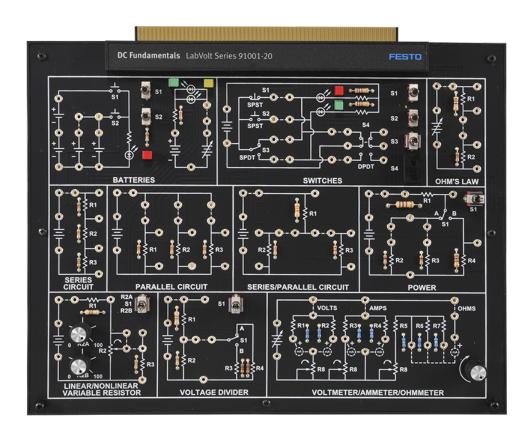
# DC Fundamentals FACET Board 580877 (91001-20)



LabVolt Series

Datasheet



<sup>\*</sup> The product images shown in this document are for illustration purposes; actual products may vary. Please refer to the Specifications section of each product/item for all details. Festo Didactic reserves the right to change product images and specifications at any time without notice.

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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

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#### Festo Didactic SE

Rechbergstrasse 3 73770 Denkendorf Germany

P. +49(0)711/3467-0 F. +49(0)711/347-54-88500

#### Festo Didactic Inc.

607 Industrial Way West Eatontown, NJ 07724 United States

P. +1-732-938-2000 F. +1-732-774-8573

#### Festo Didactic Ltée/Ltd

675 rue du Carbone Québec QC G2N 2K7 Canada

P. +1-418-849-1000 F. +1-418-849-1666

#### www.labvolt.com

www.festo-didactic.com

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