# Tera Term Pro version 2.2 Help Index

Jul 2, 1997 T. Teranishi

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Tera Term (Pro) is a free software terminal emulator (communication program) which supports:

Serial port connections.

TCP/IP (telnet) connections.

VT100 emulation, and selected VT200/300 emulation.

TEK4010 emulation.

File transfer protocols (Kermit, XMODEM, ZMODEM, B-PLUS and Quick-VAN).

Scripts using the "Tera Term Language".

Japanese and Russian character sets.

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# **Copyright and Notice**

Software: Tera Term Pro version 2.2 Jul 2, 1997

**Author:** T. Teranishi

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Tera Term (Pro) is a free software.

There is no warranty for damages caused by using this application.

Without written permission by the author, you may not distribute modified packages of Tera Term, and may not distribute Tera Term for profit.

For requests, questions and bug reports, contact the author by e-mail at the following address:

teranishi@rikaxp.riken.go.jp

Please read this help and other text files carefully before you contact the author. The author will appreciate any kind of support from you if it does not put the author under some obligation.

# Acknowledgment from the author

I would like to thank everyone who sent bug reports and suggestions. I especially thank the people who have supported the development of Tera Term from very early on. I also wish to thank the following people:

Members of experimental nuclear physics groups in RIKEN and University of Tokyo for supporting the development.

Akihiro Shirahashi for helping with distribution of Tera Term and maintaining the Tera Term mailing list.

Hirofumi Fujii for giving useful information on terminal emulation and communication programming.

Luigi M Bianchi for helping with the documentation included in this package. Yukio Mitsuyama and Yoshihiro Yamato for testing Tera Term with PC-98

keyboard.

Ralf Schares for helping with the modification of the Tera Special font. Juri Tsibrovski and Serguei Lukyanov for giving information about Russian character code sets.

# **Requirements**

Supported operating systems:

MS-Windows 95 MS-Windows NT 3.51 and 4.0

**Note:** For Windows 3.1, use Tera Term ver. 1.X.

### **Emulations**

### DEC VT100 and selected features of VT200/300

ANSI escape sequences, which are not supported by VT100 (color attribute etc.), are also supported.

You can enable or disable the use of bold style font for characters with the bold attribute. You can also set the color to display them.

Characters with the blink attribute don't actually blink. Instead, you can set the color with which to display them.

Characters with double width/height and VT52 mode are not supported.

#### Tektronix TEK4010

# History

Tera Term Pro ver. 2.2 Jul 2, 1997

Bug fixes.

**Tera Term Pro ver. 2.1 Jun 30, 1997** 

Installer and uninstaller

32-bit versions of TTPMACRO.EXE and KEYCODE.EXE

Russian mode

"[Edit] Copy table", "[Setup] Load key map" and "[Window]" commands

Status line of the VT terminal

Pass-through printing

ANSI full color

New command-line options (/I, /L=<log file>, /LA=<language>, /M=<macro file> and /V)

Port number just after a host name in the command line (such as "myhost.mydomain 23")

New read-only options in the Tera Term setup file

New items in the keyboard setup file

Macro execution by pressing a user defined key

New command-line options of TTPMACRO (/I and /V)

New macro commands (see TTPMACRO.TXT)

# Tera Term Pro ver. 2.0 Jun 7, 1996

32-bit version, telnet break signal, new item in the keyboard setup file (SendBreak=), host name with a port number in the command line (such as "myhost.mydomain:23"), comment in the command line, new [Setup] Serial port dialog box and Alt+[mouse right button].

### Tera Term ver. 1.3 Jun 7, 1996

Telnet break signal, new item in the keyboard setup file (SendBreak=), host name with a port number in the command line (such as "myhost.mydomain:23"), comment in the command line, new [Setup] Serial port dialog box and Alt+[mouse right button].

### Ver. 1.2 Dec 18, 1995

English mode and Quick-VAN protocols.

### Ver. 1.1 Jul 22, 1995

### Ver. 1.0 Jul 3, 1995

ZMODEM and B-Plus protocols.

### Ver. 0.9 Apr 25, 1995

XMODEM protocol.

### Ver. 0.8 Feb 17, 1995

Macro language "Tera Term Language".

# Ver. 0.7 Jan 27, 1995

### Ver. 0.6 Oct 31, 1994

User keys.

### Ver. 0.5 Oct 3, 1994

Kermit protocol, file transfer without protocol and Kanji (JIS).

# Ver. 0.4 May 16, 1994

Keyboard setup.

### Ver. 0.3 Mar 29, 1994

Telnet option negotiation.

### Ver. 0.2 X X, 1994

Port setup dialog box and help file.

### Ver. 0.1 X X, 1994

TCP/IP connection (Winsock).

### Ver. 0.0 Feb 24, 1994

Serial port connection, Kanji (SJIS & EUC), VT100 and TEK4010.

# Q & A

For requests, questions and bug reports, contact the author by e-mail at the following address:

teranishi@rikaxp.riken.go.jp

Please read this help and other text files carefully before you contact the author.

# Frequently asked questions

### [About Tera Term]

- **Q.** How about the current situation of Tera Term for Windows 3.1?
- **A.** Tera Term version 1.X is for Windows 3.1. The development of Win 3.1 version will be continued for a while.
- **Q.** Where can I find the latest version?
- **A.** You can find it at the following sites:

ftp://riksun.riken.go.jp/pub/pc/misc/terminal/teraterm/ftp://ftp.s.u-tokyo.ac.jp/PC/terminal/teraterm/

### [Basic usage]

- **Q.** Tera Term automatically closes when I logout a telnet host. How to disable closing?
- **A.** Turn "**Auto window close**" off in the [Setup] TCP/IP dialog box.

- **Q.** I want to connect to a telnet host, but a serial port is always opened when Tera Term is started.
- **A.** Set "**Default port**" to "**TCP/IP**" in the [Setup] General dialog box.

### [Keyboard]

- **Q.** How to set the Backspace or Delete key to work for the backspace function.
- **A.** For the Backspace key, turn "**Backspace key**" on or off in the [Setup] Keyboard dialog box. For the Delete key, turn "**Delete key**" on (this may not work in some hosts).
- **Q.** How to use numeric keys in normal way?
- **A.** See "Numeric keypad".
- **Q.** How to use F1-F4 keys as VT100 PF1-PF4 keys?
- **A.** See "<u>PF1-PF4 keys of VT100</u>".
- **Q.** How to change the keyboard shortcut for the [Edit] Paste (Copy) command to Ctrl+V (Ctrl+C)?
- **A.** See "<u>User shortcut keys</u>".

### [Miscellaneous]

- **Q.** The installer does not create the Tera Term program group and shortcut icons.
- **A.** Restart the system and reinstall Tera Term, or create them by yourself.
- **Q.** The "Tera Special" font characters are not displayed properly.
- **A.** Remove the "Tera Special" font from "Fonts" of Control Panel, restart the system and reinstall Tera Term.
- **Q.** How to change the behavior of text selection by mouse double clicking?
- **A.** See "Delimiters of a word selected by double clicking".
- **Q.** The "at" command of Windows NT does not work for executing Tera Term.
- **A.** Specify "/interactive" option.

### Uninstallation

To uninstall Tera Term Pro, run "Add/Remove Programs" in Control Panel, or run **TTUNINST.EXE** in the Windows directory.

If the uninstaller does not work, you can uninstall Tera Term Pro manually. Delete all Tera Term files in the Tera Term directory and remove the "Tera Special" font from "Fonts" in Control Panel.

# Keyboard

You can change some keyboard setup items in the [Setup] Keyboard dialog box.

You can modify key assignments by editing the keyboard setup file.

# Shortcut keys

### VT window

**Tips:** <u>User shortcut keys</u>

### Alt+B

Sends a break signal to the host.

### Alt+C or Ctrl+INS

Copies selected text to the clipboard.

### Alt+N

Connects to a new host or a serial port.

### Alt+P

Prints the current screen, or the selected text.

# Alt+Q or Alt+F4

Closes Tera Term.

### Alt+R

Sends text in the clipboard to the host, and then sends a new-line code.

### Alt+T

Sends a AYT (Are You There) telnet signal to the host. Usually, the host sends back some message responding to it. This key is available only with a telnet connection.

# Alt+V or Shift+INS

Sends text in the clipboard to the host.

#### Ctrl+Esc

Switches to another window.

#### TEK window

### Alt+C or Ctrl+INS

Copies a selected portion of the screen to the clipboard.

### Alt+O

Moves to VT window.

### Alt+P

Prints the current screen, or the selected portion of the screen.

#### Alt+R

Same as VT window.

# Alt+Q or Alt+F4

Closes TEK window.

### Alt+V or Shift+INS

Same as VT window.

### Ctrl+Esc

Switches to another window.

### Meta key

When "meta key" is selected in the [Setup] Keyboard dialog, the Alt key works as the meta key in the VT window. For example in the meta-key mode, the Alt+A key sends ESC A. Shortcut keys which use the Alt key (such as Alt+C) are disabled in this mode.

### Mouse

VT window

### **Dragging with the left button**

Selects text, and copies it to the clipboard.

### **Double clicking the left button**

Selects a word, and copies it to the clipboard.

# Triple clicking the left button

Selects a line, and copies it to the clipboard.

# **Dragging with the middle button**, or

# Dragging with the right button

Selects text, copies it to the clipboard, and then sends it to the host.

# Clicking the middle button, or Clicking the right button

Sends text in the clipboard to the host.

# Double clicking the left button on the title bar

If the window size (real screen size) is not equal to the terminal size (logical size of the terminal), resizes the window to the terminal size. A further double clicking restores the original window size.

# Clicking the left button while pressing the Ctrl key

If the menu bar is hidden, the pop-up menu appears. To hide the menu bar, check the **Hide menu bar** option in the [Setup] Window dialog box.

# Dragging the window by the left button while pressing the Alt key

Moves the window, if the title bar is hidden. To hide the title bar, check the **Hide title bar** option in the [Setup] Window dialog box.

# Clicking the right button while pressing the Alt key

Minimizes the window, if the title bar is hidden.

# Dragging a text file and dropping it into the window

Sends text in the file to the host.

TEK window

### **Dragging with the left button**

Selects a portion of the screen.

Clicking the middle button, or Clicking the right button
Same as VT window.

### Clicking the left button while pressing the Ctrl key

Same as VT window.

# **Tips**

How to set up Tera Term

User shortcut keys

Numeric keypad

### PF1-PF4 keys of VT100

Log and replay functions

Tips on XMODEM

Tips on ZMODEM

Tips on B-Plus

Tips on TCP/IP connection with a port other than 23

# How to set up Tera Term

You can use commands in the [Setup] menu for normal setup. Sometimes, you may want to edit the setup file directly for detailed customizing.

You can modify key assignments by editing the keyboard setup file.

# Log and replay functions

You can log characters received from the host. Execute the [File] Log command to start logging.

To browse log files, which contain escape sequences, it is convenient to use the replay function of Tera Term. To replay a log file, run Tera Term with the following command line:

### TERATERM /R=<log file name>

The log file is displayed in the window as if the characters were received from the host.

You can also use the [File] New connection command to replay a log file.

# **Numeric keypad**

In the default setup, Tera Term emulates VT100 keyboard. Therefore some numeric keys do not work like them in other applications. For example, the "Num Lock" key does not work as "Num Lock". To disable the emulation and use numeric keys in normal way, edit the keyboard setup file **KEYBOARD.CNF** to disable every items in the [VT numeric keypad] section by using the word "off", like the following:

### [VT numeric keypad]

Num0=off

Num1=off

Num2=off

Num3=off

Num4=off

Num5=off

Num6=off

Num7=off

Num8=off

Num9=off

NumMinus=off

NumComma=off

NumPeriod=off

NumEnter=off

PF1=off

PF2=off

PF3=off

PF4=off

# PF1-PF4 keys of VT100

In the default setup, PF1-PF4 keys of VT100 are emulated by "Num Lock", "/", "\*" and "-" keys of numeric keypad. To emulate PF1-PF4 keys by F1-F4 keys of PC keyboard, edit the keyboard setup file **KEYBOARD.CNF** like the following:

### [Numeric keypad]

PF1=59

PF2=60

**PF3=61** 

PF4=62

; Key codes for F1-F4 keys are 59-62.

# [X function keys]

XF1=off

XF2=off

XF3=off

XF4=off

; XF1-XF4 items should be disabled, because

; key codes 59-62 can not be used twice in the setup file.

# **Tips on XMODEM**

The XMODEM file transfer protocol requires the communication lines to be transparent

to all 8 bit characters, from \$00 to \$FF.

For serial port:

Set the appropriate parameters in the [Setup] Serial port dialog box. **Data** must be **8** bit, and Flow control must be hard (CTS/RTS) or none.

For telnet:

If file transfers fail, try connecting to the host with the binary option. To connect with the binary option:

Specify the /B option on the command line, or

Edit the setup file.

Telnet binary option

# **Tips on ZMODEM**

The ZMODEM protocol implemented in Tera Term does not support 7 bit communication lines.

For serial port:

Set the appropriate parameters in the [Setup] Serial port dialog box. **Data** must be **8** bit.

For telnet:

If file transfers fail, try to <u>escape all control characters</u>. If that does not work, try connecting to the host with the binary option. To connect with the binary option:

Specify the /B option on the command line, or

Edit the setup file.

Telnet binary option

Setup items for ZMODEM:

Auto activation of ZMODEM Receive

**ZMODEM** parameters for sending

# **Tips on B-Plus**

The B-Plus file transfer protocol does not support 7 bit communication lines. B-Plus, as implemented in Tera Term, does not support file transfers between two PC's. You should use the B-Plus protocol to transfer files between your PC and a BBS such as CompuServe.

For serial port connections, set the appropriate parameters in the [Setup] Serial port dialog box. **Data** must be **8 bit**.

If file transfers fail, try to escape all control characters.

Setup item for B-Plus:

Auto activation of B-Plus Receive

# User shortcut keys

You can define shortcut keys for the following functions by editing items in the [Shortcut keys] and [VT function keys] sections of the keyboard setup file:

[ ]	Item in the [Shortcut keys] section	function	default key
]	EditCopy	[Edit] Copy command *1)	none
]	EditPaste	[Edit] Paste command *1)	none
]	EditPasteCR	[Edit] Paste <cr> command *1)</cr>	none
]	LineUp	Scrolls up screen by 1 line	Ctrl+Up-arro w
]	LineDown	Scrolls down screen by 1 line	Ctrl+Down-ar row
]	PageUp	Scrolls up screen by 1 page	Ctrl+PageUp
1	PageDown	Scrolls down screen by 1	Ctrl+PageDo wn

BuffTop	page Scrolls screen to buffer top	Ctrl+Home
BuffBottom	Scrolls screen to buffer bottom	Ctrl+End
NextWin	Moves to the next Tera Term window	Ctrl+Tab
PrevWin	Moves to the previous Tera Term window	Ctrl+Shift+Ta b
LocalEcho	Toggles the local echo status	none
Item in the [VT function keys] section	function	default key
Hold	Locks/unlocks the port for receiving	none
Print	[File] Print command *1)	none
Break	Sends a break signal *1)	none

<sup>\*1)</sup> System shortcut keys are asigned for these functions.

If you want to assign Ctrl+V for the **[Edit] Paste** command, edit the **EditPaste** item in the **[Shortcut keys]** section of the keyboard setup file:

# EditPaste=1071

(In case of IBM-PC/AT keyboard) See **KEYCODE.TXT** for detail.

# [File] menu

# New connection...

Connects to a new host or a serial port.

# Log...

Logs received characters to a file.

# Send file...

Sends a file to the host.

### **Transfer**

Transfers files between the PC and the host with the Kermit/XMODEM/ZMODEM/B-Plus/Quick-VAN protocols.

### Change directory...

Changes the current directory for file transfers.

### Print...

Prints the current screen, or the selected text.

### **Disconnect**

Closes the connection. If the connection type is TCP/IP and the <u>Auto window close</u> option is selected, Tera Term is also closed.

#### Exit

Closes Tera Term. If the connection is open, it is also closed.

# **New connection ([File] menu)**

Connects to a new host or a serial port. If the connection is already open, opens a new Tera Term window.

# "New connection" dialog box

#### TCP/IP

#### Host

Enter the host name or IP address, or select one from the host list. To edit the host list, use the <a href="[Setup] TCP/IP">[Setup] TCP/IP</a> command. You can enter not only the host name or address, but also the <a href="command line parameters">command line parameters</a> like the following:

**myhost.mydomain** Host name only.

myhost.mydomain:23 Host name with a port number.

**foohost.foodomain** /**F=FOOHOST.INI** Host name & setup file name.

/C=1 Specifies the serial port connection.

/**R=LOG.DAT** Replays the log file.

### **Telnet**

Enables the telnet protocol. Usually, you should select this option.

# TCP port#

Normally, you should use the TCP port number 23 for the telnet protocol.

# Note:

Only if <telnet flag> is on and <TCP port#> is 23, Tera Term starts spontaneously sending telnet commands to the host for the option negotiation when the TCP/IP connection is established. In any cases, Tera Term can respond to telnet commands sent by the host.

#### See also:

Telnet port number / Terminal setup for non-telnet connection

#### Serial

#### **Port**

Select the port (COM1, COM2, COM3, or COM4) you wish to open.

# Log ([File] menu)

Logs received characters to a file.

Log and replay functions

# "Log" dialog box (to input the log file name)

#### File Name

Enter or select the log file name.

### **Binary**

If you select this option, received characters are written without any modifications. Otherwise, new-line codes are converted and escape sequences are stripped out.

### Append

If you select this option and the specified log file already exists, received characters are appended to the file. Otherwise, the file is overwritten.

### "Log" dialog box (displayed while logging)

#### Close

The **Close** button quits logging and closes the log file.

#### Pause/Start

The **Pause** button pauses logging. The **Start** button restarts logging. These buttons function as toggles.

# Send file ([File] menu)

Sends a file to the host.

# "Send file" dialog box (to input the file name)

#### File Name

Enter or select the file name of an existing file.

### Binary

If you select this option, received characters are sent without any modifications. Otherwise, new-line codes are converted and control characters (except TAB, LF and CR) are stripped out.

# "Send file" dialog box (displayed while sending)

#### Close

The **Close** button quits sending.

#### Pause/Start

The **Pause** button pauses sending. The **Start** button restarts sending. These buttons function as toggles.

# Transfer ([File] menu)

# **Kermit**

Transfers files between the PC and the host with the Kermit protocol.

### **XMODEM**

Transfers files between the PC and the host with the XMODEM protocol.

### **ZMODEM**

Transfers files between the PC and the host with the ZMODEM protocol.

### **B-Plus**

Transfers files between the PC and the host with the B-Plus protocol.

### **Quick-VAN**

Transfers files between the PC and the host with the Quick-VAN protocol.

# **Kermit** ([File] Transfer menu)

Transfers files between the PC and the host with the Kermit protocol.

### Receive

Receives files from the host. Activate the Send command of the host's Kermit before executing this command.

# Get...

Receives files from the host, which is in the Kermit server state.

### Send...

Sends files to the host. Activate the Receive or Server command of the host's Kermit before executing this command.

### **Finish**

Exits the Kermit server state of the host.

# **Kermit Get ([File] Transfer menu)**

Receives files from the host, which is in the Kermit server state.

### "Kermit Get" dialog box

Enter the file name to be received. The received file is stored in the current directory.

# **Kermit Send ([File] Transfer menu)**

Sends files to the host. Activate the Receive or Server command of the host's Kermit before executing this command.

# "Kermit Send" dialog box

Enter or select the file names of the existing files to be sent.

# **XMODEM** ([File] Transfer menu)

Transfers files between the PC and the host with the XMODEM protocol.

### Receive...

Receives a file from the host. Activate the send command of the host's XMODEM before executing this command.

### Send...

Sends a file to the host. Activate the receive command of the host's XMODEM before executing this command.

# Tips on XMODEM

# **XMODEM Receive ([File] Transfer menu)**

Receives a file from the host with the XMODEM protocol. Activate the send command of the host's XMODEM before executing this command.

### "XMODEM Receive" dialog box

### File Name

Enter the file name to be received.

### **Option**

### Checksum/CRC/1K

The XMODEM option. Select the same option as the host's XMODEM. If you don't know the host's option, try the **Checksum** option.

#### Binary

The binary file transfer option. If you want to receive a text file, don't select this option.

### Tips on XMODEM

# **XMODEM Send ([File] Transfer menu)**

Sends a file to the host with the XMODEM protocol. Activate the receive command of the host's XMODEM before executing this command.

# "XMODEM Send" dialog box

### File Name

Enter or select the file name of the existing file to be sent.

### **Option**

### Checksum/CRC/1K

The XMODEM option. Select the same option as the host's XMODEM. If you don't know the host's option, try the **Checksum** option.

# Tips on XMODEM

# **ZMODEM** ([File] Transfer menu)

Transfers files between the PC and the host with the ZMODEM protocol.

#### Receive

Receives files from the host. Activate the send command of the host's ZMODEM before executing this command.

### Send...

Sends files to the host. Activate the receive command of the host's ZMODEM before executing this command.

### Tips on ZMODEM

# **ZMODEM Send** ([File] Transfer menu)

Sends files to the host. Activate the receive command of the host's ZMODEM before executing this command.

# "ZMODEM Send" dialog box

Enter or select the file names of the existing files to be sent.

#### **Binary**

The binary file transfer option. If you want to send text files, don't select this option.

### Tips on ZMODEM

# **B-Plus** ([File] Transfer menu)

Transfers a file between the PC and the host with the B-Plus protocol.

### Receive

Receives a file from the host. Activate the download command of the host

before executing this command.

### Send...

Sends a file to the host. Activate the upload command of the host before executing this command.

## Tips on B-Plus

# **B-Plus Send ([File] Transfer menu)**

Sends a file to the host with the B-Plus protocol. Activate the upload command of the host before executing this command.

### "B-Plus Send" dialog box

Enter or select the file name of the existing file to be sent.

### Tips on B-Plus

# Quick-VAN ([File] Transfer menu)

Transfers files between the PC and the host with the Quick-VAN protocol.

Note: Quick-VAN protocol is used in the Japanese BBS "PC-VAN".

### Receive

Receives files from the host. Activate the download command of the host before executing this command.

### Send...

Sends files to the host. Activate the upload command of the host before executing this command.

# **Quick-VAN Send ([File]Transfer menu)**

Sends files to the host with the Quick-VAN protocol. Activate the upload command of the host before executing this command.

# "Quick-VAN Send" dialog box

Enter or select the file names of the existing files to be sent.

# Change directory ([File] menu)

Changes the current directory for file transfers.

# "Change directory" dialog box

Enter a new directory name.

# Print ([File] menu)

"Print" dialog box

# **Print Range**

If you choose **All**, the current screen is printed.

If you choose **Selection**, the selected text is printed.

# [Edit] menu

### Copy

Copies selected text to the clipboard.

**Note:** Normally, you don't need to use this command, because dragging text automatically copies text to the clipboard (see <u>mouse usage</u>). Use this command to re-copy selected text to the clipboard.

# Copy table

Copies selected text to the clipboard. If the copied text consists of words, each space between words is converted to a Tab character. If you copy a table on the screen by using this command, you can paste it into a spread sheet application, like Excel.

#### **Paste**

Sends text in the clipboard to the host.

#### Paste<CR>

Sends text in the clipboard to the host, and then sends a new-line code.

#### Clear screen

Erases the screen.

### Clear buffer

Erases the scroll buffer and the screen.

# [Setup] menu

# Terminal...

Changes the terminal emulation setup.

# Window...

Changes the window setup.

### Font...

Changes the font.

### Keyboard...

Changes the keyboard setup.

### Serial port...

Changes the serial port parameters.

# **TCP/IP...**

Changes the TCP/IP setup.

# General...

Changes the miscellaneous setup.

## Save setup...

Saves the current setup to a <u>Tera Term setup file</u>.

### Restore setup...

Restores setup data from a Tera Term setup file.

# Load key map...

Load a keyboard configuration from a keyboard setup file.

# **Terminal** ([Setup] menu)

"Terminal setup" dialog box

### **Terminal size**

The logical size of the terminal (numbers of columns and lines). Note that the window size (real screen size) is not necessarily equal to the terminal size.

### Term size = win size

Forces the terminal size to be always equal to the window size.

### Auto window resize

When the terminal size is changed, resizes the window to the terminal size.

## **New-line (receive)**

If the **CR+LF** option is selected, received CR (\$0D) characters are converted to CR+LF (\$0D \$0A) pairs.

### **New-line (transmit)**

If the **CR+LF** option is selected, CR (\$0D) characters to be sent are converted to CR+LF (\$0D \$0A) pairs before they are actually sent.

#### Terminal ID

Terminal ID to be reported to the host when the host requests it. Note that the terminal ID is not identical to the telnet terminal type. To change the telnet terminal type, use the **[Setup] TCP/IP** command.

#### Local echo

Enables local echoing of characters sent.

#### Answerback

The string to be answerd back to the host, when the ENQ (\$05) character is received. Each non-printable character in the string can be expressed as a "\$" and ASCII code in two-character hex number. For example, the string "ABC<CR><LF>" is expressed as the following:

### ABC\$0D\$0A

### **Auto switch (VT<->TEK)**

Enables auto switching between VT and TEK emulations.

### Help for Russian mode

# Terminal ([Setup] menu; Russian mode)

# "Terminal setup" dialog box

#### Terminal size

The logical size of the terminal (numbers of columns and lines). Note that the window size (real screen size) is not necessarily equal to the terminal size.

### Term size = win size

Forces the terminal size to be always equal to the window size.

#### Auto window resize

When the terminal size is changed, resizes the window to the terminal size.

### **New-line (receive)**

If the **CR+LF** option is selected, received CR (\$0D) characters are converted to CR+LF (\$0D \$0A) pairs.

### **New-line (transmit)**

If the **CR+LF** option is selected, CR (\$0D) characters to be sent are converted to CR+LF (\$0D \$0A) pairs before they are actually sent.

### **Terminal ID**

Terminal ID to be reported to the host when the host requests it. Note that the terminal ID is not identical to the telnet terminal type. To change the telnet terminal type, use the **[Setup] TCP/IP** command.

#### Local echo

Enables local echoing of characters sent.

#### **Answerback**

The string to be answerd back to the host, when the ENQ (\$05) character is received. Each non-printable character in the string can be expressed as a "\$" and ASCII code in two-character hex number. For example, the string "ABC<CR><LF>" is expressed as the following:

#### ABC\$0D\$0A

# **Auto switch (VT<->TEK)**

Enables auto switching between VT and TEK emulations.

### Character set

Host

Russian character set used in the host computer. **KOI-8** or **Windows** (code page 1251).

Client

Russian character set used in your PC. **KOI-8** or **Windows** (code page 1251). If you are using Russian version of Windows, you should select **Windows**.

# Window ([Setup] menu)

"Window setup" dialog box

#### Title

Text displayed in the window title.

# **Cursor shape**

Cursor shape. Block, Vertical line or Horizontal line.

### Hide title bar

Hides the title bar and menu bar. You can move the window by dragging it with the left mouse button while pressing the Alt key. You can minimize the window by clicking the right mouse button while pressing the Alt key. Clicking the left mouse button while pressing the Ctrl key causes the pop-up menu to appear.

#### Hide menu bar

Hides the menu bar. Clicking the left mouse button while pressing the Ctrl key causes the pop-up menu to appear.

#### **Full color**

Enables the full color emulation. In this mode, the bold (blink) attribute is used as a color attribute bit for text (background). This option increases the number of colors for text and background specified by escape sequences twice, from 8 to 16.

#### Scroll buffer

Enables the scroll buffer. If enabled, the number of lines in the scroll buffer (including the displayed area) can be specified. The maximum number of lines is 10000. If memory is not enough, this value is reduced automatically.

#### Color

**Text** 

Text color.

### **Background**

Background color.

#### Attribute

Attribute of characters (**Normal**, **Bold** or **Blink**) whose colors are being changed.

#### Reverse

Exchanges the text color and background color.

# Font ([Setup] menu)

Changes the font.

# "Font setup" dialog box

**Font** 

Select a font from the list.

Size

Select a font size in points.

### **Enable bold style**

Enables the use of bold style font for characters with the bold attribute.

#### **Note:**

The Tera Special font, which is included in the distribution package, can not be selected in this dialog box. It is used automatically by Tera Term.

# Help for Russian mode

# Font ([Setup] menu; Russian mode)

Changes the font.

"Font setup" dialog box

**Font** 

Select a font from the list.

Size

Select a font size in points.

### Enable bold style

Enables the use of bold style font for characters with the bold attribute.

### **KOI-8** font

You should check this option only if the selected font is a Russian KOI-8 font. Note that fonts which come with Russian Windows are not KOI-8 fonts.

#### Note:

The Tera Special font, which is included in the distribution package, can not be selected in this dialog box. It is used automatically by Tera Term.

# **Keyboard** ([Setup] menu)

# "Keyboard setup" dialog box

### **Transmit DEL by:**

# **Backspace key**

If this option is checked, pressing the backspace key sends the DEL character (ASCII 0x7F). If not checked, the BS character (ASCII 0x08) is sent. Even if this option is (not) checked, the BS (DEL) character can be sent by pressing the Ctrl+backspace key.

### **Delete key**

If this option is checkd, pressing the Delete key sends the DEL character. If not checked, the function assigned for the Delete key is determined by <u>the keyboard setupfile</u>.

### Meta key

Enables the meta-key mode. The Alt key is used as the meta key. For example, the sequence ESC A is sent by pressing the Alt+A key. Shortcut keys which use the Alt key (such as Alt+C) are disabled.

You can modify key assignments by editing the keyboard setup file.

### Help for Russian mode

# **Keyboard** ([Setup] menu; Russian mode)

"Keyboard setup" dialog box

### **Transmit DEL by:**

### **Backspace** key

If this option is checked, pressing the backspace key sends the DEL character (ASCII 0x7F). If not checked, the BS character (ASCII 0x08) is sent. Even if this option is (not) checked, the BS (DEL) character can be sent by pressing the Ctrl+backspace key.

### **Delete key**

If this option is checkd, pressing the Delete key sends the DEL character. If not checked, the function assigned for the Delete key is determined by <u>the keyboard setupfile</u>.

### **Keyboard**

Russian keyboard driver type. If you are using the standard keyboard driver

which comes with Russian Windows, select **Windows**. If you are using non-Russian Windows and using a driver which generates KOI-8 code, select **KOI-8**.

### Meta key

Enables the meta-key mode. The Alt key is used as the meta key. For example, the sequence ESC A is sent by pressing the Alt+A key. Shortcut keys which use the Alt key (such as Alt+C) are disabled.

You can modify key assignments by editing the keyboard setup file.

# Serial port ([Setup] menu)

"Serial port setup" dialog box

### **Port**

Serial port to be used.

# Data, Stop, Baud rate, Flow control, and Parity

Serial port parameters. Choose the appropriate parameters for the modem or the host.

**Note:** If **Data** is **7 bit**, the XMODEM, ZMODEM, B PLUS and Quick-VAN protocols are disabled. If **Flow control** is **Xon/Xoff**, the XMODEM and Quick-VAN protocols are disabled.

# Transmit delay

Time intervals between characters (lines) being sent, in milliseconds.

# TCP/IP ([Setup] menu)

# "TCP/IP setup" dialog box

### **Host list**

You can edit here the host list to be displayed in the <a>[File]</a> New connection dialog box. It is convenient to add your favorite hosts to the list. You can add not only host names and IP addresses, but also the <a>command line parameters</a> like the following:

myhost.mydomain Host name only.
myhost.mydomain:23 Host name with a port number.
foohost.foodomain /F=FOOHOST.INI Host name & setup file name.
/C=1 Specifies the serial port connection.

### **/R=LOG.DAT** Replays the log file.

### Auto window close

Closes Tera Term when the connection is closed.

# TCP port#

TCP port number. Normally, port number 23 is used for the telnet protocol.

### **Telnet**

Enables the telnet protocol. Usually, you should select this option.

# Terminal type

Terminal type to be reported to the host when the telnet connection is established.

# General ([Setup] menu)

# "General setup" dialog box

# **Default port**

Default port type (**TCP/IP** or **Serial**) to be used when Tera Term is run without command line parameter.

### Language

Language mode (English, Japanese or Russian) of the terminal emulation.

# Save setup ([Setup] menu)

Saves the current setup to the Tera Term setup file.

### "Save setup" dialog box

Enter or select the setup file name. If the file already exists, it is overwritten. If you omit the file name extension, the extension ".INI" is used.

# **Restore setup ([Setup] menu)**

Restores the setup from the <u>Tera Term setup file</u>.

# "Restore setup" dialog box

Enter or select the file name of the existing setup file. If you omit the file name extension, the extension ".INI" is assumed.

# Load key map ([Setup] menu)

Load a keyboard configuration from a keyboard setup file.

# "Load key map" dialog box

Enter or select the file name of the existing keyboard setup file. If you omit the file name extension, the extension ".CNF" is assumed.

# [Control] menu

### **Reset terminal**

Resets various terminal modes.

### Are you there

Sends a AYT (Are You There) telnet signal. Usually, the host sends back some message responding to it. This command is available only with a telnet connection.

### Send break

Sends a break signal to the host.

# Reset port

Resets the serial port. This command is available only with a serial connection.

# **Open TEK**

Opens the TEK window.

#### Close TEK

Closes the TEK window.

#### Macro

Runs a macro file.

# [Window] menu

You can activate one of existing Tera-Term windows by selecting it from the list in this menu. At most 9 windows can be listed in this menu. If actual number of windows exceeds 9 and you want to activate a window which is not in the list, use the **Window** command at the bottom of this menu.

# Window...

Activates or closes a Tera-Term window.

# Window ([Window] menu)

Activates or closes a Tera-Term window.

# "Window list" dialog box

### Window

List of existing Tera-Term windows. Select one from the list.

# **Open**

Activates the selected window and closes this dialog box.

### **Close window**

Closes the selected window.

# [Help] menu

### Index

Displays this help.

# Using help

Displays the help about Windows Help.

# About Tera Term...

Displays information about Tera Term.

# **TEK window commands**

[File] menu

[Edit] menu

[Setup] menu

# [VT-window] menu

Moves to VT window.

[Window] menu

[Help] menu

# [File] menu (TEK window)

### Print...

Prints the current screen, or the selected portion of the screen.

#### Exit

Closes the TEK window.

# Print (TEK window [File] menu)

# "Print" dialog box

# **Print Range**

If you choose **All**, the current screen is printed.

If you choose **Selection**, the selected portion of the screen is printed.

# [Edit] menu (TEK window)

# Copy

Copies a selected portion of the screen to the clipboard.

### Copy screen

Copies the screen to the clipboard.

### **Paste**

Sends text in the clipboard to the host.

#### Paste<CR>

Sends text in the clipboard to the host, and then send a new-line code.

#### Clear screen

Erases the screen.

# [Setup] menu (TEK window)

# Window...

Changes the window setup.

### Font...

Changes the font.

# Window (TEK window [Setup] menu)

# "Window setup" dialog box

#### Title

Text displayed in the window title.

### **Cursor shape**

Cursor shape. Block, Vertical line or Horizontal line.

#### Hide title bar

Hides the title bar and menu bar. You can move the window by dragging it with the left mouse button while pressing the Alt key. You can minimize the window by clicking the right mouse button while pressing the Alt key. Clicking the left mouse button while pressing the Ctrl key causes the pop-up menu to appear.

#### Hide menu bar

Hides the menu bar. Clicking the left mouse button while pressing the Ctrl key, causes the pop-up menu to appear.

### **Color emulation**

Enables the emulation of colors for text and graphics.

Note: Enabling this option consumes larger amount of memory.

### Color

**Text** 

Text color.

### **Background**

Background color.

### Reverse

Exchanges text color and background color.

# Font (TEK window [Setup] menu)

Changes the font.

"Font setup" dialog box

#### **Font**

Select a font from the list.

Select a font size in points.

# [Help] menu (TEK window)

#### **Index**

Displays this help.

### Using help

Displays the help about Windows Help.

### About Tera Term...

Displays information about Tera Term.

# Tera Term setup file

Tera Term is initialized by information contained in the setup file when Tera Term is started, or when the [Setup] Restore setup command is executed. The file name of the setup file can be specified as a command line parameter of Tera Term. If you omit the file name, the defult file name **TERATERM.INI** is used. If you omit the file name extention, the default extension ".INI" is used.

To save the current setup into the setup file, execute the [Setup] Save setup command.

# Read-only options in the Tera Term setup file

You need to edit the Tera Term setup file directly to change the following setup items:

### **Terminal emulation**

Disabling the C1 (ASCII \$80-\$9F) control characters

Displaying all received characters

Mouse code in TEK GIN report

#### Window

Disabling auto text copying new

Delimiters of a word selected by double clicking new

Disabling the pop-up menu new

Hiding the "Show menu bar" command new

Disabling the language mode selectionnew

Maximum scroll buffer size new

Nonblinking cursor new

Maximum number of lines to move in a jump scrolling

Disabling text selection when the window is activated by mouse new

Actual colors of "whilte" and "black" colored text

Space between characters (lines)

Hiding the [Window] menu new

#### Communication

Disabling the warning on TCP/IP disconnection

Telnet binary option

Telnet echo option new

Telnet log

Telnet port number / Terminal setup for non-telnet connection

new

### File transfer

Auto activation of B-Plus Receive

Escaping all control characters in the B-Plus protocol

B-Plus log new

Kermit log

XMODEM log

Auto activation of ZMODEM Receive

Parameters for ZMODEM sending

Escaping all control characters in the ZMODEM protocol

**ZMODEM** log

# **Printing**

Printer font

Page margins new

Scaling factors for printing new

### Miscellaneous

Beep sound on connection new Executing a macro on startup new

# Disabling the C1 (ASCII \$80-\$9F) control characters

If you choose the **Terminal ID** to be "**VT2XX**" or "**VT3XX**" in the [Setup] Terminal dialog box, characters in range of ASCII \$80-\$9F are interpreted as the C1 control characters. You can disable this interpretation and make these characters visible on the screen (if you are using a font which supports these characters), by adding the following line to the [**Tera Term**] section of the setup file:

### Accept8BitCtrl=off

Default:

#### Accept8BitCtrl=on

# Disabling auto text copying

If you select text by mouse, it is copied to the clipboard at the same time. To disable the auto text copying, add the following line to the [**Tera Term**] section of the setup file:

AutoTextCopy=off

Default:

AutoTextCopy=on

**Beep sound on connection** 

To enable a beep sound which is made when a TCP/IP connection is established and when the connection is terminated, add the following line to the **[Tera Term]** section of the setup file:

**BeepOnConnect=on** 

Default:

BeepOnConnect=off

#### **Auto activation of B-Plus Receive**

To enable the auto activation of the B-Plus Receive command, add the following line to the **[Tera Term]** section of the setup file:

#### **BPAuto=on**

If you run the B-Plus Send command in the host, the B-Plus Receive command of Tera Term is automatically activated.

Default:

**BPAuto=off** 

# **Escaping all control characters in the B-Plus protocol**

To escape all control characters in the B-Plus file transfer, add the following line to the **[Tera Term]** section of the setup file.

BPEscCtl=on

Default:

BPEscCtl=off

## **B-Plus log**

To log data packets of B-Plus to the file **BPLUS.LOG**, add the following line to the **[Tera Term]** section of the setup file:

BPLog=on

Default:

**BPLog=off** 

## Disabling the warning on TCP/IP disconnection

In the default setup, Tera Term displays the warning message "Disconnect?" when you try to close the TCP/IP connection by using the "Close" command in the system menu (or by double clicking the icon at upper left corner of the window). To disable this warning message, add the following line to the [Tera Term] section of the setup file:

ConfirmDisconnect=off

Default:

ConfirmDisconnect=on

# Displaying all received characters

To display all received characters (including control characters) on the screen, add the following line to the **[Tera Term]** section of the setup file:

#### Debug=on

If you press Shift+Esc, Tera Term enters the debug mode, in which all received characters are displayed on the screen. If you press Shift+Esc again in the debug mode, Tera Term returns to the normal mode.

In the debug mode, received characters are displayed by the following way:

ASCII code of Displaying

the character form \$00 - \$1F ^@ - ^\_ s20 - \$7E normal character

\$7F **<DEL>** \$80-\$FF MSB of the

turned to be 0 and displayed by the same way as one for \$00-\$7F characters, except that text is displayed in the reversed color.

ASCII code is

Default:

Debug=off

### Delimiters of a word selected by double clicking

You can select a word by double clicking it with the left mouse button. You can specify delimiter characters for the word selection by adding the following line to the [**Tera Term**] section of the setup file:

#### **DelimList=<delimiter characters>**

For example:

#### **DelimList=<>()[]**

specifies 6 delimiter characters "<", ">", "(", ")", "[" and "]".

Note that the space and "\$" characters should be specified as "\$20" and "\$24":

**DelimList=\$20**; space character

Default:

DelimList=\$20!"#\$24%&'()\*+,-./:;<=>?@[\]^`{|}~

In the DelimList line, only singe-byte code characters can be specified. Double-byte code characters (Japanese kanji) are regarded as delimiters. You can make them be

non-delimiters by adding the following line:

DelimDBCS=off

Default:

DelimDBCS=on

If you prefer the word selection behavior of earlier Tera Term versions, specify like the following:

DelimList=\$20 DelimDBCS=off

## Disabling the pop-up menu

When the menu bar is hidden, clicking the left mouse button while pressing the Ctrl key causes the pop-up menu to appear. To diable the pop-up menu, add the following line to the **[Tera Term]** section of the setup file:

EnablePopupMenu=off

Default:

EnablePopupMenu=on

# Hiding the "Show menu bar" command

When the menu bar is hidden, the "Show menu bar" command appears in the system menu. To hide the "Show menu bar" command, add the following line to the [Tera Term] section of the setup file:

EnableShowMenu=off

Default:

EnableShowMenu=on

# **Kermit log**

To log data packets of Kermit to the file **KERMIT.LOG**, add the following line to the **[Tera Term]** section of the setup file:

KmtLog=on

Default: **KmtLog=off** 

## Disabling the language mode selection

To disable the language mode selection in the [Setup] General dialog box, add the following line to the [Tera Term] section of the setup file:

LanguageSelection=off

Default:

LanguageSelection=on

#### Maximum scroll buffer size

You can change the maximum scroll buffer size, which can be specified in the [Setup] Window dialog box, by adding the following line to the [Tera Term] section of the setup file:

**MaxBuffSize=<number of lines>** (should be less than or equal to 100000)

Note: Tera Term consumes < number of lines> \* < terminal width> \* 2 bytes of memory for the scroll buffer.

Default:

MaxBuffSize=10000

# **Nonblinking cursor**

You can make the cursor nonblinking by adding the following line to the **[Tera Term]** section of the setup file:

NonblinkingCursor=on

Default:

NonblinkingCursor=off

**Printer font** 

In the default setup, the font used for printing is the same as one for displaying text on the screen. You can specify a font for printing, by doing the following procedure:

- 1) Change the font for displaying text by using the [Setup] Font command and print text.
- 2) If you find a nice font for printing, save the current setup to the setup file by using the **[Setup] Save setup** command.
- 3) In the **[Tera Term]** section of the setup file, add a line which starts with "**PrnFont=**". Copy parameters of the "**VTFont=**" line (for example "**Terminal,0,13,1**") to the "**PrnFont=**" line.
- 4) Restore the font for displaying text.

Example:

PrnFont=Terminal,0,13,1

Default:

PrnFont=

## Page margins

You can specify the left, right, top and bottom margins of a page for printing by adding the following line to the **[Tera Term]** section of the setup file:

PrnMargin=<left>,<right>,<top>,<bottom>

These margins should be specified in unit of 1/100 inches.

Default:

PrnMargin=50,50,50,50

# Maximum number of lines to move in a jump scrolling

To change the maximum number of lines to move in a jump scrolling, add the following line to the **[Tera Term]** section of the setup file:

ScrollThreshold=<number of lines>

Default:

#### ScrollThreshold=12

## Disabling the text selection when the window is activated by mouse

When the window is inactive, you can activate the window by clicking the text area of window. In the default setup, the text selection is started by this mouse clicking at the same time. To disable the text selection when the window is activated by mouse, add the following line to the **[Tera Term]** section of the setup file:

SelectOnActivate=off

Default:

SelectOnActivate=on

#### **Executing a macro on startup**

A macro can be executed automatically when Tera Term is started. You can specify the macro filename by using the command line option "/M=<macro file>" or by adding the following line to the [Tera Term] section of the setup file:

StartupMacro=<macro file>

Default:

StartupMacro=

# Mouse code in TEK GIN report

In TEK GIN mode, the cross hair cursor appears in the TEK window. When you press a key or click the left mouse button, the key code (ASCII code) is sent with the the coordinate of the cursor.

You can change the key code for the left mouse button by adding the following line to the **[Tera Term]** section of the setup file:

TEKGINMouseCode=<key code>

Default:

TEKGINMouseCode=32

(ASCII code 32 corresponds to the space character.)

## **Telnet binary option**

To enable the telnet binary option, add the following line to the **[Tera Term]** section of the setup file:

#### TelBin=on

You can also specify the binary option on the <u>command line</u> (/B option).

Default:

TelBin=off

### **Telnet echo option**

If you add the following line:

#### TelEcho=on

to the **[Tera Term]** section of the setup file, Tera Term tries to change the host's echoing (remote echoing) status, depending on the status of "**Local echo**" option in the [Setup] Terminal dialog box. If "**Local echo**" is (not) checked, Tera Term tries to make the remote echoing off (on), to avoid double echoing or no echoing at the remote host and Tera Term. Note that this mechanism does not work for hosts which do not support the telnet echo option.

Default:

TelEcho=off

# **Telnet log**

To log option-negotiation data of a telnet session to the file **TELNET.LOG**, add the following line to the **[Tera Term]** section of the setup file:

TelLog=on

Default:

TelLog=off

## **Telnet port number**

On the <u>command line</u>, or on the <u>[File] New connection</u> dialog box, you can specify the TCP port number (<TCP port#>) and telnet flag (<telnet flag>) for a TCP/IP connection. If these parameters are omitted in the command line, the default values are taken from the Tera Term setup file.

Only if <telnet flag> is 1 (on) and <TCP port#> is 23, Tera Term starts spontaneously sending telnet commands to the host for the option negotiation when the TCP/IP connection is established.

This particular port number for telnet, 23, can be changed by adding the following line to the **[Tera Term]** section of setup file:

### **TelPort=<telnet port#>**

Default:

TelPort=23

Whatever <TCP port#> is and whatever <telnet flag> is, Tera Term can respond to telnet commands sent by the host.

## **Terminal setup for non-telnet TCP/IP connection**

For a non-telnet TCP/IP connection (usually with a port other than 23), you may need to set the "local echo" option on, and the "new-line (transmit)" option to **CR+LF**. If you add the following lines to the **[Tera Term]** section of the setup file:

TCPLocalEcho=on
TCPCRSend=CRLF (CR is also acceptable)

the "local echo" option is turned on and the "new-line (transmit)" option is set to CRLF automatically when the connection is establised on condition that <telnet flag> is 0 (off), or <TCP port#> is not equal to <telnet port#>. Otherwise, setup values specified by [Setup] Terminal are used. By using these options, one setup file can support both the telnet connection and non-telnet connection.

#### Default:

**TCPLocalEcho=off** (This option is disabled and the "local echo" option in the [Setup] Terminal dialog box is always used.)

**TCPCRSend=** (This option is disabled and the "new-line (transmit)" option in the [Setup] Terminal dialog box is always used.)

Actual colors of "white" and "black" colored text

The escape sequences "<ESC>[37m" and "<ESC>[30m" make the text color white and black, respectively. Similarly, the escape sequences "<ESC>[47m" and "<ESC>[40m" make the background color white and black, respectively.

Some applications assume that the screen background is black (like real VT100 terminal), and expect that white colored text is visible. However, the default background color of Tera Term is white, and therefore white colored text is invisible.

If you add the following line:

#### UseTextColor=on

to the **[Tera Term]** section of the setup file, the actual color of "white" colored text (background) becomes a color for "**Text**" ("**Background**") specified in the [Setup] Window dialog box. Similarly, the actual colors for "black" text (background) becomes a color for "**Background**" ("**Text**").

Default:

UseTextColor=off

#### **Space between characters (lines)**

To change space between characters (lines), add the following line to the **[Tera Term]** section of the setup file:

#### **VTFontSpace=**<**dx1>**,<**dx2>**,<**dy1>**,<**dy2>**

#### Where:

**dx1>** Left side space for each character in pixels. **dx2>** Right side space for each character in pixels.

**<dy1>** Space above each line in pixels.

<dy2> Space below each line in pixels.

#### Example:

**VTFontSpace=0,1,0,0** 1 pixel of right side space for each character.

**VTFontSpace=0,0,1,0** 1 pixel of space above each line.

Default:

VTFontSpace=0,0,0,0

## **Scaling factors for printing**

When a printed image is too small or too large, usually you can enlarge or shrink the image by changing the scaling factor in the "Printer" section of Control Panel. If the printer driver does not support scaling, you can specify scaling factors in the Tera Term setup file. To specify scaling factors for the VT and TEK windows, add the following lines to the **[Tera Term]** section of the setup file:

VTPPI=<pixels per inch> ; for the VT window TEKPPI=<pixels per inch> ; for the TEK window

The scaling factor should be specified in unit of pixels per inch. If the printed image is too small (large), increase (decrease) the scaling factor.

Default:

VTPPI=

TEKPPI=

## Hiding the [Window] menu

To hide the [Window] menu, add the following line to the **[Tera Term]** section of the setup file:

WindowMenu=off

Default:

WindowMenu=on

# **XMODEM log**

To log data packets of XMODEM to the file **XMODEM.LOG**, add the following line to the **[Tera Term]** section of the setup file:

XmodemLog=on

Default:

XmodemLog=off

#### **Auto activation of ZMODEM Receive**

To enable the auto activation of the ZMODEM Receive command, add the following line

to the **[Tera Term]** section of the setup file:

#### **ZmodemAuto=on**

If you run the ZMODEM Send command in the host, the ZMODEM Receive command of Tera Term is automatically activated.

Default:

ZmodemAuto=off

### **Parameters for ZMODEM sending**

You can change the ZMODEM parameters for sending by adding the following lines to the [**Tera Term**] section of the setup file:

**ZmodemDataLen=<data sub packet length in bytes>** 

ZmodemWinSize=<window size for sending in bytes>

Note that these parameters does not affect ZMODEM receiving.

The maximum data sub packet length is 1024. Usually the larger packet length causes the faster sending speed.

The maximum window size is 32767. Usually the larger window size causes the faster sending speed. If you want to set the window size to infinity, specify a minus value (e.g. -1).

If the communication line has problems in the flow control or error correction, or the data processing power of the host is extremely low, decreasing the packet length or window size may improve speed and stability of file sending.

Default:

ZmodemDataLen=1024 ZmodemWinSize=32767

# **Escaping all control characters in the ZMODEM protocol**

To escape all control characters in the ZMODEM file transfer, add the following line to the [**Tera Term**] section of the setup file.

**ZmodemEscCtl=on** 

Default:

**ZmodemEscCtl=off** 

#### **ZMODEM log**

To log data packets of ZMODEM to the file **ZMODEM.LOG**, add the following line to the **[Tera Term]** section of the setup file:

```
ZmodemLog=on
```

```
Default:
```

**ZmodemLog=off** 

#### **Command line (shortcut link) format**

```
TTERMPRO [<host>[[:]<TCP port#>]]
       [/B] [/C=<serial port#>]
       [/F=<setup file>] [/FD=<file transfer directory>]
       [/H] [/I] [/K=<keyboard setup file>]
       [/KR=<kanji code (receive)>] [/KT=<kanji code (transmit)>]
       [/L=<log file>] [/LA=<language>] [/M=<macro file>]
       [/P=<TCP port#>] [/R=<replay file>] [/T=<telnet flag>]
       [/V] [/W=''<window title>'']
       [/X=<window pos (x)] [/Y=<window pos (y)]
       [;<comment>]
  where:
        <host>
                           Host name or IP address.
        <host>:<TCP port#>
                                  <host> with a TCP port number.
                ":" is placed between <host> and <TCP port#>.
                                  <host> with a TCP port number.
       <host> <TCP port#>
                                                                    new
               Space character(s) between <host> and <TCP port#>.
               Number just after <host> is interpreted as a port number.
       /B
             Telnet binary option.
       /C=<serial port#>
          /C=1 COM1
```

```
/C=3 COM3
  /C=4 COM4
/F=<setup file>
  /F=TERATERM.INI (default)
/FD=<file transfer directory>
/H
     Hide title bar.
/I
     Start Tera Term in iconized state.
                                     new
/K=<keyboard setup file>
  /K=KEYBOARD.CNF (default)
/KR=<kanji code (receive)>
                               Note: Japanese mode only
  /KR=SJIS
  /KR=EUC
  /KR=JIS
/KT=<kanji code (transmit)>
                               Note: Japanese mode only
  /KT=SJIS
  /KT=EUC
  /KT=JIS
/L=<log file>
                  Start Tera Term with logging.new
/LA=<language>
                  Language mode.
                                     new
  /LA=E
           English
  /LA=J
           Japanese
  /LA=R
           Russian
/M=<macro file>
                  Start Tera Term with macro. new
/P=<TCP port#>
/R=<replay file>
/T=<telnet flag>
  T=1
           Enable telnet
  T=0
           Disable telnet
```

/**C=2** COM2

```
/V
            Start Tera Term in hidden (invisible) state. new
       /W="<window title>"
       X = < window position(x) >
       /Y=<window position (y)>
       ;<comment>Comment. Should be last in the command line.
Example:
       TTERMPRO
       TTERMPRO myhost.mydomain
       TTERMPRO myhost.mydomain:23
       TTERMPRO myhost.mydomain 23
       TTERMPRO 111.111.11.11
       TTERMPRO myhost.mydomain /T=0 /P=7
       TTERMPRO /C=1
       TTERMPRO /F=TELNET.INI
       TTERMPRO foohost.foodomain /F=FOOHOST.INI
       TTERMPRO /C=2 /F=MYSETUP.INI
       TTERMPRO /K=MYKEY.CNF /W="My host"
       TTERMPRO /R=README.TXT; replay a file
       TTERMPRO myhost /B /X=100 /Y=50
Default values
       Following default values are stored in the Tera Term setup file:
              <TCP port#>
              /B
              <serial port#>
              <file transfer directory>
              <kanji code (receive)>
              <kanji code (transmit)>
              <language>
              <macro file>
              <telnet flag>
              <window title>
              <window pos (x)>
              <window pos (y)>
       Only if <telnet flag> is 1 (on) and <TCP port#> is 23, Tera Term starts
```

Note:

spontaneously sending telnet commands to the host for the option negotiation when the TCP/IP connection is established. In any cases, Tera Term can respond to telnet commands sent by the host.

See also:

Telnet port number / Terminal setup for non-telnet connection

#### **Keyboard setup file**

The keyboard setup file assigns keys on PC keyboard for various functions such as VT terminal functions, sending user defined character strings, Tera Term commands and executing macro files.

The default keyboard setup stored in the file **KEYBOARD.CNF** is almost compatible with VT terminal keyboard. You can modify key assignments by editing the file. See **KEYCODE.TXT** for the format of keyboard setup file.

The file name of keyboard setup file to be loaded by Tera Term can be specified as a <u>command line</u> parameter of Tera Term. If you omit the file name extension, the default extension ".CNF" is assumed. If you omit the file name, the default file **KEYBOARD.CNF** is loaded.

The distribution package contains the following keyboard setup files:

IBMKEYB.CNF	Sample file for the
	IBM-PC/AT 101-key
	keyboard
PC98KEYB.CNF	Sample file for the
	NEC PC 98 keyboard
	(Japanese Windows
	95)
NT98KEYB.CNF	Sample file for the
	NEC PC 98 keyboard
	(Japanese Windows
	NT)
KEYBOARD.CNF	Default keyboard
	setup file (copy of

**IBMKEYB.CNF** at the moment just after the installation)