LabVIEW DAQ Example

Description: The purpose of data acquisition is to measure an electrical or physical phenomenon such as voltage, current, temperature, pressure, or sound. PC-based data acquisition uses a combination of modular hardware, application software, and a computer to take measurements.

Requirements: LabVIEW 2009 + DAQmx + USB-6008 DAQ device

USB-6008 DAQ device:

Task: Connect the USB-6008 DAQ device to your computer

Measurement and Automation Explorer (MAX):

Task: Use the Measurement and Automation Explorer (MAX) to configure and test your USB-6008 DAQ device. Run a Self-Test to see if everything is OK.

DAQ Assistant:

The DAQ Assistant, included with NI-DAQmx, is a graphical, interactive guide for configuring, testing, and acquiring measurement data. With a single click, you can even generate code based on your configuration, making it easier and faster to develop complex operations.
The **NI-DAQmx Driver** software is the layer of software for easily communicating with the hardware. It forms the middle layer between the application software and the hardware.

The Data Acquisition palette in LabVIEW:

![Data Acquisition palette](image)

**Task:** Find the Data Acquisition palette in LabVIEW and try the **DAQ Assistant**.

**Analog Input**

**Task:** Create a simple program in LabVIEW that reads the **Analog Input Channel ai0**.

![Analog Input](image)

**Analog Output**

**Task:** Create a simple program in LabVIEW that writes to the **Analog Output Channel ao0**.

![Analog Output](image)