VXT 2000+/VXT 2000
Windowing Terminal
Installing and Getting Started

Order Number: EK–VXT20–IN. D01

January, 1994

This document describes how to install your terminal and get ready to start a session on a host computer system.

Before you install the terminal, make sure VXT software is installed on a host system or InfoServer system in your network.

Internet Address for Reader Comments

You can send your comments and suggestions about this guide and other VXT manuals by electronic mail to the following Internet address:

docteam@gwen.enet.dec.com

Revision/Update Information: This is a new document. It replaces previous Installation and Getting Started documents for all VXT 2000 models.

Software Version: VXT Version 2.1

Digital Equipment Corporation
Maynard, Massachusetts

Digital Equipment Corporation makes no representations that the use of its products in the manner described in this publication will not infringe on existing or future patent rights, nor do the descriptions contained in this publication imply the granting of licenses to make, use, or sell equipment or software in accordance with the description.

Possession, use, or copying of the software described in this publication is authorized only pursuant to a valid written license from Digital or an authorized sublicensor.

© Digital Equipment Corporation 1994. All Rights Reserved.

FCC NOTICE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Any changes or modifications made to this equipment may void the user’s authority to operate this equipment.

Operation of this equipment in a residential area may cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.


The following are trademarks of Digital Equipment Corporation: AXP, DEC, DECDirect, DECimage, DECCnet, Digital, ThinWire, ULTRIX, OpenVMS, VAX DOCUMENT, VXT 2000, and the DIGITAL logo.

UNIX is a registered trademark licensed exclusively by X/Open Co. Ltd.

OSF/1 and Motif are trademarks of The Open Software Foundation, Inc.

Sun is a registered trademark of Sun Microsystems, Inc.

All other trademarks and registered trademarks are the property of their respective holders.

This document was prepared using VAX DOCUMENT Version 2.1.
## Contents

1 Before You Install the Terminal ........................................ 1
   System Preparations ........................................... 1
   Identifying Two-Box and One-Box Models .................... 1

2 Installing Two-Box Models ........................................ 2
   Unpack and check the contents of each carton ............... 2
   Install any options first .................................... 4
   Place the system box and monitor in position, on a level
   surface ....................................................... 4
   Connect the cables to the system box ..................... 4

3 Installing One-Box Models ........................................ 6
   Unpack and check the contents of each carton ............. 6
   Install any options first .................................... 8
   Place the terminal in position, on a level surface .......... 8
   Connect the cables to the rear of the terminal .......... 8

4 Turning On the Terminal ........................................... 10
   Make sure VXT software is installed ...................... 10
   Turn on the terminal’s power switch ...................... 10
   Check the self-test display .................................. 10
   Observe the software booting messages ................... 11
   Wait for the Terminal Manager window or a customized
   display ....................................................... 11

5 Getting Started ..................................................... 13
   First Steps ..................................................... 13
   Checklist ...................................................... 14
   Choose the display language ................................. 15
1 Before You Install the Terminal

System Preparations
Before you install the terminal, make sure

☐ **VXT software is installed** on a host computer system or InfoServer system.
   Your system manager should prepare the system as described in VXT Software Version 2.1 Installation and System Management.

☐ **You have enough optional memory to install, if needed.** The standard terminal comes with 4 megabytes (MB) of memory installed.

<table>
<thead>
<tr>
<th>If You Use...</th>
<th>And...</th>
<th>Your Terminal Needs At Least...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server-based VXT software</td>
<td>-</td>
<td>4 MB of memory</td>
</tr>
<tr>
<td>Server-based VXT software</td>
<td>Image accelerator board</td>
<td>6 MB</td>
</tr>
<tr>
<td>Host-based VXT software</td>
<td>-</td>
<td>10 MB</td>
</tr>
<tr>
<td>Host-based VXT software</td>
<td>Image accelerator board</td>
<td>12 MB</td>
</tr>
</tbody>
</table>

**Identifying Two-Box and One-Box Models**
The terminal comes in two versions, with or without a system box.

<table>
<thead>
<tr>
<th>If You Are Installing...</th>
<th>Go To...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two-box model</td>
<td>Chapter 2</td>
</tr>
<tr>
<td>(includes a system box)</td>
<td></td>
</tr>
<tr>
<td>One-box model</td>
<td>Chapter 3</td>
</tr>
<tr>
<td>(system components are</td>
<td></td>
</tr>
<tr>
<td>built in to the monitor)</td>
<td></td>
</tr>
</tbody>
</table>
2 Installing Two-Box Models

Unpack and check the contents of each carton.

Standard Parts Checklist

1. Monitor
2. Monitor guide
3. System box
4. Mouse and pad
5. Monitor cable:
   a. monochrome
   b. color
   c. gray scale
6. Monitor power cord
7. System box power cord
8. Keyboard and legend strip:
   a. LK401/LK402 ANSI
   b. LK421 short ANSI (UNIX style)
   c. LK443/LK444 PC (no legend strip)
   d. LK460 (Sun style, not shown)
9. User documentation kit

WARNING

If necessary, use two people to lift or move the monitor.
Installing Two-Box Models

Optional Parts Checklist

1. 2-megabyte memory controller board
2. 2- or 4-megabyte memory module (up to three modules)
3. Network board with (a) ThinWire and thickwire connectors, or (b) twisted-pair and thickwire connectors
4. Thickwire Ethernet network cable
5. ThinWire Ethernet network cable, T-connector, and terminator
6. Twisted-pair Ethernet network cable
7. Image accelerator board and image system box label
8. Serial port and parallel port cables and adapters (not shown)

Caution

Do not remove parts from their antistatic bag yet. Static electricity can damage components.

Inspect parts for shipping damage. If you have missing or damaged items, contact your sales representative and delivery agent.

Save cartons and packing material, in case you move or relocate your terminal.
Installing Two-Box Models

Install any options first.

1. Memory modules Go to Appendix A.
2. Other option boards Refer to the guide included with the board.

Place the system box and monitor in position, on a level surface.
Place the monitor on the system box. Allow room to connect cables.

Connect the cables to the system box.

1. Connect the mouse or graphics tablet. Set the mouse on the mouse pad.
2. Connect the keyboard. Lower the keyboard’s legs and install the legend strip for the top-row keys.
3. Connect your network cable. Connect the other end of the cable to your local area network. Your system box has two network connectors - (a) a ThinWire connector and a thickwire connector, or (b) a twisted-pair connector and a thickwire connector.
   Below the network connectors are indicator lights and a CPU halt button, used in servicing the terminal.
4. Connect a serial printer or secondary host computer, if used.
5. Connect a parallel printer, if used.
6. Connect the monitor cable to the monitor and the system box. The connector for a color or gray scale monitor is shown. When you connect a color or gray scale cable, make sure pin A1 is on the left.
7. Before you connect the long system power cord, make sure the monitor’s power switch is off; see your monitor guide for the switch location, if needed. Also make sure the power switch (O) on the system box is off (O).
   Connect the long power cord to the system box, then to a grounded electrical outlet.
   If you have a VRM17 monitor: Set the high scan/low scan switch at the rear of the monitor to the high scan position. To check your monitor’s model number, see the label on the rear of the monitor.
8. Connect the short power cord to the monitor and the system box.
   Turn the monitor’s power switch on.
9. Do not turn the system box’s power switch on yet.
Installing Two-Box Models

After you connect the cables, go to Chapter 4.
3 Installing One-Box Models

Unpack and check the contents of each carton.

Standard Parts Checklist

WARNING

If necessary, use two people to lift or move the terminal.

1. Terminal
2. User documentation kit
3. Mouse and pad
4. Power cord
5. Keyboard and legend strip:
   a. LK401/LK402 ANSI (standard or word processing)
   b. LK421 short ANSI (UNIX style)
   c. LK443/LK444 PC (no legend strip)
   d. LK460 (Sun style, not shown)
Optional Parts Checklist

1. 2- or 4-megabyte memory module (up to three modules)
2. Image accelerator board (for VX227 17-inch model only)
3. Serial port and parallel port cables and adapters (adapters not shown)
4. Thickwire Ethernet network cable
5. Twisted-pair Ethernet network cable
6. ThinWire Ethernet network cable, T-connector, and terminator

Inspect parts for shipping damage. If you have missing or damaged items, contact your sales representative and delivery agent.

Save cartons and packing material, in case you move or relocate your terminal.

Caution
Do not remove parts from their antistatic bag yet. Static electricity can damage components.
Installing One-Box Models

Install any options first.

1. Memory modules  Go to Appendix B.
2. Image accelerator board  Refer to the guide included with the board.

Place the terminal in position, on a level surface.
Allow room for connecting cables.

Connect the cables to the rear of the terminal.
The figure shows the 17-inch model (VX227), but the 15-inch model (VX225) is similar.

1  Make sure the power switch at the front of the terminal is off. You press the switch in to turn the terminal on, and out to turn the terminal off. Connect the power cord to the terminal, then to a grounded electrical outlet.

2  Connect the keyboard. Lower the keyboard's legs and install the legend strip for the top-row keys.

3  Connect the mouse or graphics tablet. Set the mouse on the mouse pad.

4  Connect a serial printer or secondary host computer, if used.

5  Connect a parallel printer, if used.

6  Connect your network cable. Connect the other end of the cable to your local area network. Some terminals have (a) a thickwire connector and (b) a twisted-pair connector. Other terminals have (c) a ThinWire connector.

Do not turn the terminal on yet.

After you connect the cables, go to Chapter 4.
Installing One-Box Models
4 Turning On the Terminal

Before you turn on the terminal, read through this chapter. When you turn on the terminal, it performs three steps in quick sequence:

- Runs its self-tests.
- Loads VXT software from a host computer system or InfoServer system. This process is known as booting the terminal.
- Displays the Terminal Manager window or something else set up by your system manager, such as a login box or application.

Make sure VXT software is installed.

Before you turn on the terminal, make sure VXT software is available on a host system or InfoServer system in your network.

Turn on the terminal’s power switch.

Two-box models: Press | on the system box’s power switch.

One-box models: Press in the power switch at the front of the monitor. The light on the switch should turn on.

Check the self-test display.

You should see a display similar to the following:

<table>
<thead>
<tr>
<th>Display</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>VXT V n.n</td>
<td>VXT boot ROM version number</td>
</tr>
<tr>
<td>08-00-2B-11-22-33</td>
<td>Terminal’s Ethernet address</td>
</tr>
<tr>
<td>nn MB</td>
<td>Megabytes of memory installed (4 to 18)</td>
</tr>
<tr>
<td>LJ-01540-TI0</td>
<td>Self-test progress indicator (Fills in as tests are completed.)</td>
</tr>
</tbody>
</table>

Record the terminal’s Ethernet address: 08-00-2B-___-___-___

If you installed additional memory: Make sure the memory size displayed (nnMB) is correct. See memory requirements in Chapter 1.

<table>
<thead>
<tr>
<th>Standard</th>
<th>+</th>
<th>Optional</th>
<th>=</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 megabytes</td>
<td>+</td>
<td>2 to 14 megabytes</td>
<td>=</td>
<td>6 to 18 megabytes</td>
</tr>
</tbody>
</table>

If you installed an image accelerator board: Make sure the self-test display lists the IMG board.
Turning on the Terminal

Observe the software booting messages.
After completing the self-tests, the terminal loads its VXT software from a host system or InfoServer system:

```
  83 BOOT SYS
```

The exact messages displayed depend on where the VXT software is installed and what communication method is used to load the software.

Wait for the Terminal Manager window or a customized display.
After loading its VXT software, the terminal typically displays the Terminal Manager window. Your system manager may customize the terminal to display something else, such as a login box or a frequently used application.

<table>
<thead>
<tr>
<th>If you see...</th>
<th>Then...</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Terminal Manager window</td>
<td>Go to Chapter 5 to start using your terminal.</td>
</tr>
<tr>
<td>A login box or application window</td>
<td>Your system manager has customized your terminal.</td>
</tr>
<tr>
<td>A blank screen with an arrow cursor</td>
<td>Your system manager may have customized your terminal. In this case, holding down mouse button 2 should display a VXT Create menu. You are done with this guide.</td>
</tr>
<tr>
<td>Any other display or messages</td>
<td>Review the installation steps, checking cable connections.</td>
</tr>
<tr>
<td></td>
<td>If the terminal fails to complete the self-tests or the VXT software booting sequence, record the screen messages and go to Appendix C.</td>
</tr>
</tbody>
</table>

Congratulations! Your terminal is ready to use.

This is a good time to set your monitor’s brightness, contrast, and viewing angle.

**Two-box models:** See your monitor guide.

**One-box models:** See the following figure.
Turning on the Terminal

Monitor Controls (One-Box Models)

<table>
<thead>
<tr>
<th>Control</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power switch and indicator light (VX225 model shown)</td>
</tr>
<tr>
<td>2</td>
<td>Contrast</td>
</tr>
<tr>
<td>3</td>
<td>Brightness</td>
</tr>
<tr>
<td>4</td>
<td>Rotation</td>
</tr>
<tr>
<td>5</td>
<td>Horizontal centering</td>
</tr>
<tr>
<td>6</td>
<td>Vertical centering</td>
</tr>
</tbody>
</table>

On the 17-inch VX227 model, you can center or rotate the screen display from the Terminal Manager window, using the Customize Video Alignment dialog box. See VXT 2000+/VXT 2000 Windowing Terminal User Information.
Now that you have the Terminal Manager window displayed, you are ready to start using your terminal.

The online Getting Started menu in the Terminal Manager window provides step-by-step instructions for creating sessions.

First Steps...
Before you create your first session, you may need to perform some simple setup steps, such as choosing the display language or entering a network address for your terminal.

1. Read the checklist that follows. Determine the steps you need to perform.
2. Collect any required information from your system manager.
3. To change the display language, read the instructions in this chapter.
4. To perform other checklist steps and create a session, go to the Getting Started menu for instructions.

If you have problems saving settings, see Appendix C.

Using the Getting Started Menu
To display the Getting Started menu, go to the menu bar at the top of the Terminal Manager window. Click mouse button 1 (MB1) on Getting Started. By default, MB1 is the left mouse button.

To choose a menu item, click MB1 on the item.
Getting Started

Checklist

In this chapter:

☐ Choose the display language.
   The default setting is English. Perform this step if you want to choose another language.

On the Getting Started menu:

☐ Choose the keyboard type.
   The default setting is for the North American keyboard. Perform this step if you have a different keyboard.

☐ Enter the terminal’s IP address in the terminal.
   Perform this step if your terminal will use the TCP/IP transport to communicate with host systems. Your system manager may have performed this step for you. If not, ask your system manager for

   Your terminal’s IP address
   Your terminal’s subnet mask
   The addresses of your network’s TCP/IP name servers (if any)
       Primary:
       Secondary:

☐ Enter the terminal’s DECnet address in the terminal.
   Perform this step if your terminal will use the DECnet transport to communicate with host systems. Your system manager may have performed this step for you. If not, ask your system manager for

   Your terminal’s DECnet address
   The addresses of your network’s DECnet name translators (if any)
       Primary:
       Secondary:
Choose the display language.
The display language is initially set to English.

To change the display language:
1. Click on the Customize menu in the Terminal Manager window’s menu bar.
2. Click on the Language . . . menu item to display the Customize Language dialog box.
3. In the dialog box, click on your language choice. Your choice is highlighted.
4. Click on the OK button to save your choice and dismiss the Customize Language dialog box.
5. To apply your choice, you must reboot the terminal.
   a. Click on the Session menu in the Terminal Manager window’s menu bar.
   b. Click on the Reboot menu item.
   c. The terminal displays a confirmation box, asking if you really want to reboot the terminal. Click on Yes.
      The terminal reloads its VXT software, then displays the Terminal Manager window in your chosen language.
   d. To perform other checklist steps and create a session, go to the Getting Started menu at the upper right of the Terminal Manager window.
A Installing Memory in Two-Box Models

Before You Start
If you ordered additional memory, you should receive
• 1 memory controller board (2 MB)
• 0 to 3 memory modules (2 MB or 4 MB each)

Read the installation steps before opening the system box or removing parts from their shipping bag. Static electricity can damage components.

Use a grounding wrist strap and an antistatic mat, if available. Otherwise, frequently touch the metal chassis of the system box during installation, to equalize any electrostatic charges.

Remove the system box cover.

1. **If the terminal is already installed:** Turn off the power switches on the monitor and the system box. Disconnect the two power cords from the system box. Disconnect the power cord from the power outlet. Remove the monitor from the top of the system box.

2. Release the cover by pushing your fingers into the two slots on the side of the box, as shown.

3. Slowly lift the cover until you release the hinges on the other side of the box. Then lift the cover completely off the system box.
Installing Memory in Two-Box Models

Identify components in the system box.
Refer to the following figure when installing options in the system box:

1. Network board (ThinWire and thickwire model shown)
2. Video board
3. System logic board
4. Image accelerator board (optional)
5. Memory controller board (optional)
6. Power supply

Discharge any electrostatic charge.
1. Follow the directions on the power supply label to touch the power supply and equalize any electrostatic charge.
2. Remove the memory controller board and memory modules from their antistatic bags.
Installing Memory in Two-Box Models

Caution

The memory controller board and memory modules can be damaged by electrostatic discharge. Handle the memory controller board by its cover or strap. Handle the memory modules by their edges. Avoid contact with the gold contact fingers on the module.

Install the memory modules on the memory controller board.

1. Place the first memory module into slot J1 at a 45-degree angle. The notched corner of the module should be near the outside edge of the memory controller board, as shown.

2. Press down on the module as you raise it to a standup position. Both sides of the module lock into the metal connector clips. Make sure the plastic tabs go into the holes on the memory module. Also make sure the metal connector clips return to their original position.

Repeat these steps for a second and third memory module, if you have them. Insert the second module into slot J2 and the third module into slot J3.
Installing Memory in Two-Box Models

Install the memory controller board into the system box.

1. Grasp the strap of the board.

2. Insert the board into the two chassis supports. Carefully lower the board until it rests on the connector and post in the system box. Use the post as a guide to align the connectors.

3. Press the board firmly into place on the connector in the system box. Make sure the clip on the post locks the board in place.

Install any other options.
If you are installing more options, refer to the instructions provided with the option.

Replace the system box cover.
Connect the cables to the system box.
Return to Chapter 2 to complete the installation.
B Installing Memory in One-Box Models

Before You Start
If you ordered additional memory, you should receive

- 1 to 3 memory modules (2 MB or 4 MB each)

Read the installation steps before opening the terminal’s rear cover or removing parts from their shipping bag. Static electricity can damage components.

Use a grounding wrist strap and an antistatic mat for the installation, if available. Otherwise, frequently touch the metal chassis of the terminal during installation, to equalize any electrostatic charges.

17-inch model (VX227): Install any memory modules before installing an optional image accelerator board.

Open the terminal’s rear cover.

1. If the terminal is already installed: Turn the terminal off. Disconnect all cables from the terminal. Also disconnect the power cord from the power outlet.

2. Release the terminal’s rear cover by pressing in the two locking tabs 1 with your thumbs.

3. 15-inch model (VX225): Slowly lower the hinged cover toward you 2.
   17-inch model (VX227): Remove the cover by pulling the cover’s slotted tabs straight out of their slots 3.

To close the VX225 cover, press in the two locking tabs 1 with your thumbs and push the cover into place. Release the tabs to lock the cover in place.

To close the VX227 cover, first insert the lower tabs in their slots. Then press in the two locking tabs 1 with your thumbs and push the cover into place. Release the tabs to lock the cover in place.
Installing Memory in One-Box Models

Discharge any electrostatic charge.
1. After you open the rear cover, touch the terminal’s metal chassis, to equalize any electrostatic charge.
2. Remove the memory modules from their antistatic bags.

__________________________ Caution __________________________

Memory modules can be damaged by electrostatic discharge. Handle the modules by their edges. Avoid contact with the gold contact fingers on the module.

__________________________

Install the memory modules.
1. Find slot J1 at the right edge of the system logic board.
2. Place the first memory module into slot J1 at a 45-degree angle. The notched corner of the module fits into the bottom of the slot.
Installing Memory in One-Box Models

3. Press in on the module as you move it into a standup position. Both sides of
the module lock into the metal connector clips. Make sure the plastic tabs go
into the holes on the memory module. Also make sure the metal connector
clips return to their original position.

17-inch model (VX227): If there is an image accelerator board installed
to the left of slot J3, temporarily remove the board before trying to install a
memory module in slot J3. Carefully release the left edge of the board from
the two post clips, then grasp the board’s strap and gently pull the board out.

4. Repeat these steps for a second and third memory module, if you ordered
them. Insert the second module in slot J2 and the third module in slot J3.

17-inch model: Install the optional image accelerator board, if used.
If you are installing the optional image accelerator board, refer to the instructions
provided with the option.

Replace the system box cover.
Connect the cables to the terminal.
Return to Chapter 3 to complete the installation.
C Need Help?

This appendix helps you identify and correct simple installation and setup problems. The appendix covers the following topics:

- Display Problems?
- No Terminal Window or Login Box?
- Getting Started—Cannot Save Your Settings?
- Are the System Box and Monitor Matched?

Display Problems?

If your screen display is blank, distorted, or misaligned, try the following:

<table>
<thead>
<tr>
<th>If the . . .</th>
<th>Then . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen is blank and the power indicator light is off</td>
<td>Check all power cord and cable connections.</td>
</tr>
<tr>
<td></td>
<td>Check that the power switch is on.</td>
</tr>
<tr>
<td></td>
<td>Check that the power outlet is okay by plugging in another piece of equipment that you know is working.</td>
</tr>
<tr>
<td>Screen is blank and the power indicator light is on</td>
<td>Check the brightness and contrast adjustment controls.</td>
</tr>
<tr>
<td>Screen display is distorted or rolling</td>
<td>Move any electromechanical device, such as a fan, a motor, or an electric pencil sharpener, away from the terminal, or move the terminal.</td>
</tr>
<tr>
<td>Display area is not centered on the screen</td>
<td>Use the horizontal, vertical, and rotation controls to adjust the display area.</td>
</tr>
</tbody>
</table>

If you perform all the suggested solutions and the problem still exists, contact your system manager or Digital service representative.

No Terminal Window or Login Box?

If you have problems when you turn on the terminal (Chapter 5), refer to the following numbered sections.

- If the terminal fails to complete its self-tests, you may have a terminal problem. See Section 1.
- If the terminal fails to complete the software booting sequence, you may have a system setup problem or network problem. See Section 2.
Need Help?

You can also try entering a BOOT command to load VXT software. See Section 3.

Section 1. Checking the Self-Tests for Terminal Problems

If the terminal stops during the self-tests:

1. Turn the terminal’s power switch off.
2. Disconnect your network cable from the terminal.
3. Turn the terminal’s power switch on.

The terminal performs its self-tests. You should see a display similar to the following:

<table>
<thead>
<tr>
<th>Display</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>VXT V n.n</td>
<td>VXT boot ROM version number</td>
</tr>
<tr>
<td>08-00-2B-11-22-33</td>
<td>Terminal’s Ethernet address</td>
</tr>
<tr>
<td>nnMB</td>
<td>Megabytes of memory installed</td>
</tr>
<tr>
<td>[progress bar]</td>
<td>Self-test progress indicator (Fills in as tests are completed.)</td>
</tr>
<tr>
<td>?? 001 9 VNI 0132</td>
<td>Error for disconnected network cable</td>
</tr>
<tr>
<td>(any other error code...)</td>
<td></td>
</tr>
</tbody>
</table>

1. Make sure the memory size listed equals the amount of memory installed in the terminal. If not, remove and reinstall optional memory modules (Appendix A or Appendix B). If there is still a problem, contact your system manager.

2. If you see another error code here, the problem is in the terminal. Here are some errors you can correct:

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>?MOP 255 or ?TFTP 255</td>
<td>Install enough memory to load the VXT system image. Host-based terminals need 10 megabytes.</td>
</tr>
<tr>
<td>?? 002 3 QDZ 0080</td>
<td>Check that the keyboard is plugged in correctly.</td>
</tr>
<tr>
<td>?? 020 12 IMG 0016</td>
<td>Check that the image accelerator board is seated correctly.</td>
</tr>
</tbody>
</table>

If you do not see another error code, the problem is related to your network, host system, or server. In any case, provide the results to your system manager.
Section 2. Checking the Booting Sequence for System Problems

If the terminal completes its self-tests but fails to load the VXT software, record the screen messages and give them to your system manager.

The following table lists possible causes for certain messages. VXT Software Version 2.1 Installation and System Management provides more detailed troubleshooting information for system managers. You can also try to load the VXT software by entering a command at the terminal; see the next section, “Section 3. Entering BOOT Commands to Load VXT Software”.

<table>
<thead>
<tr>
<th>Message</th>
<th>Possible Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>If You Load VXT Software from a Host System</td>
<td></td>
</tr>
<tr>
<td>The terminal displays the following lines repeatedly:</td>
<td>Check your network cable connections.</td>
</tr>
<tr>
<td>MOP V3...</td>
<td></td>
</tr>
<tr>
<td>MOP 1?</td>
<td></td>
</tr>
<tr>
<td>MOP 1?</td>
<td></td>
</tr>
<tr>
<td>MOP V4...</td>
<td></td>
</tr>
<tr>
<td>MOP 1?</td>
<td></td>
</tr>
<tr>
<td>MOP 1?</td>
<td></td>
</tr>
<tr>
<td>IP...</td>
<td></td>
</tr>
<tr>
<td>The terminal displays the following lines repeatedly:</td>
<td>Did your system manager install VXT software and configure a system to load your terminal?</td>
</tr>
<tr>
<td>MOP V3...</td>
<td>Did your system manager enter the terminal’s Ethernet address correctly in the system configuration file?</td>
</tr>
<tr>
<td>MOP V4...</td>
<td>Is the terminal separated from the host system by a gateway?</td>
</tr>
<tr>
<td>IP...</td>
<td>Is the terminal on a subnet?</td>
</tr>
<tr>
<td></td>
<td>Make sure there are no bridges that filter MOP protocol messages between the terminal and the system.</td>
</tr>
<tr>
<td></td>
<td>Check your network cable connections. On ThinWire networks, make sure to use T-connectors and their terminators properly. See your network documentation.</td>
</tr>
<tr>
<td>?TFTP 1</td>
<td>The tftp daemon on your host system could not find the VXT system image that the system manager specified in the bootptab file.</td>
</tr>
<tr>
<td>?TFTP 3</td>
<td>This message usually indicates that the tftp daemon is not running on the host system.</td>
</tr>
</tbody>
</table>
Need Help?

<table>
<thead>
<tr>
<th>Message</th>
<th>Possible Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>If You Load VXT Software from an InfoServer System</td>
<td></td>
</tr>
<tr>
<td>The terminal displays the following lines repeatedly:</td>
<td>Check your network cable connections.</td>
</tr>
<tr>
<td>MOP V3...&lt;VXTLDR&gt;</td>
<td></td>
</tr>
<tr>
<td>MOP 1?</td>
<td></td>
</tr>
<tr>
<td>MOP 1?</td>
<td></td>
</tr>
<tr>
<td>MOP V4...&lt;VXTLDR&gt;</td>
<td></td>
</tr>
<tr>
<td>MOP 1?</td>
<td></td>
</tr>
<tr>
<td>MOP 1?</td>
<td></td>
</tr>
<tr>
<td>IP...</td>
<td></td>
</tr>
<tr>
<td>The terminal displays the following lines repeatedly:</td>
<td>Did your system manager install VXT software on an InfoServer system to load your terminal?</td>
</tr>
<tr>
<td>MOP V3...&lt;VXTLDR&gt;</td>
<td></td>
</tr>
<tr>
<td>MOP V4...&lt;VXTLDR&gt;</td>
<td></td>
</tr>
<tr>
<td>IP...</td>
<td></td>
</tr>
</tbody>
</table>

Section 3. Entering BOOT Commands to Load VXT Software

If a booting problem occurs, you may be able to load the terminal’s VXT software by entering commands at the terminal’s >>> prompt.

To display the >>> prompt:

Quickly press and release the halt button on the rear of the terminal.

**Two-box models:**
The halt button is next to the indicator lights on the rear of the system box.

**One-box models:**
The halt button is below the keyboard connector on the rear of the monitor.

To load VXT software from an InfoServer system:

```plaintext
>>> B/101  [Return]
Bootfile: VXTLDR  [Return]
VXTLDR> VXT.SYS  [Return]
```

VXT.SYS specifies the default version of VXT software on your network. You can also enter a specific three-digit version number; for example, enter VXT021.SYS for VXT Version 2.1 software.

To load VXT Version 2.1 or later software from a host system:

```plaintext
>>> B/100  [Return]
Bootfile: VXT  [Return]
```
To load VXT Version 2.0 or earlier software from a host system:

>>> B/100
Bootfile: VXTnnn

nnn is the three-digit VXT software version number. For example, enter VXT020 for VXT Version 2.0 software.

Getting Started—Cannot Save Your Settings?

If your terminal displays an error message when you click on the OK button in a dialog box to save new settings, check the VXT Message Box to see if your terminal is READ ONLY. If so, your system manager must use the terminal’s configuration manager to move your terminal out of the read-only Unregistered Terminals work group. See VXT Software Version 2.1 Installation and System Management for details on using the configuration manager.

After your terminal is placed in another work group, choose Reboot from the Session menu in the Terminal Manager window. When the Terminal Manager window reappears, you can proceed to change and save your settings.

Are the System Box and Monitor Matched?

If you have a terminal with a system box, make sure you have the correct system box model for your monitor. See VXT 2000+/VXT 2000 Windowing Terminal Release Notes for a list of matching models.

To check the model number of your monitor or system box, look at the label on the back of the unit.

Other Problems?

VXT 2000+/VXT 2000 Windowing Terminal User Information contains an appendix on solving problems and getting service.
D Related Documentation

This document is part of your terminal’s user documentation kit.

<table>
<thead>
<tr>
<th>Document</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>VXT 2000+/VXT 2000 User Documentation Kit</td>
<td>EK–VXT20–DK</td>
</tr>
<tr>
<td>VXT 2000+/VXT 2000 Windowing Terminal Installing and Getting Started</td>
<td>EK–VXT20–IN</td>
</tr>
<tr>
<td>VXT 2000+/VXT 2000 Windowing Terminal User Information</td>
<td>EK–VXT20–UG</td>
</tr>
</tbody>
</table>

You can also order the following VXT software documents from Digital. Check with your Digital sales representative for availability in your country.

<table>
<thead>
<tr>
<th>Document</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>VXT Software Version 2.1 Installation and System Management</td>
<td>AA–PJHFE–TE</td>
</tr>
</tbody>
</table>

Ordering Information

You can order options and documentation by mail, phone, or electronically. For a list of options, see VXT 2000+/VXT 2000 Windowing Terminal User Information.

Need Help?

If you need help deciding which documentation best meets your needs, please call 800–DIGITAL (800–344–4825) and press 2 for technical assistance.

Electronic Orders

To place an order through your account at the Electronic Store, dial 800–234–1998, using a modem set to 2400 or 9600 baud. You must be using a VT terminal or terminal emulator set at 8 bits, no parity. If you need help, call 800–DIGITAL (800–344–4825) and ask for an Electronic Store specialist.
Related Documentation

Telephone or Direct Mail Orders

<table>
<thead>
<tr>
<th>If You Are From</th>
<th>Call . . .</th>
<th>Or Write . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.A.</td>
<td>DECdirect Phone: 800–DIGITAL (800–344–4825) FAX: (603) 884–5597</td>
<td>Digital Equipment Corporation P.O. Box CS2008 Nashua, New Hampshire 03061</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>Phone: (809) 781–0505 FAX: (809) 749–8377</td>
<td>Digital Equipment Caribbean, Inc. 3 Digital Plaza, 1st Street Suite 200 Metro Office Park San Juan, Puerto Rico 00920</td>
</tr>
<tr>
<td>Canada</td>
<td>Phone: 800–267–6215 FAX: (613) 592–1946</td>
<td>Digital Equipment of Canada Ltd. 100 Herzberg Road Kanata, Ontario, Canada K2K 2A6 Attn: DECdirect Sales</td>
</tr>
<tr>
<td>International</td>
<td>–</td>
<td>Local Digital subsidiary or approved distributor</td>
</tr>
</tbody>
</table>

Digital Personnel

To order hardware or software documentation, contact the U.S. Software Supply Business group for instructions. For software documentation, request an Internal Software Order Form (EN–01740–07).

U.S. Software Supply Business
Digital Equipment Corporation
10 Cotton Road
Nashua, NH, 03063–1260
DTN: 264–3030
(603) 884–3030
FAX: (603) 884–3960
Index

A
Adjustments, 12

B
BOOT commands, 26
Booting messages, 11
  troubleshooting, 25
Brightness control, 12

C
Cables
  connections
    one-box model, 8
    two-box model, 4
    one-box model, 7
    two-box model, 2, 3
Connectors
  one-box model, 8
  two-box model, 4
Contrast control, 12
Controls
  location, 12
  one-box model, 12
Cover
  See One-box model, Two-box model
Customize menu
  Customize Language dialog box, 15

D
DECnet address, 14
Display language, 14
  choosing, 15
Documentation, 28
  ordering, 28

E
Error codes, 24
Ethernet address
  displayed by self-test, 10
  recording, 10
Ethernet cables, 3, 7

G
Getting Started checklist, 14
Getting Started menu, 13

H
Help, 23
Horizontal centering control
  VX225, 12
Host system
  problems, 25
  to load VXT software, 1
Screen display problems, 23
Self-test display, 10
  checking for an error message, 23
Serial communication
  connector, 9
  connectors, 5
Serial communications
  cable, 3, 7
Server-based operation
  See InfoServer system
Sessions
  creating
    Getting Started menu, 13
Site preparation, 1
Software requirements, 1
System box
  and monitor models, 27
  components, 17
  connectors, 4
  removing the cover, 16
System box model
  See Two-box model
System connectors, 5
System logic board, 17, 21

Terminal
  connectors
    two-box model, 4
    one-box model, 1, 6
    self-tests, 10
    turning on, 10
    two-box model, 1, 2
Terminal Manager window, 11
  Customize menu, 15
Terminal setup, 13
Tests, 10
Thickwire Ethernet
  cable, 3, 7
  connector, 5, 9
ThinWire Ethernet
  cable, 3, 7
  connector, 5, 9
ThinWire network board, 17
Troubleshooting, 23
Twisted-pair Ethernet
  cable, 3, 7
  connector, 5, 9
Twisted-pair network board, 17
Two-box model, 1
  parts checklist
    optional, 3
    standard, 2
  system box models, 27

Vertical centering control
  VX225, 12
Video board, 17
VRM17 monitor
  scan switch, 4
VX225/VX227 terminals
  See One-box model
VXT software
  BOOT commands, 26
  booting messages, 11
  required for installation, 1