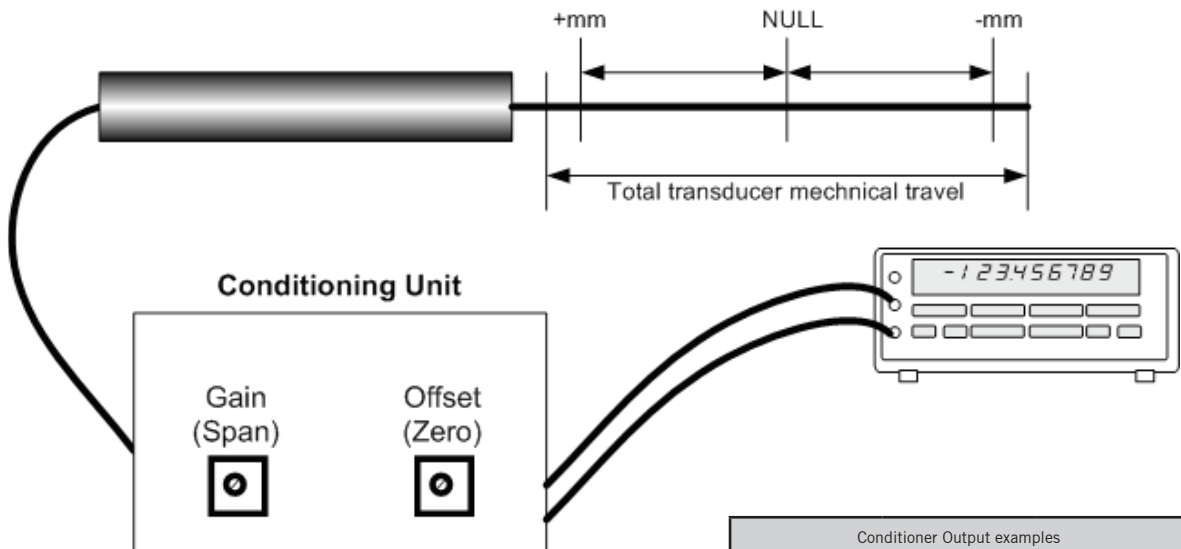




# Analogue Electronics

## General Setting Up of Conditioning Modules



Note: It is important to make sure that mV/V output of the transducer is within the range of the conditioner. If not, it may be necessary to fit attenuating resistors to the input of the conditioner (refer to "Transducer and Associated Electronic Sensitivity" application note 502409).

Conditioner Output examples		
Max (+mm)	Centre (0 mm)	Min (-mm)
10 V	5 V	0 V
10 V	0 V	-10 V
20 mA	0 Ma	-20 mA
20 mA	12 mA	4 mA

### Instructions

In order to set up the conditioner it is important to establish the centre of the transducers calibrated stroke. This is where the output of the transducer is 0 V and is not necessarily the mechanical centre.

- ▶ Simulate 0 V going into the conditioner by removing the transducer from the conditioner and by putting a shorting link in the place where the white and green wires should go
- ▶ Secondly, adjust the conditioner to give the required output for its centre (12 mA) by adjusting the 'Zero' pot
- ▶ Remove the link and refit the transducer
- ▶ Move the transducers core until you achieve 12 mA

The mechanical measuring stroke of the transducer is now +X mm and -X mm either side of this point.

If you require the output of the conditioner to be the reverse of the above table, it will be necessary to swap the white and green wires over when fitting into the conditioner.

To adjust the conditioner to match the transducer:

- ▶ Move core +X mm (-X mm if using in reverse) and adjust the 'Span' Pot to give 20 mA
- ▶ Move core -X mm (+X mm if using in reverse) and adjust the 'Zero' Pot to give 4 mA
- ▶ The two pots are interactive of each other so therefore it will be necessary to repeat the previous two steps until the exact required output is achieved.

Please contact your nearest Solartron Metrology office or representative if you experience any difficulty in achieving the required output.