DAQami

Data Acquisition Companion Software

Overview

DAQami provides an easy-to-use drag-and-drop interface that makes logging data and generating signals a quick and simple task.

Users can take advantage of DAQami's short learning curve to become familiar with the capabilities of their DAQ device. Verifying signal connectivity and quality is a snap with DAQami.

DAQami is a perfect fit for interactive testing and data logging, and is ideal for DAQ applications that run for minutes or days.

Configuring a DAQami Acquisition

When DAQami launches, users can configure device, channel and acquisition options, and add displays to view input data and to manipulate output data.

Configurations can be saved to a file for reuse and modification.

Selecting a Device

DAQami supports most USB, Bluetooth, and Ethernet devices. Once a device is added to an acquisition, users can view device information and select differential or single-ended mode for devices that support both analog input modes.

One device can be used per acquisition.

A software-based DEMO-BOARD is included for evaluating DAQami without physical hardware.

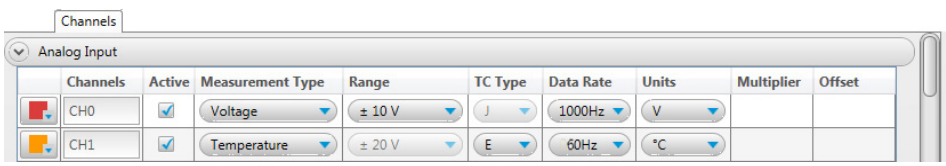
Activating and Configuring Channels

Users can activate and configure analog, digital, and counter I/O channels in the **Channels** tab.

Configuring Analog Input Channels

DAQami can acquire voltage and temperature data on a per-channel basis.

Users can select the measurement type for each activated analog input channel on devices that support voltage and temperature.



For each activated analog input channel, users can configure the measurement type, voltage input range or thermocouple type, and custom units based on a multiplier and offset (mx + b).

Features

- Out-of-the-box data acquisition companion software for supported USB, Ethernet, and Bluetooth® DAQ devices
- Easy-to-use drag-and-drop interface
- Acquire and log up to 1 million samples per channel from analog (voltage and temperature), digital, and counter input channels
- Generate signals from analog, digital, and counter/timer output channels
- Export acquired data to a .csv file for use in Microsoft® Excel® or MATLAB®
- English, Chinese, and German language support

Supported Operating Systems

- Microsoft Windows® 10/8/7/ Vista® 32/64-bit

Try DAQami for 30 Days

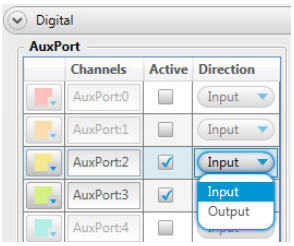
Download and install DAQami from www.mccdaq.com/DAQami and try the fully-functional, easy-to-use software for 30 days – including data acquisition, data logging and export, and signal generation capabilities.

After the initial 30 days, all features except for data logging and data export will continue to be available. Users can unlock data logging and data export features after the initial 30 days by purchasing the software.

Configuring Digital Input Channels

DAQami™ can acquire digital data on a per-channel basis.

Users can set the direction of digital bits or ports to input if supported by the device.



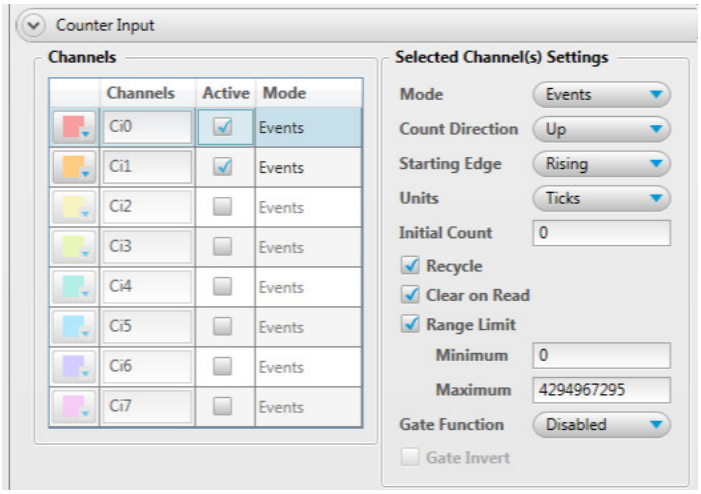
Digital channels activated and configured for input or output in the Digital channels grid.

Configuring Counter Input Channels

DAQami can acquire counter data on a per-channel basis for devices that support counter operations.

Depending on the counter features available on the device, DAQami supports the following counter modes:

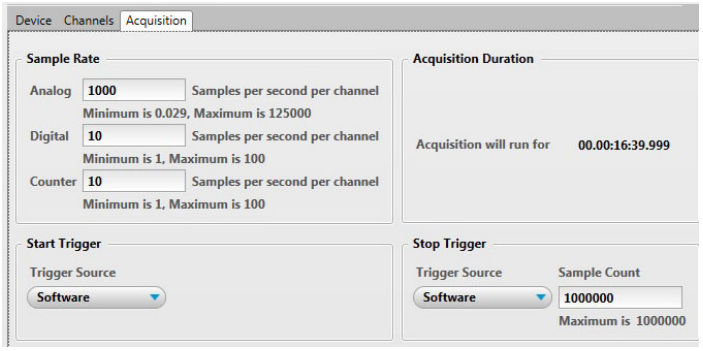
- Events – Count high-speed pulse events.
- Frequency* – Measure the frequency of a TTL-level signal.
- Period* – Measure the period of a counter input signal.
- Pulse Width* – Measure the time from the rising edge to the falling edge, or vice versa, of a counter input signal.
- Timing* – Measure the time between an external event on a counter input and the same counter gate.



Counter input channels activated and configured in the Counter Input channels grid.

Configuring Acquisition Options

The sample rates for all activated input channels, along with analog trigger settings, can be configured in the **Acquisition** tab for each type of data being acquired. Each active input channel can acquire up to 1 million samples.

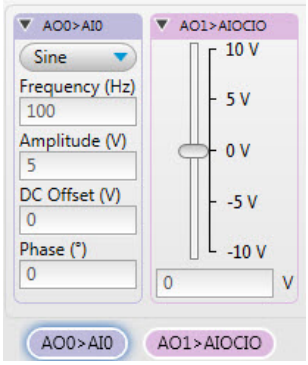


Configure sample rates and other settings for activated input channels in the Acquisition tab.

Configuring Analog Output Channels

DAQami can generate signals from activated output channels.

Analog output settings for all supported AO devices can be configured before and during an acquisition using a slider control on an Output display. If the device supports hardware pacing, a waveform control is also available.



Use a slider control (right) or waveform control (left) on an Output display to configure analog output signals.

* Currently only supported by USB-CTR Series devices.

Configuring Digital Output Channels

DAQami can output digital data on a per-channel basis.

Digital outputs for all supported DO devices can be configured as high or low before and during an acquisition using a switch control on an Output display. If the device supports digital output scanning, a square wave control is also available (refer to the square wave control shown in *Configuring Counter/Timer Output Channels*).

Use a switch control on an Output display to set the state of a digital output to high or low.

Configuring Counter/Timer Output Channels

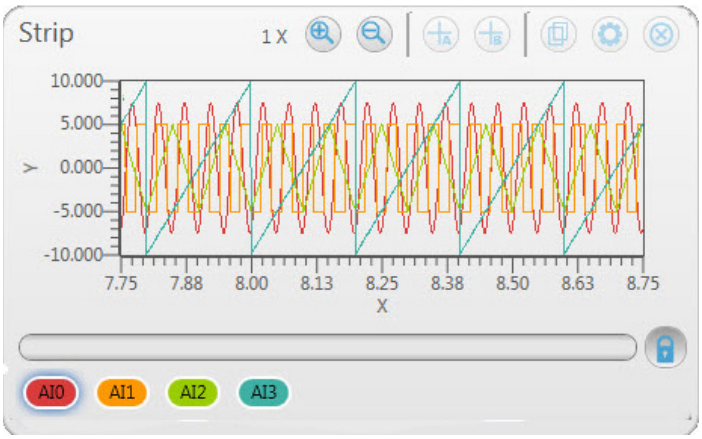
DAQami can generate counter/timer signals from activated channels.

Use a square wave control on an Output display to set the state of a digital output or counter output to high or low.

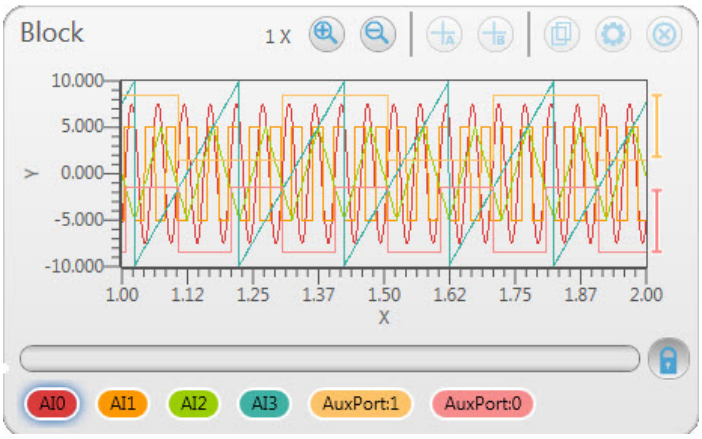
Viewing Data

The following displays can plot analog/temperature, digital, and counter input data:

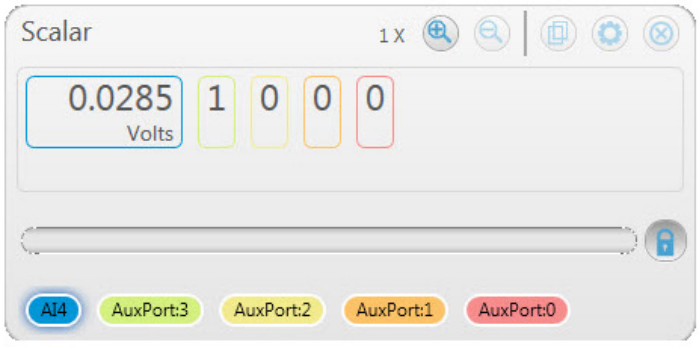
- **Scalar** – Shows the numeric value of a data point.
- **Strip** – Shows data points for each channel, and continuously scrolls from left to right.
- **Block** – Shows a specified number, or block, of data points for each channel.



A Strip display plotting analog data.



A Block display plotting analog and digital data.



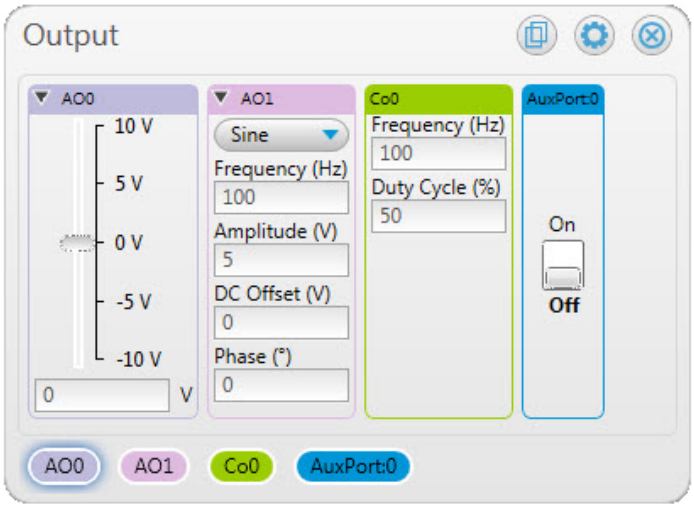
A Scalar display showing voltage and digital bit values

Configuring Output Signals

Add the active analog, digital, and counter/timer output channels to an Output display in order to manipulate the signal while it is being generated.

On the following Output display:

- Analog output channel 0 (**AO0**) can be controlled by a slider, and analog output channel 1 (**AO1**) generates a waveform with wave type, frequency, and other settings.
- Digital output channel 0 (**AuxPort:0**) is controlled by a switch control to output either 1 (On) or 0 (Off).
- Counter output channel 0 (**Co0**) is controlled by numeric controls that set the frequency and duty cycle.



An Output display with analog, digital, and counter output channels

Reviewing and Exporting Data

Users can review data on Scalar, Strip, and Block displays as it is being acquired.

Users can also open and review data post-acquisition. Device and display settings are saved with each data file.

When an acquisition stops, logged data can be exported to a .csv file. **Auto Export** options can also be set to automate data export.

Saving Configuration Files

Users can save the current configuration to file at any time. Once a configuration is saved, it can be opened to use again and modify.

DAQami Help, Tooltips, and Step-by-Step Guide

DAQami includes a comprehensive, context-sensitive help file, tooltips, and an onscreen **Step-by-Step Guide** which explains how to add a device, configure a device, add a display, and acquire data.

Supported Hardware

Refer to www.mccdaq.com/DAQami for information about supported Measurement Computing DAQ devices.

Order Information

Part Number	Description
DAQami	Data Acquisition Companion Software

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