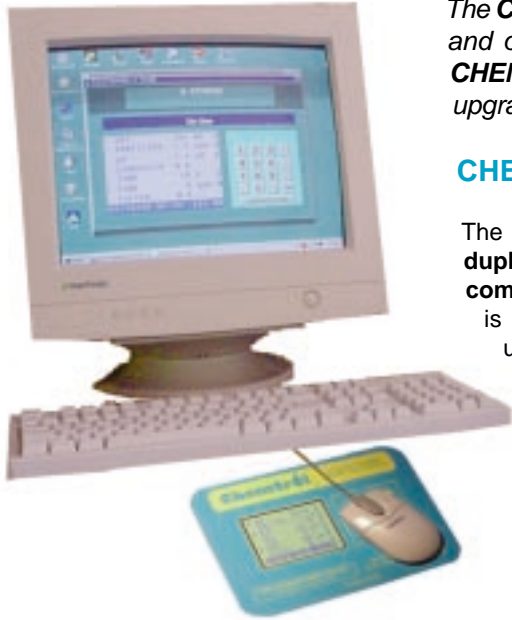


Chemcom™ COMMUNICATIONS

FOR CHEMTROL™ CONTROLLERS



The **CHEMCOM™ COMMUNICATIONS** options provide remote computer monitoring and operation for all CHEMTROL™ PC automated water treatment controllers. **CHEMCOM™** is available for new controllers and for existing controllers with a simple upgrade of the motherboard.

CHEMCOM™ REMOTE OPERATION

The CHEMCOM™ software program is a proprietary *Windows* program that offers **true duplex operation with identical duplicate screens on both the controller and the computer**. This means that every event on the controller or action on the remote computer is immediately reproduced on the other screen. This unique feature is particularly useful for remote monitoring, operator training and troubleshooting. It also eliminates the need to learn a new computer program.

There are several different ways to connect to the remote controller, each being adapted to specific situations, such as location and availability of communications equipment.

It is also possible to interface the controller with a MODBUS protocol directly to a Building Management Systems (BMS).



RS-485 COMMUNICATIONS

This is the simplest and most direct mode of communication between a remote computer and the controller. It is used when the computer is physically close to the equipment room so that a direct line connection can be established between the RS-485 terminal ports on the controller and on the remote computer.

Advantages

Full remote access by facility operator without need for telephone lines and modems.

Requirements

Computer must be located close to the equipment room.

MODEM COMMUNICATIONS

This is the normal mode of remote communication using a telephone line. It only requires an analog telephone line in the equipment room and gives access to the controller from anywhere in the world and from any computer programmed with CHEMCOM™ software. Communication is through a data/voice modem on the motherboard of the controller.

Advantages

Full remote access by the operator on-site, at home or from any remote location.

Access by the dealer or manufacturer for technical support.

Requirements

Cost of telephone line and phone calls.

ETHERNET/INTERNET COMMUNICATIONS

This is recommended for facilities with a local ethernet computer network. The controller is connected to the network as an additional computer. It can be accessed from any computer on the network that has the CHEMCOM™ software program. It can also be accessed from outside the network by connecting to the Internet.

Advantages

No telephone line required and no phone bills.

Technical support from dealer or manufacturer through Internet connection.

Possible integration to Building Management Systems (BMS).

Requirements

Requires a local Ethernet network.

Requires Internet connection with static IP address.

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
PHONE
FAX
INTERNET

800-621-2279
805-683-8833
805-683-1893

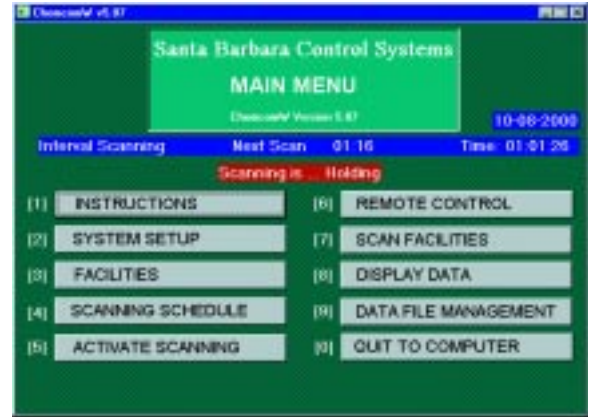
www.sbcontrol.com

Leading in Automated Water Treatment Since 1976

CHEMCOM™ PROGRAM MENU

The CHEMCOM™ remote control program runs under *Windows* operating software from *Microsoft*. The Main Menu provides the following key functions:

- SYSTEM SETUP to customize the communications options for the remote computer, such as communication port setting, and alarm limits for each parameter,
- FACILITIES SETUP to enter the specifics for each remote facility, such as modem and operator phone numbers, model and type of connection,
- SCANNING SCHEDULE for automatic scanning mode,
- REMOTE CONTROL to access and operate any of the remote facilities,
- DATA DISPLAY to show operational data in either graphical or text format.



REMOTE CONTROL SCREEN

The remote computer displays a control screen that is an exact duplicate of the front panel of the controller. It uses the same function keys, menus and submenus. This allows easy operation for anyone who is familiar with operation of the controller.



The remote screen gives full access to the controller for monitoring, troubleshooting and operator training.

DATA SCAN LOG

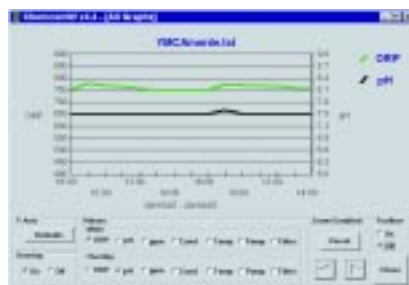
The operating data stored in the controller can be downloaded directly to the computer and shown either as a scan log, a text file or a graphic display. The data log schedules are selected by the operator. On the scan log shown here, the out-of-range values are highlighted in red. The limits can be reset by the operator at any time before or after data downloading.



The data log text file can be used for operation reports, health department inspections, etc.

GRAPHIC DATA DISPLAY

The operating data from the controller can also be shown in graphic form. The operator can select parameters for display and can zoom in and out for specific dates and times of the day.



BID SPECIFICATIONS

1. OPTION ETHCOM: The controller shall include an Ethernet / Internet modem for remote operation by PC-compatible computer using Ethernet / Internet network communication. A Windows-based software program shall be supplied with true duplex operation capability representing the actual controller screen display with automatic downloading and visual graphics representation of test data. Controllers using simulation or virtual representation of the display screen shall not be considered equal.

2. OPTION MODBUS: The controller shall include software-based conversion of sensor signals, setpoint, high & low alarms, cumulative run time and total feed time for ORP, pH, PPM, Temperature, (Conductivity, Pressure influent and effluent, and Flow available with optional sensors) into MODBUS protocol for monitoring on Building Management Systems. The controller shall also allow MODBUS writing for changing control modes and setpoints from Building Management Systems.

3. OPTION RS485: The controller shall include a communication converter and RS485-based multiplex communication for remote operation by PC-compatible computer linked directly to the controller. A Windows-based software program shall be supplied with true duplex operation capability representing the actual controller screen display with automatic downloading and visual graphics representation of test data. Controllers using simulation or virtual representation of the display screen shall not be considered equal.

4. OPTION 4-20 mA SIGNAL: A five (5)-channel converter board shall be provided to convert the sensor digital signals for ORP, pH, PPM, temperature and conductivity (TDS) into analog 4-20 mA signals for monitoring on Building Management Systems. The board shall be capable of sending a sourcing or sinking type of signal.

REPRESENTED BY:

