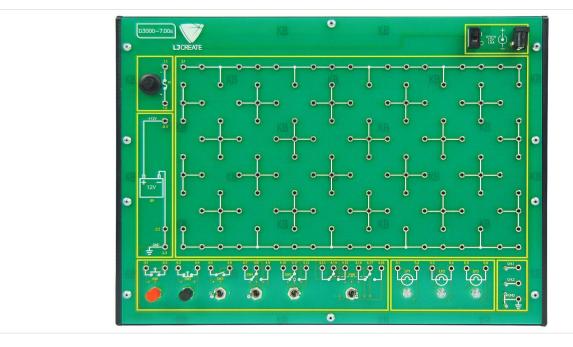
Product Information Sheet

Automotive Electronic Circuits Board





This hands-on learning resource allows students to build a variety of introductory automotive electronic circuits using a range of on-board and carrier-mounted components. Students are set tasks that encourage them to explore circuits practically to help develop their understanding of electrical components, circuits and systems. The resource is also focused on the development of diagnostic and faultfinding skills using real test equipment.

This resource is supplied with a curriculum manual CD containing practical tasks and activities.

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

Practical Topics Covered Include:

- Simple circuits and measurements
- Lamps in series circuits
- Lamps in parallel circuits
- Lamps in series-parallel circuits
- Switches
- Resistance

Typical Activities Include:

- Construct a simple circuit containing a battery and lamp
- Measure DC voltage using a digital multimeter
- Investigate the operation of a switch
- Investigate the operation of a fuse
- Investigate the concept of a common ground connection
- Construct a circuit from a schematic diagram

- Measure DC current using a digital multimeter
- Calculate power use in lamp circuits
- Measure voltage drops across lamps connected in series
- Measure current through lamps connected in parallel
- Measure voltages and currents in a series-parallel lamp
- Use a multimeter to investigate the operation of a range of switches
- Investigate the effect of different switch types on circuit operation
- Investigate switches connected in series and parallel
- Measure resistance
- State Ohm's Law

The circuit board provides the following features:

- 2mm matrix patching area
- 12V DC source with battery symbol
- Resettable fuse
- Switches:
 - Push-to-make
 - Push-to-break
 - 2-position off-on
 - 2-position changeover

 - 3-position on-off-on
- 2-position, 2-pole changeover Lamps:
 - 12V, 0.5W (x2)
 - 12V, 1W
- Oscilloscope connection panel

Product Information Sheet (Continued)

Automotive Electronic Circuits Board



Items Included:

- Trainer
- Trainer Storage Case
- Curriculum manual CD

Other Items Required:

707-01 Autotronics Accessory Pack

General Information:

Trainer Weight: 0.75 kg

Trainer dimensions: 290 x 210 x 50 mm (W, D, H)

Packed Volume: Approx 0.007 m³ Packed Weight: Approx 1.2 kg

Order Code: 700-01