### Dell<sup>®</sup> Latitude<sup>®</sup> C/Dock Expansion Station Before You Dock



**U**se one of the following driver-installation procedures *before* you dock the Dell Latitude CP portable computer to the C/Dock Expansion Station for the first time. Before you begin, use the instructions in the next section to determine the basic input output system (BIOS) revision level of the the computer.

If the computer uses the Microsoft<sup>®</sup> Windows<sup>®</sup> 95 operating system, use the instructions in the next section. If the computer uses the Microsoft Windows NT<sup>®</sup> 4.0 operating system, use the instructions in "Windows NT" found later in this document.

The diskettes you need to perform the procedures in this document came with the C/Dock Expansion Station.

# Windows 95

If your computer uses Windows 95, use the following procedure *before* you dock the computer for the first time. The diskettes used in this procedure came with the C/Dock Expansion station.

*NOTES: Dell recommends that you check with your network administrator before performing this procedure.* 

1. *If the computer has never been turned on*, remove any PC Card installed in the PC Card slot, turn on the computer while *undocked*, and complete the operating system setup. Then go to step 2.

*If the operating system setup has already been completed*, undock the computer if necessary and go to step 2.

- 2. Click the Start button, point to Settings, and click Control Panel.
- 3. Double-click the System icon.

- 4. Select the Device Manager tab.
- 5. From the menu, double-click SCSI Controllers.
- 6. If the following line appears, dock the computer, turn it on, and go to step 17 of this procedure. If the following line does *not* appear, go to step 7:

Adaptec AI-7860 PCI SCSI Controller

- 7. Shut down the computer.
- 8. Insert the *Dell BIOS Upgrade Diskette* into the diskette drive, and turn on the computer.
- 9. When the following message appears on the display, remove the BIOS upgrade diskette and restart the computer:

BIOS upgrade is done!

10. With the computer still undocked, insert the Dell Latitude C/Dock Drivers Quick Install for Windows 95 diskette into the computer's diskette drive.

The *Quick Install for Windows 95* diskette installs drivers for the following devices and configures the Latitude CP computer to support the C/Dock Expansion Station:

- 3Com<sup>®</sup> Ethernet network controller (3Com Fast Etherlink XL 10/100MB TX Ethernet Adapter)
- Small computer system interface (SCSI) controller (Adaptec AIC-7860 Peripheral Component Interconnect [PCI] SCSI controller)
- Integrated drive electronics (IDE) controller (CMD 646U Ultra direct memory access [DMA] controller) that supports a CD-ROM in the C/Dock media bay

### 11. Click the Start button and click Run.

12. Type a:\setup and click OK.

- 13. Follow the instructions on the display to begin the driver installation program.
- 14. When prompted, click Yes to install the CMD Bus Master IDE Driver.
- 15. When prompted, remove the *Quick Install* diskette and click Yes to restart the computer.
- **16.** When the boot routine is completed, dock the computer.
- 17. At the Configuration Setup window, click OK.
- **18.** When prompted, click Yes to restart the computer.

The operating system loads the new drivers. After each driver is loaded, the computer prompts you to restart the computer. Select No the first two times you are prompted to reboot. A single reboot after the third driver loads activates all the new drivers at the same time.

## **19.** At the CMD Driver Parameters Preload Utility window, click Yes to restart the computer.

If you receive the following message after the drivers are installed and the computer is restarted, perform steps 3 through 10 of this procedure again:

Windows

Your multi-function device (CMD PCI-0646 Bus Master PCI to IDE Controller) has some child devices.

20. If the C/Dock Expansion Station uses a PCI video expansion card or Token-Ring network expansion card, install the appropriate driver.

For instructions, see "Installing a Windows 95 Driver for a PCI Video Card" or "Token-Ring Network Card Driver" found later in this document.

After the first docking experience, the computer can be "warm docked" (docked in suspend mode). See the *Dell Latitude C/Dock Expansion Station User's Guide* for more information.

Store the *BIOS Upgrade* and *Quick Install for Windows 95* diskettes with the program diskette sets you made when you first received your Latitude CP computer. Use the diskettes if you ever need to reinstall your software.

# Windows NT

If your computer uses Windows NT, turn on the computer for the first time *before* you dock it to the C/Dock Expansion Station. Then use the following procedure to install the appropriate drivers.

NOTES: You must have administrator privileges to perform the following procedure.

Dell recommends that you check with your network administrator before performing this procedure.

1. *If the computer has never been turned on*, remove any PC Card installed in the PC Card slot, turn on the computer while *undocked*, and complete the operating system setup. Then go to step 2.

*If the operating system setup has already been completed*, undock the computer if necessary and go to step 2.

- 2. Click the Start button, point to Settings, and click Control Panel.
- 3. Double-click the System icon.
- 4. Select the Device Manager tab.
- 5. From the menu, highlight and open SCSI Controllers.
- 6. If the following line appears, dock the computer, turn it on, and go to step 15 of this procedure. If the following line does *not* appear, go to step 7:

Adaptec AI-7860 PCI SCSI Controller

- 7. Shut down the computer.
- 8. Insert the *Dell BIOS Upgrade Diskette* into the diskette drive, and turn on the computer.
- 9. When the following message appears on the display, remove the BIOS upgrade diskette and restart the computer:

BIOS upgrade is done!

10. With the computer still undocked, install the driver for the IDE controller (CMD 646U Ultra DMA controller) that supports a CD-ROM in the C/Dock media bay.

For instructions, see "IDE Controller Driver" found later in this document.

11. With the computer still undocked, install the driver for the SCSI controller (Adaptec AIC-7860 PCI SCSI controller).

For instructions, see "SCSI Controller Driver" found later in this document.

# 12. With the computer still undocked, update the Advanced Power Management (APM) driver and PC Card driver.

For instructions, see "APM and PC Card Drivers" found later in this document.

### 13. Shut down the computer.

Click the Start button and click Shut Down. Then click Shut down the computer? and click Yes.

14. Dock the computer to the C/Dock Expansion Station.

For instructions, see the *Dell Latitude C/Dock Expansion Station User's Guide*.

#### 15. Install the network controller driver.

CAUTION: The computer must be docked in order to install the network driver successfully.

For instructions, see "Network Controller Driver" found later in this document.

# 16. If the C/Dock Expansion Station uses a PCI video expansion card or Token-Ring network expansion card, install the appropriate driver.

For instructions, see "Installing a Windows NT Driver for a PCI Video Card" or "Token-Ring Network Driver" found later in this document.

### **IDE Controller Driver**

If your computer uses Windows NT, use the following procedure to install the driver for the IDE controller on the C/Dock Expansion Station. The IDE controller supports a CD-ROM drive in the C/Dock media bay.

*NOTE:* You must have administrator privileges to perform the following procedure.

- 1. Undock the computer.
- 2. Click the Start button, point to Settings, and click Control Panel.

- 3. Double-click the SCSI Adapters icon.
- 4. Click the Drivers tab and click Add.
- 5. In the Install Driver window, click the Have Disk button.
- 6. Insert the *Dell Latitude C/Dock Expansion Station Windows NT 4.0 IDE Driver* diskette into the computer's diskette drive.
- 7. In the Copy the manufacturer's files from box, type a: \ and click OK.
- 8. Highlight CMD CSA-646U Ultra DMA IDE Adapter and click OK.
- 9. Type  $a : \setminus$  and click Continue.
- **10.** When prompted to restart the computer, remove the diskette and click Yes.

After the driver is installed, you may configure it for maximum performance as follows:

- 1. Click the Start button and click Run.
- 2. Type cmdcfgnt.exe and click OK.
- 3. Click the General tab.
- 4. Select the PCI bus speed that matches that of the computer.

To determine the PCI bus speed of the computer, see the section titled "Chip Set and Bus" in Appendix A of the *Reference and Troubleshooting Guide* that accompanied the Latitude CP computer. If a documentation update came with the computer, check whether a new PCI bus speed has been added.

- 5. To enable the DMA features of the controller, click the Enable DMA box so that a check mark appears in the box.
- 6. Use the Boot Controller tab to tune each drive in a specific DMA channel.

### SCSI Controller Driver

*NOTE:* You must have administrator privileges to perform the following procedure.

If your computer uses Windows NT, use the following procedure to install the driver for the SCSI controller on the C/Dock Expansion Station:

### 1. Undock the computer.

- 2. Click the Start button, point to Settings, and click Control Panel.
- 3. Double-click the SCSI Adapters icon.
- 4. Click the Drivers tab and click Add.
- 5. In the Install Driver window, click the Have Disk button.
- 6. Insert the *Dell Latitude C/Dock Expansion Station Windows NT 4.0 SCSI Driver* diskette into the computer's diskette drive.
- 7. In the Copy the manufacturer's files from box, type a: \ and click OK.
- 8. At the Install Driver window, click OK.
- 9. In the Windows NT Setup window, type a:\ and click Continue.
- **10.** When prompted to restart the computer, remove the diskette and click Yes.

### APM and PC Card Drivers

*NOTE: You must have administrator privileges to perform the following procedure.* 

If your computer uses Windows NT, use the following procedure to update the APM and PC Card drivers on the Latitude CP computer. The drivers are on diskettes that came with the C/Dock Expansion Station.

- 1. Shut down the computer and undock it.
- 2. Press the power button and log on.

Confirm that Service Pack 3 is installed.

- 3. Insert the *Dell Latitude C/Dock APM Driver for Windows NT Diskette* into the computer's diskette drive.
- 4. Double-click the My Computer icon on the desktop.
- 5. Double-click the 3 1/2 Floppy (A:) icon.
- 6. Double-click the Uninstl icon.
- 7. When prompted, click the uninstall icon. NOTE: Do not click the Exit Uninstall button.
- 8. When the uninstall routine is completed, click OK.

- 9. When prompted to restart the computer, click Don't Restart Now.
- **10.** Remove the *Dell Latitude C/Dock APM Driver for Windows NT Diskette* from the computer's diskette drive.
- 11. Insert the *Dell Latitude C/Dock PC Card Driver* for Windows NT Diskette 2 of 2 into the computer's diskette drive.
- 12. Double-click the My Computer icon on the desktop.
- 13. Double-click the 3 1/2 Floppy (A:) icon.
- 14. Double-click the Uninstl icon.
- 15. When prompted, click the uninstall icon.

NOTE: Do not click the Exit Uninstall button.

- 16. When prompted, delete all installed network or modem drivers (listed in the Network Adapters box) as follows:
  - a. Highlight and right-click the Network Neighborhood icon on the desktop. From the menu, select Properties.
  - b. Select the Adapters tab. In the Network window, highlight the network or modem driver you want to delete.
  - c. Click Remove. When prompted, click Yes to remove the driver.

Use this procedure to remove all drivers listed in the Network Adapters box.

- 17. Click Close.
- 18. When prompted, remove the diskette and click Restart Now to restart the computer.
- **19.** Insert the *Dell Latitude C/Dock APM Driver for Windows NT Diskette* diskette into the computer's diskette drive.
- 20. Click the Start button and click Run.
- 21. Type a:\setup and click OK.
- 22. In the Softex Power Management Control Setup window, click the installation button.
- 23. After the driver has been installed, click OK.
- 24. When prompted to restart the computer, click Don't Restart Now.

- 25. Remove the *Dell Latitude C/Dock APM Driver for Windows NT Diskette* from the computer's diskette drive.
- 26. Insert the *Dell Latitude C/Dock PC Card Driver* for Windows NT Diskette 1 of 2 into the computer's diskette drive.
- 27. Click the Start button and click Run.
- 28. Type a:\setup and click OK.
- **29.** Click the installation button, and follow the instructions on the display.
- **30.** When prompted, remove the diskette and click Restart Now to restart the computer.
- **31.** Follow the instructions on the display to configure the PC Card diagnostics feature.
- 32. Shut down the computer and dock it.
- 33. Turn on the computer.
- 34. Install the network driver you deleted in step 16.

For instructions, see the next subsection.

### **Network Controller Driver**

If your computer uses Windows NT, use the following procedure to install the driver for the network controller on the C/Dock Expansion Station.

*NOTE:* You must have administrator privileges to perform the following procedure.

1. Shut down and dock the computer, and then press the power button and log on.

If a PCI video card is installed in the C/Dock Expansion Station, select Windows NT Workstation Version 4.00 (VGA mode).

If there is no PCI video card installed, select Windows NT Workstation Version 4.00.

- 2. If a PCI video card is installed in the C/Dock Expansion Station, go to step 3. If there is no PCI video card installed, go to step 9.
- 3. At the Invalid Display Settings window, click OK.
- 4. At the Display Properties window, click Load Drivers Now.
- 5. Click Display Type.

- 6. Click Change.
- 7. Click Have Disk.
- 8. Install the PCI video card driver.

For instructions, see "Installing a Windows NT Driver for a PCI Video Card" found later in this document.

- 9. Highlight the Network Neighborhood icon on the desktop and right click.
- 10. From the menu, select Properties.
- 11. In the Network window, click the Adapters tab.
- 12. Click Add.
- 13. Click Have Disk.
- 14. Type c:\drvlib\netcard\x86\3c90x and click OK.
- 15. In the Select OEM Option window, highlight 3Com Fast EtherLink XL Adapter (3C905) and click OK.
- 16. After the driver is installed, click Continue.
- 17. In the 3Com NIC Diagnostics window, select the Properties tab.
- **18.** In the Individual Settings box, click Media Type and set the option to Autoselect.
- 19. In the 3NICDiag window, click OK.
- 20. In the 3 Com NIC Diagnostics window, click OK.
- 21. When prompted, click No to change configuration settings and restart your computer.
- 22. In the Network window, click the Identification tab.
- 23. Click Change.
- 24. Enter the computer name and workgroup name appropriate for your network.

If the computer name and workgroup name are not correct, the computer cannot recognize other computers on the network. If necessary, see your network administrator for the proper identifications.

- 25. Click OK to close the Identification window.
- 26. Click Close to close the Network window.
- 27. When prompted, click Yes to restart the computer.

# **P**CI Video Card Driver

If your computer uses Windows 95, use the instructions in the following section to install the PCI video card driver. If the computer uses Windows NT, use the instructions in "Installing a Windows NT Driver for a PCI Video Card" found later in this section.

### Installing a Windows 95 Driver for a PCI Video Card

Use the following procedure to install a Windows 95 PCI video driver if you are using the PCI video expansion card supplied by Dell. The diskette needed for this procedure came with the C/Dock Expansion Station.

### 1. If necessary, install the PCI video card.

For instructions, see "Removing and Installing a PCI Expansion Card" in the *Dell Latitude C/Dock Expansion Station User's Guide*.

## 2. Connect an external monitor to the C/Dock Expansion Station.

For instructions, see "Connecting External Devices to the C/Dock Expansion Station" in the *Dell Latitude C/Dock Expansion Station User's Guide*.

- 3. Shut down the computer, and dock it to the C/Dock Expansion Station.
- 4. Turn on the computer, and select Next when prompted to install a standard PCI video graphics array (VGA) driver.
- 5. When prompted, select Finish to complete the installation of the VGA driver.
- 6. After the VGA driver is installed, select Yes to restart the computer.
- 7. Insert the first driver diskette into the computer's diskette drive.

Use the Matrox Millennium II MGA PowerDesk for Win95 Diskette 1.

- 8. Click the Start button and click Run.
- 9. Type a:\setup.exe and click OK.
- 10. Follow the online instructions until the installation is complete. When prompted, remove the diskette and select Yes to restart the computer.

### 11. To customize the driver, click the right mouse button in the main Windows background screen and select Properties.

Use the options in the PowerDesk Display Properties window to customize the driver.

### Installing a Windows NT Driver for a PCI Video Card

If your computer uses Windows NT, use the instructions in the following section to install the PCI video card driver. The diskette needed for this procedure came with the C/Dock Expansion Station.

# 1. Check the version of the APM and PC Card drivers used by your computer.

Double-click the PC Card or Battery icon on the taskbar. In the Softex PC Card Controller window, select About.

If the version is A47519217, go to step 2. If the version is something different, you must remove the driver and install an updated version. For instructions, see "APM and PC Card Drivers" found earlier in this document. After upgrading the drivers, continue with step 2 of this procedure.

### 2. If necessary, install the PCI video card.

For instructions, see "Removing and Installing a PCI Expansion Card" in the *Dell Latitude C/Dock Expansion Station User's Guide*.

# **3.** Connect an external monitor to the C/Dock Expansion Station.

For instructions, see "Connecting External Devices to the C/Dock Expansion Station" in the *Dell Latitude C/Dock Expansion Station User's Guide*.

- 4. Shut down the computer, and dock it to the C/Dock Expansion Station.
- 5. When prompted, select Windows NT Workstation Version 4.00 (VGA mode) and log on.
- 6. Insert the Matrox Millennium II MGA PowerDesk for WinNT Diskette 1 diskette.
- 7. Click the Start button and click Run.
- 8. Type a:\setup.exe and click OK.

- 9. Follow the online instructions until the installation is complete. When prompted, remove the diskette and select Yes to restart the computer.
- **10.** To customize the driver, click the right mouse button in the main Windows background screen and select Properties.

## **T**oken-Ring Network Driver

The computer must be docked and connected to the network before you begin to install the IBM<sup>®</sup> Token-Ring network driver.

If the computer uses Windows 95, install the Token-Ring network driver by using the instructions in Chapter 3, "Software Installation," of the *IBM PCI Token-Ring Adapter Installation and Testing Instructions* that came with the C/Dock Expansion Station. If the computer uses Windows NT, use the following procedure to install the Token-Ring network driver:

## 1. Check the version of the APM and PC Card drivers used by your computer.

Double-click the PC Card or Battery icon on the taskbar. In the Softex PC Card Controller window, select About.

If the version is A47519217, go to step 2. If the version is something different, you must remove the driver and install an updated version. For instructions, see "APM and PC Card Drivers" found earlier in this document. After upgrading the drivers, continue with step 2 of this procedure.

### 2. Install the Token-Ring Network driver.

Use the instructions in Chapter 3, "Software Installation," of the *IBM PCI Token-Ring Adapter Installation and Testing Instructions* that came with the C/Dock Expansion Station.