Chemtrol™ PC4000

PROGRAMMABLE CONTROLLER

AUTOMATED FILTER CONTROL with True Duplex Remote Control

The **CHEMTROL™ PC4000** filter controller is a programmable control center for automatic filtration and backwash with true duplex remote operation. It introduces a new standard of sophistication in automated water treatment for many applications such as swimming pools, spas, cooling towers and industrial water treatment.

ADVANCED FEATURES

√ Programmable **RECIRCULATION PUMP CONTROL**,
√ **FLOW MONITORING** and **TOTALING** with safety alarm,
√ **INFLUENT/EFFLUENT PRESSURE** monitoring with safety alarms,
√ **INTERLOCK** with **CHEMISTRY CONTROLLER**,
√ **WASTE PIT** and **SURGE PIT ALARMS**,
√ **AUTOMATED BACKWASH** for single or multiple filters,
√ Works with **PNEUMATIC, HYDRAULIC** or **ELECTRIC VALVES**,
√ **EIGHT (8) BACKWASH PROGRAMS**,
√ **PRIORITY VALVE** program,
√ **AUTOMATIC DATA LOGGING** for up to 999 tests,
√ **HEATER CONTROL** with fireman safety and energy saver program,
√ **WATER LEVEL CONTROL** with electronic sensor and fill valve control,
√ **RS-485 CONNECTION** to **CHEMTROL™** chemistry controllers,
√ **REMOTE COMPUTER OPERATION** and **GRAPHIC DATA DISPLAY**,
√ **FULL-SCREEN MENUS** in English, French or Spanish.

POWERFUL AND RELIABLE

The **CHEMTROL™ PC4000** is a powerful and reliable controller that incorporates automated control of filtration with choice of backwash programs for single or multiple filters. All menus are displayed in clear language in English, French or Spanish with choice of US or metric units.

Each unit is supplied with a comprehensive operation manual, on-site startup and training by a Qualified Dealer, plus a **FIVE-YEAR electronics warranty**.

REMOTE COMPUTER OPERATION

EXTENDED TECHNICAL SUPPORT

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

The **CHEMCOM™** Program for *Windows™* allows **immediate technical support** from our Service Department or from a Qualified Dealer by remote computer with true duplex operation,
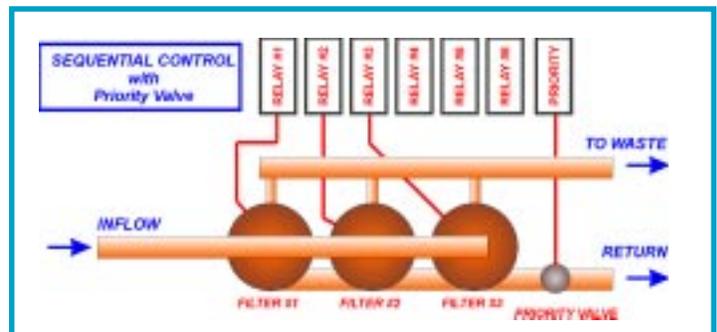
Visit our Web Site at www.sbcontrol.com or call today for a free demo CD.

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

INSTALLATION
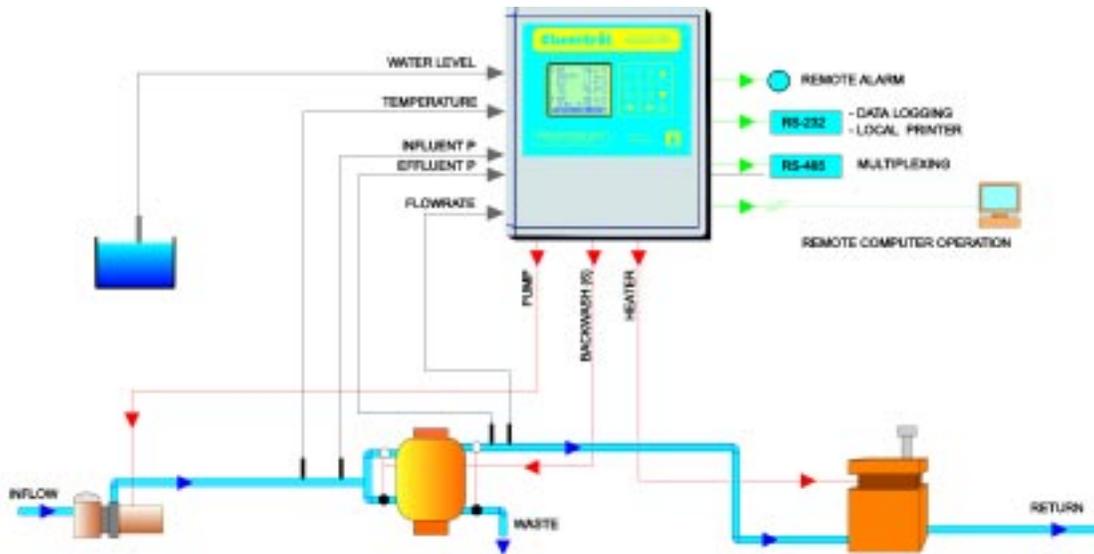
SPECIFICATIONS

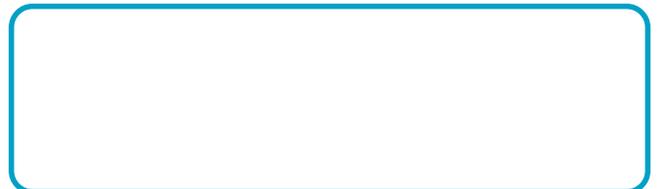|	
SCREEN DISPLAY	8 lines @ 22 characters
TEMPERATURE READOUT	0 to140 F (-18 to 60C)
SENSOR CALIBRATIONS	Field adjustable
CONTROL MODE	Off, Manual, Auto, Timer, Schedule
BACKWASH PROGRAMS	7-day Timer
	Pressure Differential
	Time or Pressure
	Time and Pressure
ALARMS	Visual, audio and external alarms
DATA LOGGING	On-board memory for up to 999 tests
	RS232 communication port
	for local download and printing
MULTIPLEXING	RS485 port for up to 30 controllers
REMOTE OPERATION	Data communication modem
	CHEMCOM$_{TM}$ software
	and graphic data display
ELECTRICAL	10 A / 110 or 230V with selector switch
	All output relays 5 A
WARRANTY	5-year electronics
	1-year sensors
MECHANICAL	NEMA 4X fiberglass cabinet
	13x11x6 1/2 in (34x29x17 cm)
SHIPPING	
Controller	24x18x18 in / 60x45x45 cm (40 lbs/18 kg)
Water Level	72x12x12 in / 180x30x30 cm (54 lbs/25 kg)

MODEL SELECTION

STANDARD FEATURES

√ **SINGLE OR SEQUENTIAL FILTER BACKWASH**

√ **RECIRCULATION PUMP CONTROL**

√ **FLOW RATE MONITORING AND TOTALING**

√ **INFLUENT / EFFLUENT PRESSURE TRANSDUCERS**

√ **WASTE AND SURGE PIT ALARMS**

√ **HEATER CONTROL**

√ **AUTOMATIC DATA LOGGING**

√ **REMOTE ALARM**

OPTIONS

☐ **REMOTE COMPUTER OPERATION**

☐ **4-20 mA DATA OUTPUT**

☐ **AUTOMATIC WATER LEVEL CONTROL**

REPRESENTED BY:

2.75
(70)

4.500
(114)

6.000
(152)

8.000
(203)

1.75
(44)

13.21
(336)

15.21
(386)

Chemtrol ™

SANTA BARBARA CONTROL SYSTEMS

115/230V 15A
FRONT PANEL

16.59
(421)

GROUND

3.000
(76)

2.500
(63)

7.09
(180)

3.750
(95)

1.750
(44)

2.25
(57)
REF

2.813
(71)

2.500
(63)
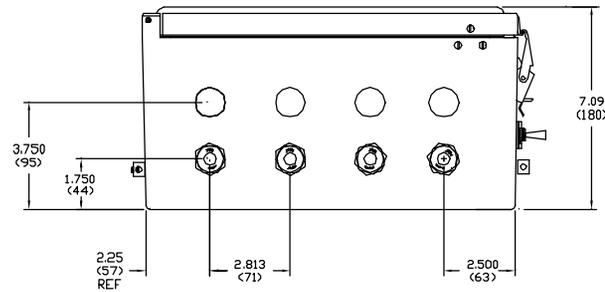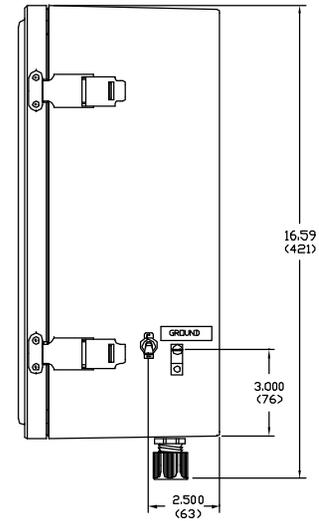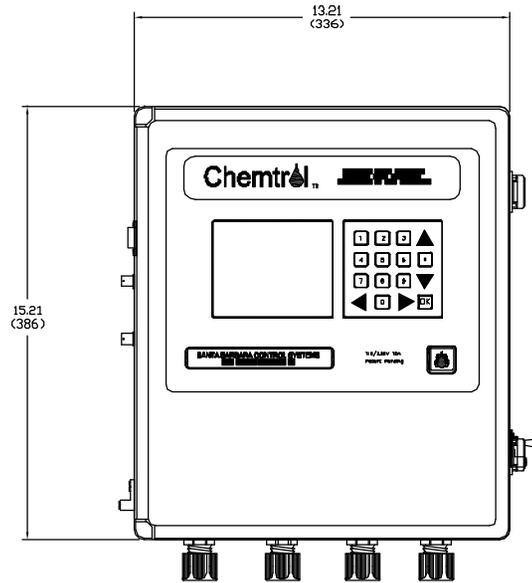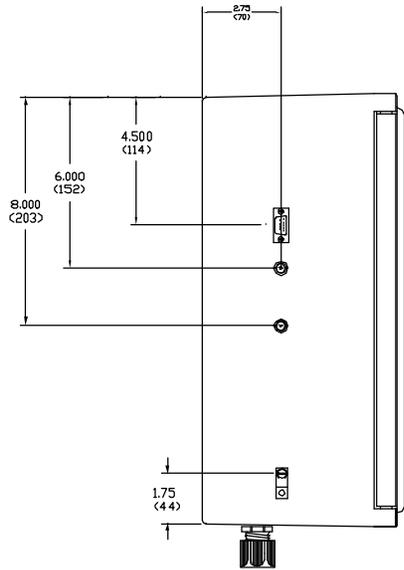
UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES

DECIMALS.		FRACTIONS ±X/X°
X.X	±.030	ANGULAR
X.XX	±.020	X° ±1°
X.XXX	±.010	X.X° ±.5°

MATERIAL

FINISH

SANTA BARBARA CONTROL SYSTEMS
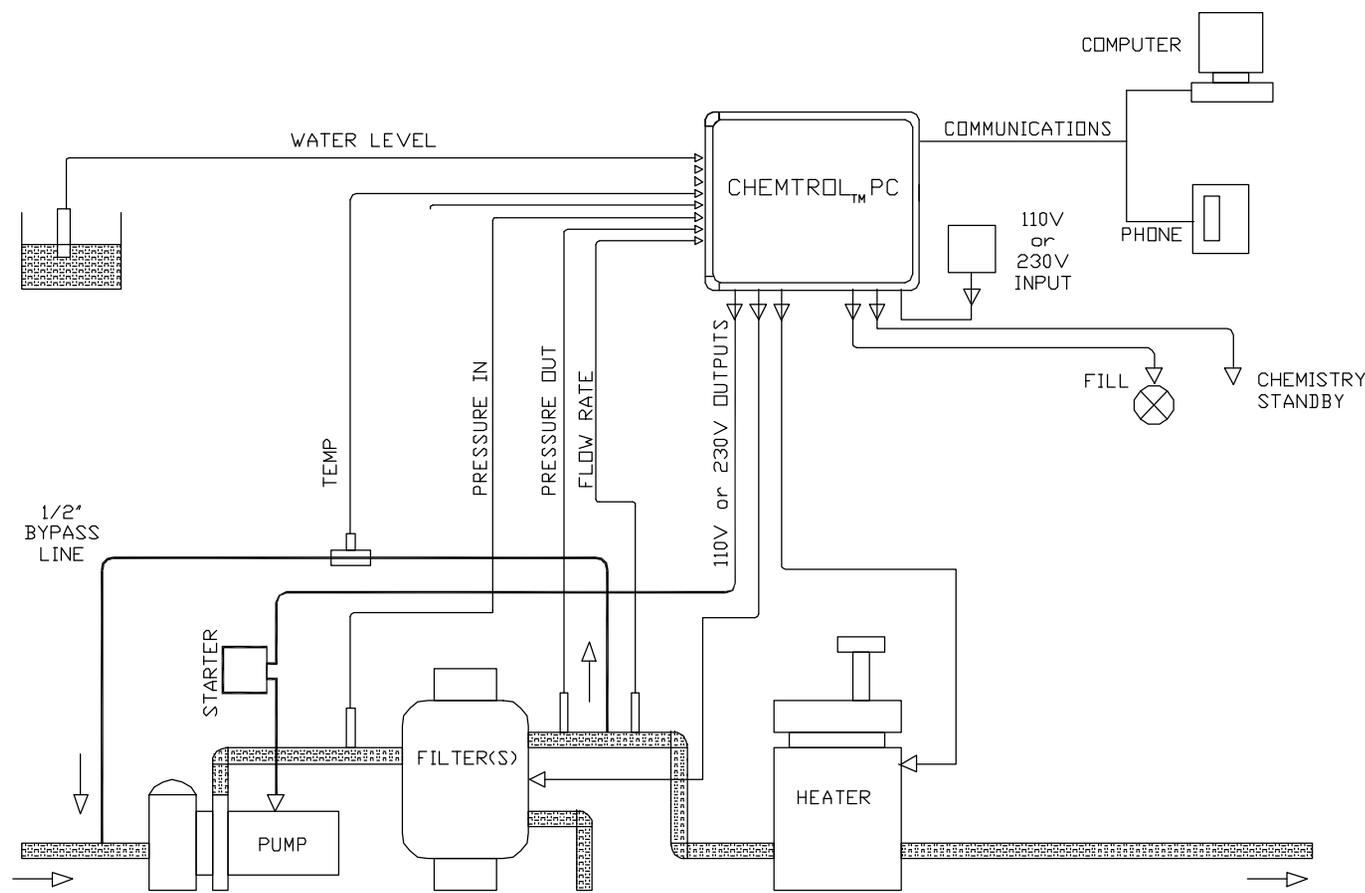5375 OVERPASS ROAD, SANTA BARBARA CA 93III-2007
805-683-8833   FAX 805-683-1893

Chemtrol ™

CHEMTROL ™ PC4000 CONTROLLER
FIBERGLASS CABINET

SIZE	FSCM NO.	DWG NO.	REV
B			—
Scale: ALL DIMENSIONS IN IN. (MM)			Sheet 1 OF 1

COMPUTER

WATER LEVEL

COMMUNICATIONS

CHEMTROL™ PC

110V
or
230V
INPUT

PHONE

FILL

CHEMISTRY
STANDBY

TEMP

PRESSURE IN

PRESSURE OUT

FLOW RATE

110V or 230V OUTPUTS

1/2"
BYPASS
LINE

STARTER

FILTER(S)

PUMP

HEATER

ELECTRICAL
POWER INPUT
  115V / 10A dedicated
  230V selector switch

POWER OUTPUTS
  Same voltage as input
  All 5A relays with
  5A slow blow fuses
FILL VALVE
HEATER CONTROL
RECIRCULATION PUMP CONTROL
FILTER CONTROLS (6 each)
EXTERNAL ALARM

SENSORS

TEMPERATURE: Thermistor
  1/2" SST PVC tee
PRESSURE: Piezoelectric (2)
  1/8" MPT fittings
FLOW METER: Square wave
  1.5" MPT + saddle clamp
WATER LEVEL: Optical
  1/4" MPT fitting

COMMUNICATIONS
RS-232 SERIAL PORT
RS-485 PARALLEL PORT
TELEPHONE JACK

NOTE #1: Controller must be located more than 10-ft
(3-m) away from water edge.
NOTE #2: Sensor cable lengths are 10-ft (3-m) long with
optional 25-ft (8-m) and 50-ft (16-m) extensions.
NOTE #3: For main recirculation line over 2-in (50 mm),
install 1/2" bypass line for Bypass Line Assembly
(BPL-0.5) or Sensor Cell Cabinet (SCC).

SANTA BARBARA CONTROL SYSTEMS
Santa Barbara, CA 93111   805/683-8833

CHEMTROL™ PC4000 INSTALLATION
Fiberglass Cabinet
All dimensions in in. [mm]

CHN 12/05/01

PC4INSTAL.dwg