

COMMERCIAL-GRADE SENSORS

Unlike laboratory-rated sensors, commercial-grade sensors are rugged and rated for large high-demand commercial pools and outdoor conditions. Sense and Dispense uses only commercial-grade sensors.



PRO LOGIC AND AQUA PLUS TOTAL POOL MANAGEMENT

All the control you need to create the ultimate pool and spa experience.

Manage all pool and spa functions, as well as other backyard features, effortlessly. This flexible and scalable professional-grade series is the first Total Pool Management line in the industry to offer integrated water chemistry automation, tie-in to home automation, salt chlorination and control of up to 16 devices. A variety of models lets you choose the level of control that best fits your environment and add options that allow you to work less and play more. You can control your pool from the unit or from one or more of our optional remote controllers – indoors, poolside or in the water with our waterproof Aqua Pod™.



AQUA RITE PRO SALT CHLORINATION

It's amazing what a little salt can do to enhance the pool experience.

Aqua Rite Pro is the simple, safe and affordable approach to sanitize pools and spas. It turns ordinary salt into a regenerating supply of fresh, pure chlorine, automatically. Adding Sense and Dispense makes owning a pool even easier by automating water chemistry for pool and spa water that's clean, clear and luxuriously soft.



Sense and Dispense, Total Pool Chemistry

AQL-CHEM	ORP and pH Sense, ORP Dispense
AQL-CHEM2	pH Dispense, 120V Solenoid Valve for CO ₂
AQL-CHEM2-240	pH Dispense, 240V Solenoid Valve for CO ₂
AQL-CHEM3-120	pH Dispense, 120V Stenner Pump for Acid
AQL-CHEM3-240	pH Dispense, 240V Stenner Pump for Acid
AQL-CHEM-UPG	Chemistry Chassis Retrofit Kit (Includes AQL-CHEM and communication board. Add AQL-CHEM2 for pH dispense.)

Just one of the many ways we're reinventing the pool experience.
To learn more, visit www.goldlinecontrols.com.

GOLDLINE
CONTROLS
A HAYWARD COMPANY

The Best Experience,
Automatically.

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Total Pool Chemistry™



Spend more time
enjoying your
pool and less time
working on it.

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Total Pool Chemistry

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Properly sanitized and balanced water is important for swimmer comfort and safety. It dramatically extends the life of the pool, materials and equipment. A typical misconception is that clear water is good water. Clear water doesn't mean good water, but good water will be clear. Striking the right chemical balance when just about anything can affect the water can be a daunting task. Wind, rain, sun and swimmers themselves all affect water quality and balance.

WHY IS WATER CHEMISTRY IMPORTANT?

Continuous filtration, cleaning and sanitization are not enough – balancing pH (potential hydrogen) is vital. Chlorination should keep germs and algae at bay but when pH is unbalanced, it can't do its job. Let the pH drop too low and the water becomes acidic and attacks anything it touches. When pH drifts up, the water becomes alkaline and creates an environment where mineral deposits (scale) can form. Both high and low pH also lessen the effectiveness of chlorine. When pH is low, chlorine expends too rapidly. When pH is high, chlorine becomes ineffective at its primary task – killing bacteria and algae.

ORP (oxidation reduction potential) measures the oxidizing capacity in water. It is a proven measurement and maintenance technology mandated for commercial pool sanitization. Unlike most home-test processes, ORP

is not fooled by the effects of pH, TDS (total dissolved solids) and other factors. Most home-test kits and strips only report free chlorine and other less effective chlorines. Only ORP can deliver further detailed analysis of the more important free chlorine. It differentiates free chlorine's components HOCL (hypochlorous acid) and OCI- (hypochlorite ion). OCI- is a slow-acting sanitizer, and HOCL is up to 300 times more effective. ORP targets HOCL, a more fine-tuned measurement of the effectiveness of chlorine and water quality.

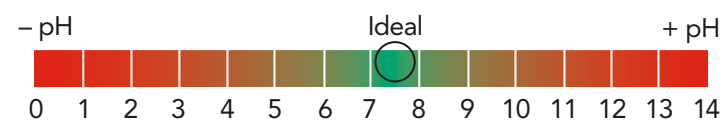
Studies have reported on the relationship between ORP and chlorine's activity with germs and bacteria. They've concluded that ORP significantly predicts water bacterial quality better than other methods. As a result, in most states, the highly regulated commercial pool industry requires ORP testing.

WHAT IS BALANCED WATER?

Water balance is composed of several key factors – pH, total alkalinity, calcium hardness and TDS. All of these factors are important, but none more so than pH. pH is

a measurement of the concentration of hydrogen ions in water. It is measured using a logarithmic scale from 0 to 14, with pH 7 being neutral.

For pool water to be in balance, all factors must be in their proper range. That range may vary slightly depending on the finish of the pool and the average temperature of the pool water. The one value that never changes is pH. It must be maintained between 7.2-7.8 for a pool to be considered "balanced."



HOW TO ACHIEVE BALANCED WATER

Achieving optimal water quality can be time consuming and frustrating. Most pool owners test their water daily and add the chemicals required to get and keep the water clean and in balance. Get it wrong, and you could swing the balance the other way, increasing your maintenance time and causing unnecessary chemical costs.

Chemical	Ideal Levels
pH	7.2 to 7.8
Free Chlorine	1.0 to 3.0 ppm
Total Alkalinity	80 to 120 ppm
Salt	2,700 to 3,400 ppm
Stabilizer	60 to 80 ppm
Calcium Hardness	200 to 400 ppm

WHAT IF?

What if your pool could self adjust, automatically test its own chemistry, and balance and sanitize your water? What if it always knew what the water needed and adjusted continuously, eliminating unhealthy highs and lows? Ensuring brilliant, balanced water all the time, automatically. You can get your water and maintenance time in balance with Goldline® Controls.

Goldline Controls now offers Sense and Dispense™, Total Pool Chemistry™.

This professional-grade ORP and pH sense-and-dispense technology was previously only available for commercial pools. Goldline Controls now offers an economical approach, with the same level of accuracy, for residential pools. Unlike others on the market, Sense and Dispense uses a proportional feed algorithm that continuously tests the water, sampling pH and sanitizer activity, and adjusting chemical feeding on a basis proportional to the demand. Other approaches don't sample the water often enough and release larger doses, which is far less effective and can create highs and lows similar to a manual approach.



Adding the Sense and Dispense option to your Pro Logic™, Aqua Plus™ or Aqua Rite™ Pro is a fully integrated solution – not an additional box that resides on your pool pad – eliminating additional installation costs. It also provides a single source for status reporting and control.

Sense and Dispense consists of two kits. The first kit senses pH and ORP levels and dispenses a self-renewing supply of pure chlorine generated from salt. pH dispense can be achieved using the second kit, which includes a manifold that connects to a CO₂ tank. CO₂ is highly effective in lowering pH. With salt-chlorinated pools, pH tends to drift up. CO₂ reduces pH to recommended levels by forming H₂CO₃ (carbonic acid), a safe acid that does not require handling. As an alternative to CO₂, Sense and Dispense also supports commercially available peristaltic acid pumps. This approach does not require the second kit to manage pH.

*Requires optional salt chlorination kit