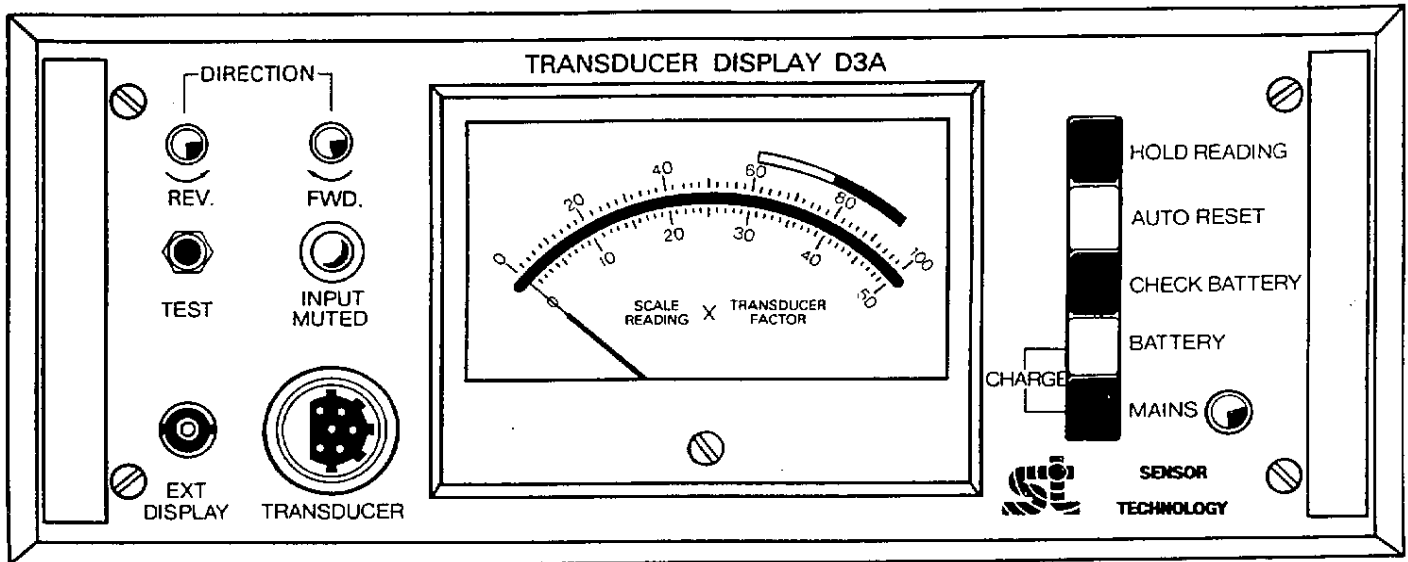


D3A Analogue transducer display/power supply

D3B Digital transducer display/power supply

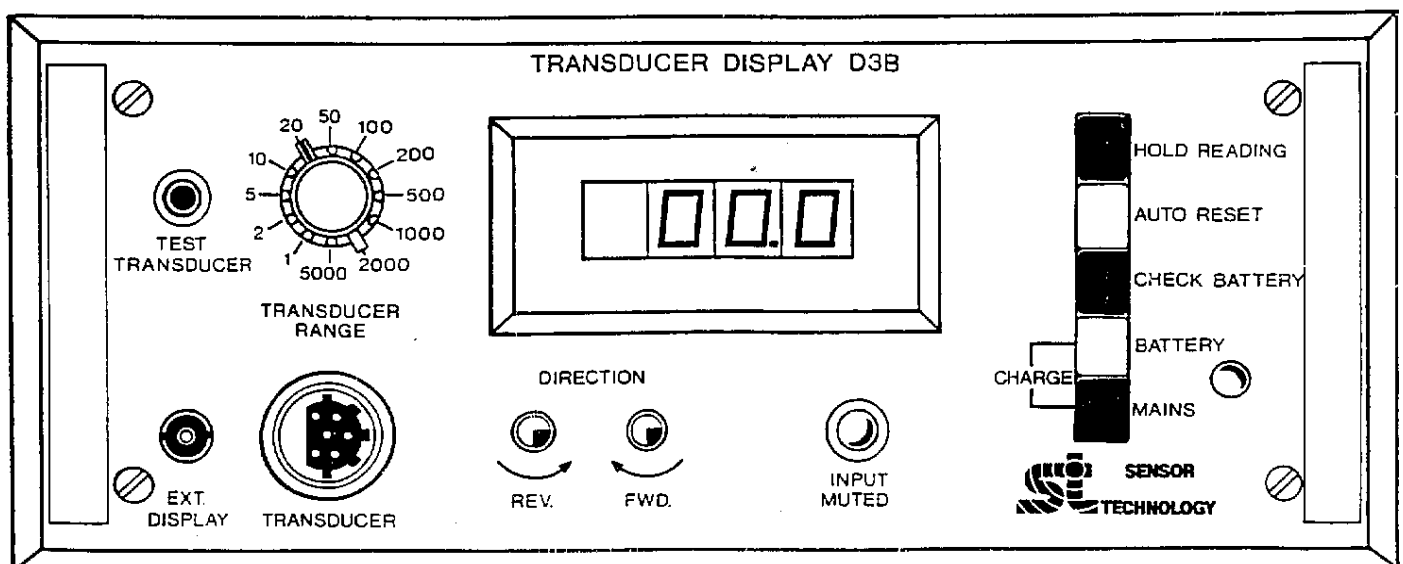


The D3A Analogue and D3B Digital Electronic Transducer Display Module are a proven concept in the precision measurement of dynamic and static torques. It enables the user to measure both clockwise and anti-clockwise torques without changing transducers. The unit is portable, either operating

from its optional internal rechargeable batteries, or from the mains supply. A charging unit and regulator are built in. Any transducer is interchangeable and compatible with the Display Module, which has the dual function of providing a precision power supply for the transducer, and an analogue or digital readout.

The D3A display is a 3.5" mirror scale Analogue meter having simple calibration compatible with the whole range of Transducers.

The D3B display is a .5in LED 3.5 Digital panel meter, with a range switch to select the appropriate transducer range.



Features

Torque Direction. The direction of the torque applied is sensed automatically by the instrument and displayed by indicator lamps on the front panel.

Hold Reading. By push button selection on the front panel the memory circuit holds on display the highest peak of any torque cycle, until manually reset.

Automatic Reset. By selecting the "Holding Reading" and "Auto Reset" together, the memory circuit will retain on display the direction and peak value

of torque for 3-4 seconds then automatically reset to zero. When the instrument is used in this way only the initial torque peak in the cycle is registered, any subsequent input being muted, until the system has reset automatically to zero. Other modes for the calibration of air tools are available to special order.

External Display. A socket on the front panel gives a precise output of 0 to +1 volt d.c. for full scale deflection of any transducer. This has sufficiently low output impedance for direct coupling of pen recorders, oscilloscopes, digital voltmeters, printers,

etc. A similar socket on the rear panel provides a ± 1 volt output for full scale deflection, direct from the transducer, the polarity being dependant upon the direction of the applied torque. The output from this socket is most suitable for monitoring transients or torsional vibrations, with appropriate ancilliary equipment, or, for example, tensile and compressive forces.

Options:

Sealed Battery Pack
RS232 output
4-20 milliamp output
Centronics output
Hand Terminal for data entry

Specification

Readout	D3A - Mirror scale analogue meter, 3.5" scale length. D3B - .5in 3.5 LED Digital Display selected with 12 position switch. Automatic decimal point correction.
Accuracy	$\pm 1\%$ standard. $\pm 0.5\%$ to order.
External Display Output	0 to +1 volt d.c. for full scale. Min. load resistance 500 ohms. Accuracy $\pm 0.5\%$
Range	Determined by transducer.
Mains Voltage	230 or 115V $\pm 15\%$. 50-60 Hz.
Power Consumption	Varies with instrument modules and transducers in use - Max 50w.
Batteries (optional)	Two 6V 6amp hour sealed type.
Battery Operating Time	Dependant on instrument modules and transducers in use. Strain gauge transducers - 15 hours. Optical Transducers - 6 hours.
Finish	RAF Blue grey case, scratch resistant finish. Front and rear panels anodised al. alloy. Modular case to fit additional instruments.
Case Dimensions	Width 305mm. Height including feet 143mm. Depth 203mm. Allow 50mm at rear for plug access.
Panel Dimensions	Width 279mm. Height 102mm.
Weight	With batteries 7.25kg. Less batteries 5.20kg.

The D3A/D3B interfaces with the wide range of D Range instruments and transducers, providing the power for both transducers and auxiliary instruments such as D4A Limit Detector, D5A/B Power Indicator and D6A/B Wide Range RPM Indicator.