FROG @ease

Floating Sanitizing System Operating Instructions
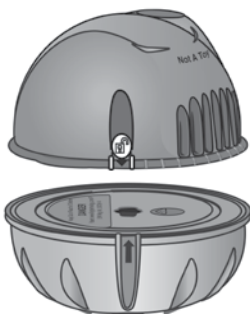
FROG® @ease® is the hot tub sanitizing system⁺ that takes the guesswork out of water care so you always feel at ease while enjoying your hot tub.

⚠ This is not a toy. For sanitizing hot tubs only! Keep out of reach of children when using the hot tub.

The FROG @ease Floating System has two replaceable cartridges.

The combination provides the Fresh Mineral Water®∞ benefits of **cleaner, clearer, softer**® water that's easier to take care of.

TOP HALF (Blue)
FROG @ease Mineral Cartridge

BOTTOM HALF (Silver)
FROG @ease SmartChlor® Cartridge

FROG @ease Mineral Cartridge

Active Ingredient:
Silver Chloride 0.5%
Other Ingredients: 99.5%
Total: 100.0%

KEEP OUT OF REACH OF CHILDREN   CAUTION

DIRECTIONS FOR USE: It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. For use in hot tubs up to 600 gallons. Use with the FROG @ease SmartChlor Cartridge. Ensure all hot tub equipment is working properly. Operate the pump and filter as recommended by your hot tub manufacturer. Clean filter following manufacturer's directions. May be used with a previously filled hot tub unless it was sanitized with bromine or biguanides or the cyanuric acid level is higher than 80 ppm. Then drain and fill the hot tub with fresh water before using this product. Multiple systems may be used for larger gallons (example: 2 up to 1200 gallons, 3 up to 1800 gallons, etc.).

Read entire operating instructions for complete directions for use.

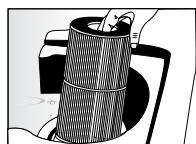## Step 1: Prepare the Hot Tub

1. Metal Out — Have your dealer test your water before filling the hot tub. If using source water that is high in calcium, iron or other metals, see your dealer before filling the hot tub. It may require the use of a metal control product.

If previously using bromine and switching to the FROG @ease System, you must drain and refill your hot tub before using this product.

If previously using dichlor you may convert to the FROG @ease System without having to drain the hot tub, as long as the cyanuric acid level is below 80 ppm.

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 2 hours before testing again and adding any additional balancing chemicals.
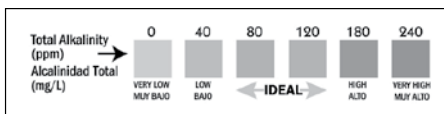
Water Balance Guidelines

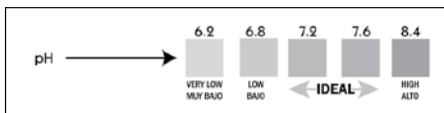|	
pH:	7.2 - 7.6
Total Alkalinity:	80 - 120 ppm
Total Hardness:	150 - 250 ppm
Total Dissolved Solids:	<1500
Cyanuric Acid:	0 - 50 ppm

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

b. Look at the **Total Alkalinity** reading first. Use FROG TArget™ or FROG JumpH™ 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. If your pH tends to fall, then maintain Total Alkalinity closer to 120 ppm.

Total Alkalinity (ppm) Alcalinidad Total (mg/L): 0 VERY LOW MUY BAJO, 40 LOW BAJO, 80 ◄IDEAL► 120, 180 HIGH ALTO, 240 VERY HIGH MUY ALTO

c. After Total Alkalinity is in range, **test for pH**. It should be **between 7.2 and 7.6**. If higher, add FROG DropH™ (a pH down adjuster) or if lower, add FROG JumpH™ (a pH up adjuster).

pH: 6.2 VERY LOW MUY BAJO, 6.8 LOW BAJO, 7.2 ◄IDEAL► 7.6, 8.4 HIGH ALTO

d. Lastly, test for **Total Hardness** again. If you were able to use fill water low in hardness, you may now have to add FROG SooTHe™ (hardness increaser) to maintain **between 150 and 250 ppm**.

If balancing takes longer than 2 days shock the water with FROG Jump Start® start-up shock and maintain a chlorine level while continuing balancing.

4. JUMP START — **Very Important!** After balancing and before using cartridges if you haven't already added a shock during balancing, establish an initial residual of 0.5 - 1.0 ppm free chlorine with FROG Jump Start start-up shock, included in this package, that quickly dissolves with an effervescent fizzing action – one packet per 600 gallons.

5. Heat water to the manufacturer's recommended temperature.
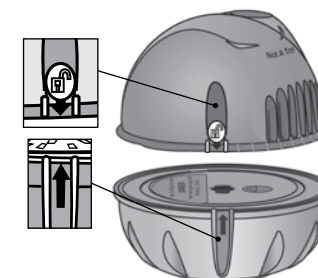
Step 2: Put the System to Work

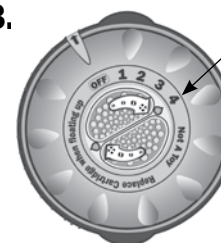### Simply follow these easy steps:

1. Remove outer packaging from the FROG @ease SmartChlor Cartridge.

2. Line up arrows on both cartridges, push together and lock.

3. Setting # on the FROG @ease SmartChlor Cartridge

Setting Chart

Gallons	Setting #
200-299	1
300-450	2
451-550	3
551-600	4

Twist the dial on the FROG @ease SmartChlor Cartridge to the setting number for your hot tub. (See chart based on gallons).
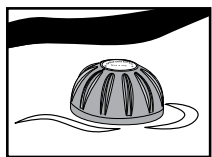
4. Toss into the hot tub. It will float in the water at a slight tilt. Multiple systems may be used for larger gallons (2 up to 1200 gallons).
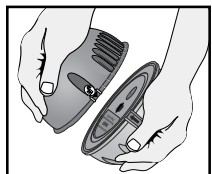
If you like, remove the FROG @ease System from the hot tub while soaking. Lift out the FROG @ease System and let drain into the hot tub. Place on any surface not susceptible to chlorine bleaching. Remember to return it to the hot tub afterwards.

Replacing Cartridges:

When the FROG @ease Floating System flips completely over, remove the FROG @ease SmartChlor cartridge.

1. FROG @ease SmartChlor Cartridge will last about 3-4 weeks for an average 400 gallon hot tub.

2. Floating System naturally tilts in the water. To check if FROG @ease SmartChlor Cartridge is empty, lift up and drain all water from the system, then replace in the hot tub and see if it flips completely.

3. Detach FROG @ease SmartChlor Cartridge by twisting to align with "unlock" arrow and pull apart.

4. Attach new cartridge (see Step 2: Put the System to Work). If using multiple systems, one may flip over before the other. Always replace the FROG @ease SmartChlor Cartridge as soon as each system flips over. Do not wait for both to flip before replacing the FROG @ease SmartChlor Cartridge.

5. Discard in trash or offer for recycling if available.

Note: If the FROG @ease SmartChlor Cartridge still contains a small amount after detaching, place in hot tub to float on its own until empty. Do not let it sink to bottom as it may bleach hot tub surface.

After 4 months or when draining and refilling the hot tub, the FROG @ease Mineral Cartridge must be replaced even if you hear the spent minerals inside. This cartridge is available only in the FROG @ease Floating Sanitizing System.

Step 3: Routine Hot Tub Care

1. Drain and refill hot tub as directed by your hot tub manufacturer. Whenever you drain and refill, make sure to replace your FROG @ease Minerals.

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

3. Regularly test water with FROG @ease Test Strips and follow directions in Step 1 for maintaining pH, Total Alkalinity and Total Hardness.

NOTE: pH is affected by bather load, chemicals used, evaporation and the make-up of your source water so maintaining water balance regularly is important.

4. FROG @ease SmartChlor Cartridge will maintain 0.5-1.0 ppm free chlorine level as long as the water is balanced.

NOTE: Free Chlorine levels are reduced up to 75%* when using FROG Minerals.

NOTE: Why FROG @ease Test Strips? The FROG @ease SmartChlor Cartridge forms a chlorine reserve that will be inaccurately measured as total chlorine on other test strips. Unlike conventional chlorine, the SmartChlor reserve readily shifts to free chlorine as needed, maintaining hot tub health with a low level of chlorine.

5. Shock the hot tub with FROG Maintain®, a non-chlorine shock for single dose shocking when you replace the FROG @ease SmartChlor Cartridge or once a month. Do not use a dichlor shock due to the build-up of cyanuric acid that will negatively affect SmartChlor's effectiveness.

6. Replace the FROG @ease SmartChlor Cartridge when the system flips over and the complete FROG @ease Floating System that includes a FROG @ease Mineral Cartridge as directed under Step 2: Put the System to Work.

Troubleshooting

Cloudy Water or Low-Chlorine Levels

• Shock the hot tub with FROG Maintain, a non-chlorine shock. Do not use a dichlor shock due to the build-up of cyanuric acid that will negatively affect SmartChlor's effectiveness.

• Check water balance. pH and Total Alkalinity need to be in the proper ranges for the FROG @ease System to work correctly.

• Check FROG @ease SmartChlor Cartridge and replace if empty—see instructions under Step 2: Put the System to Work.

• If the FROG @ease SmartChlor Cartridge is not empty, turn dial setting up one number while maintaining water balance. If needed, turn dial up again.

• Check your calendar. The entire FROG @ease System including a FROG @ease Mineral Cartridge needs to be replaced every four months. Without the minerals, SmartChlor will not be enough to sanitize the hot tub.

FROG @ease SmartChlor Cartridge Life

• If hot tub is larger than 400 gallons with significant bather load, you may require a higher dial setting which will shorten the cartridge life.

• If you think the cartridge setting is too high, you can turn the dial setting down one number while maintaining water balance. If needed, turn dial down again.

• If the FROG @ease System is continually sucked into the skimmer or filter well, tether the product to the tub away from the jets.

• Remove the FROG @ease System while using the hot tub with the jets running.

High Chlorine Levels

• This is highly unlikely with the FROG @ease System because SmartChlor is self-regulating. However, if you use standard test strips, it may appear that total chlorine is higher than the free chlorine.

• No worries—the strip is measuring the SmartChlor reserve, which will shift to free chlorine as needed. Please always use the FROG @ease Test Strips that were included with your System.

+ FROG @ease System consists of the FROG minerals silver chloride and carbonate used with 0.5 ppm of FROG @ease SmartChlor Cartridge. The FROG @ease Mineral Cartridge must be used in conjunction with the FROG @ease SmartChlor Cartridge.

* Compared to the minimum ANSI recommended chlorine level of 2.0 ppm for a hot tub.

∞ Cleaner, Clearer and Softer water for pools, hot tubs and swim spas.

Learn more at frogproducts.com or call 800.222.0169
Register your FROG @ease Sanitizing System at frogproducts.com