

USB1-MHz, 16-Bit Multifunction Modules



Before you get started

Verify that you have the following items.

- Personal Daq/3000 Series Device(s)
- Data Acquisition CD
- Monitor: SVGA, 1024 x 768 screen resolution
- USB Port available on PC (USB2.0 recommended); USB cable
- 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*

Step 1 – Install Software

IMPORTANT: Software must be installed before installing hardware.

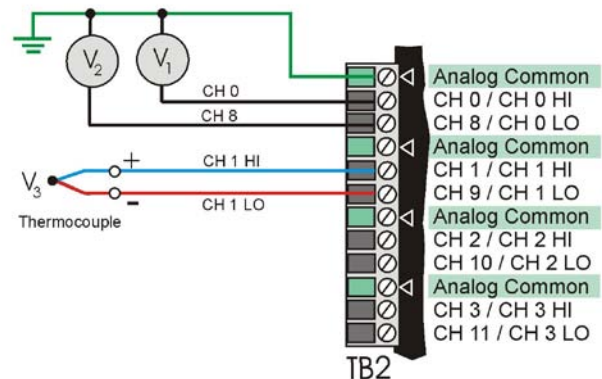
1. Place the Data Acquisition CD into the CD-ROM drive. *Wait for PC to auto-run the CD. This may take a few moments, depending on your PC.* If the CD does not auto-run, use the Desktop's Start/Run/Browse feature and run the **Setup.exe**.
Note: As an alternative to using the CD, you can download software from: www.mccdaq.com/software.
2. After the intro-screen appears, follow the screen prompts.

Step 2 – Connect Signal Lines and Hardware

Connect signal lines to the removable screw-terminal blocks.

Voltage signals can be connected using the *Single-Ended* method. In the figure, voltage source V1 is connected to Channel 0 and to analog common; and voltage source V2 is connected to Channel 8 and the same analog common connection.

The figure shows voltage V3 resulting from a thermocouple. In this case *Differential* mode is being used. The HI (+) line from the thermocouple is shown connected to Channel 1 HI; and the LO (negative) side is connected to Channel 1 LO. Notice that Channel 1 LO is the same screw terminal connection that would be used for CH 9 Single-Ended.



To differentially connect a thermocouple; connect the red T/C wire to the channel's Low (L) connector. Connect the *other color* wire to the channel's High (H) connector.

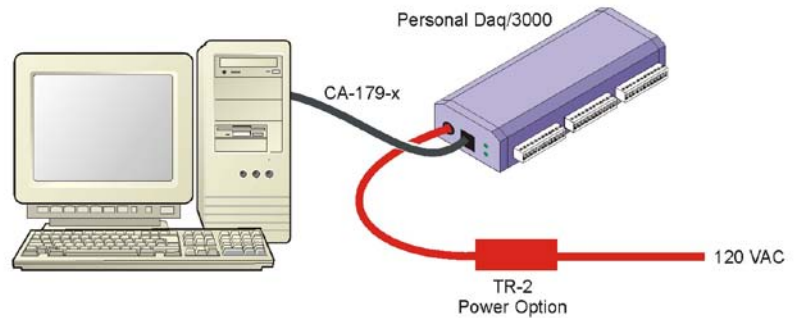
PDQ30 is an optional analog expansion module that can be used to add an additional 48 SE (or 24 DE) analog inputs. **PDQ30 is not to be connected to a live device. Unplug the USB cable from the host PC prior to connecting the PDQ30.** Refer to user's manual for regarding PDQ30 issues.

Power Consumption (Typical) ¹			
Model	Consumption ²	TR-2 ²	Notes
/3000	2500 mW	Recommended	¹ The power consumption listed is for a single /3000 Series device, or for a single device connected to a PDQ30 expansion module. ² A power adapter (TR-2) will be required if the USB port cannot supply adequate power. When meeting USB2 standards, a USB port can supply 2500 mW (nominal at 5V, 500 mA).
/3001	3000 mW	Required	
/3005	2000 mW	Optional	
/3000 & PDQ30	2900 mW	Required	
/3001 & PDQ30	3400 mW	Required	
/3005 & PDQ30	2400 mW	Recommended	



If using a TR-2, be sure to supply power from it to the Personal Daq/3000 *before connecting the USB cable to the computer*. This allows the device to inform the host computer [upon connection of the USB cable] that the unit requires minimal power from the computer's USB port.

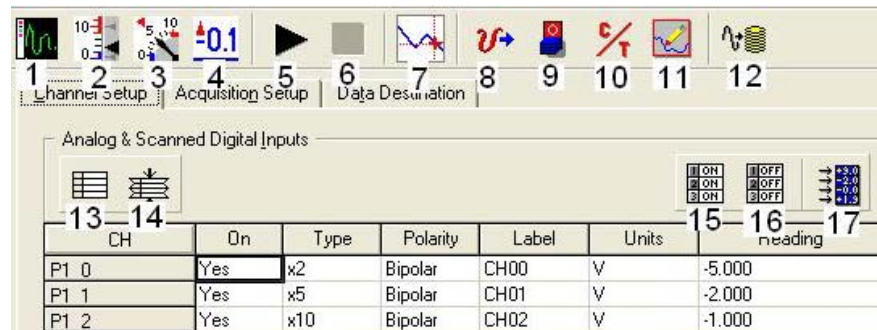
Use a CA-179-x USB cable to connect the Personal Daq/3000 Series device to a USB port on the computer. Note that use of a PC with a USB2.0 port is recommended. A USB1.1 port will work, but will result in lower performance.



Step 3 - Start DaqView & Configure the System

From Windows, open DaqView by double clicking on its icon, or use the Windows Desktop Start menu to access the program. You will find *DaqView* listed in the Program group (Use the desktop Start Menu / Programs to access the group).

Once the program is executed, software automatically identifies your Personal Daq/3000 Series device and brings up DaqView's *Main Window*.



Button Reference

(1) Scope	(2) Bar Graph Meters	(3) Analog Meters	(4) Digital Meters	(5) Start All Indicators	(6) Stop All Indicators
(7) View File Data	(8) Analog Output	(9) Digital I/O	(10) Counter/Timer	(11) Waveform & Pattern Output	(12) Acquire
(13) Show ALL Channels	(14) Hide INACTIVE Channels	(15) Turn All Visible Channels ON	(16) Turn All Channels OFF	(17) Channel Reading	

To configure channels, make the desired changes in the *Channel Setup* window. This window displays the analog and scanned digital input channels and allows you to configure; for example: you can change a channel from bipolar to unipolar and can change its units.

To configure acquisition parameters, select the second tab (below numbers 4 & 5 in the above figure). This displays the *Acquisition Setup* window, which you can use to set triggering and configure the scan. The settings will be used when an acquisition is started.

To assign a filename and folder, select the third tab (below numbers 6 & 7 in the above figure). This displays the *Data Destination* window, which provides a means of designating the desired file names, file formats, and the directory for saving the acquired data.

To collect data, Click the <Enable Readings Column> button (17), or the <Start All Indicators button> (5); the data acquisition begins and the *readings* column becomes active. Click the <Acquire> button (12) to send the data to disk.

Click one of the toolbar's display icon buttons to see your data in the form of a scope or meter display. Click the <Scope> button (1) to bring up the *Scope window*. This allows you to set up scope and chart displays. Buttons 2, 3, and 4 are for bar graph meters, analog meters, and digital meters. Note that you can simultaneously view combinations of display types.

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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Measurement Computing, 10 Commerce Way, Norton, MA 02766

phone: (508) 946-5100; email: info@mccdaq.com; www.mccdaq.com Printed in Hungary