



Installing an Operating System

HP Vectra XU

6/xxx

You must install an operating system before you can use your new HP Vectra PC.

Installing an Operating System

For Your Information You must install an operating system before you can use your new HP Vectra PC. This document explains how to install:

- Windows NT 3.51 WS
- Windows 95
- OS/2 Warp Connect.

You will find all necessary drivers on the *HP Vectra XU/VT Drivers and Documentation* CD-ROM. The latest versions of all the drivers (and the corresponding installation notes) can be obtained from the HP BBS and from the HP Access World Wide Web page.

NOTE

The instructions below are for the installation of the English-language versions of these operating systems.

Installing Windows NT 3.51 WS

Install the operating system in two steps:

- 1 A basic installation in VGA mode, without network or sound drivers.
- 2 After the operating system is up and running, install the HP drivers to obtain full functionality and stability.

1. Basic Installation

First install Windows NT without network functionality and in VGA mode. Once you have Windows NT up and running, refer to step 2 for an explanation of how to install full functionality with high resolution video, sound, and network drivers, and how to obtain best stability and performance with HP provided and qualified drivers for mass storage devices.

Preparing to Install Windows NT

Before installing Windows NT Workstation 3.51 you will need:

- *XU/VT Drivers and Documentation* CD-ROM and *XU/VT Boot* diskette (supplied with your PC)
- one blank, formatted, diskette.

You will need to copy some important files (system drivers) from the CD-ROM to a blank diskette before attempting to install Windows NT:

- 1 Use the MS-DOS **DISKCOPY** command to make a *duplicate* copy of the “XU/VT Boot” diskette onto the blank diskette, then store the original “XU/VT Boot” diskette in a safe place.
- 2 Label the *duplicate* diskette: “XU/VT Boot” diskette.
- 3 Insert the *duplicate* “XU/VT Boot” diskette in your PC’s flexible disk drive and insert the “XU/VT Drivers and Documentation” CD-ROM disk in the CD-ROM drive.
- 4 Restart your PC and press **F2** to enter the Setup program.

Installing an Operating System

- 5 In the Setup program, highlight **Operating System** and select **Windows NT**. Press the **(F3)** key to save the setting and exit the Setup program.
- 6 When your PC restarts, it will start (boot) from the inserted diskette. Follow the displayed instructions to copy the files needed for an installation of Windows NT.
- 7 Remove the disk and CD-ROM from your computer when the files have been copied from the CD-ROM disk to the *duplicate* diskette.

Installing Windows NT

Please refer to the MS Windows NT Workstation 3.51 manual for detailed explanations about the installation process.

Before installing Windows NT, make sure you have these disks:

- Windows NT Setup disks
(Setup Boot disk, Setup disk #2, and Setup disk #3)
 - Windows NT CD-ROM
 - Duplicate *Boot* diskette.
- 1 Insert the Windows NT “Setup Boot Disk” into drive **A** and insert the Windows NT CD-ROM in the CD-ROM drive. Restart your PC.
 - 2 Insert “Setup Disk #2” when prompted by the installation program.
 - 3 Press to setup Windows NT.
 - 4 Press to select the **Express Setup**.

NOTE

If you are installing the US English version of Windows NT with a localized (non-US English) keyboard, you should choose the **Custom Setup**. The Custom Setup gives the option of selecting a localized keyboard.

- 5 Insert “Setup Disk #3” when prompted by the installation program.
- 6 When the installation program reports that the IDE CD-ROM has been detected as a mass storage device, press **S** to specify an additional device.

- 7 Select **Other** by pressing . Insert the duplicate *Boot* disk, and then press .
- 8 Press to select the displayed Adaptec driver and then press to continue the installation.
- 9 Remove the duplicate *Boot* disk and insert the Windows NT “Setup Disk #3”.
- 10 Press to install Windows NT from the CD-ROM. Follow the instructions displayed by the installation program. (Refer to the Microsoft Windows NT documentation for detailed installation instructions.)
- 11 When asked to insert the **Adaptec 7800 Family Manager Set** driver diskette, insert the duplicate *Boot* disk and press to retry.
- 12 When the files have been copied from the duplicate *Boot* disk, remove the disk and press to restart your computer.
- 13 Follow the instructions displayed by the Windows NT installation program to continue the installation of Windows NT.
- 14 When the installation program tries to detect the network adapter, click **Continue**, then select **Continue** in the next dialog box.
- 15 Select **No Network** in the **Add Network Adapter** dialog box, then click **OK** to confirm your choice. (The installation of network drivers is explained in the following section.)
- 16 Continue the Windows NT installation until a dialog box proposes the type of display connected to your computer.
- 17 Click **OK** to select the **VGA Compatible Display**, then click **OK** to save the configuration.
- 18 When the installation of Windows NT is complete, click **Restart Computer** to restart your computer.

2. Installing the HP Drivers

Windows NT must be fully installed and running on your HP Vectra before you can install the HP drivers. The drivers are located on the *HP Vectra XU/VT Drivers and Documentation* CD-ROM supplied with your HP Vectra PC. (This CD-ROM is referred to as the *HP Drivers* CD-ROM in the following instructions.)

NOTE

The instructions below assume that drive letter **D:** is assigned to your CD-ROM drive.

Installing IDE Mass Storage (CD-ROM) Drivers

- 1 Double-click the **Windows NT Setup** icon.
- 2 In the **Options** menu, choose **Add/Remove SCSI Adapters**.
- 3 Select **IDE CD-ROM (ATAPI 1.2)/Dual Channel PCI IDE**, click **Remove**, then click **OK** to confirm that you want to remove the adapter.
- 4 Click **Add** and then click **OK**.
- 5 Scroll down the list of adapters and select **Other**.
- 6 Insert the *HP Drivers* CD-ROM; type **D:\IDE\WINNT35** and then click **OK**.
- 7 When the next dialog box displays **CMD 64xx 32-bit IDE Adapter**, click **OK**, then click **Install**.
- 8 Click **Continue** to confirm the path for the files.
- 9 Close the **SCSI Adapter Setup** dialog box, then close the **Windows NT Setup** window.
- 10 After the installation, shutdown Windows NT and then restart the computer.

Enabling Networking after Installation

- 1 In the Control Panel, choose the **Network** icon.

- 2 Click **Yes** when the **Install Network Now** message appears.
- 3 Confirm the proposed setup path, which is the source of the Windows NT installation files on the Windows NT CD-ROM (for example, **D:\i386**).
- 4 Click **Continue** to install the HP network driver for Windows NT. To install the driver:
 - a Choose **Do Not Detect** to manually select an adapter.
 - b Click **Continue** to choose a network adapter.
 - c In the list box, choose **Other** and then select **Continue**.
 - d Insert the *HP Drivers* CD-ROM and specify the location of the drivers with:
D:\LAN\WINNT (for the HP 10/100VG) or **D:\LANBT\WINNT** (for the HP 10/100BT).
 - e Select the network adapter from the displayed list of adapters.
- 5 The system will continue with the installation. Follow the instructions displayed by Windows NT to complete the network driver installation process.
- 6 When prompted by the installation program, click on **Restart Computer**.

Detailed technical explanations and information about the network driver for Windows NT are supplied in a Network Administrator's Guide in Windows Help file format on the *HP Drivers* CD-ROM. The file is located in **\LAN\DOC\NAG.HLP** (for the HP 10/100VG), or in the file **\LANBT\DOC\NAG.HLP** (for the HP 10/100BT).

Changing the Video Driver after Installation

Windows NT starts in VGA mode by default. To install the HP qualified video driver for Windows NT:

- 1 In the Control Panel, choose the **Display** icon.
- 2 Choose **Change Display Type**.
- 3 Click **Change**.

Installing an Operating System

- 4 To install the HP video driver:
 - a Click the button named **Other**.
 - b Insert the *HP Drivers* CD-ROM and specify the location of the drivers with **D:\VIDEO\DISK4**.
 - c Choose your desired resolution from the list of Matrox MGA Millennium drivers, click **Install**, then click **Yes**.
 - d When asked to confirm the location of the drivers, verify that **D:\VIDEO** is displayed, then click **Continue**.
 - e When the files have been copied from the *HP Drivers* CD-ROM, follow the displayed instructions to restart the computer.

Detailed technical explanations and information about the Matrox Video driver for Windows NT are contained on the *HP Drivers* CD-ROM in the file **\VIDEO\DISK4\README.NT**.

Installing the Sound driver

To enable the integrated audio interface:

- 1 In the Control Panel, choose the **Drivers** icon.
- 2 Click on **Add**.
- 3 Choose **Creative Labs Sound Blaster 1.x, Pro, 16** from the list and click **OK**.
- 4 Insert the Microsoft Windows NT CD-ROM in the CD-ROM drive.
- 5 Confirm the proposed settings in the following dialog box, then click **OK**.

NOTE

The proposed settings will correspond, by default, with the Audio Interface settings in the HP Setup program. If an error message appears, check that the proposed settings are the same as those configured in the Setup program. Refer to the *User's Guide* for more information about the Setup program.

Obtaining the HP Desktop Management Interface Driver

The HP Desktop Management Interface (DMI) driver for Windows NT can be downloaded from the HP Access WorldWide Web page.

To obtain the latest HP DMI driver for Windows NT, point your web browser to this address:

`http://www.hp.com:80/cposupport/indexes/vssutilities.html`

Download the latest driver and view the **README.TXT** file provided with the driver for installation instructions.

Installing Windows 95

Install the operating system in two steps:

- 1 A basic installation in VGA modes.
- 2 After the operating system is up and running, install the HP drivers to obtain full functionality and stability.

1. Basic Installation

First install Windows 95 using the integrated Windows 95 system drivers. Once you have Windows 95 up and running, refer to step 2 for an explanation of how to install full functionality with high resolution video and network.

Preparing to Install Windows 95

Your PC is supplied with a disk kit, comprising one “XU/VT Boot” diskette and one “XU/VT Drivers and Documentation” CD-ROM disk. Before attempting to install Windows 95 you should make a duplicate copy of the “XU/VT Boot” diskette onto a blank diskette:

- 1 Use the MS-DOS **DISKCOPY** command to make a *duplicate* copy of the “XU/VT Boot” diskette onto a blank diskette, then store the original “XU/VT Boot” diskette in a safe place.
- 2 Label the *duplicate* diskette: “XU/VT Boot” diskette.
- 3 Restart your PC and press **(F2)** to enter the Setup program.
- 4 Highlight **Operating System** and select **Windows 95**. Press the **(F3)** key to save the setting and exit the Setup program.

Installing Windows 95

- 1 Install Windows 95 from the *Windows 95 (for PCs without Windows)* installation disks.
- 2 When the **Windows 95 Setup Wizard** asks you to indicate what hardware is installed in your computer, click on the checkbox to indicate a CD-ROM drive is installed. Do not indicate that a network adapter or sound card are installed.
- 3 When the **Windows 95 Setup Wizard** displays the **Finishing Setup** dialog box, remove the Windows 95 diskette as requested by the setup program. Do not click the **Finish** button.
- 4 Insert the *duplicate* “XU/VT Boot” diskette in the flexible disk drive and insert the “XU/VT Drivers and Documentation” CD-ROM in the CD-ROM drive. Click the **Finish** button.
- 5 Do not remove the HP disk and CD-ROM when the message **Setup detected a disk in your floppy disk drive** appears. Click **OK** to restart your computer.
- 6 Your PC will start (boot) from the *duplicate* “XU/VT Boot” diskette.
- 7 Select the option for *Windows 95 for PCs without Windows* from the menu.
- 8 Select the option *Windows 95 is installed*. The SCSI drivers will be copied from the “XU/VT Drivers and Documentation” CD-ROM to your hard disk.
- 9 When the files have been copied, remove the diskette and the CD-ROM, then restart your PC.
- 10 When your PC restarts, Windows 95 will display a message to indicate that it is starting for the first time.
- 11 Windows 95 will ask you to insert certain Windows 95 diskettes as it completes the installation. Windows 95 will restart again when it has finished copying files from these diskettes.

2. Installing the HP Drivers

Windows 95 must be fully installed and running on your HP Vectra before you can install the HP drivers. The drivers are located on the *HP Vectra XU/VT Drivers and Documentation* CD-ROM supplied with your HP Vectra PC. (This CD-ROM is referred to as the *HP Drivers* CD-ROM in the following instructions.)

NOTE

The instructions below assume that drive letter **D:** is assigned to your CD-ROM drive.

Installing the MGA Video Driver

- 1 Insert the *HP Drivers* CD-ROM in the CD-ROM drive.
- 2 Double-click on the **My Computer** icon on the Windows 95 desktop.
- 3 Double-click on the CD-ROM drive icon, then on the **Video** folder, then on the folder named **Disk 6**.
- 4 Execute the file named **Setup** (to start the **MGA Millennium PowerDesk Setup**).
- 5 Click on the **Next** button to accept the default destination path.
- 6 Click on the **Next** button to confirm the installation of **Quick Access** and the **MGA Monitor Program**.
- 7 Select your language then click on the **Next** button.
- 8 Click **OK** in the **Information . . .** window.
- 9 Click **Yes** in the next dialog box, when asked to use the Windows 95 monitor mechanism.
- 10 Click **OK** when a message explains that the driver has been installed.
- 11 Click on the **Start** button of the **MGA Change Display Wizard**.
- 12 Click on the **Settings** tab in the **Display Properties** folder.
- 13 Click on **Change Display Type**.
- 14 Click on **Change** of the **Adapter Type** (the adapter will have been incorrectly detected as “Oak Technology Super VGA”).

- 15 Click on **Have Disk**.
- 16 Enter **D:\VIDEO\DISK6** as the path to copy the files from.
- 17 Click on **OK** to confirm **MGA Millennium Power Desk**. (The files will be copied from the CD-ROM to the hard disk.)
- 18 Click **Close** in the **Change Display Type** folder.
- 19 Click **Finish** on the **MGA Change Display Wizard**.
- 20 Click **Yes** to restart in the **MGA Exit Wizard** dialog box. Windows 95 will restart with the new video drivers.
- 21 Click on the **Start** button when Windows 95 restarts, then:
 - point to **Settings**,
 - click on **Control Panel**,
 - double-click on **System**,
 - and click on the **Device Manager** tab.
- 22 Double-click on **Other Devices**.
- 23 Click on **PCI VGA-compatible Display Adapter** and then click on **Remove**.
- 24 Click on **OK** to confirm removal of the device.
- 25 Click the checkbox to indicate that the device can be removed safely, then click the **Test** button.
- 26 Click the **Close** button to close the **System Properties** folder.

Configuring the Display

- 1 Click on the **Start** button then:
 - point to **Programs**,
 - point to **MGA Millennium Power Desk**,
 - and double-click on **MGA Monitor Program**.
- 2 Click on the **Selection** button, select your display, then confirm your selection with **OK**.
- 3 Click on **Save and Exit**, then select **Restart** to restart Windows 95.

Changing Display Settings

- 1 Click on the **Start** button then:
point to **Settings**,
click on **Control Panel**,
and double-click on **Display**.
- 2 Click on the **MGA Settings** tab to change display settings.

Detailed technical explanations and information about the video driver for Windows 95 are contained on the *HP Drivers* CD-ROM in the file `\VIDEO\DISK6\README`.

Configuring the Network

- 1 Insert the *HP Drivers* CD-ROM in the CD-ROM drive.
- 2 Click on the **Start** button then:
point to **Settings**,
click on **Control Panel**,
double-click on the **System** icon,
click on **Device Manager**,
double-click on **Other Devices**,
and double-click on **PCI Ethernet Controller**.
- 3 Click on the **Driver** tab.
- 4 Click on the **Change Driver** button.
- 5 Select **Network adapter** and click on **OK**.
- 6 Click **Have Disk** and select `D:\LAN\W95` (for the HP 10/100VG adapter) or `D:\LANBT\W95` (for the HP 10/100BT adapter) and click **OK**.
- 7 Click **OK** when the name of the HP network adapter installed in your PC is displayed.
- 8 Follow the instructions displayed by Windows 95 to complete the installation. You must restart Windows 95 when the installation of the network drivers has completed.

Installing OS/2 Warp Connect

Install the operating system in two steps:

- 1 A basic installation in VGA mode, without network or sound drivers.
- 2 After the operating system is up and running, install the HP drivers to obtain full functionality and stability.

1. Basic Installation

First install OS/2 without network functionality and in VGA mode. Once you have OS/2 up and running, refer to step 2 for an explanation of how to install full functionality with high resolution video, sound, and network, and how to obtain best stability and performance with HP provided and qualified drivers for mass storage devices.

Preparing to Install OS/2

Before installing OS/2 Warp Connect you will need:

- IBM OS/2 Warp Connect “Installation Diskette for CD-ROM”
 - IBM OS/2 Warp Connect “OS/2 Diskette 1 for CD-ROM”
 - IBM OS/2 Warp Connect CD-ROM
 - *XU/VT Drivers and Documentation* CD-ROM
- 1 Start your PC and press **(F2)** to enter the Setup program.
 - 2 Highlight **Operating System** and select **OS/2**. Press the **(F3)** key to save the setting and exit the Setup program.

Installing OS/2

Consult the manual that came with your OS/2 Warp installation disks for a detailed explanation of the installation procedure.

When the installation program prompts you to install networking support, select **No**. Networking support should be installed after completing the installation of OS/2 Warp.

When the installation of OS/2 Warp has completed, two error messages will appear when your computer is restarted:

```
SYS1201: The device driver C:\MMOS2\SB16D2.SYS... was  
not installed
```

```
SYS1201: The device driver C:\MMOS2\AUDIOVDD.SYS...  
was not installed
```

Press to continue when each error message appears. (These messages will appear because the HP SCSI drivers have not yet been installed. You must install the HP SCSI drivers, as described below, to prevent this error message appearing again.)

2. Installing the HP Drivers

OS/2 must be fully installed and running on your HP Vectra before you can install the HP drivers. The drivers are located on the *HP Vectra XU/VT Drivers and Documentation* CD-ROM supplied with your HP Vectra PC. (This CD-ROM is referred to as the *HP Drivers* CD-ROM in the following instructions.)

NOTE

The instructions below assume that drive letter **D:** is assigned to your CD-ROM drive.

Installing the HP Mass Storage Drivers (for CD-ROM)

To install the HP qualified IDE driver for OS/2:

- 1 Use the OS/2 **System Editor** to add the following line to the **CONFIG.SYS** file:

```
BASEDEV=IBMIIDECD.FLT
```

- 2 Save the change to the **CONFIG.SYS** file, then shutdown OS/2 and restart your computer.
- 3 Insert the *HP Drivers* CD-ROM into the CD-ROM drive.
- 4 Copy **CMD646X.ADD** and **CMDATAPI.FLT** from the **D:\IDE\OS2** to **C:\OS2\BOOT**.

5 In the **CONFIG.SYS** file, replace these lines:

BASEDEV=IBM1S506.ADD with **BASEDEV=CMD646X.ADD**
BASEDEV=IBMIDECD.FLT with **BASEDEV=CMDATAPI.FLT**

6 Shutdown OS/2 and restart your computer.

7 Open the OS/2 **System** folder, choose **System Setup**, then choose **Selective Install**, and then select **Other** for CD-ROM.

8 Insert the *OS/2 Warp Connect* CD-ROM into the CD-ROM drive.

9 Click the **Install** button in the **OS/2 Setup and Installation** window, then click **OK** when the installation has completed.

10 Shutdown OS/2, then restart your computer to use the new IDE drivers.

Installing the HP SCSI Drivers

To install the HP qualified SCSI driver for OS/2:

1 Insert the *HP Drivers* CD-ROM into the CD-ROM drive.

2 Open the OS/2 **System** folder, then the **System Setup** folder.

3 Click on the **Device Driver Install** icon.

4 Change the source directory for the drivers with the **Change** button to **D:\SCSI\OS2**.

5 Click the **Install** button. The drivers will be copied from the CD-ROM.

6 Exit from the OS/2 Device Driver installation.

7 Shutdown OS/2, then restart your computer to use the new SCSI drivers.

Installing the Network driver

To install networking support with the HP qualified network drivers for OS/2:

1 Insert the *HP Drivers* CD-ROM into the CD-ROM drive.

- 2 Open the OS/2 **System** folder, then open the **OS/2 Warp Connect Install/Remove** folder.
- 3 Click on **Warp Connect Selective Install for Networking**.
- 4 Select an installation on this workstation (local install).
- 5 Follow the instructions displayed by the installation program.
- 6 Click on the **Other Adapter** button, when the **Select Network Adapter** dialog box appears.
- 7 Specify the location of the driver with **D:\LAN\IBM\OS2** (for the HP 10/100VG) or **D:\LANBT\IBM\OS2** (for the HP 10/100BT), when asked for the file location, and click **OK**.
- 8 Select the network adapter from the list displayed in the **Drivers Found** dialog box. Select **Ethernet** as the **Type of LAN**.
- 9 When the **Select Network Adapter** dialog box appears, the HP network adapter you selected is highlighted in the adapter list.
- 10 Remove the *HP Drivers* CD-ROM from the CD-ROM drive, insert the OS/2 Warp Connect CD-ROM and then click **OK**.
- 11 Click **OK** in the **Select Network Adapter** dialog box, to accept the selection of the adapter.
- 12 Click **OK**, then click **OK** again in the configuration dialog box.
- 13 Click the **Install** button in the **Ready to Install** window.
- 14 Select **OK** to confirm the shutdown of the operating system. Leave the OS/2 Warp Connect CD-ROM in the drive (some files will be copied from the CD-ROM when the operating system restarts).

Detailed technical explanations and information about the network driver for OS/2 are supplied in a Network Administrator's Guide in Windows Help file format on the *HP Drivers* CD-ROM. The file is located in **\LAN\DOC\NAG.HLP** (for the HP 10/100VG), or in the file **\LANBT\DOC\NAG.HLP** (for the HP 10/100BT).

Installing the High Resolution Video driver

After successful installation of OS/2, you should install the HP video driver from the *HP Drivers* CD-ROM.

- 1 Insert the *HP Drivers* CD-ROM in the CD-ROM drive.
- 2 In the OS/2 **System** folder, open the **Command Prompts** folder and click on the OS/2 **Full Screen** icon.
- 3 At the command prompt, type the following:

```
D:   
CD VIDEO\DISK5   
INSTALL /U 
```

This will start an 'unattended' installation of the video drivers.

- 4 When the installation of the drivers has completed, exit from the command prompt, shutdown the operating system, then restart the system.

Selecting a Display

- 1 In the OS/2 **System** folder, open the **Command Prompts** folder and click on the OS/2 **Full Screen** icon.
- 2 At the command prompt, type the following:

```
CD \MGA\OS2   
MGAMON 
```

This will start the MGA Display selection program. Choose your display (monitor) from the list.

- 3 When this selection process has completed, exit from the command prompt, shutdown the operating system, then restart the system.

Changing Display Settings

- 1 In the OS/2 **System** folder, open the **System Setup** folder.
- 2 Click on the **System** icon and change the settings (for example, the screen resolution).



NOTICE

The information contained in this document is subject to change without notice.

Hewlett-Packard makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Hewlett-Packard shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

Hewlett-Packard assumes no responsibility for the use or reliability of its software on equipment that is not furnished by Hewlett-Packard.

This document contains proprietary information that is protected by copyright. All rights are reserved. No part of this document may be photocopied, reproduced, or translated to another language without the prior written consent of Hewlett-Packard Company.

Microsoft[®], MS[®] and MS-DOS[®] are U.S. registered trademarks of Microsoft Corporation.

Windows[™] is a trademark of Microsoft Corporation.

OS/2[™] is a trademark of International Business Machines Corporation.

Hewlett-Packard France
Grenoble Personal Computer Division
Technical Marketing
38053 Grenoble Cedex 9
France

© 1996 Hewlett-Packard Company



Printed in France 07/96
Part Number: D3538-90301