WinRAC
RAC-200 Windows Software

WinRAC *Reference Manual*

Windows is a registered trademarks of Microsoft Corporation. JAMAR Technologies, Inc. recognizes the trademarks of all other companies and products mentioned in this manual.

If you have any questions about the use of WinRAC, please call the following number:

800-776-0940
Monday – Friday 8:00 AM to 5:00 PM Eastern time

You may also contact us by fax at:

1-215-491-4889

or via e-mail at:

support@jamartech.com

For more information on our products, the latest news in product development, and to download software updates, visit our web site at:

www.jamartech.com

For information on all known issues with WinRAC, go to:

www.jamartech.com/winracsupport.htm

Address any correspondence to:

JAMAR Technologies, Inc.
151 Keith Valley Road
Horsham, PA 19044-1411

Table of Contents

Chapter 1

Introduction & Installation

What is WinRAC?

WinRAC is a software program designed by JAMAR Technologies, Inc. for use with the RAC-200 Distance Measuring Instrument. This program is compatible with the Windows 95/98 & NT operating systems and allows you to retrieve surveys that have been stored in the RAC-200 as well as to collect data from the RAC-200 directly into your computer in a real time mode. Once your data has been entered into the program, it can be edited in a variety of ways and comprehensive reports can be produced.

System Requirements

The following are the minimum system requirements needed for installing and running this program.

- IBM PC or 100% compatible
- Windows 95, Windows 98 or Windows NT (4.0 or better)
- 486DX, 66 megahertz processor or better
- 16 MB RAM
- SVGA Graphics Card (640x480, 256 colors minimum)
- Mouse or other pointing device
- Hard disk with 10 MB of free space
- Double speed CD ROM or higher
- Available serial port

Software Updates

Updates to our software, containing new features and bug fixes, are issued periodically and can be downloaded from our web site at:

www.jamartech.com

For up to the minute information on all known issues with WinRAC, go to:

www.jamartech.com/WinRACsupport.htm

Installing WinRAC

Begin the installation by placing the WinRAC CD into your CD-ROM drive. If your CD drive is configured for Autoplay, the Installation Options program will start after a few second. Otherwise, click on the 'Start' button on your Windows desktop. Select Run from the list of options and type the command line 'X:\setup' where X is the letter of your CD-ROM drive. Press OK and the Installation Options will begin.

The Installation Options program allows you to do several things in addition to installing the software, such as checking our current product catalog or registering your copy of the software. To install WinRAC, click on the Install WinRAC button and the installation will begin.
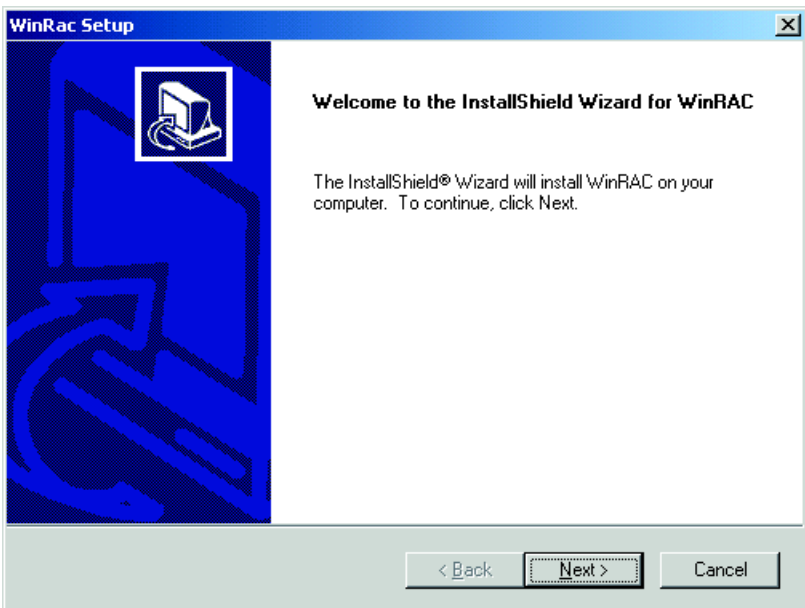
The first screen you will see welcomes you to the installation for the program. Be sure all other programs are closed before proceeding with the installation. During the installation, files used by the program will be placed on the computer, including some Windows system files. If other programs are open and using some of the files that need to be installed, an error can occur during the installation process. When you are ready to proceed, click on the Next button.
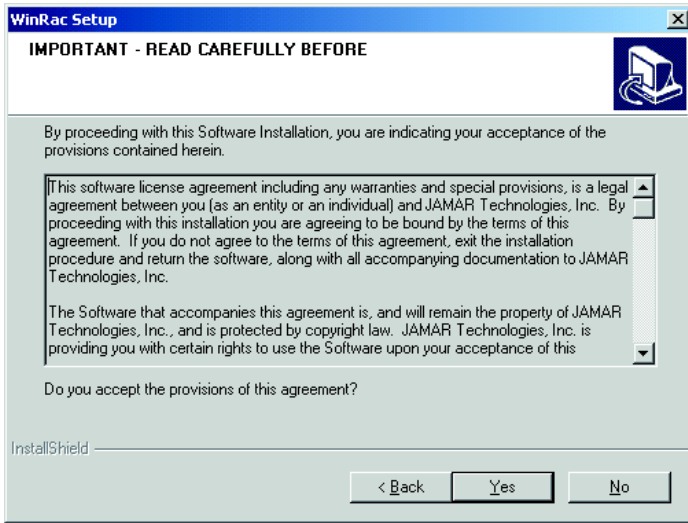
The Software License screen allows you to review the license agreement that must be accepted in order to use the program. Please review this agreement before selecting one of the options. You must accept the agreement in order to proceed with the installation or otherwise use the program. If you agree to the license, click Yes to continue.
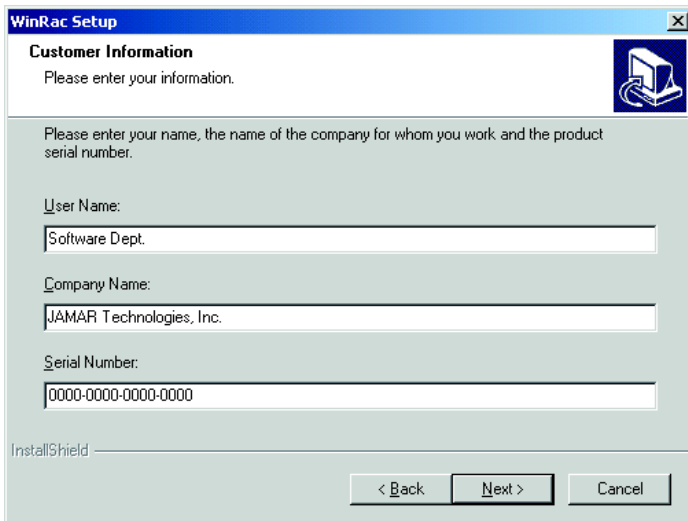
The User Information Dialog requires you to enter the name of the person that will be using the program, as well as the company name. The program's serial number, which is a 16-digit number that can be found on the back of the program's CD case,

must also be entered. When entering the number be sure to include the dashes. If the serial number is entered incorrectly, you will not be allowed to proceed with the installation. Once the information has been entered, click the Next button to continue.
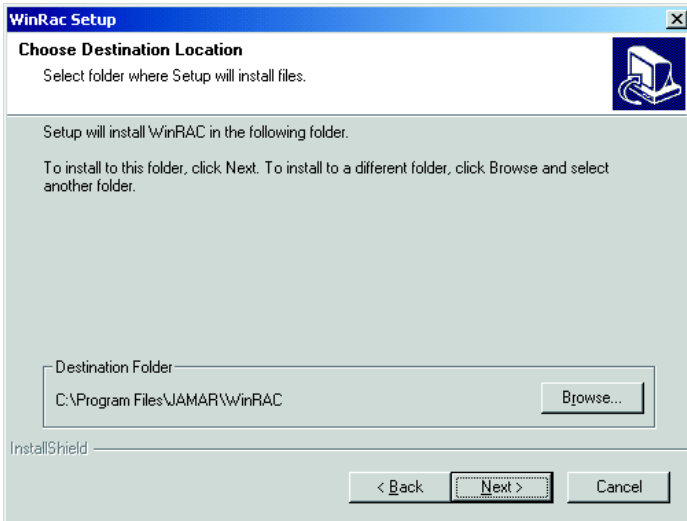
The Choose Destination Location screen is used to select the directory in which WinRAC will be installed. The default location is C:\Program Files\JAMAR\WinRAC. Once the directory has been set, click Next to continue.
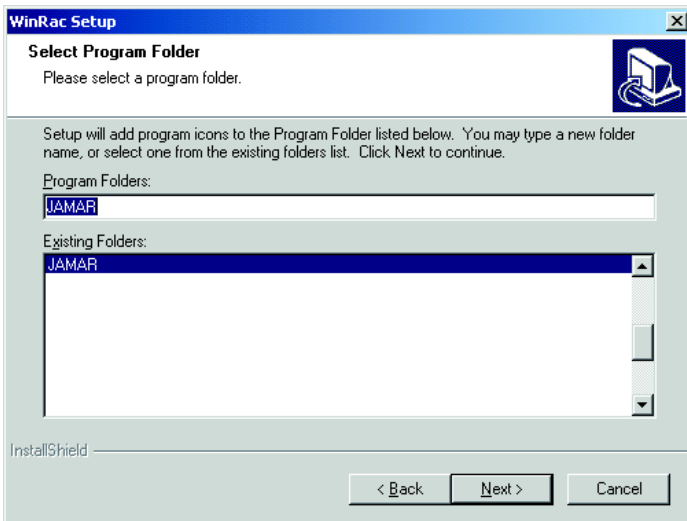
The Select Program Folder screen is used to the name the folder the program is stored in. Click Next to continue and a summary of the settings you have chosen will be shown. Click Back to change any or click Next and the program files will be copied onto your computer.
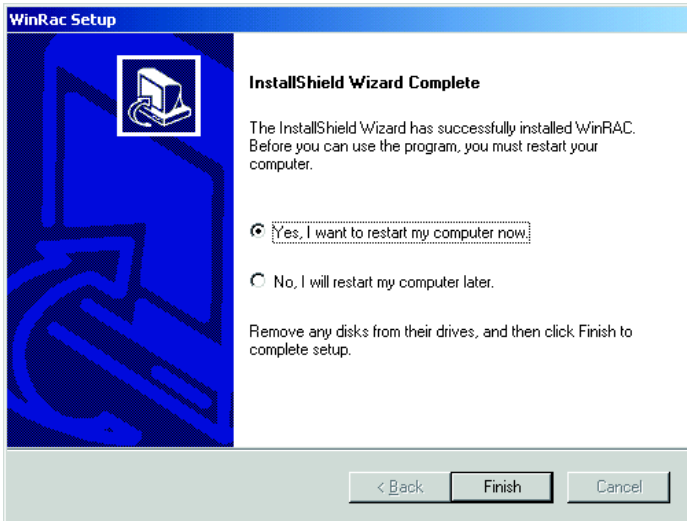
Once the program files have been copied onto the computer the Setup Complete screen will appear. You may be prompted to restart your computer at this point. Click Finish to exit the installation.

Once it has been installed, the program can be accessed by clicking on the Windows Start button, going to Programs, then JAMAR and choosing WinRAC.

Chapter 2

Navigating in WinRAC & Using the Help System

Navigating in WinRAC

WinRAC has been designed to allow you to easily access the many features and options contained in the program. The tool bar located at the top of the program allows quick access to some of the program's most common features while the drop down menus provide access to all functions of the program.

Toolbar

Open a stored survey · Open Print Setup · Copy data to clipboard · Delete an event

Save current survey · Preview Report · Insert an event

Edit Header · Create Graph · Collect Real-Time Data · Use Calculator

Edit Description Tables · Retrieve Survey from RAC-200 · Control RAC-200 from Keyboard

Drop Down Menus

File	Edit	Insert	Format	RAC
Open
Close
Save
Save As...
Export
Preview
Print...
Preferences
C:\Temp\Sample Survey.rdf
Exit

File Menu

Edit	Insert	Format	F
Copy
Copy Formatted
Delete Event
Edit Header

Edit Menu

Insert	Format	RAC-2
Insert an Event

Insert Menu

Format	RAC-200	Tools	Win
Change Unit of Measure ▶
Set Font To Default

Format Menu

RAC-200	Tools	Window
Retrieve Stored Data
Control RAC-200

RAC-200 Menu

Tools	Window	Help
Reset First Distance
Reset First Location Number
Reset First Elapsed Time
Merge 2 Surveys
Description Tables
Produce Graphs

Tools Menu

Window	Help
Cascade
Tile Horizontal
Tile Vertical
Arrange Icons
✔ 1 C:\Temp\Sample Survey.rdf

Window Menu

Help
WinRAC Help Topics
About WinRAC

Help Menu

Additional Navigation and Selection Devices

Tabs

A number of screens in the program contain tabs to allow access to additional information. To access this additional information, click on the tab you wish to go to.
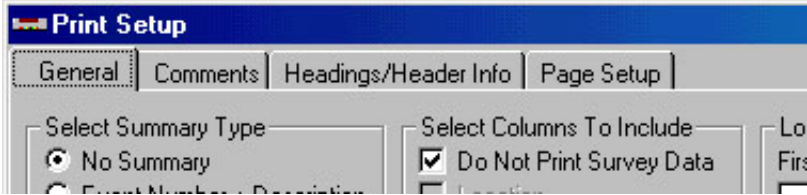
In this example, the General tab is currently active. To select any other the other tabs, such as the Comments tab shown below, click on them with the mouse.
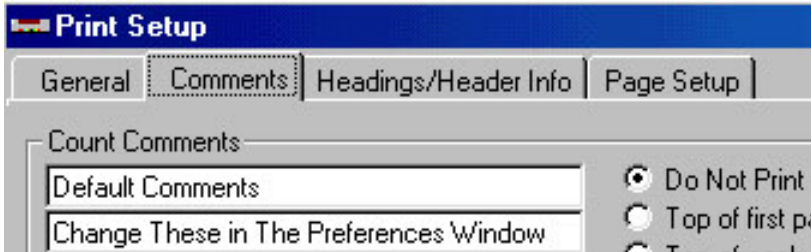
Radio Buttons

Many areas of the program contain radio buttons for selecting options and features. In general, you click on the circle next to the item to select it. Radio buttons are used when only one option can be selected at a time.
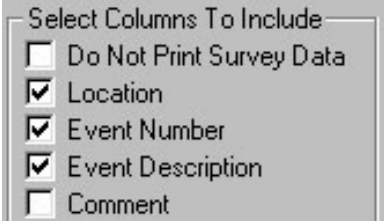
In the example shown here, taken from the Print Setup, the option to Do Not Print Comments on the report has been selected.
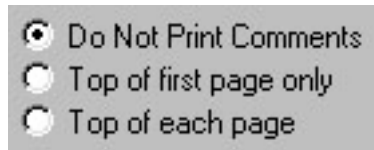
Check Boxes

Like Radio buttons, many areas of the program contain check boxes for selecting options and features. In general, placing a check in the box tells the program to include the option or feature listed. No check means the options or feature is not to be included. Check boxes are used when more than one option can be selected at a time.

Click on the box next to the item listed to either select or de-select it. A black check mark will appear when the option is selected. In the example shown here, taken from the Print Setup, Location, Event Number and Event Description are checked and will be included in the report. Comments is not checked and will not be included in the report.

Select Columns To Include
☐ Do Not Print Survey Data
☑ Location
☑ Event Number
☑ Event Description
☐ Comment

The Help System

Like many other Windows programs, WinRAC contains an extensive Help system to aid you in using the program. The Help system is essentially a built-in manual and most of the information that can be found in this printed manual can also be found in the Help system.

There are several ways in which to access the information that is contained in the Help. Select Help from the list of drop-down menus then choose WinRAC Help Topics to be taken into the Table of Contents for the system, shown below.
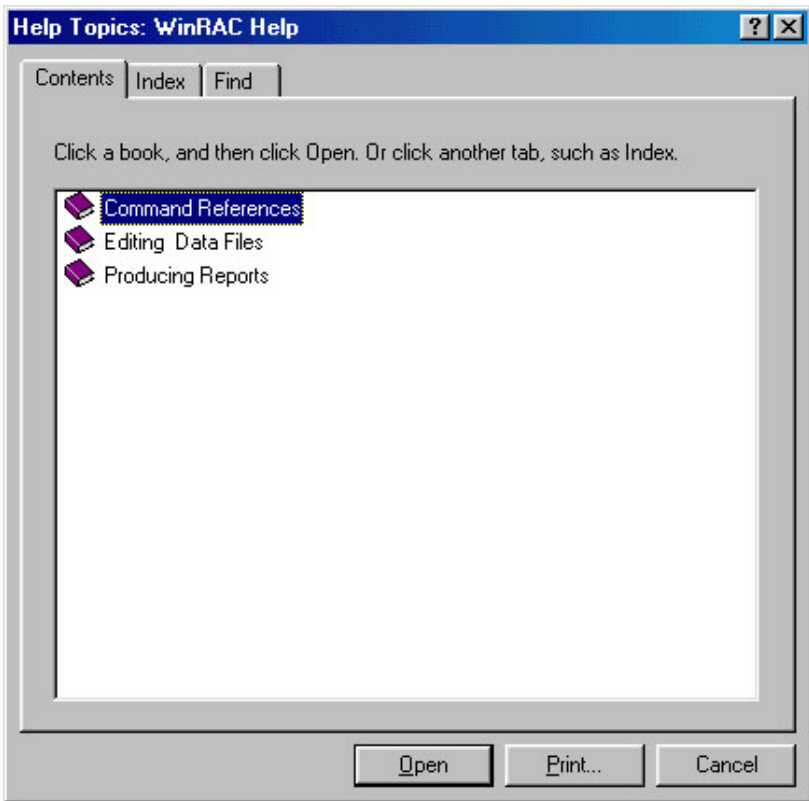
Once here you can use the Contents to locate the item you want information on or use the Index or Find tabs to do a search using specific keywords.

Many screens in the program also contain Help buttons that will automatically pop-up Help information related to the screen you are working on. If you are not sure what to do in a certain screen, or what some of the available options mean, click on the Help button and detailed instructions will appear.
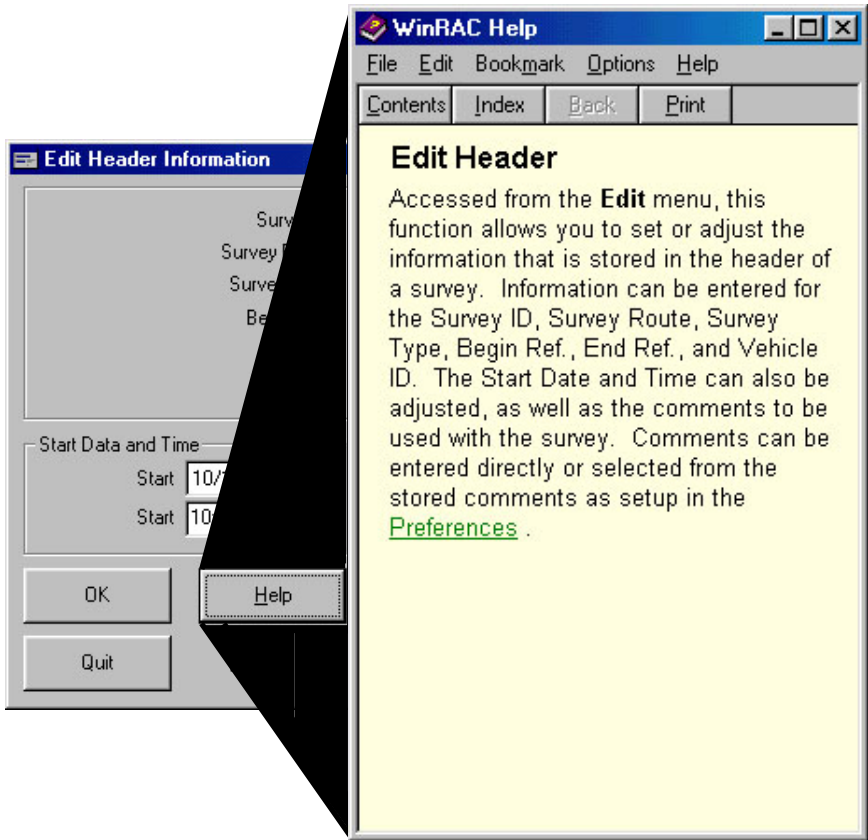
From downloading a survey, to editing a file, to producing a report, all the information needed to properly use the program can be found in the Help system.

This page was intentionally left blank.

Chapter 3

Customizing WinRAC – the Preferences Menu

Customizing WinRAC

WinRAC has been designed to allow you to tailor the program to fit your needs. The main area used to do this is the Preferences menu, which can be accessed by clicking on the File menu, then selecting Preferences.

Preferences

The Preferences window allows you to customize how your data will be displayed to fit your needs. There are three tabs within the Preferences that can be used to customize the program to suit your needs.

Edit Screen Setup
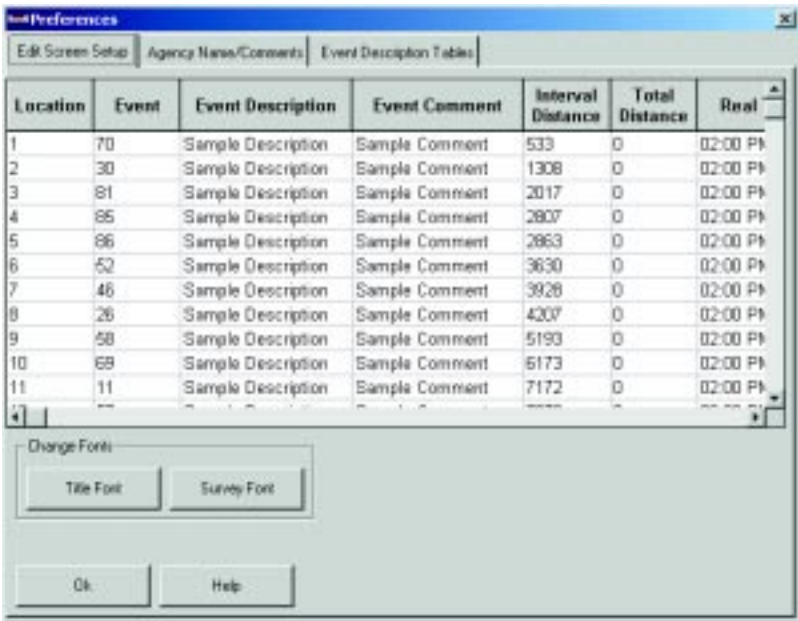
The Edit Screen Setup tab is use to select the type, style and size of the font to be used in the program and on reports. In the Change Fonts field you can select either Title Font or Survey Font and adjust the settings for either part of the report. Changes that are made will be shown in the preview area above the Change Fonts field. Existing files can be changed to these default setting by selecting Set Font to Default in the Format menu, which is discussed on page 5-3.

Agency Name/Comments
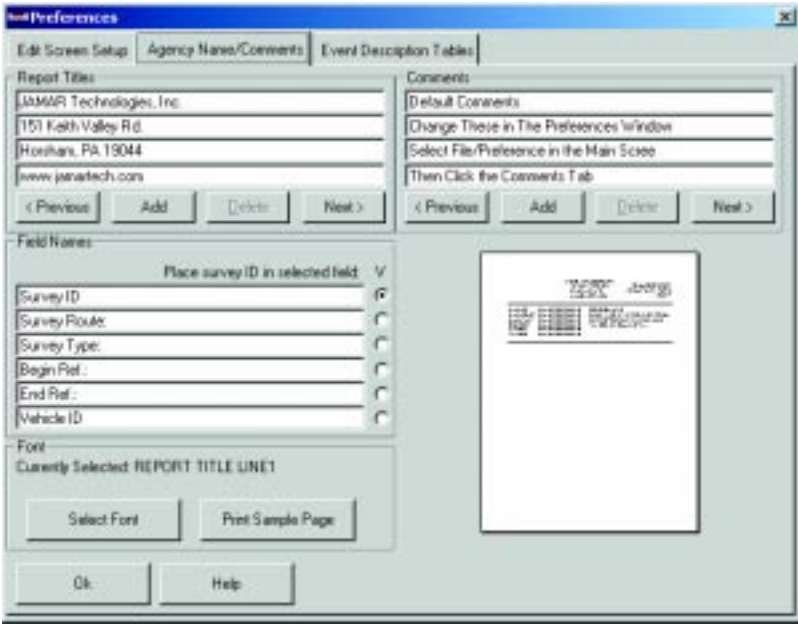
The Agency Name/Comments tab allows you to customize the font setting for the Report Titles and Comments, as well as store multiple sets of titles or comments for quick access when working with files. This tab also allows you to set your own Field Names and choose what field the Survey ID should be placed in. The entries you select for the Field Names will be used in the Header of your data files, so we recommend giving some thought to what you want these fields to be named.

To create a new set of titles or comments, click on the Add button and a blank field will appear where you can enter the new information. The Delete button can be used to remove a set of titles or comments that are no longer needed. Note that you cannot delete the first set of titles. Titles that are saved can be accessed when preparing to print a report by clicking on the Headings/Header Info tab in the Print Setup. Comments that are saved can be accessed by selecting Edit Header in the Edit menu, which is discussed in Chapter 5.

You may adjust the font type, style, size and color for any line in the title in any combination. Click on the line you want to adjust and you will see the selected line listed in the Font field. The Select Font button can then be used to make changes. You may adjust the font for the comments in the same way, but note that the comments can only be customized as a whole, not line by line. The

Print Sample Page button in the Font field allows you to print a preview of how the comments and titles will appear.

The Field Names area of the tab can be used to assign your own names to specific fields. To change a name, click on the field name to modify and type in the new name. This area can also be used to assign where the Survey ID should be placed in the data. Select the radio button next to the field in which you wish to have the ID placed.

Event Description Tables
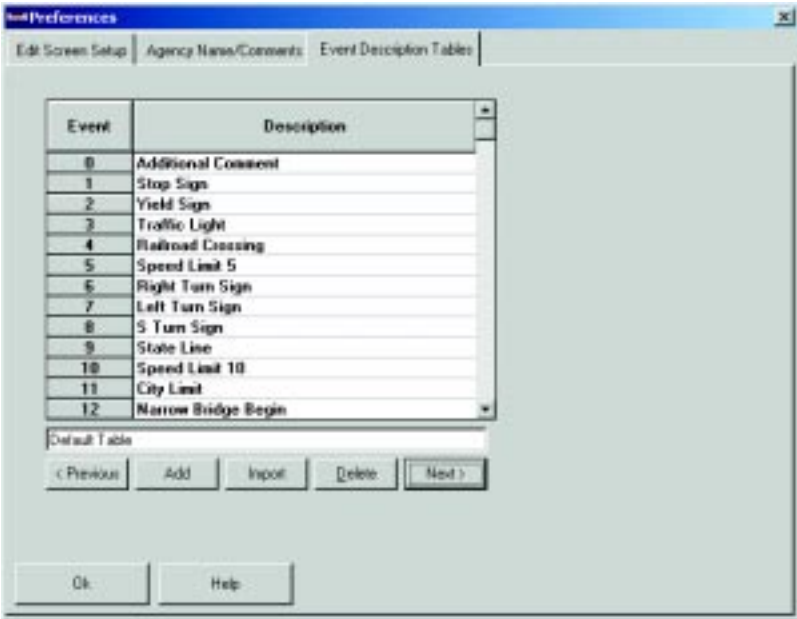
The Event Description Tables tab allows you to load multiple sets of tables containing plain language descriptions of the numeric events used during the data collection. To enter a description, click on the line next to the number you wish to describe and enter the information. To assign a name to the specific table you are creating, use the Default Description Table field. To create a new table, click on the Add button and a blank table will appear where you can enter the new information. The Delete button can be used to remove a table that is no longer needed. The Import button can be used to import an existing RACOMM table into the program.

Tables can be assigned to a survey using the Description Tables function of the Tools menu, which is discussed in Chapter 5.

Chapter 4

Creating and Opening Data Files

Creating and Opening Data Files

There are three ways in WinRAC to create or bring up a data file for editing: downloading a stored survey from the RAC-200, collecting data in the Real Time mode, and retrieving an existing file from you computer.

Retrieve Stored Survey
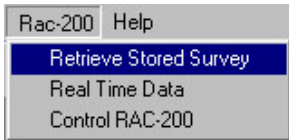
Survey information that has been stored in the memory on the RAC-200 can be retrieved into the program by selecting Retrieve Stored Survey from the RAC-200 menu or clicking on the Retrieve Survey icon in the toolbar.
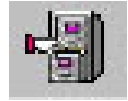
To retrieve a survey, you will need an open serial port on your computer, a power supply for the RAC-200 and a serial cable to connect the RAC-200 to the computer.

Computer serial ports are generally either 25 pin or 9 pin male plugs and there may be more than one on your computer. Serial ports are designated as COMx where x is a number from 1 to 4. You must correctly identify the port number you are plugging into in order to download your data. If you are unsure of the port number, consult your computer's manual or contact your computer support person.

After selecting Retrieve Stored Data, the Read RAC-200 window will appear. This screen will show the currently selected baud rate and COM port to be used for the download. To change either the baud rate or COM port, click on the Setup button and then click on the radio button that corresponds with your selection. The baud rate you select must match the one selected in the RAC-200. Once these items are set, click on the Begin button and you will see a message telling you to begin dumping the RAC-200.

To begin the download process from the RAC-200, press the PRNT and 8 keys on the RAC-200 then press ENTR. The currently selected baud rate will then be displayed. Use the ADD and SUB keys to adjust this setting then press ENTR. The beginning location is then displayed. If you want to start down-

loading data at a different location number, key in the number desired and press the ENTR button. Otherwise just press ENTR. Code 0 is then displayed. If you wish to download only certain event codes, key them in here. WinRAC allows you to print selected print codes, so unless you have a specific reason not to download all events, use the default setting and press ENTR.
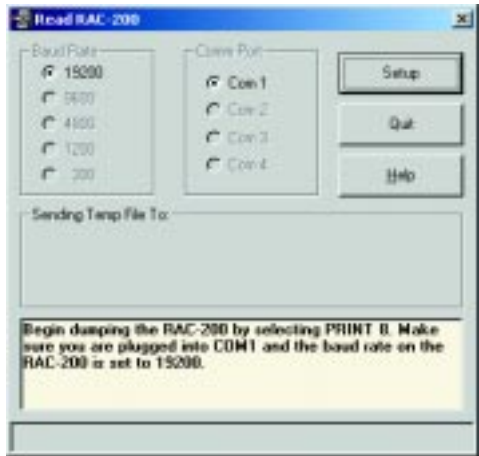
The RAC-200 then displays the last date entered into the unit and you will see the message Enter the Survey Date displayed in the message field of the Read RAC-200 window. If the date shown on the RAC-200 is not the date you want, change it by using the 0 through 9 keys then press ENTR.

The RAC-200 then displays ID and you will see the message Enter the Survey Identifier displayed in the message field of the Read RAC-200 window. The survey ID can be a one to six digit number from 0 to 999999. Key in this number using the 0 through 9 keys then press ENTR. Note that it is not necessary to key in all six numbers. For instance, if the survey ID is one hundred twenty three, key in 123, not 000123. If you do not key in a survey ID, then the ID will default to zero. Once the ID has been entered press ENTR.

The RAC-200 will then begin sending data to the program. You will see numbers quickly flashing on the RAC-200 display and a blue status bar will begin to move across the Read RAC-200 window. Once the download is complete, a window will appear containing the survey data. The information in the survey can then be edited, as described in Chapter 5.

Collecting Real Time Data
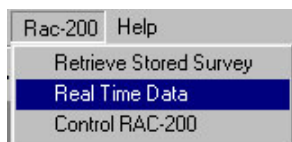
Survey information can be directly input into the program as it is collected in real time by selecting Real Time Data from the RAC-200 menu or clicking on the Real Time icon .

To collect data in the real time mode, you will need an open serial port on your computer, a power supply for the RAC-200 (cigarette lighter adapter) and a serial cable to connect the RAC-200 to the computer.

Refer to the section *Retrieve a Stored Survey* on page 4-2 for information on identifying the proper COM port.

With the RAC-200 turned on and connected to the computer, select Real Time Data and the RAC-200 to PC interface window will appear. The program will check the currently selected COM port and if it locates a RAC-200 connected to it a graphical display of the RAC-200 will appear on the computer screen. You will then be taken

to the Edit Header window to setup the new survey, which is described on the next page.

If the program does not locate a RAC-200 on the current COM port, connection settings will appear below the RAC-200 graphical display.
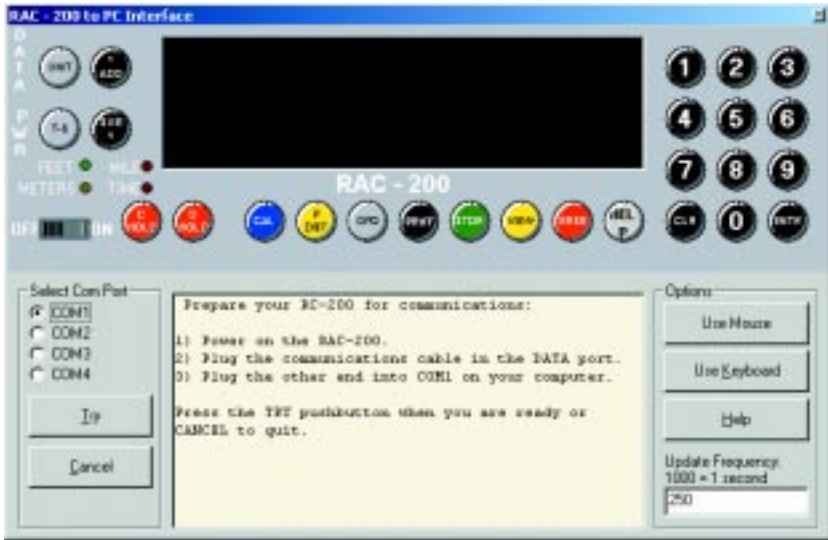
There are three options other than the COM port that can be selected or adjusted with the connection settings. When selected, the Use Keyboard button allows you to use buttons on the keyboard to execute functions on the RAC-200, rather than using the mouse to click on the buttons. To change back to using the mouse, click on the use Mouse button.

The Update Frequency field allows you to adjust the rate at which the graphical display of the RAC-200 will be updated on the computer screen to reflect what is showing on the RAC-200 itself. A setting of 1000 will update the display every second, while a lower number will update it more frequently.

The connection settings will show the currently selected COM port to be used for connecting to the RAC-200. After selecting the COM port your RAC-200 is connected to, click the Try button and the program will attempt to connect to the RAC-200. Make sure the RAC-200 is on in order for the connection to be made. If the connection is successful, you will then be taken to the Edit Header window.

Edit Header Information

The Edit Header Information window allows you to set the information that will be used in the header of a survey. Information can be entered for the Survey ID, Survey Route, Survey Type, Begin Ref., End Ref., and Vehicle ID (or the names you have assigned in the Preferences - refer to page 3-3). The Start Date and Time can also be adjusted, as well as the comments to be used with the survey. Comments can be entered directly or selected from the stored comments as setup in the Preferences. After the survey data has been stored to the computer, these same fields can be modified by selecting Edit Header from the Edit menu, as described in Chapter 5.

Once you have set the header information to the format you want, click Okay and you will be taken into the Real Time Collection Parameters window.

Real Time Collection Parameters

You are given three options for choosing when data should be read into the survey from the RAC-200 while in Real Time mode: On Demand, By Time Interval and By Distance Interval. The Event Desc. Table button can be used to load a table of event descriptions to be used with the survey.

On Demand

This option allows you to receive data from the RAC-200 only when you demand it.

By Time Interval

This option allows you to receive data from the RAC-200 at a specific time interval. Enter a number between 1 and 999 seconds and data will be

retrieved from the RAC-200 each time the interval occurs.

By Distance Interval

This option allows you to receive data from the RAC-200 at a specific distance interval. Enter a distance, in miles, and data will be retrieved from the RAC-200 each time the interval occurs.
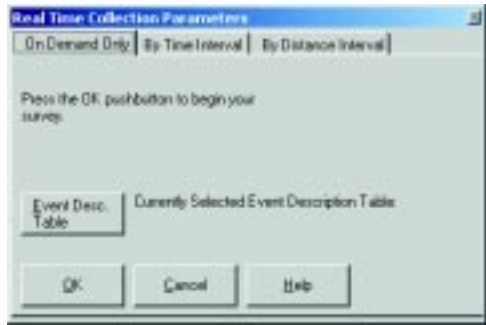
After clicking OK for the mode in which you wish to receive data, the Insert Real Time Event window will appear.

Insert Real Time Event

Press the [Scroll Lock] Toggle Count Hold button to begin the survey. Once the survey has begun, data will be downloaded from the RAC-200 based on the real time mode you have selected. If By Time Interval or By Distance Interval were selected, data will be downloaded whenever the selected interval is reached. If On Demand was selected, data will only be downloaded when you request it.
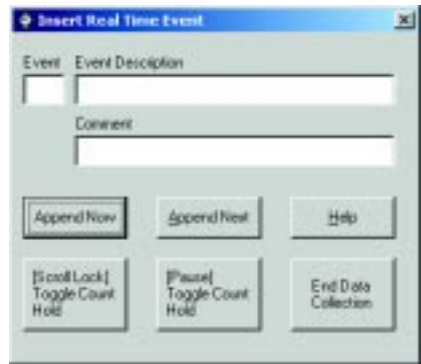
To assign an Event number to downloaded data, enter the number in the Event field. If a Description Table has been selected for the survey, the text description that corresponds to the number you entered will appear in the Event Description field. If no table has been selected you can directly type in a description in this field. A comment for the event can also be entered using the Comment field.

Once this information has been entered, there are two ways in which to have it included in the survey. If you are using the By Time Interval or By Distance Interval mode, the Append Next button stores the information that has been entered and will include it with the next set of downloaded data when the designated interval is reached. The Append Now button will immediately download data from the RAC-200 and include the event information in the survey.

This would be used when in the On Demand mode, or if you want to include additional events between intervals in the By Time Interval or By Distance Interval mode.

The [Pause] Toggle Count Hold button will pause the data collection from the RAC-200 while the End Data Collection will conclude the data collection. Once the data collection has been ended, the survey data can be edited, as described in Chapter 5.

Control RAC-200

This function, which can also be accessed by clicking on the Control RAC-200 icon, allows you to directly control the RAC-200 from your computer. For smoothest operation, use only the WinRAC program to make changes to the RAC-200 while in this mode. Do not use WinRAC while also pressing keys directly on the RAC-200.

The connection setup used to control the RAC-200 from the program is the same as with Real Time data collection. Review the previous section for additional information on connecting to the unit from WinRAC.

When you are controlling the RAC-200 from the program, and trying to store events in the unit, set the Update Frequency to zero. This will allow you to enter event numbers into the RAC-200 without the update clearing the display.

Retrieving Existing Data Files
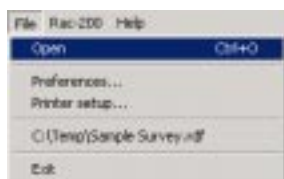
Data Files that have been saved in the program can be retrieved by selecting Open from the File menu or by clicking on the Open File icon.

Once selected, the Open command will bring up a screen similar to Windows Explorer.

Use the directory tree on the left of the screen to navigate to where you want to open your files from then select the file from the list that appears on the right hand side.

The File Name, Date, Time, Survey ID, Survey Route, Type Survey, Begin Ref., End Ref., Vehicle ID# and Number of Events are listed for each file. The columns in this screen can be resized to fit your needs. The program will remember the sizes the next time you enter the window.
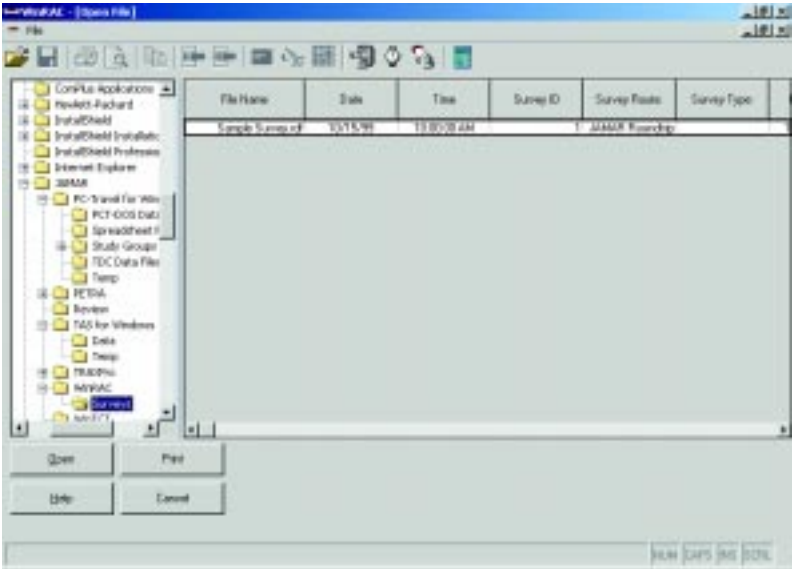
The Print button located at the lower left allows you to print a listing of all files, with their related information, from the currently selected directory.

Chapter 5

Editing Data Files

Working With Your Data Files

When a data file has either been opened from an existing directory or downloaded from the RAC-200, there are a number of things that can be done to edit or adjust the file. Each file appears in its own window in the program; you may have more than one file open in the program at a time.

The information contained in the file can be adjusted and modified in several ways, using the Edit, Insert, Format and Tools menus, along with other features.

Edit Menu

Copy

This function, which can also be accessed by clicking on the Copy icon, copies the selected area to the clipboard. The Paste command can then be used to place the data at a new location, either within WinRAC or any other Windows program that has Copy and Paste capability.
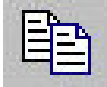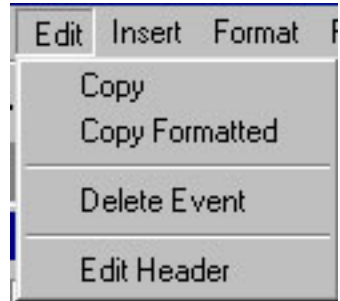
Copy Formatted

This function allows you to copy data with the Column and Row Titles included and the data in their proper row/column. This can be used to move data to other Windows programs, such as Excel, in a more complete format than just copying the data.

Delete an Event

This function, which can also be accessed by clicking on the Delete Event icon, allows you to delete any existing event from the study. After selecting this option, enter the number of the location you wish to delete and click on the Delete Event button. The event corresponding to the location selected will be removed, along with its location number. To re-number the locations and replace the deleted number, use the Reset First Location Number function of the Tools menu.
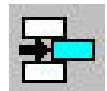
Edit Header

This function, which can also be accessed by clicking on the Edit Header icon, allows you to set or adjust the information that is stored in the header of a survey. Information can be entered for the Survey ID, Survey Route, Survey Type, Begin Ref., End Ref., and Vehicle ID (or the names you have assigned in the Preferences - refer to page 3-

3). The Start Date & Time can also be adjusted, as well as the comments to be used with the survey. Comments can be entered directly or selected from the stored comments as setup in the Preferences.

Insert Menu

Insert an Event
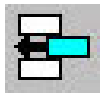
This function, which can also be accessed by clicking on the Insert Event icon, allows you to insert a new event into the study. After selecting this option,

enter where the new event should be placed by selecting an existing location number. Then, choose to either place the new event before or after the selected location. All location numbers after the inserted event will then be adjusted.

Format Menu

Change Unit of Measure

This function allows you change the unit being used to measure distance in the study. You are given the option to convert to feet, miles or kilometers. This change will be reflected in both the Distance Units and Velocity Units entries of the header. Changing the unit of measure will also change the data shown in the Interval Distance, Total Distance and Velocity data columns.
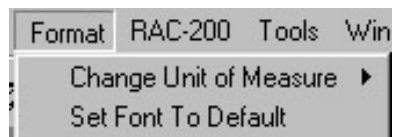
Set Font to Default

This function allows you set the fonts being used for the selected study to the default settings as entered in the Preferences function of the File menu. When files are originally created, they use the fonts that are currently set in the Preferences. However, if the Preferences are changed at a later date, the change does not affect existing files - they retain the original settings with which they were created. This function allows you to quickly convert the fonts of an existing file to the new Preferences settings.

Tools Menu

Reset First Distance

This function allows you to change the Total Distance for the first event recorded in the survey. All subsequent Total Distances will be updated to reflect the change. This tool can be useful if you want a survey to begin recording distances from the first event.

Tools	Window	Help
Reset First Distance		
Reset First Location Number		
Reset First Elapsed Time		
Merge 2 Surveys		
Description Tables		
Produce Graphs		

Reset First Location Number

This function allows you to change the location number used for the first event in the survey. All subsequent location numbers will be updated to reflect the change. This tool can be useful if you want a survey to begin at a specific location number (such as 1 rather than the default 0) or if you have deleted events and want the location numbers to be re-sequenced to fill in the deleted numbers.

Reset First Elapsed Time
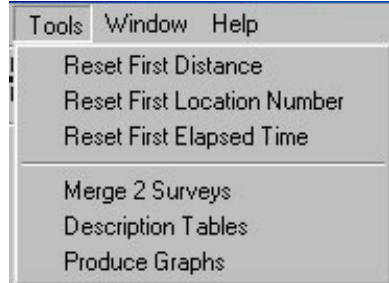
This function allows you to change the Elapsed Time for the first event recorded in the survey. Subsequent Elapsed Times will be updated to reflect the change. This tool can be useful if you want a survey to begin recording elapsed time from the first event.

Changing the first elapsed time will also affect the Real Time listings, which are based on the start time of the survey. To change the start time of a survey, use the Edit Header function. The First Elapsed Time must be set to zero in order for the Real Time listing of the first event to reflect the start time of the survey.

Merge 2 Surveys

This function allows you to combine two surveys into one. **You must have at least two files currently open in order to use the Merge function.**

In general, there are two reasons why you would want to merge surveys. One, if you covered the same area more than once, recording a different set of events each time, you would want to overlay the surveys. In this case, each survey should start at the same location, with a preset distance of zero, and should be approximately the same length. Two, if you started a second survey at the point at which you ended the first, you would want to chain the second survey to the end of the first. In this case, the starting Elapsed Time or Total Distance of the second survey should correspond with the end of the first survey.

After selecting the Merge 2 Surveys option, the Merge window will open.
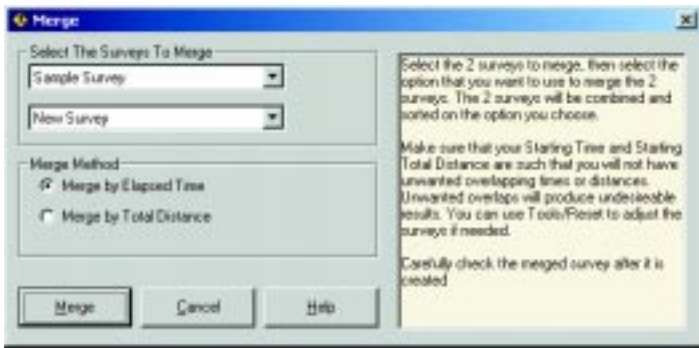
If only two studies are currently open, they will be listed in the Select the Surveys to Merge field. If more than two are open, use these fields to select the two you want to merge. After selecting the files to be merged, you must select the Merge Method to use. Surveys can be merged by either Elapsed Time or Total Distance. After selecting the method to be used, click on the Merge button and the selected surveys will be merged into a new one. Review the new file to be sure the data has been merged as expected, then save the new file.

Description Tables

This function, which can also be accessed by clicking on the De-scription Tables icon, allows you to assign plain language descrip-tions to the numeric events used during the data collection. When you select this function, the Description Tables window will ap-pear.

The left side of the window contains the Current Definitions. To enter a new definition, or edit an existing one, click on the line to change and type in the new definition.
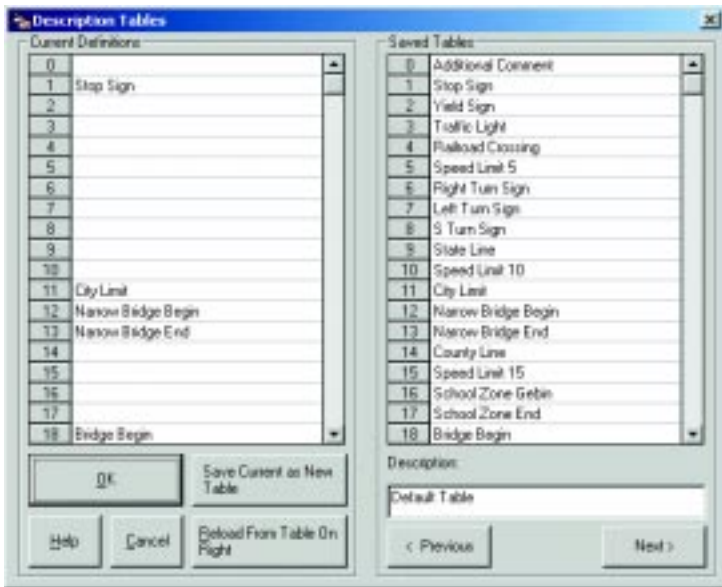
The right side of this window contains Saved Tables that have been pro-grammed in the Preferences function. Use the Previous and Next buttons to scroll through the available tables. If you would like to use one of the tables, click on the Reload from Table on Right button and the table will be copied to the Current Definitions field. Once the events are defined as you would like, click the OK button and the new definitions will appear in the data file's Event Description column.

Graphs

This function, which can also be accessed by clicking on the Graphs icon, lets you display your data in a variety of graphical ways. To design your own graph, or customize the existing one, right click on the graph itself and you will see a menu with op-tions to access the Chart Designer and Wizard as well as several other functions.
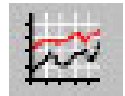
There are also several menu options that are available in the Graphs function.

File

In the File menu, you can choose from Save to File or Print. The Save to File function will direct you to where the graph can be saved as a file while the Print function allows you to select your printer and print the graph. The graph will print in color if you are using a color printer.

Edit

In the Edit menu, the Copy Chart function allows you to copy the graph to the Windows clipboard. It can then be pasted into any Windows program that supports Cut and Paste functions.

Y-Axis

This menu is used to select what unit will be used down the left side of the graph. You can choose from Speed, Distance or Time.

X-Axis

This menu is used to select what unit will be used across the bottom of the graph. You can choose from Distance or Time.

# Additional Editing Features

Data Grid

The grid that is used to display the data can also be adjusted. Each column can be increased or decreased in size to suit your needs. *When a report is produced, the width of the columns in the report will be based on how you have configured them in the data itself.* To change the size of a column, slide your mouse over the right margin of the column title. The mouse will turn into an icon of two lines with arrows going in opposite directions. Hold down the mouse key and drag the column to its desired size.

The data can also be sorted by any of the column information simply by clicking on the column title you wish to sort by. To reset to the default order, click on the Location column title.

Exporting

The data that is contained in a file can also be exported into the ASCII format. Accessed from the File menu, this selection lets you save the currently active file in an text format (.txt extension) that can be opened by a wide variety of other programs.

You are given the option of selecting the items you want to include in the exported file by placing check marks in their corresponding boxes. Items from the Header, from the Survey Data and from the Survey Header can be included, or excluded, as desired. You may choose the delimiter to be used from comma, tab or semicolon, or pick your own. The Preview button will show you what the exported file will look like while the Export button will prompt you to assign a name for the new ASCII file.
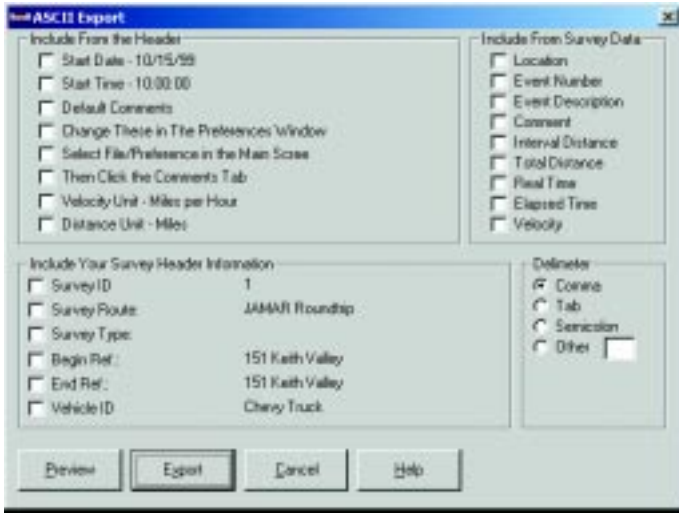
Saving

Changes you have made to the data file can be saved by selecting
Save from the File menu, or by clicking on the Save icon.
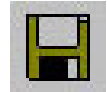
If you would like to Save the file under a different name, select
Save As from the File menu.

Chapter 6

Producing Reports

Print Setup

When your data has been edited to suit your needs, you will want to produce a report of the data. To produce a report, select Print from the File menu, or click on the Print Setup icon, and the Print Setup window will appear. There are four tabs in this window that can be used for customizing your reports.

General

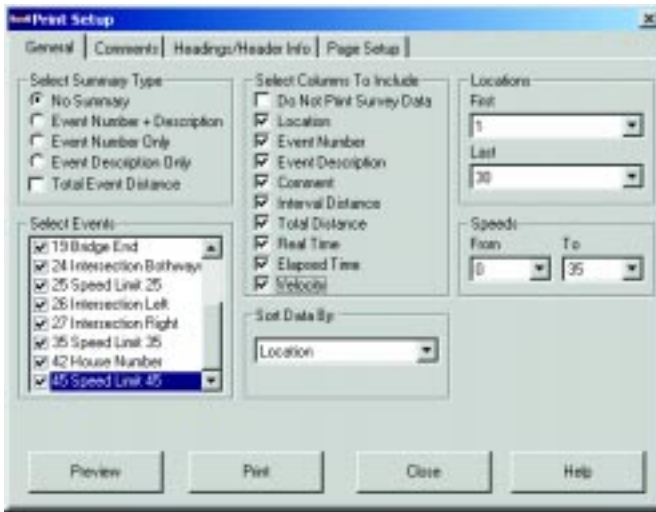The first field in the General tab is Select Summary type. This is used to choose what, if any, summary you would like to see at the end of the report. You may choose from No Summary, Event Number and Description, Event Number Only or Event Description Only. If the Total Event Distance box is check, this information will be included with the chosen summary.

The Select Events field is used to pick which events you want to include in the report. The default setting is to include all events. If you would like to exclude any, remove the check mark from the box next to the event you wish to exclude. Similar to the Select Events field, the Select Columns to Include field is used to pick which columns you want to include in the report. The default setting is to include all columns. If you would like to exclude any, remove the check mark from the box next to the column you wish to exclude. If you do not want to include any of the columns, check the Do Not Print Survey Data box. This would be used if you only wanted to produce a summary of the data, without printing the data itself. Note that the width of the columns in the report will be the same as in the data file itself. For

more information on changing the size of the columns, refer to Working with your data .

The Sort Data By: field allows you to choose how the data in the report should be sorted. You can choose to sort by any of the column titles. The Locations field allows you to pick a specific range of locations to include in the report while the Speeds field allows you to pick a specific range of speeds to include in the report.

Comments
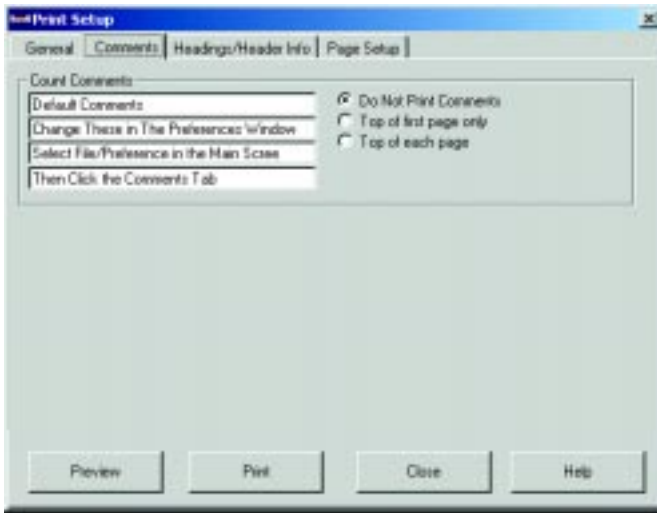
The Comments tab is used to pick where the comments should be shown in the report, if at all. The comments that are shown in this tab are the ones that have been entered for the file in the Edit Header function. If you wish to override these, type in the new comments to be used. You can then choose to print the comments at the top of first page only, at the top of each page, or not to print the comments at all.

Heading/Header Info

The Headings/Header Info tab is used to pick what Report Headings should be used and what header information should be included with the report. Use the Previous and Next buttons under Stored Headings to pick the heading desired from the default headings that have been entered in the Preferences function. These headings will then appear at the top center of each report page.

You can also choose to include certain Header Information with the report. If you
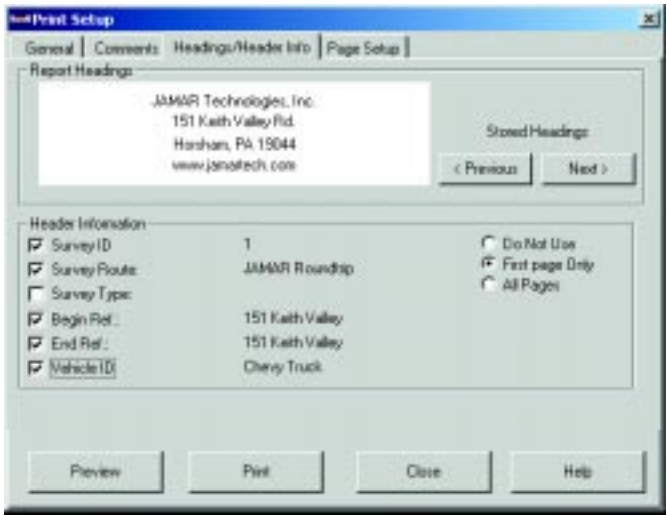
select First Page Only or All Pages you can include any of the header information by placing a check next to the information to include. This will then appear at the beginning of the report. If the Do Not Use button is selected, no header information will be included.

Page Setup
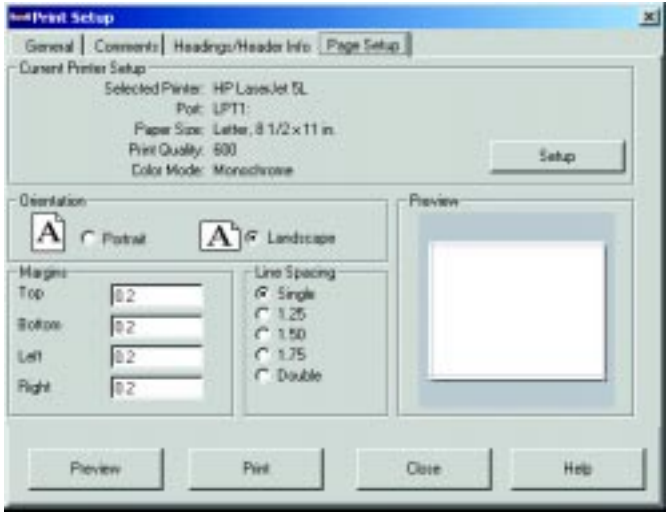
The Page tab is used to setup the printer you want to print to and select how the printed pages should be formatted.

The Current Printer Setup field provides information on the currently selected printer. To choose a different printer, click on the 'Setup' button. The Orientation field allows setting your printout for either Portrait or Landscape. The Margins field allows you to set the margins that will be used with the printout.

The Line Spacing field allows you to set the spacing that will be used between each interval of data. The default setting is for single spacing, but can be changed to 1.25, 1.50, 1.75 or double-spacing. The Preview field shows how the currently selected margins will be spaced in the printout.

Once you have set the Print Setup to the Options desired, click on Preview to see how the report will look or click on Print to send the report to the printer.

Preview

When in the Print Preview window, which can also be accessed by clicking on the Preview icon, you can use the Next button to see additional pages of the report, and the Previous button to go back to pages you've past.

Print Preview

| Previous | Next | Zoom ▾ | Printer | Print | Close | Save | Help |

Default Titles
Change These in The Preferences Window
Select File/Preference in the Main Screen
Then Click the Titles Tab

Survey ID   1   Default Commer
Survey Route: JAMAR Roundtrip   Change These ir
                                                                     Select File/Prefe
Begin Ref.:   151 Keith Valley   Then Click the C
End Ref.:   151 Keith Valley   Distance Units::
Vehicle ID   Chevy Truck   Velocity Units:: N

Location	Event Number	Event Description	Comment	Interval Distance	Total Distance
0	35	Speed Limit 35		0.088	1.783
1	42	House Number		0.148	0.635
2	35	Speed Limit 35		0.166	0.801
3	1	Stop Sign		0.020	0.821
4	21	Intersection Between		0.040	0.031

Clicking on the Zoom button gives you a closer look at the data. You can also zoom into any place of the report by double-clicking with you mouse at the point you want to zoom. Scroll bars at the bottom and right of the window are used for moving around while zoomed in. Clicking on the arrow next to the Zoom button also gives you several options for looking at the data. The Thumbnail selection provides small

pictures of each page of the report. The Two Pages selection shows two pages at a time in the preview. The Whole Page selection shows a complete page in the preview. The Page Width and Fill Screen selections increase the amount of screen filled by the preview.

The 'Printer' button will access the Print Setup where you can choose the printer you want to print to as well as change other options such as Portrait or Landscape styles. The 'Print' button is used to send the report to the selected printer while the Close button will exit you out of the Print Preview.

Saving Reports for Use with JAMAR Review

JAMAR Review is a **free**, and **freely distributable**, Windows-based (95/98 & NT) program that can be used to review and/or print traffic reports and surveys produced by WinRAC and other JAMAR software programs. The program allows you to distribute reports in an electronic format to those who do not own WinRAC.

To produce files for use with JAMAR Review click on the **Save** button in the Print Preview window. This save function will create an exact copy of the report in an electronic format with a .ppf file extension. This file can then be e-mailed or posted on a web site for review by anyone using the JAMAR Review program, which can be download and installed **for free** from our web site at **www.jamartech.com**. A copy of the program is also included on the WinRAC installation CD with the file name jamarreview.exe. *Note that people using the program can only review or print the reports, they cannot make changes to the reports.*