

Divine Hot Tubs™ Deluxe | Euro
SPA MANUAL-50HZ

Deluxe Series



D E L U X E

live better | feel better

P.O. Box 2140 | Woodinville, WA 98072 | U.S.A.
www.divinehottubsdeluxe.com



"We reserve the right to improve our product without notice"

Copyright © Divine Hot Tubs™ Deluxe, August, 2016 (A division of Thermal Hydra Plastics, LLC.).

All rights reserved. Specifications may change without notice. International products may be configured differently to meet local electrical requirements.

TABLE OF CONTENTS

5 INTRODUCTION

- 5 ICON Key

6 IMPORTANT SAFETY INSTRUCTIONS

- 6 Read and Follow All Instructions

8 STEPS FOR POSITIONING YOUR SPA

- 8 Local Codes
- 8 Delivery Passageway
- 8 Location & Base
- 8 Installation and Electrical Hookup
- 9 Electrical Requirements
- 15 Filling Your Spa

16 TOPSIDE CONTROL - TURNING ON YOUR SPA

- 16 Topside Control Button Reference Display, 1/2/3 Pumps

19 WATER PURITY & FILTRATION

- 19 Keeping The Water Clean
- 19 Spa Chemistry 101
- 21 How To Use the Chemicals
- 21 Usage Definitions
- 22 Starting A Chemical Maintenance Program
- 24 Filtration
- 25 Ozone Generator

26 JETS

- 26 Types Of Jets
- 27 Jet, Air and Waterfall Controls
- 27 Cleaning The Rotating Jets
- 28 Jet Removal

28 MAINTENANCE & MISCELLANEOUS

- 28 Pillows
- 28 Spa Cabinet Skirt
- 28 The Shell
- 29 Spa Cover
- 29 Winterizing
- 30 Draining The Spa

32 APPENDIX A

- 32 Troubleshooting
- 32 System Trouble
- 32 Controls
- 33 Pumps
- 33 Jets
- 33 Water
- 35 FAQ's - Frequently Asked Questions
- 36 Wi-Fi Module – Supplement
- 37 Bluetooth Pairing Guide – Supplement
- 38 Notes
- 40 Warranty

INTRODUCTION

Congratulations on your purchase of your new hot tub! Your hot tub is designed and manufactured with the finest components available and is engineered with comfort, low maintenance, and durability in mind.

You will enjoy your spa for several years to come if you are diligent with the care and maintenance of your spa. This manual will help you to determine the best way to take care of your spa based on the amount of use and the type of environment your spa is installed.

It is very important for you to read the entire manual before attempting to use your spa. Contained in this manual are important maintenance and start-up procedures as well as safety precautions that must be followed to ensure the prolonged life of your spa and the safety of the people using the spa. Failure to follow start-up procedures may damage your unit and void your warranty.

Please feel free to contact us if you have any further questions after reading this manual. We hope you enjoy many years of fun and relaxation in your new hot tub

ICON Key

The Icon key on the left defines the type of information boxes that will appear throughout the manual. The boxes highlight helpful information that contains useful tips or warnings that apply to the use and care of your spa.

ICON KEY



Safety Tip



Key Point



Warning!

SAFETY FIRST
IMPORTANT SAFETY INSTRUCTIONS! READ AND FOLLOW ALL INSTRUCTIONS. SAVE THESE INSTRUCTIONS.



Electrical
Warning!

When installing and using this electrical equipment it is recommended that a licensed and bonded electrician perform the work. Basic safety precautions should always be followed, including the following:

- A pressure wire connector is provided on the outside of the control box to permit the connection of a solid copper bonding wire between the spa and any metal equipment, metal enclosures of electrical equipment, metal water pipe or conduit within 5 feet of the spa as needed to comply with local requirements.
- A green colored terminal (or a wire connector marked "G", "GR", "Ground", or "Grounding") is provided. To reduce the risk of electric shock, connect this terminal to the grounding terminal of your electric service or supply panel with a continuous green insulated copper wire equivalent to the circuit conductor supplying this equipment.
- The electrical supply must include a suitably rated Ground Fault Interrupter Circuit to open all underground supply conductors to comply with section 422-20 of the National Electrical Code. ANSI/NFPA 70-1987. The power supply cut off must be readily accessible to the spa occupant, but installed at least 5 feet from spa water.
- Test the performance of the GFCI according to manufacturers recommendations. If the GFCI does not perform correctly,

there may be a ground current flowing indicating the possibility of electric shock. Disconnect the power until the fault has been identified and corrected.



Electrical
Warning!

- **DANGER –RISK OF ELECTRIC SHOCK.** Install at least 5 feet from all metal surfaces.
- **DANGER – RISK OF ELECTRIC SHOCK.** Do not permit any electric appliance such as a light, telephone, radio or television within 5 feet of a spa or hot tub.

- **WARNING –RISK OF CHILD DROWNING.** Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children cannot use a spa or hot tub unless they are supervised at all times.

 WARNING	
PREVENT DROWNING 1. SUPERVISE CHILDREN AT ALL TIMES. 2. ATTACH SPA COVER AFTER EACH USE. 3. SPA HEAT CAN CAUSE HYPERTHERMIA AND UNCONSCIOUSNESS. 4. SPA HEAT IN CONJUNCTION WITH ALCOHOL, DRUGS, OR MEDICATION CAN CAUSE UNCONSCIOUSNESS.	PREVENT ELECTROCUTION 1. NEVER PLACE ANY ELECTRIC APPLIANCE WITHIN 5 FEET OF SPA.
NOTE: THIS MARKING IS TO BE REMOVED ONLY BY THE CUSTOMER.	



Safety
Warning!

- **DANGER –** To reduce risk of injury, do not remove suction fittings.
- Installation should provide drainage of the electrical equipment area to prevent electrical shortage.
- Store all chemicals in a cool dry area and keep out of children's reach.
- To reduce the risk of injury:
 - A. Spa heat can cause hyperthermia and unconsciousness! The water in a spa or hot tub should never exceed 104° F (40° C). Water temperatures between 100° F (38° C) and 104° F (40° C) are considered safe for a healthy adult. Lower water temperatures are recommended for ex-

tended use (exceeding 10 –15 minutes) and for young children.

- B. Since excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy, pregnant or possibly pregnant women should limit water temperatures to 100° F (38° C).
- The use of alcohol, drugs, or medication before or during spa or hot tub use may lead to unconsciousness with the possibility of drowning.
 - Persons suffering from obesity or with a medical history of heart disease, low or high blood pressure, circulatory system problems or diabetes should consult a physician before using a spa or hot tub.
 - Persons using medication should consult a physician before using a spa or hot tub since some medication may induce drowsiness while other medication may affect heart rate, blood pressure, and circulation.
 - Before entering a spa, the user should measure the water temperature since the tolerance of water temperature-regulating devices varies.



Electrical
Warning!

WARNING – he spa (appliance) is not to be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction.

- Children should be supervised to ensure that they do not play with the spa (appliance).
- Parts containing live parts, except parts supplied with safety extra-low voltage not exceeding 12 V, must be inaccessible to a person in the spa (bath).

- Earthed appliances must be permanently connected to fixed wiring.
- Parts incorporating electrical components, except remote control devices, must be located or fixed so that they cannot fall into the spa (bath).
- The spa (appliance) should be supplied through a residual current device (RCD) having a rated residual operating current not exceeding 30 mA.
- If a stationary spa (appliance) is not fitted with a supply cord and plug, or with other means for disconnection from the supply mains having a contact separation in all poles that provide full disconnection under overvoltage category III conditions, the instructions shall state that means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.



Safety
Warning!

CAUTION – In order to avoid a hazard due to inadvertent resetting of the thermal cut-out, this spa (appliance) must not be supplied through an external switching device, such as a timer, or connected to a circuit that is regularly switched on and off by the utility.



Positioning of your spa

When selecting a site for your spa, take into account the following:

Local Codes:

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

Delivery Passageway:

The spa will arrive as a unit, and cannot be disassembled. Ideally the spa will be placed on a trolley, either on its side or on its base. The unit will then be rolled into place easily crossing grass, gravel, and small terrain anomalies. For safe and non-intrusive installation, we require an opening not less than the size of your spa plus at least 40cm height for the trolley and a minimum of 5cm clearance on each side. If your access

does not meet these conditions, or in the case of other obstacles (steps, fences, walls, steep hills, etc.) contact Divine Hot Tubs Deluxe for advice and conditions.

Location & Base:

A sheltered environment can result in lower operating and maintenance costs. You must allow 1 meter clearance for access to the spa's access panel for servicing.

- The site you select for your spa **MUST** be a flat, level continuous surface that fully contacts the bottom of the spa.
- Your new spa weighs between 300-450kg when dry, and when filled to capacity weighs 900-2300kg. Therefore a solid support is essential when the spa is mounted on a deck or ground level patio/floor. We recommend that you install your spa at ground level. This allows easy access to equipment.
- A 10 to 15cm thick re-enforced concrete slab is ideal, but not required. In most cases your spa can be placed on properly installed existing patios.
- The base must be at least the size of the bottom of your spa.
- Water should always drain away from the spa. **DO NOT** locate your spa in a low run-off area since melting snow or rain could flood the area and cause pump and equipment damage.
- **DO NOT** situate spa near or under overhead wires, keeping clear of all electrical appliances.

Installation and Electrical Hookup:

Have a licensed electrician run the required 230-volt power line to the spa installation site. This power line must be permanently connected (hard-wired) to the mains supply. Do not use extension cords or plug-in type connections. At the site where the spa is to be located leave 5 meters of cable and the appropriate cable gland. All electrical wiring to a spa must be installed by a qualified, licensed electrician, and meet local building/electrical codes. A certificate from the electrician verifying it has been tested must be obtained.

PLEASE NOTE: Failure to supply the recommended power will void the Manufacturer's Warranty!

Electrical requirements

System Box Wire Gauge Check

When inspecting the wiring for any control system, note that connections for the incoming wires are clearly labeled at the main terminal block.

- Two 16A service - minimum twelve gauge copper wire per line (each).
- 30A service – minimum ten gauge copper wire.
- 40A service – minimum eight gauge copper wire.
- 50A service – minimum six gauge copper wire.

These wires must connect the house breaker box, through the local disconnect, to the main terminal block. The wiring diagram inside the system box shows the main terminal block as TB1.

Important

Using non-copper wire can be dangerous, and also can be the cause of a spa's malfunction. If non-copper wire is used at any point, we do not recommend servicing the spa until an electrician replaces it with the proper gauge copper wire.

Important

This service must be single phase. Any abnormal voltage reading requires an electrician. Do not attempt to fix these types of problems yourself. High voltage can seriously injure or kill.

R.C.D. Wiring Check

If a Residual Current Device has recently been installed, a majority of tripping problems can be attributed to incorrect wiring of the R.C.D. A clear understanding of the correct configuration is essential. Please refer to the figure on page 15 as needed.

Wiring Check for R.C.D./Service Disconnect

Precautions

In most areas, R.C.D.'s are required for spa installations. In other areas, R.C.D.'s are recommended for spa installations, but are not mandatory.



If the spa you are servicing was not installed with a R.C.D., strongly urge your customer to improve safety and comply with current standards by installing one.

Note: A suitable R.C.D. may be acquired through your local distributor.

Important: Remember, high voltage is still accessible in the house breaker box even though you have turned off the spa breaker.

R.C.D. Line-in Wiring Check

- Locate the proper circuit breaker and turn it off.
- Remove the cover from the house breaker box. Check the main service amperage rating to the breaker box. **Note:** Typically, a house circuit will require at least a 100 Amp service when a spa is installed.
- From the circuit breaker, locate the brown load wire and the blue neutral wire.
- From the R.C.D. neutral bar, locate the blue load neutral, and the green ground wire.
- Be sure there are no other appliances on the spa circuit. If there are, service must be re-wired to supply the spa only.
- Make sure all three wires exit the house breaker box via conduit, routed to the R.C.D. breaker box. The brown should be connected to the R.C.D. line-in. The blue load neutral connects to the neutral in.

R.C.D. Line-out Wiring Check for 230 V Dedicated System

(3 wire system including ground wire)

The brown wire should connect to load out, the blue wire from neutral out. All wires will exit the box via conduit routed to the spa control system.

Once you have found all wiring correctly installed, begin to check for proper voltage.

Voltage Checks - System Box R.C.D. |

Load Out Voltage Check

230 V Dedicated System:

- Be sure the house breaker is on.
- Be sure the R.C.D. breaker is on.
- Probe the blue and brown wires at the R.C.D. load out. The voltage should be 230 V.
- Probe the blue wire and the green ground wire. The meter should read 0 V.
- Probe the brown wire and the R.C.D. neutral bar. The voltage should read 230 V.
- Recheck voltage under peak load conditions.*

Important!

If the voltage is not within the acceptable range, call an electrician or the local electric company to diagnose the problem.

System Box Check (at TB1)

230 V Dedicated System Check:

- Be sure the R.C.D. breaker is on.
- Probe the blue and brown wires. Look for 230 V.
- Probe the blue and green ground wires for 0 V.
- Probe the brown and green ground wires – also 230 V.
- Recheck voltage under peak load conditions.*

*** Peak Load Check**

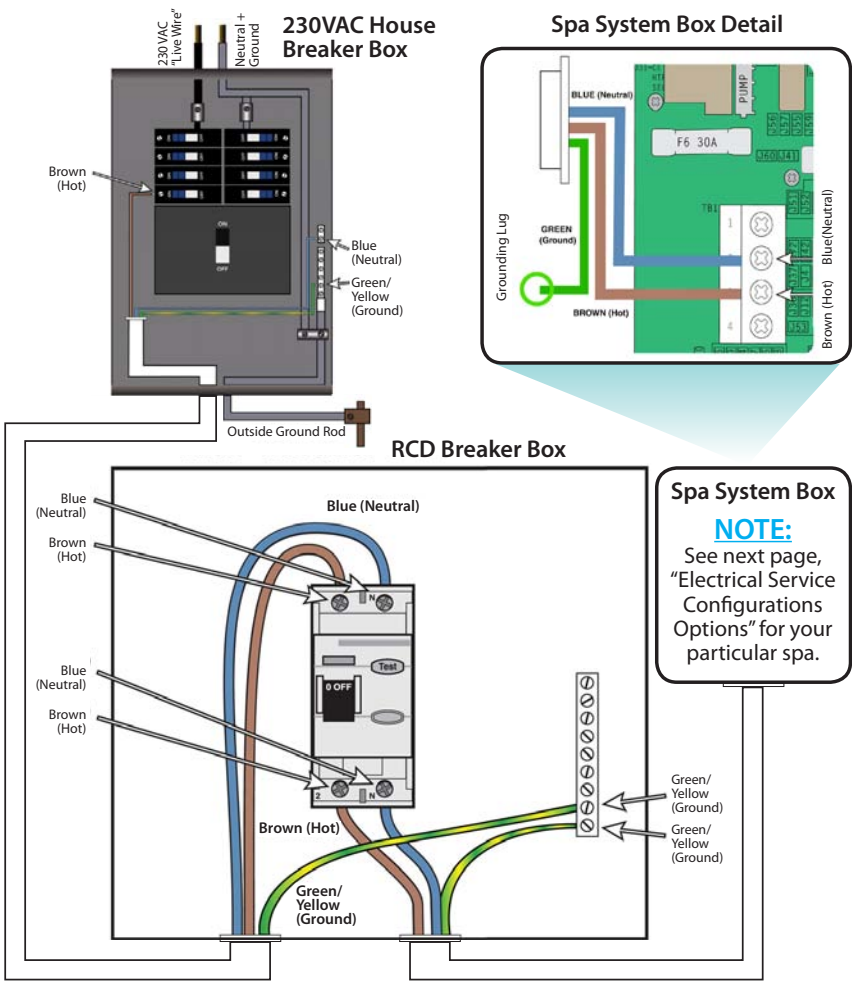
It is important to check the voltage again under peak load conditions. To reach peak load, turn on the blower, heater, light, and all pumps.

Peak Load Check for 230 V System:

- Check the voltage between the blue and brown wires. The acceptable voltage range is between 207 and 253 V.

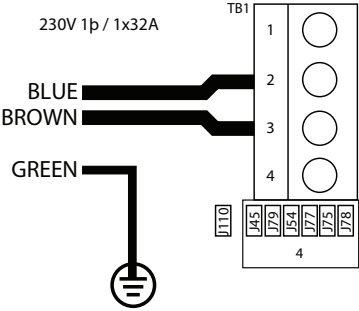
ELECTRICAL WIRING SCHEMATIC

IMPORTANT: Electrical connections must be made by qualified, licensed personnel. Please contact a licensed residential electrician for these services.



ELECTRICAL SERVICE CONFIGURATION OPTION

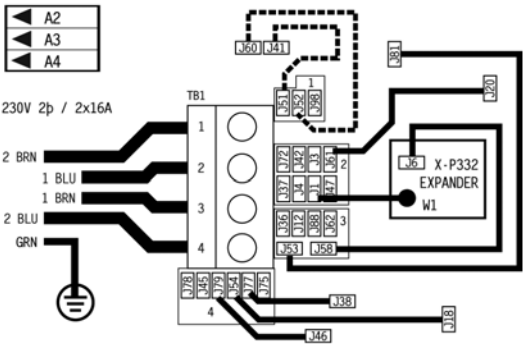
For DIP Switch Configured System



◀ SINGLE SERVICE FEED

230VAC, 50Hz*, 1p, 32A,
(Circuit Breaker rating =
40A max.)

Pump 1 and Pump 2 are on line 2; Heater and
Pump 3 and Pump 4 are on line 1.

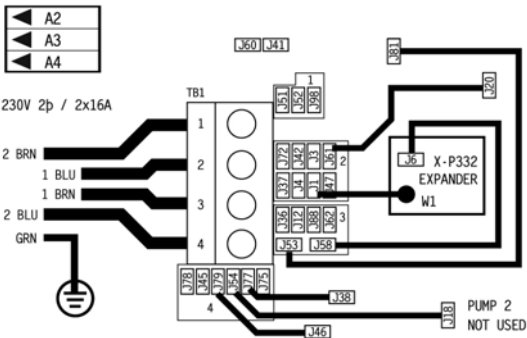


◀ DUAL SERVICE FEED

Setup 5 / Programming 5 /
Konfiguration 5

400VAC, 50/60Hz*, 3p, 16A,
(Circuit Breaker rating =
2x16A max. each phase
line)

Pump 1 is on line 2; Heater and Blower are on line 1.



◀ DUAL SERVICE FEED

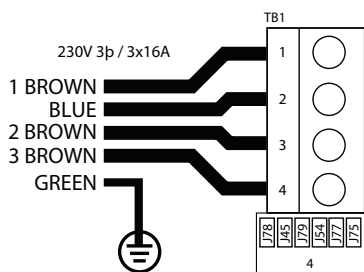
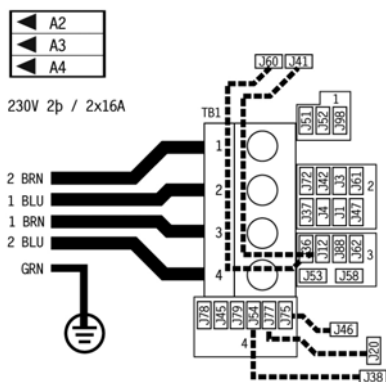
Setup 8 / Programming 8 /
Konfiguration 8

ELECTRICAL SERVICE CONFIGURATION OPTION

For DIP Switch Configured System

◀ DUAL SERVICE FEED

Setup 9 / Programming 9 /
Konfiguration 9



◀ TRIPLE SERVICE FEED

IMPORTANT - Service must include a neutral wire, with a line to neutral voltage of 230VAC.

* BP systems automatically detect 50Hz vs 60Hz.

ADDITIONAL PRODUCT RESOURCES AND DOWNLOADS

For additional product resources, manuals and other helpful information, please visit our website at www.divinehottubsdeluxe.com

5. FILLING YOUR SPA THROUGH THE FILTER CHAMBER

Before you begin to fill your spa, it is advisable to have your water tested for hardness (water rich in calcium and mineral content). Wells usually contain harder water than urban water supplies. Mineral and metal imbalances in your water can shorten the life of the equipment in your spa. Contact your local hot tub dealer for proper water analysis.

We recommend that you purchase a high quality "Water Test Kit" for checking pH and sanitizer levels. Test the water daily until your "user load" is determined.

Make sure there is no dirt or sediment at the bottom of the tub and that there is nothing inside the filter compartment before filling with water. **Filling the spa through the filter housing will help to prevent air locks** (trapped pockets of air) **in pumps on start up.**

Identify your filter housing and fill as shown:



▲ TOP-ACCESS SINGLE-FILTER HOUSING WITH TELESCOPING WEIR AND SINGLE FILTER HOUSING WITH TURBINE VANE FILTER COVER (not shown)



▲ FRONT-ACCESS DUAL-FILTER HOUSING OR FRONT-ACCESS SINGLE-FILTER HOUSING (NOT SHOWN)

1. Place your garden hose into the filter housing. This will ensure that air bubbles are removed from the lines while you fill the spa.
2. Turn the water on so that most of the water enters through the filter chamber.
3. Fill the water to the proper level – half way up the filter housing, just below the head pillow or just under the neck jets as shown in pictures above.



IMPORTANT!

Improperly balanced water may damage your spa and void your warranty!



IMPORTANT!

Do not fill your tub with water from your hot water heater!

TOPSIDE CONTROLS: TP600

TURNING ON YOUR SPA



Figure 1: TP600 control panel, 6-button (3 pumps)



Figure 1: TP600 control panel, 6-button (2 pumps)



Figure 2: TP600 control panel, 5-button (1 pump)

Start Up

When the GFCI for the spa is switched on to supply power, a startup sequence of numbers will appear on the display. If no button is pressed, **LINK** will appear after the startup sequence. Press any button to link the panel with the system.

The spa will enter **Priming Mode**. After Linking, press the **Jets Button(s)**  to turn the pumps on and off to verify that all air is purged from the plumbing, particularly the plumbing associated with the heater. If the spa uses a circulation pump, the **Light**  Button turns the Circ Pump on and off during Priming Mode. Priming Mode will end automatically in 4 minutes. Pressing a **Temperature Button** will exit Priming Mode manually. When Priming Mode ends, Pump 1 low will start, if no circ pump is present, however the water temperature will not appear for a minute or so. Once the water temperature is recognized by the system, and if it is below the **Set Temperature**, the heater will start.

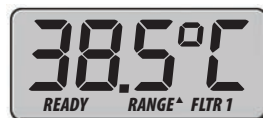
Basic Operation

The **Up** ▲ and **Down** ▼ buttons are often referred to as **Temperature Buttons**. Some panels only have a single Temperature Button. Press a Temperature Button once and the current Set Temperature will begin to flash on the LCD. (The Set Temperature and the actual water temperature are often different.) While the numbers are flashing, press a Temperature Button again to change the Set Temperature. Press-and-hold for faster adjustment. After the new Set Temperature stops flashing, in about 10 seconds, the actual temperature is displayed again and the new Set Temperature is programmed. The spa will now heat to the new Set Temperature as needed.

The **Light** Button turns the Spa Light on and off and is also used in conjunctions with the Temperature Button(s) to navigate the system menus.

Programming

Refer to the TP600 User Guide for detailed operation, programming and message instructions.



Navigating the deeper menu structure is done with only 2 or 3 buttons on the control panel. Pressing the **Light** button *while the Set Temperature is flashing* will enter the menus. Pressing **Light** after that will proceed through the menu choices. Pressing a Temperature Button while any menu item is showing will either edit it directly or begin an editing sequence.

Depending on the screen displayed, waiting between 10 and 30 seconds will allow the panel to return to normal operation and a display of spa status.

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. *Refer to the TP600 User Guide for detailed instructions.*

A second filter cycle can be enabled as needed.

Dual Temperature Ranges

This system incorporates two temperature range settings with independent set temperatures. The High **Range** ▲ is indicated in the display and might be set between 26.6°C and 40°C. The Low **Range** ▼ is indicated in the display and might be set between 10°C and 37.2°C. Low Range may be economical during non-use periods.

More specific temperature ranges, such as 10°C to 26.1°C for low range, or 32.2°C to 40°C for High Range, may determined by the manufacturer.

Ready and Rest Modes

If the filtration 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 as 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 filtration pump has been running for a minute or two. **READY/REST** Mode may appear when Jets 1 is activated.

Complete User Guide Reference

Download the complete User Interface and Programming Guide at
http://service.balboa-instruments.com/zz40940_download.zip

The Ground Fault Circuit Interrupter (GFCI) or Residual Current Detector (RCD) is an important safety device and is required equipment on a hot tub installation.

(The GFCI Test Feature is not available on CE rated systems.)

Used for verifying a proper installation

Your spa may be equipped with a GFCI Protection feature. If your spa has this feature enabled by the manufacturer, the GFCI Trip Test must occur to allow proper spa function.

Within 1 to 7 days after startup, the spa will trip the GFCI to test it. (The number of days is factory programmed.) The GFCI must be reset once it has tripped. After passing the GFCI Trip Test, any subsequent GFCI trips will indicate a ground fault or other unsafe condition and the power to the spa must be shut off until a service person can correct the problem.

Forcing the GFCI Trip Test (North America Only)

The installer can cause the GFCI Trip Test to occur sooner by initiating it using the above menu. The GFCI should trip within several seconds and the spa should shut down. If it does not, shut down the power and manually verify that a GFCI breaker is installed and that the circuit and spa are wired correctly. Verify the function of the GFCI with its own test button. Restore power to the spa and repeat the GFCI Trip Test.

Once the GFCI is tripped by the test, reset the GFCI and the spa will operate normally from that point. You can verify a successful test by navigating to the above menu. PASS should appear after a temp button is pressed from the GFCI screen.

Warning:

The end-user must be trained to expect this one-time test to occur and how to properly reset the GFCI. If freezing conditions exist, the GFCI or RCD should be reset immediately or spa damage could result.

CE Product:

CE registered systems do not have an RCD Test Feature due to the nature of the electrical service. Some UL registered systems do not have the GFCI Test Feature activated. The end-user must be trained how to properly test and reset the RCD.

WATER PURITY & FILTRATION

Keeping the water clean – chemical sanitizers

One of the bigger reasons that people require service on their spa is because they haven't followed a chemical application regiment. Water can accumulate impurities that can worsen the performance or even damage the filtration system if chemicals are not applied on a regular basis. The water can even become unhealthy if chemicals are not used to sanitize the water. Improper pH levels or calcium levels can cause either corrosion of parts or scale build-up.

We recommend that you begin a routine of applying chemicals that you can get comfortable with and follow all the time. If you get into a scheduled regiment, it will be easier to remember when to apply the chemicals.

Your spa comes with an ozonator that will do a very good job at killing bacteria and oxygenating the water, but chlorine or bromine are used to compliment the job of the ozonator.

Finally, the best way to keep the water clean over long periods of time is to change the water four times a year. Connect a hose to the drain valve and open it all the way to allow the tub to drain all the way. Use a shop-vac to remove any standing water and debris at the bottom of the tub. Refer to the maintenance section for instructions on cleaning the tub before refilling it.



IMPORTANT!

Always read directions on chemical container thoroughly before using spa chemicals.

Spa Chemistry 101

At first, trying to understand spa chemistry can seem like a daunting task to say the least. We intend on helping you understand spa chemicals so that you can maintain the health of your spa at the best level possible.

There are three basic principals to spa water chemistry.

1. Sanitize/Disinfect (kill viruses, germs, etc.)
2. Oxidize (break down organic compounds like oils and sweat)
3. Maintain slightly base (alkaline) water (pH of 7.4 - 7.6). This controls the corrosiveness of the water, prevents excessive scaling (mineral formation on surfaces exposed to water, and insures that the water is comfortable to the skin.



The pH scale goes from 0 to 14, with zero being extremely acidic and 14 being extremely base (alkaline). Seven is considered neutral pH.

Once you have a good understanding of the chemicals that are used in your spa, you will be able to maintain proper water balance. Water balance is reached when all elements (pH, total alkalinity, calcium hardness and total dissolved solids) are within their proper ranges.

The following definitions for chemicals will help you understand what the chemical is and what it is used for:

Sanitizers

CHLORINE – Chlorine is widely used as a sanitizer or disinfectant in pool and spa water to kill bacteria, viruses and algae, and oxidizes ammonia and nitrogen compounds such as swimmer waste. Its formal name is Sodium Dichlor and is referred to as a chlorinated concentrate. Sodium Dichlor is a fast-dissolving, granular, stabilized organic chlorine compound providing either 56% or 63% available chlorine. Cyanuric acid and/or stabilizers are added to prevent U.V. light destruction of the chlorine by the sun.

Chlorinated concentrate produces chlorides and chloramines, which are formed when chlorine has combined with ammonia and nitrogen in pool and spa water. Chloramines exude a foul, "chlorine" odor and causes skin and eye irritation.

BROMINE – Bromine is the other commonly used sanitizer or disinfectant in pool and spa water to kill bacteria and algae, and oxidizes ammonia and nitrogen compounds such as swimmer waste. This chemical does not eliminate swimmer waste unless it is combined with an oxidizer (non-chlorine shock). It is very susceptible to direct sunlight, therefore is not efficient in outdoor pools. Bromine is sometimes used as an alternative for people whom are allergic or sensitive to chlorine products.

Bromine products are available as sodium bromide and bromine tablets. The bromide ion has no effective disinfectant or sanitizing capabilities without the use of nonchlorine shock (potassium monopersulfate). Potassium monopersulfate is added to oxidize, or activate, bromide ion to bromine, which rapidly forms the active sanitizer - hypobromous acid - in spa water. Upon reaction with bacteria and other spa contaminants, hypobromous acid is reduced back to bromide ion, ready to be activated again by the next dose of potassium monopersulfate. Potassium monopersulfate begins to produce bromine immediately and continues to do so for several hours, providing sufficient time for oxidation of bather waste and other organic contamination such as ammonia and nitrogen.

NON-CHLORINE SHOCK (Potassium Monopersulfate) – Also known as "Oxy-Shock", is an important chemical used in the process of disinfecting and sanitizing the spa water. Non-chlorine shock is used as an oxidation agent to oxidize and eliminate organic contaminants, dead algae and debris, and will also convert the chlorine by-products (chlorides and chloramines) back into free available chlorine.

When used with bromine products, non-chlorine shock is used with sodium bromide in a two-part disinfection system. Potassium monopersulfate (non-chlorine shock) is added to oxidize, or activate, bromide ion to bromine which rapidly forms the active sanitizer - hypobromous acid - in spa water. Upon reaction with bacteria and other spa contaminants, hypobromous acid is reduced back to bromide ion, ready to be activated again by the next dose of potassium monopersulfate.

Most non-chlorine shock products have buffers that reduce pH instability, and corrosion inhibitors that help protect the heater and other metal surfaces.

OZONE – Ozone is a powerful gas that is used as a sanitizer and an oxidant to keep the spa water clean and disinfected. Although ozone is about 3000 times more powerful than chlorine, it has a tendency to dissipate quickly and does not create any sanitizer residual. By using an ozonator for your spa, you can cut maintenance time and chemical costs by as much as 60%. Ozone is manufactured by an ozonator (ozone generator) and is dispensed during the filtration mode.

pH Controllers

SODIUM BICARBONATE - Commonly used to increase pH and total alkalinity of spa water. Sodium bicarbonate is also known as natural baking soda.

SODIUM CARBONATE – Also known as soda ash, is a substance used to raise pH and total alkalinity.

SODIUM BISULFATE – Also known as dry acid, the chemical used to lower pH and total alkalinity of spa water.

MURIATIC ACID – A liquid acid that is most commonly used to reduce pH and total alkalinity levels. It tends to be very strong and is not recommended for use in spas.

Water Conditioners

FLOCCULENT – A compound which clarifies spa water by gathering oils, dirt, scum, metal deposits and small contaminant particles into larger globules, which then can be easily trapped in the filtering system allowing the filtering system to work more effectively.

CLARIFIER – A compound used to remove dissolved solids, metals, dirt, oils, or other contaminants from spa and pool water.

SCUM BALL™ – A softball sized ball that is kept in the water. The ball is chemically treated so that it attracts contaminants that would normally be trapped in the filter.

SEQUESTERING AGENT – Stain & scale preventing compounds that sequester dissolved metals to prevent water discoloration.

CALCIUM CHLORIDE – A soluble white compound used to raise the calcium hardness of spa & pool water, to protect equipment from corrosion.

ALGAECIDE – A chemical used to kill algae and prevent it from growing back.

DEFOAMER – A compound used to reduce or eliminate foaming in spa water. Products containing Chitin do this naturally.

CHITIN – A naturally occurring polymer (pronounced KY-tin) found in crab and lobster shells. As a spa clarifier, it is the best flocculating agent available. Removes oils, dirt, scum, and metal deposits and allows the filtering system to work more effectively.

How To Use The Chemicals

Now that you have some knowledge about spa chemicals, you will learn how to use those chemicals to maintain balanced water in your spa. This section will explain how to apply chemicals, how much to use, and when to use them.

Usage Definitions

Before getting into how much and when, it is important to understand some of the terminology that is used to describe how the chemicals are applied:

P.P.M. – Parts Per Million. Expressed as a ratio of number out of 1 million.

SHOCK – Addition of an oxidizer (OXY SHOCK) or superchlorinator to the water to break-down the organic contaminants on which bacteria feed and to destroy ammonia and nitrogen compounds (oxidize only).

SUPERCHLORINATION – Means the addition of enough chlorine in the water to kill all living things (sanitize) and destroy any organic wastes present in the water (oxidize). Usually this means about double your normal dose of chlorine. Superchlorination can be done once a day for heavy bather loads or as infrequent as once a week for a moderately used spa.

CHLORINATION – To add chlorine to your spa on a regular basis to disinfect and oxidize your spa water.

BREAK POINT CHLORINATION – The process of shocking the water with significant quantities of chlorine to oxidize all contaminants and organic wastes and leave all remaining chlorine as free chlorine.

CALCIUM HARDNESS – A measure of the amount of calcium dissolved in water. Water with low hardness can lead to corrosion of metal parts. Water with high level of hardness can cause scale (calcium crust) build up on spa surfaces and clog filters, heaters and pumps.

WATER BALANCE – Water balance is reached when all elements (pH, total alkalinity, calcium hardness and total dissolved solids) are within their proper ranges.

ENZYMES – Biodegradable proteins which breakdown oils, films and digest scum in spa water.

FREE CHLORINE – The amount of chlorine available to kill bacteria or algae. Also known as “Available Chlorine”.

COMBINED CHLORINE – The portion of the total chlorine in water in chemical combination with ammonia, organics, and nitrogen, most of which are chloramines.

TOTAL ALKALINITY (TA) – The measure in PPM of all the dissolved base/alkaline material in the water. The acid-neutralizing capacity of water which indicates its buffering ability, or resistance to fluctuations in pH.



WATER BALANCE is reached when all elements (free chlorine, pH, total alkalinity, calcium hardness and total dissolved solids) are within their proper ranges.

TOTAL DISSOLVED SOLIDS (TDS) – The total amount of dissolved materials in pool or spa water. The ideal range is from 1,000 to 2,000 ppm in pools and 1,500 ppm above the start-up TDS in spas.

Starting A Chemical Maintenance Program

Ultimately, in a chemical maintenance program, the goal is to maintain water balance. If you apply chemicals and test your water on a regular basis, water balance is easy to maintain and your spa water will stay clear and healthy. Although test strips are fairly accurate, test kits are also available that are very accurate and will test everything that you will need to monitor your water chemistry.

Three main parameters should be tracked closely:

1. pH
2. Free chlorine
3. Alkalinity

T.D.S. (Total Dissolved Solids) and calcium hardness should be checked after the first three are in the correct range. Test strips and test kits come with instructions on how to diagnose readings to determine whether the chemicals are in the right range. Table/Figure 2-1 shows how to dispense chemicals and how often to do it.



WATER BALANCE
is reached when all elements (free chlorine, pH, total alkalinity, calcium hardness and total dissolved solids) are within their proper ranges.

In the beginning, it is a good idea to test your water daily to learn how the water changes with the addition of chemicals. By keeping a log, you will be able to keep better track of your water condition.

When adding water to your spa for the first time or changing the water, you should superchlorinate the water by doubling (1 tbsp. Per 100 gallons) the regular dose of chlorine. It is a good idea to wait for 8 hours before entering your spa after superchlorinating the water.

Remember that keeping your spa water healthy keeps you, your family, and your guests healthy too. Most service calls for spa repairs are related to problems caused by not maintaining balanced spa water.

Figure 2-1: Spa water care

PARAMETER	INDICATION	SCHEDULE	ACTION
pH	< 7.2 pH	Check bi-weekly or more for heavy use	Add Spa Up™
pH	> 7.8 pH	Check bi-weekly or more for heavy use	Add Spa Down™
Chlorine/Bromine	3 – 5 ppm	Check bi-weekly or more for heavy use	Add Chlorine or Bromine
Alkalinity	80 – 120 ppm	Check bi-weekly or more for heavy use	Add Alkalinity Increaser
TDS	< 3000 ppm	Check monthly	Drain and refill if > 3000 ppm
Oxy-Shock		Add bi-weekly or more for heavy use	Add Oxy-Shock
Hardness	110 – 130 ppm	Check monthly or with new water	Add calcium increaser if < 110 ppm. Drain and refill if > 200 ppm.
Ozone		Ozonator runs on FILTER CYCLES	



CAUTION!
Turn off the power to the spa before removing the filter!

Filtration

Your spa is pre-programmed to run a 2-hour filter cycle twice a day. For the system to work properly, the filters must be hosed off at least once a week and thoroughly cleaned once a month with a filter degreaser. We recommend that you buy an extra filter cartridge from your hot tub dealer to alternate with the filters included with your spa. A dirty filter will restrict water flow and will prohibit the filtering system from keeping your spa clean. If the filters are not cleaned for extended periods, it could possibly damage the pumps.



For the best performance possible, clean the filter weekly.

If you have a problem with floating contaminants, you may want to purchase a skimmer net to easily remove bugs, leaves, etc...

Details on cleaning the filters are included in the maintenance section, but as a reminder, it is important to first turn off the power to the spa. Leaving the power on while changing the filters could allow objects to be drawn into the heater and/or pump and may damage your equipment.

▼ To remove FRONT LOADING FILTERS, DOUBLE CARTRIDGE (OR SINGLE CARTRIDGE, NOT SHOWN):

(filter component colors and styles may vary)



Slide door face upwards.



Remove door face.



Pull out leaf basket.



Gently unscrew and remove both filters.



Clean or replace filters.
Note: be sure not to over tighten filters when replacing.

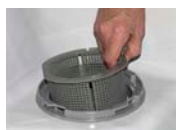
* Ensure that the leaf / skimmer basket flange is aligned in the grooves when returning leaf / skimmer to the housing.

▼ To remove filter, SINGLE CARTRIDGE - TOP LOADING - with telescoping weir:

(filter component colors and styles may vary)



Turn filter housing counter-clockwise to remove.



Lift and remove filter basket.



Insert two or three fingers into filter and pull out.



Clean or replace filter.

▼ **To remove filter, SINGLE CARTRIDGE - with turbine vane filter cover:**

(filter component colors and styles may vary)



Remove lid from the turbine vane filter cover.



Remove filter basket clips.



Remove filter basket.



Pull out filter. Clean or replace filter.

Ask your hot tub dealer for more information on the new Microban Filters, a new technology with antimicrobial protection that will inhibit the growth of bacteria and mold.

Ozone Generator

The spa manufacturing company offers an optional Ozonator made to our specifications. Ozonators supply the spa water with ozone, which is an extremely effective oxidant that will kill bacteria and microorganisms. The Ozonator will distribute ozone into your spa automatically during the filter cycles and will keep your spa and water sparkling clean. Even though ozone is effective at keeping your water clean, it cannot replace the use of chlorine or bromine. Refer to the chemical section for more information.

No maintenance is necessary on the ozonator. The ozonator works during the filter cycles set by the controller only. If your spa did not include an optional ozonator and you would like to have one installed, contact your spa dealer.

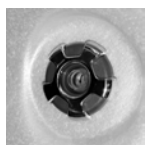
JETS

Types of Jets

Your Hot tub comes with different types of jets and jet configurations. Each type of jet has a specific purpose and operates differently than the others. All jets with the exception of the fixed jets in the foot well by the light are adjustable and can be turned on or off. They all combine to create a luxurious and invigorating hydrotherapy environment that can't be beat.

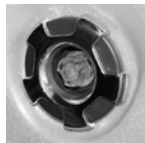
Most of the jets are removable for easy cleaning. It is not uncommon for particulates to get caught in the jets causing them to stop rotating, especially in environments where there are trees overhead or nearby. Refer to the next section for jet cleaning instructions. Most of the jets are easy to adjust or remove when the pumps are off.

NOTE: Jet styles or the cosmetic outer ring of the jet may change from time to time, but all offer similar water flow and movement, directional adjustments and/or spinning motions.



2.25" Adjustable & directional

Target areas: Leg, back, wrist. This jet allows strategic placement to group multiple jets together in a small area. These jet groupings allow the hydrotherapy to be maximized in leg, back and wrist areas for your ultimate comfort.



3.25" Adjustable & directional

Target areas: Leg, foot, neck, shoulder, back. This jet can be directed to maximize your ultimate comfort, as it is fully adjustable.



5.25" Massage with 14 flow nozzles

This massage jet delivers an extreme massage action through fourteen concentrated jets. These jets provide unbelievable hydro therapeutic relief to your body at the end of a hard day.



5.25" Deep tissue, adjustable & directional

This adjustable jet provides a high water flow for a deep tissue massage to loosen the extremely tight muscle groups.



5.25" Single nozzle, deep tissue, power rotating

This single nozzle jet rotates an extravagant swirl of water and air bubbles emulating a 'kneading' deep tissue massage.



5.25" Dual nozzle, deep tissue, power rotating

This dual nozzle jet rotates two extravagant swirls of water and air bubbles emulating a 'kneading' deep tissue massage.

Jet, air and waterfall controls

Diverter or Selection Valves

Some hot tubs may come with this valve. This valve, which is located just below the water line, is used to divert the power from the pump to one of the “Hot Seats” or the other. The valve has a 180° range from one side to the other. By moving the valve to one side, the pump will deliver all of its power to one seat. Moving the valve to the other side will shift the power to the other seat. If the valve is moved to a position anywhere between both sides, the power will be shared between both sides. The other diverter valve controls the power going to “Extreme Power Flo Jet” (foot well jet).



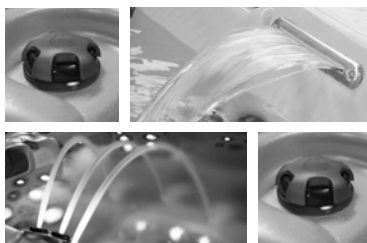
Waterfall Control and Waterfall Jet

Soothing dual waterfalls are featured on selected models. Handy turn knob controls allows for complete adjustability of flow to match your every mood.



Air Controls

These valves, which are located on the top-side, are used to control the air that flows through the jets. By introducing air into the jets, they effectively double their power. Because there are so many tub models, it would be impractical to describe which air controls correspond with what jets. Experiment by opening all the jets and turn on one motor at a time. Turn the air controls one at a time and take note as to what jets are affected. Air controls will only affect the jets that are operating.



Cleaning The Rotating Jets

Occasionally debris will get caught in the housing of the rotating jets causing the jet to either slow down the rotation or stop rotating altogether. This can easily be fixed by removing the jet and cleaning it. Always turn pumps off before removing jets. After removing the jet, they can easily be cleaned by vigorously shaking the jet while in the water. If the jet nozzle does not spin freely after doing this, move the nozzle to the outside rotating position and turn the nozzle in the rotating pattern until it starts to bind. Move the nozzle back and forth over the binding spot until it starts to free up. Shake the jet in the water again and check for free rotation

Jet Removal

Jets – To remove jets simply turn the outside ring of the jet counterclockwise approximately one quarter turn and pull jet out (see figure to right). To replace the jet, simply place the jet in the shell and turn the jet until the slots line up, then turn jet one quarter turn clockwise until secured. The jet will easily push into place and “snap” when it is locked.



MAINTENANCE

Pillows

Your spa may be equipped with high quality polyurethane foam pillows. These pillows can be removed by simply pulling them off. To replace them, line the receptacle holes up with the buttons on the spa.

Spa Cabinet Skirt

Your hot tub uses a weather-resistant and impact-resistant materials for their exterior cabinetry. These materials offer the beautiful look of tongue and groove wood cabinetry. If you have a hot tub with cedar wood, a generous coat of water base sealer has been applied at the factory. To maintain the beautiful appearance and extend the life of the cabinet, apply a coat of water base clear sealer once a year.

If access to the plumbing, motors or the controller is required, remove the screws on the service panels using a screwdriver. Panels can then be easily removed by pulling the panel away from the spa. **Note: The weather-resistant cabinet styles may change from time to time, but all have removable access panels.**



1. Unscrew and remove the two vertical trim pieces on the front of your spa below spa control panel.



2. Unscrew and remove the front cabinet panel.



3. Remove the spa panel for access to spa components. Reverse these steps to attach the spa panel.

The Shell

Your Spa is constructed with a high quality, impact resistant, thermoplastic shell that requires very little maintenance. Make sure that when you drain and clean your spa that you use a mild, nonabrasive cleaner and cleaning pads. We recommend that you use a cleaner made specifically for cleaning spas. They tend to be non-abrasive and easy to rinse off completely.



WARNING!
Do not sand
quarite
finishes.

Spa Cover

If you purchased a cover with your spa, you will want to be sure to keep it clean and protected. Spa covers exposed to the outdoors take a beating from the elements. Use a vinyl protectant to discourage deterioration caused by the UV rays from the sun. This will also minimize rain penetration.

Once a month, take the cover off the spa and use a sponge and dish soap to scrub the cover clean. Keeping the cover free of dirt and debris is the most important maintenance task for the cover. Be sure to clean the seams extra well.

Your cover comes with screws that are used to fasten the receiving end of the strap locks. Simply align the cover on the spa and stretch out the straps until they are tight. Mark the location of the strap receptacles, then fasten them to the spa skirt with the screws supplied.

Winterizing

If you live in a climate where winter temperatures are below freezing and power to the spa will be disconnected, follow these procedures for draining:



WARNING!

Damage caused
by freezing is
not covered
under warranty.

1. Add an algaecide to the water and run pumps for half an hour to evenly disperse algaecide.
2. Turn off power to the unit at the circuit breaker.
3. Drain the spa by attaching a garden hose to the open end of the drain valve (See section on 'Draining your spa'). After the spa is empty, remove the hose and leave the drain valve open.
4. For freeze protection – Access motor area by removing the outer front panels to the right and left of the controller panel and unscrew the plumbing collars from the pumps. Leave union couplings disconnected. Vacuum out lines with a wet/dry shop vacuum.
5. Soak up any excess water that drains from motors and associated plumbing with a towel. Keep water and debris out by covering with a rigid spa cover.
6. Before using the spa again, reattach pump couplings, close drain valve, and review startup instructions.

If the spa is to be used during the winter, save energy by turning the temperature down and keeping the spa covered. If the spa reaches freezing temperatures, the main pumps will automatically turn on to circulate the water.

Draining The Spa

Divine Hot Tubs™ Deluxe steps to draining your hot tub.



Locate the front panel of your spa:

The drain hose connection is located on the inside front door of your spa. The front of your spa is the side with the spa control panel that allows you to operate your spa.



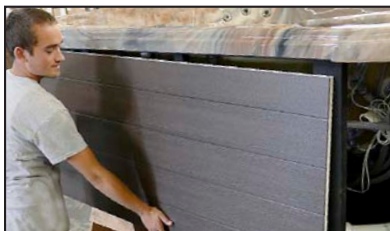
Step 1:

Unscrew and remove the two vertical trim strips on either side of the front panel. You do not need to remove any of the curved corner pieces.



Step 2:

Unscrew all the screws from the front panel with a screwdriver or a drill with a screwdriver bit.



Step 3:

Remove the front panel and set aside.



Step 4:

Locate the drain hose which has been zipped tied to a plumbing pipe (to keep secure during transportation).



Step 5:

You will need a scissors, nippers or cutting tool to cut the zip tie from the drain hose.



Step 6:
Cut the zip tie from around the drain hose.



Step 7:
Extend the drain hose outside of the spa.



Step 8: ...
Make sure the "inner ring" is hand tightened clockwise to the "closed" position.



Step 9:
Unscrew the end cap from the drain hose.



Step 10:
Screw in a garden hose. Locate the other end of the garden hose where you want your water to drain.



Step 11:
With the hose attached, turn the "inner ring" counterclockwise, then gently pull the round portion out to the "open" position (approx. 1/4") to drain your spa.

Note:
Reverse these steps before you refill your spa with water.

APPENDIX A

Troubleshooting

For error message on your topside control, see control reference from the Initial Start-up.

System Trouble

PROBLEM	PROBABLE CAUSE	REMEDY
GFCI trips (on startup)	Improper or defective wiring.	Electrician should inspect for wiring mistakes.
GFCI trips	A) Ozone generator defective.	Unplug from controller and reset breaker to verify problem.
	B) Unknown cause.	Unplug all components, then plug in one at a time until problem is identified.
	C) Heater element burned out.	Contact customer service.
System not operating	A) System lockup.	Reset power source or GFCI.
	B) Improper or defective wiring.	Electrician should inspect for wiring mistakes.
	C) House circuit breaker tripped to off position.	Reset circuit breaker.
	GFCI tripped to off position.	Reset GFCI. If still tripping, Check installation guide for proper wiring.

Controls

PROBLEM	PROBABLE CAUSE	REMEDY
System overheating, shutdown	A) Restricted filter.	Clean filter overnight with filter degreaser.
	B) Water too low.	Fill water to fill line on filter door.
Control response poor	A) Low water level.	Fill water to fill line on filter door.
	B) Dirty filter.	Clean filter overnight with filter degreaser.
	C) Closed slice valves.	Remove service panels and open slice valves.
Water won't heat	A) Same suggestions as system overheating and poor control response.	If problem persists, contact customer service.
	B) Improper or defective wiring.	Electrician should inspect for wiring mistakes.

Pumps

PROBLEM	PROBABLE CAUSE	REMEDY
Noisy pump or motor	A) Clogged filter or pump inlets.	Clean filter, filter basket and pump inlets
	B) Low water level.	Fill water to fill line on filter door.
	C) Slice valves not open.	Remove service panels and open slice valves.
	D) Debris in pump(s).	Contact customer service.
	E) Damaged or worn motor bearings.	Contact customer service.
Motor not functioning	A) Cord unplugged or damaged.	Check wiring to controller. Contact customer service.
	B) Motor overloaded.	Let motor cool for one hour, open all jets. Motor will reset automatically.
	C) Defective start switch.	Contact customer service.
	D) Blockage in line.	Contact customer service.
	E) Kink in hose.	Remove service panels and check for a kinked hose.
	F) Slice valves not open.	Remove service panels and open slice valves.
	G) Blown fuse.	Check fuses. Replace if bad.

Jets

PROBLEM	PROBABLE CAUSE	REMEDY
Rotating jets won't rotate	Debris in jet housing.	See 'Cleaning the rotating jets' section of the JETS chapter.

Water

PROBLEM	PROBABLE CAUSE	REMEDY
Water leak	A) Compression fittings (unions) have loosened.	Tighten fittings.
	B) Leak at barbed fitting.	Cut off hose clamp through the raised ear portion and reseal hose. Reconnect with a new hose clamp or a 'worm drive clamp'.

Water (Continued)

PROBLEM	PROBABLE CAUSE	REMEDY
Cloudy water	A) Clogged or blocked filter fitting.	Remove filter and clean fitting.
	B) Dirty filter.	Clean filter.
	C) Poor water chemistry.	Balance water.
	D) Insufficient filter time.	Increase filter time to a minimum 4 hours per filter cycle.
	E) Particles too small for filter.	Add flocculent and clarifier.
	F) High pH and / or alkalinity.	Adjust pH with pH Down.
	G) Trace metals in water.	Use metal remover.
	H) Too much clarifier used.	Wait to be filtered out.
Green water	A) Algae.	Add algaecide, superchlorinate and add Oxy Shock. Check ozonator.
	B) Metal corrosion in equipment.	PH too low, adjust to 7.2 to 7.6 with pH Up.
Brown water	Iron present in water.	Superchlorinate and add Oxy Shock. Add metal remover.
Blue-green water	Copper present in water. Usually only found in spas with gas heaters.	PH too low, adjust to 7.2 to 7.6 with pH Up.
Bleached hair/bathing suits. Eye irritation.	Too much chlorine.	Allow to dissipate. Add Oxy Shock.
Bad smell, eye & skin irritation, complaints of too much chlorine.	Too much chloramines, not enough free chlorine in water.	Superchlorinate and maintain 3 - 5 PPM. Add Oxy Shock.
Scale formation on walls and equipment.	A) High pH.	Reduce to 7.2 to 7.6 pH.
	B) Calcium too high.	Drain 20% to 40% of tub and refill with "soft" water. Maintain at 150 to 400 PPM.
pH fluctuates radically	Total alkalinity out of balance.	Balance alkalinity.

FAQ'S - FREQUENTLY ASKED QUESTIONS

Q: Why is my spa not heating?

A: Check which mode you are in: standard, sleep or economy. See 'Topside Control'. Standard and Economy mode will allow temperature to drop 10 degrees. Sleep mode will allow temperature to drop 20 degrees.

Q: The system is receiving proper voltage, why doesn't anything function?

A: 1. Check for blown fuses, burn marks or signs of tampering in the box.
2. Power down the spa, and reset the GFCI. If problem persists, contact customer service for tech support.

Q: What does the ozone generator do?

A: An ozonator purifies naturally. It produces an active oxygen that attacks bacteria at microscopic levels reducing the amount of chemicals needed for perfect water. Ozone is also useful in coagulation of metals and other contaminants found in some areas.

Q: How do I know if my ozonator is working?

A: During a filter cycle, a green LED light on the ozonator will light and bubbles will move through the clear water line that connects to the ozonator.

Q: How do I fill the spa with water?

A: 1. Place your garden hose into the filter housing. This will ensure that air bubbles are removed from the lines while you fill the spa.
2. Turn the water on so that most of the water enters through the filter chamber.
3. Fill the water to the proper level – half way up the filter housing.

Q: How do I drain the spa?

A: See instructions 'Draining The Spa'.
> Drain Location: The drain is located in the center of the floor directly under the topside control panel. This is the innermost closed position.
1. Remove Cap. Using your hand, unscrew the cap to the drain.
2. Attach Hose. Screw on a garden hose. Place the other end of the hose in the area you want the water to drain to.
3. Open Drain. With the hose attached, turn the round portion of the drain counterclockwise until it stops, then gently pull the round portion (with hose attached) out until you hear a click (approx 1/4").
4. Close Drain. When you are done draining your spa, reverse these steps to close the drain (step 3), remove the hose (step 2), screw on the cap (step 1).

WI-FI MODULE - SUPPLEMENT

Note: This only applies for models equipped with this feature.

For more info, please visit:

Visit YouTube for videos at <https://www.youtube.com/user/balboawatergroup/featured> and learn how to connect bwa™ to your Wi-Fi network or download our user guide here <http://www.balboawatergroup.com/bwa>

bwa™ App Installation 1-2-3 Easy Installation Guide

What You Need

1



A smart device
(Android™, iPhone® or iPad®)



Wireless Internet Connection
(3G, 4G, or Wi-Fi hot spots)

Download App

2

On a Android™ Device

Scan QR Code To Go
Directly To Google Play



Open Google Play Store



Search for
"Balboa Water Group"



Download the App

On a iPhone® or iPad®

Scan QR Code To Go
Directly To The App Store



Open The App Store



Search for
"Balboa Water Group"



Download the App

Connecting to Your Wi-Fi

3



1. Connect to your home Wi-Fi.
2. Visit YouTube for videos at <https://www.youtube.com/user/balboawatergroup/featured> and learn how to connect bwa™ to your Wi-Fi network or download our users guide here <http://www.balboawatergroup.com/bwa>.

0315BWA-Wi-Fi

©2015 Balboa Water Group. Single Source Solution. All rights reserved.
1382 Bell Avenue | Tustin, CA 92780 | p 714.384.0384 | www.balboawater.com
Balboa has the right to change technical data without notice. iPhone and iPad are registered trademark of Apple Inc. Android is a trademark of Google Inc.

BALBOA
water group

BLUETOOTH PAIRING GUIDE - SUPPLEMENT

Note: This only applies for models equipped with this feature.

CS-P80A150V4BBT BLUETOOTH SUBWOOFER

(SPA BULLET/MARINAVOX/VIDSONIX)

WITH zVX-CD3H2 HOUSING DOCK

Stores modern (larger) size smart phones. Switch between wired AUX input and Bluetooth. Lighted system power switch. Smoked colored retractable door.

Bluetooth Protocols: A2DP Stereo, HSP, HFP, AVRCP, OPP, PBAP

Bluetooth Version: 2.1

V4BBT AMP Specs (150Wmax) -

Subwoofer: 80Wmax (35Wrms)

External Speaker Output (X2): 35Wmax (18Wrms)

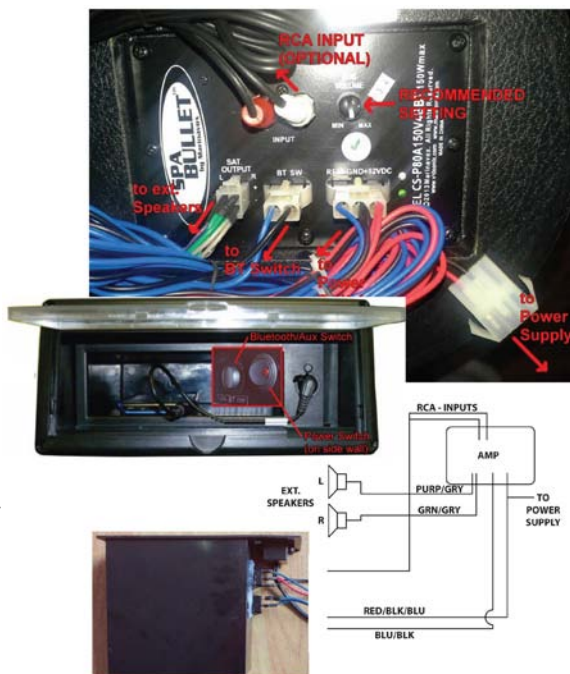
SYSTEM MUST BE USED WITH:

- POWER SWITCH – RED LIGHT ON -> ON
- BLUETOOTH SWITCH – BLUE LIGHT ON -> BT ON
- (BLUE LIGHT OFF -> CAN USE WITH RCA JACK INPUT)

BT CODE FOR PAIRING “0000”

OPERATIONAL NOTES:

- SYSTEM WILL MAKE A SERIES OF TONAL “BEEPS” INDICATING THE BLUETOOTH FUNCTION HAS TURNED ON AND IS SEARCHING FOR DEVICE PAIRING.
- MUST CONNECT/PAIR VIA DEVICE (i.e. Smart-Phone) BLUETOOTH SETTINGS AND ENTER BT CODE ABOVE.
- WITH NO MUSIC OR SOUNDS PLAYING, SYSTEM MAY EXHIBIT LOW LEVEL BACKGROUND NOISE DUE TO BT SEARCH FUNCTION. TURN THE POWER SWITCH “OFF” WHEN NOT IN USE.



BT1120513REV4
BT-INSTR-CD3H2-2014.doc

NOTES:

This image shows a full page of white paper with horizontal dashed lines, typical of primary-ruled notebook paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

9-1-16

Divine Hot Tubs™ Deluxe

LIMITED WARRANTY

Every Divine Hot Tubs™ Deluxe spa is manufactured to our exacting standards and requirements.

Your long-term enjoyment of your hot tub is our ultimate goal. Therefore, we are proud to provide these comprehensive warranties with our products.

5 yr.
Structural
Warranty

2 yr.
Equipment
Warranty

1 yr.
Hardcover
Warranty

5-YEAR SPA STRUCTURAL

Divine Hot Tubs™ Deluxe structural system (shell surface, cabinet integrity*, pillar supports and floor base) are warranted against water loss occurring from defects in material or workmanship for five years from the original purchase date. Divine Hot Tubs™ Deluxe also warrants their spa shell interior surface against blistering, cracking and delamination for five years from the original purchase date.

2-YEAR EQUIPMENT

Divine Hot Tubs™ Deluxe warrants the operating plumbing and equipment against defects in workmanship for two years from the original purchase date. This includes two year warranty for authorized labor.

1-YEAR INSULATED HARDCOVER

Divine Hot Tubs™ Deluxe warrants the insulated hardcover against defects in workmanship for one year from the original purchase date.



D E L U X E

live better | feel better

"We reserve the right to improve our product without notice"

* Does not include the surface color finish (stain or paint).

LIMITED WARRANTY DETAILS

Structural System:	5-Year Warranty (shell surface, cabinet integrity*, pillar supports and floor base)
Plumbing & Equipment:	2-Year Warranty
Authorized Labor:	2-Year Warranty
Hardcover:	1-Year Warranty

HOW THE WARRANTY WORKS

In the event of a covered defect under this Limited Warranty, Divine Hot Tubs™ Deluxe Series or its agent will make repair in accordance with conditions contained in this Limited Warranty. The homeowner is required to provide full access to the cabinet's entire service side panels, without any obstructions, to service all internal components. There will be no charge for parts or labor to repair the spa. There may be repair person travel costs if the spa is located outside the normal service area. If the covered defect cannot be repaired, as determined by Divine Hot Tubs™ Deluxe Series, we reserve the right to provide a replacement exchange spa of equal value. The spa owner will be responsible for the cost of the removal and installation of the replacement spa. Divine Hot Tubs™ Deluxe Series must be contacted in advance for packaging and shipping instructions. The liability of Divine Hot Tubs™ Deluxe Series under this Limited Warranty, if any, shall not exceed the original amount paid for the defective product. It is the responsibility of the spa owner to notify the factory in writing immediately upon discovery of a warranty claim. Neglecting this notification may void your claim.

LIABILITY LIMITATIONS

This warranty does not cover any defects, malfunctions or damages that result from improper installation, commercial use or improper maintenance. The spa shell is made of high quality impact resistant thermoplastic. The spa surface cannot be subjected to periods of direct sunlight without being filled with water. Exposure to direct sun can cause deformation of the spa surface. Such exposure will void the warranty. This Limited Warranty is limited to the original owner, installed at the original site. Any requests for change of site location must first be approved in writing by Divine Hot Tubs™ Deluxe Series. This Limited Warranty is void if the spa has been altered, neglected, abused or misused or if any repairs have been made by an unauthorized agent. Misuse and abuse include any installation, maintenance or operation not in accordance with the owner's operations manual. Divine Hot Tubs™ Deluxe Series is not responsible for incidental or consequential damages of any nature, acts of God or other causes beyond the control of Divine Hot Tubs™ Deluxe Series. All warranties, implied or otherwise, including implied warranties for merchantability and fitness for a particular purpose, are limited to the terms set forth in this warranty. Exterior structural integrity of the cabinet is warranted to be free of defects at time of delivery and for five years thereafter*. No representative of Divine Hot Tubs™ Deluxe Series, not its agents, distributors or dealers, has any authority to alter in any manner the terms of this Limited Warranty and Divine Hot Tubs™ Deluxe Series is not responsible for any undertaking, representation of warranty made by any other person beyond those expressly set forth in this warranty. Exclusions: fuses, light bulbs, spa pillows, filter cartridges, music/media/sound system such as iPod/MP3/FM docking stations (including wireless, Bluetooth, Wi-Fi, speakers, tweeters, subwoofer) – which are covered under their separate manufacturer's warranty.

* Does not include the surface color finish (stain or paint).

Standard features, accessories, options, components, quantities, styles, sizes, colors, brand names, models and specifications may be improved on or changed without notice.

Customer Service Center

www.divinehottubsdeluxe.com

Toll Free 1-877-483-1606

Email: customerservice@divinehottubsdeluxe.com

Customer Service Hours:

Mon - Fri 8:00 am - 5:00 pm

United States, Pacific Standard Time (PST)



P.O. Box 2140 | Woodinville, WA 98072 | www.divinehottubsdeluxe.com

