VT LAN 40 Terminal

Quick Start and Operating Information

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FCC ID: A09-VTGYX

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This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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Quick Start

This part of the guide helps you to quickly start one or more sessions with a host computer from your VT LAN40 terminal. If you are unfamiliar with how to use Windows and the mouse, see Appendix A for detailed information and procedures.

How to Start Your VT LAN40 Terminal

- 1. Turn your terminal and your monitor on.
 - If you have used your terminal before, use the procedures in the next section.
 - If this is the first time you are turning your terminal on, the Configure Keyboard dialog box appears.

-	Configu	re Keyboard	
	Select You	Keyboard	
US			Ŧ
	<u>0</u> K	<u>C</u> ancel	

- 2 Select the keyboard you are using.
- 3. Choose OK.

A message box appears to prompt you about configuring your network.

Quick Start ...



- 4. You have two choices for configuring the network:
 - If you are **not** connecting to a network or you are using a LAT network connection, choose the 'No' button and use the procedures in the next section.
 - If you are connecting to a network using the TCP/IP or DECnet protocols, choose 'Yes'. The Setup Network dialog box appears.

- Setup Network
Network
DECnet TCP/IP Ethernet Info
Done

- 5. Choose DECnet or TCP/IP. For forms on which you can record the network information that you need in order to configure your terminal for TCP/IP or DECnet connections, see Appendix B, "How to Connect to a Network."
- 6. Enter the required network information in the appropriate network setup dialog box.
- 7. Choose OK.

The Setup Network dialog box reappears.

If you need to connect to both the DECnet and TCP/IP networks, from the Setup Network dialog box, select the button for the other network that you wish to connect to and enter the required network information.

8. Choose OK.

The Setup Network dialog box reappears.

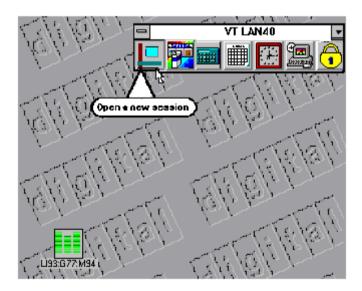
9. Choose Done.

A prompt screen appears for selecting whether or not you wish to restart your system with your network settings configured.

10. Choose 'Yes' to restart or 'No' to cancel the configuration of network settings.

How to Start Your First Session

The following display shows the screen that appears when you move your cursor on top of the VT LAN40 icon, which is the leftmost icon in the Control Center.



Quick Start ...

1. Click on the VT LAN40 icon in the Control Center.

The New Session dialog box appears.

- New Session		
Enter a name for this session		
<u>N</u> ame	OK	
<u>T</u> emplate	Cancel	
Existing Sessions	<u>D</u> elete	

2. Enter a session name.

Tips for Creating a Session Window

You might want to use a name that describes the function of the session, such as **mail** or **accounts**. The name can be no longer than eight alphanumeric characters.

3. Choose OK.

The Session Setup dialog box appears.

Session Setup Select the communications port and terminal mode for this session.			
Communications Port None Serial Serial Multisession LAT Telnet CTERM Configure	Terminal Mode VT340/420 7-bit ± Configure Explanation	OK Cancel	

- 4. Select the Communications Port type.
- 5. Choose the Configure button under the Port type option in the dialog box.
 - If you select Serial or Serial Multisession, be certain that the Port, Baud Rate, and other settings match your configuration.
 - If you select LAT, enter a service name for your LAT connection and the name of the node to which you want to connect.
 - If you select Telnet, enter the Telnet setup information.
 - If you select CTERM, enter a Host name.
- 6. After you enter the appropriate information and select settings, choose OK.

How to Communicate with a Host Computer

If you select the Serial Multisession port, you can create several simultaneous session windows on a single communications port. For every session that you open, an individual session window appears.

- 1. Position the cursor in the session window,
- 2. Click.
- 3. Press the Enter key.

Note

If you do not see your login prompt in the session window, toggle the Hold Screen button on the VT LAN40 Toolbar to **green**.



For descriptions of the Toolbar icons, see the end of this Quick Start.

4. Enter the usual information that you need to log in to your host computer.

For example, you can enable multiple sessions when you log in to your host computer as follows:

a. At the Local> prompt, enter the following command:

Local> set port multi enable

- b. Press the Return key.
- c. Continue with your login procedure.

You can also permanently set a terminal server port to enable multiple sessions as follows:

a. At the Local> prompt, enter the following command:

Local> define port multi enable

- b. Press the Return key.
- 5. Choose Save from the Session menu. Because you saved your session, you can start another session with the same feature settings.

How to Start Your Next Session

To start another session with the same settings as the first session

- 1. Choose Open from the Session menu.
- 2. Enter the appropriate information as the dialog boxes appear.
- 3. Choose OK to confirm your choices.

To start a new session with different settings

- 1. Choose New Session from the Session menu, or click on the VT LAN40 icon.
- 2. Enter the appropriate information as the dialog boxes appear.
- 3. Choose OK to confirm your choices.

How to Exit and Save a Session

The following procedure allows you to save your session settings so that the terminal can use those settings when you create a new session.

- 1. Log out of your existing session.
- 2. Choose Exit Session from the Session menu.
- 3. If you made any changes to your configuration or wish to save any layouts, select from the prompts for saving configurations and layouts.
- 4. Choose OK to exit a session.

If you want to exit all open sessions at once, select Exit All from the Session menu and select from the prompts for saving configurations and layouts.

The VT LAN40 Toolbar

At the top of the VT LAN40 window, just below the Menu bar is the VT LAN40 Toolbar



To use a button, click on the icon. A dialog box is displayed for the function.

For detailed information about each of the Toolbar functions, see the Operating Information section of this guide.

Following are descriptions of the functions for the Toolbar buttons.



Open Session Starts the a session in a new window.

õ **Print** Prints some or all of page memory. The amount printed depends on the selection that you choose for print options.



Copy Copies the selected area of the emulation window.

Ê *Paste* Sends the selected area of the emulation window to the host. You also can send a copy of the contents to the host if you do not select an area of the emulation window.



Colors Displays the Attribute Colors dialog box from which you can map colors to the various character attributes.



Reduce Font Decreases the font size of the text in the emulation window by one increment.



Enlarge Font Increases the font size of the text in the emulation window by one increment.



Show Keyboard Displays the on-screen VT keyboard.

D7 *Next Session* Switches to the next VT LAN40 application window from the list at the bottom.



Hold Screen Stops and restarts output to the emulation window.

VT LAN40 Terminal Operating Information

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About This Guide

This guide provides a quick-start procedure and detailed operating procedures for the VT LAN40 terminal.

Audience

This guide is for users and system administrators who want to configure and operate their VT LAN40 terminal.

For More Information

For more information, refer to the VT LAN40 *Installation* card, which contains detailed information about installing your LAN terminal.

See the inside back cover of this guide for ordering information.

Environment

This product has been designed and manufactured to minimize the impact to the environment. The packaging is recyclable, and the terminal can be returned for proper disposal. The terminal also has power management features that exceed the Environmental Protection Agency Energy Star requirements for saving energy.

1

How to Use Your VT LAN40 Features

This chapter explains all VT LAN40 icons and how to use the VT LAN40 features. Your VT LAN40 terminal uses a graphical Windows environment. When you use the elements of the system design correctly, you ensure that your computer's memory is shared efficiently among applications while you work with sessions.

Each application that you start appears as a separate window. Your work takes place on the desktop, which is the screen space that your system occupies. You can move work items around on the desktop, bring new items onto it, and remove those that you do not need.

The VT LAN40 Control Center

The Control Center illustrated in Figure 1-1 appears at the top of the display immediately after you turn your system on.



Figure 1-1 VT LAN40 Control Center

The icons in the Control Center allow you to:

- Open the VT LAN40 window.
- Set up the network and system configuration.
- Display a calculator, calendar, and the system clock.
- Manage desktop functions in the Control Panel.
- Activate the Window screen saver.

Table 1-1 describes each of the icons and its function. To use a Control Center function, click on the desired icon.

Table 1-1 VT LAN40 Control Center Functions

Control Center Icon	Use and Action	
	Launches the VT LAN40 application. Click to display the window for opening and using VT LAN40 sessions.	
	Displays the Configuration Options dialog box, from which you can set up the network configuration and all other configuration options.	
	Displays a calculator that can perform both standard and scientific calculations, depending on the type of calculator view that you select.	
	Displays the monthly calendar. The calendar can display any month from January 1970 to January 2038.	
靐	Displays the system clock. To change clock settings, click on the clock face to display the clock menu. To close and save the clock and clock settings, press Alt F4 while the clock displays.	
	Displays the Control Panel group of icons. Functions that you can use and control from the Control Panel are: colors, ports, mouse, desktop, keyboard, printers, international settings, date and time, and resolution settings.	
(Activates the VT LAN40 screen saver, which can be password protected.	

The VT LAN40 Control Panel

The Control Panel allows you to customize terminal settings such as the mouse, communication ports, keyboard, and window colors. To open the VT LAN40 Control Panel group, click on the Control Panel icon.



Table 1-2 describes each of the icons and its function. To use a Control Panel function, double click on the desired icon.

Table 1-2	VT LAN40	Control Panel	Functions
-----------	----------	----------------------	-----------

Control Panel Icon	Use and Action
e e e Color	Displays the Define Custom Colors dialog box, from which you can change the color of one or more of the screen elements in your window.
Ports	Displays the Ports dialog box, from which you can specify the baud rate for local printer access.
Mouse	Displays the Mouse dialog box, from which you can change the mouse characteristics.
Desktop	Displays the Desktop dialog box, from which you can change the screen background and customize the way that windows and icons appear on your screen.
·	You can also change the screen saver characteristics and the screen saver password.
دهسی ۲۰۰۵ Keyboard	Displays the Keyboard dialog box, from which you can change your keyboard characteristics.

Table 1-2 (Cont.) VT LAN40 Control Panel Functions

Control Panel Icon	Use and Action
Printers	Displays the Printer dialog box, from which you can change the options for your printer.
(International	Displays the International dialog box, from which you can change the options for the keyboard layout, measurement unit, and international date and time format.
Date/Time	Displays the Date/Time dialog box, from which you can change the system date and time.
Set Resolution	Displays the Set Resolution dialog box from which you can customize the VT LAN40 window display.
Energy Star	Displays the Energy Star setting configuration dialog box, from which you can adjust the energy saving mode intervals.

Check System Resources

The System Resource Monitor automatically appears in the lower left corner of the VT LAN40 display.



System Resource Monitor

The system monitor display window that appears if you double click never indicates 100% for any of the resources it monitors.

Following are typical initial values that exist for resources when your VT LAN40 terminal starts up:

U95:G83:M85

If a monitor column displays yellow, do not start additional applications. If a column displays red, exit from applications in order to restore adequate memory resource levels.

How to Customize Your Terminal Startup

You can set up customized configurations for the startup display of the Control Center and the programs displayed from the Applications command in the System menu.

In order to view configuration options, use one of the following methods:

• Click on the Control Center configuration icon



The Configuration Options dialog box appears, as illustrated in Figure 1-3.

• Click on the Control-menu box that appears in the upper left corner of the Control Center.



The System menu appears, as illustrated in Figure 1-2.

- Control Center	•
Restore	
<u>M</u> ove	
Mi <u>n</u> imize	
S <u>w</u> itch To	Ctrl+Esc
<u>Applications</u>	•
C <u>o</u> nfiguration	
<u>L</u> ock System	
Always On <u>T</u> op	
Hard <u>R</u> eset	
Restore <u>Factory</u> Settings	
<u>S</u> hutdown	
A <u>b</u> out	

Figure 1-2 System Menu

Select Configuration.

The Configuration Options dialog box appears, as illustrated in Figure 1-3.

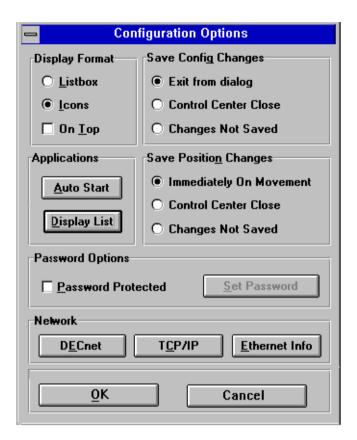


Figure 1-3 Configuration Options Dialog Box

From this dialog box, you can manage all the configuration options. Use the procedures in the next sections if you wish to customize the configuration for your terminal.

To Change the VT LAN40 Startup

From the Configurations Options dialog box, you can select which applications are to start automatically when you turn your terminal on.

1. Select Auto Start from the Configuration Options dialog box.

The Program Auto Start Selection dialog box appears, as illustrated in Figure 1-4.

Program Auto Start Selection		
Available Calculator Calendar Clock Configuration Control Panel Lock Mine Sweeper Solitaire Task Manager	>> <u>A</u> dd>> << <u>R</u> emove<<	Auto <u>S</u> tart System Resource Meter VTLAN-40 <u>Normal</u> <u>L</u> conized
OK		Cancel

Figure 1-4 Program Auto Start Selection Dialog Box

- 2. Click an application in the Available area to highlight that application to be autostarted.
- 3. Choose Add to move the highlighted application to the Auto Start area.

Repeat Steps 2 and 3 until all the applications to be autostarted are in the Auto Start area in the window.

4. Choose OK.

The Configuration Options dialog box reappears.

To Change Programs Displayed on the Control Center

From the Configurations Options dialog box, you can customize the programs that appear on the Control Center.

1. Select Display List from the Configuration Options dialog box. The Programs To Be Displayed dialog box appears, as illustrated in Figure 1-5.

Programs To Be Displayed		
Available <u>P</u> rograms Clock System Resource Meter	Programs To Display Calculator Calendar Control Panel VT LAN40 Lock	
OK	Cancel	

Figure 1-5 Programs To Be Displayed Dialog Box

- 2. Click on a programs in the Available Programs area to highlight that program so that it displays when the VT LAN40 starts up.
- 3. Choose Add to move the highlighted program(s) to the Programs To Display area.

Repeat Steps 2 and 3 until all the programs to be displayed on the Control Center are in the Programs To Display area in the window.

4. Choose OK.

When you close the Configurations dialog box, the Control Center displays showing your new program selections.

The Configuration Options dialog box reappears.

- 6. Use one of the following procedures:
 - To accept the configuration settings, choose Done.
 - To activate system security, use the procedures in the next section.

To Set Up VT LAN40 Security

In addition to customizing the configuration settings, you can also set up security so that you can change setting options only if you enter a password.

1. Click on the Password Protected checkbox in the Configuration Options dialog box, and then choose Set Password.

The Set Password dialog box appears.

- 2. Type in a password. Before you choose OK, record that password and store it in a secure place.
- 3. Choose OK to make the password active or Cancel to cancel the password use.

The Configuration Options dialog box reappears.

4. Choose Done.

Tips About VT LAN40 Security

Once you set up a password, you can restore the factory settings or change your configuration settings.

- 1. Click on the Control-menu box in the Control Center. The System menu appears.
- 2. When you select an option such as Configuration or Restore Factory Settings, you **must** enter your password in the Password dialog box that appears **before** you can continue.
- 3. Choose OK and change the desired settings.

After you change settings and the Configuration Options dialog box reappears.

4. Choose Done.

2

VT LAN40 Overview: Sessions and Layouts

Each time you turn on your VT LAN40 system, the Control Center displays at the top of your window. In the bottom left corner of your window is the system monitor icon that dynamically tracks and displays system memory use.

Figure 2-1 illustrates the VT LAN 40 Control Center, which displays as soon as you turn your system on and contains icons that represent the applications that you can start. The VT LAN40 icon is the leftmost icon in the Control Center.



Figure 2-1 VT LAN40 Control Center

To display the VT LAN40 application on your desktop, click on that icon.



Open a session

Parts of a VT LAN40 Window

The elements of a window allow you to work with the window as well as with the application within that window. Most windows have certain elements in common, such as a title bar and menus. Not all windows, however, have every element. Figure 2-2 illustrates the VT LAN40 window, shown with the elements labeled. This window appears when you click on the VT LAN40 icon in the Control Center.

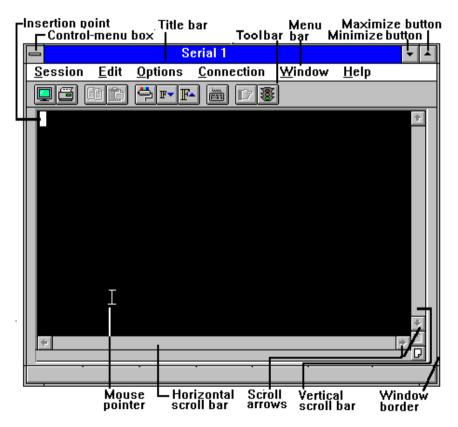


Figure 2-2 VT LAN40 Window

Table 2-1 describes the window elements illustrated in Figure 2-2.

Table 2-1 VT LAN40 Window Elements

Window Area	Description
Insertion point	Shows where you are in a window by marking the place where text and graphics appear when you begin typing or drawing. The shape of the insertion point might vary among applications.
Control-menu box	Located in the upper-left corner of each window. Click on the Control-menu box to open the Control menu. You use this menu to display or remove the menu bar, or to resize, move, and close windows. The Control-menu box on the Control Center allows you to access the System menu, from which you can choose such functions as configuration options, hard reset and terminal shutdown, lock screen, and Restore factory settings.
Title bar	Shows the session name or [None] if a new session has just been opened. If more than one window is open and when multiple sessions are open to your host, the title bar for the <i>active</i> window has a color or intensity different from other title bars.
Toolbar	Provides icons that represent commands that are available from your desktop window. You can click on a button to complete commands or actions more quickly and without using a menu. For more information, see "Using the ToolBar" in this chapter.
Menu bar	Lists the available VT LAN40 menus. A menu contains a list of commands, or actions, that you can carry out.
<i>Maximize</i> <i>button/</i> Minimize button	Click the <i>Maximize button</i> to enlarge the active application window so that it fills the entire desktop. Click the <i>Minimize</i> <i>button</i> to reduce the window to an icon. You can also use the Maximize and Minimize commands on the Control menu.
Restore button	Contains both an up arrow and a down arrow. This button replaces the <i>Maximize button</i> after you enlarge a window, and therefore is not shown in Figure 2-2. You can click the Restore button to return the window to its previous size. If you are using the keyboard rather than a mouse, you can use the Restore command on the Control menu.

Table 2-1 (Cont.) VT LAN40 Window Elements

Window Area	Description
Mouse pointer	When you move the mouse, the position of the pointer changes on the screen. The shape of the mouse pointer might vary among applications and even among documents within the same application.
Horizontal/ Vertical scroll bars	Allow you to move to a part of a session that has scrolled off the screen. Click the <i>scroll arrows</i> with the mouse to move through the display one line at a time.
Window border	The outside edge of a window. You can change the window size by lengthening or shortening the border on each side of a window.

Using the Toolbar

At the top of the VT LAN40 window, just below the Menu bar is the Toolbar, as illustrated in Figure 2-3.



Figure 2-3 VT LAN40 Toolbar

Each of the icons on the Toolbar allows you to choose a command. To choose a command, click on the icon. A dialog box is displayed for the function. Following are descriptions of the functions for the Toolbar.



Open Session Starts the named session in a new window.

Print Prints some or all of page memory. The amount printed depends on the selection that you choose for print options.



Copy Copies the selected area of the emulation window.

Paste Sends the selected area of the emulation window to the host. You also can send a copy of the contents to the host if you do not select an area of the emulation window.

Colors Displays the Attribute Colors dialog box where you can map colors to the various character attributes.

Reduce Font Decreases the font size of the text in the emulation window by one increment.



Enlarge Font Increases the font size of the text in the emulation window by one increment.



Show Keyboard Displays the on-screen VT keyboard.

Next Session Switches to the next session window from the list at the bottom of the Session menu.



Hold Screen Stops and restarts output to the emulation window.

Multiple Sessions

A session is an active connection between the VT LAN40 and a host system. You can run the VT LAN40 in multiple application windows, each window containing a session with the same or a different host.

To have multiple sessions connected through the same port, your network hardware and software must support multiple sessions.

By saving a layout for multiple sessions, you can quickly restore, change, or copy information about individual sessions. Layouts are explained later in this chapter.

Session Menu Commands

Figure 2-4 illustrates the Session menu, which contains commands for working with sessions (and a printer, if you install a local printer).

Session
<u>N</u> ew Session
<u>O</u> pen Session Res <u>t</u> ore Saved Settings
<u>S</u> ave Save <u>A</u> s
<u>P</u> rint Close Print <u>J</u> ob P <u>r</u> int Setup
<u>E</u> xit Session E <u>x</u> it All

Figure 2-4 Session Menu

Menu Options

The following options are available from the Session menu.

New Session... Creates and names a new session in another window.

Open Session... Starts the named session in a new window.

Restore Saved Settings Restores the previously saved settings.

Save Saves the current session using the current configuration name.

Save As... Displays the Save As dialog box. The options in this dialog box allow you to specify a session name for the configuration that you are saving.

You also can select which components of the configuration to save.

Print... Prints some or all of page memory. The amount printed depends on the selection you make under Extent in the Print dialog box.

Close Print Job Forces immediate printing of accumulated printer data. You can use Close Print Job only when there is data waiting to print.

Print Setup... Displays the Print Setup dialog box where you can select the printer to use. Other options depend on the printer you select. For details about setup for a printer, see Chapter 5, "How to Set Up and Use A Local Printer".

Exit Session Exits the current VT LAN40 window.

Exit All... Exits all VT LAN40 sessions.

New Session...

1. Choose the New Session command on the Session menu.

The New Session dialog box appears, as illustrated in Figure 2-5.

New Session		
Enter a name for this session		
<u>N</u> ame		OK
<u>T</u> emplate		Cancel
<u>E</u> xisti	ng Sessions	<u>D</u> elete

Figure 2-5 New Session Dialog Box

2. Type the name for the new session.

Tips for Naming a Session

You might want to use a name that describes the function of the session, such as **mail** or **accounts**. The name can be no longer than eight alphanumeric characters.

3. Choose OK.

When you open your first session on the terminal, the Session Setup dialog box appears, as illustrated in Figure 2-6. The options for session setup allow you to provide the correct communications port setup information for your first session.

Thereafter, when you open a new session, a dialog box for session setup appears *only* if no setup exists. To change the setup, use the Communications command (Options menu).

Figure 2-6 illustrates the Session Setup dialog box for a new session.

Session Setup Select the communications port and terminal mode for this session.		
Communications Port	Terminal Mode VT340/420 7-bit	OK
None Serial Serial Multisession LAT Telnet CTERM	Co <u>n</u> figure Explanation	

Figure 2-6 Session Setup Dialog Box

- 4. From this dialog box, you can select the following options:
 - A communications port type.
 - Configuration options for the port type that you select (use the Configure button that appears in Figure 2-6 under the Communications Port area).
 - The terminal mode for you terminal.
 - Configuration options for the terminal mode that you select (use the Configure button that appears in Figure 2-6 under the Terminal Mode area).

For details about the port type and terminal mode, see Appendix B, "How to Make a Connection."

Open Session...

Choose the Open Session command on the Session menu.

The Open Session dialog box appears, as illustrated in Figure 2-7.

	Open Session	
<u>N</u> ame		ОК
Existing Sessions SERIAL1 SERIAL2		<u>N</u> ew Session Cancel

Figure 2-7 Open Session Dialog Box

To start a previously created session

- 1. Display the Open Session dialog box, using either of the following methods:
 - Choose the Open Session command on the Session menu.
 - Use the Open Session button on the VT LAN40 Toolbar.



Open Session button

- 2. Select a session from the Existing Sessions list, or type a session name in the Name box.
- 3. Choose OK.

The session starts in a new window.

To switch to another open session

If you have more than one session open, you can switch among them using any of the following methods:

- Click anywhere in the window of the session that you want to be active.
- Select an item from the list at the bottom of the Window menu.
- Double click on the desktop to activate the Task List window, highlight the session that you wish to switch to, and press the Switch To button.
- Click on the Next VT LAN40 button on the VT LAN Toolbar to switch to the next session shown in the list at the bottom of the Window menu.



Next VT LAN40 button

• Press Alt Tab, Alt Esc or the F4 key.

To connect a session

If the Auto Connect command is selected on the Connection menu, your terminal is connected to the configured communications port when VT LAN40 starts, or whenever you change the port type or network address. Otherwise, you must connect a session manually.

Use any of the following methods to connect a session:

- Choose Connect from the Connection menu.
- Choose the Connect button on the status bar.

To disconnect a serial or network session

Choose Disconnect from the Connection menu.

The Session window remains on the screen.

Save

The Save command on the Session menu saves the current configuration and current user mappings. The VT LAN40 uses the current session name.

If you want to save your configuration under a different name, use the Save As... command from the Session menu.

Save As...

The Save As... command on the Session menu displays the Save As dialog box, as illustrated in Figure 2-8.

-	Save As	
<u>N</u> ame		<u>S</u> ave
Existing Sessions		Delete
		Cancel
		Help

Figure 2-8 Save As Dialog Box

The options in this dialog box allow you to specify a name. If you want to save the complete configuration under the current name, you can use the Save command from the Session menu.

Dialog Box Options

Name Type a configuration file name or select a session name from the list under Existing Sessions.

Existing Sessions A list of previously created sessions.

Print...

The Print command on the Session menu is explained in Chapter 5, "How to Set Up and Use a Local Printer."

Close Print Job

The Close Print Job command on the Session menu flushes accumulated printer data from the VT LAN40 buffers. It affects all modes of printing: the Print command, print key, escape sequences, and autoprint. The action taken depends on the type of printer configured. At the end of a flush, a form feed is sent to the printer, causing it to eject the last page.

Print Setup...

The Print Setup command on the Session menu is explained in Chapter 5, "How to Set Up and Use a Local Printer."

Exit Session

The Exit Session command on the Session menu displays the Exit dialog box which allows you to exit the current VT LAN40 window. If you made changes to your configuration, the VT LAN40 might prompt you to save the configuration.

If you want to exit one of several open sessions, use this command; otherwise use the Exit All command. The display of prompts that allow you to save configuration and layout options depends on whether or not you have checked the options for saving changes on exit in the General Settings dialog box (Options menu).

Exit All...

The Exit All command on the Session menu exits all VT LAN40 sessions, as illustrated in Figure 2-9.

	Exit		
- <u>S</u> ave chang	Save changes to configuration(s)		
O Yes	🔿 No	Prompt	
Save Lay	yout changes		
None of the 2 VT LAN sessions are connected. Exit all sessions?			
)K Cance	l Help	

Figure 2-9 Exit Dialog Box

If you made changes to your configuration or layout, the VT LAN40 might prompt you to save those changes, depending on whether you change the configuration in the Exit Settings dialog box (Options menu).

This Exit dialog box also provides you a prompt message to verify that you want to exit all of the sessions that are currently connected.

Window Menu and Layout Commands

This part of the chapter provides information about how to use the Window Menu, open layouts, and save layouts. A layout provides information about a group of session windows, their positions on the desktop, and their host connections.

Figure 2-10 illustrates the Window menu which contains commands that control multiple sessions.

<u>W</u> indow
<u>N</u> ext Session
Open Layout
S <u>a</u> ve Layout
√ <u>1</u> SERIAL1

Figure 2-10 Window Menu

Menu Options

Next Session Switches to the next VT LAN40 application window from the list at the bottom.

Open Layout... Starts all VT LAN40 application windows in the specified layout, and connect to individual hosts.

Save Layout... Saves information about all VT LAN40 application windows in a layout.

(List of Sessions) Shows all the current VT LAN40 session windows. The window that you select becomes active.

Next Session

The Next Session command on the Window menu switches to the next VT LAN40 application window from the list at the bottom of the Window menu.

Open Layout...

The Open Layout command displays the Open Layout dialog box, as illustrated in Figure 2-11. This command starts all VT LAN40 application windows and connects to individual hosts.

	Open Layout	
Existing Layouts		OK
		Cancel
1		

Figure 2-11 Open Layout Dialog Box

If a VT LAN40 window described in the selected layout is already running (as identified by its host connection), that window is not restarted, it is only moved on the desktop to the position designated for it in the previously saved layout. Any existing VT LAN40 windows that are not part of the selected layout are not changed.

Dialog Box Options

Existing Layouts Click on a name from the list.

Save Layout...

The Save Layout command displays the Save Layout dialog box, as illustrated Figure 2-12.

By saving a layout for multiple sessions, you can later restart all the sessions on your desktop in the same position they occupied when you made the layout.

-	Save Layout	
<u>N</u> ame		<u>S</u> ave
Existing Layouts		Cancel
		Delete
		Delere
1		

Figure 2-12 Save Layout Dialog Box

The options in this dialog box allow you to specify a name for the layout. You can also select and delete an existing layout.

Dialog Box Options

Name Type a layout name.

Existing Layouts Click on a name from the list.

To save a layout of one or more sessions

- 1. Choose the Save Layout command on the Window menu.
- 2. Type a layout name or select an existing layout name.

Tips for Naming a Layout

You might want to use a name that describes the function of the layout, such as **mail** or **accounts**. The name can be no longer than eight alphanumeric characters.

3. Choose Save to save the layout or Cancel to cancel the operation.

To start a previously saved layout

Use any of the following methods:

- Choose the icon on the Control Center for opening a session that you previously used when you saved the layout.
- Use the Windows menu:
 - 1. Choose the Open Layout command on the Windows menu.
 - 2. Click on the name of the layout that you wish to open.
 - 3. Choose OK.

Either method simultaneously restarts several sessions, in their former positions on your desktop.

If a session described in the layout is already open (as identified by its host connection) that session is not restarted, it is only moved on the desktop to its position in the previously saved layout. Any existing sessions that are not part of the layout are not changed.

To delete a layout

- 1. Highlight the layout to be deleted
- 2. Click on the Delete button.

List of Sessions

The list of sessions at the bottom of the Window menu shows all the currently running VT LAN40 sessions.

The names displayed in the list on the Window menu are the names that appear in the title bar of each VT LAN40 window.

To switch to any of these windows, click on its name on this list.

3 How to Set Your Terminal Options

Chapter 3 provides information about setting terminal configuration options for communications (such as port assignment and baud rate), terminal displays, keyboard use, graphics, local editing, and printing use.

Options Overview

After you install the VT LAN40, you must correctly configure communications options for how your environment connects to the host system. You can also customize other terminal configuration options such as user-preferred character set, terminal type, keyboard layout, and display colors. You can change a configured option whenever you want by choosing a command from the Options or other menus, and changing the desired dialog box option.

If you choose the Terminal command from the Options menu, a cascaded menu appears from which you can select options that change settings for:

- Your terminal type.
- The display, keyboard, graphics, local edit, and printer features that you use.

Use one of the following methods to save your options settings:

- Set an option in the Exit Settings dialog box to save your configuration settings when you exit the VT LAN40.
- Use the Save or Save As command from the Session menu.

Options Menu Commands

Figure 3-1 illustrates the Options menu that controls many aspects of the VT LAN40 terminal use.

<u>O</u> ptions
<u>V</u> iew
<u>C</u> olors
<u>T</u> erminal →
Communications
<u>H</u> istory
<u>E</u> xit Settings
<u>S</u> martPad
<u>K</u> eyboard
Me <u>n</u> us
<u>M</u> ouse
√ Show Tool <u>b</u> ar
Show Smart <u>P</u> ad
Show Keyboard

Figure 3-1 Options Menu

Menu Options

View... Displays the View dialog box so that you can change the character size, and show or hide the various scroll and status bars.

Colors... Displays the Attribute Colors dialog box so that you can map colors to the various character attributes.

Terminal... Displays a cascading menu that allows you to change the way that the VT LAN40 emulates a VT terminal.

Commands listed in the Terminal cascaded menu are:

General... Displays the Terminal General dialog box, which allows you to specify the settings for the type of terminal you want VT LAN40 to emulate.

Display... Displays the Display dialog box, which allows you to control the appearance of the emulation window. You can set the number of columns and lines, access the Colors and Attribute dialog boxes, and more.

Keyboard... Displays the Keyboard dialog box, which allows you to select settings for your keyboard. You also can define your own function keys, and map actions to keys.

Graphics... Displays the Graphics dialog box, which allows you to configure how the terminal handles Sixel and ReGIS graphics.

Local Edit... Configures the VT local editing functions.

Printer... Configures various options controlling VT printing functions.

Communications... Displays the Communications dialog box. The options in this dialog box allow you to choose the port to use for communicating with the host system. You also can select setup options, such as baud rate and network characteristics from an associated setup dialog box.

History... Displays the History dialog box, where you can specify a maximum size for the History buffer in which to store information about a previously displayed screen.

Exit Settings... Displays the Exit Settings dialog box, containing other configuration options.

SmartPad... Displays the SmartPad dialog box. The options in this box allow you to define your own buttons and button pads.

Keyboard... Displays the Keyboard Mapping dialog box where you can assign strings and VT functions to individual keys.

Menus... Displays the Menus dialog box. The options in this box allow you to define your own commands on the VT LAN40 menus or on the Menu bar.

Mouse... Changes default mouse functions.

Show Toolbar Displays the Toolbar at the top of the application window.

Show SmartPad Displays your custom button pad on the VT LAN40 status bar.

Show Keyboard Displays the on-screen VT keyboard.

View ...

The View command on the Options menu displays the View dialog box, as illustrated in Figure 3-2.

- Vie	w		
Eont Width	OK		
Auto + 3	Cancel		
4	Cancer		
5 6 +			
X Vertical Scroll Bar			
× Horizontal Scroll Bar			
🔀 <u>S</u> tatus Bar			
VT Status Line Below Scroll Bar 🛨			
L <u>a</u> nguage English 👤			
-			

Figure 3-2 View Dialog Box

The options in this dialog box allow you to change the size of text in the emulation window and to show or hide the various scroll and status bars.

Dialog Box Options

Font Width Displays a drop-down list box from which you can select a font size from 3 pixels wide to 24 pixels wide, or Auto. The Auto selection uses a font size based on the window size.

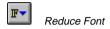
If the window contains graphics, the View command makes the displayed image larger or smaller. This appears to zoom the image.

The display size of different fonts on your screen depends on the resolution of your display.

You can repeatedly click on either of the following buttons on the VT LAN40 Toolbar to automatically increment a change of font size in your session window.

To reduce or enlarge the session window font size

• Click on the Reduce Font button to decrease the font size of the text in the emulation window by one decrement.



Continue to click on this button until the font size is satisfactory.

• Click on the Enlarge Font button to increase the font size of the text in the emulation window by one increment.



Continue to click on this button until the font size is satisfactory.

On a standard VGA (640x480) display, font sizes 5 Wide and 7 Wide show all 80 (or 132) columns in the full screen, even with the vertical scroll bar enabled. Font size 8 Wide shows all columns only when you disable the vertical scroll bar.

On an 800x600 display, font sizes 5 Wide, 7 Wide, and 8 Wide show all 80 (or 132) columns in the full screen, even with the vertical scroll bar enabled. Font size 10 Wide shows all columns only when you disable the vertical scroll bar.

The VT LAN40 automatically selects the font size for a 132-column display based on the selected 80-column font size.

Vertical Scroll Bar Displays a box in the scroll bar to indicate your position on the page. If you activate the History feature, a box in the scroll bar indicates the relative position in text that is no longer displayed in the emulation window.

Click on this checkbox so that you can use the vertical scroll bar to scroll up and down the screen.

Horizontal Scroll Bar Displays a box in the scroll bar to indicate your position on the page. Use this bar to scroll left and right on the screen. The VT LAN40 dims the scroll bar if there is no additional data to view.

Click on this checkbox so that you can use the horizontal scroll bar to scroll left and right.

Status Bar Displays the VT LAN40 Status Bar at the bottom of the session window.

VT Status Line Displays or hides the VT status line and allows you to specify whether the Status line is positioned above or below the horizontal scroll bar.

Language This feature is unavailable in the U.S. version of the VT LAN40. In VT LAN40 International versions, you can select any of the following languages for the display of all menus, commands, dialog boxes, and system messages: English, French (Français), German (Deutsch), or Spanish (Español Latino).

Colors...

The VT LAN40 emulates the color features of the VT340 terminal. VT LAN40 allows you to add more colors to your display by mapping character attributes (bold, inverse, underline, and blink) to colors.

VT LAN40 supports the ISO Color sequences, which allows the host to control the foreground and background colors independently of the other visual attributes.

VT LAN40 provides default colors for each attribute, attribute combination, and the ISO colors. You can change these default colors to customize your screen display.

The VT340 can display 16 colors at a time selected from a palette of 4096 colors. The VT LAN40 provides options that allow you to display the best color match.

To Display Color Options

Use any of the following methods to change Color options.

- Choose Colors on the Options menu, and then choose the Colors button.
- Choose Display from the Options Terminal menu, and then choose the Colors button.

The Colors dialog box allows you to change VT LAN40's colors.

• Click the Color button on the VT LAN40 Toolbar to display.



The Attribute Colors dialog box that appears allows you to map colors to the various character attributes.

Color Options

VT Color Index Select the color you want to change. A number and name identify the color.

Red, Green, Blue Assign values (0 to 255) to the color ratios for the selected VT Color Index.

To make gradual changes to colors, you must have Use Exact Colors selected.

Use Exact Colors This option is available only if you select a resolution of 256 colors for your display (that is, a display with a palette).

To set your resolution display for 256 colors:

1. Click the Control Panel icon in the Control Center.



2. Double click on the Set Resolution icon.



3. The Set Resolution dialog box appears.

Select 800 X 600 for the Resolution, Normal for the Font, and 256 for the number of colors.

4. Choose OK.

Lock User Colors Select the checkbox to prevent the host from changing colors. Normally the host can change any of the 16 colors defined by the terminal. However, some host applications fail to restore the colors, altering the appearance of VT LAN40's text and graphics from other applications.

Reset Restore colors to saved values.

Terminal

As illustrated in Figure 3-3, the Options Terminal commands display another menu of commands that provide dialog boxes for changing the options in your terminal configuration.

Use the following procedures to display the Options Terminal menu.

- 1. Choose Options from the VT LAN40 Menu bar.
- 2. Choose Terminal to display a cascaded menu.

<u>Options</u>	_
<u>⊻</u> iew	
<u>C</u> olors	
<u>T</u> erminal	<u>G</u> eneral
C <u>o</u> mmunications	<u>D</u> isplay
<u>H</u> istory	<u>K</u> eyboard
<u>E</u> xit Settings	G <u>r</u> aphics
<u>S</u> martPad	<u>L</u> ocal Edit <u>P</u> rinter
<u>K</u> eyboard	<u>r</u> mer

Figure 3-3 Options Terminal Menu

Table 3-1 displays the terminal functions that you can modify.

Table 3-1 Options Terminal Menu Commands

Command	Type of Setting
General	Terminal type
Display	Emulation window appearance
Keyboard	Function keys/keyboard mapping

Table 3-1 (Cont.) Options Terminal Menu Commands

Command	Type of Setting
Graphics	Sixel and ReGIS graphics handling
Local Edit	Local edit functions
Printer	Printer functions

Options Terminal: General...

The VT LAN40 emulates the VT420, VT320, VT220, VT100, and VT52 text terminals. The VT LAN40 also emulates the VT340 and VT240 graphics terminals. From the Options Terminal menu, the General command displays the Terminal General dialog box, as illustrated in Figure 3-4.

🛥 Terminal General			
<u>M</u> ode	VT340/420 7-bit 🛨 OK		
DA <u>R</u> esponse	VT LAN40 🛨 Cancel		
Custom Primary DA	;7;8;9;13;15;16;21c		
Custom <u>S</u> econdary DA			
<u>A</u> nswerback			
<u>C</u> haracter Set Mode	Multinational 👤		
User Preferred Character Set	DEC-MCS		
National Character Set	N. American 👤		
☐ Local <u>E</u> cho ☐ Lock User <u>K</u> eys ☐ Lock User <u>F</u> eatures			

Figure 3-4 Terminal General Dialog Box

The options in this box allow you to specify the settings for the type of terminal you want the VT LAN40 to emulate. Many of the options correspond to the options available on the VT340 series terminals. Other options are specific to the VT LAN40.

Dialog Box Options

Mode Select the terminal operating mode from the following choices in the drop-down list:

VT340/420 7bit VT420 features with graphics and 7-bit control codes

VT340/420 8bit VT420 features with graphics and 8-bit control codes

VT100 VT100-compatible

VT52 VT52-compatible.

ANSI-BBS Suitable for many BBS hosts; compatible with the PC ANSI mode.

401X Emulates a Tektronix 401X series terminal similar to the way a VT340 does.

DA Response Select the Device Attributes response. The VT LAN40 sends this response on a request from the host system. Select from the following choices in the drop-down list:

VT LAN40 Provides a superset of the VT340 DA Response, including some VT420 functions.

Custom Responds with the strings stored in Custom Primary DA and Custom Secondary DA.

Other values exactly match the DA response for that terminal type.

Custom Primary DA Specify your own Primary Device Attributes response. If you select Custom in DA Response, the VT LAN40 sends this string in response to a Primary Device Attributes request. You can specify control codes that are in the range 0 to 31 if you type a circumflex ^ followed by an upper-case alphabetic character (for example, $^{\text{E}}$). You can also specify any special code if you type a circumflex followed by three decimal numbers.

Custom Secondary DA Specify your own Secondary Device Attributes response. If you select Custom in DA Response, the VT LAN40 sends this string in response to a Secondary Device Attributes request. You enter Control (Ctrl) and special codes as described in Custom Primary DA.

Caution

Be certain that you define a Custom DA response carefully because an improperly formed DA response can cause erratic behavior in the remote host.

Answerback Specify your answerback string. You can enter up to 31 characters.

You enter control and special codes as described in Custom Primary DA. The VT LAN40 sends this string in response to a ^E from the host.

Character Set Mode Select the character set mode for the VT LAN40 to use from the following choices in the drop-down list:

Multinational Map the regular ASCII character set into the lower (7-bit) character set, called GL. Also, you can map the supplemental User Preferred Character Set into the upper (8-bit) character set, called GR. To send and receive codes in the GR set, you need 8 bits of data. If you use a serial port, ensure that your port can send all 8 bits.

National Map one of the National Replacement Character Sets (NRC) into GL. The National Character Set selection you choose determines the actual NRC set used. National mode uses only 7 bits; therefore, GR is unavailable.

User Preferred Character Set Select the 8-bit supplemental character set for VT LAN40 to use from the following choices in the drop-down list:

DEC-MCS	DEC Supplemental
ISO Latin-1	ISO Latin-1
ISO Latin-2	ISO Latin-2
IBM-PC	IBM Graphics set

National Character Set Select a National Replacement Character Set from the drop-down list. VT LAN40 uses this character set when you select National under Character Set Mode. This selection does not affect the key labels of the on-screen VT keyboard.

In VT LAN40 international versions, you can select the any of the following National Replacement Character sets from the following choices in the dropdown list:

N. American	British	Flemish	Fr.Canadian
Danish	Finnish	German	Dutch
Italian	Swiss French	Swiss German	Swedish
Norwegian	French/Belgian	Spanish	Portuguese

Local Echo Select the checkbox so that the VT LAN40 displays the characters it sends to the host. If the box is not checked, the host must handle echoes.

Lock User Keys Select the checkbox so that the host system cannot change user-defined key (UDK) definitions.

Lock User Features Select the checkbox so that the host system cannot change the settings of the user preference features, columns, scroll, and inverse screen.

Options Terminal: Display

From the Options Terminal menu, the Display command shows the Display dialog box, as illustrated in Figure 3-5.

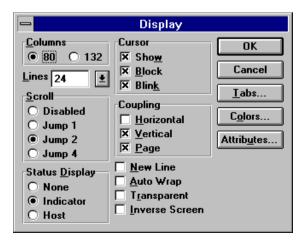


Figure 3-5 Display Dialog Box

The options in this dialog box allow you to control the appearance of your emulation window. Many of these options correspond to the options available on the terminal; others are specific to VT LAN40.

Dialog Box Options

Columns Select the page width for text. When you change the setting, the VT LAN40 clears the screen. Select one of the following choices:

80 80 columns wide132 columns wide

Lines Select the number of lines per page for the session. This also determines the number of pages. You can type in any number of lines between 24 and 144. You can also select from numbers in the drop-down box that are compatible with VT terminals:

24 (6 pages)	48 (3 pages)
25 (5 pages)	72 (2 pages)
36 (4 pages)	144 (1 page)

Scroll Select how many lines scroll onto the screen at one time from one of the following choices:

One line
One-eighth of the window
One-quarter of the window
Does not scroll

Status Display Specify how to use the VT status line from one of the following choices:

None	Do not display status line.
Indicator	VT LAN40 uses it to write its status.
Host	The host displays information on it.

Cursor Specify the appearance of the cursor from one or more of the following choices:

Show	Display the cursor.
Block	Display cursor as a block, not underline.
Blink	Make the cursor blink.

Coupling Specify whether to and how to scroll to keep the cursor visible from one or more of the following choices:

Horizontal Scroll horizontally when the cursor moves beyond the right or left edge of a window.

Vertical Scroll vertically when the cursor moves beyond the top or bottom of a window.

Page Automatically display a different page when the cursor moves to that page in page memory.

New Line Select the checkbox so that the RETURN key sends a CR and LF, instead of just a CR.

Auto Wrap Select the checkbox so that text automatically wraps to the next line when it reaches the right margin.

Transparent Select the checkbox so that the VT LAN40 displays received control characters, rather than processing them.

Inverse Screen Select the checkbox to reverse the foreground and background colors for normal text.

Tabs Click the Tabs button to display the Tabs dialog box where you can set and clear tabs.

Colors Click the Colors button to display the Colors dialog box where you can adjust VT LAN40's colors.

Attributes Click the Attributes button to display the Attribute Colors dialog box where you can select the colors to use for the various character attributes (bold, underline, inverse, blink), and their combinations.

Options Terminal: Keyboard...

The VT LAN40 keyboard layout closely resembles a VT keyboard. Most keys are located where you expect to find them so that you can easily use VT features. From the Options Terminal menu, the Keyboard command displays the Keyboard dialog box, as illustrated in Figure 3-6.

-	Keyboa	rd	
Layout Enhanced Editpad Arrangement ● Set By Driver ● VT-Like Keypad Mode ● Numeric ● Application Cursor Key Mode ● Normal ● Application Backspace Key ● Delete ● Backspace	F1 Key Hold FKey Ignore F2 Key F2 Key F3 Key Setup F3 Key Ignore	F4 Key Esc FKey Ignore F5 Key Break FKey Ignore Bell <u>Margin</u> <u>X</u> Warning	OK Cancel <u>U</u> DKs Mapping

Figure 3-6 Keyboard Dialog Box

The options in this box allow you to select settings for your keyboard. You also can define your own functions for the Shift+F6 through Shift+F20 function key combinations. Options correspond to the VT420 terminal options or are specific to the VT LAN40.

Dialog Box Options

Layout Select your keyboard type from the following choices in the drop-down list:

Enhanced LK411/LK412

Editpad Arrangement Select an arrangement for the six editing keys.

Keypad Mode Select what the keypad keys send when pressed from one of the following choices:

Numeric The default setting that sends the ASCII code of the numbers shown on the keycaps.

Application Sends control sequences.

Cursor Key Mode Select what the cursor (ARROW) keys send when pressed from one of the following choices:

Normal The default setting that sends ANSI cursor control sequences. **Application** Sends control functions.

Backspace Key Select what the Backspace key sends when pressed from one of the following choices:

Delete The default setting that sends the Del character. **Backspace** Sends the BS character.

F1 Key Select the action the F1 key performs when pressed from one of the following choices:

Hold The default setting that stops the scrolling of text.FKey Sends the VT F1 function key sequence.Ignore Do nothing.

F2 Key Select the action the F2 key performs when pressed from one of the following choices:

Print The default setting that performs VT print functions.

FKey Sends the VT F2 function key sequence.

Ignore Does nothing.

F3 Key Select the action the F3 key performs when pressed from one of the following choices:

Setup The default setting that acts as an ALT key producing an effect similar to the VT setup function.

FKey Sends the VT F3 function key sequence.

Ignore Does nothing.

F4 Key Select the action the F4 key performs when pressed from one of the following choices:

Esc The default setting for the action 'Next Session'. **FKey** Sends the VT F4 function key sequence. **Ignore** Does nothing.

F5 Key Select the action the F5 key performs when pressed from one of the following choices:

Break The default setting for the action 'Send a break signal'.FKey Sends the VT F5 function key sequence.Ignore Does nothing.

Bell Select when the bell sounds. You can select one or both values from one or more of the following choices:

Margin Sound when the text cursor approaches the right margin. Warning The default setting causing the bell to sound when operating errors occur or the terminal receives ASCII BEL.

UDKs Display the UDKs dialog box. Choose this button to assign character strings to the Shift+F6 through Shift+F20 key combinations called user-defined keys (UDKs). Normally, the host assigns values to the UDKs.

Mapping Display the Keyboard Mapping dialog box. Choose this button to display the pop-up VT keyboard from which can change the usual mapping of PC keys to VT functions.

Options Terminal: Graphics...

VT LAN40 emulates the ReGIS, Sixel, and Tektronix graphics features of the VT340. You can view a dialog box that controls the appearance of graphics and then control whether graphics are stored in a Display list or as a bitmap.

To print an image, at least one of these options must be selected. If you select neither, you cannot redisplay the screen. If you select both, the VT LAN40 uses the Display List when necessary (for example, after a zoom), and the Bitmap at other times.

Using either or both of these methods increases the memory requirement of the VT LAN40 session.

Use the Backing Store option in the Graphics dialog box to determine how the VT LAN40 stores the graphics image in order to redraw it on the screen. Choose from the following methods.

Display List (Default)

If you select this option, the VT LAN40 stores all the graphics commands in a list and then redisplays the window by executing the entire list.

This option offers you the most flexibility when you want to change the font size (zoom) and when printing.

The Display List method might not be suitable for an application that changes parts of the screen without ever clearing the screen (for example, a real-time monitor that displays the current state of some process).

Bitmap

If you select this option, VT LAN40 saves a copy of the image in memory. This option allows the VT LAN40 to quickly redisplay the image from the copy in memory. When you change the font size, VT LAN40 clears the screen because it cannot redisplay the image at the new size.

The Bitmap method allows the VT LAN40 to redraw the screen faster than with the Display List method does, but does not allow you to redisplay the image if you change the font size.

Options Terminal: Local Edit...

The VT LAN40 supports the local editing features of the VT300 series terminals. In local editing mode, VT LAN40 stores the text you type in page memory so that you can edit and send a block of edited text to the host. The options in this box allows you to set configuration options related to local editing.

Options Terminal: Printer...

The Printer command on the Options Terminal menu displays the Printer dialog box. The options in this box allow you to select the printing mode and printer options. For details about printing modes and printer options, see Chapter 5, "How to Set Up and Use a Local Printer."

History...

The History feature allows you to view, copy, and paste data that has scrolled off your display (data that no longer appears in the session window). This feature allows you to review lines of your session that were previously displayed. You can also specify values for the display operations, such as a maximum size for stored text.

The VT LAN40 stores text that scrolls off the screen or text that you clear from the screen using the Clear command.

The history appears above the first VT page in your session window. When the VT LAN40 displays the History, the vertical scroll bar box shows your position within the viewed page and History.

To activate the History feature

Use either of the following methods:

- Choose Enable History from the Connection menu.
- Choose History from the Options menu and select Enable History in the History dialog box.

To view the history

Use any of the following methods to view the history:

- Move the vertical scroll bar on the right side of the screen.
- Press Ctrl+Up Arrow and Ctrl+Down Arrow to view the previous or next line.
- Press Ctrl+Shift+Up Arrow and Ctrl+Shift+Down Arrow to view the previous or next screen.

To remove all information from the history

While viewing the session containing the history data, choose the Clear History command from the Connection menu.

Exit Settings...

After setting your configuration or layout items, you might want to save some or all of this information. The Exit Settings command on the Options menu displays the Exit Settings dialog box, as illustrated in Figure 3-7.

-	Exit Settings		
Save Changes on Exit			
O Yes	🔿 No	Prompt	
Save Layout on Exit All			
Prompt on E	xit All		
Yes	O No	O If Connected	
	OK Cancel]	

Figure 3-7 Exit Settings Dialog Box

If you have made changes in your VT LAN40 terminal configuration, this dialog box controls whether changes are automatically saved when you exit.

Dialog Box Options

Save Changes on Exit Choose one of the following choices to indicates whether configuration changes that you make are saved when you exit.

Yes Changes are always saved. No Changes are not saved. Prompt If you have changed the configuration, you are asked if you want to save the changes when you exit VT LAN40.

Save Layout on Exit Select the checkbox if the layout changes that you make are to be saved when you exit.

Prompt on Exit All If you have changed the layout, select from one of the following choices so that you are prompted to save changes when you exit the VT LAN40 using the Exit All command.

Yes A prompt screen displays before you can exit. No No prompt screen displays before you exit and changes are not saved. If **Connected** A prompt screen displays before you can exit, if you are connected to a network.

SmartPad...

The SmartPad feature allows you to define an on-screen Toolbar. You can display the Toolbar in a separate window or on the VT LAN40 status bar at the bottom of a session window. The status bar can display only one line of the Toolbar.

Keyboard...

The Keyboard command on the Options menu displays the Keyboard Mapping dialog box, as illustrated in Figure 3-8.

How to Set Your Terminal Options ...

Keyboard Mapping		
PC Key Num Lock [190]	Done	
Map To Sequence	Cancel	
Value <pf1></pf1>	Delete	
Mapped Keys	DeleteAll	
	Keyboard	
1		

Figure 3-8 Keyboard Mapping Dialog Box

The options in this dialog box allow you to change your keyboard mapping.

To map a keyboard key

1. Press the key on the keyboard that you wish to define.

The key or key sequence that you press appears in the PC key area of the window.

	-			Ke	ybo	arc	l Ma	app	ing										
	PC	Key (Ext+	[16	C]	_	_			[)or	ne							
	Мар	То	Seq	Jena	e				∎ ľ	C	an	cel	F.	L .					
	Valu	ie <	Кеур	ad -:	,					n	اماد	ete	۲.	L .					
	Мар	ped	Keys						- L (4	L .					
	Ext	+ [10	6C] =	" ∢K	еур	ad ·	»"			_	_	eAll	4						
									l	Ke	ybe	bard							
											_								9
F1 F2 F KCLD POINT S	3 F4 IIP ESC	F5 BRK	F6	F7 [⁻⁸ F	'9 FI	9	FII	FI2	FI3 F	14	F15 田	F16 D0		FI7	F18	FI9	F20	
Ĩ, İ	@ #	: [\$ 5 4	5	ê l) 9	2	<u> -</u>	[<u>+</u>]	FIND	INS	REM	PFI	PF2	PF3	PF4	
TAB	2 W	E	RT	Ý	U		0	Ì		F	ET	3 81	PREV	NEXT	7	8	9	-	
CTL LOCK		P	FG	H	Ŀ	K	Ŀ	;					+		+	5	6		
SHIFT	Z	×	c [V	В	N	М	; [) [s	HIFT		-	¥	+	1	2	3	ENT	
COMPO	XSE							0	MPOSE						0		$\left \cdot \right $		Key that is pressed.

Figure 3-9 Example of How to Map a Key

2. Choose the Keyboard button on the Keyboard Mapping dialog box.

The on-screen VT keyboard displays in front of the dialog box, as illustrated in Figure 3-9.

3. Select a key on the on-screen VT keyboard.

In this example, the keypad key for the minus (-) is selected.

A dotted box appears on top of the key that you select. In this example, you can see the dotted box on top of the - key (shown on the right side of the on-screen keyboard in Figure 3-9).

4. Choose the Done button on the Keyboard Mapping dialog box to map the key name to the keyboard key that you select. Choose Cancel to cancel the mapping operation.

Menus...

The Menus command allows you to customize the Menu bar and menus. You can add menu items, and define them for ALT key access. You could also remove commands. Items can display a cascading menu or perform an action.

Mouse...

The Mouse command allows you to change mouse functions and to assign characters and VT functions to mouse buttons.

Show Toolbar

Choose this command from the Options menu to display the Toolbar at the top of the application window.

Show SmartPad

Choose this command from the Options menu to display your custom button pad on the VT LAN40 status bar.

Show Keyboard

The Show Keyboard command displays an image of the on-screen VT keyboard, as illustrated in Figure 3-10.

You will find the on-screen VT keyboard useful to access keys you normally cannot easily access on your keyboard because:

- Your keyboard does not have convenient access to the required functions.
- You have some keys mapped, preventing you from using the original key functions.

The key labels of the on-screen keyboard can be changed to French or German labels according to the National Character Set you select in the Terminal General dialog box from the Options Terminal menu.

To display the on-screen VT keyboard:

Use either of the following methods:

- Choose Show Keyboard from the Options menu to display the on-screen VT keyboard, if not already displayed.
- Choose the VT Keyboard button on the VT LAN40 Toolbar.



VT Keyboard button

The on-screen VT keyboard displays.

F1 F2 F3 HKLD PRHT SUTP	F4 F5 ESC BRK	F6	F7 F8	F9 FI) FI	I FI2 FI3 FI4	F15 F16 HEP D0	FI7 FI8	F19 F20
~ [@	# [8	5	6 4 7	8 9		- [+ 🛛	FIND INS REM	PET PE2	PF3 PF4
TAB Q	WE	RT	Y L	' [']	0 P	{ } RET	SEL PREV NEXT	7 8	9 -
CTL LOCK A	S D	F G	Н	JK	۱. ;		+	4 5	6,
SHIFT >	Z X	C V	B	4 M [: [:	2 SHIFT	← + →	1 2	3 ENT
COMPOSE						COMPOSE		0	

Figure 3-10 On-Screen VT Keyboard

To use the on-screen VT keyboard

• Click the keys that you want sent to the host.

The VT LAN40 sends these keys to the host just as if you pressed the actual keys on your regular keyboard.

To remove the on-screen VT keyboard

Use any of the following methods while you are viewing the keyboard:

- Choose Show Keyboard again from the Options menu.
- Choose Close from the Control menu on the top left corner of the on-screen keyboard.
- Click the VT Keyboard button on the Toolbar.

4

How to Edit Information from the Display

Chapter 4 provides information about the following editing functions: copy, paste, select, and block select.

Edit Menu Commands

Figure 4-1 illustrates the Edit menu, which contains commands for selecting and pasting areas of the emulation window.



Figure 4-1 Edit Menu

Menu Options

Copy Copies the selected area of the emulation window.

Copy Special... Displays the Copy Special dialog box. The Copy Type option in this box allows you to specify the data format that you want the VT LAN40 to use. The Copy option copies the selected area of the emulation window.

The Cancel option returns you to the emulation window without copying.

Paste Sends the selected area of the emulation window to the host.

Select Selects text using your keyboard. This command allows you to select irregular areas of the emulation window.

Block Select Selects text using your keyboard. This command allows you to select rectangular areas of the emulation window.

Сору

The Copy command on the Edit menu creates a copy of the selected text and graphics.

By default, the VT LAN40 adds a carriage return and linefeed to the end of each line of text. The Copy Special command allows you to use a different line terminator from the defaults.

To copy a selection

Before you can copy data from your VT LAN40 emulation window, you must select the area that you want to copy.

Once you select the area to be copies, use any of the following methods:

• Click the Copy button on the VT LAN40 status bar or the Copy button on the VT LAN40 Toolbar.



Copy button

• Choose Copy or Copy Special from the Edit menu.

Copy Special...

The Copy Special command on the Edit menu copies a selected area, as illustrated in Figure 4-2.

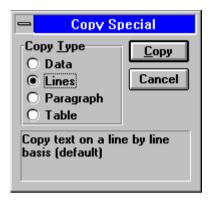


Figure 4-2 Copy Special Dialog Box

You can use this command only after selecting the area you want to copy.

The Copy Special command allows you to specify whether to use the selected area in a word processing document or a spreadsheet. Your choice determines the type of line terminator VT LAN40 uses.

To copy a selection with a special format:

- 1. Choose Copy Special from the Edit menu.
- 2. Under Copy Type, select an option.

Table 4-1 describes the copy type options.

Select	In order to copy the following
Data	Text without any formatting or line terminators. This is most useful when the text is being pasted back to the host as command line data.
Lines	Text with carriage return and linefeed added to the end of each line. This is the same as selecting Copy from the Edit menu.
Paragraph	Text for use in a word processing application. To prevent words from running together, VT LAN40 inserts a space at the end of a line. VT LAN40 inserts a carriage return and linefeed only before a blank line.
Table	Text for use in a spreadsheet or word processing table. VT LAN40 changes white space between words into a single tab character. Most spreadsheets and word processor tables interpret tab characters as cell separators.

Table 4-1 Copy Type Options

3. Choose the Copy button.

Paste

The Paste command on the Edit menu sends the selected text to the host. The format of the data sent to the host depends on the type of mouse button that you press:

- If you press the left mouse button (stream select), the VT LAN40 sends the selection with the "Data" mode of formatting—without line terminators.
- If you press the right mouse button (block select), the VT LAN40 pastes the selection with the "Lines" mode of formatting—with a terminator at the end of each line.

Graphics cannot be Pasted. The VT LAN40 always translates data that you paste to your host character set.

To paste a selection to the host

Use any of the following methods:

• Click on the Paste button on the VT LAN40 status bar or the Paste button on the VT LAN40 Toolbar.



Paste button

• Choose Paste from the Edit Menu.

To paste text to the host

- 1. Be certain that there is nothing selected on your screen.
- 2. Choose Paste from the Edit menu.

Select

You can use the keyboard or the mouse to select text from the session window. The Select command on the Edit menu allows you to select areas of the emulation window using your keyboard.

To select text with your mouse

- 1. Place the cursor at the beginning of the text that you wish to select.
- 2. Press and hold the left mouse button.
- 3. Position the mouse in the upper left corner of the text that you wish to select.
- 4. Drag the mouse to the lower right corner of that block of text.
- 5. The area that you select is highlighted.

If the area contains graphics, VT LAN40 converts the selected area to a rectangular block.

Host communications stop while you are selecting text. VT LAN40 displays the selected area using the inverse video attribute. You also can select text from the viewed history.

Block Select

You can use the keyboard or the mouse to select text from the session window. The Block Select command on the Edit menu allows you to select a rectangular area (block) of the emulation window using your keyboard.

5

How to Set Up and Use a Local Printer

VT LAN40 provides all the VT printing functions: Print Screen, Autoprint mode, and Printer Controller mode.

The Print command (Session menu) and the VT Print key emulate the VT print functions. These commands print all or part of the emulation screen, and allow you to print data that you have already received.

Set Up for a Printer

To set up a printer

- 1. Install your printer using the Windows Control Panel if you have not done so.
- 2. Choose Print Setup from the VT LAN40 Session menu.

The Print Setup command on the Session menu displays the Print Setup dialog box.

- 3. Select a printer from the list of installed printers.
- 4. Click on the Options button to configure the printer with Windows setup.

The remaining options depend on the printer you select and might include whether to print in portrait or landscape orientation, the paper size and source, and advanced features such as dithering.

To set up your printer options

Choose Printer from the Options Terminal menu to specify options for your local printer, such as font, termination character, and printer mode.

Procedures for Printing

The VT LAN40 allows you to print by pressing a key or by using a print command.

To Print Text

Keypress

You can print the current page or the scrolling region by pressing the F2 key.

To view the options in the Printer dialog box, choose the Options menu, then the Terminal menu, and then choose Printer from the cascaded menu. Options in the Printer dialog box affect how VT LAN40 will print the screen display. Select Page or Region under Extent. Select None or Form Feed under Terminator. Select a font (or select Automatic) under Font Selection.

You can cancel printing by choosing the Cancel button on the VT LAN40 status bar.

Command

You can print portions of the VT page(s) using the Print command from the Session menu. You can choose to print a selected area of the screen, the viewed portion of the current page (window), the entire current page, or all the pages.

If you have selected an area of the screen, a "Print" button appears on the status bar. Choosing this button prints the selected text. It is equivalent to choosing the Print command, with Selection as the Extent.

To print text using the Print command

1. Choose Print from the Session menu, or click the Print button on the VT LAN40 Toolbar.



Print button

2. Select one of the options under Extent.

- 3. Select Text under Format.
- 4. Choose OK.

To Print Graphics

Before you display the graphic image that you want to print, you must setup graphics options so that a graphic image is saved and ready for printing.

Prepare Graphics for Printing

The Backing Store methods allow you to print graphics images from a bitmap of the screen or from the saved Display List. To allow printing, you must select one or both of the Backing Store methods, Bitmap or Display List, in the Graphics dialog box (Options Terminal menu). For details about storing graphics, see Chapter 3, :How to Set Your Terminal Options."

Print from a Bitmap

The resolution of the printed image is limited by the resolution of the screen display. Text and graphics are scaled to the same ratio to fill the output page, maintaining the alignment of text and graphics.

To select bitmap printing

- 1. Select either (or both) of the options under Backing Store in the Graphics dialog box.
- 2. If you selected Display List in the preceding step, select Use Bitmap under Graphics Printing in the Printer dialog box.

Print from the Display List

VT LAN40 sends Windows graphics drawing commands from the Display List to the local printer. This method usually produces a higher resolution than the Bitmap method. However, text and graphics might not be scaled exactly the same, causing some misalignment between text and graphics on the full-page output.

If your printer does not support graphics drawing commands—that is, if Display List printing does not work for your printer—try the Bitmap method.

To select Display List printing

- 1. Select the Display List option under Backing Store in the Graphics dialog box.
- 2. Select the Bitmap option under Graphics Printing in the Printer dialog box.

Print with a Keypress

Printing graphics by pressing the Shift F3 key prints only the displayed portion of the image.

Options in the Printer dialog box tell VT LAN40 how to print the screen display. Select None or Form Feed under Terminator.

Options under Graphics Printing in the Printer dialog box allow you to select whether to print the background, whether to print in color, and whether to reverse the light and dark areas of the image.

You can cancel printing by choosing the Cancel button on the VT LAN40 status bar.

Print with a Command

You can print portions of the VT page(s) using the Print command from the Session menu. You can choose to print a selected area of the screen, the viewed portion of the current page (window), or the entire current page.

In the Printer dialog box, you can select None or Form Feed under Terminator.

Options under Graphics Printing in the Printer dialog box allow you to select whether to print the background, whether to print in color, and whether to reverse the light and dark areas of the image.

To print graphics using the Print command

1. Choose Print from the Session menu, or click the Print button on the VT LAN40 Toolbar.



Print button

- 2. Select one of the options under Extent. (The All Pages option does not apply to graphics.)
- 3. Select Graphics under Format.
- 4. Choose OK.

To Delete Accumulated Print Data

VT LAN40 and Windows buffer printer data. For most Windows printers, closing the printer prints the buffered data, and might eject the page. VT LAN40 gives you two ways of closing the printer: the Close Print Job Idle Timer option in the Printer dialog box (Options Terminal menu), and the Close Print Job command on the Session menu.

Close Print Job Idle Timer Option

The timer controls whether VT LAN40 sends your print jobs to a printing device soon after you request printing, waits for a time-out, or waits until you force printer output.

For data that arrives quickly, set the timer to a small time interval to ensure that the printer deletes accumulated data frequently.

For data that arrives slowly, set the timer to a large value. This prints data less often than a small interval does.

Close Print Job Command

To force output to the printer, you can use the Close Print Job command (Session menu), or exit from VT LAN40.

Printer Modes

Auto Print

The host controls Auto Print mode. In this mode, the data appears on the screen and the printer. VT LAN40 prints each line of text from the screen when it receives a line feed, form feed, or vertical tab. Typically, you use this mode to log screen data. Usually, VT LAN40 enters Auto Print mode on a control sequence sent from the host. You can turn the Autoprint feature on manually if you select Auto Print in the Printer dialog box (Options Terminal menu).

Emulating an ANSI Printer

If the host expects to send data to an ANSI printer in Printer Controller mode, you can configure the VT LAN40 to accept and print such data.

Select the Emulate ANSI Printer option in the Printer dialog box (Options Terminal menu). The VT LAN40 translates the data to equivalent Windows printer commands.

Printer Controller Mode

In Printer Controller mode, VT LAN40 prints data from the host directly, without displaying it on the screen (pass-through mode). Normally, the host selects Printer Controller mode without any user action. However, you can switch to Printer Controller mode manually by selecting the Controller option in the Printer dialog box (Options Terminal menu).

Unless you select the Emulate ANSI Printer option in the Printer dialog box, the VT LAN40 assumes the host is configured for the local attached printer and sends all data to the printer without translation.

A host might cause the VT LAN40 to enter and exit Printer Controller mode several times during a print operation, even when printing on the same page. You can select the Close Print Job Idle Timer option to gather small print jobs into one larger print job.

Commands for Printing and Printer Options

Print...

The Print command on the Session menu displays the Print dialog box, as illustrated in Figure 5-1.



Figure 5-1 Print Dialog Box

The options in this box allow you to select how much of page memory to print. You can print text or graphics using this command.

You can also display this dialog box by clicking on the Print button on the VT LAN40 toolbar.



Print button

The VT LAN40 appends a form feed only if you selected Form Feed under Terminator in the Printer dialog box. Otherwise, the VT LAN40 does not append a terminator.

You also can print page memory using the F2 or Printscreen key, depending on your keyboard. You cannot use this command in Printer Controller mode.

Dialog Box Options

Extent Specify how much of page memory to print. The selection that you choose overrides the selection under Extent in the Printer dialog box (Options Terminal menu). Select from:

Selection Print the selected area.

Window Print what appears in the VT LAN40 emulation window.

Page Print the current VT page. If in 401X mode, print the entire Tektronix image.

All Pages Print all VT pages. (Does not apply to graphics.)

Format Specify whether to print text only, or text and graphics. Select from:

Text Print text only.

Graphics Print text and graphics.

Printer...

From the Options Terminal menu, the Printer command displays the Printer dialog box, as illustrated in Figure 5-2.

-	Printer
Mode Normal O Auto	Print O Controller
<u>C</u> lose Print Job Idle Time	er 10 secs ± Cancel
Print Screen	
Extent	<u>T</u> erminator
🔿 Page	O None
Region	Form Feed
Controller Mode	
Emulate <u>A</u> NSI Printe	er
Graphics Printing	
Print background	
🛛 Print c <u>o</u> lors	
🔀 <u>R</u> everse black and	white colors
🗌 Use <u>b</u> itmap	
Font Selection	
🛛 A <u>u</u> tomatic	<u>Fonts</u>

Figure 5-2 Printer Dialog Box

The options in this box allow you to select the printing mode, and other printer options. Many of the options correspond to those available on a VT terminal.

Dialog Box Options

Mode Determines when and how printing takes place. In most cases, the host selects these modes for you.

Normal Disable continuous printing.

Auto Print Print the current line of text after receiving an end-of-file, line feed, form feed, or vertical tab.

Controller Send data directly to the printer without displaying the data on the screen.

Close Print Job Idle Timer Sets the interval of idle time (no data received) after which VT LAN40 flushes any buffered printer data, and prints the page. This option handles the timing needs of local printers. It affects all modes of printing: print screen, auto print, and printer controller modes.

If VT LAN40 has buffered printer data and accumulates no other data during the timer interval, this option flushes the buffered printer data. This sends the data to the Windows printing spooler or printing device, and then closes the printer.

When this timer expires, it performs the same function as the Close Print Job command on the Session menu.

If you set a small timer value for your local printer, the VT LAN40 sends each print job quickly to the printer. You might want to disable the timer (select Manual) and use the Close Print Job command on the Session menu to send accumulated data to the printer. Values are:

2 secs	1 min	Manual
10 secs (default)	2 min	
30 secs	5 min	

Print Screen Determines the Extent and Terminator for the printing.

Extent Selects what portion of the VT page prints when you request a print screen by pressing a key. The VT terminal defines the extent. The host can control this option. Choose one of the following:

Page Prints the entire page even if you are viewing only a portion of that page.

Region Prints only the scrolling region. Normally, the VT LAN40 defines the scrolling region as the complete page.

Note

The Print command on the Session menu has its own dialog box to control Extent. Along with Page, it offers All Pages, Selection, and Window (the current view), which you cannot choose in the Printer dialog box. *Terminator* Determines whether or not the VT LAN40 sends a form feed at the end of the print operation. Select one of the following choices:

None Sends no form feed.

Form Feed Sends a form feed, forcing each print to a separate page.

Controller Mode Prints data from the host without displaying it on the screen.

Emulate ANSI Printer Translates LA210 ANSI printer sequences to equivalent printer functions. The VT LAN40 assumes the host sends LA210 ANSI printer sequences and therefore translates those sequences to equivalent printer functions.

If you do not select this option, the VT LAN40 assumes the host is configured for the specific printer attached. The VT LAN40 sends all data to the printer without translation.

Graphics Printing Controls how VT LAN40 handles printing of graphics images. Select one or more of the following choices:

Print background Prints the current screen background. By default, the VT LAN40 does not print the background. The background color is the paper color.

Print colors Prints colors on a color printer and uses a dithering technique on a monochrome printer. If you do not select this option, the VT LAN40 converts all non-white colors to black.

Reverse black and white colors Swaps the brightest and darkest color in the palette for printing. Usually, images print as black text on a white background (because paper is white, and the screen usually is black).

Use bitmap Uses the bitmap method of graphics printing, regardless of which backing store method was selected in the Graphics dialog box from the Options Terminal menu.

Font Selection Sets the printer font for VT LAN40 to use.

Automatic Uses a fixed-pitch font. The VT LAN40 selects a font from the ones supplied by the printer, choosing the one that best fits 80 or 132 columns on the printed page.

Fonts Displays the Font dialog box from which you can choose the font that you want the VT LAN40 to use. This option is available only if you do not select Automatic.

Font Dialog Box

Figure 5-3 illustrates the Font dialog box with options that allow you to select a font, style, and size for VT LAN40 to use.

-	Font		
<u>Font:</u> Roman 10cpi B. Roman 10cpi	Font Style: ont Style: Font Style:	Size: OK 12 ↑ 12 ↑ Cance ↓ ↓	_
	Sample		

Figure 5-3 Font Dialog Box

Dialog Box Options

Font Select from the list of your installed Windows fonts.

Font Style Select Regular, Italic, Bold, or Bold Italic.

Size Select a font size from the list.

Sample When you select a font, font style, and size, an alphabet is automatically displayed that represents the text style that you have requested.

Α

How to Use VT LAN40 and Windows

This appendix presents some basic mouse techniques and Windows techniques to help you more easily manage your VT LAN40 terminal.

Terms for Basic Mouse Use

The following table describes some of the terms referred to throughout this guide when mouse techniques are explained.

Term	Meaning
Click	To quickly press and release the mouse button.
Double-click	To click the mouse button twice in rapid succession.
Drag	To hold down the mouse button while you move the mouse.
Point	To move the mouse until the mouse pointer on the screen rests on the item of choice.

Other Windows Terms

The following list provides terms that are referred to throughout this guide.

Term	Meaning
Keyboard shortcut	Shortcut keys can be used to carry out some menu commands. Shortcut-key combinations are listed to the right of a menu item. Instead of opening the menu and choosing a command, you simply press the key combination.
Select an item*	Marking he item with the selection cursor, which can appear as a highlight, a dotted rectangle, or both. You also select checkboxes in dialog boxes. Selecting alone does not initiate an action.
Choose an item*	Carries out an action. For example, choosing an icon might start an application, open a window, or carry out a command. You can also choose an item from a menu, or choose a command button in a dialog box. (Menus and dialog boxes are discussed in more detail later in this chapter.) You often need to select an item before you can choose it.

*Sometimes, you can use a combination of mouse and keyboard techniques. For example, you could click an item to select it, and then press Enter to choose it.

Use of Your Menus

Commands are listed on menus that are listed on the menu bar along the upper edge of the application window.

In addition, each application window has a Control menu. The Control menu opens from the small box in the upper-left corner of each window. For more information, see "Using the Control Menu" later in this chapter.

To Select or Close a Menu

Figure A-1 illustrates the selecting of the Session menu and shows the commands that you can choose from that menu.

		S	ERIAL1		-	
<u>S</u> ession	<u>E</u> dit	<u>O</u> ptions	<u>C</u> onnection	<u>W</u> indow		
<u>N</u> ew Sea	sion]		
<u> </u>	ssion.					
<u>N</u> ew Ses Open Se Res <u>t</u> ore	Saved	Settings				
<u>S</u> ave						
Save <u>A</u> s						
Print						
Close Pr	int <u>J</u> ob)				
P <u>r</u> int Set	tup					
<u>E</u> xit Ses	sion		7			
E <u>×</u> it All						

Figure A-1 VT LAN40 Menus

In Windows, you select (highlight) a menu and then choose a command from that menu. When you choose a command, you either carry out an action immediately or open a dialog box or another menu from which you carry out one or more actions.

To select a menu

Use either the mouse or the keyboard, as follows:

Mouse

Use either of the following methods:

- Using the mouse pointer, point to the name of the menu on the menu bar click the left mouse button to open the selected menu.
- Drag the selection cursor down the menu until the menu item is highlighted and release the mouse button.

Keyboard

- 1. Press Alt or F3 to select (highlight) the menu bar.
- 2. Press the Left Arrow or Right Arrow key to select the menu you want.
- 3. Choose Enter to open the selected menu.

Тір

If a name in the menu bar has an underlined letter, you can press Alt to move to the menu bar, and then type the underlined letter to open the menu. For example, to open the Session menu, press Alt, S.

To close a menu

Use one of the following methods.

- Click the menu name or anywhere outside the menu.
- Press Alt or F10 to cancel the menu and move back to the application workspace.
- Press Esc to close the menu but remain on the menu bar so that you can select another menu.

To Choose a Menu Command

Menu items are usually commands. Figure A-2 illustrates the Options menu for the VT LAN40, which provides commands that allow you to set and control the options for sessions with your host.

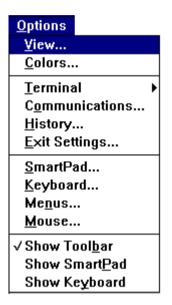


Figure A-2. Sample Menu

Menu items can also be characteristics you assign to graphics or text (such as bold or centered), a list of open windows or files, or the names of cascading menus, which list additional commands.

To choose an item from a selected menu

Use one of the following methods:

- Click the item.
- Type the letter that is underlined in the item name.
- Use the Up Arrow and Down Arrow keys until you reach the item you want to select, and then choose Enter.

Menu Conventions

The following menu conventions are used in Windows.

Menu Convention	Meaning
Dimmed (or not visible) command	You might not be able to use the command with your application at the current time. (For example, you might need to select another item before using this command.)
An ellipsis () following a command	A dialog box appears when you choose the command. The dialog box contains options you need to select before the command can be carried out.
A checkmark (\checkmark) to the left of a command	The command is in effect when you toggle (that is, when you click to display the checkmark). When you click on the command again (toggle off, you remove the checkmark and the command is no longer in effect.
A key combination to the right of a command	The key combination is a shortcut for this command. You can use this key combination to choose the command.
A triangle () to the right of a command	When you choose this command, a cascading menu appears, listing additional commands.

Use of a Control Menu

Application windows, application icons, and some dialog boxes display a Control menu, as illustrated in Figure A-3.



You open the Control menu for windows and dialog boxes by selecting the Control-menu box located in the upper-left corner of the window or dialog box.

Restore	
<u>M</u> ove	
<u>S</u> ize	
Mi <u>n</u> imize	
Ma <u>x</u> imize	
<u>C</u> lose	Alt+F4
S <u>w</u> itch To	Ctrl+Esc
<u>O</u> pen Session	
Open Layout	
Save Layout	
√ Show Menu <u>B</u> ar	

Figure A-3 Control Menu

The Control menu for an application window and a dialog box are somewhat different from each other. The following section describes how to use the Control menu in these environments.

How to Open the Control Menu

The way in which you open the Control menu depends on whether you are working with an application window, a dialog box, or an icon.

To open the Control menu for a window or an icon

Use either the mouse or the keyboard, as follows:

Mouse

Use one of the following methods:

- Click the Control-menu box in the upper-left corner of the window.
- Click the application icon.

Do not double-click; because if you do, the window closes or the icon is restored to a window.

Keyboard

- 1. Press Alt+Esc repeatedly to cycle through the open application windows and icons until you reach the one you want.
- 2. Press Alt, Spacebar to open the Control menu. (Press Alt if you want to close the menu without choosing a menu item.)

To open the Control menu for a dialog box

Use one of the following methods:

- Click the Control-menu box in the upper-left corner of the dialog box.
- Press Alt, Spacebar. (Press Alt to close the menu without choosing a menu item.)

Control-Menu Commands

The following table describes the commands on the Control menu. Only some applications have all these commands.

Command	Use
Restore	Restores the window to its former size after you have enlarged it (by using the Maximize command) or reduced it to an icon (by using the Minimize command).
Move	Uses the keyboard to move the window to another position.
Size	Uses the keyboard to change the size of the window.
Minimize	Reduces the window to an icon.
Maximize	Enlarges the window to its maximum size.
Close	Closes the window or dialog box. (From an application window, you can use this command to quit the application.)
Switch To	Displays the Open Task List, which allows you to switch between running applications and to rearrange windows and icons on your desktop.
Open Session	Opens the Open dialog box, which allows you to either open a new VT LAN40 session or select and open an existing session.
Open Layout	Opens the Open Layout dialog box, which allows you to either create a new layout for your session or select and open an existing layout for your session.

Command	Use
Save Layout	Opens the Save Layout dialog box, which allows you to either save the layout that is currently open for your session or select and save a new layout for your session.
Show Menu Bar	The Menu bar is visible in the window, if Show Menu Bar is checked. The menu bar is not visible if this command is unchecked.

How to Work with a Window

When you work with applications, several windows can be open at the same time. This section explains how to move and resize windows, scroll through window contents, and arrange windows on the desktop.

How to Change the Size of a Window

You might want to change the size and shape of windows on your desktop. For example, to compare the contents of two windows, you can reduce the size of both windows so that they fit side by side. If you are using a mouse, you can drag the window's border or corners to adjust the size. If you are using the keyboard, you can modify the window's size and shape by using commands on the Control menu.

Note

The minimum size for all windows is about 2 inches by 1 inch. Some application windows cannot be resized.

To change the size of a window

Use either the mouse or the keyboard, as follows:

Mouse

- 1. Select the window you want to resize.
- 2. Point to a border or corner.
- 3. The pointer changes to a two-headed arrow.
- 4. Drag the corner or border until the window is the size you want.

If you drag a border, the window size changes only on the side of the border you drag. If you drag a corner, the two adjoining sides that form the corner are moved at the same time. An outline shows the size and shape you are creating.

- 5. Release the mouse button.
- 6. To cancel the resizing, press Esc before you release the mouse button.

Keyboard

Select the window you want to resize and use the following keys, as appropriate. (Be sure Num Lock on the PC keyboard is turned off.)

Action Description	To Perform the Action
Cycle through application windows until you reach the window to be changed.	Press Alt+Tab or Alt+Esc .
Resize an application window	 Press Alt, Spacebar to open the Control menu. From the Control menu, choose Size.C
	3. The pointer changes to a four-headed arrow. Use an arrow key to move the pointer to the border you want.
(Resize continued)	 Press two arrow keys simultaneously to select a corner of the window.
	For example, press Up Arrow+Right Arrow to select the upper-right corner of the window. Use an arrow key to move the border.

Action Description	To Perform the Action
Change horizontal and vertical size	If you are changing the size both horizontally and vertically:
	1. Press the Right Arrow key to stretch the window to the right
	 Press the Up Arrow key to stretch the window toward the top of the desktop, until the window is the size you want.
	An outline shows the size and shape as you make changes.
	5. Press Enter when the window is the size you want.
Cancel the resizing	Press Esc before you press Enter.

How to Reduce a Window to an Icon

When you finish working with an application, you might want to reduce the application window to an icon if you want the application available for later use.

When you reduce an application window to an icon, the application continues to run but its window does not take up space on the desktop. You might also be able to reduce a document window to an icon.

You can select and move icons on your desktop in the same way you select and move windows.

To reduce a window to an icon

Use either the mouse or the keyboard, as follows:

Mouse

- 1. Select the window you want to reduce.
- 2. Click the Minimize button (the box with a down arrow to the right of the title bar) in the upper-right corner of the window.

Keyboard

Select the window you want to reduce and use the following keys, as appropriate.

Action Description	To Perform the Action
Cycle through application windows until you reach the one you want	Press Alt+Tab or Alt+Esc .
Reduce an application window	 Press Alt, Spacebar to open the Control menu. From the Control menu, choose Minimize.

How to Enlarge a Window

In most cases, you can enlarge an application window to fill a larger portion of the desktop or even the entire desktop.

A document window can be enlarged to fill an entire application window except the menu-bar area.

To enlarge a window to its maximum size

Use either the mouse or the keyboard, as follows:

Mouse

- 1. Select the window you want to enlarge.
- 2. Click the Maximize button in the upper-right corner of the window.

Note

You can also maximize a window by double-clicking its title bar. To restore an application window to its previous size, double-click the title bar again. Click the Restore button in the upper-right corner of the window.

Keyboard

Select the window you want to enlarge and use the following keys, as appropriate.

Action Description	To Perform the Action
Cycle through application windows until you reach the one you want	Press Alt+Tab or Alt+Esc .
Enlarge an application window	 Press Alt, Spacebar to open the Control menu. From the Control menu, choose Maximize.

How to Use Scroll Bars

Some windows and dialog boxes have scroll bars that you can use to view information that exists beyond the borders of the window. When you can view all the contents of a window or dialog box without scrolling, scroll bars might be absent or dimmed to indicate that they cannot be used.

To scroll through information displayed in a window or dialog box

Use either the mouse or the keyboard, as follows:

Mouse

Use either of the following methods.

- Drag the scroll box to scroll through all the information in a list or document.
- Use the following techniques to scroll. (Be sure Num Lock on the PC keyboard is off.)

Type of Scrolling	To Perform the Action
One line up or down	Click the up or down scroll arrow.
One screen	Click the scroll bar above or below the scroll box on vertical scroll bars, and to the left or right of the scroll box on horizontal scroll bars.
Continuously	Point to one of the scroll arrows, and hold down the mouse button until the information you want comes into view.
To any position	Drag the scroll box in the scroll bar to the position you want. The section of the document or list that moves into view depends on where you position the scroll box. For example, if you position the scroll box halfway down the vertical scroll bar, the text halfway through the document or list appears.

How to Close a Window

One way to quit an application is to close the application window. Similarly, you can close a session by closing the session window.

If you changed your session since you last saved it, a message prompts you to save the session before closing the window.

Use any of the following methods to close a window:

- From the File menu, choose Exit.
- Choose Close from the Control menu.
- Double-click the Control-menu box.

Use of a Dialog Box

Figure A-4 illustrates a sample of a VT LAN40 dialog box. A dialog box provides options from which you can request information about a task you are performing or supply information you might need.

Terminal General			
<u>M</u> ode	VT 340/420 7-bit 🛨 OK		
DA <u>R</u> esponse	VT LAN40 ± Cancel		
Custom <u>P</u> rimary DA	;7;8;9;13;15;16;21c		
Custom <u>S</u> econdary DA			
<u>A</u> nswerback			
<u>C</u> haracter Set Mode	Multinational 🛨		
<u>U</u> ser Preferred Character Set	DEC-MCS 🛓		
National Character Set	N. American 🛨		
☐ Local <u>E</u> cho ☐ Lock User <u>K</u> eys ☐ Lock User <u>F</u> eatures			

Figure A-4 Dialog Box Example

Most dialog boxes contain options that you can select. After you specify options, you can choose a command button to carry out a command.

Other dialog boxes might display additional information, warnings, or messages indicating why a requested task cannot be accomplished.

Some dialog boxes contain an ellipsis (...) after a menu command to indicate that another dialog box will appear when you choose that command.

To Move Within a Dialog Box

Often you need to move within a dialog box to select one or more options. The currently selected option is marked by the selection cursor, which appears as a dotted rectangle or a highlight.

To move within a dialog box

Use either the mouse or the keyboard, as follows:

Mouse

Click the option or area you want to move to.

Keyboard

Use either of the following methods (Be sure Num Lock on the PC keyboard is turned off.):

- Press Tab to move forward (generally from left to right and top to bottom), or press Shift+Tab to move in the opposite direction.
- While you press and hold down Alt, type the letter that is underlined in the option name or group name.
- Within an area, use the arrow keys to move from one option to another.

Command Buttons

You choose a command button to initiate an immediate action, such as carrying out or canceling a command.

- The OK and Cancel buttons are common command buttons. They are often located along the bottom or on the right side of the dialog box.
- A command button followed by an ellipsis (...) opens another dialog box that expands the active dialog box.

For example, the Color... command expands to allow you to change the color attributes. When you choose Color from the Options menu, the Color dialog box displays all the color attribute options.

• Unavailable buttons are dimmed.

• The currently selected button has a darker border than other buttons. You can choose the selected button simply by pressing Enter.

To close a dialog box without completing a command, choose the Cancel button or press Esc.

To choose a command button

Use either the mouse or the keyboard, as follows:

Mouse

Click the command button.

Keyboard

1. Press Tab to move to the button you want.

A dark border marks the selected button.

2. Press the Spacebar or Enter.

Тір

If the button has an underlined letter in its name, you can choose the command button in one step. Press and hold down Alt while typing the underlined letter.

Types of Dialog Box Options

The types of options in a dialog box are described in the following sections.

Text Boxes

You type information into a text box.

When you move to an empty text box, an insertion point (blinking vertical bar) appears at the far left side of the box. The text you type starts at the insertion point.

If the box you move to already contains text, this text is selected, and any text you type replaces it. You can also delete the existing text by pressing Delete or Backspace.

To select text in a text box

Use either the mouse or the keyboard, as follows:

Mouse

Use either of the following methods:

- Drag the pointer across the text you want to select.
- Double-click on a word to select one word at a time.

Keyboard

Use the following method (Be sure Num Lock on the PC keyboard on the PC keyboard is turned off.):

- 1. Use the arrow keys to move to the first character you want to select in the box.
- 2. To extend the selection, press and hold down Shift while pressing the appropriate arrow key. (Press Shift+Home to extend the selection to the first character in the box. Press Shift+End to extend the selection to the last character in the box.)

List Boxes

A list box displays a list of choices. If there are more choices than can fit in the box, scroll bars display along the bottom and/or the side of a window so that you can move quickly through the list. For information about scrolling, see "Using Scroll Bars" earlier in this appendix.

Usually, you can select only one item in a list box.

To select a single item from a list box

Use either the mouse or the keyboard, as follows:

Mouse

Use either of the following methods:

• Click the scroll arrows until the item you want to select appears in the list box.

Click the item, and then choose the appropriate command button.

• Double-click the item to select it and complete the command all in one step.

Keyboard

Use either of the following methods (Be sure Num Lock on the PC keyboard is turned off.):

- Use the arrow keys to scroll to the item you want.
- Type the first letter of the item you want to select. The selection cursor moves to the first item that starts with that letter.

Press ENTER.

Sometimes you can select more than one item in a list box, whether or not those items are sequential. In these cases, you can select or cancel as many items as you want.

Drop-Down List Boxes

A drop-down list box appears initially as a rectangular box with the current selection marked by the selection cursor. When you select the arrow in the square box at the right, a list of available choices appears. If there are more items than can fit in the box, scroll bars are provided.

This type of list box is often found in small or crowded dialog boxes.

To open a drop-down list box and select an item

Use either the mouse or the keyboard, as follows:

Mouse

Use either of the following methods:

• Click the arrow at the right of the box to open the box.

Click the up or down scroll arrow.

• Drag the scroll box to move to the item you want to select. Click the item.

Keyboard

Use the following method (Be sure Num Lock on the PC keyboard is turned off.):

1. Press Alt+Down Arrow to open the box.

- 2. Press the Up Arrow or Down Arrow key to move the selection cursor to the item you want.
- 3. Press Alt+Up Arrow or Alt+Down Arrow to select it.

Option Buttons

Option buttons represent mutually exclusive options. You can select only one option at a time.

The selected option button contains a black dot. Unavailable options are dimmed.

To select an option button

Use either the mouse or the keyboard, as follows:

Mouse

Click the option button.

Keyboard

Use the following method:

- 1. Press Tab to move to the group of options you want.
- 2. Use the arrow keys to select the option button you want.

Тір

If the option has an underlined letter, you can select the option button by pressing and holding down Alt while typing the underlined letter.

Check Boxes

A check box next to an option indicates that you can select or clear the option. You can select as many check-box options as needed. When a check box is selected, it contains an X. Names of unavailable options are dimmed.

Note

In some cases, a check box might be shaded. A shaded box often signifies that additional choices relate to the option, though the meaning varies with the application.

To select or clear check boxes

Use either the mouse or the keyboard, as follows:

Mouse

Use the following method:

- 1. Click each blank check box you want to select.
- 2. Click a selected box to clear it.

Keyboard

Use the following method:

- 1. Press Tab to move to the check box you want to select or clear.
- 2. Press the Spacebar to select the box.
- 3. Press the Spacebar again to clear the selection.

Тір

If the option name has an underlined letter, press and hold down Alt while typing the underlined letter to select or clear the check box.

B

How to Make a Connection

The first part of this appendix provides forms and procedures to help you to complete your network setup, if your VT LAN40 terminal is connecting to a TCP/IP and/or a DECnet network.

The remainder of this appendix provides information about establishing a communications configuration, making a connection, and controlling the sessions with your host.

TCP/IP Setup Procedures

Before you begin network setup

- 1. Collect necessary network information for connecting to TCP/IP.
- 2. Record information in the blank lines on the following form.

TCP Data
TCP/IP
Host Name
IP Address
Subnet Mask
Default Gateway
Domain Name Resolver
Name Server 0

To complete the setup

- 3. Select the TCP/IP button from the Configuration Options dialog box.
- 4. Enter the TCP/IP setup information in the TCP/IP dialog box.
- 5. Choose OK to complete the network setup or Cancel to return to the Configuration Options dialog box.

DECnet Setup Procedures

Before you begin network setup

- 1. Collect necessary network information for connecting to DECnet.
- 2. Record information in the blank lines on the following form.

DECnet Data				
Executor				
Name				
DECnet Address				
Nodes				
Name				
DECnet Address				

To complete the setup

- 3. Select the DECnet button from the Configuration Options dialog box.
- 4. Enter the name and address assigned to this terminal.
- 5. For each DECnet node that you wish to connect, choose the Add button and type each node name and address.

Choose OK to complete the network setup or Cancel to return to the Configuration Options dialog box.

How to Make a Connection ...

The Communications Setup

Before communicating with a host computer, you must establish a valid communications configuration. VT LAN40 supports many communications methods, from serial connections—as the VT terminal does, to network connections such as LAT and TCP/IP.

You select your communications method from the list under Port in the Communications dialog box.

You can select additional configuration information for the methods by choosing the Setup button to display the associated dialog box. VT LAN40 supports the following communications methods:

- Serial
- Serial Multisession
- LAT
- Telnet
- CTERM

These communications methods allow you to have more than one session on the screen at the same time. Your hardware or network software might restrict the number of sessions you can run.

For example, if you use a Serial port, you can run only one session at a time on each COM port. If you want to run multiple sessions, you could configure each one to a different COM port, or use the Serial Multisession method. However, if you use a LAT network connection, the network software allows you to connect to the same or different host services with multiple VT LAN40 sessions.

Communications

When you start the VT LAN40 for the first time, you must select a communications method. The VT LAN40 supports the serial (COM) ports, Serial Multisession, Telnet, LAT, and CTERM connections.

To select and configure a communications port:

1. Choose Communications from the Options menu.

The Communications dialog box appears, as illustrated in Figure B-1.

Communications			
Port None Serial Serial Multisession LAT Telnet CTERM	OK Cancel <u>S</u> etup		
⊠ <u>L</u> imit Transmit Rate <u>R</u> ate (ch/sec) 240			

Figure B-1 Communications

The options in this dialog box allow you to choose a port for communication with the host and to access the setup dialog box appropriate for that port.

Dialog Box Options

Port Select the communications method you want to use to connect to the host system. VT LAN40 sets this option to **None** during installation. Select one of the following:

Serial Access the COM ports on your PC. The Serial Setup dialog box allows you to select the particular COM port, and set the port parameters.

Serial Multisession Use a protocol that allows multiple sessions on a single serial port.

The Multisession Serial Port Setup dialog box allows you to select the port and set parameters.

LAT Use the Local Area Transport network protocol for terminal access over Ethernet.

Telnet Use for terminal access to hosts using TCP/IP.

CTERM Use wide area DECnet network.

Limit Transmit Rate Select rate limiting during normal terminal emulation, pasting, and read operations. This option does not affect protocol-controlled file transfers such as Kermit or the baud rate.

In many cases, hosts can transmit data faster than they can receive it. Sending large amounts of data to the host with commands such as Paste can cause data loss. This option prevents a loss of data Transmit Rate in the Communications dialog box (Options menu).

Rate (ch/sec) Set the maximum transmit rate in characters per second for the VT LAN40 to use when sending data to the host. The default rate is 240 characters per second.

Setup Display the Setup dialog box for the communication method you selected in the Port field.

- 2. Select a communication method from the list under Port. Use the scroll bar to access the complete list.
- 3. Choose the Setup button, if available, to display a dialog box that contains options for the selected port. For a serial port, this dialog box allows you to set hardware parameters such as baud rate. For a network port, this dialog box allows you to choose the network service.
- 4. Choose OK after making any necessary changes.
- 5. Choose OK in the Communications dialog box.

Connection Menu Commands

Figure B-2 illustrates the Connection menu that contains commands that control and affect a session with your host.

<u>Connection</u>
<u>Connect</u>
<u>D</u> isconnect
√ <u>A</u> uto Connect
<u>P</u> hone
<u>L</u> ocal
Cl <u>e</u> ar
Clear C <u>o</u> mm
<u>R</u> eset
Enable <u>H</u> istory
Clear H <u>i</u> story

Figure B-2 Connection Menu

Menu Options

Connect Connects to the configured port. You can use this command only if the VT LAN40 is not already connected.

Disconnect Disconnects the VT LAN40 from the configured port.

Auto Connect Connects automatically to the configured port when you start VT LAN40.

Phone... Uses your modem to dial a selected number from your personal dialing directory.

Local Prevents the VT LAN40 from sending data to the host. Instead, the VT LAN40 only displays characters on your screen (local display).

Clear Removes the information displayed in the emulation window from display memory. This clears the screen. It also sets all line attributes to normal.

Clear Comm Clears the communications buffers. Also removes any blocks to sending or receiving data.

Reset Returns the terminal to its power-up state. This affects only the ANSI state.

Enable History When checked, saves information that is scrolled off the VT screen in the History buffer.

Clear History Clears the contents of the history buffer.

Connect

The Connect command on the Connection menu connects the VT LAN40 to the communications port you configured. This command is only available when VT LAN40 is not already connected. You also can use the Connect button on the Status Bar.

Disconnect

The Disconnect command on the Connection menu disconnects the VT LAN40 from the current communications port.

The VT LAN40 optionally performs a disconnect when you exit.

Auto Connect

The Auto Connect command on the Connection menu connects the VT LAN40 to the configured port when you start the VT LAN40 or when you change the port type or network address.

If you disconnect a network connection with Auto Connect allowed, VT LAN40 prompts you about re-connecting to the network.

When you change your network service or port, VT LAN40 disconnects, then reconnects to the new selection.

If you do not have Auto Connect selected, you must use the Connect command to make a network connection to the configured port.

Clear Comm

To clear the communications port, choose the Clear Comm command from the Connection menu. This command empties the communications buffers, clears any conditions that could prevent transmitting or receiving data (for example, Xoff received), and cancels any current escape sequence processing.

Connection Setup

You must configure the serial port to the appropriate setting for your environment. The VT LAN40 supports baud rates up to 115,200 baud.

Procedures for Port Setup

Figure B-3 illustrates the Serial Port Setup dialog box that is used to specify the parameters for a serial port.

To display a Setup dialog box

- 1. Choose Communications from the Options menu.
- 2. Select the type of port.
- 3. Then choose Setup.

Serial Port Setup				
Port COM1	ОК			
Baud Rate				
O 300 O 1200 O 2400	Cancel			
○ 4800				
○ 38400 ○ 57600 ○ 115200				
Data Bits Stop Bits				
O7				
Parity				
None O Even O Odd O Mark				
O Space				
<u>Check Parity</u>				
Elow Control				
O None Xon Xoff Hardware				
Receive Xoff Point 1024				
Modem Disconnect				
○ 60 ms ○ 2 sec ● Never				
X Disconnect on Exit				

Figure B-3 Sample Setup Dialog Box

Dialog Box Options

Port Select the COM port to use. The VT LAN40 supports COM1 and COM2

COM1 COM2

Baud Rate Specify the rate, measured in bits per second, at which the terminal communicates with the host system. The VT LAN40 uses a default rate of 9600. Select one of the following choices:

300	1200	2400	4800	9600
19200	38400	57600	115200	

Data Bits Specify the number of data bits for each character. Use 8 if you set Parity to None, or 7 if you set Parity to a value other than None. The VT LAN40 uses a default of 8 data bits. Select one of the following choices:

7 8

Stop Bits Specify the time interval between each transmitted character. Select one of the following choices:

1 1.5 2

Parity Select the type of error checking. If you set Data Bits to 8, specify None. Select one of the following choices:

none even odd mark space

Check Parity Check incoming parity.

Flow Control

None No action taken. This can result in loss of transmitted data.

Xon/Xoff (Default) Pauses when buffer fills, then sends a signal to a remote computer when ready to receive more data. Generally, the best selection for communicating with most host computers.

Hardware Remote system controls the flow of data. Often applicable to situations where the baud rate between your computer and a communications device, such as a modem, differs from the baud rate between the modems. Usually encountered when using modems that use compression and error correction techniques such as V32bis, V42, or V42bis standards.

Receive Xoff Point Specifies how much data can accumulate in the VT LAN40 receive buffer before the VT LAN40 sends an Xoff requesting the host to stop

sending data. The VT LAN40 uses a default of 1024 (the maximum). You might want to reduce this value if the VT LAN40 appears to react slowly to a hold screen, or an interrupt to your host.

Modem Disconnect Disconnect the session by lowering the DTR signal for about two seconds if no DSR or DCD activity occurs for the specified time period.

This generally disconnects the session, as most modems hang up the line when this happens. However, refer to your modem documentation if you have any questions about this effect. If your modem cannot drop DSR or DCD, or your serial cable does not present the signals to the VT LAN40, it might not recognize the line drop. Select from:

60 ms 2 sec Never

Disconnect on Exit Drop the modem DTR signal when VT LAN40 exits (the default). Normally, the modem disconnects. If you do not select this option, the DTR signal remains high after the VT LAN40 exits, and the modem stays connected.

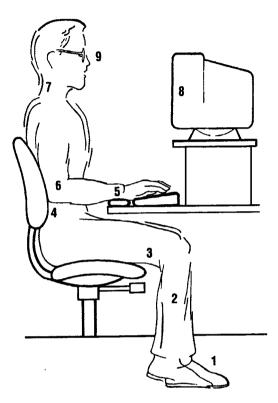
C Specifications

Proper Setup and Use

Certain recent scientific literature suggests that poor posture, work habits, or office equipment setup might cause injuries. Other literature suggests that there is no cause and effect. Because the safety of our users is a great concern, it is important to take the precautions described in Table C-1.

If you experience pain or discomfort while using the terminal, take a substantial break and review the instructions for posture and work habits. If your pain or discomfort continues when you resume using the terminal, discontinue use and report the condition to your job supervisor or physician.





Adjust	So that your
Chair	1. Feet are flat on the floor or footrest, if needed.
	2. Legs are vertical forming a right angle to the floor.
	3. Weight is off your thighs and are in a horizontal position. Keep the back of your knees away from the seat so you do not compress the area behind them, which could restrict the blood flow.
	4. Upper body is erect and your lower back is supported with a backrest.
Keyboard and Mouse	5. Wrists are straight and do not flex more than 15°. They may be supported but should not rest on sharp edges.
	 Keep your upper arms straight down at your sides, elbows close to your sides to support your arm weight. Forearms should be at a 70° to 90° angle.

Table C-1 (Cont.) Recommendations for Proper Setup and Use

Adjust	So that your		
Head	7. Avoid neck strain. Your head should incline downward, but no more than 15° to 20° .		
Terminal	8. Keep eye level and the correct distance for proper vision.		
Eyes	9. Avoid eye fatigue, which can be caused by glare, image quality, uncomfortable furniture, eye height, and uncorrected vision. If you cannot read the screen at different distances, you may need special glasses. Relax your eyes periodically by looking at distant objects.		
Adjust	То		
Work Breaks	Take periodic work breaks. Morning, lunch, and afternoon breaks meet most recommendations. Take advantage of work breaks to move around and do other movements.		
Lighting	Avoid direct lighting or sunlight on the screen, which causes glare and reflec- tions. The terminal screen has an antiglare treatment to reduce glare. Place lighting behind or to the side of your work area, and distribute the lighting evenly on your work area. Adjust the terminal brightness and the contrast controls as needed.		
Noise	Keep background noise at a minimum. Background noise above 65 dBA is tiring. Sound-absorbing materials, such as curtains, carpeting, and acoustic tile, can help reduce background noise.		
Temperature	20° C to 23° C (68° F to 74° F).		
Humidity	30% to 70%.		
Ventilation	Provide adequate air ventilation for equipment operation and to avoid fatigue.		
Space between terminals	More than 70 cm (28 in) center to center, preferably more than 152 cm (60 in).		

System Unit

Table C-2 provides specifications for the system unit.

Table C-2 System Unit Specifications

Dimensions	With Stand	Without Stand	
Height Width Depth	34.3 cm (13.5 in) 13.3 cm (5.25 in) 33.0 cm (13.0 in)	7.0 cm (2.75 in) 31.8 cm (12.5 in) 33.0 cm (13.0 in)	
Weight	4.5 Kg (10.0 lbs) 4.1 Kg (9.0 lbs)		
Operating Systems Supported	UNIX, OpenVMS, DEC OSF/1, ULTRIX, or any other that supports the ANSI protocol.		
Emulations	ANSI (VT 340/420/320/220/100).		
Character Set Support	Multiple languages using ISO; Windows commands selectable in four languages.		
Productivity Features	Local copy and paste. Time of day clock. Desktop calculator. Desktop calendar.		
ROM Cartridge	Operating system, Windows, and emulation are shared on the card located behind a door in the front of the unit.		
Electrical Requirements AC input voltage Line frequency Power	100 to 240 VAC full range, single phase, 3-wire. 47 Hz to 63 Hz. Power consumption 30 watts maximum.		
Operating Temperature	10°C to 40°C (50°F to 104°F).		
Humidity	10% to 90% relative humidity. Maximum wet bulb = 28°C. Minimum dew point = 2°C (noncondensing).		

Monitor Requirements

The terminal requires a monitor that supports VGA resolution or higher, with a 15-pin, D-Sub connector.

Keyboard

The terminal is designed to support industry-standard PS/2 compatible keyboards.

Keyboards from some manufacturers might not function correctly due to differences in their implementation of the standard.

Table C-3 provides keyboard specifications for the VT LAN40.

Table C-3 Keyboard Specifications

Keyboard style	LK411/412 for ANSI style layout; PCXAL for enhanced PC 101/102 style layout; available for most European languages.		
Protocol	IBM enhanced PS/2-compatible		
Connector	PS/2-style, 6-pin mini DIN		
Keyboard keys	All keys are programmable for single characters, character sequences, or local functions.		
Compose	Compose characters are available in: Multinational, ISO Latin 1, and National Replacement character sets (NRCS) for the following VT keyboards: Canadian-English, Canadian-French, Danish, Dutch, French, Finnish, Flemish, German, Italian, Norwegian, Portuguese, Spanish, Swedish, United Kingdom, and United States keyboards.		
Nonvolatile memory	256K bytes memory		

Standards Conformance

Acoustic Noise Preliminary declared values per ISO 9296 and ISO 7779 /DIN EN27779:

	Sound Power Level		Sound	Sound Pressure Level ^[2]	
		L_{wAd} , B		L_{pAm} , dBA	
Product ^[1]	Idle	Operate	Idle	Operate	
Terminal	<3.3	<3.3	<21	<21	

 Current values for specific configurations are available from service representatives. (1 B = 10 dBA.)

[2] Operator position.

Table C-4 provides standards conformance and approvals for the VT LAN40.

Table C-4 Standards Conformance and Approvals

Туре	Standard	Subject
Communications	NET 2 test report	Australia PTT Germany PTT Japan PTT Sweden PTT
EMI/RFI	CISPR-22 Class B	Electromagnetic compatibility
	CSA 108.8	DOC Canada North American Class B version
	FCC part 15 Class B	Electromagnetic compatibility
	CE Class B(EN55022	Radio Protection Mark
	Class B, EN50082-1 Class 1) EN60555-2 ITE Class 2 (Japan)	CE label VCCI Electromagnetic compatibility
Energy	"Energy Star"	EPA Energy Star requirements
Ergonomic	ZH1/618, GS-VS- SG7	TÜV Ergonomic Requirements

Safety	CSA 22.2 #950 M1989	Safety of Information Technology Equipment Including Electrical Business Equipment (Canada)
	AS/NZS3260	Australia product safety
	TÜV EN60950 (IEC 950) 2nd ed (1988) EN60950 (Amd 1 & 2, 1990)	Safety of Information Technology Equipment Including Electrical Business Equipment
	VDE0805 and Amd	GS-Mark (Geprüfte Sicherheit)
	EMKO-TSE (74-SEC) 203/92, DEMKO, FIMKO, NEMKO, SEMKO	Nordic Country Approvals
	UL 1950 (2nd ed)	Safety of Information Technology Equipment Including Electrical Business Equipment

Table C-4 (Cont.) Standards Conformance and Approvals

Specifications

EMI Requirements for Canadian Market: This equipment does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the Radio Interference Regulation of the Canadian Department of Communications.

Ergonomic

This product meets TÜV and GS ergonomic requirements.

Flame Retardants

The thermoplastic enclosures do not contain polybrominated diphenylether (PBDE) as a flame retardant additive; therefore, they do not emit toxic dibenzofuran and dibenzodioxin gases.

PVC

The plastic enclosures are not made of rigid PVC. The material has a nonhalogenated, flame-retardant system and is cadmium free.

Asbestos

Asbestos is not used in this product or in its manufacturing process.

Ozone Depleting Substance

The terminal is in full compliance with the labeling requirements in the U.S. Clean Air Act Amendments of 1990. It does not contain, nor is it manufactured with, a Class 1 ODS, as defined in Title VI Section 611 of this act.

Environmental

This product has been designed and manufactured to achieve environmental compatibility and minimize the impact to the environment.

Power Saver

This product is in full compliance with the Video Electronics Standards Association (VESA) requirements for Display Power Management Signaling (DPMS)[TM] proposal. After a user-selectable period of idle time, this device automatically signals the display circuits to reduce power.

Battery Disposal

Recycle or dispose of batteries contained in this product properly, in accordance with local regulations for the battery type as marked on the battery. Prior to disposal or recycling, protect batteries against accidental short circuiting by affixing non-conductive tape across battery terminals or conductive surfaces.

For more information, consult your nearest Digital Service Center.

Keep small batteries away from children.

Replacement of Batteries

When batteries are replaced, use only batteries which are compatible with the product's electrical requirements and recharging circuitry, if applicable. Consult your local Digital Service Center for information and proper servicing.

Lithium Batteries

If this is a Lithium battery, the following precautions apply:

Caution

Danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions. Consult the product user manual or service manual for replacement instructions, or consult your local Digital Service Center.

Power Cord Information

Table C-5 provides power cord information for the VT LAN40.

Table C-5 Power Cord Information

Country	Order Number	AMP	Length
Australia, New Zealand	BN19H-2E	10A	3.5 m
U.S., Canada, Japan	BN19P-2E	10A	3.0 m
Netherlands, Norway, Turkey, Hungary, Czech, Poland, Romania, Russia, Latin America, Belgium, Germany, Sweden, Spain, Portugal, Finland, Greece, France	BN19C-2E	10A	2.5 m
Denmark	BN19K-2E	10A	2.5 m
Italy	BN19M-2E	10A	2.5 m
United Kingdom	BN19A-2E	10A	2.5 m
Switzerland/French Switzerland/German	BN24T-2E	10A	2.5 m
Israel	BN18L-2E	10A	2.5 m
India, South Africa	BN19S-2E	10A	2.5 m

D Troubleshooting and Operating Tips

Appendix D provides information about the power-up self-test, error messages, troubleshooting, and operating tips for the VT LAN40.

Power Up Selftest

During the VT LAN40 power-up sequence, while the system power-up self-test is occurring, the terminal displays the message:

Self test in Progress - Please Wait...

If the test is successful, the terminal displays the VT LAN40 Control Center. If a problem occurs, an error message displays.

Table D-1 provides the error messages that can display during power up.

Table D-1 Self-Test Error Messages

Error Message	Corrective Action
Terminal battery has failed. Contact an authorized service representative.	The terminal stores its settings in battery- refreshed memory. If the battery fails, it must be replaced by an authorized service representative. The battery is not a user- serviceable part.
Keyboard Error. Check keyboard or contact an authorized service representative.	The keyboard is either not attached or is defective. Turn off the terminal, and verify that the keyboard is properly connected.
	Do not confuse the mouse connector with the keyboard connector. The connectors look identical, but they are different and are clearly marked.
Self test has failed. Contact an authorized service representative.	One of the self tests performed by the terminal has failed. Contact an authorized service representative to repair the terminal.
Turn off terminal and insert a ROM card.	In order for the terminal to operate properly, a ROM card must be inserted in the front of the unit, as follows:
	1. Turn the terminal off.
	 Verify that the card is inserted properly and is firmly seated in its socket.
	 If the problem continues, try another ROM card.
	 If the message persists, then contact an authorized service person.

Error Message	Corrective Action
Non-volatile memory has been initialized. If this always occurs, contact an authorized service representative.	This message is displayed when the system settings have changed, usually due to the insertion of a new or updated ROM card or when factory defaults are restored.
	Turn the terminal off, then on. If the message persists, contact an authorized service representative to have the SRAM battery replaced. The SRAM battery is not user-serviceable.
SRAM card is missing or damaged.	Contact an authorized service representative to install or replace the SRAM card.

Table D-1 (Cont.) Self-Test Error Messages

Troubleshooting

Table D-2 identifies problems that affect VT LAN40 operation and solutions for correcting those problems. The first column in Table D-2 summarizes problem symptoms and possible causes; the second column describes solutions.

Table D-2 Troubleshooting: Problems and Solutions

Problem	Solution
Terminal operation appears to stop. Cause: Selection is in progress.	Cancel the selection, or press CTRL-Q.
	All terminal operations in the window are suspended
	while a selection is in effect. The selection appears as inverse or highlighted text. During selection, the "stop light" on the Toolbar is red. To cancel the selection, use any of the following procedures:
	Click the left mouse button in the window.
	Click on the "stop light" in the Toolbar.
	Hold down the Control key and press "Q".

Table D-2 (Cont.) Troubleshooting: Problems and Solutions

Problem	Solution	
The printer will not print. Cause #1: The printer port is set incorrectly.	Click on Control Center to display the Control Panel application. Double click on the Ports application. In the Ports dialog box, select the serial port used for printing and set corresponding printer values.	
	Note	
	If an incorrect BAUD rate is selected and an attempt is made to print, terminal operations can stop. To resume operations, you must turn the terminal off.	
Cause #2: Incorrect serial port selected.	Click on Control Center to display the Control Panel application. Double click on the Printers application. In the Printers dialog box, choose Connect. Choose either COM1 or COM2, whichever is appropriate.	
Terminal operations appear to stop during printing.	When printing to a serial port, ensure that the correct BAUD rate and other settings are selected from the	
Cause #1: Wrong BAUD rate selected on serial port.	Ports dialog box in the Control Panel. See the first explanation in the previous error description.	
Cause #2: Conversion from the Display list is slow.	The terminal can print graphics in one of the following ways:	
	The Bitmap method, which transfers a bitmap	
	from the screen to the printer.	
	The Display List method, which translates the	
	image on the screen into drawing primitives.	
	When you use the Display List method, some images, especially Sixel images, take a long time to translate because they consist of pixels rather than lines. You can increase the print speed by changing to bitmap printing. However, if you use bitmap printing, the printed image size is usually much smaller than the image that prints when you use the Display List printing option.	
	To use the Bitmap printing method	
	1. From the Options Terminal: Graphics dialog	
	box, under the heading "Backing Store",	
	deselect "Display list".	
	2. Select "Bitmap".	
	3. Redisplay your graphics.	

Table D-2 (Cont.) Troubleshooting: Problems and Solutions

Problem	Solution	
The screen is blank, but power is on.	Press any key on the keyboard. The monitor might need time to warm up.	
Cause: The Power Management feature is active.		
Colors move on the screen, or the display might be distorted, flickering, or rolling.	Press the degauss switch on the monitor. If color problems persist, then electromagnetic interference exists. Move any electromagnetic device away from the terminal, or move the terminal.	
Cause: Electromagnetic interference is coming from other appliances.		
Cannot disable the screen saver	The terminal uses the following two passwords:	
password. Cause: Use of the System dialog box instead of the Desktop dialog	The Control Center password (accessed from the Control Center Configuration dialog box).	
box.	• The screen saver password (which causes the	
	screen saver to remain active until the correct	
	password is entered and is accessed from the Control Panel).	
	Select the Desktop application in the Control Panel to set the screen saver password.	
Error message: "Insufficient memory for display list growth,	Close some windows or reduce the memory requirements for the open windows.	
image data will be lost" Cause: Too many windows are active.	The terminal maintains a "copy" of the screen in memory. When a window is placed on top of another window and then removed, any graphic images on the uncovered window are restored from the off- screen copy. This off-screen copy might require a lot of memory. If you attempt to create many sessions, the terminal frees its off-screen memory so that more sessions can be created. However, because this memory is freed, the terminal cannot automatically redisplay the graphic images. Instead, you have to enter a request to the host to redraw the graphic images that you wish to redisplay.	
Error message: "Insufficient memory for bitmap store"	Close some session windows. See the explanation in the previous error description.	
Cause: Too many windows are active.		

Table D-2 (Cont.) Troubleshooting: Problems and Solutions

Problem	Solution
Desktop pattern feature does not work.	In the Desktop application on the Control Panel, select (None) for the "wallpaper" type.
Cause: The "wallpaper" feature is active.	
Use of the copy and paste feature yields unexpected results.	See the Operating Tips section at the end of this appendix for details about optimizing use of the copy
Cause: Optimal copy and paste methods are not being used.	and paste features.
Cannot copy and past when the Toolbar and menu are disabled.	See the Operating Tips section at the end of this appendix for details about additional copy and paste
Cause: Copy and past buttons are not visible.	methods.
Remote system cannot identify the terminal type.	Choose the Options Terminal General menu. In the General dialog box, check that the DA response option is appropriate for the terminal mode selected.
Cause: A conflicting terminal mode and DA response exist.	For example, the DA response VT102 might be selected for the mode VT340/420 8-bit. However, because VT102 cannot be 8-bit, an OpenVMS system performing a SET TERM/INQUIRE command will fail to identify the terminal. In this case, choose 7-bit.
Error messages display that make references to processes that are not visible to the user.	Observe the system resource meter (Sysmeter) to determine if memory is low, and then close applications, as needed, to restore memory levels.
Cause: Memory resources are low or depleted.	When memory resources are very low, the terminal might issue error messages that refer to internal system operations. You can determine if memory is low by observing the Sysmeter icon (usually displayed in the lower left corner of the terminal). If the bar color displays either yellow or red, or the bar has disappeared, then memory is critically low.
	Close unneeded applications, or, to reduce memory utilization, see the Operating Tips section in this appendix for information about memory management.
Sysmeter turns yellow or red. Cause: Too many applications are running.	See the Operating Tips section in this appendix for information about memory management.

Table D-2 (Cont.) Troubleshooting: Problems and Solutions

Problem	Solution
The terminal does not save the clock settings.	Save the clock settings by closing the clock application or by shutting down the terminal.
Cause: Settings have not been saved.	Since some of the applications do not have an option for saving settings, settings for those applications are saved only when that application is closed or when the terminal is shut down.
	To ensure that settings are saved, use one of the following methods:
	Choose the Shutdown command from the System menu (displayed when you click on the Control-menu box in the upper left corner of the Control Center).
	Close the application using one of the following methods:
	 Double click on the Control-menu bar in the upper-left corner of the application.
	 Single click on the Control-menu bar for an application.
	 Choose the Close command when the Control menu for that application displays.
	• If the application does not display a Control- menu bar or title bar, press the Alt Tab key to transfer focus to the application.
	Press the Alt F4 key.
Some keys do not work properly or are not present. Cause: Key mapping conflicts exist.	See the Operating Tips section at the end of this appendix for details about how to remap keyboard keys.

Table D-2 (Cont.) Troubleshooting: Problems and Solutions

Problem	Solution
Typed characters are lost after the screen saver disappears from the display. Cause: Focus is not on the desired application.	Set the focus to the desired window by clicking anywhere in that window.
	When the screen saver is deactivated, focus might return to a different application than is expected. Click anywhere in the desired window, or use Alt Tab to return focus to the desired application window.
Video display has a visible flicker or is unreadable.	Use the Set Resolution application from the Control Panel to specify a new refresh rate.
Cause: The video refresh rate is set incorrectly.	Note
	The terminal must restart for the new rate to be activated.
	WARNING
	Not all monitors are multi-sync or support all possible refresh rates. Before you save the refresh settings, be certain that the monitor that you are using can support the new refresh rate.
	If an incorrect rate is selected, it will not be possible to display the screen in order to select a different rate. In that case, attach a monitor that supports the selected rate, so that you can display the screen and correctly set a new rate.
Cannot start multiple session on a serial port.	Create a session and select Serial Multisession for the communications port type.
Cause: Serial Multisession is not selected as the port type.	

Table D-2 (Cont.) Troubleshooting: Problems and Solutions

Problem	Solution
An attempt to restore lost sessions does not work. Cause: The terminal was powered off or lost connection to the remote host while in Serial Multisession mode.	When using a multi-session protocol over a serial line such as on a terminal server, or when running the Session Support utility (SSU) on a remote host, if the connection is lost it might only be possible to recover one of the sessions at a time.
	To recover a session
	1. Choose Connection and Restore Sessions.
	2. Log out of the connected session.
	3. Transfer focus to the next session window.
	 Repeat steps 1 through 3 till all sessions are closed.
	To prevent system operation from stopping, do <i>not</i> power off the terminal until you close all sessions. Instead of turning off your terminal, use the following procedures:
	 Choose the Desktop application from the Control Panel to select a screen saver.
	2. Set a password for the screen saver.
	 Click on the Lock icon in the Control Center to activate the screen saver.
	The screen saver prevents anyone from seeing what is on your screen or from using your terminal until the correct password is entered. Once you activate a password -protected screen saver and turn off your terminal, the screen saver automatically activates when you restore power to your terminal.
Cannot find a way to turn on a key click.	Key click is not supported on the VT LAN40.

Operating Tips

The following operating tips provide detailed information about optimizing the use of the copy and paste functions, managing memory, and remapping keyboard keys.

How to Optimize Copy and Paste

Because the best method for copying and pasting can vary within an application or between applications, you need to make the following decisions so that your pasted text is formatted appropriately for the context in which it is being used:

- 1. Decide whether to use the mouse or the keyboard.
- 2. Decide whether to copy the text using the block selection or line selection method explained in this section.
- 3. Decide the type of paste operation you want to use. The types are: data, lines, paragraph, and table.

Note

You can paste the text immediately into the current window at the present cursor position. Or, you can copy the selected text into the clipboard and paste it into another session or cursor position. If you use the clipboard, you can also paste the same text multiple times until you perform another copy operation.

Line Selection Method

The line selection method allows you to select across lines of text when you move the cursor vertically across the lines. Ordinarily, when you paste the line selected text, carriage returns are not inserted. Even if you select multiple lines, the entire selection is pasted as a single line of text.

Note

Since no additional space characters are inserted, the last word on a line may run together with the first word on the following line.

Line selection using the mouse

Hold down the left mouse button and drag the cursor over the text that you wish to copy. You cannot copy or paste graphics. If you double click on the left mouse button, the terminal selects words instead of characters.

Line selection using the keyboard

Select the Edit menu and choose Copy. Use the arrow keys to position the cursor at the beginning of the text you want to select. Press and hold the Shift key and use the arrow keys to position the cursor to a position after the last character of the text.

Block Selection Method

Block selection is useful for copying columns of text or tables from a document.

Block selection using the mouse

Use the right mouse button to select the text you want to copy. A rectangular block of text is selected rather than complete lines. Usually when you paste this block of text, a carriage return is inserted after each line of text. If you double click with the right mouse button, the terminal selects complete lines instead of blocks.

Block selection using the keyboard

Select the Edit menu and choose Block Select. Press and hold the Shift key and use the arrow keys to position the cursor to a position after the last character of the text you want to select.

Types of Paste Operations

The Copy Special menu item allows you to customize the type of paste operation you want to perform: data, lines, paragraph, or table.

• **Data**: This format is the default used when you "drag select" with the left mouse button.

Carriage returns are *not* pasted, and no characters are inserted. This is useful for copying command lines.

• Lines: This format retains the carriage returns at the end of each line.

No characters are inserted. This is the default when you use the right mouse button, or when you choose the block selection method using the mouse or the keyboard.

• Paragraph: This format inserts a space at the end of each line.

Carriage returns are *not* retained, and the selection is pasted as a single line. However, a single carriage return *is* inserted before a blank line, and multiple blank lines are treated as one line. This format is useful for copying text when you use a word processing application.

• **Table**: This format changes whitespace between words into a single tab character.

This is useful for pasting text into a spreadsheet application.

Note

Text from the host system will not display until the you have cancelled the selection. A selection is in effect when the rightmost icon (the Stop Light) on the Toolbar is red. To cancel the selection, press CTRL-Q or click on the Stop Light icon.

Additional Copy and Paste Techniques

In addition to the Toolbar and menus, you can use either of the following two methods to access the copy and paste functions:

Redefine the mouse buttons

The following common customization for the mouse defines the "*right mouse up*" event to mean paste. Once redefined, the left mouse button can be used to select text and the right mouse button can be used to paste text.

1. Select Options Mouse

The Mouse dialog box appears.

- 2. In the Action area of the dialog box, select "Right button up" from the dropdown list.
- 3. In the Map To area of the dialog box, select Paste from the drop-down list.

4. Choose Done.

You can no longer perform a block select using the right mouse button; instead use the Block Select menu item.

If there is no visible selected text on the screen, then pressing the right mouse button pastes whatever text is in the clipboard.

Do **not** define the mouse button double-click function for pasting. A double click clears the present selection before performing the paste, and therefore only works when you are pasting text from the clipboard.

Define a SmartPad button

To use the SmartPad feature, you must enable the Status bar and display the SmartPad and then define a button, as follows:

- 1. Choose Options View and be certain that the Status Bar checkbox is checked.
- 2. Select Options Show SmartPad.

A checkmark to the left of the Show SmartPad command indicates that the SmartPad is activated.

- 3. In the Caption area of the Button Pad dialog box, enter a description such as 'Paste'.
- In the Map To area of the dialog box, select Paste from the drop-down list. The new mapping is added to the list of buttons.
- Turn off the 'X' in front the Buttons on Status Bar option in the dialog box. You have now created a "floating" SmartPad so that buttons are always visible.
- 6. Choose Done.

You can now paste text by clicking the Paste button on the SmartPad.

Memory Management

The VT LAN40 has a memory pool that is shared between running applications, such as the VT LAN40 session windows. Each session requires memory and depletes the pool.

The system resource meter (Sysmeter) provides a visual indication of how much memory is left in the pool. Sysmeter displays columns with a percentage label below each column that gives an approximate indication of the percentage of resources available.

When memory resources are low, Sysmeter automatically displays yellow or red columns, as follows:

- A yellow column means that 40% of memory is in use.
- A red column means that 90% of memory is in use.

By closing applications that are no longer needed, memory can be restored to the pool for other applications to use.

Certain settings on the VT LAN40 session window can use large amounts of memory. For example, under Options History, you can turn on a feature that stores text that has scrolled off the screen (which you can view by using the scroll bars on the side of the screen). You can specify a size for maintaining the history that is less than the default 64K which accommodates 800 eighty-character lines, or about 33 twenty-four line screens. If you do not need the default storage amount, or if you do not need to store previously-viewed screens, you can adjust the settings in the History dialog box and provide more memory for additional sessions.

How to Remap Keyboard Keys

The VT LAN40 supports two different keyboards. Since common usage for keyboards differs and keyboard mapping are maintained on a per session basis, you must define your own key preferences when they key mappings are not optimum. This section describes the procedures for redefining a key and provides two examples of how to redefine commonly-used keys.

To redefine a key

1. Select the Options Keyboard menu

The Keyboard Mapping dialog box displays.

- 2. When you press a key on the keyboard, the VT LAN40 displays the name for that key in the PC Key area of the dialog box.
- 3. Select one of the following options for the Map To area of the dialog box:
 - Nothing Make the key inoperative.
 - Paste Cause the key to perform the paste function.
 - Sequence Allow a key or sequence of keys to be sent to the host when the key is pressed.
- 4. Choose Done.

Example 1

On the PC keyboard, the 'dash' (-) key is mapped to the PF4 key. The 'dash' key can be redefined to mean 'dash' (instead of PF4) as follows:

1. Choose Options Keyboard.

The Keyboard Mapping dialog box displays.

2. Press the 'dash' key on the PC keypad.

The key name appears in the PC Key area of the dialog box.

- 3. Select Sequence in the Map To area of the dialog box.
- 4. Choose the Keyboard button.

A small LK411-style keyboard displays.

5. Click on the keypad 'dash' key on the small keyboard.

The Mapped Keys display will read:

Num - [6D] = "<Keypad ->."

6. Choose Done.

The 'dash' key now acts like the LK411 keypad 'dash' key.

Example 2

If you are using the VT style keyboard (LK411/LK412), it might be helpful to redefine the 'escape' and the 'angle bracket' keys (< and >) on the left side of the keyboard.

1. Select Options->Keyboard.

The Keyboard Mapping dialog box displays.

2. Press the 'escape' key on the PC keyboard.

The key name appears in the "PC Key" area of the dialog box.

- 3. Select "Sequence" in the "Map to" field.
- 4. Choose the "Keyboard" button.

A small LK411-style keyboard will be displayed.

5. Click on the 'left apostrophe' key ("`") on the small keyboard.

The "Mapped Keys" display will read:

Esc[1B] = "`"

- 6. Choose the "PC Key" field.
- 7. While holding down the shift key, press the 'escape' key.
- 8. On the small keyboard, click on the 'shift' key, then the 'tilde' key ("~").

The "Mapped Keys" display will read:

```
Esc[1B] = "`"
Shift+Esc[41B] = "~"
```

9. Follow the same procedure using the 'left angle bracket' (<) and 'right angle bracket' (>) keys.

The final display will appear as:

```
Esc[1B] = "`"
Shift+Esc[41B] = "~"
`[C0] = "<"
Shift+`[4C0] = ">"
```

Now alternate mappings on the escape key are in effect, and the left and right angle brackets are available on the angle bracket key, as well as the shifted comma and period keys.

Note

Outside of a session window, the ESC key still means 'escape' and can be used to exit from menus and dialogs, etc.

Note

Since the key definitions are in effect *only* in a session window, remember that each saved session can have *different* concurrent mappings.

Glossary

active page

The page that receives data from the host system; the host selects the active page. The text cursor appears on the active page only. The VT terminal has up to six pages of display, depending on the selected number of lines per page.

Whether the active page is the current (displayed) page depends on the page you select to display and whether you allowed page coupling.

active position

The location, indicated by the cursor, where the next typed character will appear.

active window

The window currently in use.

alias response

A sequence the terminal uses to identify itself to the host as some other type of terminal. You can configure these responses. Each response corresponds to a certain operating level.

ANSI

American National Standards Institute.

ANSI character types

The American National Standards Institute graphic (alphanumeric) and control character type definitions.

Glossary ...

You can display graphic characters on the screen. These include letters, numbers, punctuation marks, and any other displayable character.

Usually, you do not display control characters. You use them to make the terminal perform specific functions in data communication and text processing. Control characters include carriage return (CR), form feed (FF), and escape (ESC).

ANSI terminal specification

The American National Standards Institute specification for terminal functionality. VT terminals implement many of the functions and extensions to the functions that are defined in this specification. VT LAN40 implements the VT ANSI features and extensions, and numerous extensions of its own.

application software

A program that performs a specific function, such as VT LAN40 emulation.

application window

The screen area (window) containing the work area, and associated information displays, such as a menu bar. The application window contains the title bar and menu bar on the top, the emulation window in the center, and the status bar on the bottom.

argument

The numbers, text, or graphics that refine the action or result of a macro function.

array

A table of related variables.

ASCII

American Standard Code for Information Interchange.

attribute

A font style you can assign to a character such as bold or italic; a size (height or width) you can assign to a line.

Auto Print

A mode, controlled by the host in which data appears on the screen and the printer.

backing store

A VT LAN40 feature that provides two methods of storing graphics images: Bitmap and Display List.

BAUD rate

The speed, measured in bits per second, at which the terminal communicates with the host system or a printer.

bitmap

An array of pixels representing an object (image).

bottom margin

The last line of the scrolling region.

buffer

A temporary storage area in memory used to hold information.

button pad

An area of the window that contains a display of user-defined buttons. You can create a button pad to display on the status bar or in a separate window.

C0 and C1 codes

The control characters in the 256-character set used by VT terminals. The set consists of two halves, lower and upper, each containing 128 characters. The first 32 characters of the lower part are the C0 codes; the first 32 characters of the upper part are the C1 codes.

CCITT

Comité Consultatif Internationale de Telegraphie et Telephonie. An international organization that defines standards for communications equipment such as telephones and telegraphs.

character attribute

A characteristic (format) assigned to a character that determines how the character appears on the screen. Character attributes include bold, italic, underline, and so on.

character set

A group of graphic and control characters stored as a unit in the terminal. You can display graphic characters on the screen. You use control characters to perform special functions.

character-coding format

The coding formats for characters: 7-bit coding uses 7 bits to send each character to the host system, 8-bit coding uses 8 bits. The ASCII character set uses 7-bit coding; the Multinational and ISO character sets use 8-bit coding.

client

An application or system that requests services or resources from another application or system.

code table

A list of all characters in a character set and their codes. Most standard character sets put similar characters into groups, so they have similar codes.

columns

A vertical row of character positions on the screen. You can display lines containing 80 or 132 columns.

configure

The process of selecting options that determine the characteristics and the appearance of application and emulation windows, and features such as Auto Start and Communications.

constant

A fixed value that does not change during macro execution.

control codes

The codes that specify terminal commands or formatting instructions such as LF (line feed) or CR (carriage return); usually, preceded by a caret (^).

control functions

The commands an application uses to make the VT LAN40 perform special functions. These include control characters, device control strings, control sequences, and escape sequences.

coupling

A function that keeps the cursor visible when you pan beyond the window edges in a particular direction. You can couple the cursor to horizontal or vertical movement, or to display a different page when the cursor moves to it in memory.

CSI code

Control Sequence Introducer code. The control function used to start most ANSI commands. You can transmit CSI as the two 7-bit characters **ESC** [, or the single 8-bit character **CSI** (9B hex).

CTERM

The wide area DECnet network.

current page

The displayed page. See also Active page.

cursor

The indicator of the active position on the screen. The text cursor usually appears as a blinking underline or block; the mouse cursor usually appears as an I-bar symbol.

data bits

The number of bits (7 or 8) in each data packet sent between two computers.

DDE

Dynamic Data Exchange. Windows-defined protocol for transferring data between Windows applications. The VT LAN40 supports DDE as a server and a client.

DEC Multinational Character Set

A character set consisting of two parts: 7-bit (left half), and 8-bit (right half). Each half contains its own control characters.

DEC Special Graphics Character Set

A 7-bit character set of 94 graphic characters including special symbols and line segments. Also called the VT100 Line Drawing character set.

DEC Supplemental Graphic Character Set

An 8-bit character set of 94 graphic characters including letters with accents and diacritical marks, and special symbols.

DEC Technical Character Set

A 7-bit character set containing scientific and mathematical characters used to write formulas and equations, including the Greek alphabet.

desktop

The background of your screen on which windows, icons, and dialog boxes appear.

device attributes

The characteristics, stored as control sequences, that describe the terminal and its configuration. A request from the host to the terminal sends a device attribute (DA) response. This DA response identifies the particular type of terminal.

dialog box

A window that displays options for you to choose to give the application the information it needs to carry out a command.

display controls mode

A special operating mode in which you can display control characters. In this mode, VT LAN40 does not perform any control functions, but only displays the

characters. This mode is controlled by the Transparent option in the Display dialog box (Options Terminal menu).

display list

A set of instructions for drawing an object (image).

echo

The display data sent to the host system on the screen as you type. If the host does not send back the characters it receives, you should select the Local Echo mode option in the Terminal General dialog box (Options Terminal menu).

emulation

A mode in which a device imitates the behavior of a different device.

emulation window

The area of the application window containing the VT terminal face, scroll bars, and VT status line. Usually, the emulation window entirely fills the application window. When it does not, there is a border around the emulation window.

flow control

The processes that regulate the rate at which data is transferred from one device to another. This process compensates for the differences in input and output data flow.

font set

A group of fonts designed used with a specific device resolution. The set used determines how the text looks on the screen and printer.

font size

The height of a printed character; also called point size. One point equals 1/72 of an inch.

font styles

The format that you can assign to characters—bold, underline, italic, normal, or combinations of these. Also called text styles, attributes, and type styles.

Glossary ...

full-duplex

A communications mode in which the signal flows in both directions at the same time, enabling you to transmit and receive data simultaneously. VT LAN40 normally operates in full-duplex mode.

function keys

A row or rows of keys that perform special local functions, such as displaying Help.

graphic table

The terminal in-use table that is formatted two-parts: the left half contains the GL codes for use in 7-bit or 8-bit environments; the right half contains the GR codes for use in 8-bit environments only.

half duplex

A communications mode in which the signal flows in both directions, but only one direction at a time.

history

A VT LAN40 feature that allows you to store information that is no longer displayed because it scrolls off the screen.

history buffer

A temporary storage area where you can keep data no longer displayed in the emulation window. You can view, copy, and paste this data.

HoldScreen key

A key that causes output to the screen to pause until you press the Holdscreen key again. On the IBM Enhanced keyboard, F1 functions as the Holdscreen key.

host system

The computer system to which the VT LAN40 connects.

ISO

International Organization for Standardization.

ISO Latin-1 Supplemental Set

An 8-bit character set including letters with accents and diacritical marks, and special symbols. For most purposes, this set is an extension of the Multinational character set.

LAN

Local Area Network.

LAT

Local Area Transport. The network protocol for terminal access using Ethernet.

layout file

A file that stores information about a group of VT LAN40 application windows, their positions on the desktop, and their host connections.

line attributes

The characteristics (formats) that you apply to a line to change the way it displays on the screen. The VT LAN40 supports the same line attributes as VT terminals: double-wide, double-high and double-wide, and normal.

line drop

An unrequested communications disconnection. Most network connections have built-in functions to indicate a broken connection. The VT LAN40 generally notifies the user when this happens.

local area network

See LAN.

local area transport

See LAT.

local mode

An operating state in which keystrokes are displayed on the screen, but not sent to the host.

Glossary ...

local edit

An editing mode in which the VT LAN40 stores text you type in page memory. You can edit this text in the VT LAN40, and then send a block of edited text to the host.

map

The process of assigning sequences and VT functions to keyboard keys, mouse buttons, and user-defined buttons.

margins

The top, bottom, left, and right boundaries of a page. The VT LAN40 cannot write or scroll data beyond these margins. Also called scrolling margins.

menu bar

A horizontal bar in the application window that contains the names of the VT LAN40 menus; appears below the Title bar.

modem

A communications device that transmits and receives data over a telephone line.

MSU

See Multisession Serial Utility.

Multisession Serial Utility

Multisession Serial Utility is an implementation of the SSU Utility for providing multiple sessions on a single serial line.

NRC

See National Replacement Character Sets.

National Replacement Character Sets

A class of 7-bit character sets created for different languages and dialects.

on-line

An operating state in which VT LAN40 can communicate with a host system. The VT LAN40 sends data entered at the keyboard to the host, and displays data received from the host on the screen.

page

A section of the terminal page memory. Each page has left, right, top, and bottom scrolling margins. You can define the size and layout of a page by using setup features or control functions.

page format

The size and number of pages in the terminal page memory. You can arrange page memory into 1 to 6 pages. You also can define the margins of a page.

page memory

An area in memory that stores the information on the screen. You can divide page memory into a variable number of pages each containing the same number of lines.

pan

The action of moving the page behind the window. This page movement allows you to view information not displayed in the window when the page is larger than the window. To pan the page, use the horizontal and vertical scroll bars.

parallel port

A port used for devices that accept information one 8-bit word at a time; uses multiple lines to transfer data.

parity

An error detection method that checks the validity of a transmitted character; both systems must use the same type of parity.

pixel

The smallest displayable unit on a video screen; also called pel, or picture element.

Glossary ...

port

A connection or socket used to attach a device, such as a printer or modem, to your PC. Your PC sends information to the attached device through a cable.

print buffer

A temporary storage area for information to be sent to a printer.

printer controller mode

A mode in which data is sent directly from the host to a printer, without displaying it on the screen.

protocol

A set of rules and procedures for communication between devices. For example, Kermit is a file transfer protocol, and XON/XOFF is a flow control protocol for serial communications.

ReGIS

Remote Graphics Instruction Set. A set of commands that describes a graphics image using geometric shapes (lines, curves, and circles), and actions (fills and patterns).

Remote Graphics Instruction Set

See ReGIS.

resolution

The number of dots that make up an image on a screen or printer. The more dots, the higher the resolution, and the finer and smoother images appear when displayed at a given size.

scrolling

The moving of data between the margins of the current page. Data that scrolls past the margins does not remain in page memory, but you can save it in the History Buffer.

scrolling region

The area on the current page between the top, bottom, left, and right page margins. The default scrolling region is the complete page.

select

The process of marking a section of text for copying. You can mark lines or blocks of text with the mouse or keyboard.

serial port

A port used for devices that accept information one bit at a time; uses a single line to transfer data.

server

A system or application that provides shared resources (such as printers) and services to other computers and applications.

session

An active connection between VT LAN40 and a host system. You can run VT LAN40 in multiple application windows, each window containing a session with the same or a different host.

Session Support Utility

See SSU.

7-bit and 8-bit codes

The coding formats for characters; 7-bit coding uses 7 bits to send each character to the host system, 8-bit coding uses 8 bits. The ASCII character set uses 7-bit coding; the Multinational and ISO character sets use 8-bit coding.

Sixel

A unit of graphics data transmitted as a character. One Sixel represents six vertical pixels of an image.

SmartPad

See Button Pad.

spooler

A system program that automatically runs when you choose a print command. The spooler allows you to print a series of documents or files in the background while you continue working in the application. Glossary ...

SSU

Session Support Utility. A mechanism that provides multiple sessions on a single serial line.

stop bit

A timing unit between transmitted characters.

string

A sequence of alphanumeric characters.

subscript

A string or integer used to access an item in an array.

Supplemental Character Set

The 8-bit character set the terminal normally uses; usually, the Multinational, or ISO Latin-1 character set.

System Resource Monitor

The System Resource Meter allows you to monitor some of the memory resources of your terminal.

Tektronix 4014

A vector graphics terminal that uses direct-view storage tube technology.

Telnet

A protocol for terminal access to hosts using a TCP/IP network connection.

terminator

A control character(s) that signal the end of a line, document, and so on.

Toolbar

A row of icons in your session window that represent the VT LAN40 commands that are available from your desktop window.

transparent mode

A special operating mode in which you can display control codes characters. In this mode, the VT LAN40 does not perform any control functions, but only displays the characters. This mode is controlled by the Transparent option in the Display dialog box (Options Terminal menu).

User-Defined Keys (UDKs)

On VT terminals, fifteen of the top row keys defined on the keyboard as User-Defined Keys. You can use UDKs to send selected characters or control functions. You use UDKs as Shift+F6 through Shift+F20. Normally, the Host computer assigns these keys.

VESA

Video Electronics Standards Association.

VT status line

A line of text that appears below the VT LAN40 emulation window. There are three possible settings: indicator (displays operating information about the VT LAN40), host-writable (displays information provided by an application), and disabled.

XON/XOFF

The standard ASCII control characters used to tell an intelligent device to stop and resume transmission of data.

zoom

The process of increasing or decreasing the magnification of an object (image).

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