

# Introducing the CIO-DAC16

## Overview: CIO-DAC16 features

The CIO-DAC16 has 16 channels of 12-bit analog output (one D/A per channel). Analog outputs are dual-DAC AD7273s (two analog outputs per chip), with each output buffered by an OP07. The CIO-DAC16 is compatible with MetraByte's DDA-06 but lacks digital outputs. Software designed for the DDA-06 will operate the analog outputs.

Analog output ranges are switch-selectable for a Bipolar or Unipolar range. Bipolar ranges are  $\pm 10$  V,  $\pm 5$  V, and  $\pm 2.5$  V. Unipolar ranges are 0 to 10 V, 0 to 5 V, and 0 to 2.5 V.

The analog outputs are controlled by writing a digital control word as two bytes to the DAC's control register. The control register is double buffered so the DAC's output is not updated until the second byte (the high byte) is written.

Each analog output pair is jumper-selectable for either individual or simultaneous update. When a DAC pair is set for simultaneous update, writing new digital values to the DAC's control register does not update the DAC's voltage output. Update of the output occurs only after a READ from the board's addresses.

The board also features a wait state generator that you enable with an on-board jumper.

## Software features

For information on the features of *InstaCal* and the other software included with your CIO-DAC16, refer to the *Quick Start Guide* that shipped with your device. The *Quick Start Guide* is also available in PDF at [www.mccdaq.com/PDFs/manuals/DAQ-Software-Quick-Start.pdf](http://www.mccdaq.com/PDFs/manuals/DAQ-Software-Quick-Start.pdf).

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