

Title: Ohm's Law

Objective:

To verify Ohm's Law and determine the resistance of a given resistor.

Apparatus Required:

- Battery Eliminator
- Ammeter
- Voltmeter
- Rheostat
- Connecting Wires
- Resistor

Procedure:

1. Connect the circuit as per the circuit diagram.
2. Set the rheostat to allow minimum current.
3. Note the voltmeter and ammeter readings.
4. Gradually increase the current and take several readings.
5. Plot a graph of V versus I .
6. The slope of the graph gives the resistance.

Observations:

Record values of Voltage (V) and Current (I).

Conclusion:

Ohm's Law is verified if the V - I graph is a straight line.