

INSTALLATION GUIDE

NI-DNET™ Hardware and Software for Windows

This installation guide contains instructions to help you install your NI-DNET system. Complete documentation is in the *NI-DNET User Manual* and the *NI-DNET Programmer Reference Manual*, which are on your *NI-DNET Software for Windows* CD in Adobe Acrobat portable document format (PDF). Refer to the *NI-DNET Programmer Reference Manual.pdf* and *NI-DNET User Manual.pdf* files on the CD or in the `NI-DNET\Documentation` folder on your hard drive.

The NI-DNET software on this CD supports Microsoft Windows operating systems.

This installation guide covers all National Instruments hardware products for DeviceNet on the PCI, PCMCIA, and PXI buses. It is written for users already familiar with Windows.

Install the NI-DNET Software Before the Hardware

Before installing the NI-DNET software, 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.

Complete the following steps.

1. Insert the *NI-DNET Software for Windows* CD into your CD-ROM drive. The installer launches if your CD-ROM drive plays data CDs automatically. If the installer doesn't launch automatically, navigate to the CD using Windows Explorer and launch the `autorun` file from your *NI-DNET Software for Windows* CD.
2. The Installation Wizard guides you through the necessary steps to install the NI-DNET software. You can go back and change values where appropriate by clicking **Back**. You can exit the setup where appropriate by clicking **Cancel**.
3. If you have LabVIEW Real-Time (RT) installed on your system, download the NI-DNET driver support for your Real-Time PXI controller. Launch Measurement & Automation Explorer (MAX) and follow the online help to download NI-DNET Real-Time components to your Real-Time PXI controller.
4. Power off your computer when the setup is complete.
5. Proceed to the *Install the CAN Hardware* section.

Install the CAN Hardware

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

Install Your PCI-CAN 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 components on your CAN card.

1. Be sure your computer is powered off and unplugged.
2. Remove the top cover (or other access panels) to give yourself access to the computer expansion slots.
3. Find an unused PCI slot in your computer.
4. Remove the corresponding slot cover on the back panel of the computer.
5. Insert the CAN card into the slot with the CAN connector sticking out of 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 card 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.

Install Your PCMCIA-CAN 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 components on your CAN card.

1. Insert the card into a free PC Card (PCMCIA) socket.
2. Connect your PCMCIA-CAN cable to the card.
3. Proceed to the *Verify Your Installation* section.

Install Your PXI-CAN 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 components on your CAN card.

1. Be sure your PXI or CompactPCI chassis is powered off, and unplug the computer.
2. Choose an unused PXI or CompactPCI 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 card into the selected slot. Use the injector/ejector handle to fully inject the card into place.

6. Screw the front panel of the PXI card to the front panel-mounting rail of the PXI or CompactPCI chassis.
7. Proceed to the *Verify Your Installation* section.

Verify Your Installation

1. Power on your computer and start Windows.

A New Hardware Found dialog box appears. If the dialog box does not go away on its own, choose the default option, **Install the Software automatically (Recommended)**, and let the operating system install the driver files. (On Windows XP SP2 or later, choose **No, not this time** to avoid connecting Windows Update, then choose the default option.)

If the New Hardware Found dialog box does not appear when you restart Windows, refer to Appendix C, *Troubleshooting and Common Questions*, of the *NI-DNET User Manual* for more information.

2. Launch MAX and refresh (press <F5> or choose **View»Refresh** from the menu). Your CAN cards should be listed now under **Devices and Interfaces**. To test all detected CAN cards, choose **Tools»NI-DNET»Test All Local Cards**.
3. Proceed to the *Connect the Cables* section.

Connect the Cables

After you have installed the CAN interface, connect your CAN cables to the interface. Because exact cabling requirements vary for each application, National Instruments does not provide cables, other than the PCMCIA-CAN cable. Refer to Appendix B, *Cabling Requirements*, of the *NI-DNET User Manual* for information about the cabling requirements of the CAN hardware.

Uninstalling the NI-DNET Software

Before uninstalling the NI-DNET software, remove all CAN interface hardware from your computer.

Complete the following steps to remove the NI-DNET software.

1. Run the **Add/Remove Programs** applet from the **Control Panel**.
2. Select **National Instruments Software**. Click the **Change** button.
3. Select **NI-DNET** in the list of products and click **Uninstall**.

The uninstall program removes all folders, utilities, device drivers, DLLs, and registry entries associated with the NI-DNET software. The uninstall program removes only items that the installation program installed.

If you have added anything to a directory created by the installation program, the uninstall program cannot delete that directory because it is not empty after the uninstallation. Remove any remaining components manually.

After the uninstall program completes, restart your computer.

Further Documentation

Complete documentation is in the *NI-DNET User Manual* and the *NI-DNET Programmer Reference Manual*, which are available on your *NI-DNET Software for Windows* CD in Adobe Acrobat portable document format (PDF). The *NI-DNET User Manual* includes a *Troubleshooting and Common Questions* appendix with more detailed information about installation and configuration of your NI-DNET software and hardware. Refer to the `NI-DNET Programmer Reference Manual.pdf` and `NI-DNET User Manual.pdf` files on the CD or in the `NI-DNET\Documentation` folder on your hard drive.

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