

# CAN Hardware and the NI-DNET™ Software for Windows 2000/NT/Me/9x

This guide contains instructions to help you install your NI-DNET system. A complete document set, including your user manual and programmer reference manual, is in Adobe Acrobat portable document format (PDF) on your *NI-DNET for Windows 2000/NT/Me/9x* CD. Refer to the files NI-DNET Getting Started for Windows 2000.txt, NI-DNET Getting Started for Windows NT.pdf, NI-DNET Getting Started for Windows 9x.pdf, NI-DNET User Manual.pdf, and NI-DNET Programmer Reference Manual.pdf on the CD or in the NI-DNET\Manuals folder on your hard drive for the complete document set.

The National Instruments CAN hardware covered in this installation guide includes AT-CAN (**Windows Me/9x only**), PCI-CAN, PCMCIA-CAN, and PXI-8461.

This document assumes you are already familiar with Windows 2000/NT/Me/9x.

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# Install the NI-DNET Software Before the Hardware

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Before installing the DeviceNet software, **Windows 2000/NT users** must first log on as Administrator or as a user with Administrator privileges. The NI-DNET setup program must have Administrator privileges because the program modifies the configuration registry of your system. Except for the variation noted in step 3, users of all Windows operating systems should complete the following steps.



**Note** If you have a previous version of NI-DNET installed on your machine, you must uninstall it before upgrading to this latest version of NI-DNET.

1. Select **Start»Settings»Control Panel**.
2. Double-click on the **Add/Remove Programs** icon in the Control Panel to launch the Add/Remove Programs applet. You can use this same applet to uninstall the NI-DNET software at a later time. Refer to *Uninstalling the NI-DNET Software*, in your *NI-DNET User Manual* on the CD for more information.
3. **Windows 2000 users:** Click on **Add New Programs**. Click on **CD or Floppy**. **Windows NT/Me/9x users:** Click on the **Install** button.
4. Insert your *NI-DNET for Windows 2000/NT/Me/9x* CD, and click on the **Next** button to proceed.
5. The setup wizard guides you through the necessary steps to install the NI-DNET software. You may go back and change values where appropriate by choosing **Back**. You can exit the setup where appropriate by choosing **Cancel**.

6. Shut down your computer when the setup is complete.
7. Proceed to the next section, *Install the CAN Hardware*.

## Install the CAN Hardware

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This section describes how to install your CAN hardware on the AT, PCI, PCMCIA, and PXI busses.

### Install Your AT-CAN or PCI-CAN Series Board



**Caution** Before you remove the board from the package, touch the antistatic plastic package to a metal part of your system chassis to discharge electrostatic energy, which can damage several components on your CAN interface.

1. Make sure that your computer is turned off. Keep the computer plugged in so that it remains grounded while you install the CAN interface.
2. Remove the top cover (or other access panels) to give yourself access to the computer expansion slots.
3. Find an unused expansion slot of the appropriate type in your computer.
4. Remove the corresponding slot cover on the back panel of the computer.
5. Insert the CAN interface into the slot with the DeviceNet connector(s) positioned in the opening on the back panel. It might be a tight fit, but do not force the interface into place.
6. Screw the mounting bracket of the CAN interface to the back panel rail of the computer.

7. Replace the top cover (or the access panel to the expansion slot).
8. Proceed to the *Verify Your Installation* section in this document.

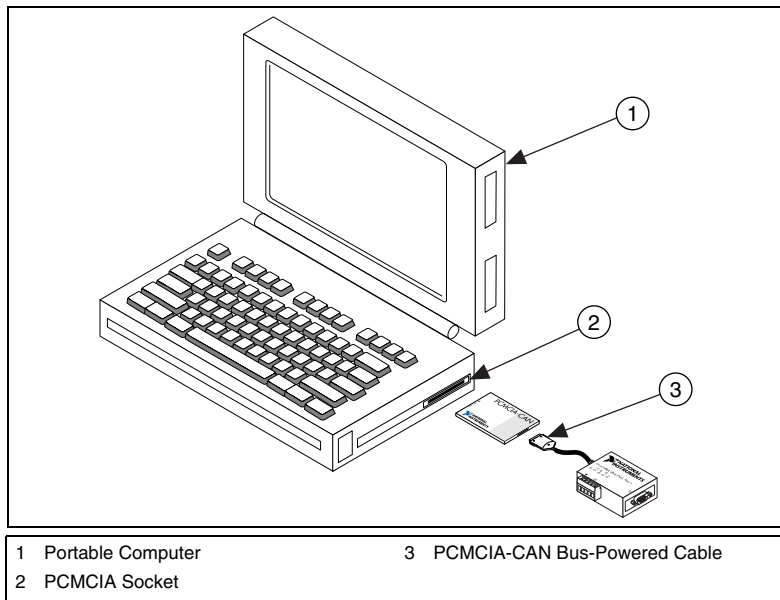
## Install Your PCMCIA-CAN Series Card



**Caution** Before you remove the card from the package, touch the antistatic plastic package to a metal part of your system chassis to discharge electrostatic energy, which can damage several components on your CAN interface.

1. Shut down your operating system and power off your system.
2. Insert the card into a free PC Card (PCMCIA) socket. The card has no jumpers or switches to set.
3. Connect the PCMCIA-CAN bus-powered cable to the card.
4. Proceed to the *Verify Your Installation* section in this document.

Figure 1 depicts insertion of PCMCIA-CAN into a portable computer.



**Figure 1.** Inserting the PCMCIA-CAN

## Install Your PXI-8461



**Caution** Before you remove the board from the package, touch the antistatic package to a metal part of your system chassis to discharge electrostatic energy, which can damage several components on your board.

1. Make sure that your PXI or CompactPCI chassis is turned off. Keep the PXI or CompactPCI chassis plugged in so that it remains grounded while you install the PXI board.
2. Choose an unused PXI or CompactPCI 5 V peripheral slot.
3. Remove the filler panel for the peripheral slot you have chosen.
4. Touch a metal part on your chassis to discharge any static electricity that might be on your clothes or body.
5. Insert the PXI board into the selected 5 V slot. Use the injector/ejector handle to fully inject the device into place.
6. Screw the front panel of the PXI board to the front panel mounting rail of the PXI or CompactPCI chassis.
7. Proceed to the *Verify Your Installation* section in this document.

## Verify Your Installation

1. Turn on your computer and start Windows.

**Windows 2000/Me/9x users:** A **New Hardware Found** dialog box appears, then goes away on its own. If the dialog box does not go away, select **Windows default driver** and click the **OK** button. If the **New Hardware Found** dialog box does not appear when you restart Windows, refer to *Troubleshooting and Common Questions* in your *Getting Started* manual for more information.

**Windows NT 4.0 users:** Refer to your *Getting Started* manual to verify your installation.

2. Run the NI-DNET Hardware Configuration utility. This utility is used to configure the CAN hardware and verify proper operation of the software. For further information, refer to the *Verify the Installation* chapter in the getting started manual.
3. Proceed to the *Connect the Cables* section in this document.

## Connect the Cables

After you have installed the CAN interface, connect your DeviceNet cables to the interface. Because exact cabling requirements vary for each application, National Instruments does not provide DeviceNet cables. Refer to Appendix B, *Cabling Requirements*, in your *Getting Started* manual on the CD for information about the cabling requirements of DeviceNet.

## Further Documentation

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A complete document set is in Adobe Acrobat portable document format (PDF) on your *NI-DNET for Windows 2000/NT/Me/9x* CD. After you have installed the software, the document set is also available in the `NI-DNET\Manuals` folder on your hard drive. The document set includes:

- `NI-DNET Getting Started for Windows 2000.txt`
- `NI-DNET Getting Started for Windows NT.pdf`
- `NI-DNET Getting Started for Windows 9x.pdf`
- `NI-DNET User Manual.pdf`
- `NI-DNET Programmer Reference.pdf`

Refer to the appropriate *Getting Started* document for your Windows operating system on how to configure your CAN cards and diagnose the installation.

Refer to the *User Manual* for an introduction to the NI-DNET software and to the *Programmer Reference Manual* for detailed descriptions of each NI-DNET function.