

FRONTDOOR
Terminal
User Guide

FRONTDOOR

Terminal

User Guide

Copyright © 1998, 1999, 2001 Definite Solutions HB; All rights reserved.

All Definite Solutions products and trademarks are trademarks or registered trademarks of Definite Solutions HB; with the exception of FrontDoor which is a registered trademark of Joaquim Homrighausen. Other brands and product names are trademarks or registered trademarks of their respective holders.

This publication is protected by international copyright laws and treaty provisions. It may only be distributed and used in accordance with those laws and treaty provisions.

DEF-E-FDTERM-Z-1/2001-EP

Produced in Sweden.

Definite
S O L U T I O N S

To the memory of Catharina Frödin and Alva Gårdlund.
And to Alexander, Christian, Katja, and Igor Homrighausen.
Party on Fred, we miss you.

Special thanks to Colin Turner for his help with the production of this document.

TABLE OF CONTENTS

TABLE OF CONTENTS 4

1. INTRODUCTION 6

 ABOUT THIS DOCUMENT 6

 VERSION NOTATION 6

 EXECUTABLES 6

 USING THIS DOCUMENT..... 6

 STARTING THE TERMINAL..... 6

2. THE BLANK SCREEN 8

3. THE TERMINAL MENUS..... 9

 FILE 9

 LINE..... 11

 SESSION 13

 OPTIONS 14

 HELP 15

4. UPLOADING FILES 17

5. DOWNLOADING FILES..... 18

6. KEYBOARD MACRO MANAGER..... 19

 NAVIGATING..... 19

 ADDING MACRO SETS..... 19

 EDITING MACRO SETS 19

 REMOVING MACRO SETS 20

 SELECTING A MACRO SET..... 20

 EXITING 20

7. PROFILE MANAGER 21

 NAVIGATING..... 21

 ADDING PROFILES 21

 EDITING PROFILES..... 21

 REMOVING PROFILES 21

 SELECTING A PROFILE 21

 EXITING 22

8. PHONE DIRECTORY MANAGER..... 23

 NAVIGATING..... 23

 ADDING ENTRIES 24

 EDITING ENTRIES 24

 REMOVING ENTRIES 24

 SORTING ENTRIES 24

 DIALING..... 24

 MANAGING THE DIALING QUEUE..... 25

 EXITING 25

9. SPECIFYING ADDRESSES 26

 THE USERLIST BROWSER..... 26

 THE NODELIST BROWSER 26

 NAMES.FD 26

 SEARCHING WHILE BROWSING 26

 SELECTING..... 27

 EXITING 27

APPENDIX A: GLOSSARY 28

APPENDIX B: KEYBOARD REFERENCE	30
MENUS.....	30
FUNCTIONS	30
INPUT FIELDS	30
OTHER	30
APPENDIX C: KEYPAD MODES	31
APPENDIX D: INTERACTIVE EMSI	32
APPENDIX E: MOUSE SUPPORT	33
MENUS.....	33
PROMPT DIALOGS.....	33
LISTS	33
SCROLL BACK BUFFER	33
APPENDIX F: CONTACT INFORMATION	34
INDEX	35

1. INTRODUCTION

The FrontDoor Terminal, hereafter "the Terminal", is a sophisticated terminal emulator. It is the program you use when accessing bulletin board systems (BBS), Telnet services, and some other dial-up services. While the Terminal contains a number of advanced features, it is sufficient to be familiar with but a handful of them to use the Terminal.

It is likely that you will encounter a number of unfamiliar terms. They will not be described in detail unless they are critical to complete the function described in a section. A small glossary is located at the end of this document.

About this document

When using the PDF viewer from [Adobe](#), Acrobat Reader, this document is best viewed in 1024x768 (or higher) resolution. We realize that not everyone has access to hardware capable of such resolutions and apologize if the document appears hard to read on some displays.

The *bookmarks* window (typically displayed to the left of the *document* window) can be closed to gain some display space for the document window. Furthermore, the [View](#) options [Fit page](#) and [Fit width](#) can be used to change the display of the document. We also recommend experimentation with the various display settings in the reader, in particular the [Smooth text and monochrome images](#) option (located under [File.Preferences.General](#) in the English language version of the reader).

One, perhaps not so obvious, feature in the Acrobat Reader is the ability to jump "back" after having followed a link. To jump back, hold down the **CTRL** key and press - (minus).

Version notation

The following notations are used to indicate where features are supported differently by various versions of the software:

[ML]	Multi-line version;
[SL]	Single-line version (Shareware);
[DOS]	DOS version (see below);
[!DOS]	Any version other than the DOS version (see below);
[OS/2]	OS/2 version (see below).

Executables

Since this document intends to cover all available platform versions of the software, the following should be noted in regards to the name of the program executables:

FD.EXE	The name of the DOS executable;
FD2.EXE	The name of the OS/2 executable.

Using this document

This document is intended to be used as a reference guide. It makes the assumption that the reader understands some basics of the FrontDoor mailer, "FD" hereafter, and the general concept of a terminal emulator. The document does not attempt to explain any configuration issues in detail. For this purpose, the reader is advised to refer to the [FrontDoor Administrator Guide](#).

Throughout this document, references to options and menus in various FrontDoor programs, are made by using a reference to a menu path. These paths begin with the name of the top-level menu, followed by one or more menus or options, until the final destination has been reached. A few examples follow:

[Terminal.Miscellaneous.Protocol](#)

[Modem.Hardware.Serial port](#)

If no reference is given to a specific program, FDSETUP is implied.

Starting the Terminal

To start the Terminal from the command prompt, you type **FD/TERM** at the prompt and press **ENTER**. If your computer responds with **Bad command or filename** (or a similar message), it is typically an indication that the Terminal has not been properly installed. If you know to which directory the Terminal was installed on your system, you can change to that directory and then repeat the previously described procedure.

In graphical environments such as Windows and OS/2, the Terminal can also be configured with an icon to allow starting the program directly from that environment.

To start the Terminal from FD, use the **ALT+J** shortcut.

If you are experiencing problems when attempting to start the Terminal, please contact the system administrator..

Startup messages

The following is a list of some common messages issued by the Terminal upon starting from the command prompt:

Message	FOSSIL driver not detected
Description	The Terminal could not detect the presence of a FOSSIL driver which is required for the Terminal to be able to communicate with the modem or other communications device attached to the computer.
Notes	[DOS]
Message	Unable to initialize communications hardware
Description	The Terminal could not open or initialize the communications hardware; typically the " <i>COM port</i> ". The communications hardware may be in use by other applications or not properly closed by a previously used application.
Notes	[!DOS]
Message	Invalid or missing TASK setting
Description	The Terminal could not retrieve a valid task setting. This is configured through the TASK environment variable.
Notes	[ML]
Message	Invalid TZUTC setting
Description	The TZUTC environment variable has not been specified correctly
Notes	None
Message	FOSSIL revision 5 support required
Description	The Terminal successfully detected the presence of a FOSSIL driver. The FOSSIL driver does not, however, indicate support for the required level of capabilities.
Notes	[DOS]
Message	Frozen, waiting for semaphore to clear..
Description	The Terminal has detected an applicable FDFREEZE semaphore and will remain "frozen" until the semaphore is no longer present.
Notes	To exit the Terminal immediately, press ALT+Q .
Message	Waiting (60s) for FDALIVE.nnn semaphore to clear
Description	The Terminal has detected an FDALIVE.nnn semaphore where nnn is a numerical value corresponding with the contents of the TASK environment variable. It will wait up to 60 seconds for the semaphore to be updated before resuming operation. If the semaphore is updated within 60 seconds, the Terminal will terminate; if the semaphore is not updated, the Terminal will continue to load.
Notes	If the detected FDALIVE.nnn semaphore is the result of a system crash, the Terminal can be forced to ignore its presence by pressing the SPACE . To exit the Terminal immediately, press ALT+Q .

2. THE BLANK SCREEN

When the Terminal is successfully started, it will normally clear the screen and display its primary working screen; i.e. a blank screen. Unlike many other terminal emulation packages, the Terminal does not feature a status bar; nor any other static text in its working screen.

If the Terminal is started from the command prompt (see "Starting the Terminal"), a window with product and license information will be displayed for a brief period of time; the Terminal will then attempt to initialize the communications device.

If the Terminal does not display this screen, it is typically due to a configuration error.

Once the Terminal has completed its startup sequence, it is ready to be used. Data entered from the local keyboard is transmitted to the communications device. Data received from the communications device is displayed on the screen.

To leave the Terminal, press **ALT+Q**.

3. THE TERMINAL MENUS

The pull-down menu system is accessed by using the shortcut corresponding to the desired menu. A good starting point is usually the [File](#) menu which is the menu invoked with **ALT+F**. To exit the menu system, simply press **ESC**.

Most options available in the pull-down menu system can be directly accessed by using the shortcut listed to the right of the menu option; the options in the [Line](#) menu are, however, an exception to this.

These shortcuts cannot be used while the menu system is displayed/active. The only shortcuts available while the menu system is active are those used to change the current pull-down menu (**ALT+F**, **ALT+L**, **ALT+S**, **ALT+O**, and **ALT+H**).

The selection bar in menus is moved with **UP** and **DOWN**. Pressing the **HOME** key will move the selection bar to the topmost (available) field; pressing the **END** key will move the selection bar to the last (available) field, **PGUP** and **PGDN** generally move the selection bar one page up and one page down respectively. If a list or menu contains more entries than will fit on the screen, **CTRL+PGUP** and **CTRL+PGDN** can be used to move to the top and bottom, respectively, of the list/menu.

To move between the top-level pull-down menus, the **LEFT** and **RIGHT** keys are used.

File

The contents of the [File](#) menu will now be described. The shortcut for the [File](#) menu is **ALT+F** as mentioned above.

Upload files

Invokes the upload function, used to transmit (upload) one or more files to the remote system. The Terminal will prompt for the file-transfer protocol to be used, after which the file selection dialog is displayed. See "Uploading files" for more information about this function.

 *This function can also be used to update the modem firmware for modems with software configurable firmware.*

The shortcut for the [Upload files](#) function is **ALT+F1**.

Download files

Invokes the download function, used to receive (download) one or more files from the remote system. The Terminal will prompt for the file-transfer protocol to be used and where the received files should be stored on the local system. See "Downloading files" for more information about this function.

The shortcut for the [Download files](#) function is **ALT+F2**.

Transmit ASCII file

This function is typically used when already written text, contained in an ASCII file on the local system, needs to be transmitted to a remote system as if it was entered from the keyboard.

The Terminal will display the Transmit ASCII file dialog which contains options for how the line-termination sequence <CR><LF> (ASCII 13, ASCII 10) should be transmitted to the remote, how empty lines are to be handled, the character delay time, and the name of the file to read from.

The character delay time is expressed in units of 1/100 seconds; the default is 20 (.2 seconds). Some situations may require a longer character delay time than that. If the final result of the ASCII transmission does not closely resemble the contents of the specified file, it is typically an indication that the character delay time setting is too low.

Note that with the exception of line-termination sequences and empty lines (see above), the contents of the specified file are transmitted "as is" to the remote system. No filtering or conversion of data is made by the Terminal except for the possible use of translation tables (see "Translation tables").

The shortcut for the [Transmit ASCII file](#) function is **ALT+A**.

Run script

[ML] Allows a script to be invoked. Scripts are typically used when dialing remote systems to allow the Terminal to establish a connection when simply dialing the number of the remote system will not suffice, or when complex access authorization procedures are used by the called system.

This function is primarily intended to allow a script to be invoked when a connection has already been established. For more information about scripts and the FrontDoor script language, refer to the [Administrator Guide](#).

There is no shortcut for this function.

Macro management

Invokes the keyboard macro management function used to maintain macro sets. A macro set is a collection of macro keys, also referred to as *user keys*. This function can also be used to select the active macro set.

A macro set consists of 20/24 (depending on the type of keyboard attached to the system) configurable user keys. The user keys are typically used to transmit a specific sequence of data to the communications device or remote system; such as a user name, a password, etc. The shortcuts for the user keys are **SHIFT+F1** through **SHIFT+F10 (F12)** and **CTRL+F1** through **CTRL+F10 (F12)**. See "Keyboard macro manager" for more information about managing macro sets.

Each entry in the phone directory (see below) can have a specific macro set assigned to it; when a connection is established after dialing an entry in the phone directory, the specified macro set is automatically loaded. The default macro set is configured in [Terminal.Keyboard macros](#) in FDSETUP. Macro sets 0-65535 can be configured and maintained from within the Terminal.

The shortcut for the [Macro management](#) function is **ALT+V**.

Profile management

Invokes the profile management function used to maintain user profiles. A user profile is a collection of associated information about a given user; these profiles are primarily used for sessions negotiated using the interactive EMSI terminal protocol (IEMSI).

This function can also be used to select the active profile. See "Profile manager" for more information about managing profiles. See "Interactive EMSI" for more information about Interactive EMSI.

Each entry in the phone directory (see below) can have a specific profile assigned to it; when a connection is established after dialing an entry in the phone directory, the specified profile is automatically loaded. The default profile set is **Default** and this is configured in [Terminal.IEMSI Profile](#) in FDSETUP. Profiles 1-65535 can be configured and maintained from within the Terminal.

The shortcut for the [Profile management](#) function is **ALT+E**.

Command history

Invokes the command history window. When text is manually entered and then terminated by pressing **ENTER** (i.e. to confirm the data to the communications device or remote system), the Terminal adds the text to a circular buffer referred to as **command history**. When the buffer used to store the command history becomes full, the Terminal will re-use the space occupied by the oldest entry.

When this function is used to recall a sequence of data, the recalled data does not include the terminating/ending **ENTER**; the reason for this is to allow possible further input.

If there is no history in the command history list, the Terminal will display **No history** when this function is invoked.

Use the **UP** and **DOWN** keys to select the entry to be recalled from the history list; use **ENTER** to recall the currently highlighted entry.

The shortcut for the [Command history](#) function is **ALT+U**.

Editor

Invokes the program specified in [Terminal.Filenames and paths.Editor](#) in FDSETUP. The Terminal will prompt for additional parameters to the program to be invoked.

The FOSSIL driver is deactivated when the Terminal is temporarily suspended while the external program is running; when control is returned to the Terminal, the FOSSIL driver is reactivated/initialized.



This function can also be used to invoke an external file-transfer protocol or other external applications.

The shortcut for the [Editor](#) function is **ALT+I**.

DOS shell

Invokes a temporary OS shell. From the OS shell, most operating system functions and external programs can be accessed.

This function is most useful in pure DOS environments, or similar environments where it is not possible to start other programs without first exiting the currently running program. When the DOS shell function in the Terminal is used, a temporary copy of the OS is loaded and the Terminal is suspended. The DOS version of the Terminal can be (and is by default) configured to maximize the amount of memory available in the temporary shell; this is referred to as *the Terminal swapping itself out of memory*.

Once activities in the temporary OS shell have been completed, you must type EXIT and press the **ENTER** key to return to the Terminal.

The DOS shell function is available from just about anywhere in the Terminal: including the various menus, dialog boxes, and input fields.

The shortcut for the DOS shell function is **ALT+Z**.

Leave Terminal

Terminates the Terminal. When the Terminal is terminated, its log file and nodelist database will be closed, the FOSSIL driver and/or communications hardware will be deinitialized, and the program will exit with errorlevel ten (10) to indicate a *user break* (normal termination).

The shortcut for this option is **ALT+Q** and is available in most screens, dialog boxes, and input fields.

If the Terminal was invoked from FD by using the **ALT+J** shortcut, control is returned to FD as opposed to the Terminal exiting to the operating system.

Line

The contents of the [Line](#) menu will now be described. The shortcut for the [Line](#) menu is **ALT+L**.

BPS

Allows the (DTE) speed at which the Terminal communicates with the communications device to be changed. Valid choices are **300**, **1200**, **2400**, **4800**, **9600**, **19200**, and **38400** BPS.

If the [Modem.Hardware.Locked port](#) setting in FDSETUP is configured as **Yes**, the speed cannot be changed; the Terminal will display **Fixed** instead of a speed figure if this is the case. It is common to lock the port when using high-speed modems and then configure the FOSSIL driver to a fixed speed (such as 57600 or 115200 BPS).

There is no shortcut for this function.

Data bits

Specifies the number of databits that should be used when communicating with the communications device. This should normally be eight (**8**). Valid choices are seven (**7**) and eight (**8**).

The Terminal will temporarily reset the data bits setting to eight (**8**) during file-transfers (this does not include the [Transmit ASCII file](#) function) and then restore the original setting upon completion.

There is no shortcut for this function.

Parity

Specifies the type of parity that should be used when communicating with the communications device. This should normally be **None**. Valid choices are **None**, **Odd**, and **Even**.

The Terminal will temporarily reset the parity setting to **None** during file-transfers (this does not include the [Transmit ASCII file](#) function) and then restore the original setting upon completion.

There is no shortcut for this function.

Stop bits


Specifies the number of stop bits that should be used when communicating with the communications device. This should normally be one (**1**). Valid choices are one (**1**) and two (**2**).

The Terminal will temporarily reset the stop bits setting to one (**1**) during file-transfers (this does not include the [Transmit ASCII file](#) function) and then restore the original setting upon completion.

There is no shortcut for this function.

Wraparound

Determines whether or not the Terminal should place the cursor on a new line when it is positioned at the rightmost position of the screen and a character is received. This should be set to **On** in most situations. There are however VT100/VT52 applications that require this setting to be **Off**. When the emulation (see below) setting is manually changed to **VT100**, this setting is automatically set to **Off**.

 *This setting does not affect how the Terminal reacts to a <CR> or <LF> character being received.*

There is no shortcut for this function.

CR expansion

Determines how a received <CR> (ASCII 13) character should be processed by the Terminal. If set to **CR**, no expansion is made. If it is set to **CR/LF**, the Terminal will expand all received <CR> characters to <CR><LF>.

There is no shortcut for this function.

Local echo

Some dial-up services do not *echo* (return) the characters sent by the Terminal; i.e. data entered from the local keyboard. It may be necessary to enable (**Yes**) this setting for such characters to be visible.

If the remote system does echo the character entered locally, and this setting is enabled, the result will be duplicated text; e.g. **HHELLLLLOO!!**). This can also occur in an off-line (not connected) state if the communications device is echoing characters entered from the keyboard.

There is no shortcut for this function.

Emulation

Specifies the terminal emulation protocol that should be used by the Terminal when interpreting data received from the communications device (and thus the remote system). This is one of **ANSI**, **VT100**, **VT52**, and **TTY** emulation.

TTY emulation features only primitive "terminal emulation" and does not support colors or cursor repositioning other than when <CR> and <LF> characters are received.

When **ANSI** emulation is selected, the Terminal will automatically adjust the [Allow AVT/0 sequences](#) setting (see below) to reflect the [Terminal.Miscellaneous.AVATAR/0+](#) setting in FDSETUP. AVT/0+ is a very efficient and fast terminal emulation protocol used by many BBS packages. Support for AVT/0+ sequences can be manually disabled (see below).

For **VT100** and **VT52** emulation, the **F1-F4** keys will transmit the sequences indicating the **PF1-PF4** keys; **F7** will transmit <ESC> (Escape, ASCII 27); **F8** will transmit the keypad ENTER sequence (as will the **ENTER** key on the numerical keypad).

There is no shortcut for this function.

Hex dump mode

Specifies the status of the *Hex dump mode* which is typically used for debugging purposes. When this mode is enabled (**On**), the Terminal will display the ASCII value of certain characters in hexadecimal notation rather than the character itself.

Note that the [Auto-Zmodem downloads](#) function (below) will not function when this mode is enabled.

There is no shortcut for this function.

Translation tables

Specifies the state of the translation tables used to translate data received from and data transmitted to the communications device; the setting is one of **None**, **Config**, and **Latin1**.

None


Instructs the Terminal that no translation of incoming and outgoing data should be performed.

Config

Instructs the Terminal to translate incoming and outgoing data as configured in [Terminal.Xlat.In](#) and [Terminal.Xlat.Out](#).

Latin1

Instructs the Terminal to translate incoming and outgoing data from and to the **ISO8859-1** (Latin1) character set. When this translation is performed, the current local code page (see "Code page") is used.

 *Latin1 translation is typically used when using the Terminal in 8-bit UNIX environments.*

There is no shortcut for this function.

Auto-Zmodem downloads

Determines if the Terminal should monitor data received from the communications device for the Zmodem receiver initialization sequence; indicating that a Zmodem transmitter is active on the remote system.

If enabled (**Yes**), the Terminal will automatically invoke the [Download files](#) function with the Zmodem file-transfer protocol when the initialization sequence is detected.

There is no shortcut for this function.

Allow AVT/0 sequences

Specifies that the Terminal should process received data that appears to be AVT/0+ (AVATAR/0+) terminal emulation sequences. Since AVT/0+ emulation is based on certain control characters, it may be desirable to disable support for such sequences if the remote frequently transmits such characters.

There is no shortcut for this function.

Clear on Form Feeds

Determines whether or not the Terminal should clear the screen when a <FF> (*form feed*, ASCII 12) character is received from the communications device.

There is no shortcut for this function.

Interactive EMSI

Determines if the Terminal should attempt to negotiate an *Interactive EMSI* (IEMSI) session with the remote system to automatically transmit user information such as user name, user handle, password, etc. See "Interactive EMSI" below for more information about IEMSI.

There is no shortcut for this function.


Session

The contents of the [Session](#) menu will now be described. The shortcut for the [Session](#) menu is **ALT+S**.

Capture

Allows received data to be captured to a disk file or printer (this is often referred to as *logging data to disk*). If the use of any type of translation tables has been enabled (see above), the data is translated before being captured.

The Terminal will prompt for the name of the file or device to which captured data should be written.


 *The Terminal will not capture <NUL> (ASCII 0) characters; if the current terminal emulation is set to VT100 or VT52, no characters with an ASCII value below <SPACE> (ASCII 32) will be captured.*

The shortcut for the [Capture](#) function is **ALT+C**.

Conversation mode

Invokes the conversation mode, or full-screen chat, function. This is a split-screen interface where data received from the communications device is displayed in the upper section of the screen and data entered from the local keyboard is displayed in the lower section of the screen.

If an IEMSI session (see above) has been established with the remote system, the Terminal will monitor received data for a request to automatically invoke and terminate the conversation mode function.


 *Note that while the conversation mode function is active, no functions other than those listed at the bottom of the screen are available; with the exception of keyboard macros and the DOS shell function. Furthermore, capturing and any special (non-TTY) terminal emulation is temporarily suspended.*

The shortcut for the [Conversation mode](#) function is **ALT+N**.

Dial

Invokes the *nodelist dial* function which allows a remote system listed in the nodelist database to be dialed. The Terminal will prompt for an address to search for in the nodelist database. See "Specifying addresses" for more information about this.

The current settings (emulation, macro set, etc) will be used when a connection with the remote system has been established. If system-specific settings are required, the phone directory (see below) should be used as it allows a number of settings to be customized for a given remote system.

 *Note that this function is disabled if the nodelist database is not present.*

The shortcut for the [Dial](#) function is **ALT+D**.

Manual dial

Invokes the manual dial function which is simply a telephone number prompt. If the manual dial telephone number prompt is completed, the Terminal will attempt to dial the specified number; the number will be sent to the communications device without further translation.

The current settings (emulation, macro set, etc) will be used when a connection with the remote system has been established. If system-specific settings are required, the phone directory (see below) should be used as it allows a number of settings to be customized for a given remote system.

The shortcut for the [Manual dial](#) function is **ALT+M**.

Disconnect

Disconnects the call in progress (if any).

The shortcut for the [Disconnect](#) function is **ALT+X**.

Phone directory

Invokes the phone directory manager used to maintain the terminal phone book. Entries in the phone directory can be customized to allow certain options to be automatically adjusted when a connection with a given system is established. The phone directory manager is described in a separate section (see "Phone directory manager").

The shortcut for the [Phone directory](#) function is **ALT+P**.

Reset timer


Resets the on-line timer to zero. The on-line timer is automatically reset when a new connection is established. Once a connection is terminated, the Terminal displays the amount of time elapsed between the connection being established and the connection being terminated.

The current on-line timer can be viewed in the [Options](#) menu (see below) when a connection has been established.

The shortcut for the [Reset timer](#) function is **ALT+R**.

Scroll back buffer

Invokes the scroll back buffer manager which can be used to view data that has scrolled off the screen. The scroll back buffer manager allows the contents of the buffer to be saved to disk (**F3** and **F4**); to leave the scroll back buffer manager, press **ESC**.

 Note that the Terminal may automatically clear the contents of the buffer if there is insufficient memory available when the phone directory manager is invoked.

The shortcut for the [Scroll back buffer](#) function is **ALT+B**.

Send BREAK

Instructs the Terminal to transmit a (short) BREAK signal to the communications device. How the communications device handles the BREAK signal depends on its configuration. Many communications devices, in particular modems, can be configured to clear its internal buffers upon receiving a BREAK signal.

The shortcut for the [Send BREAK](#) function is **ALT+W**.

Clear screen

Clears the screen and positions the cursor in the upper left-hand corner.

The shortcut for the [Clear screen](#) function is **ALT+J**.

Initialize modem

[ML] Instructs the Terminal to transmit the various modem initialization strings to the communications device; these strings are configured in [Modems.Command strings.Init-1](#) through [Init-3](#), [Terminal.Miscellaneous.Init](#), and [Modem.Command strings.TermInit](#) (and transmitted in that order).

The Terminal does not attempt to interpret any possible response messages from the communications device.

The shortcut for the [Initialize modem](#) function is **ALT+Y**.

Options

The contents of the [Options](#) menu will now be described. The shortcut for the [Options](#) menu is **ALT+O**.

Raw mode


Shows the state of the raw keyboard mode, or raw mode for short.

The IBM PC keyboard generates two characters for every key you press. The first character is called the *ASCII code*, and the second character is called the *scan code*. Only the ASCII code is transmitted to the remote system by default. There are, however, some situations which require the Terminal software to transmit both codes. The AVATAR emulation protocol and the Doorway programs both require the complete codes (two characters) to identify certain keys; function and cursor keys in particular.

The shortcut for the [Raw mode](#) function is **SCROLLLOCK**. An alternative to the **SCROLLLOCK** key is **ALT+=**; this shortcut may not, however, work in all environments. **ALT+=** refers to the key immediately to the left of the **BACKSPACE** key on non-US/UK keyboards.

Raw mode can also be enabled when the remote system transmits a specific sequence that instructs the Terminal to enter raw mode. Whether or not the Terminal honors the raw mode sequence is controlled by the [Terminal.Miscellaneous.Auto DW Mode](#) setting in FDSETUP.


Once raw mode has been enabled, you cannot reach any of the Terminal's regular functions by using the keyboard until raw mode is disabled. If mouse support is enabled (default), you can invoke the menu (by clicking both buttons on a two-button mouse or the center button on a three-button mouse) and thus reach most functions.

 The **ALT+=** shortcut was added in addition to **SCROLLLOCK** to allow raw mode to be enabled in operating environments where **SCROLLLOCK** is already used for some other function. One such environment is DESQview/X. This means that the **ALT+=** keyboard sequence cannot be transmitted in raw mode. It should also be noted that regardless of the ScrollLock LED on the keyboard, the [Options](#) menu should correctly reflect the proper state of **SCROLLLOCK**.

Numerical keypad

Shows the state of the numerical keypad and the numerical keypad mode for VT52/VT100 emulation. See "Keypad modes" for additional information about this.

The shortcut for the [Numerical keypad](#) function is **NUMLOCK**.

 When the remote system (host) requests that the Terminal enters numerical application keypad mode, the Terminal automatically enables NumLock. On extended (101/102) keyboards, this will also enable the NumLock LED. The NumLock LED on IBM-PC (standard) keyboards will not change by doing this.

It should also be noted that versions other than the DOS version may not be able to change the NumLock LED depending on the operating system. The [Options](#) menu should, however, correctly reflect the proper state of NumLock.

Cursor key mode

Shows the state of the cursor key mode; this is only applicable to VT52/VT100 emulation. See "Keypad modes" for additional information about this.

The shortcut for the [Cursor key mode](#) function is **ALT+F10**.

Scroll back used

Shows information about the scroll back buffer.

[DOS] The figures represent the amount of memory used and the maximum amount of memory for the scroll back buffer respectively.
[!DOS] Only the amount of memory currently used for the scroll back buffer is displayed.

There is no shortcut for this function.

Capture

Shows whether or not capturing (see "Capture" above) is active.

There is no shortcut for this function.

On-line

Shows whether or not a connection is active.

There is no shortcut for this function.

Time on-line

Shows the duration of the current connection (if any).

There is no shortcut for this function.

Speed

Shows the speed of the current connection (if known).

There is no shortcut for this function.

Code page

Shows the currently active code page used by the Terminal. This is only used when data translation is set to **Latin1** (see "Translation tables").

There is no shortcut for this function.

Help

The contents of the [Help](#) menu will now be described. The shortcut for the [Help](#) menu is **ALT+H**.

Current macro set

Displays the 20/24 (depending on the type of keyboard attached to the system) configurable user keys and allows one to be selected and transmitted by moving the selection bar to the desired key.

The user keys are typically used to transmit a specific sequence of data to the communications device or remote system; such as a user name, a password, etc. See "Macro management" for more information about configuring macro sets.

The shortcuts for the user keys are **SHIFT+F1** through **SHIFT+F10 (F12)** and **CTRL+F1** through **CTRL+F10 (F12)**.

The shortcut for the [Current macro set](#) function is **ALT+K**.

Raw mode

Displays some brief information about the "raw" keyboard mode. See "Raw mode" ([Options](#) menu) for more information about this.
There is no shortcut for this function.

Numerical keypad

Displays some brief information about the numerical keypad when the numerical keypad mode is active. See "Numerical keypad" ([Options](#) menu) for more information about this.
There is no shortcut for this function.

Program notice


Displays program and license information.
There is no shortcut for this function.

4. UPLOADING FILES

The [Upload files](#) function (**ALT+F1**) in the [File](#) (**ALT+F**) menu is used to transmit (upload) one or more files to the remote system; it can also be used to update the modem firmware for modems with software configurable firmware.

The Terminal will first prompt for the file-transfer protocol to be used. If one is specified, the Terminal will display the transmit files entry screen. The transmit files browser can be invoked by pressing **ENTER** in the entry field if it is empty, or by specifying a filemask containing wildcards (? and *).

The Zmodem file-transfer protocol should be used where possible as it is by far the most efficient and tolerant protocol of the internally available protocols.

 *The transmit files browser cannot be invoked for the **Xmodem** file-transfer protocol; this protocol only allows one file at a time to be transmitted to the remote system or communications device.*

The top section of the browser shows the currently selected directory and the files contained in it. This section is used to select the files to transmit. The bottom section of the browser shows a list of files that have been selected for transmission; entries can be removed from the bottom section. **TAB** is used to switch between the two sections.

To select the currently highlighted file from the top section, press the **SPACE** key. The selected file should immediately appear in the bottom section. If the file does not appear, it is an indication that there is insufficient memory available to add the file; should this happen, you can either switch to the bottom section and remove some files, or restart the Terminal and then attempt to use this ([Upload files](#)) function again; though doubtful, it is possible that clearing the scroll back buffer will make a sufficient amount of memory available for this function to operate.

If you press the **ENTER** key on a directory entry (indicated by a trailing \) in the top section, the browser will switch to that directory. If you press the **ENTER** key on a drive entry (indicated by [- and -] surrounding the drive letter) in the top section, the browser will switch to that drive.


When the desired files have been selected, press **F10** from the browser window (either the top section or the bottom section). To abort the function, press **ESC**.

5. DOWNLOADING FILES

The [Download files](#) function (**ALT+F2**) in the [File](#) (**ALT+F**) menu is used to receive one or more files from the remote system.

The Terminal will first prompt for the file-transfer protocol. If one is specified, the Terminal will display the receive files entry screen. The Zmodem file-transfer protocol should be used where possible as it is by far the most efficient and tolerant protocol of the internally available protocols.

Depending on the selected protocol, the Terminal requires either a valid path or a complete filename to be specified. For the **Xmodem** file-transfer protocol, a complete filename must be specified; furthermore, only one file at a time can be received using this protocol. For other protocols, a valid path must be specified; the Terminal will use applicable information from the remote system about the file to be received.

 *When specifying a path, the directory browser can be invoked by pressing **F10**.*

It should be noted that the Terminal cannot be configured to allow the reception of an identical (existing) file. For the **Zmodem** and **SEALink** file-transfer protocols, the Terminal will compare the time, date, and size of an existing file with the same name as the one being sent by the remote system; if the file being sent is considered to be identical to an existing file, the Terminal will request that the remote system skips (does not send) the file and proceed to the next file if any.

Auto-Zmodem downloads

When the Zmodem file-transfer protocol is used, the Terminal can receive files without manual intervention by simply instructing the remote system to begin transmitting the files. This requires that the auto-Zmodem download setting (see "Auto-Zmodem downloads") in the [Line](#) menu is enabled (**Yes**).

When the auto-Zmodem function is used, the Terminal will use the last path specified in the receive files entry screen. If the receive files entry screen has not yet been invoked, the Terminal will default to the directory specified in [Terminal.Filenames.Download](#).

6. KEYBOARD MACRO MANAGER

The macro manager is used to maintain the terminal keyboard macros (see "Macro management"), or keyboard macro sets. A macro set consists of 20/24 (depending on the type of keyboard attached to the system) configurable user keys. The user keys are typically used to transmit a specific sequence of data to the communications device or remote system; such as a user name, a password, etc.

The default macro set is configured in [Terminal.Keyboard macros](#) in FDSETUP. Macro sets 0-65535 can be configured and maintained with the keyboard macro manager; invoked with the **ALT+V** shortcut.

The keyboard macro sets are stored in the TERMKEYS.FD file in the SYSTEM directory. Keyboard macro sets may contain special characters that are expanded by the Terminal when a given macro sequence is transmitted to the communications device or remote system.

Navigating

If one or more macro sets have been created from within the Terminal, the keyboard macro manager will display the currently active macro set (if any); if the default macro set is the active set, the macro manager will initially display macro set zero (0); i.e. the first macro set configured from within the Terminal.

The **LEFT** and **RIGHT** keys can be used to move to the previous and next macro set, respectively. The **HOME** and **END** keys can be used to move to the first and last macro set, respectively. To locate a specific macro set by its number, the [Find \(F5\)](#) function can be used.

Adding macro sets

To add a new keyboard macro set, press **INS** (Insert). An entry screen will be displayed where the contents of the new macro set can be configured; it is possible, but not recommended, to save an keyboard macro set even though no data has been entered.

To copy an existing entry, select (display) the macro set that should be copied and press **F10** (instead of pressing **INS**).

Most of the available special sequences are displayed in the entry screen, some notes regarding these are, however, mentioned below.

Clearing all fields

The **F9** key can be used to clear the contents of the macro set.

Importing the default macro set

The contents of the default macro set (see above) can be imported into a macro set being created by using the [Import default set](#) function (**F6**). Using this function will replace the contents of the macro set being created with the contents of the default macro set.

Special characters

The following character sequences can be used in macro sets to perform specific functions.

```

~~      Literal ~
~|      Literal |
|       <CR>
~B      <TAB>
~!      One (1) second pause
~P      The contents of the password field in the current IEMSI profile (see "Profile management" and
        "Profile manager").

```

It is also possible to insert special characters by using **CTRL+P** followed by a numerical sequence entered on the numerical keypad; e.g. to add the <FF> (ASCII 12) character, press **CTRL+P**, and then hold down the **ALT** key and enter the digits **1** and **2** (12) on the numerical keypad before releasing the **ALT** key.

Saving a macro set

Press **F10** to save the new macro set.

Discarding changes to a macro set

Press **ESC** to discard the new macro set.

Editing macro sets

Editing macro sets is similar to adding new macro sets. Press **F4** to edit the currently displayed macro set. For more information about the various options, see "Adding macro sets".

Removing macro sets

It is not possible to remove a single, specific macro set. To remove all macro sets configured from within the Terminal, press **DEL** (Delete); the Terminal will prompt you to confirm that it should remove all macro sets.

To remove the contents of a specific macro set, use the [Edit](#) function (**F4**), clear all the fields (**F9**), and then save the macro set.

Selecting a macro set

To select the currently displayed macro set for use, press **ENTER**. To select the default macro set for use, press **F6**.

Exiting

Press **ESC** to close the profile manager window.

7. PROFILE MANAGER

The profile manager is used to maintain (IEMSI) user profiles. A user profile is a collection of associated information about a given user; these profiles are primarily used for sessions negotiated using the interactive EMSI terminal protocol (IEMSI). This function can also be used to select the active profile.

The default profile is configured in [Terminal IEMSI Profile](#) in FDSETUP. Profiles 1-65535 can be configured and maintained with the profile manager; invoked with the **ALT+E** shortcut.

The user profiles are stored in the TERMPROF.FD file in the SYSTEM directory.

Navigating

The profile manager will initially display the currently active profile.

The **LEFT** and **RIGHT** keys can be used to move to the previous and next profile, respectively. The **HOME** and **END** keys can be used to move to the first and last profiles, respectively. To locate a specific profile set by its number, the [Find \(F5\)](#) function can be used; the number of the default profile is zero (0).

Adding profiles

To add a new profile, press **INS** (Insert). An entry screen will be displayed where the contents of the new profile can be configured; it is possible, but not recommended, to save a profile even though no data has been entered in the **Name**, **Handle**, and **Password** fields.

To copy an existing entry, select (display) the profile that should be copied and press **F10** (instead of pressing **INS**).

Most of the available profile settings are interpreted in a similar manner by BBS software and other on-line applications supporting the IEMSI protocol.

Name is typically the real user name; e.g. **John Doe**.

Handle, where supported, is typically a short-form name of the real user name or a nickname; e.g. **JD**.

Password is the password required to access the system.

For the remaining settings, please consult the user guide or instructions of the on-line system for more information. Some of the remaining settings are not supported by certain BBS software.

Clearing all fields

The **F9** key can be used to clear the contents of the profile.

Importing the default macro set

The contents of the default profile (see above) can be imported into a profile being created by using the [Import default profile](#) function (**F6**). Using this function will replace the contents of the profile being created with the contents of the default profile.

Saving a profile

Press **F10** to save the new profile.

Discarding changes to a profile

Press **ESC** to discard the new profile.

Editing profiles

Editing profiles is similar to adding new profiles. Press **F4** to edit the currently displayed profile. For more information about the various options, see "Adding profiles".

Removing profiles

It is not possible to remove a single, specific profile. To remove all profiles configured from within the Terminal, press **DEL** (Delete); the Terminal will prompt you to confirm that it should remove all profiles.

To remove the contents of a specific profile, use the [Edit](#) function (**F4**), clear all the fields (**F9**), and then save the profile.

Selecting a profile

To select the currently displayed profile for use, press **ENTER**. To select the default profile for use, press **F6**.

Exiting

Press **ESC** to close the profile manager window.

8. PHONE DIRECTORY MANAGER

The phone directory manager is used to maintain the terminal phone book. The phone book entries are stored in the TERMPHON.FD file in the SYSTEM directory. Entries in the phone directory can be customized to allow certain options to be automatically adjusted when a connection with a given system is established.

The phone directory manager list is divided into six columns. From left to right, they are: description, telephone number, baudrate, terminal emulation protocol, file-transfer protocol, and some optional indicators (not present on all entries).

The current connection state - **Offline** or **Online** - is displayed to the right on the top window frame.

Navigating

The selection bar is moved with **UP** and **DOWN**. The **HOME** key will move the selection bar to the topmost (of those displayed) entry; and the **END** key will move the selection bar to the last (of those displayed) field. **CTRL+PGUP** and **CTRL+PGDN** will move to the first and last entry in the list, respectively.

The incremental search function can also be used to move the selection bar. It works by matching text that you type against a description. It first attempts to search from the current position of the selection bar towards the end of the list. If no match is made, the search is restarted from the top of the list, until the position of the selection bar is reached, in which case no match was made.

The search criterion that the incremental search function works with will be displayed to the left on the bottom window frame.

Description

This is the description of the phone book entry; this field typically contains the name of the remote system.

Telephone number

The telephone number to be dialed to establish a connection with the remote system. The contents of this field is sent without further translation to the communications device.

If the entry has been configured to use a script to establish a connection with the remote system, the name of the script is shown in this column instead of the telephone number.

Baudrate

The (DTE) BPS rate to which the Terminal should configure the communications port when the entry is selected to be dialed. This contents of this field is ignored (and cannot be edited) if the [Modem.Hardware.Locked port](#) setting in FDSETUP is configured as **Yes**.

Emulation protocol

The default terminal emulation protocol that should be used when a connection is established with the remote system. This is one of **ANSI**, **VT100**, **VT52**, and **TTY**. See "Emulation" for more information about the various terminal emulation protocols.

File-transfer protocol

The default file-transfer protocol that should be used when a connection is established with the remote system. This is one of **Zmodem**, **SEalink**, **Telink**, and **Xmodem**. The Zmodem file-transfer protocol should be used where possible as it is by far the most efficient and tolerant protocol of the mentioned protocols.

Optional indicators

L

Indicates that the entry has the CR expansion (see "CR expansion" above) setting enabled (**On**).

X

Indicates that the entry has the Config translation tables (see "Translation tables" above) configured.

Q

Indicates that the entry is queued for dialing (see "Dialing").

■ (small square)

Indicates that the entry has been marked to be removed (see "Removing entries").

Adding entries

To add a new entry to the phone book, press **INS** (Insert). An entry screen will be displayed where a number of fields should be configured; it is, however, possible to save an entry even though no data has been specified for the description (name) and number (telephone number) fields.

To copy an existing entry, place the selection bar on the entry to be copied and press **F10** (instead of pressing **INS**).

[DOS] A maximum of 400 entries can be kept in the Terminal's phone book. [!DOS] A maximum of 1000 entries can be kept in the Terminal's phone book.

As most options in the entry screen correspond to various settings and options already described, they will not be described in detail here. Some notes worth mentioning are, however, listed below.

Clearing all fields

The **F9** key can be used to clear the various fields.

Random password

To use the [Random password](#) function, press **F8**. The Terminal will generate an eight-character sequence consisting of characters **A-Z**, **1-9** and set the contents of the [Password](#) field to the generated sequence.

BPS

The contents of the BPS field cannot be modified if the [Modem.Hardware.Locked port](#) setting in FDSETUP is configured as **Yes**.

IMPORT

The [IMPORT](#) function allows the applicable data from an entry in the nodelist database to be imported. See "Specifying addresses" for more information about specifying addresses to access entries from the nodelist database.

Saving an entry

Press **F10** to save the new entry.

Discarding a new entry

Press **ESC** to discard the new entry.

Editing entries

Editing phone book entries is similar to adding new entries. Press **F4** to edit the currently highlighted entry. For more information about the various fields and options, see "Adding entries".

Removing entries

To remove the currently highlighted entry, press **DEL** (Delete). This will toggle the deletion flag for the currently highlighted entry; the deletion flag is indicated by a small square (■). Entries marked for deletion will be removed when the phone book window is closed or when the [Sort/Purge](#) function is used.

Sorting entries

The [Sort/Purge](#) function is used to sort the entries in the phone book. Entries will be sorted in ascending order based on the contents of the description field. Using the [Sort/Purge](#) function will result in entries marked for deletion (see above) being removed from the phone book.

Dialing

To select an entry for immediate dialing, press **ENTER** when the selection bar is positioned on the desired entry. When an entry is selected for immediate dialing, the Terminal will add the entry to the dialing queue (indicated by a **Q**) and then process the queue starting with the selected entry.

If the dial attempt did not result in a connection, the Terminal will process the next entry in the queue (if any) until a connection is established or the dial function is manually aborted. When the last entry in the queue is reached, the Terminal will recycle to the first entry.

If a connection is established, the phone book window will be closed automatically.

Managing the dialing queue

To toggle the queue flag for the currently highlighted entry, press **SPACE**. To remove all entries from the dialing queue, press **F6** (this does not remove any entries from the phone book).

Exiting

Press **ESC** to close the phone book window.

9. SPECIFYING ADDRESSES

For certain functions, the Terminal will prompt for an address to be specified; i.e. a nodelist address. There are a number of ways to provide the Terminal with this information.

The most obvious way is to specify the address manually; this is also the fastest method, but requires that you know the address.

The FrontDoor nodelist database is much like a phone directory listing. The Terminal can be instructed to look-up systems in the database, and then copy information from the database to the input field in which the address should be entered. These look-ups can be made by providing partial or complete search criteria to the Terminal. When you provide partial search criteria to the Terminal, something called a *browser* is invoked.

There are two primary browsers in the Terminal: The nodelist browser and the userlist browser. The former is used to browse the nodelist sorted on the various components of an address (Zone, Net, Node, and Point), the latter is used to browse the nodelist sorted on names (last names) of users (typically, system operators).

The userlist browser

The userlist browser is invoked by entering a partial system operator name when prompted to specify an address. For example, to invoke the userlist browser, you could type **AN** (or **an**) and then press the **ENTER** key. If the Terminal could locate one or more system operators in the nodelist with a last name starting with the letters **AN**, it will display these in a list for you to choose from. If you want to change the search criteria – for example to make it more specific – when the Terminal has displayed its list, simply press the **ESC** key and change **AN** to something else, and press **ENTER** again.

The nodelist browser

The nodelist browser can be invoked by simply pressing **ENTER** when the entry field is empty or by specifying an address search mask. An address search mask is made up of one or more address components, followed by a question mark (?). The only effect the address search mask has is to determine where in the nodelist database the Terminal starts displaying from.

Address search masks

:?

Starts by displaying all zones in the nodelist

Z:?

Starts by displaying all nets in zone Z; e.g. **255:?**

Z:N/?

Starts by displaying all nodes in zone Z, net N; e.g. **255:3046/?**

Z:N/D.?

Starts by displaying all points of the server/boss system Z:N/D; e.g. **255:3046/10.?**

?


Starts by displaying all nodes in the net of your address. This is the same as pressing **ENTER** in an empty field.

NAMES.FD

This is the name of a text (ASCII) file located in the FrontDoor SYSTEM directory that, if present, allows you to maintain a list of frequently used names and (optionally) addresses. This file is not required for the Terminal to function, but if used properly it can save a lot of typing and time.

Depending on how your system is configured, you may not have sufficient access to edit this file. But if you do, it can be edited by using a normal text editor. The format of the file is described in the [Administrator Guide](#).

To invoke the NAMES.FD browser, simply type an asterisk (*) in the address entry field and press **ENTER**. If you append data after the asterisk, that data will be used as the initial search criteria for the incremental search (described below). The first field in this file is used as a tag (description); i.e. if the first entry's tag is "doe", and you enter *doe in the recipient name field, the Terminal will find a match on the first line and immediately exit. If there is more than one line starting with the same text, the Terminal will position the selection bar on the first match and expect you to choose an entry from the list.

 Unlike when you invoke the userlist browser, the Terminal will not limit the list to only contain those entries matching the text entered in the recipient name field.

Searching while browsing

You can also move the selection bar in the various browsers to the desired entry by using the incremental search function. Once you have become familiar with this function, it is usually the fastest way to select an entry while browsing.

The incremental search function works by matching text that you type against a name (last name) or an address. It first attempts to search from the current position of the selection bar towards the end of the list. If no match is made, the search is restarted from the top of the list, until the position of the selection bar is reached, in which case no match was made.

The search criteria that the incremental search function works with will be displayed to the left on the bottom window frame.

If you enter a digit (0-9) as the first character, the incremental search function attempts to match it to an address. Note that in the nodelist browser, the entire recipient address is not displayed in the list. The Terminal will attempt to match your incremental search criteria with what is displayed in the list.

If you enter any non-digit as the first character, the incremental search function attempts to match it against a name in similar way to that described above. Keep in mind that the incremental search function attempts to match the criteria you provide with the **last** name of the recipient.

It may sometimes be necessary to correct a typing mistake in the search criteria; if you are trying to locate a system operator with the last name **Johansson** but have typed **johant**, simply press **BACKSPACE** once to erase the **t** character and then resume typing. Note that if no matches could be made with **johant**, the Terminal will have reset the search string to the last character entered, in this case a **t**, making it impossible to correct the mistake by using **BACKSPACE**.

If there are several entries in the list with a similar recipient name or address, you can force the incremental search to display the next match without further typing; if you are trying to locate a recipient with the last name **Johansson** and there are several recipients in the list with that last name, simply type **johansson** and then use **TAB** to move to the next match.

Selecting

Press **ENTER** to select the currently highlighted address and return to the address entry field.

Exiting

Press **ESC** to abort the browser and return to the address entry field.

Appendix A: GLOSSARY

Active field	Certain input screens, such as the message header dialog box, contain a number of input fields where you enter data. The active field is the field that is currently being used to store the data that you enter.
Address	The unique combination of Zone:Net/Node.Point , identifying an individual site (system).
AKA	Alternative address ("Also Known As").
ARQ	Automatic Repeat Request; a general term for error control protocols which feature error detection and automatic retransmission of defective blocks of data.
ASCII	American Standard Code for Information Interchange; used to represent letters, numbers, and special characters such as \$, !, and /.
Auto Answer	A feature of most modems, allowing them to answer inbound calls automatically, without the intervention of software or other hardware.
AVATAR	An flexible and extremely fast terminal emulation protocol designed by George A. Stanislav. The Terminal supports the AVATAR/0+ (AVT/0+) level of this protocol. AVATAR stands for <i>Advanced Video Attribute Terminal Assembler and Recreator</i> .
BBS	See <i>Bulletin Board System</i>
Bit rate	The number of binary digits or bits transmitted per second (BPS). Communication channels using telephone links are established at set bit rates, commonly 9600, 14400, 28800, and 33600 BPS.
BPS	The bits (binary digits) per second rate.
Bulletin Board System	A Bulletin Board System, or BBS for short, is a system to which users can connect via a dial-up connection, a Local Area Network or via the Internet. It often consists of different areas, e.g. message groups, file areas, on-line games, and chat rooms.
Caller ID	Information identifying the calling party. This is typically generated by the communications/telephony network for use by devices and applications.
Carrier detect	A control signal line of the RS-232C standard interface typically used to indicate that two devices (such as modems) have established a connection. Forced carrier is the term used to describe the case when a communications device has been configured to always assert carrier detect, regardless of the true state of the connection; this is not desirable when using the device in conjunction with FD.
CD	See <i>Carrier detect</i>
Clear to send	A control signal line of the RS-232C standard interface indicating that the communications device (such as a modem) is ready to receive data from the data terminal (computer). The clear to send signal is used to implement hardware flow control between the data terminal and the communications device (CTS/RTS handshaking).
CPS	Characters per second; an expression used to measure the speed of file and data transfers.
CTS	See <i>Clear to send</i>
Data communication equipment	Equipment used to establish and control a data link between two geographical locations, often by using the telephone network. This is typically a modem or ISDN adapter.
Data terminal equipment	The device that generates/creates or is the final destination of data; typically a computer.
Data terminal ready	A control signal line of the RS-232C standard interface indicating that the data terminal (computer) is ready to use a communications device. This signal is often used to instruct a communications device to terminate a connection (hang-up).
DCD	See <i>Carrier detect</i>
DCE	See <i>Data communication equipment</i>
DTE	See <i>Data terminal equipment</i>
DTR	See <i>Data terminal ready</i>
E-Mail	Electronic mail.
EMSI	Electronic Mail Standard Identification. A standard describing a method by which two mailers (such as FD) determine which features should be used to exchange mail and files; EMSI is a very flexible <i>handshake protocol</i> favored by FD over FTS-1 and FTS-6 to negotiate mail sessions with other systems.
Flow control	A mechanism that compensates for differences in the flow of data input to and output from a device, such as a modem.
FOSSIL	An acronym for <i>Fido, Opus, SEAdog Standard Interface Layer</i> . This refers to a driver, or an interface to a driver, providing some basic functions based around communications and the IBM PC interrupt 14H vector.
FTS-1	FidoNet Technical Standard #1. A standard describing a method by which two mailers (such as FD) determine which features should be used to exchange mail and files; this is often called the FTS-1 <i>handshake protocol</i> .

FTS-6	FidoNet Technical Standard #6. A standard describing a method by which two mailers (such as FD) determine which features should be used to exchange mail and files; this is often called the FTS-6 or YooHoo <i>handshake protocol</i> . FTS-6 is more flexible and faster than the FTS-1.
Hardware flow control	Flow control implemented by means of using hardware signals such as CTS and RTS.
IEMSI	Interactive EMSI. Used to automatically logon with a Terminal program to an interactive service such as a BBS.
ISDN	Integrated Services Digital Network; ISDN is an application of digital technology that provides end-to-end digital service over the public communications network. ISDN was designed to integrate the transmissions from a variety of devices (computers, telephones, and fax machines) into one digital network.
LAN	Local Area Network. A LAN is often used to connect a number of computers at an office with each other, to make it possible to share resources such as disk drives, modems, and printers.
Mailer	A program responsible for sending, receiving, storing, and forwarding of mail. FD is the mailer in the FrontDoor package.
Modem	MODulator/DEModulator; a device that transmits and receives data through a communications channel such as radio or telephone lines. It modulates, or transforms, digital signals from a computer into the analog form that can be carried successfully on a telephone line. It also demodulates signals before passing them on to the receiving computer.
Network Address	See <i>Address</i>
Parity	An error-detection method that checks the validity of a transmitted character. Parity checking has been surpassed by more reliable and efficient forms of block-checking, including Xmodem-type protocols and the ARQ protocol. The same type of parity must be used by two communicating computers, or both may omit parity. When parity is used, a parity bit is added to each transmitted character. The bit's value is 0 or 1, to make the total number of 1's in the character even or odd, depending on which type of parity is being used (Odd, Even, Mark, Space, None, etc).
Primary Address	The first address configured in FDSETUP (Global.Address.Address.Main).
Primary AKA	See <i>Primary Address</i>
Protocol	A system of rules and procedures governing communications between two or more devices or programs. Protocols vary, but communicating devices and programs must follow the same protocol in order to exchange data. The format of the data, readiness to receive or send, error detection, and error correction are some of the operations that may be defined as protocols.
Request to send	A control signal line of the RS-232C standard interface indicating that the data terminal (computer) is ready to receive data from the communications device (such as a modem). The request to send signal is used to implement hardware flow control between the data terminal and the communications device (CTS/RTS handshaking).
RTS	See <i>Request to send</i>
SEALink	A sliding-windows 8-bit only file transfer protocol based on Xmodem, developed by System Enhancement Associates (SEA).
Software Flow Control	See <i>XON/XOFF</i>
Start/Stop bits	The signaling bits attached to a character before the character is transmitted during asynchronous transmission.
Undialable	A system which is listed in the FD undialable manager with three check marks (">>>") is said to be undialable; i.e. FD will not call such a system. The concept of undialable systems is intended to protect against repeated failures to establish a successful mail session with a given remote system.
WAN	Wide Area Network. A WAN is used to connect computers at different locations to each other.
Word length	The number of bits in a data character other than parity, start, or stop bits.
XC	See <i>Crossposting</i>
Xmodem	The first of a family of error control software protocols used to transfer files between computers. Xmodem is in the public domain and was originally designed by Ward Christensen in 1977.
XON/XOFF	Standard ASCII control characters used to tell an intelligent device to stop/resume transmitting data. This is often referred to as Software Flow Control.
YooHoo	See <i>FTS-6</i>
ZedZap	A variant of the Zmodem file-transfer protocol.
Zmodem	A full streaming file-transfer protocol with optional 7-bit transparency and variable size data frames, designed and placed in the public domain by Omen Technologies, Inc. under contract for Telenet Corporation.

Appendix B: KEYBOARD REFERENCE

This section is intended to be a keyboard reference for the Terminal. Some keys have corresponding menu options, while others do not.

Menus

Function	Keyboard sequence
File	ALT+F
Help	ALT+H
Line	ALT+L
Options	ALT+O
Session	ALT+S

Functions

Function	Keyboard sequence
Capture	ALT+C
Clear screen	ALT+J
Command history	ALT+U
Conversation (chat) mode	ALT+N
Current (keyboard) macro set	ALT+K
Cursor key mode	ALT+F10
Dial (manual)	ALT+M
Dial (nodelist)	ALT+D
Disconnect	ALT+X
Download files	ALT+F2
Editor	ALT+I
Initialize modem [ML]	ALT+Y
Macro management	ALT+V
Numerical keypad	NUMLOCK
Phone directory manager	ALT+P
Profile management	ALT+E
Quit	ALT+Q
Raw (keyboard) mode	SCROLLLOCK or ALT+=
Reset on-line timer	ALT+R
Scroll back buffer	ALT+B
Send BREAK	ALT+W
Transmit ASCII file	ALT+A
Upload files	ALT+F1

Input fields

Function	Keyboard sequence
Clear entire field	CTRL+Y
Clear field from cursor to beginning of field	CTRL+HOME
Clear field from cursor to end of field	CTRL+END
Delete character under cursor	DEL (Delete)
Delete word to right of cursor	CTRL+W
Field navigation (multi-field entry)	TAB and SHIFT+TAB
Insert/Overtyping mode toggle	INS (Insert)
Move cursor left	LEFT
Move cursor left one word	CTRL+LEFT
Move cursor right (cannot move past text)	RIGHT
Move cursor right one word	CTRL+RIGHT
Move cursor to beginning of field	HOME
Move cursor to end of field	END

Other

Function	Keyboard sequence
DOS shell	ALT+Z
Field navigation (multi-field entry)	TAB and SHIFT+TAB
Leave Terminal (exit program)	ALT+Q

Appendix C: KEYPAD MODES

The VT100 and VT52 terminal emulation protocols require that the cursor keys transmit different codes depending on the state of the remote application. Most on-line services follow the VT100 recommendation for this, but several editors and other programs have their own ideas of how this should be handled.

If the numerical keypad (**NUMLOCK**) is enabled (see "Numerical keypad"), the white cursor keypad will transmit the numerical application codes for VT100/VT52. If an extended (101/102) keyboard is attached to the system, the gray cursor keys will not follow the numerical keypad setting.

By using the **SHIFT** key together with the white cursor keypad, the setting of NumLock can be temporarily negated; i.e. if NumLock is enabled and you press **SHIFT+UP** (8), the Terminal will transmit the "up" key sequence to the remote. If NumLock is disabled and you press **SHIFT+UP** (8), the Terminal will transmit the numerical application keypad sequence for 8.

Appendix D: INTERACTIVE EMSI

Interactive EMSI (IEMSI) is the term used to describe a mechanism by which an interactive client application, such as the FrontDoor Terminal, can establish a session with a server such as a BBS.

IEMSI is loosely related to the EMSI protocol used by FD to establish a mail session with other mailers; the two protocols, however, share little other than its fundamental design and structure.

When the Terminal has been configured to support the IEMSI protocol, it will monitor data received from the communications device for a specific sequence indicating that the remote system supports IEMSI. When this sequence is detected, the Terminal will attempt to establish an IEMSI session with the remote system. If the session is successfully established, the Terminal will have transmitted applicable information about the user to the remote system; the user information transmitted by the Terminal is stored in IEMSI profiles (see "Profile management").

If the phone book (see "Phone directory manager") is used to dial a remote system, a specific IEMSI profile can be automatically loaded by the Terminal when a connection is established. An IEMSI profile can also be selected manually by using the **ALT+E** shortcut.

When an IEMSI session has been established, the Terminal will automatically invoke and close the split-screen conversation mode function (see "Conversation mode") when so requested by the remote system.

Appendix E: MOUSE SUPPORT

Most commands and functions are accessed by using the keyboard. The Terminal does, however, feature limited mouse support as outlined below.

Menus

The mouse can be used to select a menu option and to move the selection bar. In the menu system, you can move between menus by clicking the LEFT mouse button when the mouse pointer is on the menu heading. Use the RIGHT mouse button to close the menu system (*this is identical to pressing the ESC key*). To select a menu option, double-click the LEFT mouse button when the mouse pointer is on the desired option; if the mouse pointer and selection bar are already on the desired option, a single click on the LEFT mouse button should be used.

To invoke the menu system, use the LEFT and RIGHT mouse button simultaneously. If you have a 3-button mouse, you can also use the CENTER button to invoke the menu system.

Prompt dialogs

The mouse can be used to choose a response when you are prompted by the Terminal. Simply move the mouse pointer to the desired response and double-click the LEFT mouse button; if the mouse pointer and selection bar are already on the desired response, a single click on the LEFT mouse button should be used. If there is a *Cancel* option displayed in the dialog box, clicking the RIGHT mouse button will choose it and close the dialog.

Lists

In other lists such as the phone directory manager and the (command) history, the mouse can be used to select entries much like you would select a menu option using the mouse. Typically, clicking on an item in the list that is not highlighted will first highlight it, while clicking on an already highlighted item will select it.

If there is a scroll bar to the right of the list, you can either click the LEFT mouse button when the mouse pointer is positioned somewhere on the actual bar, or when it is positioned on one of the arrows at the extreme ends of the bar.

Scroll back buffer

In the scroll back buffer function (see "Scroll back buffer" above), accessed with **ALT+B**, the mouse can be used to scroll the contents of the screen by clicking on the indicators to the right on the bottom status bar.

Appendix F: CONTACT INFORMATION

Definite Solutions can be reached at:

Postal address: Definite Solutions HB
Mailbox 1012
S-112 73 Stockholm
SWEDEN

Telephone: +46 8 6505087 **(0800-1800 CET, Mon-Fri)**

Fax: +46 8 6505071

BBS: +46 8 4410010 (V.34 8N1, X.75 ISDN)
+46 8 4410011 (V.34 8N1, X.75 ISDN)

FidoNet: 2:201/329
2:201/330

Internet: sales@defsol.se
<http://www.defsol.se/>

Please refer to our website (above) for additional information such as the [FrontDoor Developer's Kit](#) (FDDEV), the *FrontDoor Frequently Asked Questions* (FDFAQ) document, and more.

INDEX

A

About *See* Program notice

B

BPS 11, 15
 BREAK *See* Send BREAK

C

Capture 13, 15
 Chat *See* Conversation mode
 CKM *See* Cursor key mode
 Clear on Form Feeds 12
 Clear screen 14
 Code page 15
 Command history 10
 Contact information 34
 Conversation mode 13
 CR expansion 11
 Cursor key mode 15

D

Data bits 11
 Definite Solutions 34
 Dial 13
 Manual 13
 Disconnect 13
 DOS shell 10
 Download 9, 18
 Auto-Zmodem 12, 18

E

Editor 10
 Emulation
 AVT/0 sequences 12
 Selecting 12
 VT100/VT52 notes 12
 External protocols *See* Editor

F

Form Feeds *See* Clear on Form Feeds
 Full-screen chat *See* Conversation mode

H

Hang-up *See* Disconnect
 Hex dump mode 12
 History *See* Command history

I

Interactive EMSI 32
 Profiles *See* Profiles

K

Keyboard
 CR expansion 11
 Cursor key mode 15
 Keypad modes 31
 Macros 9, 15, 19
 Numerical keypad 15
 Raw mode 14
 Translation 12
 Keyboard reference 30
 Functions 30
 Input fields 30
 Menus 30
 Other 30

L

Leave Terminal 10
 Line speed *See* BPS
 Local echo 11
 Logging received data *See* Capture

M

Macros 9, 15, 19
 Menus 9
 File 9
 Functions 30
 Help 15
 Keyboard reference 30
 Line 11
 Mouse support 33
 Options 14
 Session 13
 Modem
 Initialize 14
 Mouse support *See* Editor

N

NAMES.FD 26
 Notations
 FDSETUP options 6
 Version 6
 Numerical keypad 15

O

On-line indicator 15

On-line timer 14, 15

P

Parity 11
Phone directory 13
 Manager 23
Profiles 10, 21
Prompt dialog
 Mouse support..... 33

Q

Quit *See Leave Terminal*

R

Raw mode 14

S

Scripts 9
Scroll back buffer..... 14, 15
Send BREAK 14

Specifying addresses 26
Starting the Terminal 6
Stop bits..... 11

T

Terminate call..... *See Disconnect*
Timer *See On-line timer*
Translation tables 12
Transmit ASCII file..... 9

U

Upload 9, 17
 ASCII *See Transmit ASCII file*

W

Word length..... *See Data bits*
Wraparound..... 11

Z

ZedZap 29