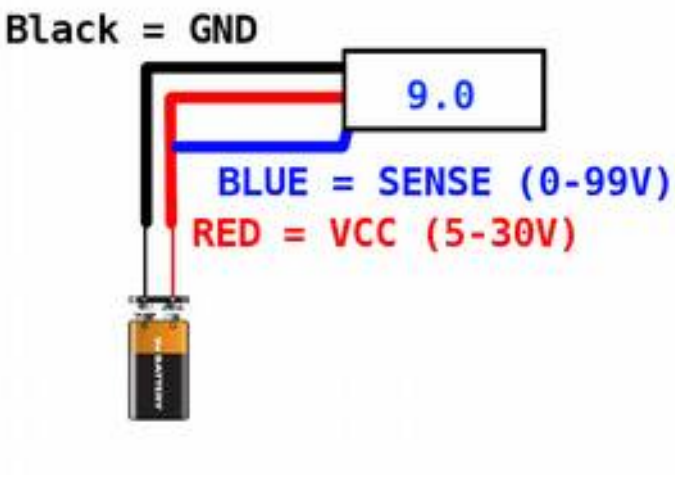
0-99 Voltmeter Test Setup

The 0-99V Voltmeter is a 3 wire device, to assist understanding here are some examples of connecting.

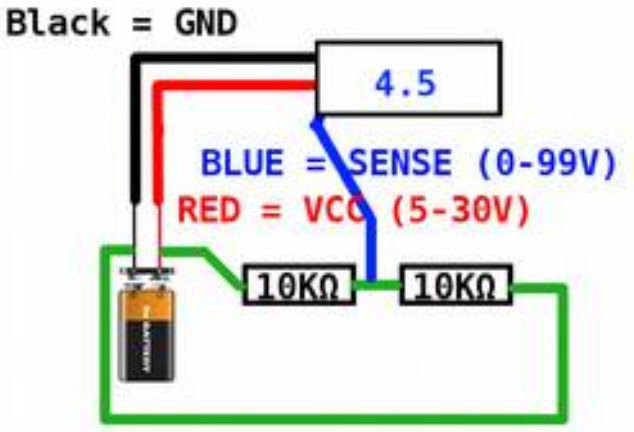
Measure 9v Battery Directly

We connect the Red (VCC) and Black (GND) to +/- of the battery, and then connect Blue also to the +, Blue is Sense so we are sensing the voltage at the + of the battery, approx 9v for a fully charged battery.



Measure 4.5v From Voltage Divider

We connect the Red (VCC) and Black (GND) to +/- of the battery, we create a voltage divider evenly splitting the 9v into 4.5v, and attach the blue wire at the midpoint to measure 4.5v approx (given battery charge, resistor tolerances).



Measure High Voltage Battery

We connect the Blue (Sense) to the high voltage battery +, we connect the Black (GND) to the high voltage battery -, and we connect the Red to a regulator which produces 5-30v powered from the high voltage battery.

How you get the 5-30v VCC is up to you, the ground must be common with the sense voltage ground.

VCC draws very little current, a simple Resistor-Zener regulator will do.