



Chem Comm IV Guide

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*Santa Barbara Control Systems
5375 Overpass Road, Santa Barbara, CA 93111
Tel: (805) 683-8833 (800)621-2279*

*Fax: (805) 683-1893
Visit at www.sbcontrol.com*

Document Revisions

Date	ChemComm Version Number	Document Changes
06/13/2019	4.11	Initial Draft
07/10/2019	4.11	Add PC2000, PC3000
11/25/2019	4.11	Update Table 1



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1 Introduction

CHEMTROL® Automation uses advanced electronic sensing technology to monitor and control the most control critical parameters in water, such as sanitizer activity, pH, temperature, conductivity or total dissolved solids (TDS). These are all essential to maintaining safe and enjoyable water.

ChemComm IV is a Windows 10 (64bit) application that allows access to Chemtrol Controllers over an Ethernet connection.

1.1 Scope and Purpose

This document covers the application, installation, and operation of ChemComm IV monitor for Chemtrol® line of water system controllers.



1.2 Technical Support

Please take the time to read this detailed Instruction Manual to insure proper installation and operation. If you need further technical assistance, you can contact your Qualified *CHEMTROL®* Representative, call our Technical Department toll free at 800-621-2279 or e-mail us at *chemtrol@sbcontrol.com*.

1.3 Hardware Setup

1. ChemComm IV installs only on a 64 bit Windows 10 machine.
ChemComm IV uses the normal Windows installer
ChemComm IV Install.msi
2. Chem Comm IV works with an Ethernet connection to the Chemtrol controller. This version does not support serial connection.
3. Connect the Ethernet cable to main board Ethernet connector as shown in Figure 1.

If the connection is to a Ethernet switch, use a standard straight-through Ethernet cable. If Connecting directly to a PC, use a cross-over cable.

See Appendix for setup of PC2000 and PC3000 Controllers that use replaceable chipsets.



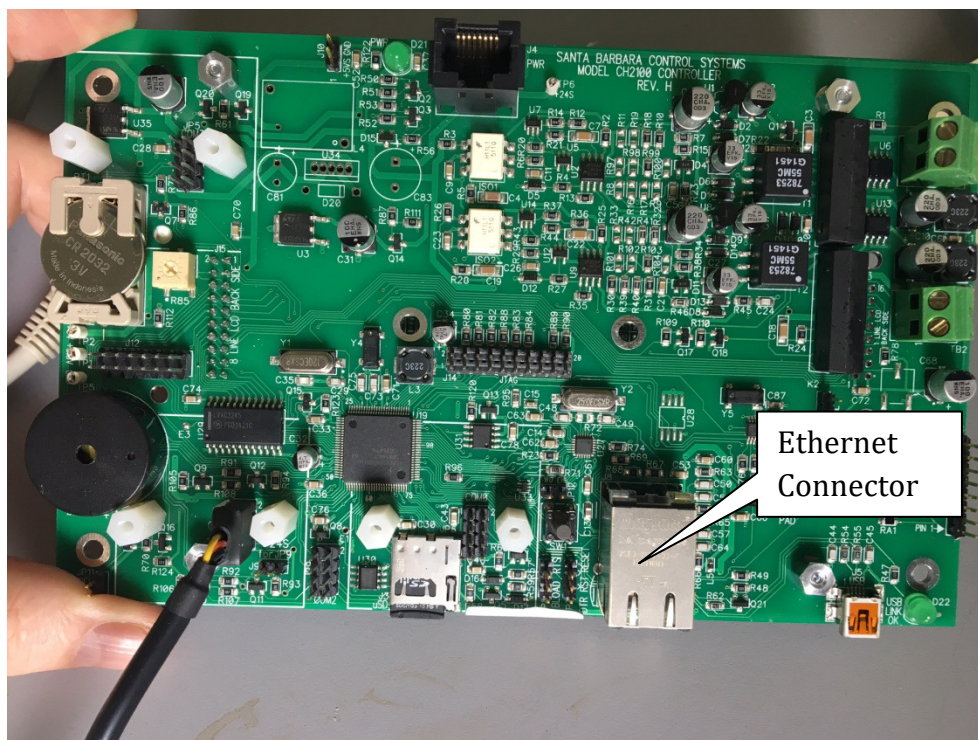


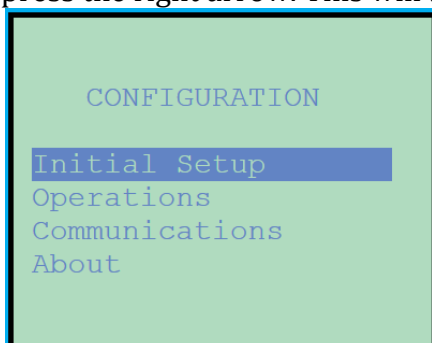
Figure 1 Ethernet Connector CH2100 Boards

2 Controller Setup

The controller must be enabled to communicate with ChemComm IV.

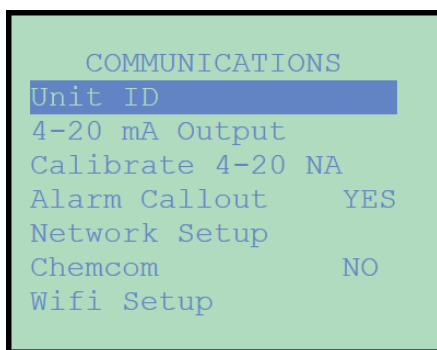
2.1 Enabling ChemComm at the Controller

From the main screen (on the controller), bring the selection bar to the bottom row and press the right arrow. This will bring you to the Configuration Screen.



Next, use the down arrow to select the Communications row and press the right arrow. This will bring you to the Communications setup screen



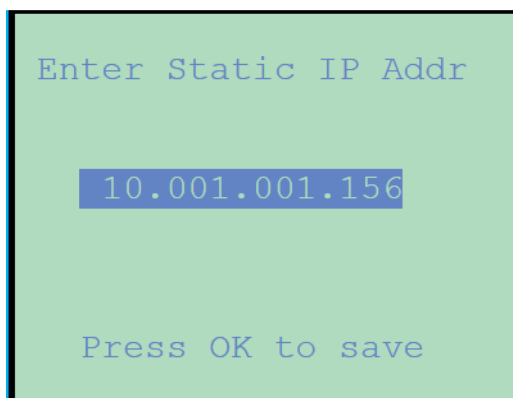


If the ChemComm row says NO then use the down arrow to select the ChemComm row. Press the right arrow to change the indicator from NO to YES. If the indicator says NO then press the OK button. You will get a warning about a restart, press the OK button. . We will restart later. The ChemCom row must indicate YES.

Use the up arrow button to select Network Setup and press the right arrow.

Next use the down arrow to select Device IP Address and press the right arrow.

A screen will appear showing the IP address of the controller. Copy this address down as we will need it later. You may have either a static IP or a DHCP (automatically assigned) IP.



Use the right arrow to back out to the main screen then cycle the power to the controller unit.



3 ChemComm Setup

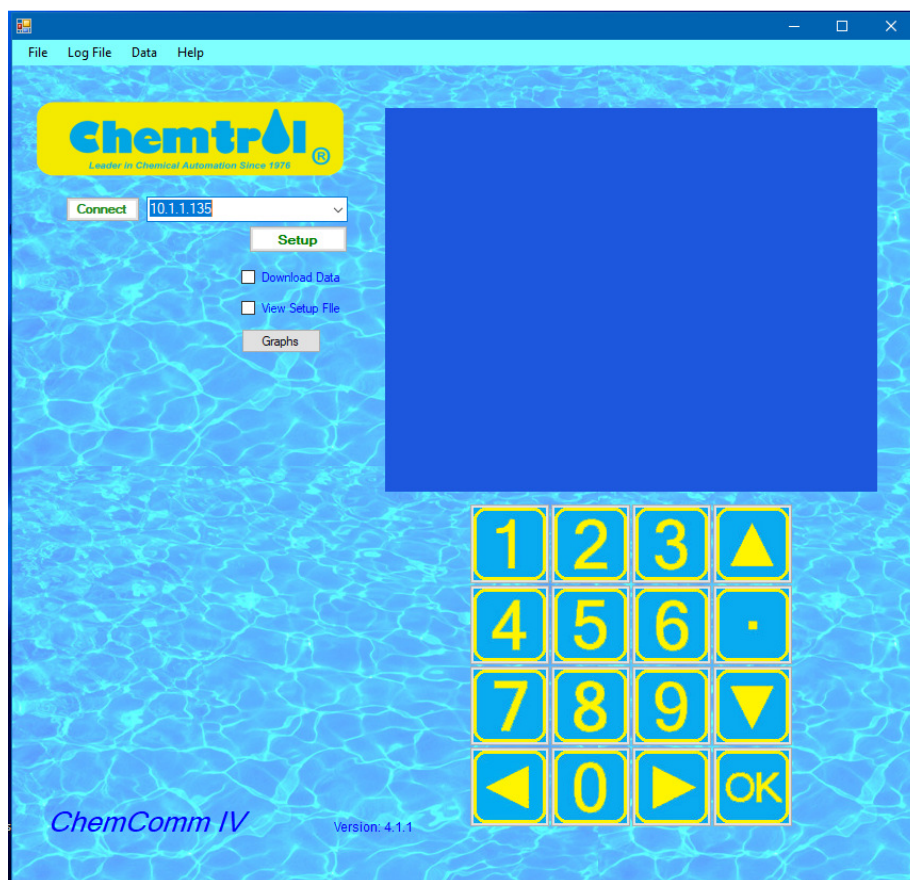
The illustrations here show a different IP address than the previous section. The basic restriction is that the ChemComm IV must be on the same sub-network as the controller.

3.1 ChemComm Installation

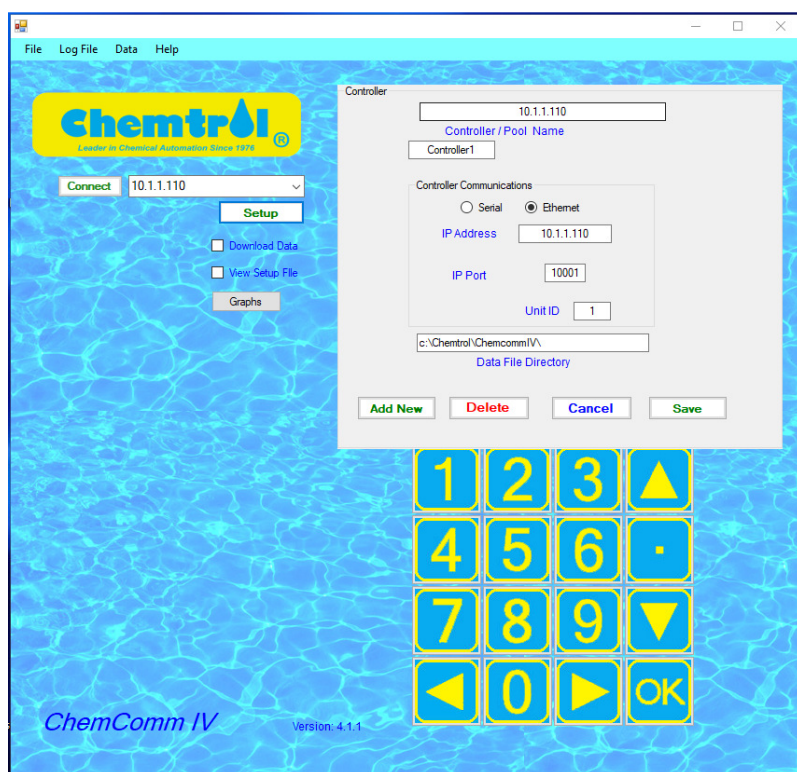
Unpack the ChemComm installation file and get the ChemComm 411.msi. Run the ChemCommIV install program.

If you want to re-install the program, you will need to uninstall it first. There is no need to uninstall ChemComIII; the two programs will co-reside on the same computer.

The installation will place an icon on your desktop. Launch the program and a ChemComm IV framework will appear.



Press the Setup button. This will bring up the setup screen as shown below



The setup screen has 5 fill-in boxes.

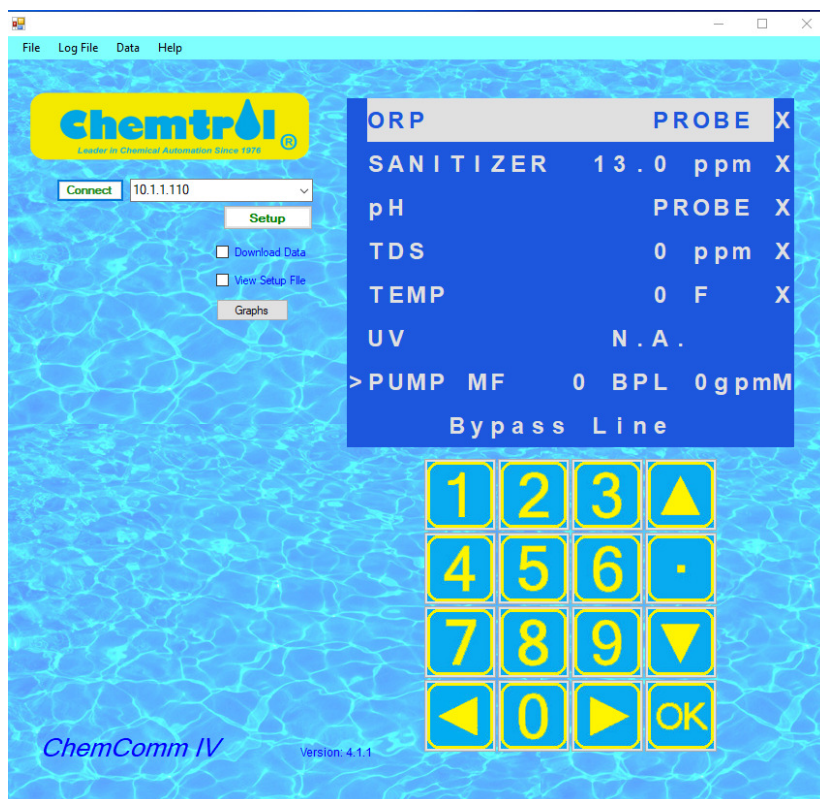
1. At the top is the Controller/Pool name. Use this field to name the controller of interest or (as shown above) or the IP address. This name will appear in the dropdown list on the main screen.
2. Make sure the radio button for Ethernet is pressed.
3. Enter the IP address of the controller. It is either the static address or the DHCP address.
4. IP Port must be set to 10001
5. The data file is the file where you would like the data files to be stored. It defaults to c:\Chemtrol\ChemcommIV\

Press save to save the settings. If you have more than one controller, then set up each in succession.

ChemComm will return to the main screen. A correct setup will show the current readings, as shown below. Press connect to force a connection to the controller.



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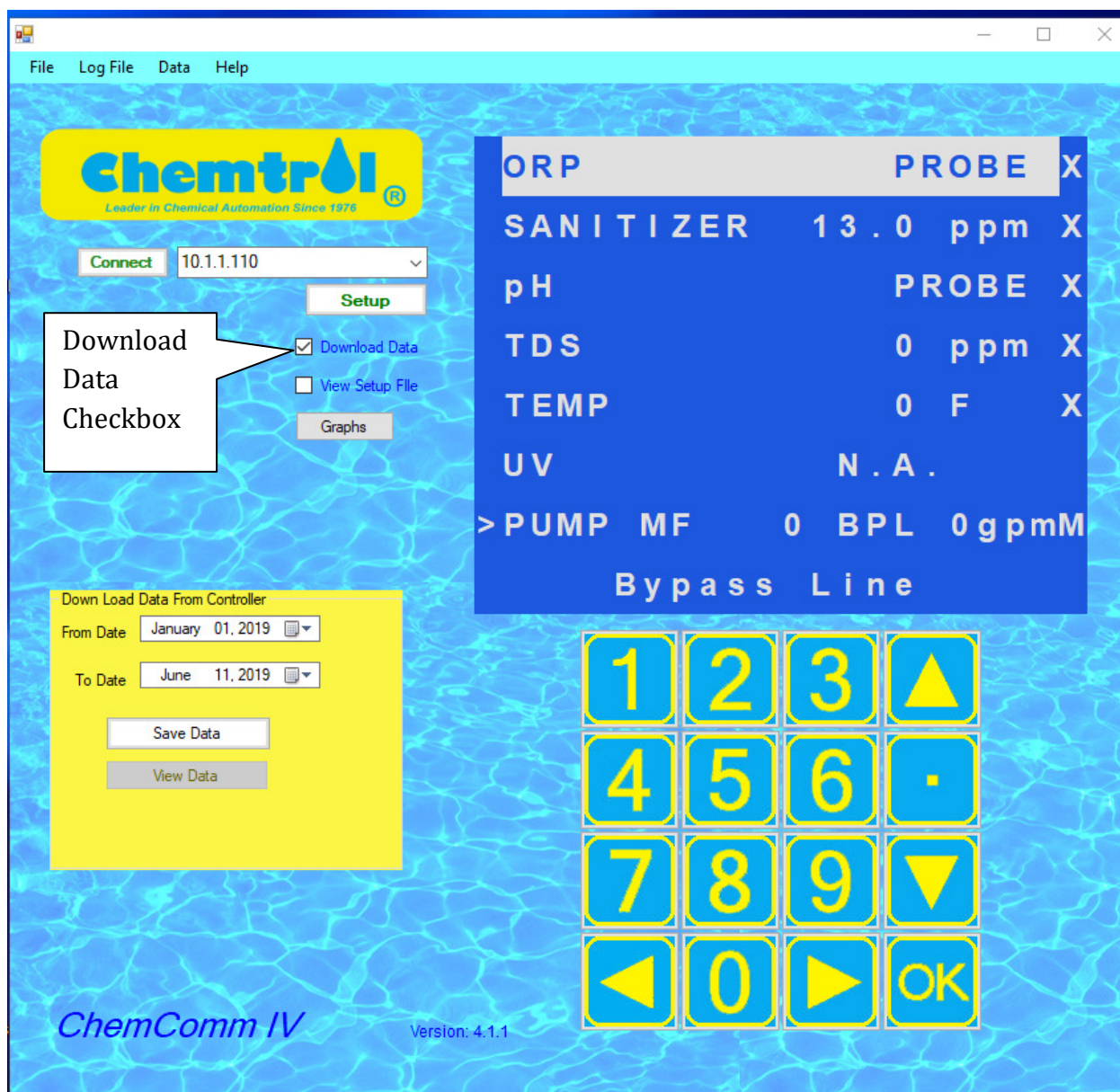
At this point you may operate the controller using the front panel controls, by arrow and clicking

Note that the Controller will service either ChemComm IV or the remote from internet.



4 Data Offloading

Checking the Download Data box on the controller will bring up the down load data panel as shown.



Enter in the dates then press the Save data button. You will have the opportunity to change the file name and location and to view the data when the progress box completes

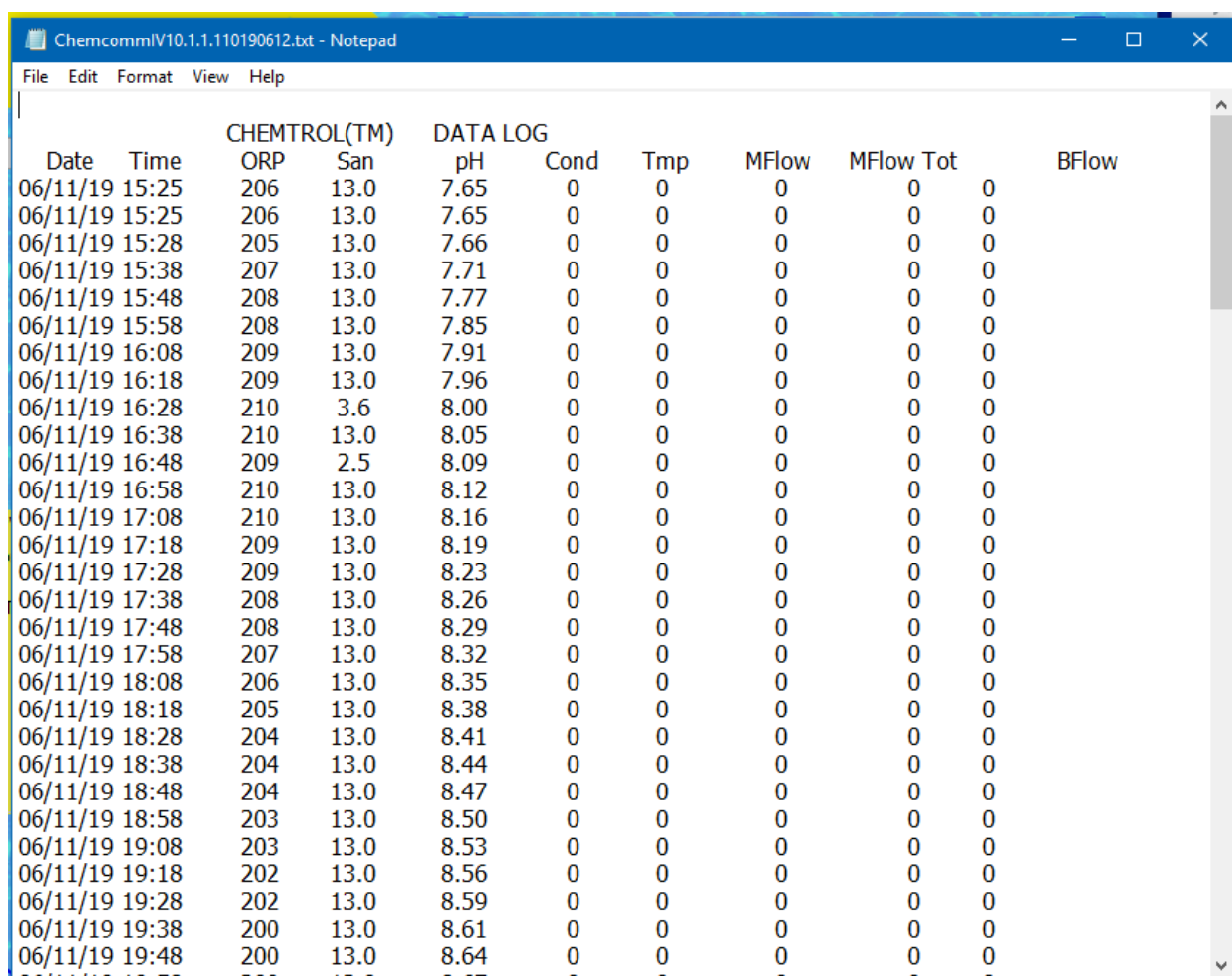
In the down load data panel select the from date and to date. Be sure to enter a date that that is one day more than the desired end date. For example to down load dates 1-



1-2017 to 5-10-2017, enter dates 1-1-2017 to 5-11-2017. Note that the date boxes are Windows pull down select boxes.

Note that the time and date must be set properly on the controller.

- Next Press the Get Data button.
- The system will choose a place to store the resulting file. You may change this if desired.
- Press Save and you will see a green progress bar scan across the bottom.
- Press View data to see what was downloaded. A sample captured file is shown in Figure 7



Date	Time	CHEMTROL(TM)	DATA LOG						
		ORP	San	pH	Cond	Tmp	MFlow	MFlow Tot	BFlow
06/11/19	15:25	206	13.0	7.65	0	0	0	0	0
06/11/19	15:25	206	13.0	7.65	0	0	0	0	0
06/11/19	15:28	205	13.0	7.66	0	0	0	0	0
06/11/19	15:38	207	13.0	7.71	0	0	0	0	0
06/11/19	15:48	208	13.0	7.77	0	0	0	0	0
06/11/19	15:58	208	13.0	7.85	0	0	0	0	0
06/11/19	16:08	209	13.0	7.91	0	0	0	0	0
06/11/19	16:18	209	13.0	7.96	0	0	0	0	0
06/11/19	16:28	210	3.6	8.00	0	0	0	0	0
06/11/19	16:38	210	13.0	8.05	0	0	0	0	0
06/11/19	16:48	209	2.5	8.09	0	0	0	0	0
06/11/19	16:58	210	13.0	8.12	0	0	0	0	0
06/11/19	17:08	210	13.0	8.16	0	0	0	0	0
06/11/19	17:18	209	13.0	8.19	0	0	0	0	0
06/11/19	17:28	209	13.0	8.23	0	0	0	0	0
06/11/19	17:38	208	13.0	8.26	0	0	0	0	0
06/11/19	17:48	208	13.0	8.29	0	0	0	0	0
06/11/19	17:58	207	13.0	8.32	0	0	0	0	0
06/11/19	18:08	206	13.0	8.35	0	0	0	0	0
06/11/19	18:18	205	13.0	8.38	0	0	0	0	0
06/11/19	18:28	204	13.0	8.41	0	0	0	0	0
06/11/19	18:38	204	13.0	8.44	0	0	0	0	0
06/11/19	18:48	204	13.0	8.47	0	0	0	0	0
06/11/19	18:58	203	13.0	8.50	0	0	0	0	0
06/11/19	19:08	203	13.0	8.53	0	0	0	0	0
06/11/19	19:18	202	13.0	8.56	0	0	0	0	0
06/11/19	19:28	202	13.0	8.59	0	0	0	0	0
06/11/19	19:38	200	13.0	8.61	0	0	0	0	0
06/11/19	19:48	200	13.0	8.64	0	0	0	0	0

Figure 7. Captured Data file

- The resulting file is a text file and may be imported into Word or Excel.



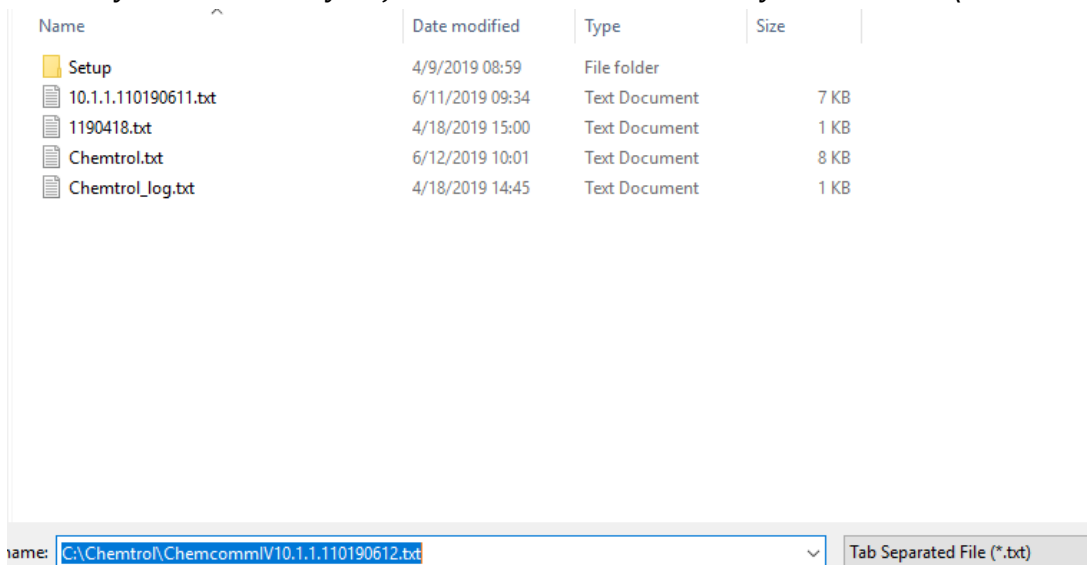
5. You may change the dates and repeat the down load if desired. You will need to choose a new file name for each new file.

5 Trending Graphs

To obtain trending graphs from stored data, press the graphs button. The graphing screen will appear. It will display the current file (you can change it).

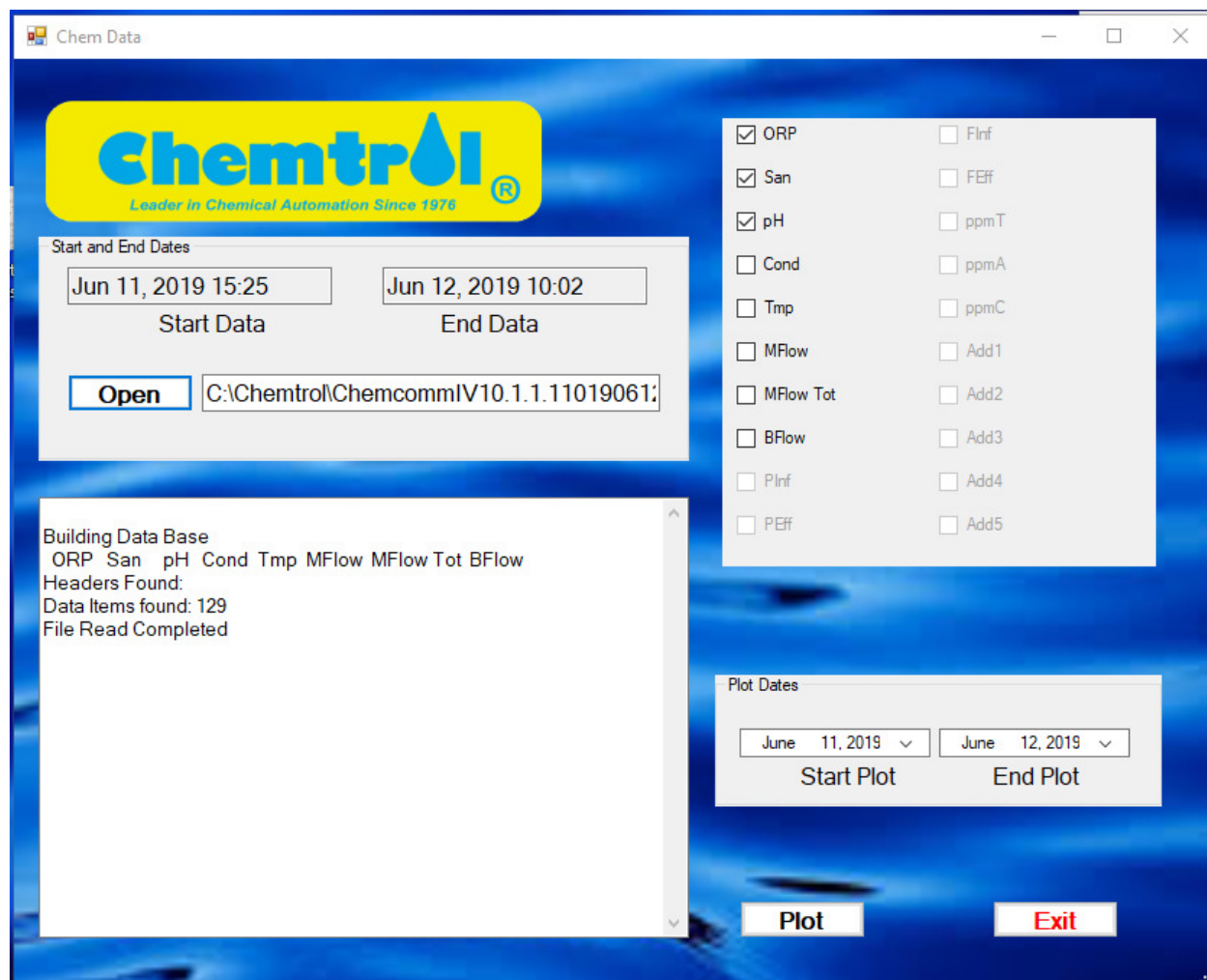
Note that the time and date must be set properly on the controller.

1. Press Open. The open file dialog box will appear. Choose the file you wish to plot. Make sure you target the file you wish to plot. You may have to jump up one directory to see the file you just saved. Files are saved by default in C:\Chemtrol\

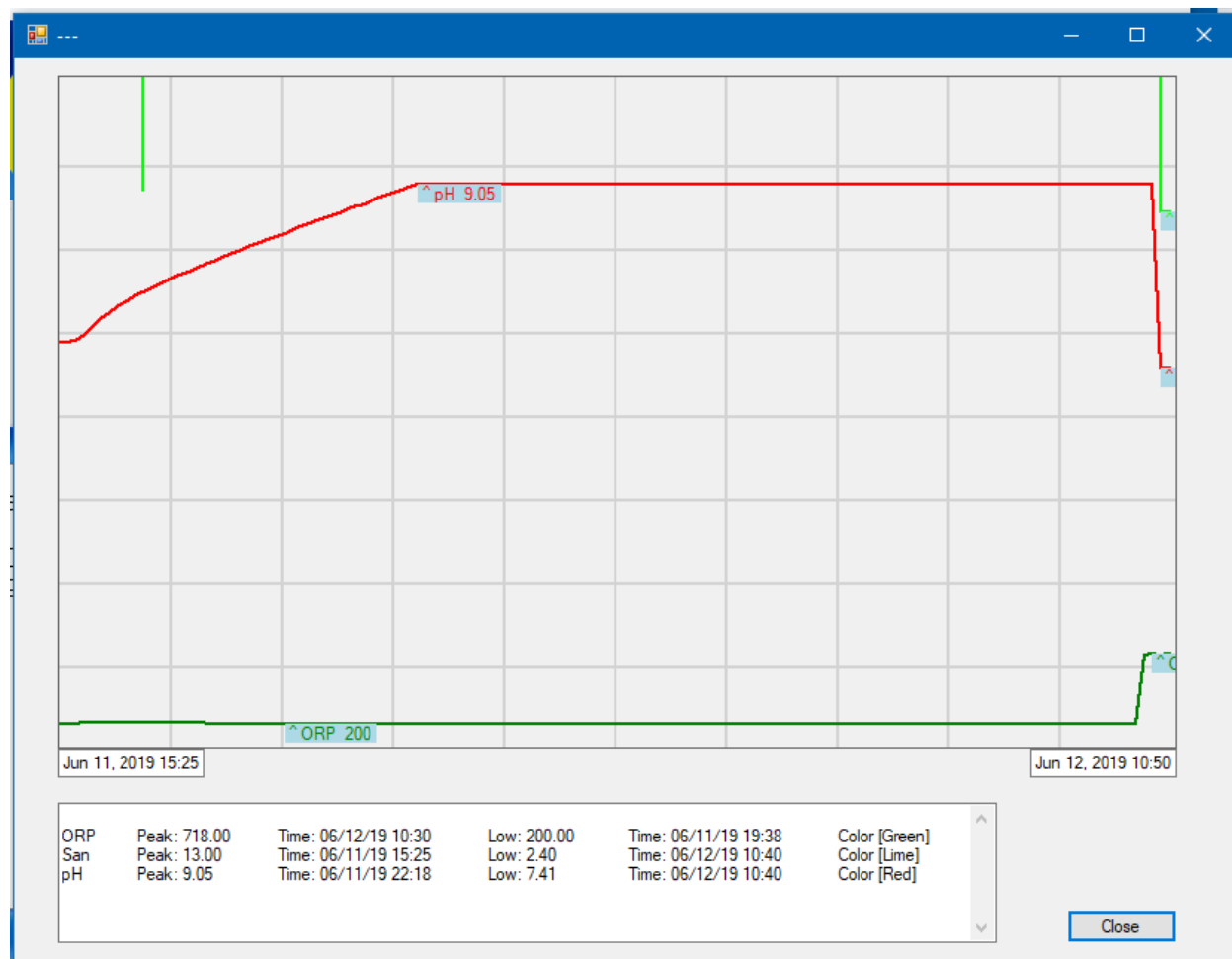


2. Chem Comm will examine the file and fill in the Start and end dates of the file.
3. The plot dates will also be filled in. Adjust if you want a different start and end date.
4. A series of check boxes will show the data available. Check off the ones you wish to plot.





Press plot and a plot will be shown with data peaks and lows identified. The figure shows a test unit responding to test signals.



6 Appendix

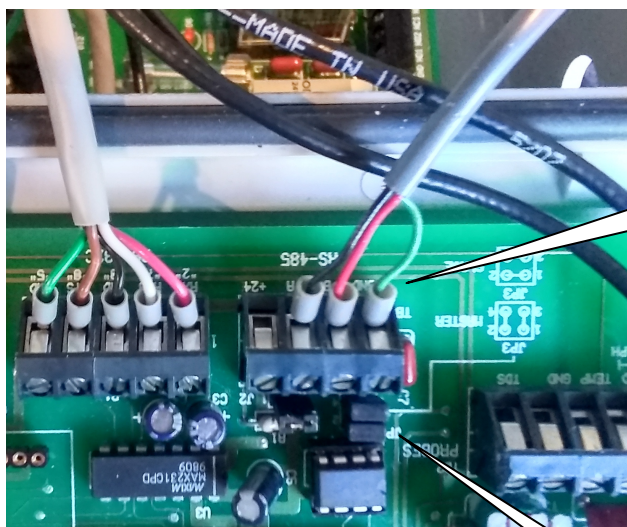
6.1 PC 2000 Series

The PC2000 series of controllers is programmed via chip set as shown



PC 2000 Chipset 1PC 2000

Connect the RS-485 serial inputs as shown. Set the jumpers to SLAVE mode



Carefully note the RS-485 connections:

A = Black

B = Red

Ground = Green

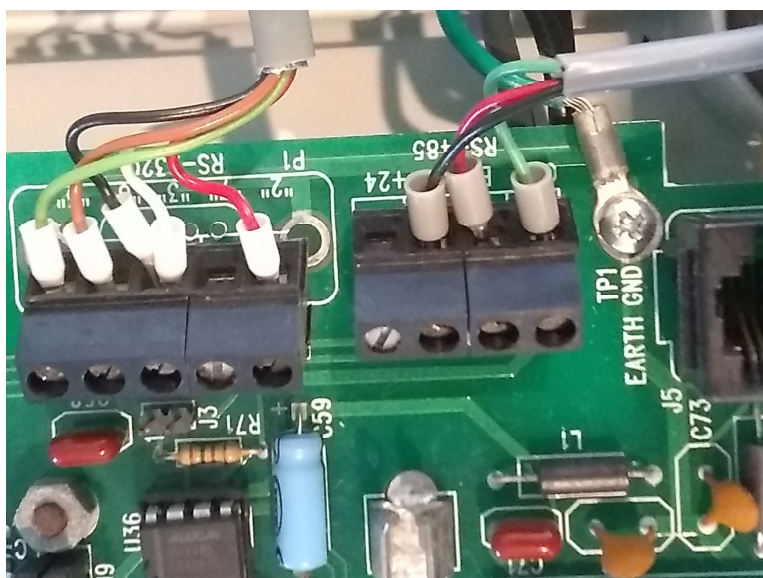


6.2 PC3000 Series

The PC3000 early series of controllers is programmed via chip set as shown



Connect the RS-485 serial inputs as shown. Set the jumpers to SLAVE mode



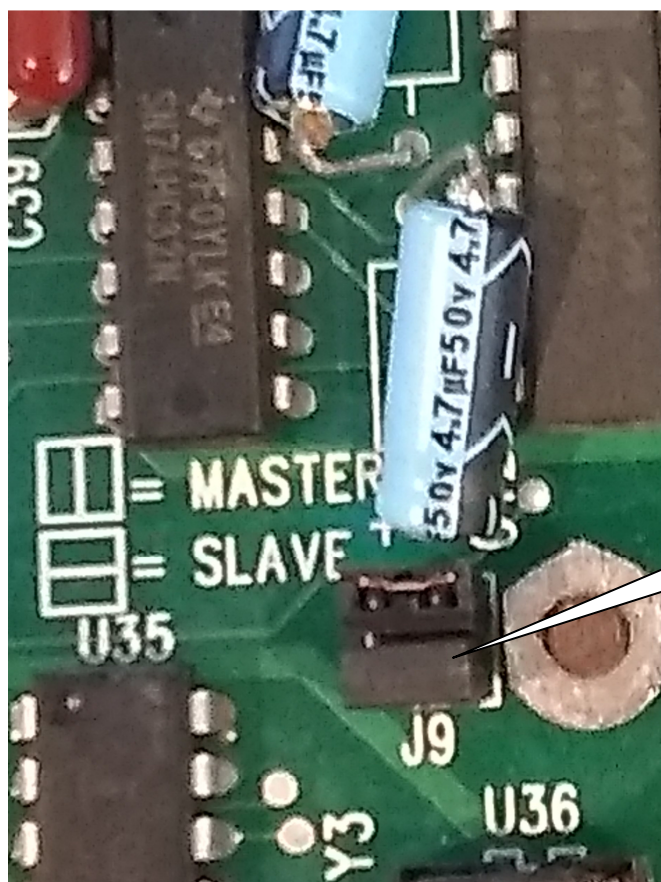
Carefully note the RS-485 connections:

A = Black

B = Red

Ground = Green





Jumpers
set to
SLAVE

