

Personal Daq/54, /55, /56, PDQ1, and PDQ2



Before you get started

Verify that you have the following items.

- Personal Daq/50 Series Device(s)
- USB Cable
- USB Port on PC
- Data Acquisition CD
- Monitor: SVGA, 1024 x 768 screen resolution
- Windows XP users:
PC with Intel™ Pentium, 1 GHz or equivalent;
128 MB memory; 10 GB disk space
- Windows Vista users:
PC must be *Windows Vista Premium Ready*

IMPORTANT: When using Personal Daq modules, computer *energy save* modes can cause false data readings. Prior to using a Personal Daq ensure your computer's *energy save* mode is disabled. If needed, consult your PC documentation.

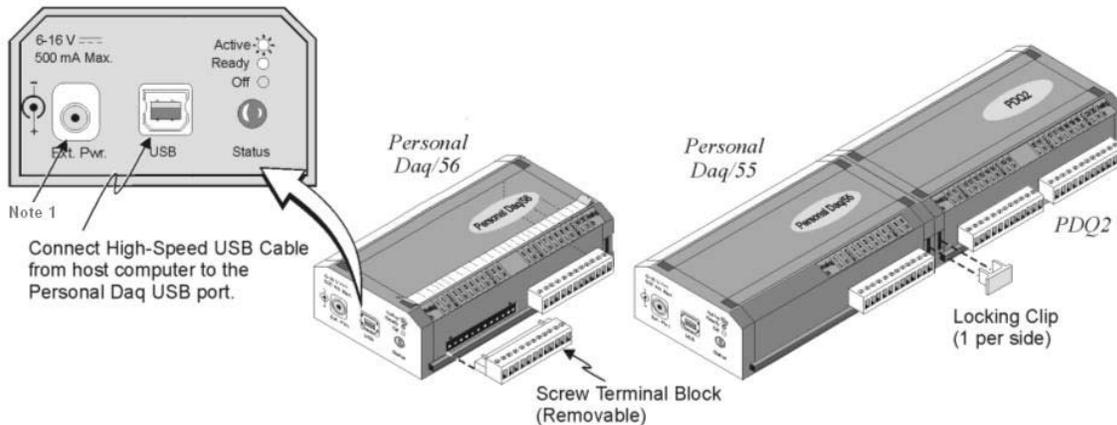
Step 1 – Install Software

IMPORTANT: Software must be installed before installing hardware.

1. Remove previous version Daq drivers, if present. You can do this through Microsoft's **Add/Remove Programs** feature.
2. Insert the Data Acquisition CD into your CD-ROM drive and wait for the CD to auto-run. An *Opening Screen* will appear. As an alternative, you can download software from: www.mccdaq.com/software.
3. After the intro-screen appears, follow the screen prompts.

Step 2 – Connect Hardware

Use an approved high-speed USB cable to connect the Personal Daq system to one of the host computer's USB ports. Additional setup examples, involving USB hubs and power adapters, are described in the user's manual. An expansion module (PDQ1 or PDQ2) can be added to Personal Daq/55 and /56 units; but are not to be connected to Personal Daq/54 units, for which there is no expansion functionality.



Note 1: Typically, there is no need to connect power to the External Power connector. Most PC USB ports supply the needed 500 mA at 4 to 5.25 V. However, some notebooks do not. In such cases, the Personal Daq unit will require the use of a power adapter.



When using a power adapter with your Personal Daq system, be sure to supply power [from the adapter to the Personal Daq] before connecting the USB cable. This allows Personal Daq to inform the host computer upon connection of the USB cable, that the unit requires minimal power from the computer.



Reference Note: If applicable, refer to (1) *PDQ10, DIN Rail Kit Installation Guide* and/or the *PDQ1 and PDQ2 Installation Sheet*. Note that the information is also provided in your *Personal Daq User's Manual*, included in Acrobat .pdf format on the Data Acquisition CD.

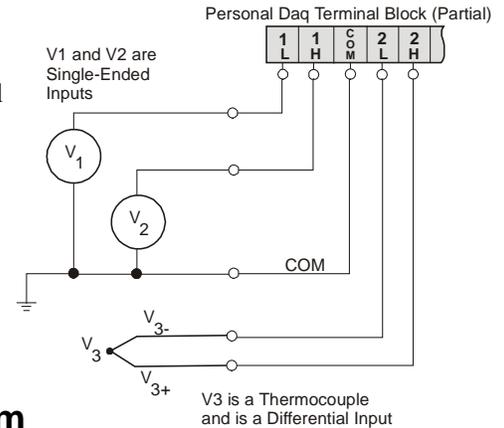
Step 3 – Connect Signal Inputs



CAUTION! Never touch connector pins or circuit components unless you are following ESD guidelines in an appropriate ESD controlled area. Such guidelines include the use of properly grounded mats and wrist straps, ESD bags and cartons, and related procedures.

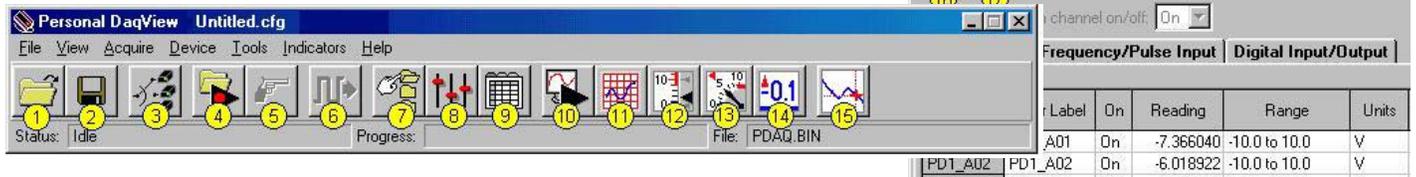
Use Personal Daq’s screw terminals to connect channel inputs. The terminal blocks are detachable for ease in making connections. Device labels identify input types and channel numbers. Each Analog Input channel can be configured for *single-ended* or *differential* volts, or for *differential thermocouple* inputs. The non-analog channels are designated as Frequency/Pulse Input (F) and Digital I/O (D).

For Personal Daq, thermocouples are to be connected in *differential mode* only. This is because *single-ended connections* can result in noise and false readings. In regard to Differential connection, the red wire connects to the channel’s Low (L) connector; and the second color-coded wire connects to the channel’s High (H) connector. The user’s manual contains additional information.



Step 4 – Start Personal DaqView & Configure the System

From Windows, open *Personal DaqView* by double clicking on its icon, or use the Desktop Start menu to access the program. You will find *Personal DaqView* listed in the desktop’s **Program** group. The software will identify your Personal Daq device and bring up the *Main Control Window*. This window is detailed in the *Personal Daq User’s Manual* included on the installation CD.



Button Reference:

(1) Open Configuration File	(2) Save Configuration File	(3) Select Active Device	(4) Arm Trigger for Disk Recording	(5) Manual Trigger	(6) Update Digital Outputs
(7) Configure Data Destination	(8) Configure Acquisition	(9) Configure Channel Settings	(10) Update All Indicators	(11) Scrolling Charts	(12) Bar Meters
(13) Analog Meters	(14) Digital Meters	(15) View Data	(16) Enable Readings Column	(17) Disable Readings Column	

To configure channels, first click toolbar button (9). This opens the *Channel Configuration Window* with the Analog Input screen selected. You can change from one configuration screen to another via three tabs (Analog Input, Frequency/Pulse Input, Digital Input/Output).

To configure acquisition parameters, first click button (8). This opens the *Configure Acquisition Window*, with the several parameters you can change, including Pre-Trigger, Trigger, Post Trigger, Averaging, and Scan Rate.

To assign a filename and folder for saving acquisition data, first click button (7). This opens the *Data Destination window*. From here you can assign a filename and a folder location. Detailed information is provided in the user’s manual.

To Collect Data: Click the <Enable Readings Column> button (16) or click, the <Update All Indicators> button (10). This starts the acquisition. The data acquisition begins and the *readings* column becomes active. However, data is not recorded to disk. Clicking the <Arm Trigger for Disk Recording> button (4) will send the data to disk. Click one of the toolbar’s display icon buttons (11, 12, 13, or 14) to see your data in the form of a chart or meter. Note that you can view all display types, or a combination of them, at the same time.

Note: For detailed information, view the PDF documentation located on CD, at our website, or in the Programs Group [which resides on your PC, after software installation].



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