



WORKSHEET 1-3
Using a Digital Multimeter: Resistance Measurement

Worksheet Objectives

In this worksheet, you will practice making resistance measurements with a digital multimeter (DMM). When you have completed this worksheet, you will be able to use a DMM to make resistance measurements.

Tools and Equipment

For this exercise you will need the following:

- Electrical simulator
- Digital multimeter

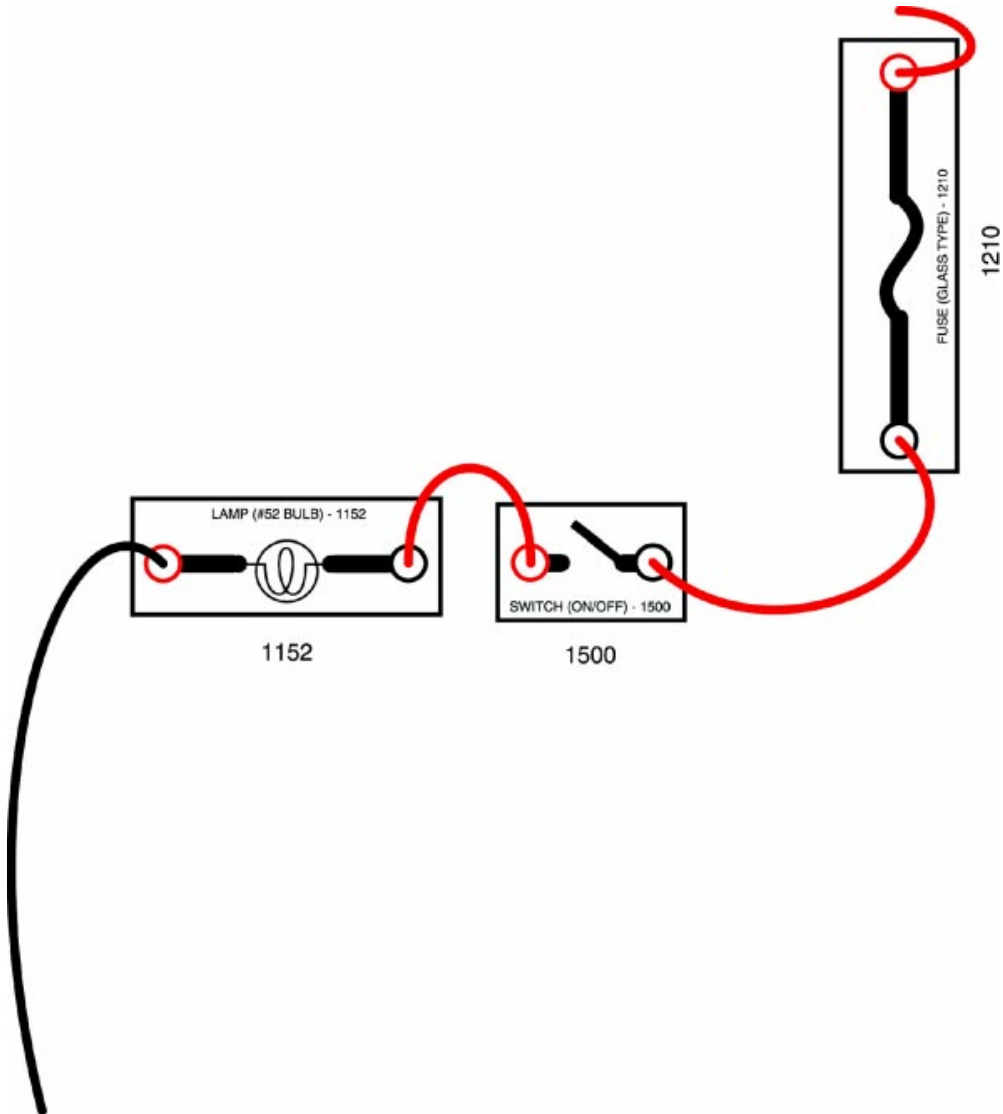


Fig. 1W3-1
 TL623f001c-1W2

Exercise 1: Measuring Resistance

1. Continue to use the circuit shown in Fig. 1W3-1.
2. Turn off the electrical simulator power supply and disconnect the positive and negative leads from it.
3. Set up your DMM to measure resistance in this circuit:
 - Mode selector to Ohms
 - Auto-range on
 - Leads in correct jacks on DMM (red in V Ω , black in com)
4. At each test point shown on the wiring diagram (see Fig. 1W3-1) connect the DMM test leads as follows:
 - Isolate each component by disconnecting the jumper wire linking to another component.
 - Red lead to most positive side at component.
 - Black lead to most negative side at component.
5. Note the resistance values on the DMM display and write them in the blank spaces below. Make sure to include any letters modifying the units of measure (k for kilo or M for mega).

Fuse _____ ohms

Switch _____ ohms

Lamp _____ ohms

Wire _____ ohms

Resistance Measurement

Name: _____ Date: _____

Review this sheet as you are doing the Resistance Measurement worksheet. Check each category after viewing the instructor’s presentation and completing the worksheet. Ask the instructor if you have questions regarding the topics provided below. Additional space is provided under topic for you to list any other concerns that you would like your instructor to address. The comments section is provided for your personal comments, information, questions, etc.

I have questions

I know I can

Topic	Comment		
Measuring Resistance			



Notes