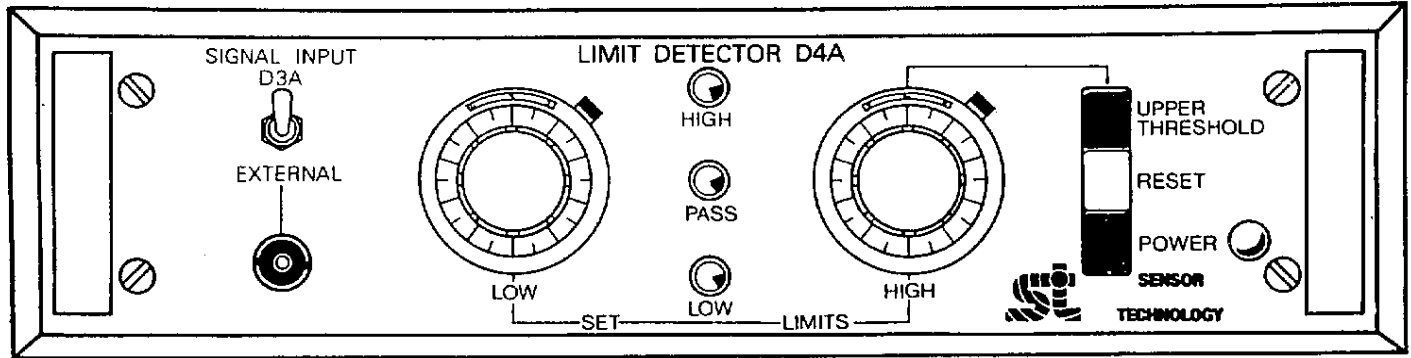
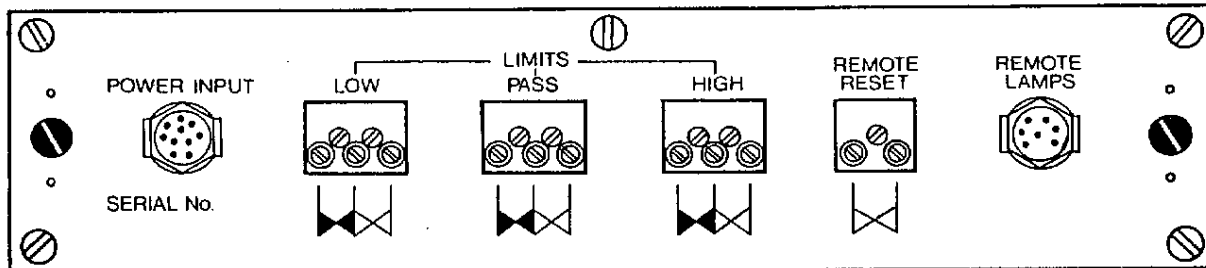


D4A Programmeable limit detector

STL 4
Issue 2



Front panel



Rear panel

The D4A is a dual limit detector which operates in conjunction with the D3A/B Torque Display (or D6A/B R.P.M. Indicator or D5A/B Power Computer) and permits the selection of either a pass limit, or upper and lower limits of torque (or speed or power), depending on the mode selected. Outputs are provided to:

- (a) control external equipment i.e. actuate visual and audible alarm, or shut down a process, if a limit is exceeded.
- (b) provide remote indication and reset facility.

Each limit has a changeover relay which is normally in the state shown in the mimic diagram above, but switches over when that limit matches the input signal.

Window Mode. Sets a passband between an upper and lower limit and gives an indication of 'low', 'pass', or 'high'.

Threshold Mode. Gives a 'high' indication by lamp when the set threshold is exceeded by the input signal. As the input

may be a sharp "spike", which would not normally be visible to the operator, a latch circuit is incorporated so that whenever the threshold is exceeded the 'high' light stays on regardless of subsequent falls in input signal. To reset, a push button is provided; there is also a remote reset input connector on the rear panel.

Accuracy. Limits are set on 10-turn potentiometers and accuracy is to 1% of the full scale input level. To prevent oscillation between states when the input is at the exact level of a setting, hysteresis of 0.8% is applied to both threshold detectors.

Input. The input signal is 0 to +1 volt d.c., either from D3A/B (via lead supplied), or from D5A/B, D6B/B via BNC lead to external socket.

Power. Power is supplied from the D3A/B Torque Display Module via a multi pin connector. Special leads are supplied if the unit is coupled to the D5A/B or D6A/B Modules.

Outputs.

Relays. Resistive ratings:-
a.c. upto 250V. . . . 5A
250-480V 1A
d.c. upto 100V. . . . 5A
100-250V 0.2A

Remote Reset. Terminals should be shorted by a resistance of not greater than 20 ohms.

Remote Lamps. Can be operated via a 7-pole connector on rear panel. Max. bulb current is 80mA (6V bulbs).

Case Dimensions.

Width 305mm
Depth 203mm
Height 76mm

Allow 50mm at rear for plug access.

Panel Dimensions.

Width 279mm
Height 76mm

Note: This unit is designed to fit standard module cases with other units in the 'D' range.

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