



## **Unicom 4.0 Limited Trial Help Contents**

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Full help and printed documentation is provided in the registered version only.  
For additional help during your trial evaluation, please call us at (206)432-1201.

## **Setting Up Unicom**

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## Introduction

Unicom is an all-in-one, easy to use, Fax, Data and Email package especially designed for users of Microsoft Windows. With this software, the full capability of your high-speed modem or fax modem may be utilized.. With a fax modem, Unicom will allow your computer to act as a fax machine while also performing data communications and network Email operations.

Incoming fax and data calls can easily be processed by Unicom using one phone line. With a fax modem, Unicom can be setup to accept Data & Fax, Data only or Fax only calls then selectively process these calls.

All program features have been designed for background operation with as much user customization as possible. Background operation allows other applications to run while Unicom performs lengthy communication tasks.

Built-in are many advanced features only found in software costing hundreds of dollars more. Some of the many exciting features found in this package are described as follows:

### **Fax Features (some features are not available in the Sharware version)**

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#### **Send and Receive Class 1 and Class 2 Fax Documents**

Unicom's print driver will intercept and fax output from any Windows application with a print option. This lets you easily fax whatever you can print in Windows.

Faxes can be received on a call-by-call basis, manually on a current voice call, or automatically using Unicom's Call Director feature.

#### **Automatic Routing of Fax and Data Calls**

Unicom's Call Director answers all incoming calls then properly routes it. An incoming fax call can be directed to Unicom or to another fax application. Data calls can be directed to Unicom's host mode, terminal mode, processed by a script command file or directed to another external data application.

#### **Scheduled Fax Send with Multiple and Group Destinations**

Faxes may be scheduled for transmission at a specific date and time and to multiple and group destinations. Multiple and group destinations are easily selectable from an easy-to-use fax phone book.

#### **Automatically forward received faxes to other sites**

Received faxes may be forwarded or broadcasted to any number of selected fax destinations. They may also be forwarded to any number of Email addresses accessible from a MAPI compatible network.

#### **Automatically Display or Print newly received faxes**

Received faxes can be automatically printed and/or displayed to the terminal screen.

#### **Fax Viewer Application with Graphics Export Capability**

Received faxes are viewed using Unicom's fax viewer application. You may resize or adjust the page or export the image into a number of popular graphic file formats including: TIFF, GIF, PCX, BMP, MAC and WordPerfect WPG formats.

#### **Directly fax images scanned using a TWAIN compatible Scanner**

Support is built-in to allow direct faxing of scanned images using a TWAIN compliant scanner. Any number of images may be scanned then faxed after being automatically converted from a graphic image.

#### **Fax Phone Book**

A fax phone book is provided to allow selection and management of any number of fax entries. Phone book entries may be sorted by Name, Company, Fax Number, Group Name or by Dialing Service. Multiple phone books are supported and because they are stored as text, the data can be exported to other applications.

#### **Cover Page Editor**

Any number of custom cover pages can be created using a simple graphics editor (like PaintBrush) that produces bitmap images. Unicom's Cover Page Editor provides control of the information layout that will be printed on a cover page. Any number of cover pages may be created and made available for selection when sending faxes.

#### **Fax Send and Receive Logs**

Send and Receive logs are provided to record fax transmission and reception events. You may print out these logs, view or print the fax associated with the entry or reset the log.

### **Service Dialing**

A unique dialing service may be associated with each fax phone book entry. When a particular fax destination has been selected, Unicom will automatically dial using the dialing service defined for the destination. This feature allows multiple long distance services or dialing procedures to be used that is selectable by fax destination.

### **Fax Scheduler Control**

This control allows a user to re-schedule, start, hold, resume, or delete fax jobs that have been scheduled for transmission.

### **Data Communication Features**

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#### **Many Popular File Transfer Protocols:**

X-Y-ZModem , Ymodem Batch, Ymodem-G, ZModem Resume, Kermit, CompuServe B, QuickB and ASCII. Of these, CompuServe and Zmodem protocols have been implemented for **automatic uploading** and **automatic downloading**. Zmodem will now automatically resume an aborted transfer on the next attempt. External protocols are supported.

**16 Color Terminal Emulation** with special attribute support. Emulations include: **DEC VT102 (ANSI)**, **DEC VT52**, **ANSI-BBS and TTY**. Screen fonts, colors and attributes are user selectable. All your installed Windows fonts are readily available for use.

#### **Auto-Sense 256 Color GIF Graphics Viewer**

GIF graphic images are displayed automatically during downloading. Images containing up to 256 simultaneous colors can be viewed (if your video hardware & driver are capable). Support is provided for receiving CompuServe interactive GIF images like weather maps and satellite pictures.

**Batch Dialing Phone Book** will hold an unlimited number of entries, maintain statistics, program settings and a dialing string for each entry. A Phone Book editor is provided. Other than disk space, there is no limit to the size of the phone book or the number of phone books allowed.

**Host Mode** allows remote users access to your computer similar to that of a mini- computer bulletin board. Each user is assigned an ID and password. A remote user may upload and download files, examine directories, change directories, type files, page the sysop, read messages, write messages, view the user list or shell to DOS. These capabilities are enabled or disabled for each user by the host sysop. The sysop may monitor interaction, log events, operate in dial-back mode and chat with a remote user. With this feature, you can also retrieve your incoming faxes from a remote location.

**Modem Display Lights** have been integrated in to the top of the Unicom display. These are the same lights built-in to the more advanced external modems. These indicators give you a visual clue to the physical state of the communications link.

**A Scrollback Buffer** that can hold up to **5000 lines** of information is provided. The user may easily scroll through the contents of this buffer with the use of the built-in horizontal and vertical scroll bars. The scrollbar buffer can be integrated into the window display or remain hidden until it is needed.

**WinScript Windows Script Language.** Programmers may customize Unicom and automate many communication tasks. WinScript is 'C - like' in design and provides over 200 statements and commands including support for conditional program control. Many functions that take advantage of the Windows environment are provided.

**Script Recording Capability** can be used to create script command files automatically as you interact with a remote host computer.

**Script Scheduling** allows up to eight WinScript command files to be executed at specific days and times. Programming the scheduler is just like programming a VCR.

#### **DDE Server Capability**

Other Windows applications that support DDE may exchange information with Unicom using a DDE link. Unicom can receive and execute commands from DDE client applications. A client application may instruct Unicom to execute a specific WinScript file, WinScript command line, hot key, macro or external application. A client application can retrieve the contents of script variables or be advised when they change.

**Download File Processor**

Unicom can be setup to watch for incoming files with a specific extension then invoke a utility to process the file after it is received. For example, with the use of an unzip utility, all .ZIP files can be unzipped by Unicom after downloading. Each file type may be processed automatically or interactively via a queue control. Any utility can be assigned to process specific incoming file types.

**A Convenient Screen Toolbar** provides 3D icon pushbuttons that give you quick access to many of Unicom's menu selections.

**A Custom Icon Tool Bar** allows you to add your own icons to the Unicom display screen. These icons may be setup to activate other applications, run scripts, execute macros, hot keys or external protocols.

**Easy screen editing.** Highlight text on the screen using the mouse. You may then copy this selected text to the clipboard, erase it, mark as a file or send it back to the host. A file marker feature is built-in to let you highlight filenames off the screen then transmit them to the host.

**External Protocol Support**

Unicom is now compatible with most all external protocols. Unicom can detect specific upload and/or download signatures then invoke the protocol. Any number of external file transfer protocols may be added.

**INT 14 and External I/O Driver Support**

Unicom can be adapted to special I/O hardware. A user may develop a special Windows DLL driver to allow Unicom to communicate with any special device. An INT 14 driver is included with Unicom. This INT-14 driver allows Unicom to be used on many networks that incorporate modem sharing.

**Email Features**

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**Send and Receive Email using MAPI Compatible networks**

Access to the Windows standard mail compose screen and mail reader is provided for easy sending and reading of network Email.

**Access the Network Address Book**

The network address book is easily accessible from Unicom.

**Automatically Forward Received Faxes as Mail**

Received faxes may be forwarded to any number of network destinations.

# Installing Unicom

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## Windows System Requirements

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To effectively use Unicom 4.0, the following is required:

- 1) Microsoft Windows Version 3.1x (or above).
- 2) A personal computer equipped to run Microsoft Windows efficiently:  
An 80386 DX CPU (or higher is recommended), 4mb of memory  
and a hard disk with disk caching software.
- 3) A Hayes Compatible Modem with optional Fax Class 1 or 2 capability.
- 4) A Serial Communications Port (if using an external modem).

## Configuring your Communications Hardware

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*The Microsoft communication port driver (comm.drv) requires that your communications port be set to operate using a unique interrupt (IRQ). Unfortunately, COM1 and COM3 are usually configured to share IRQ 4. COM 2 and COM 4 usually share IRQ 3. While DOS comm applications may work, Windows-based comm applications may lock when 2 devices share the same IRQ.*

Communication port assignments and IRQs are usually jumper selectable on your computer motherboard, plug-in serial interface card or plug-in internal modem card. Consult your hardware reference manual for information on how to configure these devices. After setting the hardware IRQ, run Windows Control Panel and set the comm port IRQ in the advanced setup for your particular port.

### To configure your communications hardware:

- 1) Determine which communication port you intend to use:(COM 1 , 2, 3 or 4)
- 2) Configure your serial port to the base port and IRQ for the desired COMx device. This involves setting jumpers or switches on the device. Consult your hardware reference manual. Make sure the port is configured to a unique and appropriate IRQ.
- 3) Run Windows Control Panel. Select the 'Ports' icon and highlight the desired port. Press the settings button, then select the Advanced button. You will be prompted for the base port and IRQ setting for the port.

## Installing Unicom

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- 1) Insert the distribution disk into the appropriate drive.
- 2) Activate INSTALL.EXE on the disk using Windows file manager or file explorer application. Just double-click on INSTALL.EXE using your mouse, or use the run option from Program or File Manager and enter the file name.
- 3) The install program will prompt you for the source directory path of the installation disk. You will also be prompted for the destination path where Unicom is to be installed. Enter this information into the setup window that appears.

Once INSTALL.EXE has completed, your system will need to be shutdown and re-started so the Unicom fax print driver can be installed. Install will then restart Windows when you are ready.

## Starting Unicom

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Unicom may be activated in a number of ways as shown below:

From a RUN command line in Program Manager or File Manager enter:

**UNICOM** [faxfile.ufx][configfile.cfg ][scriptfile.scr]

From Program Manager as an installed program icon in a program group:

With your mouse: double click on the Unicom icon

From File Manager or File Explorer

- a) Double click on a Unicom script file (.scr), -or-
- b) Double click on a Unicom config file(.cfg), -or-

- c) Double click on the executable file Unicom .exe

At the start of each Unicom session, a configuration file will be accessed (from the Unicom files directory) to determine what communication port will be used and other operating parameters. This configuration file will default to Unicom.cfg if no file was specified when invoking Unicom. If Unicom cannot locate any configuration file, the port will default to COM2, 2400 baud, No Parity, 8 data bits and 1 stop bit.

Should a communication port fail to open, Unicom will display a message box to indicate the failure. The port configuration window will then be displayed automatically. At this point, a valid communication port should be selected. If no communication ports can be opened and you're sure the port is there, another application may be using the port or your communications hardware may be configured improperly. Close other communication applications or check the port IRQ setting on the serial interface card or internal modem.






















When a communication port is successfully opened, Unicom will try to initialize the modem if the port was configured for a modem connection. Should the message "Modem Not Responding" appear, Unicom failed to obtain an 'OK' response from the modem. Make sure the communications port and modem are configured properly.

### Screen Regions

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#### The top buttons

#### Description

	Erases selected screen text or the whole terminal screen.
	Search for text in the scroll buffer.
	Transmit selected screen text back to the host.
	Download a file into your computer.
	Upload selected files to a remote computer.
	Access the Dialing Directory.
	Access the Manual Phone Dialer.
	Instruct the modem to hang up.
	Activates the Comm Port configuration window.
	Activates the Terminal Setup window.
	Displays the Modem Setup window.
	Displays the Keyboard Macro Editor.
	Displays the Zmodem Setup window.
	Toggle Host Mode operation on or off.
	Toggle Chat Mode operation on or off.
	Mark a file on the screen for download.
	Answer an incoming data call
	Terminal auto wrap mode toggle.
	Terminal local echo toggle.
	Terminal CR->CRLF toggle.
	Terminal erase on backspace toggle

**Modem Display Lights** are built-in indicators usually found on the front of most external modems. They are integrated into the top of the Unicom display window and can be hidden using the control menu.

<u>Light</u>	<u>Definition</u>
HS	On when operating at baud rates above 2400
AA	On when Unicom sets your modem to auto answer mode
CD	On when your modem detects a remote modem carrier.
OH	On when your modem is off hook (when dialing).
RD	On when Unicom is reading data from the modem
SD	On when Unicom is sending data to the modem
TR	On when Data Terminal Ready (DB25 pin 20) is high
MR	On when Modem Ready (DB25 pin 6) is high
RS	On when Request to Send (DB25 pin 7) is high
CS	On when Clear to Send (DB25 pin 5) is high
RI	On when Ring Indicator (DB25 pin 22) is high
fifo	On when 16550 support is enabled in System.ini
DDE	On when Unicom is operating in DDE server mode

#### Status Line

Program messages, communication settings, terminal settings, screen icon and menu definitions are displayed on



this line located at the bottom of the Unicom window.

### **Scroll bars**

Vertical and horizontal scroll bars allow the user to manipulate the Unicom screen using a mouse (or via options in the control menu). The vertical scroll bar allows a user to scroll the display screen back and forth from the terminal screen to the scroll buffer. The horizontal scroll bar is useful for viewing any columns beyond the side edges of the window.

### **User Keys**

The user keys are the rows of screen buttons above the status line. They correspond to twenty two keyboard keys. They may be user defined as hot keys, macros or for activating script command files, external protocols or other applications. The keyboard macro editor is used to define the meaning and screen button label of these keys which include: F1-F12 and the keypad keys. The keyboard macro editor is accessed from the Setup-Data menu.

### **Custom Icon Toolbar**

The Icon Toolbar is a row of user installed icons that are located just above the User Keys. Any number of icons can be added to perform functions just like the User Keys described above. A small scroll bar can be used to scroll rows of these icons. You may hide or display this toolbar anytime using options in the control menu.

### **Terminal Screen**

Characters sent from a remote host are displayed on a 25 line terminal screen. If your window is sized too small to view all the lines, the scroll bar may be used to scroll the terminal top into view. If your window is sized to support more than 25 lines, the scroll buffer can be set to occupy these extra lines starting at the top of your screen.

### **Scroll Buffer**

When your terminal scrolls, lines which scroll off the top are placed in the scroll buffer for later review. This buffer is configurable in size from 80 to 5000 lines. The bottom of the scroll buffer can be integrated into the Unicom window (on top of the terminal) or hidden from view.

# Setting Up Unicom

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## Communication Port Settings

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The physical communication link for both fax and data operations is described to Unicom using the setup window below in Figure 1. To activate this window, select Comm Port from the Setup Menu.

For most Fax and Data Communication uses, your communication settings will be  
Baud 19200, Word:8, Parity: NONE and 1 Stop bit:

Figure 1. Communication Port Setup Window

### Configuration Option Descriptions:

**Port:** Specifies the device name of your communications link: (COM1 - 4)  
Device names supported by all installed DLC drivers will be listed in this field automatically.

**Baud Rate:** Port Operating Speed (bits transmitted per second) (300 bps to 128kb)

**Parity:** Specifies the character parity for the currently selected port. NONE means no parity bit is provided. EVEN, ODD, MARK, SPACE specify that parity will be set as follows: NONE is the usual setting but EVEN is commonly used.

EVEN Parity bit set to provide an even number of set bits.  
ODD Parity bit set to provide an odd number of set bits.  
MARK Parity bit always set.  
SPACE Parity bit always clear.

**Stop:** 1 or 2 Stop Synchronization Bits, 1 is the usual setting.

**Word:** Defines the number of data bits that make up the character size.  
Eight bit words are commonly used with no parity.  
Seven bit words are commonly used with even parity.

### Handshake:

Is a means by which your computer (and the remote host) will control incoming and outgoing data. Some modems require a handshake to avoid losing data. Handshakes may be performed using hardware (RS 232 pins) or via software using special ASCII control characters. Unicom provides selection of the following handshake types as supported by the Windows comm port driver:

Hardware: specifies that RS-232 pin 4: Request to Send (RTS) performs receive flow control and pin 5: clear to send (CTS) for transmit flow control. RTS will be dropped when the receive queue is full and raised otherwise. Character transmission will be suspended when CTS is dropped by the external device and resumed when it is raised.

None: specifies no handshake. A software specific handshake is up to the application program (such as an XMODEM protocol transfer) driving each end of the communication link.

Xon/Xoff: interprets DC1 (CTL Q) and DC3 (CTL S) characters as special flow control characters. When Unicom receives a DC3 (Xoff), it will suspend any transmission until a DC1 (Xon) is encountered. Likewise, when Unicom's receive buffer is full, a DC3 (Xoff) is transmitted to the remote computer to cause it to suspend (provided the remote recognizes XON/XOFF) transmission. Unicom resumes the suspended remote transmission (when ready) by transmitting a DC1.

### Port Connection Type:

Instructs Unicom to treat the remote connection as a modem or a direct computer-to-computer link. If set to MODEM, Unicom will transmit an init string at the start of each program session and when invoking host mode. A modem reset command 'ATZ' will be issued upon terminating Unicom. If set to Computer, Unicom will not send modem commands to the port.

### Disable Error Report:

Controls the reporting of hardware detected communication errors from the communication port driver being used with Windows.

Parity: When selected, disables reporting of parity errors detected in received characters.  
Framing: When selected, disables reporting of improperly synchronized transmissions due to poor line quality or mismatched communication settings.  
Overrun: When selected, disables reporting of a Unicom transmit or receive buffer overflow conditions.

**Receive Buffer Size:**

Controls the size of the interrupt receive buffer that the Windows Communication driver allocates to hold incoming data from the hardware. This setting overrides the CommBufferSize setting in your system.ini file.

**Transmit Buffer Size:**

Controls the size of the transmit buffer that the Windows Communication driver allocates to hold outgoing data from Unicom. This setting overrides the CommBufferSize setting in your system.ini file.

Select the port and the desired characteristics from the above options and press the CONFIGURE button to activate the port. To restore the port settings to the original configuration (as stored in the program configuration file), press the DEFAULT button then press CONFIGURE.

## Modem Setup

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Figure 2. Modem Setup Window

Many different modems are supported by Unicom. The modem setup window allows you to select from a list of modem brands and models. Select the list box entry for the make and model that matches your modem. Unicom will then display the appropriate modem init string for your modem into the edit box within the setup window. You may then edit this init string if you wish to alter the default setup string. All pre-defined modem setup strings invoke or assume hardware handshaking will be used. Make sure Unicom is set to hardware handshaking. If your modem is not listed, try selecting one that is similar.

If your modem includes fax capability, select the appropriate class supported. Most modems support Class 2 fax. If you are not using a fax modem, select NONE.

If your modem is not listed among the many entries in this setup window, select the manual setup button as it provides two additional methods of modem configuration.

Figure 3. Manual Modem Setup Window

The purpose of this window is to construct a modem init string that will be sent to the modem. The manual modem setup window supports two types of init strings: User Entered and Selected. The two radio buttons located at the top of the window are used to determine which init string is to be used.

When selected, the User Entered radio button will instruct Unicom to use the modem init string defined in the edit box. If the Selected radio button is chosen, Unicom will construct a modem init string based upon the user selections in the Selected Init String section.

### User Entered Init String:

An edit box is provided so that you may define your own modem init string. You must prefix the string with an AT. Though not visible, Unicom will append a terminating carriage return to the end of the string placed here. Control character prefixing is supported in this edit field including the ~ delay character. The ~ character represents a half second delay.

### Selected Init String:

A modem init string is constructed automatically based upon the configurable modem options contained in the Selected Init String section. These options are defined as follows:

Wait for dial tone: (2-255 seconds) DEFAULT = 2 determines the maximum time the modem will wait for a dial tone during dialing operations.

Wait for answer: (1-255 seconds) DEFAULT = 60 determines the time the modem will wait for an answer after dialing has commenced.

Dial Type: Tone or Pulse operation.

Speaker Control: Always OFF, ON for dialing or ON while the phone is off hook.

Auto Answer: ON or OFF. Setting ignored during Call Director Mode.

Answer on ring [x]: If Auto Answer is enabled, the modem will pick up the phone on ring x (if x > 0).

Dialer Speed: Slow, Medium or Fast. This affects the dialing rate for tone operation only.

Call Waiting

Protection:

ON or OFF.  
When enabled, this feature will prevent the modem from breaking a phone connection because of a call waiting 'click' associated with incoming calls. The loss of carrier time is extended to 10 seconds to prevent the modem from hanging up during this type of interruption. This method does not instruct the phone system to block waiting calls.

Many local phone systems will allow you to dial \*70 to block call waiting when dialing. The prefix/suffix dialing feature may be used for this purpose. See the Dialing Phone Book section for information on how to use prefix dialing.

Hayes compatible modems may differ in modem responses when attempting a connection or hanging up by dropping the RS-232 data terminal ready signal.

A modem-specific setup window has been provided to describe responses and timing behavior that can vary from one Hayes compatible brand of modem to another.

To activate the modem-specific setup window, press the MORE pushbutton from the modem setup window. Figure 4. illustrates the Modem Specific Setup Window.

Figure 4. Modem Specific Setup Window

Connect String: This field should contain your modems response upon making a successful data connection. When dialing, Unicom examines modem responses to determine the result. The typical default string is uppercase CONNECT for most Hayes compatible modems. Some modems respond with CARRIER followed by the connect baud rate. If Unicom displays the message 'Connection Established' on the status line when using a program dialer, you can be sure the connect string is set properly.

No Connect Responses: Enter the possible responses produced by your modem that indicate unsuccessful dialing. If Unicom encounters one of these strings during dialing, the specific response will be reported to the user. The most common responses are listed in the illustration above. Consult your modem reference manual for these response strings.

Hang Up String: Should Unicom fail to hang up by dropping DTR, it will perform a software hang up procedure. This involves sending the escape to command character sequence '+++' to bring the modem into command mode. Once in command mode, the modem is instructed to hang up using the string defined in this field.

Escape Guard Time: (0.5,1.0,1.5 Sec) This is the amount of time Unicom will delay before and after sending the modem attention '+++' sequence to bring the modem into command mode during a software hang-up attempt.

Response to DTR drop: Modems typically produce a response string once a connection is dropped for reasons that include loss of DTR. Unicom drops DTR (RS-232 pin 20) for hang up operations and watches for the response defined here to determine if the attempt was successful.

To allow Unicom to hang up quickly using the DTR drop method, you must provide this hardware signal to your modem using an RS-232 cable that supports pin 20. The modem must also be commanded to drop the line upon loss of DTR. This command is typically provided from the modem init string which is loaded at program initialization. Consult your modem reference for the particular modem command.

Entering a value in this field is not necessary if your modem cable provides Data Carrier Detect (DCD or RLSD). Unicom will watch for this line to transition after dropping DTR. If this line changes state, Unicom will consider the hang-up successful. If no DTR drop response string or DCD transition is encountered after dropping DTR, Unicom will perform a software hang-up procedure.

Command Speed: (Slow,Med,Fast) Some Hayes compatible modems become confused when commands arrive too quickly to the modem. This option controls the amount of time to delay per character when commands are issued to the modem. A Fast setting means no character delay. Medium introduces a 30 msec delay and Slow introduces a 60 msec delay. For most modems, the Command Speed can be set to Fast.

## Call Director Setup

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This setup screen allows you to instruct the Call Director as to what type of calls are to be answered and how they will be processed. To access this screen, select Call Director from the Setup Menu. For the Call Director to work properly in directing both fax and data calls, you need to provide an Adaptive Answer Init String in the edit box provided.

Figure 5. Call Director Setup Window

### Answer Incoming Calls

Fax & Data: Both incoming fax and data calls will be answered.  
Fax Only: Incoming calls other than fax calls will be ignored.  
Data Only: Incoming calls other than data calls will be ignored.

### Direct Incoming Data Calls

Host Mode: The data call will be directed to Unicoms host mode feature.  
Terminal Mode: Your keyboard and terminal screen will connect to the call.  
Script: A WinScript script language program will process the call.  
Other Pgm: An external data application will be activated for the call.

### Direct Incoming Fax Calls

Unicom Fax: Unicom will receive and process the incoming fax.  
Other Pgm: An external fax application will process the incoming fax.

**Modem Adaptive Answer Init String** is a special modem command that instructs your fax modem to answer both fax and data calls. If this is incorrectly set, the Call Director may not function properly. Some modems may have their own special command. The most common are listed as follows:

**For many Class 2 fax modems use: AT+FAA=1**

**For many Class 1 fax modems use: AT+FAE=1**

If you are not sure, check your fax modem reference manual .

If you are not sure as to what fax class your modem operates:

At your terminal type: AT+FCLASS=? (Press Enter)

The modem should respond with 0,1,2 or ERROR.

Answer on ring: Call Director will pick up the phone on the ring you specify..

Activate @ program startup: If set, Call Director will activate automatically at the start of each subsequent program session.

## Fax Operation Settings

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General options controlling fax send and receive are set using the Fax Operation Setup Window shown in Figure 6. To access this screen, select Fax -Operation from the Setup Menu.

Figure 6. Fax Operation Setup Window

### Send Fax Setup

Redial Attempts : Should fax dialing fail, Unicom will retry using the number of attempts defined in this field.

Redial Delay: Is the number of seconds Unicom will wait before making subsequent tries at sending a fax.

Delete Sent Faxes: *Use this option with caution.* If you receive a fax and auto fax forwarding is on, the fax will be deleted after it is forwarded. When this happens, your fax log will show the fax received but you'll never see it.

Default Cover Page: This options controls what default cover page will be shown in the Send Fax Window.

Fax Upload File Path: This controls where the UNIFAX fax printer driver will store printed faxes created when printing from Windows apps. Default Phone Book: Sets the default Fax Phone Book to use when accessing the phone book from the program menu or when selecting fax destinations from the Send Fax window.

Fax Station ID: This field is limited to 20 characters. This station ID is transmitted to a remote fax during fax negotiation. It is not printed on your fax, but the remote fax machine uses it to identify your station. Typically a persons name, company name or fax number is placed this field. It can also be left blank.

### Receive Fax Setup

Multi-Site Fax Forwarding allows you to forward received faxes to any number of destinations. Destinations may be selected by pressing Add. The fax phone book will be displayed allowing selection of multiple and group destinations using the Mark or Group buttons.

Enable Fax Forwarding: Toggle this on or off to enable forwarding

Add: This button activates the default fax phone book.

Del: Deletes any destination highlighted in the destination list.

Fax Download File Path: Lets you control where received faxes will be stored.

**Automatic Fax Printing** will instruct Unicom to print faxes as they are received to any desired printer. Only one destination printer is supported.

Enable: Toggles auto fax printing on or off.

Printer: This button allows you to select a destination printer.

Display Received Faxes: Checking this option causes the fax viewer application to display newly received faxes immediately upon reception.

## Fax Sender Info

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When sending a fax, Unicom can automatically address a fax cover page with sender and receiver information. The sender information is easily entered or changed using the Fax Sender Information setup window shown below.

Figure 7. Fax Sender Information

To access this window, select Fax-Sender Info from the Setup Menu.

## Data Communication Settings

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### Terminal Options

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#### Main Settings

Unicom's terminal setup window allows control all aspects of the terminal screen. Terminal type, fonts, colors, attributes, scroll buffer, terminal modes, terminal width and cursor type can be configured by selecting terminal from the setup menu.

Figure 8. Terminal Setup Window

Options provided in the terminal setup window are described as follows:

#### Terminal Type:

- DEC VT102 -(ANSI) :  
Emulates an ANSI compatible terminal including VT-100.  
Supports special DEC character sets and double size chars.
- DEC VT52:  
Emulates a DEC VT52 terminal.
- ANSI-BBS:  
Provides an ANSI emulation compatible with that used in dial-up bulletin board systems. Supports 16 colors.
- TTY:  
No emulation, responds to ASCII control codes for cursor movement, line control and character display.

#### Terminal Modes:

- Newline: This option will automatically generate a linefeed upon receipt of a carriage return. If characters seem to wrap around on a single line with your particular host, enable this option. If lines always appear double-spaced, disable this option.
- Local Echo: Some hosts do not echo characters back when typed from the keyboard. Half duplex systems typically operate this way (such as GENie). Enable this option to instruct Unicom to echo characters to the screen as they are typed from your keyboard. Likewise, should characters appear double on your screen, disable this option.
- Autowrap: Some remote hosts do not position the cursor to the start of the next line after reaching the end of the current line. If enabled, this option will instruct Unicom to move the cursor to the 1st column of the next line after the end of line is reached.
- Erase on Backspace: Once enabled, backspace characters received will be translated into BS-SPACE-BS to erase the character on your screen. This translation is normally performed by the remote host. If characters are not erased using backspace with your particular host, enable this option. This option has no effect if the backspace key is defined as a delete key (except for tty operation).
- Backspace Key is DEL: Controls the meaning of your backspace key. If checked, the key will operate as a delete key. When unchecked, the backspace key operates normally.

#### Scroll Buffer:

- Lines edit box: The size and positioning of the scroll buffer is selected here. Enter the desired size (in lines) of the scroll buffer in the edit box. The scroll buffer can be sized from a minimum of 80 to a maximum of 5000 lines. Values entered that are outside this range will be reset to the closest limit.
- Visible @ Top: If selected, the scroll buffer will be visibly integrated into the Unicom window above the terminal screen. The bottom of the scroll buffer will occupy as many lines over 24 that can be displayed in the window. This will allow your video hardware to display the maximum number of lines possible.

Some remote hosts do not make clean use of your scroll buffer. Instead, the scroll buffer may



appear to contain useless junk. The scroll buffer can be hidden from view : just un-check the Visible @ Top option. This dedicates the entire window real estate to the 24 line terminal screen. The scroll buffer may still be accessed using the vertical scroll bar or paging options in the control menu.

**Columns:**

80 or 132 column widths are supported. This option will not automatically select an appropriate font size to allow viewing of the entire line. The user selected font (and size) will determine if the entire line can be viewed. In any case, the horizontal scroll bar will let you position the screen to scroll any obscured columns into view.

Figure 9. Font Selection Screen

**Select Font** This button displays the above font selection screen. The particular font, size, style and text color can be selected. Unicom will ignore any selections within Effects.

**Screen Color**

Background: A rectangular window displays the currently selected background color to be used when Unicom displays text to the screen. A horizontal scroll bar is provided for user selection of 16 possible text colors.

**Char Spacing:**

This option controls the spacing of proportional fonts such as roman and helv. These fonts look nice but vary in their individual character widths. All known terminal emulations assume a fixed size font - the width (and height) of each character is equal. To use proportional fonts, each character must be positioned to a cell that can hold the widest character in the font. The resulting extra space is wasteful and it just doesn't look nice.

This character spacing option allows you to reduce this extra spacing at the risk of losing parts of wide characters such as uppercase W or X.

- Normal: Characters are mapped to fixed size cells that can hold the widest character.
- 7/8: Characters are mapped to a fixed size cell sized 7/8 of the widest character.
- 3/4: Characters are mapped to a fixed size cell sized 3/4 of the widest character.
- 2/3: Characters are mapped to a fixed size cell sized 2/3 of the widest character.

This option has no affect on character placement for fixed sized fonts such as Terminal or Courier.

**Cursor Blink**

- None: The cursor does not blink
- 100: Blinks every 100 msec.
- 200: ' ' 200 msec
- 400: ' ' 400 msec.

**Cursor Type**

- Underline: Choose
- Vert Bar: your
- Block: preference

Figure 10. Attribute Override Window

**Attribute Override:** Allows text to be displayed in a form more pleasing to the eye. Bold text may appear fuzzy on many displays. Italic fonts may look strange and background colors may cause foreground text to disappear. By checking all the above options, you can improve the appearance of colored and special text on your display.

**Color Mapping**

Many remote host computers (such as BBS systems) present color menus to their users. In most cases you have not choice but to accept the color scheme as is. With Unicom's color mapping setup screen, you may translate undesired colors to colors you prefer.

Figure 11. Color Mapper Setup Screen.

The above Color Mapper setup screen is accessed from the setup menu under Data-Terminal-Color Mapping.

## Keyboard Macros

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The meaning of your keyboard function and keypad keys are user definable. Function keys F1 through F12 and the keypad keys may be defined as keyboard macros, program hot keys or for launching script command files. These keys are also displayed on the screen as user screen buttons with a user defined label for quick activation using a mouse.

To activate the keyboard macro editor, select Keyboard from the setup menu  
The keyboard editor window will appear as shown in Figure 12.

Keyboard macros are simply character definitions that Unicom will type for you. Program hot keys are nothing more than predefined Unicom menu picks, that when activated, perform the same action as if you selected the menu pick with the mouse or keyboard. A key may also be defined to launch a script command language file.

The entry you provide in definition field for each key will determine if the key is a macro, hot key, script launcher, external protocol or external application launcher.

The following codes are used to define the key (^ codes must appear in the first and second columns):

### Script Launcher ^Sscriptfile.ext

Executes the script file specified in the *scriptfile.ext* argument. The file is expected to reside in the Unicom files directory.

Example: ^Sunicom.scr - activates unicom.scr.

No space is allowed between ^S and the file name.  
The file name must not contain a drive and/or directory.

### Hot Key ^menuposition (see Appendix I - Hot Key Menu Map)

Macro Any text and/or control characters may be defined up to a maximum size of 80.  
Unprintable characters are represented by the ASCII code using the following notation: ^xxx  
where xxx is the ASCII code  
(xxx = 0-255). Example: CNTRL-C (ASCII 03) = ^3  
DEL (ASCII 255) = ^255

### External Protocol ^Ecommand line

The command line field above should contain the pathname and options for the external protocol being activated.

### External Application ^Xcommand line

The command line field above should contain the pathname and any options to activate the external DOS or Windows application.

Certain keys (marked with an asterisk \*) have special meaning when using VT102 or VT52 emulations such as cursor movement or terminal specific functions. You may override this special meaning by leaving the check box at the lower right of the Keyboard Macro editor unchecked. Once unchecked, these special keys operate with the definitions you provide. Otherwise their meaning is determined by the specific terminal emulation in use. If the check box is set, F1-F4 operate as VT102 PF1 through PF4 keys. The arrow keys will then be used for cursor positioning.

Figure 12. Keyboard Macro Editor

To define a key, place the keystrokes into the definition edit box. Control characters can be inserted into macros and are denoted with the ^ character prefix. For example: ^C will output a control-C (ASCII 03). Control characters may be mixed with printable ASCII characters. As describe above, any ASCII character may be described using the ^xxx notation (where xxx = the ASCII code). Each macro is limited to a maximum of 80 characters. For a complete list of all possible prefix character combinations see Appendix I. Refer to the ASCII table for a complete list of characters and their respective codes.

The label field for each key will be displayed in the corresponding screen button to identify the key. The key may be activated by pressing the key itself or by activating the screen button with your mouse. Screen buttons containing

user defined labels assigned to each function key are displayed at the bottom of the screen above the status line. To toggle display of these button on or off, select Screen Options - User Keys from the Control Menu.

Hot keys may be used to 'launch' applications added to the Tools menu. Just add the desired applications and assign  $\wedge 2xx$  to a key where  $xx = 0$  to  $99$ .

## **Character Translation**

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Unicom provides user control over the translation of incoming and outgoing characters with the use of translation tables. Character translation, if enabled, is performed in terminal mode only. Translation is disabled during Chat mode, script operations and modem operations. To activate the translation table setup window, select Translation from the setup menu. A window will appear as shown in Figure 13.

Figure 13. Translation Table Setup Window.

A foreign language user may wish to map a special ANSI character to the same character in the IBM PC extended character set. To accomplish this, a user would assign a new value for the desired characters in the Outgoing character table.

## Host Mode Settings

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Host mode allows remote access to your computer similar to that of a mini BBS. At a minimum, Unicom requires that you establish a User ID, Password and allocate allowable session time for each remote user. To activate the Host setup window, select Data - Host Access from the Setup Menu. The Host Setup window will be displayed as shown below in Figure 14.

Figure 14. Host Setup Window

There are two types of settings : User and System. The User Maintenance section is used to maintain information about each remote user who will be allowed to login to your computer. All other settings are system settings that control how host mode behaves for all users.

### Host System Settings

#### Host Identification

String (80 chars max): This field contains the string that identifies your system to a remote user who is attempting to login. It is displayed when Unicom detects a CONNECT response from the modem (if one is used). If the connection is set to computer in the comm port setup window, this message is displayed after the remote user enters 2 consecutive carriage returns. This string indicates the start of the login process.

Greeting File: This file contains text information that will be transmitted to the remote user once a connection has been established but before a user logs in. This file may contain embedded escape codes to format the remote terminal screen. At each screen of text (23 lines), the remote user is prompted: More? (Y/n).

A blank entry or invalid filename in this field will disable this option.

Unicom will look for this file to be located in the Unicom Files Directory as defined in the File Path Setup Window.

Bulletin File: This file is transmitted to the remote user after each successful user login. At each screen of text, the remote user is prompted: More? (Y/n).

A blank entry or invalid filename in this field will disable this option.

Unicom will look for this file to be located in the Unicom Files Directory as defined in the File Path Setup Window.

Menu Filename: Unicom provides a default remote user menu. You may define your own menu and cause Unicom to display it to the remote user. The menu can be created using a text editor. Special control characters may be embedded in the file.

To define your own menu, use a text editor or an ANSI screen editor. At the end of each line of text make sure you insert a CR and LF character (with ANSI editors you can omit this). Just save this file into the Unicom directory and place the name in this field.

A blank entry or invalid filename in this field will cause Unicom to display a default menu.

Unicom will look for this file to be located in the Unicom Files Directory as defined in the File Path Setup Window.

Help Filename: A help option exists on the default menu presented to the remote user. When the user selects the help option, Unicom will transmit the file named in this field to the user. A default help file is not provided with Unicom. The help file must reside in the Unicom files directory.

Monitor Mode: Allows viewing of the remote users session from the host display. The sysop may use the host keyboard to interact with the host menu. All characters type by the remote user (including passwords) can be viewed.

No Activity Check: Automatically logs out a remote user who does not respond to an input prompt for approximately 5 minutes. In all cases, the user will receive a lack of activity warning if no response has been received to a prompt after 45 seconds.

Log User Activity: If enabled, Unicom will log all user actions to the event file defined in the Data Operation Setup window. User responses to the log in process, responses to menu picks, file and directory activity will be logged.

Dial Back Mode: This mode will allow a remote user to log in then Unicom hangs up and calls the user back within 60 seconds. Each user record includes a phone number which is used to dial the user back. Dial back mode (once enabled) will be in effect for all users. This mode can also be enabled for specific users in

the Host User Setup screen.

## Host User Settings

The user maintenance section of the host setup window lets you maintain information for each user authorized to access your computer through host mode. The list box visible in this section contains the User IDs of all authorized users. By highlighting an entry in this list box with a mouse or keyboard, existing entries may be changed or removed. New user records are created using the Add button.

Pushbutton

Add Used to create a new user record. Displays the Host User Setup window shown in Figure 15 below.

Delete Removes the user record associated with the User ID selected in the list box.

Change Activates the Host User Setup window and fills in all fields with the user information of the User ID selected in the list box.

Figure 15. Host User Setup Window.

The Host User Setup window is displayed by selecting Add or Change from the user maintenance section of the Host Setup window. At a minimum, you must enter a User ID, Password and Login Drive & Path. The Name and Address fields are not used by Unicom and are for your reference only.

The telephone field is required if you intend to operate in dial back mode. Unicom dials the number exactly as stored in this field. No modem commands are allowed in this field.

Each Host User field and option is defined as follows:

**User ID:** Identifies the remote user. Unicom prompts the remote user for this ID during login. Once logged in, the user id is displayed on Unicom's status line to identify the current user.

**The User ID must consist of only one word.**

**Password:** Validates the user attempting to log in with a particular User ID. The password must consist of only one word.

### User Information

Name The real name of the user who is allowed remote access. Unicom does not use this field. It can be used anyway you choose.

Telephone The telephone number of the remote user. If operating in dialback mode, a modem must exist and be set to answer this phone number. mode at

Address The street address of the remote user can go here. Like the field, Unicom does not use this field. It can be used Name anyway you choose.

**Login Drive** This field determines the initial drive and directory which the user will access once logged in. Users without remote privilege to change directory will be confined to this path.

**Privileges** Privileges must be enabled for each menu option a remote user will be allowed to access. The sysop enables or disables the check box for the corresponding menu operation in the user record. These options are:

File Download	File Upload	Change Directory
Shell to DOS	List Directories	Type Files
Read Messages	Write Messages	Page the Sysop
Access the User ID List		

**Access**

Minutes Allowed per Session: limits the amount of time per session allowed.

Dial Back Mode: If enabled, once the user logs in, Unicom will hang up and call them back using the phone number defined in the user record.



## **Data Transfer Paths**

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Files received from data transfers are stored in a user selectable download directory. Likewise, when uploading files, Unicom will begin file selection from a user specified upload directory.

To set the Data Transfer Paths, select Data-Transfer Paths from the Setup Menu.

Figure 16. Data Transfer Paths Setup

Enter the desired paths into the corresponding fields then press Ok.

## File Transfer Protocols

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### ASCII Transfer Settings

The ASCII transfer setup is divided into operating parameters for uploading and downloading operations. To access the ASCII transfer options, select the Data -Protocols - ASCII option from the setup menu.

Figure 17. ASCII File Transfer Setup Window

### ASCII Upload Parameters

Echo Locally: If enabled, the file data being transferred will be echoed to your screen.

Pace

Character: [0-99] The pace character is the numeric value of an ASCII character that is transmitted by the remote host receiving the file. This character is interpreted by Unicom as 'send the next line'. Unicom will wait for the remote to sent this character for each line transmitted.

Char Pacing: [0-999] Represents a delay time (in milliseconds) between transmission of each character to the remote host computer. Setting this value to zero, disables any time delay. A zero value also greatly increases speed.

Line Pacing: [0-999] Represents the time (in 1/10 seconds) to delay after the transmission of each line or carriage return. A zero value in this field disables line pacing.

CR Translation: [None, Strip or Add LF] Carriage return translation can be used to strip carriage returns or insert linefeeds (after carriage returns) for the file being transmitted. Selecting none disables any translation.

LF Translation: [None, Strip or ADD CR] Linefeed translation will strip linefeeds or add carriage returns after linefeeds to the file being transmitted. Selecting none disables any translation.

### ASCII Download Parameters

CR translation and LF translation as described above will filter and control these characters received during ASCII file downloads from remote host computers. The selection and definition (as described above) for downloading is the same as for uploading.

When downloading using ASCII, Unicom will automatically end the transfer if a control-Z character is encountered. Otherwise the user must press the Stop button in the transfer window.

### Zmodem Transfer Setup

Figure 18. Zmodem Transfer Settings

Unicom provides a Zmodem setup window (Figure 18) for advanced users of this protocol. If the setup screen seems confusing to you, don't worry, just select the Defaults push button to ensure correct operation. Advanced Zmodem users may wish to use some of the options provided by the design of this protocol.

File management options allow examination of an existing file size and length before a transfer will occur. Other options control the amount of feedback during the transfer. Lot's of feedback could be useful for determining the source of problem transfers.

The default is minimum feedback since the additional reports can be quite confusing if you're not a Zmodem expert.

**NOTE: The Zmodem upload option: Unlink AfterTransmission (if set) will DELETE the file on your disk once it has been uploaded.**

### Kermit Transfer Setup

Figure 19. Kermit Setup Window

The Kermit is a configurable protocol but you may not want to change the settings shown in Figure 19 unless you are an advanced user. Assuming you are, here are the field definitions:

**Max Packet Size:** This is the maximum length for outbound packets, regardless of what was negotiated with the other Kermit. Normally, you would change this field (from the default) only to send shorter packets than the other Kermit requests, because you know something the other Kermit doesn't know, e.g. there's a device on the communication path with small buffers.

**Timeout:** This can be used to adjust the normal Kermit timeout parameter for both local and remote systems. Timeout will occur if a packet is not received after the number of seconds specified in this field.

**# of pad chars:** This value controls the number of pad chars to be requested from the remote Kermit to precede each packet it sends. Padding is not usually required but may be necessary to keep some intervening communication happy.

**Padding Char:** Use the specified control character for interpacket padding. Some hosts may require padding characters (normally NULL or DEL) before a packet, and certain front ends or other communication equipment may need certain control characters to put them in the right mode. The number is the ASCII decimal value of the padding character, (0 - 31, or 127).

**EOL Char:** This field contains the ASCII value of the packet terminator to put on outbound packets. Normally a carriage return (13). Change this field if the other Kermit requires a nonstandard packet terminator.

**Quote Char:** This field contains the ASCII value of the character to be used to prefix control and other prefix characters. The only reason to change this would be for sending a very long file that contains many '#' characters (the normal control prefix) as data.

**Port:** (Switch to N-8-1 or No Switch) This option determines if Unicom will automatically set the port for binary operation before Kermit is initiated. Selecting N-8-1 (the normal default) will allow Kermit to transfer binary data. No Switch should be used if the remote Kermit does not switch automatically to 8 data bits, No parity and 1 stop bit.

**NOTE: Unicom's implementation of Kermit does not support transfer of 8 bit data through 7 bit links.** Make sure your communication link is 8 bit on both ends when transferring binary data.

Much overhead is built into the design of Kermit. Its performance in Unicom is limited to under 700 cps even when operating at the fastest baud rate possible. If you need performance, Zmodem and Ymodem G are recommended.

The fixed attribute definitions are not described here. Refer to the Kermit Users Guide from Columbia University.

## External Protocols

Unicom provides support for use of file transfer protocols developed by other manufacturers. External protocols are usually developed as standalone DOS applications. Some of these protocols include HSLINK, BIMODEM, DSZ and others.

Since most of the current external protocols were developed for the DOS environment, you may need to perform the following steps in order to make it work with Windows.

1) Run the Windows Control Panel. In the 386 Enhanced setup, set the port contention setting to 'Never Warn'. This will prevent a Windows message box prompt from appearing each time Unicom activates your external protocol.

You need to make this adjustment anyway if you intend to allow remote users to shell to DOS when using Host Mode.

2) Unicom closes the communication port before activating the external protocol. This action may drop the DTR control signal to your modem for a brief moment until the external protocol takes over.

The modem may interpret this as a signal to terminate the phone connection. It may then be necessary for you to include an AT command in your modem setup string to command the modem to ignore DTR. Unfortunately, by doing this, the modem may not hang up the phone easily when instructed to by Unicom.

3) A .PIF file may need to be created for the external protocol. Select the background check box option in the lower right corner of the pif editor window. This allows the protocol to execute when you switch to other applications.

It may also be necessary to set advanced settings. Select the Advanced button to activate the advanced options window of the PIF editor. Enter background and priority values above 2000 but below 10000.

External protocols must be installed into Unicom. That is, you need to provide upload and download command lines Unicom will use to activate the protocol. Unicom may also be setup to automatically invoke any external protocol upon receiving a special signature command from the remote host computer. Separate upload and download signatures are supported with an option to selectively enable or disable signature detection.

To install an external protocol to Unicom, select the Data-Protocols-External option from the setup menu..

Figure 20.

All currently defined external protocols are listed in the list box above. You may add, delete or edit these entries by activating the appropriate buttons. An edit screen will appear (as in Figure 21) each time you add or edit an external protocol.

Figure 21.

Protocol Title: This names the external protocol for reference within Unicom.

Upload Cmd Line: The command line and any necessary options or filenames are entered here to activate the upload.

Download Cmd Line: This contains the command line Unicom will use to activate the external protocol for downloading.

Auto Detect Transfer Sequences This section is optional but has been provided for transfer protocols that are activated by a remote host command. For example, Zmodem has different upload and download signatures which are used for auto activation.

Upload Sequence: Specify the upload signature specific to your external protocol. You may use the ^xxx notation to specify any ASCII character (printable or not). (xxx = 0-255)

Download Sequence: Specify the download signature specific to your external protocol. Like the Upload Sequence, you may use the "^xxx" notation to designate any ASCII character by number (0-255).

Sense Upload: If checked, Unicom will continually scan the input for the Upload sequence defined above. If encountered, the upload command line will be executed.

Sense Download: If checked, Unicom will continually scan the input for the Download sequence defined above. If encountered, the download command line will be executed.

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## **Download Processor**

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After you have downloaded a file from a remote computer or BBS, it will likely require some post processing on your part. For example, after downloading a compressed file, it must be uncompressed before it can be used. Files with a .ZIP extension require unzipping. Likewise .ARC files require unarcing, and so on...

Unicom can be configured to invoke a particular utility on a downloaded file according to the extension type. To do this, just activate the download processor setup screen from the data option in the setup menu. A window will appear as in Figure 22. You may add or edit existing file extension types to the list box by selecting the appropriate pushbutton.

Figure 22. Download Processor Setup.

When adding or editing existing entries, the following setup screen will appear.

Figure 23. Download Processor Edit Screen.

Enter the file extension type to be processed along with the utility to be invoked in the edit boxes. You then have the choice of the following options:

- 1) To process the file automatically each time a file with the extension is received.
- 2) To process the file manually using a queue control that will pop-up after the file is downloaded.

Check the radio button for the desired processing method.

To discontinue download file processing, highlight then delete the corresponding list box entry using the Delete button as shown in Figure 22.

## Data Operation Setup

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The Data Operation Setup window provides many user selectable options that affect program operation. This window allows you decide how Unicom is to behave during many program procedures.

To activate the Data Operation Setup window, select Operation from the Setup-Data menu. A window will appear containing the current option settings as shown in Figure 24.

Figure 24. Data Operation Setup Window

### Definition of Data Operation Setup Options

<u>Verification Prompts:</u>	If set, Unicom will display a message box prompting the user to acknowledge end of file transfers, program termination and modem hang-up operations.
<u>Log Events to File</u>	Controls recording of events such as dialing, hanging up, executing scripts , file transfers and other program activities. Each event is time-stamped. Events are written to the file whose name you provide in the edit box. This file is assumed to reside in the Unicom files directory. The drive and directory is not required in the filename.
<u>Auto Minimize on File Transfers:</u>	When checked, Unicom will automatically iconize itself at the start of every file transfer. This can be useful for clearing the screen quickly so you may resume operating another windows application. Unicom will pop back up to the screen after the transfer completes.
<u>Auto Minimize on Repeat Dialing:</u>	Enable this feature to quickly remove Unicom from the screen when batch dialing systems that are typically busy. Unicom will pop back up to the screen when a connection has been established.
<u>Notification Beeps</u>	are enabled or disabled with this option. Notification beeps occur at end of file transfers and upon successful dialing. The type of notification beep is determined by the file: Unicom.SND which contains musical note and duration values.
<u>Log Filter</u>	Terminal escape codes may be filtered out of any file or printer logging operation by enabling this feature. When disabled, no filtering is performed - incoming characters are logged exactly as received. This has no effect when using the TTY terminal.
<u>Default File Transfer Protocol:</u>	Choose the protocol to be selected within the upload and download protocol selection window when transferring files.
<u>Auto File Downloading</u>	
<u>Zmodem:</u>	Controls detection of a Zmodem init packet. Unicom will initiate a Zmodem download automatically at the request of the remote computer. Enabling the option will free you from manually selecting Transfer - Download, then Zmodem anytime you wish to receive a file.
<u>CompuServe:</u>	Controls automatic detection of CompuServe B and Quick B file transfers from CompuServe. If enabled, Unicom will automatically begin download or upload operations at the request of CompuServe.
<u>Data Phone book File:</u>	Enter the name of the default phone book to be loaded each time you activate the Data Phone book.
<u>Script Editor:</u>	The filename of the script language editor of your choice should be entered here. Unicom activates this editor when the Edit, Edit Last or Create items are selected from the script menu. If this field is empty, Unicom will activate Notepad by default.
<u>AutoStart Script File:</u>	A script filename entered in this edit box will automatically execute upon each initial activation of Unicom. A blank entry or invalid filename in this field will disable the autostart feature. Script command files must be located in the directory defined by the Unicom files path.
<u>Keyboard Macro File:</u>	The filename of the default keyboard macro file should be entered here. The keyboard macro file defines the meaning of the keyboard function keys either as macros or program Hot Keys.
<u>Log File:</u>	Unicom will default to the filename entered here when file logging is activated. This name is entered in the filename edit box that is displayed when File Log is selected from the file menu.

## Program Options Setup

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Figure 25. Program Options Setup

<u>Startup Window:</u>	The startup window options control the appearance of the Unicom window upon program activation.
<u>Normal:</u>	Unicom will position and size its window on the screen according to where it was at the time of the last Save Setup. The values are stored in UNICOM.INI.
<u>Full Screen:</u>	will zoom the Unicom window to occupy the entire screen.
<u>Iconic</u>	Unicom will be activated in iconic form, the Unicom icon will be displayed at the bottom of the screen.
<u>User Keys:</u>	Controls the display of the user defined function key buttons at the bottom of the screen at program activation.
<u>Scroll Bars:</u>	When enabled, Unicom will display both horizontal and vertical scroll bars at each program activation.
<u>Logo:</u>	Controls the display of Unicom's opening logo. Disabling the option speeds program startup time. Unregistered users cannot disable this option.



## **Tools Menu Setup**

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Figure 26. Tools Menu Setup

This setup screen allows configuration of the Tools Menu with application entries of your choice. These applications are then listed by name for quick activation either from a menu selection or with a Hot Key definition. With this configuration screen, you may add many commonly used applications for a quick 'Launch' by Unicom.

Once you have selected all the desired applications, press Done to instruct Unicom to configure the Tools Menu. Unicom stores the complete path for the application in memory. If the application cannot be found (or for any other activation error) when it is selected from the menu, Unicom will automatically display this setup window.

## Custom Icon Setup

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Everyone loves icons. You may install any icon of your choice into your own custom icon tool bar. Each icon may be defined as you decide. It can activate another application, execute a script, hot key, macro or external protocol.

Icons can be created by you using an icon editor or, in many cases, obtained free from bulletin board services. Generally, any .ICO file can be used.

Unicom allows you to add, delete or modify the custom icon tool bar. Select the Custom Icons option from the setup menu. The custom icon setup screen will be displayed as in Figure 27.

Figure 27. Custom Icon Bar Setup Screen

To add a new icon, just browse through your drive using the files list box. To view a .ICO file, just select the file name in the list box with your mouse. The icon image will be displayed directly above.

To install the currently selected icon, press the Add button.  
An icon edit window will appear as shown in Figure 28.

Figure 28. Custom Icon Bar Edit Window

Field	Description
<u>Command:</u>	Defines the function to be performed when the icon is activated by a user mouse click. Valid functions are:
	HotKey Activation           "^^menuposition"
	External Protocol       "^^Ecommand line"
	Application           " ^^Xcommand line"
	Script File           "^^S"
	Macro               "text or control chars like ^M"

Description of Icon Function: Enter your own description of what your icon does into this field. It will be displayed on the status line whenever the mouse is clicked on your icon. This will help you remember what your icons do.

### Icon Filenames

Normal                   This field is automatically filled in with the file name of your selected icon.

Highlighted:   Unicom will normally invert icons when they are selected. You can override this behavior and provide a separate highlighted icon. Unicom will draw instead. This can be used for 3-d effects.                   For example, you may use the normal selection for an icon drawn in the up position. The highlighted field would be used to hold the name of the icon to be drawn in the down position.

## **Saving and Loading Settings**

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All program settings may be saved to configuration files and loaded automatically for your next Unicom session. To save all currently defined settings, select Save Setup File from the Setup menu. A file selection window will appear prompting for a new or existing filename.

Any configuration file may be loaded. Select Load Setup File from the setup menu. A file selection window will appear listing all configuration files.



