

102 Helpsheet

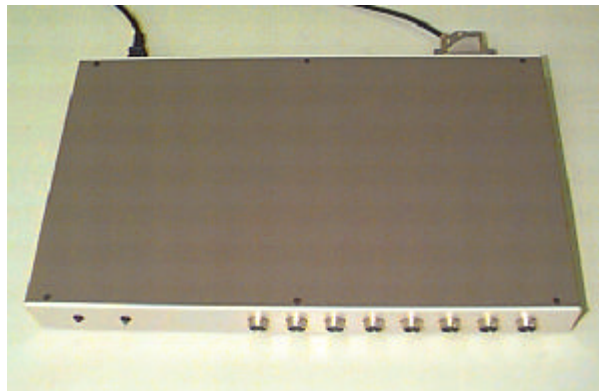


*World Leaders in Computer Controlled Testing
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Hardware

8 Channel Pad

Parallel/Serial Data Acquisition



1. Parallel/Serial Pad Summary

8 channels of 16 bit data acquisition. Each channel can be user defined with gain and range (span) settings. +/- 5 Volts supply voltage is available individually for each transducer.

2. General Description Parallel/Serial Pads

Connected to the parallel port for convenience, the Parallel PAD 16 bit data acquisition system offers high performance at low cost, and turns your note-pad or other PC into a powerful data acquisition unit.

The serial pad is similar to the parallel pad in every way. The serial pad though, connects to the serial (comm) port instead of the parallel (printer) port.

A wide range of signals are accommodated by the inputs as follows:

Parallel Pad

+/- 10 V
+/- 3 V
+/- 1 V
+/- 300 mV
+/- 100 mV
+/- 30 mV
+/- 10 mV
+/- 3 mV

Serial Pad

+/- 10 V
+/- 5 V
+/- 1 V
+/- 200 mV
+/- 100 mV
+/- 30 mV
+/- 20 mV
+/- 10 mV

Sensor energising is provided as +/- 5V DC.

Power is derived from a standard IEC power cable. The internal universal power supply accepts voltages in the range 85 Volts to 264 Volts AC.

3. Channel Configuration

The 8 acquisition channels are labelled 0-7 (see figure 1.1 below). Care should be taken when connecting transducers as some channels are dedicated for particular transducers specified within the GDS software. Please refer to your software handbook for specific channel settings.

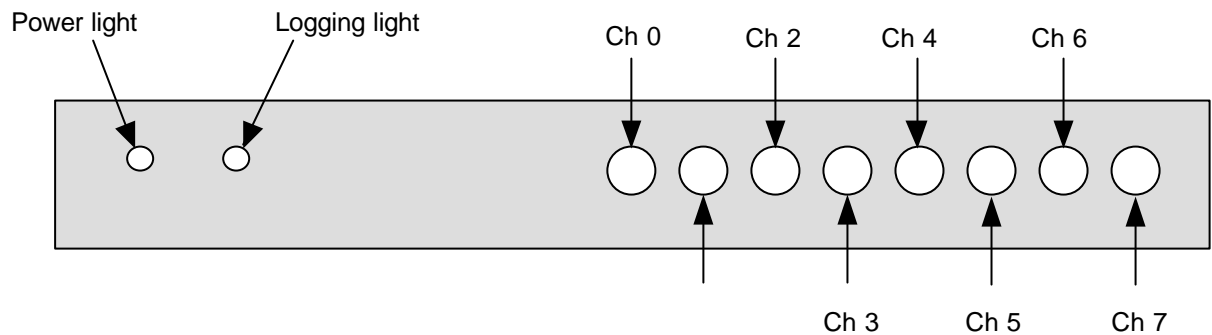


Figure 1.1. Dedicated channels for parallel/serial pad use in GDSTAS.

4. Transducer Connection

Figure 1.2 below shows the pin information for channels 0-7. The diagram is shown looking directly into the socket on the acquisition device.

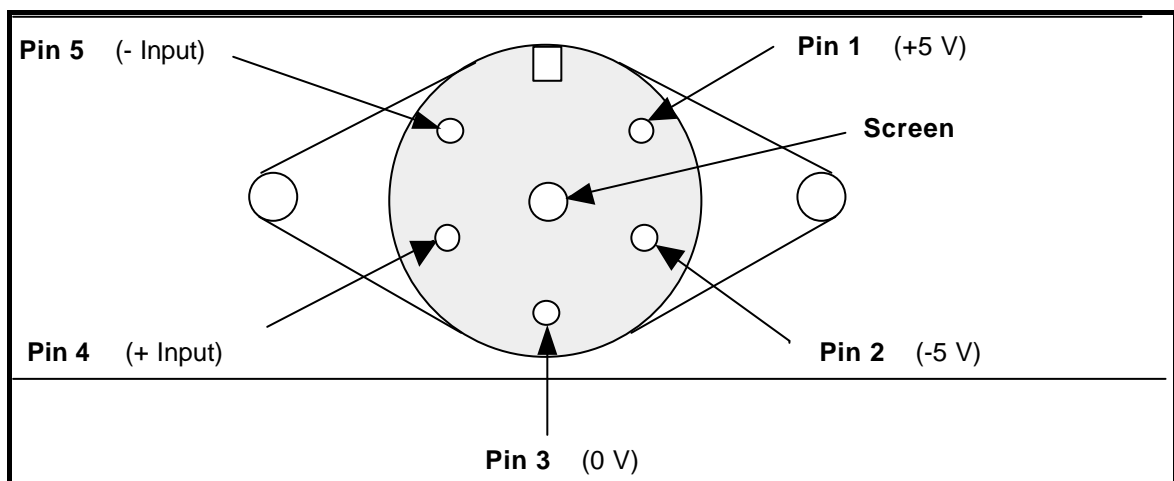


Figure 1.2. Acquisition Device Socket Pinout.

<u>Pin Number</u>	<u>Connection</u>
1	+ 5 volts excitation
2	- 5 volts excitation
3	0 volts
4	+ input from transducer
5	- input from transducer

5. Use of the Parallel Port

The Parallel Pad utilises the Parallel (or Centronics) port of the PC to obtain the fastest data transfer possible compatible with all types of PC, that is Notebook, Laptop, Tabletop or Tower.

The 25 way cable supplied with the PAD is a straight forward extension lead (Pin1 to Pin 1 etc) and should be plugged in to the 25 way Socket on PC and the 25 way Plug in the Unit. A 25 way socket is also provided on the PAD to connect a printer, or to connect a number of PADs together.

Note 1: Do not connect to the 25 way Plug on the PC, this is generally the serial Port and is not compatible interface. If in doubt consult your PC documentation.

Note 2: The Parallel Port setting in the computer BIOS must be set to SPP (standard). This is the default setting for most PC's, but is an important first diagnostic check if communication is not being achieved. The BIOS settings can be accessed on most PC's by pressing the *del* button upon boot-up.