

Corporate Office

7042 Fairfield Business Dr.
Fairfield, OH 45014-5480
(513) 874-3225
(513) 874-3229 Fax



Introduction to Mobile Electric Using A Multimeter

Course Description: This course is an introduction to electrical fundamentals as they apply in the mobile equipment environment. Emphasis is placed on understanding digital multimeters and using them to measure current, resistance, continuity, capacitance and more. Math is kept to a minimum and the course is hands-on from the very beginning. Each student will be given 2 different basic electrical training boxes to be used throughout the course along with a multimeter. Students are also encouraged to supply their own multimeter for use during class. As topics are introduced, students will be able to demonstrate them using their multimeters and electronic boards. This course provides an excellent preparation for the Level 1 Mobile Electric course.

Prerequisites: None

Learning Objectives:

- Define Ohms Law
- Recognize Powers of 10 (i.e. Amps vs. Milliamps)
- Describe series resistance
- Describe series parallel
- Identify resistor color codes
- Discuss and operate multimeters
- Discuss safety aspects of multimeter use
- Build series and parallel circuits
- Measure resistors in series using a multimeter
- Measure resistors in parallel using a multimeter
- Explain potentiometers
- Measure voltage drop
- Measure current in series and parallel circuits
- Verify Ohms Law using multimeters on various circuits
- Explain diodes
- Verify good vs. bad diode using a multimeter