

Patio Spas

Owners Manual

BP Series





Okanagan



Saskatoon



Gander



Muskoka

For Service Support please contact us anytime: support.canadianspacompany.com











BACK GARDEN DELIVERY FORM

Take your smart phone and tape measure outside with you and attach information directly from your phone!

At your convenience upload your information to our site and our experienced delivery team will organise your delivery and installation.







https://www.canadianspacompany.co.uk/pages/back-garden-delivery-form



SERVICE PORTAL

Our service portal has useful information on your spa. The FAQ section provides answers to your hot tub questions.

Submit a ticket in our system and our global team will effectively solve your issue quickly and efficiently 24/7.







SAFETY INFORMATION - Europe (50Hz)

IMPORTANT SAFETY INSTRUCTIONS

When installing and using this electrical equipment be sure to follow these basic safety precautions:

- WARNING: To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.
- DANGER: Risk of accidental drowning. Extreme caution must be exercised to prevent unauthorised access by children. To avoid accidents, ensure that children cannot use this spa unless they are supervised at all times.
- 3. DANGER: Risk of injury. The suction fittings in this spa are sized to match specific water flow created by the pump. Should the need arise to replace the suction fitting or the pump, ensure that the flow rates are compatible. Never operate the spa if 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 Electrical Shock. Install at least 5 feet (1.5m) from all metal surfaces. As an alternative, spa may be installed within 5 feet (1.5m) of metal surfaces if each metal surface is permanently connected (bonded) by a minimum ground wire.
- DANGER: Risk of Electrical Shock. Do not permit any electrical appliance such as a light, telephone, radio, television, etc. within 5 feet (1.5m) of a spa unless such appliances are installed and built-in by the manufacturer.
- ELECTRICAL SUPPLY: The electrical supply for this product must include a suitably rated switch or circuit breaker to open all ungrounded supply conductors to comply with the national electrical standards. This disconnect must be readily accessible and visible to the spa occupant but installed at least 5 feet (1.5m), from the spa water.
- 7. **WARNING:** To reduce the risk of injury:
- a) The water in the spa should never exceed 40°C (104°F). Water temperature between 38°C (100°F) and 40°C (104°) is considered safe for a healthy adult. Lower water temperatures are recommended for young children and when the spa use exceeds 10 minutes.
- Since excessive water temperatures have a high potential for causing foetal damage during early months of pregnancy, pregnant women should limit spa water temperatures to 38°C (100°F)
- c) Before entering a spa, the user should measure the water temperature with an accurate thermometer since the tolerance of water temperature regulating devices varies.
- d) The use of alcohol, drugs, or medication before or during spa use may lead to unconsciousness with the possibility of drowning.
- Obese persons and persons with a history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a spa.
- f) Persons using medication should consult a physician before using a spa since some medication may induce drowsiness while other medication may affect heart rate, blood pressure, and circulation.

- AUDIO/VIDEO EQUIPMENT WARNINGS (Optional equipment based on model)
 CAUTION: Risk of Electrical Shock. Do not leave compartment door open.
- CAUTION: Risk of Electrical Shock. Replace components only with identical components.
- WARNING: Prevent Electrocution. Do not connect any auxiliary components (for example cable, additional speakers, headphones, additional audio/video components, etc.) to system.
- 11. CAUTION: Risk of Electrical Shock. Do not service this product yourself as opening or removing audio covers may expose you to dangerous voltage or other risk of injury. Refer all servicing to qualified service personnel.
- 12. CAUTION: Risk of Electrical Shock. When the power supply connections or power supply cord(s) are damaged; if water is entering the audio / video compartment or any electrical equipment compartment area; if the protective shields or barriers are showing signs of deterioration; or if there are signs of other potential damage to the unit, turn off the unit and refer the servicing to a qualified service personnel.
- 13. This unit should be subject to periodic routine maintenance (for example, once every 3 months) to make sure that the unit is operating properly.
- 14. CAUTION: Do not operate audio video controls while inside the spa
- Installation of the spa for other than a residential dwelling will result in voiding the manufacturer's warranty.
- 16. Do not bring any object into the spa that could damage the spa shell.
- 17. Never insert any object into any opening.
- 18. WARNING: Do not sit on the spa cover or place objects on it.
- 19. Remove any water or debris that may collect on the spa cover.
- 20. WARNING: Do not use the spa immediately after strenuous exercise.
- If you feel pain or dizziness at any time while using the spa, discontinue use and contact a physician.
- 22. WARNING: To reduce risk of injury it is especially important that persons with pre-existing health conditions or problems such as obesity, heart disease, high or low blood pressure, circulatory problems, pregnancy or diabetes to consult their doctor before using the spa.
- 23. WARNING: Observe reasonable time limits when using the spa. Long exposures at high temperatures can cause high body temperatures. Symptoms may include dizziness, nausea, fainting, drowsiness, and reduced awareness. These effects could possibly result in drowning.
- 24. WARNING: The spa jets produce a stream of water with relatively high pressure. Prolonged exposure of localized area of the body may cause bruises to the skin.
- IMPORTANT: The include warning sign must be posted where all users of the spa can see and read it.
- 26. **WARNING:** To avoid risk of drowning. The Spa cover should be in place and properly latched when spa is not in use.
- 27. IMPORTANT: Read and understand the warnings on the spa cover.
- 28. Proper water chemistry is necessary to maintain the water and prevent possible damage to spa components.



WARNING

REDUCE THE RISK OF ELECTROCUTION

1. Never place an electric appliance within 5 feet (1.5m) of spa.

REDUCE THE RISK OF CHILDREN DROWNING

- 1. Supervise children at all times.
- 2. Attach and lock down spa cover after each use.

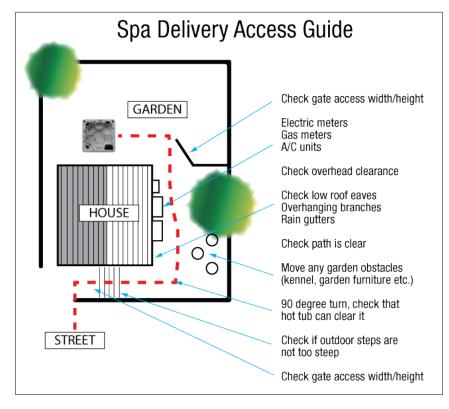
REDUCE THE RISK OF OVERHEATING

- 1. Check with a doctor before use if pregnant, diabetic, in poor health, or under medical care.
- 2. Exit immediately if uncomfortable, dizzy, or sleepy. Spa heat can cause hyperthermia and unconsciousness.
- 3. Spa heat in conjunction with alcohol, drugs, or medication can cause unconsciousness.

WHEN PREGNANT; soaking in hot water for long periods can harm your fetus. Measure water temperature before entering

- 1. Do not enter spa if water is hotter than 100°F (38°C).
- 2. Do not stay in spa for longer than 10 minutes.

Pre-Delivery Information





Before delivery check your spa height and width and add 5cm clearance on each side to ensure access.



Check that the hot tub can clear a 90° turn



Ensure you have prepared a level concrete base or a properly fitted existing patio or decking with access to a drain.

Delivering your Canadian Spa

Choose your location

The hot tub location is very important to optimise your bathing experience and provide a relaxing environment for you and your family. Therefore, the following points should be considered:

- The view from the house to the spa, and the view from the Spa in the garden.
- Direction of neighbours, doors, fences or trees.
- · Ensure quick and easy access from your house to the spa.
- Direction of drainage. Water should always drain away from the spa. Do not locate your spa in a low run-off area – rain water could flood the area and cause pump and equipment damage.
- If you are installing the spa within a deck, the entire spa base must be sitting directly on the prepared base. The lip of the shell must not support any weight.
- The minimum clearance for entry to the spa's access panel for servicing is 0.75m.
- The spa should not be located near or under overhead wires and must be kept clear of all electrical appliances
- A sheltered environment can result in lower operating and maintenance costs.

Planning Permission

Under normal circumstances planning permission is not required, but we recommend consulting your local planning office prior to purchase.

Local Regulations

There may be certain restrictions and/or requirements that are particular to your locality. If in doubt, check with your local council.

Installation and Ground surface requirements

- Ground preparation is not included in the sale of any spa or gazebo. The location where you are planning to put your spa and/or gazebo must be completely prepared.
- The site must be smooth, flat and level, to ensure complete contact with the bottom of your spa.
- Hot Tubs and Swim-Spas are extremely heavy; therefore, a solid support is essential.

A 10-15cm thick reinforced concrete slab is ideal, in most cases your spa can be placed on a properly fitted existing patio. Your spa can be mounted on a deck, but it must be of solid construction capable of holding the weight of your spa and water. Either way, it is recommended you install your spa at ground level to allow easy internal access.

- The base needs to be at least the same size as the footprint of your spa (for hot tub model sizes see back page of this Guide)
- You must allow 0.75 metre clearance for access to the spa's access panel for servicing.
- You will need to get a qualified electrician to undertake this work
- Plug and play models plug directly into a 13Amp socket.

Pre-Delivery Information

Plug & Play Hot Tub

Before delivery of Acrylic Plug & Play Spa

Please check our General Information section for pre-delivery requirements. These hot tubs plug into a normal wall 13 Amp socket – preferably weather proof - to offer a no hassle solution to install them easily and without the need of an electrician. Be sure that the spa is the ONLY load on the circuit when plugged in.

The design allows for easy drainage. You may wish to purchase a suitable submersible pump to speed up this process. Water: The best means of filling your spa is with a garden hosepipe (use cold water not hot water). Please ensure that you have one readily available. If you are aware that your water pressure is poor, we should be advised prior to delivery. The design of our spas allows for easy drainage, again, using the hosepipe which conveniently fits onto the drain valve situated at the base of your spa. Ideally, you should empty the water to a nearby drain. You may wish to purchase a suitable submersible pump to speed up this process.

Delivery Options

Delivery to outside the kerbside of house, customer to be present to sign for the delivery. Customer responsible to position the spa after it is removed from truck.



Backyard Delivery with Dolly (Optional)

OPTION 1

Delivery from warehouse and delivered to customer and moved into hot tub location. Customer to provide access for position see our guide for measurements required for each spa.

OPTION 2

Delivery from warehouse to customer, moved into hot tub location then fully installed (including all accessories) and commissioned (No Electrics). Followed by a maintenance tutorial. Customer to provide access for position. See our measurement guidelines for each spa. Optional crane service is available, please contact us for more information.

Cancellation Policy

We require a 48-hour cancellation notice prior to your scheduled delivery. If we are notified later, then a reasonable cancellation charge will be applied.

Service and Warranty Procedures

Please read through your warranty carefully, as some items are deemed user serviceable and considered general maintenance items by the manufacturer.

If you encounter any problems with your spa please contact our service desk on service@canadianspacompany.com

Our goal is to resolve any potential issue(s) as quickly as possible so that you can continue to enjoy your new spa.

A complete copy of our Manufacturer Warranty and Owner's Manual can be found on www.canadianspacompany.com







Crane Service is available (Optional)

Filling up your Spa

IMPORTANT: Before filling the spa, it is important to read and understand the water chemistry section of this manual. Do not proceed until the water chemistry section is understood and the source water is tested.

Verify that the spa is in the desired final location. Refer to the 'Choose a location' section - once filled, the spa cannot be moved without draining.

Follow these filling instructions to avoid damage to the spa pump:

- 1. Leave power to the spa off until spa is completely filled.
- 2. Never leave an unfilled spa exposed to direct sunlight with out the Spa Cover installed. Resulting damage such as bubbles and wrinkles in the spa shell and fading of the jet faces is not covered by the manufacturer's warranty.
- Never operate spa pump without water because this could result in permanent pump and/or heater damage which is not covered by the manufacturer's warranty.
- 4. Remove all warning labels from spa shell.
- 5. Remove the filter lid, basket and filter cartridge.
- Inspect all Jets (shipping may cause jets to become loose or detached). Check to see that the black Drain Valve (located to the left or right of the front access panel) is closed

IMPORTANT: Follow the next steps closely to prevent damage to the Spa Pump.

Filter Type: Glacier Anti-Microbial Filter SKU: KA-10082







- 7. Insert garden hose or other clean water source directly into filter housing. Push hose pipe into filter housing until it stops. Fill up to middle of the skimmer. Secure hose placement and turn on water. Filling the spa through the filter housing prevents an air lock from occurring in the spa pump, which is an air pocket preventing the flow of water through the pump. Permanent damage caused by running the pump with an air lock (or without water) is not covered by the manufacturer's warranty.
- 8. Check for leaks! Although spas are fully checked at the factory, shipping and delivery might cause a leak.
- 9. Before power is applied familiarise yourself with the spa control operations.
- 10. Turn water off and remove hose.
- 11. Reinstall filter cartridge, basket and filter lid.
- 12. Add start-up Chemicals after power is turned on.



Draining your Spa/Using the drain valve

- Start by shutting off the electrical breaker connected to your spa
- 2. Locate the drain valve at the side of the spa. This valve has a straightforward locking mechanism that stops the water from flowing out while you attach a garden hose to the cap.

First using the tab of the cap pull and twist till pipe comes

Now with the pipe out turn clockwise till the pipe further extends out

- 3. With the valve fully extended, unscrew the cap from the middle of the valve.
- 4. Screw in the male end of the garden hose to the valve and run the hose to your drain location.
- Once the water has stopped flowing out of the drain valve, use the wet/dry vacuum to suck out any remaining water from each jet head
- 6. Twist valve and push in to CLOSE.



Chemical Guide



Chlorine Granules - Disinfection



To protect your health, ensure that your spa water is disinfected thoroughly on a regular basis. This is particularly important in spas, as the high water temperatures provide an ideal breeding ground for bacteria. To prevent water care problems, there must always be sufficient levels of disinfectant in the water.

The use of Chlorine granules is the traditional method of disinfecting spas. Chlorine granules dissolve quickly, without residues, and do not bleach the surfaces. The granules are pH-neutral, i.e. the pH value of the water does not change with the dosing of the granules.

Check the pH value using the 3 function test strips at least once a week, and, if necessary, adjust it to 7.2-7.6. Add $10~g/m^3$ of Chlorine granules after each bathing session. Let the circulation pump run for 10~minutes, and then check afterwards using 3 function test strips that the ideal value of 1.0-1.5~ppm (mg/L). is reached. If necessary, continue to dose. The granules are dosed directly into hot tub water.

FREE Water Test App









pH Up and pH Down

The pH value is the basis for reliable disinfection. The care products only work perfectly when the levels are correct, meaning the water is not harmful to skin, hair or eyes. The ideal pH value is between 7.2 and 7.6.

The pH value is influenced by various factors. For example it increases when fresh water is added. Increasing the water temperature or using the jets changes the pH value. Therefore, check the value at least once a week and, if necessary, increase the levels using pH Up or decrease with pH Down. The granules are dosed directly into the spa water.

pH SCALE pH LOW PH NORMAL PH HIGH Reduced efficacy of disinfection Corrosion of metals Skin & eye irritation Unpleasant odour PH NORMAL PH HIGH Reduced efficacy of disinfection Skin & eye irritation Forms limescale deposits Staining of the filter



Foam Free

If your spa water has a tendency to foam, then we recommend you add Foam Free. The product is added directly to the spa water. If the water continues to foam, even after the product has been added, replace the water.



Scale Control

The overall hardness is a measure of the amount of calcium and magnesium in the water. Scale Control prevents calcium precipitations forming on the walls and in the pipes of your spa. You can find out the overall hardness level of your water by contacting your local water supplier. With a level over 200 ppm (mg/L)., heating the water can cause limescale deposits on the walls, creating rough surfaces. To prevent limescale deposits, always use Scale Control after refilling.





Canadian Spa 3 Way Test strips to check the levels of Chlorine, PH and Total Alkalinity. Simple and easy to use. Ensure your spa is always safe to use. Pack of 50 strips. Dip a test strip into the water and compare to the colour chart to take readings for: - Chlorine, pH, Total Alkalinity.

<u>TIP</u>: Chlorine and pH should be checked EVERY TIME the spa is used to ensure that the water is safe to use! Go to App, put in your test results and it will tell you what to add and how much.



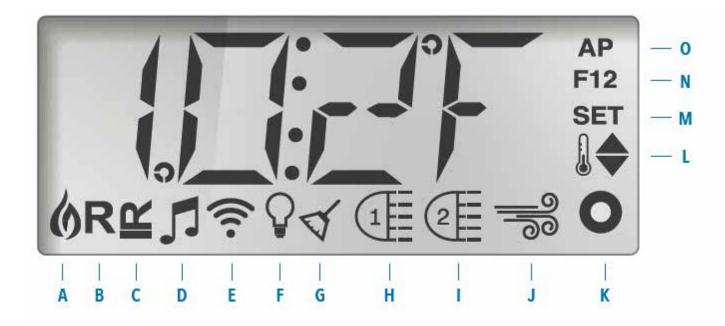
Canadian Spa Company Spa Ball KA-10003

TROUBLESHOOTING GUIDE		
PROBLEM	POSSIBLE CAUSE	SOLUTION
CLOUDY WATER	A) organic contaminants build-up B) suspended particles C) pH high D) total alkalinity too high E) poor filtration F) high dissolved solids	A) shock treatment with Granular Chlorine B) add Granular Chlorine, use SPA-BALL C) add pH DOWN until pH level reads 7.2–7.6 D) add pH DOWN, adjust total alkalinity to 80–150 p.p.m. E) dirty filter, replace filter F) empty spa and refill
COLOURED WATER	debris in water	use Chlorine Granules.
FOAMING	high concentration of oils and organic contaminants being agitated by jet	squirt FOAM-FREE on foam. Use the SPA-BALL
SCALE DEPOSITS	high calcium level, high pH, high alkalinity	drain partially, add Granular Chlorine, correct pH level to 7.2–7.6 and alkalinity to 80–150 p.p.m.
ODOUR	high level of organic contaminants combined chlorine. Chlorine level too high	shock with Granular Chlorine
EYE/SKIN IRRITATION	A) pH too low B) combined chlorine due to high concentration of organic contaminants	A) add pH up until level is 7.2–7.6 B) shock with Granular Chlorine, add disinfectant
NO CHLORINE/ BROMINE READING	A) high concentration of organic contaminants using up sanitizers B) test trips may be ineffective	A) add Granular Chlorine B) replace at least once a year, keep cool and out of sunlight

TP500 Control Reference Card

Initial Start-up

When your spa is first actuated, it will go into Priming mode, indicated by " ." Please see the M-7 Installation Instruction Manual for complete instructions on Power-up and Pump Priming. The Priming mode will last for less than 5 minutes (warm to skip Priming Mode) and then the spa will begin to heat up and maintain the water temperature in the Standard mode.



A - Heat F - Light K - Auxiliary (Jets 3 or MICROSILK*)

B - Ready Mode G - Cleanup Cycle L - Temperature Range (High / Low)

C - Rest Mode H - Jets 1 M - Set (Programming)

D - bba™2 On I - Jets 2 N - Filter Cycle (1 or 2 or Both)

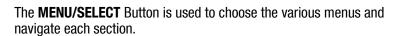
E - WiFi (Cloud Connection) J - Blower O - AM or PM (Time)

Main Menus

Navigation

Navigating the entire menu structure is done with 2 or 3 buttons on the control panel.

Some panels have separate **WARM** (Up) and **COOL** (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 (Warm and Cool) can use both of them to simplify navigation and programming where a single Temperature icon is shown.





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.

Fill it up!

Preparation and Filling

Fill the spa to its correct operating level. Be sure to open all valves and jets in the plumbing system before filling to allow as much air as possible to escape from the plumbing and the control system during the filling process.

After turning the power on at the main power panel, the top-side panel display will go through specific sequences. These

After turning the power on at the main power panel, the top-side panel display will go through specific sequences. These sequences are normal and display a variety of information regarding the configuration of the hot tub control.

Priming Mode - M019*

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 can be energized by pushing the "Jets" or "Aux" buttons.

Priming the Pump

As soon as the above display appears on the panel, push the "Jets" button once to start the Pump in low-speed and then again to switch to high-speed. will now be running in high-speed to facilitate priming. If the pump has not primed after 2 minutes, and water is not flowing from the jets in the spa, do not allow the pump to continue to run. Turn off the pump and repeat the process. Note: Turning the power off and back on again will initiate a 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 will not prime, shut off the power to the spa and call for service.

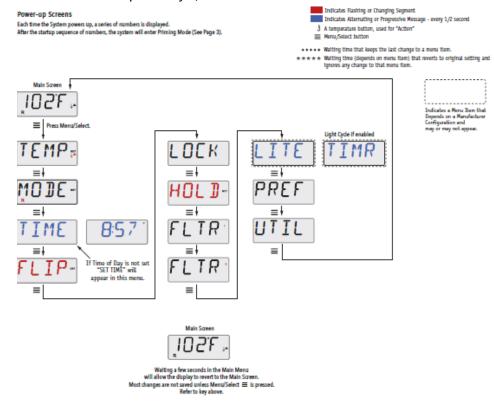
<u>Important:</u> A pump should not be allowed to run without priming for more than 2 minutes. Under NO circumstances should a pump be allowed to run without priming beyond the end of the 4-5 minute priming mode. Doing so may cause damage to the pump and cause the system to energize the heater and go into an overheat condition.

Exiting Priming Mode

You can manually exit Priming Mode by pressing the "Warm" or "Cool" button. Note that if you do not manually exit the priming mode as described above, the priming mode will be automatically terminated after 4-5 minutes. Be sure that the pump have been primed by this time. Once the system has exited Priming Mode, the top-side panel will momentarily display the set temperature but the display will not show the water temperature yet, as shown below.

This is because the system requires approximately 1 minute of water flowing through the heater to determine the water temperature and display it.





Spa Behavior

Pump

Press the "Jets" button once 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 time-out period.

The low-speed of pump 1 runs. If the spa is in Ready Mode the Pump may also activate once in a while for at least 1 minute to detect the spa temperature (polling)and then to heat to the set temperature if needed. When the low-speed turns on automatically, it cannot be deactivated from the panel, however the high speed may be started.

Filtration and Ozone

Pump 1 low and the ozone generator will run during filtration.

The system is factory-programmed with one filter cycle that will run in the evening (assuming the time-of-day is properly set) when energy rates are often lower. The filter time and duration are programmable.

A second filter cycle can be enabled as needed.

At the start of each filter cycle, all water devices (other than the primary pump) will run briefly to purge the plumbing to maintain good water quality.

Freeze Protection

If the temperature sensors within the heater detect a low enough temperature, then the pump automatically activate to provide freeze protection. The pump will run either continuously or periodically depending on conditions.

In colder climates, an optional freeze sensor may be added to protect against freeze conditions that may not be sensed by the standard sensors. Auxiliary freeze sensor protection acts similarly except with the temperature thresholds determined by the switch. See your dealer for details.

Clean-up Cycle (optional)

When a pump is turned on by a button press, a clean-up cycle begins 30 minutes after the pump is turned off or times out. The pump and the ozone generator will run for 30 minutes or more, depending on the system.

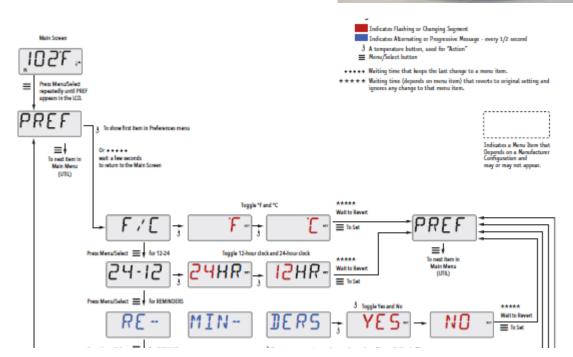
Preferences

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.



Temperature and Temp Range

Adjusting the Set Temperature

When using a panel with Up and Down buttons (Temperature buttons), pressing Up or Down will cause the temperature to flash. Pressing a temperature button again will adjust the set temperature in the direction indicated on the button. When the LCD stops flashing, the spa will heat to the new set temperature when required.

If the panel has a single temperature button, pressing the button will cause the temperature to flash. Pressing the button again will cause the temperature to change in one direction (e.g. UP). After allowing the display to stop flashing, pressing the Temperature Button will cause the temperature to flash and the next press will change the temperature in the opposite direction (e.g. DOWN).

Press-and-Hold

If a Temperature button is pressed and held when the temperature is flashing, the temperature will continue to change until the button is released. If only one temperature button is available and the limit of the Temperature Range is reached when the button is being held, the progression will reverse direction.

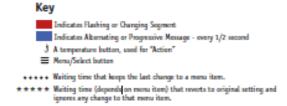
Dual Temperature Ranges

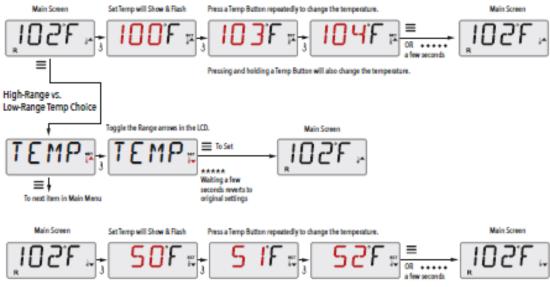
This system incorporates two temperature range settings with independent set temperatures. The High Range designated in the display by a thermometer and an "up" arrow, and the Low Range designated in the display by a thermometer and "down" arrow.

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 27°C /80°F and 40°C /104°F. Low Range might be set between 10°C /50°F and 37°C /99°F. More specific Temp Ranges may be determined by the Manufacturer. Freeze Protection is active in either range.





Pressing and holding a Temp Button will also change the temperature.

Mode - Ready and Rest

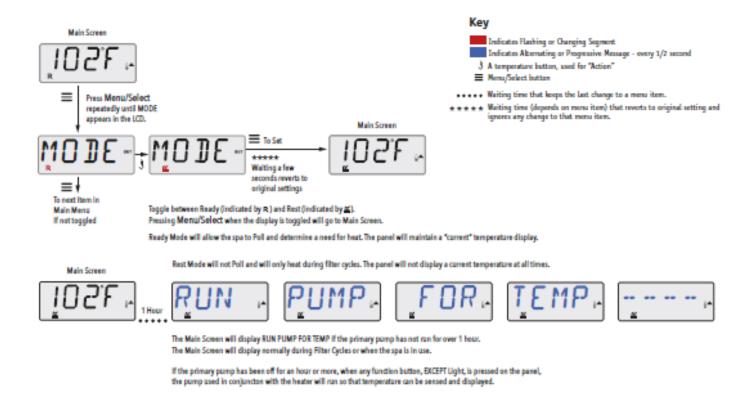
In order for the spa to heat, a pump needs to circulate water through the heater. The pump that performs this function is known as the "primary pump."

The primary pump can is a 2-Speed Pump

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."

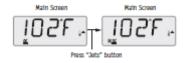
Rest Mode (indicated by () will only allow heating during programmed filter cycles. Since polling does not occur, the temperature display may not show a current temperature until the primary pump has been running for a minute or two.

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.



Ready-in-Rest Mode

R \(\sigma\) 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.



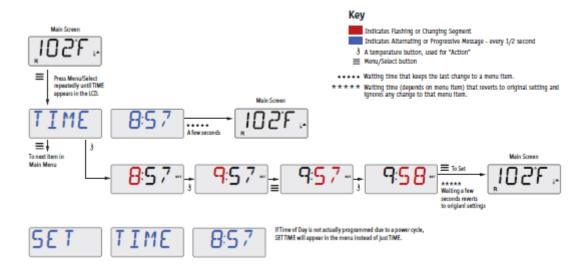
Show and Set Time-of-Day

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.

24-hour time display can be set under the PREF menu.



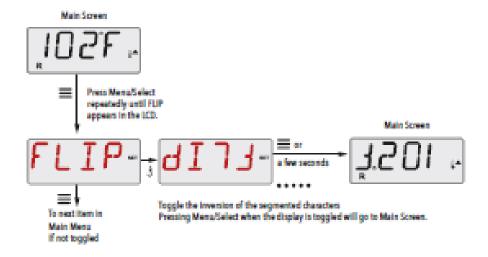
Note:

This note refers to systems that do not keep track of Time-of-Day when powered down.

If power is interrupted to such a system, Time-of-Day is not stored. The system will still operate and all other user settings will be stored. If filter cycles are required to run at a particular time of day, resetting the clock will return the filter times to the actual programmed periods.

When such a system starts up, it defaults to 12:00 Noon, so another way to get filter times back to normal is to start up the spa at noon on any given day. SET TIME will still flash in the TIME Menu until the time is actually set, but since the spa started at noon, the filter cycles will run as programmed.

Flip (Invert Display)



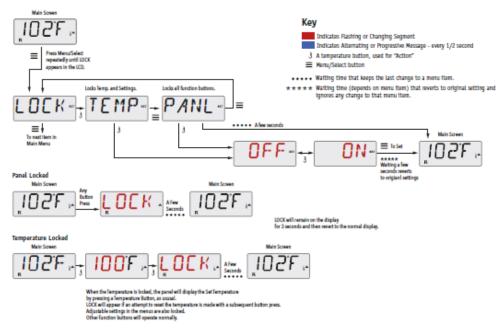
Restricting Operation

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 other programmed settings cannot be adjusted.

Temperature Lock allows access to a reduced selection of menu items. These include Set Temperature, FLIP, LOCK, UTIL, INFO

and FALT LOG



Unlocking

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



If the panel has both an UP and a Down button, the ONLY button that will work in the Unlock Sequence is the UP button.

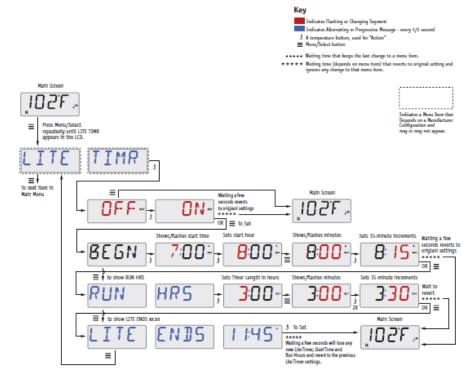
The temperature will not Unlock if the Unlock sequence is done while the panel is displaying "LOCK".

Light Timer Programming

Light Timer Option

If LITE TIMR does not appear in the Main Menu, the Light Timer feature is not enabled by the manufacturer.

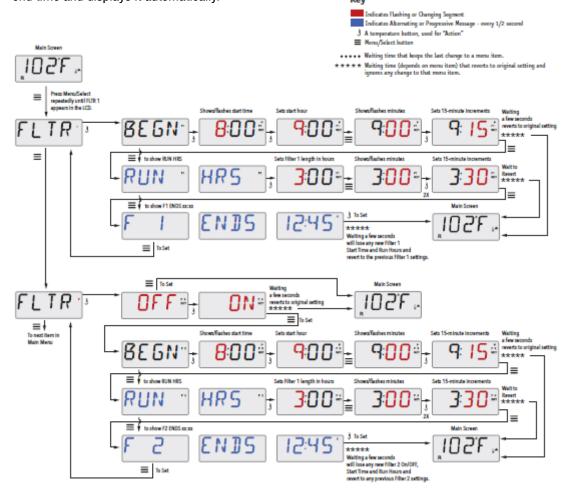
When available, the Light Timer is OFF by default.



Adjusting Filtration

Main 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.



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, the pump will purge water from their respective plumbing by running briefly at the beginning of each filter cycle.

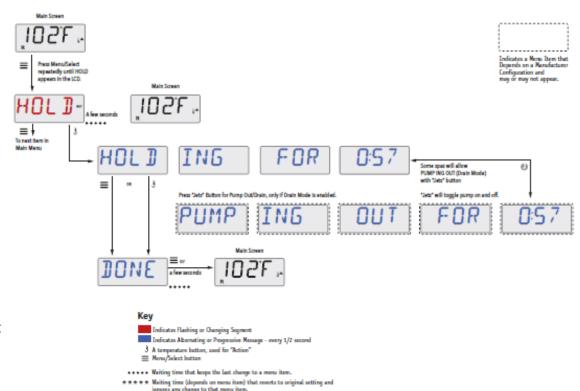
If Filter Cycle 1 is set for 24 hours, enabling Filter Cycle 2 will initiate a purge when Filter Cycle 2 is programmed to begin.

Hold Mode – MO37

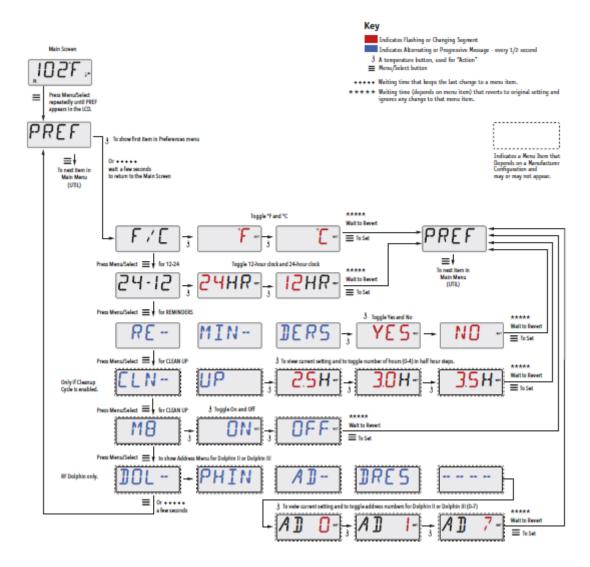
Hold Mode is used to disable the pump during service functions like cleaning or replacing the filter. Hold Mode will last for 1 hour unless the mode is exited manually.

Drain Mode

Some spas have a special feature that allows a pump to be employed when draining the water. When available, this feature is a component of Hold Mode. Drain Mode will time out with Hold Mode.



Preferences



Preferences

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.

Additional Utilities

Utilities

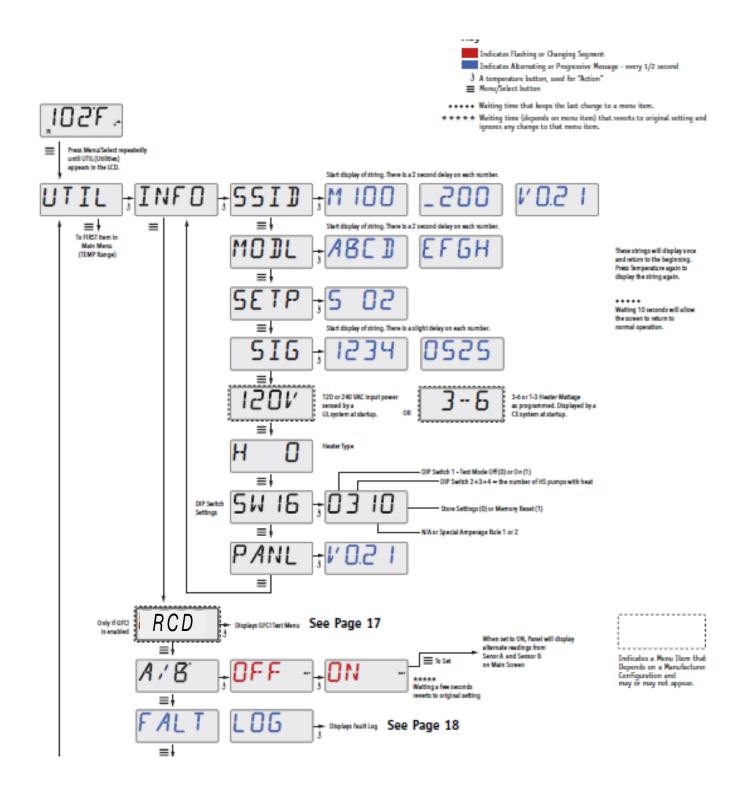
In addition to INFO, The Utilities Menu contains the following:

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.



General Messages



Priming Mode - M019

Each time the spa is powered up, it will enter Priming Mode. The purpose of Priming Mode is to allow the user to run each pump and manually verify that the pump is primed (air is purged) and water is flowing. This typically requires observing the output of each pump separately, and is generally not possible in normal operation. Priming Mode lasts 4 minutes, but you can exit it earlier by pressing any Temp button. The heater is not allowed to run during Priming Mode.



Water Temperature is Unknown

After the pump has been running for 1 minute, the temperature will be displayed.



Too Cold - Freeze Protection

A potential freeze condition has been detected, or the Aux Freeze Switch has closed, and the pump is activated, depending on how your system was built. The pump is ON for at least 4 minutes after the potential freeze condition has ended, or when the aux freeze switch opens.

In some cases, the pump may turn on and off and the heater may operate during Freeze Protection.

This is an operational message, not an error indication.



Water is too Hot (OHS) - MO29

One of the water temp sensors has detected spa water temp 110°F (43.3°C) and spa functions are disabled. System will auto reset when the spa water temp is below 108°F (42.2°C). Check for extended pump operation or high ambient temp.



J29 Warning - M044

J29 is typically used as a Heater Disable input. As such, it should not typically be shorted at power-up. This message appears if J29 is shorted at power-up.

Heater-Related Messages



Heater Flow is Reduced (HFL) - M016

There may not be enough water flow through the heater to carry the heat away from the heating element. Heater start up will begin again after about 1 min. See "Flow Related Checks" below.



Heater Flow is Reduced (LF)* - M017

There is not enough water flow through the heater to carry the heat away from the heating element and the heater has been disabled. See "Flow Related Checks" below. After the problem has been resolved, you must press any button to reset and begin heater start up.



Heater may be Dry (dr)* - M028

Possible dry heater, or not enough water in the heater to start it. The spa is shut down for 15 min. Press any button to reset the heater start-up. See "Flow Related Checks" below.



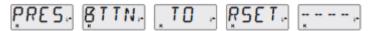
Heater is Dry* - M027

There is not enough water in the heater to start it. The spa is shut down. After the problem has been resolved, you must press any button to reset and restart heater start up. See "Flow Related Checks" below.



Heater is too Hot (OHH)* - MO30

One of the water temp sensors has detected 118°f (47.8°C) in the heater and the spa is shut down. You must press any button to reset when water is below 108°f (42.2°C). See "Flow Related Checks" below.



A Reset Message may Appear with other Messages.

Some errors may require power to be removed and restored.

Flow-Related Checks

Check for low water level, suction flow restrictions, closed valves, trapped air, too many closed jets and pump prime. On some systems even when spa is shut down, some equipment may occasionally turn on to continue monitoring temperature or if freeze protection is needed.

^{*} This message can be reset from the topside panel with any button press.

Sensor-Related Messages



Sensor Balance is Poor - M015

The temperature sensors MAY be out of sync by or 3°F. Call for Service.



Sensor Balance is Poor* - M026

The temperature sensors ARE out of sync. The Sensor Balance is Poor fault has been established for at least 1 hour. Call for Service.



Sensor Failure - Sensor A: M031, Sensor B: M032

A temperature sensor or sensor circuit has failed. Call for Service.

Miscellaneous Messages



No Communications

The control panel is not receiving communication from the System. Call for Service.



Pre-Production Software

The Control System is operating with test software. Call for Service.



°F or °C is replaced by °T

The Control System is in Test Mode. Call for Service.

^{*} This message can be reset from the topside panel with any button press.

Sensor-Related Messages

MEN - FAIL- -----

Memory Failure - Checksum Error* - M022

At Power-Up, the system has failed the Program Checksum Test. This indicates a problem with the firmware (operation program) and requires a service call.

ŞTUK. PUMP. ----.

Memory Warning - Persistent Memory Reset* - M021

Appears after any system setup change. Contact your dealer or service organization if this message appears on more than one power-up, or if it appears after the system has been running normally for a period of time.

* This message can be reset from the topside panel with any button press.

Črok⊳ Ěvir∍ ≛---->

Memory Failure - Clock Error* - M020 - Not Applicable on the BP1500

Contact your dealer or service organization.

CNFG. FAIL. ---- CALL. FOR. SRVC. ----.

Configuration Error - Spa will not Start Up

Contact your dealer or service organization.

ĢFCI. FAIL. ----.

GFCI Failure - System Could Not Test/Trip the GFCI - MO36

NORTH AMERICA ONLY. May indicate an unsafe installation. Contact your dealer or service organization.

* This message can be reset from the topside panel with any button press.

Sensor-Related Messages

ŞTUK. PUMP. ----.

A Pump Appears to be Stuck ON - MO34

Water may be overheated. POWER DOWN THE SPA. DO NOT ENTER THE WATER. Contact your dealer or service organization.

HOT - FALT- ---- CALL- FOR- SRVC- -----

A Pump Appears to have been Stuck ON when spa was last powered - MO35

POWER DOWN THE SPA. DO NOT ENTER THE WATER.

Contact your dealer or service organization.

MATR" FERF

The water level is too low

Some systems have a water level detect, and this message appears if it detects that the water level is too low.

* This message can be reset from the topside panel with any button press.

Reminder Messages

General maintenance helps.

The display of Reminder Messages can be suppressed by using the PREF Menu.

Reminder Messages can be chosen individually by the Manufacturer. They may be disabled entirely, or there may be a limited number of reminders on a specific model.

The frequency of each reminder (e.g. 7 days) can be specified by the Manufacturer.

Press a Temperature button to reset a displayed reminder message.



Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 7 days.

Check pH with a test kit and adjust pH with the appropriate chemicals.



Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 7 days.

Check sanitizer level and other water chemistry with a test kit and adjust with the appropriate chemicals.



Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 30 days.

Clean the filter media as instructed by the manufacturer. See HOLD on page 9.

ŢEST. ĢFCI.

Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 30 days.

Residual Current Device (RCD) is an important safety device and must be tested on a regular basis to verify its reliability.

Every user should be trained to safely test the RCD associated with the hot tub installation. A RCD will have a TEST and RESET button on it that allows a user to verify proper function.

Warning:

If freezing conditions exist, a RCD should be reset immediately or spa damage could result. The end user should always trained to test and reset the RCD on a regular basis.

Reminder Messages

CHNG" MATR"

Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 90 days.

Change the water in the spa on regular basis to maintain proper chemical balance and sanitary conditions.

ČTN " ČONU"

Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 180 days.

Vinvl covers should be cleaned and conditioned for maximum life.

ĮRT " WOOD.

Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 180 days.

Wood skirting and furniture should be cleaned and conditioned per the manufacturers instructions for maximum life.

CHNG. FLTR.

Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 365 days.

Filters should be replaced occasionally to maintain proper spa function and sanitary conditions.

ÇHNG. ÇART.

Alternates with temperature or normal display.

As needed. Install new mineral cartridge.

ĊHEK∵

, OZ -

Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 365 days.

Check vour ozone and/or UV generator per your spa manufacture's instructions.

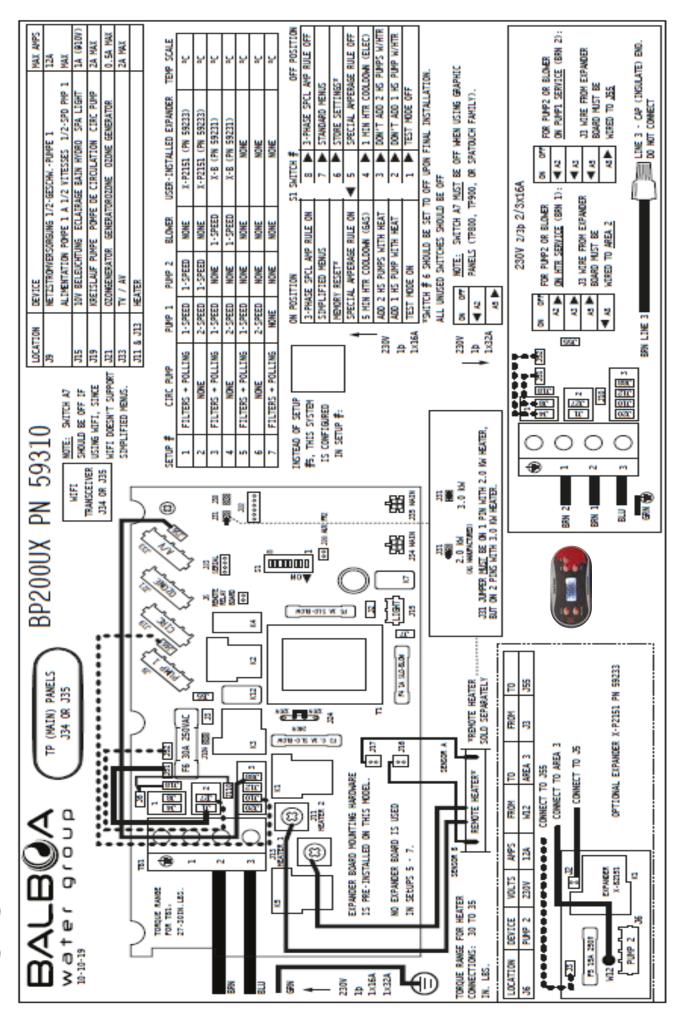
ŽKNC" ČHEK"

Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 365 days.

Have a service technician do a check-up on your spa per your spa manufacturer's instructions.

Wiring Diagram for Remote Heater Version



DIP Switch Functions

Fixed-function DIP Switches

A1 Test Mode (normally Off).

A2 In "ON" position, add one high-speed pump (or blower) with Heater.

A3 In "ON" position, add two high-speed pump (or 1 HS Pump and Blower) with Heater.

A5 In "ON" position, enables Special Amperage Rule B. See Special Features section under Configuration Options for functionality with

your system. In "OFF" position, enables Special Amperage Rule A.

A6 Persistent memory reset (Used when the spa is powering up to restore factory settings as determined by software configuration).

A2 and A3 work in combination to determine the number of high-speed devices and blowers that can run before the heat is disabled. i.e. A2 and A3 in the ON position will allow the heater to operate with up to 3 high-speed pumps (or two HS Pumps and Blower) running at the same time. Heat is disabled when the fourth high-speed pump or blower is turned on. *Note: A2/A3 all off = No heat with any high-speed pump or blower.*

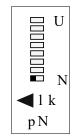
Any time you change a DIP Switch, other than A1, you must reset Persistent Memory for your new DIP Switch Settings changes to take effect. If you do not reset Persistent Memory, your system may function improperly.

To reset Persistent Memory:

- Power down by disconnecting power source from spa.
- Put a jumper across J43, covering both pins.
- · Power up by connecting power source to spa.
- Wait until "Pr" is displayed on your panel.
- · Power down again.
- Remove jumper from J43

(May also move to cover 1 pin only)

Power up again.



Assignable DIP Switches

A4 In "ON" position, enables a 5-minute cooldown for some gas heaters (Cooling Time B).

In "OFF" position, enables a 1-minute cooldown for electric heaters (Cooling Time A).

A7 In "ON" position, Simplified Menus on TP400/TP500/TP600. Do not use graphic panels (TP800, TP900, or spaTouch™ family) with Simplified Menus.

In "OFF" position, Regular Menus on TP400/TP500/TP600. This setting is compatible with all panels.

Undesignated switches are not assigned a function.

Jumper Definitions

J109 Non Applicable on CE models

J30 Do Not Use

Jumper on 1 pin with 2.0kW or smaller heater Jumper on 2 pins with a 3.0kW or higher heater. NOTE: Jumper setting varies by system model which is shown to the right of the jumper.

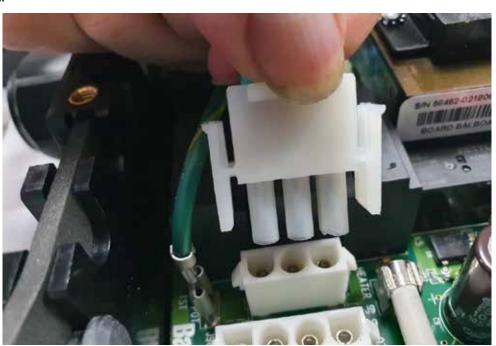
J44 Jumper must be on center two pins (240V) for CE Systems.

WARNING: Setting DIP switches or jumpers incorrectly may cause abnormal system behavior and/or damage to system components.

Refer to Switchbank illustration on Wiring Configuration page for correct settings for this system.

About Persistent Memory and Time of Day Retention:

This system uses memory that doesn't require a battery to store a variety of settings. What we refer to as Persistent Memory stores the filter settings, the set temperature, and the heat mode.



Warning! Qualified Technician Required for Service and Installation

Permanently wired connected Option

Basic Installation and Configuration Guidelines

Use minimum 6mil 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.

Warning: People with infectious diseases should not use a spa or hot tub.

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

Warning: Do not use a spa or hot tub immediately following strenuous exercise

Warning: Prolonged immersion in a spa or hot tub may be injurious to your health

Warning: Maintain water chemistry in accordance with the Manufacturers instructions.

Warning: The equipment and controls shall be located not less than 1.5 metres horizontally from the spa or hot tub.

Warning! RCD Protection.

The Owner should test and reset the 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 yourdealer 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.

Warning:

- Water temperature in excess of 40°C may be injurious to your health.
- Disconnect the electrical power before servicing.

Warning:

• Disconnect the electric power before servicing. Keep access door closed.

Inline RCD Plug (KK-10695):

• 7metre cord • Right angle 3 pin plug • In-line RCD • Shark tooth wire caps • Hot Tub Installations



Limited Warranty

LIMITED WARRANTY

Canadian Spa Co. Manufacturing extends the following warranties to the original purchasers of its portable spas:

Structural Warranty: Canadian Spa Co. warrants structure of the spa shell against water loss due to structural failure for the period of 1 years from the date of purchase by the original owner. If in Canadian Spa Co. opinion, structure proves to be defective Canadian Spa Co. will repair or, at its option, replace the defective structure without charge to the customer

Surface Warranty: Canadian Spa Co. warrants the acrylic finish against defects in material and workmanship and specifically against blistering, cracking or delamination for the period of one (1) year from the original purchase date to the original purchaser. If, in Canadian Spa Co. opinion, the surface proves to be defective during this period, Canadian Spa Co. will repair or, at its option, replace the defective spa shell without charge to the customer.

Plumbing Warranty: Canadian Spa Co. warrants the plumbing of the spa will remain free from leaks for the period of one (1) year from the date of purchase to the original purchaser.

Equipment Warranty: Canadian Spa Co. warrants the equipment pack (pump, blowers, heater, and control system) against malfunction and defects in the materials and workmanship for one (1) year from the date of purchase to the original purchaser.

Skirting Warranty: Canadian Spa Co. warrants the synthetic cabinet skirting surrounding the spa to be free from defects in materials and workmanship at the time of purchase. Because synthetic cabinets are subject to weathering, any fading, crazing, cracking or warping of the finish is not covered.

Extent of Warranty: This Limited Warranty applies to portable spas manufactured after January 1st 2020 and sold by authorised Canadian Spa Co. dealers to residential retail customers. This Limited Warranty is given only to the first retail purchaser and terminates upon transfer of ownership. No warranty is provided on light bulbs, light lens covers, filters or any dealer installed accessories. Cost of installation, removal and/or shipping of the spa is not covered by this Limited Warranty. In the event Canadian Spa Co. deems necessary the removal of the spa to a place of repair or that the spa must be replaced, any and all costs of the spa removal and replacement; landscaping, decking, fencing and/or structure removal. alteration and/or replacement; or other costs of providing access to the spa will be for the purchaser. This Warranty applies only to spas in single family, residential installations. This Limited Warranty becomes void if the spa is placed in commercial

Guarantee of the insulating cover: Canadian Spa Co. guarantees that the cover the purchase is free from defects in materials and workmanship. Where the cover is exposed to strong external influences such as extreme weather conditions, regular maintenance or protection is essential. Canadian Spa Co. warrants the cover for the period of one (1) year. Defects caused by misuse or insufficient care are not covered by the warranty.

TERMS, CONDITIONS AND LIMITATIONS

Any defect or damage caused by installation, alteration or repair by anyone who is not an employee of Canadian Spa Co. or authorised service technician is not covered by the Warranty. This Warranty becomes void if the spa has been subjected to misuse, abuse, alteration or attempted alteration, repairs or attempted repairs by anyone other than an authorised Canadian Spa Co. service technician, improper installation, improper water chemistry, improper maintenance, acts of god, or damage caused beyond the control of Canadian Spa Co. Misuse and abuse shall include any operation of the spas other than as directed in the Canadian Spa Co. Manual.

Examples of misuse and abuse include, without limitation:

- Damage of the spa surface caused by leaving the spa uncovered while the spa is empty of water or due to covering the spa with plastic film of any kind.
- Damage to the spa surface caused by contact with cleaners or solvents
- Damage caused by the operation of the spas at water temperatures outside of the range of 2-40 degrees Celsius.
- Damage caused by unapproved sanitizer such as calcium hypochlorite, tri-chlor type chlorine or any sanitising chemical that may remain undissolved on the spa surface.
- Damage caused by failure to provide even sufficient support for the spa.

Warranty Performance:

In the event of a defect covered under the terms of this Limited Warranty, notify your authorised Canadian Spa Co dealer. A Canadian Spa Co. authorised service technician will repair the spa subject to the Terms and Conditions of this Limited Warranty. Use all reasonable means to protect the spa from further damage. Reasonable travel charges may be assessed by Canadian Spa Co. or its authorised service technician if the spa is located outside the nearest authorised service technician's service area. This warranty covers parts ONLY and does not include travel or on-site service charges unless a Service Contract has been purchased from Canadian Spa Co. Ltd.

Disclaimers:

Canadian Spa Co. or any of its authorised service technicians shall not be held liable for injury, inconvenience, loss of use, chemical or water damage, transportation costs, continent liabilities or any other incidental or consequential costs, expenses or damage as result of any deficiency or alleged deficiency of the spa. In no event shall Canadian Spa Co. be liable, for any reason or cause, in excess of the amount paid for the product. No other warranties, expressed or implied, are valid. No agent, dealer, distributor, Service Company or other party is authorised to change, modify or extend the terms of this Limited Warranty in any manner whatsoever.



For Service Support please contact us anytime:

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KM-10105



Canadian Spa Company meets ISO 9001 Standards. When you purchase a hot tub from Canadian Spa Company the ISO 9001 certification assures world class excellence in manufacturing and customer service.