



**GENERATION SWIM SPA  
OWNER'S MANUAL**



Dear Valued Customer,

Congratulations on your purchase of a Generation Swim Spa! We are sure you will have years of enjoyment with your quality spa. Whether relaxing from a busy day, reconnecting with loved ones, or enjoying the massaging jets, you will find both mind and body soothed and rejuvenated.

Enclosed in this manual you will find valuable information on proper installation by your Generation Hot Tubs Authorized Dealer, along with operating instructions and helpful tips on how to enjoy your new Generation Swim Spa.

Below, you can fill out and use the Record of Ownership as a quick reference for information about your spa, dealer, and purchase details. To locate your spa's Serial Number, simply find the metal plate on the bottom right-hand corner of your spa and list the nine-digit number printed on the plate.

Finally, please complete and return the enclosed Warranty Registration Card within 15 days of receiving your spa in order to have your spa listed in Generation Hot Tubs' System. In this way, we can register your purchase and enter your information into our database. We respect your privacy and will **never** sell your personal data to any outside parties.

We wish to thank you for your purchase of a quality Generation Swim Spa. And now, it's time to sit back and "RELAX! 'Cause you are worth it!"

Sincerely,  
Your Generation Hot Tubs Team

Generation Hot Tubs	Record Of Ownership:
Generation Model:	
Serial Number:	
Date Purchased:	
Dealer Name:	
Dealer Number:	
Dealer Address:	
Dealer City/State:	
Service Technician:	
Other Info:	

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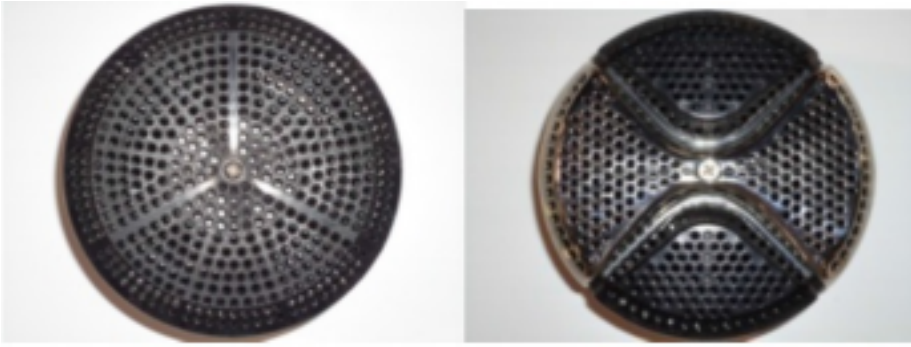
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**NOTE** : Please read this manual in its entirety as it contains important safety and maintenance information.

**WARNING: RISK OF SEVERE INJURY OR DROWNING**



**DANGER:** Entrapment may occur if hair is entangled, knotted or snagged in a suction fitting, drain or filter lid, or weir assembly. This has been reported in persons when submerging themselves underwater. Children are at risk for hair entrapment if swimming under water. **DO NOT BLOCK** suction covers for any reason.

**WARNING!** Installation and use of this equipment require the user always to follow safety precautions including.

**DANGER: NO DIVING: Diving may result in serious injury or death.**

**WARNING: Risk of Accidental Drowning:** Exercise extreme caution to prevent unsupervised children going near the swim spa. Children should not use the swim spa without adult supervision.

**WARNING: Risk of Serious Injury or Death: Never operate the spa if suction fitting, cover, filter, filter lid or weir assembly are broken, damaged or missing.** Entrapment may occur if hair is entangled, knotted or snagged in a suction intake or filter weir. This has been reported in persons who submerge themselves underwater allowing hair to come close and/or within the reach of the suction intakes, filter weirs. Do not lay across the footwell. Always sit in an upright position. See your dealer if you need to replace the suction intakes or pump to ensure that the flow rates are compatible. Never replace the suction fittings with one that has a lower flow rate than what is marked on the original suction fitting.

**DANGER: Risk of Electrical Shock:** Install at least 5 feet (1.5 m) from any metal surface. As an alternative, the swim spa may be installed closer to a metal surface if each surface is permanently connected by a minimum No. 8 AWG solid copper conductor attached to the ground lug inside the equipment compartment of your swim spa. Do not permit any electrical appliances such as light, telephone, radio, television, etc. within 5 feet of the swim spa. Never operate any appliance from the inside of your swim spa or when you are wet. Do not attempt to remove the light housing cover(s) without lowering the water level below the light housing cover. The Unit must be hardwired to a supply circuit protected by a Ground Fault Circuit Interrupter (GFCI). The GFCI is required by most building codes and should be provided by installer & tested before each use. Consult the GFCI manufacturer's instructions for correct testing and operation.

**CAUTION:** The electrical supply for this swim spa must include a suitably rated switch or circuit breaker to open all ungrounded supply conductors to comply with section of the National Electrical Code, ANSI/NFPA70-1993. This disconnect must be readily accessible and visible to the swim occupant but installed at least 5 feet (1.5 m) from the swim spa water.

A bonding lug has been provided on the outside of the Equipment Package electrical control box. The lug permits the connection of No. 8 AAWG (8.42mm<sup>2</sup>) solid copper bonding conductor between the Equipment Module and all other electrical equipment and exposed metal in the vicinity, as may be needed to comply with local regulations.

**CAUTION:** Be sure water flows freely from hydrotherapy jets within the spa. Any blockage or restriction to this water flow by persons or objects may damage system components, create an electrical shock hazard, and/or cause water damage to the surrounding area. To avoid damage to pumps(s) and the heater, the equipment must never be

operated unless the spa is filled with water. **To Reduce the Risk of Injury:** The water in the swim spa should never exceed 104 degrees Fahrenheit (40 degrees Celsius). Water temperatures between 100 F (38°C) and 104°F (40°C) are considered safe for a healthy adult. Lower water temperatures are recommended for young children and when swim spa use exceeds 10 minutes.

**To Reduce the Risk of Injury:** Excessive water temperatures have a high potential for causing fetal damage during early months of pregnancy; therefore, pregnant or possibly pregnant women should limit swim spa water temperatures to 100°F (38°C). See your Physician for recommendations before entering your swim spa.

**To Reduce the Risk of Injury:** Before entering the swim spa, the user should measure the water temperature with an accurate thermometer since the tolerance of the water temperature regulating devices may vary +/- 5°F (2°C). Water temperature may rise when jets are operating at “high” speed for extended duration.

**To Reduce the Risk of Injury:** The use of alcohol, drugs, or medications before or during use of the swim spa may lead to unconsciousness with the possibility of drowning.

**To Reduce the Risk of Injury:** Pregnant women, the elderly, infants or persons suffering from obesity or with a medical history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should contact a physician before using the swim spa. People with infectious diseases should not use the swim spa.

**To Reduce the Risk of Injury:** Persons using medications should consult a physician before using the swim spa since some medications may induce drowsiness while other medication may affect heart rate, blood pressure, and circulation.

\* Observe a reasonable time when using the swim spa. Long exposures at high temperatures can cause high body temperature (hyperthermia). Enter and exit the swim spa slowly. Wet surfaces can be very slippery.

\* Proper chemical maintenance of swim spa water is necessary to maintain safe water and prevent possible damages to swim spa components.

\* Use the cover straps and clip tie downs to secure the cover when not in use for safety protocol. This will help discourage unsupervised children from entering the swim spa and will also help to keep the cover secure in high wind conditions. There is no guarantee that the cover, clip tie downs or actual locks will prevent access to the swim spa.

### **CAUTION!**

**Hyperthermia: Prolonged immersion in hot water may induce hyperthermia. Hyperthermia occurs when the internal temperatures of the body reaches a level several degrees above the normal body temperatures of 98.6°F (37°C). The symptoms of hyperthermia include dizziness, drowsiness, lethargy, and fainting as well as:**

- \* Failure to feel the heat
- \* Failure to recognize the need to exit the spa
- \* Unawareness of impending hazards
- \* Fetal injury in pregnant women
- \* Physical inability to exit the swim spa
- \* Unconsciousness resulting in the potential of drowning
- \* **DO NOT** block, sit in or on the filter recess area
- \* **DO NOT** allow horseplay or unsupervised use of your swim spa
- \* **DO NOT** allow anyone to tamper, block or play with the safety or suction fittings of your swim spa
- \* **DO NOT** allow diving or standing on the top rail of your swim spa

### **Installation Instructions**

#### **Read and Follow All Instructions Carefully**

## Contact Your Dealer with Any Questions

**Concrete Pad\*:** Your swim spa must be fully supported over the entire base. A typical installation would be on a concrete pad that will support 1,000 psi loads. Minimum 6-8” (15-20 cm) thick concrete with # 4 rebar on 18” (46 cm) centers. Condition of the site will determine the exact support requirements needed, contact your local contractor for adequate installation.

\*Generation Hot Tubs does not warranty spas placed on unsupportive surfaces, such as gravel, dirt, plastic or other unapproved materials. Please refer to warranty for more information. **Excessive Water Run Off:** Speak to your contractor about diverting water runoff from rainstorms to prevent your concrete pad from washing out from underneath. **Clearance Access:** In order to service your swim spa, clearance around the exterior cabinet should be 24” (61 cm) to allow for the cabinet to be removed. Failure to leave your dealer access may result in a delay and extra cost to you to gain access to service your swim spa.

## Set-Up & Delivery Guidelines

See surface and pad requirements mentioned above.

Do NOT place any swim spa on any deck or balconies.

### ACCESS & CLEARANCE

See your dealer for measurements of the swim spa you purchased to ensure clearance required for delivery. Example: gates, walls, debris, fences, trees, overhead power lines, etc. Clearance required turning a corner can be equal to the length of the spa. Any trimming of trees and bushes, or leveling of the delivery area must be done before delivery and is at the financial responsibility of the customer.

### ELECTRICAL REQUIREMENTS

**USA Pack Requirements:** Your 220 volt spa pack will require a double pole 60 amp dedicated GFCI ground fault circuit breaker with 6 AWG gauge copper wire, 2 load (hot) wires, neutral and the ground. Some swim spa models may only require a 50 amp dedicated GFCI service; see your dealer for proper electrical requirements.

**EURO Pack Requirements:** Your 220 volt spa pack will require a double pole 2 x 32 Amp GFCI ground fault circuit breaker with 6 AWG gauge copper wire, 2 load (hot) wires and the ground. Some swim spa models may only require a 32 Amp dedicated GFCI service; see your dealer for proper electrical requirements.

**11kw Heater Option:** (USA Models Only) With the upgraded option to the 11kw heater, it will require one 60 Amp Breaker and one 30 Amp Breaker.

**Extension Cords:** Extension cords are **NOT** to be used in conjunction with the operation of the swim spa. Low voltage damage could result which is not covered under warranty.

**Licensed Electrical Contractor:** Contact a local licensed electrical contractor for proper installation and county, city, state codes or permits requirements necessary.

**Wiring Diagram:** Be sure to correctly follow the wiring diagram on pages 12 & 13 to prevent damage to the components inside the swim spa control system.

## **General Maintenance Information**

**Filtration:** We recommended running the filters 6 hours daily, 3 hours each morning/evening. Keep the water level 3-4” (7.5 - 10 cm) above the filter lid. Low water level will cause the filter weir to draw air in and possibly cause the failure to pump and system components.

**Cleaning:** To clean the surface of the spa (acrylic and jets), use a damp cloth/sponge with water or mild household soap or liquid detergent. Do not use abrasive products as this can remove the shiny luster of the acrylic. Remove light scratches with paste wax or automobile rubbing compound and buff the area. Contact your dealer with questions on serious damage.

Clean the filter every 2 weeks or as needed. Make sure your swim spa is powered down and remove the filter cartridge. Wash using a water hose with a pressure nozzle and reassemble. Be aware that any cleaners or chemicals could cause the water to bubble or foam. If your spa begins to foam or bubble it could also be caused by any lotions, dyes, or detergents in the water. Showering or hosing down before entering can solve this problem.

The cover’s life can be prolonged if conditioned regularly. Otherwise the sun can dry the material and cause it to crack. If the cover needs to be cleaned, use only anti-petroleum products, and simply wash the underside with water and let it dry.

**Water Chemistry:** Every 5-7 days, the chemical level should be tested to ensure the pH, Alkalinity, Calcium Hardness and Bromine/Chlorine levels are correct. It is important to know the volume of the water in your spa to calculate and adjust the chemicals needed. See quick reference guide below.

Swim Spa Model—Water Volume

GH 12000 Model—1100 U. S. Gallons (approximately)

GH 16000 (S) Model —1875 U.S. Gallons (approximately)


**Replacements:** The filter should be replaced at least once a year.

Covers will last a long time, especially if conditioned and cleaned (only with anti-petroleum products). Simply maintain and replace as needed.








Water should be replaced at least 1-2 times a year depending on use. Simply empty the spa via a sub-pump and refill with fresh tap water. Your spa can be used all year round and does not need to be closed for any reason. If you do want to drain your spa in winter, see your Dealer for Winterizing Recommendations in your area.

### **CAUTION:**

Cover must be kept on the spa at all times when the spa is drained or winterized. Prolonged exposure to sunlight can cause damage to plastic parts, acrylic surface, jets or any interior components. Prolonged exposure to sunlight will not be covered under the manufacturer's warranty.

	<b>CONTROLS &amp; VALVES</b>
	<b>AIR CONTROL VALVES</b>
	Each swim spa is equipped with 2-5 air controls. Air controls allow you to add air to the water flowing through the jets.



	<b>Water Diverter Valve</b>
	If your spa is equipped with a water diverter valve, it is the largest valve on top of your spa and allows you to divert water flow from one seat to the other or equal power to all seats at the spa end of your swim spa.
	<b>Water Feature ON/OFF Valve</b>
	This water feature, the ON/OFF valve, allows you to adjust the water flow to the water feature jets on your swim spa (if equipped).
	<b>Individual Jet Internals</b>
	Each 2", 3" and 5" sized jet can be adjusted by turning the outer housing clockwise or counterclockwise to increase or decrease water pressure. The fixed 2" size jets are not adjustable on some models.
	<b>Swim Spa Lighting</b>
	Your swim spa may be equipped with a LED lighting system on each 3"-5" jet internal, 1-2 main underwater light housings, water features and perimeter lighting. These are optional packages, but all are controlled from the swim spa top side control panel. See your dealer for this lighting option.
	<b>Digital Top Side Control Panel</b>
	When you are ready to program your spa, use the Quick Reference Guides enclosed in this manual for your specific topside controller.
<b>Stereo System Controls</b>	
	If your spa is equipped with an optional stereo system, please refer to the stereo owner manual located in the swim spa documents pack.
	The intakes are located at the base of the spa and return the water to the heating units to maintain water flow. NEVER BLOCK water flow for any reason.

### Chemical Terminology

<b>Term</b>	<b>Meaning</b>
<b>pH</b>	Measurement of the acidity or basicity of your spa. Spas should be between 7.2 - 7.8 pH. Test weekly or as needed and add pH Up or Down to manage pH Levels.

<b>Total Alkalinity</b>	Measurement of the water's resistance to pH change. Spas should be between 80 - 120 ppm (parts per million). Test weekly or as needed to manage Alkalinity levels.
<b>Calcium Hardness</b>	Measurement of dissolved minerals in the water. Spas should be between 100-400 ppm. Less than 100 ppm is "soft water" and more than 400 ppm is "hard water". Test weekly or as needed to maintain proper CH Levels.
<b>Bromine</b>	Functions as a sanitizer and produces less odor than Chlorine. Bromine levels should be between 3.0-5.0 ppm. Test weekly or as needed to maintain proper Bromine levels. Do not use with Chlorine.
<b>Chlorine</b>	Functions as sanitizer and is generally used in larger spas and pools. Spas should be between 1.5 - 3.0 ppm. Test weekly or as needed to maintain proper Chlorine levels. Do not use with Bromine.
<b>Test Strips</b>	Test strips measure the levels of Chemicals, CH and Ph of your spa and can be purchased at your local dealership. Use test strips weekly to test your water and maintain proper chemical levels.
<b>Filters</b>	Your spa comes with our 360* Cartridge Filters which use pleated, point-bonded fibers to capture and remove debris from the water. It is important to clean the filters with a water hose every 2 weeks or as needed.
<b>Ozone</b>	Your spa may come equipped with a CD (Corona Discharge) Ozone Generator. This device comes pre-installed and automatically injects O3 Oxygen to oxidize and sanitize your spa's water.

### Temperature and Spa Modes

#### **Temperature (modes, ranges & recommendations):**

Spa temperature can range from 80\*-104°F or 50\*-104°F depending on your system. We recommend setting your spa to 100°F when in use and 80°F when not in use. Depending on conditions, the spa takes about an hour to heat 1°F.

#### **Standard, Economy and Sleep Modes**

**Standard Mode** is the basic functioning mode for the spa. The spa will always be ready for use and will maintain the set temp 24/7. All features are programmable and maintainable. The filters run as programmed and the heater works as needed to maintain set temperature. **Economy Mode** only heats your spa to the set temperature during the set filter cycles. **Sleep Mode** heats during the filter cycle like Economy Mode, but not to the set temperature.

Instead, the temperature will be heated within 20°F/10°C of the set temperature.

### **Revolution Series Programing**

#### **Dual Temperature Ranges:**

The spa has two programmable temperature ranges: **high range** from 80-104°F and **low range** from 50\*-99°F. In each range a specific temperature can be programed. When the spa is not in use it can be switched to the low range to be more economical. When you are ready to use the spa, it can be switched into high range to achieve and maintain the desired temperature. **Ready and Rest Modes:**

**Ready Mode** is similar to Standard Mode of other series. The spa will constantly maintain the set temperature by “polling” (circulating and heating the water as needed) every half hour. **Rest Mode** is similar to Economy Mode in other series. The spa heater only works during the filter cycle (no polling) and the temperature displayed is not always current.

### **Balboa Water Group WiFi Application**



For more information visit:

<http://www.balboawatergroup.com/bwa>



## **GH Series Spas Limited Warranty**

### **10 Year Shell Warranty** - Generation Hot Tubs

warranties its spas not to leak, meaning to be structurally sound and capable of holding water only, and against loss of water through the lamination of the spa shell caused by defects in materials and/or workmanship for a period of 10 years from the original date of purchase as long as the spa is owned by the original purchaser. Upon inspection an authorized dealer may at its option choose to return the spa to the factory or dealer for repair or shell replacement or they may choose to repair onsite. If a return is required, removal/return of the defective spa to the factory or dealer will be at the cost and/or responsibility of the owner.

**7 Year Surface Finish of Shell Warranty** - Generation Hot Tubs warranties the surface finish of its spas to be free from blistering and cracking due to defects in the acrylic surface material for a period of 7 years from the original date of purchase as long as the spa is owned by the original purchaser. This surface shell warranty does not apply to discoloration or fading: Further the Limited Warranty does not apply if a failure is caused by or contributed to by any of the following improper installation, improper use of chemicals (trichlor chlorine, acids, chlorine tablets, etc.) improper introduction of foreign substances into the water, etc and/or failure to adequately protect the surface from exposure to the sun elements and extreme temperatures. In the event of a defect, the acrylic surface repair is further limited to only the defected portion of the surface and the repair is not guaranteed against discoloration or fading.

**5 Year Plumbing Warranty** - Generation Hot Tubs warrants all plumbing parts to be free from defects in material for a period of Five Years from the original date of purchase as long as the spa is owned by the original purchaser. Further this Limited Warranty specifically covers leaks from wall fittings, jet body fittings, internal glue joints, filter housing glue joints. **3 Year Component and Labor Warranty** - Generation Hot Tubs warranties the electrical components such as heater, pump(s), circuit board, sensors and top side control against malfunctions or defects in materials for a period of Three Years from the original purchase date as long as it is owned by original purchaser. Plumbing Labor warranty is 3 Years. Replaceable service items light bulb, fuses, pillows, gaskets, o-rings, etc. are not covered under this warranty but are warranted to be free

from defects in materials at time of delivery to the original purchaser. This Limited Warranty does not apply if the failure is caused by or contributed to by any of the following: improper wiring, use of an extension cord(s), improper alterations or modifications, failure to connect to a dedicated service as indicated by the manufacturer's specifications. Further, this Limited Warranty follows the guidelines of the original equipment manufacturers.

**1 Year Warranties** - The ancillary electrical systems and mechanical components are warranted against malfunction due to defects of materials for a period of One Year from the original purchase date by the original purchaser. Accessory electrical systems may include TV, stereo unit, power supply, stereo speakers, optional stereo equipment (excluding remote controls), ozone purification units, LED system control units, LED lights and light housings. Mechanical components include water diverter valves, water fall, on/off valves, air control valves, jet internals, filter housing components, and pump seals. 90 day labor warranty on equipment related to the operation of stereo and TV equipment. This does not include any wireless remote control(s). No labor warranty on Jet internal replacement.

**Spa Structure** - The wood structure of the spa and HDPE (High Density Polyethylene) bottom is warranted against defects in the wood or HDPE for a period of one year from original purchase date by the original purchaser. Insect, chemical, spa placement damages are not covered under this warranty. **Exterior Skirting** - The exterior skirting of the spa warranty is to be free of defects at time of delivery. **Placement of Spa** - Spa must be placed on a flat surface (e.g. concrete pad, wood deck) Spas not placed on a flat surface may void shell, surface and structure warranty to be decided by Generation Hot Tubs or authorized dealer.

**Not Covered Under a Warranty by Generation Hot Tubs:** Damages done by lightning strikes, high voltage spikes, improper wiring, burned power input terminal on circuit board, flood, insect damage, chemical abuse, freeze damages, delivery damages from your authorized dealer, freight companies and commercial applications. **Warranty Claims:** Labor coverage is a warranty program maintained by Generation Hot Tubs on your behalf. See authorized dealer or authorized service facility for details and procedures of submitting claims

## USA Breaker & Wiring Diagrams

**60 Amp Breaker:** This 60 amp GFCI wiring diagram would be for your 3-4 pump swim spas. **50 Amp Breaker:** A 50 amp GFCI wiring diagram would be for your 2 pump swim spa. Same diagram above except using 50 amp circuits.

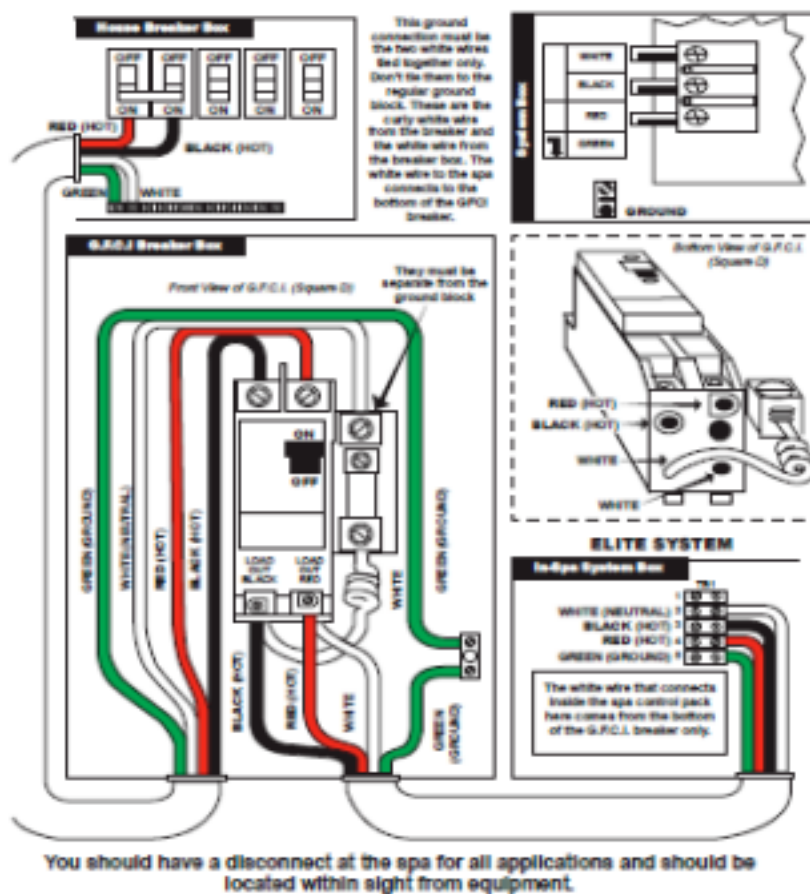
**30 Amp Breaker:** If using an 11kw heating system you'll need to use a 60 amp and a 30 amp breaker

Electrical Installations Instructions

### G.F.C.I. Breaker Concerns

If after you wire your spa and apply power, the GFCI breaker will not stay engaged, the G.F.C.I. breaker is not wired correctly. Check G.F.C.I breaker wiring chart following this section and verify that all of your connections are correct. Generally, if the breaker will not stay engaged, it is a wiring problem on the neutral wire. "Note: The neutral and ground wire cannot touch anywhere in the line between the G.F.C.I. breaker and the spa. (See wiring diagram). The white neutral wire from the spa control system must go to the Load Neutral (bottom of the breaker).

### 50 Amp Service for 1 – 2 Pump Spas & 60 Amp Service for 3 – 4 Pump Spas



## EURO WIRING SPECS (50HZ)

For 50 HZ Systems – 1 to 3 Pumps - Use 1 X 32 AMP Breakers

For 50 HZ Systems – 4 Pumps – Use 2 X 32 AMP Breakers

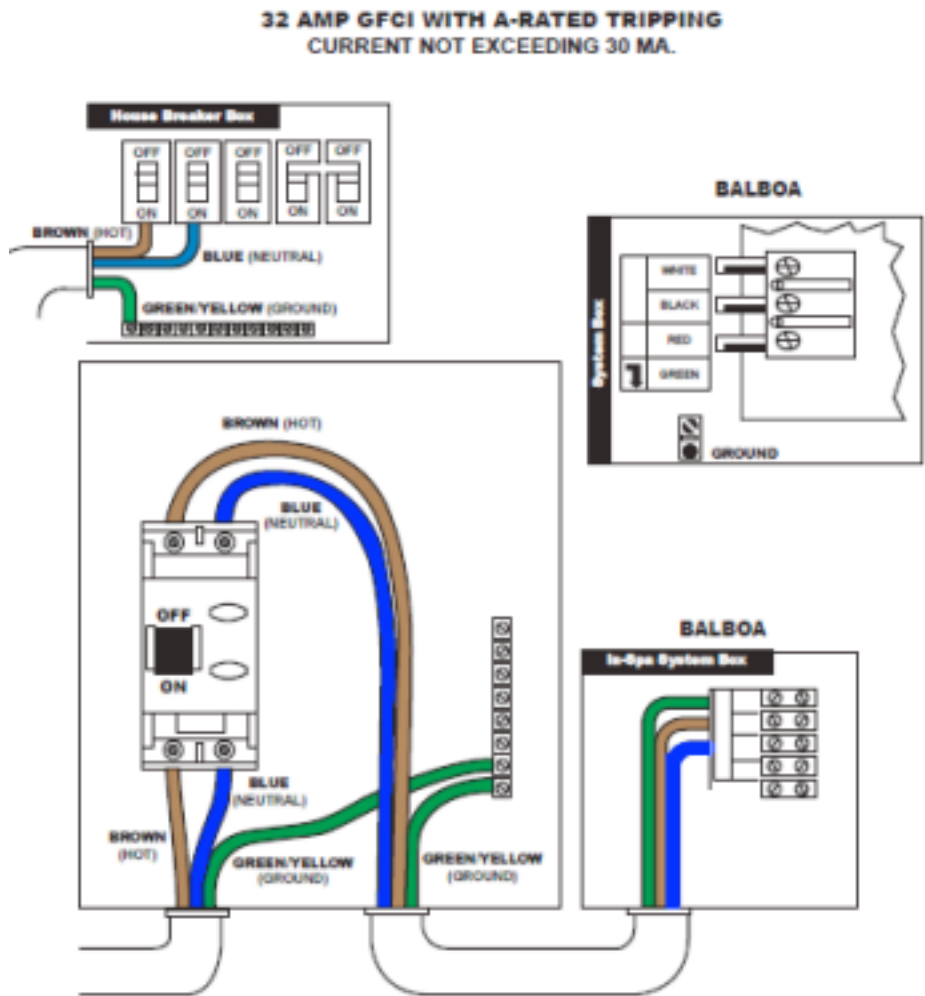
Use 6 Gauge Wire

For Supply Connections,

use Conductors sized on the basis of 60 Degrees Celsius Amperage but rated at a minimum of 90 Degrees Celsius.

Torque Range for Main Terminal Block

27 – 30IN. LBS – (31.3 – 34.5 KG)



**50 HZ SYSTEMS ONLY!**

## **Operating Manual for Balboa Spa Touch 2- Topside Control Panel**

For a pdf copy of the Operating Manual for the topside control panel, go to [www.Balboawater.com](http://www.Balboawater.com).

Click on Menu in the upper right hand corner and go to “Support”.

Scroll to “User Guides”. Choose “Spa Touch 2” to access the Spa Touch2 User Guide.

Direct website for User Guide is:

[Balboa Spa Touch 2](#)

[Balboa Spa Touch 4](#)



**Thank you for your investment in a Generation Hot Tubs Swim Spa. We hope you have many safe and enjoyable moments as you relax, recreate, and renew, ‘cause we believe you are worth it!’**  
**If you have any questions, concerns, or issues that arise, first contact your authorized dealer or you may reach us at :**

**May God bless you and the generations to follow.**

**Sincerely,**

**Generation Hot Tubs**

