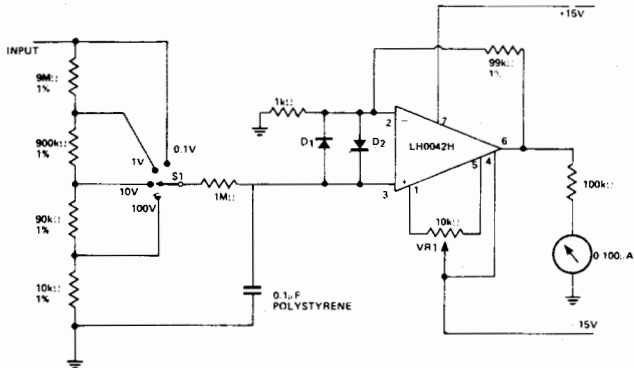


SIMPLE HIGH IMPEDANCE VOLTMETER



The circuit shown can be used as a high impedance voltmeter with ranges having full scale deflections of 0.1V, 1V, 10V and 100V. The range is selected by the input potential divider connected to S1.

The meter is set to zero by means of the potentiometer VR1 when no voltage is applied at the input. D1 and D2 are low leakage silicon protective diodes, whilst the LH0042H is a relatively low cost FET operational amplifier manufactured by the National Semiconductor Company.

The circuit consumes only about 20mW of power and can be supplied from batteries. Further ranges can be added by including appropriate additional resistors in the input circuit and additional positions in the switch S1.