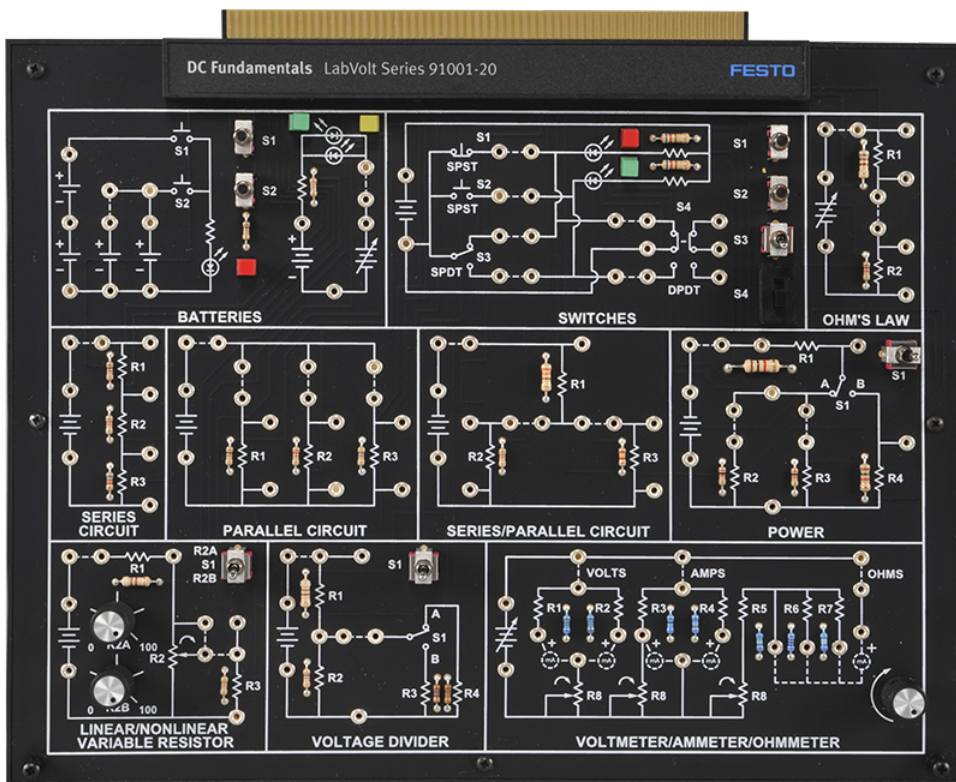


# DC Fundamentals FACET Board 580877 (91001-20)



LabVolt Series

Datasheet



Festo Didactic

en

05/2024

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## General Description

The DC Fundamentals course provides comprehensive, hands-on instruction in the terminology, principles and applications of dc circuits. Following a carefully designed instructional program, students become familiar with all components of the board. They learn how to isolate, identify, and test a series of circuits and perform troubleshooting exercises to demonstrate their mastery of the course objectives.

All dc power to the circuit board is supplied by the 15 V power supply via the base unit and its protection circuitry. Students troubleshoot dc circuit faults inserted by the computer or manually by the instructor, who alters hidden switches located under a locking cover.

A dc milliammeter is provided with the circuit board.

The circuits found on this board include:

- Batteries
- Switches
- Ohm's Law
- Series Circuit
- Parallel Circuit
- Series-Parallel Circuit
- Power
- Linear/Non-Linear Variable Resistor
- Voltage Divider
- Voltmeter/Ammeter/Ohmmeter

## Topic Coverage

- Instrument, FACET Base Unit and Board Familiarization
- Symbols and Schematics
- Basic and Electrical Safety Rules
- Circuit Voltage, Current, Resistance
- DC Power Sources in Series and in Parallel Series
- Opposing DC Sources
- Switches Identification and Switching Concepts
- Ohm's Law: Circuit Resistance, Current, & Voltage
- Resistance, Voltage and Current in a Series Resistive Circuit
- Resistance, Voltage and Current in a Parallel Resistive Circuit
- Resistance, Voltage and Current in a Series-Parallel Resistive Circuit
- Power in a Series and/or Parallel Resistive Circuit
- Rheostat and Potentiometer
- Voltage and/or Current Dividers
- Measuring: DC Ammeter, DC Ohmmeter, DC Voltmeter
- Troubleshooting DC Circuits 1

Reflecting the commitment of Festo Didactic to high quality standards in product, design, development, production, installation, and service, our manufacturing and distribution facility has received the ISO 9001 certification.

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