

Recall for Windows

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You can send your comments to:-

MKS Instruments, Spectra Products
Cowley Way
Weston Road
Crewe
Cheshire
CW1 6AG
U.K.

+44 1270 250150 Tel. International
+44 1270 251939 Fax. International

01270 250150 Tel. U.K.
01270 251939 Fax. U.K.

In North America you can send your comments to:-

MKS Instruments, Spectra Products
700A East Dunne Ave.
Morgan Hill
CA 95037

(408) 778 6060 Office
(408) 776 8575 Fax

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Section 1.

Getting started

In this section of the manual we will explain the basic function of Recall for Windows, install the software on your PC and provide an introductory tour of Recall to get you familiar with the basic features. This will also check that Recall is working correctly. If you are a new user of Recall for Windows we strongly recommend you to work through this section. If you have already used earlier versions of Recall we suggest you work through the tour to check everything is working.

1.1. Getting help

We are always please to provide assistance where we can. If you experience any difficulties or need help please feel free to call your local Spectra facility and ask for the service department. Please have the following information ready so that our technical staff may help you quickly and effectively:

The information displayed in the Help About form. To access this select **Help | About** from the *menu bar* as described in section 1.7.1. **About Recall**.

1.2. Manual conventions

Text Conventions

As far as possible Recall for Windows uses a format and conventions common to other Windows software packages. The following text formatting conventions are used throughout this manual:

<i>Italic type</i>	Windows terms. You can refer to your Windows manual for more information
Bold type	names on buttons names of menus Words or characters you should type. Example if the manual instructs you to type cd spectra you type the lowercase letters cd followed by a space and the lowercase letters spectra.

Keyboard Conventions

Function key names are written in uppercase letters. Example, the Control key is written CTRL, the Escape key ESC.

Where keys need to be pressed simultaneously the + sign is used. Example ALT+F1 means hold down the ALT key while pressing the F1 key.

Where keys are pressed in sequence commas are used. Example: ALT, C, D would mean press the ALT key then press C then press D.

Where one of the four arrow keys is referred to the appropriate symbol is used enclosed in parentheses. Example, up arrow is written (↑).

Mouse Conventions

Recall for Windows only uses one mouse button. If you have a mouse with more than one button the left mouse button is the one you will use unless you have configured your mouse differently.

Point Position the mouse pointer so that it rests on the object you have been instructed to point to.

Click Press then immediately release the mouse button without moving the mouse.

Double Click Press then immediately release, press again then immediately release the mouse button without moving the mouse.

Drag *Point* to the object to be moved, press and hold down the mouse button whilst moving the mouse to reposition the object. Then release the mouse button.

1.3. Introducing Recall

Recall for Windows is a software package which allows you to view data files which have been stored using the disk store facility in RGA for Windows. There are two editions of Recall for Windows; the Standard Edition is supplied with RGA for Windows, the Analytical Edition is available as an option. The Standard Edition is described in this manual and the additional features of the Analytical Edition are described in a supplemental manual. We will explain how to check which type you have after describing the installation process.

Recall for Windows and RGA for Windows may be run on the same PC, simultaneously, which permits data analysis while acquiring new data. Recall for Windows does not require an RGA control unit to be connected to the PC nor does RGA for Windows have to be installed to allow Recall to be used. Many users install Recall with RGA for Windows on the PC used for data acquisition, in the laboratory say, then install Recall on the PC in their office as well.

Supplied with Recall are three data files which you can use to learn about Recall without having to use RGA for Windows to acquire data, we will refer to these throughout the manual.

1.4. Making a backup copy

If you have not already done so you should generate backup disks from the program disks supplied. To do this use the MS-DOS DISKCOPY utility (or any other method you are familiar with) to make a copy of the original disks. Keep the original disks in a safe place and only use the copy.

1.5. Installing Recall

The Standard Edition of Recall for Windows will usually be installed along with RGA for Windows and this is described in the RGA for Windows manual. If you are installing Recall on a PC without RGA for Windows or are installing the Analytical Edition of Recall please follow the instruction below.

If you are installing the Analytical Edition and already have the Standard Edition installed it will be overwritten by the Analytical Edition. Don't worry, all the features in the Standard Edition are also in the Analytical Edition.

The Standard Edition of Recall is supplied on the same disks as RGA for Windows. The Analytical Edition of Recall is supplied on its own disk. We assume you will use drive A but of course you may use drive B if you prefer, just substitute drive B for drive A in the instructions below.

To install Recall for Windows:

1. Run up Windows
2. Insert the RGA for Windows disk 1 into drive A of your PC if you are installing the Standard Edition or if you are installing the Analytical Edition insert the single disk which has been supplied.
3. Chose the **Run . . .** option from the Windows Program Manager **File** select menu.
4. Type **a:install .**

The Spectra Install window will be displayed.

If it is the Standard Edition there will be five products in the install list:

RGA for Windows

Download
Recall
DDE Examples
Macro Examples

To install Recall only, *click* on the *check box* for each of the other four products to leave Recall as the only product which is *checked* (has a X in the square box).

If it is the Analytical Edition you will only have the one product option to install.

You may also change the directory where Recall for Windows will be installed. For the purposes of this manual we will assume you use the default directory C:\SPECTRA\.

5. *Click* on the Install button to begin the installation process. Insert disk two if, and when, prompted to do so.
6. Recall for Windows will be installed on your hard drive and a program group called Spectra will be created (if it does not already exist) and the program items Recall and Recall Help will be added. If you are replacing the Standard Edition with the Analytical Edition the Recall item will be replaced with the Analytical Recall program item.

This completes the installation process.

1.6. The guided tour

This part of the manual will get you up and running using Recall for Windows, it will also check that everything is working after the installation process. We do assume that you are familiar with the Windows environment. We have made every effort to use standard terminology so that you can quickly refer to the Microsoft Windows manual for detailed information about specific windows topics.

1.6.1. Starting Recall

Starting Recall for Windows is very easy and is just like starting other Windows programs.

From the Windows Program Manager *double click* on the Spectra icon to open the Spectra program group.

In the Spectra program group *double click* on the Recall icon.

The Recall window will be opened. *Click* on the *maximize* button (refer to your Windows manual if you are unsure) so that the Recall window uses the full screen.

1.6.2. Opening a file

As mentioned earlier three data files have been supplied with Recall and were copied into the Spectra directory during the installation process. The three files are named:

recall.wbg
recall.wpj
recall.wmt

and are respectively a Bar Chart file, a Peak Jump file and a Multi Trend file.

As with other Windows applications, operations can often be started in a number of ways and this is true for opening a file in Recall. For now we will try one method the others are explained in the technical reference section of the manual.

To open the Bar Chart file recall.wbg:

Select **F**ile | **O**pen . . . from the *menu bar* (to do this *click* on **F**ile then *click* on **O**pen . . .) the Open *dialog box* will then be displayed.

In the **F**ile **N**ame: box there should be three files listed:

recall.wbg
recall.wpj
recall.wmt

click on recall.wbg then *click* on the **OK** button.

The file will be opened and will be displayed in the scan window. Another window called the Recall (Scan Info) window has been opened but is hidden behind the main Recall window. *Click* on Window on the *menu bar* then *click* on Info Window in the menu list. The Recall (Scan Info) has been brought to the front and is now visible. The screen should look similar to Figure 1 which we have annotated to describe the various parts of the Recall screen.

1.6.3. The Main window

Figure 1 shows the Main Recall Window when one file has been opened. Below is a description of the main parts of the Recall window.

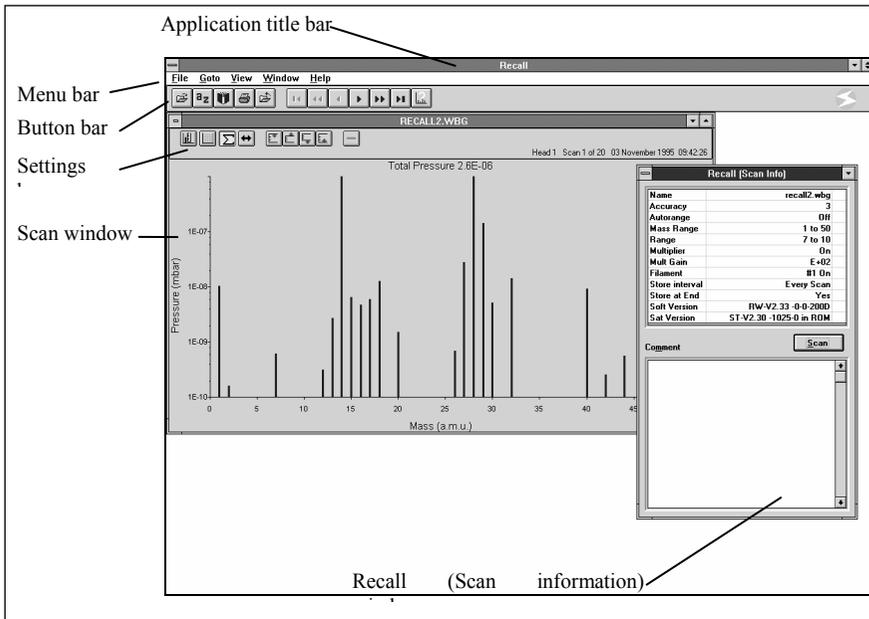


Figure 1 The Recall screen

1.6.3.1. Menu bar

All the functions in Recall for Windows may be accessed via the *menu bar*, just as they can in other Windows software packages. There are nine menus; **File**, **View**, **Library**, **Goto**, **Channel**, **Window**, and **Help**. Not all of these are displayed at the same time, the *menu bar* will change depending on the type of window which is open.

1.6.3.2. Main window button bar

The button bar contains a series of buttons for the most commonly used functions refer to Figure 2 for the name of each button, below is a brief description of the function of each button.

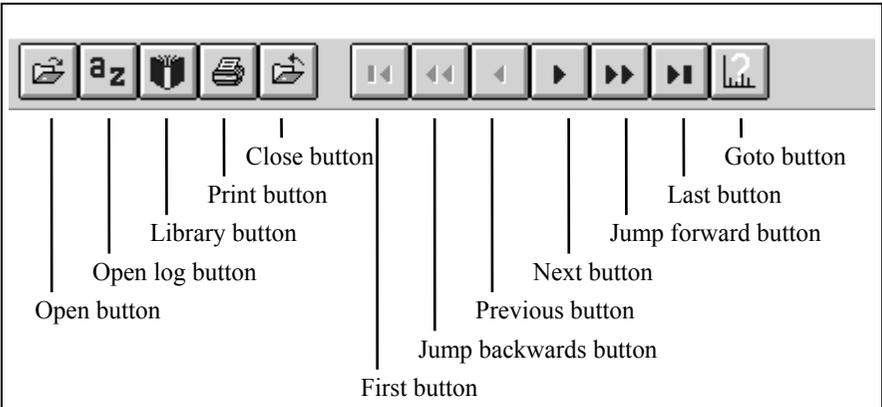


Figure 2 Button bar

Open button	Click on this button to display the open file <i>dialog box</i> .
Open log button	Allows the user to open a file log by first opening the Select a Directory <i>dialog box</i> .
Library	Opens the Library Manager <i>dialog box</i> from where a library may be opened or created.
Print button	Prints the current scan by first opening the Print <i>dialog box</i> .
Close button	Click on this button to close the active scan window.
First	Goto the first scan in the file or library.
Jump backward	Jump back through the file or library by 10% of the total number of scans.
Previous	Goto the previous scan in the file or library.
Next	Goto the next scan in the file or library.
Jump forward	Jump forward through the file or library by 10% of the total number of scans.
Last	Goto the last scan in the file or library.
Goto	Opens a <i>dialog box</i> so that you may goto any scan in the file or library.

1.6.3.3. Scan window

The Scan Window is a child window which contains the actual scan data. In the case of Figure 1 it contains a Bar Chart scan. Since Recall is a multiple document application we can open many Scan Windows all within the Recall Window.

1.6.3.4. Recall Settings Bar

The Recall settings bar is a set of buttons displayed in the Scan Window above the scan data. These buttons allow the user to alter the view of the scan and enable some additional features. The buttons in the settings bar will change depending on the type of file being displayed. Below is a brief description of the function of each button.



Cursor button

Click on this button to enable/disable the cursor.



Grid button

Click on this button to enable/disable the grid.



Total pressure button

Enables/disables the display of the total pressure



Mass span button

Changes the mass span displayed on the x-axis.



Background subtract

Subtracts the background scan from the current display. This is only available in the analytical edition of Recall for Windows.



Log low range increase

Increases the low gain range by one decade in logarithmic display. i.e. 1×10^{-7} to 1×10^{-8}



Log low range decrease

Decreases the low gain range by one decade in logarithmic display. i.e. 1×10^{-7} to 1×10^{-6}



Log high range increase

Increases the high gain range by one decade in logarithmic display. i.e. 1×10^{-9} to 1×10^{-10}



Log high range decrease

Decreases the high gain range by one decade in logarithmic display. i.e. 1×10^{-9} to 1×10^{-8}



Alarms button

Enables/disables the display of alarm settings in peak jump files.

	Peak surround	Enables/disables the peak surround in peak jump files.
	Log button	<i>Click</i> on this button to switch between a logarithmic and a linear y-axis.
	Continuous trace	Enables the continuous trace (join the dots) with trend files.
	Vertical labels	Toggles between vertical and horizontal display of the time labels on the x-axis in trend displays.
	Analogue	Shows an analogue scan as analogue.
	Bar chart	Shows an analogue scan as a bar chart.
	Twin display	Shows an analogue scan as a twin analogue/bar chart display.
	Update time	<i>Click</i> on this button to display the time and date of the last update when viewing a literature folder library scan.
	Information window	Displays the library information window.

1.6.3.5. Scan information window

The Scan Information Window contains useful information relating to the data file currently being displayed. Whilst many Windows may be opened there will only be one Scan Information Window, the information it contains will relate to the active File Window. The information held in the comment box may be edited in Recall but none of the other fields may be changed.

1.6.4. Recall scan info

When you opened the data file recall.wbg, two document or child windows were opened. One is the Scan Window the second is the Recall Scan Information window, refer to Figure 1. The Scan Info window contains data which was stored at the same time as the scan data in RGA for Windows, such as the accuracy, mass range and which filament was on. Also any comment that was stored will be displayed. This is

the only information in the Scan Info window which may be edited in Recall.

It will often be found useful to edit the comment prior to printing a scan. To edit the comment simply position the cursor in the comment field then use the arrow keys to move around the comment, new text may be typed in and text may be deleted using the BACKSPACE and DELETE keys. Try editing the comment.

When you close the file you will be prompted to save the changes in the comment field.

Close the Scan Information Window by *clicking* on the **S**can button. It can be re-opened at any time by selecting **W**indow | **I**nfo Window from the *menu bar* or pressing **CTRL+I**.

1.6.5. Viewing scans

The file recall.wbg which you have opened contains 20 scans and at the moment you are viewing the first of these 20 scans. The scan number, time and date when the scan was stored are displayed to the right of the settings bar. To view the second of the 20 scans *click* on the Next button on the icon bar, refer to figure 2 for button descriptions.

Notice that now the scan number reads 2 of 20 and the time has changed. Now *click* on the Jump forward button to move to scan 7 of 20.

1.6.6. Opening other file windows

Recall for Windows is a multiple document application which means that any number of file windows may be opened simultaneously. Also, the same file may be opened more than once so that different parts of the file may be viewed simultaneously.

Open the recall.wbg file by; selecting **F**ile | **O**pen . . . from the *menu bar*, *click* on recall.wbg in the **F**ile **N**ame: box then *click* on the **O**K button. A second child window will be opened showing scan 1 of 20 of the recall.wbg file. Now open a third child window by selecting **F**ile | **O**pen . . . from the *menu bar*, *click* on the **L**ist **F**iles of **T**ype: *dropdown list box* to display the list then *click* on Multi Trend (*.wmt). The **F**ile **N**ame: box will now show one item, recall.wmt, *click* on this then *click* on the **O**k button.

The last two windows which were opened are shown *cascaded*, they are on top of each other with the title bars visible. The three windows can be shown so that they are all visible. To do this *click* on **W**indow in the *menu bar* then *click* on Tile Horizontal from the menu list. The three child windows are shown on the screen one

above the other. Notice that the Multi Trend child window is the active window because it was the top most window when the three windows were *cascaded*. This is denoted by the colour of the *title bar* which will be different to the other two child windows.

Note that the colour of the active *title bar* and the inactive *title bars* will depend on your Windows configuration setup in **Main | Control Panel | Color**. It is possible to have both active and inactive *title bars* the same colour. We recommend you to avoid this.

1.6.7. Hiding buttons

Unfortunately, with having three scan windows displayed simultaneously we run short of screen space to display data. However, we can gain some extra screen space by not displaying the button bar. *Click* on **V**iew in the *menu bar* to display the **V**iew menu, *click* on **B**utton Bar in the menu (note the **B** next to **B**utton Bar indicating that it's currently being displayed). The button bar at the top of the screen will have gone and the three scan windows will have expanded to use the additional space.

We can also choose not to display the settings bar in each of the scan windows. *Click* on **V**iew in the *menu bar* then *click* on the **S**ettings Bar *menu item*. The settings bar in the multi trend window will have been disabled and the data will have expanded to use the extra space. The settings bar in the other two windows can be disabled, firstly make the window the active window by *clicking* anywhere in it, notice the *title bar* change colour. Then, select **V**iew | **S**ettings Bar from the *menu bar*. You can then repeat this for the third child window.

The last thing we can do to gain screen space for the display of partial pressure data is to disable the total pressure display. Make the centre child window the active window then *click* on **V**iew on the *menu bar*. In the **V**iew menu *click* on **T**otal Pressure. The total pressure reading will have disappeared and the scan data will have expanded to use the additional screen space. Now, make the bottom child window the active window then press **CTRL+T** (hold down the control key and press the T key on your keyboard) notice that the total pressure display has gone. You may have noticed **Ctrl+T** shown after **T**otal Pressure in the **V**iew menu. Like most Windows applications operations in Recall for Windows may be performed a number of ways. If the settings bar had been displayed we could have disabled the total pressure display by *clicking* on the Total Pressure button.

Close the two child windows showing the bar chart scans by selecting **F**ile | **C**lose from the *menu bar* to close the bottom window. Make the remaining bar chart window the active window then *click* on the Close button on the button bar. Again, there is more than one way to carry out an operation. You should now be left with just one child window showing the multi trend scan. *Click* on the *maximize* button in

the top right corner of the child window so that the trend scan fills the Recall window.

1.6.8. Viewing trend scans

Multi trend, leak check and fast scan files show more than one scan of data on the screen. Therefore, viewing data is slightly different than from viewing bar chart, peak jump and analogue files where only one scan is shown at a time. The multi trend file currently being displayed shows all the scans in the file. If you look at the bottom left corner of the screen the **Start At:** value is 0% and the **Span:** is 100% indicating that you are viewing the whole file. Notice also that the movement buttons on the button bar are all *greyed out* since you are viewing the whole file there is nowhere to move to.

Adjust the span to 25% by *clicking* on the left arrow of the *scroll bar* below the **Span:** box. It is easier if you hold down the mouse button rather than repeatedly *clicking*. If you go passed 25, *click* on the right arrow button in the *scroll bar* to increase the span to 25%. Now, *click* on the re-draw button which is to the right of the **Span:** box. The screen will now show the first 25% of scans in the file . Also, three of the movement buttons on the button bar are available, *click* on the Next button. The screen will change to show the second 25% of scans in the file, note that the **Start At:** box shows 25 not 0. You can continue to move around the file using the movement buttons and by selecting different values for **Start At:** and **Span:**. Remember, when you change either the **Start At:** or the **Span:** value you have to *click* on the re-draw button to implement the changes.

Enter a **Start At:** value of 75% and a **Span:** of 50% and *click* on the re-draw button. The screen is updated but the **Span:** value is changed to 25% which is the maximum value with a **Start At:** of 75%. Whenever impossible values are entered the **Span:** will be adjusted automatically by Recall.

1.6.9. Log axis

When viewing multi trend and peak jump files you can switch between a logarithmic and a linear y-axis. On the settings bar *click* on the Log button and the display will change to show a three decade logarithmic y-axis and the four log range buttons on the settings bar are no longer *greyed out*. The range displayed is 1×10^{-9} to 10×10^{-7} indicated by the values 1×10^{-9} , 1×10^{-8} and 1×10^{-7} on the y-axis. *Click* on the Log Low Range Increase button (the first button to the right of the Log button) to change the display to show two decades 10^{-8} and 10^{-9} . Now, *click* on the Log Low Range Decrease button (second button to the right of the Log button) to change the display back to three decades. *Click* on the button again to display ranges 10^{-6} , 10^{-7} , 10^{-8} and 10^{-9} then *click* on it once more. The display will now show five decades 10^{-5} to 10^{-9}

and the Log Low Range Decrease button will be *greyed out* since 10^{-5} is the lowest gain range and you cannot decrease the low range any further.

Click on the Log High Range Increase button (third button to the right of the Log button) and notice the bottom value on the y-axis change from $1E-9$ to $1E-10$. *Click* the same button once more to display the 10^{-11} range, the button will be *greyed out*. You are now displaying the maximum seven decades, 10^{-5} through 10^{-11} (for a file created using the Faraday detector).

1.6.10. Creating your own library

The library feature is very useful and we will go through the sequence of operations for creating your own library. More details of the library feature can be found in section 2.2. **Libraries** of the manual.

Click on the Close button on the button bar to close the multi trend file, you now have no files open (if you have closed them). Open the recall.wbg file, *click* on **View** on the *menu bar* then *click* on **Copy to Clipboard** (notice Ctrl+C next to **Copy to Clipboard**) in the **View** menu. The current scan, scan 1 of 20 of file recall.wbg, will be copied onto the *clipboard* and this will form the first entry in our new library. *Click* on the Library button on the button bar to open the Library Manager *dialog box*. We want to create a new library so *click* on the **New>** button. The type of folder we want to create is a bar chart folder so *click* on the **Live Barchart scan folder radio button** (this should already be selected) then enter the name for the folder. We will call the folder TUTORIAL 1 so position the *mouse pointer* in the **Folder Name** box, the arrow will change to a cursor, then *click*. Type in the name TUTORIAL 1, or some other name if you prefer. We will end this section by deleting the folder anyway. When you have typed in the name *click* on the **Ok** button.

After a short delay the name TUTORIAL 1 will be added to the **Library** list. At this point the library folder TUTORIAL 1 has been created but the scan on the *clipboard* has not been put into it. With TUTORIAL 1 highlighted, *click* on the **Open** button. You will notice that a new child window and a message box have been opened. *Click* on the **Yes** button in the message box and a *dialog box* will be opened. Type in some text to form the scan description then *click* on the **Ok** button. After a short delay the scan on the clipboard will appear in the empty child window with the description you wrote just above the scan data.

Now, we will add a second scan to the new library folder TUTORIAL 1. You should have two child windows open in the Recall window, the top most one is the library window and the other is for the file recall.wbg. Make the recall.wbg the active window by either *clicking* on a visible part of it or *click* on **Window** on the *menu bar* then *click* on **1 RECALL.WBG** in the **Window** menu. Use the movement keys to select scan 15 of 20 then press **CTRL+C** on the keyboard to copy scan 15 of 20 to the *clipboard*. Make the library window the active window by *clicking* on part of it

or selecting it from the **W**indow menu. Now, *click* on **L**ibrary (which is only available when a library window is active) and *click* on **P**aste in the **L**ibrary menu. The Edit Library Entry *dialog box* will be displayed so type some text for the description and *click* on the **O**k button. After a short pause the scan will appear in the Library window and you can use the movement buttons to change between the two scans you have in the TUTORIAL 1 library folder. Normally you will have a number of data files from which to take scans rather than just the one, recall.wbg, that we have here.

To delete the TUTORIAL 1 library folder close the library window by *clicking* on the Close button on the button bar with the library window active. *Click* on the Library button on the button bar to open the Library Manager *dialog box*. *Click* on TUTORIAL 1 in the **L**ibrary list to highlight it then, *click* on the **D**efine button. A warning box will be displayed, *click* on the **Y**es button. TUTORIAL 1 will be removed from the Library list in the Library Manager *dialog box*. Once it is deleted the data in the library folder cannot be retrieved but the original data in the recall.wbg file is still available.

1.7. Using help

1.7.1. About Recall

To display the Help About window select **H**elp | **A**bout Recall . . . from the *menu bar*. From the About window you can check which edition of Recall for Windows you have. The line below the application title Recall for Windows will either be; Standard Edition in which case you have all the features described in this manual or

Analytical Edition in which case some of the advanced data analysis features are described in a supplemental manual, reference LP103017.

Also in the About window will be the software version number. If you need to contact your local Spectra facility for help it is most important to have the software version number available.

Operation of Help is fully describe in section 2.7. **H**elp.

Section 2.

Technical Reference

In this section of the manual we will describe each of the commands in Recall for Windows. We envisage users referring to this section when they require help on a specific topic, you may like to practise using Recall and then read parts of this section as necessary.

2.1. File commands

To access any of the file commands *click* on **F**ile in the *menu bar* or press **ALT+F** to show the File menu. *Click* on the file command to carry out the command or open a *dialog box*. Some of the commands have short cut keys, some have buttons on the button bar. Each command is described below.

2.1.1. Opening a file

To open a file select **F**ile | **O**pen from the *menu bar* or press **CTRL+O** or *click* on the Open button on the button bar. A standard windows open file *dialog box* will be displayed, the various parts of which are described below.

Once all the information is correct *click* on the **OK** button to open the file or *click* on the **Cancel** button to close the *dialog box* without any action being taken.

File Name: Enter the name of the file you wish to open in the File Name box by typing the full name or *clicking* on one of the files in the file name list.

Directories: This box will display a list of the directories on the currently selected drive. Use the directories box to select the directory where the file you wish to open is stored.

Drives: *Click* on the **Drives:** *dropdown list* to display the drives available on your system then *click* on the required drive.

List File of Type:

There are six file types available and these correspond to the six main modes in RGA for Windows. Each file type has its own file extension. Files of one type may be displayed in the file name list by *clicking* on the appropriate file type in the **List File of Type:**

dropdown list box. The file types with their extensions are listed below:

Multi Trend	.wmt
Analogue	.wan
Bar Chart	.wbg
Peak Jump	.wpj
Fast Scan	.wfs
Leak Check	.wlc

In addition to the six file types selecting (*.*) will display all the files in the currently selected directory and selecting (*.w*) will display all the RGA for Windows files (and any other files with a file extension beginning with a w).

2.1.2. Multi head/valve files

If the file you select to open was stored on a system running multi headed RGA for Windows software or on an instrument fitted with a Valve Controller the Select Head or Select Valve *dialog box* will be displayed. A file stored on an instrument fitted with a valve controller will consist of scans stored with the different valves open. The valve select function acts as a filter causing only those scans stored with the specified valve open to be displayed. The same is true for files stored on a multi headed RGA for Windows system.

To open the file with all the scans available stored from different heads, or with different valves open, *click* on the **All Valves / Heads** *radio button* then *click* on the **Ok** button.

To open a file showing only scans from one head or with one particular valve open *click* on the **Selected Valve / Head** *radio button*, enter the number of the head or valve in the **Number:** box, then *click* on the **Ok** button.

A new scan window will be opened, the valve or head number will be shown in square brackets in the *title bar*. The number of scans shown below the *title bar* will be the number for the head or valve selected rather than the total number of scans in the file. The user may open another scan window for the same file to display scans stored from another head or with another valve open.

2.1.3. Closing a file

To close a file *click* on the Close button on the button bar or select **F**ile | **C**lose from the *menu bar*. Only the currently active file will be closed, if other files are open they will remain open.

2.1.4. Browsing

You can browse through the data files you have stored looking at file name, date, time and comment information to find a specific file before opening it. Select **F**ile | **B**rowse . . . from the *menu bar* to open a standard windows open file *dialog box*. Enter information in the same as you would when opening a file, as described above. *Click* on the **O**k button to open the Comment Browser window which will display the full file name, the date and time when the file was stored and the comment. *Click* on the **O**pen button to open the file or *click* on the **B**rowse button to select another file.

2.1.5. File log

Due to the eight character limit on DOS filenames, giving meaningful names to data files can be difficult, particularly when you have a large number of files. The file log is designed to make opening one of a large number of files easier.

One file log can be created and maintained for each disk directory. The file log contains four pieces of information for each data file: file name, date, time and comment. It is important to make use of the comment field to obtain the best advantage from the file log.

2.1.5.1. Opening a file log

To open a file log select **F**ile | **O**pen **L**og . . . from the *menu bar* or *click* on the Open Log button on the button bar or press **CTRL+L**. The Select a Directory window will be displayed. Choose the drive and directory for which you want the file log. Recall will maintain one File Log in each directory of your choice. For your information, a list of the data files in that directory will be displayed. *Click* on the **O**k button to open the log. If no log exists you will be asked if you want Recall to create one. The file log will be opened and the Scan Log window will be displayed which is in the form of a four column table. The columns are: file name, the date when the file was stored, the time when the file was stored and the comment.

To open a file from the file log *click* anywhere in the row for that file then *click* on the **O**pen button or, *double click* anywhere on the row for that file.

2.1.5.2. Maintaining the file log

When you create the file log the files are sorted according to the file type, determined by the filename extension and then by the filename. The file log is not updated automatically as new files are added to the directory.

To add new files to the file log after it has been created, updated or re-compiled select **File | Update Log . . .** from the *menu bar*. The Select a Directory *dialog box* will be displayed. Select the drive and directory then *click* on the **Ok** button. The new files will be added to the end of the file log.

Re-compiling the file log will re-create the file log with all the data files found in the specified directory. This has the advantage of sorting all the files so that files of the same type appear grouped together e.g. all the Bar Chart files appear together. It may take a little longer than simply updating the log.

To re-compile the file log select **File | [Re]-compile Log . . .** from the *menu bar*, the Select a Directory *dialog box* will be displayed. Select the drive and directory then *click* on the **Ok** button.

2.1.6. Printing

The Print command in Recall for Windows provides a good deal of flexibility and a range of features to enable the user to produce high quality and informative hard copies.

To begin printing, select **File | Print . . .** from the *menu bar* or *click* on the Print button on the button bar or press **CTRL+P**. If you have not used the print command in this session the Font window will be displayed, otherwise the Print Layout window will be displayed.

In the Font window select the required **Font**:, **Font Style** and **Size**: you will be able to see what your choice looks like in the **Sample** box. Recall only uses the font name from the Font window the font style and size are ignored, although the setting does affect the appearance of your choice in the **Sample** box. The font size is set by *clicking* on the **Fonts>>** button in the Print Layout window. When you have finished *click* on the **OK** button and the Print Layout window will be displayed. Note that the number and type of fonts available will depend on the printer and printer driver you have selected from **Windows Program Manager | Control Panel | Printers**.

The various settings available in the Print Layout window are described below. Once any required changes have been made *click* on the **Print** button to start printing, *click* on the **Cancel** button to close the Print Layout window, and throw away any changes you have made.

2.1.6.1. Print layout window

There are two areas at the top of each printout where title information can be shown; in the centre and to the right. Type in the appropriate box the text you want to appear in the title, you may include the & characters as described below and alter the fonts by using the **Fonts>>** button, again described below.

By default the centre title will contain the application title Recall for Windows and the filename by including the &A and &F characters. The right title will contain the time and date when the file was stored by incorporating the &D and &T characters. The default information can be removed simply by deleting the & characters using the **DELETE** and **BACKSPACE** keys.

A maximum of four lines of text may be printed as a title. The first line forms the Heading and the remaining three the Sub-Heading. The scroll bars should be used to view titles which are too large to fit in the boxes.

A footnote may be printed below the scan data on the printout. Type in the text for the footnote in the **Footnote** box, the & characters may be used and the font for the footnote can be changed by using the **Fonts>>** button.

You can include on the printout the comment that was stored as part of the data file by *clicking* on the **Options, Print Comment check box** to *check* it. The comment may be printed immediately above the scan data, to do this *click* on the **Above scan radio button**. To print the comment at the bottom of the page just above the footnote *click* on the **Below scan radio button**. Space for the comment is limited on the printout, if it is very long choose a small font. See below for details of changing font sizes.

There are a number of special features which apply to printing files stored in the Multi-Trend, Leak Check and Fast Scan modes. To print the traces just as black lines *click* on the **Unlabelled Mono radio button** in the **Trends** box. To add the channel number as a label to the appropriate trace *click* on the **Labelled Mono radio button**. Be warned, this may considerably increase the time taken to print. If you have a colour printer you can print coloured traces by *clicking* on the **Colour radio button** in the **Trends** box.

The printout can be in a landscape or portrait orientation as shown in the Layout box. To change the orientation *click* on the **Setup>>** button then *click* on the appropriate **radio button** in the Orientation section of the Print Setup window.

The printout can be positioned centrally on the page by *checking* the **Central on Page check box**. If this is not *checked* the printout will be offset on the page to leave a wide margin on the left of a portrait printout and at the top of a landscape printout to allow printouts to fit into a binder.

To change the type or size of font used on the printout *click* on the **Fonts>>** button to display the Font Sizes window. Only one type of font may be used throughout the

printout but this may be changed by *clicking* on the **Change Font** button to display the Font window and then select the required font. The current font is shown immediately above the **Change Font** button. The size of characters in various parts of the printout may be changed by *clicking* on the appropriate *dropdown list box* then *clicking* on the required size in the list. The Main Heading is the first line of text written in the Centre Title box or the Right Title box. If you only want Main Heading text in the Center, put a blank line as the first line in the Right Title box. The Sub Heading is the remainder of the text written in the Centre Title box and the Right Title box. When all the information is correct *click* on the **Ok** button, *clicking* on the **Cancel** button will close the Font Sizes window without any changes being made to the fonts.

2.1.6.2. & Characters

Certain information can automatically be added to titles and footnotes by the use of the & characters. Their functions are described below:

&A	prints the A pplication title, Recall for Windows
&C	prints the full scan C aption as displayed on the button bar
&D	prints the scan D ate
&F	prints the F ilename as displayed in the window title
&I	prints the library scan description (I nformation)
&N	prints the current date, when the printout is printed (N ow)
&S	prints the S can number if applicable
&T	prints the scan T ime
&U	prints the literature library scan form U la
&&	prints a single & character

This list can be displayed on screen by *clicking* on the **H**elp button in the Print Layout window.

2.1.6.3. Print defaults

Once you have setup the format for your printout it is likely you will want to use it again or keep it as your standard print layout. You can do this by *clicking* on the **Save Settings as Default** button which will save the current setup for future use.

2.1.7. Show as . . .

2.1.7.1. Show as trend

The **Show As Trend** *menu item* is available when the active window contains a Peak Jump or Bar Chart file. A Peak Jump file will be converted to a Multi Trend display with the channels set to the same masses. The Peak Jump file must contain at least two scans. A Bar Chart file will be displayed as a Multi Trend with the channels set to masses defined in **File | Defaults | Bar to trend conversion**, see section 2.1.9.3. **Bar to trend conversion.** Once the trend is displayed the channels may be set to any mass within the range of masses stored in the original Bar Chart file. To display a Peak Jump or Bar Chart file as a Multi-Trend select **File | Show As Trend** from the *menu bar*, a new window will be opened containing the trend display.

2.1.7.2. Show as peak jump

A Multi Trend, Fast Scan or Leak Check file may be displayed as a Peak Jump by selecting **File | Show As Peak Jump** from the *menu bar*. Another window will be opened containing the Peak Jump display and the usual functions are available to move through the scans.

2.1.8. Scan clipboard

You can open a child window whose function is to display the contents of the *clipboard*. No other information may be displayed in this window. To open the Scan Clipboard window select **File | Scan Clipboard** from the *menu bar*. If there is a scan on the *clipboard* it will be displayed, if there is not the message "Clipboard is empty" will be displayed. A check mark () will be shown next to **Scan Clipboard** in the **File** menu when the Scan Clipboard window is open. Selecting **File | Scan Clipboard** from the *menu bar* when the check mark is displayed will cause the window to be closed.

When the Scan Clipboard window is the active window five extra menu items are available in the **View** menu, as described in section 2.4. **View commands.**

Only Bar Chart, Peak Jump and Literature scans can be displayed in the Scan Clipboard window. Multi Trend, Fast Scan and Leak Check scans copied to the *clipboard* using **View | Copy to Clipboard** will be shown as a Peak Jump. It is only the final displayed set of data points which are copied onto the *clipboard* and, therefore, shown as the Peak Jump. Before copying data to the *clipboard*, be sure to adjust the span of the trend so that the required data is at the end of the display.

The Scan Clipboard window is not automatically updated as the contents of the *clipboard* change.

2.1.9. Defaults

The default settings generally determine the initial appearance of scan windows. All the settings are adjusted in the Recall Default Settings window which is opened by selecting **File | Defaults . . .** from the *menu bar*.

The settings in the centre of the window are determined by which of the four options in the top part of the window are selected.

Once all the settings are correct *click* on the **Ok** button to use them for this session of Recall. *Click* on the **Save These Settings as Default** button if you want to use these settings each time you use Recall for Windows. *Clicking* on the **Cancel** button will close the Defaults Settings window without any changes being implemented.

2.1.9.1. General view options

To change the general view options *click* on the **General View Options** *radio button* or press **ALT+G**.

X-axis Title Enter the title to appear under the X-axis. The factory default setting is Mass (a.m.u.). Do not enter a title longer than the space provided in the box.

Y-axis Title Enter the title to appear next to the y-axis. The factory default setting is Pressure (mBar). Do not enter a title longer than the space provided in the box.

Show Y-axis Title
When this box is *checked* the y-axis title will be displayed. *Un-check* this box and the y-axis title will be hidden and the y-axis will move to the left to use the additional screen space.

Cursor *Click* on the Cursor box to *check* it and have the cursor enabled when you open a file.

Grid *Click* on the Grid box to *check* it and have the grid enabled when you open a file.

2.1.9.2. Peak jump and trend options

To change the Peak Jump and Trend options *click* on the **Peak Jump and Trend Options** *radio button* or press **ALT+P**.

Peak Surround *Click* on the Peak Surround *check box* to enable the Peak Surround when a peak jump file is opened.

Alarms *Click on the Alarms **check box** to enable the alarms display when a peak jump file is opened.*

Trend X-axis Text
With Multi-Trend, Leak Check and Fast Scan files the time on the x-axis may be displayed vertically or horizontally by *clicking* on the Vertical or Horizontal *radio button*.

Trend X-axis Time
With Multi-Trend, Leak Check and Fast Scan files the time may be displayed as actual time by *clicking* on the **Real Time** *radio button* or as elapsed time from the start of the scan by *clicking* on the **Relative Time** *radio button*.

Continuous Trace
*Check the **Continuous Trace** **check box** to display all the traces as solid lines. **Un-checked** the box to display each trace as a series of dots.*

2.1.9.3. Bar to trend conversion

Bar Chart files may be converted and displayed as a Trend. Since the Bar Chart file can contain up to 300 partial pressure measurements (if the mass range was 1 to 300 amu) and the Trend can only display a maximum of twelve values, some method of determining which masses are initially displayed is required. The settings in the Bar to Trend Conversion window will determine to which masses the twelve channels are set. Selecting **Use standard values** will set channels 1 to 12 to the following masses:

2, 4, 12, 14, 15, 16, 17, 18, 28, 32, 44, 46

If you select **Use values from RGA4WINn.INI** the channel masses will be the same as those last used in RGA for Windows as these settings are stored in the RGA4WINn.INI file. You must start Recall using the /h switch, so for instance, if you want to use the settings from the RGA4WIN3.INI file Recall should be started with a /h3 switch.

Lastly, you may set your own masses by selecting **Custom values**. The mass for channel 1 will be displayed, type in the value you require then *click* on the right arrow button and set the mass for channel 2. Continue in this way until all the channels are set to the correct masses. You can *click* on the left arrow button to move backwards through the channels.

Remember that once the Bar Chart to Trend conversion has taken place the mass setting for each channel may be changed. The above only determines the initial setting. If the file stored Total Pressure you can choose Total for any channel.

2.1.9.4. Library

This sets the default library which will be entered initially when **File | Library . . .** is selected from the *menu bar*. The default setting is SPECTRA which is the library supplied on the Recall for Windows program disks and is installed with Recall. To change the default library position the cursor in the **Default Library Filename** box and type in the new name. If the file is not to be placed in the Recall directory, you must specify the full path name.

You may also change the label on the y-axis for scans in the literature folder. The default setting is Peak Height, to change this position the cursor in the **Literature library Y-axis Title** box and type in the new title.

2.1.10. Exiting Recall

To exit Recall for Windows select **File | Exit Recall** from the *menu bar* or *double click* on the *Control-menu box* (the box with the minus sign in the top left corner of the main Recall window), see your Windows manual for further details.

2.2. Libraries

The library is a powerful Recall feature which allows the user to store and retrieve historical data. Usually you would store your most important or interesting results in a library where they can easily be retrieved to view. Once scans are stored in a library there are a number of ways of organising the data.

There is no limit to the number of libraries you can create although to begin with it is a good idea to just work with one library until you become familiar with the feature. Each Recall for Windows library is a single, Microsoft Access compatible disk file, stored with the filename extension **.MDB**.

You can have any number of folders within each library. In turn each folder may contain any number of the same type of scans. There are three types of folder; folders which contain Bar Chart scans, folder that contain Peak Jump scans and folders that contain literature data (similar to the library data in RGA for Windows). So, for example, a library might contain three different Bar Chart folders, two Peak Jump and one Literature folder. Recall provides all the tools to move data from one folder to another or even one library to another. The nature of your work and how you wish to organise your results will determine the number of libraries and folders you will want to open. Since, you can move data around it is not necessary to determine this before you start to explore the feature or store data in libraries.

Data stored in a library is copied from its original source, the original data is not lost or erased. Storing data in a library is not necessarily a more compact method of storage.

2.2.1. The Spectra library

Supplied with Recall for Windows is the Spectra library which will have been copied into the Spectra directory during the installation procedure. Using the default settings the full filename is:

C:\SPECTRA\SPECTRA.MDB.

The spectra library contains one folder which is a literature scan folder containing 61 entries. The 61 scans are fingerprints for common gases which are often encountered in gas analysis and vacuum systems.

2.2.2. Library manager

The library manager is the main means of using and organising your libraries and their folders. From the library manager you can create, open and delete folders, open libraries or use the utilities to compact and repair the database.

To open the library manager select **F**ile | **L**ibrary . . . from the *menu bar* or *click* on the Library button on the button bar. The Library Manager *dialog box* will be opened.

The current library which is in use is shown in the **C**urrent **L**ibrary **F**ile: box at the bottom of the *dialog box*. When you first enter the library manager the default library will be displayed:

C:\SPECTRA\SPECTRA.MDB

providing you installed Recall for Windows in the default directory and have not changed the library default using **F**ile | **D**efaults . . . , refer to section 2.1.9.4. **L**ibrary. The **L**ibrary box will contain a list of all the folders in the currently selected library (SPECTRA.MDB). Initially there will be just one listed, RGA.

To open a folder *click* on the required name in the list to highlight it, then *click* on the **O**pen button.

To create a new folder *click* on the **N**ew> button to display the Library Folder *dialog box*.

You can delete a folder by highlighting it then *clicking* on the **D**elete button, a warning box is then displayed, *click* on the **Y**es button to complete the deletion. Once a folder has been deleted the data in it will be lost, IT IS NOT RECOVERABLE.

To change to another library or to create a new library *click* on the **Change** button to open a standard windows open file *dialog box*.

Click on the **Utilities>** button to display two more options **Compact Database** and **Repair Database**, these are described later.

To close the Library Manager *dialog box*, *click* on the **Cancel** button or press **ESC**.

2.2.3. Creating a new library

To create a new library select **File | Library . . .** from the *menu bar* or *click* on the Library button on the button bar to open the Library Manager *dialog box*, then *click* on the **Change** button. A standard Windows open file type *dialog box* will be displayed. Enter the name for the new library in the **File Name:** box do not include a filename extension Recall automatically supplies the **.MDB** extension. A warning box will then be displayed to tell you Recall cannot find the library and do you want to create a new one, *click* on the **Yes** button. Another warning box will then be displayed asking you if you want to create any folders in the new library. If you *click* on the **Yes** button the Library Folder *dialog box* will be displayed. Then, follow the procedure described in section

2.2.4. Opening and creating folders.

Click on the **No** button to create the library with no folders in it, you can add folders later. Another warning box will be displayed to give the user another chance to create folders, *click* on the **No** button. The Library Manager *dialog box* will then be displayed.

2.2.4. Opening and creating folders

To open a folder: select **File | Library . . .** from the *menu bar* or *click* on the Library button on the button bar to open the Library Manager *dialog box*, *click* on the required folder name in the Library list box to highlight it then *click* on the **Open** button. Note that you can open a folder more than once, in this way you can view different scans in the same folder simultaneously.

To create a new folder: select **File | Library . . .** or *click* on the Library button on the button bar to open the Library Manager *dialog box*, *click* on the **New>** button to open the Library Folder *dialog box*. *Click* on one of the three folder types, enter a name for the folder in the Folder Name box then *click* on the **Ok** button. If you create a literature scans folder you will be asked if you want to include a standard literature library which will store in the folder 61 scans showing spectra of the most common gases and vapours found in vacuum systems.

2.2.4.1. Folder types

There are three types of folder which contain different types of scans. A Bar Chart folder, unsurprisingly, contains Bar Chart scans but can also contain Analogue scans which will be converted to Bar Chart scans. Peak Jump folders primarily store Peak Jump scans but may also store Multi Trend, Fast Scan and Leak Check data. In each case it is the last displayed scan in the trend that is stored in the library folder as a Peak Jump scan. The third type of folder is the literature scan folder where scans consist of spectra data where peaks are given intensities in the range 0 to 1000 by the user. The user effectively “designs” his own spectra by “drawing” peaks. Usually the user will use proprietary libraries of spectra as a source of information for the literature scan folder.

2.2.5. Populating a library folder

Once you have created a library and have opened a folder you will then want to begin filling it with scans. This is done by copying onto the *clipboard* scans from data files then pasting them into the library folder.

Firstly, open the file containing the scan you want to put into the library by *clicking* on the Open button or selecting **F**ile | **O**pen from the *menu bar* and selecting the file from the Open *dialog box*. Assuming the file contains more than one scan select the required scan using the **G**oto commands or buttons as described in section 2.3. **Goto commands**. Now, copy the scan to the *clipboard* by selecting **V**iew | **C**opy to **C**lipboard from the *menu bar* or press **CTRL+C**. You can close the file or leave it open; it makes no difference once the scan is on the *clipboard*. Open the library folder by selecting **F**ile | **L**ibrary . . . from the *menu bar* or *clicking* on the Library button to display the Library Manager *dialog box*. Change to the required library if necessary then open the folder. If the folder already contains one or more scans a child window showing the first scan in the folder will be displayed. Select **L**ibrary | **P**aste from the *menu bar* or press **CTRL+V**. The Edit Library Entry window will be displayed, enter a description for the scan then *click* on the **O**k button.

If the folder doesn't contain any scans a warning box will be displayed which will tell you that there is a scan on the *clipboard* and ask you if you want to paste it into the folder, *click* on the **Y**es button.

2.2.6. Finding scans

The Goto commands operate in the same way with library folders as they do with ordinary Recall data files. You can display different scans by using the movement buttons on the button bar or by selecting the **G**oto commands from the *menu bar*, as described in section 2.3. **Goto commands**. The Scan Number command does operate slightly differently when used with library folders, as described below.

2.2.6.1. Scan number

You can jump to another scan from the active folder by defining text to search for in the scan description. Select **Goto | Entry . . .** from the *menu bar* or press **Shift+F9** or *click* on the Scan Number button on the button bar to display the Find a Folder Entry *dialog box*. In the **Scan Description to search for:** box enter the text for Recall to use for the search. It is a good idea to just enter the first one or two letters of the description. Wild cards may not be used. *Click* on the **Find First** button to display the first scan in the folder whose description matches the search text. *Click* on the **Find Next** button to display the next scan in the folder which matches the search criterion. If you want to find records that contain a certain phrase you should use the Search/Sort command in the Library menu.

2.2.7. Library menu

When you open a new folder a new child window will be opened showing the first scan in the folder. Also, the **Library** menu will be added the *menu bar*, the **Library** menu is not shown at other times. The library menu commands are described below.

2.2.7.1. Select/sort

When you open a library folder all the scans in that folder are available. At first you will probably only have a few scans in each folder and it will be quite easy to look through them using the movement buttons or the Goto commands. As your folders grow in size it is useful to work with a subset of the scans. The select/sort command allows you to form a subset of scans based on a selection criterion which you specify. Once you have the subset the movement buttons and Goto commands work in the same way but just on the subset rather than the whole folder.

To create a subset of scans select **Library | Select/Sort . . .** from the *menu bar* and the Current Search and Sort Criterion *dialog box* will be displayed. The **Selection Criterion:** box will describe the current selection criterion, if this is too large to fit in the box use the *scroll bar*. Initially the search criterion is set to select all scans from the folder. If you want to use the current criterion *click* on the **Run Search** button. If you want to alter the criterion or create a new search criterion *click* on the **Rebuild Query** button and the Construct a Search and Sort Criterion *dialog box* will be displayed.

You build a selection criterion by using the elements in the Selection part of the *dialog box*. Select a field name from the **Field Name:** *dropdown list*, a comparison from the **Operator** *dropdown list* then, enter a value in the **Value** box. Add the criterion to the selection criterion by *clicking* either the **And Into Selection** or **Or**

Into Selection button depending on which logic operation you want to be performed. You can then carry on to add further criteria to the selection by repeating the above until you have the desired criterion when you *click* on the **Run Search** button to carry out the selection procedure.

As you build up multiple criteria, Recall adds brackets to the statement to resolve the logical priorities of And/Or. If the sense is not what you require you can edit the brackets by changing the text in the **Criterion** box. The order of the brackets is in some circumstances dependant on whether you choose **And** or **Or** as your first selection. For more information see Online Help.

You can also define the criterion by which the scans in the subset are arranged by selecting one or more items from the **Sort By** list. *Click* on the item you want to sort by first so that it is highlighted then, *click* on the next item you wish to sort by, and so on. You may select as many items from the **Sort By** list as you like and the order in which the sorting is done is determined by the order in which you select the items from the list. To de-select an item simply *click* on it so that it is no longer highlighted. To de-select all the items *click* on the **Clear** button.

2.2.7.2. Select all

If you have used the select/sort command as describe in section 2.2.7.1. **Select/sort**, then only a subset of scans will be available to you rather than all of the scans in the active folder. If you want to make all the scans available again select **Library | Select All** from the *menu bar*.

2.2.7.3. Edit

The description is the text shown immediately below the settings bar which was first entered when the scan was copied into the library folder. Edit allows you to modify this scan description. It also allows changes to be made to literature scans folders.

Select **Library | Edit . . .** from the *menu bar* to display the Edit Library Entry *dialog box*. Enter the new text or modify the existing text then *click* on the **Ok** button. *Clicking* on the **Cancel** button will close the *dialog box* without any changes being made. If the active folder is a literature scans folder the Literature Library Folder Data Entry *dialog box* will be displayed. The title and values may be changed by following the details in section 2.2.7.4. **Add** .

2.2.7.4. Add

The add command is used to add scans to a literature scans folder and is only available when a literature scan folder is active. Select **L**ibrary | **A**dd . . . from the *menu bar* and the Literature Library Folder Data Entry *dialog box* will be displayed. In the title section, type the name for the entry in the **N**ame: box and its formula in the **F**ormula: box. You do not have to enter a formula. The next step is to enter a value in the range 1 to 1000 for up to 15 peaks which will make up the spectra. Usually, the major peak is given the value 1000 with up to 14 minor peaks being given values relative to this.

Position the cursor in the **M**ass: box and enter the mass of the major peak then, position the cursor in the **V**alue: box and enter a value in the range 1 to 1000 (usually 1000 for the major peak) then *click* on the **I**nsert button. Enter the mass for the second peak, then enter a value and *click* on the **I**nsert button. Continue in this way until all the required peaks have been entered. If you make a mistake while entering a Mass or its Value *click* on the **U**ndo button to clear it and start again.

Once you have some entries in the **T**able of Values you can *click* on one to highlight it. If you now *click* on the **D**efine button it will be removed from the list. Once an entry is highlighted its mass and value will be shown in the **M**ass: and **V**alue: boxes where they may be modified then, *click* on the **C**hange button to add the modified values to the **T**able of Values.

You may type text in the **C**omment box which will be displayed in the Recall (Scan Info) window.

When all the information is correct *click* on the **A**dd button to add the new entry to the folder and clear the *dialog box* ready for your next entry. *Click* on the **D**one button when you have finished to close the *dialog box*.

2.2.7.5. Paste

The paste command is used to copy scans from the *clipboard* into bar chart and peak jump folders. To paste a scan into a folder make sure the folder is the active folder, select **L**ibrary | **P**aste from the *menu bar* or press **CTRL+V**. Paste will be *greyed out* in the library menu list if there is no scan on the *clipboard*. The Edit Library Entry *dialog box* will be displayed, type in the text for the description then, *click* on the **O**k button. The new scan will be added to the end of the folder. If you have a sort criterion it is unlikely that the new scan will be in the correct place so, use the Refresh command to re-sort the folder.

If you are running RGA for Windows, you can copy the live scan to the *clipboard* and Paste it directly into your library in Recall.

2.2.7.6. Paste merge

The paste merge command allows a scan placed on the *clipboard* to be merged with the active scan. This feature was originally designed so that a scan taken using the multiplier detector could be combined with a scan taken using the faraday detector to provide a combined Bar Chart scan. Paste merge is only available when the current folder is a Bar Chart folder. Bar Chart and Peak Jump scans may be merged from the *clipboard* into a Bar Chart scan. Care should be taken as the resulting scan will be a composite and will only be authentic if you plan in advance what separate information you require.

Paste merge will be *greyed out* in the **Library** menu if the *clipboard* is empty. Before using paste merge make sure the active folder is a Bar Chart folder and the scan you want to merge has been copied on to the *clipboard*. Select **Library | Paste Merge** from the *menu bar*, the Paste Merge *dialog box* will be displayed.

The scan on the *clipboard* may be scaled when it is merged into the active scan. In the Pasted-In Peak Height Compensation area of the Paste Merge *dialog box* click on the **Total Pressure radio button** to apply a scaling factor to all the partial pressures and total pressure such that the total pressure of the scan on the *clipboard* and the total pressure of the active scan will be equal. For example, suppose the active scan has a total pressure of 4×10^{-7} and the scan on the *clipboard* has a total pressure of 2×10^{-7} . The total pressure and all the partial pressures of the *clipboard* scan will be multiplied by 2 before being merged, since, $2 \times 10^{-7} * 2 = 4 \times 10^{-7}$. Of course, this will only work if there is a total pressure reading with each of the scans.

Rather than scaling using the total pressure you can use a partial pressure. If you click on the Partial Pressure of mass *radio button* and enter a mass in the box the scan on the *clipboard* will be scaled so that the partial pressure of the mass specified is the same as that in the active scan. You must choose a mass that has a valid partial pressure in both scans.

Click on the **None radio button** to apply no peak height compensation.

When the scan on the *clipboard* is pasted into the active scan there are likely to be conflicts where both scans have a value of partial pressure for a certain mass. An order of priority can be established by using the settings in the Priority area of the Paste Merge *dialog box*. Click on the **Multiplier readings over Faraday check box** to check it, then the value obtained using the multiplier detector will be used rather than the faraday value. This will only be of use if one scan was obtained with the multiplier and the other with the faraday detector. Check the **Pasted-in readings check box** and the partial pressures in the scan on the *clipboard* will be used rather than those in the active scan.

Suppose you have a faraday scan in the Scan Clipboard window and a multiplier scan on the *clipboard*. The faraday scan is in the range E^{-6} to E^{-10} and the multiplier scan is in the range E^{-8} to E^{-12} . The final resultant scan will be in the range E^{-6} to E^{-12} . The faraday scan may have some peaks around $0.5 \times E^{-10}$ or less, which may be due to noise rather than real partial pressures. In the final resultant scan such peaks will appear as $5 \times E^{-11}$ peaks. **Checking Delete peaks not currently displayed** sets all Scan Clipboard window peaks less than $1 \times E^{-10}$ (max gain range) to zero.

When you have configured the settings in the Paste Merge *dialog box*, *click* on the **Merge Overwrite** button to carryout the merge operation and overwrite the active scan with the result. If you *click* on the **Merge Into New Copy** button a new scan will be created and the active scan will be retained, unchanged. The Edit Library Entry *dialog box* will be displayed, enter new text for the description and *click* on the **Ok** button to carry out the merge operation.

2.2.7.7. Delete

To remove the currently active scan from the library folder select **Library | Delete** from the *menu bar*. A warning box will be displayed, *click* on the **Yes** button to delete the scan. Once the scan is deleted from the folder it cannot be retrieved.

2.2.7.8. Cut

The cut command removes the active scan from the library folder and places it on the *clipboard*. Primarily this is used to move scans between libraries and folders. To cut a scan select **Library | Cut** from the *menu bar*, a warning box will be displayed, *click* on the **Yes** button to cut the scan from the folder.

2.2.7.9. Info

Select **Library | Info** from the *menu bar* or *click* on the Info button on the settings bar to display the Library Info window. This gives details of the current selection/sort criterion and the number of records in the currently selected folder. *Click* on the **OK** button to close the window.

2.2.7.10. Refresh

Select **Library | Refresh** from the *menu bar* or press **F4** to re-draw the active library scan and sort the folder based on the current criterion. It is sometimes necessary to do this after making changes to folder entries or adding new scans to a folder.

2.2.7.11. Utilities

There will be times when you will want to carry out operations on a number of scans in a library folder. The scanset utilities command allows you to copy, move and delete a number of scans at the same time. Scanset utilities could be usefully used when a folder has become very large and you want to archive some of the scans into another folder. It is important to remember that the scanset utilities commands operate on the current scanset which maybe the whole folder or more likely a subset of scans generated by using the **Select/Sort** command. For example, if you are archiving off some old scans you would first use the select/sort with a criterion of; Date/Time < 31/12/94 say, to select scans stored in 1994 and before.

To use the scanset utilities select **L**ibrary | **S**canset **U**tilities from the *menu bar* and a *menu list* containing three menu items will be displayed. To delete all the scans in the current scanset *click* on **D**el~~e~~te **A**ll . . . , a warning box will be displayed *click* on the **Y**es button to carry out the deletion. Once the scans have been deleted they cannot be retrieved.

To copy the scans in the current scanset select **C**opy **A**ll . . . from the *menu list* and the Select A Destination Library *dialog box* will be displayed. This is a standard windows open file type *dialog box*, select the library where the scans will be copied to. This maybe the same library if you are just copying to a different folder or it maybe a different library. The Select A Destination Folder *dialog box* will be displayed, *click* on the desired folder to highlight it then *click* on the **C**opy button. If you want to create a new folder to copy the scans to *click* on the **N**ew>> button, enter the name for the new folder, then *click* on the **C**opy button.

To move the scans in the current scanset select **M**ove **A**ll . . . from the *menu list* and the Select A Destination Library *dialog box* will be displayed. This is a standard windows open file type *dialog box*, select the library where the scans will be moved to. This maybe the same library if you are just moving the scans to a different folder or it maybe a different library. The Select A Destination Folder *dialog box* will be displayed, *click* on the desired folder to highlight it then *click* on the **M**ove button. If you want to create a new folder to move the scans to *click* on the **N**ew>> button, enter the name for the new folder, then *click* on the **M**ove button.

Remember to backup your .MDB and .LDB files regularly. Libraries contain large amounts of data in just one place. If anything happens to that file, all your data may be corrupted.

2.3. Goto commands

The Goto commands enable you to view scans within a data file. Each command is available in the Goto command list which is displayed by *clicking* on **G**oto in the

menu bar or pressing by **ALT+G**. Each of the seven commands are available by *clicking* on the appropriate button on the button bar or pressing the shortcut key. If a data file contains only one scan then all the Goto commands (and their buttons) will be *greyed out*.

2.3.1. Next

With Bar Chart, Analogue and Peak Jump files goto the next scan in the file by; selecting **Goto | Next Scan** from the *menu bar* or *clicking* on the Next button on the button bar or pressing **F7**. If you are viewing the last scan in the file this command will be *greyed out*.

With Multi Trend, Fast Scan and Leak Check files where more than one scan is displayed goto to the next page of scans by; selecting **Goto | Next Page** from the *menu bar* or *clicking* on the Next button or pressing **F7**. If you are viewing the last page this command will be *greyed out*.

2.3.2. Previous

With Bar Chart, Analogue and Peak Jump files goto the previous scan in the file by; selecting **Goto | Previous Scan** from the *menu bar* or *clicking* on the Previous button on the button bar or pressing **F6**. If you are viewing the first scan in the file this command will be *greyed out*.

With Multi Trend, Fast Scan and Leak Check files where more than one scan is displayed goto the previous page of scans by; selecting **Goto | Previous Page** from the *menu bar* or *clicking* the Previous button on the button bar or pressing **F6**. If you are viewing the first page of scans this command will be *greyed out*.

2.3.3. Jump forward

With Bar Chart, Analogue and Peak Jump files to jump forward by approximately 10% of the total number of scans in the file select **Goto | Jump Forward** from the *menu bar* or *click* on the Jump Forward button on the button bar or press **SHIFT+F7**. If you are already viewing the last scan in the file this command will be *greyed out*.

With Multi Trend, Fast Scan and Leak Check files where more than one scan is displayed jump forward by approximately 10% of the total number of pages by; selecting **Goto | Jump Forward** from the *menu bar* or *clicking* the Jump Forward button on the button bar or pressing **SHIFT+F7**. If you are already viewing the last page of scans this command will be *greyed out*.

2.3.4. Jump Backward

With Bar Chart, Analogue and Peak Jump files to jump backward by approximately 10% of the total number of scans in the file select **Goto | Jump Backward** from the *menu bar* or *click* on the Jump Backward button on the button bar or press **SHIFT+F6**. If you are already viewing the first scan this command will be *greyed out*.

With Multi Trend, Fast Scan and Leak Check files where more than one scan is displayed jump backward by approximately 10% of the total number of pages by: selecting **Goto | Jump Backward** from the *menu bar* or *clicking* on the Jump Backward button on the button bar or pressing **SHIFT+F6**. If you are already viewing the first page of scans this command will be *greyed out*.

2.3.5. Last

With Bar Chart, Analogue and Peak Jump files to goto the last scan in the file either; select **Goto | Last Scan** from the *menu bar* or *click* on the Last button on the button bar or press **F8**. If you are already viewing the last scan in the file this command will be *greyed out*.

With Multi Trend, Fast Scan and Leak Check files where more than one scan is displayed view the last page of scans by; selecting **Goto | Last Page** from the *menu bar* or *click* on the Last button on the button bar or press **F8**. If you are already viewing the last page of scans this command will be *greyed out*.

2.3.6. First

With Bar Chart, Analogue and Peak Jump files goto the first scan in the file by; selecting **Goto | First Scan** from the *menu bar* or *clicking* on the First button on the button bar or pressing **F5**. If you are already viewing the first scan this command will be *greyed out*.

With Multi Trend, Fast Scan and Leak Check files where more than one scan is displayed view the first page of scans by; selecting **Goto | First Page** from the *menu bar* or *click* on the First button on the button bar or press **F8**. If you are already viewing the first page of scans this command will be *greyed out*.

2.3.7. Scan Number

With Bar Chart, Analogue and Peak Jump files the user can select a specific scan for display by entering the scan number in the Goto Scan Number *dialog box* which is displayed by selecting **Goto | Scan Number . . .** from the *menu bar* or by *clicking* on

the **Goto** button or by pressing **F9**. Enter the required number by *clicking* on the up or down arrow or by typing in the value, the maximum and minimum values are displayed. Then, *click* on the **Ok** button.

When you are viewing library scans you enter the first few letters of the scan description rather than the number, as described in section **2.2.6.1. Scan number**.

2.3.8. Span settings

For files stored in Multi-Trend, Fast Scan and Leak Check modes the number of scans displayed on the screen may be changed. In this way the whole scan may be viewed to see the overall trend or a small section may be zoomed in on to see details of pressure changes. When you first open the file the whole scan will be displayed. For very long files Recall will still display the whole file but the data may be compressed. Normally the PC screen can display approximately 1000 individual data acquisitions.

Two controls are provided to display parts of the file. The **Start At:** control determines the point in the data to use as the first scan displayed on the screen. The **Start At:** value is expressed as a percentage of the total number of scans in the file. For example, if the file contains 500 scans and the **Start At:** value is 10 the first scan will be scan number 50, from $500 \times 10\% = 50$.

The second control is the **Span:** setting which determines how many scans are displayed on the screen. Again, this is expressed as a percentage of the total number of scans.

Both the **Start At:** and **Span:** controls are below the scan data and values may be entered by positioning the cursor in the box and typing the desired value. Alternatively, you can use the *scroll bar* to increment or decrement the value by *clicking* on the right or left arrow buttons or, *drag* the scroll bar using the mouse.

The maximum **Start At:** value and minimum **Span:** value are displayed in brackets above the scroll bar. It is possible to enter values which cannot be used, for instance, a **Start At:** of 50 and **Span:** of 75. In these cases the **Span:** value will be adjusted to the nearest valid value by Recall for Windows. In the example the **Span:** setting would be changed from 75 to 50.

Once new values for **Start At:** and **Span:** have been entered the screen needs to be re-drawn. To do this *click* on the Redraw button to the right of the scroll bars or select **View | Redraw** from the *menu bar* or press **F4**.

2.4. View commands

The view commands change the way the data is presented on screen they do not change the data itself.

2.4.1. Y-axis

The y-axis command controls the scale displayed on the pressure axis. For Multi-Trend, Peak Jump and Fast Scan files you switch between a logarithmic and linear y-axis by *clicking* on the **Log** button on the settings bar or selecting **View | Y-axis | Log Scale** to change from a linear scale or **View | Y-axis | Linear Scale** when the log scale is displayed. Bar Chart files may only be displayed with the axis they were stored with. Analogue and Leak Check modes only have a linear y-axis mode.

When the logarithmic y-axis is enabled the highest and lowest gain ranges displayed may be adjusted by selecting **View | Y-axis** from the *menu bar*. Then *click* on either **Low Gain Range** or **High Gain Range** then *click* on **Increase** or **Decrease**. If you are already displaying the highest or lowest range the **Increase** or **Decrease** will be *greyed out*.

When the logarithmic y-axis is enabled the gain ranges may be adjusted by using the four buttons on the settings bar which are described in section 1.6.3.4. **Recall Settings Bar**. When the upper or lower limit for a particular range has been reached the relevant button will be *greyed out*.

2.4.2. X-axis

The x-axis command allows the user to display a portion of the mass range for Bar Chart files. Select **View | X-axis . . .** from the *menu bar* to display the Mass Range *dialog box*. Type in the value for the first mass and last mass in the appropriate box, then *click* on the **Ok** button. You can only choose values within the range of masses stored in the data file.

2.4.2.1. As relative time

The time displayed on the x-axis in Multi-Trend, Leak Check and Fast Scan files may be shown as real time or elapsed time from the start of the scan. To change to elapsed time select **View | X-axis as Relative Time** from the *menu bar*. To change to real time select **View | X-axis as True Time** from the *menu bar*.

2.4.3. Cursor info

The cursor enables precise values to be displayed for measurements within the scan data window. The cursor is available when viewing files stored in all the modes but it operates in slightly different ways. To enable the cursor *click* on the Cursor button on the settings bar or select **View | Cursor Info** from the *menu bar*. A tick is shown next to Cursor in the **View** menu when it is enabled.

With Bar Chart and Peak Jump files *click* anywhere in the scan data window and the mouse pointer will move to the top of a peak. The peak value will be displayed in the cursor info bar immediately below the settings bar. You may then *drag* the pointer to other peaks and the value in the cursor info bar will change to show the value of the new peak.

The cursor operates in exactly the same way for Analogue files except there are 16 values for each peak.

With Multi-Trend, Fast Scan and Leak Check files the cursor reading is displayed in a column added to the key panel when the cursor is enabled. As you move the *mouse pointer* along the x-axis the readings at that point are displayed.

2.4.4. Peak surround

Peak surround is only available when viewing Peak Jump files. When peak surround is enabled a border is drawn around the peak in each enabled channel and the partial pressure reading is displayed above the peak.

To enable peak surround *click* on the Peak Surround button on the settings bar or select **View | Peak Surround** from the *menu bar*. A tick is shown next to Peak Surround in the **View** menu when it is enabled.

2.4.5. Alarms

To view the alarm settings in a Peak Jump file select **View | Alarms** from the *menu bar* or *click* on the Alarms button on the *settings bar*. If high and/or low alarms were set when the file was stored the alarm settings will be displayed. If you move the *mouse pointer* over an alarm symbol (the triangle to the right of the peak) it will change to a question mark, if you then *click* the alarm value will be displayed.

2.4.6. Grid

The grid is a series of horizontal lines or dots displayed under the scan data to help in reading measurements. To enable the grid *click* on the Grid button on the settings bar or select **View | Grid** or press **CTRL+G**. A tick is shown next to **Grid** in the **View** menu when it is enabled.

2.4.7. Total pressure

To show the total pressure reading *click* on the Total Pressure button on the settings bar or select **V**iew | **T**otal Pressure from the *menu bar* or press **CTRL+T**. The total pressure reading will be displayed between the cursor info bar and the settings bar. If total pressure was disabled when the file was stored the display will read “Total Pressure Off”.

2.4.8. Button bar

The button bar is the row of buttons in the main Recall window immediately below the *menu bar*. You may choose not to display the Button Bar in which case the scan window will expand to use the extra screen space. The default setting is for the button bar to be displayed.

To hide the button bar select **V**iew | **B**utton Bar from the *menu bar*. A (tick) is shown to the left of **B**utton Bar in the menu list when it is displayed.

2.4.9. Settings bar

The settings bar is the row of buttons in the scan window just above the scan data. You may choose not to display the settings bar in which case the scan window will expand to use the extra screen space. The default setting is for the settings bar to be displayed.

To hide the settings bar select **V**iew | **S**ettings Bar from the *menu bar*. A (tick) is shown to the left of **S**ettings Bar in the menu list when it is displayed.

2.4.10. Copy to clipboard

The current scan displayed on screen as the active window maybe copied to the *clipboard* by selecting **V**iew | **C**opy to Clipboard from the *menu bar* or by pressing **CTRL+C**. This command is mainly used as a means of copying scans into a Recall Library where a scan is first copied to the *clipboard* then pasted into the library. The contents of the *clipboard* may be viewed by selecting **F**ile | **S**can Clipboard, refer to section 2.1.8. Scan clipboard.

Remember the *clipboard* provides a means of transferring data. As you change data that has been copied from the *clipboard* the contents of the *clipboard* does not change. If you have edited the scan or performed a paste merge you will want to copy the modified scan onto the *clipboard* so that you can paste it into a library folder, for example.

2.4.11. Vertical legend

The times displayed on the x-axis in Multi-Trend, Leak Check and Fast Scan files may be shown horizontally or vertically. To change from horizontal to vertical select **View | Legend Vertical** from the *menu bar*. To change from vertical to horizontal select **View | Legend Horizontal** from the *menu bar*.

2.4.12. Continuous trace

The traces drawn on screen in the scan data window with Multi-Trend, Fast Scan and Leak Check files may be shown as continuous traces or as a series of dots. To change the trace display *click* on the Continuous Trace button on the settings bar or select **View | Continuous Trace** from the *menu bar*. When selected a tick will be shown next to **Continuous Trace** in the **View** menu and the button will be depressed.

2.4.13. Redraw

The redraw command is only available when viewing files stored in the Multi-Trend, Fast Scan and Leak Check modes. *Click* on the **Redraw** button or select **View | Redraw** or press **F4** to redraw the traces in the scan window. Redraw is usually used after the span settings have been adjusted using the **Start At:** and **Span:** settings.

2.4.14. Analogue

There are some special commands which are only available when the active file was stored in the Analogue mode. The Analogue scan may be viewed as a Bar Chart by selecting **View | Bar Chart** from the *menu bar* or *clicking* on the Bar Chart button on the settings bar. To change back to an Analogue view select **View | Analogue** from the *menu bar* or *click* on the Analogue button on the settings bar. When viewing the scan as a Bar Chart the y-axis may be changed to a logarithmic scale by selecting **View | Log Bar Chart Scale** from the *menu bar*. To change back to a linear scale select **View | Linear Bar Chart Scale**. By selecting **View | Twin Display** from the *menu bar* or *clicking* on the Twin Display button on the settings bar, the scan window will be split to show both an Analogue view and a Bar Chart view of the data file. The Log/Linear Bar Chart scale will still operate as described above.

When viewing an Analogue scan as a Bar Chart the Bar Chart peak height is determined from the area under the middle half a.m.u. of the analogue peak. It is not simply based on the maximum height of the analogue peak.

2.4.15. Edit text

The **Edit Text . . .** menu item is only available when the active window is the Scan Clipboard window displayed by selecting **File | Scan Clipboard** from the *menu bar*.

The descriptive text is displayed in a box above the scan data, immediately below the *title bar*. The text may be changed by selecting **View | Edit Text . . .** from the *menu bar* to display the Clipboard Scan Name *dialog box*. Enter a new description or modify the existing one then *click* on the **Ok** button.

If the scan is literature library scan the Literature Library Folder Data Entry *dialog box* will be displayed and the **Name**, **Formula** and **Table of Values** may all be edited as described in sections **2.2.7.3. Edit** and **2.2.7.4. Add** .

2.4.16. Edit peaks

The **Edit Peaks . . .** menu item is only displayed when the active window is the Scan Clipboard window. The **Edit Peaks . . .** menu item is only available when:
a literature folder scan copied from a Recall library is displayed
or

a bar chart scan is displayed in the scan window and Recall has been started with the ability to edit peaks. For information on how to start Recall for Windows with the ability to edit peaks in bar chart scans see section **2.8 Switches**.

At all other times the **Edit Peaks . . .** menu item will be *greyed out*. The result of selecting **Edit Peaks . . .** is different depending on the type of scan (literature folder or bar chart) being displayed.

When the Scan Clipboard window is displaying a scan from a Literature Library Folder selecting **View | Edit Peaks . . .** from the *menu bar* will display the Literature Library Folder Data Entry *dialog box*. In the title section type the name for the entry in the **Name:** box and its formula in the **Formula:** box. You do not have to enter a formula. The next step is to enter a value in the range 1 to 1000 for up to 15 peaks which will make up the spectra. Usually, the major peak is given the value 1000 with up to 14 minor peaks being given values relative to this.

Position the cursor in the **Mass:** box and enter the mass of the major peak then, position the cursor in the **Value:** box and enter a value in the range 1 to 1000 (usually 1000 for the major peak) then *click* on the **Insert** button. Enter the mass for the second peak, then enter a value and *click* on the **Insert** button. Continue in this way until all the required peaks have been entered. If you make a mistake while entering a Mass or its Value *click* on the **Undo** button to clear it and start again.

Once you have some entries in the **Table of Values** you can *click* on one to highlight it. If you now *click* on the **Delete** button it will be removed from the list. Once an entry is highlighted its mass and value will be shown in the **Mass:** and **Value:** boxes where they may be modified then, *click* on the **Change** button to add the modified values to the **Table of Values**.

You may type text in the **C**omment box which will be displayed in the Recall (Scan Info) window.

When all the information is correct *click* on the **U**ppdate button to add the modified entry to the folder. *Click* on the **C**ancel button when you have finished to close the *dialog box*.

When Recall has been started with the /e switch, see section **2.8. Switches**, and the Scan Clipboard window is displaying a bar chart scan selecting **V**iew | **E**dit **P**eaks . . . from the *menu bar* will display the Scan Editor *dialog box*.

The Scan Editor *dialog box* is an “always on top” window so you can move it in order to see peaks of interest in the scan. To edit the scan, start by selecting one mass you wish to edit and type its mass in the **M**ass box. The mass value must be within the range of masses displayed in the scan window. *Click* on the **A**ction *dropdown list box* and then *click* on one of the five actions:

Set To
Set To Zero
Subtract
Add
Scale By

to select it. Position the cursor in the **V**alue box and enter the required value. If the action is Set To Zero you do not have to enter a value. If you select Set To, Subtract or Add the value should be in the form aE-b where a is in the range 0.01 to 9.99 and b is in the range 5 to 16.

2.4.17. Paste from clipboard

If there is a scan on the *clipboard* it may be pasted into the scan window by selecting **S**can | **P**aste From Clipboard from the *menu bar* or pressing **CTRL+V**. Any data currently being displayed in the scan window will be overwritten and the data will be lost.

2.4.18. Paste merge from clipboard

Paste merge allows you to combine a scan on the *clipboard* with a scan in the clipboard window. Paste merge in the scan menu operates in the same way as paste merge in the library menu. You can only merge into a Bar Chart scan in the scan window but the scan on the *clipboard* may be either a Bar Chart or a Peak Jump scan.

To merge a scan first make sure the scan in the scan window is a Bar Chart scan and you have a suitable scan on the *clipboard*. Then, select **S**can | **P**aste **M**erge **F**rom **C**lipboard from the *menu bar* to display the Paste Merge *dialog box*. All the settings in the Paste Merge *dialog box* are explained in section 2.2.7.6. **Paste merge** .

When you have the correct settings *click* on the **M**erge **O**verwrite button. **M**erge **I**nto **N**ew **C**opy is not available when merging into the clipboard window.

2.5. Channel menu

The channel menu is only available when the active open file was stored in one of the three channel based modes (Peak Jump, Multi Trend, Fast Scan or Leak Check) or is a Bar Chart file being shown as a Trend.

The channel properties are shown in the Channel window which is displayed by selecting **C**hannel from the *menu bar* and *clicking* on the required channel number. If the active window shows a Peak Jump file the channel window can be opened by *clicking* on the channel button below the scan data. If the active window shows a Multi Trend, Leak Check or Fast Scan *click* on the mass number in the key panel to display the channel window.

2.5.1. The channel window

The channel window shows various properties relating to the channel such as the mass setting, autorange status, values for high and low alarms if they were set. Except for the specific case detailed below all of the properties are for information only. Channels which were enabled when the file was stored may be disabled by *clicking* on the **C**hannel **O**n *check box* to *un-check* it.

The one occasion when you can change the **M**ass: value is when you have opened a Bar Chart file and converted it to a Trend by selecting **F**ile | **S**how **A**s **T**rend. The mass value displayed in each channel may be changed by positioning the cursor in the **M**ass: box and typing in the new mass. Only values within the mass range of the stored file may be entered or Total, if the file was stored with Total On. To display Total enter 0 or Tot as the mass.

The properties of the next channel may be displayed by *clicking* on the **N**ext button, *clicking* on the **P**revious button will display the previous channel's properties. Using the **N**ext and **P**revious buttons saves time as the screen is not redrawn after each channel is selected.

Once all the channels have been configured *click* on the **O**k button to implement the changes. *Clicking* on the **C**ancel button will close the Channel window without making any changes to the current channel.

2.6. Window commands

Click on **W**indow in the *menu bar* to display the Window menu list. This contains standard windows methods for displaying multiple windows on the screen and a list of all the open windows in the Recall application. If you *click* on a file in the list it will become the active window and will be displayed uppermost on screen.

Each Recall file that you open will initially be displayed as a *minimized* window, the data will be clearly visible but the window will not fill the full screen. Remember, you can open a file any number of times and each opening will cause a new window to be displayed. In this way you can display, say, scan 1 and scan 2 from the same bar chart file. If you *click* on the *maximize* button in the top right corner of the window it will be *maximised* and will fill the whole screen. If you *click* on the *minimise* button in the top right corner of the window it will be *iconized* (displayed as an icon). Any number of windows may be open but only one will be active. The active window will have a different coloured *title bar* (unless you have configured the colours to be the same for active and inactive *title bars*) than the other windows.

2.6.1. Cascading

Select **W**indows | **C**ascade from the *menu bar* to display all the open windows on top of each other moving right and downwards on the screen so that all the *title bars* are visible. The active window will be uppermost.

2.6.2. Arrange icon

Selecting **W**indows | **A**rrange Icons will cause the icons, displayed as a result of *iconizing* open windows, to be arranged along the bottom of the screen.

2.6.3. Tiling

To change the display so that all the windows are fully visible select **W**indows | **T**ile **H**orizontal from the *menu bar*. Each open window will be reduced in size so that all windows are displayed on screen. Recall will try to display the windows horizontally (if only two or three windows are open they will be shown one above the other with each window using the full width of the screen) but will adjust the display to give the “best fit”.

Selecting **W**indows | **T**ile **V**ertical from the *menu bar* will cause each open window to be displayed in a vertical manner with each window being fully visible on screen.

2.6.4. Info window

To display the Recall (Scan Info) window select **W**indows | **I**nfo Window from the *menu bar* or press **CTRL+I**. Remember, there is only one info window and the information in it relates to the active window.

2.6.5. Clipboard window

To make the Scan Clipboard window the active window select **W**indow | **C**lipboard **W**indow from the *menu bar* or press **CTRL+W**. If the Scan Clipboard window has not been opened, by selecting **F**ile | **S**can **C**lipboard, Clipboard **W**indow will be *greyed out* in the **W**indow menu.

2.7. Help

Help in Recall for Windows operates in a similar way to Help in other Windows applications. Recall Help is a separate program which is accessed from Recall and can be entered without opening Recall by *double clicking* on the Recall Help icon in the Spectra program group. When you are working in Recall you can press F1 at any time to enter the help files. The most relevant help page will be opened. For instance, if you have *clicked* on **G**oto in the *menu bar* to display the Goto menu list then pressed F1 the Menus: The Goto Menu help page will be displayed. In this way Recall Help is context sensitive.

Most help pages will contain text which is green and underlined indicating another help topic which is available. If you move the *mouse pointer* over this text the arrow will change to a hand, if you then *click* another help page will be displayed.

If you select **H**elp from the *menu bar* a menu list containing four items will be displayed, these are described below.

2.7.1. Contents

Select **H**elp | **C**ontents from the *menu bar* to display the main contents page of Recall Help. There are number of main topic headings which you can *click* on to get further help. In the row of buttons at the top of the help window *clicking* on Contents will return you to this page.

2.7.2. Searching

Select **H**elp | **S**earch for help on . . . to display the Help Search window which allows the user to find help on specific topics. Type in a word or words pertinent to the subject on which you require help. For instance, if you want help on opening files

you could type file. The list will then show all the items beginning with file. Alternatively, you can move through the list by using the scroll bar to the right of the list.

Click on the required item in the list then *click* on the **Show Topics** button and the relevant help topics will be displayed. You can *double click* on the item to display the relevant help topics. *Click* on the required help topic in the list then *click* on the **Go To** button to display the help page.

In the row of buttons at the top of the help window *click* on the **Search** button to open the Search window.

2.7.3. Getting started

Select **Help | Getting Started** to open the Getting Started help page which will introduce you to Recall Help. Read through the text and follow the instructions.

If you *click* on the **Back** button (one of the row of buttons at the top of the Help window) the previous help page that you were viewing will be displayed. You can continue to *click* on the **Back** button to move back through the help pages you have viewed in this session. The **Back** button will be *greyed out* when you are on the first page.

Each time you view a help page the name of that page is added to the history list which can be displayed by *clicking* on the **History** button. That last page viewed is at the top of the list the first page at the bottom. If the list is too long for the window a *scroll bar* will be displayed to the right. *Double click* on any item to display that help page.

2.7.4. About

Select **Help | About Recall . . .** to display the About window which contains valuable information for our service engineers should you ever need assistance. If you telephone for technical support please have the information from the Help About window ready. *Click* on the **Ok** button to close the About window.

2.7.5. Printing help pages

Any of the help pages maybe printed out so that you have a hardcopy. To do this first go to the required help page so that it is displayed on the screen. Now, select **File | Print Topic** from the top of the help window. That particular help page will be printed. You can adjust the setup of your printer by selecting **File | Print Setup . . .** which will display the Print Setup *dialog box* where you can make any necessary

changes.

2.7.6. Help notes

The user can add their own notes to the help files which may be useful for adding further details. To add notes firstly, select the page to which the notes will relate, so that it is visible on screen. Select **E**dit | **A**nnotate . . . from the top of the help window, the *Annotate dialog box* will be displayed. Type in the text for the note and *click* on the **S**ave button when complete. *Clicking* on the **C**ancel button will close the *dialog box* without the note being saved.

You should now see a green paper clip symbol displayed in the upper left corner of the help page indicating that there is annotation for that help page. *Click* on the paper clip to open the *Annotate dialog box*, or you can select **E**dit | **A**nnotate The notes can be edited simply by typing new text and using the **D**ELETE and **B**ACKSPACE keys.

Text from the notes can be copied to the *clipboard* by selecting the text using the mouse then *clicking* on the **C**opy button. Text can be copied from the *clipboard* into the notes by positioning the cursor at the required point then *clicking* on the **P**aste button.

2.8. Switches

There are a number of “software switches” which may be used to control the way in which Recall for Windows starts up. Normally the user does not have to concern himself with these as they are automatically inserted during the installation and configuration process.

To add a software switch in the Spectra program group *click* on the Recall program item to make it active

select **F**ile | **P**roperties . . .

The **C**ommand Line will read C:\SPECTRA\RECALL.EXE assuming the default directory is used.

The software switch is added to the end of the command line. All the software switches begin with a / forward slash and there follows a single letter and possibly a single digit number, depending on the switch. More than one switch may be used in a command line and there is a space before each / .

For example if the /E switch was added the command line would appear as follows:

```
C:\SPECTRA\RECALL.EXE /E
```

Upper or lower case letters may be used.

2.8.1. Software switches

/E The /E switch is used to allow the editing of peaks in bar chart format on the *clipboard*, refer to section **2.4.16. Edit peaks**.

/Hn The Head switch, where n is the head number in the range 1 to 8. This allows Recall to look at the RGA4WINn.INI for certain settings such as background colour and channel masses. Only use this switch if you use different settings on multiple heads with RGA for Windows.