

Getting Started with WINDAQ/XL

By Shawn MacDonald

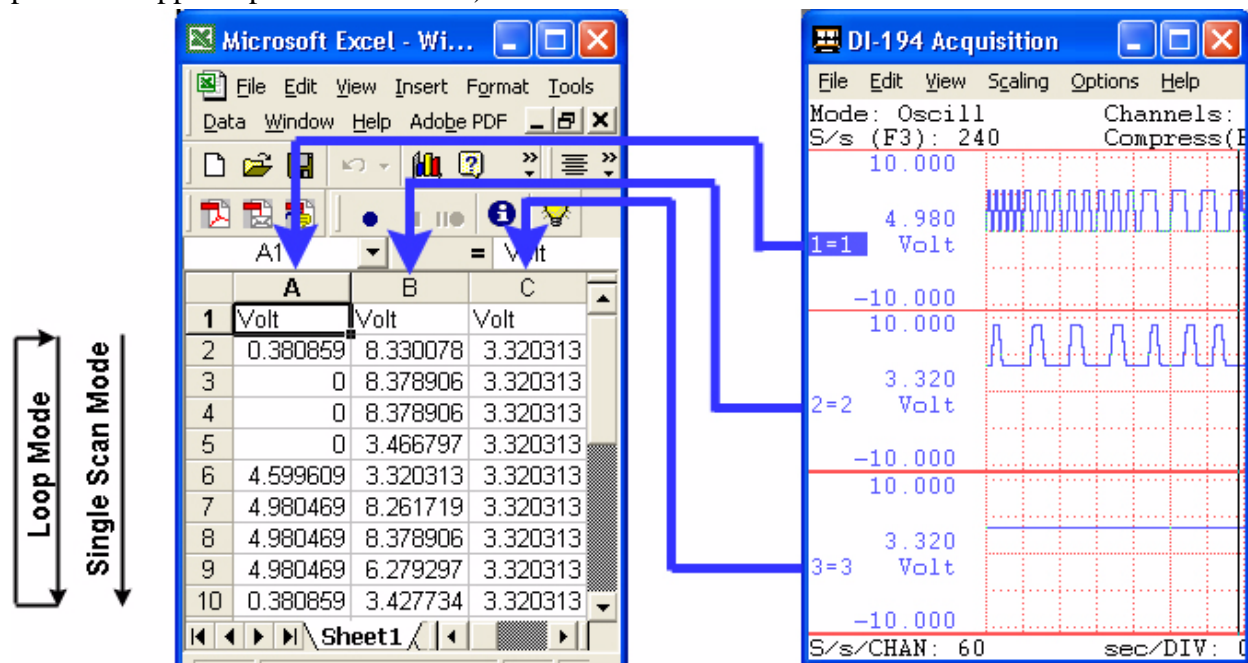
DATAQ Instruments

Microsoft Excel is one of the most widely recognized and understood spreadsheet applications in the world. WINDAQ/XL is an add-in for use with Microsoft Excel. WINDAQ/XL allows users of WINDAQ data acquisition software to import acquired data, in real time, directly into Microsoft Excel. Once imported, the data can be manipulated using all the features of Microsoft Excel.

This application note will provide you with a general understanding of the functionality of WINDAQ/XL and how it can be used with Microsoft Excel to analyze and present your acquired data. A brief procedure is also included to familiarize you with the menus and controls.

Operation

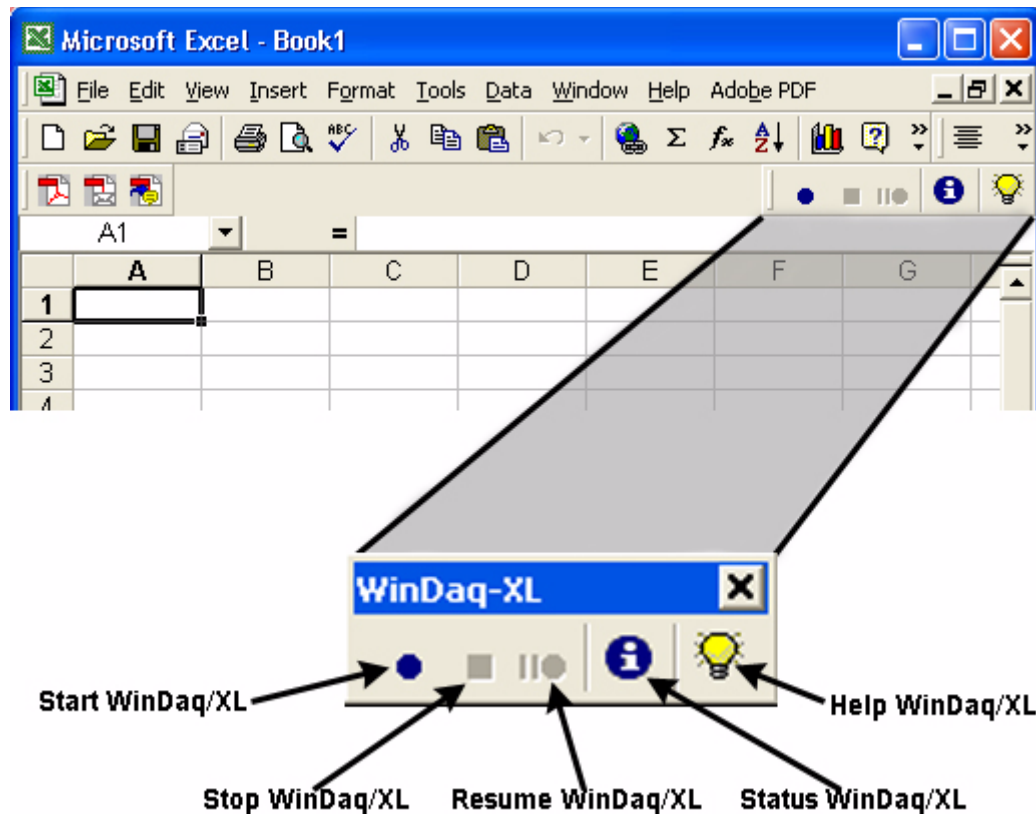
WINDAQ/XL imports the numeric value corresponding to each data point of the signal being acquired directly into Microsoft Excel. Imported data for each enabled channel is displayed in a separate column. You may choose to import data for a fixed number of points up to 32,000 per channel or continuously loop (update) the data as your signal is acquired. The rate at which data can be updated is dependent upon the speed of your computer (100 - 200 samples per second is typical). The number of channels from which data can be imported is dependent upon the number of channels that your data acquisition device will support (some DATAQ Instruments, Inc. products support up to 240 channels).



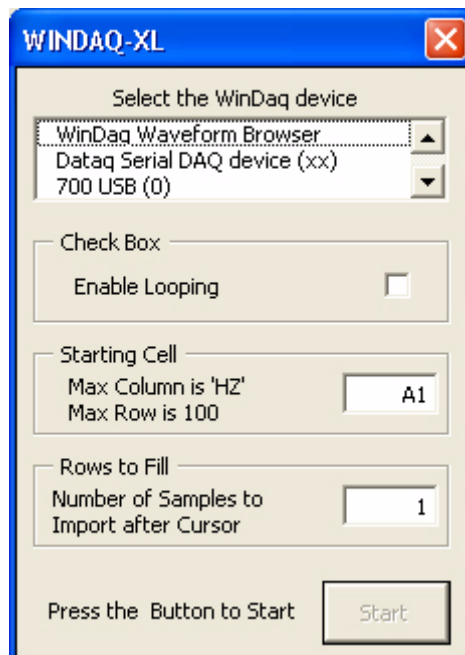
Using WINDAQ/XL

In order to import real-time data into Microsoft Excel, you must have WINDAQ data acquisition software running on your computer.

Click on the “Start WINDAQ/XL” button located on the WINDAQ/XL toolbar.



This will enable the following menu box allowing you to choose the device from which you will import the data. The Enable Looping option will continually refresh (update) the imported data.



This menu also allows you to choose a “Starting Cell” from which you will begin to import data. You can then select the number of rows you wish to fill with data; the default value of 1 will import data into the starting cell only. Once you have selected a starting cell and the number of rows to fill, click on the “Start” button. WINDAQ/XL will begin to import data.

Once imported into Microsoft Excel, data can be used to create charts and/or graphs and to calculate additional values. For example, an industrial technician, monitoring a *voltage* and *current* using a WINDAQ data acquisition system, can calculate and display *power* in a separate column using the multiplication function in Microsoft Excel. To learn more go to <http://www.dataq.com/applicat/articles/clutch.htm>, where you will find a real world application using WINDAQ/XL to calculate *energy*.