Chemtrol®
DIGITAL CONTROLLERS

Sanitizer and pH Control
for Pools, Spas and Cooling Towers

Chemical Automation is now recognized as a must for proper water treatment in swimming pools, spas, cooling towers and industrial water treatment.

*With advanced microprocessor-based technology, the **CHEMTROL® DIGITAL CONTROLLERS** introduce a new standard of sophistication in automated chemical control. These simple and user-friendly controllers offer the choice of control in PPM (parts per million or milligrams per liter) for Free Chlorine or in ORP (Oxidation-Reduction Potential) for chlorine, bromine or ozone .*

The **CH255 PPM/pH Controller** features a pH sensor and a PPM solid state sensor with a selective membrane for control of Free Chlorine.

The **CH250 ORP/pH Controller** features a pH sensor and an ORP sensor for control of chlorine, bromine or ozone.

The **CH240 pH Controller** is used for control of pH with neutralizing acidic or alkaline solutions, particularly for environmental applications.

The **CH230 ORP Controller** is used for control of the ORP of neutral-type sanitizers - such as bromine or dichlor - that do not require pH control.

STANDARD FEATURES

√ All Functions on Front Panel
√ Adjustable Setpoints
√ Adjustable Alarms
√ Proportional Feed
√ Overfeed Safety Timers

√ Waterproof Cabinet
√ Easy to install
√ Simple to use
√ 5-year Electronics Warranty
√ Toll-Free Technical Support

EASY TO USE

A bright LCD display shows ORP and/or pH readings, calibration adjustments and alarm limits. The five LED lights indicate the operating modes (OFF, Manual or Auto), feed status, out-of-range alarms and overfeed alarms.

The front panel controls include setpoint, calibration, low and high alarm limits, safety timer limit and proportional feed adjustment.

Feed control is either ON/OFF or Proportional. The Proportional Feed feature is particularly useful to avoid overfeeding in small bodies of water. It reduces the feed cycle time progressively as the sensor reading approaches the setpoint.

SIMPLE AND RELIABLE

All **CHEMTROL®** controllers are user-friendly, reliable and easy to install and operate. Every unit is supplied with a comprehensive operation manual and a **FIVE-YEAR electronics warranty**.

EXTENDED TECHNICAL SUPPORT

Technical support from **CHEMTROL®** is based on our experience with over 30,000 installations worldwide. It is available by toll-free phone, by fax or by e-mail.

Visit our Web Site at www.sbcontrol.com or call today for a free demo CD-ROM

SANTA BARBARA CONTROL SYSTEMS
5375 Overpass Road
Santa Barbara, CA 93111 - USA

TOLL-FREE	800-621-2279
PHONE	805-683-8833
FAX	805-683-1893
INTERNET	www.sbcontrol.com

Leading in Automated Water Treatment Since 1976
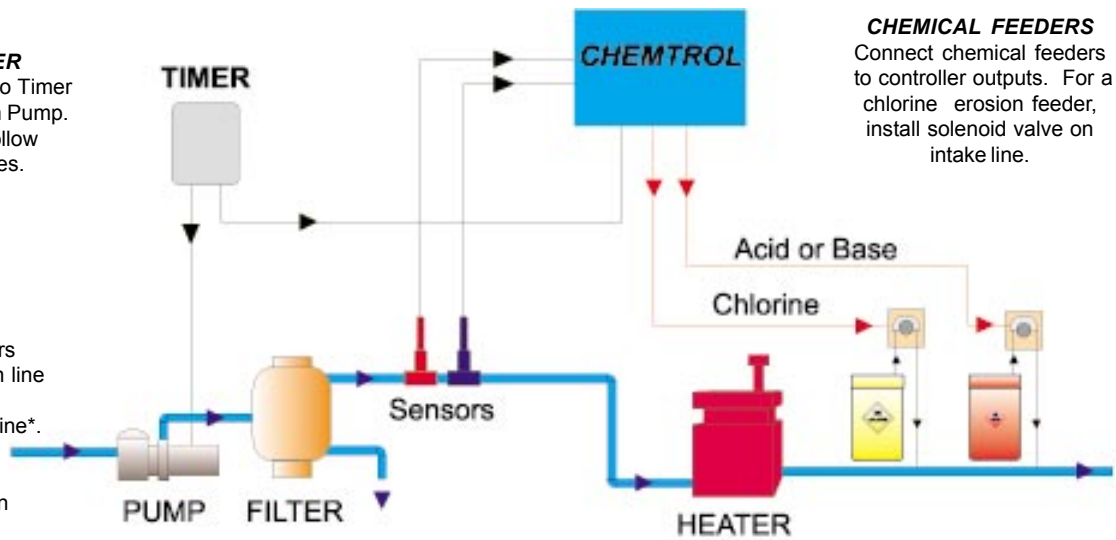
EASY TO INSTALL

EASY AS 1-2-3

① CONTROLLER
Connect controller to Timer in parallel with Main Pump. Make sure to follow electrical. codes.

② SENSORS
Install sensors on recirculation line after filter or on bypass line*.

*recommended option

③ CHEMICAL FEEDERS
Connect chemical feeders to controller outputs. For a chlorine erosion feeder, install solenoid valve on intake line.

TIMER

CHEMTROL

Acid or Base

Chlorine

Sensors

PUMP FILTER HEATER

SIMPLE TO OPERATE

The **CHEMTROL® Digital Controllers** automatically maintain both Sanitizer concentration and water pH.

All operating functions are clearly labelled and accessible from the front panel, with safety and easy-reset features not found on other controllers.

The Free Chlorine concentration can be adjusted from 0.1 to 10 ppm (or mg/l) based on local Health Department and NATIONAL SPA AND POOL INSTITUTE (NSPI) values for prevention of germs and bacteria (or from 0.01 to 2.0 for low chlorine level applications).

The default ORP control level is 700 mV, based on WORLD HEALTH ORGANIZATION (WHO) and NATIONAL SPA AND POOL INSTITUTE (NSPI) values for prevention of germs and bacteria.

The standard pH control level is 7.5. Below 7.4, the water is too acidic and causes corrosion and eye irritation. Above 7.6, it is too alkaline and causes eye irritation plus water cloudiness, scaling, stains and reduced sanitizer efficiency.

A SOUND INVESTMENT

The **CHEMTROL®** Digital Controllers are based on over 25 years of experience in water treatment automation with over 40,000 installations worldwide. Featuring a 5-year electronics warranty, it **actually pays for itself in 1 to 2 years** through cost savings in operating and maintenance expenses.

Savings continue to accrue from the more efficient use of chemicals, avoiding over- and under-feeding, and from lower labor costs for water testing and repairs of damaged equipment. In particular, commercial operators save on **specialty chemicals, customer complaints and health department shutdowns.**

SPECIFICATIONS

PPM SENSOR	Solid State with Selective Membrane and 10-ft sensor cable
ORP SENSOR	Platinum electrode with 10-ft (3 m) cable
pH SENSOR	Glass electrode with 10-ft (3 m) cable
PPM CONTROL	Standard from 0.1 to 10 ppm (mg/l) Optional from 0.01 to 2.0 ppm (mg/l)
ORP CONTROL	Adjustable from 200 to 995 mV
pH CONTROL	Adjustable from 7.0 to 8.0
READOUTS	PPM (3 digits) and pH (2 digits) LEDs
FEED MODES	Manual, automatic, proportional
ADJUSTMENTS	Setpoint, calibration, limits, feed rate
INDICATORS	LEDs for feed mode, feed status, alarms
SAFETY	Audio, visual and remote alarms Out-of-range limits and overfeed safety timers
CABINET	Polystyrene 9x7x4 in. (22x18x10 cm)
ELECTRICAL	110V, 230V or 24 VAC (specify)
PLUMBING	PVC tees for 1-1/2" or 2" line
WARRANTY	5 years on electronic module 1 year on all other parts
SHIPPING	12x12x12-in (30x30x30 cm) carton 9 lbs (4 kg) without pumps 18 lbs (8 kg) with 2 chemical feed pumps

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AUTHORIZED CHEMTROL® DEALER

CH240 DIGITAL pH CONTROLLER

Home   Product Line   Brochures   Bid Specs   Tech Support   Photo Gallery   Email

Installation   **Operation**   **Bid Specs**   **Brochure**

CHEMTROL® 240

DIGITAL pH CONTROLLER

The *CHEMTROL® 240 pH Controller* is a simple, easy to use controller designed to monitor and maintain the pH level in water. It is particularly adapted to the neutralization of acidic or alkaline solutions for environmental applications.

pH CONTROL MADE EASY

The **CHEMTROL® 240** is a microprocessor-based digital controller designed to maintain the pH level in water treatment applications.

STANDARD FEATURES

- All Functions on Front Panel
- Adjustable Setpoint
- Adjustable Alarms
- Proportional Feed
- Overfeed Safety Timer
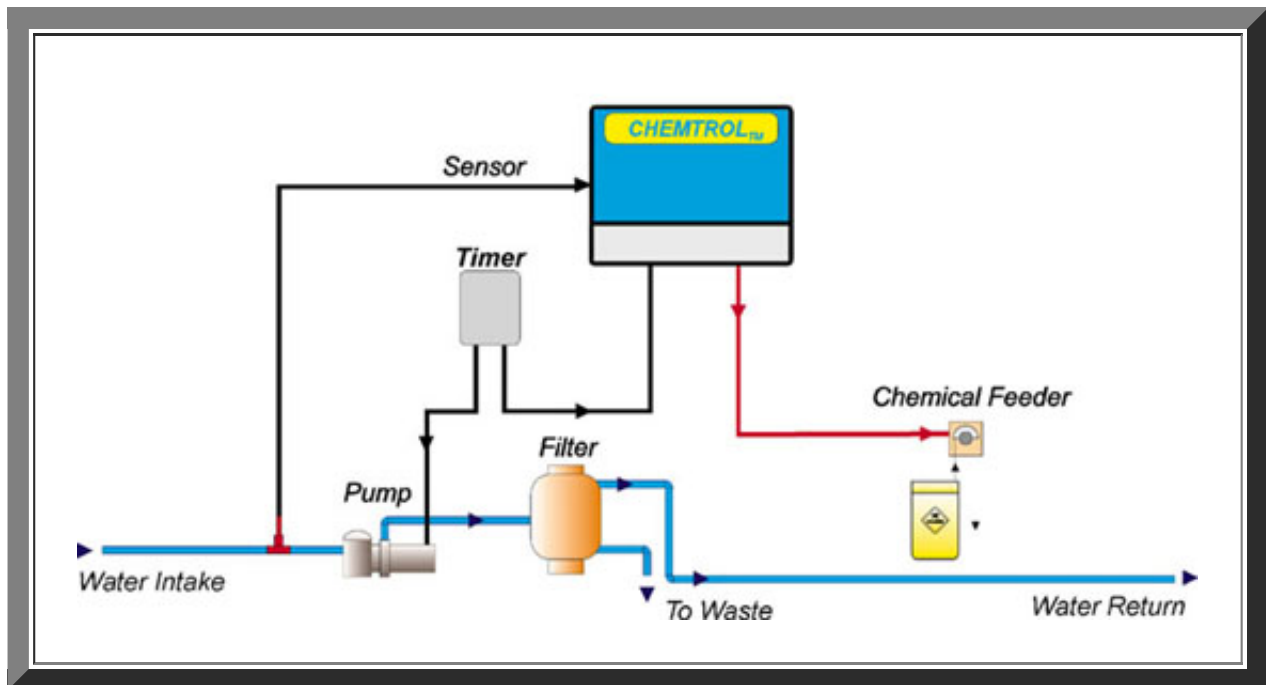- Waterproof Cabinet
- Easy to install

- Simple to use
- 5-year Electronics Warranty
- Toll-Free Technical Support.

The bright LCD display shows pH readings, calibration adjustments and alarm limits. The five LED lights indicate the operating mode (OFF, Manual or Auto), feed status, out-of-range alarms and overfeed alarms.

The front panel controls include setpoint, calibration, low and high alarm limits, safety timer limit and proportional feed adjustment.

Feed control is either ON/OFF or Proportional. The Proportional Feed feature is particularly useful to avoid overfeeding in small bodies of water. It reduces the feed cycle time progressively as the sensor reading gets closer to the setpoint.
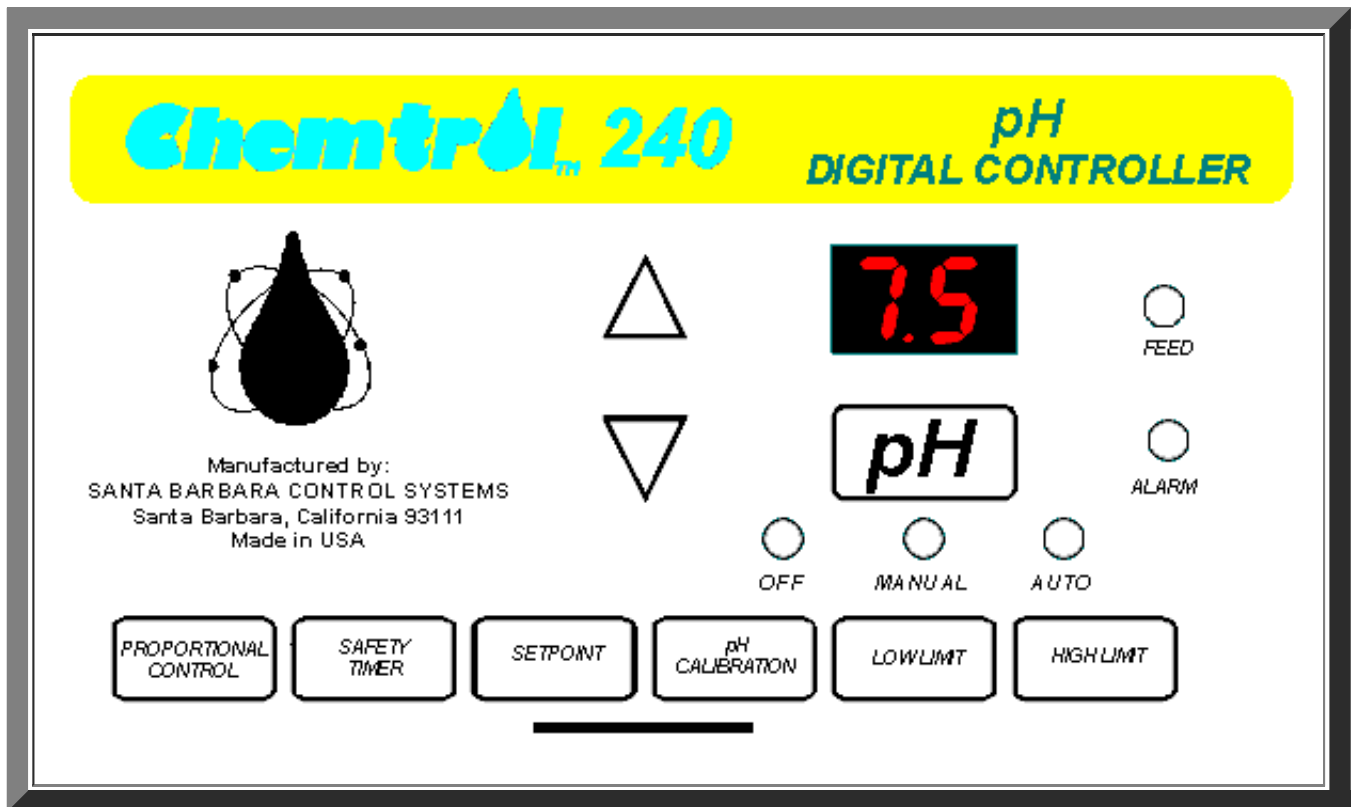
EASY TO INSTALL

Installation of the **CHEMTROL® 240** is as easy as 1-2-3.

1. **CONTROLLER** - Connect the controller to the 110 or 240V output of the Timer in parallel to the recirculation pump. This will prevent accidental feeding of chemicals when the pump is not running. Make sure to follow the electrical code.
2. **SENSOR** - Install the pH sensor on the recirculation line or on

the optional bypass line. The sensor can be mounted directly on the main recirculation line with a 2" PVC tee, as shown on the schematic. For recirculation lines over 2" in diameter lines, the sensor should be mounted on a 1/2" bypass line.

3. **CHEMICAL FEEDER** - Connect the chemical feeder to the 110 or 240V controller output, according to the manufacturer's instructions, making sure to inject the chemicals downstream of the sensor. For a bromine or chlorine erosion feeder, install a corrosion-resistant solenoid valve on the intake line of the feeder. The controller is compatible with most ozonators and electrolytic generators.

SIMPLE TO OPERATE

The **CHEMTROL**® **240** pH Digital Controller automatically maintains both the sanitizer pH (oxidation-reduction potential or Redox) level.

All operating functions are clearly labeled and accessible from the front panel, with many safety and easy-reset features not found on other controllers:

- pH calibration from 4 to 10,
- pH setpoint from 4 to 10,

- feed modes: off, manual, automatic,
- proportional control bandwidth from 0 to 100% of the setpoint,
- pH high and low alarms from 4 to 10,
- overfeed safety timer from 0 to 99 minutes.

To select a function, simply press pH and then the desired function. The display shows the current function value. Use the UP or DOWN arrows to adjust to the desired value.

SETPOINT

The standard factory-set pH control level is 700 mV, based on **WORLD HEALTH ORGANIZATION (WHO)** and **NATIONAL SPA AND POOL INSTITUTE (NSPI)** values for prevention of germs and bacteria.

To change the control level, press pH and then SETPOINT. Use the UP or DOWN arrows to adjust the pH setpoints. To save the new setpoint value and exit, press SETPOINT again.

The controller then automatically activates the chemical feeder for sanitizer feed, as required to maintain the set pH levels - regardless of fluctuations in bather load, contamination and weather. Like a thermostat maintaining a constant temperature, it prevents overfeeding or underfeeding, both of which are detrimental to good water quality.

ALARMS

When there is an alarm condition, the corresponding display flashes the alarm value:

- pH out-of-range,
- pH overfeed.

The display stops flashing when the condition is corrected. To reset the overfeed timers, turn the feed mode to off and then back to Manual or Auto.

RESET

The ideal values are set as default values. They can be adjusted by the operator at any time. To reset all factory

default values, press pH for 5 seconds.

SPECIFICATIONS

pH CONTROL	Adjustable from 4.0 to 10.0
pH SENSOR	Glass electrode with 10-ft (3 m) cable
READOUTS	pH (2 digits) LEDs
FEED MODE	Manual, automatic, proportional
ADJUSTMENTS	Setpoint, calibration, limits, feed rate
INDICATORS	LEDs for feed mode, feed status, alarms
SAFETY	Audio, visual and remote alarms Out-of-range limits and overfeed safety timers
CABINET	Polystyrene 9x7x4 in. (22x18x10 cm)
ELECTRICAL	110V, 240V or 24 VAC (specify)
PLUMBING	PVC tees for 1-1/2" or 2" line
WARRANTY	5 years on electronic module 1 year on all other parts

BROCHURE FOR PRINTING