

# AquaSense Battery Powered Flush

#### **SPECIFICATIONS**

Sensor Range: 12" to 60" (adjustable)
Battery Type: AA Alkaline Batteries

Battery Life: Three years at 4,000 flushes per month
Flush Volume: ZR6000 - 4.5 gallons per flush
ZR6000-WS - 3.5 gallons per flush
ZR6000-WS1 - 1.6 gallons per flush

ZR6000-WS1 - 1.6 gallons per flush ZR6001 - 3.0 gallons per flush ZR6003-WS - 1.5 gallons per flush ZR6003-WS1 - 1.0 gallons per flush

Voltage: 6VDC

**Operating Water** 

Pressure: 20-80 psi

Courtesy Flush: Flush at the beginning of the detection cycle

(switchable)

Automatic Flush: Flush 24 hours after the last use (switchable)

Maintenance

Override: Magnetic flush triggering or inhibiting switch

Indicator Light: Range Adjustment (first ten minutes)

Low Battery Indication

Reflective surface in view for greater than 30 minutes

Reset Switch: To restart ten-minute range adjustment cycle

To enter option changes in the electronics after

repositioning switches

Operating

Temperature: 35°F to 104°F (2°C to 40°C)

**Outside Case** 

and Cover: Chrome-Plated Die Casting

#### **OPERATION**

- 1. Invisible light rays are continually emitted from the RetroFlush sensor.
- 2. When the user comes into range of the sensor's detection zone (range 12 to 60 inches), the beam is reflected back to the sensor's receiver and changed into a low voltage electrical signal that activates an eight-second time delay circuit. This time delay prevents the unit from activating from a passerby in the restroom. Once this circuit is completed, the output circuit is signaled and continues in a "hold" mode for as long as the user remains within range of the sensor. User must be in sensor range for at least 10 seconds.
- After the user moves away from the sensor, the absence of reflected light starts an electrical "one-time" signal that operates the solenoid operator (6VDC) and activates the flushing cycle to flush the fixture. The circuit then automatically resets for the next user.

**IMPORTANT NOTE:** The Zurn AquaVantage is engineered for quiet operation. Excessive water flow creates noise, while too little water flow may not satisfy the needs of the fixture. Proper adjustment of stop valve is made when:

- The plumbing fixture is cleansed after each flush without splashing water out from the lip.
- 2. A guiet flushing cycle is achieved.

After adjustment of the stop adjusting screw, replace the Zurn stop cap screw cover.

## CARE AND CLEANING INSTRUCTIONS

**Do not** use abrasive or chemical cleaners to clean flushometers as they may dull the luster and attack the chrome or special decorative finishes. Use only mild soap and water, then wipe dry with a clean cloth or towel. While cleaning the bathroom tile, the flushometer should be protected from splattering of cleaner. Acids and cleaning fluids can discolor or remove chrome plating.

## TROUBLE SHOOTING GUIDE

PROBLEM	CAUSE	SOLUTION
Valve will not operate.	Water supply shut off	Turn on water supply, check control stop and supply
	Sensor range adjustment set too short	Increase sensor range adjustment
	Expired batteries	Replace batteries
	Difficulty with electronic control module	Check batteries. If problem continues, consult factory.
	Solenoid problem	Replace solenoid
Red light flashes when user is not present.	Obstruction in front of the sensor	Remove the obstruction
	Sensor range set too long Sensor is detecting opposite wall	Shorten sensor range
Red light flashes when user comes into view.	Batteries about to expire	Replace batteries
	Unit is in start-up mode	Light will stop in 10 minutes
	Range adjustment reset button was pressed	Light will stop in 10 minutes
Valve does not shut off.	Dirt in diaphragm bypass hole	Clean bypass hole
	Dirt or debris at valve seat or sealing area	Clean valve seat and clean diaphragm kit
	Solenoid problem	Replace solenoid
Not enough water to fixture.	Wrong RetroFlush unit installed	Check fixture requirements. Install proper RetroFlush unit.
	Control stop improperly adjusted	Adjust control stop
	Riser tube filter plugged	Clean filtered riser tube §
	Diaphragm damaged	Replace diaphragm
	Solenoid problem	Replace solenoid
Too much water for fixture.	Wrong RetroFlush unit installed	Install proper RetroFlush unit. Check fixture requirements.
	Control stop improperly adjusted	Adjust control stop
	Dirt in diaphragm bypass hole	Clean or replace diaphragm
Water drips from chrome cap.	The plastic cover has been cracked by freezing or abuse	Replace plastic cover
	The chrome cap is not tight	Tighten chrome cap

Note: For more detailed trouble-shooting, refer to FV1138 or call customer service at 1-800-997-3876.



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Battery Life: Three years at 4,000 flushes per month

Flush Volume:

 $\begin{array}{lll} {\sf ZRK\text{-}C\text{-}1.6} & - & 1.6 \text{ gallons per flush} \\ {\sf ZRK\text{-}C\text{-}3.5} & - & 3.5 \text{ gallons per flush} \\ \end{array}$ ZRK-C-4.5 - 4.5 gallons per flush ZRK-U-1.0 - 1.0 gallons per flush ZRK-U-1.5 - 1.5 gallons per flush ZRK-U-3.0 - 3.0 gallons per flush

Voltage: 6VDC

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- 3. After the user moves away from the sensor, the absence of reflected light starts an electrical "one-time" signal that operates the solenoid operator (6VDC) and activates the flushing cycle to flush the fixture. The circuit then automatically resets for the next user.

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- 1. The plumbing fixture is cleansed after each flush without splashing water out from the lip.
- 2. A quiet flushing cycle is achieved.
- 3. Sensor units should not be located across from each other or in close proximity to highly reflective surfaces.

After adjustment of the stop adjusting screw, replace the Zurn stop cap screw cover.

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	Control stop improperly adjusted	Adjust control stop
	Dirt in diaphragm bypass hole	Clean or replace diaphragm
Water drips from chrome cap.	The plastic cover has been cracked by by freezing or abuse	Replace plastic cover
	The chrome cap is not tight	Tighten chrome cap.
RetroFlush kit does not fit handle port.	Sloan A-29 copper ring used as handle port gasket	Remove copper ring.

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