Thank you for purchasing OdaStat-G™ created by App-Tek International Pty Ltd.

As part of our quest to continually improve the product we make, we are interested in hearing your feedback in relation to OdaStat-G's functionality.

If you have any suggestions or comments please pass them back through our distributors or e-mail us direct on sales@odalog.com

OdaStat-G Software Manual

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The sole purpose of this document is to assist in the use of OdaStat-G™ software.

We do not convey any right to use this information for any purpose other than in the use of the OdaStat-G™ software.

App-Tek International Pty Ltd does not accept liability for any damages arising as a result of any errors or omissions in this manual.

1 Software Introduction 5

1.1 Software Updates 5

1.2 OdaLog File Types 6

1.2.1 *.oda 6
1.2.2 *.olg 6
1.2.3 *.mlg (***m***odified ***l******o******g*** file) 6
1.2.4 *.csv (***c***omma ***s***eparated ***v***alues) 6
1.2.5 *.cfg 6
1.2.6 *.jpg 6
1.2.7 *.log 6

2 Software Installation 7

2.1 Installing the Software - Windows XP/Vista/Windows 7 7

2.2 Running OdaStat-G 8

3 IrDA Devices 9

4 OdaStat-G Operation 12

4.1 OdaStat-G Start Page 12

4.2 Steps to ensure reliable IrDA communication 13

4.3 Establishing Communications with the OdaLog via IrDA or FTP 14

4.3.1 OdaLog RTx - Internet FTP Data Communication 14
4.3.2 The "View Log.txt" and "Online Parameters" Buttons 17
4.3.3 OdaLog L2 or RTx Infrared (IrDA) Connection 18
4.3.4 OdaLog Type I – IV Connection 18

4.4 Locating Your OdaLog RTx 19

4.5 Setting the OdaLog's Date and Time 20

4.6 Setting User Controlled Instrument Parameters 21

4.6.1 OdaLog L2 and RTx Instrument Parameters - 22
4.6.2 OdaLog RTx Instrument Parameters - 23
4.6.3 OdaLog RTx - Remote FTP Configuration Files (*.fcf) 25

4.7 Downloading Logged Data via the IrDA Adapter 28

4.8 Selecting a Session (Session Selector) 29

4.9 Clear OdaLog's Memory 31

4.10 Opening Previously Stored Logged Data 32

4.11 Exporting Logged Data to ASCII (CSV) delimited format or Graphs to JPEG Picture Format 33

5 Graph Control 34

5.1 Viewing Logged Data 34

5.2 Graphing Tool Bar Items 35

5.2.1 Overlay View 36
5.2.2 Separate View (multi-gas only) 37
5.2.3 Tabulated View 38
5.2.1 Display all Instantaneous Readings (selected log types only) 39
5.2.2 Display both STEL and TWA readings for a certain gas (selected log types only) 39
5.2.3 Display Short Term Exposure Limit (STEL) for all gases 39
5.2.4 Display Time Weighted Average (TWA) for all gases 39
5.2.5 Zooming 40

5.3 Graph Options 41
5.4 Graph Styles 41
5.5 Overlaying (Logger Type Instruments only eg. Type I and Type IV's) 41
5.6 Overlay Sessions via Drag 'n Drop 42
5.7 Overlay Sessions via Cutting and Pasting 43
5.7.1 Paste 43
5.7.2 Actual Time 43
5.7.3 Relative Time 44
5.7.4 Data from Different Type Odalogs 44
5.8 Adding, Moving, Editing and Deleting a Label 44
5.9 Hiding and Showing gasses in an overlay graph 46
5.10 Hiding and Showing Event Labels 47
5.11 Hiding and Showing Labels 47
5.12 Printing a Graph 48
5.13 Session Information 49
5.13.1 'Screen Data Only' option 49
5.13.2 'OK' button 49
5.13.3 'Print' button 49
6 Editing Application Preferences 50
7 Trouble Shooting - Connecting to an OdaLog via IrDA 55
8 Connecting to an OdaLog RTx via FTP 57

1 Software Introduction

Welcome to the OdaLog Software Interface created by App-Tek International Pty Ltd.

This software package will allow you to configure your OdaLog instrument through a simple graphical user interface. You should be familiar with the use of Microsoft Windows XP/Vista/Windows 7 (32 bit) and the functions of a two button mouse before using this application.

1.1 Software Updates

It is the best intention of App-Tek International to supply error free and fully tested software. However with the continual introduction of new operating systems and service packs, discrepancies between the OdaStat-G software and the operating system's components can occur. OdaStat-G is continually updated to maintain the software's compatibility with all versions of the operating systems listed above. It is for this reason we recommend that once you install this product you immediately check if any software updates are available.

Software updates are located at www.odalog.com. You are also advised to check at regular intervals for any new updates. A link to this site is along with the OdaStat-G version number are located in the "About OdaStat" item in the OdaStat-G Help menu.

OdaStat-G has been tested with the 32 bit versions Windows XP, Vista and Windows 7. OdaStat-G itself will function on the 64 bit versions of versions Windows XP, Vista and windows 7.

1.2 OdaLog File Types

The OdaLog software can create the following file types.

1.2.1 *.oda

Files with the *.oda file extension (eg. Sample.oda), contain the raw data from the instrument and can only be interpreted by the OdaLog software. Files of this type can be opened by OdaStat-G.

1.2.2 *.olg

Files with the *.olg file extension (eg. Sample_1.olg), are binary formatted files that contain the extracted logged data from the *.oda file (one file per logged session). The OdaLog Software program stores all details about the displayed graphs and any alterations made by the user utilizes these files. Files of this type can be opened by OdaStat-G.

1.2.3 *.mlg (***m***odified ***l***o***g*** file)

When changes or modifications are made to a log file, the file is saved with the mlg or modified log file extension. This indicates that data within the mlg file has been modified in some way and does not represent the original OdaLog data.

1.2.4 *.csv (***c***omma ***s***eparated ***v***alues)

OdaStat-G allows the exporting of data to a Comma Separated Values format. Files of this type can be opened by spreadsheet programs eg. Excel.

1.2.5 *.cfg

*.cfg files are used to save certain configurations in OdaStat-G so they can be loaded quickly in the future.

1.2.6 *.jpg

OdaStat-G allows the exporting of data to a JPEG graphical file format. These file types can be opened by any JPEG compatible picture viewer or editor.

1.2.7 *.log

*.log files are binary data files created by the OdaLog RTx and transmitted to a FTP server using a GPRS modem. The files are contained in folders on the FTP server that are accessed and decoded using OdaStat-G

2 Software Installation

2.1 Installing the Software - Windows XP/Vista/Windows 7

NOTE: You must be logged on with a user account that has "administrator" privileges to install software in Windows NT, 2000, XP, Vista or Windows 7(32 bit)

1. Insert the OdaStat-G CD into your PC's CD-Rom drive.
2. Windows should detect the CD and automatically open the file installation dialog box as shown in **Figure 1**. If this has occurred go to step 5, otherwise proceed to Step 3.

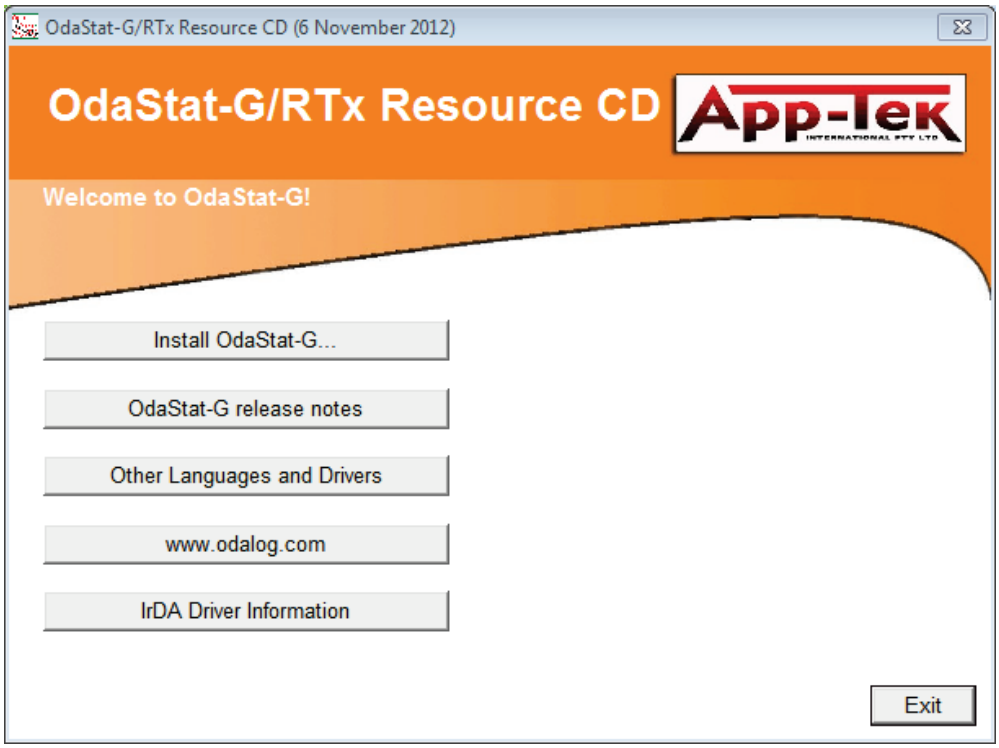

Figure 1: Auto Run Page

3. Double click on your CD-Rom Drive that contains the OdaStat-G CD to display the contents.
4. Double click on "DTAuto Run" file to open Installation dialog box as displayed in **Figure 1**.
5. Double click on the "INSTALL OdaStat-G " hyperlink text to open the setup.exe file that controls the installation process.
6. At the Welcome screen click 'Next' to continue…..

7. Read the Licensing Agreement and if you accept the terms of the agreement click on the radio button ‘I accept the terms in the license agreement’ and click ‘Next’ to continue….
8. In the Destination Folder screen click ‘Next’ to install OdaStat-G evaluation to – C:\OdaStat-G (recommended). Otherwise click ‘Change’ and select another directory.
9. In the Ready to Install screen click ‘Install’ to continue…..
10. In the InstallShield Wizard Complete screen click Finish to complete the installation.

2.2 Running OdaStat-G

After the software is completely installed, you can start OdaStat-G by either

1. Double Clicking the “OdaStat-G” shortcut icon (displayed in **Figure 2**) situated on your desktop
2. Clicking “OdaStat-G” from the Start Menu.
3. Double clicking an OdaStat data file (ie .oda, .olg, .mlg)

NOTE: If you have previously installed OdaStat or OdaStat-E on your PC, installing OdaStat-G will not uninstall these applications but will automatically link all of the data files on your PC with the above extensions to your OdaStat-G program. These data files can be opened with other versions of OdaStat by selecting and right clicking the file's icon and using the "Open With" function to select C:\OdaStat-E\OdaStat-E.exe or C:\OdaStat\OdaStat.exe.

Figure 2: OdaStat-G Icon

3 IrDA Devices

This section describes the various communications devices that are used with the OdaStat-G software to communicate with the OdaLog range of instruments.

1. EL-LINK-IR – This link is used for communications with an **OdaLog Type I to OdaLog Type IV** style of instrument. This Infrared device requires one available serial port and DOES NOT require the installation of drivers.

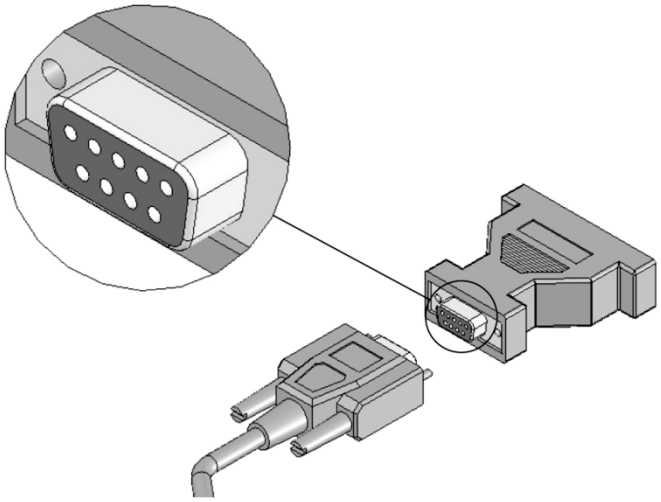

Figure 3: Serial IR (EL-LINK-IR)

2. USB-LINK-IR – This link is used for communications with an **OdaLog Type I to OdaLog Type IV** instrument. This device requires the installation of drivers before it can be used. This infrared device requires one available USB port.

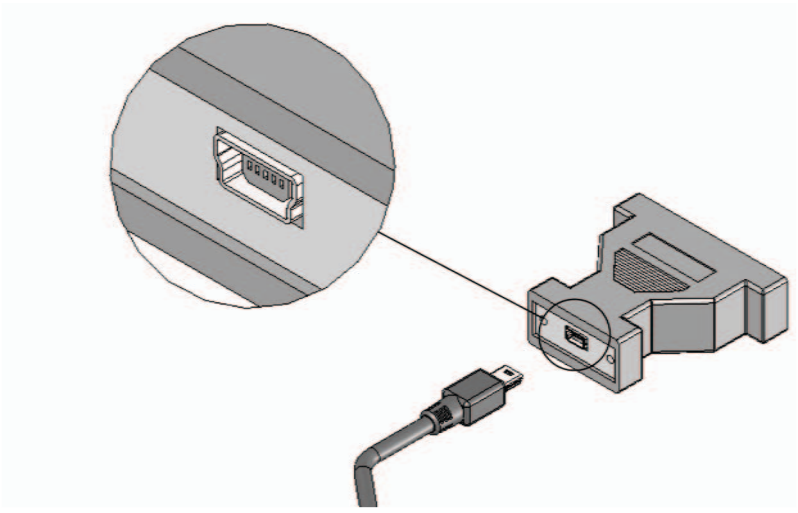

Figure 4: USB-LINK-IR

3. Sitecom USB-IrDA – This link is used for communications with an **OdaLog Type L2 and RTx**. This device requires the installation of driver software before it can be used. This infrared device requires one available USB port.

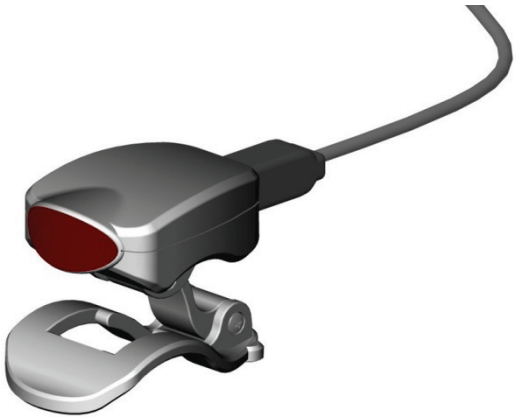

Figure 5: Sitecom USB-IrDA

4. Digitalk USB-IrDA - This link is used for communications with an **OdaLog Type L2 and RTx**. This device requires the installation of the same driver software used for the Sitecom IrDA device. This infrared device requires one available USB port.

Figure 6: Digitalk IrDA (USB)

NOTE: IrDA devices commonly built into laptops can be used by OdaStat-G to communicate with OdaLog L2 or RTx instruments provided they have been enabled in the BIOS settings. They cannot be used to communicate with Odalogs Type I – IV as they require USB to UART converter software and device drivers to be installed.

3.1 Installing the USB-IrDA Drivers

NOTE: Users who already have OdaStat-E installed on their PC and are successfully using this program to link to their OdaLog Type L2 devices do not need to install new IrDA device drivers

1. Insert the OdaStat-G CD into your PC's CD-Rom drive.
2. Windows should detect the CD and automatically open the file installation dialog box as shown in **Figure 1**. If this has occurred go to step 5, otherwise proceed to Step 3.
3. Double click on your CD-Rom Drive that contains the OdaStat-G CD to display the contents.
4. Double click on "DTAuto Run" file to open Installation dialog box as displayed in **Figure 1**.
5. Double click on the "IrDA Driver Information" hyperlink text to open the "IrDA driver installation guide" as displayed in **Figure 7.**

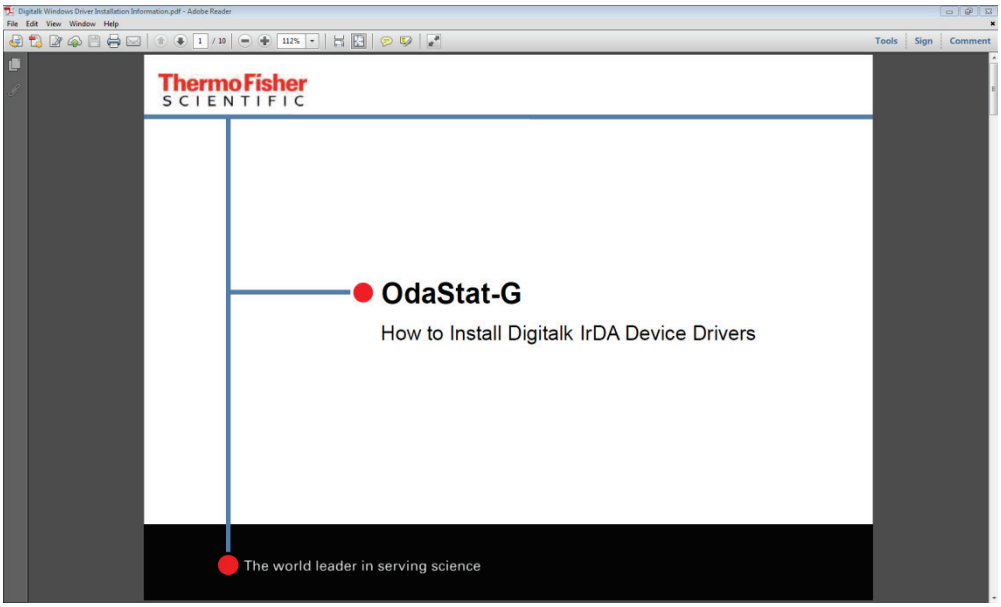

Figure 7: Select IR Driver Guide

6. Follow the instructions in the guide and install the appropriate driver for your operating system.
7. For a detailed description of the installation of the IrDA device drivers in Windows XP, open the "OdaStat-G Installation Procedure" Word document on the OdaStat-G installation disk and scroll to page seven.

4 OdaStat-G Operation

4.1 OdaStat-G Start Page

The main functions of OdaStat-G have been made easily accessible from the OdaStat-G Start Page. You can easily navigate to the Start Page by clicking either the Start Page tool bar item or Start Page from the Windows Drop down menu. See **Figure 8** and **Figure 9.**

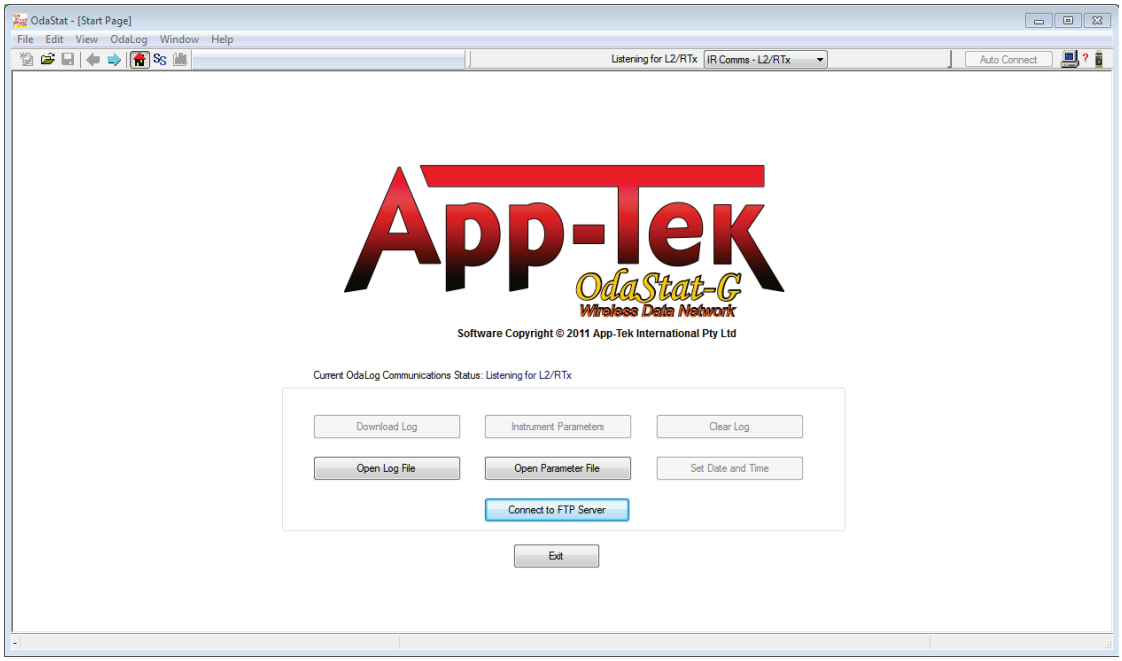

Figure 8: OdaStat-G Start Page

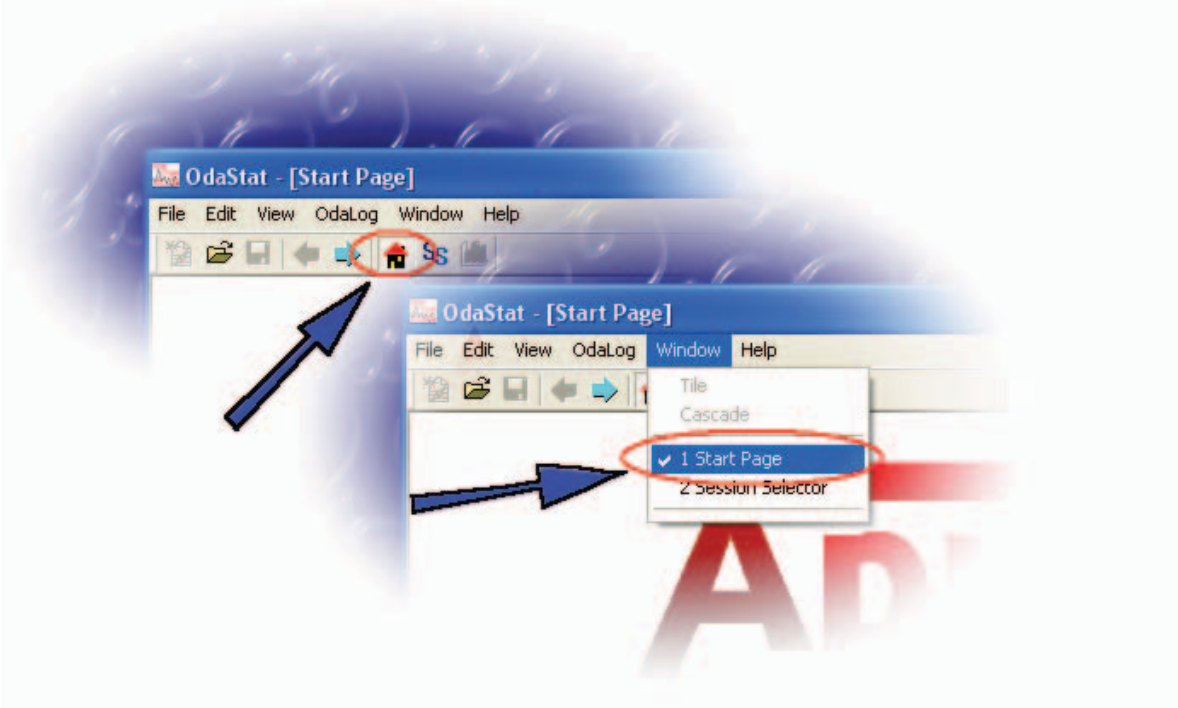

Figure 9: Navigating to the OdaStat-G Start Page

4.2 Steps to ensure reliable IrDA communication

1. Position the supplied IrDA adapter correctly with respect to the OdaLog at a slight angle clockwise to the IrDA receiver on the OdaLog.
2. Ensure that other devices with Infra Red ports (phones, other computers, organisers, OdaTrak) that are within ten metres of the OdaLog do not have their Infra Red Ports activated.
3. Ensure that strong light sources are not directed onto the OdaLog while the instrument is in IrDA mode.
4. When changing the configuration of an OdaLog using the PC software, always read back the settings from the OdaLog after they have been changed to ensure that they have been received correctly.

4.3 Establishing Communications with the OdaLog via IrDA or FTP

In order to set instrument parameters or download logged data, you need to establish a communications link between the PC software and the OdaLog instrument.

OdaLog connections can be split into three categories according to the model:

1. OdaLog RTx (IrDA or through the Internet using File Transfer Protocol - FTP)
2. OdaLog L2 (IrDA through a Digitalk or Sitecom infrared adapter)
3. OdaLog Type I – IV (IrDA through a USB-LINK-IR or EL-LINK-IR adapter)

Please refer to the section that describes the instrument and type of communication that you are using.

NOTE: RTx can also use IrDA to download data

4.3.1 OdaLog RTx - Internet FTP Data Communication

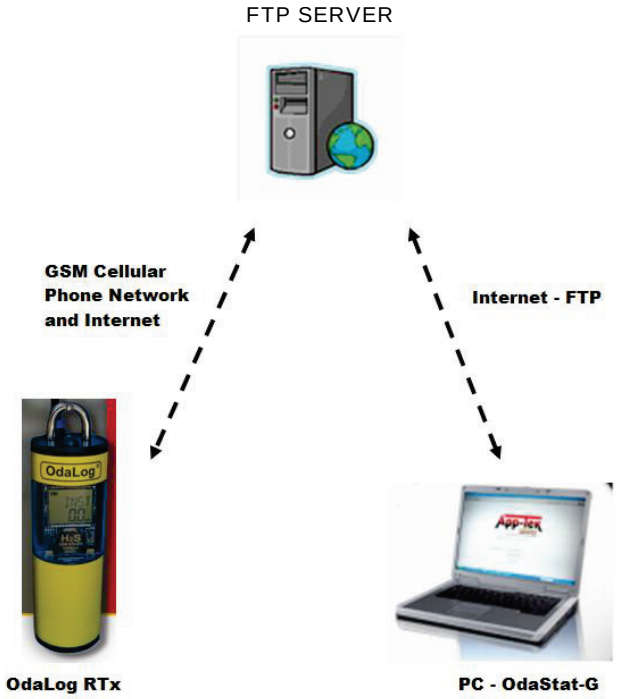

Figure 10: OdaStat-G Communication with OdaLog RTx

The OdaLog RTx transmits data using an enclosed GPRS modem that is able to upload data to a FTP (File Transfer Protocol) server through a GSM mobile or cellular phone network. The data is stored on the FTP server in the form of binary data files (*.log) that are created automatically when the GPRS function on the OdaLog RTx is activated.

OdaStat-G is able to retrieve and decode the data files from folders on the FTP server that are created for each OdaLog RTx during the manufacturing process. Each folder is labelled with the serial number of an OdaLog. A username and a password provided with each OdaLog is required to connect to the FTP server before data can be downloaded.
NOTE: OdaStat-G and the OdaLog RTx must use the same username and password to transmit and receive data to and from an account

To connect to the FTP server, firstly click on the "Connect to FTP Server" button. A dialog box used to enter the username and password will appear.

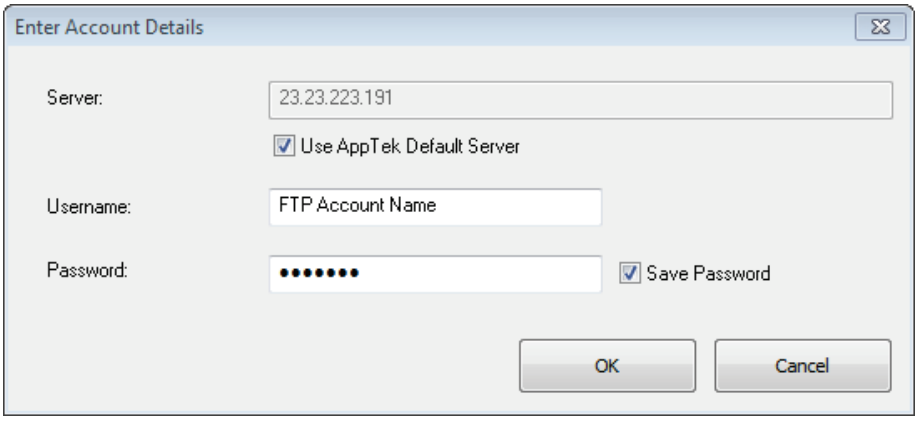

Figure 11: FTP Account Details Dialog Box

After entering the username and password, another dialog box will appear to allow the customer to select a folder containing data transmitted by each OdaLog RTx .

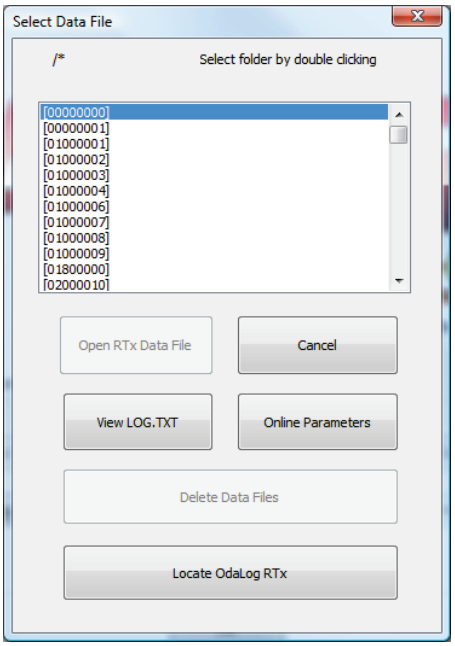

Figure 12: OdaLog Folder Selection Dialog Box

Using this dialog box, select a data folder labelled with the serial number of the desired OdaLog RTx, and double click the left button of your mouse. The

selected data file can also be removed from the OdaLog's FTP folder by clicking on the "Delete Selected Data File" button.

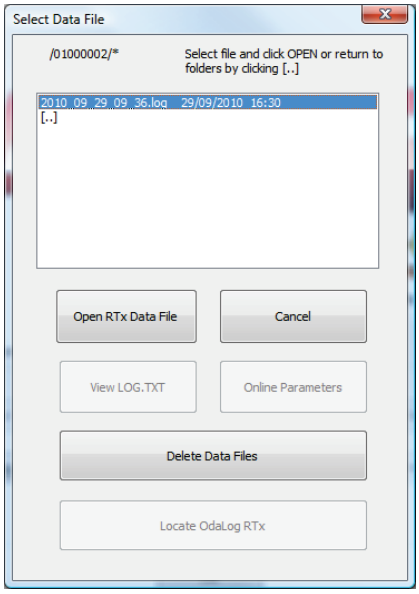

Figure 13: Data File Selection Dialog Box

The dialog box will then list the data files contained in the selected folder along with the date and time the file was last modified. Each file is created when the OdaLog RTx is activated . The "last date modified " information reveals the date and time of the last transmission from the OdaLog. To select a file, highlight the name by left clicking on it with the mouse and clicking OK

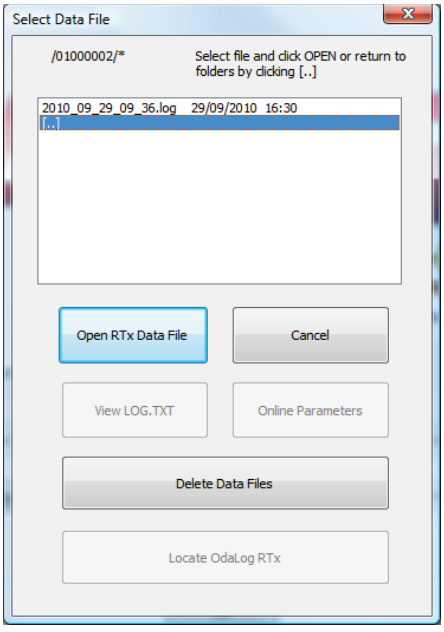

Figure 14: Browsing to Parent Folder [..]

To return to the list of folders, double click on the [..] symbol.
A dialog box will then be displayed while the selected data file is transferred from the FTP server to the C:\OdaStat-G\temp folder on the user's PC.

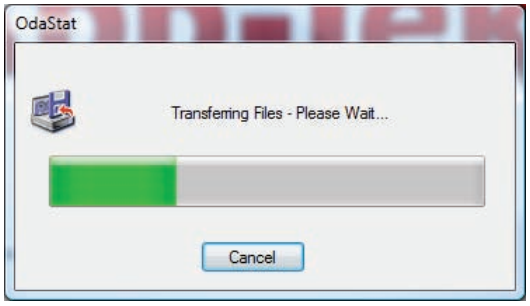

Figure 15: File Transfer Progress Bar

Once the transfer is complete, OdaStat-G will automatically graph the selected data file, and convert the data to an ODA file located in the C:\OdaStat-G\odafiles folder on the user's PC. Following this process the data can be tabulated, exported or re-graphed using other OdaStat-G functions.

4.3.2 The "View Log.txt" and "Online Parameters" Buttons

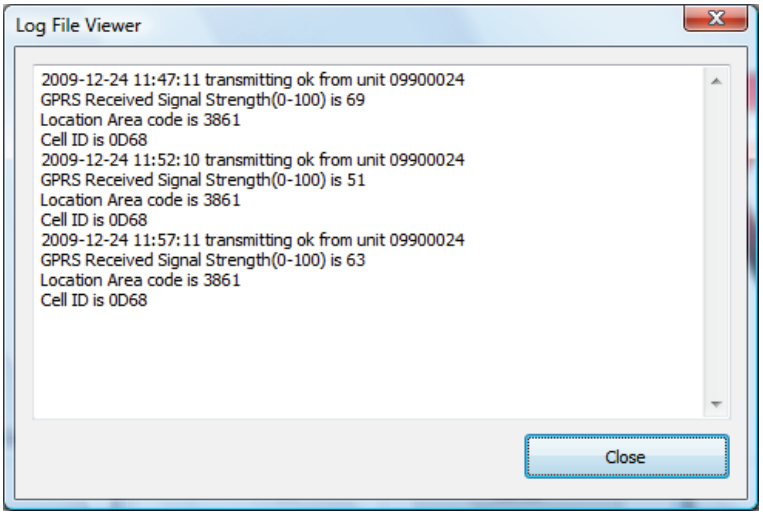

Figure 16: Log File Viewer (log.txt)

The "View LOG.TXT" button will download and display a text file containing information about data transmissions from the selected OdaLog RTx. It will also display information about events and errors that have occurred between transmissions.

The "Online Parameters" button activates a dialog box that enables the Logging Interval, Transmission Interval and Site ID information for the selected OdaLog RTx to be edited remotely. For more detailed information about this function please refer to Section 4.6.3.

4.3.3 OdaLog L2 or RTx Infrared (IrDA) Connection

OdaStat-G contains a facility for downloading data and making instrument parameter changes through infrared or IrDA devices that are supplied with each instrument.

Before communicating through an IrDA adapter with an OdaLog L2 or RTx instrument you will need USB_IrDA device drivers installed on your PC. If you have not yet installed a USB_IrDA device open the "OdaStat-G Installation Procedure" Word document on the OdaStat-G installation disk, and scroll to page seven for detailed instructions. Make sure that the Communications Link Bar is set to OdaLog L2/RTx as displayed in **Figure 17**.

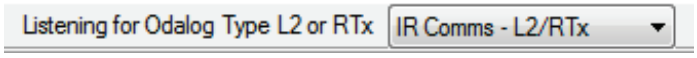

Figure 17: Select Instrument Type (L2/RTx)

Place the OdaLog in IR-DA mode (In 'INST' Mode hold down the L2/RTx unit's button until IrDA appears on the LCD screen and release the button)
Place unit in front of USB-IrDA Adapter.

The Odalog Unit will automatically connect and the communication status on the Start Page (under the App-Tek logo) will display "L2/RTx in range" momentarily, followed by a display of the model and serial numbers as in **Figure 18**.

Figure 18: Connected to OdaLog (L2/RTx)

To disconnect simply press the Disconnect button on the Communications Link Bar.

4.3.4 OdaLog Type I – IV Connection

First make sure you have a standard IR link attached to your computer. Make sure that the communications link is set to OdaLog Type I, II, III or IV as displayed in **Figure 19**.

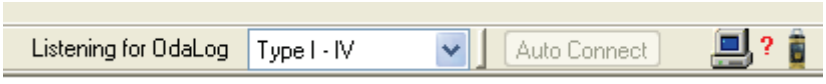

Figure 19: Select Instrument Type (TI-V)

Place unit into IR-DC mode (see respective units manual for how to place into IRDC mode).

Place unit in front of standard IR link.

Unit should automatically connect after a few seconds.

To disconnect simply press the Disconnect button on the Communications

Link Bar:

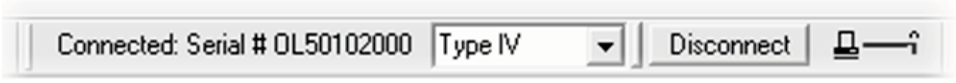

Figure 20: Connected to OdaLog (TI-IV)

If unit does not connect after a few seconds you may need to change the communications port.

To edit Type I – IV communications port click on the edit drop down menu and select 'preferences'. Click the communications tab and select Auto Detect. You will be asked to place the OdaLog instrument into IRDC mode. Do this and push OK.

*see also Connection Trouble Shooting.

4.4 Locating Your OdaLog RTx

The OdaLog RTx instrument can optionally be fitted with a GPS module. If you select the folder of an OdaLog RTx on the FTP server (as in **Figure 12**) the "Locate OdaLog RTx" button will be enabled. If you click on this button, a dialog box containing the GPS co-ordinates of the selected OdaLog will be displayed. If the selected OdaLog RTx does not contain a GPS module, an error message will be displayed.

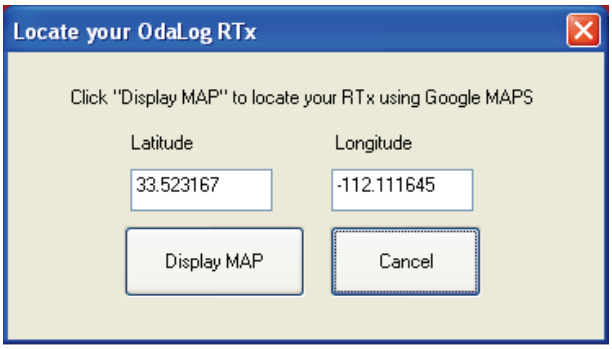

Figure 21: Locate OdaLog RTx (GPS Models only)

If you click on the "Display Map" button then the Google Maps web page will be opened in your default web browser with the location marker at the co-ordinates transmitted by the selected OdaLog RTx GPS module.

4.5 Setting the OdaLog's Date and Time

First make sure that the OdaLog unit is connected to the PC (see Connecting OdaLog). After successfully connecting the OdaLog either:

1. Select 'Set Date and Time' from the 'OdaLog' drop down menu.

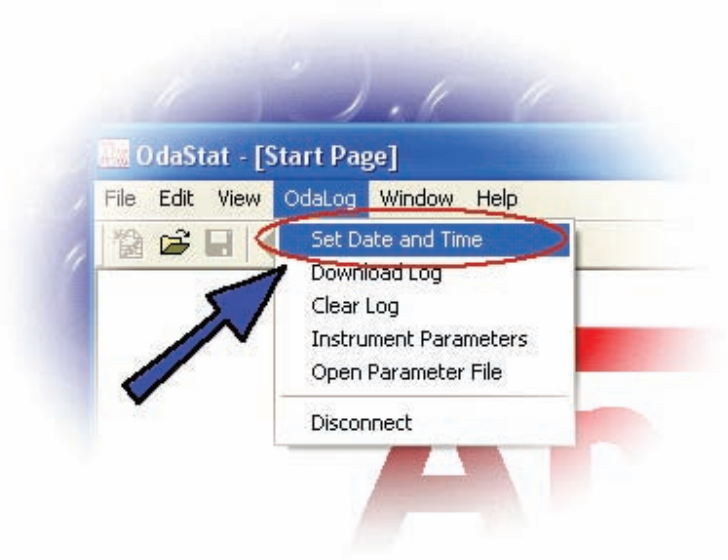

Figure 22: Setting Date and Time from the Menu

OR

2. Go to the OdaStat-G Start Page by using one of the following methods: the Tool Bar; the Window pop down menu; or the navigational buttons. Once at the Start Page click on the 'Set Date and Time' button as shown below.

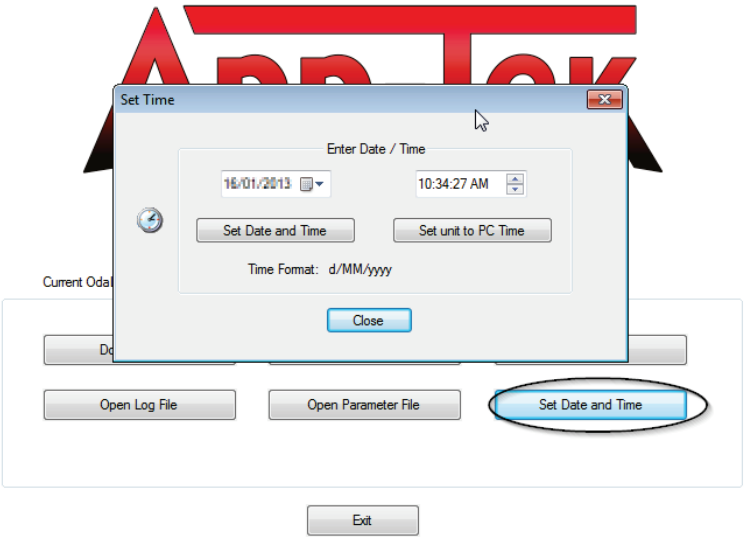

Figure 23: Setting Date and Time from the Start Page

4.6 Setting User Controlled Instrument Parameters

First make sure that the OdaLog unit is connected to the PC (see Connecting to OdaLog) through the IrDA device. After successfully connecting the OdaLog either:

1. Select 'Instrument Parameters' from the 'OdaLog' drop down menu.

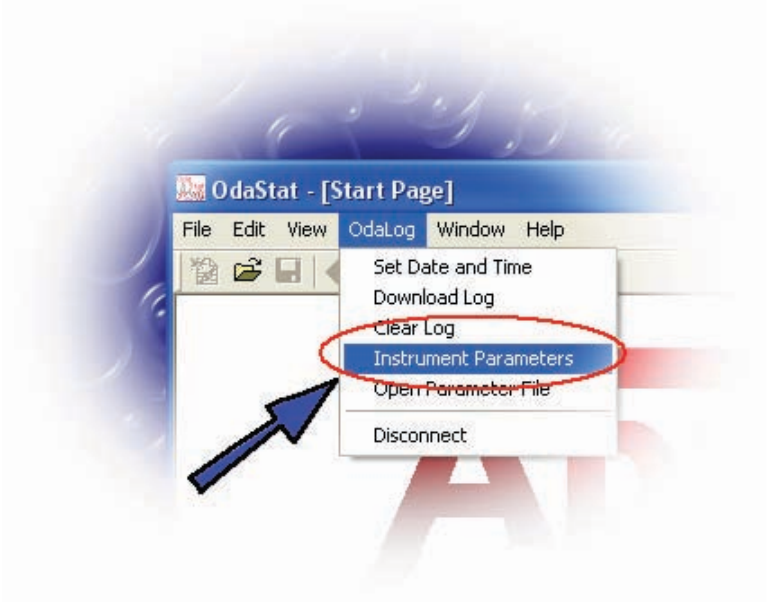

Figure 24: Instrument Parameters from the Menu

OR

2. Go to the OdaStat-G Start Page by using one of the following methods: the Tool Bar; the Window pop down menu; or the navigational buttons. Once at the Start Page click on the 'Instrument Parameters' button.
3. The "Instrument Parameters" that can be accessed and set is dependent on the type of OdaLog detected.

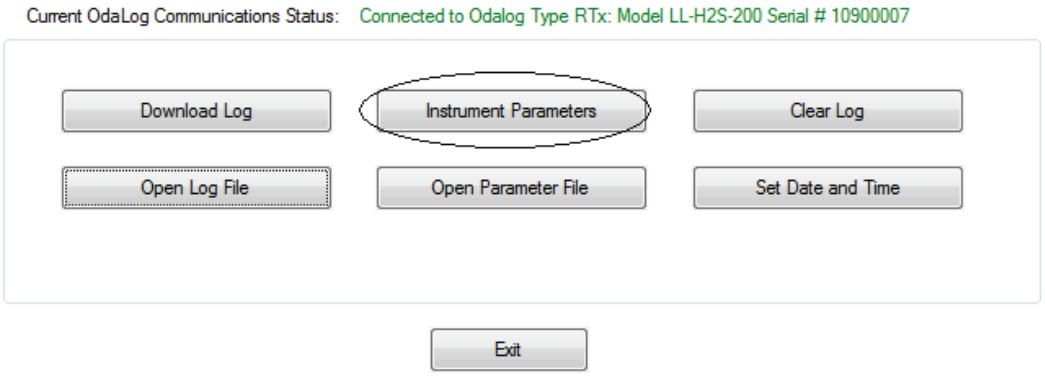

Figure 25: Opening Instrument Parameters from the Start Page

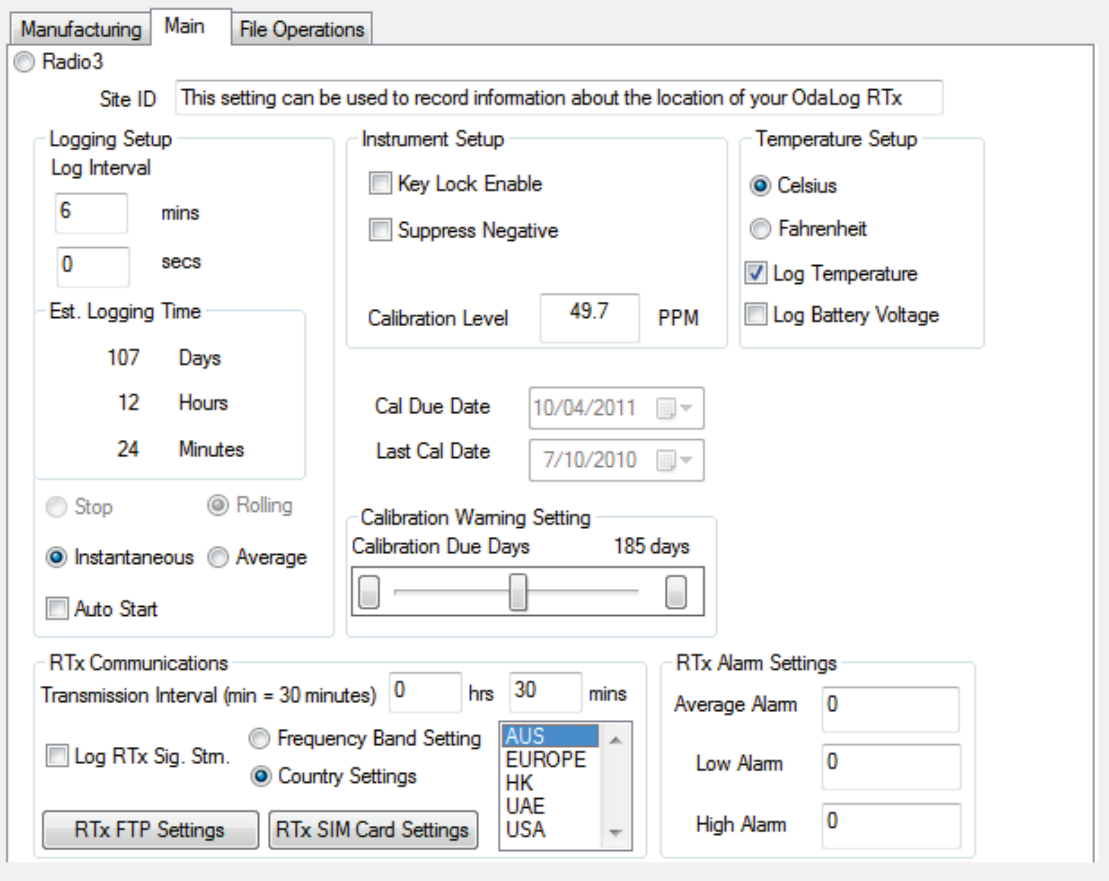

Figure 26: Instrument Parameters Main Tab - OdaLog RTx

4.6.1 OdaLog L2 and RTx Instrument Parameters -

Site ID - A label entered by the user that identifies the location of the OdaLog

Log Interval - Time interval in minutes and seconds between the collection of each data sample by the OdaLog

Estimated Logging Time - The time taken to fill the memory of the OdaLog with data. This is calculated by OdaStat-G and is based on the Log Interval entered by the user

Stop - The user can select this parameter if they wish the OdaLog to stop collecting data when the memory is full. **This option is unavailable on the OdaLog RTx**

Rolling - The user can select this parameter if they wish the OdaLog to overwrite collected data when the memory is full

NOTE: Care should be taken when making this selection to consider which data has greatest value. If it is most important to record data immediately after logging commences, select "Stop". If it is most important to record data that is logged immediately before logging is ceased, select Rolling

Auto Start - If this parameter is selected, data logging is commenced as soon as the OdaLog is turned ON, and doesn't need to be activated manually using the button on the OdaLog

Key Lock Enable - When this option is enabled, the user is able to lock the top button and disable the 'INST' display while in logging mode. See the Instruments Manual for how to use this Key Lock feature

Suppress Negative - When gas concentration readings are extremely low, negative values may be recorded due to electrical noise or extreme temperatures that affect the sensor. This parameter can be selected to prevent these reading affecting statistical analysis (e.g. mean or median value calculations)

Temperature Unit Setup - Use these settings to select the units of temperature data (e.g. Fahrenheit or Celsius)

Log Temperature - Select this parameter to record temperature simultaneously with gas concentration

Log Battery Voltage - Select this parameter to record the battery Voltage simultaneously with gas concentration

Calibration Due Date - Displays the due date for the calibration of the OdaLog

Last Calibration Date - Displays the date when the last calibration was performed

Calibration Due Days - OdaLog users who have performed a calibration can use this parameter to set the due date for the next calibration

4.6.2 OdaLog RTx Instrument Parameters -

The following controls and indicators are only visible when OdaStat-G is connected to an OdaLog RTx, and are greyed out when OdaStat-G connects to an OdaLog L2

Transmission Interval - Time interval in hours and minutes between the transmission of each session of logged data by the OdaLog RTx to the FTP server via the GPRS modem

Log Signal Strength - Select this parameter to record the strength of the signal received by the OdaLog's GPRS modem from the cellular phone network simultaneously with gas concentration

Frequency Band Setting - Indicates a GSM network parameter specific to certain countries (eg Australia - AUS). These settings are configured when the OdaLog RTx is manufactured but can be changed by the user through the IrDA if necessary. This can be set by using the "Frequency Band" or "Country Setting" controls to get the list box to display either the frequency settings

themselves or the countries in which the RTx is sold. Selecting a country in the list will set the OdaLog to the correct frequency setting for that country.

RTx FTP Settings - Activating this control will open a dialog box that is used to change FTP account details such as the username and password used by the OdaLog RTx to connect to the FTP server. This dialog box is also used to set up to 2 cellular phone numbers that can receive alarm messages from the OdaLog in response to gas concentration changes. If only one number is required then it can be entered in either box.

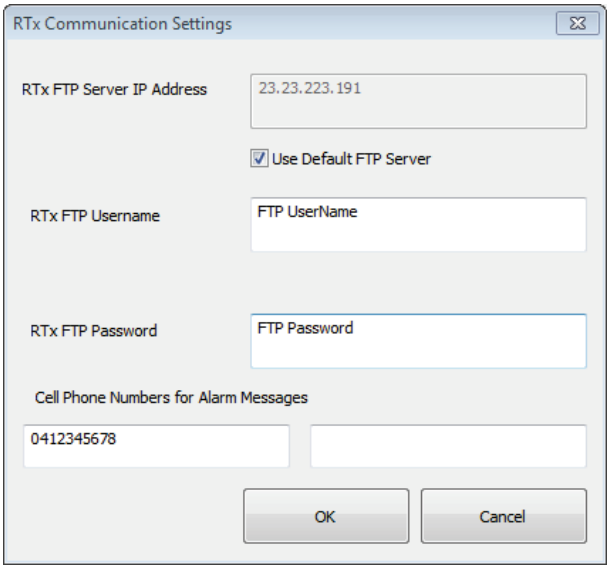

Figure 27: RTx FTP Settings

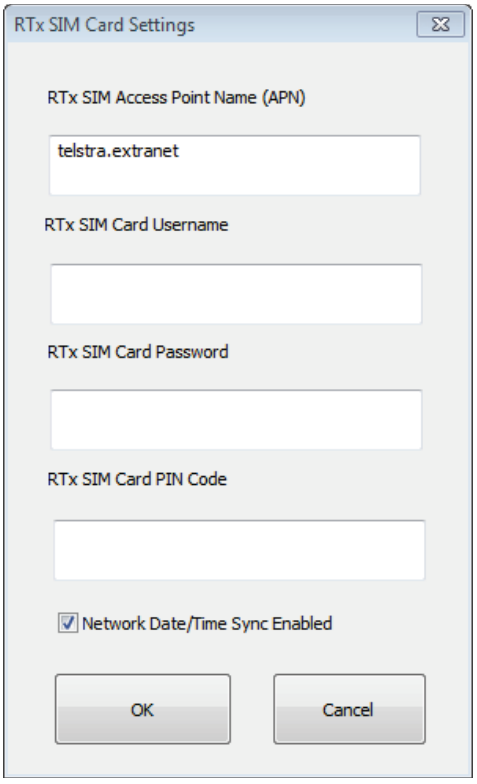

Figure 28: RTx SIM Card Settings

RTx SIM Card Settings - Activating this control will open a dialog box that is used to change the settings of the GPRS modem used to transmit data from the OdaLog RTx to the cellular phone system. These include the Access Point Name (APN), Username, Password and PIN Code

RTx Alarm Settings - These Controls allow the user of the OdaLog RTx to set low average and high gas concentration threshold values. When these values are exceeded the OdaLog will notify the user via email and/or sms to a cellular phone.

4.6.3 OdaLog RTx - Remote FTP Configuration Files (*.fcf)

OdaStat-G is able to make changes to the Site ID, Logging Interval Transmission Interval and alarm parameters of OdaLog RTx instruments through a 3 step process that is initiated by highlighting a data folder that corresponds to an OdaLog RTx and clicking on the "Online Parameters" button in the OdaLog Folder Selection Dialog Box (see **Figure 12**).

When this button is clicked OdaStat-G will download a configuration (*.cfg) file for the selected instrument to the C:\OdaStat-G\temp folder of the operator's PC. This file is opened and the Site-ID, Logging Interval and Transmission Interval settings for the selected instrument are displayed in the dialog box below.

The OdaLog RTx parameters that can be edited and set **remotely** through the FTP configuration process described in **Figure 30** include the logging interval, the transmission interval, Site ID information, alarm levels and the cell phone numbers that can set to receive alarm messages from the selected OdaLog RTx. Definitions of these parameters are included in the previous section.

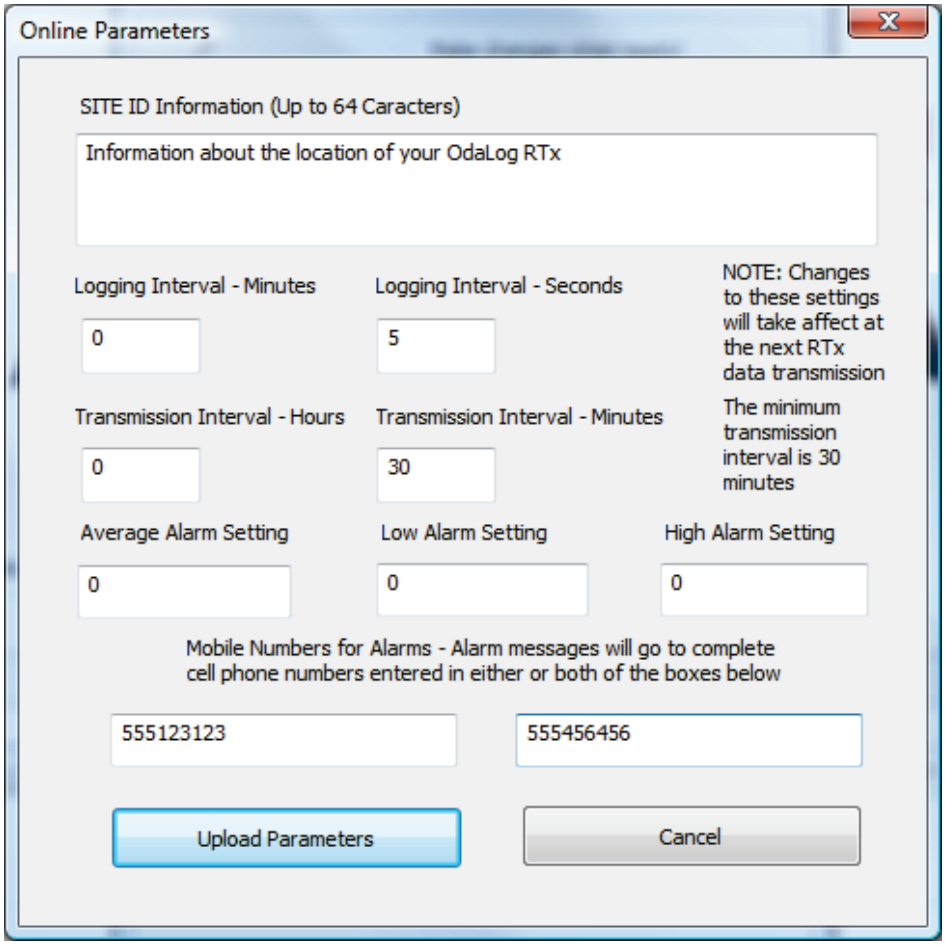

Figure 29: Online Parameters

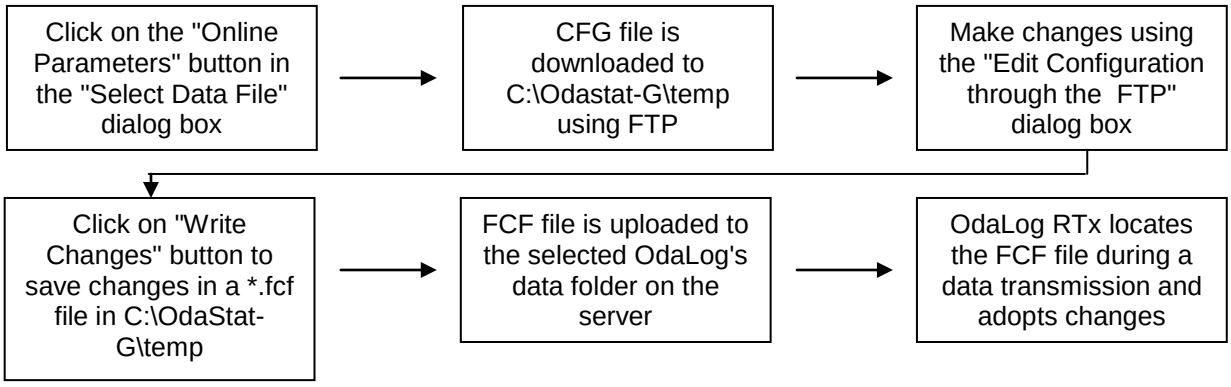

Figure 30: Remote Configuration Process

4.6.4 OdaLog RTx-Loading from Backup Configuration File

Back up of Logger configuration file on FTP server is created and save on the server .In an Instance where editing of the configuration parameters started but no correct configuration parameter file has been found on the FTP server or the file found is corrupted ,It displays a list of available backup copies and if selected, the selected back up configuration will be downloaded and editing is performed on that configuration.

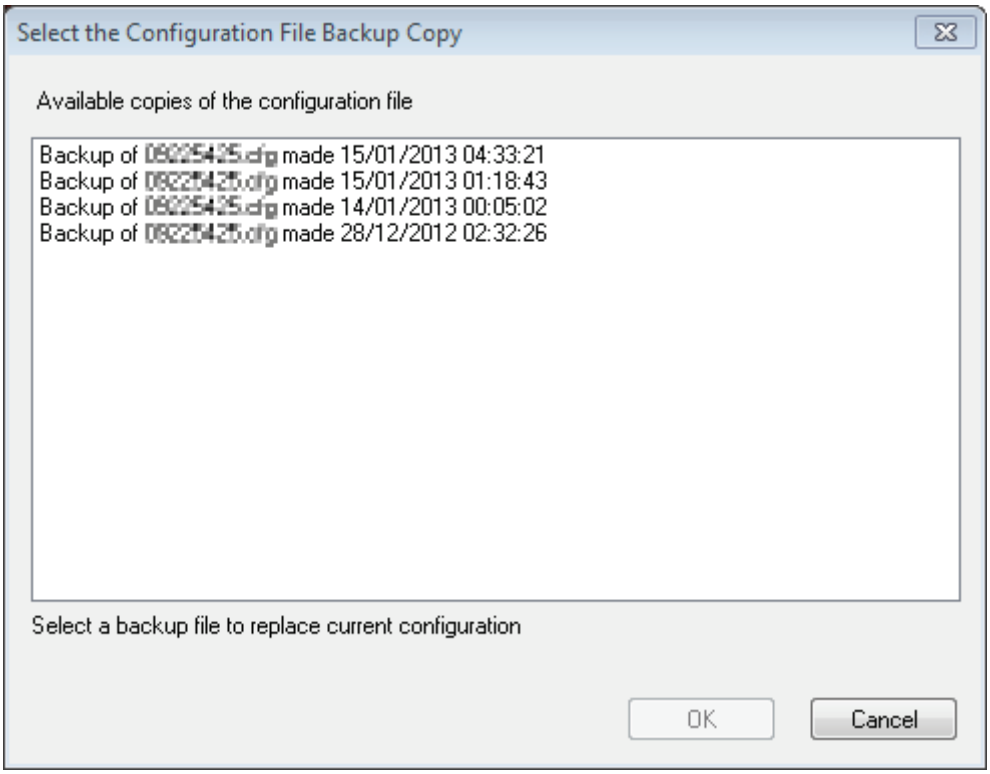

Figure 31: Backup Configuration Selection

4.7 Downloading Logged Data via the IrDA Adapter

First make sure that the OdaLog unit is connected to the PC (**See Section 4.3**). After successfully connecting the OdaLog either:

1. Select 'Download Log' from the 'OdaLog' drop down menu.

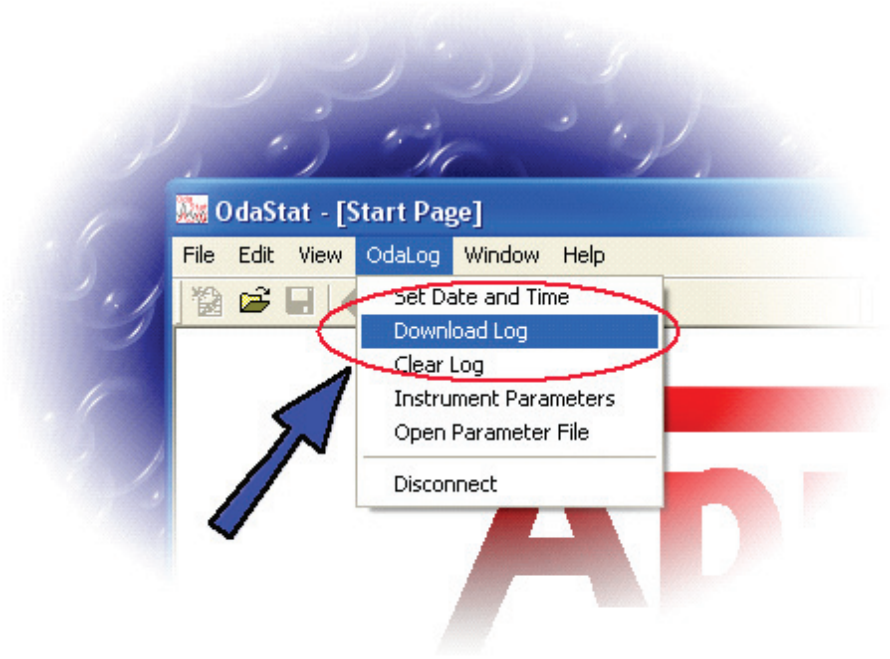

Figure 32: Download Log from the Menu

OR

2. Go to the OdaStat-G Start Page by using one of the following methods: the Tool Bar; the Window pop down menu; or the navigational buttons. Once at the Start Page click on the 'Download Log' button.

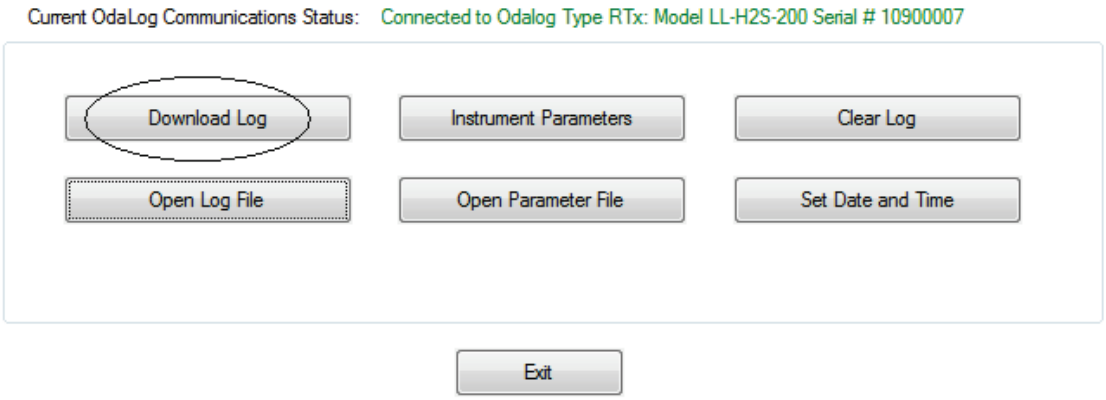

Figure 33: Download Log from the Start Page

The program will immediately start to download the currently connected OdaLog's logged data. This can be monitored on the communications link bar.

Figure 34: Download Log Progress

NOTE: If the OdaLog unit does not contain a sufficient amount of data for a log file (i.e. if it has just been cleared) you will receive the message - 'Log too small. No Log to download.'

While the instrument is downloading you may still navigate and use OdaStat-G's non-communication functions e.g. viewing a graph. However options such as Setting Date and Time and Instrument Parameters will be disabled.
When the instrument has finished downloading you will receive the message - 'Download Complete'.

4.8 Selecting a Session (Session Selector)

Once the OdaLog instrument has completed downloading you will be taken to the Session Selector screen where you can choose which sessions to view. After selecting (by clicking in the corresponding check boxes) the sessions to view, click the 'Display' button. OdaStat-G will then open this file as a Graph. (See Section 5 - Graph Control)

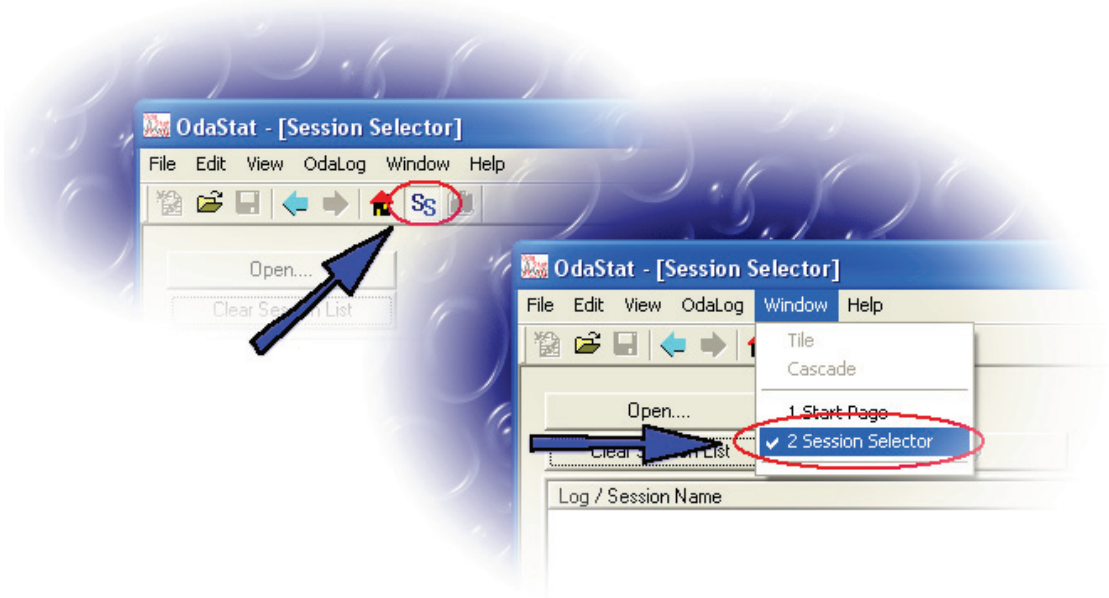

Figure 35: Opening Session Selector

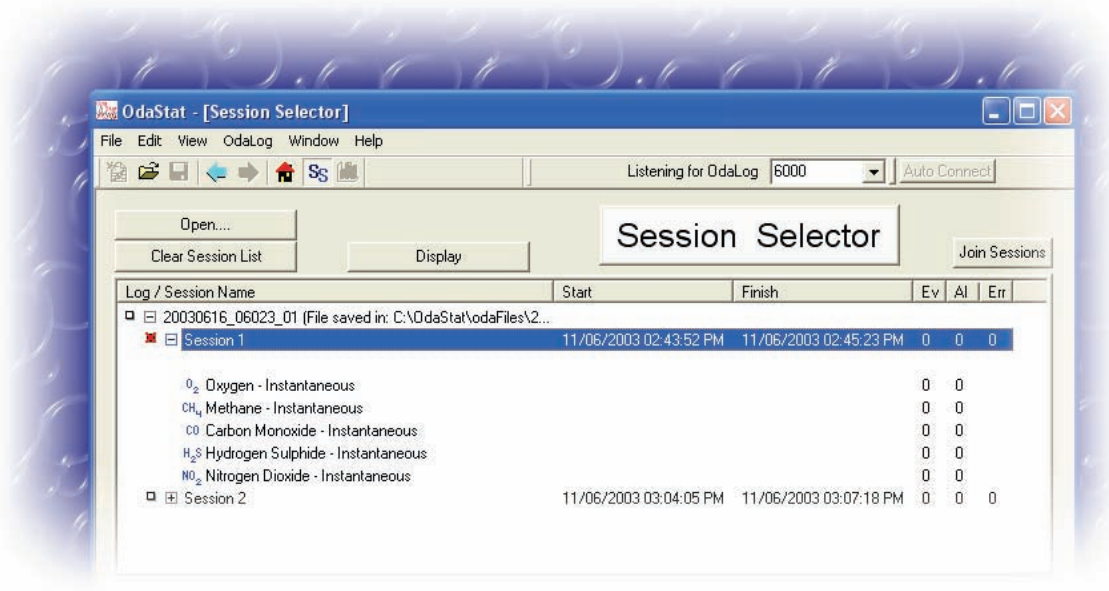

Figure 36: Session Selector Screen

Clear Session List Button

The 'Clear Session List' button's function is to clear the Session Display Area. This is handy if the Session Display Area becomes cluttered.

Session Display Area

The session display area contains 6 headings

· Log / Session Name - The name of the Oda File.
· Start - The start time for a particular session.
· Finish - The finish time for a particular session.
· Ev (Events) - How many events a particular session contained.
· Al (Alarms) - How many alarms a particular session contained.
· Err (Errors) - How many errors a particular session contained.

You can select a session to view by selecting its check box and then clicking the 'Display' button. To deselect a session simply click the check box again. To select all sessions in an Oda File click the check box beside the actual file name of the Oda File, you will notice all sessions become selected (there check box is marked with a red 'x'). To deselect all sessions simply click the same check box and you will notice all sessions become deselected.

NOTE: If a session is already opened in the graph page the session will still remained checked in the Session Selector page. Unselecting this session will cause the graph to close when the 'Display' button is clicked.

Display Button

Opens the Graph Page and shows selected sessions in a graph format.

Join Session Button

Selected sessions of data collected from different devices or time periods can be joined together and displayed on a single graph by clicking on the "Join Sessions" button in the Session Selector dialog box.

4.9 Clear OdaLog's Memory

This sends a signal to the OdaLog instrument to clear the entire log. Operation is only allowed when an OdaLog unit is connected.

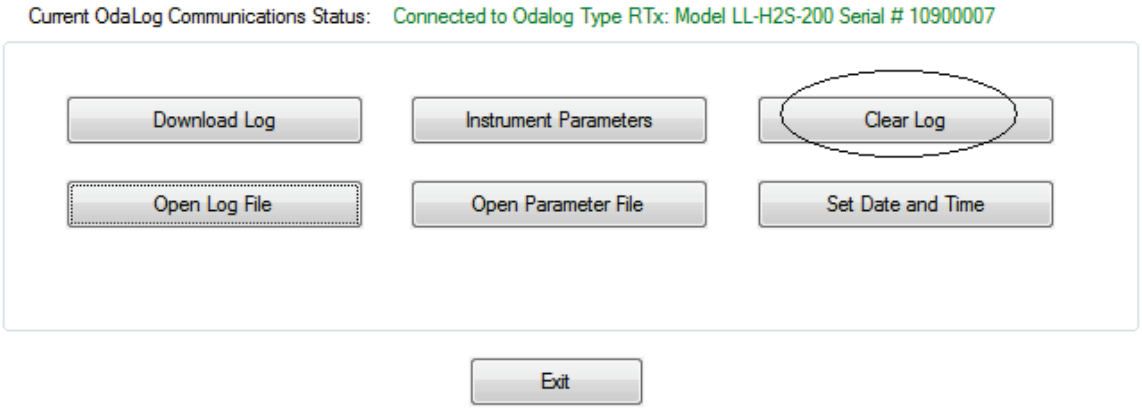

Figure 37: Clear Log

4.10 Opening Previously Stored Logged Data

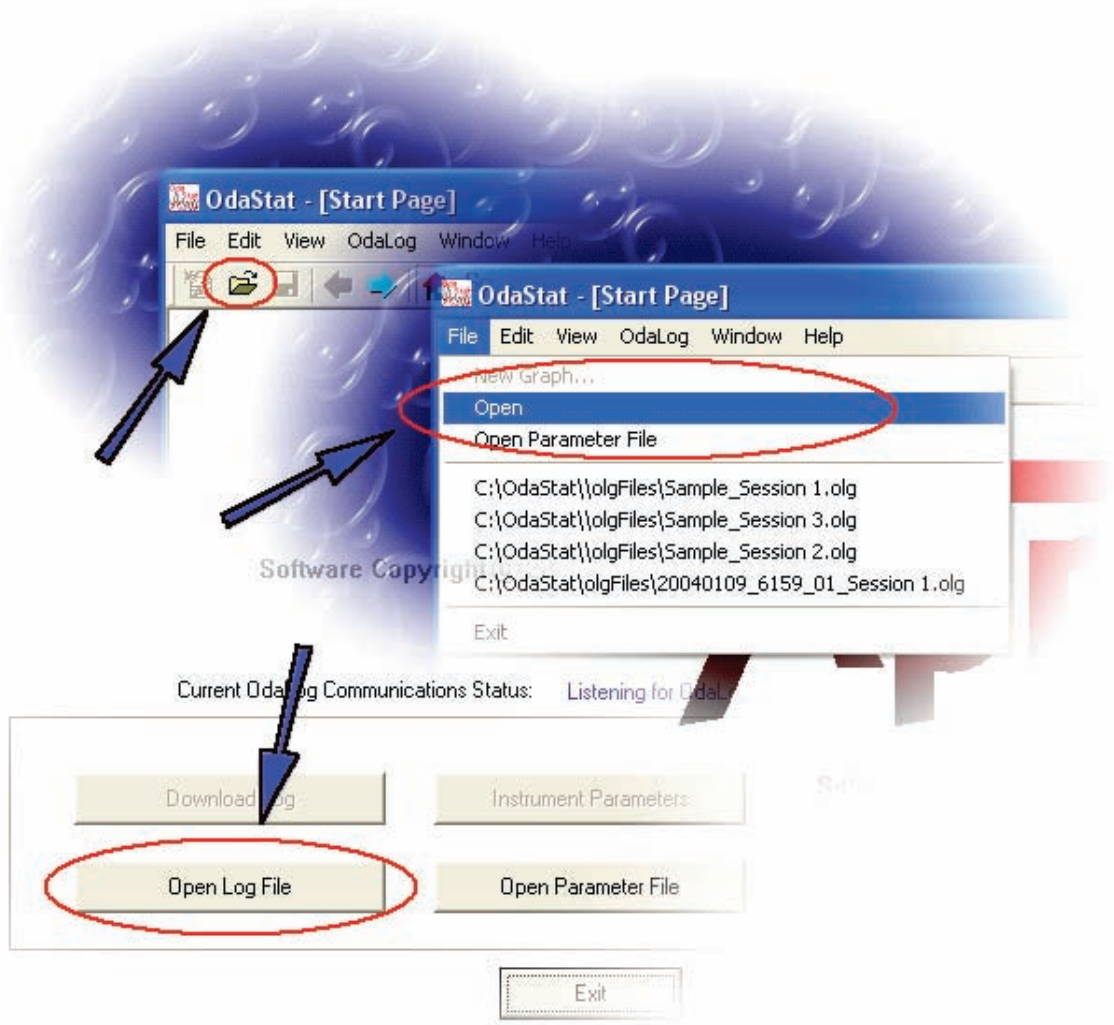

Figure 38: Opening Previously Stored Data

Opening a previously saved Log File can be performed by either returning to the OdaStat-G Start Page and clicking on the 'Open Log File' button or clicking on the Open File tool bar item as shown above. After clicking either button the Open File Selector will be displayed. This open dialog is unique to OdaStat-G and allows the user to see information about the logged files without opening them.

4.11 Exporting Logged Data to ASCII (CSV) delimited format or Graphs to JPEG Picture Format

To export logged data to CSV (Comma Separated Values), you need to first view the file as a Graph. Next click 'File' from the drop down menu and select 'Export'. Here you have the option to export as a CSV or a JPEG.

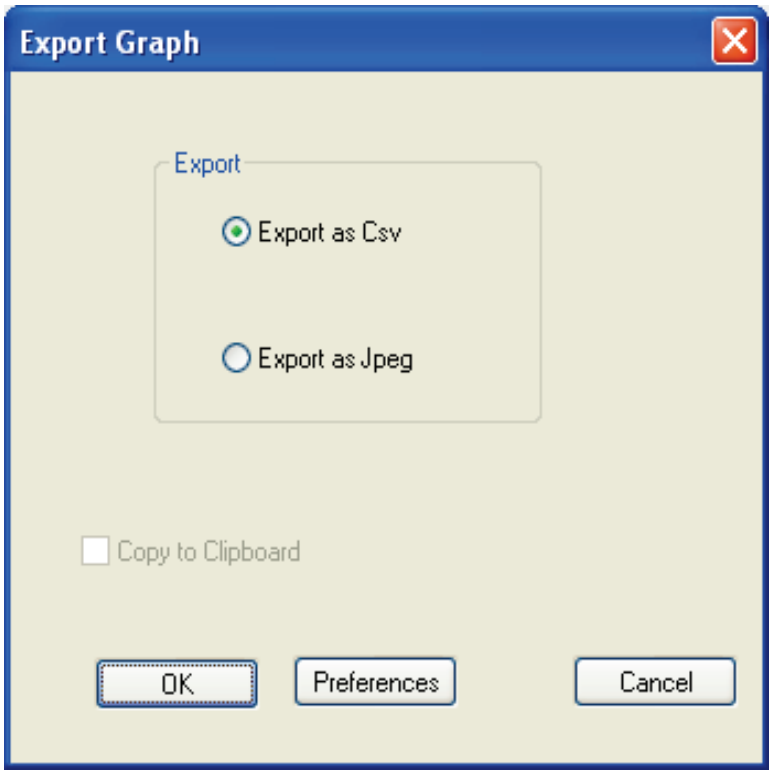

Figure 39: Export Graph Dialog Box

Data can be exported to a CSV (comma separated values) file so it can be viewed or analysed using Microsoft Excel or the displayed graph can be exported to JPEG format which can be viewed or edited using picture editor software (e.g. Paint, Photoshop or PhotoEditor).

5 Graph Control

5.1 Viewing Logged Data

Once information has been downloaded from an instrument, or a previously stored log file is opened, it can be displayed in a Graph Format.

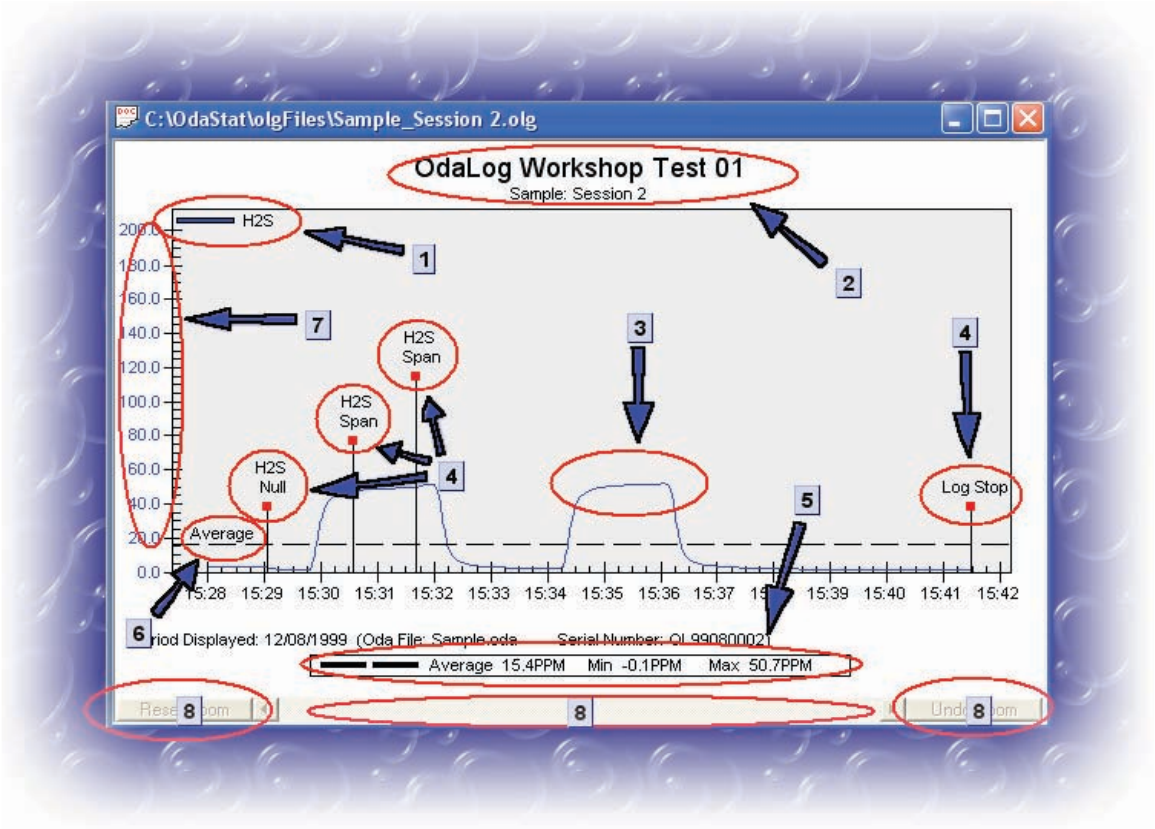

Figure 40: Typical OdaStat-G Graph

3. Gas Legend – Clicking on this item will hide the gas in multi gas graphs.
4. Graph's Main Title
5. Gas Trace
6. Logged gas Event Labels
7. Gas Statistics (if shown)
8. Average guide line
9. Axis Range
10. Zoom tools

5.2 Graphing Tool Bar Items

Display Session in Overlay Mode

Display Session in Separate Mode *

Display Session in Tabulated format

Display all Instantaneous Readings **

Display both Stel and TWA readings for a certain gas **

Display Short Term Exposure Limit (STEL) for all gases **

Display Time Weighted Average (TWA) for all gases **

Allow horizontal and vertical zooming

Allow horizontal zooming only

Add a label to graph

Show Session Information

* This option only available on OdaLog Type 6000/7000 log files that contain more than one gas. OdaStat-G cannot connect to OdaLog 6000 or 7000 models through the IrDA but can be used to view or export data files collected with these instruments

** These options are only available on log files that contain STEL / TWA readings.

5.2.1 Overlay View

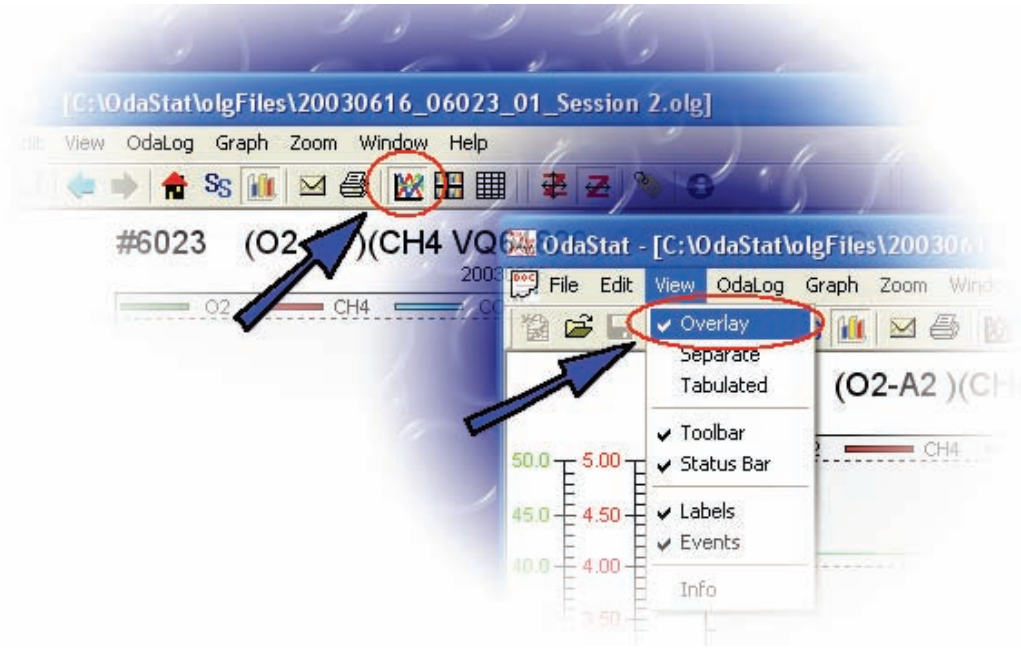

Figure 41: Selecting Overlay View

Overlay view is a graphing view where all gasses in the session are shown on the one graph using multiple axis for the different gas ranges. (As opposed to Separate View which shows each gas from a session in a separate graph).

An example of an graph with multiple gasses in Overlay View might look like:

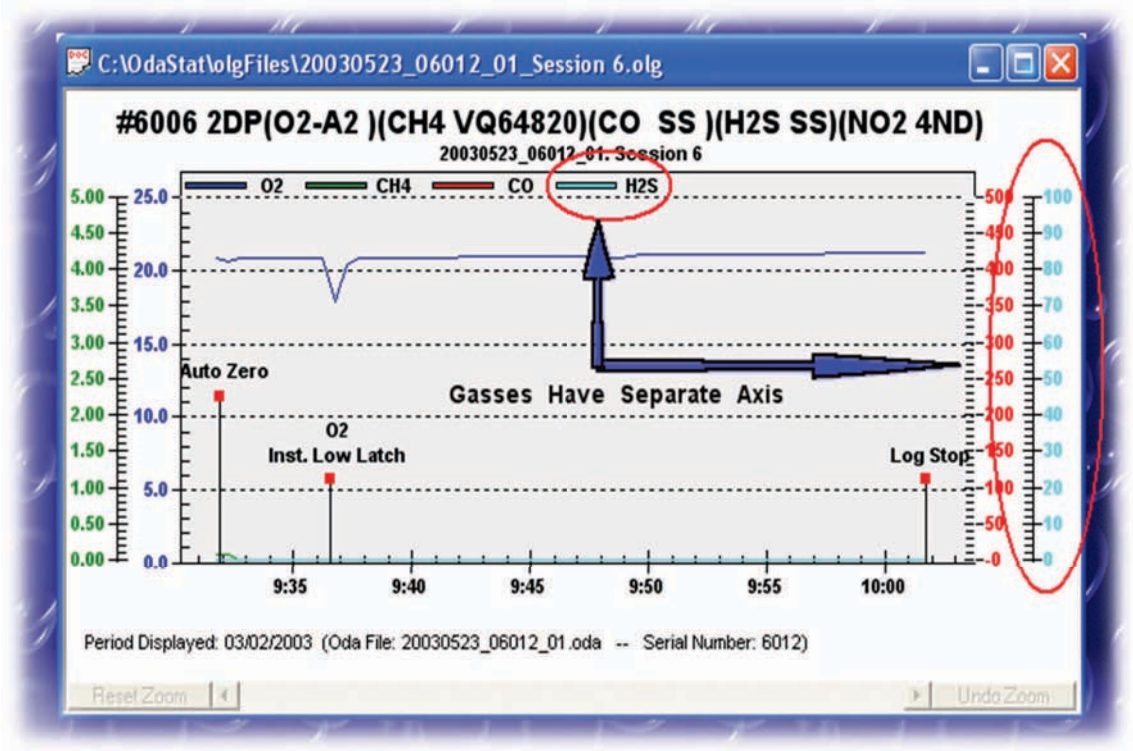

Figure 42: Overlay Graph View

5.2.2 Separate View (multi-gas only)

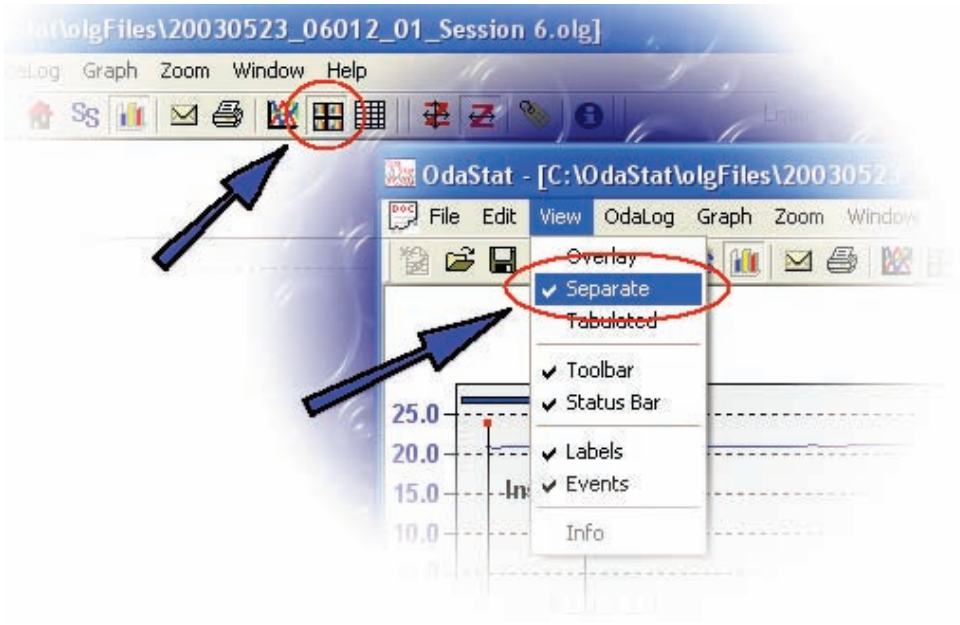

Figure 43: Selecting Separate View

NOTE: This view is only available in Multi-Gas sessions

Separate view is a graphing view where multi gas sessions are displayed in separate graphs. Only 4 graphs can be displayed on a screen at once.
A example of a session shown in Separate View might look like:

NOTE: This view is only available in Multi-Gas sessions

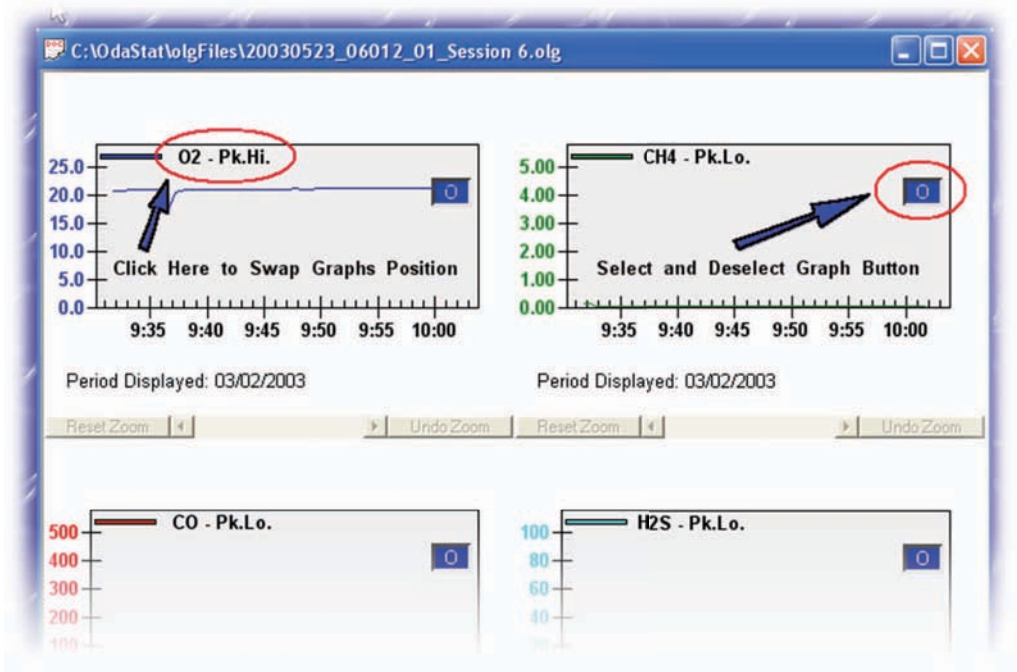

Figure 44: Separate Graph View (multi-gas only)

One significant difference in functionality between overlay view and separate view is the zooming. In separate mode zooming in on one graph will cause all selected graphs to zoom, the same applies to resetting. undoing and scrolling the zoomed graph.

The other important function unique to Separate View is the ability to swap the position of the graph. To swap a graph Click on the gasses label as shown above and then click on the graphs label that you would like to swap with.

5.2.3 Tabulated View

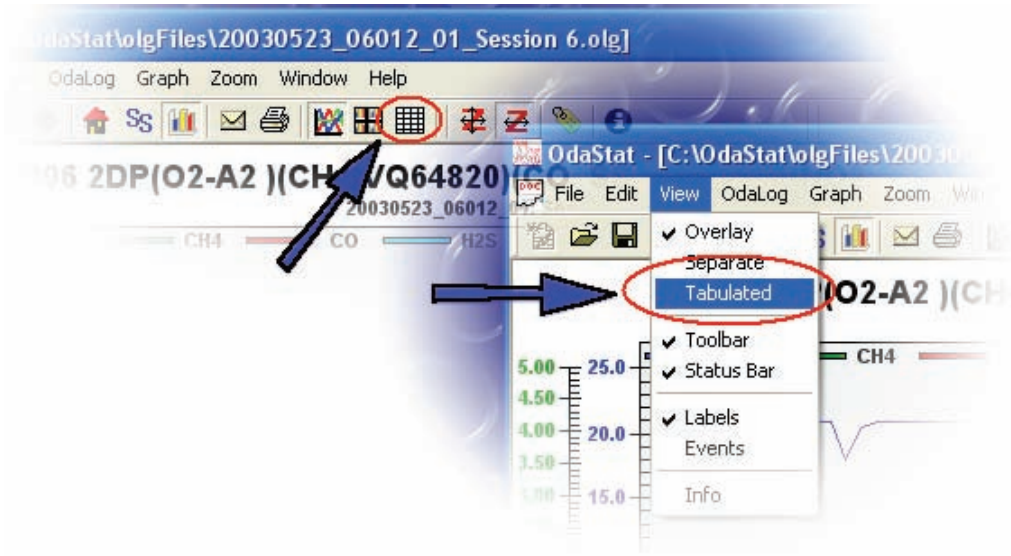

Figure 45: Selecting Tabulated View

The tabulated view, is used to show the session in tabulated data format (Spread Sheet Style).

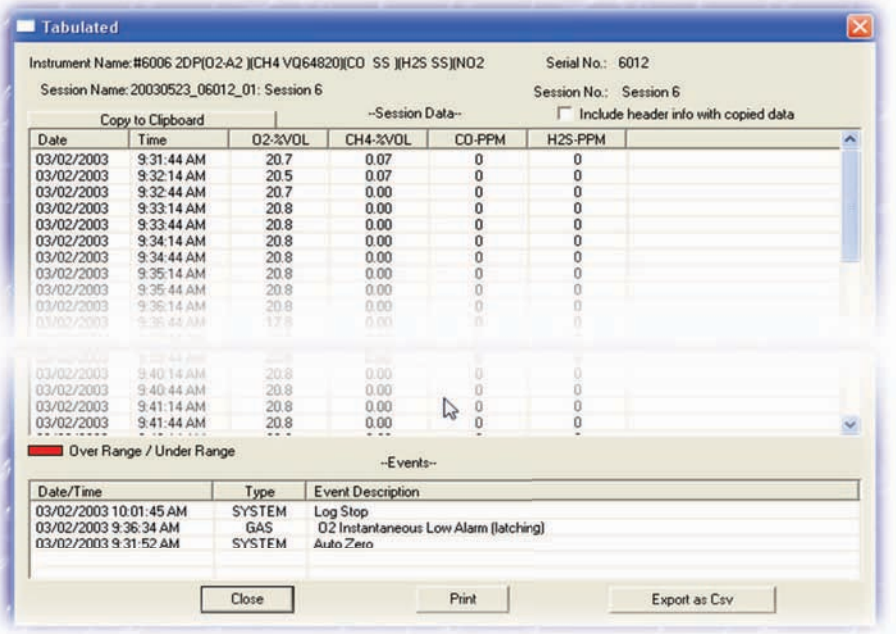

Figure 46: Tabulated View

Tabulated Views Main Functions:

'Copy to Clipboard' button

Clicking this button result in copying to the selected (highlighted data) to the Operating systems clipboard facility. You will then be able to paste the data into a Spread Sheet as it is saved in CSV format.

'Close' button

Clicking this button will close the tabulated view and return the program to the graphing view.

'Print' button

Clicking this button will send all data to the printer.

'Export as CSV' button

Clicking this button will prompt user to save data in CSV format.

5.2.1 Display all Instantaneous Readings (selected log types only)

These options are only available on log files that contain STEL / TWA readings. Refer to you OdaLog's User Manual for more information.

5.2.2 Display both STEL and TWA readings for a certain gas (selected log types only)

These options are only available on log files that contain STEL / TWA readings. Refer to you OdaLog's User Manual for more information.

5.2.3 Display Short Term Exposure Limit (STEL) for all gases

These options are only available on log files that contain STEL / TWA readings. Refer to you OdaLog's User Manual for more information.

5.2.4 Display Time Weighted Average (TWA) for all gases

These options are only available on log files that contain STEL / TWA readings. Refer to you OdaLog's User Manual for more information.

5.2.5 Zooming

By default, all of the logged data that is contained in a single session file will be displayed at once. In order to zoom in to see a particular subset of this data you will need to:

1. Select the desired zoom type. Horizontal Zoom only or Horizontal and Vertical Zoom.

Horizontal and Vertical Zoom

Horizontal Zoom Only

2. Move the marker (by moving the mouse cursor over the top of the visible graph area) to the beginning of the data you wish to start at.
3. Click and hold down the left mouse button.
4. While holding the button down, drag the mouse to the right until you reach the end point of the timeframe you wish to zoom in on. If you have selected Horizontal and Vertical zoom you can also drag at the same time from top to bottom the range of data you wish to zoom in on.
5. Release the left mouse button.
   The graph now will only display information between the two points (four points if you selected horizontal and vertical) you selected.

After zooming in on the graph, the bottom scrollbar will be updated to allow you to view data that is off the current screen.

If required, you can continue to zoom in (down to three logging intervals), or you can zoom back out to the previous level by clicking the 'Undo Zoom' button. Or, if you wish to view the entire data set once again, you can click on the Reset Zoom button.

5.3 Graph Options

A number of options are available for configuring the data in the graph. These options can be set through the dialog that appears after selecting the 'Graph' drop down menu item and selecting 'Options…' it is also accessible by clicking the right mouse button on the graph itself.

5.4 Graph Styles

A number of options are available for configuring the appearance of the graph. These options can be set through the dialog that appears after selecting the 'Graph' drop down menu item and selecting 'Styles…' it is also accessible by clicking the right mouse button on the graph itself.

5.5 Overlaying (Logger Type Instruments only eg. Type I and Type IV's)

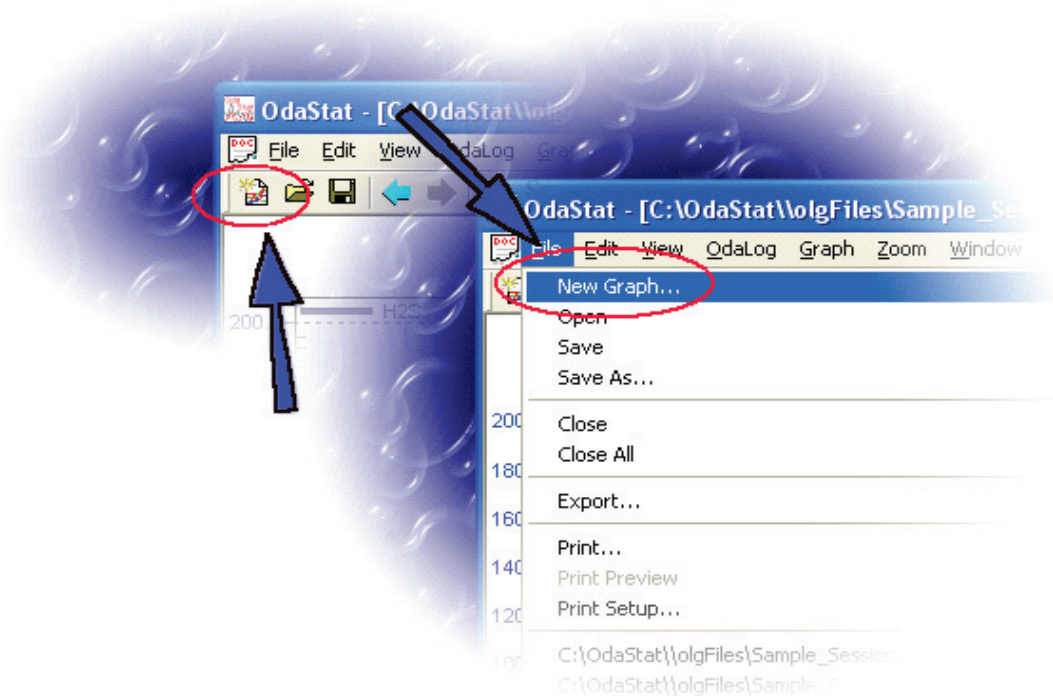

Figure 47: Creating a New Graph

NOTE: Creating a Modified Session is only available for Logger Type Instruments.

Sometimes it helps to view different sessions overlayed on top of each other. This can be accomplished by creating a new overlay session. To create a new graph you first need to have a session downloaded from a logger type instrument and opened in the graph screen. Any session created in this way will be saved with the '.mlg' (modified log file) extension. To create a new

modified session, first go to the 'File' drop down menu and select 'New Graph...' or select 'New Graph' from the tool bar as shown above. This will create a new graph. Once the new graph is displayed the user can either:

1. Overlay sessions via Drag 'n Drop; or
2. Overlay sessions via Cutting and Pasting

5.6 Overlay Sessions via Drag 'n Drop

To overlay sessions via dragging and dropping simply hold the mouse button over the desired trace to overlay and drag into the new graph. Then release as shown below.

Step 1 - Click and hold gas legend

Step 2 - Drag to new graph and release

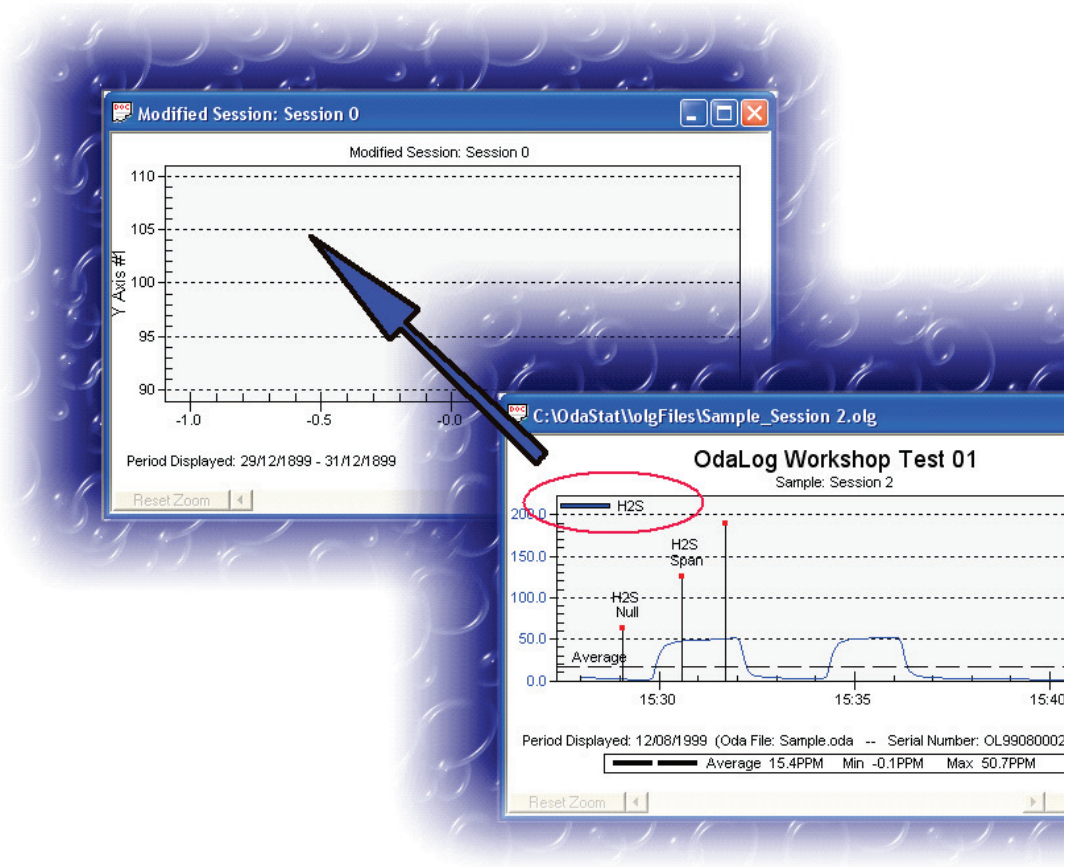

Figure 48: Overlaying Sessions from Drag 'n Drop

5.7 Overlay Sessions via Cutting and Pasting

Right click graph that contains desired gas to be overlayed.
Using the 'Window' drop down menu select ‘Tile’. This is the best view for copying and pasting. Right click on the graph that contains the gas that is to be copied and a drop down menu will appear.

The menu should consist of 'Copy <Gas Name>’ and ‘Copy Temperature’. Select the gas / temperature you would like to copy to the new overlay. If the session has no temperature data, only ‘Copy’ will appear when right clicking the graph. After this right click in the new overlay session and a drop down menu should appear. The drop down menu should look something like:

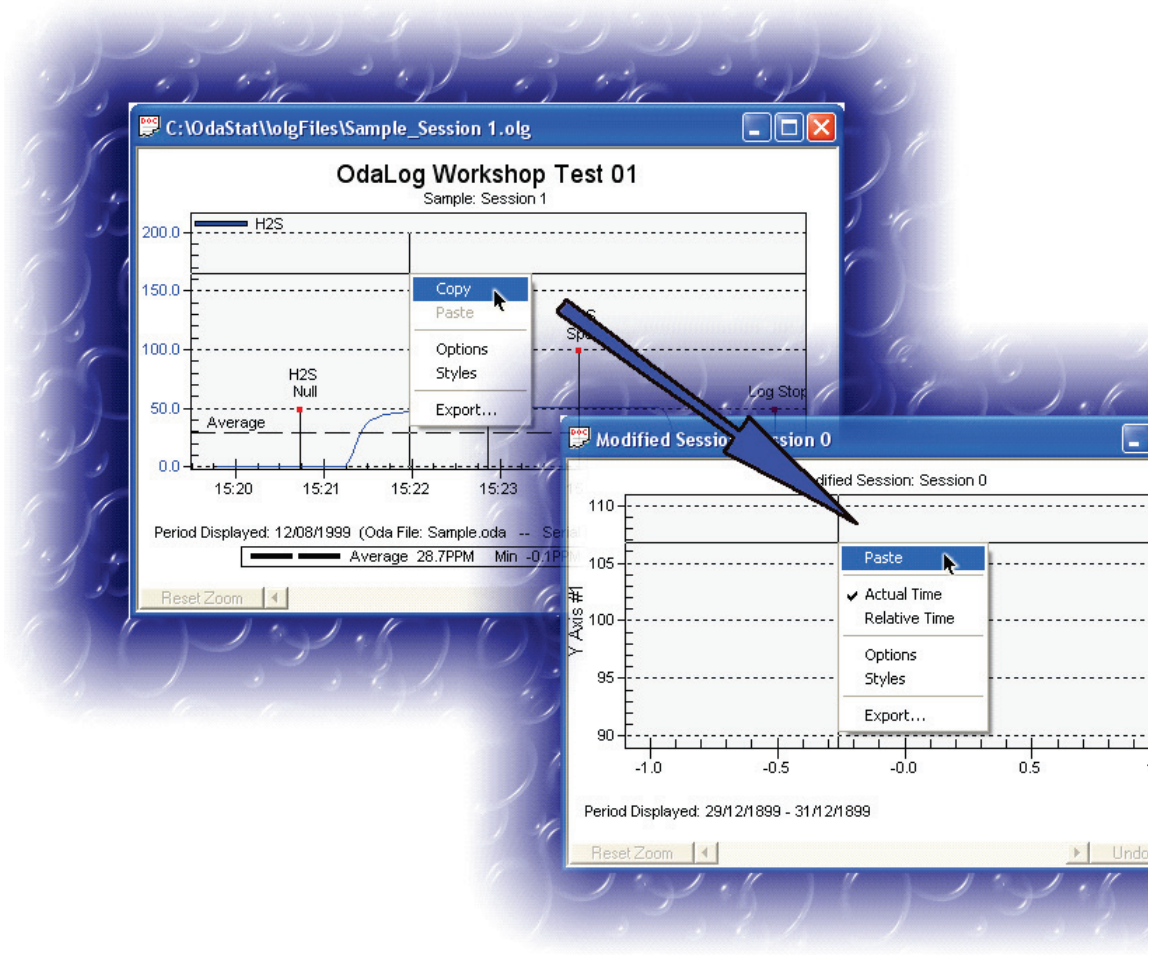

Figure 49: Overlaying Sessions via Copy ‘n Paste

5.7.1 Paste

Select this to add the current gas on the clipboard (the gas that was copied from another session -- see above) to the session.

5.7.2 Actual Time

Select this to set the modified overlay graph to use an actual time line.

5.7.3 Relative Time

Select this to set the modified overlay graph to use a relative start time between different gases.

5.7.4 Data from Different Type Odalogs

Data from different type OdaLogs (e.g. Type I and an L2) can be pasted and displayed on a single graph but cannot be exported or viewed in tabulated format. This can be achieved using the "Join Sessions" function in the Session Selector dialog box (See **Section 4.9**).

5.8 Adding, Moving, Editing and Deleting a Label

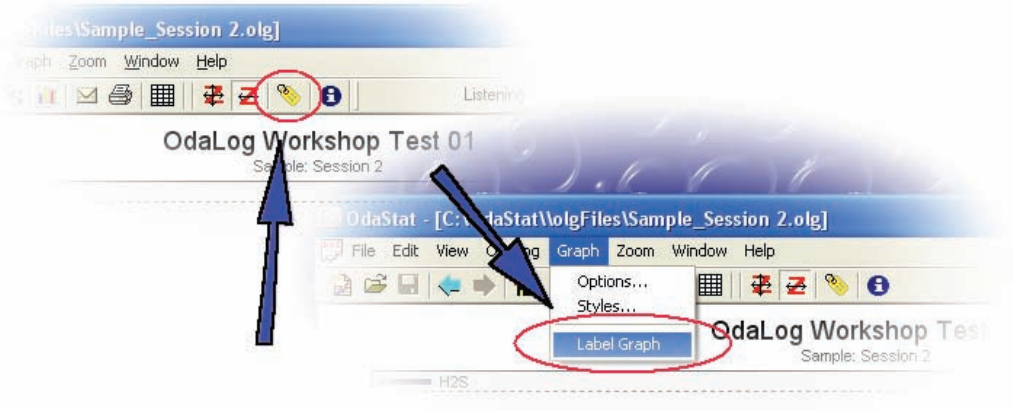

Figure 50: Graph Labels

Adding a Label

To add a label to a graph first select the label tool as shown in the tool bar above. After selecting the label tool, the graph will display all traces with data points. The label must be placed on a data point. After selecting the desired position for the label, a label edit box will be displayed, place the text that will be displayed with the label in this box and click 'OK'. A label with a pointer to the data point that was selected will be displayed. See also Moving a Label and Editing and Deleting a Label.

Moving a Label

After a label has been created it can be moved around to a more convenient position on the graph (the actual pointer will always remain fixed to the data point and cannot be moved). To move a label hold and drag with the mouse the labels red marker as shown below.

Figure 51: Graph Label Example

Editing and Deleting a Label

To edit or delete a label right click with the mouse on the labels red marker as shown above. The Label Edit Dialog box will be shown. The main components of the Label Edit Dialog are:

- OK - This will redraw the label with any changes that were made and close the Label Edit Dialog box.
- Delete - This will delete the label from the graph permanently and close the Label Edit Dialog box.
- Cancel - This will close the Label Edit Dialog box and discard any changes that were made.

5.9 Hiding and Showing gasses in an overlay graph

On a multi gas graph it may be preferred to only show certain gasses. To hide a gas simply click on the gasses name in the graphs legend.

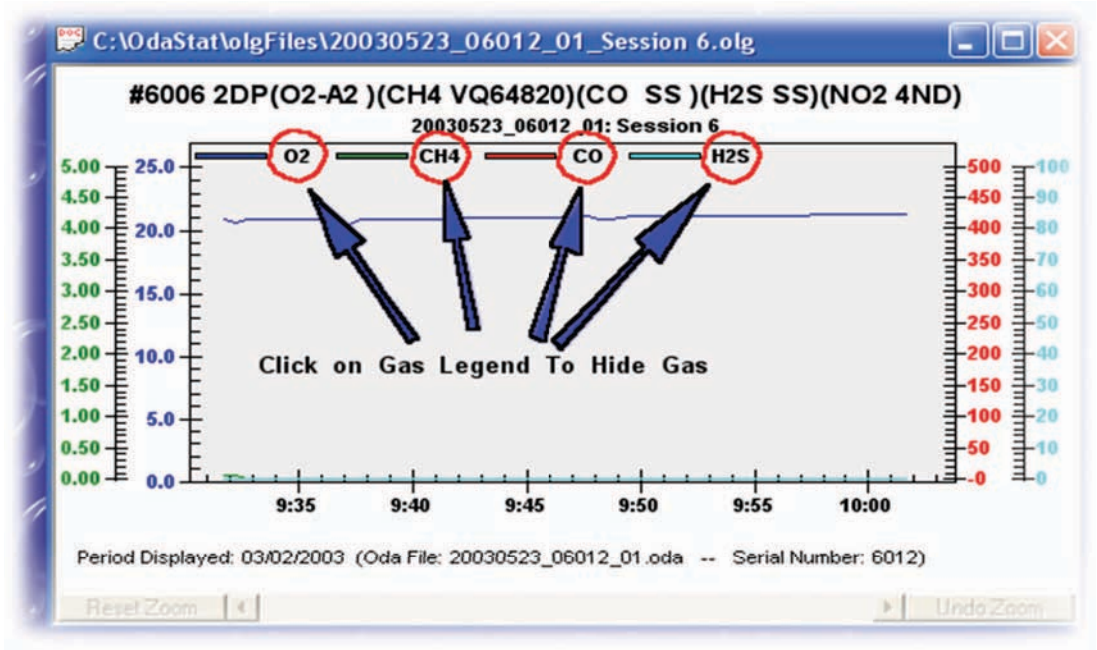

Figure 52: Hiding Gasses

The hidden gasses name will be displayed above the top of the graphs data viewing area, to display the gas again simply click on its name.

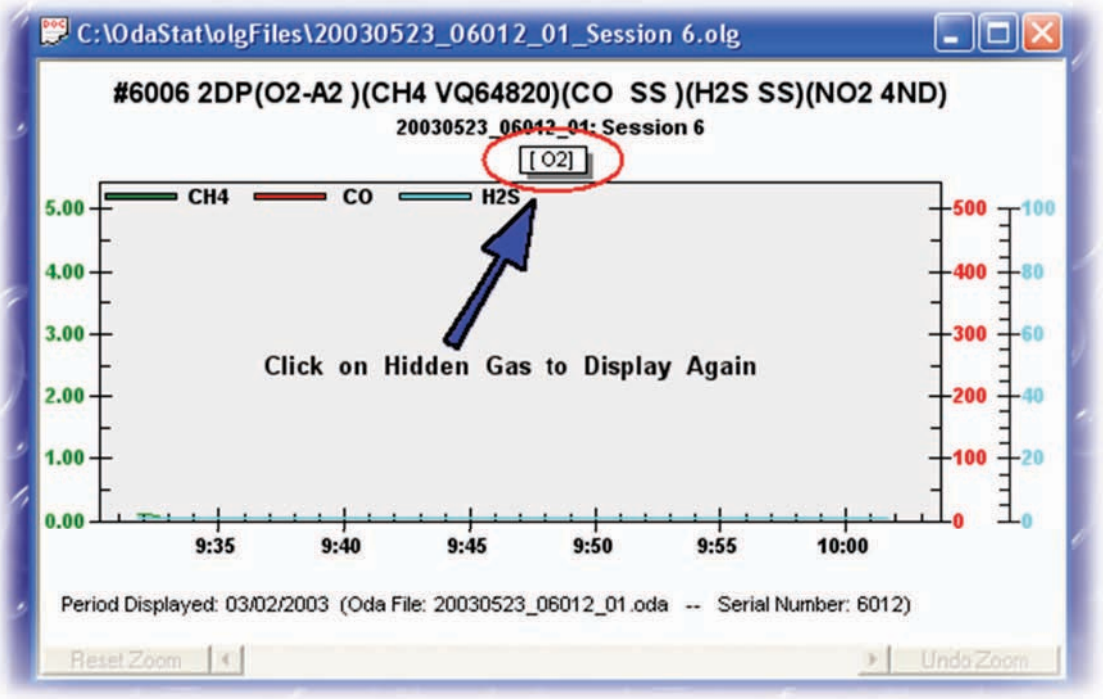

Figure 53: Un-hiding Gasses

5.10 Hiding and Showing Event Labels

Figure 54: Hide/Show Events

To toggle on and off event labels simply click on 'Events' from the drop down 'View' menu.

5.11 Hiding and Showing Labels

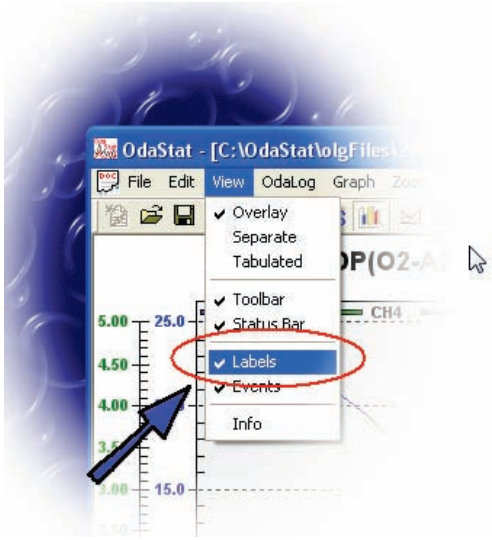

Figure 55: Hide/Show Labels

To toggle labels on an off simply click 'Labels' from the 'View' drop down menu.

5.12 Printing a Graph

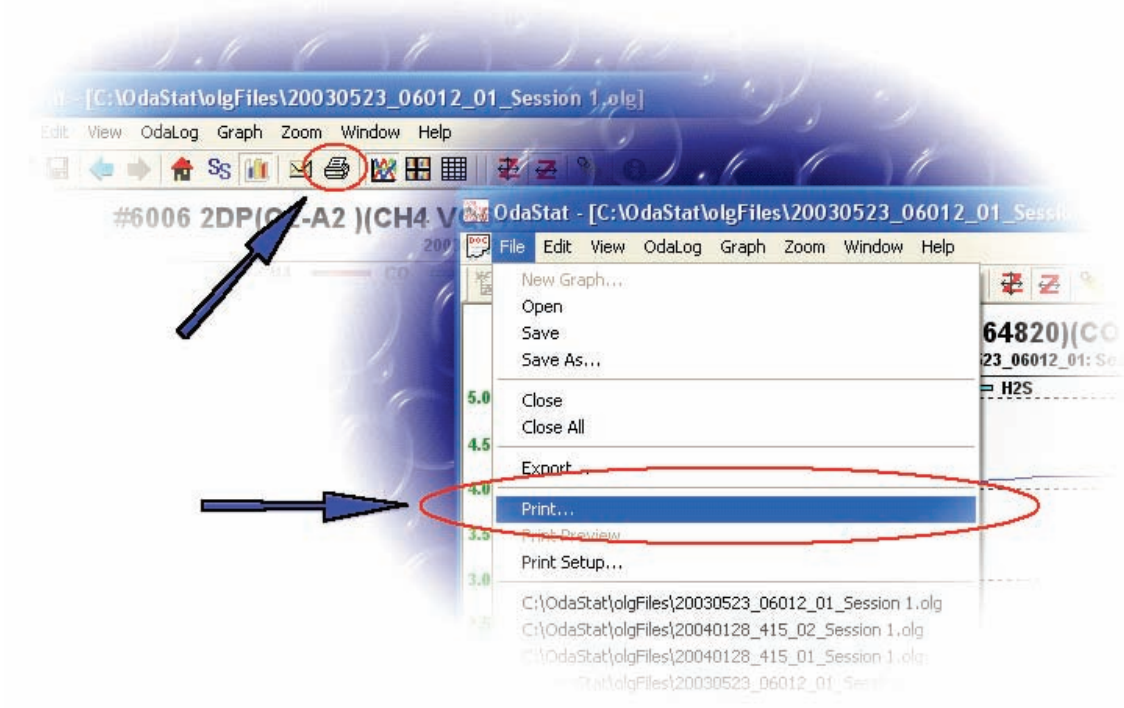

Figure 56: Printing a Graph

Printing a graph can be accomplished by either clicking the print tool bar item (as shown above) or by clicking the 'File' drop down menu and then selecting 'Print'. The default setting for printing a graph is Black and White mode. This mode will change legends to a black and white legend (dots and dashes) and will place labels on the Y - Axis. This enables the user to differentiate between gases in black and white for multi-gas graphs. If you wish to print in colour deselect the 'Print in Black and White Mode' option in Graph Styles - General tab.

NOTE: Printing via the tool bar will automatically print using the default printer settings in Windows where as printing through the File Menu will invoke the Printer Dialog box.

5.13 Session Information

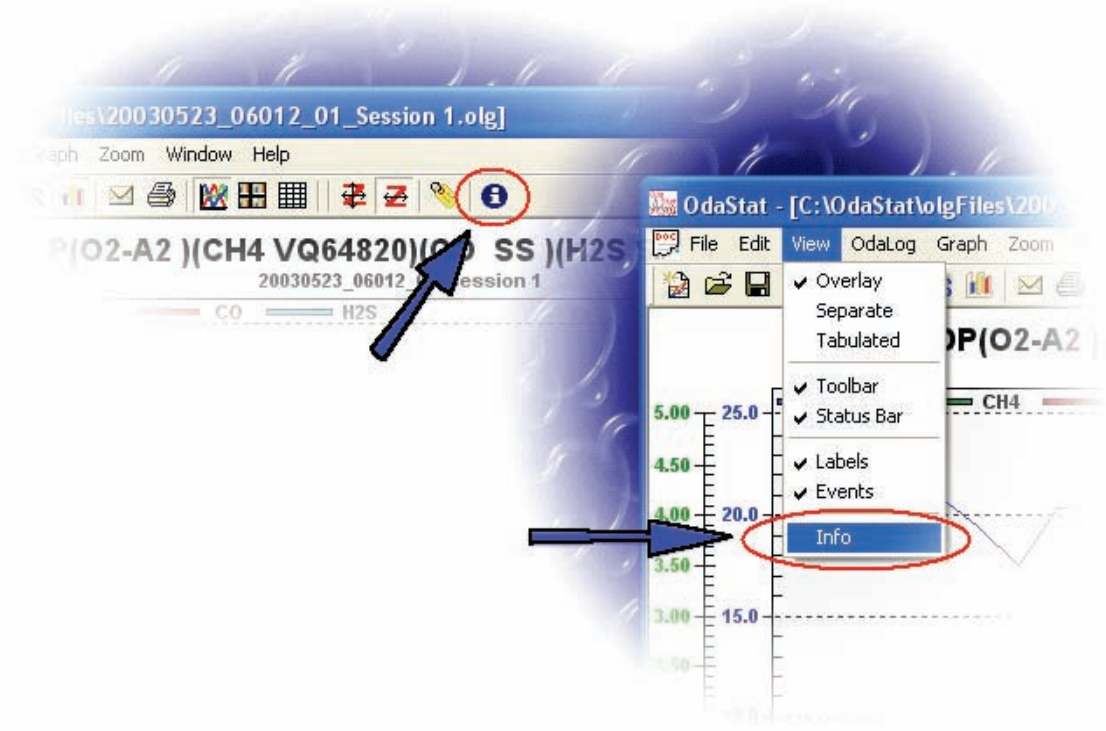

Figure 57: Session Information

To view information about a session, first open the session (See section 4.10 – " Opening Previously Stored Logged Data"), then click the 'Information' tool bar item as shown above. The Session Information screen is read only. The Session Information screen consists of three main functions:

'Screen Data Only' option
'OK' button
'Print' button

5.13.1 'Screen Data Only' option

Selecting this option will show data that only exists in the viewable area of the graph (i.e. if the graph has been zoomed only the information between the two zoom points will be shown).

5.13.2 'OK' button

Clicking this button will close the Session Information screen.

5.13.3 'Print' button

Clicking this button will send the Session Information to the printer.

6 Editing Application Preferences

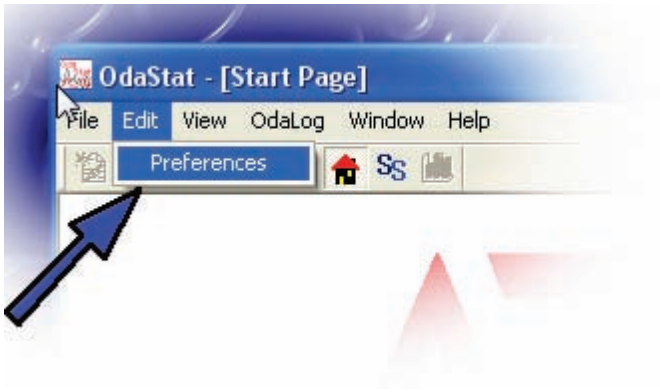

Figure 58: OdaStat-G Application Preferences

To edit application preferences first go to OdaStat-G Start Page. Then click on the edit drop down menu and select ‘preferences’. The application preferences page is divided into three categories:

6.1 Miscellaneous:

The miscellaneous preferences tab is where the user can change a variety of parameters including Calibration Warning Settings, program fonts and connection settings.

6.2 Communications:

The communications preferences are use to change parameters relating to the connection of the OdaLog.

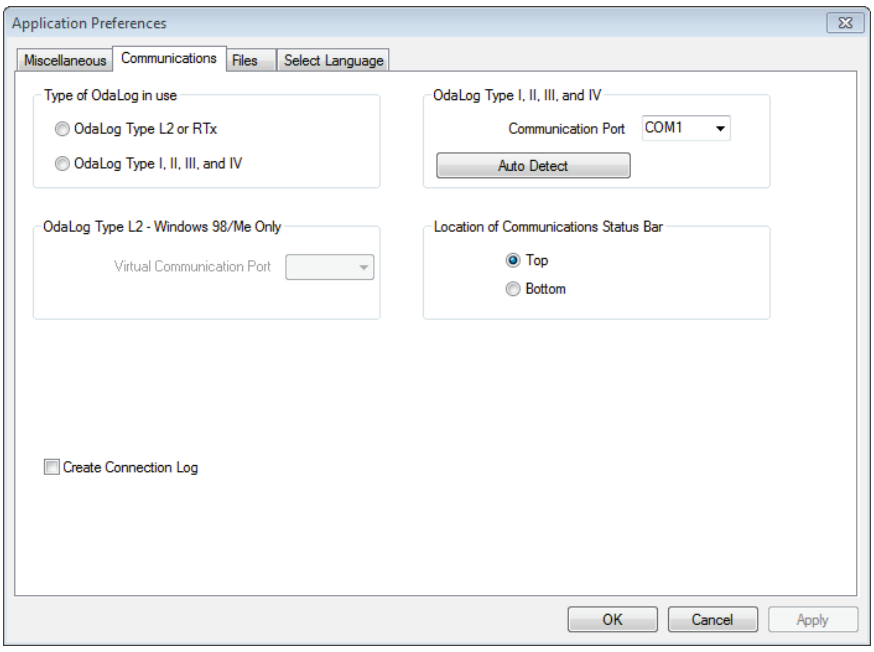

Figure 59: Preferences, Communications Tab

Communications Preferences are accessed through the Application Preferences. The communications preferences change and configure how the OdaLog will connect and communicate with the OdaStat software permanently. The four changeable properties are:

- Type of OdaLog in use:

  The OdaStat software uses a different infrared devices to communicate with the RTx and L2 OdaLogs and the OdaLog Type I , II, III and IV. To connect to an OdaLog L2 or RTx, the OdaLogL2 or RTx Option must be selected and vice versa for the Type I, II, III and IV.

- Location of Communications Status Bar:

  This option will change whether the Communications Status Bar is anchored to the top tool bar or to the bottom status bar.

- OdaLog Type I, II,III and IV (Communication Port):

  This option changes what Communication Port the OdaLog Type I, II,III and IV will use to connect to the PC.(see Operating System user manual for more information on Communication Ports).

6.3 Files:

The files preferences are used to change default settings of the file save destination directories that OdaStat will use to save files.

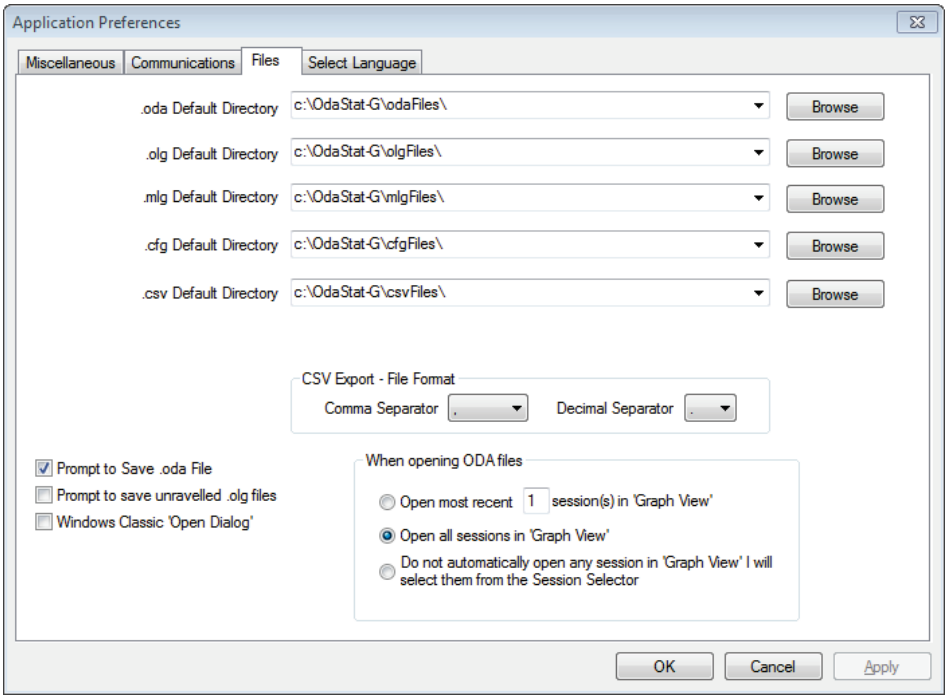

Figure 60: Preferences, Files Tab

- Files Preferences are accessed through the Application Preferences. The file preferences change where different file types are automatically saved to, whether user is to be prompted as to where to save a file and the actual format that the data will be saved as.

  .oda Default Directory

  This is the default location of where raw oda files will be saved after download. It is also the default for the 'Go to default oda directory' button in the Open Session Dialog.

  .olg Default Directory

  This is the default location of where unravelled session files are saved after download and also after changes to a graph have been made. t is also the default for the 'Go to default olg directory' button in the Open Session Dialog.

  .mlg Default Directory

  This is the default location of where modified session files are saved. It is also the default for the 'Go to default mlg directory' button in the Open Session Dialog.

.csv DefaultDirectory

This is the default saving location of csv (Comma Separated Values - for spread sheets etc) files.

Separator Preferences

Different countries use varying ways of displaying a decimal point and commas. The OdaStat-G program should adapt automatically to your settings in Windows. However sometimes you may need to send a CSV file internationally, therefore you can change these settings as to adapt to the different settings.

Prompt to Save .oda File

Checking this box will cause OdaStat-G to prompt you after downloading an instrument as to where to save the raw oda file. If this box is not set OdaStat-G will save the raw oda file automatically to the default directory that is specified in the default oda directory.

Prompt to Save Unravelled .olg Files

Checking this box will cause OdaStat-G to prompt you after downloading an instrument as to where to save unravelled .olg files. If this box is not set OdaStat-G will save the olg files automatically to the default directory that is specified in the default olg directory.

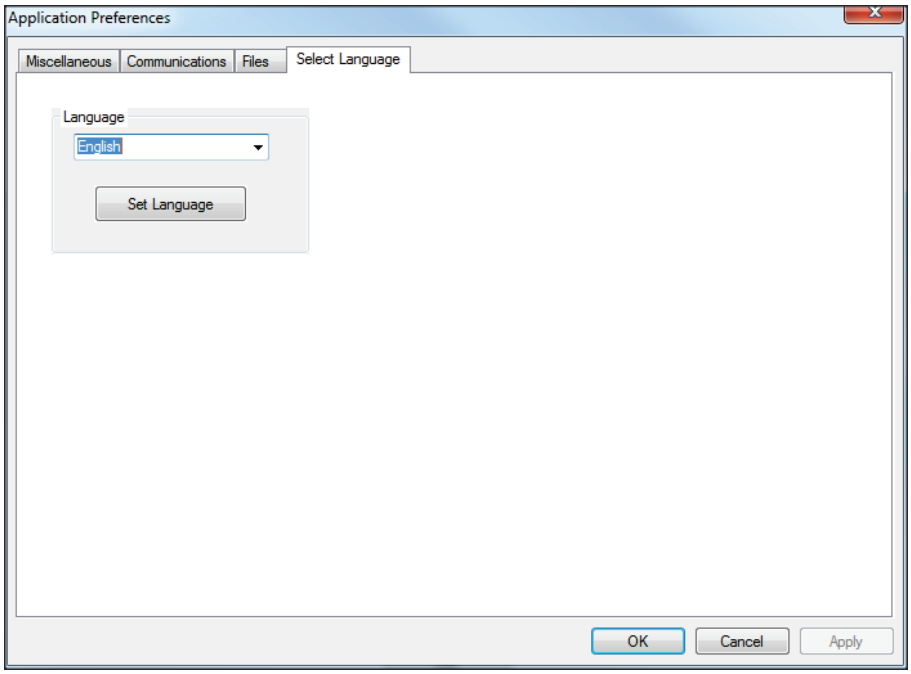

Figure 61: Preferences, Select Language

6.4 Select Language:

The “Select Language” tab is used to change the language displayed when using OdaStat-G. Here you will see a drop down list in which you can change to various languages.

If you would like to change the language that OdaStat-G is presented in than you may change the language.

NOTE: Language will not be changed until the OdaStat-G Program is restarted.

Supported Languages

- English
- Japanese
- German
- French
- Korean
- Chinese
- Spanish

The translations for each phrase used in the program are stored in a text file called translation.txt that is stored in the same folder as the OdaStat-G program file (OdaStat-G.exe).

Any preferences changed in this way will be saved and will remain changed even after restart.

7 Trouble Shooting - Connecting to an OdaLog via IrDA

The following is a list of common problems when communicating with Odalog instruments.

- Communications is set to wrong type of OdaLog (e.g. Type I – IV instead of L2.

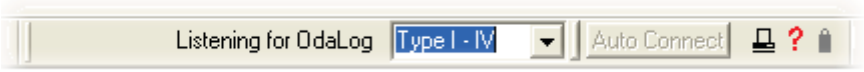

Figure 62: OdaLog Type Setting

- The wrong communications port is set in OdaStat-G's preferences. To change the communications port go to the 'Edit' drop down menu and select ‘Preferences’. Click the communications tab. Click on the 'Auto Detect' button under the group 'Type I, II, III and IV'. When asked place the OdaLog unit into IRDC mode and click ok. This should then detect the correct communications port and set it.
- Make sure that you are not trying to communicate with an IrDA type Infra Red device. **Type I - IV instruments will not communicate using an IrDA adapter (most laptops have an internal IrDA device which CANNOT be used to communicate with Type I - IV instruments but CAN communicate with an OdaLog L2)** . You need to use a standard IR device (usually connects to your pc via a serial cable).
- Make sure there are no conflicting IR devices that could be causing interference. Examples of these devices are IrDA adapters used for OdaLog 6000 units, internal IrDA (infra red) adapters found in laptops. If there are any suspect devices nearby try physically blocking their Infra Red signal.
- If using a USB-LINK-IR try reinstalling the device drivers by completing the following steps:

  Step 1:
  First physically disconnect the USB-LINK-IR from the PC.

  Step 2:
  Go to Control Panel and select “Add/Remove Programs”.

  Step 3:
  If exists, remove the program “CP210X USB to UART Bridge Controller”.

Step 4:
Carefully follow the instructions on how to install the device drivers for the USB-LINK-IR, making sure to follow the instruction specific to the operating system you are using. The USB-LINK-IR installation instructions start from page (See **Figure 1**).

Step 5:
Once the above steps have been completed and connection can still not be established verify that the virtual communications port exists via the Device Manager under the section “Ports”. The device should be displayed as “CP210X USB to UART Bridge Controller (Com xx) where ‘xx’ is the number of the com port that should be set in OdaStat-G.

If connection to the OdaStat-G software still cannot be established after following the above steps please contact App-Tek International (07) 3881 3850 and ask for software technical support.

8 Connecting to an OdaLog RTx via FTP

If OdaStat-G is not able to connect to the FTP server to retrieve data from an OdaLog RTx, the most likely cause is an incorrect Windows setting. The relevant settings are in the Internet Connection or Options section of the Windows Control Panel.

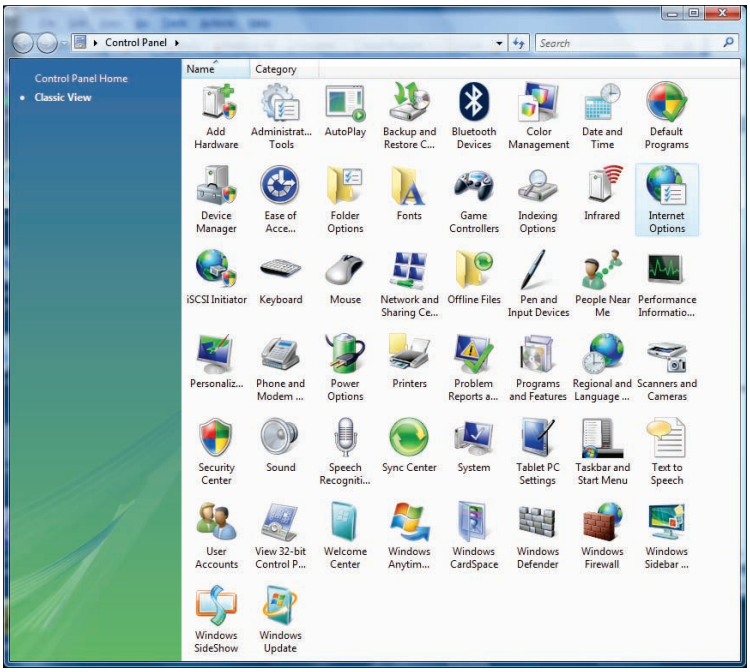

Figure 63: Windows Vista/7 Control Panel with "Internet Options" Selected

After double clicking on Internet Options, the "Internet Properties" dialog box will appear. Click on the "Advanced" tab and select the "Use Passive FTP' tick box, then click "Apply" or "OK".

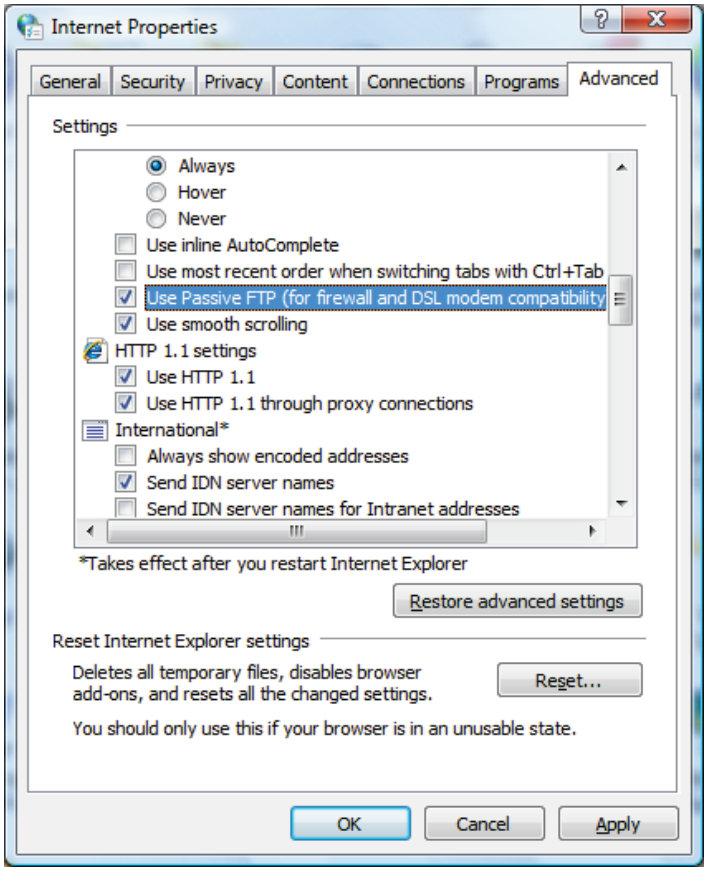

Figure 64: Internet Properties Window

NOTE: It is advisable to contact IT support staff before changing networking settings in Windows or to determine if your Internet and FTP connection is functioning correctly.

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