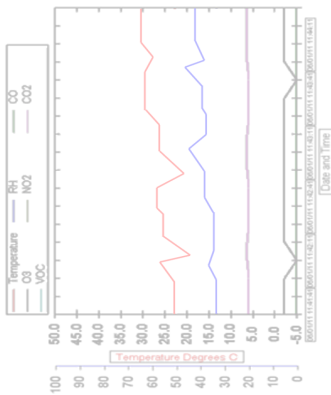
BACHARACH
The Measurable Difference

IQ Chek™

Indoor Environmental Quality
Datalogging Management Software

Instruction 1509-9002
Software Manual

Rev. 1 - February 2011



Product Leadership • Training
Service • Reliability

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IMPORTANT NOTE

READ AND UNDERSTAND THIS MANUAL PRIOR TO USING THIS SOFTWARE.

THIS DATALOGGING SOFTWARE IS DESIGNED TO PROVIDE THE USER WITH A POWERFUL TOOL TO VIEW AND MANIPULATE LOGGED DATA TO VIEW TRENDS IN MONITORED AIR QUALITY.

THIS INSTRUMENT HAS NOT BEEN DESIGNED TO BE INTRINSICALLY SAFE IN HAZARDOUS OR EXPLOSION-RATED ENVIRONMENTS. FOR YOUR SAFETY, **DO NOT** USE IT IN AREAS CLASSIFIED AS HAZARDOUS AREAS (E.G., EXPLOSION-RATED ENVIRONMENTS).

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For ONE Computer

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1. OVERVIEW

1.1. General Description

Thank you for purchasing the IQ Chek™ software package to use in conjunction with the IEQ Chek™ or Comfort Chek™ 500 indoor air quality monitors. These instruments are easy-to-use monitoring and information recording devices for monitoring trends in air quality. This manual will guide you through the installation, use, and functionality of the IQ Chek™ software program.

Figure 1-1. IQ Chek™ Software CD with IEQ Chek™ and Comfort Chek™ 500

IEQ Chek™ and Comfort Chek™ 500 can reliably record time-based information, which can be downloaded via the USB port located on the right side of the instrument. Any computer capable of running Microsoft Windows XP or higher (with an available USB communications port) can accommodate the IQ Chek™ software. For faster downloading speed from the IEQ Chek™, it is recommended to use an SD card reader. Downloading directly from the instrument may be slow and time consuming.

The Comfort Chek™ 500 instrument is a lower-cost instrument designed to provide greater value to the end user. It is manufactured with internal memory. The sample rate can be adjusted using the supplied software. The supplied USB cable must be used to download the logged information to the PC.

Read and understand this manual before using IQ Chek™. Our technical staff can assist you with any installation and operational problems you might encounter. For assistance, call our toll free number 800-736-4666.

1.2. IQ Chek™ Shipping Checklist

This checklist ensures that you have received everything required to operate the IQ Chek™ PC software. If you do not receive any of the items listed below, contact the factory immediately.

- IQ Chek™ software CD (1509-0019)
- USB communications cable
- Software manual
- SD flash card reader and 2.0GB SD flash card (IEQ Chek™ instrument only)[1]
- Other specified accessories (see original sales order and comments below)

_____

_____

_____

_____

Date: _____ Checked by: _____

For more information and technical support, contact Bacharach.

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[1] These items pertain to the IEQ Chek datalogging kit (1509-0001).

2. SOFTWARE INSTALLATION

Insert the IQ Chek™ CD and follow the instructions.

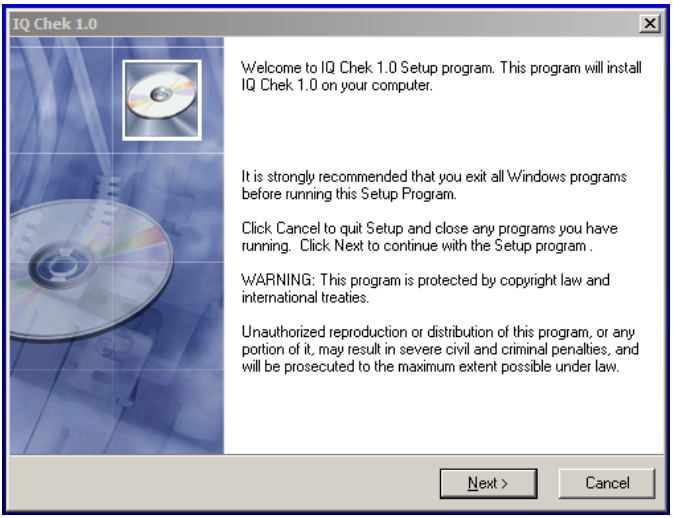


Figure 2-1. IQ Chek™ Installation Welcome Screen

Accept the license agreement by clicking **Yes** to move on.

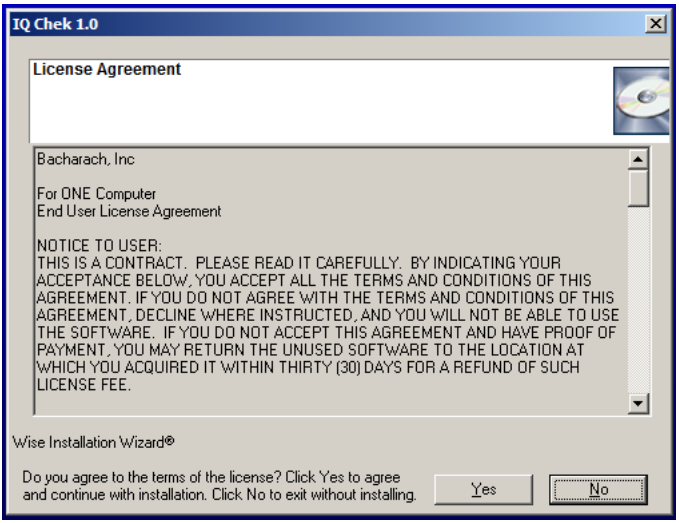


Figure 2-2. IQ Chek™ License Agreement Screen

Use the **Browse** button to locate your installation folder, then click **Next >**.

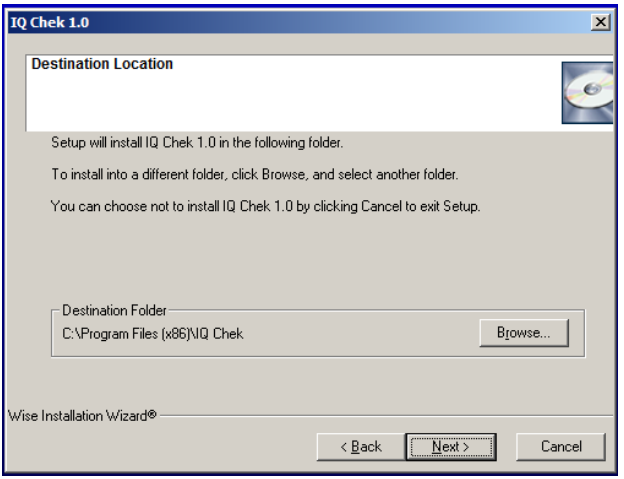


Figure 2-3. IQ Chek™ Destination Location Screen

Click the **Next >** button to start the installation process.

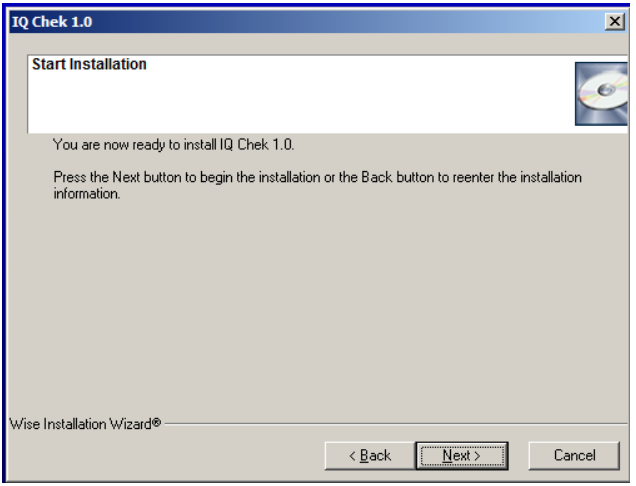


Figure 2-4. IQ Chek™ Start Installation Screen

Files will be copied to your PC. Wait for the progress screen to complete (or click **Cancel** to abort).

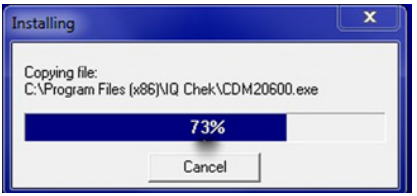


Figure 2-5. Installation in Progress

Complete the installation and exit by clicking the **Finish >** button. The IQ Chek™ icon will appear on your desktop.

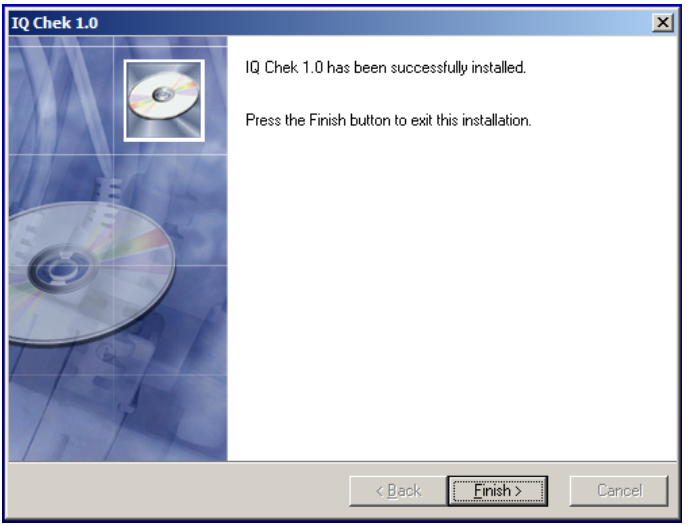


Figure 2-6. Installation Complete Screen

Figure 2-7. IQ Chek™ Desktop Icon

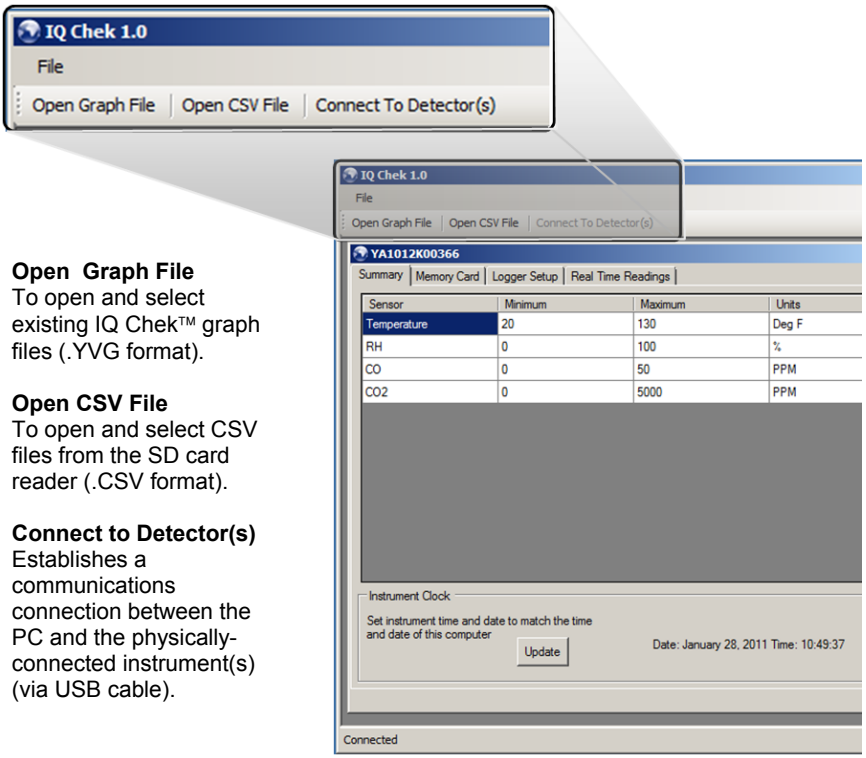
3. OPERATION

3.1. Connecting Instruments to the PC

Connect a supported Bacharach indoor air quality monitoring device to your PC with the supplied USB cable. The PC will detect the instrument and, if connected for the first time, the PC will indicate “Found New Hardware” as shown below.

Figure 3-1. Found New Hardware and Driver Installation Messages

After the Add New Hardware/Driver Installation process is complete, double click on the IQ Chek™ icon on your desktop to start the IQ Chek™ program. From the main IQ Chek™ screen™, you can connect to your device by clicking on **Connect To Detector(s)** button (shown below).



Open Graph File
To open and select existing IQ Chek™ graph files (.YVG format).

Open CSV File
To open and select CSV files from the SD card reader (.CSV format).

Connect to Detector(s)
Establishes a communications connection between the PC and the physically-connected instrument(s) (via USB cable).

Figure 3-2. Main IQ Chek™ Software Screen Highlighting Key Menu Items

3.2. Real Time Readings

To access live readings from the instrument, click on the **Real Time Readings** tab.

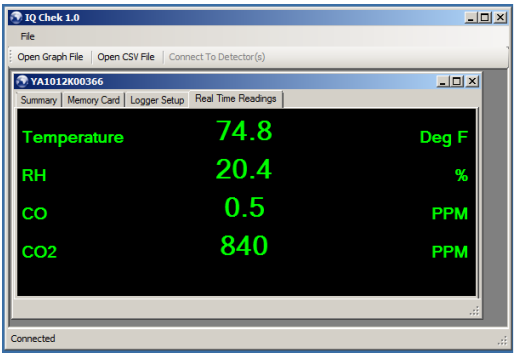


Figure 3-3. The Real Time Readings Tab

3.3. Logger Setup

To access the Logger Setup Screen, click on the **Logger Setup** tab. Note that this tab is the *only* way to setup the logging parameters in the Comfort Chek™ 500.

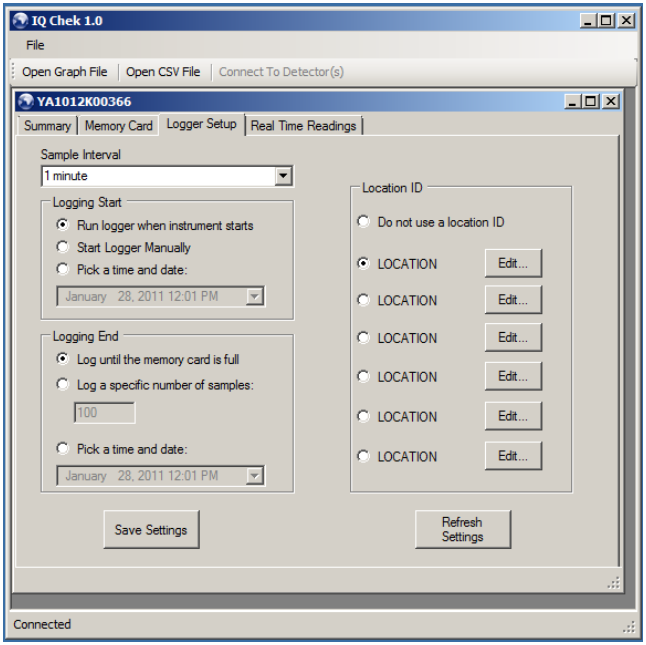


Figure 3-4. The Logger Setup Screen

3.4. Retrieving Data from the IEQ Chek™

Click on the **Memory Card** tab (see Figure 3-5) to retrieve data from the card. A progress bar will show the number of files retrieved from the memory card and will appear on the screen after completion. The user can select one or more specific files to plot on the graph screen.

Click on the **Retrieve File from Flash Card** button (see Figure 3-5) after selecting the desired file. The progress bar shows the progress as data is received.

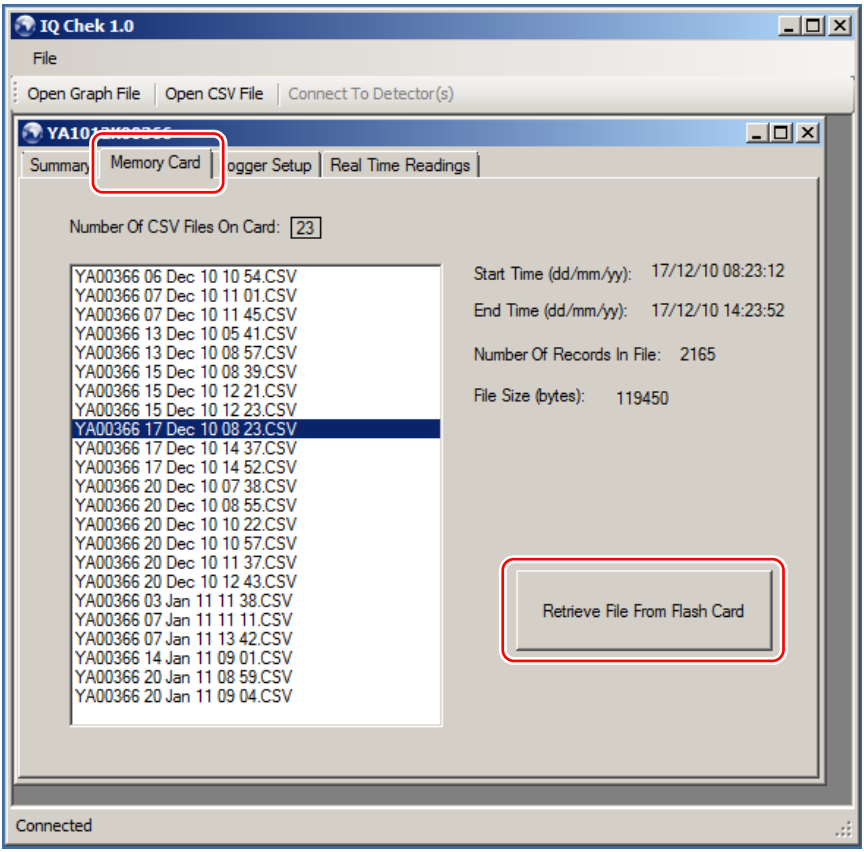


Figure 3-5. Retrieving Data from an IEQ Chek™ Memory Card

NOTE: Downloading logged files will be very slow using this method. It is recommended to remove the SD card from the IEQ Chek™ and use a card reader for much faster download speeds.

NOTE: Selecting multiple files allows you to merge graphs onto one plot for review and comparison purposes.

3.5. Retrieving Data from the Comfort Chek™ 500

Click on the Comfort Chek™ 500 tab to retrieve data from the instrument. A progress bar will show the number of files that will be retrieved from the instrument and will appear on the screen after completion. The user can select one or more specific files to plot for the graph.

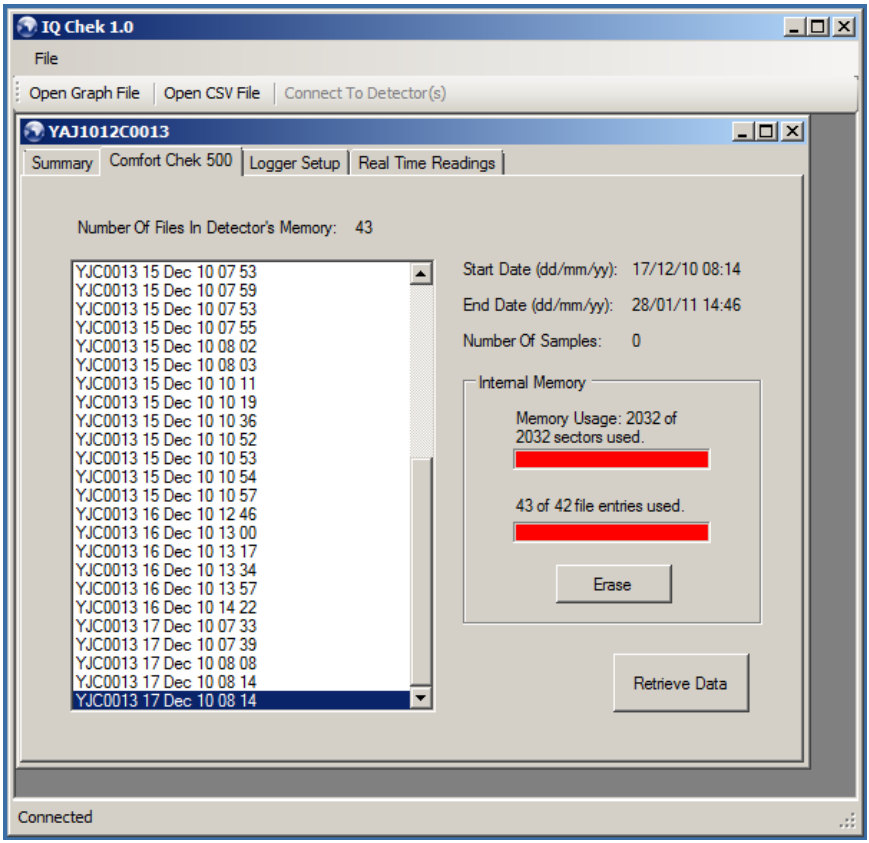


Figure 3-6. Retrieving Data from a Comfort Chek™ 500

NOTE: Selecting multiple files allows you to merge graphs onto one plot for review and comparison purposes.

3.6. Retrieving Data from an SD Card

To retrieve data from an SD card, insert the SD card into your PC (or into the SD card reader and the reader into your PC) and then click on the **Open CSV File** button as shown below. Use the OPEN dialog box to locate and select the desired CSV file. The data will be displayed as a graph.

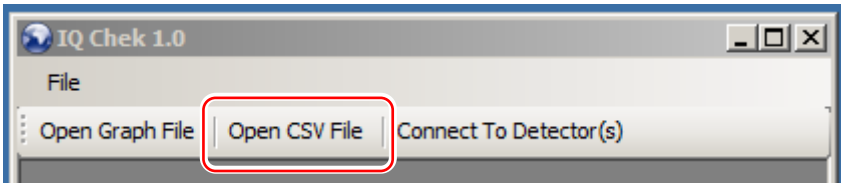


Figure 3-7. Retrieving Data from an SD Card

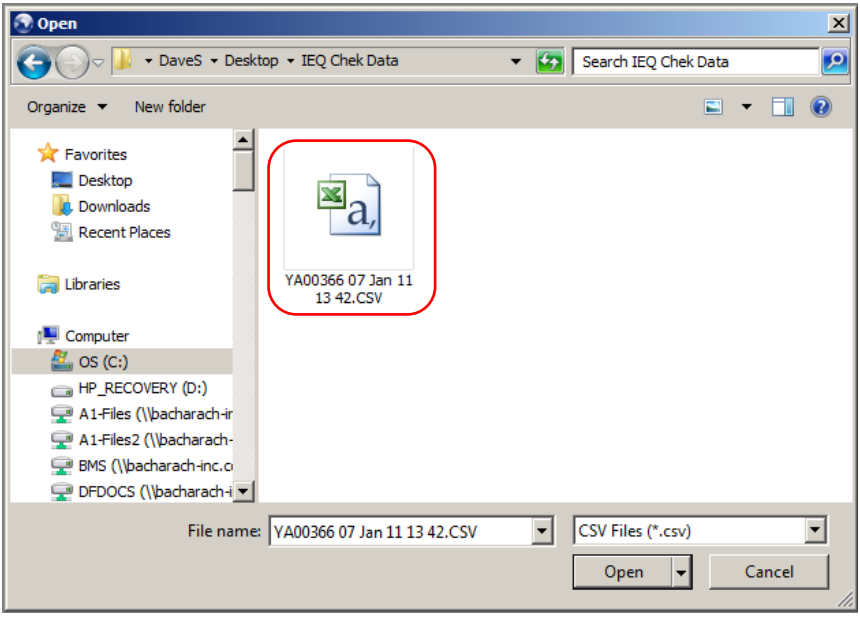


Figure 3-8. Selecting SD Card Location

3.7. Opening Saved .YVG (Graph) Files

Open an existing graph file from your computer by clicking the **Open Graph File** tab.

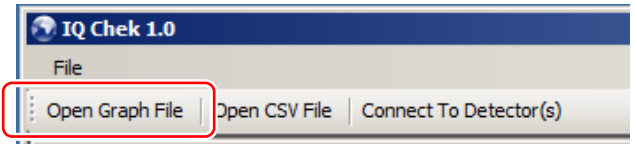


Figure 3-9. Open Graph File Tab

Click on the **Open Graph File** tab and then locate the required graph file(s) (having the .YVG extension) that you want to open. See below.

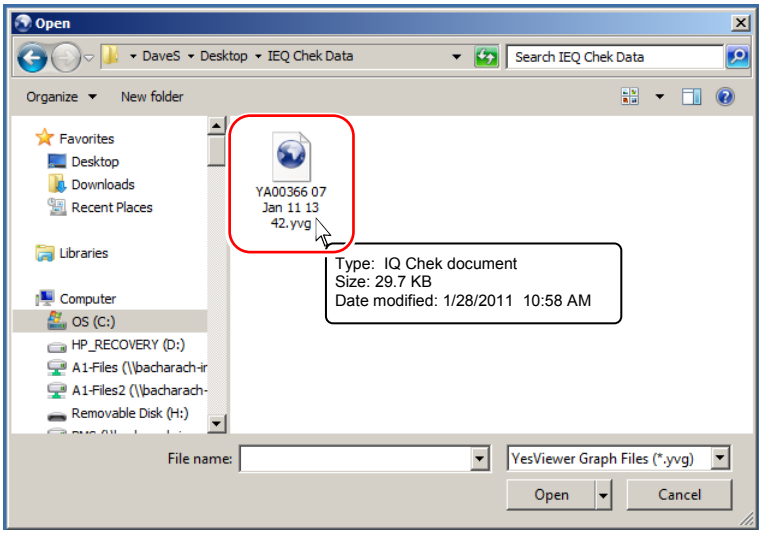


Figure 3-10. Selecting a Graph File to Open

3.8. Graphs

Select the file(s) you would like to graph (through the Open CSV File or Open Graph File buttons) and click the **Open** button. IQ Chek™ will automatically display the data as a graph. You can view the graph data in various ways and manipulate the displayed graph using the following items.

- Graph Results Toolbar
- Graph Tab
- Statistics Tab
- Data Table Tab

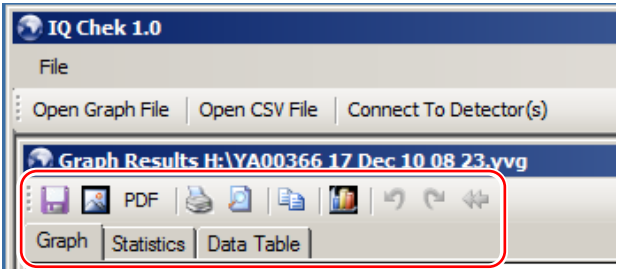
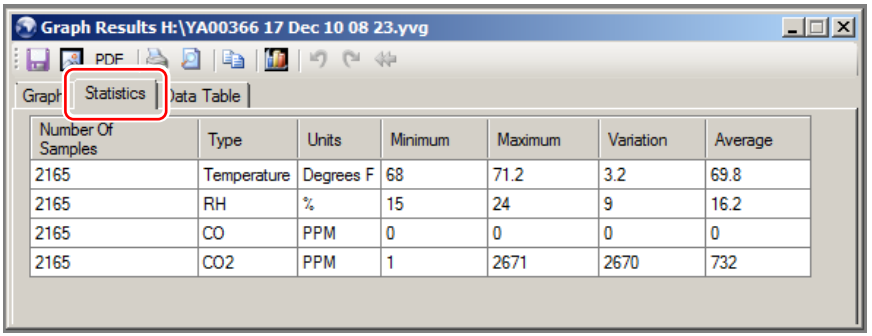


Figure 3-11. Graph Results Toolbar and Graph, Statistics, and Data Table Tabs

GRAPH TAB: Graph plotting occurs automatically on the Graph tab once user opens the .CSV (data) file or .YVG (graph) file.

STATISTICS TAB: Sample statistical data (available by clicking on the **Statistics** tab) is shown below.



Number Of Samples	Type	Units	Minimum	Maximum	Variation	Average
2165	Temperature	Degrees F	68	71.2	3.2	69.8
2165	RH	%	15	24	9	16.2
2165	CO	PPM	0	0	0	0
2165	CO2	PPM	1	2671	2670	732

Figure 3-12. Sample Statistical Data Screen

DATA TABLE TAB: To see logged data in tabular format, click the Data Table tab. By default, the data is displayed in statistical format.

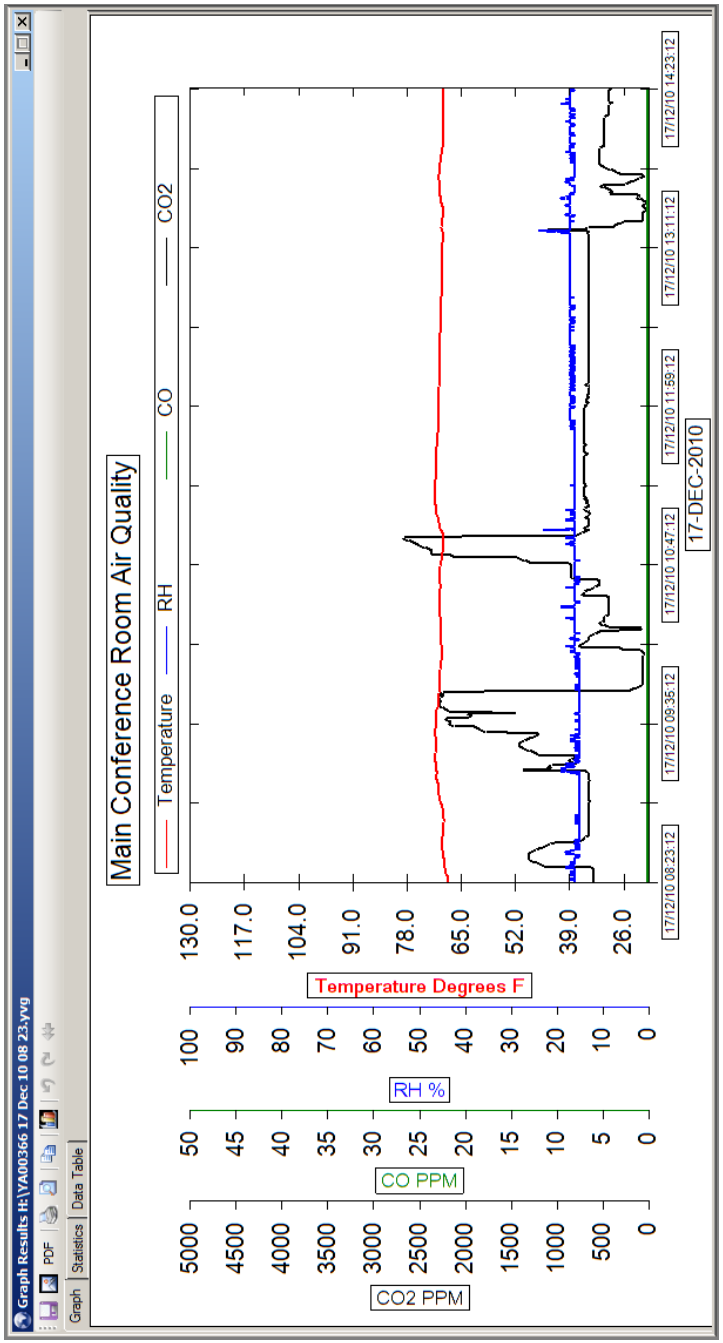


Figure 3-13. Retrieved CSV Data Converted to a Graph

IQ Chek 1.0

File

Open Graph File | Open CSV File | Connect To Detector(s)

Graph Results H:\YA00366 17 Dec 10 08 23.yvg

PDF

Graph | Statistics | Data Table

Date (dd/mm/yy)	Time	Location	Temperature	RH	CO	CO2
17/12/10	08:23:12	None	68	16	0	588
17/12/10	08:23:22	None	68	16	0	588
17/12/10	08:23:32	None	68	16	0	588
17/12/10	08:23:42	None	68	16	0	588
17/12/10	08:23:52	None	68	16	0	588
17/12/10	08:24:02	None	68	16	0	588
17/12/10	08:24:12	None	68.1	16	0	588
17/12/10	08:24:22	None	68.1	16	0	588
17/12/10	08:24:32	None	68.1	16	0	588
17/12/10	08:24:42	None	68.1	16	0	588
17/12/10	08:24:52	None	68.1	16	0	588
17/12/10	08:25:02	None	68.1	16	0	588
17/12/10	08:25:12	None	68.1	17	0	588
17/12/10	08:25:22	None	68.1	16	0	588
17/12/10	08:25:32	None	68.1	16	0	588
17/12/10	08:25:42	None	68.1	16	0	588
17/12/10	08:25:52	None	68.1	16	0	588
17/12/10	08:26:02	None	68.1	16	0	588
17/12/10	08:26:12	None	68.1	16	0	588
17/12/10	08:26:22	None	68.3	16	0	588
17/12/10	08:26:32	None	68.3	16	0	588
17/12/10	08:26:42	None	68.3	16	0	588
17/12/10	08:26:52	None	68.3	17	0	588
17/12/10	08:27:02	None	68.3	17	0	588
17/12/10	08:27:12	None	68.3	16	0	588
17/12/10	08:27:22	None	68.3	17	0	588
17/12/10	08:27:32	None	68.5	16	0	588
17/12/10	08:27:42	None	68.5	16	0	588
17/12/10	08:27:52	None	68.5	16	0	588

Figure 3-14. Sample Tabular Data Screen

GRAPH RESULTS TOOLBAR: From the Graph Results toolbar, click on the save button to save the file in YVG format to your PC. When viewing the graph, you can save the file in other formats as well. By clicking on the statistics and data table tabs, the user can see them respectively and save the graphs using the Save Graph icon.

For changing the graph settings, manipulating data, printing, and saving data files into different formats, use the following toolbar items.

Icon	Description	Icon	Description
	Save graph in .YVG format		Copy graph to clipboard
	Save graph in graphic format		Change graph settings
PDF	Save graph in PDF format		Undo previous zoom
	Opens print dialog box		Redo zoom action
	Print preview		Undo all previous zooms

Figure 3-15. Graph Results Toolbar and Icon Descriptions

NOTE: To zoom into a particular portion of the graph, use the mouse to click and drag a rectangular area to define the zoom area. Use the undo zoom, redo zoom, and undo all buttons with the zoom feature.

The Change Graph Settings button allows the user to customize the graph. Click on the graph icon (Figure 3-16) to display the graph properties dialog (Figure 3-17).

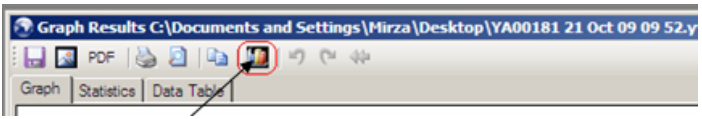


Figure 3-16. The Graph Settings Icon

From this “dashboard”, you can perform the following functions.

- Graph Title: Change description, font, and color.
- Background: Select background color of graph area.
- X-Axis: Change description, font, and color of label. Toggle X-axis grid lines and X-axis markers separately.
- Legend: Toggle legend (on/off). If on, select position (top or side), font, and color.
- Units: Show units on X-axis, in legend, or at both locations.
- Data Lines: Allow changes to the data line color of a particular parameter. Allow changes to line style and width to make it more prominent. Toggle the alarm display line. Availability of line markers to differentiate between parameters (useful for distinguishing different data lines on non-color printouts).

Refer to the dashboard (Figure 3-17) for graph settings.

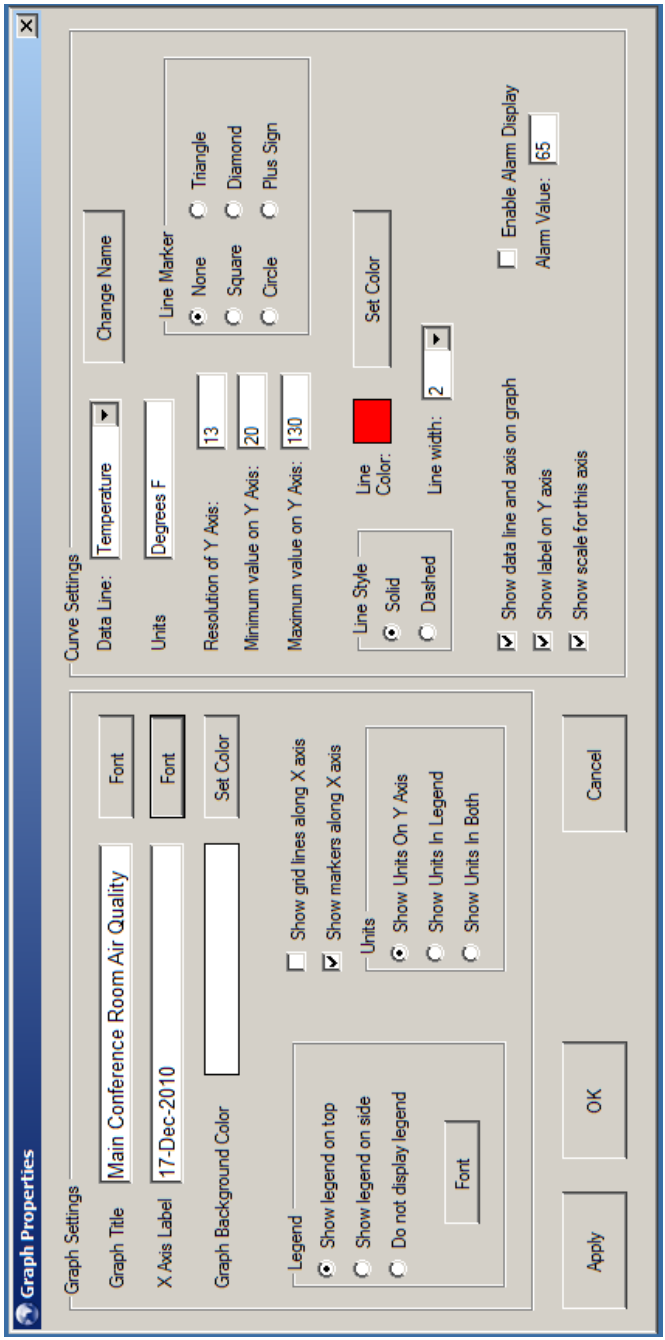


Figure 3-17. Dashboard for Graph Settings

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