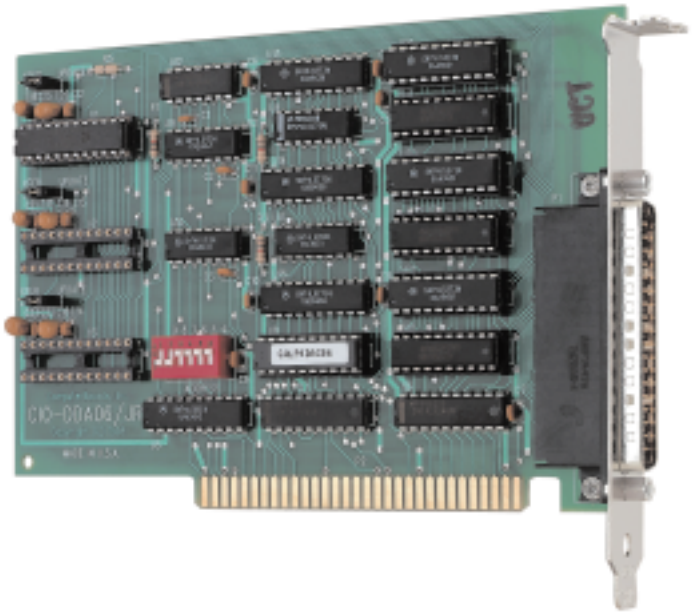
CIO-DDA06/Jr

6 Channel, 12 Bit Resolution, Analog Output, 24 High Drive Digital I/O

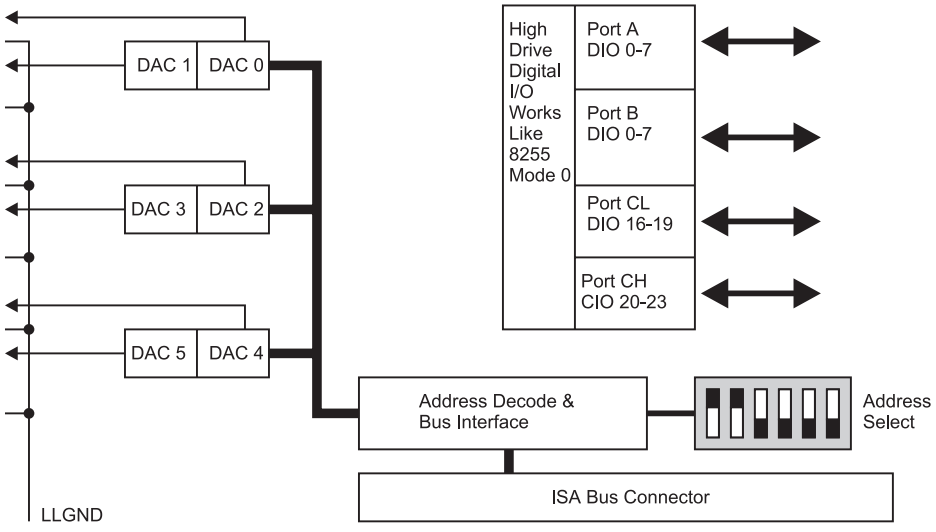


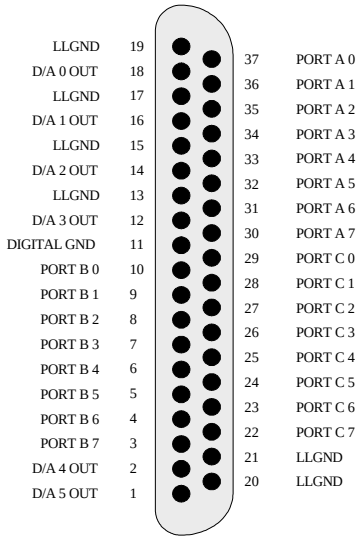
DESCRIPTION

The CIO-DDA06/Jr analog output and digital I/O board is the lowest cost D/A and digital I/O board in the DDA06 register and connector format. Completely populated it supplies 6 channels of A/D in a fixed range of +/-5V at 12 bits (1 part in 4,096) resolution.

Installed in any IBM PC/XT/AT/PS30 or compatible computer the CIO-DDA06/Jr turns your personal computer into an analog and digital control station suitable for proportional valve control, high voltage AC and DC contact monitoring and on/off control. The CIO-DDA06/Jr is two boards in one; a 24 bit digital input/output board that is CIO-DIO24H compatible and a 6 channel analog output board. The 37 pin D connector's 24 digital I/O pins are assigned identically to the CIO-DIO24H. The analog outputs occupy the remaining pins. This means that accessories such as the SSR-RACK24 just plug right in!

The CIO-DDA06/Jr is supplied with a complete user's manual, calibration software and is supported by Universal Library for DOS and Windows languages, as well as Control-CB and Labtech Notebook.





RANGE SELECTION

The analog output range is fixed at +/-5V. The amplifiers and switches which would be required to provide other ranges are expensive. This is one of the reasons the CIO-DDA06/Jr is so inexpensive! For other ranges see the CIO-DDA06/12.

SOFTWARE SUPPORT

The CIO-DDA06 is supplied with software for calibration and test. In addition, the Universal Library provides high level language support for :

DOS Languages
Windows Languages (DLL)

Menu driven control programs such as Control-CB, Labtech Notebook and Labtech Control support the CIO-DDA06/Jr.

To complete the programmers arsenal, VI COMponents for Windows provides VBX, OCX or ActiveX controls for complete Graphical Display, Analysis and Control functions.

See the complete data sheet for both of these programming tools, and menu driven packages elsewhere in this catalog.

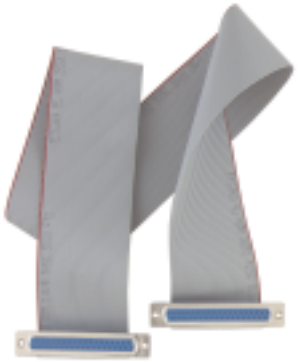
SIGNAL CONDITIONING & ACCESSORIES

Solid State Relays provide over 4,000 Volts isolation and allow the CIO-DDA06/Jr to sense or control high-voltage AC and DC voltages. The solid state relays mount on the SSR-RACK24 which interfaces directly to the CIO-DDA06/Jr.

A complete line of screw terminal boards and cables support both the analog output and digital I/O signals. Screw terminal boards accept 12-22 AWG wire and are constructed of high quality black FR4 with durable jaw-type screw terminals.

CIO-MINI37

C37FFS-5 CABLE



C37FF-2 CABLE

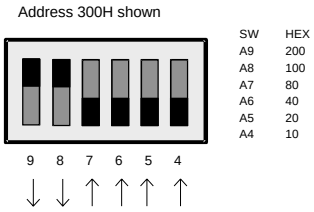
I/O & CONTROL REGISTER MAP

The CIO-DDA06/Jr and CIO-DDA06 are 100% software compatible because the I/O registers have identical functions on each board. I/O registers are the locations which the computer writes commands and data to and reads status and data from.

ADDRESS	FUNCTION	ADDRESS	FUNCTION
Base	D/A0 LSB	Base + 8	D/A4 LSB
Base + 1	D/A0 MSB	Base + 9	D/A4 MSB
Base + 2	D/A1 LSB	Base + 10	D/A5 LSB
Base + 3	D/A1 MSB	Base + 11	D/A5 MSB
Base + 4	D/A2 LSB	Base + 12	PORT A Out/ In
Base + 5	D/A2 MSB	Base + 13	PORT B Out/ In
Base + 6	D/A3 LSB	Base + 14	PORT C Out/ In
Base + 7	D/A3 MSB	Base + 15	Configured digital I/O

BASE ADDRESS SWITCH

The CIO-DDA06 occupies 16 consecutive I/O addresses. The first, or Base Address, is set by a bank of switches in a DIP switch on the board. It is possible to set the base address of the CIO-DDA06 anywhere within the range 0 to 3F0 Hex. Because of this flexibility, multiple CIO-DDA06 boards, or other I/O boards, may be used in the same PC.



SPECIFICATIONS

Channels	6 Voltage Output
Resolution	CIO-DDA06/Jr, 12 Bit, 1 part in 4,096
D/A Type	Dual DAC, AD7237 (12 Bit)
Latches	Double buffered/Sim. Update
Linearity	+/- 1/2 Bit
Monotonicity	Guaranteed
Temperature drift	+/-25ppm/Deg C
Load Current	+/-5mA Max
Output Resistance	0.5 ohm
Settling Time +/- FS 0.01%	5uS Typical, 10uS Max
OUTPUT RANGE	Fixed +/-5V
DIGITAL I/O	
I/O Ports	2 Eight Bit, 2 Four Bit
Total Bits	24
Output High	2.4V Min @ 15 mA
Output Low	0.5V Max @ 64 mA
Input High	2.0V Min, 7.0V Max
Input Low	-0.5V Min, 0.8V Max

ORDERING GUIDE

6 Channel, 12 Bit, +/-5V D/A (2 installed) , 24 Digital I/O	CIO-DDA06/Jr
Additional two channels, one chip	CIO-DUAL-DAC
24 Channel Solid State Relay Rack	SSR-RACK24
8 Channel Solid State Relay Rack	SSR-RACK08
Screw Terminal Boards	
16" X 4" all signals from one 37 D plus proto area & circuitry.	CIO-TERMINAL
4" X 4" all signals from one 37 D connector.	CIO-MINI37
Plastic enclosure for the CIO-MINI37	ENC-MINI37
16" X 4" all signals from one 37D, Spade Lug Terminals.	CIO-SPADE50
Cables	
2 foot ribbon cable, 37 conductor, female connectors.	C37FF-2
'N' foot ribbon cable, 37 conductor, female connectors.	C37FF-N
5 foot shielded cable, molded female connectors, 37 cond.	C37FFS-5
10 foot shielded cable, molded female connectors, 37 cond.	C37FFS-10