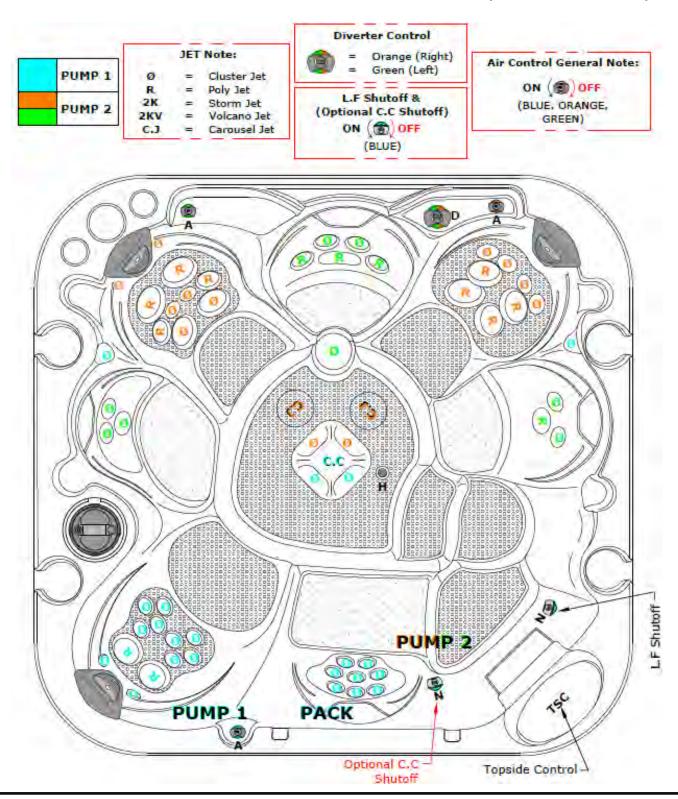
#### **DIAGNOSTIC MESSAGES**

SYMPTOM	PROBABLE CAUSE	RECOMMENDED ACTION
	No message on display. Power has been cut off to the spa.	The control panel will be disabled until power returns. Spa settings will be preserved until next power up.
	Temperature unknown.	After the pump has been running for 2 minutes, the current water temperature will be displayed.
НН	"Overheat" - The spa has shut down.* One of the sensors has detected 118°F/47.8°C at the heater.	DO NOT ENTER THE WATER. Remove the spa cover and allow water to cool. Once the heater has cooled, reset by pushing any button. If the spa does not reset, shut off the pow-er to the spa and call your dealer for service organization
ОН	"Overheat" - The spa has shut down.* One of the sensors has detected that the spa water is 110°F/43.5°C.	DO NOT ENTER THE WATER. Remove the spa cover and allow water to cool. At 107°F/41.7°C, the spa should automatically reset. If spa does not reset, shut off the power to the spa and call your dealer or service organization
SA	Spa is shut down.* The sensor that is plugged into the Sensor "A" jack is not working.	If the problem persists, contact your dealer or service organization. (May appear temporarily in an overheat condition)
Sb	Spa is shut down.* The sensor that is plugged into the Sensor "B" jack is not working.	If the problem persists, contact your dealer or service organization. (May appear temporarily in an overheat condition)
Sn	Sensors are out of balance. If alternating with spa temperature, it may just be a temporary condition. If flashing by itself, spa is shut down.	If the problem persists, contact your dealer or service organization.
HL	A significant difference between temperature sensors has been detected. This could indicate a flow problem.	If the water level is normal, make sure all pumps have been primed. If problem persists contact your dealer or service organization.
LF	Persistent low flow problems. (Displays on the fifth occurrence of message within 24 hours.) Heater is shut down, but other spa functions continue to run normally.	Follow action required for (HFL) message. Heating capability of the spa will now reset automatically. You may press any button to reset.
dr	Possible inadequate water, poor flow, or air bubbles in detected in the heater. Spa is shut down for 15 minutes.	If the water level is normal, make sure all pumps have been primed. If problem persists contact your dealer or service organization.
dY	Inadequate water detected in heater. (Displays on third occurrence of message.) Spa is shut down.*	Follow action required for (dr) message. Spa will not automatically reset. Press any button to reset manually.
IC	"Ice" - Potential freeze condition detected. *Even when spa is shut down, some equipment will turn on if freeze protection is needed.	No action required. All equipment will automatically activate regardless of spa status. The equipment stays on 4 minutes after the sensors detect that the spa temperature has risen to 45°F/7.2°C or higher. An optional freeze sensor may be added to protect against extraordinary freeze conditions. Auxiliary freeze sensor protection is advisable for colder climates. See your dealer for details.

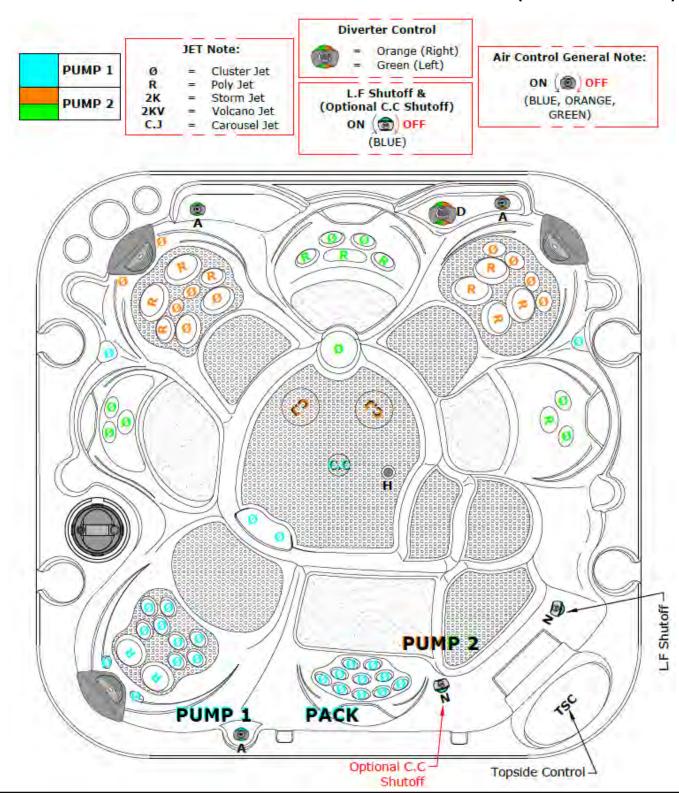
# TRADITIONAL SPA JET OPERATIONS CLASSIC APEX BENCH 50 JETS WITHOUT DOME (HIGH PROFILE)



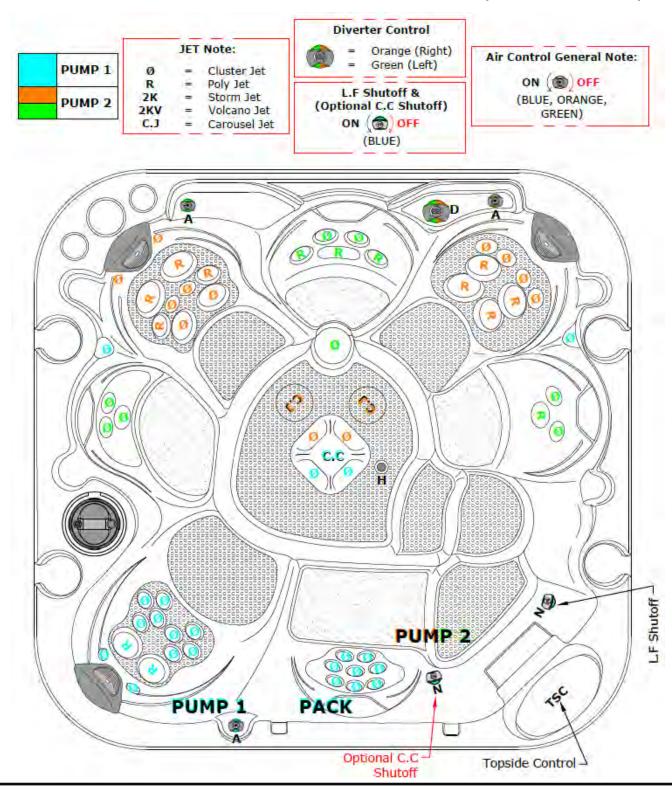
# TRADITIONAL SPA JET OPERATIONS CLASSIC APEX BENCH 50 JETS WITH DOME (HIGH PROFILE)



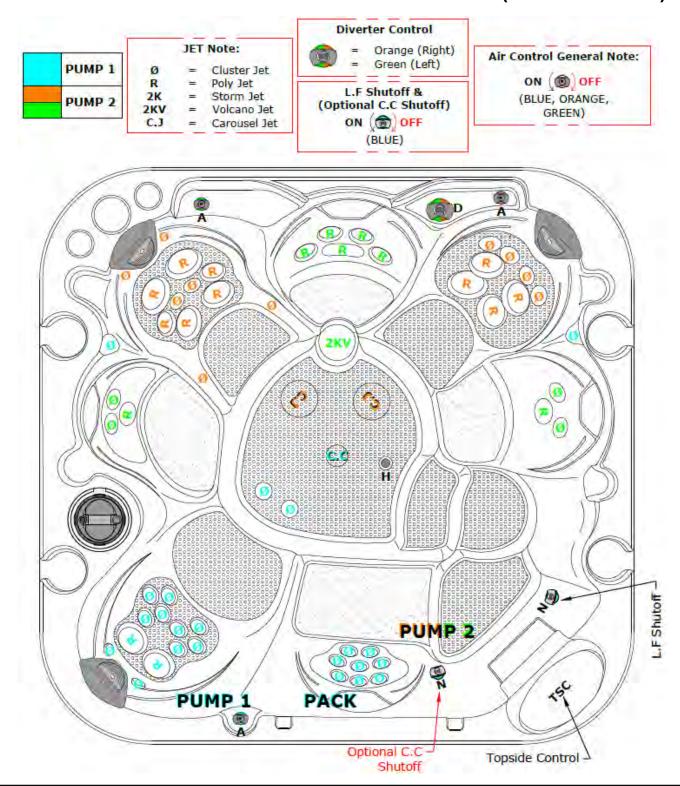
## TRADITIONAL SPA JET OPERATIONS CLASSIC APEX BENCH 50 JETS WITHOUT DOME (LOW PROFILE)



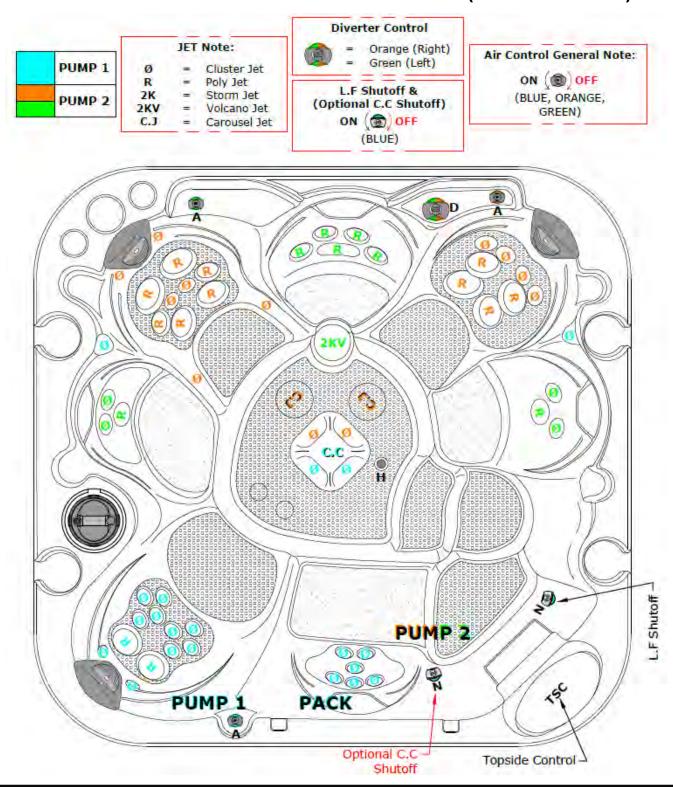
## TRADITIONAL SPA JET OPERATIONS CLASSIC APEX BENCH 50 JETS WITH DOME (LOW PROFILE)



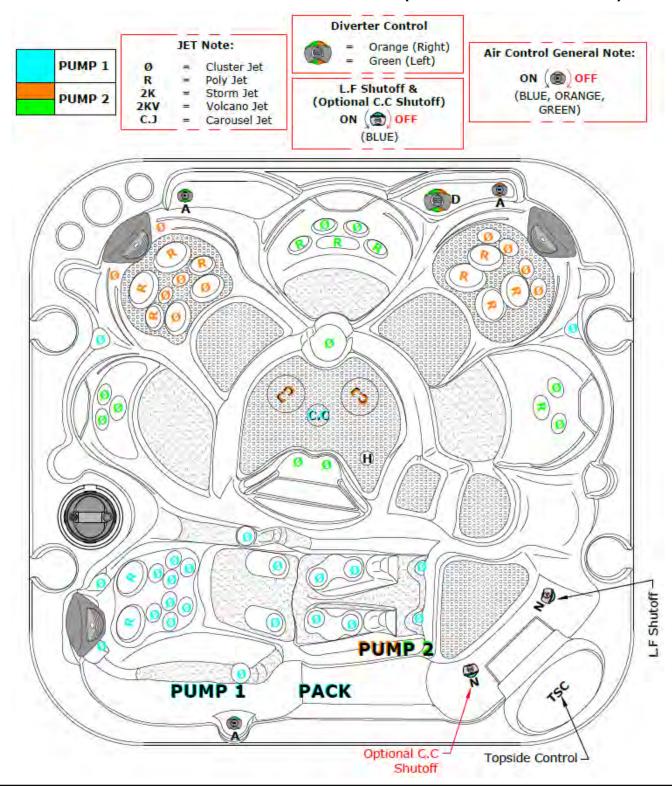
### TRADITIONAL SPA JET OPERATIONS ELITE APEX BENCH 50 JETS WITHOUT DOME (HIGH PROFILE)



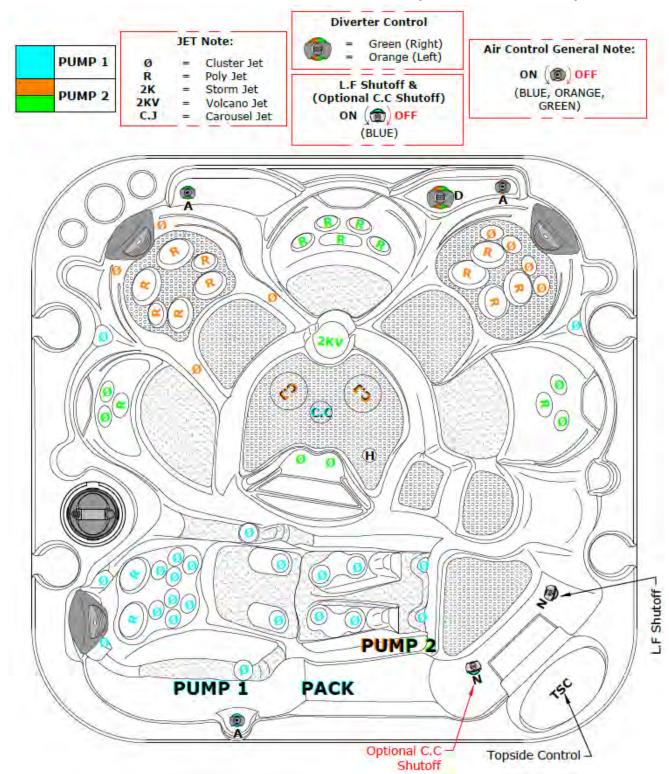
### TRADITIONAL SPA JET OPERATIONS ELITE APEX BENCH 50 JETS WITH DOME (HIGH PROFILE)



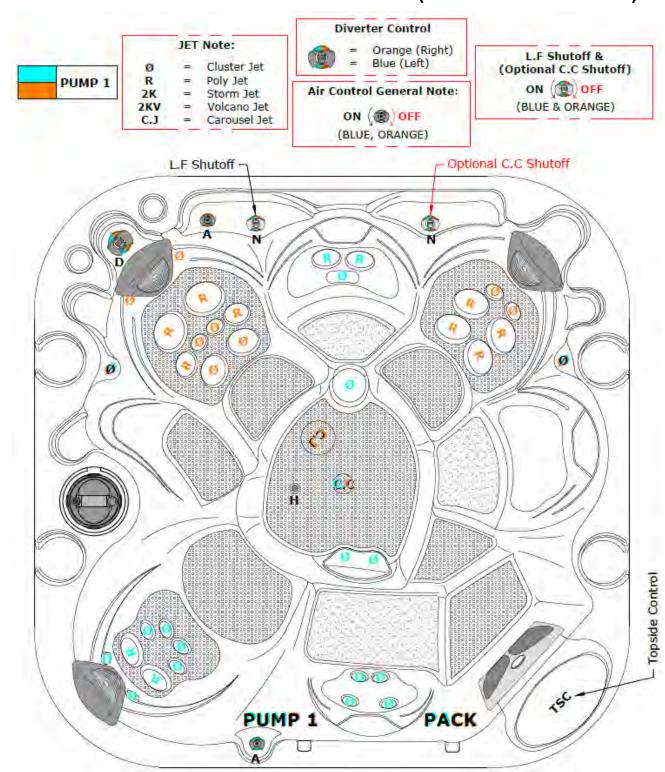
### TRADITIONAL SPA JET OPERATIONS CLASSIC APEX LOUNGE 50 JETS (LOW/HIGH PROFILE)



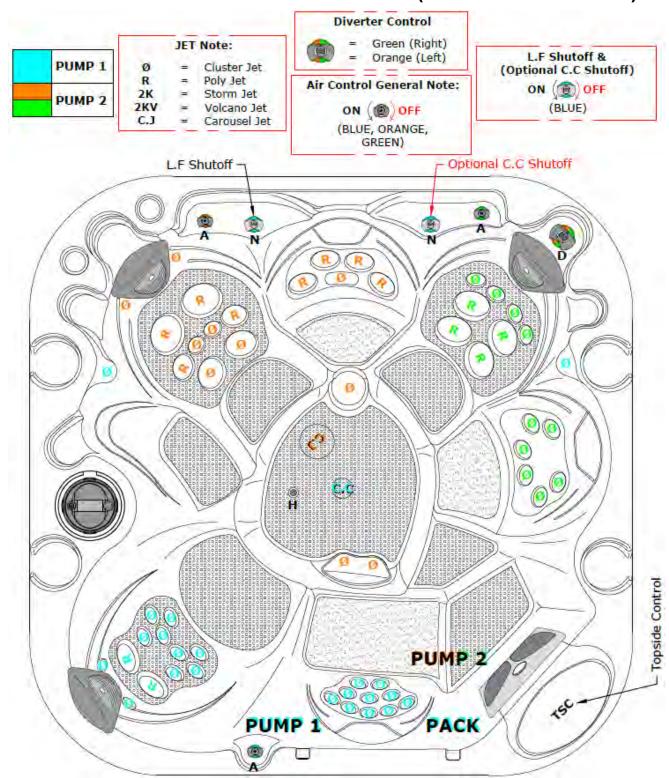
### TRADITIONAL SPA JET OPERATIONS ELITE APEX LOUNGE 50 JETS (HIGH PROFILE)



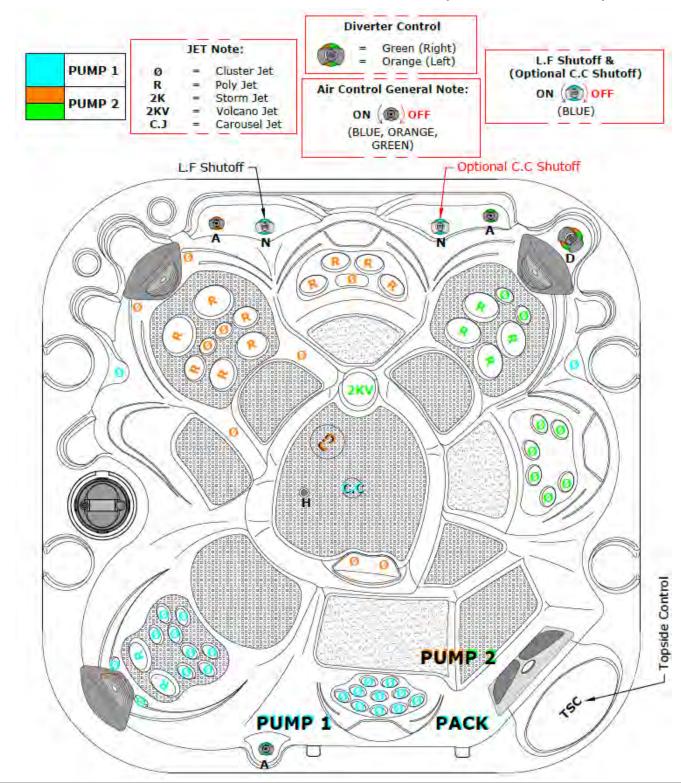
## TRADITIONAL SPA JET OPERATIONS CLASSIC ELEMENT BENCH 30 JETS (LOW/HIGH PROFILE)



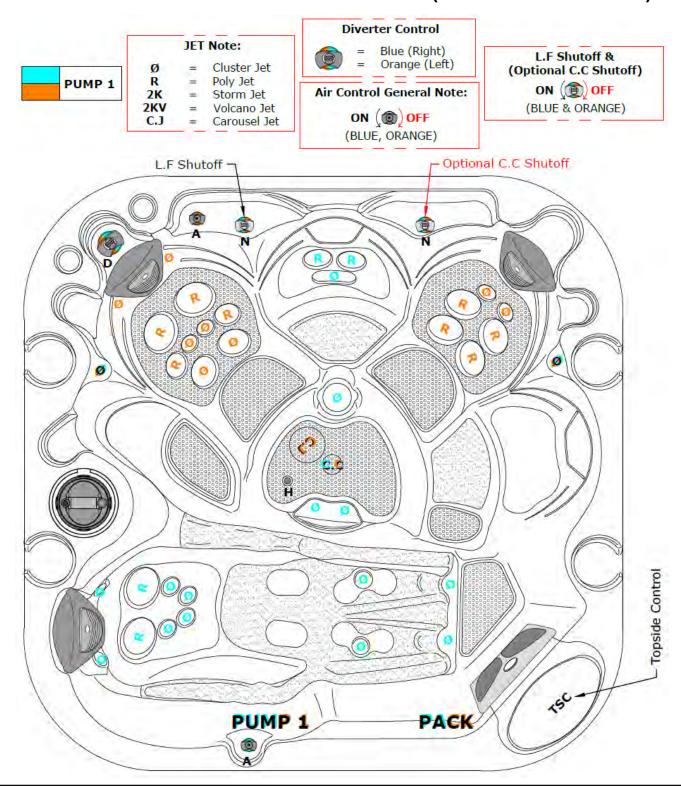
### TRADITIONAL SPA JET OPERATIONS CLASSIC ELEMENT BENCH 50 JETS (LOW/HIGH PROFILE)



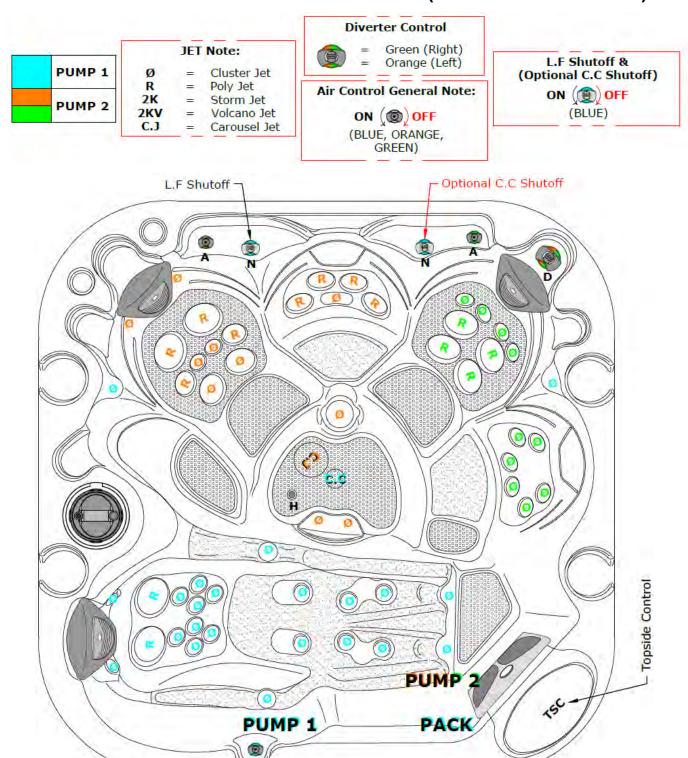
# TRADITIONAL SPA JET OPERATIONS ELITE ELEMENT BENCH 50 JETS (HIGH PROFILE)



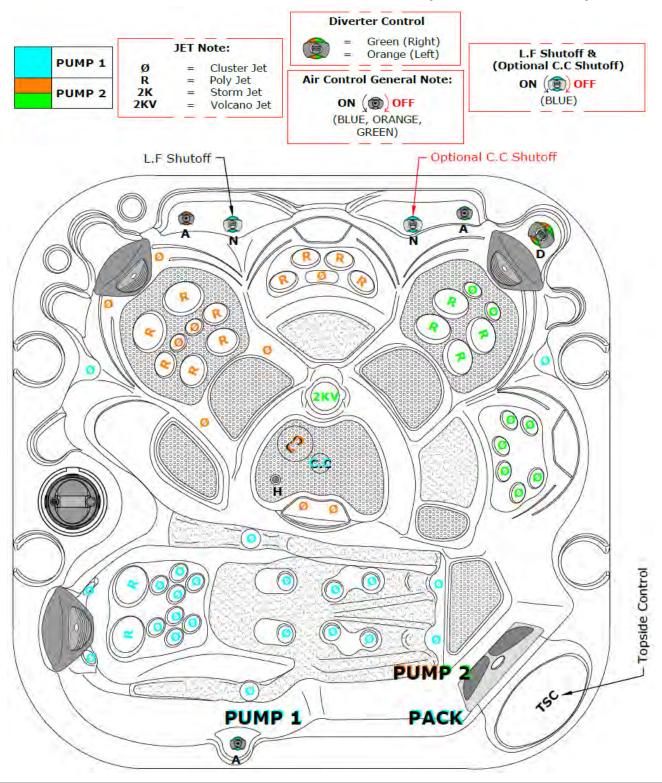
## TRADITIONAL SPA JET OPERATIONS CLASSIC ELEMENT LOUNGE 30 JETS (HIGH/LOW PROFILE)



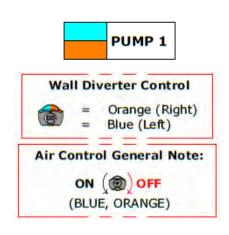
### TRADITIONAL SPA JET OPERATIONS CLASSIC ELEMENT LOUNGE 50 JETS (HIGH/LOW PROFILE)

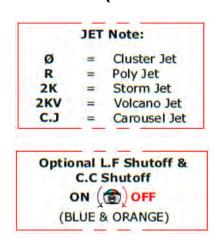


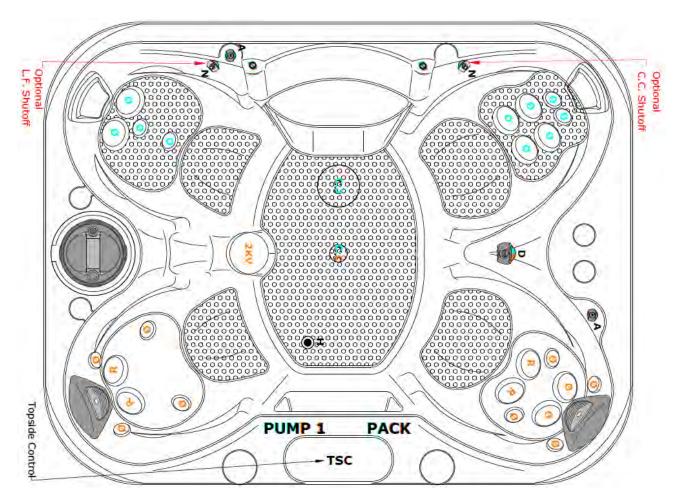
### TRADITIONAL SPA JET OPERATIONS ELITE ELEMENT LOUNGE 50 JETS (HIGH PROFILE)



### TRADITIONAL SPA JET OPERATIONS PATIO OMEGA LOUNGE 21 JETS (LOW PROFILE)

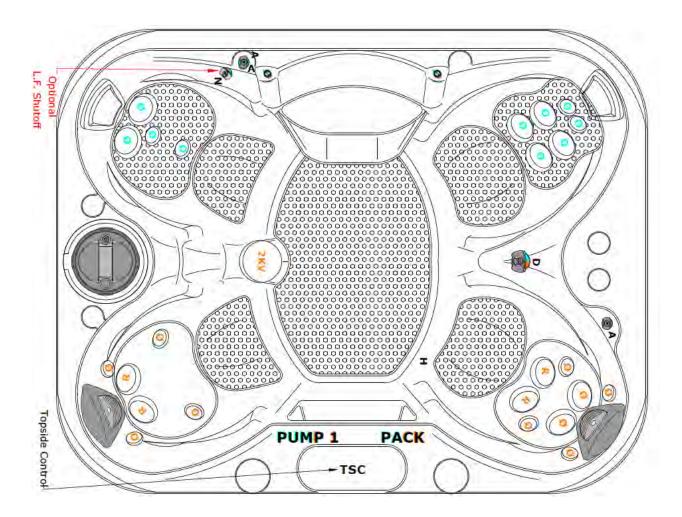




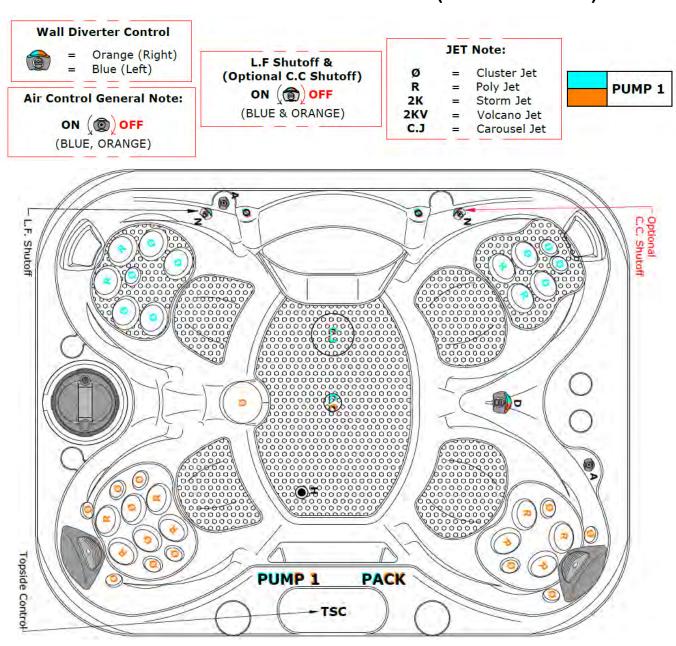


# TRADITIONAL SPA JET OPERATIONS PATIO OMEGA LOUNGE 21 JETS (ULTRA 30" LOW PROFILE)

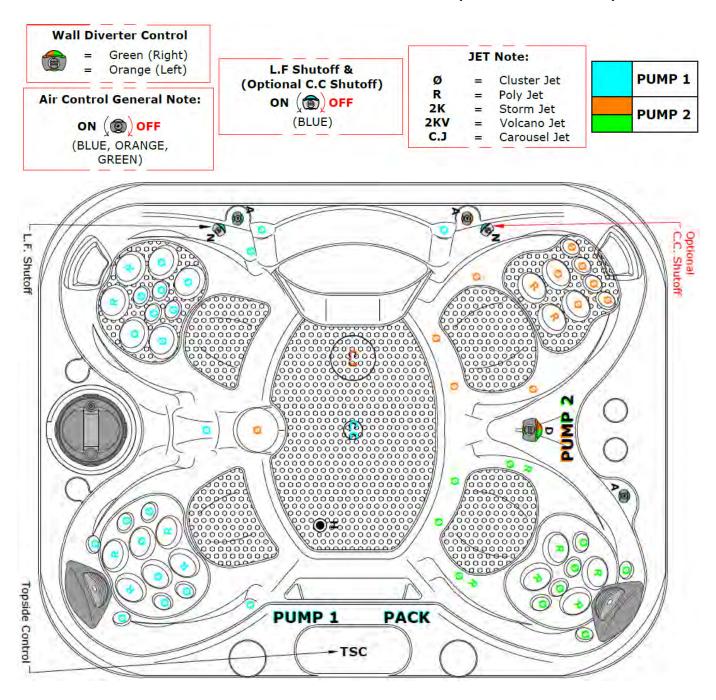




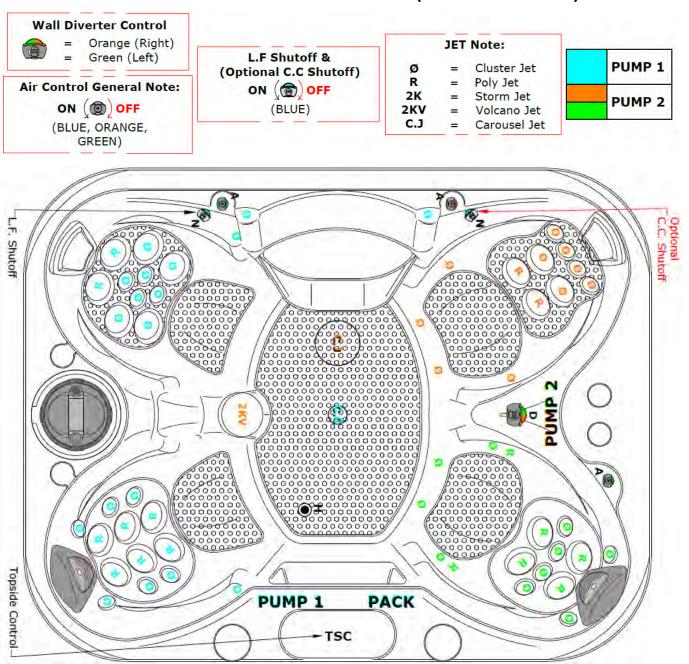
# TRADITIONAL SPA JET OPERATIONS CLASSIC OMEGA BENCH 30 JETS (LOW PROFILE)



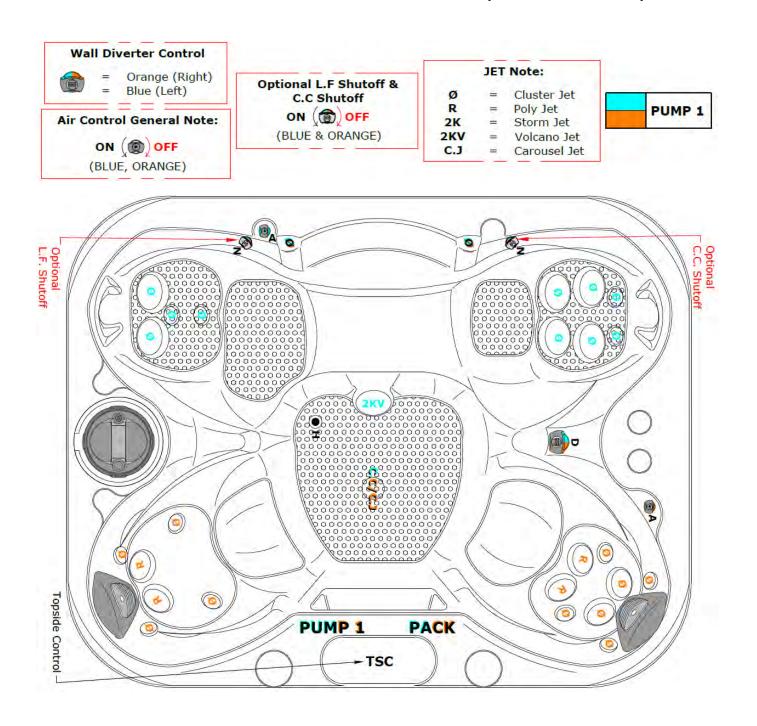
# TRADITIONAL SPA JET OPERATIONS CLASSIC OMEGA BENCH 50 JETS (LOW PROFILE)



### TRADITIONAL SPA JET OPERATIONS ELITE OMEGA BENCH 50 JETS (HIGH PROFILE)

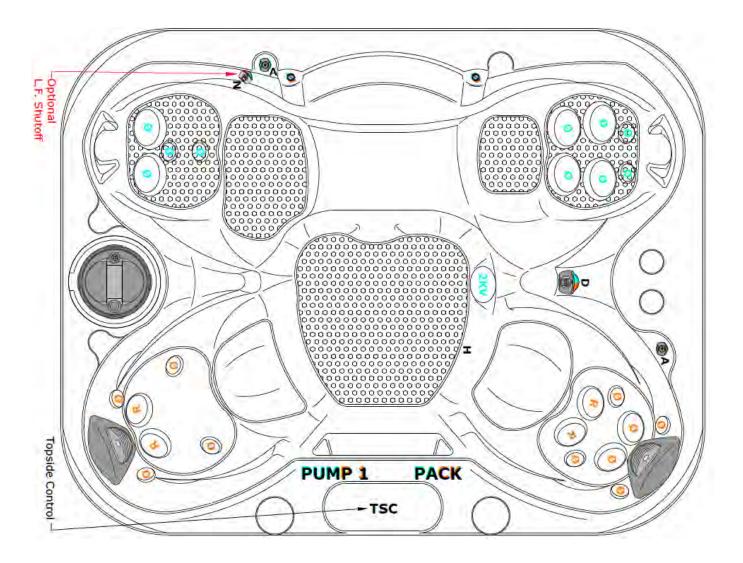


# TRADITIONAL SPA JET OPERATIONS PATIO OMEGA 2 LOUNGE 21 JETS (LOW PROFILE)

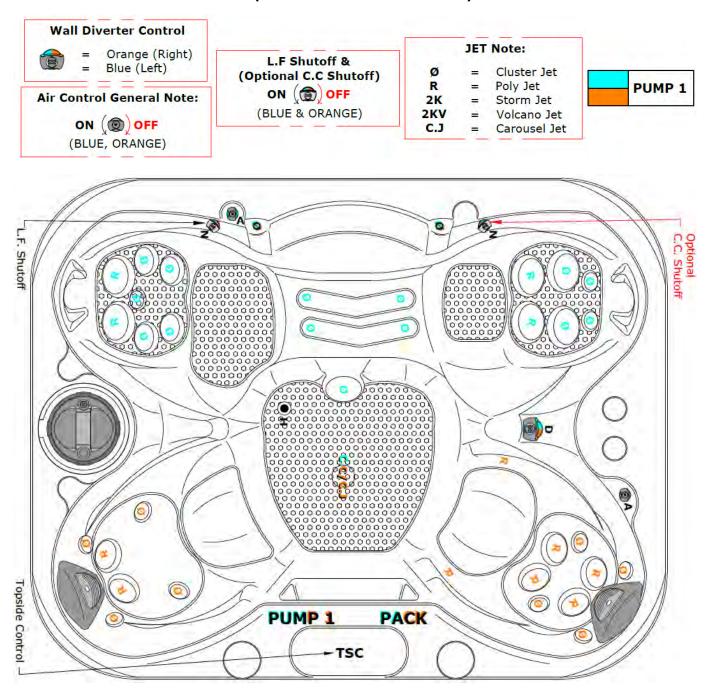


# TRADITIONAL SPA JET OPERATIONS PATIO OMEGA 2 LOUNGE 21 JETS (ULTRA 30" LOW PROFILE)



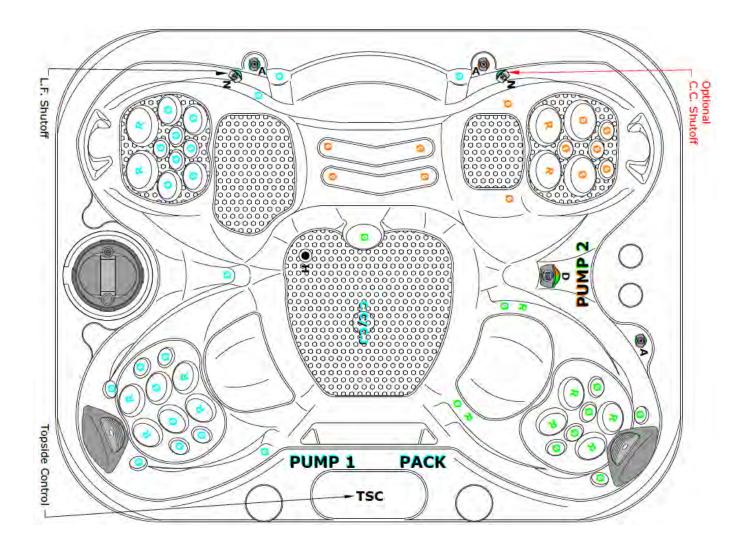


### TRADITIONAL SPA JET OPERATIONS CLASSIC OMEGA 2 LOUNGE 30 JETS (HIGH/LOW PROFILE)

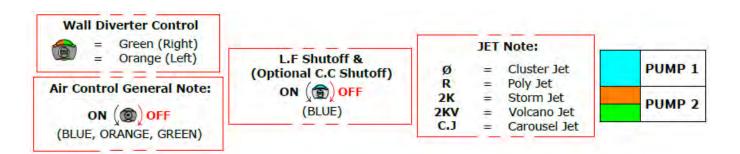


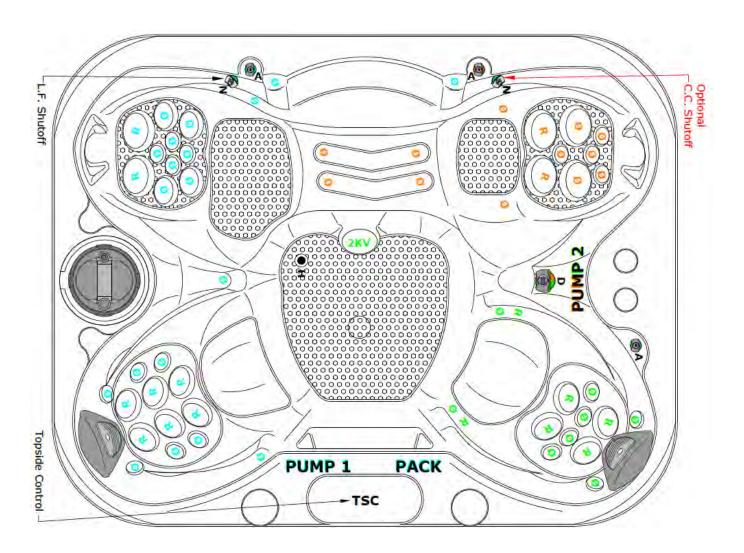
### TRADITIONAL SPA JET OPERATIONS CLASSIC OMEGA 2 LOUNGE 50 JETS (HIGH/LOW PROFILE)





### TRADITIONAL SPA JET OPERATIONS ELITE OMEGA 2 LOUNGE 50 JETS (HIGH PROFILE)





### TRADITIONAL SPA SEPECIFICATIONS

Series	Model	Seat	Dims (cm)	Dims (in)	Capacity (I)	Capacity (us gal)	Dry wt (kg)	Dry Wt (lbs)	Wet Weight (kg)	Wet Weight (lbs)
Classic	Apex Lounge	6	234 X 234 X 92	92 X 92 X 36	1496	395	672	1482	2168	4780
Elite	Apex Lounge	6	234 X 234 X 101.5	92 X 92 X 40	1496	395	672	1482	2168	4780
Classic	Element Lounge	5	212 X 212 X 92	83.5 X 83.5 X 36	1210	320	420	925	1630	3594
Elite	Element Lounge	5	212 X 212 X 101.5	83.5 X 83.5 X 40	1210	320	420	925	1630	3594
Patio	Omega Lounge	4	167.5 X 212 X 77.5	66 X 83.5 X 30.5	890	235	294	647	1184	2610
Classic	Omega Lounge	4	167.5 X 212 X 92	66 X 83.5 X 36	890	235	294	647	1184	2610
Elite	Omega Lounge	4	167.5 X 212 X 101.5	66 X 83.5 X 40	946	250	294	647	1240	2734

Series	Model	Seat	Dims (cm)	Dims (in)	Capacity (I)	Capacity (us gal)	Dry wt (kg)	Dry Wt (lbs)	Wet Weight (kg)	Wet Weight (lbs)
Classic	Apex Bench	7	234 X 234 X 92	92 X 92 X 36	1552	410	672	1482	2224	4903
Elite	Apex Bench	7	234 X 234 X 101.5	92 X 92 X 40	1552	410	672	1482	2224	4903
Classic	Element Bench	6	212 X 212 X 92	83.5 X 83.5 X 36	1268	335	420	925	1688	3721
Elite	Element Bench	6	212 X 212 X 101.5	83.5 X 83.5 X 40	1268	335	420	925	1688	3721
Patio	Omega Bench	4-5	167.5 X 212 X 77.5	66 X 83.5 X 30.5	930	246	294	647	1224	2698
Classic	Omega Bench	4-5	167.5 X 212 X 92	66 X 83.5 X 36	930	246	294	581	1224	2698
Elite	Omega Bench	4	168 X 212 X 101	66 X 83.5 X 40	996	263	294	647	1290	2844

#### **BALBOA WI-FI MODULE**

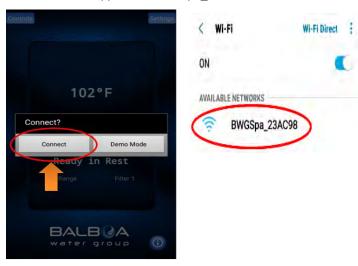
With the Balboa Wi-Fi Module installed in your spa follow the steps below to setup/configure the device.

**Step 1:** Download the app from the Google Play store or the iTunes store. The app will be titled "Coast Spas—Spa Remote" (Google) or Coast Spas—Remote Spa Control (iTunes).

**Step 2:** Make sure your Wi-Fi on your device is enabled. Check your device's instructions on how to access Wi-Fi Settings.



**Step 3:** While standing at the spa select the Wi-Fi Module from the list of available devices from your device's Wi-Fi menu. The Wi-Fi device will appear as BWGSpa XXXXX in the list.



**Step 4:** Once connected to the Wi-Fi Module directly open the Coast Spas app. The Coast Spas app will allow you to control and interact with the spa while you are still with in range.





Selecting "Controls" will open a list of installed components like pump(s), blower, lights, etc.

**Note:** This screen will vary depending on installed components.

Selecting "Settings" will open the settings menu. While connected to the spa will be able to set the temperature, change the degrees between °F or °C, alter the heat mode (Ready/Rest), select the temperature range (low or high), set the time of day, input filter cycles (time start and duration) and have access to the advanced menu.

For more information on the various settings please refer to the selection in the owner's manual for your topside control.

#### **Connecting to the Home Network**

**Note:** You can only connect the Wi-Fi app to the house network when connected directly to the Wi-Fi Module. See "Getting Started" to connect directly to the Wi-Fi Module.

Once connected to the Wi-Fi Module navigate to: Settings ► Advanced ► Wi-Fi Settings



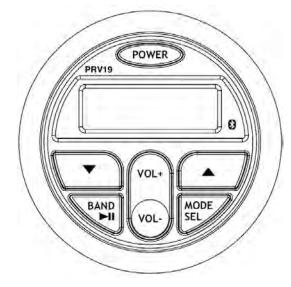
**Step 5:** Select your routers security setting. This will vary and if the wrong setting is selected the app will not be able to access the spa.

**Step 6:** Set your home network. Each router will have its own unique SSID (Service Set Identifier).

**Step 7:** Enter your key. The key will be the passkey used to sign in on your network.

Note: If you do not know or need assistance locating any of the information above please contact your locale service provider.

#### **PRV 19 STEREO SYSTEM**



#### FRONT PANEL LAYOUT

Power On/Off

Short push for the first time to turn unit on. With unit powered on, short push for MUTE feature. Press and hold for more than 2 seconds to turn the unit off.

MODE Mode Function.

**SEL** Switches amongst Radio, USB, and Auxiliary. SEL stands for SELECT.

BAND In Radio mode, this works Band Function.

▶ In MP3 playing mode, it works Play/Pause function

VOL + Volume Increase

VOL - Volume Decrease

▼ Track Down/Tune Down/Reverse

▲ Track Up/Tune Up/Fast Forward

#### **GENERAL OPERATION**

- **SEL button** Press and hold this button to enter into SELECT function, then repeatedly short push in succession results in the following menu options: Bass, Treble, Balance, Fader, Loud, EQ, Beep, Initial Volume, Area. Press VOL + or VOL to adjust the options.
- LOUD. Choose between Loud ON or OFF
- EQ. Choose between Classic, Pop, Rock, Jazz and EQ off.
- Beep. Choose between Beep ON, Beep 2ND, Beep OFF.

**Initial Volume.** Refers to the loudness level upon start of the receiver.

Area. Choose between USA and European.

#### **RADIO OPERATION**

- Press ► || button (BAND function) to access FM and AM.
   There are three FM bands and two AM bands.
- Tuning. A short press of the ▼ or ▲ button results in a search of the station and stops at next sufficient signal strength. A long press results in manual tuning mode.

#### **USB OPERATION**

- Insert a USB stick into the USB slot. \* Songs must be of the mp3 or wma format. \*
- b || button. Press it to pause the track. Press it again to resume play.
- ▼ and ▲ button (Track Up / Track Down)
   Short press Track Up or Track Down button to select the next or previous track. Press and hold Track Up or Track Down button to go fast forward and rewind the current

#### **BLUETOOTH OPERATION**

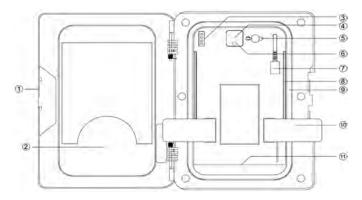
The Media device must Bluetooth capability in order to stream music.

- To pair your Bluetooth device, press the MODE button on the stereo until BT AUDIO appears.
- Press and hold the BAND button until PAIRING appears.
- Next, go to settings on the Bluetooth device and turn the Bluetooth option to "on".
- Select the "PRV19" from available devices. If you are prompted for a passcode enter "1234". If the stereo does not immediately pair press the BAND button. This will allow the pairing process to finalize. A noise will alert you that the devices are paired. The display will also read "CONN OK" (Connection Okay).

**Note:** To disconnect your device press and hold the BAND button. The display will read "DISCONN" to alert you the disconnection is complete.

**Note:** While playing BT Music press the ▶ || to pause or resume playback.

#### **DM6 INSTRUCTIONS**



- 1. Open/Close Latch & Protective Door
- 2. Door Control Keypad
- 3. LED Mode Indicator
- 4. Power On/Standby LED
- 5. 3.5mm Aux Input for MP3 device
- 6. Power ON/OFF LED



- USB Connector
- 8. Back lighting
- 9. Water/Dust Protection Gasket
- 10. Security Strap for digital media devices
- 11. Charging Compartment for Remote Control



#### **POWER ON**

Press the ON/OFF button.

**Red Light:** Power to the docking station is ON, but the unit is in standby mode.

**Blue Light:** The unit is powered ON and looking for an audio source.

#### HANDHELD REMOTE CONTROL CHARGING

The remote has a built-in Polymer Lithium rechargeable battery and comes with a charging cable. Connect one end of the charging cable to the charging connection on remote control and connect the USB end of the charging cable to any USB charger (5V DC) for charging.

Make sure the remote has been charged before used.

#### HANDHELD REMOTE CONTROL SYNCHRONIZING

The remote should already be paired from the factory, but if you need to synchronize the remote, follow the steps below.

 Make sure Digital Media Locker is powered ON (red LED) the place the remote within 0.5 meter of the Digital Media Locker.

Buttons		AUX IN Mode	Bluetooth Mode	USB Mode	FM Radio			
Power	0	Press unce: Toggle Operational						
Vode/Pair	MODE	Press once: Change the source Press and hold: no function						
Volume Up	$\pm$	Press once Volume up. Press and hold. Fast relume up.						
Volume Down	_	Press crose Volume down Press and hold Fast returns down						
Fast Forward	<b>≫</b> I	Press and no function Press and hold; no function	Press and hold, Scan up					
Fast Rewind	14	Press once: no function Press and hold: no function Press and hold: Fast backward			Press once: -0.05kHz Press and hold: Scan down			
Play/ Pause	►II	Press once Toggle mute. Press and hold: no function	Press once: Plsy/Pause Press and hold no function		Press once: Toggle mute Press and hold no function			
1	1	Press once no function Press and hold no function		Press and hold: no function	Press once: Preset 1 Press and hold: Save to Preset 1			
2	2	Press once: no function Press and hold: no function		Press once; no function Press and hold: Random	Press and hold. Save to Preset 2			
3	(3)	Press once: Toggle mule Press and hold no function		Press once: Folder down Press and hold: no function	Press once: Preset 3 Press and hold: Save to Preset 5			
EXT Trigger	#	Press once: Exernal Trigger 1 Press and holet External Trigger 2						
Audio	AUDIO	Press anat Enile Audio Manu Press and hold: Exit Audio Menu						
\/Bass	Vies	Press once: Toggle VBas Press and hold: no function						
Buttons		AUX IN Mode	Bluetooth Mode	USB Mode	FM Radio			
Mode	MODE	Press once: Change the source Press and hold no function						
Power	0	Press once: Toggle Operational mode to Standby mode or vice verta						
Mode	m	Press once: External Trigger 1 * Press and hold: External Trigger 2 *						
Volume Up.	+	Press once: Volume up Press and hold: Fast volume up.						
Volume Down	-	Press once: Volume down Press and hold. Fast volume down						
Fast Forward	144	Press once, no function Press and hold; no function		Press once; + 0,05kHz Press and hold: Scan up				
Fast: Rewind	144	Press and hold no function	Press once: Previous track Press and hold: Fast backward		Press once: -0,05kHz Press and hold: Scan down			
Play! Pause	≯II	Press once: Toggla mute Press and hold: no function	Press once: Play Pause Press and hold: no function		Press once: Toggle mule Press and hold; no function			
9		Press once, no function Press and hold, no function		Press once: Folder up Press and hold; no function	Press once: Preset 1 Press and hold: Save to Preset			
21 Random	2	Press once no function Press and hold no function		Press once: no function Press and hold; Random	Press once: Preset 2 Press and hold: Save to Preset			
3		Press once: Toggle mule Press and hold: no function		Press once: Folder down Press and hold: no function	Press once: Preset 3 Press and hold: Save to Preset			

- Press and hold MODE on remote control until the LCD shows "Pairing in Progress". Release the button.
- Within 2 seconds, the LCD will show "Paired". If it fails to pair, the LCD will show "Retry again". If this happens, wait 5 seconds and repeat steps above.

#### LISTENING VIA USB

- Attach your USB thumb drive or devices USB cable to the female USB socket of the Digital Media Locker.
- 2. Press MODE to select USB mode.
- 3. Press PLAY to play or pause the music.
- 4. Press FAST REWIND / FAST FORWARD once play previous / next song file.
- Press and hold FAST REWIND / FAST FORWARD to fast forward / fast rewind the song file.

#### AQ-DM-6UBT—DIGITAL MEDIA LOCKER

#### LISTENING VIA BLUETOOTH DEVICE

- Bluetooth mode will be activated once a Bluetooth device is paired in any mode. Use MODE to change to the Bluetooth mode to listen to music.
- Play the song from device and the sound will play through the Digital Media Locker.
- 3. Press PLAY/PAUSE to play/pause the song.
- Press FAST REWIND/FORWARD buttons to play previous/next song file.
- Press and hold FAST REWIND/FORWARD buttons to fast forward / fast rewind the song file.
- Previous/next track and volume up/down can be controlled directly from your Bluetooth device or directly from the Digital Media Locker remote control.

#### **BLUETOOTH MULTI-LINK**

A second Bluetooth device can pair to the Digital Media Locker even when it has been paired to another Bluetooth device. The second Bluetooth device will be able to play once the first device has stopped playing.

#### LISTENING TO FM RADIO

Press MODE on remote control to switch to FM radio mode.

#### Scan or Seek FM Radio Channels

- Press FAST REWIND or FAST FORWARD to seek another station.
- Press and hold either FAST REWIND or FAST FORWARD for manual tuning back or forward.

#### Saving Radio Channel to Memory

To save the current frequency into memory, press and hold 1, 2 or 3 for more than 2 seconds. The station will be stored into relevant button.

#### **Listening to Saved Radio Memory**

Press the 1, 2 or 3 preset button once to listen to the station stored in that button.



#### **DEL OZONE OPERATION**

- Ozone will turn on during the programmed filter cycles and pump #1 operation.
- Verify that the green light on the Ozone turns on when activated.
- Check the spa drain (at the bottom of the spa) to verify that small ozone bubbles are coming out.
- Verify that one way check valve is installed on the ozone tubing and it is working as intended.



#### **IN.CLEAR INSTRUCTIONS**

See video: http://www.inclear.ca/inclearstartupprocedure

For more information: <a href="http://www.inclear.ca/inclearwater">http://www.inclear.ca/inclearwater</a>

#### 1. CLEAN THE SPA

It's important to completely clean the spa to remove all residues accumulated on the surface and inside or around the jet area. After draining the spa, use spa cleaning products only. Household cleaners contain additives such as phosphates which may affect the bromine production.

#### 2. TDS (TOTAL DISSOLVED SOLIDS) CHECK

check the TDS (Total Dissolved Solids) of the water you'll use to fill the spa. Verifying the TDS range can be done by your spa selling dealer. The TDS range should be within 50 and 400 PPM. When you're certain the water is within the proper TDS range, fill your spa. If the TDS is higher than 500 PPM, ask your spa dealer for additional information to help reduce initial TDS. DO NOT use water from a "Salt Water Softener" system. Make sure there is adequate flow and that no airlocks are trapped in the unit's plumbing. If airlocks are formed, start the pump and follow the instructions in the owner's manual.

#### 3. ADJUST WATER CHEMISTRY IN THE SPA

Proper chemical maintenance of a spa is essential for the health of bathers. Maintaining the quality of the spa water within these specified values will enhance your enjoyment of the spa and prolong the life of the In.Clear system.

For best results, adjust to the following water chemistry parameters. Check these parameters periodically. Calcium hardness (TH): between 150 and 200 PPM Total Alkalinity: between 100 and 120 PPM pH: between 7.2 and 7.8

Water chemistry should be balanced before adding sodium bromide into the water. It's essential that the water chemistry parameters are within the proposed range to obtain optimal system performance. vHigh Calcium Hardness may lead to faster calcification of the electrolytic plates.

#### 4. ADD SODIUM BROMIDE (SUCH AS BROMICHARGE)

Water temperature between 32° and 38° C (90° and 100° F) helps dissolve sodium bromide and facilitates the adjustment of the maintenance level. Start the pump on high speed to allow water to circulate and slowly add sodium bromide uniformly in the spa by simply pouring it from the container. Metric Calculation: Add 0.143 kg of sodium bromide which has a guarantee of at least a 98% active ingredient, such as BromiCharge, per 100 L of water to attain 1400 ppm TDS value

(Total Dissolved Solids). Example, if your spa holds 1200 L of water, add 1.72 kg of sodium bromide (12 X 0.143 kg). Imperial Calculation: Add sodium bromide which has a guarantee of at least a 98% active ingredient, such as BromiCharge per 100 US gallons of water. Example, if your spa holds 300 US gallons of water, add 3.6 lbs of sodium bromide (3 X 1.2 lb). **Note:** Your selling dealer can tell you how much water your spa holds (in liters or gallons).

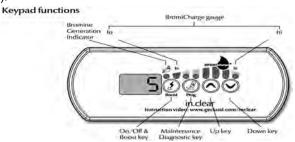
#### **MAINTENANCE MODE**

Maintenance Mode keeps the bromine bank levels at a stable and acceptable range when the spa is not being used. Maintenance mode is the "everyday" mode and is automatically ON when the system is activated.

Press and hold the Program key for 2 seconds to change the maintenance mode level.

Use the Up and Down keys to adjust the maintenance level, ranges from 1 to 50.

Finding and setting the right maintenance level will keep the residual bromide level between 3 and 5 PPM (the recommended range). Once the proper maintenance level is determined, keep the same setting unless the spa conditions change (change in water temperature, spa location etc.).



#### **BOOST MODE**

The Boost Mode should be activated every time you use your spa. Boost mode increases the bromine generation rate to attack pollutants in the water and helps rebuild the necessary residual bromine in the water after each use of the spa.

If water quality is not good after use, only boost level should be adjusted, not the maintenance level.

Press the Boost key once while in maintenance mode to start a boost, or to adjust boost settings.

Use the Up and Down keys to adjust the boost level, ranges from 1 to 8.

**Note:** Boost levels depend on the number of bathers using the spa. We recommend you validate the Boost level after each use to determine the ideal boost level for all numbers of bathers.

#### TRADITIONAL SPA SERVICE LOG

Service Performed	Date
<del></del>	
<del></del>	
<del></del>	

#### TRADITIONAL SPA SERVICE LOG

Service Performed	Date
<del></del>	



