

## DaqView™

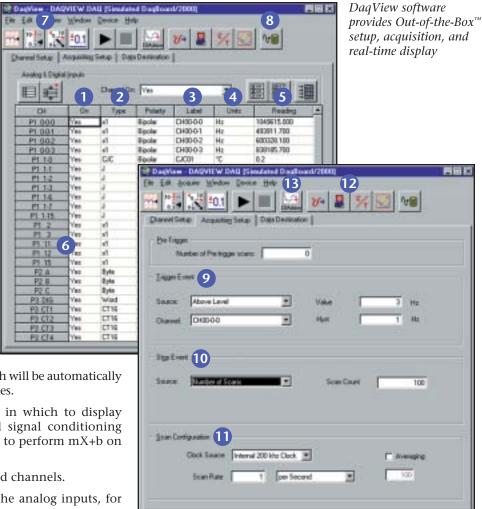
# Out-of-the-Box™ Spreadsheet-Style Setup, Data Acquisition, & Display Software



DaqView™ allows you to verify signal connections, acquire and save data to disk, and graphically view real-time data within moments of taking your IOtech hardware *Out-of-the-Box™*. Easily set up all your hardware, acquisition, and display parameters, without programming, via a simple spreadsheet-style screen. DaqView is a full-featured acquisition and display application that provides all the functionality you'll need for many data-logging applications. For more demanding applications, use DASYLab®.

### DaqView lets you:

- 1 Designate an individual data channel as active or inactive by clicking on a selected channel.
- 2 Choose different ranges or gains for each channel, based on the installed signal conditioning options. You can also select bipolar or unipolar scales for each channel.
- 3 Assign each channel a unique label, which will be automatically referenced throughout eZ-PostView<sup>™</sup> series.
- 4 Choose the desired engineering units in which to display acquired data, based on the installed signal conditioning options. You can also enter parameters to perform mX+b on each reading before displaying it.
- 5 Display real-time readings of all selected channels.
- 6 Scan digital and counter inputs with the analog inputs, for time-correlated data.
- 7 Customize a real-time display using any combination of strip charts, bar graphs, dials, and digital displays.
- 8 Store data to disk in real-time at up to 100 Ksamples/s. You can also select an auto-increment mode to create a new, numerically indexed data file each time a trigger is received.
- 9 Select programmable trigger conditions (e.g., immediately, keyboard hit, external TTL, and channel value). Analog and digital trigger latency is less than  $10 \mu s$ .
- Acquire up to 10 million scans post-trigger. In addition, you can acquire up to 32K pre-trigger scans.
- Program the scan sequencer, from one scan every 10 µs to once per hour.
- 12 Set up analog output, digital I/O, and counter/timer functions.
- 13 Review acquired waveforms with a stripchart-style display via eZ-PostView<sup>™</sup>.



## **Supported Hardware**

DaqBook/2000 Series (see p. 89)

DaqLab/2000 Series (see p. 103)

DaqScan/2000 Series (see p. 108)

DBK Signal Conditioning Options (see p. 112)

DaqBoard/1000 Series (see p. 187)

DaqBoard/2000 Series (see p. 192)

**Daq/216B** (see p. 215)

<sup>\*</sup> DaqView is available as an option for DaqBoard/1000, and DaqBoard/2000 series (DaqView2000)



# DaqView<sup>™</sup> Out-of-the-Box<sup>™</sup> Software

#### I/O Support

In addition to analog input, DaqView lets you easily set up and configure analog output, digital I/O, and counter/timers prior to beginning an analog scan sequence.

#### Digital I/O\*

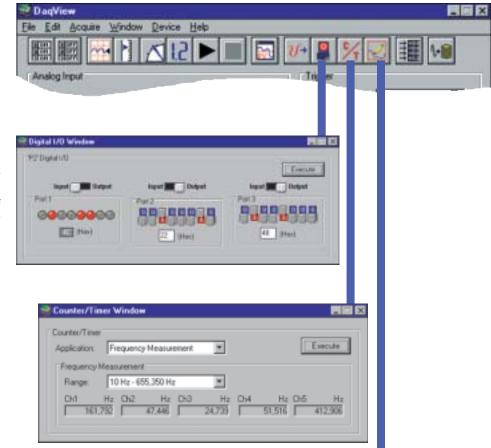
Each of the three 8-bit digital I/O ports can be configured for input or output. DaqView also allows you to set up and configure up to 192 channels of digital I/O expansion if DBK digital options are installed in your system. Signals are updated each time the execute button is pressed.

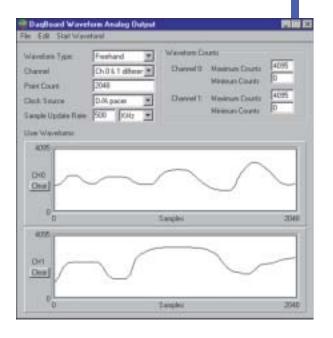
#### Counter/Timers\*

You can set 5 counter/timers to measure frequency, totalize pulses, or generate periodic digital outputs. Signals are updated each time the execute button is pressed.

#### **Analog Output\***

You can set up the analog outputs as simple voltage levels or as waveforms. DaqView lets you draw waveforms, load files containing waveforms, or choose from a variety of pre-loaded waveform types. The maximum waveform update rate is up to 100K updates/s\*.





sales@iotech.com

<sup>\*</sup> Only supported on DaqBoard/1000, DaqBoard/2000, DaqBook/2000 series, DaqLab/2000 series, and DaqScan/2000 series



# DaqView<sup>™</sup>

## Out-of-the-Box<sup>™</sup> Software

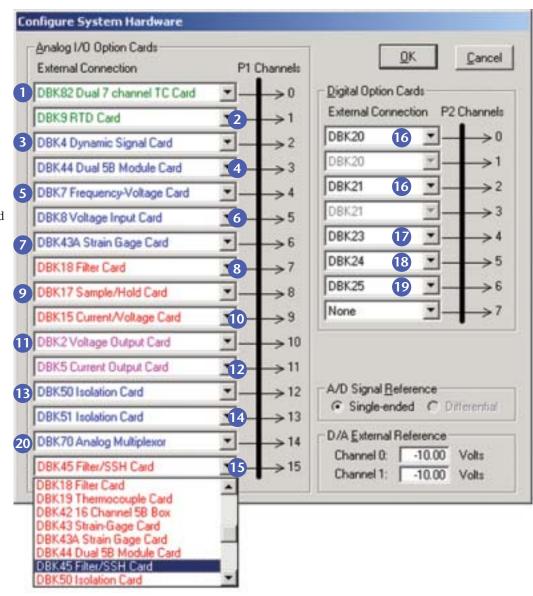
### Signal Conditioning & Expansion I/O Support

DaqView supports a wide variety of input and output signals via IOtech's DBK signal conditioning and expansion hardware options. These DBK products support various analog and digital I/O signals from thermocouples and RTDs to accelerometers and strain gages. DaqView automatically converts readings from the DBK options into real-world parameters such as temperature, displacement, frequency, and many other engineering units. For example, DaqView

automatically performs cold junction compensation and linearization on thermocouple readings before passing them along for display or for storage to disk.

DaqView lets you expand up to 256 analog inputs. A sample hardware installation screen, which identifies different DBK options attached to an IOtech data acquisition system, is depicted below.

- 1 Thermocouples
- 2 RTDs
- 3 Accelerometers
- 4 5B signal conditioning
- 5 Frequency input
- 6 High-voltage input
- 7 Strain gages
- 8 Low-pass filtering
- 9 Simultaneous sample & hold
- 10 4-20 mA current input
- 11 Analog output
- **12** 4-20 mA current output
- 13 Isolated high-voltage input
- 14 Isolated low-voltage input
- Analog input simultaneous sample & hold, and low-pass filtering
- 16 Digital I/O expansion
- 17 Isolated digital input
- 18 Isolated digital output
- 19 Relay
- 20 Vehicle Bus



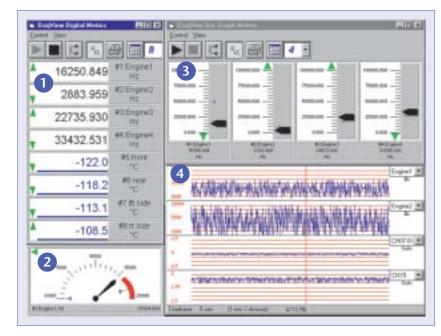


## DaqView™

## Out-of-the-Box<sup>™</sup> Software

## **Custom Real-Time Display**

You can create your own real-time display screen using DaqView's built-in display options. No programming is required—simply point, click, and drag desired display options to create a custom screen. Examples of DaqView's real-time displays follow.



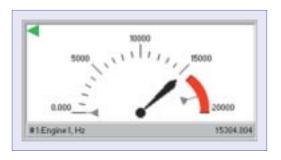
## 1 Digital Display

You can display up to 32 channels of digital readings. You can enable or disable the trend indicator.



## 2 Dial Meter

DaqView allows you to show up to 32 channels in a dial display format. Each dial indicates instantaneous levels, as well as peak hold and trends.

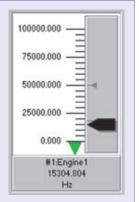


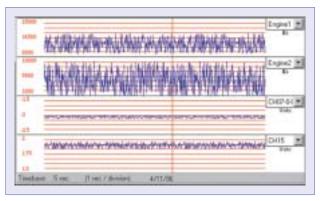
## 4 Strip Chart

DaqView lets you display up to 16 smooth-scrolling strip charts of data, all of which scroll at the same rate. You can define a full-scale range for each individual channel, as well as adjust the scroll rate to 14 different speeds.

## **3** Bar Graph

You can select up to 32 channels for display in a bar graph format. Each bar graph shows instantaneous levels, as well as peaks and trends.





## **Ordering Information**

DaqViewis available for IOtech's DaqBook, DaqBoard, Daq/216B, DaqLab, and DaqScan series of products. See the Ordering Information for your respective hardware to receive DaqView with your system.



## DaqViewXL™

## DaqView Data Acquisition Software for Microsoft® Excel™

DaqViewXL<sup>™</sup> is an Excel add-in that provides complete data acquisition functionality. Seamlessly integrated into Excel's tool palette, DaqViewXL provides you with the same comprehensive acquisition and display capabilities as DaqView<sup>™</sup>. Excel is an ideal tool for test engineers because it provides a variety of graph and charting functions for presenting data in a graphical format, as well as mathematical and analysis functions such as FFTs. Excel's ability to retrieve and manipulate previously acquired data in a spreadsheet format and DaqViewXL's advanced data acquisition functions form a comprehensive data acquisition solution.

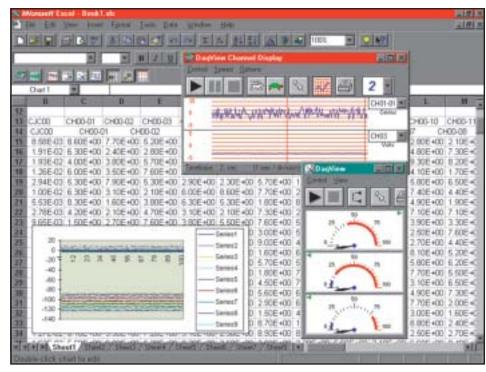
### Ordering Information

Description Microsoft® Excel™ add-in for data acquisition

Part No.

DaqViewXL\*

Included with DaqView2000 for the DaqBoard/1000, and DaqBoard/2000 series



DaqViewXL seamlessly executes from within Excel's tool palette

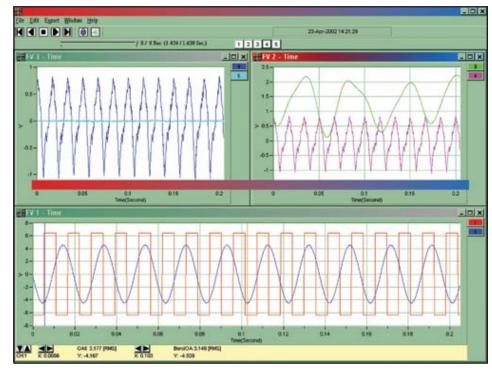
#### eZ-PostView<sup>™</sup>

The basic eZ-PostView<sup>™</sup> system that is included free with the *Out-of-the-Box*™ application software is powerful, yet easy-to-use. eZ-PostView's interactive graphics make it possible to quickly inspect enormous data files at fast speeds. Interactive zooming and cursors allow the user to view the smallest details of collected data.

As needs evolve, the basic system can be enhanced by adding optional software modules. When needs exceed the capabilities of the free eZ-PostView, add-on options are available that provide additional data viewing and management tools along with data analysis capabilities.

## Ordering Information

eZ-PostView<sup>™</sup> is included with DaqView



eZ-PostView for post-acquisition viewing