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The following Visual Modem Help Topics are available:

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Commands

From the Main Window, there are 3 primary menu options:

File Menu Commands

Configure Menu Commands

Modem Menu Commands

File Menu Commands

Visual Modem allows you to save any settings configuration to a file for future reloading and use. In this way, you can save many different configurations for any set of circumstances. You need only to reload the particular settings configuration file (using the Open file menu command), and send the settings to the modem. Any number of files can be saved and subsequently used.

All settings configuration files are identified by their file extension of ".VM".

The available File Menu Commands are:

New

Open

Save

Save As...

Print Modem Settings

Write Current Settings to Clipboard

Exit

New

The New file command immediately resets all current settings to their default values. It also indicates that you wish Visual Modem to forget about the existence of any configuration file you may have been building at the time. Therefore, in order to save current settings, you will need to use the Save As... menu option to establish a new file name. Thereafter, you need only use the Save menu option to save any updates.

Any subsequent use of the New file menu option will once again reset all current settings.

Note: The resetting of default values that occurs when the New file menu option is selected, occurs only in the computer's memory. No settings are altered in the modem's memory or NRAM.

Open

This option allows you to select any existing Visual Modem configuration files which you may have created and saved previously.

Opening a file does *not* send the configuration settings contained in that file to the modem. It only loads those values into the computer's memory.

In order to actually set the values contained in the opened file to the modem, you need to use the Send Current String to Modem or Write Settings to NRAM option from the Modem file menu.

In this way, you can browse the existing settings for any Visual Modem saved settings file without altering your modem's current settings.

Save

This option will save the current settings in the file designated at the time the Save As... file menu option was selected.

This option is only available once the file has already been saved at least once during the current Visual Modem session.

Save As...

This option allows you to save all of the current Visual Modem settings in a file which you can then reload into Visual Modem at a later date using the Open file menu command.

You are given a dialog box in which to specify the name of the file you wish to save.

Note: Regardless of the file extension you specify, Visual Modem will use the extension of ".VM" when saving the settings configuration file.

Exit

This option will terminate your current Visual Modem program.

Configure Menu Commands

There is currently just 1 item under the Configure Menu option:

User Preferences

Modem Menu Commands

This is where you will find the bulk of Visual Modem's functionality:

[Fetch Current Settings](#)

[Basic Settings](#)

[Extended Settings](#)

[S Register Settings](#)

[Phone Numbers](#)

[Build - A - Command](#)

[Create Command File](#)

[Send Current String to Modem](#)

[Write Settings to NRAM](#)

[Fetch Factory Defaults](#)

Basic Settings

This option provides a simple and accurate means of altering your modem's current basic settings.

By scrolling through the various list boxes, you can alter the current basic subsequent write to your modem, or a file, or you may cancel any changes made during the dialog. You may also set the values to those of the factory default.

Extended Settings

This option provides a simple and accurate means of altering your modem's current extended settings.

By scrolling through the various list boxes, you can alter the current extended settings options in any combination. You may either save the settings for subsequent write to your modem, or a file, or you may cancel any changes made during the dialog. You may also set the values to those of the factory default.

S Register Settings

The S Register settings are spread across several screens. Each screen is accessible from the other. The following S Register screens are provided:

[S Registers 0 Thru 12](#)

[S Register 13](#)

[S Register 15](#)

[S Registers 19 Thru 38](#)

Phone Numbers

Your modem has the ability to store up to 4 phone numbers in its NRAM. With this screen, you can browse the numbers currently stored, and change any or all of the numbers.

Build - A - Command

The Build - A - Command Dialog allows you to send any combination of commands to the modem.

This feature can be especially helpful for trouble shooting, and for those with non-standard of non-USRHST modems.

Building a Command.

To build a command, double-click on the list box selection of the command you wish to send to the modem. The list box contains all of the allowable commands. Any item you double-click will be automatically appended to the starting command string of "AT".

Since the USR HST maximum length allowable for a command line is 40 characters (including the AT prefix), Visual Modem will automatically detect and inform you when that limit has been reached.

Visual Modem will also detect and inform you of any attempt to add a command which is already a part of the existing command string.

A special feature of Visual Modem is the ability to retrieve custom built modem commands that have been saved to disk with the [Create Command File](#) function, and display those custom commands for use in the Build-A-Command dialog. If you have not created a customized modem command file, you may do so by invoking the Create Command File option from this dialog.

Sending the Command to the Modem.

The command string that you build is not sent to the modem until you select the "Send Command to Modem" button located at the bottom left of the dialog box. When you select this option, the entire command string that you have built is sent to the modem and the modem response is displayed for you. The command line is left intact after being sent to the modem.

Resetting the Command Line.

You may reset the command line at any time to its original value of "AT" by selecting the "Reset Command Line" button at the bottom middle of the dialog box. This will reset the command line WITHOUT sending the existing command line to the modem.

Fetch Custom Command File

If you have created a file with customized modem commands via the [Create Command File](#) function, you can retrieve the commands contained in the file and display them for use by the Build-A-Command dialog.

Create Custom Command File

If you have a need to create additional modem commands not contained in the Build-A-Command list, you can use the [Create Command File](#) option to create and store the commands to disk.

This feature is particularly useful for those with non-USRHST modems which may not recognize the modem commands contained in Visual Modem.

Send Current String to Modem

When you wish to send the whole of the various configuration options to the modem (Basic Settings, Extended Settings , etc.), select this option to send each of the commands to the modem, thus updating the modem's current setting memory with the new values.

Remember: The modem's current settings memory is lost when the modem is turned off. In order to save the current settings from power-off to power-on, you must use the Write Settings to NRAM option.

Write Settings to NRAM

This option writes the current Visual Modem settings to your modem's NRAM memory.

This allows you to save the modem's settings even after the modem is turned off.

Procedures

The following will explain how to carry out various procedures using Visual Modem.

[Save Current Modem Settings to Disk](#)

[Retrieve Previously Saved Modem Settings](#)

[Fetch Current Modem Settings into Visual Modem](#)

[Send Customized Command String to Modem](#)

[Create Customized Modem Command File](#)

[Send Current Settings to Modem](#)

[Write Current VM Settings to Modem's NRAM](#)

[Fetch Factory Settings into VM and Your Modem](#)

[Define Visual Modem Startup Parameters](#)

[Inhibit Display Of Modem Responses in VM](#)

[Remove Registration Reminder Popups](#)

[Write Current Modem Settings to the Clipboard](#)

[Print Current Modem Settings](#)

[Contacting Visual Modem Author](#)

Registration

Visual Modem is a shareware program. This does **NOT** mean the program is free. It simply means you are given a trial period in which to determine if the program meets your needs.

If the program is of use, you are required to register the program. The following details the registration requirements:

Single Copy	\$39.95 per copy.
2 - 10 Copies	\$34.95 per copy.
11 or more Copies	\$29.95 per copy.

Registration of 2 or more copies must be purchased together with single purchase order.
Send check or money order to:

Mark Findlay
8717 31st Ave N.W.
Seattle, WA 98117.

You may print a registration form from the HELP Menu area.

Contacting the Author

If you have questions concerning the program, registration requirements, program enhancement requests, or other issues, you can contact the author through the following channels:

- **PRODIGY** User ID: DDJJ90A
(the above ID contains numeric zero, not alpha O)
- **KCSS BBS** in Seattle WA (206) 296-0691 Sysop: Bob Neddo
(Use the TELECOMM Conference)

Note: The KCSS BBS is one of many bulletin boards which comprise the MetroLink International Network. Leaving a message in the TELECOMM Conference of any participating network BBS should be sufficient to route the message.

- By mail to the registration address.

Fetch Factory Defaults

This option allows you to recall the factory default configuration settings into your modem's current setting memory. It does NOT fetch the settings into your modem's NRAM. Therefore, the factory settings are lost when you turn your modem off unless you Write Settings to NRAM after loading the factory defaults.

Fetch Current Settings

This option loads into Visual Modem, the current settings of your modem.

The current settings area of your modem's memory does **NOT** get saved each time the modem is turned off. In order to save the settings of your modem between power-off and power-on, you must write the settings to your modem's NRAM .

Fortunately, Visual Modem allows you to store several different settings configurations in the form of a file which can be subsequently reloaded at a later date and sent to the modem. In this way you can quickly, easily and accurately configure your modem to fit individual calling needs.

NRAM

NRAM represents memory in your modem that does not get lost when the modem is turned off.

You can write to this memory, any settings you wish to maintain between power-off and power-on of your modem

This should not be confused with the current settings area of your modem which gets lost whenever the modem is turned off. Typically, the current settings area of the modem is loaded with NRAM or default settings each time the modem is turned on. In order to insure the values which are loaded into current settings memory when the modem is turned on, any settings options should be written to NRAM as well as to current settings memory.

User Preferences

This option allows you to set certain operation preferences which will take effect each time you use Visual Modem.

Before sending a string to the modem or attempting to read from the modem, you should enter the User Preferences area from the Configure menu and confirm the options provided.

Com Port

Insure that the proper Com Port has been established. The default value is Com 1.

Number of Seconds to Wait for Modem Response

This value represents the number of seconds Visual Modem should wait before attempting to read the return value from any command sent to the modem. It is important that you provide enough time for the modem to absorb the sometimes lengthy command strings that Visual Modem sometimes sends to the modem. If insufficient time is allowed, it is possible that Visual Modem will not be able to completely interpret the expected return values from the modem.

Display Modem Responses

This switch enables you to turn off the display of modem commands sent and received from the modem. Although it is quite informative to be able to see exactly what is transpiring between you and your modem, turning this option off does make interaction much faster.

MetroLink International Network

The MetroLink International Network is a large group of Bulletin Boards (BBS) all sharing (networking) their conference mail systems. Each participating BBS in the network transfers its conference mail each day to other BBS systems acting as "local hubs". These local hubs distribute the collective "mail" to other regional hubs, and before you know it, every participating BBS has a copy of every other participating BBS's conference mail.

In this way, John Doe in Washington DC. could write a message to Jane Doe on the DC. BBS, and through the magic of the network, a copy of the message would very shortly appear on all the other BBS systems in the network. When Jane Doe logged on to her favorite BBS in Seattle, she could read the message addressed to her without ever having to call the DC. BBS. (Provided the Seattle BBS was a member of the network).

Since the KCSS BBS is a member of the MetroLink International Network, you may contact the Visual Modem author by writing a message in the TELECOMM conference of any other BBS that also participates in the MetroLink network.

Be sure to address the message to **MARK FINDLAY**.

The KCSS BBS will be able to provide you with the names and phone numbers of all participating network BBSs in the network.

Conference

A conference is a term used by several different Bulletin Board systems (BBS) to refer to a dedicated area in which to read and write messages of a specific topic.

For example, a GAMES conference might contain messages solely regarding computer games, while a MODEM conference might contain messages strictly about different modems.

Each bulletin board operator configures the BBS to contain 0 or more conferences, the topic of which is up to the sysop.

Other terms used to denote conference are FORUM and MESSAGE BASE.

Visual Modem: Overview

Visual Modem is a simple way to examine and alter the settings of your USR HST Dual Standard 9600 Modem.

While full functionality is geared towards use with the USRHST, **any** modem can take advantage of the custom modem command creation facility to create, save and send modem commands especially tailored to a particular modem.

Instead of having to wade through the complex maze of cryptic modem commands (i.e. ATB1&S0=0E1F0&F) etc., Visual Modem offers the user a collection of screens which display all of the settings options in *text* format, allowing the user to comfortably scroll through the listing of available modem commands and change or reset any of the modem's configuration settings.

Visual Modem also acts as a tutor, displaying the actual modem commands for each setting sent to the modem and each response received. (Just in case you find yourself *without* Visual Modem someday...).

Once the desired modem settings have been set, the user can send the entire set of new configuration settings to the modem with the selection of a single Visual Modem menu item.

For those occasions when you prefer to send individual modem commands to the modem, Visual Modem also provides a Build-A-Command feature which allows you to scroll through the entire library of commands and select any combination, building the command string as you go.

Visual Modem also offers the user the ability to save to a file at any time, the settings which the user has configured. This provides an ideal way of quickly and easily setting your modem for any number of different calling requirements.

As the opening screen says: "You *don't* have to be a modem "*Einstein*" anymore to get maximum use and enjoyment out of your modem.

Getting Started.

When you first enter Visual Modem, you are given the Main Menu from which you may either open a previously saved Visual Modem settings configuration file, or simply configure a new settings file from the default values provided at startup.

User Preferences.

This option allows you to set certain operation preferences which will take effect each time you use Visual Modem.

Before sending a string to the modem or attempting to read from the modem, you should enter the User Preferences area from the Configure menu and confirm the options provided.

Com Port

Insure that the proper Com Port has been established. The default value is Com 1.

Number of Seconds to Wait for Modem Response

This value represents the number of seconds Visual Modem should wait before attempting to read the return value from any command sent to the modem. It is important that you provide enough time for the modem to absorb the sometimes lengthy command strings that Visual Modem sometimes sends to the modem. If insufficient time is allowed, it is

possible that Visual Modem will not be able to completely interpret the expected return values from the modem.

Display Modem Responses

This switch enables you to turn off the display of modem commands sent and received from the modem. Although it is quite informative to be able to see exactly what is transpiring between you and your modem, turning this option off does make interaction much faster.

Using Visual Modem

Now that you have the basics, it is time to begin using Visual Modem.

From the Main Window, Choose, the Modem menu selection and choose the Fetch Current Settings option.

This will load into the computer's memory, your modem's current settings. Now you can enter into any of the other Modem menu items and see exactly how you modem is currently configured.

For example,

choose the Basic Settings menu option and browse the current settings for such modem configuration options as Local Echo and Modem Speaker. At this point, you could browse other menu items or, if you would like to change any of the basic settings, simply click on the list box for that item to scroll to the option choice you would like to invoke.

When you have changed the options you wish to change, you can send the new settings to the modem using the Send Current String to Modem command. (Sure beats thumbing through the manuals doesn't it!?)

Saving Settings to File

Visual Modem allows you to store any combination of settings in a file which you can at a later date reload into Visual Modem and immediately recreate the exact settings you had at the time the file was saved. Simply use the File menu items Save As... and/or Save to store all modem settings. This allows you to create multiple settings for use in various situations.

Printing Modem's Current Settings

What modem configuration program would be complete without the ability to print your modem's current settings. This option will allow you to print your current configuration as well as any configuration you may have previously created and saved!

Ready to Go...

That should be all you need to get started with Visual Modem. If you find yourself wondering what's going on at any point in the program, simply click on the Help button provided, or press F1 to return to help.

Number of Seconds to Wait for Modem Response

This value represents the number of seconds Visual Modem should wait before attempting to read the return value from any command sent to the modem. It is important that you provide enough time for the modem to absorb the sometimes lengthy command strings that Visual Modem sometimes sends to the modem. If insufficient time is allowed, it is possible that Visual Modem will not be able to completely interpret the expected return values from the modem.

Display Modem Responses

This switch enables you to turn off the display of modem commands sent and received from the modem. Although it is quite informative to be able to see exactly what is transpiring between you and your modem, turning this option off does make interaction much faster.

S Registers 0 Thru 12

This screen displays the modem's S Registers 0 thru 12.

From this screen you can alter the current S register values, set the values to their factory defaults, or access other S Register screens.

Alteration of the S Register values does not take effect until you Send Current String to Modem or Write Settings to NRAM.

S Registers 19 Thru 38

This screen displays the modem's S Registers 19 thru 38.

From this screen you can alter the current S register values, set the values to their factory defaults, or access other S Register screens.

Alteration of the S Register values does not take effect until you Send Current String to Modem or Write Settings to NRAM.

S Register 13

This screen displays the modem's S Registers 13.

From this screen you can alter the current S register values, set the values to their factory defaults, or access other S Register screens.

Alteration of the S Register values does not take effect until you Send Current String to Modem or Write Settings to NRAM.

S Register 15

This screen displays the modem's S Registers 15.

From this screen you can alter the current S register values, set the values to their factory defaults, or access other S Register screens.

Alteration of the S Register values does not take effect until you Send Current String to Modem or Write Settings to NRAM.

Send Command to Modem

This option will send the contents of the Build-A-Command command string to the modem. Once the command has been sent to the modem, the modem response will be displayed provided the Display Modem Responses option is ON.

Modem Response

The term modem response is used here as the return value received from the modem in response to a command.

Typically, the string "OK" is received in response to any number of different modem commands; however, certain commands elicit longer, more detailed responses.

Bulletin Board

A Bulletin Board System (also known as a BBS) is a software program which runs on a PC and allows other PC users (via their modem) to access files and messages maintained by the BBS.

While there are literally thousands of BBSs in operation throughout the country and the world, there is no standard for BBS format or operation. Therefore you can expect to find a great many differences in the look and feel of one BBS system from another.

The large communications networks such as CompuServe and Prodigy are examples (loosely speaking) of Bulletin Boards.

S Register

The S Registers are a set of memory areas in your modem which contain values which tell the modem how to operate under certain conditions.

Most of the registers contain values ranging from 0 to 255.

A few of the registers are bit mapped; that is, their values are set by combining several values together resulting in a single value.

Save Current Modem Settings to Disk

You may save the modem settings that you create and alter in Visual Modem by storing them in a file.

To save the settings to disk:

1. Select File from the Main Window Menu.
2. From the File Menu, select Save or Save As...
3. Specify the filename you wish to save the current settings under.

If you are saving the file for the first time, select the Save As... menu option from the File Menu. Otherwise, you need only select the Save option.

Note: Regardless of the file extension you provide to the Save dialog, Visual Modem will always use an extension of ".**VM**".

Retrieve Previously Saved Modem Settings

Once you have saved settings to disk, you may retrieve those settings back into Visual Modem and subsequently send the settings to your modem.

To retrieve a settings file from disk:

1. Select File from the Main Window Menu.
2. From the File menu, select Open .
3. Specify the file you wish to retrieve into Visual Modem.

Fetch Current Modem Settings Into Visual Modem

To retrieve the settings currently contained in your modem and place them into Visual Modem for inspection and subsequent alteration:

1. Select Modem from the Main Window Menu.
2. From the Modem Menu, select Fetch Current Settings .

Send Customized Command String to Modem

Visual Modem provides you with the ability to create a custom string to send to the modem. You are presented with a list box of all available commands. You simply click on the commands you wish to send to the modem and the appropriate command string is built.

To build and send your own command strings:

1. Select Modem from the Main Window Menu.
2. From the Modem Menu, select Build-A-Command .

Send Current Settings to Modem

When you are satisfied with the settings within Visual Modem, you can send the entire settings string to the modem with the following:

1. Select Modem from the Main Window Menu.
2. From the Modem Menu, select Send Current String to Modem .

Note: This option sends the current settings to your modem's memory, not to your modem's NRAM. To send the settings to your modem's NRAM, use the Write Settings to NRAM option from the Modem Menu..

Write Current Visual Modem Settings to Modem's NRAM

When you are satisfied with the settings within Visual Modem, you can send the entire settings string to your modem's NRAM with the following:

1. Select Modem from the Main Window Menu,
2. From the Modem Menu, select Write Settings to NRAM .

Fetch Factory Settings into VM and your Modem

You can fetch the factory defaults into your modem (and into Visual Modem as well) at any time using the following:

1. Select Modem from the Main Window Menu.
2. From the Modem menu, select Fetch Factory Defaults .

Define Visual Modem Startup Parameters

You can define and alter the startup parameters that Visual Modem will use each time the program is invoked. Such items as Com Port, and display options are configurable by you.

To define Visual Modem startup parameters:

1. Select Configure from the Main Window Menu.

Note: Visual Modem stores your startup parameters in a file called "VM.PRF".

Inhibit Display of Modem Response in VM

To increase performance and reduce distraction, you can turn off the modem responses received by Visual Modem and displayed on the screen.

To inhibit display of modem responses:

1. Select Configure from the Main Window Menu.

At that point, you will be presented with the User Preferences Screen.

Remove Registration Reminder Popups

The registration reminder popups are there to help encourage registration of your copy of Visual Modem.

When you register, you will be given the Registration ID needed to complete the registration contained in the [registration dialog](#) .

Once you have completed the registration, the registration reminder popups no longer appear.

Registration Dialog

The registration dialog allows you to register your copy of Visual Modem.

You can only use this dialog once you have registered the program and have received the registration ID.

Once you have received the registration ID:

1. Select Registration from the Main Window Menu.
2. Select Register VM from the Registration Menu.
3. Type in the NAME and ID exactly as they appear in the registration packet you receive once you have registered.

Note: Type carefully as you are given 2 chances to enter the proper NAME and ID.

Keyboard Hot Keys

There are a number of Hotkeys which can be invoked to go directly to the screen or function you wish. Each Hotkey is invoked by holding down the CONTROL key while simultaneously pressing the appropriate corresponding keyboard letter.

The following Hotkeys are available:

^N	<u>New File</u>
^O	<u>Open File</u>
^V	<u>Save File</u>
^S	<u>Save As...</u>
^P	<u>Print Modem Settings</u>
^L	<u>Write Current Settings to Clipboard</u>
^X	<u>Exit Program</u> .
^U	<u>User Preferences</u> .
^F	<u>Fetch Current Settings</u>
^B	<u>Basic Settings</u>
^E	<u>Extended Settings</u>
^H	<u>Phone Numbers</u>
^C	<u>Build - A - Command</u>
^T	<u>Create Command File</u>
^M	<u>Send Current String to Modem</u>
^W	<u>Write Settings to NRAM</u>
^D	<u>Fetch Factory Defaults</u>
^A	About Visual Modem
^I	<u>Visual Modem Registration Information</u>
^R	<u>Register Visual Modem</u>
^G	<u>Print Registration Form</u>

F1 can be pressed at any time to obtain **HELP**

Create Command File

The Create Command File option allows you to create and maintain your own set of custom modem commands.

This feature is particularly useful for those with other modems other than USR HST type modems. With this ability, the user can still invoke the Build-A-Command dialog to send individual commands to the modem.

Create Command File allows you to build any number of modem commands, save the commands to disk, retrieve a previously created custom command file, and delete existing commands from an existing command file.

The functions available from this dialog are:

Add

Use this command to add the custom command you have just built to the command listing. Visual Modem will check to insure that you have made a valid entry in the command field, and that the command is not already in the command listing.

Delete

Use this command to delete any selected item from the custom command listing. When you have selected the items you wish to delete, click on the delete button to remove those items.

Note: The items deleted will not actually be deleted from the custom command file until you save the new listing with the Save File option.

Get File

Use this option to retrieve a previously saved Custom Command File. Custom command files are denoted with the extension of ".VMC".

Once you have selected the file and it has been read into the Create Command File dialog, the filename which you selected is displayed in the upper left corner of the screen.

Save File

This option allows you to save to disk, the custom commands you have entered or changed.

Note: Regardless of the extension you assign to the filename to save, Visual Modem will always assign an extension of ".VMC" to all Custom Command Files.

Clear Current Commands

This option allows you to immediately erase the custom commands listed in the display area.

Note: The commands erased in the display area are not erased from any existing disk file. In order to delete a Custom Command File, you must use the DOS delete command.

Build-A-Command

This option will take you directly to the Build-A-Command dialog, from which you may either build commands based on the USR HST commands contained in the Build-A-Command list box, or retrieve any of the custom command files you build in the Create Command File function.

Hotkey

Hotkey is a term used to denote a keyboard key(s) which when pressed, invokes another process immediately rather than require the user to navigate through several menu items.

selected

When you are presented with a list of items, clicking once on any of the items will reverse the display for that item, making the letters white and the background black.

This item is deemed to be *selected*..

Print Modem Settings

This option allows you to print your modem's current configuration.

You can use this option to print any saved modem configuration by first loading a previously saved configuration from the File menu Open command.

If the configuration being printed is part of a saved file, the filename will appear at the beginning of the print listing.

All aspects of the modem configuration displayed by Visual Modem will appear in the print listing:

```
BASIC SETTINGS
EXTENDED SETTINGS
S REGISTER SETTINGS
    S REGISTERS 0 THROUGH 12
    S REGISTER 13          (Bit Settings)
    S REGISTER 15          (Bit Settings)
    S REGISTERS 19 THROUGH 38
NVRAM PHONE NUMBERS
```

The current values are displayed along with a brief description of the significance of each setting value.

Print Registration Form

This option simplifies your registration by printing a registration form complete with pricing information and registration address.

Writing Current Modem Settings to Clipboard

You can now send your current modem settings to the Windows Clipboard. Visual Modem will send the text of your current modem settings to the clipboard in the same format that the settings appear in the Print Modem Settings output.

This function can be especially helpful in documenting various settings using any Windows based word processor.

