



# **PORTABLE BAPTISTRY**

## **OPERATION & CARE GUIDE**

THIS GUIDE IS INTENDED TO SUPPLY YOU WITH THE INFORMATION TO GET THE MOST FROM YOUR BAPTISTRY. WITH PROPER CARE AND REGULAR MAINTENANCE, YOUR BAPTISTRY WILL PROVIDE YOU WITH YEARS OF TROUBLE FREE USE.

# IMPORTANT SAFETY INSTRUCTIONS

READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY

Clearly understand the specifics of safe operation and proper maintenance of your baptistry. Baptistries do come with serious responsibility. Establish rules and enforce them. It is your responsibility to be sure that the baptistry users will use the unit safely.

## INSTALLATION SAFETY NOTES

- WARNING:** Turning the unit equipment switch **off** does not prevent risk of shock. Power in the equipment area is still live until the main plug is removed from the electrical outlet.
- WIRING:** Wiring must be done by a licensed electrical contractor. The unit is equipped with a GFI (ground fault interrupter) at the end of the unit's power cord. Wiring must meet the requirements of National Electric Code, ANSI/NFPA70-1999 and any other applicable state and local codes.
- ELECTRICAL SHOCK:** Never allow any electrical appliance or device within reach (5' to 10') of unit. Electrical appliances include, but not limited to lighting, radio, TV, yard tools, extension cords or any plug-in devices.
- EQUIPMENT MAINTENANCE:** Never perform any work on the spa equipment or electrical components with out first unplugging the main plug from the wall outlet. It is recommended that a qualified Royal Spa Service Tech do any unit equipment repairs. Any problems with Breakers, GFI, main wire or disconnect should be serviced by a licensed electrician.
- UNIT BASE:** The unit's base/floor must be designed to hold the weight of the unit, water, and occupant. **Base** must be level and designed to prevent settling. **Base** must meet any applicable local and state codes.

## MAINTENANCE SAFETY NOTES

- REPAIRS:** Always contact Royal Spa Service and Repair Department before attempting electrical or mechanical maintenance / repairs.
- WATER BALANCE:** Proper water balance must be maintained to prevent damage to the unit and equipment, and to keep the water a comfortable neutral environment for bathers.
- BACTERIA:** Proper use of sanitizers after use and at weekly intervals is recommended to maintain safe and bacteria free baptistry water.
- CHEMICAL LEVELS:** Excessive chemical levels or the lack of chemicals continue to be the main cause of baptistry damage, strong and unpleasant odor, and bather discomfort.
- CHEMICAL HANDLING:** Always use caution when handling chemicals. Water treatment chemicals are **concentrated**, poisonous if swallowed or inhaled, corrosive to the touch and can cause burns to the skin and eyes. It is recommended to wear eye protection when working with chemicals and immediately rinse off any chemical that comes in contact with your skin.
- CHEMICAL STORAGE:** Always store chemicals out of the reach of children. Make all family members aware of the chemicals potential dangers. Store chemicals in a dry, cool, safe place. NEVER mix chemicals together! REMEMBER, chemicals are made to be put into water. NEVER add water to the chemicals.

## SPA USE SAFETY NOTES

- BAPTISTRY COVER:** The baptistry cover should always be kept closed when not in use. When the baptistry is in use the cover should be removed from unit or left fully open. NEVER use baptistry with the cover partially open or in a position that it can fall on someone in the baptistry.

# BAPTISTRY USE SAFETY NOTES

- HYPERTHERMIA:** Hyperthermia occurs when the body's internal temperature increases a few degrees above normal body temperature of 98.6°f (37°C). The symptoms include lethargy, drowsiness, dizziness, and fainting. **PREVENTION-** reduce the water temperature, reduce the length of time in the water or both.
- SICKNESS:** It is not recommended that any person enter a unit with open wounds, sores, viral or infectious diseases.
- SUCTION FITTINGS:** Fittings/grates in the bottom foot area of the unit are designed to pull in water at a safe suction/flow rate. It is still recommended to keep bathers hair away from this area for added safety. If any of these suction grates break or crack, discontinue use and call Royal Spa Service for repair.
- MEDICATION:** Soaking in hot water may intensify or exaggerate the effects of many medications. You should contact your physician for his recommendations prior to use of the unit.
- ALCOHOL OR DRUGS:** Soaking in hot water will intensify or exaggerate the effects of alcohol and most drugs. The use of alcohol or drugs could make one unable to get out of the water or cause unconsciousness and drowning. It is recommended that you avoid consuming alcohol or drugs before or while using a unit.
- TIME LIMITS:** Always observe a reasonable time limit and temperature while using the unit. Remind of these limits.
- WATER TEMPERATURE:** Temperatures should not exceed 104°f (40°C). Water temperatures between 99° and 104° are considered safe for a **healthy** adult. Lower temperatures are recommended for people with some health conditions when use exceeds 10 minutes. People with any health condition, including pregnancy, should consult their physician prior to use.
- CPR:** It is a good idea to have at least one responsible person who is trained in artificial respiration and/or cardiopulmonary resuscitation (CPR).

## CHILDREN'S SAFETY AND YOUR BAPTISTRY

- ACCIDENTAL DROWNING:** Extreme caution must be exercised to prevent unauthorized use or access to spa by unsupervised children. The spa cover must remain closed and locked when not in use.
- COVER:** Never allow a child to stand or play on the baptistry cover. Baptistry covers are not designed to safely hold the weight of a child and could present a extreme danger if it cracked or broke thru.
- WATER TEMPERATURE:** Should remain at or below normal body temperature (98.6°f) when a child's time in the unit exceeds 5 minutes. Please consult their physician prior to them entering baptistry.
- CONDUCT:** There should be no playing, wrestling or rough-housing in, on or around the unit. Never allow children to walk around the top area, jump or dive into the baptistry. Children should always keep their heads above the water unless supervised by an adult.

## RESPONSIBILITY

The responsibility of proper maintenance, conduct, use, and above all safety is all in your hands as a baptistry owner. The responsibility of informing your guests and their children of baptistry rules and safety concerns is also your responsibility and a very important prevention tool.

# USING CHEMICALS

The chemicals needed for your baptistry help make it clean, disinfected and more attractive to use. But remember, these chemicals are potentially dangerous and may present some hazards if not used properly. Carefully follow the manufacturer's instructions for the use and storage of chemicals.

In general, here are some tips for chemical usage and storage: Before using chemicals, read the labels and directions carefully. Follow label use instructions.

Keep all chemicals out of the reach of children.

## Storage & Usage of Your Chemicals

- Chemicals for test kits should be replaced every year.
- Keep the original lids on all chemical containers and make sure the lids are closed tightly when not in use.
- Do not stack different chemicals on top of one another.
- Store your chemicals in a clean, cool, dry and well ventilated area preferably off the floor to prevent contamination from other materials. Keep them away from chemicals and equipment used for garden and lawn maintenance.
- Do not store your chemicals where other flammable items may mix with them. For example, a mixture of these chemicals and fertilizer can cause a fire or explosion.
- Keep liquid chemicals away from dry chemicals. Keep apart chemicals which are different forms of oxidizing compounds. Physically separate all different forms of chemicals.
- Do not inhale dust or fumes from any chemicals. If necessary, use proper protective devices for breathing, handling and eye protection. Promptly wash off any chemical residues which get on your skin.
- Never reuse old chemical containers unless specified by the manufacturer.
- If you have any questions regarding safe handling, storage or use of chemicals, contact the manufacturers.
- Wash out empty disinfectant containers before disposing to eliminate danger of fire, explosion or poisoning
- Carefully clean up any spilled chemicals with large amounts of water, to dilute and wash away the chemicals. Disinfectants and pH adjustment chemicals can usually be sent to the sewer with large quantities of water, since they are intended for use at low levels.

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# USING CHEMICALS

## Storage & Usage of Your Chemicals (Continued...)

- Always add the chemicals directly to the water, either in a suitable feeder, distributed across the surface of the water or diluted and poured into the water. Always add chemicals to water. Never add water to chemicals. Follow label use instructions.
- When preparing water solutions for feeder application, pour the chemical slowly into the appropriate amount of water, stirring constantly to provide mixing and dilutions.
- Never add chemicals to the baptistry water while people are using the facility/unit.
- Test the water in your baptistry with a reliable test kit on a schedule recommended by your water chemistry professional. Add the necessary chemicals according to the test results and the manufacturer's instructions. In the hot water environments, disinfectants may rapidly break up and spread out, requiring more frequent water testing. Follow your manufacturer's instructions in this regard. The more people who use the facility/unit, the more frequently you should test the water.

**Notes:**

# INITIAL START UP

1. Fill tub with water from a garden hose.
2. Turn the thermostat **OFF** - at Equipment System inside the cabinet. "Off" is achieved by turning the thermostat knob counter clockwise until it stops.
3. Turn power on by plugging the unit into the wall outlet and pressing the "Reset" button located on the plug.
4. Be sure the Hi-Limit Switch is pushed **IN** on Equipment System. It is a small black button located on the face of the control box inside the cabinet.
5. Check to be sure the Circulating Pump is operating (water flowing from small jets in foot-well). One jet may be the Ozonator Jet and not appear to be working. You can also check the clear tube coming out of the small Circulating Pump, (at Equipment System inside of the cabinet) and going into the Heater Housing, to see if the water is flowing properly.
6. Allow the jets to run for 2-3 minutes with the heat still in the **OFF** position.
7. Check to be sure there are no air locks. (**WARNING** Air locks can cause instantaneous heater failure, known as "dry-firing", and this is **not** covered under warranty)
8. Check for water leaks at Couplers on the heater housing and hand tighten if necessary.
9. Turn temperature on the Equipment System to desired level. Periodically check temperature of water to until desired temperature is reached. Reduce thermostat setting until heater turns off. Keep the cover on the unit to ensure the water heats properly. Not having the cover on the unit may prevent the unit from heating up.
10. Check Alkalinity and PH with test strips or test kit and adjust accordingly.
11. Add initial chemicals according to the "Portable Baptistry Chemistry" section of this manual.
12. Do Timely Maintenance as directed, and **ENJOY YOUR BAPTISTRY!**
13. Contact your local Royal Spa Representative to answer any questions that you may have.

# Portable Baptistry Chemistry

## Weekly & Start-Up:

- .1/2 Ounce Stain-N-Scale Defense
- .1 Ounce Shock Out
- .1 Ounce of Metal Protector

## Special Notes:

- Small amounts of liquid or granular chlorine may be needed in a high-use situation.
- 1 Ounce of Scum Out may be needed if there is an oily ring at the water line.
- 1 Ounce of Liquid or a 1/2 ounce of Granular Chlorine can be added if water becomes cloudy. Be sure to leave the cover off of the unit for 1 hour after adding any chlorine product.
- The water needs to be drained and re-filled frequently since there is no filter on the system.
- It is recommended to drain & refill the unit after a heavy weekend of use.
- You can leave the unit empty for as long a necessary.
- If water is going to be left in the unit for over one week, then the pH of the water needs to be balanced.

# Portable Baptistry Mechanics

## Electrical:

This 110 volt unit comes equipped with a Ground Fault Circuit Interrupter built into it's power cord. It will plug into any 110 volt outlet. You may turn the unit on/off by using the "Test" and "Reset" buttons located on the unit's plug. You may also simply unplug the unit from the wall to turn the unit "OFF". The use of an extension cord is strictly prohibited. You should plug the unit directly into the wall outlet. There is a small hole in the base of the Baptistry's equipment area to run the plug and cord through to reach the power outlet. Do not turn on the unit unless it is completely filled with water.

## Circulation: (Pump)

This unit comes equipped with a small circulating pump that runs the entire time the unit is plugged in and turned on. Do not turn on the unit unless the baptistry is filled with an adequate amount of water. Running the pump without water will cause damage to the system.

## Ozone:

This unit comes equipped with an electrical purifier know as an Ozonator. The Ozonator helps maintain water clarity and cleanliness. The Ozonator runs automatically when the unit is filled and turned on. There is no settings for this unit.

## Heater:

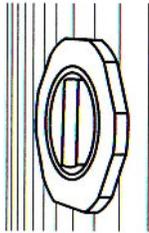
This unit comes equipped with an electrical heater that is controlled by a thermostat control knob located in the equipment area. Simply turn the dial to a desired temperature and the heater will automatically turn on and off to maintain the desired temperature when unit is filled and turned on. Be sure that the thermostat is turned to the coldest setting before turning the unit "ON". Completely fill the unit, plug it in (turn it on) and establish water flow through the pumping system before turning the thermostat "Up" to a warmer setting to avoid damaging the heating system.

## Draining & Refilling:

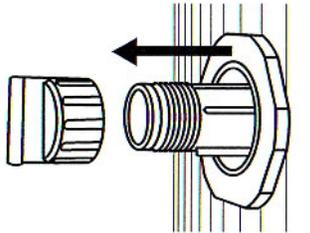
Filling the spa is most simply done with a garden hose. Fill the unit at least 6 (six) inches above the seating area before turning on any equipment. Be sure the drain is closed before filling. Secure the drain by before refilling.

***Draining instructions are on the next page.***

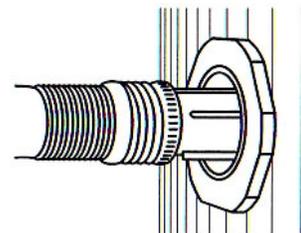
# Portable Baptistry Draining



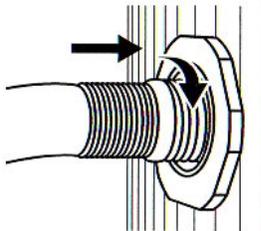
1. Inset closed position



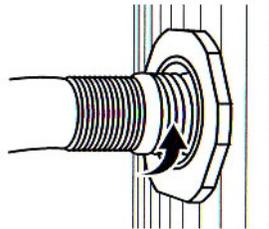
2. Extended closed position (pull out to fully extended position and remove cap); place cap in safe place.



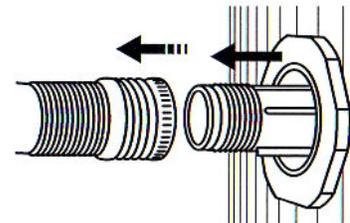
3. Full extended closed position (attach garden hose in the full extended closed position).



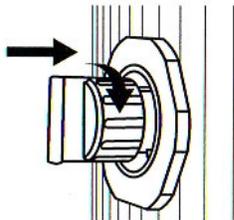
4. Open position for draining (turn hose and fitting  $\frac{1}{4}$  turn clockwise and insert  $\frac{1}{2}$  way to open position for draining).



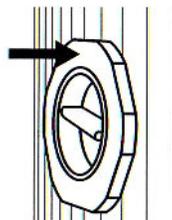
5. Open position for draining (turn hose and fitting  $\frac{1}{4}$  turn counter clockwise and pull out to full extended closed position).



6. Full closed extended position (remove hose and replace cap).



7. With replaced cap screwed on, turn  $\frac{1}{4}$  turn clockwise and push in all the way to inserted closed position.



8. Closed inserted position.

# WATER CHEMISTRY 101

## **Water Quality Maintenance**

Maintaining the quality of the water within specified limits will enhance your enjoyment and prolong the life of the unit's equipment system and other components. It is a fairly simple task, but it requires regular attention because the water chemistry involved is a balance of several factors. There is no simple formula, and there is no avoiding it. A careless attitude in regard to water maintenance will result in poor and potentially unhealthful conditions for soaking and even damage to your unit. For specific guidance on maintaining water quality, consult your authorized Royal Spa dealer who can recommend the appropriate chemical products for sanitizing and maintaining your spa.

## **pH Control**

pH is a measure of relative acidity or alkalinity of water and is measured on a scale of 0 to 14. The midpoint of 7 is said to be neutral, above which is alkaline and below which is acidic. In the water, IT IS VERY IMPORTANT TO MAINTAIN a slightly alkaline condition of 7.2 to 7.6. Problems become proportionately severe the further outside of this range the water gets. A low pH will be corrosive to metals in the equipment system. A high pH will cause minerals to deposit on the interior surface of the unit and its components (scaling). In addition, the ability of the sanitizers to keep the water clean is severely affected as the pH moves beyond the ideal range. That is why most all water test kits contain a measure for pH as well as the sanitizer.

## **Total Alkalinity**

Total Alkalinity refers to the ability of the water to resist a change in pH. The key purpose total alkalinity serves is to help manage or control the pH in the water. It does this by acting as a buffer so that when materials are added to a spa that would cause the pH to go up or down these changes are controlled and do not result in severe changes to the water's balance. Total alkalinity is measured in parts per million (ppm) using a total alkalinity test kit or test strip. Total alkalinity is best kept in the range of 80-120 ppm. When the value is less than 80 ppm, the water can become aggressive, and the pH can swing easily up, down and back again. If the value is higher than 120 ppm, the water can become cloudy and scale forming and the pH will tend to drift upward.

## **Sanitizing**

To destroy bacteria and organic compounds in the water, a sanitizer must be used regularly. Chlorine and Bromine are the two most popular sanitizers used. Shock Out is another sanitizer used that also enhances the effectiveness of Bromine and Chlorine. Many other additives are available for your water. Some are necessary to compensate for out-of-balance water (pH/Alk Up & pH/Alk Down), some aid in cosmetic water treatment (Spa Brite & Foam Gone) and others simply alter the feel or smell of the water (Scum Out). Your authorized Royal Spa Dealer can advise you on the use of these additives.

## **Optional Ozone Water Purifier**

If you have elected to have your spa equipped with the optional ozone water purifier you will find that your water stays fresh and clear with significantly less chemical usage. You will also probably be able to go longer between complete water changes.

# WATER CHEMICALS

<b>Metal Protector</b>	A chemical that will prevent iron or metal stains. This chemical is added to the spa water when the spa is filled for the first time or when refilled. (Recommended for weekly use.)
<b>pH/Alkalinity Down</b>	Lowers the pH of the spa water (active ingredients, sodium Bisulfate 100%).
<b>pH/Alkalinity Up</b>	Raises pH, (active ingredient sodium carbonate)& Raises total alkalinity of spa water-initial component of water balance prevents pH bounce and deterioration of spa surfaces, fittings from alkalinity.
<b>Stain &amp; Scale</b>	Stain and scale preventative and clarification eliminates water discoloration caused by mineral and scale deposits in spa water. Also helps filter remove suspended particles that cause cloudiness.
<b>Shock Out</b>	Oxidizes contaminants such as ammonia, perspiration and suntan lotion. Increases the clarity of the water and reduces eye burn. When used with chlorine, it will remove chloramines, which cause "chlorine odor" and enhance the sanitizing effectiveness .
<b>Brom-Tabs</b>	Disinfects spa water keeping it clean, clear and free of odor.
<b>Granulated Chlorine</b>	A concentrated compound prepared to destroy and control the growth of bacteria and algae in spas. Aids in spa water clarity.
<b>Scum Out</b>	An environmentally friendly water cleaner. Nature's own enzymes help eradicate grease, oil and scum build up caused by body oils, suntan oils, and other contaminants. This chemical will not affect water balance.
<b>Foam Gone</b>	An effective anti-foam agent and preventative specifically prepared for use in spas. It safely eliminates foaming from water due to high aeration and soap/detergents.
<b>Spa-Brite</b>	Specially formulated preparation that resolves clarity and refreshes murky water. It increases the efficiency of spa filters by trapping microscopic particles suspended in cloudy water.
<b>Spray &amp; Rinse</b>	Removes minerals and other debris from filter elements. Extends filter life.
<b>In Spa ration</b>	Blend of fragrance formulated especially for spas. Leaves your skin soft and moisturized has no alcohol and is water-soluble.
<b>Go Brom</b>	Develops a bromine reserve in spa water. It is used to prevent the formation of unwanted compounds when using Bromine Tabs—use on each fill of your spa.
<b>Magic Lube</b>	Silicone based lubricant and sealer formulated for use under the most adverse conditions including salt water. Extremely durable, non-hardening and non-carbonizing used on most metals, rubbers, and plastic water proof and chemical

**AVAILABLE ONLINE AT:**

**[www.royalspa.com](http://www.royalspa.com)**