# FROG 20-48-0192 Ease Floating Sanitizing System Instruction Manual

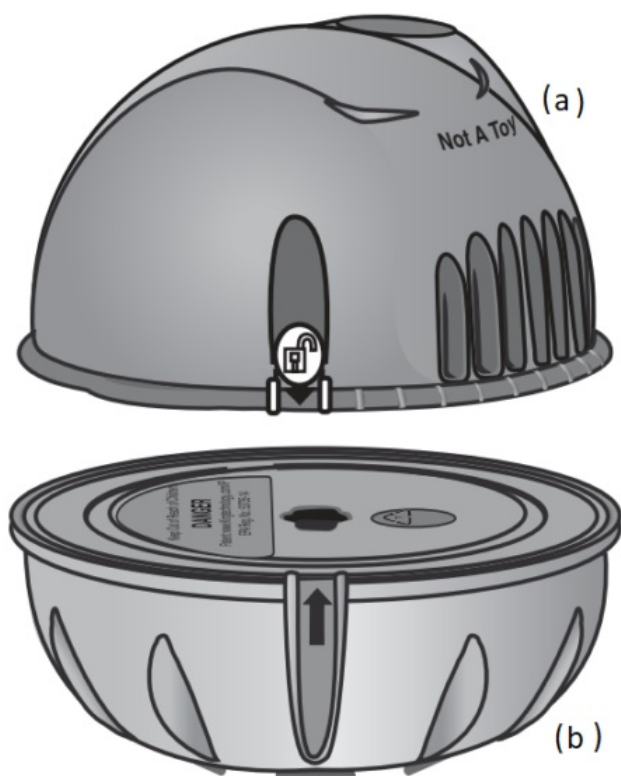**FROG 20-48-0192 Ease Floating Sanitizing System Instruction Manual**

FROG® @ease® is the hot tub sanitising system+ that takes the guess work out of water care so you always feel at ease while enjoying your hot tub.

⚠ This is not a toy. For sanitising hot tubs only!

**The FROG @ease 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.

**A.** TOP HALF (Blue) FROG @ease Mineral Cartridge
**B.** BOTTOM HALF (Silver) FROG @ease SmartChlor® Cartridge

**Contents**

## FROG @ease Mineral Cartridge

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

## KEEP OUT OF REACH OF CHILDREN

**CAUTION**
It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

**DIRECTIONS FOR USE**: 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 sanitised with bromine or biguanides.
Then drain and fill the hot tub with fresh water before using this product.

**Read entire operating instructions for complete directions for use.**
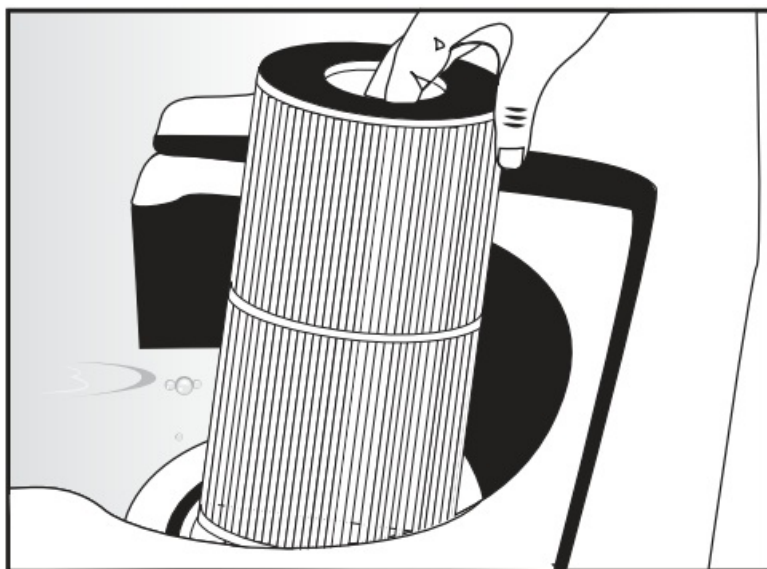
## Step 1: Prepare the Hot Tub

1. Fill hot tub with fresh water. 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 cyan uric 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 6 hours before testing again and adding any additional balancing chemicals.

   **Water Balance Guidelines**

   **pH:** 7.2 – 7.8

   **Total Alkalinity**: 80 – 120 ppm

**Hardness:** 150 – 250 ppm
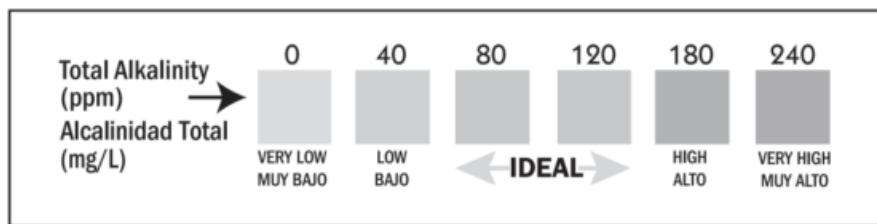
**Total Dissolved Solids**: <1500
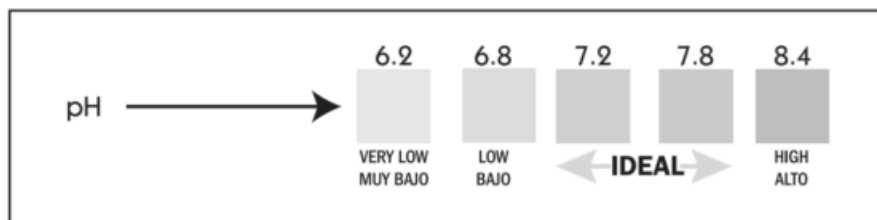
**Cyan uric Acid:** 0 – 50 ppm

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. 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 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 Increase.

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

4. **Very Important!** After balancing and before using cartridges, 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.

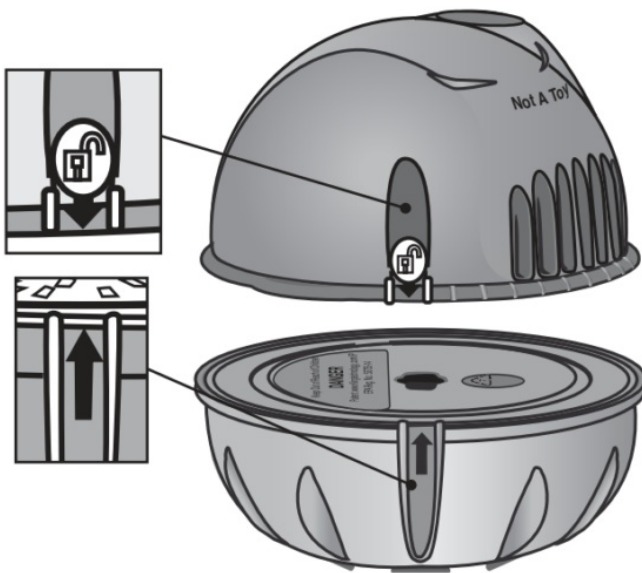5. Heat water to the manufacturer's recommended temperature.

## Step 2: Put the System to Work

**Simply follow these easy steps:**

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



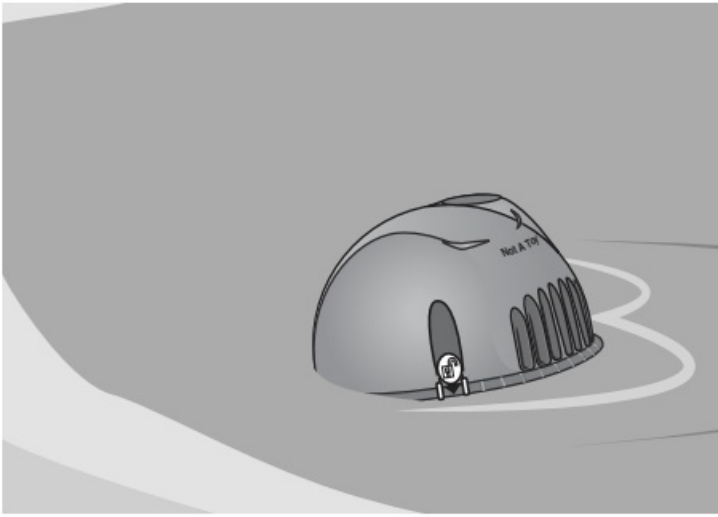2. Line up arrows on both cartridges, push together and lock.

**Step 2 Continued . . .**

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

3. Twist the dial on the FROG @ease SmartChlor Cartridge to the setting number for your hot tub. (See chart based on gallons).
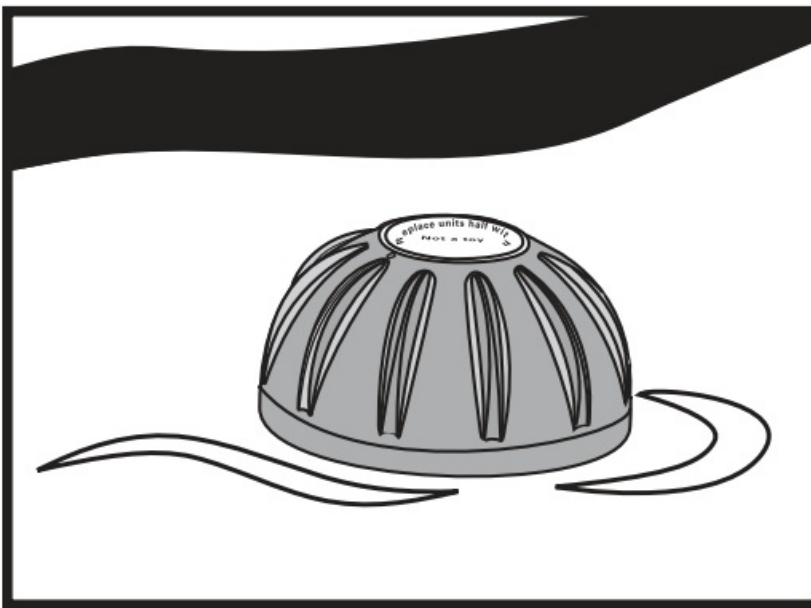


Setting # on the FROG @ease SmartChlor Cartridge

4. Toss into the hot tub. It will float in the water at a slight tilt.

If you like, remove the FROG @ease System from the spa 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.
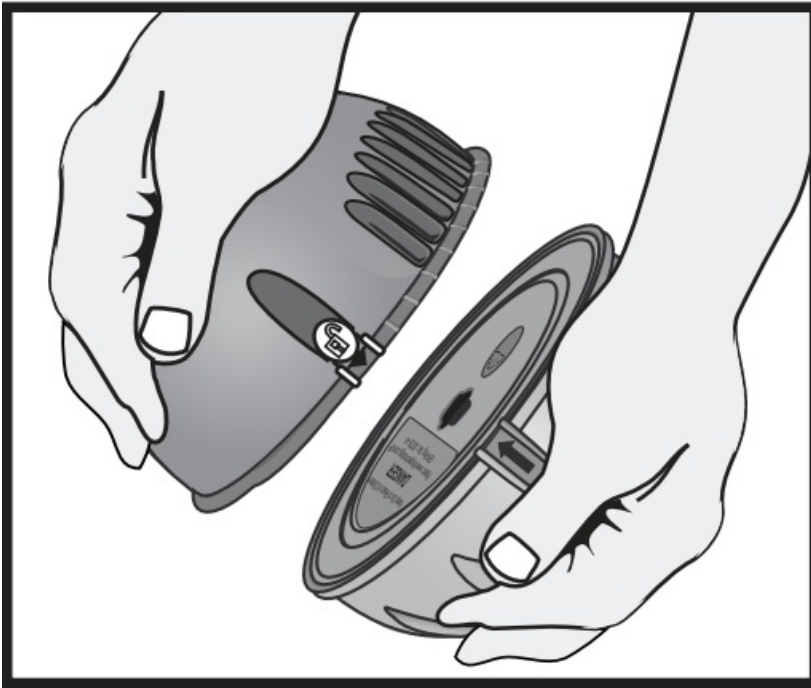
**Replacing Cartridges:**

**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 lists 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)

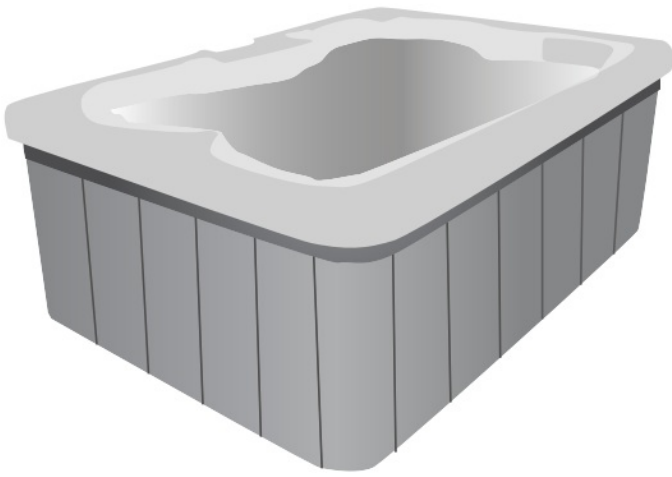5. Discard in trash or offer for recycling if available.



**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 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 @ease 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 spa 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.



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 "Replacing Cartridges".



## Troubleshooting

**Cloudy Water or Low-Chlorine Levels**

- Shock the hot tub with FROG Maintain, a non-chlorine shock.
- 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 "Replacing Cartridges".
- 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.

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

**Manufactured by: King Technology, Inc.**
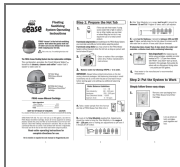530 11th Ave S, Hopkins, MN 55343 U.S.A.
**952-933-6118**

- Customer Service **800-222-0169 frogproducts.com** Made in U.S.A.
  Patents: **kingtechnology.com/IP**
- + 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. For pools and hot tubs.

Ver la version en espalier tested manual en **frogproducts.com**

**Documents / Resources**

**FROG 20-48-0192 Ease Floating Sanitizing System** [pdf] Instruction Manual
20-48-0192 Ease Floating Sanitizing System, 20-48-0192, Ease Floating Sanitizing System, Floating Sanitizing System, Sanitizing System, System

## References

- 🐸 **FROG® Pool and Hot Tub State of the Art Sanitizing Solutions with Fresh Mineral Water**
- *K* **IP - King Technology**
- **User Manual**