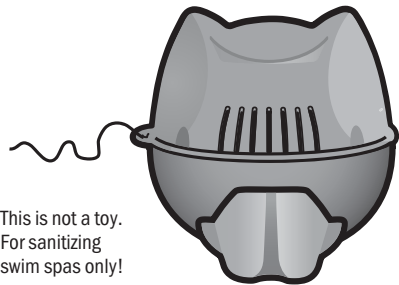




# FROG® @ease® for Swim Spas Operating Instructions



This is not a toy.  
For sanitizing  
swim spas only!

**FROG @ease is the swim spa sanitizing system<sup>†</sup> that takes the guesswork out of water care so you always feel at ease while enjoying your swim spa.**

## FROG @ease Mineral Cartridge

<b>Active Ingredient:</b>	
Silver Chloride .....	0.5%
Other Ingredients: .....	99.5%
<b>Total:</b> .....	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 swim spas up to 3,000 gallons. Use with the FROG @ease SmartChlor Cartridge. Ensure all swim spa equipment is working properly. Operate the pump and filter as recommended by your swim spa manufacturer. Clean filter following manufacturer's directions. May be used with a previously filled swim spa unless it was sanitized with bromine or biguanides. If any of those conditions apply, drain and fill the swim spa with fresh water before using this product.

**Read entire operating instructions for complete directions for use.**

Ver la versión en español de este manual en [frogproducts.com](http://frogproducts.com)

## Step 1: Prepare the Swim Spa

**1.**

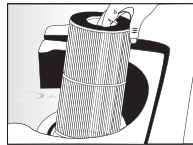


Have your dealer test your water before filling the swim spa. If using source water that is high in total hardness, iron or other metals, your dealer may recommend the use of a metal control product.

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

**If previously using dichlor** you may convert to the FROG @ease System without having to drain the swim spa, as long as 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.

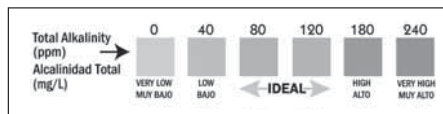
### Water Balance Guidelines

pH:	7.2 - 7.6
Total Alkalinity:	80 - 120 ppm
Total Hardness:	150 - 250 ppm
Total Dissolved Solids:	<1,500
Cyanuric Acid:	0 - 50 ppm

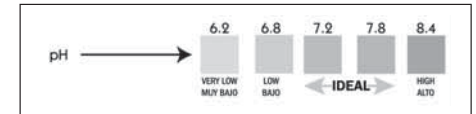
**a.** Take a water sample from the swim spa and dip a FROG @ease Test Strip into it.



**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 7.6**. If higher or lower, add a pH adjuster.



**d. Test for Total Hardness again.** If you were able to use fill water low in hardness, you may now have to add Hardness Increaser to maintain between 150 and 250 ppm.

**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, if you haven't already added a shock during balancing, establish an initial residual of 0.5 - 1.0 ppm free chlorine with dichlor.

**5.** Heat water to the swim spa manufacturer's recommended temperature before using this product. Always maintain a temperature of at least 80°F but no higher than the swim spa manufacturer's recommendation.

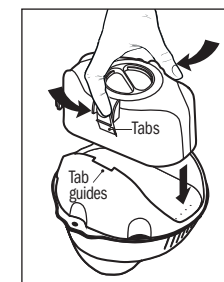
## Step 2: Put the System to Work

**Simply follow these easy steps:**

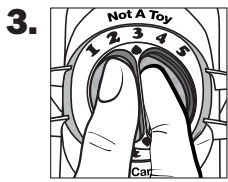
**1.** Remove outer packaging from the FROG @ease Mineral Cartridge and FROG @ease SmartChlor® Cartridge.

Note: small mineral particles may have dislodged from the FROG @ease Mineral Cartridge in shipping. Simply discard particles in trash.

**2.**

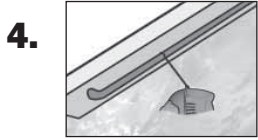


Align the FROG @ease SmartChlor Cartridge with tab guides on the FROG @ease Mineral Cartridge. Push together until you hear the cartridge click into place.



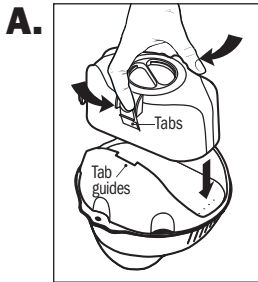
Setting Chart	
Gallons	Setting #
Less than 1,800	2
1,800 to 2,200	3
More than 2,200	4

Adjust to setting number based on swim spa gallon size (see Setting Chart). If a dual zone swim spa, set according to the gallons of the swimming area only.



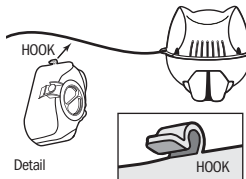
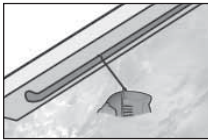
Attach to railing of swim spa with the tether provided and let it float in the swim spa. If you like, remove the FROG @ease System from the swim spa while soaking or exercising. Lift out the FROG @ease System and let drain into the swim spa. Place on any surface not susceptible to chlorine bleaching. Remember to return it to the swim spa afterwards.

## Replacing the Cartridges:



When the product flips over, the FROG @ease SmartChlor Cartridge is empty. Remove the empty FROG @ease SmartChlor Cartridge and replace with a new one.

This system naturally sits at a tilt in the water. To check if the FROG @ease SmartChlor Cartridge is empty, lift up and drain all the water from the system. You should be able to tell by looking if there is still FROG @ease SmartChlor left in the cartridge.



If only a small amount is left attach a new FROG @ease SmartChlor Cartridge and hook the old cartridge on the tether until it is completely empty.



When empty, discard in trash or offer for recycling if available.

**B.** After 4 months or when draining and refilling the swim spa, the blue FROG @ease Mineral Cartridge must be replaced even if you hear the spent minerals inside.

## Step 3: Routine Swim Spa Care

1.



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

2.



Run filtration system as recommended by your swim spa manufacturer.

3.



Regularly test water with FROG @ease Test Strips and follow directions in “Step 1: Prepare the Swim Spa” for maintaining pH, Total Alkalinity and Total Hardness.

**NOTE:** pH is affected by bather load, chemicals used, evaporation and the makeup 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.**

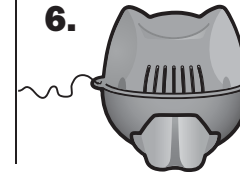
**NOTE:** Why FROG @ease Test Strips? The FROG @ease SmartChlor Cartridge forms a chlorine reserve that will be inaccurately measured as total chlorine on other test strips. Unlike conventional chlorine, the SmartChlor reserve readily shifts to free chlorine as needed, maintaining swim spa health with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

5.



Shock the swim spa with FROG Maintain® for easy 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 swim spa with FROG Maintain Non-Chlorine Shock. Do not use a dichlor shock due to the buildup 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, adjust setting up one number while maintaining water balance. If needed, adjust setting 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 swim spa.

### 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.
- ### SmartChlor Cartridge Life
- If swim spa is larger than 2,000 gallons with significant bather load, you may require a higher setting, which will shorten the cartridge life.
  - If you think the cartridge setting is too high, you can adjust the setting down 1 number while maintaining water balance. If needed adjust the setting down again.
  - If the FROG @ease System is continually sucked into the skimmer or filter well, tether the product to the side away from the jets.
  - Remove the FROG @ease System while using the swim spa with the jets running.

Learn more at [frogproducts.com](http://frogproducts.com) or call 800.222.0169 Register your FROG @ease Sanitizing System at [frogproducts.com](http://frogproducts.com)



Manufactured for King Technology, Inc.

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800-222-0169 | [frogproducts.com](http://frogproducts.com)

Made in U.S.A. Patents: [kingtechnology.com/IP](http://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 swim spa.

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