



**INSTRUMENTS**

# **GX-6000 Data Logger Management Program Operator's Manual**

**Part Number: 71-0383**

**Revision: F**

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## Warranty

RKI Instruments, Inc. warrants gas alarm equipment sold by us to be free from defects in materials and workmanship, and performance for a period of one year from date of shipment from RKI Instruments, Inc. Any parts found defective within that period will be repaired or replaced, at our option, free of charge. This warranty does not apply to those items which by their nature are subject to deterioration or consumption in normal service, and which must be cleaned, repaired, or replaced on a routine basis. Examples of such items are:

Absorbent cartridges	Batteries
Pump diaphragms and valves	Filter elements
Fuses	

Warranty is voided by abuse including mechanical damage, alteration, rough handling, or repairs procedures not in accordance with the instruction manual. This warranty indicates the full extent of our liability, and we are not responsible for removal or replacement costs, local repair costs, transportation costs, or contingent expenses incurred without our prior approval.

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This warranty covers instruments and parts sold to users only by authorized distributors, dealers, and representatives as appointed by RKI Instruments, Inc.

We do not assume indemnification for any accident or damage caused by the operation of this gas monitor and our warranty is limited to replacement of parts or our complete goods.

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**CAUTION:**     *Read and understand this manual before using the GX-6000 Datalogging Program. Also read and understand the GX-6000 Operator's Manual included with the GX-6000 portable gas detection unit.*

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# Chapter 1: Introduction

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## Overview

Using an advanced detection system consisting of up to six gas sensors, the GX-6000 Personal Gas Monitors detects the presence of combustible gases, oxygen (O<sub>2</sub>), carbon monoxide (CO), and hydrogen sulfide (H<sub>2</sub>S) and various other toxic gases simultaneously. The compact size and easy-to-use design make them ideally suited for a wide range of applications as described in the GX-6000 Operator's Manual. Please read the GX-6000 Operator's Manual first before using the GX-6000 Datalogging Program.

The GX-6000 Datalogging Program downloads stored data in the GX-6000 to a Windows-based PC. After the data has been downloaded, you can view, save, or print it using your computer and the GX-6000 Datalogging Program.

The purpose of this manual is to explain how to use and set up the GX-6000 Datalogging Program. You will learn how to:

- install and launch the software
- install the downloading cable (if needed)
- access and store data in a common database
- download data from the GX-6000
- view, print, and save data
- change data logging parameters
- create user and station IDs
- change the appearance of the program screens
- change the color of graphed readings for a particular gas

Before you get started, be sure to review the system requirements in the next section.

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**CAUTION:** *The GX-6000 unit detects oxygen deficiency and elevated levels of oxygen, combustible gases, carbon monoxide, and hydrogen sulfide, all of which can be dangerous or life threatening. When using the GX-6000, you must follow the instructions and warnings in the GX-6000 Operator's Manual to assure proper and safe operation of the unit and to minimize the risk of personal injury.*

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**CAUTION:** *The operator of this instrument is advised that if the equipment is used in a manner not specified in this manual, the protection provided by the equipment may be impaired.*

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# System Requirements

To use the GX-6000 Datalogging Program, your personal computer must meet the following requirements:

- **Operating Systems:** Windows<sup>®</sup> 7, Windows<sup>®</sup> 8, or Windows<sup>®</sup> 10
- **Processor:** IBM<sup>®</sup> compatible PC running Pentium<sup>®</sup> 2 or higher.
- **Memory:** 32 MB RAM minimum
- **Available Hard Disk Space:** 32 MB minimum
- Infrared port or  
USB port and a USB/IrDA adapter cable

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## GX-6000 Data Logging Capacity

**Table 1: GX-6000 Data Logging Capacity**

<b>Interval Trend Time</b>	<b>Data Logging Hours</b>
10 seconds	10 hours
20 seconds	20 hours
30 seconds	30 hours
60 seconds	60 hours
180 seconds (3 minutes)	180 hours
300 seconds (5 minutes)	300 hours
600 seconds (10 minutes)	600 hours

Table 1 above lists the GX-6000's data logging capacity for each interval trend time setting assuming no alarms or other events. The interval trend time setting can be set using the Set Window (see "Changing Instrument Parameters" on page 53).

---

## Overwriting Data in the GX-6000

The instrument's Data Log Overwrite setting is factory set to *On* so that when the instrument's data logging memory becomes full, it begins to overwrite the oldest interval trend data with new interval trend data. Download data regularly to avoid over-writing data in the instrument before it can be downloaded. The Data Log Overwrite setting is accessible in the instrument's Maintenance Mode. To set the Data Log Overwrite setting to *Off*, see the GX-6000 Operator's Manual. When the Data Log Overwrite setting is set to off, the instrument will stop saving data when its data logging memory is full.

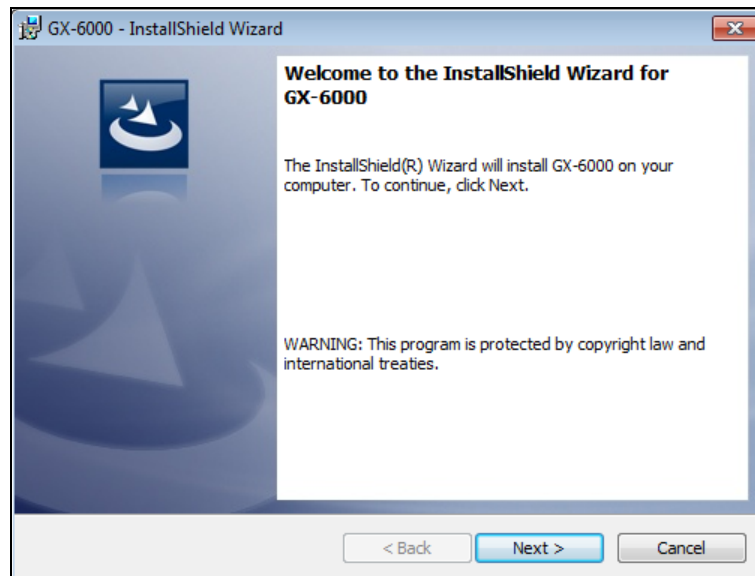
The Data Log Overwrite setting applies only to interval trend data. All other data, such as alarm trend data, event data, or calibration data, will continue to be saved when the memory is full. If the maximum number of each of these types of data has been reached, the oldest data will be overwritten.

## Chapter 2: Setup

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### Installing the GX-6000 Datalogging Program

1. Launch Windows®.
2. Exit from all applications and open windows.
3. Go to [www.rkiinstruments.com/gx6000](http://www.rkiinstruments.com/gx6000).
4. Click on the **Download** tab.
5. Click the **GX-6000 Datalogging Program** link.
6. A .zip file will begin to download. Select whether you want to open or save the .zip file.
7. Extract the contents of the .zip file.
8. Double click the **setup.exe** file.
9. After a few seconds, a screen appears indicating that the InstallShield Wizard is preparing to install the Datalogging Program, then the GX-6000 InstallShield Wizard window appears to guide you through installation.



**Figure 1: GX-6000 Datalogging Program Installation**

10. Follow the on-screen instructions in the InstallShield Wizard Window to install the program.



11. If the InstallShield Wizard finds versions of Windows® files on your computer newer than those in the downloaded .zip file, it will ask you if you want to keep these newer files. Click **Yes**.
12. When the InstallShield Wizard indicates that installation is complete, click the **Finish** button.

---

## Accessing a Common Database

The Datalogging Program automatically stores downloaded data in a database file on the computer's hard drive in the same folder as the Datalogging Program. In this configuration, a computer has access to its own database but no other computer's database. Only data downloaded to that computer may be viewed.

The Datalogging Program can map its database to another file location on the same computer or on a network. Putting the database on a network location allows multiple users to save data to and access data from the same location. All computers accessing that database can view all data that is downloaded from any computer.

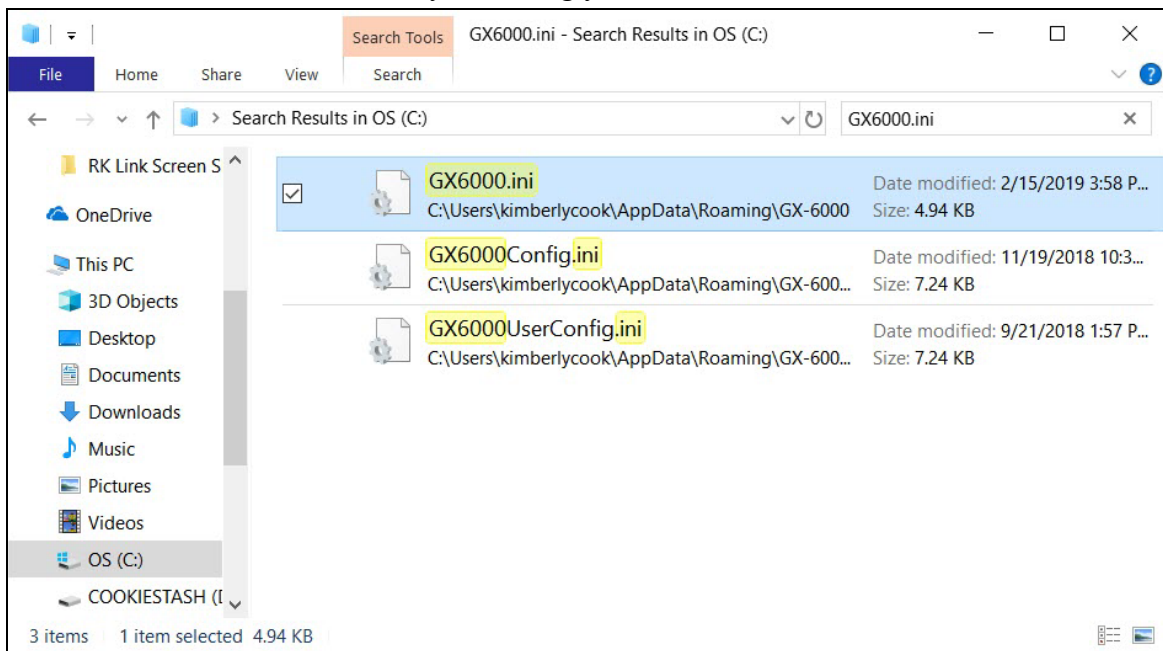
---

**NOTE:** Only one software installation mapped to a common database can be running at a time. If two installations attempt to access the same database, an error indication will appear when the second program is launched.

---

1. Determine where the database is going to be located and make a note of that file path.
2. If the GX-6000 Datalogging Program hasn't been launched on the computer yet, you must launch and close the program. This creates a GX6000.ini file that contains configuration settings.

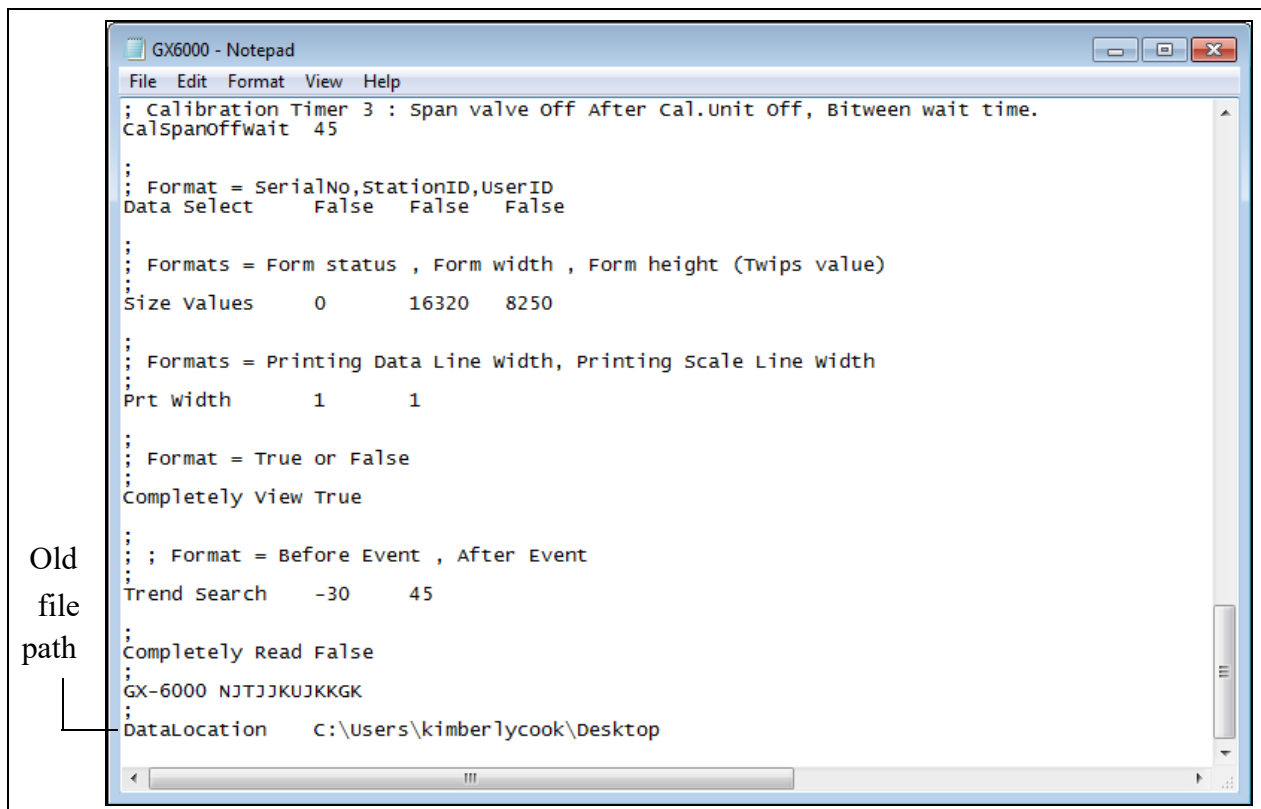
3. Locate the GX6000.ini file by searching your C drive for “GX6000.ini”.



**Figure 2: GX6000.ini File Found on C Drive**

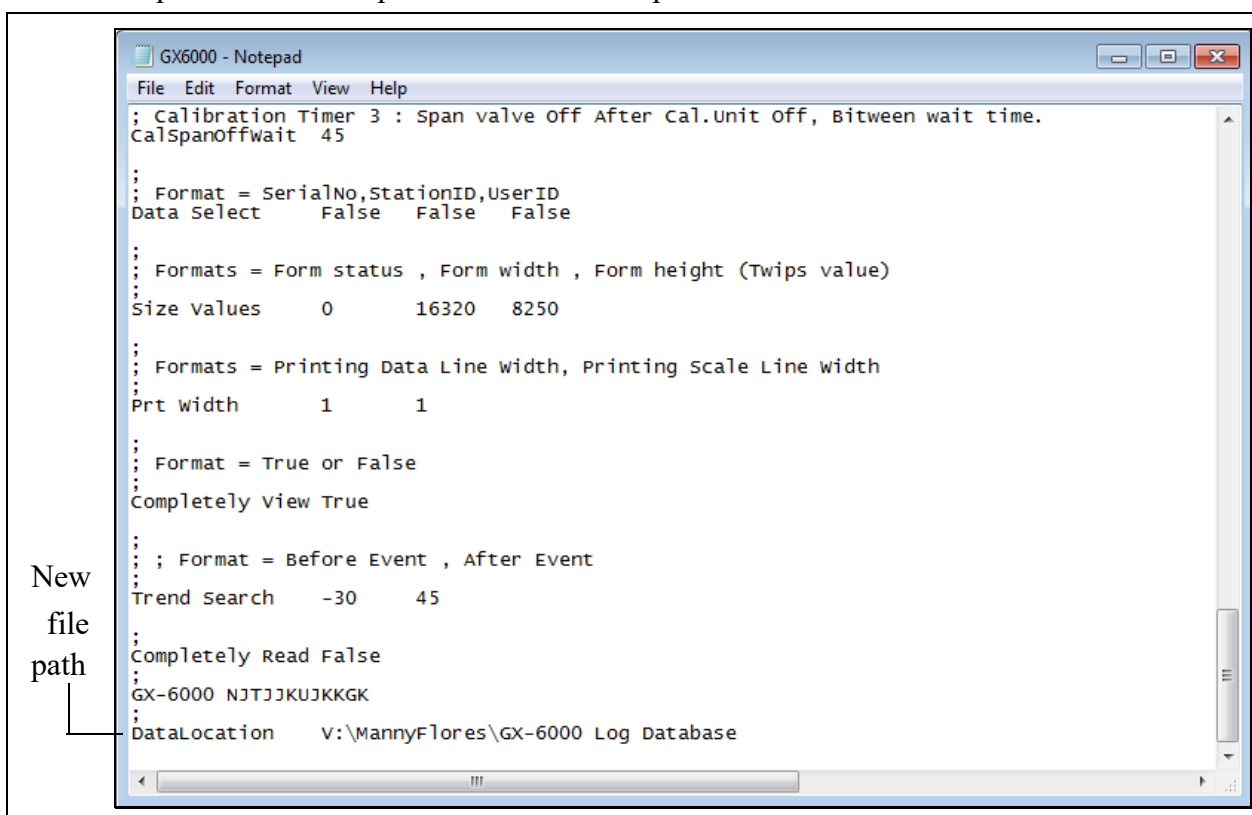
4. Double click the GX6000.ini file and open it in Notepad.

5. Scroll down to the very last line. This line is the Data Location path. An example of the path created by the program is shown in Figure 3.



**Figure 3: GX6000.ini File with Original Path**

6. Replace the current path with the desired path.



**Figure 4: GX6000.ini File with New Path**

7. Save the file and reopen the GX-6000 Datalogging Program.
8. When you launch the program again, a database will be created in the specified location.
9. Repeat step 2 - step 7 for all installations that need access to the common database.

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## IrDA Downloading Cable

The instrument communicates with a computer via an on-board infrared communication port that complies with IrDA 1.1 protocol standards.

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**NOTE:** If your computer has a built-in infrared port that complies with IrDA 1.1 protocol, you do not need an adapter cable to download data.

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If your computer does not have an infrared port, you will need to install an IrDA 1.1 compliant IrDA/USB adapter cable on your computer to use the GX-6000 Datalogging Program with your instrument. An IrDA/USB cable is available from RKI Instruments, Inc. See the Spare Parts List at the end of this manual for the RKI part number.

## Installing an IrDA Adapter Cable

After installing the GX-6000 Datalogging Program, you must install the driver for the IrDA/USB adapter cable. Make sure the cable driver is compatible with your Windows® operating system.

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**NOTE:** Do not plug in the IrDA/USB adapter cable into your computer before installing the driver.

---

Follow the manufacturer's instructions for installing the cable on your computer. If you do not have instructions from the cable manufacturer for installing your cable, see your Windows documentation. In general, you must go to the Control Panel and use the Add Hardware Wizard to install the cable drivers. RKI makes no warranty for the operation or compatibility of the drivers with any particular device.

## Windows® Infrared Operation Note

When using an IrDA adapter cable and the GX-6000 Datalogging Program, it is necessary to make a special setting in the Infrared Configuration window for proper communication between the instrument and the GX-6000 Datalogging Program. This must be done before attempting to use the program.

---

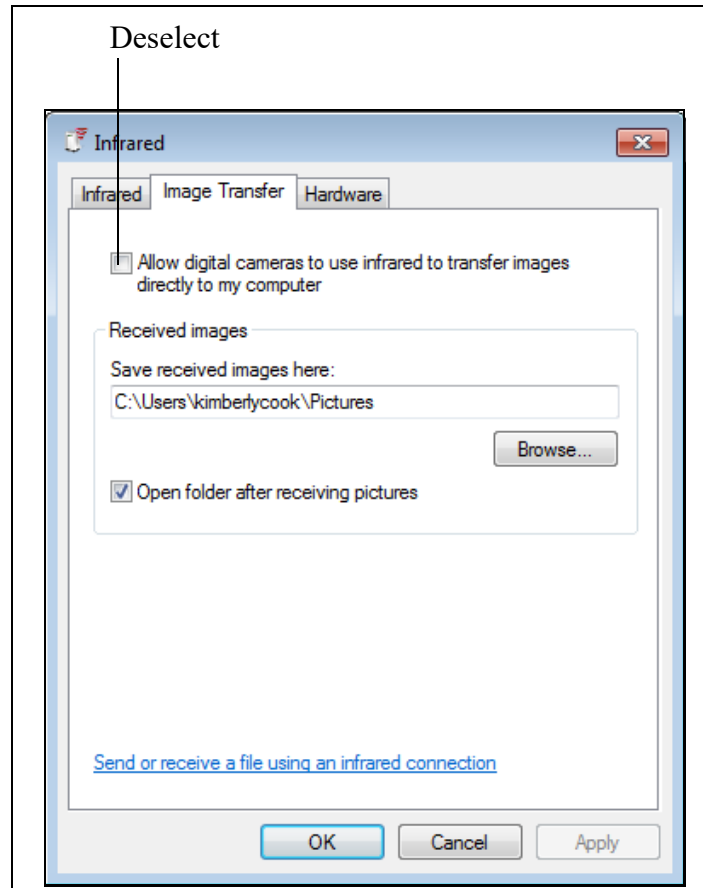
**NOTE:** If you have a Windows 7 computer, the Infrared Configuration window may not appear. If the Infrared Configuration window does not appear, disregard the directions below.

---

Follow these steps to make this setting:

1. Click **Start** on the Windows® Icon Tray.
2. If **Control Panel** is available to select in the **Start** menu, select it. The Control Panel will appear.  
If **Control Panel** is not selectable in the Start menu but **Settings** is, select **Settings**, then select **Control Panel**. The Control Panel will appear.
3. If the Control Panel is viewed by category, open the **Hardware and Sound** folder then click "Send or Receive a File" under the **Infrared** section. The Infrared Configuration window will appear.  
If the Control Panel is viewed by icon, click the **Infrared** icon. The Infrared Configuration window will appear.
4. Click on the Image Transfer tab.

5. Deselect the selection box for “Allow digital cameras to use infrared to transfer images directly to my computer”.



**Figure 5: Image Transfer Tab**

6. Click **OK**.
7. Close the Control Panel window.

# Chapter 3: Operation

## Launching the Program

1. Double click the **GX-6000** shortcut on the computer desktop or navigate to the **GX-6000** program using the **Start** menu.
2. The program launches and the Download window appears.

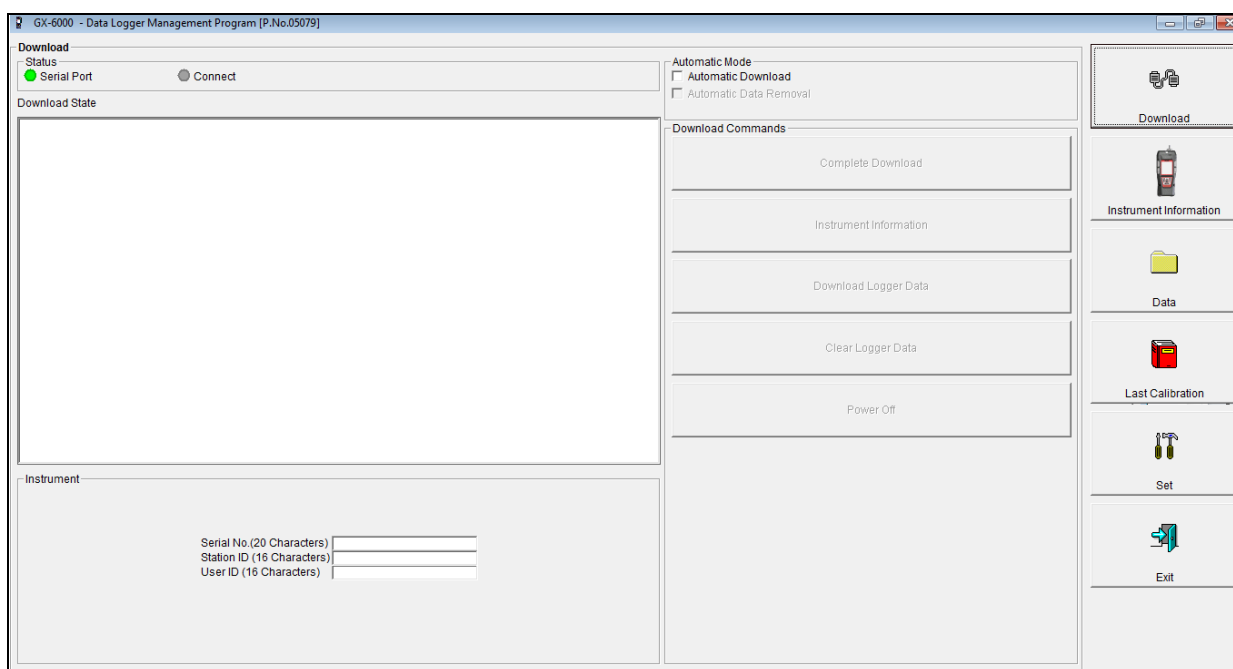
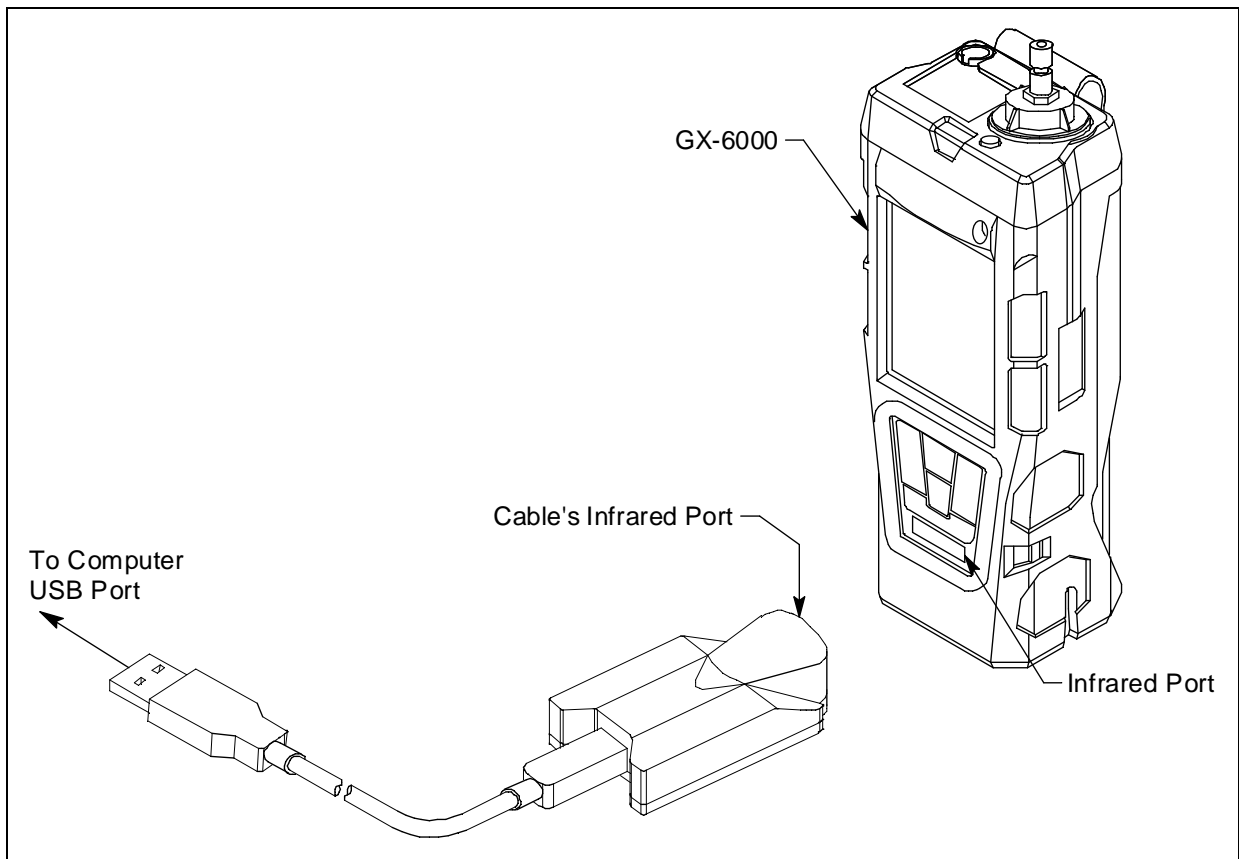


Figure 6: The Download Window

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## Connecting an Instrument

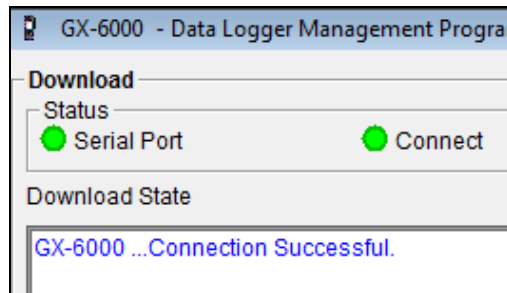
1. Launch the GX-6000 Datalogging Program.
2. Place the instrument an inch or two away from the infrared port on your computer or on the IrDA/USB cable and align the infrared ports. The GX-6000's infrared port is below the POWER/ENTER button.



**Figure 7: Aligning the Instrument with the Cable Infrared Receiver**

3. Press and hold the POWER/ ENTER button on the instrument until you hear a beep, then release it.
4. The instrument will begin its power up sequence. If the **L./B MODE** menu item in Maintenance Mode is set to **LEAK CHECK MODE BAR HOLE MODE, BAR HOLE MODE**, or **LEAK CHECK MODE**, press and release the POWER/ENTER button to continue the power up sequence. If you do not press a button for 20 seconds, the instrument will automatically continue.

5. When a successful connection between the instrument and the computer occurs, the Connect light in the Download window turns green and “Connection Successful.” displays.



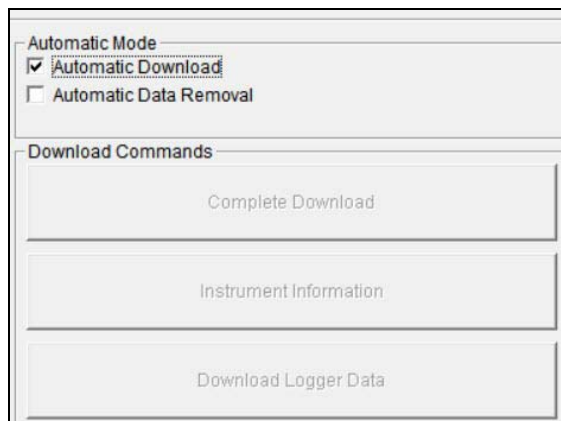
**Figure 8: Connection Message**

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## Downloading Data from an Instrument

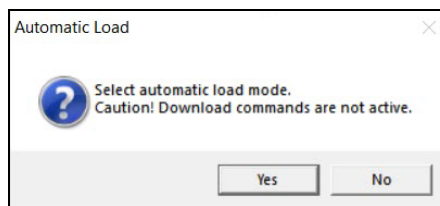
### Automatic Downloading

1. Select the **Automatic Download** selection box.



**Figure 9: Automatic Download Selection Box**

2. A caution message appears. If **Automatic Download** is selected, the download commands are not active. However, if a GX-6000 is connected when you select the **Automatic Download** box, the download commands will remain active until that instrument is disconnected.



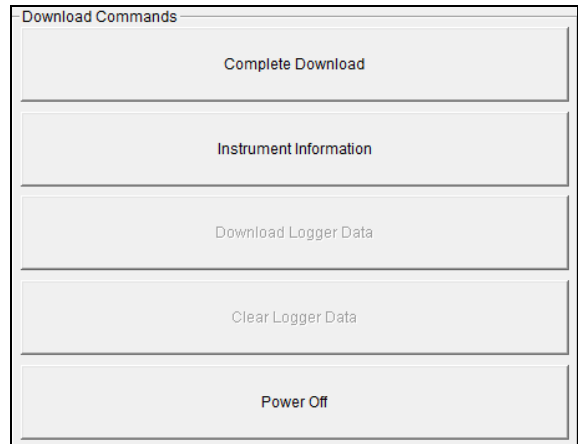
**Figure 10: Automatic Download Caution**



3. If you want the data in the instrument to be automatically cleared after an automatic download, select the **Automatic Data Removal** box. The **Automatic Data Removal** box is only available for selection if the **Automatic Download** box is selected.
4. Connect an instrument as described in “Connecting an Instrument” on page 15.
5. A download begins automatically after a successful connection is made.
6. The instrument will turn off automatically after the data has been downloaded.

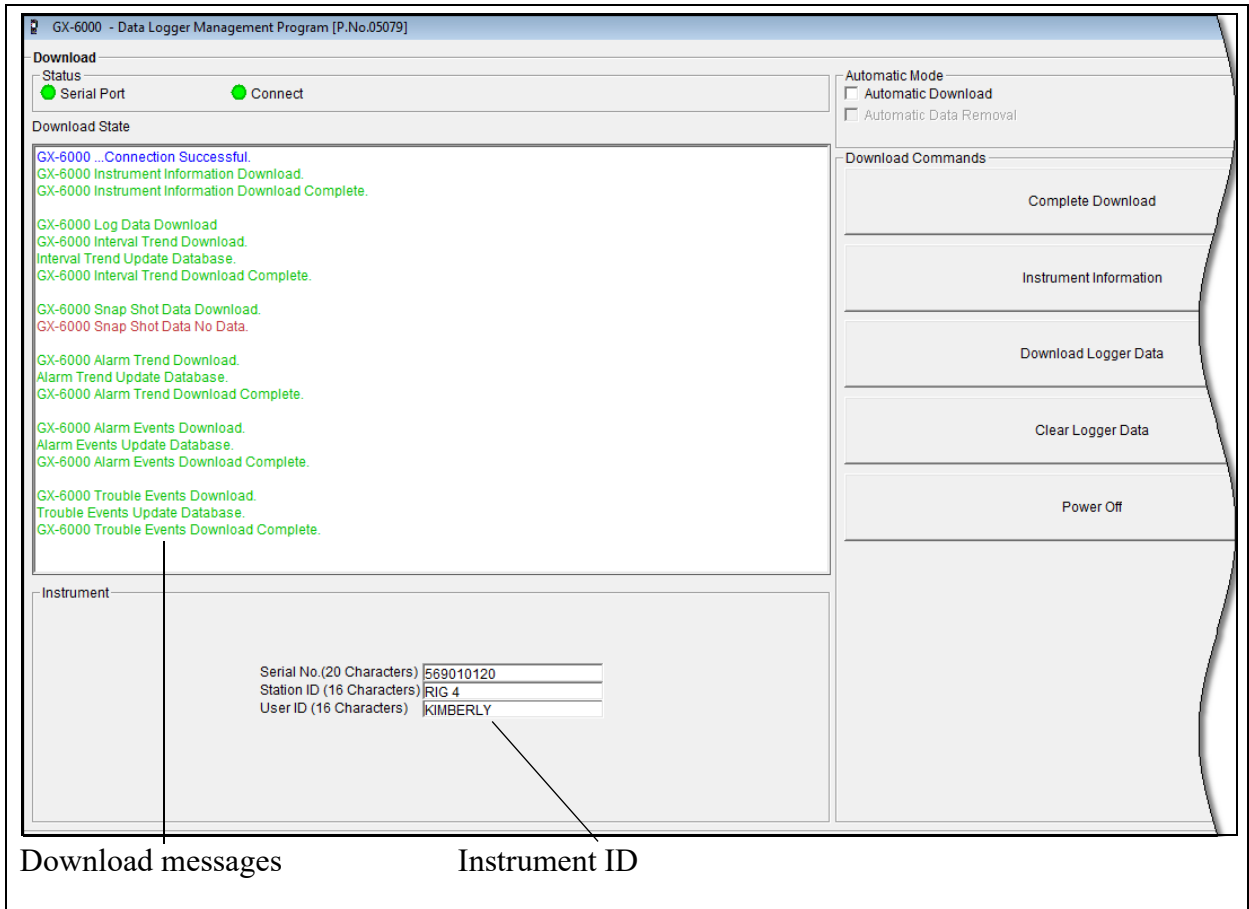
## Manual Downloading

1. To download logged data and instrument information from the instrument, click **Complete Download**.
2. To download instrument information only, click **Instrument Information**.
3. To download logged data only, click **Download Logger Data**. **Download Logger Data** becomes selectable only after doing a Complete Download or Instrument Information Download.



**Figure 11: Download Commands**

- While the data is downloading, the message area of the Download window indicates program actions, communication or downloading problems, and what type of information has been downloaded.



**Figure 12: Download Messages**

- After downloading data from an instrument, you can delete all the data in the instrument by clicking **Clear Logger Data**. This will not delete instrument parameters such as serial number, alarm settings, or auto calibration settings.

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**WARNING:** *If you click Clear Logger Data, all data is erased in the instrument, but not in your computer's memory. So it's advisable that you download the data from the instrument first before clearing the data.*

---

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## Instrument Power Off

To turn a connected instrument off:

1. Select the Download button if you are not already in the Download window.
2. Click the Power Off button. The instrument will shut off.
3. Exit the program by clicking the Exit button in the bottom right corner of the program.

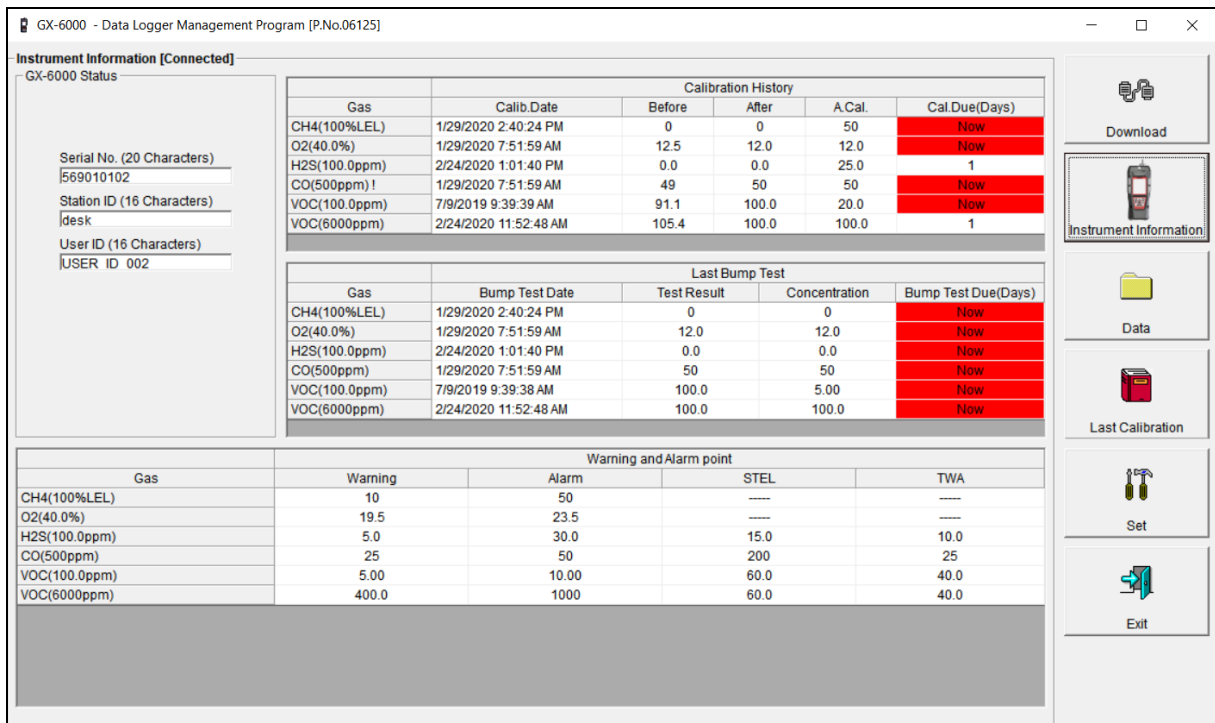
---

**NOTE:** If you shut down the GX-6000 Datalogging Program without first turning off the instrument, the instrument will go into alarm after 3 minutes to indicate that it is still on but not connected to a program. Starting up the GX-6000 Datalogging Program and establishing a connection will reset the alarm. Using the POWER/ENTER button to turn the instrument off will also reset the alarm.

---

# Chapter 4: Instrument Information Window

1. Connect an instrument and manually perform a **Complete Download** or **Instrument Information** download as described in “Connecting an Instrument” on page 15 and “Manual Downloading” on page 17.
2. Click **Instrument Information**.



**Figure 13: Instrument Information Window**

3. The serial number, station ID, user ID, calibration and bump test history, and alarm points for the connected instrument will be visible.
4. An sensor that is currently in a sensor life warning condition will have a “!” next to the gas name in the Calibration History section.
5. If the instrument is turned off after being connected to the program, the information in the **Instrument Information** window will disappear.

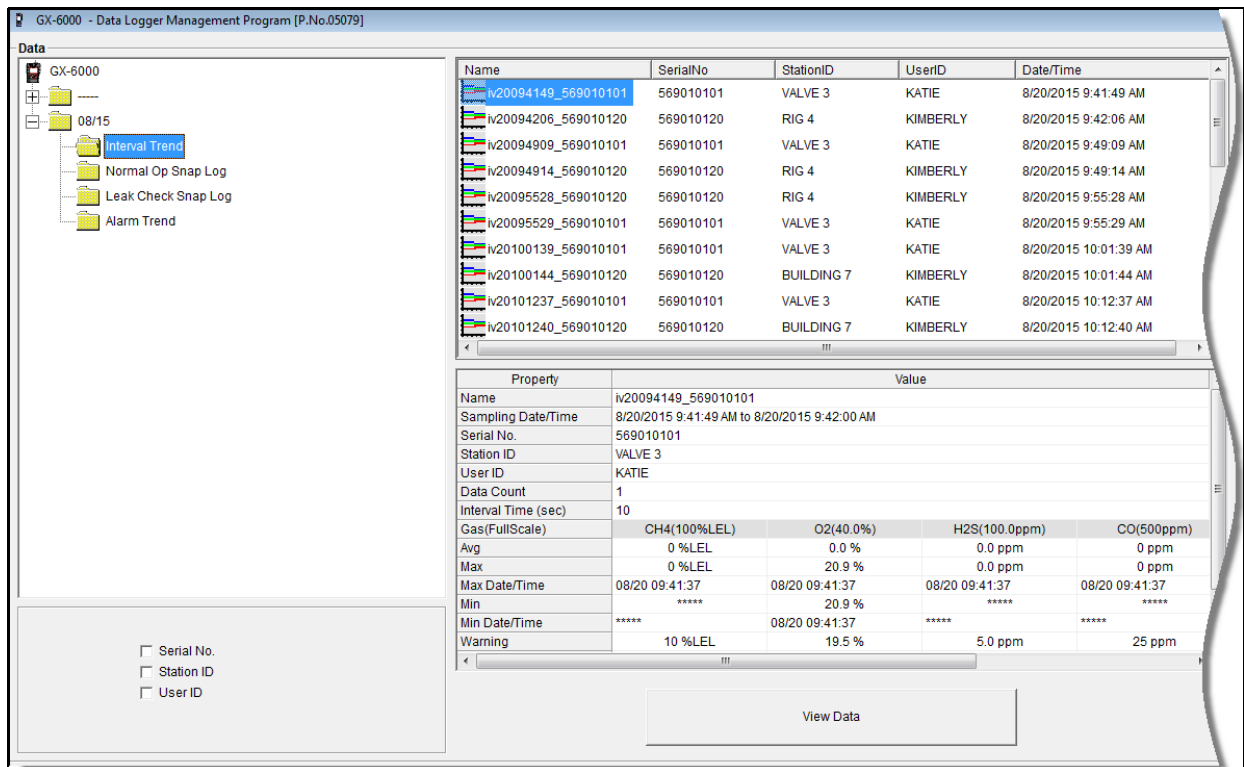
# Chapter 5: Data Window

The instrument logs six types of data files: bump test data, calibration history, interval trend data, alarm trend data, snap log data, and event data.

You can view, print, and export (save to a file) each of these types of data files. All of these types of data files can also be deleted. The deleting of files is password protected and is described in “Deleting Data in the Data Window” on page 41.

**NOTE:** If the GX-6000 Datalogging Program database is on the user’s computer (default setting), data will only appear for instruments downloaded to that computer. If the database is on a network, data will appear for all instruments downloaded to that database. See “Downloading Data from an Instrument” on page 16 for more instruction.

1. Click **Data** along the right side of the program window.



**Figure 14: Data Window, Basic Data Organization**

2. Click the selection box or boxes in the lower left frame to organize the data as desired. The data may be organized by one or more of the following parameters: serial number, station ID, or user ID. If none of the boxes are selected, then the data is organized as shown in Figure 14.

---

**NOTE:** In the examples that follow, the data will be shown organized by serial number. Your Data Window may appear slightly different.

---

## Bump Test Data

The instrument saves information for up to 100 of the most recent bump tests and calibrations combined. This bump test history is retrieved using either the **Complete Download** download command or the **Download Logger Data** download command.

All downloaded bump test data for all downloaded instruments is available in the Bump Test folders in the Data Window. The Bump Test folder is located in an untitled folder for each instrument. The bump test information available here is more comprehensive than that in the **Last Calibration** window.

1. Click the **Data** control button along the right side of the program window. The Data Window appears.

Click to view bump test file(s)

Bump test file(s)

Name	SerialNo	StationID	UserID	Date/Time
Bump Test	569010102	VALVE 3	MANNY	8/21/2015 12:11:59 PM

DateTime	Gas	Test Result	Concentration	Judge
8/21/2015 9:06:16 AM	CH4(100%LEL)	50 %LEL	50 %LEL	FAIL
	O2(40.0%)	11.9 %	12.0 %	FAIL
	H2S(100.0ppm)	25.0 ppm	25.0 ppm	FAIL
	CO(500ppm)	49 ppm	50 ppm	FAIL
	----	----	----	
8/21/2015 9:04:29 AM	CH4(100%LEL)	50 %LEL	50 %LEL	FAIL
	O2(40.0%)	12.2 %	12.0 %	FAIL
	H2S(100.0ppm)	25.0 ppm	25.0 ppm	FAIL
	CO(500ppm)	50 ppm	50 ppm	FAIL
	----	----	----	
Total		3	Datas	

View Data

**Figure 15: Data Window - Selecting Bump Test Files**

2. Expand the folders for the desired serial number by double-clicking or using the (+) button next to each folder.
3. Open the untitled folder by double-clicking it or using the (+) button.

4. Click the **Bump Test** folder. The Bump Test file(s) for that instrument will appear in the top right frame. If multiple Station IDs or User IDs are used for an instrument, then more than one Bump Test file will appear.
5. The date/time displayed on each line corresponds to the date and time of the instrument download and not a date or time of a bump test.
6. Click a file to select it. The first two bump tests saved will be shown in the bottom right frame along with the total number of bump tests saved if it is more than two.
7. Each saved bump test shows the date/time of the bump test, the gas, the test result, the concentration of gas used, and the result of the bump test.
8. To view the Bump Test file in table format, double click the Bump Test file or click **View Data**.

GX-6000 - Data Logger Management Program [P.No.05079]

Data View(BumpTest)

Table  Graph  Event Only  Condensed

Print Export Summary Return

No	Date/Time		Ch1	Ch2	Ch3	Ch4	Ch5	Ch6
1	8/21/2015 9:06:16 AM	Gas	CH4(100%LEL)	O2(40.0%)	H2S(100.0ppm)	CO(500ppm)	---	---
		Test Result	50 %LEL	11.9 %	25.0 ppm	49 ppm	----	----
		Concentration	50 %LEL	12.0 %	25.0 ppm	50 ppm	----	----
		Judge	FAIL	FAIL	FAIL	FAIL	----	----
2	8/21/2015 9:04:29 AM	Gas	CH4(100%LEL)	O2(40.0%)	H2S(100.0ppm)	CO(500ppm)	---	---
		Test Result	50 %LEL	12.2 %	25.0 ppm	50 ppm	----	----
		Concentration	50 %LEL	12.0 %	25.0 ppm	50 ppm	----	----
		Judge	FAIL	FAIL	FAIL	FAIL	----	----
3	8/21/2015 9:03:33 AM	Gas	CH4(100%LEL)	O2(40.0%)	H2S(100.0ppm)	CO(500ppm)	---	---
		Test Result	0 %LEL	0.0 %	0.0 ppm	0 ppm	----	----
		Concentration	50 %LEL	12.0 %	25.0 ppm	50 ppm	----	----
		Judge	PASS	PASS	PASS	FAIL	----	----

Figure 16: Data View, Bump Test

## Printing Data

1. Click **Print**.
2. Select a printer in the window that appears and click **OK**.

## Exporting Data

1. Click **Export**.
2. Specify the filename and file location. The default file type is “.csv” (comma-separated values).
3. Click **Save**.

---

## Calibration History

The instrument saves information for up to 100 of the most recent bump tests and calibrations combined. This calibration history is retrieved using either the **Complete Download** download command or the **Download Logger Data** download command.

All downloaded calibration information for all downloaded instruments is available in the Calibration History folders in the Data Window. This information is saved in a Calibration History Folder that is located in an untitled folder for each instrument. The calibration history files are differentiated by instrument. The calibration information available here is more comprehensive than that in the Last Calibration Window. The calibration information for all calibrations downloaded, whether successful or not, is saved instead of just the most recent successful calibration for each instrument.

1. Click **Data** along the right side of the program window. The Data Window appears.

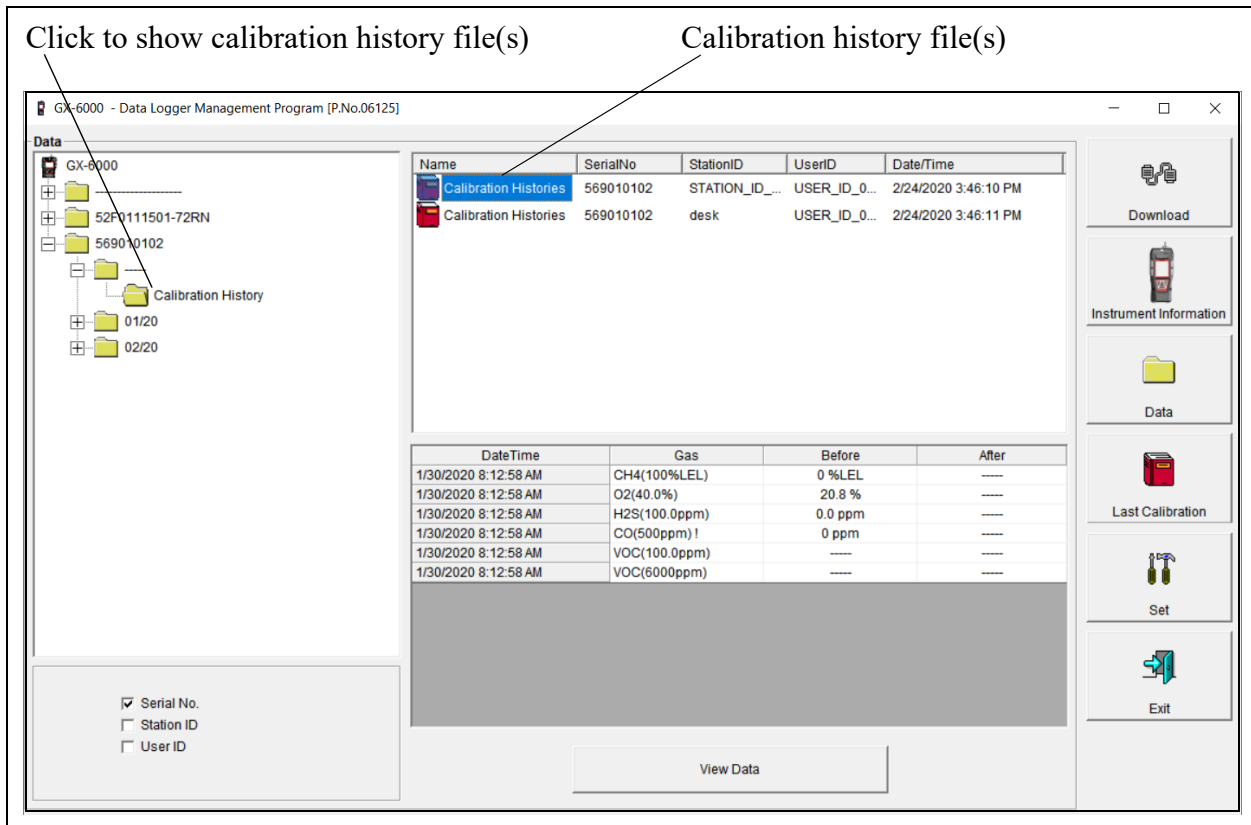


Figure 17: Data Window - Selecting Calibration History Files



- Expand the folders for the desired serial number by double-clicking or using the (+) button next to each folder.
- Open the untitled folder by double-clicking it or using the (+) button.
- Click the **Calibration History** folder. The Calibration Histories file(s) for that instrument will appear in the top right frame. If multiple Station IDs or User IDs are used for an instrument, then more than one Calibration Histories file will appear.

The date/time displayed on each line corresponds to the date and time of the instrument download and not a date or time of a calibration.

- Click the file to select it. The first two calibrations saved will be shown in the bottom right frame along with the total number of calibrations saved if it is more than two.

Each saved calibration shows the date/time of calibration, the gas, the concentration before calibration, and the concentration after calibration. If a calibration failed, dashes will appear in the After column rather than gas concentrations. If a channel was not included in calibration, dashes will appear in the Before and After columns. If a sensor is in a sensor life warning condition, a “!” appears to the right of the gas name.

- To view the Calibration Histories file in table format, double click the Calibration Histories file or click **View Data**. Calibration Histories files can only be viewed in table format. If a sensor is in a sensor life warning condition, a “!” appears to the right of the gas name.

No	Date/Time	Gas	Ch1	Ch2	Ch3	Ch4	Ch5
1	1/30/2020 8:12:58 AM	Gas	CH4(100%LEL)	O2(40.0%)	H2S(100.0ppm)	CO(500ppm) !	VOC(100.0ppm)
		Before	0 %LEL	20.8 %	0.0 ppm	0 ppm	----
		After	----	----	----	----	----

**Figure 18: Data View, Calibration History**

## Printing Data

- Click **Print**.
- Select a printer in the window that appears and click **OK**.

## Exporting Data

1. Click **Export**.
2. Specify the filename and file location. The default file type is “.csv” (comma-separated values).
3. Click **Save**.

---

## Event Data

The instrument saves the 100 most recent alarm events and the 100 most recent trouble events. When an instrument is downloaded, the Datalogging Program retrieves these events from that instrument and saves them in alarm event files and trouble event files for each instrument.

Alarm event files save the time, instrument channel, and alarm type of every gas alarm event that occurs on a particular instrument. Warning, Alarm, Alarm 1H, STEL, TWA, and overscale events are saved.

Trouble event files note the time, whether the event is an instrument system failure or sensor failure and the specific type of failure. Dead battery alarms and sensor failures are among the trouble events that are saved.

1. Click **Data** along the right side of the program window. The Data Window appears.

Click to show alarm event file(s)

Alarm event file(s)

Name	SerialNo	StationID	UserID	Date/Time
Alarm Events	569010102	VALVE 3	MANNY	8/21/2015 12:11:58 PM

DateTime	Ch	Gas	Event
8/21/2015 12:09:40 PM	6	SO2(6.00ppm)	ALARM
8/21/2015 12:09:21 PM	6	SO2(6.00ppm)	WARNING
8/21/2015 12:09:18 PM	2	O2(40.0%)	WARNING
8/21/2015 9:21:31 AM	6	SO2(6.00ppm)	WARNING
8/21/2015 9:21:31 AM	2	O2(40.0%)	WARNING
8/21/2015 9:21:10 AM	2	O2(40.0%)	WARNING
8/21/2015 9:02:36 AM	-	Body	DOWN
8/21/2015 9:00:46 AM	1	CH4(100%LEL)	WARNING
Total		21 Datas	

Serial No.  
 Station ID  
 User ID

View Data

Figure 19: Data Window - Selecting Event Data Files

- Expand the folders for the desired serial number by double-clicking or using the (+) button next to each folder.
  - Open the untitled folder by double-clicking it or using the (+) button.
  - Click the **Alarm Events** or **Trouble Events** folder. The Alarm Events or Trouble Events file(s) for that instrument will appear in the top right frame. If multiple Station IDs or User IDs are used for an instrument, then more than one Alarm Events or Trouble Events file will appear.
- The date/time displayed on each line corresponds to the date and time of the instrument download and not a date or time of an alarm or trouble event.
- Click the desired event file to select it. An event list will appear in the bottom right frame with the date, time, channel, and event type for the first eight events saved in the selected file. If more than eight events are saved, the first eight events are shown and the total number of events in the file is shown at the bottom of the list.
  - Click **View Data** at the bottom of the Data Window or double-click the event file name to open the file and view it in table format. Event files can only be viewed in table format.

No	Date/Time	Ch	Gas	Event
1	8/21/2015 12:09:40 PM	6	SO2(6.00ppm)	ALARM
2	8/21/2015 12:09:21 PM	6	SO2(6.00ppm)	WARNING
3	8/21/2015 12:09:18 PM	2	O2(40.0%)	WARNING
4	8/21/2015 9:21:31 AM	6	SO2(6.00ppm)	WARNING
5	8/21/2015 9:21:31 AM	2	O2(40.0%)	WARNING
6	8/21/2015 9:21:10 AM	2	O2(40.0%)	WARNING
7	8/21/2015 9:02:36 AM	-	Body	DOWN
8	8/21/2015 9:00:46 AM	1	CH4(100%LEL)	WARNING
9	8/21/2015 9:00:46 AM	1	CH4(100%LEL)	ALARM
10	8/21/2015 9:00:42 AM	2	O2(40.0%)	WARNING
11	8/21/2015 9:00:41 AM	4	CO(500ppm)	WARNING
12	8/21/2015 9:00:40 AM	3	H2S(100.0ppm)	WARNING
13	8/21/2015 9:00:14 AM	-	Body	PANIC
14	8/21/2015 8:59:48 AM	1	CH4(100%LEL)	WARNING
15	8/21/2015 8:59:45 AM	4	CO(500ppm)	WARNING
16	8/21/2015 8:59:45 AM	2	O2(40.0%)	WARNING
17	8/21/2015 8:59:43 AM	3	H2S(100.0ppm)	WARNING
18	8/21/2015 8:59:13 AM	1	CH4(100%LEL)	WARNING
19	8/21/2015 8:59:10 AM	4	CO(500ppm)	WARNING
20	8/21/2015 8:59:09 AM	2	O2(40.0%)	WARNING
21	8/21/2015 8:59:09 AM	3	H2S(100.0ppm)	WARNING

Figure20

No	Date/Time	Ch	Gas/Body	Event
1	8/20/2015 12:31:24 PM	4	CO(500ppm)	Fail(BUMP)
2	8/20/2015 12:31:24 PM	3	H2S(100.0ppm)	Fail(BUMP)
3	8/20/2015 12:31:24 PM	2	O2(40.0%)	Fail(BUMP)
4	8/20/2015 12:31:24 PM	1	CH4(100%LEL)	Fail(BUMP)
5	8/20/2015 11:32:31 AM	4	CO(500ppm)	Fail(Span)
6	8/20/2015 11:32:31 AM	3	H2S(100.0ppm)	Fail(Span)
7	8/20/2015 11:32:31 AM	2	O2(40.0%)	Fail(Span)
8	8/20/2015 11:32:31 AM	1	CH4(100%LEL)	Fail(Span)
9	8/20/2015 10:18:21 AM	-	Body	Fail(FLOW)
10	8/20/2015 10:12:41 AM	2	O2(40.0%)	Fail(iSen.)
11	8/20/2015 10:12:36 AM	2	O2(40.0%)	Fail(iSen.)

Figure 21: Data View - Trouble Events

- Click **Summary** to show instrument information above the event data.

## Printing Data

1. Click **Print**.
2. Select a printer in the window that appears and click **OK**.

## Exporting Data

1. Click **Export**.
2. Specify the filename and file location. The default file type is “.csv” (comma-separated values).
3. Click **Save**.

---

## Snap Log Data

Snap log data can be taken in Normal Operation or in Leak Check Mode Operation.

### Normal Operation Snap Log Data

Normal Operation Snap Log Data can be taken on GX-6000 instruments. To view, print, or export normal operation snap log data for any instrument in the database:

1. Click **Data** along the right side of the program window. The Data Window appears.

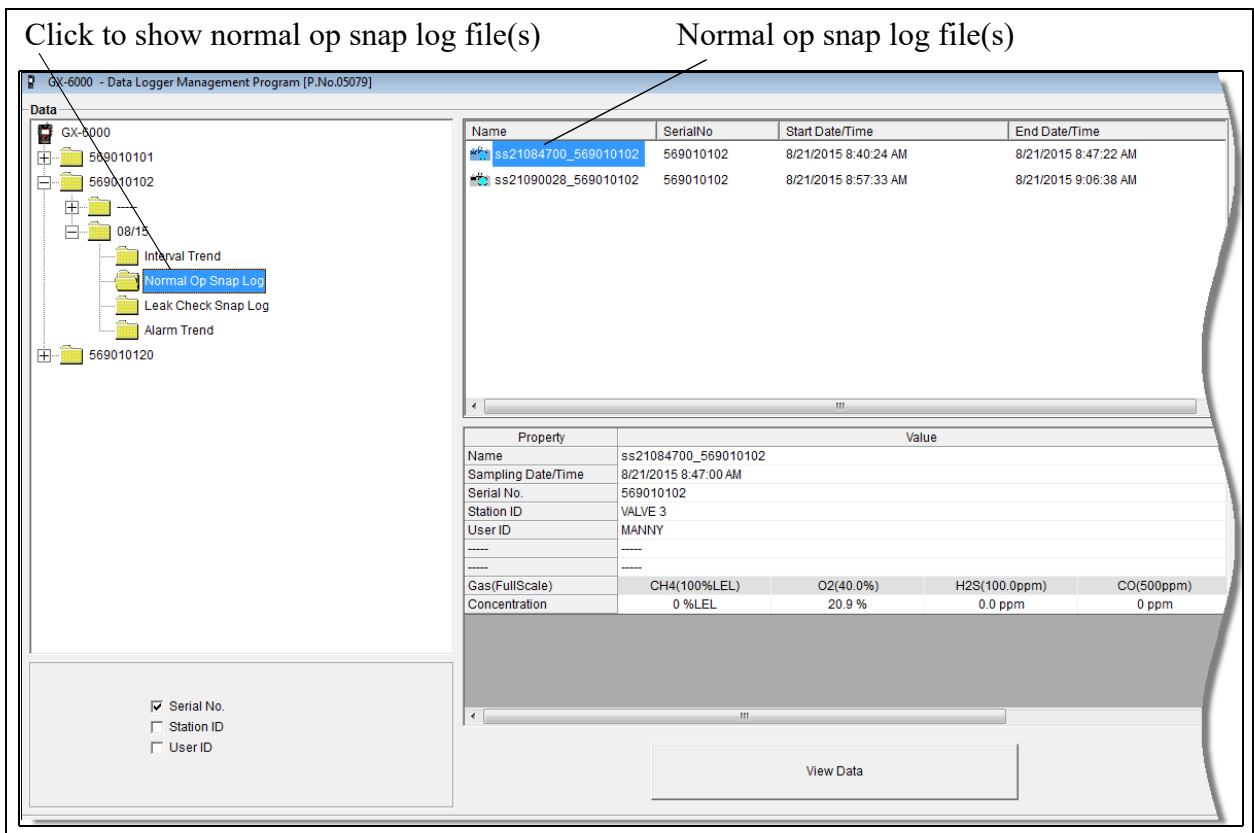
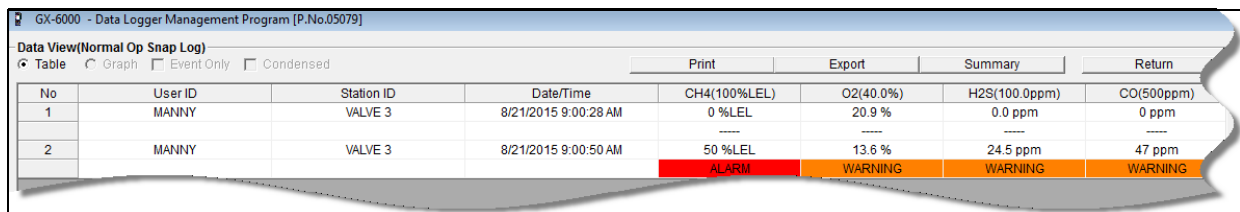


Figure 22: Data Window - Selecting Normal Op Snap Log Data Files

- Expand the folders for the desired serial number by double-clicking or using the (+) button next to each folder.
- Open the dated folder (month/year) whose contents you want to see by double-clicking it or using the (+) button.
- Click the **Normal Op Snap Log** folder. The Normal Op Snap Log file(s) for that instrument will appear in the top right frame.
- One snap log file is generated for all normal operation snap logs taken during an operating session. If you turn the instrument off and turn it back on, a new snap log file will be created.

The serial number, start date/time, and end date/time appear on the line for each snap log data file. The start date/time corresponds to the date and time that the instrument was turned on. The end date/time corresponds to the date and time that the instrument was turned off.

- Click one of the snap log data file names. A summary will appear in the bottom right frame with instrument information. It will also show the gas reading that was saved for the first snap log in that snap log file.
- Click **View Data** at the bottom of the Data Window or double-click the file name to open the file and view it in table format. Snap log files can only be viewed in table format.



No	User ID	Station ID	Date/Time	CH4(100%LEL)	O2(40.0%)	H2S(100.0ppm)	CO(500ppm)
1	MANNY	VALVE 3	8/21/2015 9:00:28 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm
2	MANNY	VALVE 3	8/21/2015 9:00:50 AM	50 %LEL ALARM	13.6 % WARNING	24.5 ppm WARNING	47 ppm WARNING

**Figure 23: Data View - Normal Op Snap Log**

- If a gas concentration increases above a warning or alarm point during a snap log, it will be displayed when the data is opened.

### **Printing Data**

- Click **Print**.
- Select a printer in the window that appears and click **OK**.

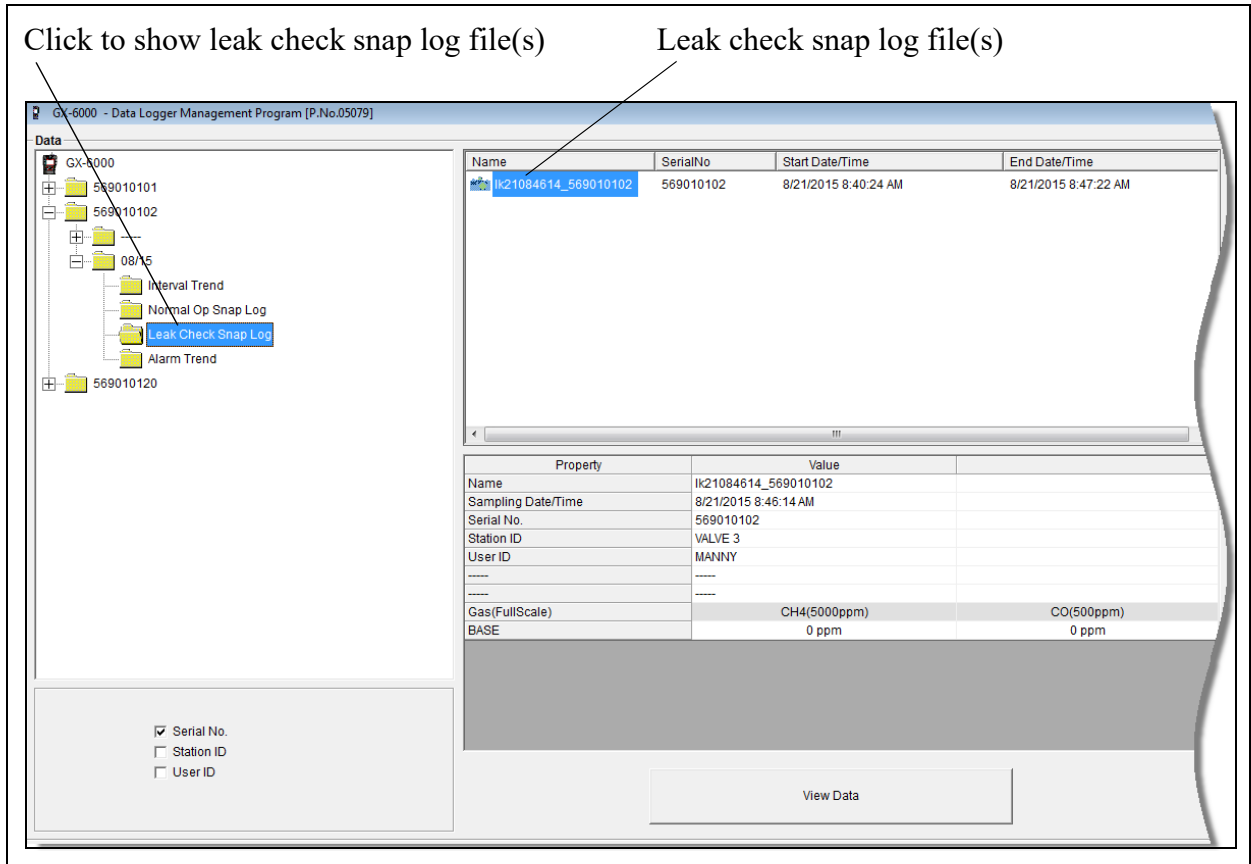
### **Exporting Data**

- Click **Export**.
- Specify the filename and file location. The default file type is “.csv” (comma-separated values).
- Click **Save**.

## Leak Check Snap Log Data

Leak Check Snap Log Data can be taken on GX-6000 instruments. To view, print, or export leak check snap log data for any instrument in the database:

1. Click **Data** along the right side of the program window. The Data Window appears.



**Figure 24: Data Window - Selecting Leak Check Snap Log Data Files**

2. Expand the folders for the desired serial number by double-clicking or using the (+) button next to each folder.
3. Open the dated folder (month/year) whose contents you want to see by double-clicking it or using the (+) button.
4. Click the **Leak Check Snap Log** folder. The Leak Check Snap Log file(s) for that instrument will appear in the top right frame.
5. One snap log file is generated for all leak check snap logs taken during an operating session. If you turn the instrument off and turn it back on, a new snap log file will be created.

The serial number, start date/time, and end date/time appear on the line for each snap log data file. The start date/time corresponds to the date and time that the instrument was turned on. The end date/time corresponds to the date and time that the instrument was turned off.

- Click one of the snap log data file names. A summary will appear in the bottom right frame with instrument information. It will also show the gas reading that was saved for the first snap log Base reading in that snap log file.
- Click **View Data** at the bottom of the Data Window or double-click the file name to open the file and view it in table format. Snap log files can only be viewed in table format.

No	User ID	Station ID		Date/Time	CH4(5000ppm)	CO(500ppm)
1	MANNY	VALVE 3	BASE	8/21/2015 8:46:14 AM	0 ppm	0 ppm
2	MANNY	VALVE 3	PEAK	8/21/2015 8:46:19 AM	100 ppm	0 ppm

**Figure 25: Data View - Leak Check Snap Log**

- Each leak check snap log consists of a Base reading and a Peak reading. Base readings are shown in yellow and Peak readings are shown in white. The User ID, Station ID, date/time, and methane reading are shown. If **CO DISPLAY** is set to **ON** in Maintenance Mode, the CO reading will also be displayed. The methane reading is based on a 5000 ppm scale. It does not matter what the display range was set to when the gas reading was taken. The actual gas reading will be displayed up to 5000 ppm. If the concentration was over 5000 ppm, OVER will replace the gas reading.

### ***Printing Data***

- Click **Print**.
- Select a printer in the window that appears and click **OK**.

### ***Exporting Data***

- Click **Export**.
- Specify the filename and file location. The default file type is “.csv” (comma-separated values).
- Click **Save**.

---

## Interval Trend Data

Average gas concentrations over the user-defined interval trend time are logged in the interval trend data files. The interval trend time can be changed in the **Set** window. See “Changing Instrument Parameters” on page 53 to change the interval trend time. Events such as gas alarms or sensor failures are saved in the interval trend data file when they occur. The table below outlines how many hours of datalogging are available per interval trend time.

<b>Interval Time</b>	<b>Data Logging Time</b>
10 seconds	10 hours
20 seconds	20 hours
30 seconds	30 hours
1 minute	60 hours
3 minutes	180 hours
5 minutes	300 hours
10 minutes	600 hours

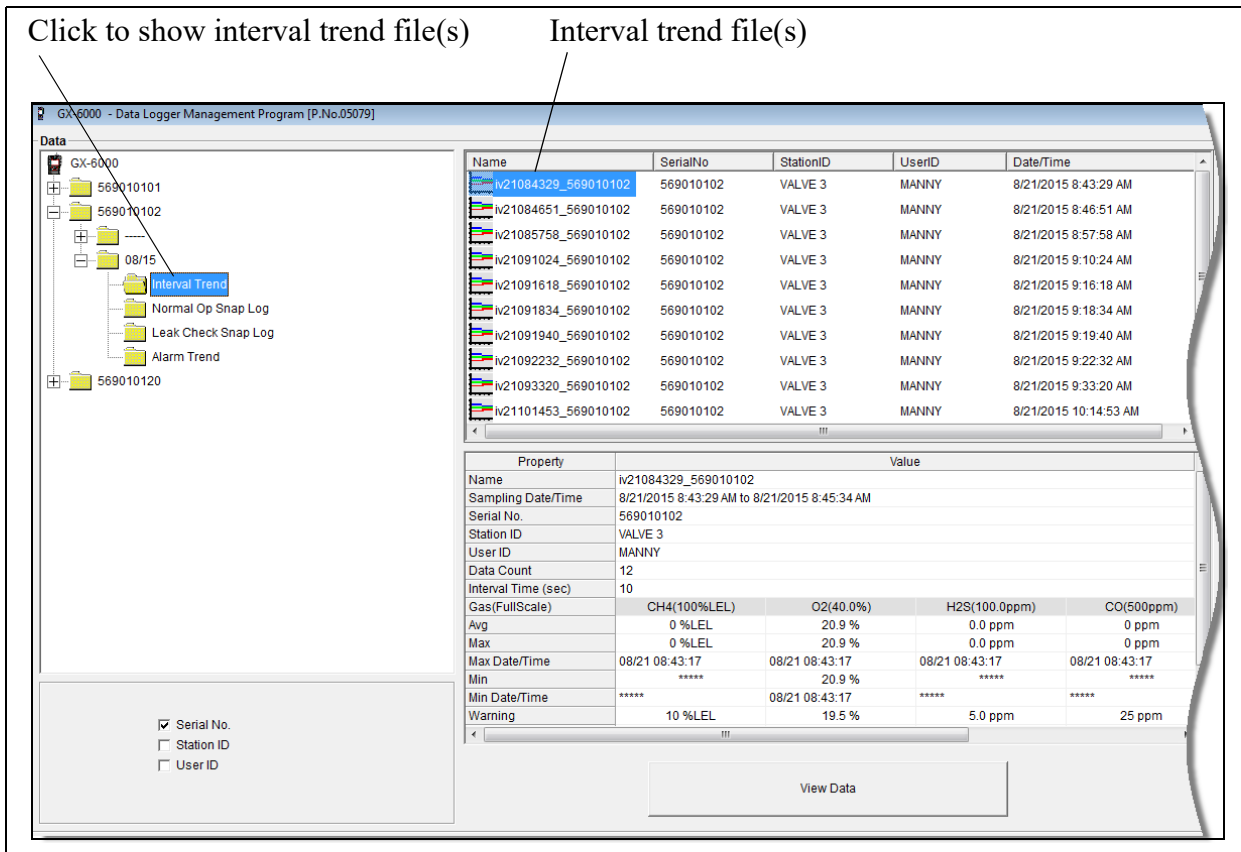
An interval trend data file is created and saved in the instrument when the instrument is turned *off*. The serial number, user ID, and station ID that are entered in the instrument when it is turned *on* are saved for the corresponding interval trend file. If the instrument’s serial number, user ID, or station ID are changed in the Set window, any interval trend files that result from subsequent operating sessions will have the new serial number, user ID, or station ID saved in them.

When the station ID of the instrument is changed during operation, is it shown as an event in the interval trend file.

The data may be viewed either in table format or graph format if at least 5 scheduled data points have been logged at the programmed interval trend time. This does not include events. If an interval data file has fewer than five scheduled data points, the graph controls are not functional and the data cannot be graphed.



1. Click **Data** along the right side of the program window. The Data Window appears.



**Figure 26: Data Window - Selecting Interval Trend Data Files**

- Expand the folders for the desired serial number by double-clicking or using the (+) button next to each folder.
- Open the dated folder (month/year) whose contents you want to see by double-clicking it or using the (+) button.
- Click the **Interval Trend** folder. The Interval Trend file(s) for that instrument will appear in the top right frame.
- The date/time indicated on each line is the date/time that data recording started.
- Click one of the interval trend data file names. A summary will appear in the bottom right frame with instrument and alarm setting information. If you want to view, graph, print, or export the interval trend data, double-click the filename or click the **View Data** button at the bottom of the window.
- Interval trend data can be viewed in either table or graph format by selecting the **Table** or **Graph** selection buttons.

## Table Format

1. To view the data in table format, click the **Table** selection button.

No	Date/Time	CH4(100%LEL)	O2(40.0%)	H2S(100.0ppm)	CO(500ppm)	VOC(50000ppb)	HCN(15.0ppm)
1	8/20/2015 9:49:24 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.3 ppm
2	8/20/2015 9:49:34 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
3	8/20/2015 9:49:44 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
4	8/20/2015 9:49:54 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.3 ppm
5	8/20/2015 9:50:04 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
6	8/20/2015 9:50:14 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
7	8/20/2015 9:50:24 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.3 ppm
8	8/20/2015 9:50:34 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
9	8/20/2015 9:50:44 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
10	8/20/2015 9:50:54 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.3 ppm
11	8/20/2015 9:51:04 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
12	8/20/2015 9:51:14 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
13	8/20/2015 9:51:24 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	136 ppb	0.3 ppm
14	8/20/2015 9:51:25 AM	----	----	WARNING	----	----	----
15	8/20/2015 9:51:27 AM	----	WARNING	----	WARNING	----	----
16	8/20/2015 9:51:28 AM	WARNING	----	----	----	----	----
17	8/20/2015 9:51:34 AM	16 %LEL	17.7 %	18.5 ppm	29 ppm	3459 ppb	0.0 ppm
18	8/20/2015 9:51:41 AM	----	----	-WARNING	NORMAL	----	----
19	8/20/2015 9:51:41 AM	----	----	NORMAL	-WARNING	----	----
20	8/20/2015 9:51:44 AM	29 %LEL	14.5 %	11.0 ppm	27 ppm	1047 ppb	0.0 ppm
21	8/20/2015 9:51:48 AM	-WARNING	----	----	----	----	----
22	8/20/2015 9:51:48 AM	NORMAL	----	----	----	----	----
23	8/20/2015 9:51:50 AM	----	-WARNING	----	----	----	----
24	8/20/2015 9:51:50 AM	----	NORMAL	----	----	----	----
25	8/20/2015 9:51:54 AM	0 %LEL	19.6 %	0.0 ppm	0 ppm	64 ppb	0.3 ppm
26	8/20/2015 9:52:04 AM	0 %LEL	20.8 %	0.0 ppm	0 ppm	52 ppb	0.0 ppm
27	8/20/2015 9:52:14 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	44 ppb	0.0 ppm
28	8/20/2015 9:52:24 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	43 ppb	0.4 ppm
29	8/20/2015 9:52:34 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	34 ppb	0.0 ppm
30	8/20/2015 9:52:44 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	27 ppb	0.0 ppm
31	8/20/2015 9:52:54 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	20 ppb	0.3 ppm
32	8/20/2015 9:53:04 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	14 ppb	0.0 ppm
33	8/20/2015 9:53:14 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	8 ppb	0.0 ppm
34	8/20/2015 9:53:24 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	6 ppb	0.3 ppm

**Figure 27: Interval Trend Data in Table Format**

- Interval trend data is shown as the average gas readings over the user defined interval trend time. So if the data logging session started at 4:13:38 PM and the interval time is set to 1 minute, then the readings logged at 4:14:38 PM are the average reading for each channel over that one minute period.
- Events are displayed on the screen under the channel in which they occur and with the time of the event. Events are displayed whether they occurred at scheduled log times or in between them. Events include:
  - Gas alarms (Warning, Alarm, Alarm H, STEL, TWA)
  - Trouble conditions (sensor failure, low battery, etc.)
  - Man down
  - Panic
  - “Normal” indication after alarm condition is reset
  - Station ID changed during operation
- Click **Summary** to show instrument information above the interval trend data table.
- Click the **Events Only** selection box to view only events.

6. Click the **Condensed** selection box to view the interval trend data in condensed form. When the data is condensed, the software shows only important and eventful data as follows:

- The first and last scheduled data points in the session are shown.
- If there are more than two consecutive data points with the same readings for all channels, only the first and last of these consecutive data points are shown.
- All events, such as gas alarms or sensor failures, are shown.
- For any event, the data point before and after the event is always shown.

7. Click on an alarm event to view the alarm trend data file. To return to the interval trend data file, click the **Return** button or click the “X” in the upper right corner of the new window to close the window.

GX-6000 - Data Logger Management Program [P.No.05079]

Data View(Alarm Trend)

Table Graph

Print Export Summary Return

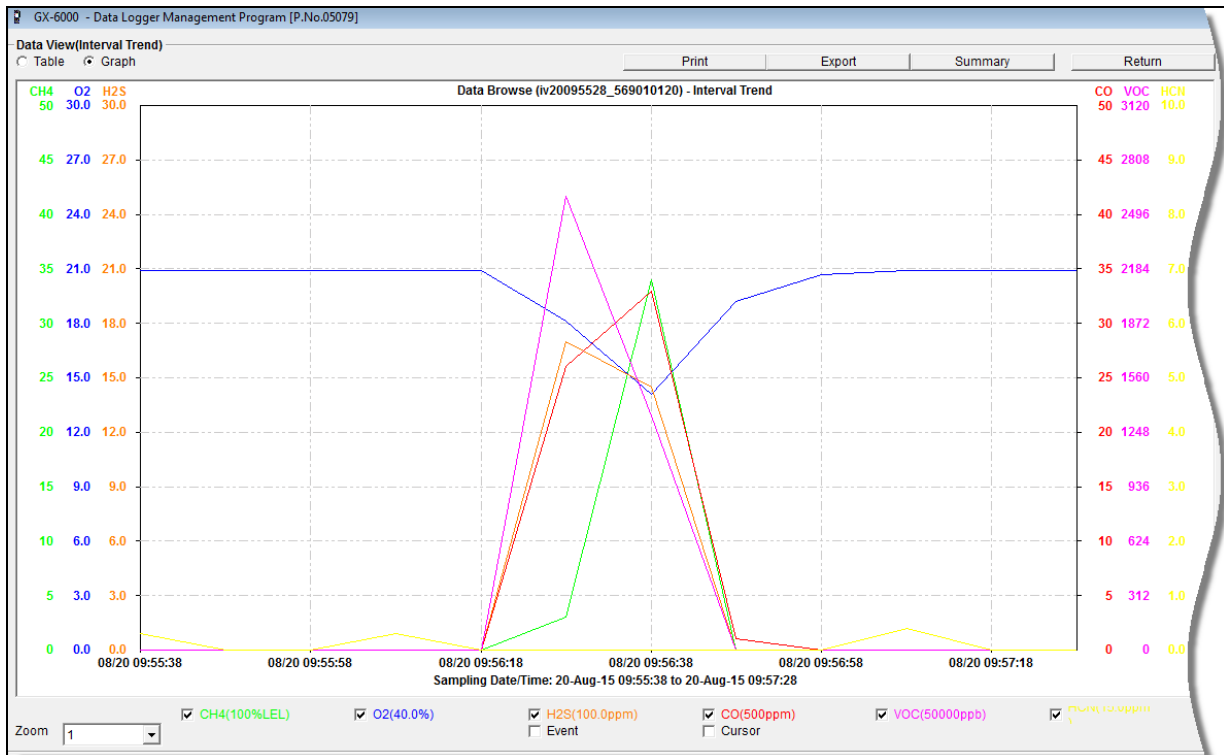
No	Date/Time	CH4(100%LEL)	O2(40.0%)	H2S(100.0ppm)	CO(500ppm)	VOC(50000ppb)	HCN(15.0ppm)
344	8/20/2015 9:50:00 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
345	8/20/2015 9:50:05 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
346	8/20/2015 9:50:10 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
347	8/20/2015 9:50:15 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
348	8/20/2015 9:50:20 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	3.6 ppm
349	8/20/2015 9:50:25 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
350	8/20/2015 9:50:30 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
351	8/20/2015 9:50:35 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
352	8/20/2015 9:50:40 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
353	8/20/2015 9:50:45 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
354	8/20/2015 9:50:50 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	3.8 ppm
355	8/20/2015 9:50:55 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
356	8/20/2015 9:51:00 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
357	8/20/2015 9:51:05 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
358	8/20/2015 9:51:10 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
359	8/20/2015 9:51:15 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	73 ppb	0.0 ppm
360	8/20/2015 9:51:20 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	812 ppb	3.7 ppm
361	8/20/2015 9:51:25 AM	0 %LEL	20.9 %	12.5 ppm	6 ppm	3388 ppb	0.0 ppm
362	8/20/2015 9:51:30 AM	30 %LEL	15.6 %	23.5 ppm	43 ppm	3567 ppb	0.0 ppm
363	8/20/2015 9:51:35 AM	38 %LEL	13.7 %	24.0 ppm	45 ppm	3588 ppb	0.0 ppm
364	8/20/2015 9:51:40 AM	38 %LEL	13.1 %	24.0 ppm	46 ppm	3579 ppb	0.0 ppm
365	8/20/2015 9:51:45 AM	20 %LEL	14.6 %	0.0 ppm	13 ppm	88 ppb	0.0 ppm
366	8/20/2015 9:51:50 AM	0 %LEL	18.7 %	0.0 ppm	1 ppm	69 ppb	0.0 ppm
367	8/20/2015 9:51:55 AM	0 %LEL	20.1 %	0.0 ppm	2 ppm	62 ppb	3.8 ppm
368	8/20/2015 9:52:00 AM	0 %LEL	20.7 %	0.0 ppm	0 ppm	58 ppb	0.0 ppm
369	8/20/2015 9:52:05 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	49 ppb	0.0 ppm
370	8/20/2015 9:52:10 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	45 ppb	0.0 ppm
371	8/20/2015 9:52:15 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	50 ppb	0.0 ppm
372	8/20/2015 9:52:20 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	49 ppb	0.0 ppm
373	8/20/2015 9:52:25 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	42 ppb	4.0 ppm
374	8/20/2015 9:52:30 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	37 ppb	0.0 ppm
375	8/20/2015 9:52:35 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	35 ppb	0.0 ppm
376	8/20/2015 9:52:40 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	32 ppb	0.0 ppm
377	8/20/2015 9:52:45 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	29 ppb	0.0 ppm

Figure 28: Data Displayed by Alarm Trend Cursor Symbol

## Graph Format

1. To view the data in graph format, click the **Graph** selection button. Five or more scheduled data points are required to display an interval trend data file in graph format.

**NOTE:** The data count shown in Figure 26 includes scheduled data points and events. A data count above 5 does not guarantee enough scheduled data points for a graph.



**Figure 29: Interval Trend Data in Graph Format**

2. Select or deselect gases to show on the graph.
3. Choose the zoom level. Zooming in shows greater detail relative to time.
4. Select **Event**, to see indications for warning, alarm, start of calibration, or end of calibration. Each indication is color coded to the gas color.
5. Select **Cursor** to view the gas reading and log time for the data point at the cursor location. Use the left and right arrow buttons on your keyboard to move the cursor across the graph horizontally. Use the up and down arrows on the keyboard to move the readings up or down on the screen.
6. Click **Summary** to show instrument information above the interval trend data graph.

## Printing Data

1. Click **Print**.
2. Select a printer in the window that appears and click **OK**. Data displayed in Graph view will print as a graph and data displayed in Table view will print as a table.

## Exporting Data

1. Click **Export**.
2. Specify the file name, file location, and file type. For Graph view, the export file type is “.bmp” (Windows bitmap). For Table view, the default file type is “.csv” (comma-separated values).
3. Click **Save**.

---

## Alarm Trend Data

The instrument saves up to 8 files that describe the most recent alarm events (Warning, Alarm, Alarm H, STEL, TWA, man down, or panic). If an alarm event occurs, then an alarm trend file that is centered around the event is saved separately from the interval trend data files.

It shows the readings up to 30 minutes before and 30 minutes after the event, with the log interval time every five seconds. The gas readings logged at the alarm event time are highlighted in red and the gas readings logged every 5 seconds around the alarm event are the peak (minimum for oxygen) readings for the previous five seconds. If the instrument has not been on for 30 minutes before the alarm event occurs, the data during this time is left blank. If the instrument is turned off less than 30 minutes after an alarm event occurs, the data file will only have logged data until the unit was turned off.

---

**NOTE:** If you are operating your instrument in Inert Mode with the oxygen alarm pattern set to H-HH, the maximum reading for the oxygen channel will be saved every 5 seconds instead of the minimum.

---

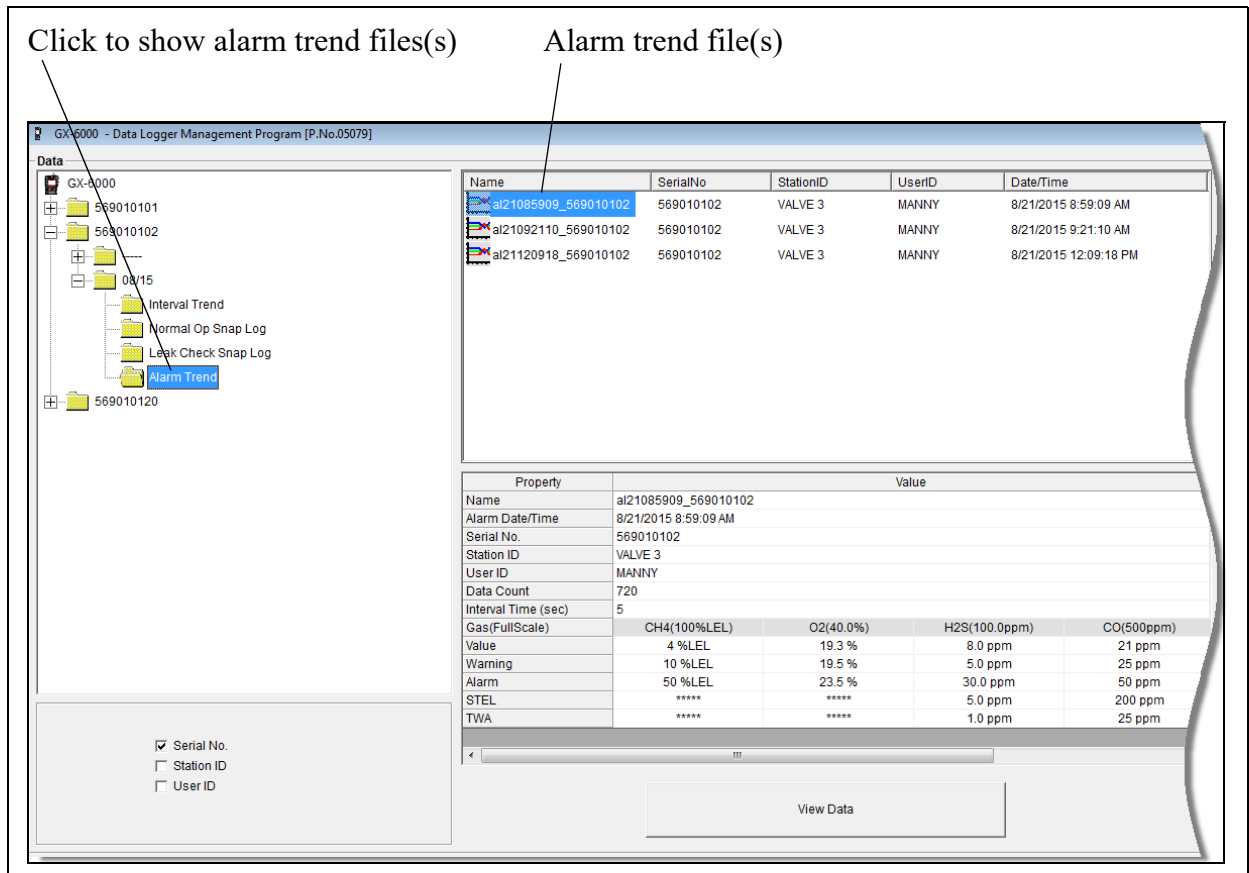
If the gas readings highlighted in red are fresh air readings, then a man down or a panic alarm triggered the alarm trend file.

When an alarm event triggers an alarm trend file to be saved, subsequent alarm events must occur 15 minutes after the previous triggering event in order to trigger the saving of another alarm trend file.

If 8 alarm trend files are already saved in the instrument’s memory, the oldest alarm trend file is overwritten when a new alarm trend file is saved.

Alarm trend data can always be displayed in either table or graph format.

1. Click **Data** along the right side of the program window. The Data Window appears.



**Figure 30: Data Window - Selecting Interval Trend Data Files**

- Expand the folders for the desired serial number by double-clicking or using the (+) button next to each folder.
- Open the dated folder (month/year) whose contents you want to see by double-clicking it or using the (+) button.
- Click the **Alarm Trend** folder. The Alarm Trend file(s) for that instrument will appear in the top right frame.
- The date/time indicated on each line is the date/time that data recording started.
- Click one of the alarm trend data file names. A summary will appear in the bottom right frame with instrument and alarm setting information. If you want to view, graph, print, or export the alarm trend data, double-click the filename or click the **View Data** button at the bottom of the window.
- Alarm trend data can be viewed in either table or graph format by selecting **Table** or **Graph**.

## Table Format

1. To view the data in table format, click the **Table** selection button.

The screenshot shows the 'Data View(Alarm Trend)' window in the GX-6000 Data Logger Management Program. The window title is 'GX-6000 - Data Logger Management Program [P.No.05079]'. Below the title bar, there are tabs for 'Table', 'Graph', 'Event Only', and 'Condensed', with 'Table' selected. To the right of the tabs are buttons for 'Print', 'Export', 'Summary', and 'Return'. The main area contains a table with the following columns: 'No', 'Date/Time', 'CH4(100%LEL)', 'O2(40.0%)', 'H2S(100.0ppm)', 'CO(500ppm)', 'VOC(50000ppb)', and 'HCN(15.0ppm)'. The table contains 34 rows of data, with row 361 highlighted in red. The data for row 361 is: No: 361, Date/Time: 8/20/2015 9:56:20 AM, CH4(100%LEL): 0 %LEL, O2(40.0%): 20.9 %, H2S(100.0ppm): 10.5 ppm, CO(500ppm): 4 ppm, VOC(50000ppb): 3003 ppb, HCN(15.0ppm): 0.0 ppm.

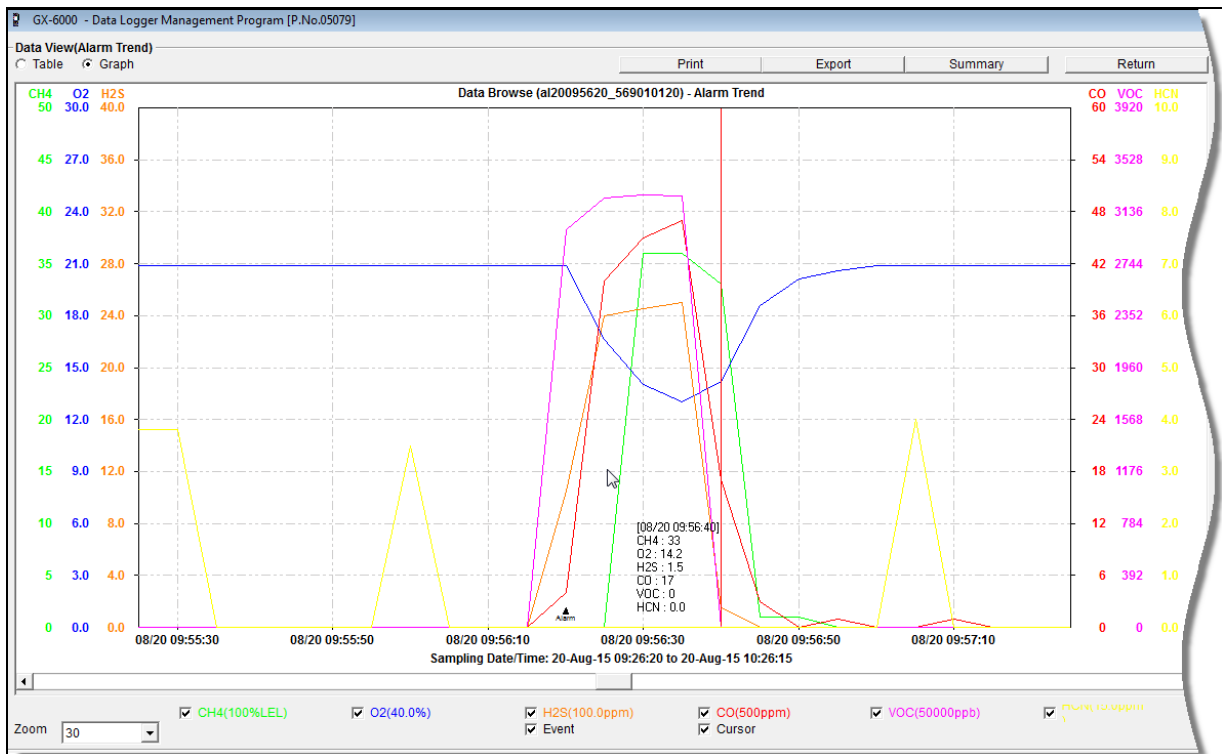
No	Date/Time	CH4(100%LEL)	O2(40.0%)	H2S(100.0ppm)	CO(500ppm)	VOC(50000ppb)	HCN(15.0ppm)
345	8/20/2015 9:55:00 AM	----	----	----	----	----	----
346	8/20/2015 9:55:05 AM	----	----	----	----	----	----
347	8/20/2015 9:55:10 AM	----	----	----	----	----	----
348	8/20/2015 9:55:15 AM	----	----	----	----	----	----
349	8/20/2015 9:55:20 AM	----	----	----	----	----	----
350	8/20/2015 9:55:25 AM	----	----	----	----	----	----
351	8/20/2015 9:55:30 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	3.8 ppm
352	8/20/2015 9:55:35 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
353	8/20/2015 9:55:40 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
354	8/20/2015 9:55:45 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
355	8/20/2015 9:55:50 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
356	8/20/2015 9:55:55 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
357	8/20/2015 9:56:00 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	3.5 ppm
358	8/20/2015 9:56:05 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
359	8/20/2015 9:56:10 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
360	8/20/2015 9:56:15 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
361	8/20/2015 9:56:20 AM	0 %LEL	20.9 %	10.5 ppm	4 ppm	3003 ppb	0.0 ppm
362	8/20/2015 9:56:25 AM	0 %LEL	16.6 %	24.0 ppm	40 ppm	3237 ppb	0.0 ppm
363	8/20/2015 9:56:30 AM	36 %LEL	14.0 %	24.5 ppm	45 ppm	3263 ppb	0.0 ppm
364	8/20/2015 9:56:35 AM	36 %LEL	13.0 %	25.0 ppm	47 ppm	3256 ppb	0.0 ppm
365	8/20/2015 9:56:40 AM	33 %LEL	14.2 %	1.5 ppm	17 ppm	0 ppb	0.0 ppm
366	8/20/2015 9:56:45 AM	1 %LEL	18.6 %	0.0 ppm	3 ppm	0 ppb	0.0 ppm
367	8/20/2015 9:56:50 AM	1 %LEL	20.1 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
368	8/20/2015 9:56:55 AM	0 %LEL	20.6 %	0.0 ppm	1 ppm	0 ppb	0.0 ppm
369	8/20/2015 9:57:00 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
370	8/20/2015 9:57:05 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	4.0 ppm
371	8/20/2015 9:57:10 AM	0 %LEL	20.9 %	0.0 ppm	1 ppm	0 ppb	0.0 ppm
372	8/20/2015 9:57:15 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
373	8/20/2015 9:57:20 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
374	8/20/2015 9:57:25 AM	0 %LEL	20.9 %	0.0 ppm	0 ppm	0 ppb	0.0 ppm
375	8/20/2015 9:57:30 AM	----	----	----	----	----	----
376	8/20/2015 9:57:35 AM	----	----	----	----	----	----
377	8/20/2015 9:57:40 AM	----	----	----	----	----	----
378	8/20/2015 9:57:45 AM	----	----	----	----	----	----

**Figure 31: Alarm Trend Data in Table Format**

2. The log times are shown along with the peak (minimum for oxygen) gas readings for the previous five seconds.
3. The gas readings at the time of the alarm event that triggered the saving of the alarm trend file are highlighted in red and are the instantaneous readings at that time. If the gas readings highlighted in red are fresh air readings, then a man down or a panic alarm triggered the alarm trend file.
4. Click **Summary** to show instrument information above the alarm trend data table.

## Graph Format

1. To view the data in graph format, click the **Graph** button. An alarm trend file can always be graphed regardless of the number of logged points.



**Figure 32: Alarm Trend Data in Graph Format**

2. Select or deselect gases to show on the graph.
3. Choose the zoom level. Zooming in shows greater detail relative to time.
4. Select **Event** so see an indication for the alarm event that triggered the saving of the alarm trend file.
5. Select **Cursor** to view the gas reading and log time for the data point at the cursor location. Use the left and right arrow buttons on your keyboard to move the cursor across the graph horizontally. Use the up and down arrows on the keyboard to move the readings up or down on the screen.
6. Click **Summary** to show instrument information above the alarm trend data graph.

## Printing Data

1. Click **Print**.
2. Select a printer in the window that appears and click **OK**. Data displayed in Graph view will print as a graph and data displayed in Table view will print as a table.



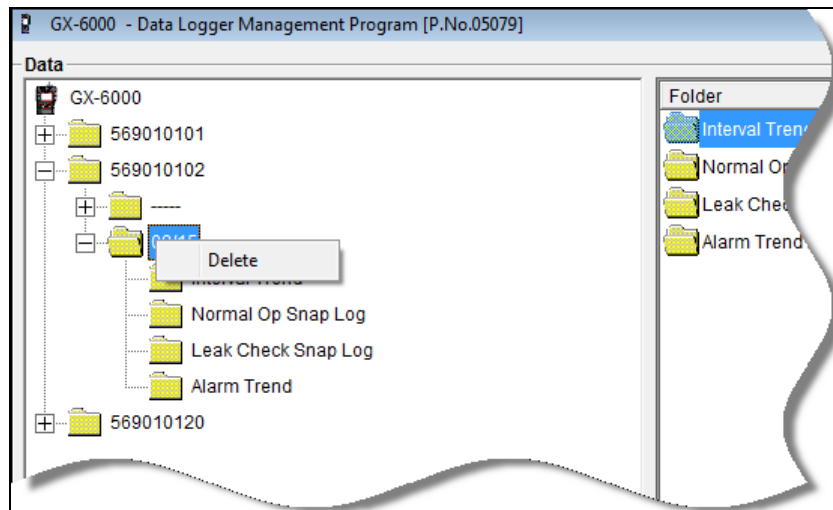
## Exporting Data

1. Click **Export**.
2. Specify the file name, file location, and file type. For Graph view, the export file type is “.bmp” (Windows bitmap). For Table view, the default file type is “.csv” (comma-separated values).
3. Click **Save**.

---

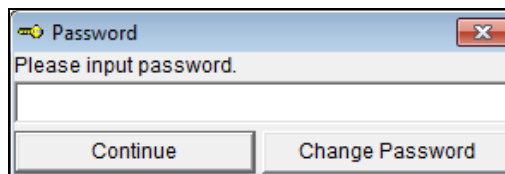
## Deleting Data in the Data Window

1. Click **Data** on the right side of the program window.
2. Right click the folder or file you want to delete.
3. The Delete box appears.



**Figure 33: Delete Box**

4. Click **Delete**. The Password Window appears.



**Figure 34: Password Window**

5. Enter the password and click **Continue**. The factory-set, case-sensitive password is “rki”. See “Changing the Password” on page 42 for instructions to change the password.
6. Click **Yes** in the confirmation window to confirm that want to delete the folder or file.

---

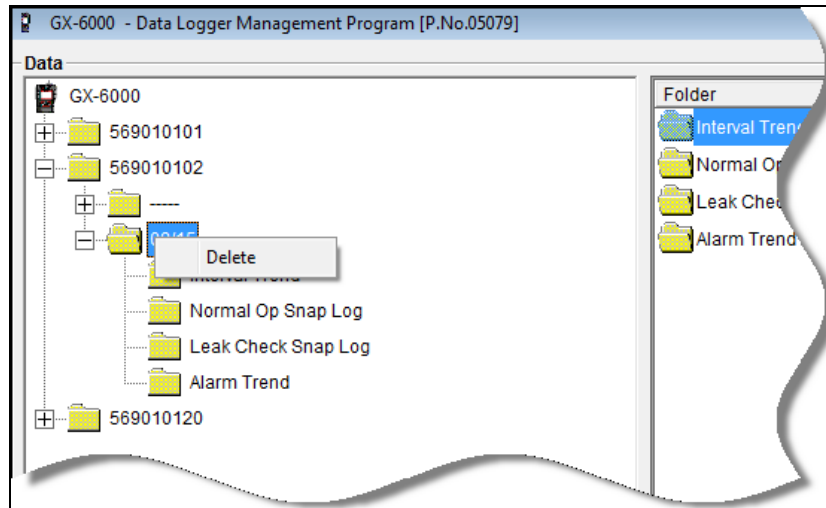
# Changing the Password

---

**CAUTION:** *Changing the password requires use of the Delete box. Take care to avoid accidentally deleting data.*

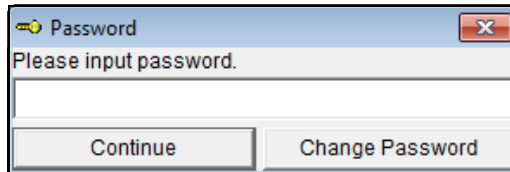
---

1. Right-click a data folder, data file, or event file. The Delete box will appear.



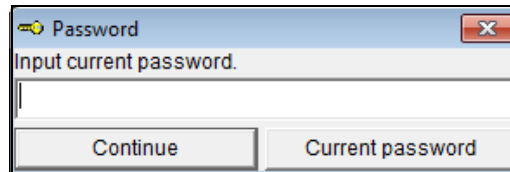
**Figure 35: Delete Box**

2. Click **Delete**. The Password Window appears.



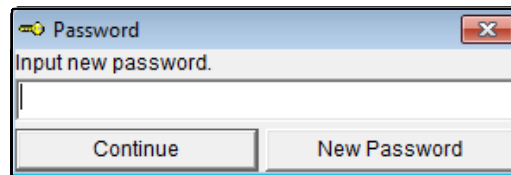
**Figure 36: Password Window**

3. Click **Change Password**. The Password Window asks you to input the current password.



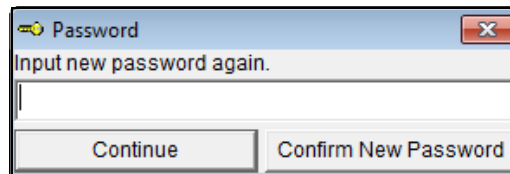
**Figure 37: Inputting Current Password**

4. Type the current password, then click **Current password**. The Password Window asks you to input the new password.



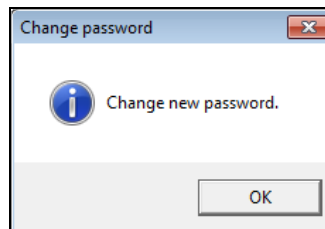
**Figure 38: Inputting New Password**

5. Type the new password and click **New Password**. The Password Window asks you to input the new password again to confirm it.



**Figure 39: Confirming New Password**

6. Type the new password again, then click **Confirm New Password**.
7. Click **OK** when the program confirms that you have changed the password.



**Figure 40: Confirming New Password**

8. Close the Password Window by clicking the red "X" in the upper right corner of the window.

## Chapter 6: Last Calibration Window

The Last Calibration Window stores the information for the most recent successful calibration and for the most recent successful bump test for each downloaded instrument. Calibration data is displayed in the top part of the screen while bump test data is displayed in the bottom part.

You can display the information three ways by using the **Need Calibration/Need Bump Test**, **Calibration Date/Bump Test Date**, or **Calibration Record/Bump Test Record** selection buttons. You can also print the information if you select the **Need Calibration/Need Bump Test** or **Calibration Date/Bump Test Date** view.

---

**NOTE:** If the GX-6000 Datalogging Program database is on the user's computer (default setting), data will only appear for instruments downloaded to that computer. If the database is on a network, data will appear for all instruments downloaded to that database. See "Downloading Data from an Instrument" on page 16 for more instruction.

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# BUMP DISP Setting's Effect on Last Calibration Window Appearance

The GX-6000 Maintenance Mode's **BUMP DISP** setting affects the Last Calibration Window's appearance. The factory setting is **OFF**.

The following screens are shown with the Bump Test portion of the window active. If the **BUMP DISP** on all of the instruments you have downloaded is set to **OFF**, you will not see the Bump Test portion of these screens. For more information on setting the **BUMP DISP** parameter, see the GX-6000 Operator's Manual.

## OFF

If the **BUMP DISP** parameter is set to **OFF** for every instrument that has been downloaded to the GX-6000 Datalogging Program, the Last Calibration Window appears as shown in the screen below. No bump test information appears.

No.	SerialNo	UserID	StationID	CH4	O2	H2S	CO	Last Download
1	569010102	MANNY	VALVE 3	8/20/2015 11:32:33 A	8/20/2015 11:32:33 A	8/20/2015 11:32:33 A	8/20/2015 11:32:33 A	8/20/2015 11:40:14 A
2	569010120	KIMBERLY	BUILDING 7	8/20/2015 11:32:07 A	8/20/2015 11:32:07 A	8/20/2015 11:32:07 A	8/20/2015 11:32:07 A	8/20/2015 11:23:27 A
3	569010101	KATIE	VALVE 3	8/20/2015 11:31:31 A	8/20/2015 11:31:31 A	8/20/2015 11:31:31 A	8/20/2015 11:31:31 A	8/20/2015 11:36:55 A

Figure 41: Last Calibration Window: BUMP DISP Off

# ON

If any instrument has been downloaded to the GX-6000 Datalogging Program that has the **BUMP DISP** parameter set to **ON**, the Last Calibration Window will appear as below. Only instruments that had the **BUMP DISP** instrument parameter turned **ON** when downloaded will appear in the Bump Test portion of the window. It should be noted that once an instrument that has the **BUMP DISP** parameter set to **ON** has been downloaded using the Complete Download or Instrument Information download buttons, the Bump Test portion of this screen will always appear.

GX-6000 - Data Logger Management Program [P.No.05079]

Last Calibration  
 Need Calibration       Calibration Date       Calibration Record     

No.	SerialNo	UserID	StationID	CH4	O2	H2S	CO		Last Download
1	569010102	MANNY	VALVE 3	8/20/2015 12:34:22 F	8/20/2015 12:34:22 F	8/20/2015 12:34:22 F	8/20/2015 12:34:22 F	----	8/21/2015 8:48:13 AM
2	569010101	KATIE	VALVE 3	8/20/2015 12:33:23 F	8/20/2015 12:33:23 F	8/20/2015 12:33:23 F	8/20/2015 12:33:23 F	----	8/20/2015 12:44:09 P
3	569010120	KIMBERLY	BUILDING 7	8/20/2015 12:32:23 P	8/20/2015 12:32:23 P	8/20/2015 12:32:23 P	8/20/2015 12:32:23 P	8/6/2015 11:23:27 AM	8/20/2015 12:42:21 P

Last Bump Test  
 Need Bump Test       Bump Test Date       Bump Test Record     

No.	SerialNo	UserID	StationID	CH4	O2	H2S	CO		Last Download
1	569010102	MANNY	VALVE 3	8/20/2015 12:34:22 F	8/20/2015 12:34:22 F	8/20/2015 12:34:22 F	8/20/2015 12:34:22 F	----	8/21/2015 8:48:13 AM
2	569010101	KATIE	VALVE 3	8/20/2015 12:33:23 F	8/20/2015 12:33:23 F	8/20/2015 12:33:23 F	8/20/2015 12:33:23 F	----	8/20/2015 12:44:09 P
3	569010120	KIMBERLY	BUILDING 7	8/20/2015 12:32:23 P	8/20/2015 12:32:23 P	8/20/2015 12:32:23 P	8/20/2015 12:32:23 P	8/6/2015 11:23:26 AM	8/20/2015 12:42:21 P

Figure 42: Last Calibration Window: BUMP DISP On

# Need Calibration/Need Bump Test View

Selecting this view shows the last calibration date, last bump test date, and the last download date for the instruments that are due for calibration or bump testing.

The instruments that are due for calibration or bump testing (in the case of the **Need Calibration/Need Bump Test** view, that will be all of them), will have their last calibration date or last bump test date highlighted in red. The instruments that have not been downloaded for more than 90 days will have their last download date highlighted in purple.

**NOTE:** The calibration interval, the number of days after a calibration that a new calibration is due, is saved in the instrument but it is only accessible in the instrument’s Maintenance Mode. The Datalogging Program will not recognize a changed calibration interval until that instrument’s information is downloaded again.

The screenshot shows two tables from the GX-6000 Data Logger Management Program. The top table is titled 'Last Calibration' and the bottom table is titled 'Last Bump Test'. Both tables have columns for No., SerialNo, UserID, StationID, and various gas sensors (CH4, O2, H2S, CO), along with a Last Download date. In the 'Last Calibration' table, the calibration dates for instruments 1, 2, and 3 are highlighted in red. In the 'Last Bump Test' table, the bump test dates for instruments 1, 2, and 3 are highlighted in red. The last download date for instrument 3 in both tables is highlighted in purple.

GX-6000 - Data Logger Management Program [P.No.05079]									
Last Calibration									
Need Calibration									
No.	SerialNo	UserID	StationID	CH4	O2	H2S	CO		Last Download
1	569010102	MANNY	VALVE 3	8/20/2015 12:34:22 F	8/20/2015 12:34:22 F	8/20/2015 12:34:22 F	8/20/2015 12:34:22 F	----	8/21/2015 8:48:13 AM
2	569010101	KATIE	VALVE 3	8/20/2015 12:33:23 F	8/20/2015 12:33:23 F	8/20/2015 12:33:23 F	8/20/2015 12:33:23 F	----	8/20/2015 12:44:09 P
3	569010120	KIMBERLY	BUILDING 7	8/20/2015 12:32:23 P	8/20/2015 12:32:23 P	8/20/2015 12:32:23 P	8/20/2015 12:32:23 P	8/6/2015 11:23:27 AM	8/20/2015 12:42:21 P

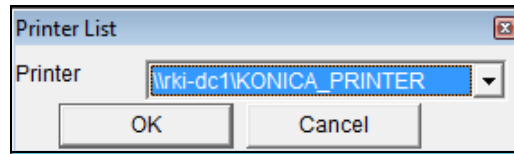
  

Last Bump Test									
Need Bump Test									
No.	SerialNo	UserID	StationID	CH4	O2	H2S	CO		Last Download
1	569010102	MANNY	VALVE 3	8/20/2015 12:34:22 F	8/20/2015 12:34:22 F	8/20/2015 12:34:22 F	8/20/2015 12:34:22 F	----	8/21/2015 8:48:13 AM
2	569010101	KATIE	VALVE 3	8/20/2015 12:33:23 F	8/20/2015 12:33:23 F	8/20/2015 12:33:23 F	8/20/2015 12:33:23 F	----	8/20/2015 12:44:09 P
3	569010120	KIMBERLY	BUILDING 7	8/20/2015 12:32:23 P	8/20/2015 12:32:23 P	8/20/2015 12:32:23 P	8/20/2015 12:32:23 P	8/6/2015 11:23:26 AM	8/20/2015 12:42:21 P

**Figure 43: Last Calibration Window: Need Calibration View**

- The **Need Calibration/Need Bump Test** view shows the following fields for both calibration and bump test data:
  - No.: Number assigned to downloaded instrument. The most recently downloaded instrument will be No. 1.
  - SerialNo: Instrument’s serial number
  - UserID: The instrument’s user ID.

- StationID: The instrument's station ID.
  - Target Gases: Date of calibration or bump test for each sensor in MM/DD/YYYY and 12-hour format.
  - Last Downloaded: Date of last download in MM/DD/YYYY and 12-hour format.
- To print a list of the instruments shown in the **Need Calibration/Need Bump Test** view along with their user ID and last calibration date or last bump test date, click the **Print** button. A Printer List dialog box will appear.



**Figure 44: Printer List Dialog Box**

- Select a printer and click the **OK** button to print the instrument list.

## Calibration Date/Bump Test Date View

Selecting this option shows the last calibration date, last bump test date, and the last download date for all the instruments that are in the program's database.

GX-6000 - Data Logger Management Program [P.No.05079]										
Last Calibration										
<input type="radio"/> Need Calibration <input checked="" type="radio"/> Calibration Date <input type="radio"/> Calibration Record <input type="button" value="Print"/>										
No.	SerialNo	UserID	StationID	CH4	O2	H2S	CO	VOC	Last Download	
1	569010120	KIMBERLY	BUILDING 7	8/20/2015 12:32:23 F	8/20/2015 12:32:23 F	8/20/2015 12:32:23 F	8/20/2015 12:32:23 F	8/6/2015 11:23:27 AM	12/1/2015 11:56:15 AM	
2	569010102	MANNY	VALVE 3	8/20/2015 12:34:22 F	8/20/2015 12:34:22 F	8/20/2015 12:34:22 F	8/20/2015 12:34:22 F	----	8/21/2015 8:48:13 AM	
3	569010101	KATIE	VALVE 3	8/20/2015 12:33:23 F	8/20/2015 12:33:23 F	8/20/2015 12:33:23 F	8/20/2015 12:33:23 F	----	8/20/2015 12:44:09 P	

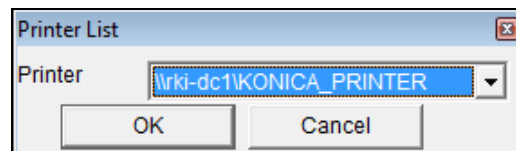
  

Last Bump Test										
<input type="radio"/> Need Bump Test <input checked="" type="radio"/> Bump Test Date <input type="radio"/> Bump Test Record <input type="button" value="Print"/>										
No.	SerialNo	UserID	StationID	CH4	O2	H2S	CO	VOC	Last Download	
1	569010120	KIMBERLY	BUILDING 7	8/20/2015 12:32:23 F	8/20/2015 12:32:23 F	8/20/2015 12:32:23 F	8/20/2015 12:32:23 F	8/6/2015 11:23:26 AM	12/1/2015 11:56:15 AM	
2	569010102	MANNY	VALVE 3	8/20/2015 12:34:22 F	8/20/2015 12:34:22 F	8/20/2015 12:34:22 F	8/20/2015 12:34:22 F	----	8/21/2015 8:48:13 AM	
3	569010101	KATIE	VALVE 3	8/20/2015 12:33:23 F	8/20/2015 12:33:23 F	8/20/2015 12:33:23 F	8/20/2015 12:33:23 F	----	8/20/2015 12:44:09 P	

**Figure 45: Last Calibration Window: Calibration Date View**



1. The **Calibration Date/Bump Test Date** view shows the following fields for both calibration and bump test data:
  - No.: Number assigned to downloaded instrument. The most recently downloaded instrument will be No. 1.
  - SerialNo: Instrument's serial number
  - UserID: The instrument's user ID.
  - StationID: The instrument's station ID.
  - Target Gases: Date of calibration or bump test for each sensor in MM/DD/YYYY and 12-hour format.
  - Last Downloaded: Date of last download in MM/DD/YYYY and 12-hour format.
2. To print a list of the instruments shown in the **Calibration Date/Bump Test Date** view along with their user ID and last calibration date or last bump test date, click the **Print** button. A Printer List dialog box will appear.



**Figure 46: Printer List Dialog Box**

3. Select a printer and click the **OK** button to print the instrument list.

# Calibration Record/Bump Test Record View

Selecting the Calibration Record/Bump Test Record view shows detailed calibration or bump test information for each instrument's most recent successful calibration or bump test.

Last Calibration								
Need Calibration								
Calibration Date								
Calibration Record								
No.	SerialNo	UserID	StationID	Gas	Before	After	A.Cal.	Cal.Due(Days)
1	569010102	USER_ID_002	desk	CH4	0	0	50	Now
				O2	12.5	12.0	12.0	Now
				H2S	0.0	0.0	25.0	Remaining 1 D
				CO!	49	50	50	Now
				VOC	91.1	100.0	20.0	Now
2	569010102	USER_ID_002	STATION_ID_001	VOC	105.4	100.0	100.0	Remaining 1 D
				CH4	0	0	50	Now
				O2	12.5	12.0	12.0	Now
				H2S	25.0	25.0	25.0	Now
				CO!	49	50	50	Now
3	USER_ID_002	STATION_ID_001	STATION_ID_001	VOC	91.1	100.0	20.0	Now
				VOC	100.8	100.0	100.0	Now
				CH4!	0	0	50	Now
				O2	20.4	20.4	12.0	Now

Last Bump Test								
Need Bump Test								
Bump Test Date								
Bump Test Record								
No.	SerialNo	UserID	StationID	Gas	Test Result	Concentration	Bump Test Due(D)	
1	569010102	USER_ID_002	desk	CH4		0	Now	
				O2		12.0	12.0	Now
				H2S		0.0	0.0	Now
				CO		50	50	Now
				VOC		100.0	5.00	Now
2	569010102	USER_ID_002	STATION_ID_001	VOC		100.0	100.0	Now
				CH4		0	0	Now
				O2		12.0	12.0	Now
				H2S		25.0	25.0	Now
				CO		50	50	Now
3	USER_ID_002	STATION_ID_001	STATION_ID_001	VOC		100.0	50.0	Now
				VOC		100.0	50.0	Now
				CH4		0	0	Now

**Figure 47: Last Calibration Window: Calibration Record View**

- The calibration field shows:
  - SerialNo: Instrument's serial number
  - UserID: The instrument's user ID.
  - StationID: The instrument's station ID.
  - Gas: Instrument's active gases. If a sensor is in a sensor life warning condition, a "!" appears to the right of the gas name.
  - Before: Gas reading prior to calibration.
  - After: Gas reading after calibration.
  - A. Cal.: Auto calibration value for each gas. The "After" column should match the "A. Cal." column.

**NOTE:** If a unit is calibrated using One Cal in the instrument's Calibration Mode (see the GX-6000 Operator's Manual) it is possible for the "After" reading to be different from the "A.Cal" setting if the unit was set to a level different than the "A.Cal" setting.

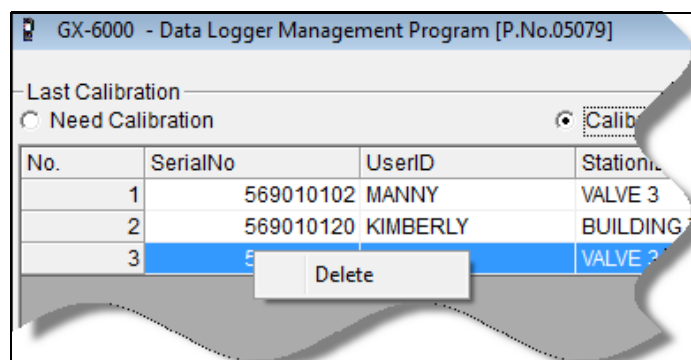
- Cal. Due (Days): Days left before calibration is due. If the instrument is due now, the box will be highlighted in red.
2. The bump test field shows:
    - SerialNo: Instrument's serial number
    - UserID: The instrument's user ID.
    - StationID: The instrument's station ID.
    - Gas: Instrument's active gases.
    - Test Result: The reading for each channel at the end of the bump test.
    - Concentration: Applied gas concentration for each gas.
    - Bump Test Due: Days left before bump test is due. If the instrument is due now, the box will be highlighted in red.
  3. It is not possible to print any information when the Calibration Record/Bump Test Record view is selected. To view and print all past calibrations for an instrument, see "Calibration History" on page 24.

---

## Deleting Last Calibration Data

To delete an instrument and its calibration or bump test data from the Last Calibration Window:

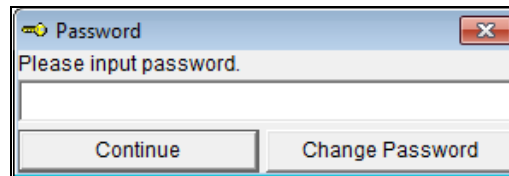
1. Click **Last Calibration** on the right side of the program window.
2. Select the **Need Calibration/Need Bump Test** or **Calibration Date/Bump Test Date** view.
3. Click the row for the instrument whose calibration or bump test information you want to delete to select it. It will be highlighted to show that it is selected.
4. Right click the selected instrument.



**Figure 48: Delete Box**

5. Click **Delete**.

6. Enter the password and click the **Continue** button. The factory-set, case-sensitive password is “rki”. See “Changing the Password” on page 42 for instructions to change the password.



**Figure 49: Password Window,**

7. Click **Yes** in the confirmation window.

---

**NOTE:** Deleting instrument data in the Data Window will not delete data from the Last Calibration Window. Data in the Last Calibration Window must be deleted separately.

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# Chapter 7: Set Window (Instrument Parameters)

In the Set Window, you can change the following instrument parameters:

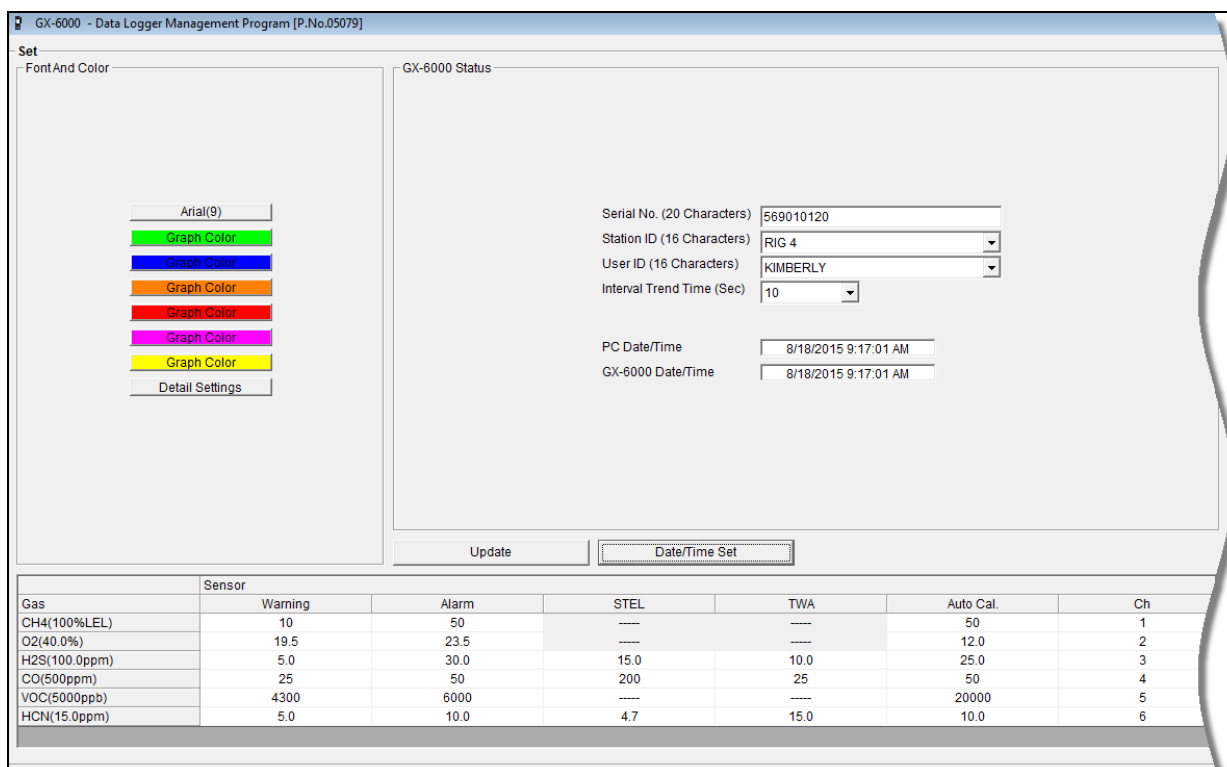
- serial number
- station ID
- user ID
- interval trend time
- date/time
- alarm points
- auto calibration value

---

## Changing Instrument Parameters

1. Launch the GX-6000 Datalogging Program.
2. If the **Automatic Download** selection box is selected, deselect it.
3. Connect an instrument as described in “Connecting an Instrument” on page 15.
4. Click **Instrument Information** (instrument information only) or **Complete Download** (instrument information and instrument data).

## 5. Click Set.



**Figure 50: Set Window**

- To change the serial number stored in the instrument, click the serial number field and use the backspace key to remove the current entry, then type the new serial number.
- To change the station ID or user ID, click on the down arrow in the desired box and select a new station ID or user ID from the list. The available station and user IDs are ones that are stored in the instrument's memory.
- Use the drop down menu to select the **Interval Trend Time**. The available choices are 10, 20, 30, 60, 180, 300, and 600 seconds. The table below outlines how many hours of datalogging are available per interval trend time.

Interval Trend Time	Data Logging Hours
10 seconds	10 hours
20 seconds	20 hours
30 seconds	30 hours
60 seconds	60 hours
180 seconds (3 minutes)	180 hours
300 seconds (5 minutes)	300 hours
600 seconds (10 minutes)	600 hours

9. To change the alarm points and the auto calibration value for each channel, double-click the field you wish to change (e.g. H2S AutoCal.) then type in the new information.
10. Click **Update** and then **Yes** in the confirmation window to upload changes to the instrument.
11. To update the instrument's date and time to match the computer's, click the **Date/Time Set** button and then click **Yes** in the confirmation window.

## Changing User and Station IDs

The Detail Settings button in the Set Window allows the user to create or change a User ID list or Station ID list and upload it to an instrument.

1. Launch the GX-6000 Datalogging Program.
2. If the Automatic Download selection box is selected, deselect it.
3. Connect an instrument as described in "Connecting an Instrument" on page 15.
4. Click **Instrument Information** (instrument information only) or **Complete Download** (instrument information and instrument data).
5. Click **Set**.

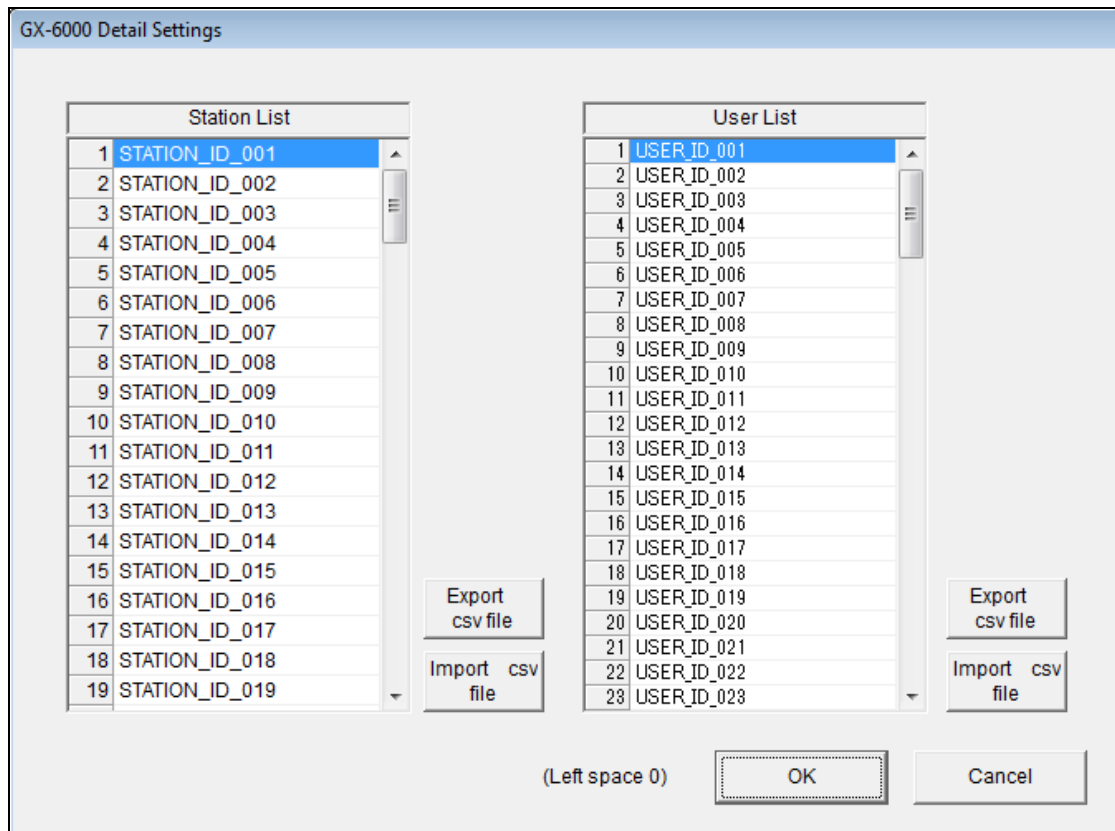
Gas	Sensor	Warning	Alarm	STEL	TWA	Auto Cal.	Ch
CH4(100%LEL)		10	50	----	----	50	1
O2(40.0%)		19.5	23.5	----	----	12.0	2
H2S(100.0ppm)		5.0	30.0	15.0	10.0	25.0	3
CO(500ppm)		25	50	200	25	50	4
VOC(5000ppb)		4300	6000	----	----	20000	5
HCN(15.0ppm)		5.0	10.0	4.7	15.0	10.0	6

**Figure 51: Set Window**

## Directly Editing Station and User ID Lists

The station and user ID lists can be edited directly or through the use of .csv files. Editing them directly is often more convenient if your station or user ID list is short. For longer ID lists, using .csv files will be more convenient. See “Updating Station and User ID Lists Using .csv Files” on page 57 for instructions to use .csv files.

1. Click the **Detail Settings** button in the Set window. If you do not currently have any User IDs or Station IDs programmed into the instrument, the screen will appear as shown below.



**Figure 52: Detail Settings Window**

The Station ID list is shown on the left and the User ID list is shown on the right. Both lists have **Export csv file** and **Import csv file** buttons located to the right of each list.

If the instrument had any user-defined station or user IDs, they would be displayed in the appropriate list.

2. Double click the station or user ID you wish to change and delete the existing information. Type in the new station or user ID. Each ID can be up to 16 characters long and can contain uppercase letters, lowercase letters, or numbers.
3. Click **OK** to save the changes and return to the Set window.
4. The new station and user ID lists will be visible in the Station ID and User ID selection boxes in the Set window. Use the drop down menu to select a current station and user ID for the instrument.

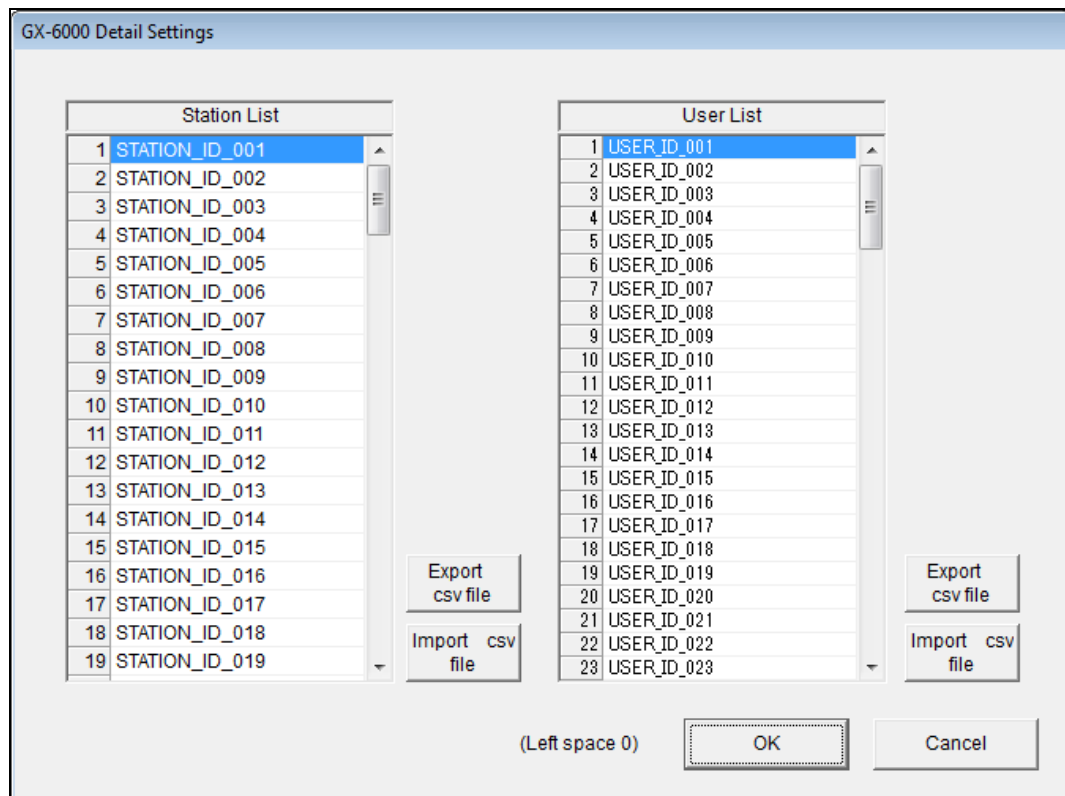


5. Click **Update** and click **OK** in the confirmation window.

## Updating Station and User ID Lists Using .csv Files

Station and user ID lists can also be edited by using .csv files.

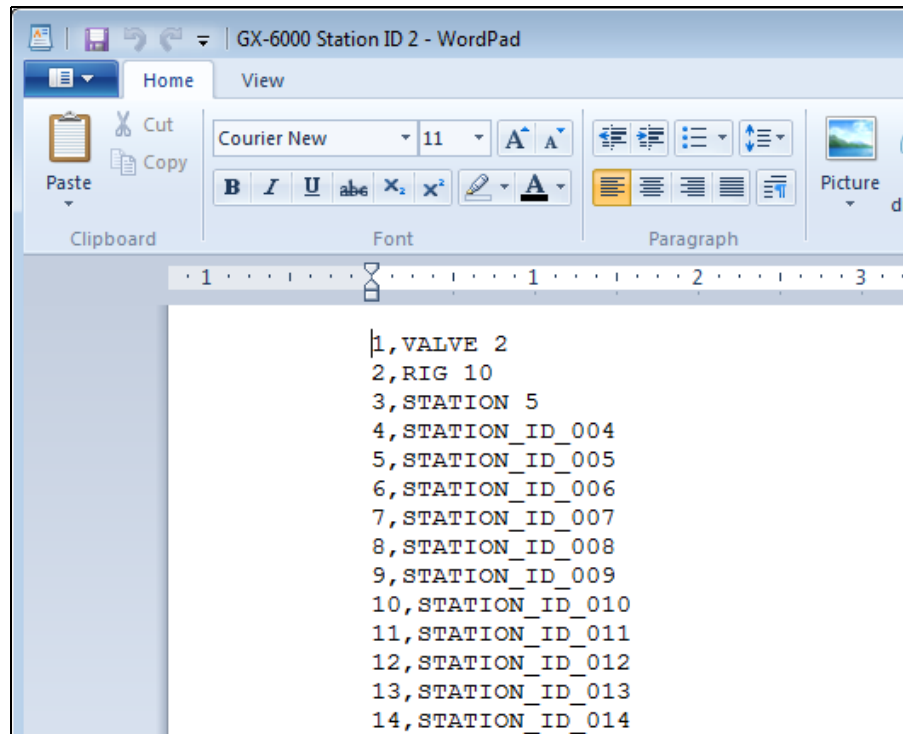
1. Click the **Detail Settings** button in the Set window. If you do not currently have any User IDs or Station IDs programmed into the instrument, the screen will appear as shown below.



**Figure 53: Detail Settings Window**

- The Station ID list is shown on the left and the User ID list is shown on the right. Both lists have **Export csv file** and **Import csv file** buttons located to the right of each list.
2. To create a new ID list, click the appropriate **Export csv file** button. In the example below, the Station ID's **Export csv file** button was clicked.
  3. Navigate to the file storage location, type in a file name, and click **Save**.

4. Open the .csv file in a word processing program such as Word, Notepad, or WordPad. Below is an example of the Station .csv file opened in WordPad.

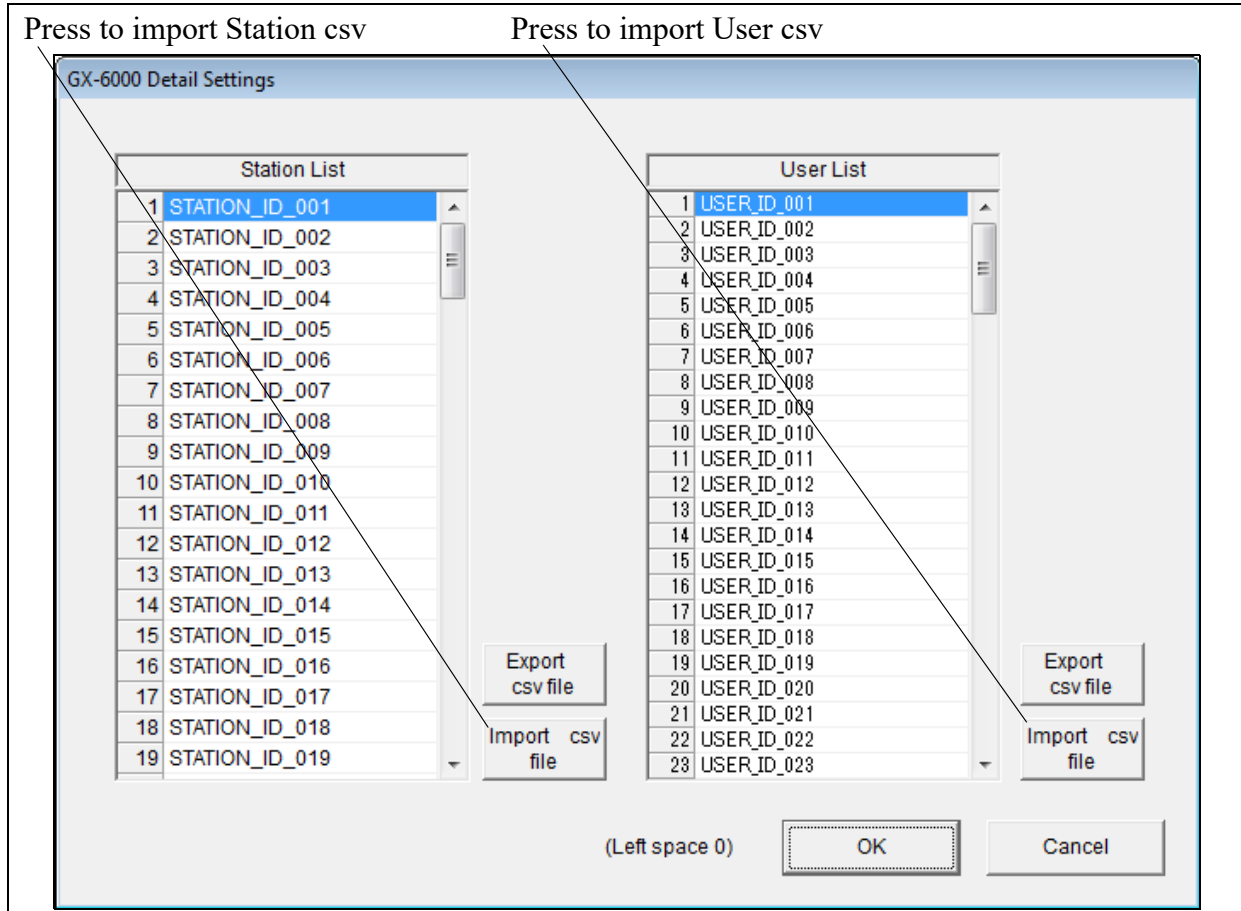


**Figure 54: Station ID .csv File Opened in WordPad**

5. Any existing Station or User IDs are displayed. Factory-loaded Station or User IDs have a STATION\_ID\_XXX or USER\_ID\_XXX appearance.
6. Delete the existing name and replace it with the desired name. The name can be up to 16 characters long and may be any uppercase letter, lowercase letter, or number.

## Importing .csv Files

1. Locate an existing Station ID or User ID .csv file. See above for instructions to generate a .csv file.
2. In the Detail Settings window, click the appropriate **Import csv file** button.



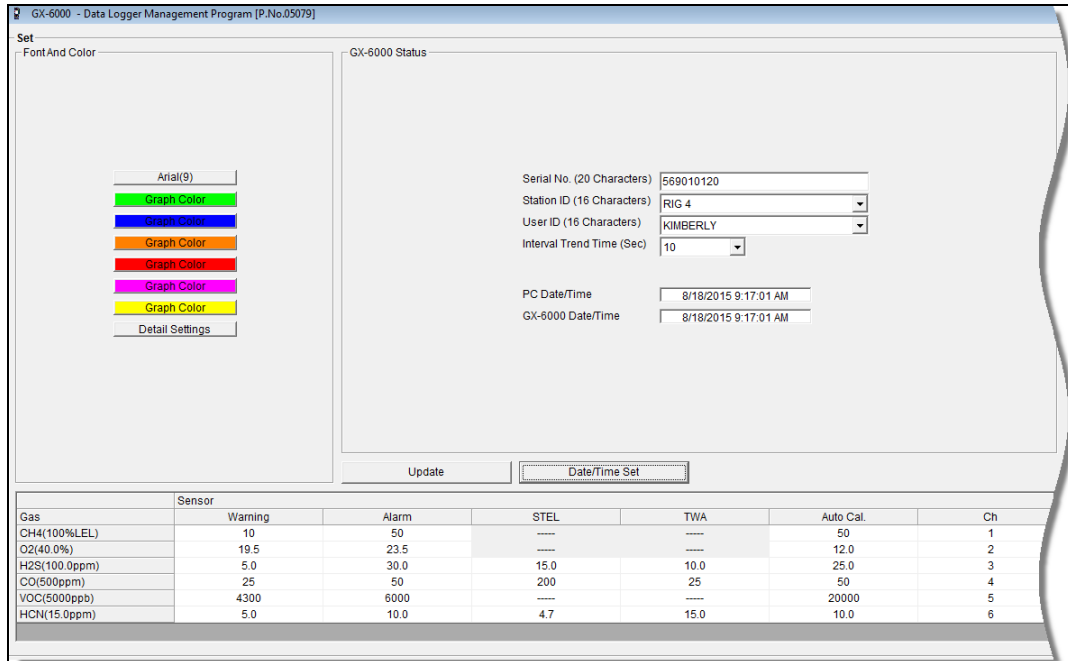
**Figure 55: Import .csv File**

3. Select the file you want to import and click **Open**.
4. Click **OK** to save changes and return to the Set window.
5. The new station and user ID lists will be visible in the Set Window's Station ID and User ID selection boxes. Use the drop down menu to select a current station and user ID.
6. Click **Update** and then **Yes** in the confirmation window to upload changes to the instrument.

# Chapter 8: Set Window (Program Appearance)

The program's font and graph colors can be changed using the Set Window.

1. Launch the GX-6000 Datalogging Program.
2. Click **Set**.

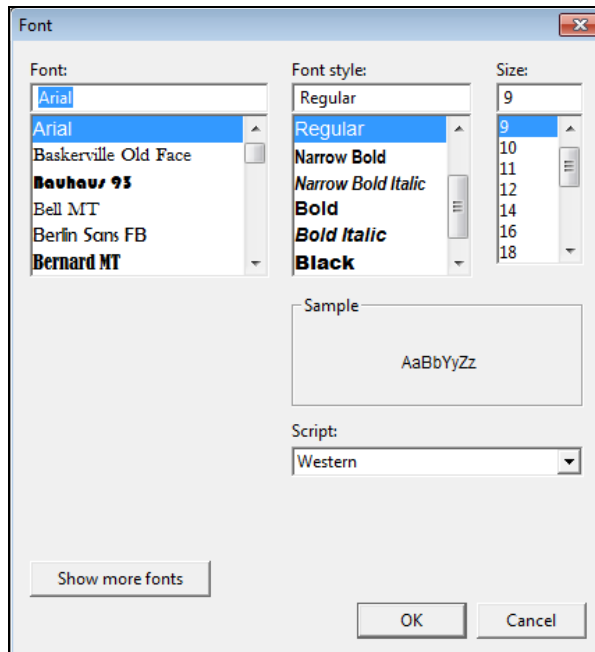


**Figure 56: Set Window**

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## Changing the Font

1. Click the font name button.
2. Choose the font type, size, style, and script in the Font Window.



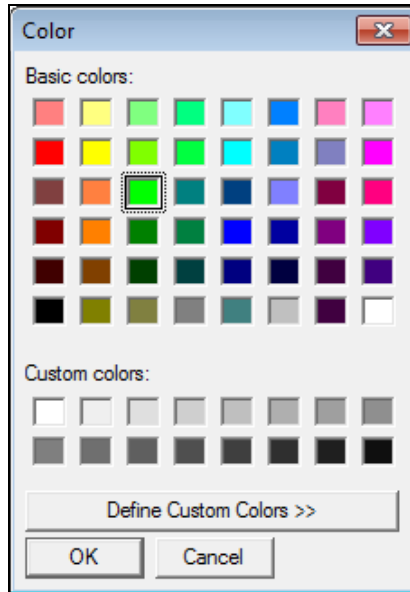
**Figure 57: Font Window**

3. Click **OK**.
4. The changes will take effect after you exit and restart the program.

---

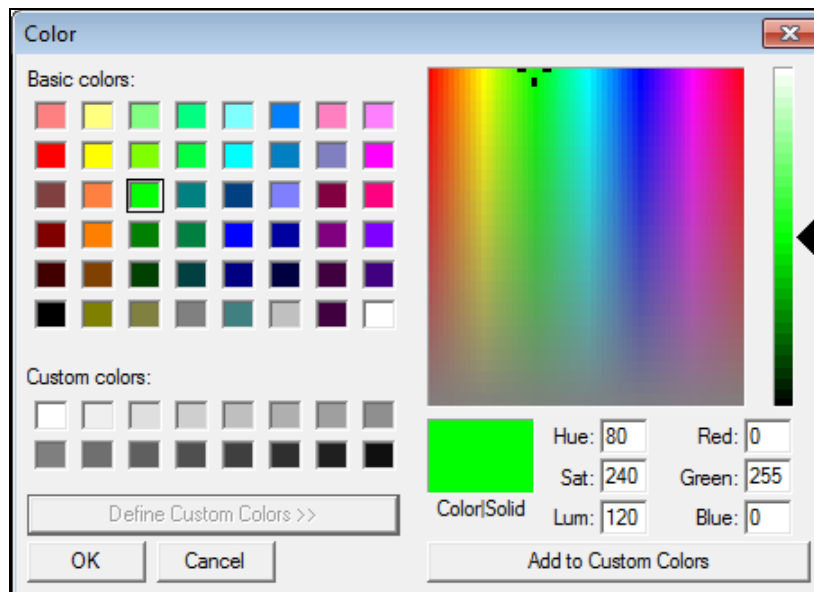
## Changing Graph Colors

1. Click the appropriate **Graph Color** button on the left side of the Set Window.
2. Pick a new graph color from the Color Window.



**Figure 58: Color Window**

3. If you want to define a custom color, click **Define Custom Colors** and the Custom Colors Window replaces the Color Window.



**Figure 59: Custom Color Window**

4. Click **OK**.
5. The changes will take effect after you exit and restart the program.

## Chapter 9: Spare Parts List

**Table 2: Spare Parts List**

<b>Part Number</b>	<b>Description</b>
47-5084RK	USB/IrDA adapter module, Legasic, for use with all premier portables (without USB cable)
47-5084RK-01	USB/IrDA adapter assembly, Legasic, for use with all premier portables (with module and USB cable)
47-5085RK	Cable, USB A to USB mini, 6 feet, for USB/IrDA adapter module
71-0375	GX-6000 Datalogging Program Operator's Manual (this document)
71-8010	GX-6000 Product CD, includes the GX-6000 Datalogging Program, and Operator's Manuals