Menus in MiniTerm©
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There are seven menus in the MiniTerm Application. This document gives a brief discussion of each of the menus. More information can be gleaned from the history file and the other documentation.

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The Apple Menu

The only Miniterm item under this menu is the "**About MiniTerm...**" item. Selecting this item pops up a dialog box which gives some hints on how to use MiniTerm and the Copyright Notice. The other items are desk accessories and (if running under Multifinder) the other active applications.

The File Menu

Start Text Capture... Choosing this item brings up a standard file dialog for chosing a file name/destination. After specifying a file name and clicking the OK button all input from the host computer is captured in the text file. This provides a means for logging a session. The item changes to Stop Text Capture. In order to close the log file it is necessary to select the Stop Text Capture item in the File Menu.

Start Text Upload... Choosing this item brings up the standard file dialog for selecting a file for output. Only text files will be shown. If a file is selected and the OK button clicked, the file will be transmitted character a time to the host. One character is sent each pass through the main event loop. After selecting this item its appearance changes to Stop Text Upload. Selecting this item closes the file and stops transmission to the host.

Text File Creator Selecting this item causes a hierarchial item to pop up. This "sub" menu allows you to chose the "Creator" for text files. The current choices are EDIT for the old apple edit program, MACA for MacWrite, MSWD for Microsoft Word, and MPS for MPW.

Text File Pacing... Selecting this item bring up a dialog box which controls the speed of text file uploads. The user can choose line pacing and the pacing character. The default is that line pacing is off and the pacing character is the colon. The user can also chose a delay between characters. Setting this to a value other than zero can greatly slow down the upload. Line pacing works by refusing to send any additional characters after a carraign return until the host has responded with the pace character.

Receive Xmodem... This choice brings up a standard file dialog box and allows the user to select a name and destination for a file to be received from the host. How the received file is interpreted depends on what options have been selected from

the **Xmodem Preferences** hierarchial menu.

Send Xmodem... This choice brings up a standard file dialog box which will allow the user to select a file to be transmitted to the host via Xmodem. How the file will be transmitted depends on options made in the **Xmodem Preferences** menu.

Xmodem Preferences Selecting this item brings up a hierarchial menu which presents the user with a number of Xmodem options:

> **Macbinary** If this option is selected then if **Send Xmodem** is selected all files will be available for transmission. The files will be packaged in MacBinary II format. If this item is selected and the user is receiving a file, the received file is checked for MacBinary format and if present decoded. If the MacBinary test fails the file is saved as received ie Straight Xmodem is assumed.

> **Text** Choosing this item will only allow Text files to be displayed in the Send Xmodem dialog. In addition <cr>'s are replaced by <cr><lf> and the final Xmodem segment is filled with NUL characters. On reception <lf>'s ,NUL and CTL Z characters are discarded and the file is given the TEXT attribute and the default creator is assigned to the file.

> **Straight** Chosing this item will only allow text files to be displayed in the Send Xmodem... dialog. The file is sent as is (the data fork). On reception the file is stored as received as a TEXT file with the default creator.

> **Disable CRC** This item forces a checksum to be used rather than the more accurate CRC error detection mechanism.

> **Fast Download** This item offers a minimal improvement in throughput by ACKing a packet soon as it arrives and then dying if an error is detected. Best used if the Mac is directly connected to the host and running at high baud rates.

> **128 Byte Buffers** Chosing this item causes 128 byte packets to be used. This is the standard for "pure" Xmodem.

> **1024 Byte Buffers** Chosing this item will cause Miniterm to advertise that it understands the 1k xmodem protocol. This can yield significant performance increases if the host also understands and can use 1k packets.

> **1K Uses C Handshake** If this selected and 1024 Byte Buffers is selected. Then the initial handshake will be the character 'C'.

If your favorite bulletin board supports 1k Xmodem you need to check with the sysop to select the appropriate handshake.

1K Uses CK Handshake If this item is selected and 1024 Byte Buffers is selected then the initial handshake will be the characters "CK".If your favorite bulletin board supports 1k Xmodem you need to check with the sysop to select the appropriate handshake.

Set Xmodem Timeouts... Selecting this item brings up a dialog which allows the user to select various timeouts. The defaults are 10 seconds which are generally sufficient with 128 byte buffers. Miniterm does not time each character but instead times the entire packet after receiving the SOH. If one k packets are used or the user is working across a packet switched network some experimention may be needed.

Page Setup... This item will bring up the standard Apple page setup dialog. After the OK button is selected another dialog is brought up. This dialog allows the user to specify if a header will be printed and allows the user to specify left and bottom margins and how tabs are to be interpreted. Miniterm only supports Monaco and Courier Fonts.

Print Text File... This item will bring up a standard file dialog box with only text files displayed. Selecting a file will cause the file to be printed using the information obtained from the **Page Setup** Dialog.

Upload Postscript File... This item will bring up a standard file dialog box showing only text files. The assumption is that the file selected contains pure PostScript code. This code will be sent to the LaserWriter NO error checking is done.

Launch... This item will bring up a standard file dialog which only lists applications. Selecting an application and clicking OK will cause the application to be "launched". Note that if the user is running under multifinder that MiniTerm will be terminated.

Create A Settings File... This item will bring up a standard file dialog box which will allow the user to select a filename/destination for a new file which contains the "state" of all of the MiniTerm settings. This file has its own "type" and double clicking a settings file will cause MiniTerm to be initialized with the stored settings.

Use a Settings File... This item will bring up a standard file dialog which will only list previously created settings files (and of course folders). Selecting a settings file and clicking the OK button causes the file to be read and the stored settings to be used. There are two exceptions, The port will not be changed and the Font selection will not be changed.

Default <- Current Settings Selecting this item causes the current settings to be stored in MiniTerm. When MiniTerm is restarted without selecting a settings file the stored default settings will be used.

Default <- Factory Settings Selecting this item causes the "Factory" settings to made the default settings. This does not take effect until the next time MiniTerm is launched. These settings are fairly standard. 1200 baud,8 bits, no parity, vt100 font ,twenty four lines by eighty columns.

Quit Selecting this item causes MiniTerm to shutdown. Text file send/receive is terminated and MiniTerm exits. The modem is not hung up.

The Edit Menu

Copy This item will copy selected text to the clipboard. Text is selected by pressing the mouse button and dragging over the desired text. A selection can be extended by holding down the shift key and pressing the mouse button. A single blank delimited word can be selected by double clicking on it.

Paste This item will cause the text contents of the clipboard to transmitted to the host. The text is sent one character at a time each pass through the main event processing loop. If the selection is exactly one line long a trailing <cr> will not be sent. This will allow command line editing. The line pacing and character delay will be used just as in a text file upload.

The Options Menu

Baud This item pops up a hierarchial menu which will contain the baud rate that is in use. The default is 1200.

Parity This item pops up a hierarchial menu which displays the current parity. The default value is "No Parity". The other choices are "Even" and "Odd". The host manager can tell the user which is the appropriate choice.

Data Bits This item pops up a hierarchial menu which displays the data size. The default is Eight Bits, this setting forces No Parity to be set. The other choice is Seven Bits. The host manager can tell the user which is the appropriate choice.

Flow Control This item pops up a hierarchial menu which displays the availability of XON/XOFF flow control. The default choice is "Enabled". This means that if MiniTerm receives a XOFF character that no more characters will be sent to the host until a XON character is received from the host. Also if MiniTerm's serial input buffer is nearly filled MiniTerm will send a XOFF character to the host as a signal to not send any more characters. When the serial buffer has more room MiniTerm will send a XON character to the host as a signal that characters can be received again. If "Disabled" is picked flow control signals will not be generated or obeyed. Flow control is automatically disabled when receiving a file via Xmodem. Flow control is used if enabled while sending a file via Xmodem. Note that noise on the line could be mistaken for a XOFF character (that will never be dismissed !) This will have the effect of "locking" the keyboard. MiniTerm will beep if the user hits a key while in an XOFF state. The XOFF condition can be cleared by chosing the **Unlock Keyboard** item from the Options Menu.

BS This item pops up a hierarchial menu which shows how the Backspace Key (Delete on Mac II) will be treated. The default choice is to send the Delete character. The other choice will send a BackSpace character. (Option Backspace (Option Delete on Mac II) will always send a backspace character.)

Local Echo This item pops up a hierarchial menu which shows if keystrokes are echoed locally. The two choices are "Enabled" and "Disabled". The default choice is "Disabled". This is the proper choice for hosts which run in "Full Duplex" mode ie the host does the echoing. If the user is connected to a "Half Duplex" host then the user should chose "Enabled".

Show Clock Selecting this item causes the current time to be displayed in the Menu Bar. Selecting the item again causes the time display to be halted.

Unlock KeyBoard Selecting this item clears an XOFF state. See the discussion above under Flow Control.

Echo CR as CRLF Selecting this item which cause an incoming CR to be echoed as the pair of characters <cr> <lf>.

Read Statistics... Selecting this item pops up a dialog box which shows the maximum number of characters found in the serial port input buffer and the average number of characters returned by each read directed to the serial port. The counts are zeroed after the dialog is dismissed.

Interpret Controls If this item is checked, control characters are displayed graphically rather than executed. The font is forced to vt100. This choice is very useful in debugging protocol problems.

Reset Terminal Selecting this item causes the screen to be cleared and the scrolling region set to the entire screen. The cursor is also sent to the Home position.

Cursor Options... Selecting this item causes a dialog to appear. This dialog controls how the cursor is managed. The choices are underline (the default), or block. Blinking (the default) or non blinking. Visible (the default) or invisible.

Track Cursor Selecting this item causes the cursor coordinates to be displayed in the lower left corner of the MiniTerm window.

The Communications Menu

Phone Manager... Chosing this item causes the phone manager dialog to appear. The phone manager allows a name and an associated string (generally a phone number) to be stored as a resource in the MiniTerm application (DIAL). When the phone manager is invoked the stored names are displayed in a scrolling list. Selecting a name will cause the associated string to be displayed. If the dial button is clicked the string will be prefixed by the Hayes command ATDT (ATDP if pulse is selected) and the resulting string sent to the modem. Double clicking a name is the same as selecting a name and clicking the Dial button. If a name is selected and the Send button is clicked the associated string is sent without a prefix. This provides a primitive macro facility. If a name is selected and the Delete button is clicked the name and string are deleted. There is no auto redial capability or even a check to see if the modem is connected.

MiniTalk Manager... Chosing this item causes the Minitalk manager dialog to be invoked. Minitalk is an AppleTalk telegram service. It allows brief messages (255 characters) to be sent to other on line users of the MiniTerm application that are connected via Appletalk. When invoked the manager tries to find all of the online users of MiniTerm. Each user is known by the User Name field in the Chooser DA. This list of names is shown in a scrolling list. Selecting a name in the list selects the target user. The user can then type their message in the upper text edit box. Double clicking the name in the list or clicking the send button or hitting the enter key will send the message to the selected target. Carriage returns can be used to send multiline messages. The message will appear in the lower text edit box at the target machine. If the target is not currently using the Minitalk manager a dialog box will pop up and display the message on the target machine. If appletalk is not active the Minitalk manager will not be available.

Priority Notification If this item is checked, MiniTerm will attempt to drive the MiniTerm application to the front window in case Miniterm is running in the background under multifinder and a Minitalk message has arrived. This feature may break in a future release of the Macintosh OS.
Dec 5,6 1988 Starting with version 2.9.6 of Miniterm I have added Notification Manager routines to advise the user that a message has arrived. The old method will be used if the version of the os does not support the Notification Manager. This should fix the problem mentioned earlier. If this item is selected Notification will also be provided when Xmodem transfers complete. (see the History notes)

The Fonts Menu

The first three items are the fonts that MiniTerm can use, **Courier Monaco** and **vt100**. Vt100 is the default. The vt100 font contains vt100 graphic characters and representations of the control characters. (But only comes in one size, 9 points) MiniTerm also contains a bold version of the vt100 font which is just as wide as the plain vt100 font. Chosing a font always selects the smallest real size available in the selected font family. The last items are the sizes that are available for each of the fonts. The real fonts are "outlined" and the user is only allowed to choose a real font. My personal preference is Courier 12.

The Port Menu

This menu is a pop up menu that is invoked by holding down the mouse button while the program is being launched. The two choices are "Modem Port" (the default) and "Printer Port". Apple recommends that the Modem port be used especially at higher speeds.