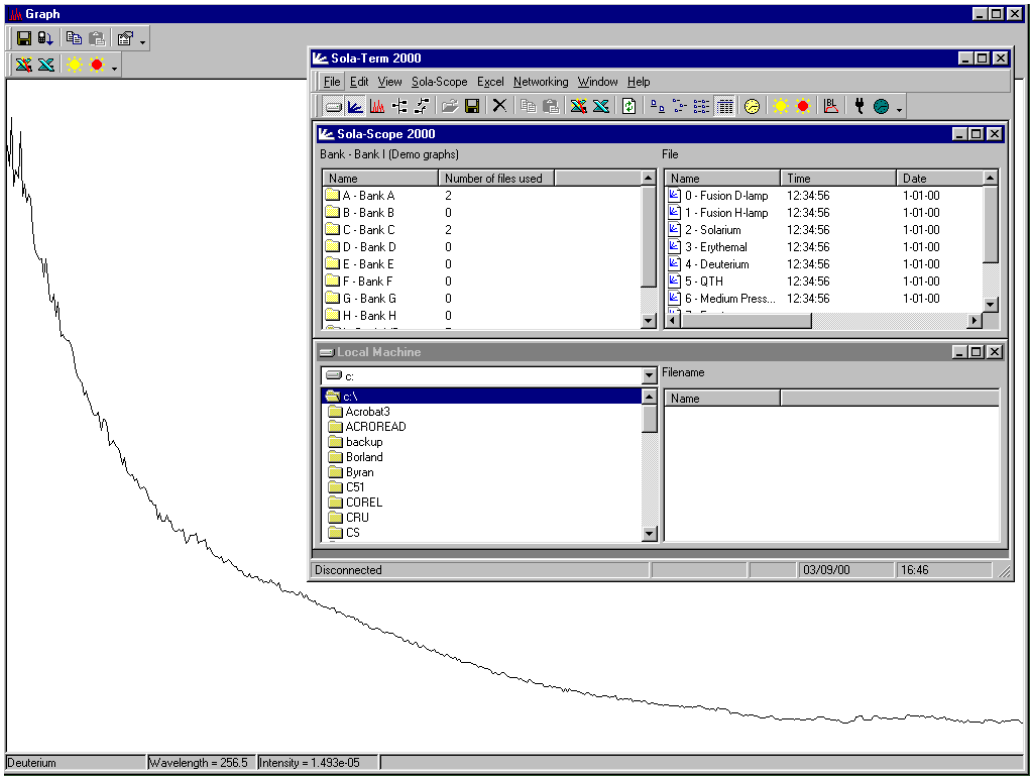
Sola-Term 2000 Manual



Revision 1.1

1 Trademarks and Acknowledgements

Microsoft, Windows, Microsoft Excel and the Microsoft Excel Icon are registered trademarks of Microsoft Corporation.

Other brands and product names mentioned in this manual may be trademarks or registered trademarks of their respective companies and are hereby acknowledged.

2 Contents

1 Trademarks and Acknowledgements 1
2 Contents 2
3 What is Sola-Term 2000 3
4 Key to notations in this manual. 4
5 Icons 5
6 The Main Window 8
7 Configuring Sola-Term 2000 - The Options Window 9
8 The Sola-Scope 2000 Window 11
9 The Local Machine Window 12
10 The Graph Window 13
11 The Networking View Window 14
12 The Networking Errors Window 15
13 Downloading data from the Sola-Scope 2000 to Sola-Term 2000 16
14 Uploading data from Sola-Term 2000 to the Sola-Scope 2000 19
15 Using files that are already stored on your hard disk 20
16 File Management 21
17 Sending Data To Excel And The Excel Wizard 22
18 The Logging Wizard 27
19 Miscellaneous Options 29
20 Networking 30
21 Using a Sola-Hazard with Sola-Term 2000 33
22 Error Messages 35
23 Index 37

3 What is Sola-Term 2000

Sola-Term 2000 is a file management system for the Sola-Scope 2000, a means of easily graphing data collected with a Sola-Scope 2000 and the control centre of the Solatell Network.
Sola-Term 2000 allows easy file management including uploading, downloading, deleting and renaming of files stored in a Sola-Scope 2000. It allows simple graphing of data in Microsoft Excel with only one button click.
Sola-Term 2000 also manages the Solatell network controlling the scanning policy and displaying information about the current state of the sensors.

4 Key to notations in this manual.

Keywords – Terminology that relates to icons, buttons or windows within Sola-Term 2000. All icons are defined in Section 4, each window is defined in it's own section and button within windows will be defined either in the current section or in the window definition section.

5 Icons

5.1 Standard icons (Level 1)

5.1.1 Folder

Sola-Scope 2000 Window – Represents a bank on the Sola-Scope 2000.
Local Machine Window – Represents a folder in the same way that Explorer does.

5.1.2 Open Folder

Sola-Scope 2000 Window – Represents the current bank. The files from the current bank are displayed in the right panel in the window.
Local Machine Window – Represents the current folder. The files from the current folder are displayed in the right panel in the window.

5.1.3 Sola-Tell File

Sola-Scope 2000 Window – Represents a file stored on the Sola-Scope 2000 within the current bank.
Local Machine Window – Represents a file (with data from one scan only) stored on a local disk.

5.1.4 Sola-Tell Bank File

Local Machine Window – Represents a file (with data from two or more scans) stored on a local disk.

5.1.5 Sola-Tell Corrupt File

Local Machine Window – Represents a file stored on a local disk that has corrupt data stored in it. This icon can also represent a Sola-Scope 1 file.

5.1.6 Large Icons View

All windows except the ***Graph window*** – Changes the view to large icons.

5.1.7 Small Icons View

All windows except the ***Graph window*** – Changes the view to small icons.

5.1.8 List View

All windows except the ***Graph window*** – Changes to the list view.

5.1.9 Details View

All windows except the ***Graph window*** – Changes to detail view.

5.1.10 Open

Sola-Scope 2000 Window – Downloads the current selected bank/file(s) and displays it/them in the graph window.
Local Machine Window – Opens the current selected file(s) and displays it/them in the graph window.

5.1.11 Save

Sola-Scope 2000 Window – Saves the currently selected bank/file(s) to a local disk.
Graph Window – Saves the data in the graph window to a file on a local disk.

5.1.12 Delete

Sola-Scope 2000 Window – Deletes the currently selected bank/file(s).
Local Machine Window – Deletes the currently selected file(s).

5.1.13 Copy

Sola-Scope 2000 Window – Copies the currently selected bank/file(s) to the system clipboard.
Local Machine Window – Copies the currently selected file(s) to the system clipboard.
Graph Window – Copies the data in the ***Graph window*** into the system clipboard.

5.1.14 Paste

Sola-Scope 2000 Window – Pastes data from the system clipboard into the currently selected file.
Local Machine Window – Saves the data from the system clipboard into a file on a local disk.
Graph Window – Pastes the data from the system clipboard into the ***Graph window***.

5.1.15 Refresh

Sola-Scope 2000 Window – Refreshes the file list.
Local Machine Window – Refreshes the file list.

5.1.16 Properties

Graph Window – Opens the ***Graph Properties Window***.

5.1.17 Local Machine Window

Opens and closes the ***Local Machine Window***.

5.1.18 Sola-Scope 2000 Window

Opens and closes the ***Sola-Scope 2000 Window***.

5.1.19 Graph Window

Opens the ***Graph Window***.

5.1.20 Receive File

All Windows – Waits for a file to be sent manually from the Sola-Scope 2000.

5.1.21 Help

Opens the help file.

5.2 Excel and Logging Icons (Level 2)

5.2.1 Logging

Opens the logging wizard to start logging.

5.2.2 Excel – Single Graph

All Windows – Sends the data from the currently selected bank/file(s) to Excel and graphs the data on a single graph.

5.2.3 Excel Wizard

All Windows – Opens the Excel Wizard to allow you to choose where to place you data within Excel.

5.2.4 Excel – Separate Graphs

All Windows – Sends the data from the currently selected bank/file(s) to Excel and graphs each set of data on its own graph.

5.2.5 Scan

Starts a scan on the Sola-Scope 2000 and downloads the data to the graph window. The pure yellow icon starts a standard scan, the icon with a red centre scan starts an auto ranging scan.

5.3 Networking Icons (Level 3)

5.3.1 Networking View Window

Opens and closes the networking view window.

5.3.2 Networking Errors Window

Opens and closes the ***Networking Errors Window***.

5.3.3 Set Baseline

Networking View Window - Sets the baseline on the current selected Sola-Check from the last scan data.

5.3.4 /Selected Folder

Networking View Window – Indicates the currently selected Sola-Check/Sola-Sensor 2000 that will be used for the next operation.

5.3.5 Network Monitoring

Starts and stops network monitoring.

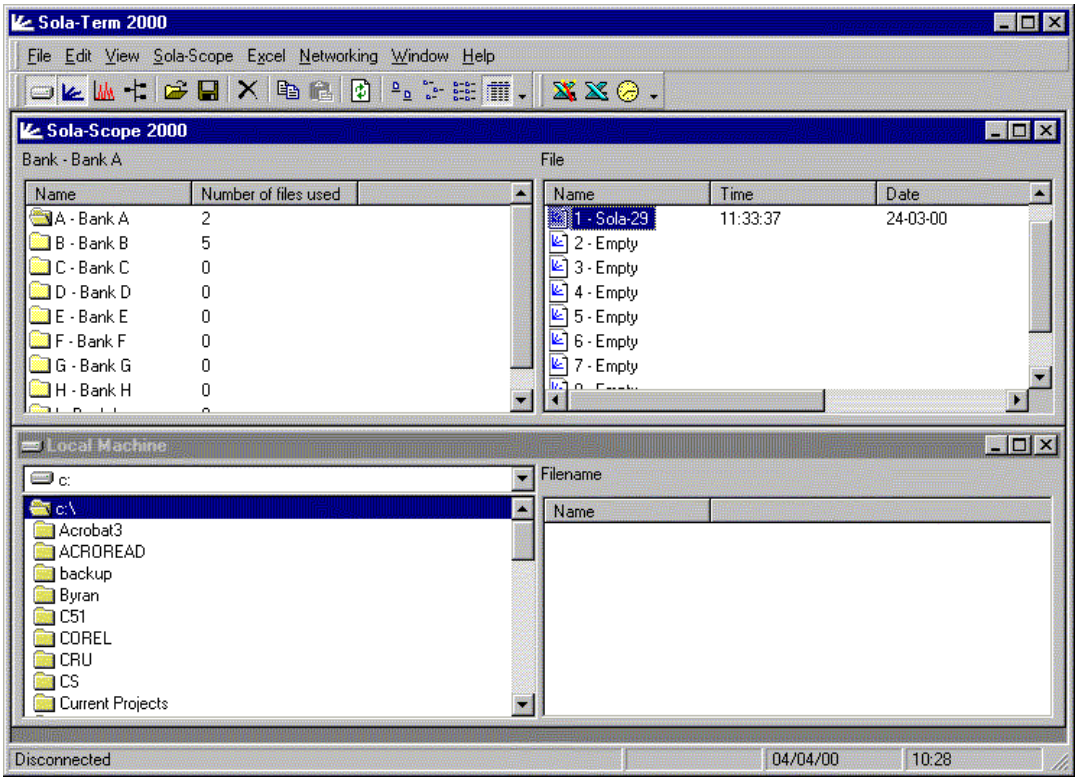
5.3.6 Permanent Coms

Toggles permanent coms.

5.3.7 Set FSD

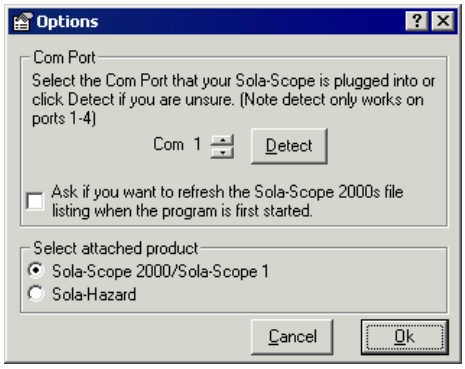
Networking View Window - Sets the FSD (Full Scale Deflection) of the currently selected Sola-Check/Sensor 2000.

6 The Main Window



The ***Main window*** holds most of the windows that will appear when you are using Sola-Term 2000, the exceptions being, the ***Graph window***, the windows involved with logging and scanning, the ***Excel wizard*** and the ***Options windows***.
Toolbar icons that can be used with more that one window will perform the function associated with the currently selected window (see previous section).

7 Configuring Sola-Term 2000 - The Options Window



(To configure Sola-Term 2000 to communicate with a Sola-Hazard please see the Using a Sola-Hazard with Sola-Term 2000 chapter later.)

Sola-Term 2000 needs to be configured correctly to communicate with the Sola-Scope 2000. Although this configuration is vital, it is very simple. This configuration is set within the ***Options window***, that can be opened by selecting the ***Options menu item*** in the ***Sola-Scope menu***.

7.1 Configuring the Communications port

The key option to configure is the communications port (or COM port for short) that Sola-Term 2000 uses to communicate with the Sola-Scope 2000. From within the ***Options window*** this can be done in two ways.

7.1.1 Using the Detect button with Sola-Scope 2000s.

- If you have not already opened the ***Options window***, open it by selecting ***Options*** from the ***Sola-Scope Menu***.
- Ensure that you have selected ***Sola-Scope 2000/Sola-Scope 1*** in the ***Select attached product*** frame. For information on using a Sola-Hazard with Sola-Term 2000 see the Using a Sola-Hazard with Sola-Term 2000 chapter later.
- Click the ***Detect*** button, this will scan COM ports 1 to 4 to see if a Sola-Scope 2000 is plugged into any of them.
- If this process finds a Sola-Scope 2000 attached to your computer then it will inform you that it has found a Sola-Scope 2000, otherwise it will report that no Sola-Scope 2000 was found.

7.1.2 Select the Com port manually

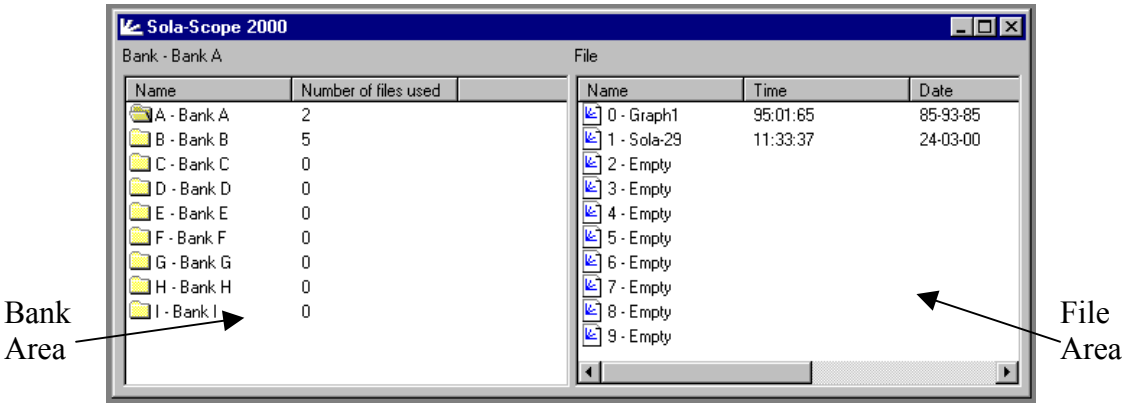
- If you have not already opened the ***Options window***, open it by selecting ***Options*** from the ***Sola-Scope Menu***.
- Ensure that you have selected ***Sola-Scope 2000/Sola-Scope 1*** in the ***Select attached product*** frame. For information on using a Sola-Hazard with Sola-Term 2000 see the Using a Sola-Hazard with Sola-Term 2000 chapter later.
- Click the up and down buttons next to the detect button to change the COM port. This will allow you to set the COM port to a number higher than 4.

7.2 Other options

The other option in the options window is “Ask if you want to refresh the Sola-Scope 2000s file listing when the program is first started”, this allows you to turn on and off the “Refresh file listing” message that appears when you first run the program.

Once you have finished click the ***OK*** button to confirm the changes, or ***Cancel*** to discard the changes made.

8 The Sola-Scope 2000 Window



The ***Sola-Scope 2000 Window*** displays a list of the files stored on your Sola-Scope 2000. It is split into two sections; on the left there is a list of the banks available and on the right a list of the files in the current bank you are viewing. The ***Open Folder icon*** in the bank section indicates the bank that is currently being viewed.

8.1 Refreshing the Bank and File Listings

This assumes that the Sola-Scope 2000 is plugged into the PC correctly.

8.1.1 Using the Refresh Icon

- If the ***Sola-Scope 2000 Window*** is not currently active select it by clicking anywhere in the ***Sola-Scope 2000 Window***.
- Click the ***Refresh Icon*** on the toolbar or select the ***Refresh menu item*** from the ***Sola-Scope Menu*** and the Bank and File lists will refresh.

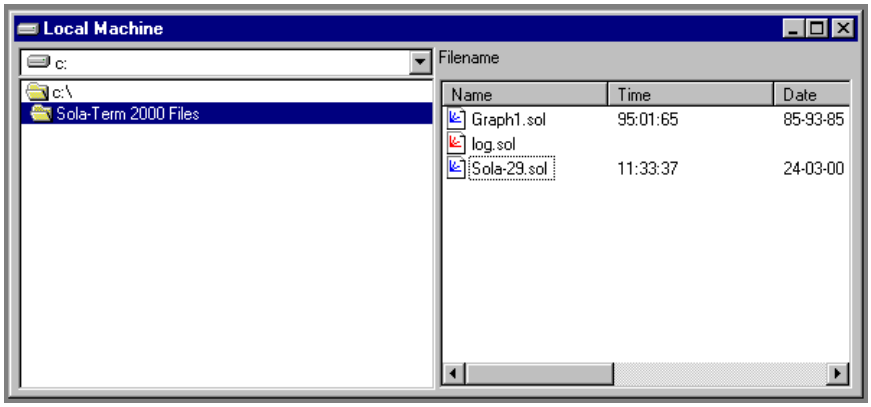
8.1.2 Using the keyboard shortcuts

- If the ***Sola-Scope 2000 Window*** is not currently active select it by clicking anywhere in the ***Sola-Scope 2000 Window***.
- Either press F5 or hold down CTRL and press R. The Bank and File lists will refresh.

8.2 Changing Banks

- Double click on the bank that you want to change to and Sola-Term 2000 will automatically update the File list.

9 The Local Machine Window



The ***Local Machine Window*** displays the folder structure of your hard disk and the files that you have downloaded from your Sola-Scope 2000 to your PC. It is split in a similar way to the ***Sola-Scope 2000 Window*** with the file area on the right and the folder area on the left, the main difference is that the folder area has a drive selection drop-down list above it to allow you to change the drive you are viewing.

9.1 Refreshing the Folder and File Listings

9.1.1 Using the Refresh Icon

- If the ***Local Machine Window*** is not currently active select it by clicking anywhere in the ***Local Machine Window***.
- Click the ***Refresh Icon*** on the toolbar or select the ***Refresh menu item*** from the ***Sola-Scope Menu*** and the Folder and File lists will refresh.

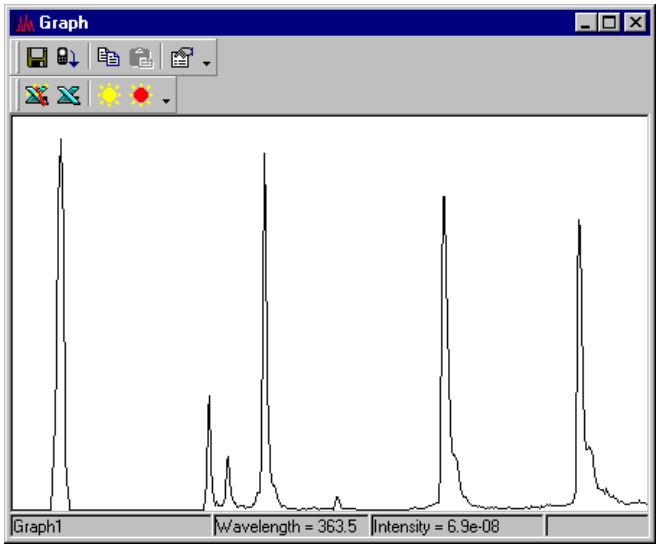
9.1.2 Using the keyboard shortcuts

- If the ***Local Machine Window*** is not currently active select it by clicking anywhere in the ***Local Machine Window***.
- Either press F5 or hold down CTRL and press R. The Folder and File lists will refresh.

9.2 Changing Folders

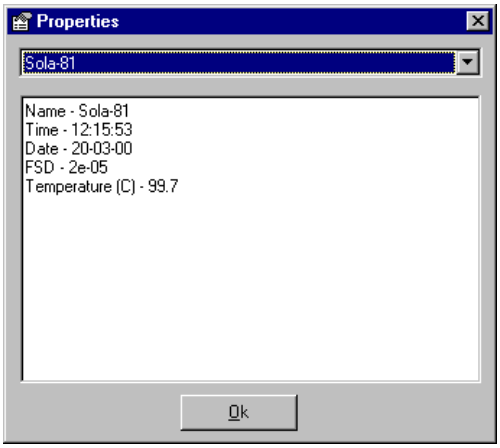
- Double click on the folder that you want to change to and Sola-Term 2000 will automatically update the File list.

10 The Graph Window



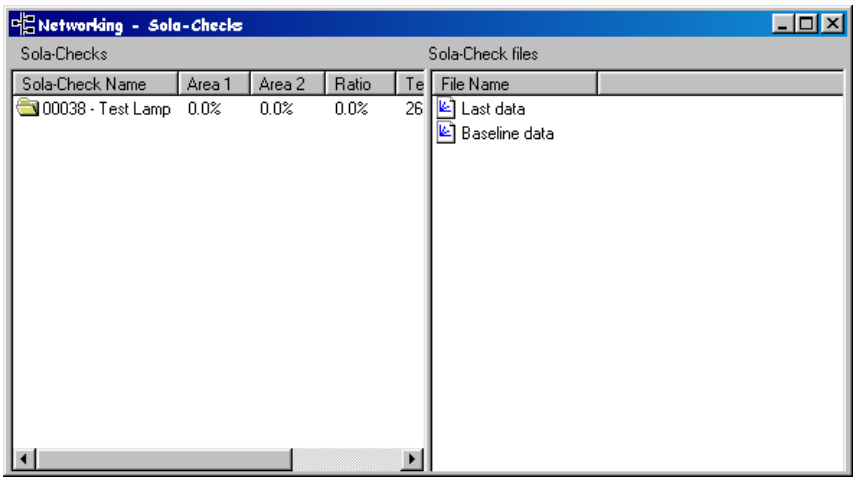
The ***Graph window*** displays the data currently loaded in Sola-Term 2000. Using the mouse pointer you are able to trace the graph by moving it from left to right. This will display the wavelength corresponding to the current horizontal position of the mouse pointer and it's associated intensity. If you have more than one graph displayed in the graph window, you can tell which graph the data refers to by looking at the graph name, displayed to the left of the Wavelength and intensity information.

10.1 Graph Properties Window



Clicking on the ***Properties icon*** in the ***Graph window*** opens the ***Graph Properties window***. This window displays the information about the graph that has its name displayed in the drop down list at the top of the window. It can be used to determine when the scan took place, what the temperature was at the time of the scan, etc…

11 The Networking View Window



The ***Networking View Window*** displays a list of the Sola-Checks/Sola-Sensor 2000s on the network and the two files stored on the current Sola-Check/Sola-Sensor 2000. The window is split into two sections; on the left there is a list of the Sola-Checks/Sola-Sensor 2000s available and on the right a list of the files in the current Sola-Check/Sola-Sensor 2000 you are viewing. The ***Open Folder icon*** in the bank section of the window shows the Sola-Check/Sola-Sensor 2000 that is currently being viewed. The ***Selected Folder Icon*** indicates the Sola-Check/Sola-Sensor 2000 that is currently selected.

11.1 Refreshing the Sola-Check/Sola-Sensor 2000 and File Listings

This assumes that the Sola-Scope 2000 is plugged into the PC correctly and the network has been initialised correctly.

11.1.1 Using the Refresh Icon

- If the ***Networking View Window*** is not currently active, select it by clicking anywhere in the ***Networking view Window***.
- Click the ***Refresh Icon*** on the toolbar or select the ***Refresh menu item*** from the ***Sola-Scope Menu*** and the Sola-Check/Sola-Sensor 2000 file lists will refresh.

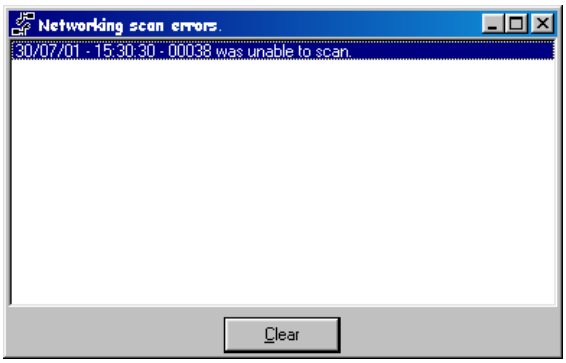
11.1.2 Using the keyboard shortcuts

- If the ***Networking View Window*** is not currently active select it by clicking anywhere in the ***Networking View Window***.
- Either press F5 or hold down CTRL and press R and the Sola-Check/Sola-Sensor 2000s file lists will refresh.

11.2 Changing Sola-Checks/Sola-Sensor 2000s

- Double click on the Sola-Check/Sola-Sensor 2000 that you want to change to and Sola-Term 2000 will automatically update the lists.

12 The Networking Errors Window



The ***Networking Errors Window*** displays a list of errors that have occurred on the network during the current run.

12.1 Clearing the list of errors

To clear the list of errors click on the ***Clear Button*** at the bottom of the window and the list will be cleared.

13 Downloading data from the Sola-Scope 2000 to Sola-Term 2000

There are several methods for downloading data from the Sola-Scope 2000 into Sola-Term 2000, most of which are similar to the methods you would find when using the software you use every day.

13.1 Loading the file into the Graph Window

Opening a file in the ***Graph Window*** from the Sola-Scope 2000 can be performed in the following ways.

13.1.1 Using the Open Icon

- If you have not already opened the ***Sola-Scope 2000 window***, click on ***the Sola-Scope 2000 Window icon*** and refresh the file list by either clicking the ***Refresh icon***, pressing F5 or CTRL-R.
- Select the file or files you want to open.
- Click the ***Open icon*** and the file will be downloaded and shown in ***the Graph window***.

13.1.2 Double clicking

- If you have not already opened the ***Sola-Scope 2000 window***, click on ***the Sola-Scope 2000 window icon*** and refresh the file list by either clicking the ***Refresh icon***, pressing F5 or CTRL-R.
- Double click on the file you want to open in the ***Graph window***.

13.1.3 Dragging and dropping

- If you have not already opened the ***Sola-Scope 2000 window***, click on the ***Sola-Scope 2000 Window icon*** and refresh the file list by either clicking the ***Refresh icon***, pressing F5 or CTRL-R.
- Select the file or files you want to open.
- Drag the file you want to open from the ***Sola-Scope 2000 window*** and drop it on the ***graph area*** of the ***Graph window***.

13.2 Saving a file to disk

Saving a file from the Sola-Scope 2000 can be performed in the following ways.

13.2.1 Using the Save Icon

- If you have not already opened the ***Sola-Scope 2000 window***, click on the ***Sola-Scope 2000 Window icon*** and refresh the file list by either clicking the ***Refresh icon***, pressing F5 or CTRL-R.
- Select the file or files you wish to save.
- Click the ***Save icon*** and a dialog will appear asking you for a file name. After clicking ***Save button*** in the dialog box, the file(s) will be downloaded and saved to disk.

13.2.2 Dragging and dropping

- If you have not already opened the ***Sola-Scope 2000 window***, click on the ***Sola-Scope 2000 Window icon*** and refresh the file list by either clicking the ***Refresh icon***, pressing F5 or CTRL-R.
- Select the file or files you wish to save.
- Drag the file(s) you want to save from the ***Sola-Scope 2000 window*** and drop it on the file area of the ***Local Machine window***.
- A dialog will appear asking you for a file name. After clicking ***Save*** button in the dialog box, the file will be downloaded and saved to disk.

13.3 Sending a file to Excel.

Sending a file to Excel from the Sola-Scope 2000 can be performed in the following ways.

13.3.1 Using the Excel - Single Graph Icon

- If you have not already opened the ***Sola-Scope 2000 window***, click on the ***Sola-Scope 2000 Window icon*** and refresh the file list by either click the ***Refresh icon***, pressing F5 or CTRL-R.
- Select the file or files you wish to send to Excel.
- Click the ***Excel – Single Graph Icon***.
- If Excel is not started you will be prompted if you wish to start Excel or not. Select the ***Yes*** Button, a progress indicator will appear and your data will be transferred to Excel.

13.3.2 Using the Excel - Separate Graph Icon

- If you have not already opened the ***Sola-Scope 2000 window***, click on the ***Sola-Scope 2000 Window icon*** and refresh the file list by either clicking the ***Refresh icon***, pressing F5 or CTRL-R.
- Select the file or files you wish to send to Excel.
- Click the ***Excel – Separate Graph Icon***.
- If Excel is not started you will be prompted if you wish to start Excel or not. Select the ***Yes*** Button, a progress indicator will appear and your data will be transferred to Excel.

13.3.3 Using the Excel Wizard Icon

- If you have not already opened the ***Sola-Scope 2000 window***, click on the ***Sola-Scope 2000 Window icon*** and refresh the file list by either clicking the ***Refresh icon***, pressing F5 or CTRL-R.
- Select the file or files you wish to send to Excel.
- Click the ***Excel Wizard Icon***.
- If Excel is not started you will be prompted if you wish to start Excel or not. Select the ***Yes*** Button, the Excel wizard will now start, follow the instructions given in the “The Excel Wizard” section later.

13.4 Copying a file from the Sola-Scope 2000 to the system clipboard.

13.4.1 Using the Copy Icon

- If you have not already opened the Sola-Scope 2000 window, click on the ***Sola-Scope 2000 Window icon*** and refresh the file list by either clicking the ***Refresh Icon***, pressing F5 or CTRL-R.
- Select the file or files you want to copy to the system clipboard.
- Click the ***Copy icon*** and the file will be downloaded and copied to the system clipboard.

13.4.2 Using the keyboard shortcut

- If you have not already opened the Sola-Scope 2000 window, click on the ***Sola-Scope 2000 Window icon*** and refresh the file list by either clicking the ***Refresh Icon***, pressing F5 or CTRL-R.
- Select the file or files you want to copy to the system clipboard.
- Hold down CTRL and press C and the file will be downloaded and copied to the system clipboard.

14 Uploading data from Sola-Term 2000 to the Sola-Scope 2000

14.1 Uploading data from the Local Machine Window

- If you have not already opened the ***Sola-Scope 2000 window***, click on the ***Sola-Scope 2000 Window icon*** and refresh the file list by either clicking the ***Refresh icon***, pressing F5 or CTRL-R.
- In the ***Sola-Scope 2000 Window*** change to the bank you want to upload the file into.
- Find the file you want to upload in the ***Local Machine Window***.
- Drag the file you want to upload from the ***Local Machine Window*** and drop it onto the files in the ***Sola-Scope 2000 Window*** you want the data to be stored in.
- The data will now be uploaded to the specified file.

14.2 Uploading data from the Graph Window

- If you have not already opened the ***Sola-Scope 2000 window***, click on the ***Sola-Scope 2000 Window icon*** and refresh the file list by either clicking the ***Refresh icon***, pressing F5 or CTRL-R.
- In the ***Sola-Scope 2000 Window*** change to the bank you want to upload the file into.
- Open the ***Graph Window***.
- Drag the graph from the ***Graph Window*** and drop it onto the file in the ***Sola-Scope 2000 Window*** you want the data to be stored in.
- The data will now be uploaded to the specified file.

Note – This will only work if you have data in the ***Graph Window***, if you do not then an error message will appear.

14.3 Uploading data from the System Clipboard

- If you have not already opened the ***Sola-Scope 2000 window***, click on the ***Sola-Scope 2000 Window icon*** and refresh the file list by either clicking the ***Refresh icon***, pressing F5 or CTRL-R.
- In the ***Sola-Scope 2000 Window*** change to the bank you want to upload the file into.
- In the ***Sola-Scope 2000 Window*** select the file you want to upload the data into.
- Click on the ***Paste Icon*** or press CTRL-V and the data will be uploaded.

Note – If there is no valid data on the System Clipboard then the ***Paste Icon*** will not be enabled and the keyboard shortcuts will not work.

15 Using files that are already stored on your hard disk

15.1 Loading the file into the Graph Window

- If you have not already opened the ***Local Machine window***, click on the ***Local Machine Window icon***.
- Locate the file you want to open in the ***Graph Window*** and either select it and click on the ***Open Icon***, or double click on the ***file icon***.

15.2 Sending a file to Excel.

15.2.1 Using the Excel - Single Graph Icon

- If you have not already opened the ***Local Machine window***, click on the ***Local Machine Window icon***.
- Select the ***file*** or ***files*** you wish to send to Excel.
- Click the ***Excel -Single Graph Icon***.
- If Excel is not started you will be prompted if you wish to start Excel or not. Select the ***Yes Button*** and your data will be transferred to Excel.

15.2.2 Using the Excel - Separate Graph Icon

- If you have not already opened the ***Local Machine window***, click on the ***Local Machine Window icon***.
- Select the ***file*** or ***files*** you wish to send to Excel.
- Click the ***Excel -Separate Graph Icon***.
- If Excel is not started you will be prompted if you wish to start Excel or not. Select the ***Yes Button*** and your data will be transferred to Excel.

15.2.3 Using the Excel Wizard Icon

- If you have not already opened the ***Local Machine window***, click on the ***Local Machine Window icon***.
- Select the ***file*** or ***files*** you wish to send to Excel.
- Click the ***Excel Wizard Icon***.
- If Excel is not started you will be prompted if you wish to start Excel or not. Select the ***Yes Button***, the Excel wizard will now start, follow the instructions given in the "The Excel Wizard" section later.

15.3 Copying a file from the Local Machine Window to the system clipboard.

- If you have not already opened the ***Local Machine window***, click on the ***Local Machine Window icon***.
- Locate the file you want to copy to the system clipboard and click on the ***Copy Icon***.

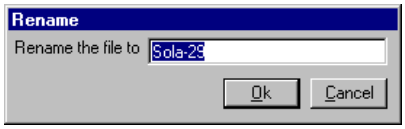
16 File Management

This section applies to both the ***Sola-Scope 2000 Window*** and the ***Local Machine Window***; any differences in operation will be detailed in the explanation of the operation.

16.1 Deleting a file

- Select the file you want to delete.
- Either press the Delete key or select the ***File menu*** and click on the ***Delete menu item***.

16.2 Renaming a file



- Select the file or bank you want to rename.
- Open the ***File menu*** and click on the ***Rename menu item***.
- Change the name in the text box to the new name for the file or bank.
- Click on the ***Ok button*** and the file/bank will be renamed.

16.3 Copying Files

To copy files you can either drag them from one window and drop them into another or in the ***Sola-Scope 2000 Window*** you can drag one file onto another.

17 Sending Data To Excel And The Excel Wizard

17.1 Sending data without using the wizard

To send data to Excel without using the wizard two icons are provided, these are the ***Excel – Single Graph Icon*** and the ***Excel – Separate Graph Icon***. Instructions on the use of these icons is detailed in earlier chapters.

17.2 Using the Excel Wizard

The Excel Wizard is designed to give you the user more control over how data is transferred to Excel. Although there are several different methods for selecting the data that will be used in the Wizard, there are only two different paths through the Wizard. This is dependant on the number of files you are transferring to Excel.

17.2.1 Sending data from single files to Excel with the Wizard

17.2.1.1 Step 1 – Selecting the Workbook and Worksheet

Step 1 in the Excel Wizard is used to select the Workbook and Worksheet you want your data to be transferred into.

17.2.1.1.1 Changing the Workbook

- Click the down arrow on the right hand side of the combo box, this will display a list of available Workbooks.
- Either select one of the existing Workbooks from the list or select New to create a new Workbook.

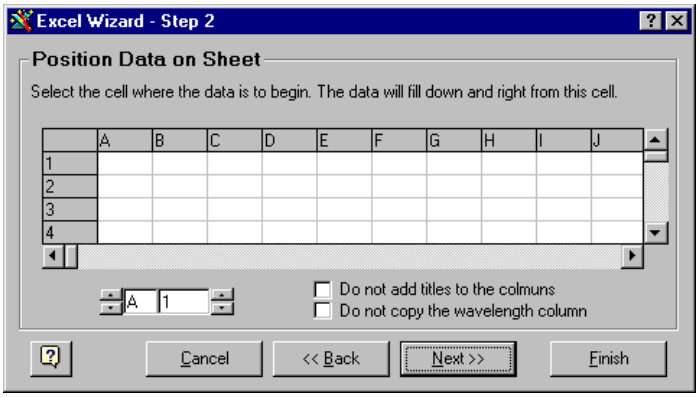
17.2.1.1.2 Changing the Worksheet

- Click the down arrow on the right hand side of the combo box, this will display a list of available Worksheets.
- Select one of the existing Worksheets from the list.

(NOTE – Changing the Workbook will change the list of available Worksheets)

Click the ***Next Button*** to progress to the next stage of the Wizard.

17.2.1.2 Step 2 – Selecting the Position where the data will be placed on the Worksheet



Step 2 of the Excel Wizard is used to select the position on the Worksheet where the data is going to be placed and some options about which sections of the data are to be transferred.

17.2.1.2.1 Selecting the data position

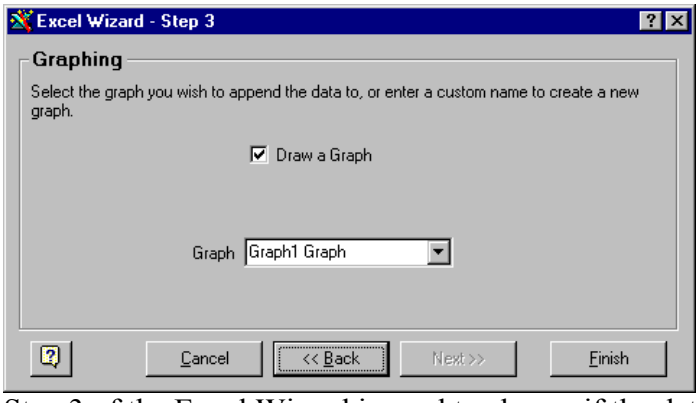
- You can use the up-down controls on either side of the text boxes displaying the cell co-ordinates to alter the position of the data.
- Alternatively you can click on one of the cells in the preview window and the cell co-ordinates in the text boxes will change.

17.2.1.2.2 Altering the data transfer options

- To not transfer the title (header) information to Excel select the ***Do not add titles to the columns*** check box.
- To not transfer the Wavelength Column to Excel select the ***Do not copy the wavelength column*** check box.

Click the ***Next Button*** to progress to the next stage of the Wizard.

17.2.1.3 Step 3 – Graphing options



Step 3 of the Excel Wizard is used to choose if the data is graphed or not.

17.2.1.3.1 To not draw a graph of the data

- To not draw a graph, make sure the ***Draw a Graph*** check box is not ticked.

17.2.1.3.2 To draw a graph

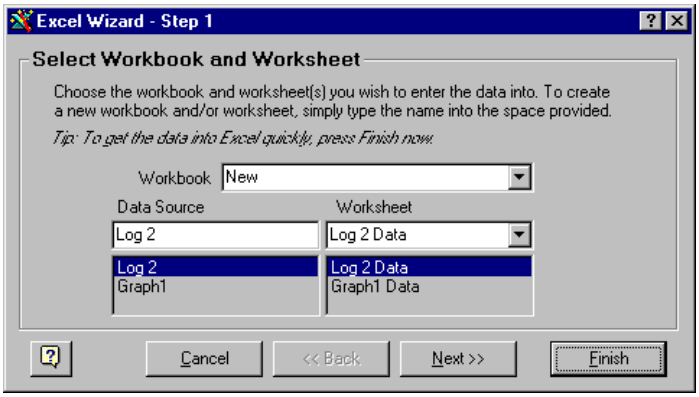
- Make sure the ***Draw a Graph*** check box is ticked.

- Select the name of an existing graph to add the data to that graph or type in a name of a graph that does not exist and a new graph will be created.

Click the ***Finish Button*** and the data will be transferred to Excel.

17.2.2 Sending data from multiple files to Excel with the Wizard

17.2.2.1 Step 1



Step 1 in the Excel Wizard is used to select the Workbook and Worksheet you want your data to be transferred into.

17.2.2.1.1 Changing the Workbook

- Click the down arrow on the right hand side of the combo box, this will display a list of available Workbooks.
- Either select one of the existing Workbooks from the list or select New to create a new Workbook.

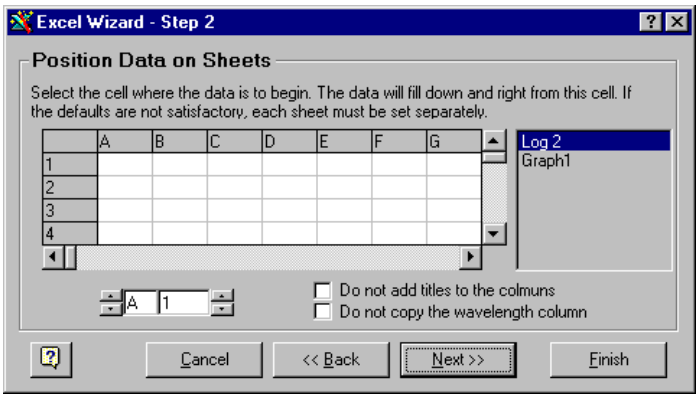
17.2.2.1.2 Changing the Worksheet

- Select one of the Data sets by clicking on one in the Data Source list located below the text box on the left-hand side of the window.
- Click the down arrow on the right hand side of the Worksheets combo box, this will display a list of available Worksheets.
- Select one of the existing Worksheets from the list.
- Repeat this for each of your data sets.

(NOTE – Changing the Workbook will change the list of available Worksheets)

Click the ***Next Button*** to progress to the next stage of the Wizard.

17.2.2.2 Step 2



Step 2 of the Excel Wizard is used to select the position on the Worksheet where the data is going to be placed and some options about which sections of the data are to be transferred.

17.2.2.2.1 Selecting the data position

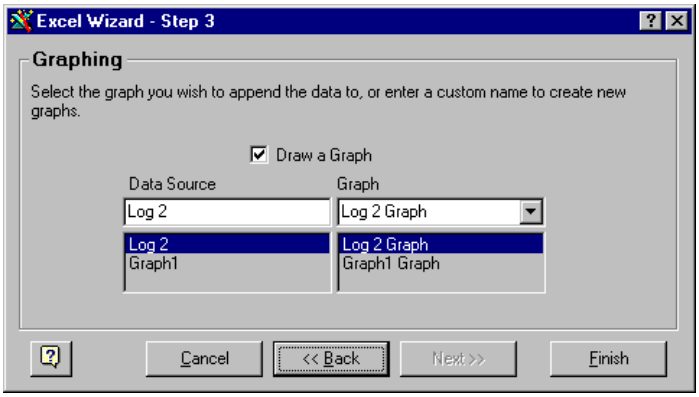
- Select one of the Data sets by clicking on one in the Data Source list located on the right-hand side of the window.
- You can use the up-down controls on either side of the text boxes displaying the cell co-ordinates to alter the position of the data.
- Alternatively you can click on one of the cells in the preview window and the cell co-ordinates in the text boxes will change.
- Repeat this for each of your data sets.

17.2.2.2.2 Altering the data transfer options

- To not transfer the title (header) information to Excel select the ***Do not add titles to the columns*** check box.
- To not transfer the Wavelength Column to Excel select the ***Do not copy the wavelength column*** check box.

Click the ***Next Button*** to progress to the next stage of the Wizard.

17.2.2.3 Step 3



Step 3 of the Excel Wizard is used to choose if the data is graphed or not.

17.2.2.3.1 To not draw a graph of the data

- To not draw a graph, make sure the ***Draw a Graph*** check box is not ticked.

17.2.2.3.2 To draw a graph

- Make sure the ***Draw a Graph*** check box is ticked.
- Select one of the Data sets by clicking on one in the Data Source list located below the text box on the left-hand side of the window.
- Select the name of an existing graph to add the data to that graph or type in a name of a graph that does not exist and a new graph will be created.
- Repeat this for each of your data sets.

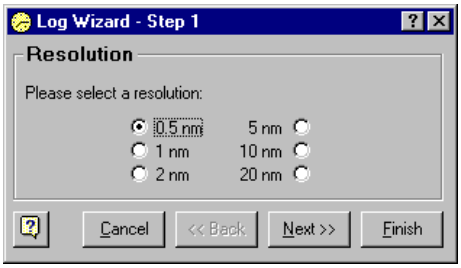
Click the ***Finish Button*** and the data will be transferred to Excel.

18 The Logging Wizard

(NOTE - The Logging Wizard will not alter the Intensity of the scan that is set on the Sola-Scope 2000 so this must be set on the Sola-Scope 2000 to ensure that the scan does not saturate)

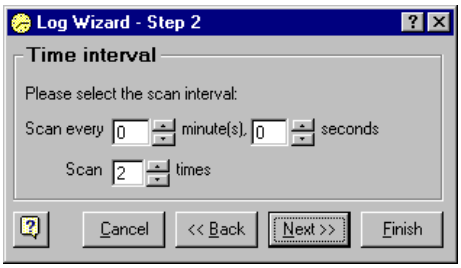
18.1 Using the Wizard

18.1.1 Step 1



The first step in the Wizard allows you to select the resolution of the scan. This calculation is performed on the PC and will not effect the sample time of the scan.
Once you have selected a resolution click the ***Next Button*** to continue.

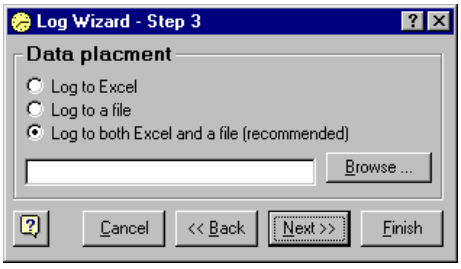
18.1.2 Step 2



The second step in the Wizard allows the interval between scans and the number of scans to be set. The number of scans can range from 2 to 20 and the interval from 0 seconds to 1000 minutes.
It is possible to alter the scan interval and number of scans by either using the up-down controls next to the text boxes or by typing the values directly into the text boxes.
Once you have selected the scan interval and number of scans required click the ***Next Button*** to continue.

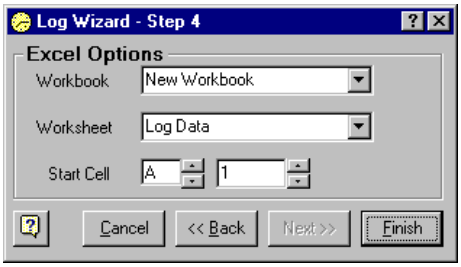
(NOTE - if the Sola-Scope 2000 has a sample time that is longer that the interval set between scans then the Logging Wizard will start the next scan as quickly as it can after the previous scan has finished.)

18.1.3 Step 3



The third step in the Logging Wizard allows you to set where the data from the scans is to be placed. It is possible to save the data to a file, send it to Excel or do both. Choosing to save the data to a file will require you to specify a filename; this can be accomplished by clicking on the ***Browse… button*** to open a standard save dialog or by typing the filename into the textbox at the bottom of the window.
If you have chosen not to send the data to Excel then you can now click the ***Finish button*** and Sola-Term 2000 will start the logging process.
If you have chosen to send the data to Excel then click the ***Next button*** to continue with the wizard.

18.1.4 Step 4



The final step in the Logging Wizard allows you to specify the Workbook, Worksheet and Start Cell the data should be placed when it is sent to Excel. The Workbook and Worksheets can be changed by either typing a name into their drop-down boxes or by selecting an entry from the respective drop-down list.
The Start Cell can be changed by either typing the cell reference into the two text boxes or by using the up down controls.
Once you have set the required Workbook, Worksheet and Start Cell click the ***Finish button*** and Sola-Term 2000 will start the logging process.

19 Miscellaneous Options

19.1 Icon Views

In the ***Sola-Scope 2000 Window***, ***Local Machine Window***, ***Networking Window*** you have the choice of four different styles of icons, ***Large Icons***, ***Small Icons***, ***List*** and ***Details***. Selecting the relevant button from the toolbar or selecting the ***menu item*** from the ***View menu*** can switch between these views.

19.2 Tile Horizontally

Selecting ***Tile Horizontally*** from ***Window menu*** will arrange the windows you have open in the ***Main Window*** in a horizontal pattern.

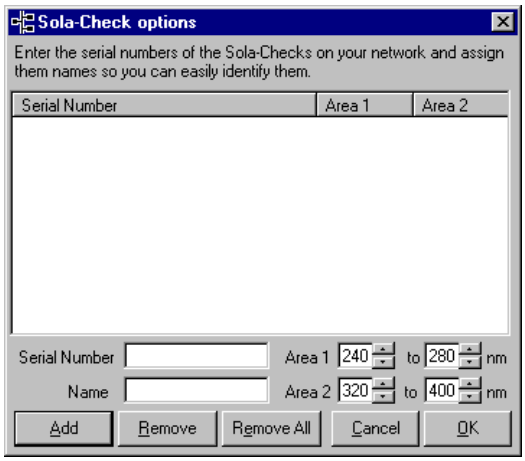
19.3 Tile Vertically

Selecting ***Tile Vertically*** from ***Window menu*** will arrange the windows you have open in the ***Main Window*** in a vertical pattern.

20 Networking

20.1 Configuring And Starting Your Network

Before you can use your network of Sola-Checks and/or Sola-Sensor 2000s you must configure the network.



20.1.1 Adding Sola-Checks/Sola-Sensor 2000s to the Network

- Enter the Serial Number of the Sola-Check/Sola-Sensor 2000 into the ***Serial Number Text Box***. (The serial number can be found on the back of your Sola-Check/Sola-Sensor 2000.)
- Enter a name in the ***Name Text Box*** to identify the Sola-Check/Sensor 2000. (This name is only used within Sola-Term 2000 to make identification of the Sola-Check/Sola-Sensor 2000 easier and has no effect on the running of the network.)
- Set the wavelength ranges for the areas by either using the up-down controls to the left of each of the ***Area Text Boxes***, or by editing the ***Area Text Boxes*** by clicking on them and typing in values.
- Click the ***Add Button*** and the Sola-Check/Sola-Sensor 2000 details will be entered into the list of Sola-Checks/Sola-Sensor 2000s that will be initialised when the network starts.

20.1.2 Removing Sola-Checks/Sola-Sensor 2000s from the Network

20.1.2.1 Removing a Single Sola-Check/Sola-Sensor 2000

- Select the serial number of the Sola-Check/Sola-Sensor 2000 in the ***Serial Numbers List*** that you want to remove from the network.
- Click the ***Remove Button***.
- A dialog box will appear asking for confirmation of the removal of the Sola-Check/Sola-Sensor 2000 from the network, click the ***Yes Button*** and the Sola-Check/Sola-Sensor 2000 will be removed from the ***Serial Number List***.

20.1.2.2 Removing all of the Sola-Checks/Sola-Sensor 2000s

- Click the ***Remove All Button***, a dialog box will appear asking you to confirm that you want to remove all of the Sola-Checks/Sola-Sensor 2000s
- Click the ***Yes Button*** and all of the Sola-Checks/Sola-Sensor 2000s will be removed from the List.

20.1.3 Starting the Network

Once you have added all of the Sola-Checks/Sola-Sensor 2000s that you require on the network click on the ***OK Button*** and after some initialising screens a dialog will appear informing you that your network has been started.

If you enter a serial number of a Sola-Check/Sola-Sensor 2000 that is not on the network then a warning message will appear informing you of this.

If the network fails to start then an error message will appear, you should check that all of the connecting leads are linked correctly and attempt to start the network again.

20.2 Once the Network is Running

20.2.1 Scanning an individual Sola-Check/Sola-Sensor 2000

- Select a Sola-Check/Sola-Sensor 2000 from the ***Sola-Checks List***. The selected check should now have the ***Selected Folder Icon*** representing it.
- Click on either of the ***Scan Icons*** and the selected Sola-Check/Sola-Scope 2000 will scan.

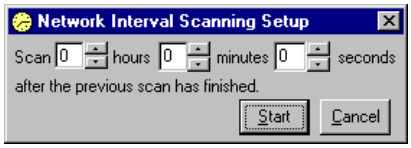
Note – if an error occurs during the scanning or the scan was unable to start then the error message will appear in the ***Networking Errors Window***.

20.2.2 Setting the baseline on a Sola-Check/Sola-Sensor 2000

- Select a Sola-Check/Sola-Sensor 2000 from the ***Sola-Checks List***. The selected check should now have the ***Selected Folder Icon*** representing it.
- Click on the ***Set Baseline Icon*** and the baseline will be set on the selected Sola-Check/Sola-Sensor 2000.

20.2.3 Network Monitoring

20.2.3.1 Starting Network Monitoring



- Click on the ***Network Monitoring Icon*** and the ***Network Interval Scanning Setup Window*** will appear.
- Set the time interval between the scans by either editing the text boxes directly or by using the Up-Down Controls to the right of each text box.
- Click the ***Start Button*** and the Sola-Term 2000 will start monitoring the Network.

20.2.3.2 Stopping Network monitoring

Click on the ***Network Monitoring Icon*** while monitoring is running and Sola-Term 2000 will stop monitoring the Network.

20.2.4 Logging an individual Sola-Check/Sola-Sensor 2000 on the Network.

- Select a Sola-Check/Sola-Sensor 2000 from the ***Sola-Checks List***. The selected check should now have the ***Selected Folder Icon*** representing it.

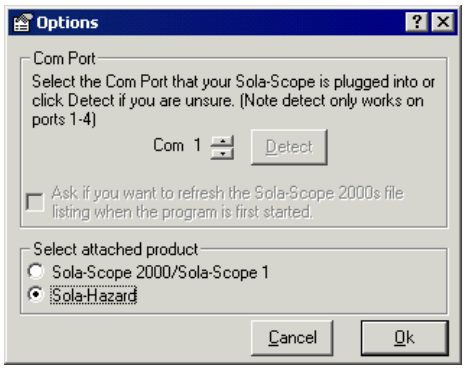
- Click on the ***Log Icon*** and the Logging Wizard should start, you can now follow the Logging Wizard as described in the Logging Wizard chapter earlier.

21 Using a Sola-Hazard with Sola-Term 2000

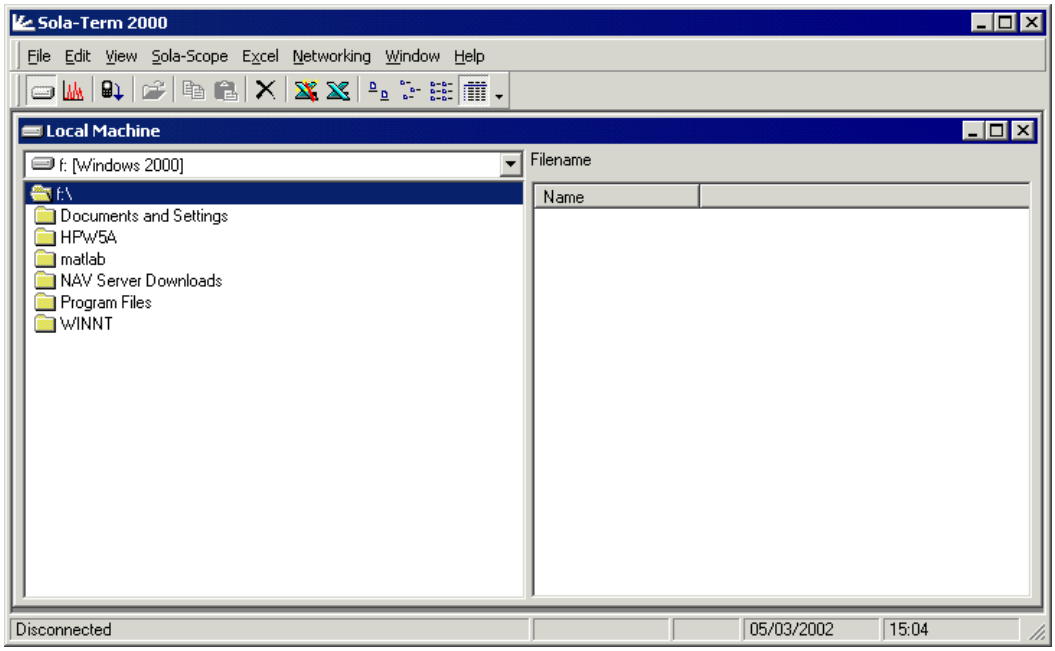
(NOTE - Only Sola-Term 2000 versions 3.1.5 and above can be used to communicate with a Sola-Hazard.)

21.1 Configuring Sola-Term 2000 for use with a Sola-Hazard.

- Open the ***Options*** window by clicking on ***Options*** menu item under the ***Sola-Scope*** menu in the main ***Sola-Term 2000*** window.



- Under the ***Select attached product*** frame select the ***Sola-Hazard*** option. This will grey out the ***Detect*** button and ***Ask if you want…*** controls above.
- Using the up and down buttons next to the Com port number select the Com port that you have attached the Sola-Hazard to.
- Click the ***Ok*** button and if Sola-Term 2000 was not already set to communicate with a Sola-Hazard then a message box will appear asking if you only want to show the relevant toolbars.
- Click the Yes button in the dialog and Sola-Term 2000 will be configured to work with a Sola-Hazard; the main window will now look like the picture below.



21.2 Receiving a file or banks from a Sola-Hazard

There are two ways to prepare Sola-Term 2000 to receive data from a Sola-Hazard.

21.2.1 Using the Receive File icon

- Click the Receive File icon on the tool bar and the downloading data window will appear.
- You can now start the Sola-Hazard sending the file or bank(s). Refer to your Sola-Hazard manual if you are unsure how to do this.

21.2.2 Using the keyboard shortcut

- Hold down the CTRL key and press the D key and the downloading data window will appear.
- You can now start the Sola-Hazard sending the file or bank(s). Refer to your Sola-Hazard manual if you are unsure how to do this.

21.3 Sola-Hazard file format differences.

There are two differences between the standard Sola-Term 2000 file format and the file format Sola-Term 2000 uses when a file is downloaded from a Sola-Hazard.

1. The file has an extra header called Source that indicates where the file came from. This can be used to easily identify where a file originated.
2. The intensity units of the scan data are stored in $W/m^2/nm$ instead of $W/cm^2/nm$. This is due to the Sola-Hazard file format using $W/m^2/nm$ and removes the need to convert the data when comparing with data downloaded from older versions of Sola-Term.

21.4 Sending data to Excel differences.

As the Sola-Hazard version of the Sola-Term 2000 file format is in $W/m^2/nm$ the data transferred to Excel is also measured in $W/m^2/nm$. This means that the label on the Y-axis of the graph (if plotted by Sola-Term 2000) will be incorrect as it displays $W/cm^2/nm$ instead of $W/m^2/nm$.

22 Error Messages

The following is a list of the most common error messages you may encounter when using Sola-Term 2000. It details the cause, the meaning and the solution of the error message and the severity of the error.

There are two different types severity for an error message, Minor and Major. Error messages that have a Minor severity are messages indicating that you have made a mistake, for example not plugging in the connecting lead from the Sola-Scope 2000 to the PC. Error messages that are classed as Major, indicate that something has gone wrong with Sola-Term 2000 and although the software can cope with this, it is advised that you restart Sola-Term 2000.
If you do encounter an error message that is classed as having a Major severity then check the Solatell web site to see if there is an updated version of Sola-Term 2000 that may solve your problem, if there is not please contact Solatell and report the error so we can fix it as quickly as possible.

Error Message	No Sola-Scope 2000 found.
Severity	Minor
Operation	Any that evolves communication between Sola-Term 2000 and the Sola-Scope 2000
Meaning	This error indicates that there was a communications problem between Sola-Term 2000 and the Sola-Scope 2000.
Cause and Solution	Many including – 1. **Cause** – The connecting lead (the RS232 lead) that links the Sola-Scope 2000 to the PC is not connected to either the PC, the Sola-Scope 2000 or both. **Solution** – Make sure that the connecting lead is plugged firmly into both the Sola-Scope 2000 and the PC. 2. **Cause** – Sola-Term 2000 is configured to use a different communications port to the communication port that the connecting lead is plugged into. **Solution** – Alter the communications port that Sola-Term 2000 is using, see the "Configuring Sola-Term 2000 - The Options Window" section earlier in the manual for details of how to do this. 3. **Cause** – The communications port is being used by another program. **Solution** – This is unlikely to happen but there are two solutions, the first is to stop the program that is using the communications port from using it. The second is to change the communications port that you are using to connect your Sola-Scope 2000 (ie. Move the connecting lead to another communications port) and alter the communication port settings in Sola-Term 2000. 4. **Cause** – You have configured Sola-Term 2000 to use a communications port that does not exist. **Solution** – Alter the communications port that Sola-Term 2000 is using, see the "Configuring Sola-Term 2000 - The Options Window" section earlier in the manual for details of how to do this

Error Message	An unknown error has occurred, it is advised you restart Sola-Term 2000
Severity	Major
Operation	Any
Meaning	An error has occurred that was not expected.
Cause and Solution	N/A

23 Index

1 Trademarks and Acknowledgements 1
2 Contents 2
3 What is Sola-Term 2000 3
4 Key to notations in this manual. 4
5 Icons 5
5.1 Standard icons (Level 1) 5
5.1.1 Folder 5
5.1.2 Open Folder 5
5.1.3 Sola-Tell File 5
5.1.4 Sola-Tell Bank File 5
5.1.5 Sola-Tell Corrupt File 5
5.1.6 Large Icons View 5
5.1.7 Small Icons View 5
5.1.8 List View 5
5.1.9 Details View 5
5.1.10 Open 5
5.1.11 Save 6
5.1.12 Delete 6
5.1.13 Copy 6
5.1.14 Paste 6
5.1.15 Refresh 6
5.1.16 Properties 6
5.1.17 Local Machine Window 6
5.1.18 Sola-Scope 2000 Window 6
5.1.19 Graph Window 6
5.1.20 Receive File 6
5.1.21 Help 6
5.2 Excel and Logging Icons (Level 2) 6
5.2.1 Logging 6
5.2.2 Excel – Single Graph 7
5.2.3 Excel Wizard 7
5.2.4 Excel – Separate Graphs 7
5.2.5 Scan 7
5.3 Networking Icons (Level 3) 7
5.3.1 Networking View Window 7
5.3.2 Networking Errors Window 7
5.3.3 Set Baseline 7
5.3.4 /Selected Folder 7
5.3.5 Network Monitoring 7
5.3.6 Permanent Coms 7
5.3.7 Set FSD 7
6 The Main Window 8
7 Configuring Sola-Term 2000 - The Options Window 9
7.1 Configuring the Communications port 9
7.1.1 Using the Detect button with Sola-Scope 2000s. 9

7.1.2 Select the Com port manually 9
7.2 Other options 10
8 The Sola-Scope 2000 Window 11
8.1 Refreshing the Bank and File Listings 11
8.1.1 Using the Refresh Icon 11
8.1.2 Using the keyboard shortcuts 11
8.2 Changing Banks 11
9 The Local Machine Window 12
9.1 Refreshing the Folder and File Listings 12
9.1.1 Using the Refresh Icon 12
9.1.2 Using the keyboard shortcuts 12
9.2 Changing Folders 12
10 The Graph Window 13
10.1 Graph Properties Window 13
11 The Networking View Window 14
11.1 Refreshing the Sola-Check/Sola-Sensor 2000 and File Listings 14
11.1.1 Using the Refresh Icon 14
11.1.2 Using the keyboard shortcuts 14
11.2 Changing Sola-Checks/Sola-Sensor 2000s 14
12 The Networking Errors Window 15
12.1 Clearing the list of errors 15
13 Downloading data from the Sola-Scope 2000 to Sola-Term 2000 16
13.1 Loading the file into the Graph Window 16
13.1.1 Using the Open Icon 16
13.1.2 Double clicking 16
13.1.3 Dragging and dropping 16
13.2 Saving a file to disk 16
13.2.1 Using the Save Icon 16
13.2.2 Dragging and dropping 17
13.3 Sending a file to Excel. 17
13.3.1 Using the Excel - Single Graph Icon 17
13.3.2 Using the Excel - Separate Graph Icon 17
13.3.3 Using the Excel Wizard Icon 17
13.4 Copying a file from the Sola-Scope 2000 to the system clipboard. 18
13.4.1 Using the Copy Icon 18
13.4.2 Using the keyboard shortcut 18
14 Uploading data from Sola-Term 2000 to the Sola-Scope 2000 19
14.1 Uploading data from the Local Machine Window 19
14.2 Uploading data from the Graph Window 19
14.3 Uploading data from the System Clipboard 19
15 Using files that are already stored on your hard disk 20
15.1 Loading the file into the Graph Window 20
15.2 Sending a file to Excel. 20
15.2.1 Using the Excel - Single Graph Icon 20
15.2.2 Using the Excel - Separate Graph Icon 20
15.2.3 Using the Excel Wizard Icon 20
15.3 Copying a file from the Local Machine Window to the system clipboard. 20
16 File Management 21
16.1 Deleting a file 21
16.2 Renaming a file 21

16.3 Copying Files 21
17 Sending Data To Excel And The Excel Wizard....22
17.1 Sending data without using the wizard 22
17.2 Using the Excel Wizard....22
17.2.1 Sending data from single files to Excel with the Wizard....22
17.2.1.1 Step 1 – Selecting the Workbook and Worksheet....22
17.2.1.1.1 Changing the Workbook 22
17.2.1.1.2 Changing the Worksheet 22
17.2.1.2 Step 2 – Selecting the Position where the data will be placed on the Worksheet....23
17.2.1.2.1 Selecting the data position....23
17.2.1.2.2 Altering the data transfer options 23
17.2.1.3 Step 3 – Graphing options....23
17.2.1.3.1 To not draw a graph of the data....23
17.2.1.3.2 To draw a graph....23
17.2.2 Sending data from multiple files to Excel with the Wizard 24
17.2.2.1 Step 1....24
17.2.2.1.1 Changing the Workbook 24
17.2.2.1.2 Changing the Worksheet 24
17.2.2.2 Step 2....25
17.2.2.2.1 Selecting the data position....25
17.2.2.2.2 Altering the data transfer options 25
17.2.2.3 Step 3....25
17.2.2.3.1 To not draw a graph of the data....25
17.2.2.3.2 To draw a graph....26
18 The Logging Wizard 27
18.1 Using the Wizard....27
18.1.1 Step 1....27
18.1.2 Step 2....27
18.1.3 Step 3....27
18.1.4 Step 4....28
19 Miscellaneous Options 29
19.1 Icon Views....29
19.2 Tile Horizontally 29
19.3 Tile Vertically 29
20 Networking....30
20.1 Configuring And Starting Your Network....30
20.1.1 Adding Sola-Checks/Sola-Sensor 2000s to the Network....30
20.1.2 Removing Sola-Checks/Sola-Sensor 2000s from the Network 30
20.1.2.1 Removing a Single Sola-Check/Sola-Sensor 2000 30
20.1.2.2 Removing all of the Sola-Checks/Sola-Sensor 2000s....30
20.1.3 Starting the Network 31
20.2 Once the Network is Running 31
20.2.1 Scanning an individual Sola-Check/Sola-Sensor 2000....31
20.2.2 Setting the baseline on a Sola-Check/Sola-Sensor 2000....31
20.2.3 Network Monitoring....31
20.2.3.1 Starting Network Monitoring 31
20.2.3.2 Stopping Network monitoring....31
20.2.4 Logging an individual Sola-Check/Sola-Sensor 2000 on the Network. 31

21 Using a Sola-Hazard with Sola-Term 2000 33
21.1 Configuring Sola-Term 2000 for use with a Sola-Hazard. 33
21.2 Receiving a file or banks from a Sola-Hazard 33
21.2.1 Using the Receive File icon 34
21.2.2 Using the keyboard shortcut 34
21.3 Sola-Hazard file format differences. 34
21.4 Sending data to Excel differences. 34
22 Error Messages 35
23 Index 37