



- J-13[™] PowerPlay[™]
- J-16[™] PowerActive[™]
- J-19[™] PowerActive[™]
- J-16[™] PowerPro[®]
- J-19™ PowerPro®

JACUZZI® SWIM SPA COLLECTION

OWNER'S MANUAL

1005244 Revision C

Attention New Swim Spa Owner

Congratulations on the purchase of your new Jacuzzi® swim spa. The following is a list of automated functions performed by your swim spa. These functions are listed below in an attempt to suppress any operational concerns you may have during the first 24 hours of ownership. Also listed below are important maintenance recommendations you should observe on a regular basis to protect your new investment.

Maintain Healthy Swim Spa Water

Always maintain your swim spa's water chemistry within the following parameters:

	With CLEARRAY® ACTIVE OXYGEN	Without CLEARRAY® ACTIVE OXYGEN
рH	7.4—7.6	7.4—7.6
Free chlorine	No less than 1.0 ppm	3.0—4.0 ppm
Free bromine	No less than 2.0 ppm	2.0—4.0 ppm
Total Alkalinity	100—150 ppm	100—150 ppm
Calcium Hardness	150—250 ppm	150—250 ppm

IMPORTANT: CLEAR**RAY® ACTIVE OXYGEN** Water Management System is factory installed. If the CLEAR**RAY® ACTIVE OXYGEN** system is altered or is not operating efficiently then follow the "without CLEAR**RAY® ACTIVE OXYGEN** water chemistry parameters as defined by the Association of Pool and Spa Professionals. CLEAR**RAY® ACTIVE OXYGEN** requires an annual bulb replacement to properly sanitize your water.



TO DECREASE RISK OF INFECTION OR DISEASE! Always maintain your spa filters as outlined below to ensure healthy spa water.

Required Filters Maintenance

Your new swim spa is equipped with an advanced water filtration system that provides unsurpassed water quality! To ensure maximum water quality at all times, you should clean the skimming filter cartridge every 3 months, or as necessary.

Required Water Replacement

You should replace the swim spa's water every 3 months. The frequency depends on a number of variables including frequency of use, number of users and attention paid to water quality maintenance. You will know it is time for a change when you cannot control sudsing and/or you can no longer get the normal feel or sparkle to the water, even though the key water balance measurements are within the proper parameters.

<u>Table of Contents</u>

1.0	Important Swim Spa Owner Information	5
2.0	WARNINGS	5
3.0	Important Safety Instructions for all Swim Spa Owners	9
3.1	Important Safety Instructions	12
4.0	Choosing a Location	12
4.1	Outdoor Location	13
4.2	Indoor Location	14
5.0	General Electrical Safety Instructions	15
6.0	Electrical Installation Instructions (230 / 240 Volt Service)	15
7.0	Power Requirements	18
8.0	Swim Spa Fill Up Procedure	18
9.0	Spa Features	24
9.1	J-13™ PowerPlay™ Swim Spa Features	24
9.2	J-16™/J-19™ PowerActive™ Swim Spa Features	25
9.3	J-16 [™] /J-19 [™] PowerPro [®] Swim Spa Features	26
10.0) J-13™ Swim Spa Operation	27
11.0) J-16™ / J-19™ Swim Spa Operation	33
11.1	Main Screen	33
11.2	2 Navigation	35
11.3	3 The Swim Spa Screen	35
11.4	1 The Settings Screen	38
11.5	5 Swim Spa Behaviour	42
11.6	5 Time of Day	43
11.7	Adjusting Filtration	44
11.8	3 Light Cycle Option	45
11.9	Restricting Operation	46

12.0 Pro X Current Control	47
12.1 Manual Workout Mode	47
12.2 Timed Workout Mode	47
12.3 Workout Program Mode	48
13.0 Swim Spa Maintenance	49
13.1 Cleaning the Filter Cartridges	
13.2 Waterfall Control Filter	50
13.3 Draining and Refilling	50
13.4 Cleaning the Swim Spa Interior	51
13.5 Pillow Care	51
13.6 Maintaining the Synthetic Cabinet	52
13.7 Cleaning the Control Panel	52
13.8 Cover Care and Maintenance	52
13.9 Winterizing	53
13.10 Starting Your Swim Spa in Cold Weather	54
14.0 Water Quality Maintenance	54
14.1 pH Control	55
14.2 Sanitizing	55
14.3 Other Additives	56
14.4 CLEARRAY® ACTIVE OXYGEN Water Management System	56
15.0 Error / Display Messages	56
16.0 Troubleshooting Procedures	59
17.0 Typical Swim Spa Wiring Diagrams	61
18.0 Circuit Board Wiring Diagrams	63

1.0 Important Swim Spa Owner Information

Your Jacuzzi® Swim Spa is constructed to the highest standards and is capable of providing many years of trouble-free use. However, because heat retentive materials are utilized to insulate the swim spa for efficient operation, an uncovered swim spa surface and wall fittings directly exposed to sunlight and high temperatures for an extended period are subject to permanent damage or discoloration. Damage caused by exposing the swim spa to this abuse is not covered under warranty. We recommend that you always keep the swim spa full of water when it is exposed to direct sunlight and that you keep the Jacuzzi® insulating cover in place at all times when the swim spa is not in use. Read and carefully follow the requirements for your swim spa's support base found in Section 4.0 titled, "Choosing a Location".

Jacuzzi® swim spas constantly strives to offer the finest swim spas available, therefore, modifications and enhancements may be made which affect the specifications, illustrations and/or instructions contained herein.

2.0 WARNINGS



Jacuzzi® declines all liability for damages arising from failure to observe the following directions.



For periodic filling, if you decide to connect the swim spa hydraulic circuit to the public water system that supplies drinking water, this connection must be carried out in compliance with the EN1717 norm, using "AA", "AB" or "AD" anti-pollution protection procedures. For further information, we recommend you contact your water supply company and/or your plumber.

Do not connect the swim spa to the hydraulic system using hoses used to water the garden.



CAUTION: Before preparing the drainage system for connecting the swim spa, consult the local authorities about regulations for the disposal of chemically-treated water.

In areas where winter temperatures frequently drop below 32°F (0°C), during the period when the swim spa is not in use, it is recommended to completely empty the system (swim spa, compensation tanks, pipes, filter).

In areas where temperatures drop below 32°F (0°C) only occasionally, the swim spa can be kept in operation as it includes a "freeze protection" feature that guarantees the maintenance of a minimum water temperature.

In case of long periods of inactivity, it is advisable to fully drain the system. Periodic drainage, during normal use, varies depending on the frequency of use, the contaminants and the type of installation. Even if not used particularly frequently, you should change the water every three months.



Prolonged sun exposure could damage the material of which the swim spa shell is made, due to its capacity to absorb heat (dark colours in particular). Do not leave the swim spa exposed to the sun without adequate protection when not in use (thermal cover, gazebo, etc.). Any damage resulting from failure to observe these warnings are not covered by the product warranty.



Live components and equipment (except those powered at very low voltage not exceeding 12V) must be out of reach of individuals in the swim spa.

Jacuzzi® Swim Spas are class "1" appliances and must therefore be permanently connected, without intermediate junctions, to the electrical network and to the protection circuit (grounding system).



Parts containing electrical components, with the exception of remote control devices, must be positioned or fixed so that they cannot fall into the swim spa.



The appliance must be powered by means of a differential switch with operating current which does not exceed 30mA.

The installer must use cables with a suitable cross-section with minimum characteristics equivalent to type H 05 VV-F. Please refer to the corresponding section.

For the equipotential connection of the appliance the installer must use the terminal provided and identified by the ground symbol. Please refer to the corresponding section. It is imperative to build a support base adequate to the load of the swim spa.

It is imperative to provide a drainage system for accidental water spills. Please refer to the corresponding section.

For connection to the supply network, we recommend installing an isolating multi-pole switch, which will ensure complete disconnection in the event of a category III over-voltage; these devices must be placed in an area that complies with the safety regulations.



CAUTION! Before carrying out any maintenance operations, disconnect the appliance from the power supply line.



CAUTION: The pressure of the hydraulic system that supplies the equipment must not exceed 600 kPa (6 bar) and, in case water is supplied through solenoid valve(s) (eg. Balance tank) the pressure must have a minimum value of 35 kPa (0.35 bar).

This equipment may be used by children above the age of 8 or individuals with reduced mobility, sensory and/or cognitive abilities only if supervised and only if they have the knowledge necessary to use the equipment safely, as well as to understand the dangers arising from improper use.

Children must be supervised to make sure they do not play with the equipment and do not carry out operations to be performed by adults and/or specialized personnel (maintenance, cleaning operations, etc.).

Do not use water with temperatures exceeding 104°F (40°C).

Tolerance to hot water varies from person to person. Pregnant women and small children must not use the swim spa without first consulting a doctor and, in any case, the water temperature must be less than 100°F (38°C).

Be very careful when using the swim spa alone. Prolonged immersion in warm water may cause nausea, dizziness and fainting. If you intend to use the swim spa for more than 10-15 minutes, a lower water temperature must be set. This also applies to children.



CAUTION: Do not sit, walk or lie on the cover. Do not place objects on it.



CAUTION: Only "load bearing" covers are designed to support weights (MAX 440 lbs / 200 kg), but they should not be subjected to sudden and strong forces (jumps, etc.). Do not sit, walk or lie down on other types of covers (non-load bearing); do not store objects on top of the cover.

In order to avoid accidental falls in the swim spa, we recommend that the locking system supplied with the insulating cover is installed.

Persons with heart conditions, diabetes, high or low blood pressure or health problems must not use the swim spa without first consulting their doctor.

People with infectious diseases should not use the swim spa without first consulting their doctor.

Do not use the swim spa after drinking alcohol, taking drugs or medication that cause drowsiness or that can raise/lower the blood pressure.

Do not use the swim spa in extreme weather conditions (during storms etc.).

Persons under medical care must consult a doctor before using the swim spa, as some medications can cause drowsiness, affect heartbeat, blood pressure and circulation.

Be very careful when getting in and out of the swim spa. All surfaces are slippery when wet.

When using the swim spa, do not use objects that can break or that are fragile.

When using the swim spa, you must keep your head, body and clothes at a distance of at least 15 3/4" (40 cm) from the suction intakes; long hair must be tied back and secured in place. Do not use electrical appliances (radios, hair dryers) near the swim spa if it is not empty.

Do not remove the protective grilles from the suction intakes. Do not turn on the swim spa if the protective grilles are broken or missing; in this case, contact an authorized Jacuzzi® dealer or an authorized Service Centre for replacement.



Prolonged sun exposure could damage the material of which the swim spa shell is made, due to its capacity to absorb heat (dark colours in particular). Do not leave the swim spa exposed to the sun without adequate protection when not in use (thermal cover, gazebo, etc.). Any damage resulting from failure to observe these warnings are not covered by the product warranty.

For all operations and maintenance of the swim spa, please refer to this manual and, where indicated, contact an authorized Jacuzzi® service center.

Please refer to the Jacuzzi® system water treatment guide and the relative catalog for details on water quality maintenance, the relative methods and instructions of use of chemical products. Where indicated, contact an authorized Jacuzzi® service center.

3.0 Important Safety Instructions for all Swim Spa Owners. READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY!

This swim spa was manufactured to meet the standards and specifications outlined in the "Virginia Graeme Baker Pool and Spa Safety Act" (VGB Safety Act). When installing and using this swim spa, basic safety precautions should always be followed, including:



DANGER: RISK OF SEVERE INJURY OR DROWNING!

- Use the straps and clip tie downs to secure the swim spa cover when not in use. This will help discourage unsupervised children from entering the swim spa. Keep the cover secure in high wind conditions.
- There is no representation that the cover, clip tie downs, or actual locks will prevent access to the swim spa.
- Never operate or use the spa if the filter, filter lid, or skimmer assembly are broken or any part of the skimmer assembly is missing. Please contact your dealer or nearest service center for service.
- Never replace a suction fitting or suction cover with one rated less than the flow rate marked on the original suction fitting. Using improper suction fittings or suction covers can create a body or hair suction entrapment hazard that may lead to drowning or severe injury.



DANGER: RISK OF SEVERE INJURY FROM ELECTRIC SHOCK OR DEATH FROM ELECTROCUTION!

Never operate any electrical appliance from inside the swim spa or when you are wet.



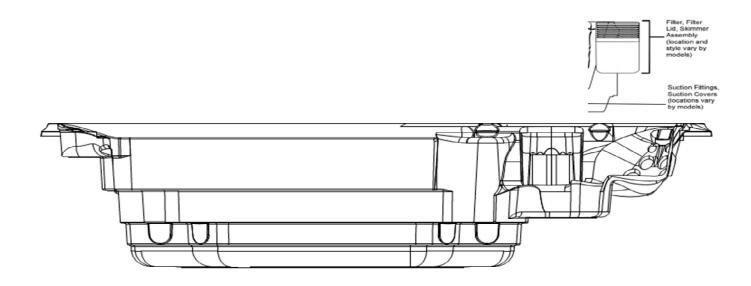
WARNING: RISK OF SEVERE INJURY OR DEATH!

- Extreme caution must be exercised to prevent diving or jumping into the swim spa or slipping and falling, which could result in unconsciousness, drowning, or serious injury. Remember that wet surfaces can be very slippery.
- Never stand, walk or sit on the top railing of the swim spa. Always test the swim spa water temperature before entering the swim 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).
- If you experience breathing difficulties in association with using or operating your swim spa, discontinue use and consult your physician.
- Never use a swim spa immediately following strenuous exercise. Enter and exit the swim spa slowly. Wet surfaces can be slippery.
- To reduce the risk of contracting a waterborne illness (e.g. an infection, bacteria or virus)
 and/or respiratory ailments, maintain water chemistry within the parameters listed on
 the inside cover of this manual and consult with a licensed engineer regarding proper
 ventilation if installed indoors or in an enclosed area.
- Always shower before and after using your swim spa. Maintain water chemistry in accordance with manufacturer's instructions. Failure to do so may result in contracting a waterborne illness (e.g. an infection, bacteria or virus)

WARNING: In addition to maintenance of filters and water chemistry, proper ventilation is recommended to reduce the risk of contracting a waterborne illness (e.g. an infection, bacteria or virus) and/or respiratory ailments that could be present in the air or water. Consult a licensed architect or building contractor to determine your specific needs if installing your swim spa indoors.

- Maintain water chemistry in accordance with manufacturer's instructions.
- Proper chemical maintenance of swim spa water is necessary to maintain safe water and prevent possible damage to swim spa components.

NOTE: This swim spa is not intended nor designed to be used in commercial or public applications. The buyer shall determine whether there are any code restrictions on the use or installation of this swim spa since local code requirements vary from one locality to another.



A Warning Sign is provided in your warranty packet. Please install at a location near your swim spa, where it is visible to users of the swim spa. For additional or replacement Warning Signs please contact your local Jacuzzi® dealer.

3.1 Important Safety Instructions

When using this electrical equipment, basic safety precautions should always be followed, including the following:

1. READ AND FOLLOW ALL INSTRUCTIONS.

- 2. 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.
- 3. At least two lugs marked "Bonding Lugs" are provided on the external surface or on the inside of the supply terminal box/compartment. For the equipotential connection as required by specific national standards, the installer must use the above terminals (standard EN 60335.2.60). In particular, an equipotential condition must be established for all metallic masses surrounding the spa, for example water and gas pipes, metallic platforms, and so on.
- 4. **SAVE THESE INSTRUCTIONS**.

4.0 Choosing a Location

IMPORTANT: Because of the combined weight of the swim spa, water and users, it is extremely important that the base upon which the swim spa rests be smooth, flat, level and capable of uniformly supporting 28,951 lbs.ft² (1220 kg/m²), without shifting or settling, for the entire time the swim spa is in place. If the swim spa is placed on a surface, which does not meet these requirements, damage to the skirt and/or the swim spa shell may result. Damage caused by improper support is not covered under warranty. It is the responsibility of the swim spa owner to ensure the integrity of the support at all times. We recommend a poured, reinforced concrete slab with a minimum thickness of 4 inches (10 cm). Wood decking is also acceptable provided it is constructed so that it meets the requirements outlined above.



WARNING: For swim spas that are to rest on roofs or other platforms not specifically tied into main structural supports, consult a professional Structural Engineer

The swim spa must be installed in such a manner as to provide drainage away from it. Placing the swim spa in a depression without provisions for proper drainage could allow rain, overflow and other casual water to flood the equipment and create a wet location in which it would sit in. For swim spas which will be recessed into a floor or deck, install so as to permit access to the equipment, either from above or below, for servicing. Make certain that there are no obstructions, which would prevent removal of all cabinet side panels and access to the jet components, especially on the side with the equipment bay.

CAUTION: If the swim spa is indoors or located in an enclosed area, proper ventilation should be discussed with an Engineer or authority competent enough to understand the necessary provisions needed to vent moist or heated air associated with chemical odors outdoors. When the swim spa is in use considerable amounts of moisture will escape potentially causing mold and mildew. This can cause health risk. Over time, this can damage certain surfaces, surroundings and equipment.

4.1 Outdoor Location

In selecting the ideal outdoor location for your swim spa, we suggest that you take into consideration:

- The proximity to changing area and shelter (especially in colder weather).
- The pathway to and from your swim spa (this should be free of debris so that dirt and leaves are not easily tracked into the swim spa).
- The closeness to trees and shrubbery (remember that leaves and birds could create extra work in keeping the swim spa clean).
- A sheltered environment (less wind and weather exposure can result in lowered operation and maintenance costs).
- The overall enhancement of your environment. It is preferable not to place the swim spa under an unguttered roof overhang since run-off water will shorten the life expectancy of the swim spa cover.
- For swim spas that are to rest on roofs or other platforms not specifically tied into main structural support, consult a professional Structural Engineer with experience in this type of application.
- In the unlikely event that you should ever need to access or gain entry to any portion of the swim spa for servicing, it is highly recommended that you plan your outdoor installation to provide full access to the entire swim spa. Please take this into consideration when placing the swim spa in a deck or enclosed by a surrounding.

- Consider locating your swim spa away from any reflective surface or glass to prevent any damage to the synthetic cabinetry.
- When possible, do not shim the swim spa. To ensure proper support the swim spa must sit flat on the intended foundation.

4.2 Indoor Location

For indoor installations many factors need to be considered before installing a spa indoors.



WARNING: In addition to maintenance of filters and water chemistry, proper ventilation is recommended to reduce the risk of contracting waterborne illness (e.g. an infection, bacteria or virus) and/or respiratory ailments that could be present in the air or water. Consult a licensed architect or building contractor to determine your specific needs if installing your swim spa indoors.

- Proper Foundation: Consult a Structural Engineer when considering a foundation that
 will adequately support the swim spa the entire time it is in place. Proper support is
 critical especially if the spa is to rest on a second story or higher. For swim spas that are
 to rest on roofs or other platforms not specifically tied into the main structural support,
 you should consult a professional Structural Engineer with experience in this type of
 application.
- Proper Drainage: It is extremely important to have in place measures to sufficiently handle excessive water spillage. Be sure the flooring in which the swim spa rests on has adequate drainage and can handle the entire contents of the swim spa. Be sure to make provisions for ceilings and other structures that may be below the swim spas installation. Areas around your swim spa can become wet or moist so all flooring and subsequent furniture, walls and adjacent structures should be able to withstand or resist water and moisture.
- Proper Ventilation: Proper ventilation should be discussed with an Engineer or
 authority competent enough to understand the necessary provisions needed to vent
 moist or heated air and air associated with chemical odors outdoors. When the swim
 spa is in use considerable amounts of moisture will escape, potentially causing mold and
 mildew over time, which can damage certain surfaces and/or surroundings.
- **Sufficient Access:** In the likely event that you should ever need to access or gain entry to any portion of the swim spa for servicing, it is highly recommended that you plan your indoor installation to provide full access to the entire swim spa.

- **Warranty:** Damage caused by not following these guidelines or any improper installation not in accordance to local codes or authorities is not covered under the swim spas warranty. Please consult your local state or city building ordinances.
- When possible, do not shim the swim spa. To ensure proper support the swim spa must sit flat on the intended foundation.

5.0 General Electrical Safety Instructions

Your new Jacuzzi® swim spa is equipped with the ProTouch™ keypad control system. It contains the most advanced safety and self-protective equipment in the industry. Nonetheless, this swim spa must be installed properly to ensure dependable usage. Please contact your local Jacuzzi® dealer or local building department should you have any questions regarding your installation.

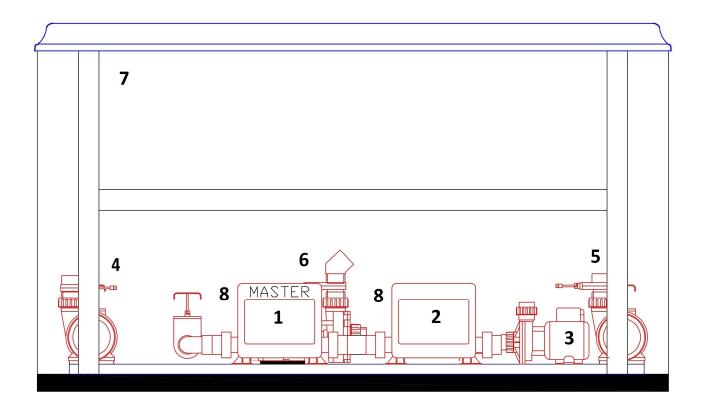
6.0 Electrical Installation Instructions (230V / 240V Service)

IMPORTANT NOTICE: The electrical wiring of this swim spa must meet the requirements of any applicable local codes. The circuit must be installed by a qualified electrician and approved by a local building/electrical inspection authority.

It is the responsibility of the installer to select materials based on their intended use, to carry out work properly, to check the condition of the system that the unit will be connected to and that it ensures safety of use also concerning maintenance work and the possibility to examine the system.

- 1. The Jacuzzi® Swim Spas are class "1" appliances and therefore they must be permanently connected, without any intermediate connections, to the electrical system and to the protection system (earth system)."
- 2. The power supplied to this swim spa must be a dedicated circuit with no other appliances or lights sharing the power provided by the circuit.
- 3. The installer must use cables with a suitable cross-section.
- 4. For connection to the power supply network, we recommend installing an isolating multi-pole switch, which will ensure complete disconnection in the event of a category III over-voltage; these devices must be positioned in an area that complies with the safety regulations.
- 5. The electrical system of the building must be provided with a 0.03A differential switch and with an efficient protection (earth) circuit. Check for proper operation of the differential switch by pressing the TEST button, which should trip.
- 6. The electrical circuit supplied for the swim spa must include a suitable ground fault circuit interrupter (GFCI) as required by NEC Article 680-42/USA.
- 7. To gain access to the swim spa's power terminal block, pull the bottom of the door panel to break the magnetic lock of the door to the frame. Place the door panel in a safe location to prevent damage.
- 8. Select the power supply entrance you want to use, Figure A. Make sure to install a 3/4" electrical fitting and conduit through the large opening provided in the side of the control box so you can feed the cable through to the terminal block.
- 9. Connect wires to the terminal block (Figures B-C). **ALL WIRES MUST BE SECURELY CONNECTED** or equipment damage could result!
- 10. Install the door panel back into place.

FIGURE 1 EQUIPMENT AREA



- 1. Master
- 2. Auxiliary heater (standard on PowerPro® / optional on Power Active™ and Power-Play™)
- 3. Pump 1
- 4. Pump 2
- 5. Pump 3 (PowerPro® only)
- 6. Pump 4 (PowerPro® only)
- 7. CLEARRAY® ACTIVE OXYGEN Water Management System
- 8. Power Supply Entrance

Note: Equipment location and quantity (such as pumps, CLEARRAY ® ACTIVE OXYGEN system, heater etc.) varies by model.

7.0 Power Requirements

Jacuzzi® swim spas are designed to provide optimum performance and flexibility of use when connected to their maximum electrical service. They are configured at the factory. The most common electrical connections are listed below.

	NORTH AMERICAN MODELS (60 Hz)	EUROPEAN MODELS (50 Hz)
VOLTAGE	240VAC	230VAC
Frequency (Hz)	60	50
Number of wires	4	3
RATINGS	GFCI	RCD
PowerPlay™ Series	50	40
PowerActive™ Series	50	40
PowerPro® Series	60	40

8.0 Swim Spa Fill Up Procedure

For best results, read each step in its entirety before proceeding with this procedure. Make sure that all drains and drain plugs are closed.

1. Prepare the Swim Spa for Filling

- Clear all debris from the swim spa (Although the swim spa shell has been polished at the factory, you may want to treat it with a specially formulated spa cleaner.)
 Consult your authorized Jacuzzi® dealer for additional information prior to filling.
- Remove both filters, skimmer, polishing filter lids and filters.

2. Fill Swim Spa

 Place the end of your garden hose into empty skimming filter fitting as you stand next to the swim spa. Fill swim spa half way, then place the garden hose into the opposite filter fitting while adding the remaining fill water.

CAUTION: TO DECREASE BUILD UP ON COMPONENTS AND MINIMIZE ACRYLIC DAMAGE.



Never fill with water from a water softener. If your water is extremely "hard", it is preferable to fill half-way with hard water and the rest of the way with softened water. Water that is too soft can be corrosive to metal components.

WARNING: TO DECREASE RISK OF INFECTION AND DISEASE.

Fill the swim spa with clean tap water from garden hose, to reduce the risk of contracting a waterborne illness (e.g. an infection, bacteria or virus) and/or respiratory ailments. Fill until water covers all the jets but does not touch the bottom of the lowest headrest (DO NOT OVERFILL!).

IMPORTANT: Always fill your swim spa through both filter fittings after draining. Failure to do so may cause air to be trapped in the pumps, preventing the pumps from circulating water. Remove the hose and replace both filter cartridges as illustrated in Section 13.1.

3. Turn On Power

Turn on the power to the swim spa at the home's circuit breaker. The heater and filter/circulation pump will automatically activate. Normally, at the initial fill, the water tends to be cold.

4. Activate Jet Pumps

Turn on jet pumps when adding chemicals in step 5 (see section 11.2)

5. Add Start-Up Chemicals

Add the swim spa water chemicals as recommended by your authorized Jacuzzi® swim spa dealer. See section titled "Water Quality Maintenance" for general guidance.

WARNING: RISK OF POISONING OR DEATH.

Never leave chemicals opened and accessible to anyone. Use chemicals according to the vendor's instructions. Always store chemicals in a safe and/or locked location. Keep away from and out of reach of children.

6. Establish a Stable Sanitizer Reading

Establish a stable sanitizer reading of no less than 2.0 ppm free bromine or no less than 1.0 ppm free chlorine. To ensure healthy water conditions, always maintain a constant sanitizer reading within the levels recommended on the inside cover of this manual. If sanitizer levels cannot be stabilized, perform the decontamination procedure steps 9-15 on the following pages.

Note: The "Decontamination Procedure" should also be used after the swim spa has been "Winterized" (Section 13.8) or has been sitting without power for an extended period.

7. Set Swim Spa to Heat

To warm swim spa water to a comfortable temperature, follow these steps:

- The display on the control panel displays the actual temperature of the swim spa water. Tap the "+" or "-" to increase or decrease the water temperature in 1 degree increments.
- The heater will turn off 1°F (0.5°C) above the set temperature and turn on 2°F (1°C) below set temperature.

Note: The temperature range for the swim spa is 80 to 104°F (27 to 40°C). To activate the **Extended Temperature feature** that allows the swim spa to reach 106°F (41°C) refer to Section 15 "Error/Display Messages".

Important Heater Details:

- The maximum temperature for which the swim spa can be set is 104°F (40°C) and the minimum is 80°F (27°C).
- Setting the thermostat at maximum will not accelerate the heating process. This will only result in a higher ultimate temperature.
- The heater operates until the water reaches 1°F (0.5°C) degree above the programmed "set temperature", then turns off. The heater will reactivate after the water cools to approximately 2°F (1°C) below the "set temperature".

8. Place Cover on Swim Spa

- Keeping the insulating cover in place anytime the swim spa is not in use will reduce the time required for heating, thereby minimizing operating costs.
- The time required for initial heat-up will vary depending on the starting temperature.



DANGER: RISK OF PERSONAL INJURY.

Check water temperature carefully before entering swim spa! Excessive water temperature can cause burns, welts and body temperature to rise, hyperthermia (over-heating).

Decontaminating Procedure

Steps 9-15 below are only required when sanitizer levels are unstable after performing Swim Spa Fill Procedures 1-6. Disregard steps 9-15 below if sanitizer levels remain stable after performing steps 1-6 above (refer to the inside cover of the manual).

9. Add 2013 ounces (71 grams) of sodium dichlor for every 99 USG (378 litres) of water. Refer to the table below for approximate water fill volume by model.

CAUTION: RISK OF PERSONAL INJURY OR SWIM SPA DAMAGE!



Never add chlorine tablets (trichlor) or acid to your swim spa for any reason! These chemicals may damage components within your swim spa, burn or irritate your skin, create a rash, and void the manufacturer warranty for your swim spa.

Water Fill Volume by Model

Model	Average Fill Volume*	Sodium Dichlor
J13	1229 USG (4670 Litres)	871 grams
J16	2010 USG (7638 Litres)	1425 grams
J19	2378 USG (9038 Litres)	1687 grams

^{*} Use average fill volume for chemical maintenance

10. Leave swim spa cover open during this step to allow excessive chemical vapours to exit the swim spa, protecting pillows and plastic knobs from chemical attack. If the swim spa is indoors, open doors and windows for proper ventilation. Turn on all swim spa jet pumps for one hour, open all air controls, and place all massage selector knob(s) in their center "combo" position.

Note: You will need to activate the jet pumps every 15 minutes since these functions have an automatic 15 minute time-out that turns them off.



WARNING: RISK OF PERSONAL INJURY!

- To decrease the risk of injury, drowning or entrapment, never leave your swim spa unattended for any reason while the cover is open and accessible, especially to small children and animals.
- Precautions should be taken to minimize your exposure to chemical vapours (that could cause lung, brain, or skin damage).

- 11. Turn off power to the swim spa at the circuit breaker, then drain the swim spa as outlined in Section 13.2.
- 11. Refill the swim spa with clean tap water from the garden hose until water covers all jets but does not touch the bottom of the lowest headrest with all headrests in their lowest position (DO NOT OVERFILL!)

CAUTION: TO DECREASE BUILD UP ON COMPONENTS AND MINIMIZE ACRYLIC DAMAGE!



Never fill with water from a water softener. If your water is extremely "hard", it is preferable to fill half way with hard water and the rest of the way with softened water. Water that is too soft can be corrosive to metal components.

- 13. Consult your authorized Jacuzzi® dealer for chemical recommendations, then add chemicals to swim spa water to achieve a constant sanitizer reading within the levels recommended on the inside cover of this manual.
- 13. Turn on jet pumps when adding chemicals to ensure proper mixing and leave your swim spa cover open until the sanitizer level becomes stable to protect pillows and plastic knobs from chemical attack. Refer to the inside cover of this manual.



WARNING: RISK OF PERSONAL INJURY!

- To decrease the risk of injury, drowning or entrapment, never leave your swim spa unattended for any reason while the cover is open and accessible, especially to small children and animals.
- To decrease the possibility of contracting a waterborne illness (e.g. an infection, bacteria or virus) and/or respiratory ailments, maintain water chemistry within step 6 parameters. If you or other bathers experience such a condition, discontinue use and seek medical attention.

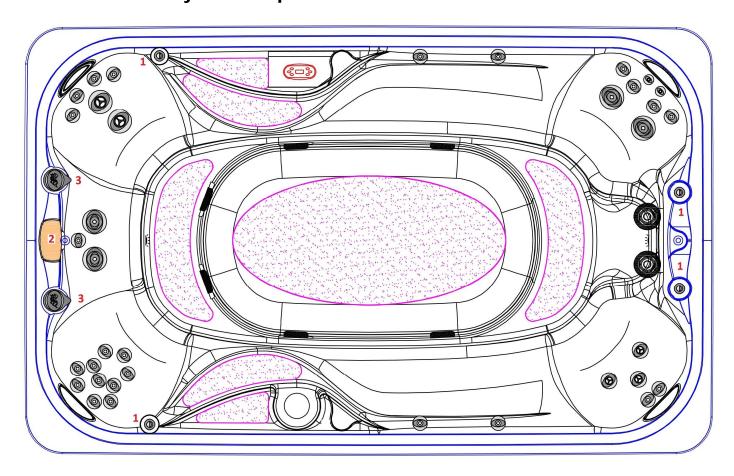
15. Establish a sanitizer reading no less than 1.0 ppm free chlorine or 2.0 ppm bromine, then allow the swim spa to set undisturbed for 8 hours. Retest water after 8 hours to determine if sanitizer levels are stable. If sanitizer levels are stable, your swim spa is ready for use. To ensure healthy water conditions, always maintain a constant sanitizer reading within the levels recommended on the inside cover of this manual. If sanitizer levels are not stable at this time, it will be necessary to repeat this procedure in its entirety until stable sanitizer readings are achieved.

IMPORTANT: If the CLEAR**RAY® ACTIVE OXYGEN** water management system is removed from the swim spa or is not operating effectively follow the "without CLEA**RAY® ACTIVE OXYGEN**" chemistry parameters as defined by the Association of Pool and Spa Professionals.

16. After adequate sanitizer levels are achieved, close all swim spa controls to maximize heat retention when the swim spa is not in use.

9.0 Swim Spa Features

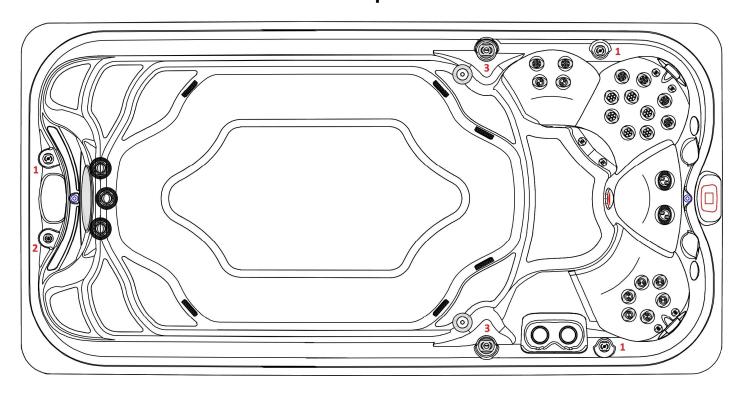
9.1 J-13™ PowerPlay™ Swim Spa Features



- 1. Air controls (x4)
- 2. J300 waterfall (x1)
- 3. 2" water diverter (x2)

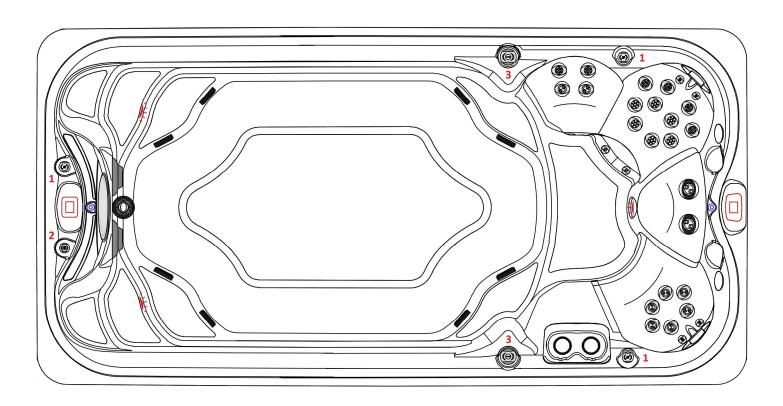
9.0 Swim Spa Features

9.2 J-16[™] / J-19[™] PowerActive[™] Swim Spa Features



- 1. Air controls (x3)
- 2. Wide sheet waterfall control (x1)
- 3. 2" water diverter

9.3 J-16[™] / J-19[™] PowerPro[®] Swim Spa Features



- 1. Air controls (x3)
- 2. Wide sheet waterfall control (x1)
- 3. 2" water diverter

10.0 J-13[™] Swim Spa Operation



KEYPAD FUNCTIONS



JET 1 KEY WHICH CONTROLS PUMP 1



TEMP + KEY WHICH CONTROLS THE TEMPERATURE AND SCROLLS THROUGH THE MENUS



JET 2 KEY WHICH CONTROLS PUMP 2



LIGHT KEY WHICH CONTROLS THE LIGHTING AND ACTIVATES THE LOW LEVEL PROGRAMMING



JET 3 KEY WHICH CONTROLS PUMP 3



TEMP - KEY WHICH CONTROLS THE TEMPERATURE AND SCROLLS THROUGH THE MENUS

PUMP / JETS FUNCTION







Press this pad to activate pump 1, pump 2 or pump 3.

1st press - turns on low speed

(pump 1 and 2 only)

- turns pump 3 on high speed

2nd press - turns on high speed

(pump 1 and 2 only)

- turns pump 3 off.

3rd press - turns off pump (pump 1 and 2 only)

When low speed is already operating, the 1st press of the pad puts the pump directly into high speed.

Low speed starts automatically for 1 minute every 30 minutes to detect the spa temperature (polling) and then to heat to the set temperature if needed. (in READY Mode only – see MODE FUNCTION), or when a filter cycle is activated, or when a freeze condition is detected.

PUMP AUTOMATIC TIME-OUT

High speed - 15 minutes

Low speed - 30 minutes

FILTER CYCLES

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 lower. The filter time and duration are

programmable. A second filter cycle can be enabled and programmed as needed. We recommend you start with as long a filter cycle as possible and over time, if you wish, you can reduce your filter cycles depending on your usage, chemical program and overall water quality.

At the start of each filter cycle Pump 2 (if there is one) will run briefly to purge its plumbing and maintain good water quality. The factory default is 4 hours per filter cycle.

PROGRAMMING







PROGRAMMING FILTER CYCLES

To change the factory default filter cycle settings

- 1. At the main screen, begin by pressing TEMP
- 2. Press LIGHT repeatedly until FLTR appears
- Press TEMP to advance to the beginning of the time setting process for filtration. (F1 or F2)
- 4. TEMP advances to the first screen to change the time for F1 or F2. (BEGN will appear)
- 5. The hour will flash. Press TEMP to change the hour
- 6. Press LIGHT to advance to minutes
- 7. Press TEMP to change the minutes
- 8. Each TEMP press advances the time 15 minutes
- 9. Press LIGHT when finished

MODE FUNCTION (Ready and Rest)

A combination of keypads is used to change hot tub operation to either 'READY' or 'REST' mode.

READY MODE

READY mode will circulate the water every 30 minutes, using Pump1 Low, in order to maintain a constant water temperature, heat as needed, and refresh the temperature display. This is known as "polling".

REST MODE

REST mode will only allow heating during programmed filter cycles. Since polling does not occur, the temperature display may not show a current temperature until the heater pump has been running for a minute or two.

PROGRAMMING (continued)







PROGRAMMING READY / REST MODE

To change the factory default filter cycle settings

- Press TEMP
- 2. Press LIGHT repeatedly until MODE appears
- In MODE, TEMP button toggles between SET READY and SET REST
- 4. Choose SET READY or SET REST, then press LIGHT to set and exit.

SETTING THE CLOCK

At the main screen, begin by pressing TEMP

- 1. Press LIGHT repeatedly until TIME appears
- 2. Press TEMP at TIME (HRS begin to flash)
- 3. Press TEMP keys to change hours
- 4. Press LIGHT (minutes begin to flash)
- 5. Press TEMP keys to change minutes
- 6. Press LIGHT to exit

HOLD MODE (STANDBY)

The HOLD (standby) feature stops the system from operating automatically, allowing for convenient filter cartridge removal and replacement.

The following pads must be pressed.

- Press TEMP
- 2. Press LIGHT repeatedly until "HOLD" appears
- 3. Press TEMP to start 60 minute count down

HOLD MODE (STANDBY - CONTINUED)

The system will automatically exit HOLD (Standby) Mode after 1 hour and resume normal operating functions.

Press then the pad - the display will flash.

If the system is heating when HOLD (Standby) Mode is activated, the display will flash and the pump will continue to operate for 15 seconds to allow the heater to cool off before stopping.

TEMPERATURE RANGES

The **TEMP** feature allows you to select a low and high temperature range depending on your climate and time of year. The settings are as follows:

High Range can be set between 27°C (80°F) and 40° C (104°F) in 1° increments.

Low Range can be set between 10°C (50°F) and 37° C (99°F) in 1° increments.

To change your selection press the following sequence.

- Press TEMP
- 2. Press LIGHT repeatedly until TEMP appears
- Press TEMP to select the range (HIGH "^" or LOW "v")
- 4. Press LIGHT to lock in the Temperature Range

PROGRAMMING (continued)







LOCK (RESTRICTING PANEL OPERATION)

Locking the panel prevents the spa from being used; it also prevents unwanted temperature adjustments. 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.

- Press TEMP
- 2. Press LIGHT repeatedly until LOCK appears
- 3. Press TEMP
- Press LIGHT to toggle between TEMP and PANL
- 5. Press TEMP to toggle ON or OFF
- 6. Press LIGHT to exit

UNLOCK (ALLOWING PANEL OPERATION)

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

- Press and hold down TEMP UP
- 2. Slowly press the LIGHT button twice
- 3. The panel with display the UNLK message

INVERT (FLIP)

This features allows you to flip the display towards the interior of the swim spa. Pressing the following sequence of keys will FLIP the display.

- 1. Press TEMP
- 2. Press LIGHT repeatedly until FLIP appears
- 3. Press TEMP to flip the display
- 4. Press LIGHT to exit

PURGE (CLEAN-UP) CYCLES

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 ozone generator will run for 20 minutes or more, depending on the system.

FREEZE PROTECTION

If the temperature sensor detects a drop to 4°C (39°F) within the heater chamber, the system automatically activates the pump to provide freeze protection. The pump will operate until the temperature reaches approximately 5°C (41°F) before returning to normal system mode.

TOPSIDE PANEL DISPLAY MESSAGES

OHH/HTR TEMP LMT/OH/HL (solid or flashing)

Overheat – Spa has shut down. One of the sensors has detected 48°C (119°F) at the heater.

DO NOT ENTER WATER! Remove cover and allow water to cool. Reset system by pressing any topside control panel pad. If system does not reset, shut off power and call your dealer.

POSSIBLE CAUSES OF OVERHEATING

- filter cycle too long or overlapping (pump running for extended periods of time)
- isolation/gate valves partially closed
- extremely hot weather/high ambient temperatures
- defective sensor wire

ICE/FREEZE COND

Potential freeze condition detected. Pumps and blower will automatically activate when temperature drops to 4°C (39°F) regardless of operation mode.

SnA/SENSOR A SERVICE RQD

Spa has shut down – sensor plugged into Sensor 'A' port not working.

SnB/SENSOR B SERVICE RQD

Spa has shut down – sensor plugged into Sensor 'B' port notworking.

SnS/SENSOR SYNC

Sensors are out of balance – If topside display alternates between temperature and SNS, then occurrence may be temporary and will correct itself. The spa shuts down completely when the SNS message is flashing on the display.

HFL/HTR FLOW LOW

A substantial difference in temperature between the sensors has been detected – this could indicate a flow problem. Check water level in spa and add if necessary, also ensure the filter is clean. If water level is okay, make sure that pumps are primed and all gate valves are fully opened.

LF/LOW FLOW

Persistent low flow problem – displays on the fifth occurrence of an HFL message within a 24 hour period. Heater circuit is deactivated but other spa functions continue to operate normally. Check water level in spa and add if necessary, also ensure the filter is clean. If water level is okay, make sure that pumps are primed and all gate valves are fully opened. Press any topside panel pad to reset.

TOPSIDE PANEL DISPLAY MESSAGES CONTINUED

dr / HEATER MAY BE DRY-WILL RETEST SHORTLY

Inadequate water detected in heater chamber - Check water level in swim spa and add if necessary. If water level is okay, make sure that pumps are primed and all gate valves are fully opened. Press any topside panel pad to reset.

Inadequate water detected in heater chamber – displays on third occurrence of a "dr" message within a 24 hour period. The spa shuts down completely when the DRY message is flashing on the display. Check water level in spa and add if necessary, also ensure the filter is clean. If water level is okay, make sure that pumps are primed and all gate valves are fully opened. Press any topside panel pad to reset.

RUN PMPS PURG AIR

Priming mode – occurs when spa is first powered up, or when power has been restored after a power interruption. Allows for safe priming of the pumps.

Temperature unknown – after the pump has been operating for 2 minutes, the current water temperature will be displayed.

- - - - -

Temperature is not current as the pump may have been off for several hours in between filter cycles. To view the current spa water temperature, either switch to Ready mode or turn on the pump for at least 2 minutes.

HOLD

Stops the control system from operating automatically to allow filter cartridge removal.

READY

System is operating in READY mode.

REST

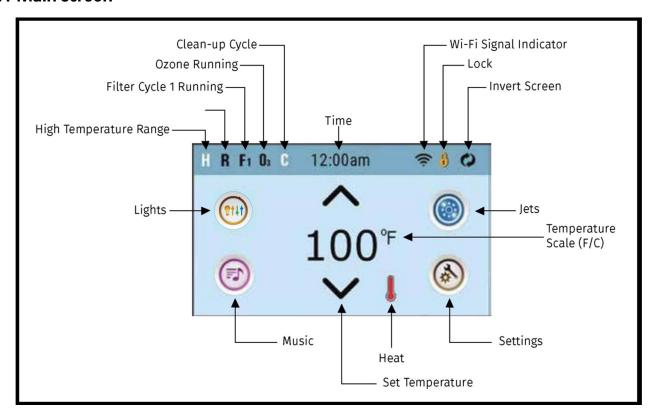
System is operating in REST mode.

COOL

If spa water temperature is more than 7°C (20°F) cooler than the set temperature, the system will automatically activate the heater to provide freeze protection. This is a normal function; no corrective action is necessary.

11.0 J-16[™] / J-19[™] Swim Spa Operation

11.1 Main Screen



Important information about the swim spa operation can be seen on the "Main Screen." Most features including Set Temperature adjustment, can be accessed from this screen. The actual water temperature can be seen and the Set Temperature can be adjusted. Time of Day, Ozone and Filter status is available along with other messages and alerts. The selected Temperature Range is indicated in the upper left corner of the display. The Spa Equipment Control Icon will spin if any pump is running. A Lock Icon is visible if the panel or settings are locked.

Note: After 30 minutes* the display will automatically go into sleep mode, which turns the display off. This is normal operation. Touch anywhere on the screen to wake the panel up.

• H = High Temperature Range L = Low Temperature Range

R = Ready Mode RR = Ready / Rest Mode IR = Rest Mode

• F1 = Filter Cycle 1 running F2 = Filter Cycle 2 running F+ = Both running

- O3 = Ozone is running. If you do not see the icon that means the ozone is off.
- C = Clean-up cycle is running. Note: Not all systems that can run a Cleanup Cycle display this icon.
- Wi-Fi icon just indicates that the Wi-Fi link is connected
- Invert (or flip) Screen 🎅

Lock Icon: When displayed, indicates the panel is in a locked mode. To unlock or lock a setting or panel lock, first press the corresponding icon on the Lock Screen, then press and hold the word "Lock" for 5+ seconds until the text and icon change to the opposite state.

There are 2 lock icons that can be shown on the title bar of most screens. A tall skinny one 🗓 representing a settings lock is applied. It is shown on screens that are affected by the settings lock. And the standard lock icon Padlock 🔒 which represents the panel being locked. If both settings and panel are locked, only the panel lock will show since the settings lock doesn't do much in that situation. When the panel is locked, the Settings Screen will only show items not affected by that lock (System Info and Lock Screens)

- Adjust set temperature higher
- Adjust set temperature lower
- Message waiting indicator: The Message Waiting Indicator will show on of the following icons



= fatal error (swim spa can't function until it is fixed)



= Normal Error or Warning



= Reminder Message



= Information Message



= Spa equipment icon

Brings up a screen where the spa jets, or other equipment can be controlled. While on the Spa Equipment Screen, you can press a Jets button once for low speed, and if configured press it again for high speed.



= Jet is inactive. Indicates if a pump is running or not.



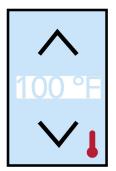
= Settings is active



= Settings is inactive



 \square = Different animation sequences, including blinking, may indicate different stages of heating.



Press Up or Down to display the Set Temperature (indicated by a flashing °F or °C, plus a change in colour of the temperature). Press up or Down again to modify the Set Temperature. The Set Temperature changes immediately.

If you need to switch between High Temperature Range and Low Temperature Range you need to go to the Settings Screen.

11.2 Navigation

- Navigating the entire menu structure is done by touching the screen.
- The two screen selections indicated below can be selected. Touch one of these to enter a
 different screen with additional controls.
- Most menu screens time out and revert to the main screen after 30 seconds of no activity.
- At the bottom of the screen, at certain times an indicator may appear showing that a
 message is waiting. Touch this indicator to go to the Message Display Screen. On that
 screen some of the messages can be dismissed.

NAVIGATION





Settings

Swim Spa Equipment

MESSAGES



A warning message is waiting

11.3 The Swim Spa Screen

The Swim Spa Screen shows all available equipment to control. The display shows icons that are related to the equipment installed on a particular swim spa model, so this screen may change depending on the installation. The icon buttons are used to select and control individual devices.

Some devices, like pumps, may have more than one **ON** state, so the icon will change to reflect the state of the equipment. Below are some examples of 2-speed pump indicators.

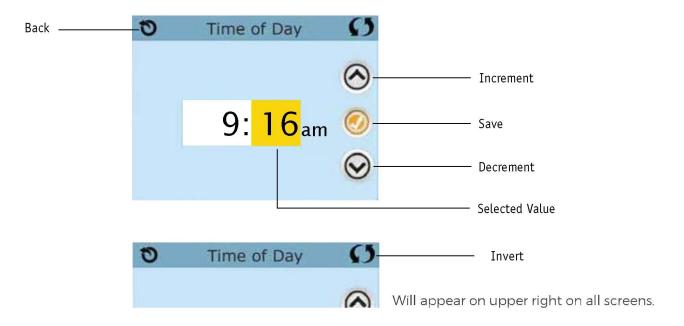






Common Buttons

If an Up or Down button is shown and pressed when on an editing page, and a value has been selected (highlighted), the value can be increased by pressing the up arrow or decreased by pressing the down arrow.



Exiting Screens

The Back button is on every screen except the Main Screen, the Priming Mode Screen are a Message Display Screen. When you see only this button, or this button plus an Inactive Save Button, it means Back or Exit. It appears on editing screens before you have changed any value, as well as on other screens.

When you see both the Back button and an Active Save button, the Save button will Save, while the Back button will Cancel. If the screen times out due to no activity it will act like cancel.



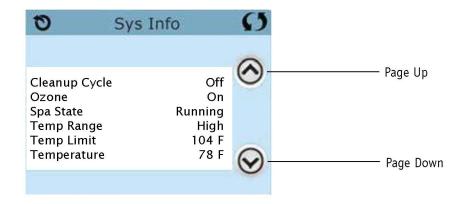
Pages

If there is a right arrow at the bottom of the screen, it takes you to the next page.



Page Up and Down

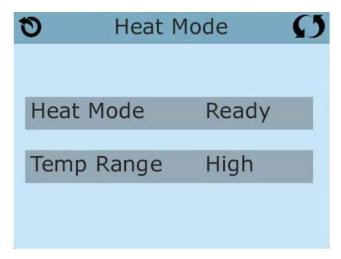
If an Up or Down button is shown and pressed when on a page with a text list, the list can be scrolled a page at a time.



11.4 The Settings Screen

The Settings Screen is where all programming and other swim spa behaviours are controlled. Each icon on the Settings screen takes you to a different screen, where one or more setting may be viewed and/or edited.





The Heat Icon takes you to a screen where you control the

Dual Temperature Ranges High vs. Low

This system incorporates two temperature range settings with independent set temperatures. The specific range can be selected on the Settings screen and is visible on the Main Screen in the upper left corner of the display. These ranges can be used for various reasons, with a common use being a "ready to use" setting vs. a "vacation" setting. Each range maintains its own set temperature as programmed by the user. This way, when a range is chosen, the swim spa will heat to the set temperature associated with that range.

High Range can be set between 81°F (27°C) and 104°F (40°C)

Low Range can be set between 50°F (10°C) and 98°F (37°C)

Freeze Protection is active in either range.

Heat Mode

Ready vs. Rest / Circulation Mode / Ready-in-Rest Mode

Heat Mode—Ready vs. Rest

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

The heater pump can be either a 2-speed pump (Pump 1) or a circulation pump. If the heater pump is a 2-Speed pump 1, Ready Mode will circulate water every 1/2 hour, using Pump 1 Low, in order to maintain a constant water temperature, heat is needed, and refresh the temperature display. This is known as "polling."

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

When the heater pump has come on automatically (for example for heating) you can switch between low speed and high speed but you cannot turn the heater pump off.

Circulation Mode

If the swim spa is configured for 24HR circulation, the heater pump generally runs continuously. Since the heater pump is always running, the swim spa will maintain set temperature and heat as needed in Ready Mode, without polling.

In Rest Mode, the swim spa will only heat to set temperature during programmed filter times, even though the water is being filtered constantly when in 24HR circulation mode.

Ready-in-Rest Mode

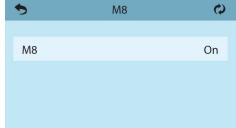
Ready in Rest Mode appears in the display if the swim spa is in Rest Mode and the Jets 1 Button is pressed. When the heater pump has come on automatically (for example for heating) you can switch between low speed and high speed but cannot turn the heater pump off. After 1 hour, the System will revert to Rest Mode. This mode can also be reset by selecting the Heat Mode line on the Screen shown on the previous page.

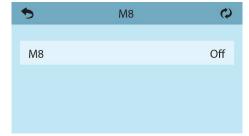
M8 Mode

M8 will automatically determine when to turn the pumps on depending on the conditions and the ambient temperature. If the sensors do not detect a decrease in water temperature from the last time it was checked, M8 will gradually increase the intervals all the way to 2 hours if the conditions are very stable.

If a user removes the spa cover for example and the spa temperature starts dropping significantly, M8 will immediately reduce the checking intervals down to 30 minutes. M8 resets the checking intervals to 30 minutes whenever the user interacts with the system (activates equipment, changes heating modes, changes the set temperature etc). Once the user stops interacting with the system, M8 will resume trying to find the best possible time and frequency at which the temperature needs to be checked.







When M8 is disabled, the system returns to its normal 30 minute intervals to check the temperature. When M8 is re-enabled, it resumes it search for an optimized frequency at which the temperature should be checked.

Incorporating M8 helps to minimize your energy consumption, supports pump longevity and helps reduce the frequency of noise associated to the pumps running.

Preparation & Filling

Fill the swim 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 will display a splash screen or start-up screen.

Priming Mode

After the initial start-up sequence, the control will enter Priming Mode and display a Priming Mode screen. Only pump icons appear on the priming mode screen. 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 selecting the "Jet" buttons. If the swim spa has a Circ Pump, it can be turned on and off by pressing the Circ" button during Priming Mode.

Priming the Pumps

As soon as the Priming Mode screen appears on the panel, select the "Jets 1' button once to start Pump 1 in low-speed and then again to switch to high-speed. Also, select the other pumps, to turn them on. The pumps should 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 swim spa, do not allow the pumps to continue to run. Turn off the pumps 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(s) will not prime, shut off the power to the swim 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

Exiting Priming Mode

The system will automatically enter the normal heating mode and filtering at the end of the priming mode, which lasts 4-5 minutes.

You can manually exit Priming Mode by pressing the "Back" button on the Priming Mode Screen. 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(s) have been primed by this time.

Once the system has exited Priming Mode, the top side panel will display the Main Screen, but the display will not show the water temperature yet. This is because the system requires approximately 1 minute of water flowing through the heater to determine the water temperature to display it.

11.5 Swim Spa Behavior

Pumps

On the Spa Screen, select a "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 of 30 minutes.

Non-Circ Systems

The low-speed of pump 1 runs when any other pump is on. If the swim spa is in Ready Mode, Pump 1 low may also activate for at least 1 minute every 30 minutes to detect the swim 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

On non-circ systems, 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, the pumps 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(s) automatically activate to provide freeze protection. The pump(s) will run continuously or periodically depending on the conditions.

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 and will run up to 4 hours depending on how long you program it for. The pump and the ozone generator will run for 30 minutes more, depending on the system. On some systems you can change this setting.

11.6 Time of Day

Be sure to set the Time of Day. Setting the time of day is important for determining the filtration times and other background features. The Heat look loon on the Settings Screen takes you to a screen where you control the Time-of-Day.

On the Time-of-Day screen, simply select the Hours and Minutes. Use the Up and Down

buttons to make changes, then Save.



If no Time-of-Day is set...

In the memory an information screen will appear. If you exit it an Information Icon will appear at the bottom of the Main Screen, until the time-of-day has been set.





11.7 Adjusting Filtration

Main Filtration

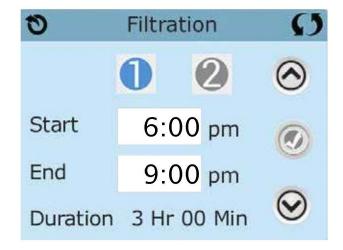
Using the same adjustment as Setting the Time, Filter Cycles are set using a start time and a duration. Each setting can be adjusted in 15 minute increments. The panel calculate the end time and displays it automatically.



Filter Cycle 2—Optional Filtration

Filter Cycle 2 is OFF by default.





Viewing Filter 1 while Filter 2 is OFF:

Viewing Filter 1 while Filter 2 is ON:

Press "1" to view Filter 1. Press "2" once to view Filter 2. Press "2" again to turn Filter 2 ON or OFF.

When Filter Cycle 2 is ON, it can be adjusted in the same manner as Filter Cycle 1. 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, as well as protect against freezing, secondary water devices will purge water from their respective plumbing by running briefly at the beginning of each filter cycle. (Some systems will run a certain number of purge cycles per day, independent of the number of filter cycles per day. In this case, the purge cycles may not coincide with the start of the filter cycle).

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

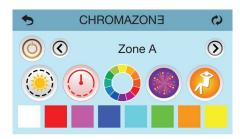
11.8 Light Cycle Option



If the Light Cycle does not appear on the Settings Screen, the Light Timer feature is not enabled. The Light Cycle Icon on the Settings Screen takes you to a screen where you control the Light Cycle. When available, the Light Timer is ('Disabled") by default. Press "Disabled" to change it to "Enabled" (ON). The settings can be edited the same way that the Filter Cycles are edited.









Power Button: Powers On/Off all user controlled CHROMAZONE™ lights



Zone A



Navigate between all available zones



Light Brightness Button: Controls the brightness of the zone lighting



Speed Control Button: Controls the speed for the light patterns



Colour Wheel Button: This smoothly cycles through the full colour spectrum



Party Light Button: This smoothly cycles through a festive pattern



Lounge Light Button: This smoothly cycles a soothing pattern

11.9 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 Settings allows Jets and other features to be used, but the Set Temperature and other programmed settings cannot be adjusted. Settings Lock allows access to a reduced selection of menu items. These include Filter Cycles, Invert, Information and Fault Log. They can be seen, but not changed or edited.

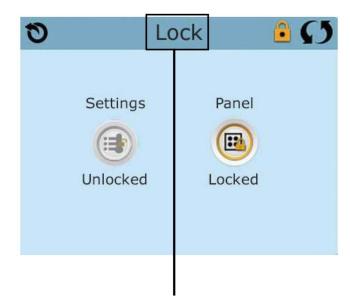




Panel Locked and Settings Unlocked

Locking / Unlocking

The same steps are used to Lock and Unlock. To lock either Settings or Panel first select the Settings (if it says "Unlocked") or Panel (if it says "Unlocked"), then press the word "Lock" for 5 seconds. To unlock either Settings or Panel first select the Settings (if it says "Locked") or Panel (if it says "Locked"), then press the word "Lock" for at least 5 seconds.



Press here for 5 seconds to lock or unlock

12.0 Pro X Current Control System

Pro X Current Control provides the ultimate swim spa solution. Our unique plumbing configuration ensures uniform water flow for a smooth workout experience. Pro X is configured with 4 two-speed pumps and provides a wide variety of workout modes to ensure swimmers achieve their fitness goals.

12.1 Manual Workout Mode

With the Manual Workout the user adjusts the speed up and down. The workout runs until it times out after an hour or the user cancels the workout. Workout elapsed time is shown. Workout can be paused / resumed. A swimmer icon animates when the workout is running. The icon stops and turns gray when the workout is paused.





Press Manual Workout

Stop workout

12.2 Timed Workout Mode

Timed Workout is the same as a manual workout except the user has to enter a workout duration and initial workout speed before progressing to the workout screen. Users can do everything they can on the manual workout screen. It adds the workout time remaining to the display.







Press Timed Workout

Set duration and speed

Stop workout

12.3 Workout Program Mode

Workout Program mode provides a list of workouts to help the swimmer achieve their fitness goals.



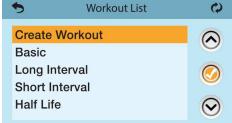


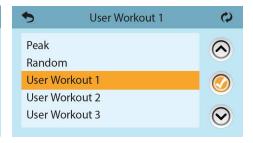
Press Workout Program

Workout Program List

Create a custom user workout by following these steps.



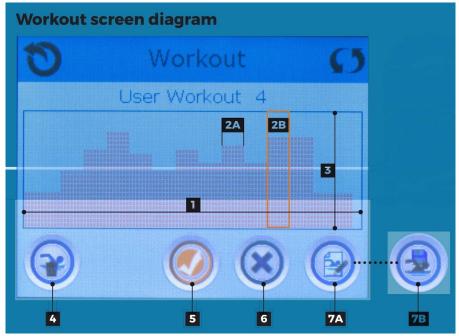




Press Workout Program

Press Create Workout

- 1) Select User Workout
- 2) Press check button



- **1** Horizontal graph axis represents total workout duration.
- **2A** One segment of time. The total workout duration is divided into segments of time. Each segment represents the water speed . Each segment can be changed to increase or decrease speed.
- **2B** Orange editing box. You can edit each segment of time when it is selected by the orange box.
- **3** Vertical graph axis represents water speed.
- 4 Delete current workout
- 5 Proceed to next editing stage
- 6 Exit current screen
- 7A Edit current workout
- 7B Save current workout





- 1 Move orange selector box right/left with arrow buttons.
- 2 Press check button to go to the next stage.



- 1 Increase / decrease water speed with arrow buttons.
- 2 Press check button to go to the next stage.



Press save button to save the workout.



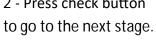
Press check button to go to the next stage

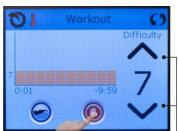


Select "Min" field and increase / decrease workout duration with arrow buttons.



1 - Select "Enter Speed" field and increase / decrease water speed with arrow buttons.
2 - Press check button





This screen appears during the workout.

Press the red button to stop the workout.

Press arrow buttons to change water speed during workout if desired.

13.0 Swim Spa Maintenance

Proper and regular maintenance of your swim spa will help it retain its beauty and performance. Your authorized Jacuzzi® dealer can supply you with all the information, supplies, and accessory products you will need to accomplish this.

13.1 Cleaning the Filter Cartridges

A reminder message appears on the control panel display after a specified number of days to remind you to clean the skimmer filters. This reminder must be reset at each filter cleaning interval.

13.2 Waterfall Control Filter

This filter must be cleaned at each drain and refill of your swim spa to ensure proper functionality of the waterfall. It is located behind the door in the equipment area. To access the filter screen turn large canister section of the assembly counter-clockwise till the apparatus separates revealing screen filter. Run filter under tap to clean out any debris and reassemble in reverse order.

13.3 Draining and Refilling

About every 3 months, you will want to replace the swim spa's water. The frequency depends on a number of variables including the amount of use, number of users, attention paid to water quality maintenance etc. During this time, it is also recommended that you clean the internal plumbing lines from buildup and debris.

CAUTION! READ THIS BEFORE DRAINING: To prevent damage to the swim spa components, turn off power to the swim spa at the circuit breaker before draining it. Do not turn the power back on until your swim spa has been refilled.

CAUTION: There are certain precautions to keep in mind when draining your swim spa. If it is extremely cold, and the swim spa in outdoors, freezing could occur in the lines or the equipment (see WINTERIZING). On the other hand, if it is hot outdoors, do not leave the swim spa's surface exposed to direct sunlight.

DRAINING YOUR SWIM SPA

REFER TO FIGURE 1 & FIGURE 2

- 1. Locate nearest drain facility (Check your local bylaws).
- 2. Attach backwash hose to hose bib located on plumbing line beside the swim spa control system.
- 3. Run backwash hose to drain location.
- 4. Open ball valve.
- 5. Close filtration pump return gate valve next to the ball valve (this directs the water out the backwash hose).
- 6. Activate the circ pump.
- 7. Monitor the swim spa while it drains.
- 8. Use a second garden hose to wash down interior surface as the swim spa continues to drain. A sponge may also be used to wipe down the interior surface.

- 9. To completely flush the old water from the plumbing lines: allow fresh water to fill into the foot-well area while the old water continues to be pumped out. Always keep at least 10cm (4 in.) of water in the foot-well so that pump 1 remains primed.
- 10. When the water from the drain hose turns clear (indicating fresh fill water), flush is complete.
- 9. Turn OFF the filtration pump.
- 10. Close the drain-hose bib on the swim spa plumbing line and continue filling swim spa with fresh water.
- 9. Place cover on swim spa (to avoid splash-out).
- 10. Open filtration pump return gate valve.
- 11. Press any button on the topside control panel (other than the pump 1 button) to take the system out of **STANDBY/DRAIN ASSIST** mode. Filtration pump and the heater will activate to circulate and heat the water while filling continues. This also reduces the possibility of an airlock occurring.
- 9. Continue adding fresh fill water until level is approximately 19mm (3/4 in.) from the top of the skimmer opening.

13.4 Cleaning the Swim Spa Interior

To preserve the sheen of your swim spa's surface, it is crucial that you avoid using abrasive cleaners or cleaners which have adverse chemical effect on the surface. If you are not certain as to the suitability of a particular cleanser, consult your authorized Jacuzzi® dealer. We recommend using Jacuzzi® Spa All Purpose Cleaner to clean the swim spa's interior surface. Use extreme care to assure that no soap residue is left on the surface. This could cause severe sudsing when the swim spa is refilled.

13.5 Pillow Care

Clean the headrests in your swim spa as needed by wiping them with a cloth with soapy water. It is not necessary to remove the headrests for cleaning. To remove headrests for long term storage or replacement, grasp both ends of each headrest and gently pull inward towards the center of the swim spa. To reinstall, over mounting strip and press down until headrest mounting bracket emits a "click" sound. Then adjust the headrest height by simply moving up or down as desired.

13.6 Maintaining the Synthetic Cabinet

The synthetic cabinet requires little or no maintenance of any kind, To clean, simply wipe cabinet with mild detergent soap solution and a clean towel.



CAUTION: Never spray cabinet with a high pressure garden hose for any reason since this action may induce an electrical short in the spa's electrical equipment.

13.7 Cleaning the Control Panel

To clean, simply wipe the control panel with a micro-fiber cloth that is used for cleaning polycarbonate lenses.

13.8 Cover Care and Maintenance

Regular monthly cleaning and conditioning is strongly recommended and may increase the longevity of your cover. To clean and condition the cover:

- 1. Use a garden hose to remove any debris.
- 2. Using a large sponge or soft bristle brush, use diluted or mild soap to gently scrub the top.
- 3. Rinse and clean and do not allow soap to dry on the cover. Do not use soap on the underside of the cover.
- 1. Please check with your Jacuzzi® dealer for recommended cover care and conditioning products. Use non-petroleum based conditioners to keep the vinyl supple.
- 2. Do not use any solvents, abrasive cleaners or strong detergents. Do not use products that contain silicone or alcohol.

Additional Care and Maintenance Instructions:

- 1. Debris can accumulate on the swim spa cover. Removal of snow or other debris will help to avoid breakage of the foam cores.
- 2. Be sure to lock the cover straps to secure the cover from unwanted or accidental entry.
- 3. Do not place heavy objects on the cover.
- 4. Do not walk, sit or stand on the cover.
- 5. Do not drag or use the flaps or the cover lock straps to remove the cover.
- 6. Use only recommended cover lifter systems.

- 7. Use only chemicals and cleaners recommended by Jacuzzi® Swim Spas.
- 8. Remember to keep swim spa covered when not in use. Maintaining proper water levels assures efficient operation and efficient electrical usage.
- 9. Do not expose your swim spa to the sun for extended periods of time as UV rays can damage the interior surface.
- 10. Use caution when removing cover. Before removing cover, assure all locks have been released to avoid lock breakage and / or cover strap damage.

13.9 Winterizing

Your Jacuzzi® swim spa is designed to automatically protect itself against freezing when operating properly. During periods of severe freezing temperatures, you should check periodically to be certain that the electrical supply to the spa has not been interrupted. In extreme, bitter cold weather (less than 32°F) we recommend that the circulation pump is set for 24-Hour operation and that the auto-heating is selected to protect against damage to the swim spa.

If you do not intend to use your swim spa, or if there is a prolonged power outage during periods of severe freezing temperatures, <u>it is important that all water be removed from the swim spa and equipment to protect against damage from freezing.</u>

Expert winterization of your swim spa is highly recommended; contact your authorized Jacuzzi® dealer. In emergency situations, taking the following steps can minimize damage.

CAUTION: TURN OFF POWER TO SWIM SPA.

- 1. Follow the directions for draining the swim spa.
- 2. Turn the massage / diverter selector(s) into the middle combo position to allow the
- 3. water in the plumbing lines to drain.
- 4. Turn the waterfall valve to the open position to allow the water in the plumbing lines to drain.
- 5. As the water level drops below the seats, use whatever means necessary to get the water out of the recessed seating areas and into the footwell, such as a wet / dry vacuum.
- 6. Open all the air controls and leave them open until you resume use of the swim spa.
- 7. When the water level ceases to drop, use whatever means available to remove any remaining water from the footwell, such as a wet / dry vacuum.
- 8. Remove the equipment-side cabinet panels and locate the drain plugs in the front of each pump. Remove these plugs to allow for water to drain out of the pumps and heater.

Note: Approximately one to two gallons will be released during this procedure. Use a wet / dry vacuum or other means to keep this from flooding the equipment compartment. Replace the drain plugs.

- 8. Loosen the unions at the ends of the heater(s) and vacuum up any water that comes out of the heaters.
- 9. Reinstall the cabinet side panels and cover the swim spa so that no casual moisture can enter into it.

Consult your Jacuzzi® dealer if you have any questions regarding winter use or winterizing.

13.10 Starting Your Swim Spa in Cold Weather

If you want to start up your swim spa after it has sat empty for a time in freezing temperatures, be aware that the water remaining in certain sections of the piping may still be frozen. This situation will block water flow preventing the swim spa from operating properly and possibly damaging the equipment. We recommend you consult your dealer for guidance before attempting to restart your swim spa under these conditions.

14.0 Water Quality Maintenance

To decrease the risk of contracting a waterborne illness (e.g. an infection, bacteria or virus) and / or respiratory ailments, maintain water quality within specified limits. This will enhance your enjoyment and prolong the life of the swim spa's equipment. Doing so requires regular attention because the water chemistry involved is a balance of several factors. Procrastination in regard to water maintenance will result in poor and potentially unhealthful conditions for soaking and even damage to your swim spa investment. For specific, guidance, on maintaining water quality, consult your authorized Jacuzzi® dealer who can recommend the appropriate Jacuzzi® chemical products.



WARNING: FAILURE TO MAINTAIN WATER QUALITY!

- Increase risk of contracting a waterborne illness (e.g. an infection, bacteria or virus) and / or respiratory ailments.
- Damage the equipment, components and swim spa shell, which are not covered under the swim spa's warranty.

CAUTION: Never store swim spa chemicals inside the swim spa's equipment bay. The equipment bay may reach elevated temperatures, this is where high voltage electronic devices are located. This area is not intended for storage of any kind.

14.1 pH Control

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 swim spa water, it is important to maintain a slightly alkaline condition of 7.4 to 7.6. Problems become proportionately severe the further outside of this range the water gets. A low pH will be corrosive to metals in the swim 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 swim spa clean is severely affected as the pH moves beyond the ideal range. That is why almost all swim spa water test kits contain a measure for pH as well as sanitizer.

14.2 Sanitizing

To destroy bacteria and organic compounds in the swim spa water, a sanitizer must be used regularly. Chlorine and bromine are two most popular sanitizers used to date. The "Proclear™ Mineral Spa Clarifier" designed especially for your swim spa is a beneficial product for water maintenance. Many other additives are available for your swim 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. You authorized Jacuzzi® dealer can advise you on the use of these additives. When adding spa shock (chlorine or non-chlorine) or pH balancing chemicals activate the jet pump(s) and leave the swim spa cover open for a minimum of 20 minutes. By doing this you will allow excessive chemical vapors to exit the swim spa, protecting pillows and plastic knobs from chemical attack.



WARNING: RISK OF PERSONAL INJURY, DROWNING OR ENTRAPMENT!

Never leave your swim spa unattended for any reason while the cover is open and accessible, especially to small children and animals.

CAUTION: RISK OF PERSONAL INJURY OR SWIM SPA DAMAGE!

Never add chlorine tablets (trichlor) or acid to your swim spa for any reason! These chemicals may damage components within your swim spa, burn or irritate your skin, create a rash and void the manufacturer warranty for your swim spa.

14.3 Other Additives

Many other additives are available for your swim 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. With our chemical products your authorized Jacuzzi® dealer can advise you on the use of these additives.

14.4 CLEARRAY® ACTIVE OXYGEN Water Management System

CLEARRAY® ACTIVE OXYGEN Water Management System is exclusive technology utilizing Natural ultraviolet technology to eliminate waterborne bacteria, viruses and algae in swim spas. The ultraviolet light otherwise known as UV-C or germicidal light inactivates the microorganisms disrupting the DNA so that it cannot reproduce and is considered lifeless. CLEARRAY® ACTIVE OXYGEN is plumbed in-line with your filtration system. After the water is drawn from the pump, filter and heater it is directed through the CLEARRAY® ACTIVE OXYGEN system. Water passes through an ultraviolet light energy that treats and disinfects the water. The water is then pumped back into the swim spa giving you crystal clear water instantly. The system has a ballast that is the power supply for the purification system; it has two LED indicator lights. The "Power On" (red color) indicating incoming power flow and the "Lamp On" (green color) indicating the system is properly working. CLEARRAY® ACTIVE OXYGEN is standard on all models.

After a year the bulb must be replaced. If the CLEARRAY® ACTIVE OXYGEN timer has been programmed correctly a message will appear on the LCD display when the time allotted has expired. In

15.0 Error / Display Messages



There are a number of unique functions designed into your Jacuzzi® swim spa to protect it from damage and / or to aid in troubleshooting. When this occurs the swim spa will notify you by showing the screen below, Figure 14.0a. A solid white light indicates that all operations are normal. A solid red light indicates that immediate attention is required to clear or fix an error code. Following is a list of all the possible messages along with their meanings. Always insist on genuine Jacuzzi® replacement parts.

Note: if you tap "X" the display will change to Figure 14.0b. The error icon will remain on the screen as a reminder. If the error is not taken care of or fixed, the error display will reappear in 2 hours, Figure 14.0a.





Figure 14.0a

Figure 14.0b

- 1. <u>Open Flow Switch</u>: (Heater is deactivated. The filter/circulation may also be deactivated). The flow switch is malfunctioning open, the circulation pump's filter cartridge is excessively dirty or an air lock condition has occurred at the circulation pump intake. Contact your authorized dealer or service organization.
- Closed Flow Switch: (Heater is deactivated. The filter/circulation may also be deactivated). The flow switch is malfunctioning closed. Contact your authorized dealer or service organization.
- 3. <u>Toggling Flow Switch</u>: (Heater is deactivated). The flow switch is behaving erratically. Heater is disabled, check for dirty filter. Make sure to clean the filter(s) and correct proper water level before contacting your dealer or service organization.
- 4. **Shorted Hi-limit Temp Sensor**: The hi-limit temperature sensor is not functional. Heater is disabled. This must be repaired only by a qualified authorized service organization or service technician.
- 5. **Open Hi-limit Temp Sensor**: The hi-limit temperature sensor is not functional. Heater is disabled. This must be repaired only by a qualified authorized service organization or service technician.
- 6. **Shorted Water Temp Sensor**: The temperature sensor is not functional. Heater is disabled. This must be repaired only by a qualified authorized service organization or service technician.
- 7. **Open Water Temp Sensor**: The temperature sensor is not functional. Heater is disabled. This must be repaired only by a qualified authorized service organization or service technician.
- 8. <u>Closed Flow Switch on Start-up</u>: Flow switch is non-functional. Closed or shorted flow switch on system start-up (system disabled). Contact your authorized dealer or service organization.
- 9. **Frozen on Start-up**: Flow switch is non-functional. Shorted flow switch on system start-up (system disabled) and freeze condition detected. Contact your authorized dealer or service organization.

- 10. Cool Warning: Swim spa water is more than 20°F / 11°C cooler than the temperature set point, the circulation pump and heater will automatically activate to provide freeze protection. The swim spa will stay in this mode until the water temperature reaches 14°F / 8°C below the set temperature. No corrective action is necessary.

 Note: The heater icon will be blinking and the error icon will be displayed under the temperature.
- 11. <u>Freeze protection</u>: A potential freeze condition has been detected. No action is required. Jet pump(s) operate until the swim spa is out of danger. No corrective action is necessary. If condition persists, contact your authorized dealer or service organization.
- 12. Overheat protection: DO NOT ENTER THE WATER! Water temperature is above acceptable limits. Heater is deactivated. Remove swim spa cover to speed cooling. If condition persists, contact your authorized dealer or service organization.

Note:

- As a safety measure, the red lights of the swim spa will flash on and off as an indication that the swim spa is in an overheat condition.
- The heater icon will be blinking and the error icon will be displayed under the temperature.



WARNING: RISK OF HYPERTHERMIA (OVERHEATING) CAUSING SEVERE INJURY, BURNS OR WELTS.

- 13. <u>Controller Overheat Protection</u>: Controller temperature has exceeded acceptable limits. If condition persists, provide shade for equipment side of swim spa. Contact your authorized dealer or service organization.
 - **Note**: The heater icon will be blinking and the error icon will be displayed under the temperature.
- 14. **Panel Com Error**: The topside controller is having trouble communicating to your swim spa. Contact your authorized dealer or service organization.
- 15. <u>CLEARRAY® Bulb Replacement Reminder</u>: This message will appear when the CLEARRAY® bulb reminder time has expired. The CLEARRAY® bulb must be replaced.
- 16. <u>Clean Filter Reminder</u>: This message will appear when the filter reminder time has expired. Remove the filters for cleaning or replacement.
- 17. <u>Water Refresh Reminder</u>: This message will appear when the "Water Refresh" timer has expired. The water needs to be drained and refilled with fresh water.

16.0 Troubleshooting Procedures

In the unlikely event your swim spa is not working the way you believe it should, please first review all the installation and operating instructions in this manual and check the message on the panel display second, if you are still not satisfied it is working properly, please follow the appropriate troubleshooting instructions:

PROBLEM	PROCEDURE
NONE OF THE COMPONENTS OPERATE (i.e pump light)	 Check the control panel lights If there are letters or symbols displayed on the screen, refer to the previous Section to determine the meaning and required action. If nothing appears on the screen: A: Check the household circuit breaker. B: Contact your dealer or authorized service organization.
PUMP DOES NOT OPERATE	 Activate the "JETS" If no sound is detected or if a "buzzing" sound is detected, turn off power to the swim spa and contact your dealer or service organization. If the motor operates but no water flows to jets: A. Pump may not be properly primed. See instruction below. B. Contact dealer or authorized service organization.

Pump Priming Instructions:

- 1. Turn off power to the swim spa.
- 2. Remove the handle from the massage selector supplied by the pump you are priming.
- 3. Loosen the massage selector's cap slightly (counterclockwise), listening for the air to seep out.
- 4. Tighten the cap finger-tight, replace the handle and turn the swim spa's power back on. **Note:** This method must be used for the jet's pumps because these pumps are not connected to the main filter system in any way.



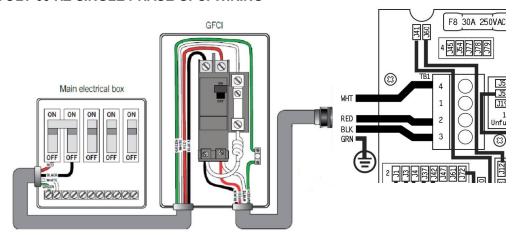
CAUTION: If freezing conditions exist and pump is not operational, take measures to protect the system from freeze damage. See the section on Winterizing.

PROBLEM PROCEDURE POOR JET ACTION 1. Make certain the jets pump is turned on. 2. Make sure all jets are fully open. Check position of massage selectors. 3. Open air control for selected jet system. 4. Check for adequate water level. 5. 6. Check for dirty filter. WATER IS TOO HOT 1. Reduce thermostat setting. 2. Switch swim spa to "Econo" mode to turn heater on only during pre-programmed time. 3. Make sure the pumps are turned off an not constantly running. NO HEAT Check thermostat setting. 1. 2. Keep the cover in place while heating. 3. If the heater indicator is displayed, but no temperature increase is experienced after a reasonable period of time, contact your dealer or authorized service organization. Verify filter / circulation pump is programmed to run 8 hours FILTER / CIRCULATION 1. PUMP OFF a day. 2. Make sure there are no errors preventing the pump from turning on. Swim spa water is warmer than 95°F (34°C) and two degrees 3. warmer than the set temperature.

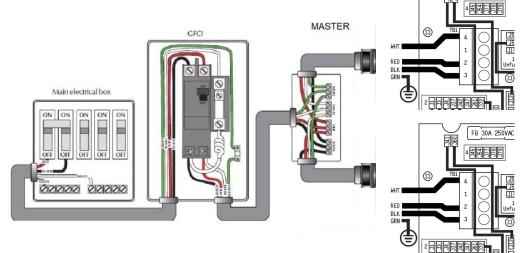
CONGRATULATIONS on your good taste and welcome to the happiest and most relaxed family in the world!

17.0 Typical Swim Spa Wiring Diagrams (240VAC - North America)

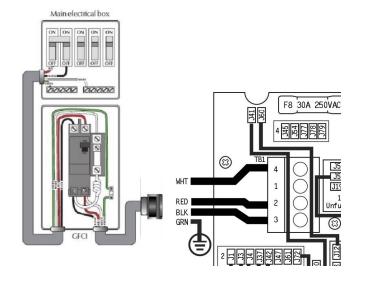
240 VOLT 60 HZ SINGLE PHASE GFCI WIRING

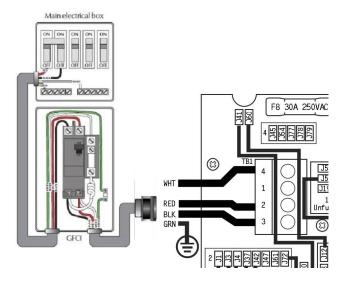


240 VOLT 60 HZ DUAL PHASE GFCI WIRING



240 VOLT 60 HZ THREE PHASE GFCI WIRING



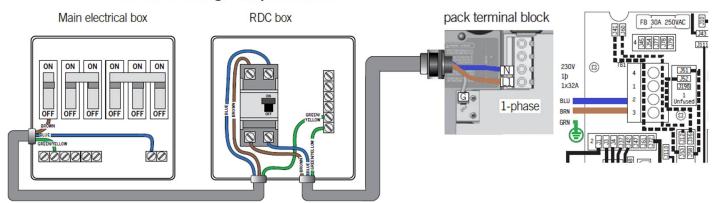


F8 30A 250VAC

17.1 Typical Swim Spa Wiring Diagrams (230VAC - European)

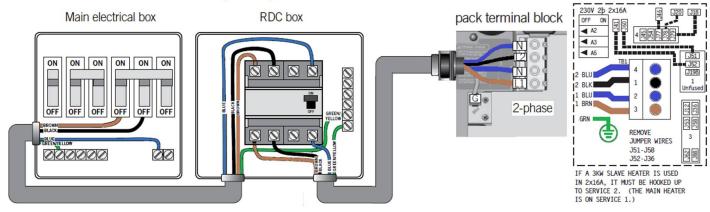
230 VOLT 50 HZ SINGLE PHASE RCD WIRING

Electrical wiring: European model



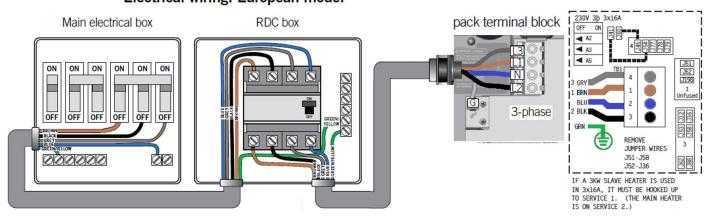
230 VOLT 50 HZ DUAL PHASE RCD WIRING

Electrical wiring: European model

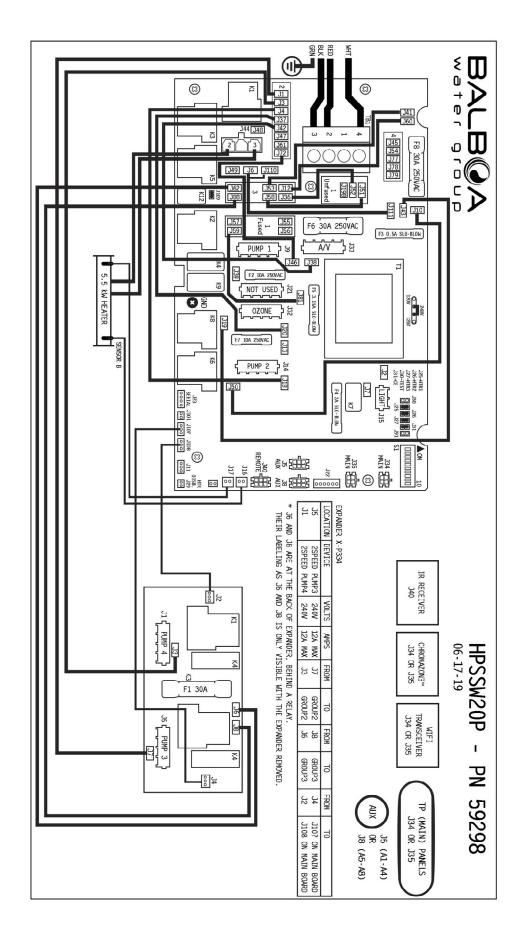


230 VOLT 50 HZ THREE PHASE RCD WIRING

Electrical wiring: European model



18.0 Circuit Board Wiring Diagrams (240VAC - North America)



18.1 Circuit Board Wiring Diagrams (230VAC - European)

