

FROG Serene Floating System Operating Instructions

FROG Serene sanitizes your hot tub by creating



- Cleaner** because it kills bacteria two ways
- Clearer** because it helps keep pH balanced
- Softer** because there's up to 50%* less bromine
- Easier** with pre-filled cartridges for no mess, or measuring

* Compared to the minimum ANSI recommended bromine level of 2.0 in a residential hot tub.

Register your FROG Serene System at frogproducts.com

Step 1: Prepare the Hot Tub

- 1. Fill hot tub with fresh water.**
If using source water that is high in iron or other metals, see your dealer before filling the hot tub. It may require the use of a metal control product.



- 2. Clean or replace filter cartridges when dirty.** (Follow manufacturer's instructions).



- 3. Balance water by following STEPS a – d in order.**

IMPORTANT: Always follow printed instructions on the balancing chemical packages. Add balancing chemicals in small increments one at a time with the jets on and wait 6 hours before testing again and adding any additional balancing chemicals.

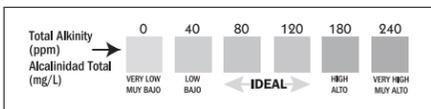
Water Balance Guidelines

pH:	7.2 - 7.8
Total Alkalinity:	80 - 120 ppm
Calcium Hardness:	150-250
Total Dissolved Solids:	<1500

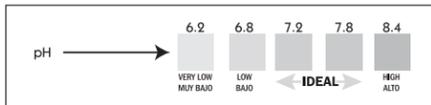
- a.** Take a water sample from the hot tub and dip a FROG Test Strip into it.



- b.** Look at the **Total Alkalinity** reading first. Adjustments should be made to bring the Total Alkalinity in the **range of 80 – 120 ppm** prior to making any adjustments to pH even if it throws pH off further.



- c.** After Total Alkalinity is in range, **test for pH**. It should be **between 7.2 and 7.8**. If higher or lower, add a pH adjuster.



- d.** Lastly **test for Calcium Hardness**. It should be **between 150 and 250 ppm**. If higher, partially drain the hot tub (about 6 inches) and fill with water low in calcium. If lower, add Calcium Increaser.

If balancing takes longer than 2 days, shock the water and maintain a chlorine level while continuing balancing.

- 4. Very Important!** Establish an initial residual of 1.0-2.0 ppm bromine or chlorine. For best results use FROG Jump Start® (EPA Reg. #53735-12) that quickly dissolves with an effervescent action – one packet per 600 gallons. Do not use a non-chlorine shock. Confirm proper residual amount before employing FROG Serene Floating System.



- 5.** Heat water to the manufacturer's recommended temperature.

Manufactured by: **King Technology**
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Made in U.S.A. Patents: kingtechnology.com/IP

EPA Est. No.: 071209-AZ-001 E083018553091843N 20-48-0173

Learn more at frogproducts.com or call 800.222.0169

Step 2: Set the Cartridges

- 1.** The FROG Serene Floating System has two replaceable cartridges.
The combination provides the **Fresh Mineral Water®** benefits of **cleaner, clearer and softer water that's easier to take care of.**
Blue = FROG Serene Mineral Cartridge
Yellow = FROG Serene Bromine Cartridge



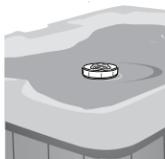
Set the mineral cartridge to #6 (hold the bottom and turn the top until 6 appears in the setting window). No further adjustments are necessary for the life of this cartridge.

Step 3: Put the System to Work

- 1.** Insert both cartridges into the green floating holder by pushing them into the openings until they stay in place.



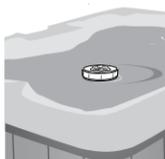
- 2.** Let the Floating System free-float in the hot tub.



- 3.** When using the hot tub, simply remove FROG Serene Floating System, drain the water into the hot tub and invert on the side of the hot tub.



- 4. REMEMBER TO RETURN FROG SERENE FLOATING SYSTEM TO HOT TUB WHEN YOU GET OUT!**



Step 4: Routine Hot Tub Care

- 1.** Drain and refill hot tub as directed by your hot tub manufacturer or every four months when FROG minerals need to be replaced.



- 2.** Run filtration system as recommended by your hot tub manufacturer.



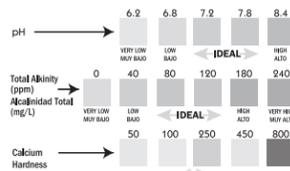
- 3.** Regularly test water. Maintain pH, Total Alkalinity and Calcium Hardness levels with the precise FROG Test Strips.



NOTE: Water balance is affected by bather load, chemical usage, evaporation and the makeup of source water so maintaining water balance regularly is important.

Troubleshooting

• Cloudy Water or Low-Bromine Levels



- Check water balance. Ensure pH, Total Alkalinity and Calcium Hardness are correct.

- Check FROG Serene Bromine Cartridge. If empty, replace following directions in Step 3: Put the System to Work.

- Make sure your FROG Serene Mineral Cartridge is not older than 4 months as it will be ineffective and more bromine will be required to maintain the hot tub until you replace the minerals.

- Shock the hot tub with a non-chlorine shock to regain clarity.

- 3.** Set the bromine cartridge to the setting that matches your hot tub size in gallons.



System Setting Chart	
200 Gallons	0
250 Gallons	1
300 Gallons	1
350 Gallons	2
400 Gallons	3
450 Gallons	4
500 Gallons	5
550 Gallons	5
600 Gallons	6

- 4.** For one week test the water daily with FROG Test Strips and adjust cartridge up or down by 1 setting per day until the color on the test strip matches the ideal FROG bromine range of 1.0 to 2.0 ppm.



Replacing Cartridges

Replace blue **MINERAL CARTRIDGE** every four months.



- a.** Discard it in the trash even if it appears to have media left inside.
- b.** Don't attempt to reuse: the minerals are spent after 4 months.

Replace yellow **BROMINE CARTRIDGE** when empty.



- a.** Life of cartridge varies depending on hot tub size and number of users.



- b.** Drain water from cartridge to ensure it is empty.



- c.** Discard in trash or offer for recycling if available.

- 4.** Maintain at least 1.0 ppm bromine level at all times.
Note: Bromine or chlorine levels are lower only when used with FROG minerals.



- 5.** Shock the hot tub once a week or as needed with a non-chlorine shock.



Heavily used hot tubs may require more frequent shocking.

- 6.** Replace mineral cartridge and bromine cartridges as directed in Step 3.



• High Bromine Levels



- Remove the system from the hot tub until the bromine level is down to 2.0 ppm.



- Lower the Bromine Cartridge setting by 1 number and replace system in the hot tub.



- Test in 24 hours. Repeat process until bromine level stays within 1.0 to 2.0 ppm.