

# Polaris AutoClearPLUS

## Homeowner's Quick Reference

### Displays

**LED Bar Graph** - Quick visual reference of salt levels in the pool. All lights (green, yellow and red) should light. If only yellow and red lights are lit, press **Test** button for actual salt concentration and adjust to attain 3000-3500 ppm.

**LCD Display** - Shows system run time. To adjust, press the **Up** button to set minutes/hours. Adjustments take effect in next cycle. Flashing triangle indicates automation system is controlling chlorinator.

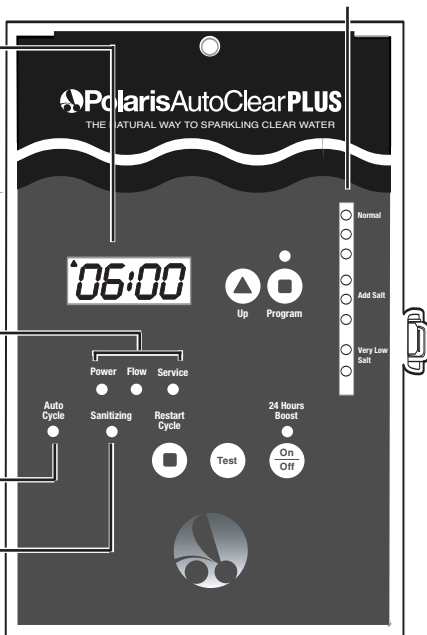
**Power** - Power is on to unit.

**Flow** - Unit has sufficient water flow to operate.

**Service** - Lights only if a problem condition exists.

**AutoCycle** - Unit is operating on programmed run cycle.

**Sanitizing** - Cell is producing chlorine.



### Functions

**Up** - Press to display programmed run time or adjust run time/temperature.

**Program** - Displays water temperature reading in degrees Fahrenheit. Use **Up** button to adjust in increments of five degrees, in a range from 55°-100° F. New settings take effect in next cycle. Display reverts back to run time.

**Restart Cycle** - Resets to latest run time and temperature settings. Press, readout will display complete run time and cycle clock will start new countdown.

**Test** - Press to display current salt level (ppm), output amps, voltage and the operational status code (90 = normal operation; 91 = salt level problem; 92 = flow problem; 93 = controller output problem; 94 = cell output problem).

**24 Hour Boost** - Lights when continuous 24-hour run cycle is activated by **On/Off** button. Pool pump must be set for 24-hour continuous run as well. After boost cycle, system reverts back to programmed run cycle.

# Operation and Maintenance

Once installed, the Polaris AutoClearPLUS will continuously use existing salt in the pool to provide chlorination. To optimize system performance and extend the life of the cell:

- Maintain salt levels between 3000-3500 parts per million (ppm). For optimum performance, maintain 3250 ppm.
- Keep pool water chemistry balanced to standard levels:

Free Chlorine	1.0 - 3.0 ppm
pH	7.4 - 7.6 ppm
Total Alkalinity	80 - 120 ppm
Calcium Hardness	200 - 400 ppm
Cyanuric Acid (Stabilizer)	Check local requirements
Metals, Phosphates and Nitrate	0 ppm
- Periodically check and adjust the temperature setting as needed to match the actual water temperature, especially in the event of dramatic changes in the weather.
- Adjust system run time and consequent chlorine output to correspond to chlorine demand. Longer run times for heavy bather activity, sunny days and water temperatures above 85° F. Shorter run times for shaded pools and cooler water. Recommended run times:

Pool Size In Gallons	Water Temperature		
	55°F to 78°F	78°F to 85°F	Above 85°F
15,000	1.0 to 2.0 hrs	4.0 to 5.0 hrs	6.0 to 7.0 hrs
20,000	1.5 to 2.0 hrs	5.0 to 6.0 hrs	7.0 to 8.0 hrs
25,000	2.0 to 2.5 hrs	6.0 to 7.0 hrs	8.0 to 9.0 hrs
30,000	2.5 to 3.0 hrs	7.0 to 8.0 hrs	9.0 to 10.0 hrs
35,000	3.0 to 3.5 hrs	8.0 to 9.0 hrs	10.0 plus hrs
40,000	3.5 to 4.0 hrs	9.0 to 10.0 hrs	10.0 plus hrs

Always adjust pump cycles to match or exceed system run time.

- Maintain chlorine levels at 1.0 - 3.0. Levels above 3.0 ppm at a pH below 7.2 are known to cause corrosion of pool metals.
- Do not use copper-based algaecides or salt with anti-caking agents.
- Do not add bi-carb or calcium chloride directly to the skimmer while AutoClearPLUS is running.
- Do not operate system if water temperature is below 55° F or salt concentration is less than 2200 ppm.

If pool water is cloudy or algae forms, test water for all values and adjust as necessary to balance. **The AutoClearPLUS is not designed to balance pool water.** To eliminate a full algae bloom, superchlorinate (shock) the pool.

## Cleaning the Cell

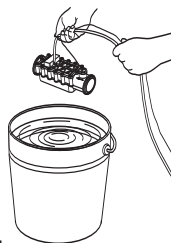
The AutoClearPLUS is self-cleaning under normal, balanced water conditions. A cell cleaning cycle is initiated every two hours indicated by a 5-second flashing of the **Service** light. However, this feature is not designed to eliminate excessive build-up. **Scaling situations are not covered by the warranty.**

To manually clean cell:

1. Turn off pump, loosen unions and remove cell from plumbing noting orientation of cell and flow switch (gray wire).
2. Use garden hose with nozzle to remove debris or scale build up. **Do not put foreign objects in the cell as plate damage may occur.**

If scale remains, immerse cell and flow switch in a solution of Muriatic acid and water (1 part acid added to 4 parts water). Soak cell until all foaming stops. Remove and rinse thoroughly.

3. Reinstall cell in proper orientation. Hand tighten unions.



## Adding Salt and Stabilizer

Salt is lost through backwashing, splash-out, rain water and other dilution. Test pool water routinely and adjust as needed, approx. 1-2 times annually. Stabilizer (cyanuric acid) which keeps UV light from destroying chlorine, is lost at about the same rate as salt.

If only yellow and red lights are illuminated on the LED bar graph display:

- Push the **Test** button (or refer to automation system's control screen) to get the actual salinity of the water. Add salt to attain 3000-3500 ppm.

Generally, salt requirements are 50 lbs. per 2000 gallons of water when starting at zero. Refer to the chart below for exact dosages.

**Pounds of Salt Needed for 3250 ppm**

Existing Salt Level	Pool Size in Gallons					
	15,000	20,000	25,000	30,000	35,000	40,000
<b>2250 ppm</b>	125 lbs	167 lbs	209 lbs	250 lbs	292 lbs	334 lbs
<b>2500 ppm</b>	94 lbs	125 lbs	156 lbs	188 lbs	219 lbs	250 lbs
<b>2750 ppm</b>	63 lbs	83 lbs	104 lbs	125 lbs	146 lbs	167 lbs
<b>3000 ppm</b>	31 lbs	42 lbs	52 lbs	63 lbs	73 lbs	83 lbs
<b>3250 ppm</b>	0 lbs	0 lbs	0 lbs	0 lbs	0 lbs	0 lbs

- Test for stabilizer level and add as needed to attain local requirements.

Stabilizer requirements vary depending on climate. Consult a local pool professional for optimum level.

# Troubleshooting

If the system displays these actions, adjustments may be necessary. Contact Polaris at 1-800-822-7933 for further assistance or repair information.

**Action: Service light is lit and display shows "91."**

- Solution:
1. Check water temperature and verify that it matches temperature setting on controller. Correct temp. setting if necessary.
  2. Press Test button for current salt concentration. Add salt as needed.
  3. Visually inspect cell and clean if necessary.

**Action: Display shows "92" and Flow light is not lit.**

- Solution:
1. Confirm circulation pump in running.
  2. Clean skimmer, filter and pump basket; backwash if necessary to ensure flow.
  3. Inspect cell and clean.
  4. Verify valve to cell is open.

5. Check cell installation; arrows on flow switch and cell housing should point in direction of flow.
6. Verify flow switch wires are connected and intact.

**Action: Display shows "94."**

- Solution:
1. Check salt level. Fault code may indicate salt level is below 1500 ppm.
  2. Possible cut cell cord.

**Action: Power light is not lit and display is dark.**

- Solution:
1. Check circuit breaker and reset if needed.

**Action: Test button salt reading and Eos (other controller) salt readouts don't match.**

- Solution:
1. Manually test for salt level and adjust to attain 3000-3500 ppm.

**Action: AutoCycle and Sanitizing lights don't come on in normal or boost mode.**

- Solution:
1. Press the Restart and Test buttons simultaneously.

## DISCLAIMER OF LIABILITY

A multitude of factors contribute to the life of a pool. AutoClearPLUS is a passive product that has no direct impact on pool life.

AutoClearPLUS will maintain an effective level of chlorine production when the guidelines set forth in this quick reference guide are adhered to. Over chlorination is known to cause corrosion in pool metals. It is extremely important to maintain proper chemical balance in accordance with pool industry standards.

All types of pool surfaces, including plaster, vinyl liners, and fiberglass can deteriorate, discolor, and become brittle over time separately by, or in combination with, age, the environment, an imbalance in pool water chemistry, improper installation, sunlight, and other factors. A build-up of scale and mineral deposits can negatively affect the materials in the pool's surface. The existence of these conditions is not caused by the use or operation of AutoClearPLUS. The pool owner is responsible for the maintenance and condition of the pool's surface, water and deck. The manufacturer disclaims any liability for repairs or replacement to any of these pool structures or components.



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