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 create a new DAQami configuration by selecting a device, configuring channel and acquisition options, and adding displays to view input data and to manipulate output data.

Settings can be saved to a configuration file for reuse and modification.

Selecting a Device

Users can add a DAQami-supported physical device (USB, Bluetooth, or network) to an acquisition. Once a device is added, users can view device information and change the channel mode for analog input devices that support differential and single-ended configurations.

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 activate analog input channels and select the measurement type for each channel for devices that measure both voltage and temperature, and configure options such as the voltage input range or thermocouple type.

Custom units can be created using 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®**

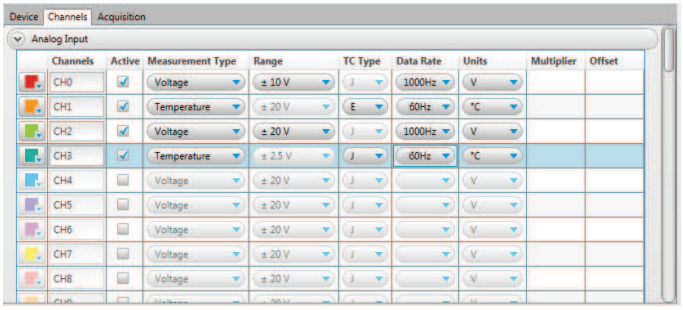
System Requirements

- **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.

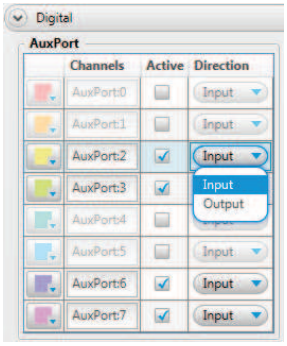


Activating and configuring analog input channels

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.



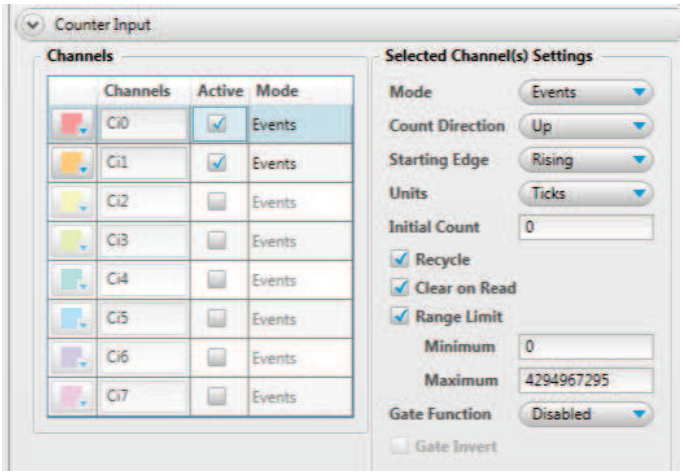
Activating and configuring channels for digital input

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:

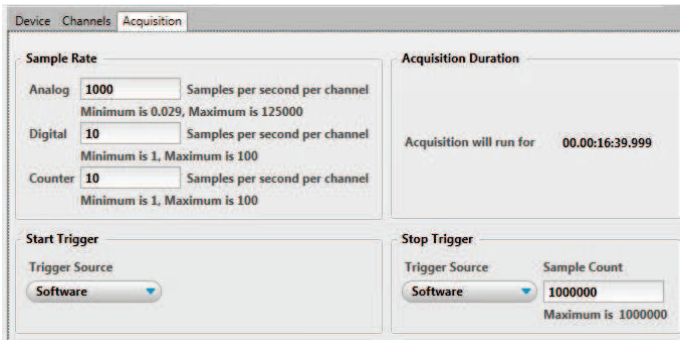
- Events – Count high-speed pulse events.
- Frequency* – Measure the frequency of a TTL-level signal.
- Period* – Measure the period of a counter input signal.
- Pulse Width* – Measure the time from the rising edge to the falling edge, or vice versa, of a counter input signal.
- Timing* – Measure the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



Activating and configuring counter input channels

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.

Activating Analog Output Channels

DAQami can generate signals from activated output channels.

Configuring Digital Output Channels

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

Users can set the direction of digital bits or ports to output if supported by the device (refer to *Configuring Digital Input Channels*).

Activating Counter/Timer Output Channels

DAQami can generate counter/timer signals from activated channels.

* Currently only supported by USB-CTR Series devices.

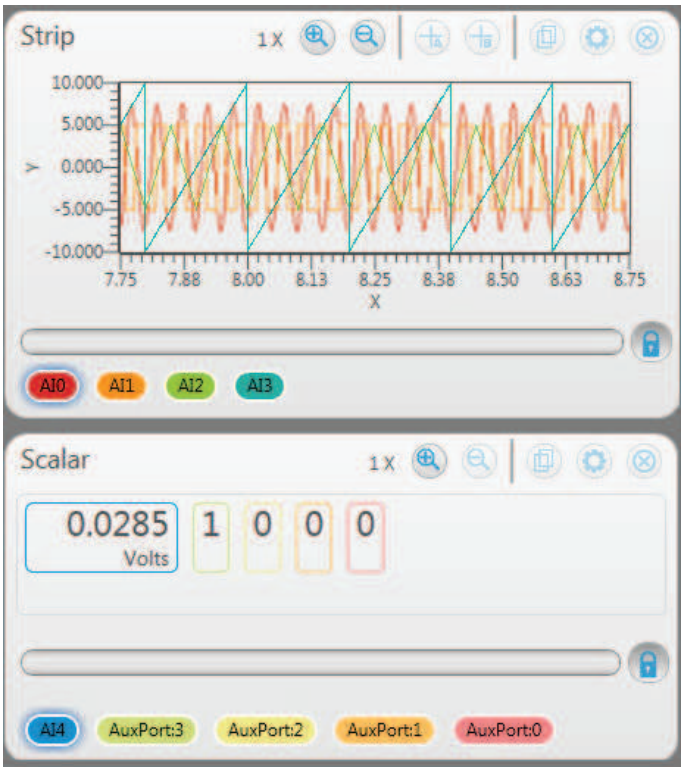
DAQami

Ordering

Viewing Data with Scalar, Strip, and Block Displays

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.



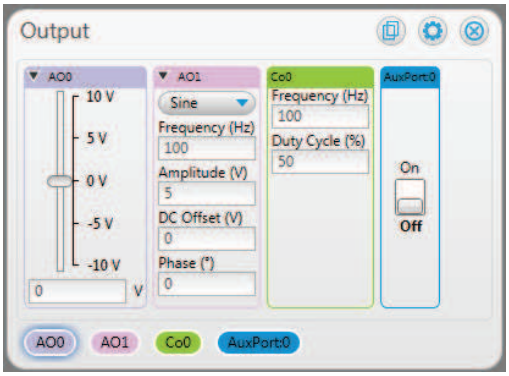
A Strip display plotting analog data, and a Scalar display showing voltage and digital bit values.

Configuring Signals with the Output Display

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.



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.

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.

Ordering Information

Part Number	Description
DAQami	Data Acquisition Companion Software

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