

PASPORT VOLTAGE-CURRENT (VI) SENSOR

This guide covers the major features of this product - it does not cover all of the available functions. This guide is not intended to replace the original equipment manual. Please refer to the manual for more detailed operating instructions and safety information.

SAFETY NOTES

1. Do not touch exposed energized wires directly with your hands.
2. Do not exceed the maximum allowable input range of any function.

EQUIPMENT DESCRIPTION

The PASPort Voltage-Current Sensor [1] measures voltage and current simultaneously and calculates power. It works in conjunction with the Xplorer GLX.

The Voltage at any point connected to the circuit being tested should not exceed 10 Volts above or below earth ground.

The measurable current range is -1 Amp to +1 Amp.

Power is calculated as the product of both current and voltage.

$$\text{Power (Watts)} = \text{Voltage (Volts)} \times \text{Current (Amps)}$$

This manual covers the functions and range of the sensor. For use of the Xplorer GLX, please view the associated manual.



Figure 1: PASPort Voltage-Current Sensor

EQUIPMENT OPERATION

1. Connect the sensor to one of the four available ports on top of the Xplorer GLX [2], or use the available extension cord between the GLX and the sensor [3].
2. An optional handle can be screwed into the side of the sensor [4]



Figure 2: Ports on Top of GLX



Figure 3: Sensor Extension Cable



Figure 4: Handle Attachment

VOLTAGE MEASUREMENT

Using the leads that are permanently attached to the sensor [5], connect the black test lead to the negative side of the circuit and the red test lead to the positive side of the circuit on either side of the location across which you are measuring voltage [5]. **Do not touch exposed energized wires directly with your hands.** If the probes must be physically attached to the wires, turn off the power to the circuit before doing so.



Figure 5: Voltage Leads

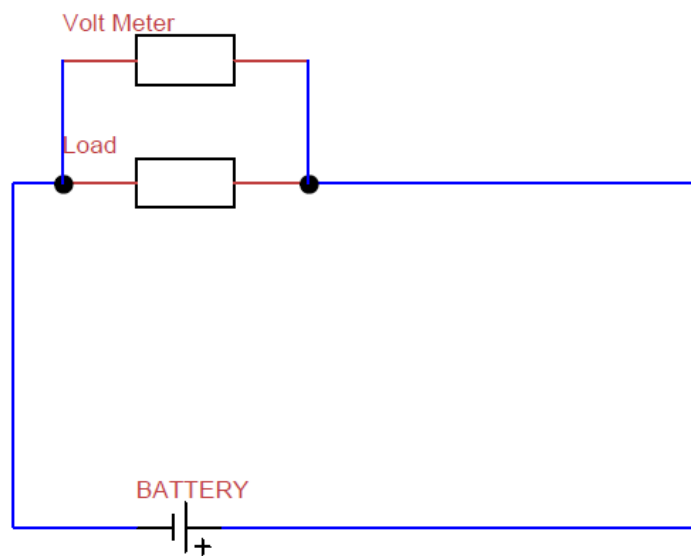


Figure 6: Measuring Voltage

CURRENT MEASUREMENT

1. Insert test leads with 4mm banana plugs into the positive and negative current terminals [7] on the sensor



Figure 7: Current Terminals

2. Open the circuit at the point where current is to be measured and touch the black test probe tip to the negative wire of the circuit. Touch the red test probe tip to the positive wire of the circuit [8]. **Do not touch exposed energized wires directly with your hands.** If the probes must be physically attached to the wires, turn off the power to the circuit before doing so.

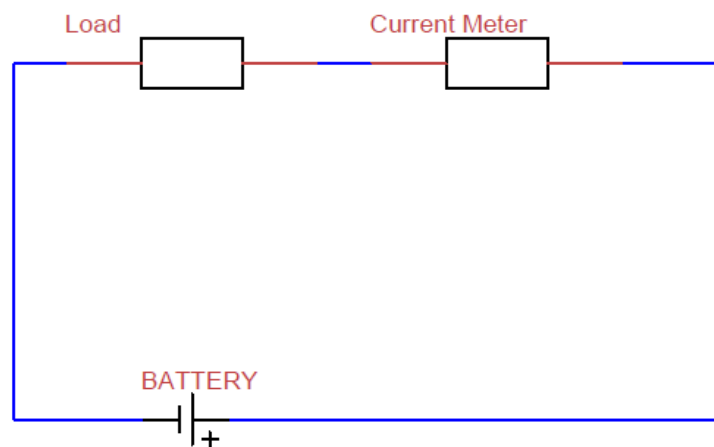


Figure 7: Measuring Current

3. If the current through the sensor exceed +/- 1 Amp, the Over Current Alarm will sound. Reduce the applied current or disconnect the sensor to prevent damage.

