

EB01B: Digital Multimeter

Part Number	88-EB01B-0000
Category	Electrical Maintenance
Duration	15 Hours

Course Introduction and Skill 1: Performing Lockout/Tagout

Course Introduction

Evaluation

Digital Multimeters (DMMs)

Safety with DMMs

Skill Overview

Skill Drill

Review Quiz

Skill 2: Multimeter Controls

Multimeter Controls

Range

Skill Overview

Skill Drill

Review Quiz

Skill 3: Multimeter Symbols

Multimeter Control Symbols

LCD Symbols

Skill Overview

Skill Drill

Review Quiz

Skill 4: The Multimeter LCD

The Display

Skill Overview

Skill Drill

Review Quiz

Skill 5: Setup for AC Voltage Measurements

Reading AC Voltage

Setup

Skill Overview

Skill Drill

Review Quiz

Skill 6: Measuring AC Voltage

Setting up the Multimeter

The Electrical Panels

Lockout/Tagout (LOTO)

The LOTO Procedure

Wiring the Circuit

Skill Overview

Skill Drill

Review Quiz

Skill 7: AC Voltage Calculations

Measuring AC Voltage

Voltage Conversion

Voltage Conversion Charts

Skill Overview

Skill Drill

Review Quiz

Skill 8: Measuring DC Voltage

Multimeter Setup for DC Voltage Measurements

Skill Overview

Skill Drill

Review Quiz

Skill 9: Measuring Resistance

Setting up the Multimeter for Resistance Measurements

Overload (OL)

Skill Overview

Skill Drill

Panel E052

Review Quiz

Skill 10: Discharging a Capacitor

Capacitors and Capacitance

Applications of Capacitors

Capacitor Safety

How to Discharge a Capacitor

Skill Overview

Skill Drill

Review Quiz

Skill 11: Measuring Capacitance

Multimeter Setup for Capacitance Readings

Skill Overview

Skill Drill

Review Quiz

Skill 12: Testing Capacitance

Opened and Shorted Capacitors

Testing a Capacitor in Resistance Mode

Skill Overview

Skill Drill

Review Quiz

Skill 13: Measuring Current

DMM Setup for Current Measurements

Connecting the DMM into the Circuit

Skill Overview

Skill Drill

Review Quiz

Skill 14: Measuring DC Millivolts

Multimeter Setup for Millivolts Measurements

Skill Overview

Skill Drill

Review Quiz

Skill 15: Continuity

- Defining Continuity
- Testing Continuity
- Continuity Checks in Industry
- Skill Overview
- Skill Drill
- Review Quiz

Skill 16: Testing Grounds and Bonds

- Grounding and Bonding in Electrical Equipment
- Testing Grounding and Bonding
- Why Testing Matters
- Multimeter Setup
- Skill Overview
- Skill Drill
- Review Quiz

Skill 17: Testing Frequency

- Defining AC Frequency
- National Frequency
- Motor Control
- Multimeter Setup
- Skill Overview
- Skill Drill
- Review Quiz

Comprehensive Post-Test