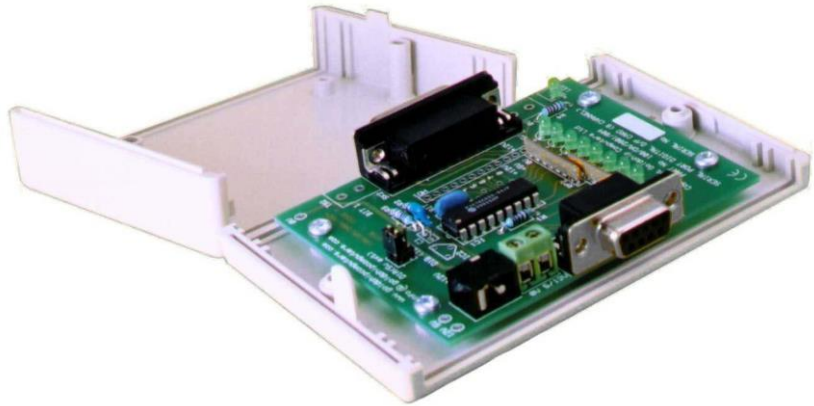


Product Datasheet 10

Features

- 5V or 12V DC external power supply option
- 2.5mm jack socket or screw terminal power connection option
- Example programs are available for LabView, Visual Basic and C++.
- Supplied with nylon feet (will take self tapping screws)
- Corner mounting holes allow cards to be stacked if required
- Also available mounted in an (open ended) ABS enclosure (as shown)
- LED channel and power status indicators
- 9 way D type (female) serial port connector
- Three output connector options (screw terminal block/15 way D Type (female)/ 12 pin male header)
- Card can be mounted as a daughter board when used with male header pin output connector option
- 0V, 5V and 12V also taken to all output connector options
- Standard (9 way D Type straight through) serial cable required for connection to PC serial port



Description

This card is a small profile eight channel digital output card designed to be connected to any RS232 compatible serial port serial and commanded via a simple command protocol. Each output can be independently set to either a logic 0 or logic 1 under software control.

The card is available with the option of three alternative output connector types and can be ordered with the option of ABS enclosure.

There are two power input connector options and status LED's for power and each of the eight channels.

Specifications

Serial Interface

Standard RS232 electrical interface. 9 way (female) D Type connector. (Only requires Rx input and 0V connections).

Power supply

5V or 12V DC

Power consumption

10 mA standby, 80 mA all channels @ max drive current

Operating temp range

0-70°C

Output channels

5V (max) @ 20mA (max) per output or 40mA (max) for all 8 channels

Dimensions

Approx 69mm (D) 87mm (W) 17mm (H) (screw terminal connector option)

Order codes

SERDO8ST

Screw terminal output connector

SERDO815D

15 way (female) D Type output connector

SERDO8HD

Male header pin output connector (allows card to be mounted as a daughterboard)

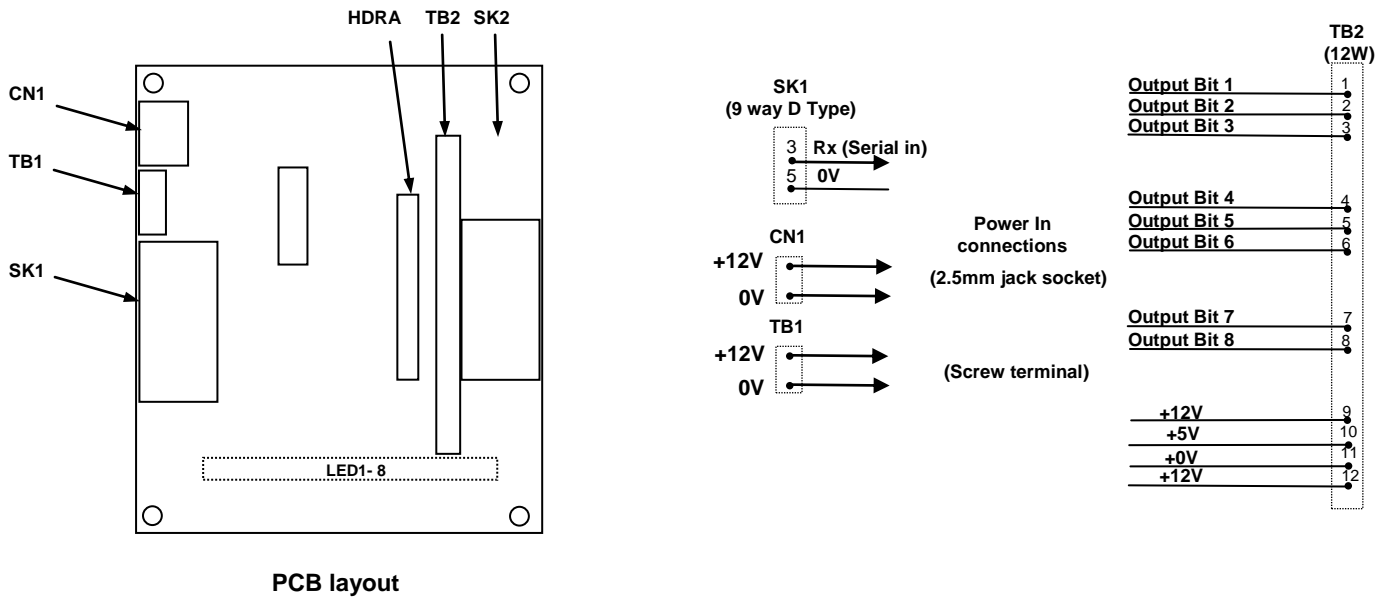
SERDO8EN

SERDO815D mounted in an (open ended) ABS enclosure

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Connection details

External connections to the card are shown below:



Serial Port settings

Baud rate: 9600
 Parity: 0
 Data: 8 bits
 Stop bits: 1

Handshaking

None – output status reflects incoming data bytes.

Command format

The following commands show the ASCII characters required to command each port of the PIC device (Hex equiv shown in brackets - can be commanded via Windows HyperTerminal – see below).

Port B (Channels 1-8) commands:

- A (41H), X Read Port B (Char X=don't care. Device sends 1 byte of returned data).
- B (42H), X Set direction of Port B, 1=Input, 0= output. (i.e. X=10111111 (AFH) = bit 6 output, the rest inputs).
- C (43H), X Write data X to Port B (i.e. X=00000001 (01H), sets channel 1 to active).

Valid data bytes are latched by the card until a further valid data byte is written to it.

Using Windows HyperTerminal

In order to test operation, the card can be connected to a serial port and controlled from HyperTerminal. Ensure port configuration is set as shown above, type (ASCII) characters shown above to achieve port direction and read or write command/data.

Example downloads

Example driver files and executables are available from the 'downloads' area of our website (www.easydaq.co.uk). Example programs are available for LabView, Visual Basic and C++.