



Environmentally Responsible Swimming Pool and Spa Equipment

From Sta-Rite®

Eco Select™ Brand

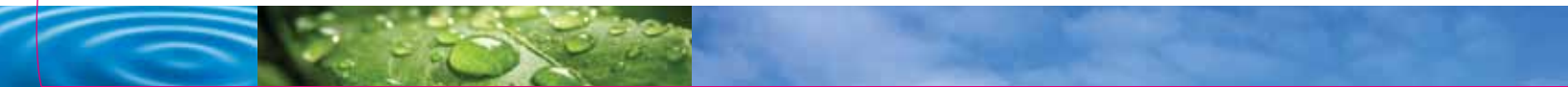
Eco-Friendly Equipment for Pools and Spas

As the global leader in pool and spa equipment, Pentair Water Pool and Spa® has made a strong commitment to develop and offer the most environmentally responsible products available. The Eco Select™ brand is the keystone of this green program to meet the dual objectives of a growing number of pool owners—to save money and make more eco-friendly choices.

It starts with product development. We have dedicated senior staff whose sole mission is to assure that new and re-engineered products are the most eco-friendly and economically attractive on the market.

You'll see the Eco Select brand associated with existing products and systems that already meet these objectives. These products save energy, conserve water, reduce noise, or otherwise contribute to a more environmentally responsible pool equipment system. In every case, a product that earns the Eco Select brand is clearly our "greenest" and most efficient choice. The rest of this booklet will introduce you to the products that have earned the Eco Select brand.

We hope you'll join us in embracing more eco-friendly pools by choosing Eco Select products for your swimming pool. If you have any questions, please contact your pool builder or local Sta-Rite® pool and spa equipment dealer.





Quick Reference Guide to Eco Select Branded Products

Check marks (✓) indicate direct contributions to reduce environmental impact and plus signs (+) indicate indirect contributions.

	Reduce Energy Use	Reduce Water Use	Quiet Operation	Reduce Chemical Use	Long Lasting	Low NOx
IntelliPro® vs-3050 Pumps	✓		✓		✓	
IntelliPro® vs+svrs Pumps	✓		✓		✓	
Max-E-Therm® Heaters	✓		✓		✓	✓
UltraTemp® Heat Pumps	✓				✓	
IntelliBrite® LED Spa Lights	✓				✓	
IntelliBrite® 5g LED Pool Lights	✓				✓	
IntelliChlor® Salt Chlorine Generator	+			✓	✓	
IntelliChem™ Chemical Controller	+			✓	✓	
System:3® Mod D.E. Filters	+	✓			✓	
System:3® Mod Media™ Filters	+	✓			✓	
EasyTouch® Automation	+				✓	
IntelliTouch® Automation	+				✓	
SunTouch® Automation	+				✓	
ProVac® II Commercial Grade Vacuum	+		✓	✓	✓	
Kreepy Krauly® Legend® II Automatic Cleaner	+		✓		✓	
Kreepy Krauly® Prowler® Robotic Cleaners	+		✓		✓	

Reduce Energy Use: Energy-efficient equipment helps reduce pool operating costs and benefits the environment.

Reduce Water Use: The average backwash uses between 250 to 1,000 gallons of water, without completely cleaning the filter: *H2Ouse*, www.h2ouse.org

Quiet Operation: Increasingly, local governments are passing noise ordinances which directly affect pool equipment. In addition, equipment noise reduces opportunities for peaceful pool enjoyment. *Noise Pollution Clearing House*, www.nonoise.org

Reduce Chemical Use: Equipment that contributes to the reduced use and storage of harsh chemicals for pool maintenance and/or products that include no hazardous materials.

Long Lasting: Products that have a longer service life need to be replaced less often, reducing the impact of waste management and natural resources required for production and transportation.

Low NOx: Nitrogen oxides (NOx) emissions are primary contributors to smog and acid rain.

Ultra Energy-Efficient Pumps

Standard pool pumps can consume as much energy as all other home appliances combined—often costing more than \$1,000 per year! IntelliPro® pumps can cut energy use up to 90%, generally saving \$620 to \$1,360* in utility costs annually—more where rates are higher than average.



Revolutionary pool pump slashes energy costs up to 90%

- IntelliPro employs exclusive permanent magnet motors (used in hybrid cars), a fundamentally more energy-efficient design compared to traditional induction motors.
- IntelliPro includes a variable speed motor; digital controls, and proprietary software that allow custom programming of the optimum speed per function—filtering, heating, cleaning, operating water features, and more. For most applications, the optimum speed is significantly lower than possible with traditional pump technology, so you can exploit a fundamental pump law: by going slower, power consumption is reduced.
- The result of these combined innovations is impressive savings... up to 90%.

*Savings based on comparison single speed, 2 horsepower pump running between 6 and 12 hrs/day at a national average of \$0.15/kWh in a 20,000 gallon pool. Savings may vary based on plumbing size and length, pump model, service factor, flow rates and other hydraulic factors.

The quietest running pump on the planet

- Thanks again to its permanent magnet motor and totally enclosed fan cooled (TEFC) design, IntelliPro is also the quietest pump ever built—at low speeds, you may not even know it's operating.

Longer, trouble-free service life—greater return on investment

- Permanent magnet motor produces far less heat and vibration than traditional induction motors. This results in less stress and wear on pump components and other equipment, too.
- Built-in diagnostics protect IntelliPro from the most common causes of premature pump failure—overheating, freezing, and voltage irregularities.

Now with added swimmer safety

- SVRS models feature a Safety Vacuum Release System that provides an added layer of anti-entrapment protection. It detects drain blockage and automatically shuts the pump off.



Energy Savings

Here are realistic estimates when comparing IntelliPro pumps to a traditional pump running between 6 and 12 hours per day at various utility rates (in dollars per kilowatt hour [kWh]) in a 20,000 gallon pool.

- At \$0.15/kWh estimated savings range from \$620 to \$1,360* per year.
- At \$0.20/kWh estimated savings range from \$825 to \$1,810* per year.
- At \$0.30/kWh estimated savings range from \$1,240 to \$2,710* per year.

A note about utility rates

Posted rates and effective rates are not the same thing. Your base posted electricity rate may be 10¢ per kilowatt hour (kWh) or less. So why are we starting our calculations at 15¢ per kWh? We've taken into account the many additional factors that make your effective rate higher:

1. The stated rate is only for electricity used. It does not include user fees and taxes that vary by state and provider.
2. In some states, rates increase substantially as a consumer uses additional electricity beyond a set baseline.
3. Many providers assess a surcharge per kWh during the summer, because demand for electricity is higher.

Visit our Energy Savings Calculator at www.staritepool.com/calculators to calculate savings for different sized pools, run times, and utility rates.



High Performance Heaters

Max-E-Therm® high performance heaters offer best-in-class energy efficiency. Plus, they are certified for low NOx emissions, making them eco-friendly favorites.



Max-E-Therm® High Performance Heaters

Best-in-class energy efficiency

- High efficiency rating makes these heaters extremely economical to operate. If your pool heater is more than 5 years old, chances are a Max-E-Therm could quickly pay for itself in utility bill savings.
- Optimized fuel/air mix provides superior efficiency and faster heat up.

Certified for low NOx emissions

- In fact, our heaters outperform current industry standards for air pollution exhaust.

Super-quiet operation won't intrude on pool leisure time

Built to last longer

- Tough composite exterior won't corrode; stands up to extreme weather conditions.



Heat Pumps

UltraTemp® Heat Pumps

When a heat pump is appropriate for your climate, it is the most energy-efficient heating option. UltraTemp® heat pumps transfer heat from the atmosphere to the pool or spa, saving up to 80% in energy costs compared to other heaters. Plus, they are charged with R-410A refrigerant, an environmentally safe, clean and non-ozone depleting refrigerant.



Saves up to 80% in energy costs

- Heat pumps are the most energy-efficient heating option.
- UltraTemp uses the most energy-efficient compressor available.
- State-of-the-art engineering design provides improved air flow, efficiency, heat output, sound reduction and overall performance.
- Check with your pool professional to see if a heat pump is appropriate for your region.

Uses environmentally safe and clean refrigerant

- Pentair Water Pool and Spa heat pumps have been using the EPA-recognized, environmentally safe, non-ozone depleting R-410A refrigerant for nearly 10 years. This has allowed the UltraTemp heat pump to be awarded the Eco Select brand for environmental responsibility.

Built to provide long-lasting value

- Tough composite exterior won't corrode or fade; stands up to extreme weather conditions.

Compare the Cost

This chart illustrates how the UltraTemp heat pump generates 2.75 to 5.8 times more heat for the same cost. Costs are based on national average fuel costs and efficiencies (Source: Federal Register). Please consult your local provider for current pricing.

Heater/Fuel Type	Cost	BTU/\$1.00
Electric	\$0.1065/kWh	32,000
LP Gas	\$1.87/Gal	40,100
Oil	\$2.22/Gal	47,200
Natural Gas	\$1.218/Therm	67,300
UltraTemp	\$0.1065/kWh	185,600

D.E. (Diatomaceous Earth) Filters

Water flows very efficiently through System:3® Mod D.E. filters, allowing the use of smaller pumps or lower pump speeds to minimize energy use. And when you rinse cartridges rather than backwash, you can significantly reduce water use, too.

More efficient water flow through System:3 Mod D.E. filters may allow use of smaller pumps or lower pump speeds to minimize energy use

- Unique internal flow path ensures optimum filtration while reducing overall back-pressure.
- Can be installed without backwash valve, further increasing hydraulic efficiency.

Cartridge cleaning options can significantly reduce water usage

- When you can rinse the cartridges rather than backwash, water use is reduced by hundreds, if not thousands, of gallons per year.
- Large-capacity cartridges provide maximum filter surface area for greater dirt-trapping capacity and fewer cleanings.

Durable construction provides longer service life

- Chemical-resistant, fiberglass-reinforced polypropylene tank provides exceptional strength.



System:3® Mod D.E. Filters

Cartridge Filters

Water flows very efficiently through the System:3® Mod Media™ cartridge filters, often allowing the use of smaller pumps or lower pump speeds to minimize energy use. And when you rinse cartridges rather than backwash, you can significantly reduce water use, too.



System:3® Mod Media™ Cartridge Filters

More efficient water flow through System:3 Mod Media cartridge filters may allow the use of smaller pumps or lower pump speeds to minimize energy use

- Unique internal flow path ensures optimum filtration while reducing overall back-pressure.

Rinsing cartridges uses less water compared to backwashing

- When you rinse the cartridges rather than backwash, water use is reduced by hundreds, if not thousands, of gallons per year.
- Large-capacity cartridges provide maximum filter surface area for greater dirt-trapping capacity and fewer cleanings.

Durable construction provides longer service life

- Chemical-resistant, fiberglass-reinforced polypropylene tank provides exceptional strength.



Automatic Pool Cleaners

The powerful Kreepy Krauly® Legend® II pressure-side pool cleaner and Kreepy Krauly® Prowler® robotic cleaners provide highly energy-efficient cleaning performance.



**Kreepy Krauly®
Prowler® 710
Robotic Pool Cleaner**



**Kreepy Krauly®
Prowler® 720
Robotic Pool Cleaner**



**Kreepy Krauly®
Prowler® 730
Robotic Pool Cleaner**



**Kreepy Krauly®
Legend® II
Automatic Pool Cleaner**

Kreepy Krauly Legend II provides great value and powerful pressure-side cleaning

- No need to buy or operate a separate booster pump, which saves money and energy.
- Front-wheel drive provides maximum traction on inclined surfaces and total cleaning coverage of pool bottom and walls.
- 4-wheel design and wide base prevent tipping (common with 3-wheel cleaners) for uninterrupted performance.
- Dual thrust jets for maximum power, speed and performance.
- 60% larger debris bag captures more dirt, wider bag opening makes emptying a cinch, and new snap-lock bag provides easy, secure closure.
- Disposable cleaner bags are available to assure that you never have to touch or empty debris again.

Kreepy Krauly Prowler robotic cleaners offer fast, eco-friendly cleaning performance

- No booster pump required.
- Integrated filter reduces run time of your primary filtration system up to 25%, saving energy use and minimizing wear and tear.
- Plugs into a standard electrical outlet, using minimal power consumption.
- Dual pressure wash jets lift sand, silt and algae off the pool floor and walls—including surface pores where brushes can't reach.
- Cleans any size, shape and type of standard residential pool in just 60–90 minutes.



Pool Maintenance Products

Our pool maintenance products provide superior cleaning and sanitation performance while significantly reducing the use and handling of harsh chemicals and hazardous materials. In production, the packaging and transportation of these chemicals is also minimized.



IntelliChlor® Salt Chlorine Generator

IntelliChlor® Salt Chlorine Generator provides effective sanitization performance without the use of harsh chemical compounds

- Less chlorine needs to be produced at chemical processing plants for use in swimming pools and spas. This reduces emissions and energy use from production, packaging and transportation.
- Pool owners no longer need to buy, transport, store, or handle chlorine products.
- Because the chlorine is pure, the odor, stinging eyes and irritated skin caused by additives in packaged chlorine are eliminated.
- Control electronics are isolated in the cell, away from high heat components, for longer cell life.
- Waterproof electronics provide maximum reliability.

IntelliChem™ Chemical Controller

With IntelliChem™ Chemical Controller, the correct amount of sanitization chemicals are always dispensed

- Protects your pool equipment from corrosion caused when pH swings in and out of balance.
- Assures safe water conditions by preventing excess chemical addition within a 24 hour period.
- Programmable chemical feed cycle on and off times for precise water balance.

ProVac® II Commercial Grade Vacuum offers commercial grade performance that's environmentally friendly

- Convertible wheels convert cleaner from lock position for a straight cleaning pattern to a pivot position for even greater coverage.
- Features composite weight system that is eco-friendly and lead-free.
- Unique suction chamber concentrates vacuum velocity for fast, thorough cleaning.
- Ball bearing wheels allow for effortless movement while the vacuum's head hugs pool contours.

LED Color-Changing and White Pool and Spa Lights

IntelliBrite® 5g LED (Light Emitting Diode) pool lights and IntelliBrite® LED spa lights are the most energy-efficient pool and spa lighting option available. Plus, they can last longer, minimizing replacement cost and disposal.



**IntelliBrite® 5g
LED Pool Lights**

**IntelliBrite®
LED Spa Lights**

LED lights use the least amount of energy of all lighting options

- IntelliBrite® 5g color-changing pool lights use 50% less energy than competing LEDs.
- IntelliBrite® 5g white pool lights use 86% less energy than incandescent and halogen lights.
- IntelliBrite® spa lights use 51% less energy compared to traditional lights.

LED lights are more durable and can last longer

- Cool-running LED lights are durable, solid-state technology, with no internal filament to wear out.
- Unlike many LED pool lights, IntelliBrite 5g lights continue to work even when a single LED goes out.

Automation

Our control systems can optimize energy use and equipment performance by automating and synchronizing equipment scheduling. They prevent problems and waste so you don't have to rely on your memory or limited time clocks to operate or turn off equipment.



**IntelliTouch®
Indoor Control
Panel**

**EasyTouch®
Automated
Controls**

**ScreenLogic®
app for iPad®**

**SunTouch®
Automated
Controls**

Automated control systems can help offset rising utility costs

- Equipment schedules are easily altered to account for changes in pool usage, weather, and other factors that impact overall equipment performance.
- Equipment isn't accidentally left on for extended periods, thereby wasting energy (for example: lights, cleaners, heaters).
- Control systems make it easier to take advantage of off-peak, seasonal utility rates.



- IntelliTouch now has a ScreenLogic® app for iPad®, iPhone® and iPod touch®.



How the Systems Approach Delivers Even More

As you've seen, there is a compelling "green case" for our products under the Eco Select™ brand. Every one of these products can lay claim to saving energy, water, reducing noise, maintaining air quality, or delivering combinations of these environmental benefits.

Perhaps most compelling of all is when you link these "best in breed" choices into a single green system. Not only do you deliver individual products that are more environmentally responsible than other choices, there can be synergistic effects as well.

Examples include:

- Optimizing pump speed automatically improves the effectiveness of the filter media. It traps more dirt by allowing better utilization of the media's surface area, postpones pressure increases, and extends the time between cleanings. You minimize energy use on the front end, minimize wash water use on the back end, and get cleaner water all along the way.



- Optimizing flow from the pump to the heater results in faster heat-up and greater efficiency so run times may be reduced and energy saved.
- Running the filter pump longer at a lower speed/flow for energy savings also improves the effectiveness of sanitization chemicals... delivering improved water quality with less total chemical consumption.
- Variable speed pump capability minimizes energy use by solar-powered systems that require high flow to initiate but less flow pressure to maintain circulation.
- Adjusting the output flow of a variable speed pump to match the exact requirements of a booster-free pressure-side cleaner, rather than relying on an oversized conventional pump, optimizes cleaning while minimizing energy use.
- Utilizing chemical reducing maintenance equipment minimizes the handling and storage of harsh chemicals and also reduces the use of resources in the production, packaging and transportation of these compounds.



Your pool professional will help you optimize your system for peak performance to minimize your energy and water use.

Energy-Saving Pool Tips

To support your efforts to make your pool and spa as economical and eco-friendly as possible, below are some changes you can make that can help conserve energy and water while reducing your operating costs.

Heating & Heat Loss

- Reduce heat loss by using a pool cover. According to the U.S. Department of Energy, savings of 50% to 70% are possible.
- Fencing, hedges, landscaping and cabanas that shelter your pool from prevailing winds will further reduce heat loss.
- If you use your pool only on weekends, reduce your heater or heat pump thermostat settings by eight to ten degrees during the week.
- When leaving for vacation for more than a week, unless freezing conditions are expected, turn off the pool heater or heat pump.
- According to the National Swimming Pool Institute and the American Red Cross, the most healthful swimming temperature is 78°F. Reducing your heater or heat pump thermostat to maintain a 78°F or lower temperature will also help conserve energy.

Circulation

- Replace your pool pump with a more energy-efficient model.
 - New variable speed pumps with permanent magnet motors and digital controls can save as much as 90% in utility costs compared to one- or two-speed pumps with induction motors.
 - If using an energy-efficient one- or two-speed pump, make sure your pump is sized to your pool's requirements.
- Reduce pump speed to reduce energy use. Remember the pump law: by going slower, power consumption is reduced.
- For good water maintenance, circulate water through filter only once per day. Additional cycles are generally unnecessary and waste energy.
- Run your pool's filtration system during off-peak hours when electricity demand is lower, generally between 8 pm and 10 am
- Keep intake grates clear of debris. Clogged drains require the pump to work harder.
- To obtain maximum filtration and energy efficiency, clean your filter regularly, as required.





www.staritepool.com