



Electro-Mechanical Relays/ Isolated Digital Input Board For IBM PC and Compatibles



Model CIO-PDISO8

\$159

- ✓ 5 Form C Electro-Mechanical Relays
- ✓ 3 Form A Electro-Mechanical Relays
- ✓ 8 Isolated Inputs Rated to 500 V
- ✓ Labview Support

The CIO-PDISO8 board is a low cost, low profile way to control and monitor high voltage ac or dc directly from your personal computer. It provides 8 electro-mechanical relays for output actuation and 8 isolated digital inputs.

The 8 relays are addressed as a single 8-bit port. Five relays are form C SPDT, while the other three are form A normally open. Each relay is rated to 3 A at 120 Vac or 28 Vdc resistive. The 8 isolated inputs are also addressed as a single byte. The inputs are not polarity sensitive and may be mixed between ac (50 to 1000 Hz) and dc.

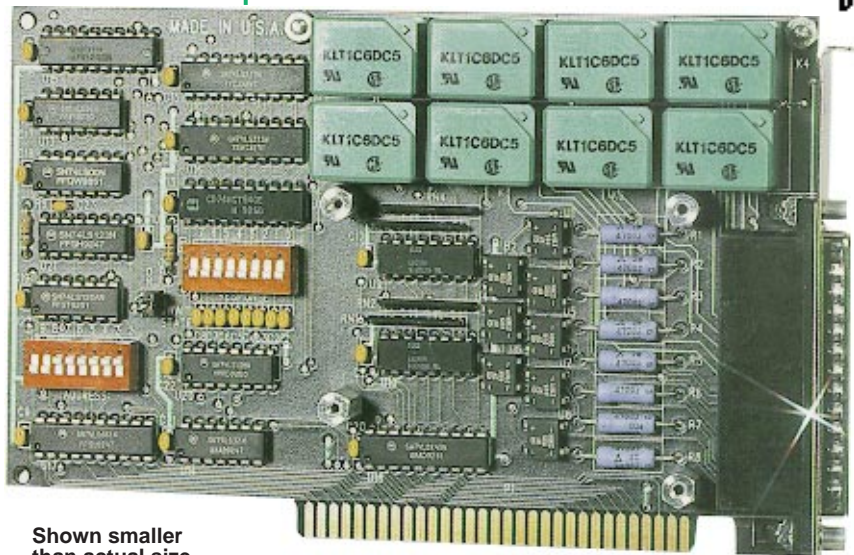
Because of the isolation provided on the CIO-PDISO8, no screw terminal or accessory board is required. Cable may be directly wired to the card. For convenience, the optional CIO-MINI37 terminal board provides screw termination.

OUTPUTS

Five form C and three form A relays provide output control for up to 28 Vdc or ac (50-1000 Hz).

Form C relays (SPDT) have 3 contacts (Normally Open, Common, Normally Closed). The center contact (common) may make contact with either of the other two.

Form A relays have 2 contacts, Normally Open and Common.



Shown smaller than actual size

ISOLATED INPUTS

Eight opto-isolated inputs provide 500 V of isolation. Each input has a filter which should be used when monitoring ac signals, and may be used to slow down dc signals.

I/O MAP AND PROGRAMMING

Programming a digital I/O board is easy from any language. A base address switch assigns a unique address to the board's I/O registers. Programming is accomplished by reading the I/O registers. Shown here are the I/O registers:

Address	D7	D6	D5	D4	D3	D2	D1	D0
Base+0	OP7	OP6	OP5	OP4	OP3	OP2	OP1	OP0
Base+1	IP7	IP6	IP5	IP4	IP3	IP2	IP1	IP0

Optional software drivers, called UNIV-DRVR, are available for programming in both DOS, Windows 3.1 & Windows 95. DOS support includes QuickBasic 4.5, Visual Basic, Turbo C, Visual C++,

Microsoft C and Quick C. Windows support includes Microsoft C, Visual C++, Visual Basic, Borland C, and C++. Labview drivers are also available. (requires UNIV-DRVR)

Specifications

Relays: 8; 5 form C SPDT, 3 form A normally open

Contact Rating: 3 A @ 120 Vac or 28 Vdc resistive load

Contact Resistance: 100 mΩ max.

Operating Time: 20 msec

Release Time: 10 msec

Life: 10 million operations, minimum

Digital Inputs: 8, opto-isolated, non-polarized; not TTL compatible

Isolation: 500 V channel-to-channel and channel-to-ground

Input Range: 5-24 Vdc or ac 50 to 1000 Hz

Input Impedance: 470 Ω min.

Response Time: 20 μsec without filter, 1 msec with filter

Power Supply: 5 V at 1 A, 5 W typical

To Order (*Specify Model Number*)

Model No.	Price	Description
CIO-PDISO8	\$159	Electro-mechanical relay/digital input board
CIO-MINI37	49	4"x4" screw terminal board, requires C37FF-2 cable
C37FF-2	25	Connection cable
UNIV-DRVR	49	Universal Driver Software for DOS and Windows
CIO-Labview-Drvr	49	Labview Drivers (requires UNIV-DRVR)

Ordering Example: CIO-PDISO8 relay/digital input board with CIO-MINI37 terminal panel and C37FF-2 cable, \$159 + 49 + 25 = **\$233**.