

Standard Operating Procedure

Title: SOP-017 Multi-Meter

PI: Art Erdman **Lab Location:** Mayo G217

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Hazard Identification:

Physical Danger

Exposure Assessment:

Electricity

- Electrical Shock
The multi meter can test circuits with high voltages. There is a risk of electrical shock when using the multi meter on these circuits. If body comes into contact with test leads while testing on circuit, shock may occur. This could cause injury.

Control Plan:

- Read and become familiar with multi-meter's operating procedures before operating
- Multi-meter should always be off when not in use
- Always disconnect the multi-meter from the power source before servicing, repairing, or making any adjustments
- Wear protective garments as needed
- Only use multi-meter on circuits that are deemed appropriate for testing
- Make sure multi-meter is set to test correct circuit property (Voltage, Amps, mA, etc.)

Experimental Procedures:

- Put on all safety equipment and tie back loose hair or clothing before operating
- Check to make sure all parts of multi-meter are working and functioning properly
- Turn multi-meter off and set up circuit, make sure circuit is complete
- When ready, turn on power source for circuit as needed
- Turn on multi-meter and set to desired circuit property
- Test for property over desired areas of circuit
- When finished, turn off multi-meter and remove from circuit; turn off power source
- Disassemble circuit and place all equipment back in appropriate place

For other inquiries, see User Manual in Appendix.

Waste Management Procedures:

When finished with the multi-meter, always clean the area. Paper towels and cleaning solution can be found in G217-11 if needed. Dispose of debris appropriately.

Place all materials back in the appropriate place.

Spill and Accident Procedures:

If an accident occurs, report immediately to the lab supervisor (G217-05) or other appropriate staff member. If no one is around, dial 911 on the landline phone near the door of G217-11 to reach the campus police. The lab first aid kit is located on the wall near the sink. A first aid pamphlet from DEHS is located in all of the MDC's first aid kits.

Appendix:

FLUKE.

Model 87 & 89 Series IV

True RMS Multimeter

Users Manual

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