

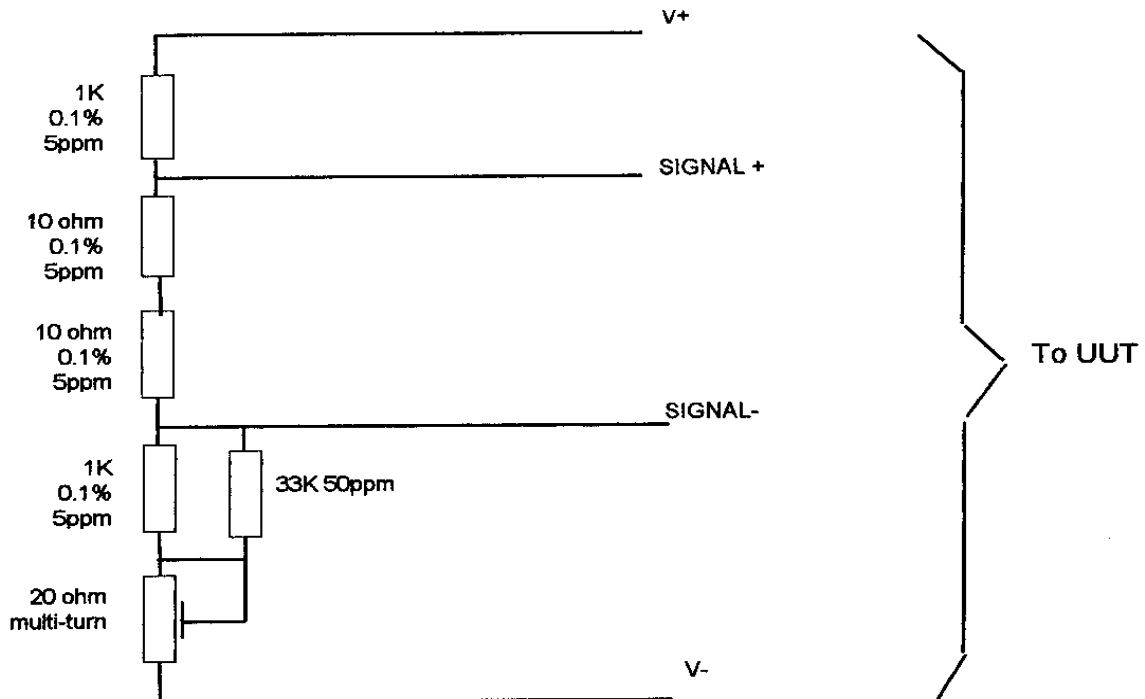
4. Strain Gauge

Connect the Strain Gauge Simulator as detailed below.

Cal Phase	1	2	3	4	5	6	7	8
Input Signal	100mV/10V							
Terminals	1(signal-) 2(signal+) 5(supply-) 6(supply+)							

Strain Gauge Simulator.

The circuit below is one way of devising such a simulator.



The simulator is calibrated using a high accuracy dc voltmeter. The voltage between Signal+ and Signal- is adjusted using the 20ohm potentiometer to be precisely 101.000% of the voltage applied between V+ and V-. Note that the simulator must be joined to the unit under test by short low resistance wires with good connections, as the sense connection is not used.

5. Temperature

Cal Phase	1	2	3	4	5	6	7	8
Input Signal	100mV						200R	
	4(-) 3(+)						1(I+) 2(V+) 3(V-) 4(I-)	

6. AC Volts/Amps

An accurate AC rms current source (1.000A) and AC rms voltage source (100mV) are required at a frequency of 100Hz. Alternatively a short term stable sine wave signal generator with adjustable output which is set using an external high accuracy AC voltmeter. A 1A current source can be obtained using a power amp to drive the instrument in series with a suitable resistor. Although 100Hz is the nominal calibration signal frequency, you may choose any frequency in the range of 20Hz to 5kHz, for which the optimum accuracy is required.

Cal Phase	1	2	3	4	5	6	7	8
	100mV							1A
Terminals	1(Lo) 3(Hi)							3(Hi) 4(Lo)

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