

WHERE TO START WITH YOUR NI 5102 OSCILLOSCOPE

This document explains how to begin using your NI 5102.

Set Up and Test Using Windows NT/98/95

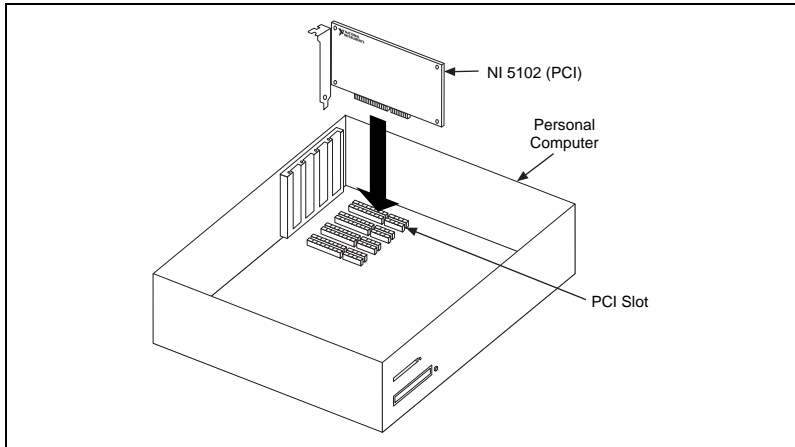
You can control the NI 5102 interactively with the VirtualBench-Scope soft front panel software or programmatically with an Application Development Environment (ADE) using the supplied NI-SCOPE Interchangeable Virtual Instrument (IVI) driver. The supported ADEs include LabVIEW, LabWindows/CVI, Microsoft Visual Basic, and other C or C++ environments. The following instructions describe how to set up your NI 5102:

1. If you are using an ADE or third-party tool, install it now if you have not already done so.
2. Install the NI-SCOPE software. The software CD includes the software you need to configure, test, and program the operation of your NI 5102.
 - a. Insert your National Instruments scope software CD into your CD-ROM drive. Click the **Install Software** option from the installation window.
 - b. To install the instrument driver, ADE examples, and VirtualBench-Scope soft front panel, choose the **Programmatic and Interactive Support** option when prompted. To install only the VirtualBench-Scope soft front panel, choose the **Interactive Support Only** option.
3. Install your NI 5102 hardware. The following figures illustrate the NI 5102 hardware installation.

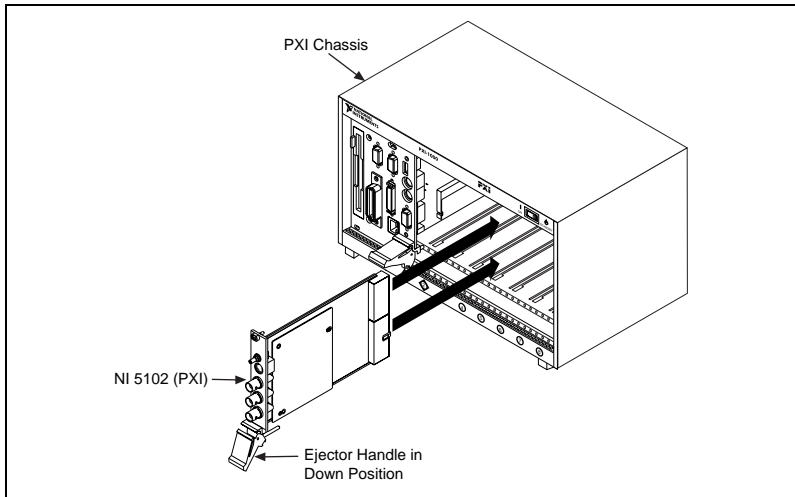


Caution You must turn off your PC or chassis before installing your NI 5102. To prevent damage due to electrostatic discharge or contamination, handle the board using the edges or the metal bracket.

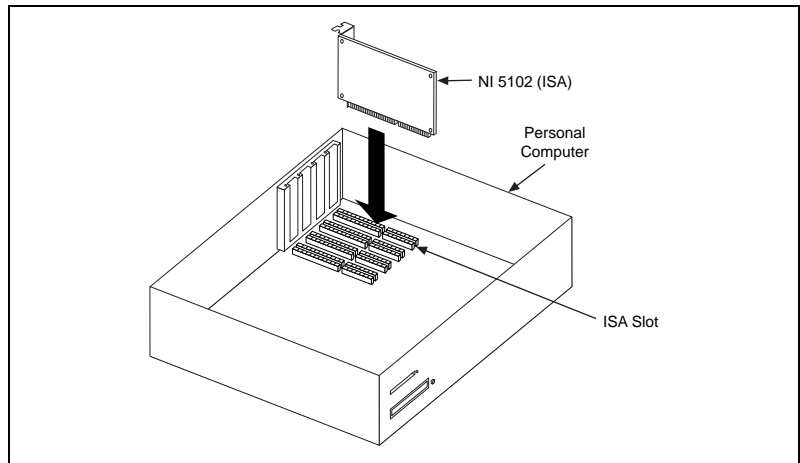
◆ **NI 5102 (PCI)**



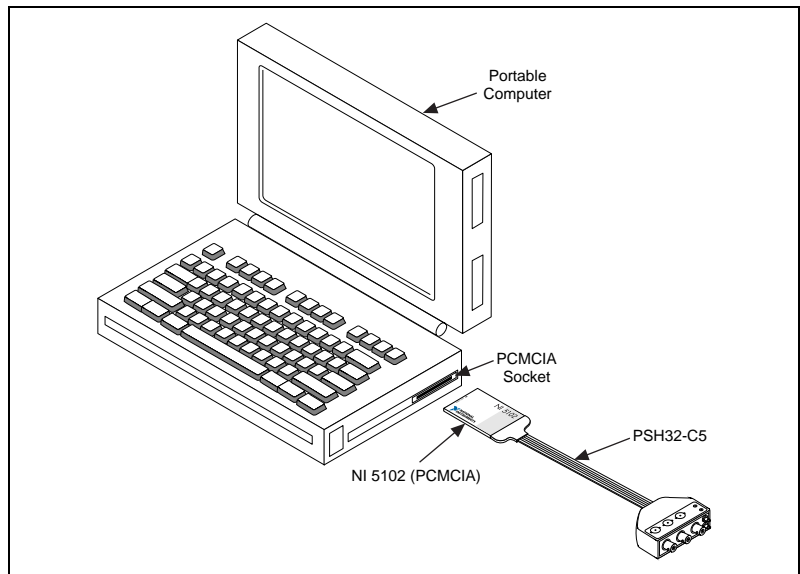
◆ **NI 5102 (PXI)**



◆ **NI 5102 (ISA)**



◆ **NI 5102 (PCMCIA)**

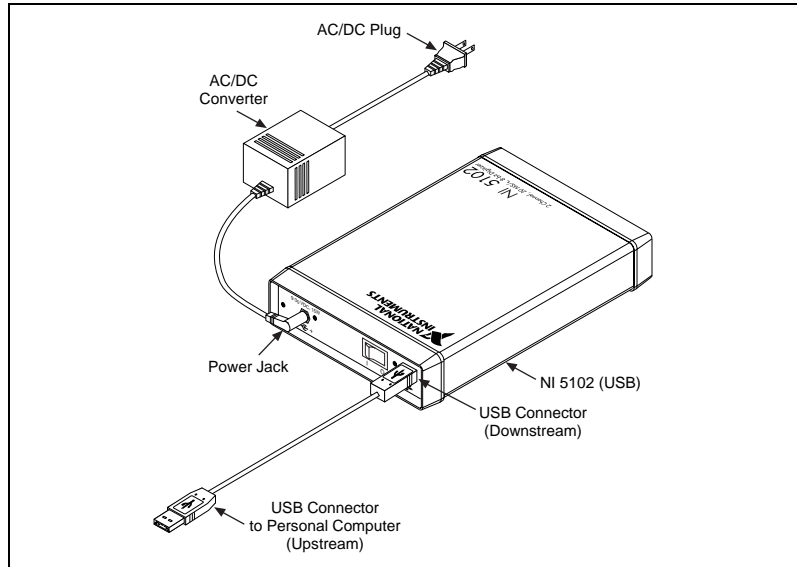


◆ **NI 5102 (USB)**

Connect the AC/DC supply to a power outlet, and connect the NI 5102 (USB) to the PC with the USB cable. Flip the rocker switch to the ON position.



Note You do not need to turn off your computer before connecting the USB connector.



4. To configure and test your NI 5102, complete the following steps:
 - a. Double-click the **Measurement & Automation** icon on the desktop.
 - b. Double-click the **Devices and Interfaces** icon to open a list of recognized devices.
 - c. Find the device in the list that corresponds to your NI 5102. Notice the device number. You will need this number to program your device.
 - d. Right-click the device name. Select **Properties** from the menu.
 - e. From the **Properties** window, click the **Test Resources** button to test the NI 5102 resources. A dialog box appears and indicates if the resource test has passed.
 - f. Click **Run Test Panels** to run the functional test panels and begin using your NI 5102.
 - g. Connect a signal to CH0 or CH1 of your NI 5102.

- h. On the test panel, set the **Channel**, **Input Limits**, and **Sample Rate**.
- i. Press **Start** to verify the successful acquisition of your signal. Select the **Advanced** button to enable triggering options.
- j. Click **Close** when you finish testing your NI 5102.
- k. Click **OK** from the **Properties** window.

You have successfully installed and configured the necessary software and hardware to use your NI 5102 with the NI-SCOPE software.

Pick one of the following options to begin using your NI 5102:

- Interactive users—Launch the soft front panel. Open the **VirtualBench-Scope** soft front panel from the **Start»Programs»National Instruments SCOPE** menu.
- Programmatic users—Begin programming your NI 5102 in your ADE. You can find LabVIEW examples by going to `Program Files\National Instruments\LabVIEW\INSTR.LIB\NISCOPE\niscope.llb`. Examples for CVI or C programmers using Windows 98/95 are located in `vxipnp\win95\Niscope\Examples`, and examples for CVI and C programmers using Windows NT are available at `vxipnp\winnt\Niscope\Examples`.



Note These paths take you to the default locations for programming examples. They will be different if you installed the examples in a different location.



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