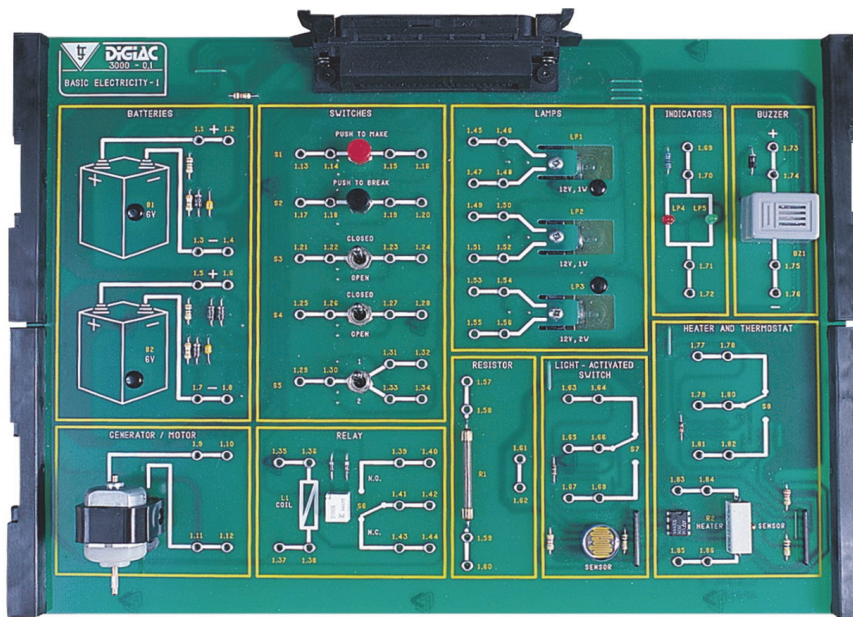


Product Information Sheet

Basic Electricity Study Module



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

The study module is designed to introduce students to electricity and electronics through a wide range of practical activities.

Using either of the Experiment Platforms, users can select from a range of faults to be inserted into the study module circuits to develop electronic diagnostic and faultfinding techniques.

The study module is supplied with PDF manuals that provide theory materials, practical tasks, faultfinding activities, and technical information.

The board can also be used in conjunction with our optional cloud-based engineering software, which offers online interactive theory presentations, investigations, and assessments to underpin the practical learning carried out on this resource.

Topics Include The Following:

- Symbols and Switches
- Magnetism and Relays
- Measuring Electricity
- Lamps in Series and Parallel
- Motors and Generators
- Thermistors
- Fault Finding

Typical Activities Include:

- Represent electrical circuits in diagrams
- Set up and investigate circuits with switches
- Identify what magnetism is
- Set up and investigate a latched relay system
- Explain why metals are good conductors
- Explain EMF and Potential Difference
- Use a multimeter to measure current and voltage
- Work out current, voltage and power requirements for lamps in series and parallel
- State what resistance is
- Recognize construction/use of variable resistors
- Recognize how a potentiometer can be used to set voltage across a component

- Measure the current flowing in a circuit
- Measure and calculate resistance.
- State the relationship between electric current and magnetic field
- Recognize the dynamo/generator effect
- Locate faults in simple electric circuits

Items Included:

- Circuit Card
- Storage Case
- Curriculum Manual in PDF Format

Other Items Required:

- 300-01 Advanced Electronics Experiment Platform
- Digital Multimeter
- or
- 300-02 Advanced Electronics Experiment Platform with Virtual Instrumentation

General Information:

Dimensions: 81 x 323 x 256 mm (W, H, D)
Shipping Volume: Approx 0.008 m³
Shipping Weight: Approx 2 kg

Order Code: 301-01

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For more information visit www.ljcreate.com