

WHERE TO START WITH YOUR NI DIGITIZER

This document explains how to begin using your digitizer.

Installing the Software and Hardware

The following instructions describe how to set up your digitizer:

1. If you are using an application development environment (ADE) or third-party tool, install it now if you have not already done so. The supported ADEs include LabVIEW, LabWindows/CVI, Visual Basic, and other C or C++ environments.
2. Install the NI-SCOPE software. The software CD includes the software you need to configure, test, and program the operation of your device.
 - a. Insert your NI-SCOPE software CD and click the **Install Software** button in the window that appears. If the installation window does not appear automatically, navigate to your CD-ROM drive and run `setup.exe`.
 - b. To install the driver, ADE examples, and the Scope Soft Front Panel, choose the **Programmatic and Interactive Support** option when prompted. To install only the Scope Soft Front Panel, choose the **Interactive Support Only** option.



Caution You *must* power off and unplug your PC or chassis before installing your device. To prevent damage due to electrostatic discharge or contamination, handle the device using the edges or the metal bracket.

3. Install your digitizer. The following figures illustrate the installation.

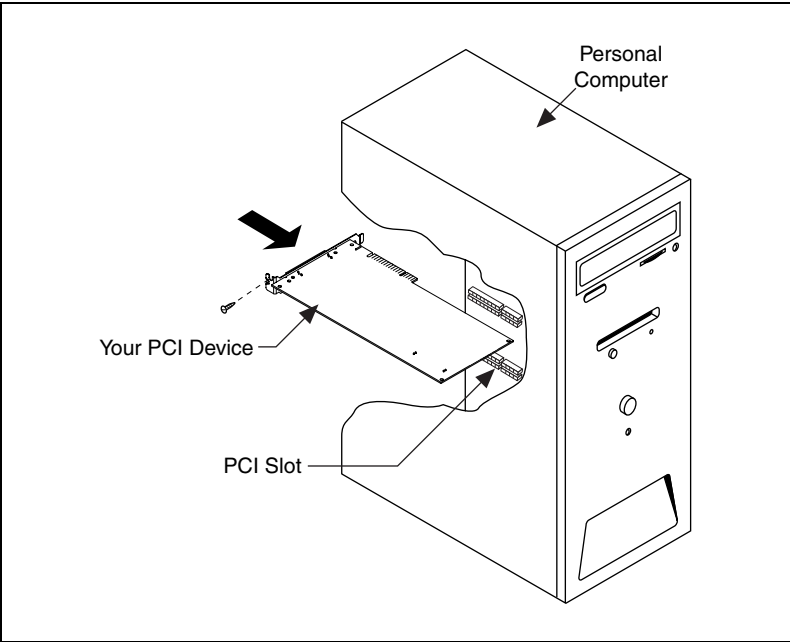


Figure 1. PCI Installation

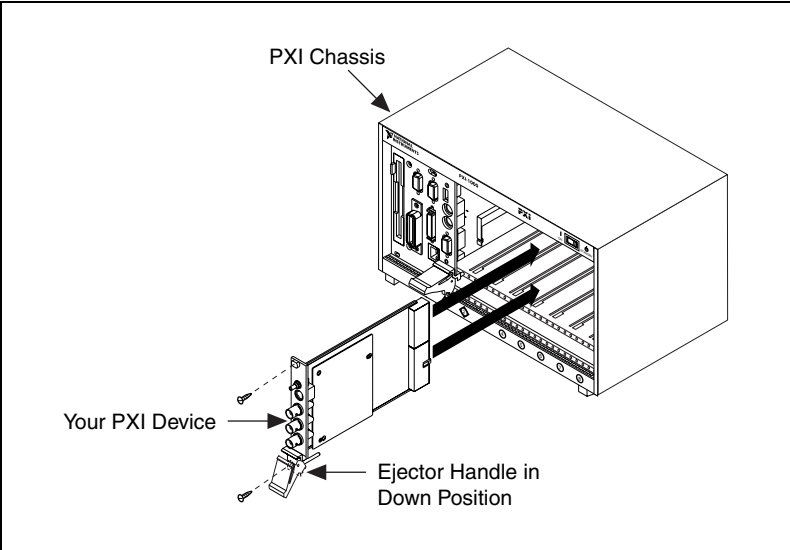


Figure 2. PXI Installation

◆ PCMCIA for the NI 5102

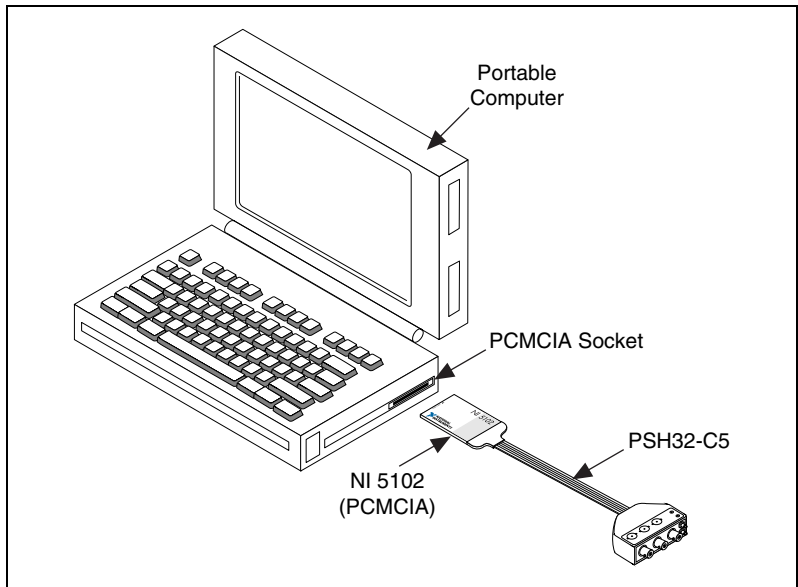


Figure 3. PCMCIA Installation

◆ USB for the NI 5102

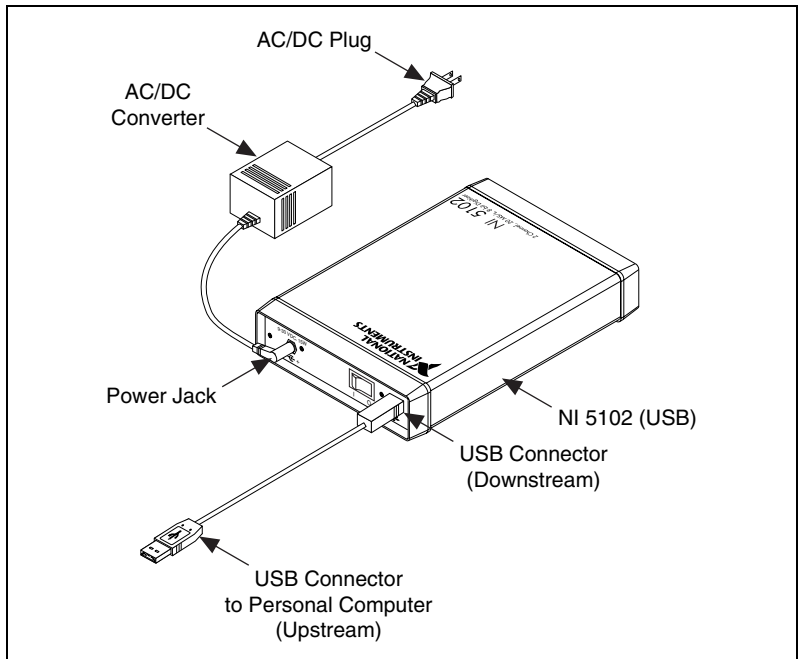


Figure 4. USB Installation

◆ ISA for the NI 5102

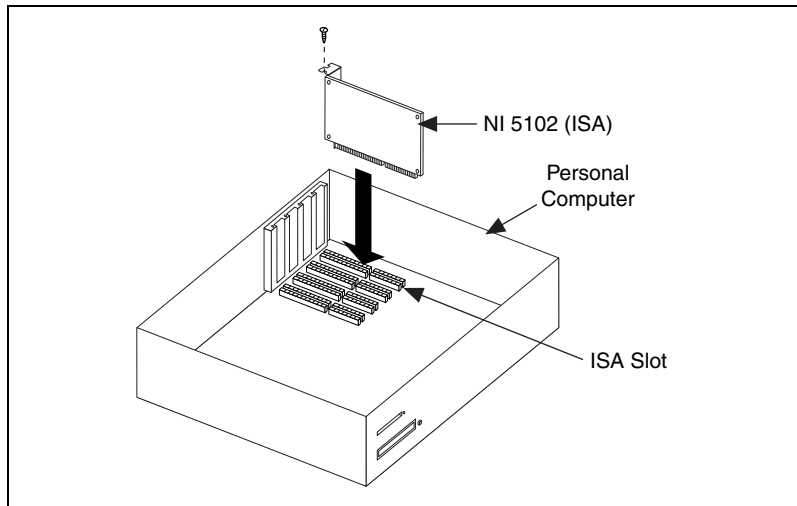


Figure 5. ISA Installation

- ◆ NI 5911 for PCI—When installing the digitizer, make sure that the BNC connector is centered between the metal frame of the chassis. Signal degradation may occur if the outer shell of the BNC cable touches the computer chassis.

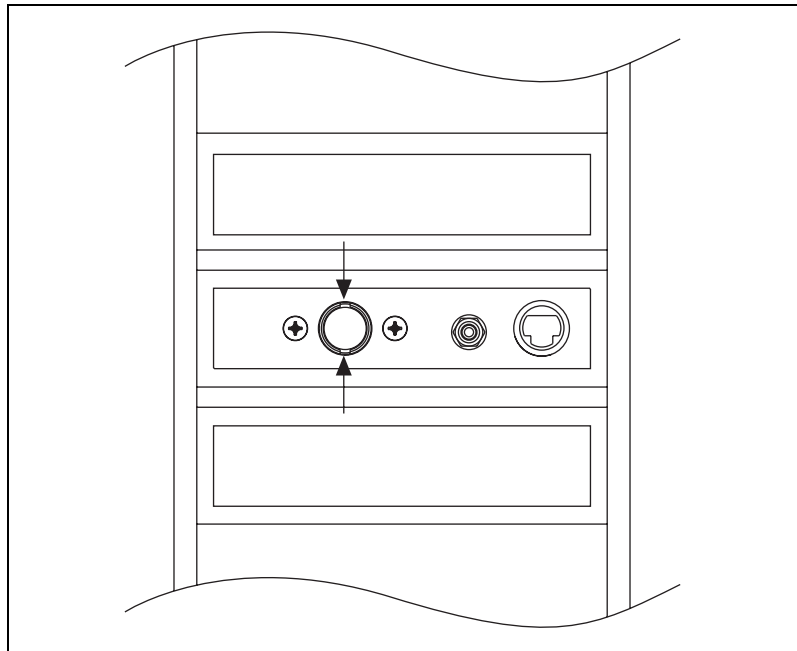


Figure 6. Centered BNC Connector on the NI 5911 for PCI

Configuring and Testing the Digitizer

To configure and test your device, complete the following steps:

1. Double-click the **Measurement & Automation** icon on the desktop.
2. Double-click the **Devices and Interfaces** icon to open a list of recognized devices.
3. Find the digitizer in the list which corresponds to your digitizer. Notice the device number your digitizer has been assigned. You will need this number to program your device.
4. Right-click the digitizer name, and select **Properties** from the menu.
5. From the **Properties** window, click **Test Resources** to test the device resources. A dialog box appears and indicates if the resource test has passed.
6. Click **Run Test Panels** to run the functional test panels and begin using your digitizer. Connect a signal to it, and select appropriate parameters such as the range, input limits, sample rate, and sample mode.



Note To minimize noise, do *not* allow the shell of the BNC cable to touch or lie near the metal of a PCI chassis.

7. Select the **Advanced** button to enable triggering options.
8. Click **Close** when you finish testing your device.
9. Click **OK** from the **Properties** window.

You have successfully installed and configured the necessary software and hardware.

Acquiring Data Programmatically or Interactively

You can control your digitizer interactively with the Scope Soft Front Panel or programmatically with an ADE using the supplied NI-SCOPE Interchangeable Virtual Instrument (IVI) driver.

Pick one of the following options to begin using your device:

- Interactive users—Launch the Scope Soft Front Panel. Open the panel from **Start»Programs»National Instruments Soft Front Panels»Sfscope**. Refer to the *Scope Soft Front Panel Help* file for more information on using this Scope Soft Front Panel to control your digitizer.

- Programmatic users—Begin programming your digitizer in your ADE. You can find LabVIEW examples by going to Program Files\National Instruments\LabVIEW\Examples\Instr\niScope Examples\. Examples for LabWindows/CVI, C, or Visual Basic programmers using Windows/Me/98/95 are located in vxipnp\win95\Niscope\Examples\. Examples for LabWindows/CVI, C, or Visual Basic programmers using Windows 2000/NT are available at vxipnp\winnt\Niscope\Examples\.



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