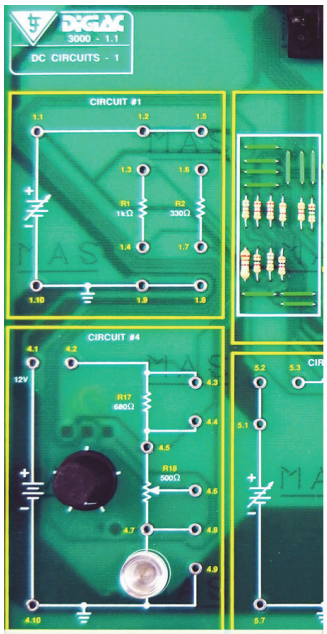
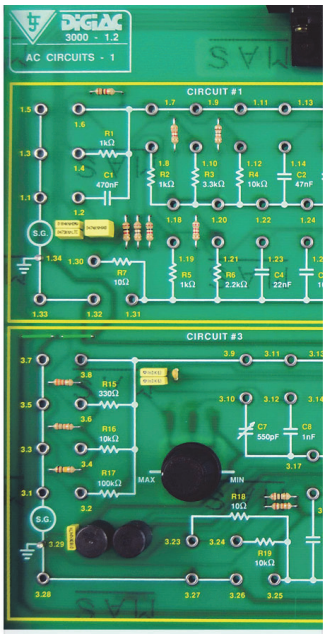
Product Information Sheet

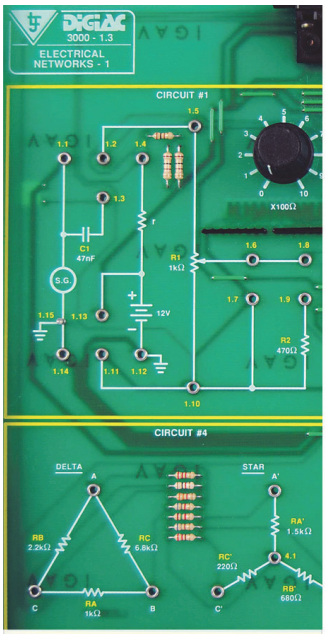
Advanced Electronics Core Pack



301-11



301-12



301-13

301-14

This collection of Advanced Electronics Study Modules provides practical learning activities to cover the range of core electronics topics.

The Core Electronics study modules are designed to connect to the Advanced Electronics Experiment Platform (300-01) as part of a modular electronics programme.

Using the Advanced Electronics Experiment Platform, a range of faults to be selected and inserted into the study module circuits to develop electronic diagnostic and faultfinding techniques.

A case is supplied for each study module for convenient storage, as well as PDF manuals for students and instructors.

These manuals provide theory material, practical tasks, faultfinding activities, and technical information.

Pack Includes the Following Modules:

- DC Circuits (301-11)
- AC Circuits (301-12)
- Electrical Networks (301-13)
- Electromagnetic Devices (301-14)

Typical Topics Include:

- The Basic DC Circuit
- Ohm's Law
- Power in a Resistor
- Resistor Color Coding
- Resistors Series/Parallel
- Variable Resistor Characteristics
- Controlling a Lamp with a Variable Resistor
- Sinusoidal Alternating Waveforms
- Alternating Supply with Pure Resistance Loading
- AC Supply with Capacitive Loading
- AC Supply with Pure Inductive Load
- Resistance-Capacitance Circuits on AC Supplies
- Resistance-Inductance Circuits on AC Supplies
- RL, RC and RLC Circuits
- The Transformer
- Supply Source Internal Resistance
- Maximum Power Transfer from Source to Load
- Dual Voltage DC and Combined AC/DC Supplies
- Thevenin's and Norton's Circuit Theorems
- Superposition and Star Delta Transformation
- DC and AC Bridges
- Permanent Magnets and Magnetic Field
- Electromagnets
- Electromagnetic Induction
- Inductive Reactance
- The Transformer
- Solenoid
- Relay
- Force on a Conductor and Motor Principle
- Stepper Motor

Other Items Required:

- 300-01 Advanced Electronics Experiment Platform
- Digital Multimeter
- Dual Trace Oscilloscope
- Function Generator

General Information:

Shipping Volume: Approx 0.032 m^3
Shipping Weight: Approx 8 kg

See individual module information sheets for more specific details.

Order Code: 301-00

P8600-B

For more information visit www.ljcreate.com