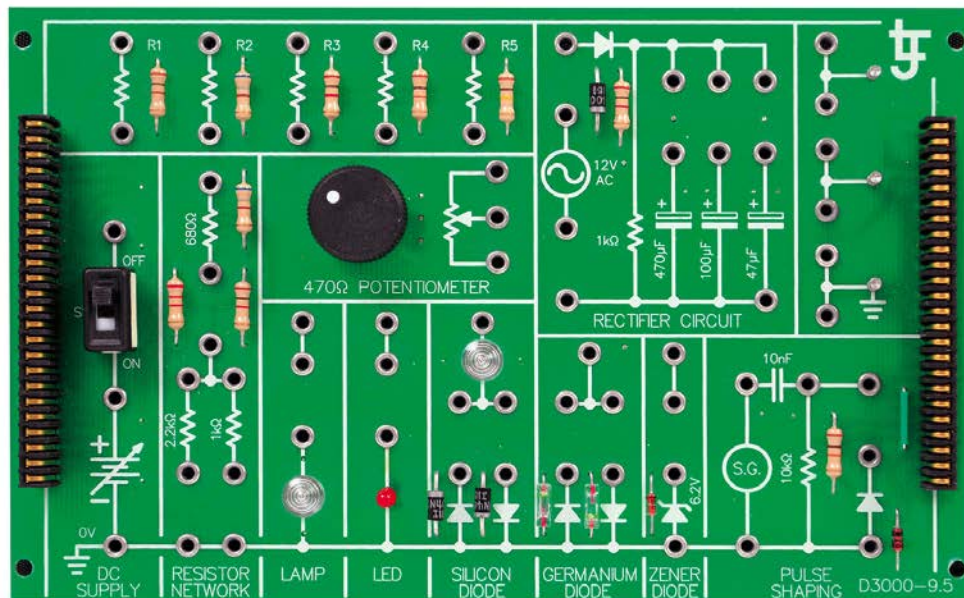


Product Information Sheet

Introduction to DC and AC Circuits



This electronics study card is designed to connect to the 409-01 Experiment Platform or to the 300-01/300-02 Advanced Electronics Experiment Platforms* as part of a modular electronics programme.

This practical resource introduces students to DC and AC circuits and their applications through a wide range of practical activities.

Students investigate basic circuit principles, and the operation of a variety of circuits using resistors and diodes. This resource is ideal for use within an intermediate electronics program.

The board can be also be used in conjunction with our optional cloud-based software, which offers online practical electronics tasks as well as interactive theory presentations, investigations, and assessments, which link directly to the practical activities carried out using this resource.

* **Note:** to connect to 300-01, 300-02, D3000 EXP or D3000 VIP2 you will also need a 409-02 Experiment Card Motherboard.

Practical Tasks Include the Following:

- The Basic DC Circuit
- Resistance and Ohm's Law
- Power in a Resistor
- Resistor Color Coding
- Resistor Troubleshooting
- Resistors Connected in Series and Parallel
- Kirchhoff's Laws
- Resistor Network Troubleshooting
- The Variable Resistor
- PN Junction Diode
- Troubleshooting a Diode Circuit
- AC Measurements
- Half-Wave Rectifier
- Troubleshooting a Half-Wave Rectifier
- The Zener Diode

Items Included:

- Circuit Card
- Storage Case
- Manuals in PDF Format on CDROM

Other Items Required:

- 490-01 Experiment Platform
 - Digital Multimeter
 - Dual Trace Oscilloscope
- or*
- 300-02 Advanced Electronics Experiment Platform
 - 409-02 Experiment Card Motherboard

General Information:

Dimensions: 50 x 238 x 175 mm (W, H, D)
Shipping Volume: Approx 0.002 m³
Shipping Weight: Approx 0.35 kg

Order Code: 419-05

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For more information visit www.ljcreate.com