WinRamp™ Lite

Version 1.2
-Your Personal Access to the Data Super Highway℠-

Winramp Lite is a full-featured communications software product distributed
under the Shareware "Try Before You Buy" software marketing concept.

USER MANUAL

Business & Government Site Licence
After the 30 day Evaluation Period, any corporation, institution, government agency or business wishing to continue use of *WinRamp Lite* in the course of its internal business is required to purchase a *WinRamp Lite* registration or site licence. Any individual wishing to use *WinRamp Lite* within a corporation, institution, government agency or business must purchase a *WinRamp Lite* registration or site licence. The site licence is provided for those who want to *WinRamp Lit*e on multiple computers. Please see the REGISTER.WRI or contact Vironix N.A., Inc. for terms.

Upgrade Policy
Registered users of *WinRamp Lite* will automatically be sent a diskette (no printed manual) of the next MAJOR release (for example 1.x to 2.0 etc.) of *WinRamp Lite* at NO CHARGE. Registration serial numbers will expire after the SECOND major release (for example 1.x to 3.x etc.). Thereafter a discounted upgrade fee will apply to further major upgrade releases.

Users wishing to receive MINOR upgrade diskette sets (for example 1.1 to 1.2 etc.) will be charged only for the diskette and mailing. Registered users can apply their registration serial numbers to MINOR upgrade releases downloaded from the WinRamp Lite Support BBS or any online system where the shareware distribution archive can be found.

VIRONIX'S SHAREWARE DISTRIBUTION POLICY

The essence of shareware software is to provide users with an opportunity to evaluate quality software before buying it, thereby keeping prices low while still providing developers with an incentive to continue development. Shareware is a distribution method, not a type of software. Copyright laws apply to registered Shareware just the same as they do for commercial software.

WinRamp Lite as Shareware
WinRamp Lite is distributed under the "Try Before You Buy" Shareware marketing concept. *WinRamp Lite* is a FULLY FUNCTIONAL communications program and no features, commands or functions have been disabled or crippled in any way. *WinRamp Lite* is NOT free software, and we strongly encourage you to register your copy. With registration you will be entitled to numerous special benefits, including:

- the latest version of the software
- an optional printed manual
- one FREE major version upgrade
- full access to the *WinRamp Lite* **Support BBS**
- a full rebate of the registration fee when purchasing the commercial version of WinRamp directly from Vironix N.A., Inc.

Dual Channel Distribution Policy
A number of Shareware publishers, having attained a reasonable degree of success, have "graduated" away from the Shareware marketing and distribution concept, often citing the low

rate of user registration as an obstacle to economic growth. Despite the obvious economic risks of publishing quality software under the Shareware concept, and due mainly to a strong belief in the future and sheer power of the "super data-highway" as a medium for publishing and distributing software, Vironix N.A. has deliberately embraced a Dual Channel distribution policy.

The elements of this Dual Channel distribution policy are:

1. To publish and distribute a fully functional application capable of competing (and beating) feature-for-feature with commercial/retail packages often costing FOUR times as much as *WinRamp Lite*. It is Vironix NA's policy to continue development and upgrading of *WinRamp Lite* in parallel to development of an even more powerful commercial product: **WinRamp**™, and to continue to commit to distributing *WinRamp Lite* as shareware.

2. To publish and market through standard retail channels a fully integrated, fully customisable communications environment, namely **WinRamp** with superior features - whilst offering registrants of the shareware *WinRamp Lite* a FULL REBATE of their registration fee when purchasing **WinRamp** directly from Vironix NA, Inc.

How this policy benefits you

Vironix NA's Dual Channel distribution policy directly benefits you, the end-user, as you are able to fully evaluate *WinRamp Lite* BEFORE spending a cent. Furthermore should you wish to upgrade to WinRamp, you will have TWO full products for the price of one.

REGISTRATION

Registering *WinRamp Lite* licenses you to use the product after the 30 day evaluation period. Registered users of *WinRamp Lite* will receive the latest version of the product, with a serial number, technical support and a bound user manual. A two-tiered pricing structure exists for registration: $35 (US) for a licensed copy of *WinRamp Lite*, free technical support and manual on disk; or $45 (US) which includes a licensed copy of *WinRamp Lite*, free technical support and a printed and bound manual. Bulk purchases are subject to discount. Please call our toll free sales number for details.

Prices and terms are subject to change without notice.

Methods of ordering:

1. Call direct to 1-800-VIRONIX   (VISA, Mastercard)
        (USA & Canada only)

2. Fax order form: to 508-354-8559

3. Compuserve
        GO SWREG ID#: 3034

4. Vironix NA Support BBS   - Dial 508-374-7125

5. Send cheque or postal order to
        Vironix N.A., Inc.
        P.O. Box 1570
        Haverhill
        MA 01831-998

WinRamp Lite may be purchased directly from the following International Distributors:

 South Africa and Southern African countries:

   Vironix Corporation (Pty). Ltd.
   Suite 4: Buckhurst, Essex Gardens
   Durban, 3630
   Rep. of South Africa   Tel: +27 31 266-8930

Fax or Post Order Form

WinRamp Lite Order Form

Name: _____

Company: _____

Address   : _____

_____

_____

Telephone number: _____

Fax number: _____

E-mail address: _____

Item	Unit Price	Qty	TOTAL
WinRamp Lite Basic Registration...................	$35.00	___	$_____
WinRamp Lite Registration with Manual..........	$45.00	___	$_____
Add $1 per copy for 3.5" disks			$_____
Shipping/Handling - USA/Canada	$10.00		$_____
Shipping/Handling - Outside USA	$15.00		$_____
Add applicable State & County Sales Tax			$_____

Total in US Funds drawn on a US Bank   **$_____**
(Check, money order, or credit card payments accepted).

For Credit Card Users Only:
Type of credit card   [ ] VISA   [ ] MasterCard   [ ] American Express

Card number: _____

Name (as it appears in card): _____

Expiration date of card: ____/____/____

Signature: _____

Where did you hear about or obtain *WinRamp Lite* from?

WHAT HAPPENS AFTER REGISTRATION

After you have registered *WinRamp Lite*, the following will occur:

1. Upon bank clearance of your registration fee (or credit card verification), you will immediately be issued with TEMPORARY Registration Serial Number Key, which when typed at the Registration dialog will prevent any further "nagscreens" from appearing whilst running *WinRamp Lite.*

2. The next step depends on how you registered:

- If you have phoned through your credit card registration via one of the voice contact numbers, your temporary key will be read to you over the phone. This is subject to the verification of your credit card.
- If you have registered through the Automated Registration on the WinRamp Lite Support BBS, you will also immediately be issued with a temporary key whilst online.
- If you registered via email, a reply message will contain your temporary key.
- If you registered on CompuServe (GO SWREG ID:3034), your temporary key will be sent to you via private CompuServe email.

3. A diskette set will immediately be posted to you, containing the full registered version of *WinRamp Lite*, in addition to a permanent serial number.

PRINTING THIS MANUAL

This manual has been prepared using the Microsoft Windows **Write** application. Applying the following settings should ensure the manual prints correctly:
- Left and right margins set at 1.25" and top and bottom margins set at 1". These are set in *Page Layout*, accessed from the Windows Write *Document* Menu.
- All Tabs stops cleared. Check this by using the *Tabs* option under the *Document* menu and clicking the *Clear All* button.
- Printing page size set for **letter 8 1/2 x 11**, under *Print Setup* accessed from the *File* menu.

Page breaks have been set for printing according to the above specifications. Should you choose to print on a different page size, formatting of the document will be misaligned, and page numbering in the Table of Contents will be incorrect. However, if you do choose to print using a different page size, it is recommended that you at least repaginate the document so that blank pages are not printed. Use the *Repaginate* command from the Write *File* menu, with the *Confirm Page Breaks* check box marked so that you can keep page breaks between chapters, but move the

others to a more logical breaking point.

Remember that if you would like a more comprehensive printed and bound manual - register now!

TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION

This chapter serves as a brief introduction to *WinRamp Lite*, providing some background you may need about Microsoft Windows and communications in general. Advanced users may want to skip directly to the section on hardware and software requirements for *WinRamp Lite*.

1.1   Welcome to WinRamp Lite!

WinRamp Lite is a full-featured communications package for the Microsoft Windows environment that allows you to use a modem to communicate with the millions of other computers in the world, using the telephone system. *WinRamp Lite* is specially designed to make communications simpler and more intuitive.

1.2   Some of the Advanced Features of WinRamp Lite

Some of the ADVANCED features of *WinRamp Lite* 1.2:

- **RIPScrip graphical terminal emulation:**
  Use *WinRamp Lite* to access Bulletin Board Systems supporting the exciting new graphical RIP terminal emulation. Currently *WinRamp Lite* is the FIRST and ONLY shareware Windows communications package supporting RIP. The *WinRamp Lite* RIP implementation works under Windows 16-color VGA*, in addition to the optimal 256-color (and more) SuperVGA.

  * Note: RIPScrip was originally designed to run under the 64-color Borland BGI graphics drivers.

- **Multiple font-sizes under ANSI and AVATAR terminal emulations:**
  With multiple font sizes under the popular ANSI BBS terminal emulation you are able to optimise your terminal emulations to run under the Windows resolution of your choice. During installation *WinRamp Lite* will automatically "sense" your Windows graphics resolution and install the optimal.

- **Prestel terminal emulation for Videotext based systems.**
  Access the public Videotext systems in a number of European and other countries around the world (for example Britain, France, Israel and Australia)

- **Open multiple terminal emulation windows simultaneously:**
  A unique feature to *WinRamp Lite* is your ability to open multiple terminal emulation windows. It's possible to open an AVATAR window, an ANSI window and a RIP windows ..

all on the same online system, or even different systems if you have multiple devices installed.

- **Customizable floating toolbars:**
  Everyone has different tastes and preferences. The *WinRamp Lite* user interface is remarkably customizable. Use the Toolbar Editor to create your own custom toolbars, and place these toolbars in the place of tour choice on the screen. *WinRamp Lite* is shipped with 3 default toolbars.

- **Graphical and Text "Cut & Paste":**
  "Cut & Paste" to the Windows clipboard BOTH text and Windows graphics from terminal emulations. This unique feature will enable you to quickly take rapid "screen shots" of your favourite online systems and paste the resulting Bitmap image into any other Windows application.

- **Multiple Dialing Directors:**
  This unique feature allows you to maintain and open any number of Dialing Directories (limited only by your hard-drive and RAM resources). Directory Entries from multiple directories can be seamlessly "merged" by toggling the *WinRamp Lite* Dialing Directory Tabs.

- **Hot Dial Window:**
  Set-up your favorite online systems to be included within the unique Hot Dial Window, each with it's own special icon. A click on the system's icon and that system will automatically be dialed ... no other keystrokes necessary!

- **WR-Script:**
  A powerful, compilable yet easy to use scripting language. Use the Auto-learn feature to capture and playback your entire online session.

- **Command Stack:**
  The Command Stack window facilitates type-ahead and is especially useful when using Chat Mode and Multi-user Dungeons as it allows you to type in commands and store them to be executed in the terminal window at a later stage and as many times as you specify.

- **WinRamp Dialing Directory Converter:**
  The WinRamp Dialing Directory Conversion Utility enables you to easily convert the dialing directories you have created while using other communications packages into the *WinRamp Lite* dialing directory format.

Among the *WinRamp Lite* "standard" features you'd expect to find in a high quality communications package:

- Macro Record and Playback. Automate functions that are often used.
- File Transfer Protocols. These include Kermit, Zmodem, Ymodem, Ymodem-G, Ymodem, Xmodem, Xmodem-CRC and Xmodem-1K.
- Capture terminal sessions to text file. Includes the ability to capture special emulation

"formatting" characters if so desired.
- Standards-compliant TTY, ANSI, Avatar, Prestel, VT52-220 and RIPScrip emulations.
- Unlimited dialing numbers per directory entry.
- Supports all 9 communications ports supported by Windows.
- Access Network drives directly from within *WinRamp Lite*.
- Scroll-Back buffer limited only by RAM. Full scroll-back buffer can be saved to a text file at any time.
- Comprehensive and easy-to-use Online Help, including a handy Index to make finding a topic just that much easier.
- GIF Viewer can be enabled during Y-, X-, and Z-Modem downloads.
- Customizable keystroke mappings.

1.3   Windows Basics

Before you install and use *WinRamp Lite* there are certain Microsoft Windows conventions you should be familiar with:

Mouse actions:
Click: Pressing the left button of the mouse once and immediately releasing it.
Double click: Pressing the left button of the mouse twice in quick succession.
Drag: Pressing and then holding down the left mouse button while moving the mouse. to the required destination.

Windows:
Active window: The upper most window (with highlighted borders) that is currently being worked with.
Scrolling: Scrolling the visible portion of the current window vertically or horizontally through mouse actions in the active window's scroll bars.
Moving: Clicking the active window's title bar and dragging it to a new location.
Resizing: Clicking anywhere on the active window's border and dragging the border to a new position.
Closing: Double clicking on the icon at the top right of the active window.

Controls:
Dialog boxes: A form for updating and capturing information a program requires.
Radio buttons: Mutually exclusive selection indicators.
Check boxes: Toggle on or off.
List boxes: To select an option from a list.
Edit boxes: To enter requested information.

1.4   Communications Basics

Communications sessions usually occur between your PC and a remote or host computer using a hardware device called a **modem**, a standard **telephone line** and **communications software** (*WinRamp Lite*). The communications software is installed on your PC, while the modem is attached to your computer's serial port and to a telephone line. The host or remote computer typically has a number of modems attached to it, waiting to receive calls from users who wish to make use of the services offered by the remote system. The basic steps that occur when you communicate with a remote system are (details on each of these operations and how to perform them are provided further on in this manual):

1. You use the communications software (*WinRamp Lite*) to dial a remote system.
2. *WinRamp Lite* sends a dial command to the modem.
3. The modem waits for a dial tone on the phone line and dials the phone number.
4. *WinRamp Lite* watches for result codes from the modem (see Appendix F).
5. The modem waits for the remote system's modem to answer.
6. The remote system's modem answers the call, signalling an answer tone along the phone line.
7. Your modem senses the answer tone and sends a carrier start signal.
8. Both modems agree on speed, modulation, error checking and data compression protocols.
9. Your modem sends a connect result code to your computer, turns the speaker off and turns the Carrier Detect signal on.
10. *WinRamp Lite* detects the connect result code and Carrier Detect signal, and tells you the connection has been successful.
11. *WinRamp Lite* manages your communication with the remote system.
12. Your modem and the remote system's modem transmit data between each other.
13. When you have completed the communications session, you use *WinRamp Lite* to disconnect from the remote system.
14. Your modem hangs up the telephone line, the remote modem detects this and also hangs up.

Don't worry if some of the terminology used here is foreign to you, it will become clearer as you read further in the manual and make practical use of *WinRamp Lite*. The glossary in Appendix A will clarify terminology.

1.5   Files included with *WinRamp Lite*

WINRAMP.EXE: The main program executable.
install.exe: Run this to install *WinRamp Lite*.
install.bin: File used by install.exe.
install.inf: Holds installation information.
install.txt: Installation notes.
upgrade.dll: *WinRamp Lite* support file.
bc40rtl.dll: *WinRamp Lite* support file.
owl100.dll: *WinRamp Lite* support file.

owl31.dll:	*WinRamp Lite* support file.
tclass40.dll:	*WinRamp Lite* support file.
vctrl.dll:	*WinRamp Lite* support file.
terminal.dll:	Vironix-supplied terminal emulation module.
transfer.dll:	Vironix-supplied transfer protocols module.
winramp.fon:	Fonts required for Prestel and other emulations.
*.chr:	Fonts for RIP emulation.
winramp.wri:	This manual.
register.wri:	A windows Write file containing registration details.
winramp.hlp:	Main *WinRamp Lite* help file.
register.hlp:	Help file containing registration details.
ripicons.exe:	Self-extracting archive containing RIP Icons. See install.txt.
venddat.wrb:	Modem vendor settings database.
convert.exe:	A DOS utility for converting dialing directories to the *WinRamp Lite* format.
convert.wri:	A text file containing WinRamp Dialing Directory Converter information.

1.6   System Requirements

- Hardware which will run Microsoft Windows 3.1, with at least 3.0 MB free disk space.
- Microsoft Windows 3.1 or higher..
- Communications hardware supported by Windows, such as the COM ports built into an IBM-compatible PC.
- Optionally, a modem or other device which connects two computers (Recommended: V.32 bis modem).

1.7   Conventions Used in this Manual

Menu options and commands and buttons are indicated with an arial font. **Bold** is used to provide emphasis.

1.8   Technical Support

For registered users ONLY. When you register your copy of *WinRamp Lite* we will provide you with our access number for voice and online technical support.

CHAPTER TWO: GETTING STARTED WITH *WinRamp Lite*

In this chapter, installation and start-up instructions are provided. For advanced users, there is a quick start guide. This is followed by a more detailed guide for less advanced users, which includes descriptions of what to expect when you first start *WinRamp Lite*.

2.1   Installing WinRamp Lite

1. If you received a compressed ZIP file, extract the files to an empty directory: Pkunzip wramp120.zip. (or ramp12.zip if you downloaded the file from Compuserve)
2. Run the install program INSTALL.EXE. (File | Run in Program Manager).
3. The *WinRamp Lite* files will be copied to the directory of your choice and the correct fonts will be installed.

If there is a file named README.TXT on the *WinRamp Lite* disk, or in the archive you received, you should read the contents of the file before you install *WinRamp Lite*. Any instructions which could not be included in this manual will be documented there.

2.2   Quick Start

If you want to get right into using *WinRamp Lite*, then start Windows, and run the WINRAMP.EXE executable. The *WinRamp Lite* logo will come up, followed closely by the WinRamp Lite Quick Configuration dialog box. You can now either use the Quick Configuration facility or configure *WinRamp Lite* yourself.

2.2.1 Using the Quick Configuration Facility:

1.   Click the Continue Quick Config button in the *WinRamp Lite* Quick Configuration Window.

2.   Select the Comm Port your modem is attached to and click the Next button.

3.   Select your modem model from the Modem Selected list and click the Next button.

4.   Select the Baud Rate of your modem and click the Next button.

5.   Check the relevant boxes for the toolbars you would like displayed in the main window of *WinRamp Lite* and click the Next button.

6.   Type the names of your Dialing Directory and the file it will be stored as and click the **Next** button.

7.   If you want the Dialing Directory window or the Hot Dial window open as *WinRamp Lite* starts up, check the appropriate check box(es) and click the **Next** button.

8.   Type in the name, and number of the BBS system you would like to set up and select the protocol and terminal emulation it supports. Click the **Next** button.

9.   Check the configuratuion settings you have entered in the Quick Configuration Summary window. Make any necessary changes and click the **Save Quick Config** button.

10.   You can go back to any previous Quick Configuration dialog box(es) at any time by clicking the **Back** button.

11.   Now you can dial the BBS you have set up by double-clicking the entry in the Dialing Directory window or by double-clicking the icon for the BBS system in the Hot Dial window.

2.2.2 Quick Start for Advanced Users

1.   Click the **Skip Quick Config** button in the *WinRamp Lite* Quick Configuration window.

2.   From the **Configure** main menu option, select the **Device**. This configures *WinRamp Lite* for the equipment you have attached to your computer.

3.   Click the **Add** button, and select the correct settings for your device. {strings, vendor modem}

4.   Click on the **OK** button, followed by the **Close** button.

5.   Now you can open a communications session by selecting, from the **Communicate menu**, the **Dial** option (or click the button on the toolbar). Choose the device you wish to use, followed by the terminal emulation, and then enter the telephone number if you wish to have it dialled automatically.

You're on your way!

2.3   Starting WinRamp Lite

WinRamp Lite is started simply by running the WINRAMP.EXE executable file. Once the software is installed, this can be accomplished by double-clicking on the *WinRamp Lite* icon in Windows' Program Manager. If the icon is not installed in Program Manager, use File Manager to

change to the directory containing the WINRAMP.EXE file, and double-click on the file to launch *WinRamp Lite.*

2.4   Navigating around *WinRamp Lite*

WinRamp Lite should be as familiar as any other Windows application, the program has a main window which has a menu, toolbars, and resizable borders. There are operations which open child windows, namely opening a terminal session, and opening the dialing directory. On launching *WinRamp Lite*, the following components will be visible - the menu bar, the toolbar, and a status bar. These are explained next.

2.4.1 *WinRamp Lite* Menus:

WinRamp Lite has the following top level menus: File, Edit, Communicate, Configure, Scripts, Register, Window and Help. Their uses are as follows (full descriptions of all menu commands are provides under the reference section of this manual):

- **File** - contains operations applicable to individual files (uploading and downloading) as well as the Exit option, to close *WinRamp Lite*.

- **Edit** - the "Cut & Paste" menu - operations which deal with text editing.

- **Communicate** - contains all the commands you'll require to communicate with a remote system.

- **Configure** - allows the modification of the environment in which *WinRamp Lite* operates, including which devices are available, which emulations are available, etc.

- **Scripts** - consists of options related to the recording, running and writing of scripts and macros which enable you to automate *WinRamp Lite*.

- **Window** - controls the child windows of *WinRamp Lite*, resizing, closing, etc.

- **Register** - provides information about registering *WinRamp Lite*.

- **Help** - access the Windows Help system, with *WinRamp Lite*-specific help.

2.4.2 The Toolbars

There are four default toolbars available when you first install *WinRamp Lite*: The **Standard toolbar** giving easy access to the most common functions, the **Configuration toolbar** for set-up and configuration functions, the **Online Actions toolbar** for functions that can be performed during an open communication session and the **Scripts and Macros toolbar** containing functions related to script and macro execution. The **Standard toolbar** is the only toolbar which is actually

displayed when *WinRamp Lite* is first started up. By placing your mouse over a button appearing in the toolbar, you will notice a description of the function that button performs appearing below. These are configurable and can be switched off once you are familiar with the functionality of the buttons. *WinRamp Lite* has extremely sophisticated toolbars, designed to make your communications efforts as easy a possible. There is the option of having multiple toolbars, each configurable as to which tools are on the toolbar, how the toolbars appear, and how they are positioned (see 5.1 Toolbars for more details).

2.4.3 The Status Bar

This is the gray bar that appears along the bottom of the screen. It is used to display messages and information about the current status of a particular action you may be performing with *WinRamp Lite*. When you first load up *WinRamp Lite* the status bar will be blank.

2.5   Exiting *WinRamp Lite*

To exit *WinRamp Lite*, use any of the following methods :

1. Click on the Exit button on the toolbar (the button with the red arrow pointing left).

2. Choose Exit from the File menu.

3. Double-click the horizontal bar in the top left corner of the *WinRamp Lite* window.

Next time you open *WinRamp Lite*, all the previous settings apply and any open windows will be displayed.

2.6   Using Online Help

At any point while you are using *WinRamp Lite*, you can obtain help by choosing one of the topics under the Help menu. This will call up a hypertext help document which will guide you in the use of *WinRamp Lite*. Help can also be launched from any dialog box for context sensitive help.

For help on how to use the Windows hypertext system, see the section on How to Use Help, from the Help menu. To find help on a specific topic, use the Search for Help on option from the Help Menu.

CHAPTER THREE: STARTING A COMMUNICATIONS SESSION

Once you're familiar with the components of the opening screen of *WinRamp Lite*, the next thing you'll probably want to do is communicate! *WinRamp Lite* offers a number of methods to communicate with a remote system (such as an Online Service or Bulletin Board System), each of which is launched from the Communicate Menu item.

Choosing Open Terminal from the Communicate menu will open a terminal window without prompting for dialing details. This allows you to dial a remote system manually, using the Hayes AT commands (see Appendix E). If you know the number and basic configuration details of a remote system, and you are unlikely to want to connect to the system again, then choose Manual Dial from the Communicate menu option and perform the following simple three step operation: select a device (typically a modem) to use; select an emulation, and enter a telephone number for the remote system. It is then simply a case of dialing, or starting a connection for the communications session.

Alternatively, if you are likely to use the remote system more frequently, you can set it up as an entry in the **dialing directory** and dial the system from there. Another option is for those systems you use a lot. *WinRamp Lite* has a special "Hot Dial" facility for these systems, where a simple double click on the icon representing one of your favorite systems will cause *WinRamp Lite* to start dialing it. Note that multiple communications sessions can be run simultaneously.

Each of these communication methods will be described in more detail further on. However, before you attempt to start a communications session, you must configure certain communications options. The most important of these is to tell *WinRamp Lite* which device (modem) you are using. Other options are defining terminal emulations and protocols (for descriptions of terminology you may be unfamiliar with, refer to the glossary in Appendix A of this manual) you wish to use with systems you may be dialing. Defaults for those terminals and protocols supported by *WinRamp Lite* have already been set-up, so you don't have to worry about configuring these at this stage (refer to Chapter 5 for details on how to configure these options). However, it is critical that you ensure the modem you have attached to your computer is specified correctly:

3.1   Defining Devices

Defining a device involves telling *WinRamp Lite* what sort of equipment is attached to your computer, to enable it to connect to other computers. Basically, which modem you have plugged in!

In order for *WinRamp Lite* to automate as much of the connection to a remote system as possible, you need to tell it what sort of hardware you have on your computer. This involves the line parameters the computer must use to send data to the modem, and the commands which the

modem requires to set it up for operation. Don't worry if you don't know these details, *WinRamp Lite* automates much of this set-up.

To define the device or devices (if you are likely to use more than one type of modem), choose the Device option from the Configure menu item. The Device Configuration dialog box will be

displayed, containing a number of default modem settings. We recommend you use a Hayes AT Command Set compatible modem. Virtually all modern modems are of this kind. If you are unsure whether your modem is Hayes compatible or not, you generally won't go wrong by assuming that it is.

The following device options are available:

3.1.1 Adding a Device

To add a device, click the Add button, and you will be presented with a dialog box detailing the modifiable options for a device. If you have a commonly available modem, click the Vendor button to choose from a list of modems for which all the details required by *WinRamp Lite* have already been set-up. In this case, most of the device settings will be filled in for you, and you can press OK for *WinRamp Lite* to accept your device. If you have a serial connection to the host, check the Direct Serial Link check box so that all the modem commands are disabled to enable the connection.

If you know the settings required for your device, change the settings shown before you click OK. If you are unsure, then leave the defaults as they are. The most important setting to check is the COM port setting. This can often be determined by checking the plugs at the back of the computer for a label telling you which COM port the modem is plugged into. If you have an internal modem, check your modem manual for the correct COM port.

The following settings are a good starting point for the device settings :

Parity: None
Word Length : 8
Stop Bits :   1
Handshaking : RTS/CTS
RX Buffer   :   5120
TX Buffer   :   5120

The following provides an explanation for information required when setting up your device:

Device Name:
What you would like to call the device - should be a descriptive name for the device for human recognition.

Port:
Which serial communication port the device is connected to. Most IBM compatible computers are supplied with two serial ports, COM1 and COM2. Your mouse is usually attached to one of the serial ports, and you can connect a modem to the other port. See your hardware documentation for more details on which ports are available to you.

Parity:
Whether an extra bit is added to each byte to make the number of '1' bits even or odd.

Word length:
The number of bits used to represent a byte of data over the serial link.

Stop bits:
The number of bits used to represent the end of a byte of data.

Baud rate:
The 'speed' at which data is sent over the serial link.

RX Buffer & TX Buffer:
The amount of RAM used to store data on its way to or from the device. Used when Windows is busy with another task, and WinRamp cannot immediately retrieve the data.

Handshaking:
How Windows will know when to temporarily stop sending data if, for example, the device's buffer is already full. The handshaking will prevent Windows from sending data when the data cannot be sent by the device.

You can also change the commands which are sent to the modem by clicking the Strings button.. The commands *WinRamp Lite* needs to know are: how to initialize the modem ready for dialout; how to make the modem dial a telephone number, and how to tell when the modem has connected to another modem. The default strings used are:

Dial:　　　　ATDT
Connect:　　CONNECT
Initialize:　　ATZ

3.1.2　Modifying Settings for a Device

To modify the settings for an existing device, select the device by clicking on its name, then click the Edit button. Modify whichever settings are required to customize the device to your environment, and then click OK.

3.1.3　Selecting the Default Device

To select the default device (which will be the highlighted device whenever you choose to establish a connection) select the device by clicking on it, and then click the Default button. The device name will now be reflected in the box underneath the word "Default".

3.1.4　Removing an Unwanted Device

If a device is no longer needed, it can be removed by selecting the device, and clicking on the Remove button. The device will be removed from the list. THIS IS NOT A REVERSIBLE ACTION - be sure that you no longer need the device before deleting it.

3.1.5 Copying a Device

If you have two similar devices, choose the Duplicate button to make a copy of one device, enabling you to change only the few settings which are different for the second device.

Each of the three communications methods specified above will now be described:

3.2 Command Line Dialing

Should you wish to dial a remote system manually, select the Open Terminal option from the Communicate menu. This will bring up the open terminal dialog box from which you select a device and terminal emulation from the lists provided. Alternatively, you can select the defaults, the details of which will appear on the status bar. Clicking on the OK button will then open a terminal window, from which you can enter the manual dial command, or any other Hayes AT command. Refer to Appendix E, or your modem manual, for details abut the commands you can use.

3.3 Manual Dialing

Selecting Dial from the Communicate menu option will bring up the Dial Dialog box. The list of devices you have set-up using the Device Configuration dialog box appear on the left. Select the device you intend using for this connection (the default is automatically selected). On the right, the list of pre-defined terminal types, and those you may have added, are listed (with the current default highlighted).

A terminal type must be selected since *WinRamp Lite* will "pretend" that it is a special piece of hardware called a Terminal. Different types of terminals have different features - some will only show CAPITAL LETTERS, others will show colors, and others will show graphics and let you use a mouse to "click" on "buttons". *WinRamp Lite* will emulate the following basic Terminal types:

TTY (a plain, text terminal);
ANSI (text with colors and basic sounds);
AVATAR (a superset of ANSI - more features);
Prestel (as used by the British Prestel service, and France's Minitel);
Remote Imaging Protocol (RIP) (a recently developed graphical standard supporting a mouse and graphics);

VT52 (an implementaion of the DEC VT52 terminal);
VT100 (based on the specification for the C. Itoh CIT-101 terminal, and is supposed to be fully compatible with the DEC VT100 terminal);
VT220 (a partial implementation of the DEC VT220 terminal based on the DEC VT320 specification).

The emulation you choose will be determined by the system you wish to connect to. If you have seen a Bulletin Board System, or other Online System which advertises itself as having a "RIP-based graphical interface", then you should choose the RIPScrip (default) terminal emulation from the list presented on the Dial dialog. If you are unsure which emulation a system uses, then ANSI (default) is probably your best choice.

You can tell if you are using an incorrect emulation - generally the screen will not appear as you expected it to! Symptoms can range from little arrows and left-square brackets appearing when you choose TTY instead of ANSI, to getting streams of lines starting with an asterisk (*) when you should have chosen RIPScrip emulation.

There are also advanced settings for each default emulation (this is why each emulation has the word "default" behind it - you can create other emulations based on the standard emulations, with certain features disabled, or configured differently.) See the section on Terminal Emulators in Chapter 5 for details on how to configure settings.

The final step to making a connection is to enter the telephone number of the remote system. This should be the number of the modem on the remote side which is most compatible with your own modem. Basically, if the system offers two separate numbers, one for high speed and one for slow modems, and you have a fast modem, then you should use the number for their high speed modems.

To enter the number, click on the telephone number field, and type in the telephone number you wish to call, including any dialing codes needed. *WinRamp Lite* "remembers" the last ten numbers you have dialed and provides these in the drop down list box, with the last number dialed displayed at the top. Click the OK button, and you are on your way! A window will open, showing the progress of the call (you can cancel at any time), and once connected, the terminal window will open. You can now start interacting with the online system you connected to.

3.4   Using the Dialing Directory

The dialing directory performs the same function as a rolodex, or telephone directory. You capture information about online systems you frequently call as a directory entry, and then you can simply click on an entry to initiate a connection to that system.

You can have multiple directories (shown along the bottom as notebook tabs), each with multiple entries (shown along the right as alphabetic tabs). Each entry stores information about a particular system - the name, telephone number(s), device and speeds to use.

3.4.1 Opening the Dialing Directory

Click on the dialing directory icon from the main toolbar, or choose the Dialing Directory option from the Communicate menu. The Dialing Directory window will then be displayed. On the left of the directory, there are alphabetic tabs much like you'd expect to find in an address book, except that there are tabs for only those letters for which there are entries. (As you add new entries, alphabetic tabs for these will automatically appear if they don't already exist). The tabs at the bottom of the dialing directory represent personal address books. These you can create according to how you would best like to organize and group directory entries, e.g. local BBSes, product support systems, etc.

You will notice that having opened the dialing directory, the menu bar has changed to include a "Directory" option. The dialing directory toolbar had also been added. To move this toolbar click on any part of the gray background of the toolbar and drag it to a new location (see toolbars section in this manual for more information on moving and configuring toolbars). The Directory menu option or tool bar are used to create and remove new directories and directory entries, and other options, as explained below.

3.4.2 Directories

Before entering details about a system (e.g. BBS) you'd like to communicate with, decide which directory you'd like to store the details under. Organizing your directory entries depends totally on how you'd like to group them - using a multiple directory system certainly helps later when you have many entries to keep track of. To add a new directory, choose New Directory from the Directory menu or toolbar. You will be asked for a name for the new directory, which will appear as another tab along the bottom of the Dialing Directory window. To remove an existing directory, chose Delete Directory from the same menu. This will ask for confirmation if you'd like to remove the current directory. Remember that all entries in that directory will be deleted too!

3.4.3 Directory Entries

To add a entry to the dialing directory, choose the Add option from the Directory menu or toolbar, and fill in the details for that system. You will notice that the dialog box is called Directory Entry Details: Dial-Up Systems. This is to allow for future growth of *WinRamp Lite* where the product will provide support for other methods of communication, e.g. LANs.

Enter the name and number of the host system. You can enter more than one telephone number, by placing the cursor on a blank line in the number field, and typing the new number. Then, when you dial, *WinRamp Lite* will cycle through all the numbers, until it finds one which is not busy. Defaults are provided for the terminal emulation, device name and file transfer protocol you wish

to use for this system. Click on the help button if you are not sure what to enter for any specific item. Should you already have a login name and password for the system, enter these in the relevant fields.

The bottom portion of the Directory Entry Details dialog box displays statistics about the online system the entry applies to. This will tell you the date you last logged onto the system, the total number of times you have accessed the system, the number of files (and total bytes) you have transferred to and from that system, and the ratio of bytes uploaded compared to those downloaded. This last item is especially useful for those BBSes and online system that require you to maintain a certain ratio of uploads to downloads. Clicking on the Reset button will initialize these statistics to zero.

Clicking on the Directory tab will bring up another dialog box where more information can be captured for the directory entry. Again a part of this dialog box has been developed to cater for future versions of *WinRamp Lite* where a scripting language will be included. You can enter the default path for macro files, file captures, uploads and downloads (see Chapter 4 for details on when and how you can use these features), or click on the browse button to select the directory. Marking the Start on Connect check box will cause *WinRamp Lite* to automatically capture all communications session with this host system to a file. You can choose a suitable icon for the entry by clicking the Change button. This icon will then be used for "hot dialing" (see Hot Dial section in manual). Any comments and notes can be entered for the directory entry so that they be displayed directly on the dialing directory when you toggle Directory Tabs off. Finally, you can specify whether or not a macro of your choice will automatically be executed when a connection to the host pertaining to a particular directory entry is established. This can be done by selecting the Macro radio button under the On Startup option. Type the name of the macro file without the extension in the field next to the Macro radio button. If the file is not in the Macro file default path, change the default path to the one that the file is in. Later versions of *WinRamp Lite* will allow you to startup the connection with a script.

The Edit menu option on the Directory menu allows you to change items of information about the entry (as does clicking on an entry with the right mouse button), while the Delete menu option removes the entry.

3.4.4 Connecting to a System

Once you've set up the directory entry for a particular system you wish to connect to, double click on the system's name, or select Dial from the Directory menu option. *WinRamp Lite* will then attempt to connect to that system. A Dialing window will appear with the name and number (or numbers) of the system. *WinRamp Lite* will start dialing the first number that appears in the Number text box, cycling the next if the elapsed time exceeds the total time you have specified before the program should "time-out' or stop trying. Every time *WinRamp Lite* attempts to redial the system, the number in the Attempts text box will increment by one.

3.4.5 Locating a System

To find a system, you can click on the alphabetic tabs to the right of the dialing directory. Each tab will show all systems whose names start with that letter, enabling easy access to the system you are looking for.

3.4.6 Customizing the Dialing Directory

The lines separating each of the items of information about an entry (name, terminal emulation, device, etc.), can be dragged using the mouse to increase or decrease the size of the item holder. Thus if you have a long name for the entry, you would drag the dividing line to the right so that the entire name could be displayed. Selecting or deselecting (when selected the option has a tick symbol on the left) the Directory Tabs options in the Dialing Directory will toggle the display of the directory tabs at the bottom of the dialing directory. When this option is not selected, comments and numbers text boxes appear at the bottom of the dialing directory instead of tabs. Comments for a particular entry are entered when adding or editing a directory entry. If an entry has multiple numbers, these will appear in the Numbers text box. Toggling the Quick Select Tabs option on

or off will display or remove the alphabetic tabs appearing on the right of the dialing directory. Similarly, the Toolbar option can be toggled depending on whether you want the Dialing Directory toolbar to be displayed or not. Since the dialing directory is a window, you can resize, move and minimize it just like any other window.

3.5   Hot Dialing

The hot dial facility has been designed for speed dialing of those system you use frequently. Clicking on the Hot Dial icon from the main tool bar or selecting the Hot Dial option from the Communicate menu will launch a special Hot Dial window. This appears much like a typical Windows program group consisting of a number of icons. Each icon represents a system entry you have setup in the dialing directory. Double clicking an icon in the hot dial directory will prompt *WinRamp Lite* to begin dialing the system, bringing up the Dialing dialog box.

To setup an icon in the hot dial window, use the dialing directory. When adding or editing a directory entry in the dialing directory, you have the option of marking the entry to be available for hot dialing, and for selecting an icon to represent the entry in the Hot Dial Window.

CHAPTER FOUR: MANAGING A COMMUNICATIONS SESSION

Having successfully connected to a remote system, there are many functions *WinRamp Lite* supports *during* the communications session. These features include uploading and downloading files, capturing incoming data to file, cutting and pasting sections from the terminal window to the Windows clipboard, recording and playing back macros and many more. Much of this functionality is only made possible due to the multi-tasking capabilities of Windows, so take advantage of it!

4.1 Transferring Files

When connected to a host system, one of the most important functions you may want to perform is transferring files to and from your PC. In order to do this, you need to select the transfer protocol you wish to use and specify file name(s) and directories (depending on the protocol). A Protocol is a set of rules and standards governing communications between computers. Default protocols have been setup in *WinRamp Lite*. Advanced users may wish to customize these default protocols. (For details on how to do this, refer to Chapter 5.) A description of each of the default file transfer protocols is provided below, followed by details on how to upload and download files:

4.1.1 ASCII Transfer

This is a simple transfer protocol, involving no error checking nor compression. This sort of transfer is of most use when you have a small piece of text to move across the line, and a very clear connection (i.e. your modem is already providing error correction.)

Disadvantages
- Transmits files in 7-bit format only. Special characters in the text could cause the link to freeze (e.g. the XON and XOFF flow control characters).
- Tends to be slow.
- Can only handle one file at a time (although some versions may support batch file transfers).
- No control information is sent.

Advantages
- Quick and dirty way to get text across the line.
- Useful for entering text into an online editor without having to re-type it.

4.1.2 Xmodem

Xmodem is one of the original PC-to-PC file transfer protocols and is offered by most BBSes and online systems. It uses 128-byte blocks when transferring files, adding an extra byte (a checksum)

to each block for error checking, thereby achieving approximately 95% reliability.

Disadvantages
- Transmits files in 8-bit format only.
- Tends to be slow.
- Can be unpredictable if used with modem error-checking and flow control.
- Can only handle one file at a time (although some versions may support batch file transfers).
- No control information (e.g. file name and date) is sent.

Advantages
- It is relatively easy to use.
- More reliable than ASCII transfers.
- Common.
- Relatively effective error-checking.

Xmodem/CRC

Xmodem/CRC (cyclic redundancy check) is a more sophisticated version of Xmodem, in that it provides improved error-checking. This has the advantage of improved reliability (approximately 99,6%).

Xmodem-1k

This is the same as Xmodem/CRC except that it uses 1024 block sizes instead of 128. It is faster than Xmodem when there is little or no "line noise", or interference, on the phone line.

4.1.3 Ymodem

Ymodem is actually another variation or derivative of X-modem, specifically Xmodem-1K. It transmits data in 1024-byte (1-KB) blocks or 128-byte blocks. A variation called Ymodem-G has no error-checking and is therefore even faster.

Advantages
- Useful for transmitting large files.
- Faster transfer speeds.
- Automated batch transfer of files.
- Adds control information, such as file name.
- Useful with a MNP or V.42 modem (refer to Appendix D).

Disadvantages
- Usually no error-checking.
- Slow if line noise exists on the phone line.
- Use of padding blocks may corrupt binary files.

4.1.4 Zmodem

This public domain protocol is the most popular file transfer protocol used in PC communications, especially with high-speed modems. Zmodem uses 512- or 1024-byte blocks. We recommend you use this protocol with *WinRamp Lite.*

Disadvantages
- Uses no buffering.

Advantages
- Relatively fast.
- Reliable (approximately 99%).
- Allows batch transfers.
- Efficient with high speed modems.
- Crash recovery for incomplete transfers.
- Widely used.

4.1.5 Kermit

Kermit is primarily used to transfer files from mainframe or mini computers and is unique in that it can transfer 8-bit files over a 7-bit data link. It has the ability to use flexible block sizes although small data blocks are the norm. The checksum technique is used for error checking. Kermit can change control characters to other ASCII characters to improve reliability.

Disadvantages
- Not very common.
- Small block sizes reduces throughput.

Advantages
- Reliable.
- Allows flexible batch downloads.
- Useful with 7-bit data links.

4.1.6 Downloading

Selecting Download from the File menu will bring up a dialog box allowing you to choose where to place a file you wish to download (receive from the remote system), and what the filename will be. Because certain download protocols have internal support for filenames, choosing one of these protocols in the list box on the right may prevent you from modifying the filename field. For example, YModem and ZModem allow multiple files to be sent at once, in which case the remote system will send the correct filenames automatically. Once you choose OK, the two computers will start the process of transferring the file.

Note that with some protocols, if you spend an extended period of time before choosing OK, the protocol may fail. In this case, simply instruct the remote system to resend the file, and choose Download again. Also, some protocols will automatically initiate a download, as is the case with ZModem. In that case, there is no need to manually select Download.

If you are downloading GIF files using XModem, YModem or ZModem, you can turn the GIF Viewer on by selecting Preferences from the Configure menu and clicking on the Misc tab and checking the Auto Display GIF box under the file receive section. This will automatically display the GIF file that is being downloaded.

4.1.7 Uploading

Selecting Upload from the File menu during a communications session will bring up a file dialog box where you can choose which files you wish to send to the remote system. Certain protocols will allow you to send more than one file at a time. If one of these protocols is selected in the list box in the upper right, you will be able to list multiple files in the list at the bottom of the dialog. Protocols like XModem will restrict you to sending only one file at a time. To upload a particular file, double-click the file in the upper list, to transfer the filename to the lower list. Uploading text (as opposed to files) can also be performed, using the text transfer "protocol".

Refer to the troubleshooting guide in Appendix B for suggestions on how to correct problems you may be having with file transfers.

4.2   Changing Terminal Emulations

During a communications session, you can change the settings of your current terminal emulation, without having to cancel your current communications sessions and start another. Use the Current Terminal from the Configure menu. Further, you can select a different terminal emulation (also without interrupting the active communications session) by selecting the Open Terminal option from the Communicate menu. Ensure that the selected COM port in the Open Terminal window is the same one as the one for the already active session and select the Terminal type you would like to see in the new window. This would allow you to, for example, open a RIP emulation window in addition to the ANSI one already open of the same data stream. It is important to ensure that the Port Sharing option in the Directory section of the Preferences is on Prompt or Automatic to enable you to see the data stream in a different emulation. In order to change the Port Sharing setting, select Preferences from the Configure menu and click the Directory button. Select either Prompt or Automatic under the Port Sharing option and click the OK button.

4.3   Cutting & Pasting Text and Graphics

You can mark out an area on the terminal window to copy to the Window's clipboard as a bitmapped image or as text characters, by selecting the Mark Graphics or Mark Text options from the Edit menu and then choosing Copy from the same menu. The Paste option in the Edit menu will copy the contents of the windows clipboard as keypresses to the remote system.

4.4   Using the Command Stack Window

You can open the Command Stack window by selecting Command Stack from the Communicate menu. A command stack window is a facility which allows you to type in commands and store these commands so that they can be executed in the terminal window at a later stage and as many times as you specify. This option facilitates Type-ahead i.e. you can type in the next command while you are waiting for the command prompt and then press Enter when the command prompt appears thereby minimising the connect time. The other situation in which the Command Stack is useful is when you are using Chat Mode. Normally, if you are busy typing in your chat message in a teleconference facility, you are not able to see other people's message until you have sent yours. By using the Command Stack, you can see all the messages as they are sent and be able to type your message with full edit capabilities i.e. cut & paste, arrow keys etc. The Command Stack option is also very useful when using Multi-user Dungeons as it allows you to repeat previously executed commands and overcomes the problem of the screen scrolling while you are in the process of typing.

The following functions can be performed in the Command Stack window:
- Ctrl-Enter performs a line feed but does not send the line.
- Enter performs a line feed and sends the line.
- Ctrl-Home goes to the top of the window.
- Ctrl-End goes to the bottom of the window.
- Ctrl-Ins copies the selected text to the keyboard.
- Shift-Ins pastes text that is in the keyboard.

4.5   Capturing Communications Sessions to File

You can capture all incoming characters to a file, for later reviewing, by clicking Start Capture from the File menu. Data capture is simply writing to disk the characters you type and the incoming text that scrolls on your screen. It is particularly useful when you want to capture a text file from another computer but the system doesn't allow downloading. (This feature is also known as an "ASCII download".) Data capture is also useful for keeping a log of your online activities (especially when you're learning to use an online service or BBS) and keeping disk "carbon copies" of e-mail.

When you choose the Start Capture menu option, you will be prompted for a file name and directory to save the data to. You will notice a flashing icon appearing on the status bar, indicating that *WinRamp Lite* is currently capturing data. Selecting Stop Capture will terminate the copying of received characters to a file

An alternative method of capturing your communications session to file is to capture data that is being stored in the buffer. This is useful when you want to save part of the communications session that has already happened - i.e. when it is too late to use the Start Capture feature. Use

the Capture Scrollback option from the File menu to perform this operation.

4.6   Toggling Scrollback Mode on or off

Marking the Scrollback option in the Edit Menu defines whether the scrollback bar is visible on the right of the terminal window (this option is thus only available when a terminal window is open). The scrollbar allows you to move back through data you have previously received. However, if the bar takes up too much room, you can switch it off.

4.7   Toggling Doorway Mode On or Off

This option allows the sending of the IBM keyboard scancodes to the remote system. This is required when using some remote-access programs, and some BBSes. This allows the remote system to realize when you have pressed keys like the Alt key, and both Shift keys. This is often referred to as "Raw Mode", or "IBM keyboard mode". Choose Doorway Mode from the Communicate menu to set this option. When doorway mode is on, none of the standard Windows keyboard commands will work, so you will need to use your mouse instead.

4.8   Recording and Playing Back a Macro

Any sequence of keyboard presses (i.e. typed text) executed during a communication session can be recorded as a macro by selecting Record Macro from the File menu and assigning that recorded sequence a .mac file name. The same sequence of actions can be executed once a connection is established and the Playback Macro option is selected from the File menu. During playback, a macro can be played, paused, resumed or rewound. The speed at which you would like the macro to execute can be specified by setting the speed scrollbar during playback.

4.9   Using WR-Script

WR-Script is *WinRamp Lite*'s programming language which allows you to automate events such as logon, logoff, download etc. There are two ways in which a WR-Script can be created: by using the **WR-Script Integrated Development Environment** (IDE) or by using the WR-Script AutoLearn facility. To write a script in the WR-Script IDE, select the WR-Script IDE option from the Scripts menu or click the WR IDE button in the Scripts toolbar (refer to the WR-Script Function Reference). You can write, debug and compile a script in the IDE. A Compile Script option is also available in the Scripts menu so you do not have to launch the IDE in order to compile.

A WR-Script AutoLearn script is similar to a macro in that they both record the actions that you perform during a communication session and replicate these actions when you execute them. They can also both be used to perform an automatic logon. The main difference, however, is that a macro records only the actions you perform whereas an AutoLearn script records both the

actions you perform as well as how the BBS responds. Due to this difference, an AutoLearn script may be more reliable than a macro. To enable the AutoLearn facility, select the WR-Script AutoLearn option from the Scripts menu when you want to start recording and deselect WR-Script AutoLearn when you are ready to stop the recording. If the AutoLearn Automatic Compile on Close is checked in the Miscellaneous section of your global preferences, you will not need to compile the AutoLearn script and can run it by selecting Run Script Object from the Scripts menu or by clicking the Run Script button. If you are creating an AutoLearn logon script, you can make use of the option available in the Directory section of the Dialing Directory settings. The On Startup and Script/Macro Action options allow you to attach a logon script to the dialing directory entry of your choice (refer to section 3.4.3. Directory Entries for details of how to do this).

4.10 Single Commands

Various commands can be sent directly to your modem, using the Communicate menu. These are Hayes AT commands (refer to Appendix E). These commands are: Send Break, which sends a break command to the modem, overriding coded communication thereby interrupting and resetting the current process; Full Duplex, which toggles between full duplex (simultaneous, bi-directional communication) and half-duplex (bi-directional communication, but only one way at a time); Reset Modem, which allows you to reset the modem using the method specified in the current device settings; and finally Auto Answer, which sets your modem to auto answer mode (the equivalent of sending an ATA command string to your modem), for when you wish your PC to act as a host (refer to Tricks and Tips in Appendix B).

4.11 Ending a Communications Session

When you wish to terminate the current telephone connection using the method specified in the current device configuration (either drop the DTR line, or send a specific string to the modem, causing it to drop the telephone line), choose Hangup from the Communicate menu. Alternatively, choosing Exit & Hangup from the File Menu will exit *WinRamp Lite* as well as disconnecting the current telephone connection.

TUTORIAL: LOGGING ONTO THE WINRAMP SUPPORT *BBS*

This tutorial demonstrates how to log onto the *WinRamp Lite* **Support BBS** in order to register the product. Once you have registered, you can use the support BBS to ask questions, leave mail and download upgrades etc. The BBS software was developed by Vironix.

In order to register online through the *WinRamp Lite* **Support BBS**, do the following:

Set *WinRamp Lite* to use the highest baud rate your modem supports. You will be connecting to an HST Dual Standard modem on the BBS.
.
Select Manual Dial, and enter the number of our BBS.

Once you have established a connection, you will see a login message telling you to enter the username 'register' to register your product. Type in the word 'register', and press Enter.
You need to fill in a few personal details, to enable us to ship your registered copy of WinRamp to you. MISTAKES CAN BE CORRECTED AT THE END - DON'T PANIC!

Take special note of how you entered your name - you will need to enter the name in exactly the same way into *WinRamp Lite* to register your product.

Select the credit card type you wish to have us debit, and enter the details off your credit card. Then, select which product you wish to purchase, either the registered *WinRamp Lite* with manual, or without manual.

You will now be given a chance to modify any of the information you have entered - press the number of the line you wish to correct, and re-type the entire line.

Once you are satisfied that everything is correct, press the number 0 (zero) to continue. If your credit card number is invalid, you will be asked to re-type your credit card number before continuing.

Finally, you will be shown the total which will be charged to your credit card - press 'Y' to confirm the transaction. DO NOT PRESS Enter AFTER THE 'Y'!

Your registration number will be shown on the screen - write this down in a safe place, along with the exact form of the name you entered. You will be sent a printed copy of this information as proof of registration, but this may take a few days to arrive.

Press Enter to terminate the connection.

All that remains is to enter your name and registration number into any 'Register...' dialog in WinRamp. Choose Register from the menu, and type in the details.

Congratulations! We thank you for your support in selecting our product.

CHAPTER FIVE: CONFIGURING *WinRamp Lite*

This chapter provides details on how to optimize your communications environment so that it facilitates communications using *WinRamp Lite.* Customization ranges from setting up your own toolbars to configuring file transfer protocols.

5.1   Toolbars

All toolbars are completely configurable, and provide easy access to all *WinRamp Lite* functions. You can set up toolbars with the functions you use the most often, to speed up your use of *WinRamp Lite*. There are four default toolbars that are loaded when you first install *WinRamp Lite* - the Standard toolbar, the Configuration toolbar, the Online Actions toolbar and the Scripts and Macros toolbar. Clicking on the Toolbars option from the Configure menu will provide you with a list of these available toolbars (and any others you may have added). Those marked with a tick represent toolbars that are currently displayed (only the standard toobar is displayed when *WinRamp Lite* is first loaded). These available toolbars can be toggled on and off, allowing you to display as many as you require.

To modify these toolbars, or create your own, select the Toolbars option from the Configure menu. Select Edit to display the Toolbar Editor. Here you can modify an existing toolbar, create a new one, and rename or delete an existing one. The available actions and their representative icons are shown in the two list boxes. The list box on the left shows those buttons that already exist on the toolbar (this will be empty when you create a new toolbar), while the right-hand list box provides a list of all available buttons which you can add to the toolbar. To add buttons to the toolbar, select those you want from the list of available buttons and click the arrow button that appears between the two list boxes. Alternatively, click on the button you wish to add and drag it to the Toolbar Buttons list box.

You can also remove buttons from the toolbar, by clicking the Remove button and change the order in which buttons appear on the toolbar by using the Up and Down buttons or by clicking on, then dragging the button the desired location.. To create a new toolbar, click on the New button and type in a name for it. Click on the OK button, then select those buttons you require to appear on the toolbar. Click on OK to signify you have finished. The check boxes appearing under the show section will be available in future releases of *WinRamp Lite.*

Once you have configured the toolbars to meet your own requirements, you can move the toolbars around the screen by clicking on any part of the gray toolbar background and dragging it to a new location. When dragged away from the borders, the toolbars become their own resizable windows. By "knocking" the toolbars against any of the borders, it will anchor itself to the border and become part of it. In this way your communications desktop can be totally configured to suit the way you work.

5.2   Setting Preferences

Most preferences can be set using the Preferences option from the Configure menu. Choosing this option will result in the Preferences dialog box being displayed. The following categories of preferences can be set:

5.2.1   General

Terminal Window Initial Size:
When a terminal emulation window is opened, should it be in a maximized state, or should it open to its default size, based around your equired number of lines and columns?

Application Open Size:
Should *WinRamp Lite* be opened with a full size, maximized window, or would you rather save the settings each time you exit so that it opens the same size as you were last working with?

Toolbar Tips:
The tool tips are the explanatory text which describe the function of a toolbar button. These tips come up if you position the mouse over a button, and leave it there for a short period of time. Set your preferences to indicate whether you want the tips displayed or not, and the delay before they should appear.

Text Editor:
Allows you to specify your preferred text editor (e.g. notepad.exe), which is accessed by clicking on the Text Editor option from the File menu.

Confirm Exit:
This option controls whether you or not you would like *WinRamp Lite* to prompt you before exiting.

5.2.2   Terminal

Cut & Paste

The cut and paste functions of *WinRamp Lite* allow you to copy text or graphics captured from a communications session to the Windows clipboard. Options available are:

Translate Text:
The Windows character sets do not all support the same characters as ANSI and other emulation character sets. This option determines whether, when copying to the clipboard, *WinRamp Lite* will try and substitute a "next best thing" approximation.

Append Carriage Return:

When you have selected a block of characters, should *WinRamp Lite* separate subsequent lines with a carriage return character, or copy only the visible characters to the screen?

Quote Paste:
This option controls whether or not any special characters are inserted in front of any text you paste in a terminal window. Enabling this option will result in the characters defined in the String setting (see below) to be inserted at the beginning of every line. This can be useful when you want to reply to a message online and need to quote from the original message.

String:
The Select and Paste edit facilities enable you to mark text and paste it in a terminal window. This
option allows you to define the string that will precede anything you paste in a terminal window so
that it can be easily identified.

Cut & Paste - 2nd Click

Undo Selection:
When this option is selected, you can undo the selection block by clicking the mouse for the second time inside the selection area.

Select Word:
When this option is selected, the second time you click the mouse in the selected area will select the word underneath the cursor.

Paste Selection:
When this option is selected, you can force *WinRamp Lite* to paste the currently selected block of text by clicking the mouse for the second time inside the selected area.

Select Word & Paste:
When this option is selected, the second time you click the mouse in the selected area will select the word underneath the cursor.

Separators:
This option is related to the selection of a word in a terminal window. You can define what *WinRamp Lite* should consider a word by specifying the characters that will be considered to be separators. It is possible to define upto 20 separators. Any character below ASCII 31 or above ASCII 128 as well as a space are automatically considered to be separators.

General

Color Flashing:
Specifies whether the text flashing attribute in the ANSI terminal emulation will be supported or not. You may wish to disable this if you have a slow computer.

Fast Scroll:
When this option is enabled, scrolling operations in any of the text emulations are performed much faster by only redrawing the screen every couple of lines.

Strip Capture:
Marking this check box will prevent the control characters (i.e. characters that control the text color and font) of the communications session from being captured, thus, capturing only meaningful and readable text to the capture file.

Low ASCII:
Determines whether or not any of the terminal emulations display characters below ASCII 32 in the IBM characters set, i.e. special characters.

Scrollback Buffer

Defines how much memory is reserved to hold data which has scrolled off the top of the screen. You can use the scrollback buffer to see data you recently received, but which has disappeared from view to make way for other data. Use the Capture Scrollback command from the File menu, or by setting Scrollback on, from the Edit menu.

5.2.3 Device

Modem

Hangup on port close:
Specifies whether the DTR line will be dropped and any modem connection terminated when you close all windows which were using a particular device. If you clear this checkbox, you should manually terminate a telephone connection.

Close Window on Hangup:
Closes the terminal window automatically when the modem drops carrier, i.e. hangs up.

Confirm Modem Hangup:
Determines whether you are asked to confirm the action of hanging up the modem before *WinRamp Lite* does it.

Confirm Session Resume:
Determines whether you are asked to confirm whether you want to resume a session or not. Resuming a session means that your modem will not be reset and you can continue using it.

Port Sharing

This setting is very important if you want to view the same incoming data stream in more than

one terminal emulation. You can choose to Disallow port sharing i.e. you will not be able to open more than one terminal emulation, you can choose to Automatically share the port when you open another window or you can ask *WinRamp Lite* to Prompt you i.e. you will be asked whether you want to share the port or disallow sharing evry time you want to open another terminal window.

Directory

Automatic ReDial:
This setting is applicable only to Dialing Directroy entries. It determines whether *WinRamp Lite* automatically starts dialing the first number again on the list of numbers for the selected Dialing Directory Entry once it has not been able to connect to any of them.

Directory Toolbar:
Determines whether the Dialing Directory toolbar appears on the screen when Dialing Directory is selected from the Communicate menu or when the Dialing Directory button is clicked on.

Minimize on Dial

Hot Dial Window:
Determines whether the Hot Dial window will be minimised once you begin the dial procedure.

Dialing Directory:
Enabling this setting causes the Dialing Directory window to be minimised once you have begun the dial procedure.

5.2.4 Paths

Scripts:
Allows you to specify the default directory for any WR-Script programs and sources scripts you may have developed.

Macros:
Determines the default directory for any Macros that you may have written for automation purposes.

Capture:
The default directory for the capture file to be kept.

Downloads:
The default directory to which all the files to be dowloaded will be written.

Uploads:
The default directory on your computer where any files that you may want to upload are stored.

5.2.5 Miscellaneous

File Receive

Check Disk Space:
Checks disk space before beginning a download procedure. If the file is too large you will be warned before the transfer takes place if the setting is on.

Delete Partial Files:
Deletes any files that might have been only partially dowloaded due to an error or if you pressed Cancel during the download procedure.

Auto Display GIF:
This option enables or disables the GIF viewer during the download of a GIF(CompuServe Graphic Interchange Format) file. Once this check box is enabled, the GIF file that is being downloaded will be displayed during the download process.

CR-LF Translation

Some hosts have either just a Carriage Return or a Line Feed at the end of a line in the incoming data stream. In order for the terminal to be displayed correctly it is necessary to add a Line Feed before the existing Carriage Return or a Carriage Return before the existing Line Feed. Leaving the setting at None should accommodate most hosts. It may be necessary to change the setting to either LF after CR or CR before LF depending on the host.

Script Interpreter

Runtime Type Checking:
When runtime type checking is on, the script interpreter will check the parameters to all functions and operators while the script executes. Since all operator and parameter type information is checked at compile time, an invalid parameter probably means the script image has been corrupted. This option slows the script execution down marginally, but it is recommended that you leave it ON unless speed is at an absolute premium.

AutoLearn Escape Sequence Checking:
Escape sequences are special control characters used by terminals. For example, they are used in ANSI to control, among other things, color. With this option on, only the actual text being send is processed - escape sequences are ignored. This can sometimes make it easier for the autolearner to recognize certain strings. Unless you encounter problems, it is recommended that you leave this option off, as certain terminals send only escape sequences.

AutoLearn Automatic Compile on Close:
Determines whether a recorded or "autolearned" script will be compiled automatically after the recording of the script has ended, or if it should be done manually.

5.3   Terminal Emulations

The terminal emulations are supplied with standard settings, which are applicable for most situations. However, if you connect to certain online systems which require something special, you will have to customize one of the base emulations to perform the special processing you require. This may be as simple as adding Carriage Return characters, or as difficult as re-mapping your entire keyboard. The possible configuration changes you can make are described below.

To configure a terminal emulation, select the Terminal menu option from the Configure Menu. The Terminal Configuration dialog box will then be displayed, with the names of the default

terminal emulations displayed. Editing or adding a terminal emulation (by clicking on Edit or Add) will bring up the Terminal Settings dialog box. You can also Remove, Duplicate and set as Default any of the terminal emulations shown by selecting it then clicking the relevant button. Clicking on the Setup button from this dialog box will display the default settings for that terminal type. The settings for each terminal type are explained below:

5.3.1 The TTY Emulation

This is the most basic of the terminal emulations, supporting plain text.

Font Size:
The size of the characters as they are displayed on your screen.

Lines, Columns
How many characters there are across the width of your "virtual screen", and how many rows there are. These affect when characters will wrap to the next line, and when the entire screen will start scrolling up.

Destructive BackSpace
Whether a received BS character will simply move the cursor left, or the characters will be erased as the cursor moves left.

Destructive Tabs
Will a received TAB character overwrite characters as it moves to the right, or will the cursor position simply change.

Column Wrap
Defines whether characters received after the last column on the right will be shown on the left of the next line. Basically like a typewriter, which beeps when you hit the right margin, and moves down to the next line.

Fast Mark
Off means that dragging the mouse around the terminal window does not select text for copying, Text means that complete characters will be marked off for copying, Graphics means that a bitmap image is prepared for copying to the clipboard.

5.3.2 The ANSI Emulation

ANSI Terminal emulation is one of the most common terminal emulations, it supports text with colors and basic sound.

Font Size
The size of the characters as they are displayed on your screen.

Lines, Columns

How many characters there are across the width of your "virtual screen", and how many rows there are. These affect when characters will wrap to the next line, and when the entire screen will start scrolling up.

Destructive BackSpace
Whether a received BS character will simply move the cursor left, or the characters will be erased as the cursor moves left.

Destructive Tabs
Will a received TAB character overwrite characters as it moves to the right, or will the cursor position simply change.

Column Wrap
Defines whether characters received after the last column on the right will be shown on the left of the next line. Basically like a typewriter, which beeps when you hit the right margin, and moves down to the next line.

ANSI Music
ANSI emulations allow certain received characters to cause the playing of musical notes. If this annoys you, you can turn it off, and experience the sounds of silence. Note that the Start ANSI Music and Delete Line Codes in ANSI are the same, which may result in the terminal freezing. Clicking Reset Terminal from the Communicate Menu should correct this .

Column Wrap
Defines whether characters received after the last column on the right will be shown on the left of the next line. Basically like a typewriter, which beeps when you hit the right margin, and moves down to the next line.

VT100 Wrap
Allows characters on the very last right-hand column, without the cursor wrapping to the next line.

Fast Mark
Off means that dragging the mouse around the terminal window does not select text for copying, Text means that complete characters will be marked off for copying, Graphics means that a bitmap image is prepared for copying to the clipboard.

5.3.3 The AVATAR Emulation

This is a superset of the ANSI terminal emulation:

Font Size
The size of the characters as they are displayed on your screen.

ANSI Fallback
Allows the AVATAR emulation to interpret ANSI codes, if they arrive. Generally AVATAR is a superset of ASCII, but some systems use ANSI codes for certain features and AVATAR for the

rest.

Lines, Columns
How many characters there are across the width of your "virtual screen", and how many rows there are. These affect when characters will wrap to the next line, and when the entire screen will start scrolling up.

Fast Mark
Off means that dragging the mouse around the terminal window does not select text for copying, Text means that complete characters will be marked off for copying, Graphics means that a bitmap image is prepared for copying to the clipboard.

5.3.4 The Prestel Emulation

The Prestel terminal emulation is used by the British Prestel service and France's Minitel.

Fast Mark
Off means that dragging the mouse around the terminal window does not select text for copying, Text means that complete characters will be marked off for copying, Graphics means that a bitmap image is prepared for copying to the clipboard.

5.3.5 The RIPScrip Emulation

This is rapidly becoming one of the most popular terminal emulations. It is a recently developed graphical standard, providing mouse and graphics support.

Button Hotkeys
RIP allows graphical buttons, which can have key combinations associated with them. The setting determines if pressing the hotkey activates the RIP button, or whether you must click the mouse on the button to activate it.

Field Tabbing
Allows the use of the Tab key to move between RIP buttons.

Protected Mode
Prevents the remote system from querying certain locally-defined variables containing sensitive information. Any attempt to retrieve the information will ask for confirmation before the value is returned to the requesting system.

Destructive BackSpace
Whether a received BS character will simply move the cursor left, or the characters will be erased as the cursor moves left.

Destructive Tabs

Will a received TAB character overwrites characters as it moves to the right, or will the cursor position simply change.

ANSI Music
ANSI emulations allow certain received characters to cause the playing of musical notes. If this annoys you, you can turn it off, and experience the sound of silence.

Column Wrap
Defines whether characters received after the last column on the right will be shown on the left of the next line. Basically like a typewriter, which beeps when you hit the right margin, and moves down to the next line.

VT100 Wrap
Allows characters on the very last right-hand column, without   the cursor wrapping to the next line.

Fast Output
Allows graphics to be displayed faster, on certain 256 color systems only. This option has been known to cause problems with some 256 color windows drivers, and may need to be disabled.

Icons Subdirectory
Where RIP icons which were sent from the remote system will be stored. If this directory does not exist, it will be created when there is data to be stored in it. This is a subdirectory of your *WinRamp Lite* base directory.

Fast Mark
Off means that dragging the mouse around the terminal window does not select text for copying, Graphics means that a bitmap image is prepared for copying to the clipboard. Text copying is not allowed, since RIPScrip is a graphical emulation.

5.3.6 The VT52 Emulation

Font Size
The size of the characters as they are displayed on your screen.

Keypad
Both the VT100 and VT220 terminals have special keyboard "modes" that cause certain keys on the keyboard to send different commands to the host system when they are enabled. Usually the host system will instruct the terminal to enable or disable such modes, but if you find that your keyboard isn't functioning as expected, you may want to try changing them manually.

Keypad Application Mode effects the numeric keypad and some of the surrounding keys (digits 0 to 9, the decimal point, the plus key, the minus key, and the enter key). Normally (when Keypad Application Mode is disabled), the keys send through actual digits and characters as expected, but

with Application Mode enabled, the keys will send through special escape sequences that the host system will recognize.

Both the standard key mapping and the escape sequences produced when Keypad Application Mode is enabled can be edited using the Key Mapping Editor.

Fast Mark
Off means that dragging the mouse around the terminal window does not select text for copying, Graphics means that a bitmap image is prepared for copying to the clipboard. Text copying is not allowed, since RIPScrip is a graphical emulation.

5.3.7 The VT100 Emulation

Font Size
The size of the characters as they are displayed on your screen.

Keypad
Both the VT100 and VT220 terminals have special keyboard "modes" that cause certain keys on the keyboard to send different commands to the host system when they are enabled. Usually the host system will instruct the terminal to enable or disable such modes, but if you find that your keyboard isn't functioning as expected, you may want to try changing them manually.

Keypad Application Mode effects the numeric keypad and some of the surrounding keys (digits 0 to 9, the decimal point, the plus key, the minus key, and the enter key). Normally (when Keypad Application Mode is disabled), the keys send through actual digits and characters as expected, but with Application Mode enabled, the keys will send through special escape sequences that the host system will recognize.

Both the standard key mapping and the escape sequences produced when Keypad Application Mode is enabled can be edited using the Key Mapping Editor.

Cursor Keys
Both the VT100 and VT220 terminals have special keyboard "modes" that cause certain keys on the keyboard to send different commands to the host system when they are enabled. Usually the host system will instruct the terminal to enable or disable such modes, but if you find that your keyboard isn't functioning as expected, you may want to try changing them manually.

Cursor Key Application Mode effects the dark gray cursor keys to the left of the numeric keypad. Normally they send through standard ANSI escape sequences for up, down, left and right, but with Application Mode enabled they send through a different set of escape sequences that the host system might require.

Both the standard key mapping and the escape sequences produced when Cursor Key Application Mode is enabled can be edited using the Key Mapping Editor.

Reverse Screen
Normally the terminal displays text in white on a black background, but with the Reverse Screen option enabled, the colours will change to black on a white background.

Block Cursor
Normally the terminal cursor is displayed as a flashing underscore, but with the Block Cursor option enabled, it will change to a flashing block.

New Line Mode
When New Line Mode is enabled, line feeds, form feeds and vertical tabs perform a carriage return as well as moving to the next line. When New Line Mode is disabled, they just move the cursor to the next line, without performing a carriage return.

Also, when New Line Mode is enabled, the Return key sends through both a carriage return and a line feed character, but when New Line Mode is disabled, only the carriage return is sent to the host.

Column Wrap
Defines whether characters received after the last column on the right will be shown on the left of the next line. Basically like a typewriter, which beeps when you hit the right margin, and moves down to the next line.

Fast Mark
Off means that dragging the mouse around the terminal window does not select text for copying, Graphics means that a bitmap image is prepared for copying to the clipboard. Text copying is not allowed, since RIPScrip is a graphical emulation.

5.3.8 The VT200 Emulation

Font Size
The size of the characters as they are displayed on your screen.

Keypad
Both the VT100 and VT220 terminals have special keyboard "modes" that cause certain keys on the keyboard to send different commands to the host system when they are enabled. Usually the host system will instruct the terminal to enable or disable such modes, but if you find that your keyboard isn't functioning as expected, you may want to try changing them manually.

Keypad Application Mode effects the numeric keypad and some of the surrounding keys (digits 0 to 9, the decimal point, the plus key, the minus key, and the enter key). Normally (when Keypad Application Mode is disabled), the keys send through actual digits and characters as expected, but with Application Mode enabled, the keys will send through special escape sequences that the host system will recognize.

Both the standard key mapping and the escape sequences produced when Keypad Application Mode is enabled can be edited using the Key Mapping Editor.

Cursor Keys
Both the VT100 and VT220 terminals have special keyboard "modes" that cause certain keys on the keyboard to send different commands to the host system when they are enabled. Usually the host system will instruct the terminal to enable or disable such modes, but if you find that your keyboard isn't functioning as expected, you may want to try changing them manually.

Cursor Key Application Mode effects the dark gray cursor keys to the left of the numeric keypad. Normally they send through standard ANSI escape sequences for up, down, left and right, but with Application Mode enabled they send through a different set of escape sequences that the host system might require.

Both the standard key mapping and the escape sequences produced when Cursor Key Application Mode is enabled can be edited using the Key Mapping Editor.

Reverse Screen
Normally the terminal displays text in white on a black background, but with the Reverse Screen option enabled, the colours will change to black on a white background.

Block Cursor
Normally the terminal cursor is displayed as a flashing underscore, but with the Block Cursor option enabled, it will change to a flashing block.

New Line Mode
When New Line Mode is enabled, line feeds, form feeds and vertical tabs perform a carriage return as well as moving to the next line. When New Line Mode is disabled, they just move the cursor to the next line, without performing a carriage return.

Also, when New Line Mode is enabled, the Return key sends through both a carriage return and a line feed character, but when New Line Mode is disabled, only the carriage return is sent to the host.

Column Wrap
Defines whether characters received after the last column on the right will be shown on the left of the next line. Basically like a typewriter, which beeps when you hit the right margin, and moves down to the next line.

Fast Mark
Off means that dragging the mouse around the terminal window does not select text for copying, Graphics means that a bitmap image is prepared for copying to the clipboard. Text copying is not allowed, since RIPScrip is a graphical emulation.

5.3.9 Keyboard Mapping

Overview

In order for *WinRamp Lite* to emulate different terminals correctly, it needs to be able to send through specific character sequences when certain keys are pressed. For example, on a VT52 terminal, the sequence "`<Esc>A`" is sent to the host system whenever the up arrow key is pressed. To complicate matters, certain terminals send through different sequences depending on what keyboard "modes" are enabled. For example, on a VT52 terminal, when the Application Keypad mode is enabled, the number eight key on the numeric keypad sends through the sequence "`<Esc>?x`" instead of sending the digit "`8`".

The terminal emulations provided with *WinRamp Lite* automatically handle these key mappings for you, so you shouldn't need to change any of them. However, you may want to setup key mappings of you own to automate complex key sequences that you use a lot. To do this, you will need to use the keyboard mapper.

Selecting a Keymap

A keymap is associated with the terminal emulation from which it is derived. To edit a keymap, therefore, you must first the select the required terminal emulation from the Terminal Configuration dialog (select Terminal from the Configure menu). Click on the Edit button to begin editing the terminal, and then click on the Keyboard Mapping button in the Terminal Settings dialog - this will take you to the keyboard mapper.

You should now see a picture of a keyboard, with the current key mappings for the terminal you are editing shown on each key. You can see what mappings are available while other keys are held down by holding down keys like Control, Alt or Shift - the characters shown on each key will change when you press down the Control key, say.

You should also notice a string of text on the right of the status bar at the bottom of the screen - this is the name of the keymap that you are currently editing. If the terminal you are editing supports multiple keymaps, you can select the particular map that you wish to edit from the Maps menu - the text in the status bar will change to reflect the new map that you have selected. Note that the first map on the menu is usually the standard map for the keyboard, while any other maps just overide specific sections of the standard map.

Editing a Key

To change what characters are sent during a terminal session when you depress a specific key, click on that key on the screen, or press the key on the keyboard. A dialog will come up showing the characters which will be sent out. Because some of these characters have no visual equivalent (like the Carriage Return character, which moves to the next line) you can view the codes in three

different ways - either as normal text, as control characters (preceded with a caret (^)) or as hexadecimal notation. Note that if the key has no default map, or is a "standard" key (e.g. the A key always sends through the letter a or A), this text field will be empty.

As an example, if you often use a system which requires you to type `"/help"` (followed by a carriage return) to obtain help, you may want to set up your F1 key to send through that character sequence. To do so, simply clink on the F1 button, and type `"/help"` in the text box. To append a carriage return, type `Ctrl-M`, or change the view to hexadecimal and type `0D` on the end of the string (`0D` is the hexadecimal value for a carriage return). Now, every time you use this terminal emulation, pressing the F1 key on your keyboard will send through the correct sequence of characters to obtain help.

Remember that these mappings apply only to the one terminal emulation which you are busy defining. You should give this emulation a specific name, so that it can be distinguished in the list of available emulations.

5.4   File Transfer Protocols

A Protocol is a set of rules and standards governing communications between computers. Default protocols have been setup in *WinRamp Lite*. If you wish to edit or add new protocol based on those supplied with *WinRamp Lite*, select the Protocol option from the Configure menu. The Protocol Configuration dialog box will then be displayed, allowing you to modify settings on certain file transfer protocols. The settings for each are explained below:

5.4.1 Text Transfers

For uploading or downloading/capturing text (not files), the following settings can be customized:

Timeout:
How long to wait for the first character, before aborting the transfer.

Inter-Line Delay:
The period of time to wait between the sending of each line, for the remote system to be ready to receive another line. The remaining options are generally useful when moving files to and from non-DOS systems like UNIX.

Strip LF:
Remove the Line Feed character from the transfer stream.

Strip CR:
Remove the Carriage Return character from the data stream.

Add CR before LF:
Add a Carriage Return character before every Line Feed character transmitted in the data stream.

Add LF after CR:
Add a Line Feed character after every Carriage Return character transmitted in the data stream.

5.4.2 Xmodem and its Variations

Xmodem is one of the original PC- to-PC file transfer protocols and is offered by most BBSes and online systems. It uses 128-byte blocks when transferring file, adding an extra byte (a checksum) to each block for error checking, thereby achieving approximately 95% reliability. Xmodem/CRC (cyclic redundancy check) is a more sophisticated version of Xmodem, in that it provides improved error-checking. This has the advantage of improved reliability (approximately 99,6%). Xmodem-1k is the same as Xmodem/CRC except that it uses 1024 block sizes instead of 128. It is faster than Xmodem when there is little or no "line noise", or interference on the phone line. Ymodem is actually another variation or derivative of X-modem, specifically Xmodem-1K. It transmits data in 1024-byte (1-KB) blocks or 128-byte blocks. A variation called Ymodem-G

has no error-checking and is therefore even faster. There are no settings for this protocol or its derivatives, therefore the Settings button is grayed out if you attempt to edit one of them.

5.4.3 Zmodem

This public domain protocol is the most popular file transfer protocol used in PC communications, especially with high-speed modems. Zmodem uses 512- or 1024-byte blocks. We recommend you use this protocol with *WinRamp Lite.* ZModem settings are:

Use 16/32 bit CRC:
The ZModem standard allows for the use of 2 octet or 4 octet error-correction codes. Select whichever is used by the remote system (usually 32 bit.)

Crash Recovery:
ZModem allows for partially received file transfers to continue from where they stopped. Check this option if you wish to make use of this feature. If this option is not enabled and you download the same file more than once, *WinRamp Lite* saves every copy you download with the first copy saved with a .000 extension, the second with a .001 extension and so on.

Auto Detect:
Will ZModem downloads start automatically when the remote system starts sending? You should only disable this option if you experience numerous false starts of a download.

Error Retries Before Aborting:
Allows you to specify how many errors the Zmodem protocol will allow before aborting during an upload or download.

Hangup Modem on Abort:
Gives you the option of sending a hangup string to your modem if the Zmodem upload or download aborts due to the numbers of errors exceeding those specified in the Error Retries Before Aborting setting.

5.4.4 Kermit

Kermit is primarily used to transfer files from mainframe or mini computers and is unique in that it can transfer 8-bit files over a 7-bit data link. It has the ability to use flexible block sizes although small data blocks are the norm. The checksum technique is used for error checking. Kermit can change control characters to other ASCII characters to improve reliability. The transfer options you can set are:

Max Packet Length:
The maximum number of bytes that will be sent per block of data. Newer Kermit implementations may support larger blocks, but there is no automated way of finding out if this is

possible.

Pad Count:
How long to delay inbetween packets of data.

Pad Character:
Which character to send on the data stream while time is being wasted between packets.

EOL character:
End of Line character. Which character to use to signify the end of a line.

Control Quote Character:
Which character to "quote" in the data stream. This character is generally known to cause problems if sent on the data stream, so alternate methods are employed to transfer data containing this character.

Repeat Prefix Character:
Signifies that a data character is repeated in the data stream.

CHAPTER SIX: *WinRamp Lite* REFERENCE: MENU GUIDE

This chapter lists functions of *WinRamp Lite*, in the order that they appear on the *WinRamp Lite* menus, thereby providing a menu-by-menu guide. Note that buttons for every command have been setup, so you can make your own toolbars consisting of any combination of actions.

6.1   The File Menu

Contains operations applicable to individual files (uploading and downloading) as well the Exit option, to close *WinRamp Lite* itself. The commands available under this menu are:

File | Download

Brings up a dialog box allowing you to choose where to place a file you wish to download (receive from the remote system), and what the filename will be. The file(s) will then be downloaded using the file transfer protocol you have selected.

File | Upload

This brings up a dialog box where you can choose which files you wish to send to the remote system. The file(s) will then be uploaded using the file transfer protocol you have selected.

File | Start Capture

Capture all incoming characters to a file, for later reviewing.

File | Stop Capture

Terminate the copying of received characters to a file. This menu option replaces Start Capture, when that feature has already been activated.

File | Capture Scrollback

Capture incoming characters that are currently stored in the buffer to a file for later reviewing.

File | Text Editor

Launch the text editor you have defined under preferences, for viewing file captures, composing email etc.

File | Dos Prompt

Runs a virtual DOS machine (known as a "Dos Box").

File | Exit

Exit *WinRamp Lite*, leave the modem connected if it is currently connected.

6.2   The Edit Menu

The "Cut & Paste" menu - operations which are to do with text editing and such. Descriptions of commands under this menu follow:

Edit | Mark Graphics

Mark out an area on the terminal window to copy to the clipboard as a bitmapped image.

Edit | Mark Text

Mark out an area on the terminal window to copy to the clipboard as text characters.

Edit | Copy

Copy the selected area to the Windows clipboard.

Edit | Paste

Copy the contents of the windows clipboard as keypresses to the remote system.

Edit | Scrollback

Defines whether the scrollback bar is visible on the right of the terminal window. This bar allows you to move back through data you have previously received. However, if the bar takes up too

much room, you can switch it off.

6.3 The Communicate Menu

Provides all the commands you need to initiate and control a communication session(s). Available commands are:

Communicate | Open Terminal

This allows you to open a terminal window directly, without prompting you for dialing information so that you can dial a remote system manually, using the Hayes AT commands (see Appendix E).

Communicate | Manual Dial

Dial a remote system, where you enter the telephone number and select the terminal emulation and device you wish to use in order to make the connection.

Communicate | Dialing Directory

Open the Dialing directory, from which you can enter and edit directory entries and dial a remote system.

Communicate | Hot Dial

Open the Hot Dial window, in which icons representing your favorite online systems can be set up. Double Clicking one of these icons will cause *WinRamp Lite* to begin dialing the system.

Communicate | Command Stack

Open the Command Stack window, which allows you to type in commands and stores these commands so that they can be executed in the terminal window at a later stage and as many times as you specify.

Communicate | Hangup

Terminate the current telephone connection, using the method specified in the current device configuration. (Either drop the DTR line, or send a specific string to the modem, causing it to drop the telephone line.)

Communicate | Send Break

Sends a break command to the modem, which overrides coded communication thereby interrupting the current process.

Communicate | Half Duplex

Toggle between full duplex (simultaneous, bi-directional communication) and half-duplex (bi-directional communication, but only one way at a time).

Communicate | Reset Modem

Allows you to reset the modem using the method specified in the current device settings.

Communicate | Auto Answer

Sets your modem to auto answer mode (the equivalent of sending an ATA command string to your modem), for when you wish your PC to act as a host (refer to Tricks and Tips in Appendix B).

Communicate | Doorway Mode

This option allows the sending of the IBM keyboard scancodes to the remote system. This is required when using some remote-access programs, and some BBS doors. This allows the remote system to realize when you have pressed keys like the Alt key, and both Shift keys. This is often referred to as "Raw Mode", or "IBM keyboard mode".

Communicate | Reset Terminal

This refreshes the terminal, clearing characters under the terminal emulation being used in the active communications session. The cursor is sent to the top of the terminal window.

6.4   The Configure Menu

Allows the modification of the environment in which *WinRamp Lite* operates, including which devices are available, which emulations are available, etc. Descriptions of each command available under this menu follow:

Configure | Device

Set up and specify details about devices you have attached to your computer that you may want to use in a communications session.

Configure | Terminal

Set-up terminal emulations that you may wish to use when connected to a remote system.

Configure | Protocol

Set-up file transfer protocols that you may wish to use when downloading or uploading files to and from a remote system.

Configure | Preferences

This dialog allows you to change the way *WinRamp Lite* does certain things, to better conform to the way you work, and the system you run *WinRamp Lite* on.

Configure | Toolbars

Allows you to determine which *WinRamp Lite* functions appear on which toolbars. You can have multiple toolbars, with multiple functions on each. Choose your toolbar at the top, or create a new toolbar. Then, select the functions from the list at the left, to add to that toolbar (listed on the right). Click OK when you have defined the toolbars as you want them.

Configure | Current Terminal

Allows you to change the set-up of the current terminal emulation you are using in a communications session.

Configure | Fine Tune

Allows you to fine tune certain elements of your communications settings, such as baud rate, parity setting, word length etc.

6.5   The Scripts Menu

Consists of options related to the recording, running and writing of scripts and macros which enable you to automate *WinRamp Lite*. The options for this menu are:

Scripts | WR-Script AutoLearn

The AutoLearn facility enables you to automate tasks that you do repeatedly on a BBS, e.g. logging in, checking mail etc. Once this option is enabled, all the actions you perform will be stored in a file which compiles automatically. Select the option again in order to disable the AutoLearn facility.

Scripts | Run Script Object

Executes the WR-Script file that you have compiled. This file can be created using AutoLearn or the WR-Script IDE.

Scripts | Stop Script

Interrupts the execution of the WR-Script file that is currently running.

Scripts | WR-Script IDE

Launches the WinRamp Lite Integrated Development Environment which enables you to write, edit, debug and test WR-Script files.

Scripts | Compile Script

Compiles the specified WR-Script file using the WR-Script Compiler.

Scripts | Record a Macro

A macro is a sequence of key presses that can be saved as a <filename>.mac file. The Record

Macro option allows you to literally record every action you perform using your keyboard during an open communication session. This sequence of actions can then be executed whenever necessary.

Scripts | Playback a Macro

Executes a macro that you have recorded. When the macro is executed, the recorded sequence of key presses are automatically performed at the speed they were recorded or faster if you so specify.

Scripts | Attach Tool Buttons

Allows you to attach toolbar buttons to any scripts or macros you choose so that they can be executed at the mere click of a button.

6.6   The Window Menu

Controls the child windows of *WinRamp Lite*, resizing, closing, etc. Descriptions of these menu items follow:

Window | Tile

As in all standard Windows applications, this will arrange all child windows of *WinRamp Lite* so that they are displayed side by side or above each other, with no windows overlapping.

Window | Cascade

Arranges all child windows of *WinRamp Lite* that may be open so that they overlap neatly, with just the left edge and title bar of background windows visible.

Window | Arrange Icons

When one or more child windows of *WinRamp Lite* are minimized, this menu option will arrange the minimized windows icons more neatly.

Window | Default Size

This will restore the terminal windows to the default size for the terminal emulation which is

currently being used.

6.7   The Directory Menu

(only displayed when dialing directory window open)

Provides the various actions you can perform with the dialing directory, such as maintaining directories and directory entries, and changing the appearance of the dialing directory window. Commands available are:

Directory | Dial

Dials the active entry that appears in the Dialing Directory, so that a communications session can be started. Equivalent to double clicking on the entry itself.

Directory | Edit

Allows you to modify details about the active entry in the dialing directory.

Directory | Add

Allows you to add a new entry to the active directory, where details about the remote system are captured for use when dialing.

Directory | Delete

Removes the active directory entry from the dialing directory database.

Directory | New Directory

Allows you to create a new dialing directory, which will appear as a tab at the bottom of the dialing directory window.

Directory | Delete Directory

Removes the current dialing directory and all associated entry details.

Directory | Directory Tabs

Provides you with the option of having the directory tabs displayed or not displayed at the bottom

of the dialing directory window. If they are not displayed, others details such as directory entry comments are displayed instead.

Directory | Quick Select Tabs

Provides you with the option of displaying or not displaying the alphabetic tabs on the right of the dialing directory window.

Directory | Toolbar

Allows you to toggle the display of the dialing directory toolbar.

6.8   The Register Menu

Information to assist you in registering *WinRamp Lite*!

Register | Register WinRamp Lite

Brings up the registration form which you fill in once you've registered *WinRamp Lite* and received all the benefits that go with registration.

Register | Evaluation Licence

Displays the licence agreement that applies when you use an unregistered copy of *WinRamp Lite* for the 30 day evaluation period.

Register | Benefits

Describes the benefits of registering *WinRamp Lite*.

Register | Special Offer

Provides details on the special introductory offer that applies if you register *WinRamp Lite*.

6.9   The Help Menu

Access the Windows Help system, with *WinRamp Lite*-specific help. Help menu items are:

Help | Contents

The main help file for *WinRamp Lite*, describing features and functions available.

Help | Search for Help on

Allows you to search for help on a specific topic.

Help | How to Use Help

Help on help - provides details on how to use the Window's hypertext help system.

Help | How to Guide

A step by step guide to performing each function available with *WinRamp Lite*.

Help | About WinRamp Lite

Tells you about *WinRamp Lite*, including credits, version and registration information.

Appendix A: GLOSSARY AND ABBREVIATIONS

Abbreviations

ANSI: American National Standards Institute
ASCII: American Standard Code for Information Interchange.
BBS: Bulletin Board System.
BPS: Bits per second.
CRC: Cyclic Redundancy Checking.
MB: Megabyte - One million bytes.
RAM: Random Access Memory.
RIP: Remote Imaging Protocol.
GIF: CompuServe Graphic Interchange Format.

Glossary

Abort
A procedure to terminate execution of a program.

Application
A program which runs on a computer and performs certain tasks.

ASCII
American Standard Code for Information Interchange. This is a 7-bit information coding system standard (with an 8th bit often added) It assigns a number (between 0 and 127) to each of the letters (upper- and lowercase), numbers, control characters and special characters. The eighth bit is often a calculated parity number (usually even) in communications software.

ASCII Download
ASCII text download governed by XON/XOFF flow control, with no error checking.

Asynchronous
A communications method whereby data is sent in a stream of bits with start and stop bits.

Hayes AT Command Set
A de facto standard for modem control commands, used by Hayes-compatible modems.

Baud Rate
The actual rate of characters or symbols transmitted per second.

BBS Door
A stand alone program which can be accessed by users of bulletin board systems to perform a

number of specialized functions.

Binary
Computer numbering system that uses two digits (0 and 1) to store and process data.

Bits Per Second (bps)
The number of data bits sent between two modems in one second. Used to indicate a modem's speed.

Block
A group of characters (typically 128 or 1024 bytes) sent together (including error-checking information) during a file transfer or other communication.

Bulletin Board System (BBS)
A host computer set up to receive calls and allow communication between the user base.

Buffer
A temporary storage area in computer memory for data. Buffers are used by file transfer protocols to speed the transmission.

Byte
A group of 8 bits of binary digits that the computer considers a unit.

Capture
Storing data being sent by a remote system (BBS or Online System) to a file or buffer for viewing at a later stage.

Carrier
The basic signal used by modems to transmit data over the phone lines.

Checksum
A method for checking that data is transmitted correctly.

COM
Specifies a serial communication port, e.g. COM1, COM2, etc.

Cyclic Redundancy Checking (CRC)
A method of data transfer error checking

Data Bits
The bits of data sent by a modem and passed on to the computer. As a communications setting, this specifies the number of data bits the modem will use.

Demodulate
Conversion of the modulated carrier tone sent by a modem back into data.

Device
Any piece of equipment that can be attached to your computer, such as a modem or a printer.

Download
The process of retrieving data from a remote system. The data (usually a file) being retrieved is also called the "download"

Error Checking
Checking for errors in data transmission and resending data if any errors are found (see Appendix C).

Field
A specific unit of information (e.g. name) stored in a database or some other data collection.

File
A group of related data treated as an independent unit containing data, programs, etc.

Flow Control
A method of controlling the flow of data between two devices.

Handshaking
Two devices (modems) involved in a communications connection acknowledging each other and synchronizing behavior.

Hangup
Terminating a modem connection.

Hardware
The physical part of a computer - often described as "the bits you can kick!"

Hayes-Compatible Modem
The modem is compatible with the industry standard Hayes modems and their Hayes AT command set.

Hexadecimal
A base 16 numbering system (0-9 and A-F) used in the computer field.

Host/Remote System
The BBS or online system you connect to during a communications session.

Initialization String
A command/s specifying the set-up the communications program requires to communicate with the modem.

Kermit
A file transfer protocol designed for portability and flexibility, which compromises transfer speeds.

Keyboard mapping
Defining which keys send which codes to a remote computer. Used to make one keyboard function as a different keyboard.

Line Noise
Interference in modem transmission caused by static and disturbances over the telephone line cause some noise to creep into the transmission, resulting in garbled data being received, or lost carrier.

Logon
Connecting to and entering your user name and password (if necessary) on a remote system.

Modem
A device for communicating over the telephone line which changes analog to digital (and vice versa) signals. Stands for MOdulator/DEModulator.

Modulate
Changing a digital signal to analog so that data can be transmitted over the telephone network to another modem.

Online
When you are connected to a remote system you are said to be "online". Also refers to the modem state when it is connected to another modem.

Online System/Service
A remote system users can connect to and perform a variety of functions, usually for a fee.

Multiple Communication Sessions
The ability to connect with two or more remote systems concurrently.

Parity
A form of error checking where the number of bits in every byte is made to be even, or odd by adding a 1 or 0 bit to each byte.

Port
The connection between the computer and external devices such as printers or modems.

Protocol
Rules and standards governing communications between computers, e.g. error-checking protocols, file transfer protocols, data compression protocols etc.

S-Register
Storage area in the modem's memory that contains the modem's settings.

Scroll
Moving the visual portion of a display horizontally or vertically across the screen.

Serial Communication

Transmission of data (bit by bit) between two computers or devices/modems.

Serial Port
A connection between the computer and an external device that transmits/receives data one bit at a time, e.g. COM1

Software
The programs or applications which run on the computer, turning it from a worthless hunk of metal into a stubborn, irritating computing machine!

Sysop
The remote SYStems OPerator, who runs a BBS or online system.

Synchronous
A communications method whereby data is sent in a continuous stream with constant timing.

Terminal
The keyboard and screen that you use to interact with a remote system. Your PC acts as a certain type of terminal during a communications session.

Terminal Emulation
A mode in which your computer acts like a specific type of terminal.

Terminal Window
A mini "screen" which shows what a "real" terminal would show on its screen.

Timeouts
When the transmission of a block of data exceeds the specified time limit, the file transfer is terminated.

Toolbar
A group of icons that trigger certain events when clicked on with the mouse. Often contains shortcut menu access methods.

Upload
The transmission of data (usually a file) from your computer to a host system via the modem.

Window
A box drawn on your computer monitor representing a single application or function.

Xmodem
A simple, widely implemented protocol with basic error-checking. Variations include Xmodem-1K (uses 1024-byte blocks instead of 128), Xmodem-CRC (better error-checking) and Ymodem.

XON/XOFF

A simple means of software flow control used by communications applications.

Ymodem
A file transfer protocol developed as an extension to the Xmodem protocol, improvements include CRC error-checking, 1024-byte blocks instead of 128, and transmission of filename, actual size, and date.

Zmodem

The most popular file transfer protocol as it has a number of improved features over the other protocols, e.g. better error-checking and reliability, faster speeds.

Appendix B: COMMON PROBLEMS, TIPS & TRICKS

Dialing Problems

If you have dialed a remote system and cannot get a connection, try the following:

- Check the basic equipment: The modem's power supply is switched on, the modem cable is connected properly, none of the connections are loose, the phone cable is plugged in.
- Dial the phone manually to check it is not faulty.
- If the remote system doesn't answer, first try again. If there is still no answer, it is likely that the problem exists with the remote system, or with the telephone line. All you can do in this case is try again later. The same goes for a busy signal - either the remote system's modems are all in use or there is a problem with the telephone network.
- If the remote system sends an answering tone, but there is no response in *WinRamp Lite* check your modem's connections and *WinRamp Lite*'s settings. Failing this, try your modem with another connection and application, if it still does not work, then the problem is internal to your modem.

File Transfer Problems

There are a number of reasons for a file transfer failing or giving you problems. Some of the most common can be avoided by:

- Ensuring your modem is connected properly.
- Ensuring the communications parameters for the remote system have been set-up correctly.
- Avoiding downloading or uploading files if there is bad line noise. Rather wait until the connection is clear, i.e. when you are not getting garbled characters appearing on your screen.
- Selecting the proper file transfer protocol - we recommend Zmodem if the remote system supports it. Experiment with protocol settings (remote systems may implement protocols slightly differently). If you have selected the wrong protocol, abort the current file transfer by pressing Ctrl-x a few times, and then select the correct one.
- Wait a few seconds before aborting a file transfer, the system may just be correcting a bad transmission block.
- If you have problems using the ASCII data capture feature or upload, note that this protocol is for 7-bit text files only (not binary files).
- Check that the directory and file name were typed in correctly.
- Remember that most files you transfer will be compressed - you therefore need the appropriate decompression utility software before you can use the file.

Disconnections

If you are abruptly disconnected, it may be for one of the following reasons:;
- Bad line noise.

- The phone line you are using is interrupted.
- The modem is attempting MNP5 communication but the remote system only handles MNP4.
- You have exceeded the online system's inactivity time period, and it automatically logs you off.

General Communications Problems

A number of communications problems may be caused by mismatched communications parameters, for instance: connecting to a remote system and being immediately disconnected; connecting then getting garbled characters scrolling off your screen, connecting then getting no response. To remedy these problems, try dropping to a lower modem speed (e.g. from 9600 to 2400 BPS). Try changing the data bits/parity/stop-bit setting to 8/N/1 or 7/E/1.

If you get garbled characters appearing on your screen where normal words should appear, check that the remote system supports the terminal emulation you have chosen and that the parity setting is correct.

If the screen goes "dead" , i.e. what you type does not appear on the screen and the remote system is not responding, it may be because the pause signal (Ctrl-S) has been inadvertently entered. Use Ctrl-Q to remove the pause. Sometimes when using the ANSI terminal emulation, the terminal window may freeze. This is due to a conflict with the codes used for Start ANSI Music and Delete Line. Clicking Reset Terminal from the Communicate menu should correct this problem.

If the screen comes out with blank lines between each line of text, this is because the text is wrapping from one line to the next, and the remote system is still sending a Carriage Return to move to the next line. From the Configure Menu, choose Current Terminal, and switch on the VT100 wrap option.

Tips And Tricks

The following suggestions may help you save time and work more efficiently online.

Reducing online time & therefore charges:

- Most online systems have a guide or manual that can be downloaded. Reading this off-line can save you time learning the system online.
- Check the online system does not charge for using a faster modem - if it does, weigh-up the cost of quicker file transfers and screen captures versus this extra levy.
- Use an off-line mail reader to compose and read messages, rather than doing so online. Alternatively, use the screen capture facility to capture messages to a file, and read them off-line.
- Check if the remote system offers speed commands to get you directly to the area or service you are interested in, rather than navigating through menus.

Using *WinRamp Lite* to transfer files between two local computers

This can be achieved with what is known as a Null-Modem cable. These are usually available in stores, or you can make your own. Follow the wiring diagram below. You need to plug the cable into the serial ports of both machines (which are usually male, 25 pin D Plugs, or occasionally male, 9 pin D plugs). If you are unsure, ask your hardware supplier which ports are which. You then need to run *WinRamp Lite* on each machine, and open a terminal session using a device which uses that serial port (COM1, COM2, etc.). Your best bet is to set up a device referring to that port, using hardware flow control. Once connected, open a terminal session using that device, and without specifying a telephone number. Then anything you type on one machine should appear in the terminal window on the other machine. You can then do uploads and downloads as though you were connected to an online system. To transfer a file from machine A to machine B, choose upload on machine A, select the file (or files) you wish to transfer, and choose the ZModem protocol. Once you start the transfer, machine B should automatically start downloading (only if you used ZModem, though.)

Null Modem cable connection diagram :

```
   DB25 FEMALE 2    3   4   5   6      7   8   20   1
               |    |   |   |   |      |   |   |    |
               |    |   |   |   |      |   +---+    |
               |    |   |   |   |      |   |   |    |
   DB9   FEMALE 3    2   7   8   6      5   4   1    |
               |    |   |   |   |      |   |        |
               |    |   |   |   |      |   |        |
               |    |   |   |   |      |   |        |
               |    |   |   |   |      |   |        |
               |    |   |   |   |      |   |        |
   DB9 FEMALE   2    3   8   7   4   1  5   6        |
               |    |   |   |   |   |  |   |        |
               |    |   |   |   +---+  |   |        |
               |    |   |   |   |   |  |   |        |
   DB25 FEMALE  3    2   5   4   20  8  7   6        1
```
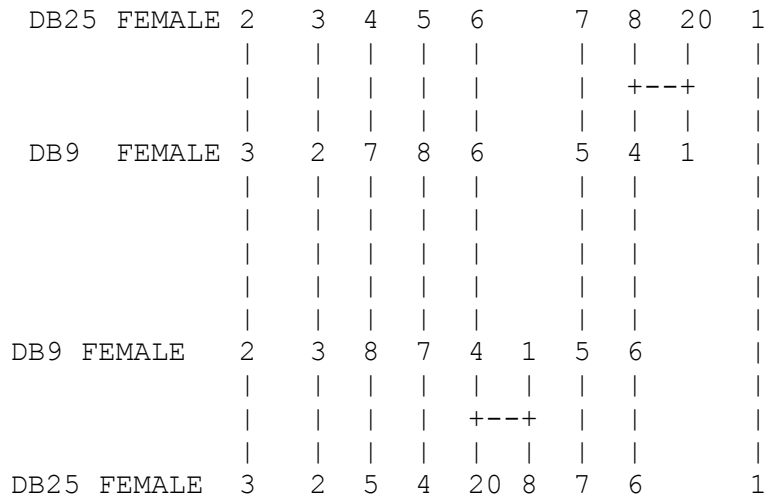
Appendix C: ERROR CHECKING PROTOCOLS

Modem error checking resends data until it is transmitted error-free (or until a timeout is reached in which case the transmission is aborted), assuming both modems support the same error-checking protocol. Some of the error-checking terminology is explained below:

ARQ
Automatic Request for Repeat mimics MNP, LAPM and other binary file-transfer protocols. Used by USRobotics and some Hayes V series modems.

MNP
Microcom networking protocol is a proprietary error-correction and file-compression protocol, usually found on the modem's ROM chips. There are 9 levels/classes:

    MNP1: For asynchronous communications, half duplex.
    MNP2: For asynchronous communications, full duplex.
    MNP3: For synchronous communications, full duplex.
    MNP4: For synchronous or asynchronous communications, providing automatic error correction.
    MNP5: The same kind of error correction and packet sizing as with MNP4, but including data compression.
    MNP6, 7, 9: MNP levels 6, 7, and 9 are similar to MNP5, but have better data compression and error correction. Used with V.32 modems.

MNP4 and 5 are used most often with dial-up communications.

LAPM
Link Access Procedure for Modems is a protocol that provides error control between two V.42 modems supporting the protocol.

Appendix D: MODEM MODULATION & DATA COMPRESSION PROTOCOLS

Modulation Standards

For two modems to connect and communicate, they must both be using the same modulation technique. Common techniques are:

V22:   1200 BPS, asynchronous.
V.22 bis: 2400 BPS, synchronous and asynchronous, full duplex.
V.29:   4800/7200/9600 BPS, synchronous, full duplex.
V.32:   4800/9600 BPS, synchronous and asynchronous, full duplex.
V.32 bis: 4800/7200/9600/12000/14400 BPS, synchronous and asynchronous, full duplex.
V.42:   Error control standard (part of the V.x standard, although not a modulation technique).
V.42bis: Data compression standard (part of the V.x standard, although not a modulation technique).
V.FAST: upto 19200 BPS.

Data compression protocols

When a modem standard end with "bis", this implies it supports data-compression. Data compression is typically implemented by eliminating repeated or redundant characters/bytes, although some modems use other methods (e.g. USRobotics HSTs). Data compression means a V.42 bis modem should support a throughput of up to four times its transmission speed, e.g. a 9600 bps modem can have a throughput of 38,400 bps while transmitting at 9600 bps.

For details on which modem modulation and data compression standards your modem support, refer to your modem manual.

Appendix E: BASIC Hayes AT COMMAND SET

The most common modem commands are defined by the "AT" or "Hayes" command set. Typical Hayes AT commands used (excluding the extended Hayes AT commands) are (more details should appear in your modem manual):

+++   Switches the modem to command mode, acting as an escape key when you are online.

ATO   Switches you from command mode to online mode.

A/   Repeats the most recent command

^C or ^K   Closes the modem's help screen.

^S   Pauses display of information when the modem is in command mode (flow control)

^Q   Resume the display of information when the modem is in command mode.

AT   Initializes the modem, clears the command buffers and precedes most commands.

ATA   Puts modem into answer mode in order to answer an incoming call manually.

ATC1   Turns the modem's transmitter on (the default)

ATC0   Turns the modem's transmitter off, for receive-only mode.

ATDP *<options; phone number>*   Dial the specified phone number using Pulse dialing.

ATDT *<options;phone number>*   Dial the specifies phone number using tone dialing.
Options are (for pulse dialing too):
,   Pause for two seconds
;   Dial then change to command mode
"   Dial the letters that follow as numbers (useful for 1800 number)
@   Wait for an answer (does not "time out" after a certain number of rings)
!   Transfer call
/   Pause for 1/8 second
R   When receiving modem cannot answer incoming calls
W   Wait for second dial tone

ATDS   Dial a number stored in the modem's memory (if modem supports it)

ATE1   Turns command-mode character echo on (used for manual dialing)

ATE0   Turns command-mode character echo off (the default).

ATF0   Turns local echo on for half duplex, used when remote system is operating at full duplex.

ATF1 Turns local echo off (the default).

ATH0   To hang up or disconnect the phone line hangs
ATH1   To open the phone line

ATI *<command option>*   Returns information depending on the option:
AT10-7   Displays information about the modem and its settings.
ATI0   Displays the product code or current speed setting
ATI1   Starts ROM test
ATI2   Starts RAM test
ATI3   Displays call duration or the current time
ATI4   Displays current settings
ATI5   Displays NRAM (nonvolatile RAM) settings
ATI6   Displays link diagnostics
ATI7   Displays a product configuration

ATK0   Makes the AT13 command display current call duration

ATK1   Makes the AT13 command display the current time.

ATM0   Turns the modem's the speaker off.

ATM1   Turns the modem's speaker on until carrier detected (the default)

ATM2   Turns the modem's speaker on so it remains on at all times.

ATM3   Turns the modem's speaker on after the modem receives a dial string and off when carrier is detected.

ATP   Sets the modem's dial mode to pulse (the default).

ATQ0   Turns on the display of call result codes (the default).

ATQ1   Turns off the display of call result codes.

ATSr   Displays specified S-register r's settings.

ATSr=nn   Sets the value of the S-register r to nn, so that settings can be customized, assuming your modem supports this.

ATT Sets the modem's dial mode to tone.

ATV0 For result codes to be displayed as numbers.

ATV1 For the result codes to be displayed as letters (the default).

ATX *<number from 1 to 7>*   For display of result codes and various features depending on your modem brand.

ATY0 Stops the modem's response to a Break signal (the default)

ATY1 Ensures modem will disconnect with a Break signal.

ATZ Resets the modem to its currently stored default.

AT& Prefix for extended Hayes AT command set.

AT$ If modem has online help, provides summary of extended commands.

AT&$ If modem has online help, provides summary of extended command set and options.

ATD$ If modem has online help, provides a summary of available dial commands.

ATS$ If a modem has registers that can be set, provides a summary of those available.

Appendix F: CONNECTION RESULT CODES

The status of a connection can be determined once you've dialed a remote system. A description of the result codes you may see follow (for details, consult your modem manual):

BUSY Modem has made the call but has detected a busy signal and therefore disconnected.
CONNECT   300 bps connection
CONNECT 1200   1200 bps connection
CONNECT 2400   2400 bps connection
CONNECT 4800   4800 bps connection
CONNECT 9600   9600 bps connection
CONNECT 300/REL   300 bps connection with error checking
CONNECT 1200/REL   1200 bps connection with error checking
CONNECT 2400/REL   2400 bps connection with error checking
CONNECT 4800/REL   4800 bps connection with error checking
CONNECT 9600/REL   9600 bps connection with error checking
ERROR   When you enter a command that is not allowed
NO ANSWER   Displayed after the pre-set number of rings before disconnecting
NO CARRIER   When the remote system disconnects or the carrier is lost.
NO DIALTONE   When the modem gets no dial tone when trying to make a call.
OK   Displayed after you enter a command and it is implemented.
RING/RINGING   Displayed each time the phone you are attempting to dial rings
VOICE   Displayed when the modem detects voice answering instead of another modem, after which it will disconnect.

Appendix G: TERMINAL IMPLEMENTATION NOTES

TTY:

TTY is a very simple terminal emulation which supports nothing but the standard ASCII control codes: carriage return, line feed, backspace, bell, tab (every eighth column), vertical tab (implemented the same as line feed), and form feed (clear screen). The delete character and any other C0 control characters are ignored.

If you are using an 8-bit connection, any characters greater than 127 will be displayed using the IBM-PC character set.

There is no default keymap for the TTY terminal. It will send through standard alphanumeric characters, and certain control characters, but none of the function keys or arrow keys do anything.

ANSI:

This terminal is based on the ANSI X3.64 standard with a couple of extensions from VT100 (e.g. scrolling regions), and support for colors as implemented by the MS-DOS ANSI.SYS driver. Since there isn't an official specification for ANSI as implemented by Bulletin Board Systems, this implementation includes just about every ANSI command available in an attempt to be as compatible as possible.

Character set mapping is supported for the ASCII, UK and Special Graphic character sets, but the terminal is treated as a 7-bit system, so you can only map into GL (characters 32-126). Any 8-bit characters (greater than 127) are displayed using the IBM-PC character set.

The default keymap for ANSI sets up the arrow keys to send the ANSI escape sequences for up, down, left and right. The Home key sends the escape sequence for moving the cursor to the home position, and the End key sends the sequence for clearing to the end of line.

Avatar:

Avatar stands for Advanced Video Attribute Assembler and Recreator. It was designed as a replacement for ANSI on Bulletin Boards, and uses binary codes which make it considerably faster.

There are two levels of Avatar - a full session (which includes a number of advanced features), and a basic session (which includes just the basic codes for manipulating the display).
WinRamp Lite currently supports only the basic session (also called AVT/0+). This is actually an

slight extension of the original level 0 specification (AVT/0), which has long since become obsolete.

Although Avatar uses the Doorway Mode keyboard, it is possible to map the keys to your specification.

VT52:

This is an implementaion of the DEC VT52 terminal. Unlike the later VT terminals, the escape sequences used by VT52 don't comply with the ANSI specifications, but are slighty faster. However, VT52 isn't particularly powerful and has a minimal set of commands.

VT52 is a 7-bit terminal, and so will reset the most significicant bit of any incoming 8-bit data so that it fits into 7-bits. Other than the standard ASCII character set, VT52 also supports a graphic character set which can be mapped into characters 95 to 126.

There are two default keymaps that come with VT52 - a standard keymap which maps the VT52 keypad function keys (F1 to F4), the cursor keys, and the numeric keypad; and a second keymap which overides the numeric keypad on the standard keymap to send through special escape sequences instead of numbers when the Keypad Application Mode is enabled.

VT100:

This emulation is based on the specification for the C. Itoh CIT-101 terminal (which is supposed to be fully compatible with the DEC VT100 terminal). All VT100 commands have been implemented except for the Auxiliary Port commands (which don't really apply), the Double Height and Double Width commands, and a few other minor features which shouldn't really effect the usability of the terminal (smooth scroll, keyboard auto repeat, time commands, and a couple of CIT specific commands).

A number of commands from the DEC VT320 specification (it describes VT100 commands as well) that weren't mentioned in the CIT-101 specification were also implemented. This includes the Insert Character command, which apparently isn't supported by the VT102 terminal, but is supported by certain other VT100 "clones".

Character set mapping is supported in the same way as the ANSI terminal. Only the ASCII, UK and Graphic character sets are supported - the Alternate and Alternate Graphic character sets map to ASCII as well. Unlike ANSI though, any 8-bit characters greater than 127 have their most significant bit reset since VT100 is meant to be a 7-bit terminal.

VT100 comes with five default keymaps - a standard keymap that maps the VT100 keypad function keys (F1 to F4), the numeric keypad, and the cursor keys; a keymap that remaps the cursor keys for when the terminal has Cursor Key Application Mode enabled (they send through different escape sequences); a keymap that remaps the numeric keypad for when the terminal has

Keypad Application Mode enabled (similar to the way VT52 works); and both of the VT52 keymaps, for when VT100 is emulating VT52.

VT220:

This is a partial implementation of the DEC VT220 terminal. It is based on the DEC VT320 specification (so it may implement a couple of VT320-specific commands), but a couple of the more esoteric features of VT220 have been left out. It doesn't support dynamically redefinable character sets, user-defined keys, and some of the status report commands. It does, however, support the International Model's Character Set Mode command, but it doesn't support the Data Processing mode for international keyboards.

VT220 implements ASCII, DEC Supplemental, ISO Latin-1 Supplemental (this is a VT320 character set, but has been included anyway), and DEC Special Graphic character sets. When the Internation Model Character Set Mode is enabled, you can also map in the 12 different international character sets. Also, since it is an 8-bit terminal, you can map character sets into both the GL (characters 32 to 126) and GR (characters 180 to 255) sets.

VT220 comes with five default keymaps much like VT100 but with a few more keys. The standard keymap includes mappings for the VT220 normal function keys (VT220's F6 to F12 are mapped to the PC's F6 to F12 keys, and F13 to F20 are mapped to Shift-F3 to Shift-F10). It also includes mappings for the VT220 editing keypad (Insert and Remove map to Insert and Delete on the PC's dark gray keypad; Find and Select map to Home and End; and Prev Screen and Next Screen map to PageUp and PageDown). The rest of the keys on the standard keyboard are the same as the VT100 keys, as are the other four keymaps.

Prestel:

This emulation is based on the description of Prestel provided in the South African BELTEL Terminal Specification. Prestel is a simple protocol with colour support, a few basic cursor control functions, and a couple of character attributes commands (double height and flashing).

It is a 7-bit protocol with a character set that is slightly different from ASCII. However, it also support a 2x3 mosaic character set which can be used to produce simple low-res graphics. The font itself is wider than most terminal fonts, since Prestle uses only 40 columns.

Prestel comes with one default keymap which changes certain keys on the PC keyboard so that they map to corresponding characters in the Prestel character set. It also provides control key mappings for Prestel characters not found on the PC keyboard (Ctrl-1, Ctrl-2, Ctrl-3, Ctrl-4 and Ctrl-5 produce 1/4, 1/2, 3/4, the pound sign and the divide sign; Ctrl-LeftArrow, Ctrl-RightArrow and Ctrl-UpArrow produce the left, right and up arrow characters).

The numeric keypad always produces digits, and the foward slash key on the keypad produces a

hash (so as to be more like a telephone keypad). The dark gray arrow keys produce the prestel control characters for up, down, left and right movement.

RIPScrip:

This is an implementation of the 1.54 revision of the RIPScrip specification. RIPScrip stands for Remote Imaging Protocol Script language - it is a text based script language for displaying online graphics and was designed specifically for the BBS community. In an effort to remain compatible with existing BBS software and allow for partial RIP support, the specification also supports ANSI sequences mixed in with the RIPScrip graphics commands.

However, since RIPScrip has its own set of fonts, it does not support character set mapping like ANSI - the IBM-PC character set is always used.

There are two default keymaps provided with RIPScrip - the first one is the same as the standard ANSI keymap; the second one is used when the VT102 keyboard mode is enabled - mappings are provided for all the function keys, the PageUp, PageDown and Insert keys, and the mapping for the End key is changed.

Appendix H: WINRAMP LITE REVISION HISTORY

WinRamp Lite Version 1.2: released 14th October 1994

1. Changed max scrollback buffer size to 9999 (was 999).

2. Open Terminal Emulation windows now appear in the main Window menu.

3. Added 3-D "look" to Checkbox and Radio buttons in the Custom Control library, now renamed to VCTRL.DLL

4. Global Preferences accepts full DOS path to text editor.

5. Alt+<key> accelerator beep fixed.

6. Fixed deleteing partial files option (see transfer.dll)

7. Accelerators in Manual Dial dialog fixed

8. Dialing "Cancel" bug fixed

9. Added "Auto Horizontal" scrolling to various edit controls

10. Tool tip delay/scroll back lines arrow control fixed.

11. Dialing Directory. Fixed bug causing occasional "Division by Zero" error.

12. Fixed column sizes in dialing dirrectory to 'remember' what the percentages were.

13. Added a "Confirm to Exit" option in Global Preferences. Implemented this option.

14. Fixed problem preventing exiting of WinRamp after selecting "Cancel" in "Hangup Modem?" dialog.

15. Fixed GP caused by terminal (RIP emulation) inducing a file transfer.

16. Added keystroke control to the tabs used in dialing directory and preferences.

17. Changed Ctrl-<key> accelerators that could conflict with well known applications to Ctrl-Shift-<key> accelerators.

18. Changes for script passthrough mode switching.

19. Fixed incorrect enabling/disabling of toolbar buttons.

20. Fixed bug caused by deleting a macro/script button whilst on a custom toolbar that occured during script/macro custom button creation and editing.

21. Script/Macro buttons getting greyed when editored and terminal is open - fixed

22. Corrected various problems that caused "session detected" error message.

23. Fixed bug of dialing after "Skip" not cancelling properly.

24. New global settings dialog format with a number of additional setting options.

25. Fixed problem with Dialing Directory that occured when selecting an entry with the Right mouse button.

26. Fixed Page Up/Down problem in Dialing Directory.

27. Fix dialing directory error causing loss of entries when a large number of entries where added.

28. Added "Command Stack" buffering feature. (Press Alt-Y to use).

29. Added support for long numbers in Dialing Directory and manual dial. Added support for letters in dialing directory number (for use by COMt to "dial" Internet addresses)

30. Fixed problem causing the appearance of a "garbled" Volume Label if there was no volume label.

31. Fixed bug in RIP which caused display problems with certain XOR operations.

32. Fixed bug in Script "Escape sequence filtering" mode.

33. Converted all WinRamp Fonts from version 3 fonts to version 2 fonts. Some graphics drivers didn't support the newer version 3 fonts.

34. Improved font default size selection : any size greater than 800x600 now defaults to the 18x9 font.

35. Added ability to display characters below ASCII 32 (' ').

36. Added CR and LF insertion capabilities.

37. Process WM_PALETTECHANGED and WM_QUERYNEWPALETTE message to cope with colours on a restore.

38. Avatar bug fix : Made Avatar's codebuf a BYTE array instead of a char array - certain Avatar codes were not being typecast correctly.

39. ANSI bug fix : Needed to select a palette out of a DC before deleting the palette.

40. ANSI State fix : ANSI music escape seq didn't work because it contained characters below 32, which are normally ignored.

41. ANSI bug fix : ANSI attribute 7 could cause hanging, fixed.

42. RIP bug : error in colour mapping routine, didn't always fetch the correct colour.

43. Added support for VT100 double height characters.

44. Made Colour-Flashing a global option since it affects all terminal emulations.

45. Updated VT-52/VT-100/VT-220 keyboard maps (control keys)

46. AVATAR now uses a keymap instead of relying on doorway mode.

47. The aspect ratio used by RIP for drawing circles has been changed from 3/4 to 31/40 so as to be more compatible with RipTerm.

48. A GIF viewer has been added for X, Y and ZModem protocols. The configurable option autostarts when a GIF download is detected. The GIF viewer includes scaling and scrolling of the image to make viewing easier.

49. ZModem error recovery has been enhanced using a delay to allow the buffer to fill with more meningful data.

WinRamp Lite Version 1.11: released 5th September 1994

Corrected font bugs occuring in high resolution graphics modes, namely underline fonts in ANSI and half-height RIP fonts.

WinRamp Lite Version 1.1: released 14th August 1994

Modifications, Additions and Corrections in the Terminals module

1. Three new terminal emulations have been added: VT52, VT100 and VT220.

2. Font handling has been redone to support multiple character sets.

3. C0 control characters and the Delete character are now ignored if the terminal doesn't support them.

4. Font mapping has been implemented more accurately in the ANSI terminal (proper character sets). The SI/SO control characters are also supported to access the GR and GL character sets.

5. There was a bug in the Rip Text Window command which sometimes caused the cursor to disappear when the window size changed. In most terminals, the cursor was the wrong size when the 9x18 font was selected.

6. The ANSI parsing system was redone to comply with the ANSI specifications more accurately.

7. Support was added for C0 control character within an escape sequence, as well as the ability to cancel an escape sequence with the ESC, CAN and SUB controls characters. Any invalid characters in an escape sequence are now ignored.

8. An ANSI sequence that required multiple parameters that had more than one semicolon inbetween parameters, or whose parameter ist started with a semicolon would previously have failed.

9. Fixed a bug in the backscroll mode which sometimes caused problems with flashing characters and the cursor. If you disabled the Colour Flashing option when you were in backscroll mode, it would be reenabled again the moment you left the backscroll.

10. When the ANSI scrolling region changes, the cursor is meant to move to the home position, which it now does.

11. A scrolling region of (0;0) is meant to set the scrolling region to the full screen. Previously it would have set the scrolling region to be the top line.

12. The ANSI inverse command has been changed to match the way most other packages implement it, since it was not working with BBSs that used the command in strange ways.

13. Support for multiple parameters has been added to a number of ANSI commands - these commands normally only receive one parameter, but in the event that they did receive more, they wouldn't have worked.

14. ANSI commands that take multiple parameters would fail if not all of the parameters were specified - they now use default values for any missing parameters.

15. The RIPScrip terminal would sometimes have its palette messed up if another application was started that tried to change the Windows palette. WinRamp should now restore the palette properly when it regains focus, although it may be necessary to shut down the other application first.

16. Fixed a bug in the way RIPScrip returned its identification string, which may have meant that certain systems wouldn't be able to detect that you were using RIP.

17. Fixed a bug in the way RIPScrip parsed incoming data which sometimes caused problems when ANSI and RIPScrip sequences were mixed together.

18. The ANSI command for deleting all tab stops could sometimes cause the system to GP later.

19. The reset terminal operation now resets all terminal settings back to their defaults (e.g. default colours, windows sizes, etc).
    Before, it used to just clear the screen and make a few other minor changes.

20. Support for multiple keyboard maps has been added, so that terminals that have keyboards that send through different sequences when in different modes (e.g. the VT terminals), can have all the keys editable from the keyboard mapper.

21. There was a subtle bug in the RIPScrip Mouse Region command so that mouse clicks were sometimes not detected. When mouse regions were saved in RIPScrip, they were restored in the wrong order, which would have caused systems that had overlapping mouse regions to function incorrectly.

22. The RIPScrip Block Mode command wouldn't process multiple file downloads properly. It also sometimes used the wrong directory for   uploads and downloads.

23. The ANSI Insert Line and Delete Line commands have been modified so that they now only effect the area of the screen within the current margins.

24. When there were two sections of flashing text on the same line, seperated by a section of text that wasn't flashing, the second   flashing section of text wouldn't flash properly. When changes are made to any of the global settings, they now take effect   immediately.

25. Scrollback support added to Prestel.

26. Prestel Fast Mark set to Text by default.

27. The Prestel default keymap was changed so that the numeric keypad sends through numbers all the time.

28. Scrollback sometimes caused problems if there was incoming data from the modem while you were in the back scroll.

29. Second click when marking text has become configurable - disable, mark word, paste, or mark word & paste.

30. When marking words, anything outside the range 33-126 is considered a seperator as well as comma and semicolon.

31. Support for "quoted" pasting has been added.

32. The Device Attribute and Printer Port reports were added to the ANSI terminal.

Modifications, Additions and Corrections in the Keyboard Mapping module

1. Modified to allow for multiple maps per terminal type.

2. Menu options included to choose between different keyboard map settings.

3. New button on toolbar to toggle between keyboard mappings.

4. New "Save Message" box when switching beween keymap editing sessions.

Modifications, Additions and Corrections in the File Transfer Module

1. When Crash Recovery option is NOT chosen ZModem will automatically rename the file received with an extension of .00x where x increases until there is no file of that name.

WinRamp Lite Version 1.01: released 25th July 1994

1. RIPScrip emulation has been dramatically speeded up by making a change to the way the "Flood Fill" command is handled under Windows.

2. A fix to the Text Scrolling under all text-based terminal emulations (TTY, ANSI and Avatar) has resulted in a major increase in the speed at which incoming text is painted.

3. Fixed bug that caused Scroll-Back to turn on ANSI "Color Flashing" option.

4. RIPScrip emaultion "Fast Output" option. Fixed possible cause of GPF error. If an error occurs under RIP emulation with the "Fast Output" mode option ON, the user will now be given the option to switch back to "Slow Output mode".

5. Fixed RIPscrip Graphics Cut and Copy.

6. Added support for * character in number dial string. This will allow users to disable Call Waiting feature where applicable.

7. Improved Zmodem download and upload "engine". Numerous tests have shown compressed

file transfer speeds of 1560cps are now possible.

8. Fixed Zmodem "Crash Recovery" Download Resume bug.

9. Added two options to Zmodem Protocol Settings:
    a. Configure number of Error Retries before aborting.
    b. Option to hangup session if file transfer is aborted due to too many errors.

10. Fixed bug causing Windows Alt-Tab application switching to fail after clicking on Toolbar button.

11. Changed RipScrip "Fast Output" default setting to OFF. Please note that if you do NOT have graphics accelerator card, and are using the standard VGA graphics driver it is best to switch this setting to ON.

<u>WinRamp Lite Version 1.00b: released 1st July 1994</u>