

WHERE TO START WITH YOUR NI 4050 FOR PCMCIA DIGITAL MULTIMETER

Thank you for buying the NI 4050 for PCMCIA digital multimeter (DMM). This document explains how to set up, test, and begin using your NI 4050 for PCMCIA.

Set Up and Test Using Windows 2000/NT/98/95

You can control the NI 4050 for PCMCIA interactively with the VirtualBench-DMM located on your National Instruments DMM software CD or programmatically with an Application Development Environment (ADE) using the supplied Interchangeable Virtual Instruments (IVI) driver. The supported ADEs include LabVIEW, LabWindows/CVI, Visual Basic, and other C or C++ environments.

The following instructions describe how to set up your software for your NI 4050 for PCMCIA. They assume you have already installed your ADE, such as LabVIEW, LabWindows/CVI, or third-party tools, on your PC.

The NI-DMM software CD includes the required software to configure, test, and program the operation of your NI 4050 for PCMCIA:

1. Insert your National Instruments NI-DMM software CD into your CD-ROM drive.
2. Click **Install** in the installation window that will appear automatically.



Note If the installation window does not appear, double-click the **My Computer** icon on your PC desktop. Find the CD drive, and double-click it. In the CD directory, double-click `install.exe`.

The NI-Switch and NI-DMM version 1.5 drivers offer three installation choices:

- **Install NI-DMM**—Choose this selection if you want to install only the software for the DMM.

- **Install NI-Switch**—Choose this selection if you want to install only the software for the switches.
 - **Install NI-Switch and NI-DMM**—Choose this selection if you want to install the software for both the DMM and the switches.
3. Click either **Install NI-DMM** or **Install NI-Switch and NI-DMM**.
 4. To install the instrument driver, VirtualBench, and ADE examples, choose **Programmatic and Interactive Support**. To install only the instrument driver and VirtualBench, choose **Interactive Support Only**.



Note The **Interactive Support Only** choice will *not* allow you to program the instrument with any programming language.

5. When installing NI-DMM, notice the **Development Environments** panel.
 - If you click the **Advanced** button in this panel, you can custom install National Instruments drivers such as NI-DAQ, NI-IVI, and NI-VISA.
 - If you do *not* want to install certain drivers, click **Advanced** and uncheck the driver(s) you do not want installed.

If a driver is already unchecked, your computer has the same driver or a newer version of the driver already installed.



Note If a newer version of a driver is present on your PC, the installer will *not* overwrite the driver.

6. After completing the installation, reboot your computer.
7. Insert your NI 4050 in the PCMCIA slot.
8. Double-click the **Measurement & Automation Explorer** icon on your PC desktop to configure and test your NI 4050 for PCMCIA.
 - a. Measurement & Automation Explorer detects the NI 4050 for PCMCIA you inserted in the PCMCIA slot of your PC. Double-click **Devices and Interfaces** to see the card listed as **NI 4050 for PCMCIA**.
 - b. Right-click **NI 4050 for PCMCIA**, and choose **Properties** from the drop-down menu to launch the **Configuring Device** window. Make a note of the device number and resources that have been assigned to the card.
 - c. In the **Configuring Device** window, click the **Test Resources** button to test the NI 4050 resources. A dialog box appears and indicates if the resource test has passed.



Note If the device does not pass the test, remove the NI 4050 from the PCMCIA slot and repeat steps 6—8c. If the device still does not pass the test, please visit our support pages at www.ni.com/support.

- d. Click **Run Test Panels** to run the functional test panels and to interactively use your NI 4050. Connect a signal to your NI 4050 and select the appropriate range and mode.
- e. Click **Close** when you finish testing your NI 4050. Click **OK** from the **Configuring Device** window to return to the Measurement & Automation Explorer main window.
- f. Select **File»Close** in Measurement & Automation Explorer to exit.

If you need further help during the configuration and testing process, open the *Measurement & Automation Explorer Help* file by selecting **Help»Help Topics**.

Now, you have successfully installed the NI-DMM software, and you have configured the NI 4050 for PCMCIA.

To interactively use your NI 4050 for PCMCIA, open the NI-DMM front panel from the **Start»Programs»National Instruments DMM** menu. Refer to your *NI 4050 User Manual* for more information on this soft front panel.

To program your NI 4050 for PCMCIA with the instrument driver, refer to the *NI-DMM Programmer Reference Online Help* file in the **Start»Programs»National Instruments DMM** menu.



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