LabVIEW Support for Personal Daq 50 Series

The Data Acquisition CD includes LabVIEW Instrument Drivers and VIs for
- Personal Daq/55
- Personal Daq/56
- PDQ1
- PDQ2

Requirements
- LabVIEW 7.0 or higher for Windows
- One of the following operating systems:
  Windows XP / Windows 2000 SP4 / Windows Vista Premium Ready

Installation
1. Place the Data Acquisition CD into the CD-ROM drive. *Wait for PC to auto-run the CD. This may take a few moments, depending on your PC.* If the CD does not auto-run, use the Desktop's Start/Run/Browse feature and run the **setup.exe** file.

2. After the intro-screen appears, follow the screen prompts.

3. Continue with instructions for installing hardware per the instructions in your user's manual or quick start guide, as applicable. A pdf version of the user's manual is included on the CD.

Note that the installer copies the files into subdirectories under the **user.lib** folder in the **LabVIEW directory**. The VIs can then be accessed from LabVIEW's File Open menu, or on the Block Diagram from the User Libraries sub-palette [on the Functions palette].

Usage
- All examples are ready to run and will work with Personal Daq, provided that valid channels are selected. An "Invalid Channel" error will be reported if non-existent channels are enabled. The examples allow you to get a quick start with your application.
- All VIs are locked. **ONLY modify the Example VIs**. It is recommended that you backup the original example library before unlocking and modifying the examples.

Tips
- Save all example VIs under a new name before unlocking and modifying.
- Do not unlock, modify, or change the default settings of the VIs contained in: Personal Daq Toolkit.llb, Personal Daq Controls.llb, or PDaqX.llb.
- Detailed information on the hardware and its theory of operation is available in the Personal Daq users manual.
- The "Personal Daq Main Acquisition Module.vi" should be the gateway to the hardware. The low-level VIs contained within require detailed knowledge of the Personal Daq hardware and driver API.
- The default settings for the "Personal Daq Main Acquisition Module.vi" allow for: immediate triggering, infinite/continuous acquisition, continuous calibration without overrange protection (most accurate), and return of 1 scan at a time as they become available.
- Due to the use of Code Interface Nodes, all hardware calls are synchronous. When the call is made to "arm" the acquisition, it does not return until calibration is completed. During this time LabVIEW will not respond to user input. A pop-up will show the expected calibration time and then automatically close when calibration is complete. Any other applications running are accessible during calibration.
- Be sure to use the provided "Acquisition Stop" control when manually terminating an acquisition. Just stopping the VI will not halt the Personal Daq, it will continue to run. Precautions have been made for this occurrence but errors could still result.