

# Tera Term Pro version 2.3 Help Index

Mar 10, 1998

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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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### **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. 2.3      Mar 10, 1998**

#### **Tera Term ver. 1.4      Mar 10, 1998**

Serial ports larger than COM4

Baud rate of 14400

User shortcut keys "EditCLS", "EditCLS", "ControlOpenTEK" and "ControlCloseTEK".

Macro commands "clearscreen", "code2str", "enablekeyb", "filemarkptr", "fileseekback", "filestrseek2", "findclose", "findfirst", "findnext", "getdir", "kmtfinish", "kmtget", "makepath", "sendkcode", "setdir", "setexitcode", "str2code" and "testlink".

Macro operator "%".

Macro: a comment can be placed in any line.

Pass-through printing directly to a port.

Special options in the setup file "AutoFileRename", "BackWrap", "Beep", "EnableStatusLine", "MaxComPort", "PassThruDelay", "PassThruPort", "PrnConvFF", "RussPrint" and "TitleFormat".

New [Setup] TCP/IP dialog box.

History list of hosts.

New Russian character sets (CP 866, and ISO 8859-5).

New icons.

Selecting text in a rectangular region.

Executing menu commands by user defined keys.

Tera Term extension interface.

### **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 (/l, /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

**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

Please read this page 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:

<http://www.vector.co.jp/authors/VA002416/teraterm.html>

<ftp://riksun.riken.go.jp/pub/pc/misc/terminal/teraterm/>

<ftp://ftp.s.u-tokyo.ac.jp/PC/terminal/teraterm/>

Note: These sites may be changed in future.

**Q.** When will the next version be released?

**A.** See Tera Term home page.

**Q.** Is Tera Term ready for Year 2000?

**A.** Yes. The system clock does not affect communication functions of Tera Term. There is only one very small possibility of trouble: the macro commands "getdate" and "setdate" may not work properly if the BIOS (system clock) of your PC does not support Year 2000. Anyway, this is not a problem of Tera Term but your PC.

#### [Basic usage]

**Q.** I can not connect to a host.

**A.** Please check the following things:

Network configuration of your PC. See Control Panel.

Can you use other network applications such as WWW browsers and ftp clients?

Is the host name or IP address correct?

Can you connect to the host from other machines?

Please do not ask the author how to configure network properties. Please read books and magazines or ask the network administrator.

**Q.** How do I connect to a host with dial-up TCP/IP (PPP)?

**A.** Before you run Tera Term, establish the PPP connection. In the case of Win 95, you should use "Dial-Up Networking".

After the dial-up (PPP) connection is established, run Tera Term. Enter the host name or IP address at the [File] New connection dialog box. If you don't know the name or IP address of the host, ask the network administrator.

In the case of PPP connection, the serial port is controlled by the PPP connection utility. Serial port functions of Tera Term are for non-PPP connections and nothing to do with the PPP connection.

**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.

**Q.** I edit TERATERM.INI but the change is not effective. What is wrong?

**A.** If you edit TERATERM.INI while Tera Term sessions are running, the change does not become effective immediately even for sessions opened after the change was made. This is because information of TERATERM.INI is loaded into memory when the first Tera Term session is started and information is kept in memory while at least one Tera Term session is running. To refresh information in memory, execute the "[Setup] Restore setup" command or close all Tera Term sessions. You don't need to do so for setup files which do not have the name TERATERM.INI.

### [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?

**Q.** I can not enter "/", "\*", "-", and "+" by using the numeric keypad.

**A.** See "Numeric keypad".

**Q.** How to use F1-F4 keys as VT100 PF1-PF4 keys?

**A.** See "PF1-PF4 keys of VT100".

**Q.** F1 (or whatever) key does not work. How to configure the keyboard?



**A.** In most cases, I can not answer this kind of question because I don't know how the key works. If you know what character (string) should be sent or what function should be performed by pressing the key, you can make the key work by editing the keyboard setup file. Read KEYCODE.TXT.

**Q.** How to change the keyboard shortcut for the [Edit] Paste (Copy) command to Ctrl+V (Ctrl+C)?

**A.** See "User shortcut keys" and KEYCODE.TXT.

### **[Miscellaneous]**

**Q.** What is "Tera Term extension interface"?

**A.** It is the interface between Tera Term and add-on modules. An add-on module is provided as a DLL which can hook Tera Term user interface functions, setup functions and Winsock functions. At the point of Mar 1998, no add-on module has been developed. Projects of developing add-on modules which support ssh and SSL are in progress. See Tera Term home page for currently available add-on modules.

**Q.** Line drawing characters ("Tera Special" font characters) are not displayed properly.

**A.** Remove the "Tera Special" font from "Fonts" of Control Panel, restart the system and reinstall the "Tera Special" font manually at "Fonts" of Control Panel.

**Q.** When line drawing characters are displayed, a "line" character does not match with an "angle" character smoothly.

**A.** Tera Term provides the original font "Tera Special" font to display line drawing characters. The font is scaled to fit the size of normal character font. Depending on the scaling factor, this mismatch problem may occur. Please find a good choice of font and size for normal characters which does not cause this problem.

**Q.** Why number of fonts in the list of [Setup] Font dialog box is so small?

**Q.** Why I can not select the "Times" font at the [Setup] Font dialog box?

**A.** Tera Term uses only fixed-pitch fonts such as "Terminal" and "Courier" because characters should be displayed with equal spacing in order to emulate the VT terminal properly. Displaying proportional font characters with equal spacing is in principle possible but it makes program complicated and slow. So Tera Term does not use proportional fonts.

**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.

## Requests

Please read this page carefully before you contact the author.

This page summarizes requests frequently asked by users. Please do not ask the author about these things and the schedule for them.

Requests not listed here may have already been supported. Please read this help, MACRO help, README.TXT, KEYCODE.TXT and Tera Term home page carefully.

### **Items which may be supported in future:**

ssh or SSL support.(Projects are in progress at the point of Mar 1998.

Please see Tera Term home page.)

Blinking and double height/width characters of VT100.

VT3XX line drawing between characters (lines).

Tool bar and status bar.

Dialer.

GUI tool to configure the keyboard.

Customizing menus and dialog boxes.

Word search.

Screen buffer and scroll bar for TEK window.

Improving resolution of TEK window printing.

In file transfers, displaying a progress bar, time to finish and the transfer speed.

ZMODEM recovery function.

YMODEM

Chinese & Korean character code sets.

Unicode

Maximize button.

[File] Print setup command

Saving selected text or text in the scroll buffer to a file.

Selecting the text/background color by using color pallets.

Switching to a small font when the screen mode is switched to the 132-column mode.

Displaying Chinese/Japanese/Korean characters in non-Chinese/Japanese/Korean Windows.

### **Items which may be supported in future (MACRO related items):**

Array variables.

Supporting the redirection by the "exec" command.

Waiting for binary data by the "wait" command.

### **Items which may be supported in very very far future:**

TEK41XX and 42XX emulations

Teletype and Wyse emulations

TN3270

Displaying a URL with a special color. Opening a WWW page when the URL is clicked.

Transparent background.

Sharing a serial port with other applications at the same time.

Line input mode and a window for line input.

Improving the speed of Kermit transfer.

Proportional fonts.

ANSI/AVATAR

REGIS

Direct communication I/O from MACRO.

## Contacting the author

**Please do not ask the author questions about usage: network configuration, how to connect a host, host configuration, keyboard configuration, how to write a macro file and so on.** Please read the documentation included in the Tera Term package. Useful information and tools may be found at Tera Term home page:

<http://www.vector.co.jp/authors/VA002416/teraterm.html>  
(The address may be changed in future.)

You may ask the author questions about Tera Term copyrights or a permission for a special way of distributing Tera Term.  
If you want to send just a message without any question, request and bug report, it may be welcome.

Before you send bug reports or requests to the author, please read carefully the following:

[Q & A](#)

[Requests](#)

[Tera Term setup file](#) (Your request may have already been supported.)

Related topics in this help.

Other files:

[README.TXT](#)

[KEYCODE.TXT](#)

[MACRO help](#)

Before you report a problem, please make sure that it is not caused by bad configuring of Tera Term and Windows. If other applications also have the same problem, it may not be a bug of Tera Term. When you report the problem to the author, show the version number of Tera Term and information which may be related to the problem. If possible, please also show how to reproduce the problem.

The author may not be able to reply your message quickly. The author may ignore bug reports already known, requests already received and questions answered by the Tera Term documentation.

E-mail address of the author (T. Teranishi):  
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(The address may be changed in future.)

## Copyright and Notice

**Software: Tera Term Pro version 2.3 Mar 10, 1998**

**Author: T. Teranishi**

**Copyright (C) 1994-1998 T. Teranishi All Rights Reserved.**

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.

Before you send requests, questions and bug reports to the author, please read carefully this help, MACRO help, README.TXT, KEYCODE.TXT and Tera Term home page. The URL of Tera Term home page is:

<http://www.vector.co.jp/authors/VA002416/teraterm.html>

(The address may be changed in future.)

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:

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Russian character code sets.

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Robert O'Callahan for helping with the development of Tera Term extension interface.

## 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.



## 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. See also KEYCODE.TXT.

### Shortcut keys

VT window

**Tips:** User shortcut keys

#### **Alt+B**

Sends a break signal to the host.

#### **Alt+C**

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**

Sends text in the clipboard to the host.

#### **Ctrl+Esc**

Switches to another window.

## TEK window

### **Alt+C**

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**

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.

### **Dragging with the left button while pressing the Shift key**

Selects text in a rectangular region of the screen, 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**

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[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 configure 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. See also KEYCODE.TXT.

## 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 (see also [KEYCODE.TXT](#)):

### [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 (see also KEYCODE.TXT):

### **[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 escape all control characters. 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

**Note:** If this option is turned on, file sending may not work.

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 see also [KEYCODE.TXT](#)):

Item in the <b>[Shortcut keys]</b> section	Function	Default key
<b>EditCopy</b>	[Edit] Copy command <b>*1)</b>	Ctrl+Insert
<b>EditPaste</b>	[Edit] Paste command <b>*1)</b>	Shift+Insert
<b>EditPaste CR</b>	[Edit] Paste<CR> command <b>*1)</b>	none
<b>EditCLS</b> <i>new</i>	[Edit] Clear screen command	none
<b>EditCLB</b> <i>new</i>	[Edit] Clear buffer command	none
<b>ControlOpenTEK</b> <i>new</i>	[Control] Open TEK command	none
<b>ControlCloseTEK</b> <i>new</i>	[Control] Close TEK command	none
<b>LineUp</b>	Scrolls up screen by 1 line	Ctrl+Up-arrow
<b>LineDown</b>	Scrolls down screen by 1 line	Ctrl+Down-arrow
<b>PageUp</b>	Scrolls up screen by 1 page	Ctrl+PageUp
<b>PageDown</b>	Scrolls	Ctrl+PageD

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

**\*1)** System shortcut keys are assigned 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 the case of IBM PC/AT keyboard)

**New:** You can also define user shortcut keys for all menu commands by using user keys at the **[User keys]** section.

## **[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 Auto window close 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 [Setup] TCP/IP command. You can enter not only the host name or address, but also the command line parameters 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 a port from the list.

## 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 [mouse usage](#)). 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 Tera Term setup file.

### **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 answered 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 answered 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. **Windows** (CP 1251), **KOI8-R**, **CP 866** or **ISO 8859-5**.

Client

Russian character set used in your PC. **Windows** (CP 1251), **KOI8-R**, **CP 866** or **ISO 8859-5**. 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 800 for Tera Term and 10000 for Tera Term Pro. 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.

#### Font char set

Character code set of the specified font, **Windows** (CP 1251), **KOI8-R**, **CP 866** or **ISO 8859-5**.

#### 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 checked, pressing the Delete key sends the DEL character. If not checked, the function assigned for the Delete key is determined by the keyboard setupfile.

#### **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 checked, pressing the Delete key sends the DEL character. If not checked, the function assigned for the Delete key is determined by the keyboard setupfile.

#### 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 KOI8-R code, select **KOI8-R**.

#### 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 [File] 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 command line parameters 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.

#### History

If this option is selected, a host name entered in the [File] New connection dialog box is appended to the top of host list.

#### 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 Tera Term setup file.

### **"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.

#### **Size**

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.



## 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:

**TTERMPRO /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.

## 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 default file name **TERATERM.INI** is used. If you omit the file name extension, the default extension ".INI" is used.

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

## Special 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

- Back wrap **new**
- Disabling beep for the BEL character **new**
- Disabling the C1 (ASCII \$80-\$9F) control characters
- Displaying all received characters
- Disabling the status line **new**
- Mouse code in TEK GIN report

### Window

- Disabling auto text copying
- Delimiters of a word selected by double clicking
- Disabling the pop-up menu
- Hiding the "Show menu bar" command
- Disabling the language mode selection
- Maximum scroll buffer size
- Nonblinking cursor
- Maximum number of lines to move in a jump scrolling
- Disabling text selection when the window is activated by mouse
- Title format **new**
- Actual colors of "white" and "black" colored text
- Space between characters (lines)
- Hiding the [Window] menu

### Communication

- Maximum serial port number **new**
- Disabling the warning on TCP/IP disconnection
- Telnet binary option

Telnet echo option

Telnet log

Telnet port number / Terminal setup for non-telnet connection

## **File transfer**

Auto renaming of a received file to avoid overwriting new

Auto activation of B-Plus Receive

Escaping all control characters in the B-Plus protocol

B-Plus log

Kermit log

XMODEM log

Auto activation of ZMODEM Receive

Parameters for ZMODEM sending

Escaping all control characters in the ZMODEM protocol

ZMODEM log

## **Printing**

Delay of path-through printing new

Path-through printing directly to a port new

Disabling the form-feed in the path-through printing new

Printer font

Page margins

Scaling factors for printing

Russian code set of the printer font (Russian mode only) new

## **Miscellaneous**

Beep sound on connection

Executing a macro on startup

## 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 editing the **Accept8BitCtrl** line in the **[Tera Term]** section of the setup file like the following:

**Accept8BitCtrl=off**

Default:

**Accept8BitCtrl=on**

## **Auto renaming of a received file to avoid overwriting**

When a file is received by using the Kermit, Zmodem, BPlus or Quick-VAN protocol, the file name is given by the remote host. If the same file name already exists in the local disk, the existing file is overwritten by the received file. To avoid this overwriting, edit the **AutoFileRename** line in the **[TeraTerm]** section of the setup file like the following:

**AutoFileRename=on**

Then, the received file is renamed automatically to avoid overwriting. For example, if the received file is "abc.txt" and the same file name already exists in the local disk, the received file is renamed to be "abc1.txt".

Default:

**AutoFileRename=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, edit the **AutoTextCopy** line in the **[TeraTerm]** section of the setup file like the following:

**AutoTextCopy=off**

Default:

**AutoTextCopy=on**

## Back wrap

If you enables the back wrap, the cursor at the beginning of a line moves back to the end of previous line when a BS character is received. To enable the back wrap, edit the **BackWrap** line in the **[Tera Term]** section of the setup file like the following:

**BackWrap=on**

Default:

**BackWrap=off**

## Disabling beep for the BEL character

You can disable the beep sound for the BEL character (ASCII \$07) by editing the **Beep** line in the **[Tera Term]** section of the setup file like the following:

**Beep=off**

Default:

**Beep=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, edit the **BeepOnConnect** line in the **[Tera Term]** section of the setup file like the following:

**BeepOnConnect=on**

Default:

**BeepOnConnect=off**

## Auto activation of B-Plus Receive

To enable the auto activation of the B-Plus Receive command, edit the **BPAuto** line in the **[Tera Term]** section of the setup file like the following:

**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, edit the **BPEscCtl** line in the **[Tera Term]** section of the setup file like the following.

**BPEscCtl=on**

Default:

**BPEscCtl=off**

## B-Plus log

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

**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, edit the **ConfirmDisconnect** line in the **[Tera Term]** section of the setup file like the following:

**ConfirmDisconnect=off**

Default:

**ConfirmDisconnect=on**

## Displaying all received characters

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

### **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 the character	Displaying form
\$00 - \$1F	^@ - ^_
\$20 - \$7E	normal character
\$7F	<b>&lt;DEL&gt;</b>
\$80-\$FF	MSB of the ASCII code is 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.

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 editing the **DelimList** line in the **[Tera Term]** section of the setup file like the following:

**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 single-byte code characters can be specified. Double-byte code characters (Japanese kanji) are regarded as delimiters. You can make them be non-delimiters by editing the **DelimDBCS** line like the following:

**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 disable the pop-up menu, edit the **EnablePopupMenu** line in the **[Tera Term]** section of the setup file like the following:

**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, edit the **EnableShowMenu** line in the **[Tera Term]** section of the setup file like the following:

**EnableShowMenu=off**

Default:

**EnableShowMenu=on**

## Disabling the status line

To disable the status line functions of VT terminal, edit the **EnableStatusLine** line in the **[Tera Term]** section of the setup file like the following:

**EnableStatusLine=off**

Then, escape sequences for the status line functions are ignored.

Default:

**EnableStatusLine=on**

## Kermit log

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

**KmtLog=on**

Default:

**KmtLog=off**

## Disabling the language mode selection

To disable the language mode selection in the [Setup] General dialog box, edit the **LanguageSelection** line in the **[Tera Term]** section of the setup file like the following:

**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 editing the **MaxBuffSize** line in the **[Tera Term]** section of the setup file like the following:

**MaxBuffSize=<number of lines>**

(should be less than or equal to 100000 for Tera Term Pro or 800 for Tera Term)

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

Default:

**MaxBuffSize=10000** ; Tera Term Pro

**MaxBuffSize=800** ; Tera Term

## Maximum serial port number

You can specify the maximum serial port number (maximum value of n for COMn) to be listed in the [File] New connection and [Setup] Serial port dialog boxes. To specify the maximum number, edit the **MaxComPort** line in the **[Tera Term]** section of the setup file like the following:

**MaxComPort=<maximum serial port number>**

The maximum serial port number can not be less than 4 even if the actual maximum number is less than 4.

Default:

**MaxComPort=4**

## Nonblinking cursor

You can make the cursor nonblinking by editing the **NonblinkingCursor** line in the **[Tera Term]** section of the setup file like the following:

**NonblinkingCursor=on**

Default:

**NonblinkingCursor=off**

## Delay of pass-through printing

You can set the delay of pass-through printing. A pass-through sequence is initiated by ESC[5i and terminated by ESC[4i. The received data between ESC[5i and ESC[4i are printed when the delay time has passed since Tera Term received ESC[4i. If the second ESC[5i is received before the delay of the first pass-through sequence has passed, the first and second printing data are combined and printed at once after the delay of the second sequence has passed. Namely, multiple consecutive sequences with intervals less than the delay are treated as one printing sequence. To change the delay of pass-through printing, edit the **PassThruDelay** line in the **[Tera Term]** section of the setup file like the following:

**PassThruDelay=<delay in sec>**

Default:

**PassThruDelay=3**



## Pass-through printing directly to a port

You can send the data of pass-through printing to a port by editing the **PassThruPort** line in the **[Tera Term]** section of the setup file like the following:

**PassThruPort=<port>**

The <port> string specifies a port to which data is sent. The format of <port> string is the same as that of the MS-DOS "mode" command. If no port is specified, Tera Term prints the data by using Windows printing functions.

Example:

**PassThruPort=LPT1**

**PassThruPort=COM2: 9600,n,8,1,x**

Default:

**PassThruPort=**

For Russian mode, you should see also:

[Russian code set of the printer font](#)

## Disabling the form-feed in the pass-through printing

You can disable the form-feed (moving to the next paper) which is caused by an FF character in the pass-through printing. To do this, edit the **PrnConvFF** line in the **[Tera Term]** section of the setup file like the following:

**PrnConvFF=on**

Then, the FF character causes the carriage-return and line-feed instead of the form-feed.

**Note:** This option is ignored for the direct pass-through printing.

Default:

**PrnConvFF=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, 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=**

For Russian mode, you should see also:

[Russian code set of the printer font](#)

## Page margins

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

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

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

Default:

**PrnMargin=50,50,50,50**

## **Russian character set of the printer font (Russian mode only)**

When you specify a printer font or a printer device, you should specify also the character set for the printer font or device. Otherwise, Russian characters may not be printed correctly. To specify the character set, edit the **RussPrint** line in the **[Tera Term]** section of the setup file like the following:

**RussFont=<char set>**

where <char set> should be one of the following:

**Windows**

**KOI8-R**

**CP-866**

**ISO-8859-5**

Default:

**RussPrint=Windows**

## Maximum number of lines to move in a jump scrolling

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

**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, edit the **SelectOnActive** line in the **[TeraTerm]** section of the setup file like the following:

**SelectOnActive=off**

Default:

**SelectOnActive=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 editing the StartupMacro line in the **[Tera Term]** section of the setup file like the following:

**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 editing the **TEKGINMouseCode** line in the **[Tera Term]** section of the setup file like the following:

**TEKGINMouseCode=<key code>**

Default:

**TEKGINMouseCode=32**

(ASCII code 32 corresponds to the space character.)

## Telnet binary option

To enable the telnet binary option, edit the **TelBin** line in the **[Tera Term]** section of the setup file like the following:

**TelBin=on**

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

Default:

**TelBin=off**

## Telnet echo option

If you edit the **TelEcho** line in the **[Tera Term]** section of the setup file like the following:

**TelEcho=on**

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**, edit the **TelLog** line in the **[Tera Term]** section of the setup file like the following:

**TelLog=on**

Default:

**TelLog=off**

## Telnet port number

On the command line, or on the [File] New connection 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 editing the **TelPort** line in the **[Tera Term]** section of setup file like the following:

**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 edit the **TCPLocalEcho** and **TCPCRSend** lines in the **[Tera Term]** section of the setup file like the following:

**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 established 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.)

## Title format

To change the title format, edit the **TitleFormat** line in the **[Tera Term]** section of the setup file like the following:

**TitleFormat=<format ID>**

where the format ID should be one of the following:

Format ID	Title format
0	<title>
1	<title> - <host/port>
2	<title> (session no.)
3	<title> - <host/port> (session no.)
4	<title> VT/TEK
5	<title> - <host/port> VT/TEK
6	<title> (session no.) VT/TEK
7	<title> - <host/port> (session no.) VT/TEK

Default:

**TitleFormat=5**

## 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 edit the **UseTextColor** line in the **[Tera Term]** section of the setup file like the following:

**UseTextColor=on**

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

Default:

**UseTextColor=off**



## Space between characters (lines)

To change space between characters (lines), edit the **VTFontSpace** line in the **[Tera Term]** section of the setup file like the following:

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

Where:

<b>&lt;dx1&gt;</b>	Left side space for each character in pixels.
<b>&lt;dx2&gt;</b>	Right side space for each character in pixels.
<b>&lt;dy1&gt;</b>	Space above each line in pixels.
<b>&lt;dy2&gt;</b>	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 for horizontal and vertical directions. To specify scaling factors, edit the **VTPPI** and **TEKPPI** lines in the **[Tera Term]** section of the setup file:

**VTPPI=<x(horizontal), y(vertical); pixels per inch)>** ; for the VT window

**TEKPPI=<x(horizontal), y(vertical); pixels per inch)>** ; for the TEK window

The scaling factors should be specified in unit of pixels per inch. If the printed image is too small (large), increase (decrease) the scaling factors. If at least one of the specified factor is zero, Tera Term takes the default scaling factors from the printer driver.

Example:

**VTPPI=300,300**

**TEKPPI=300,300**

Default:

**VTPPI=0,0**

**TEKPPI=0,0**

## Hiding the [Window] menu

To hide the [Window] menu, edit the WindowMenu line in the **[Tera Term]** section of the setup file like the following:

**WindowMenu=off**

Default:

**WindowMenu=on**

## **XMODEM log**

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

**XmodemLog=on**

Default:

**XmodemLog=off**

## Auto activation of ZMODEM Receive

To enable the auto activation of the ZMODEM Receive command, edit the **ZmodemAuto** line in the **[Tera Term]** section of the setup file like the following:

**ZmodemAuto=on**

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

**Note:** If you turn this option on, executing the ZMODEM **Receive** command at the host may activate also the ZMODEM **Receive** (not Send) command of Tera Term. This problem is unavoidable. If you don't like this behavior, turn this option off.

Default:

**ZmodemAuto=off**

## Parameters for ZMODEM sending

You can change the ZMODEM parameters for sending by editing the **ZmodemDataLen** and **ZmodemWinSize** lines in the **[Tera Term]** section of the setup file like the following:

**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, edit the **ZmodemEscCtl** line in the **[Tera Term]** section of the setup file like the following:

**ZmodemEscCtl=on**

Default:

**ZmodemEscCtl=off**

## ZMODEM log

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

**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> <TCP port#>** <host> with a TCP port number.  
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=2** COM2

**/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.

**/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.

**/LA=<language>**    Language mode.  
**/LA=E**    English  
**/LA=J**    Japanese  
**/LA=R**    Russian

**/M=<macro file>**    Start Tera Term with macro.

**/P=<TCP port#>**

**/R=<replay file>**

**/T=<telnet flag>**  
**/T=1**    Enable telnet  
**/T=0**    Disable telnet

**/V**    Start Tera Term in hidden (invisible) state.

**/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>  
/H  
<kanji code (receive)>  
<kanji code (transmit)>  
<language>  
<macro file>  
<telnet flag>  
<window title>  
<window pos (x)>  
<window pos (y)>
```

#### Note:

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. 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 command line 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:

<b>IBMKEYB.CNF</b>	Sample file for the IBM-PC/AT 101-key keyboard
<b>PC98KEYB.CNF</b>	Sample file for the NEC PC 98 keyboard (Japanese Windows 95)
<b>NT98KEYB.CNF</b>	Sample file for the NEC PC 98 keyboard (Japanese Windows NT)
<b>KEYBOARD.CNF</b>	Default keyboard setup file (copy of <b>IBMKEYB.CNF</b> at the moment just after the installation)

