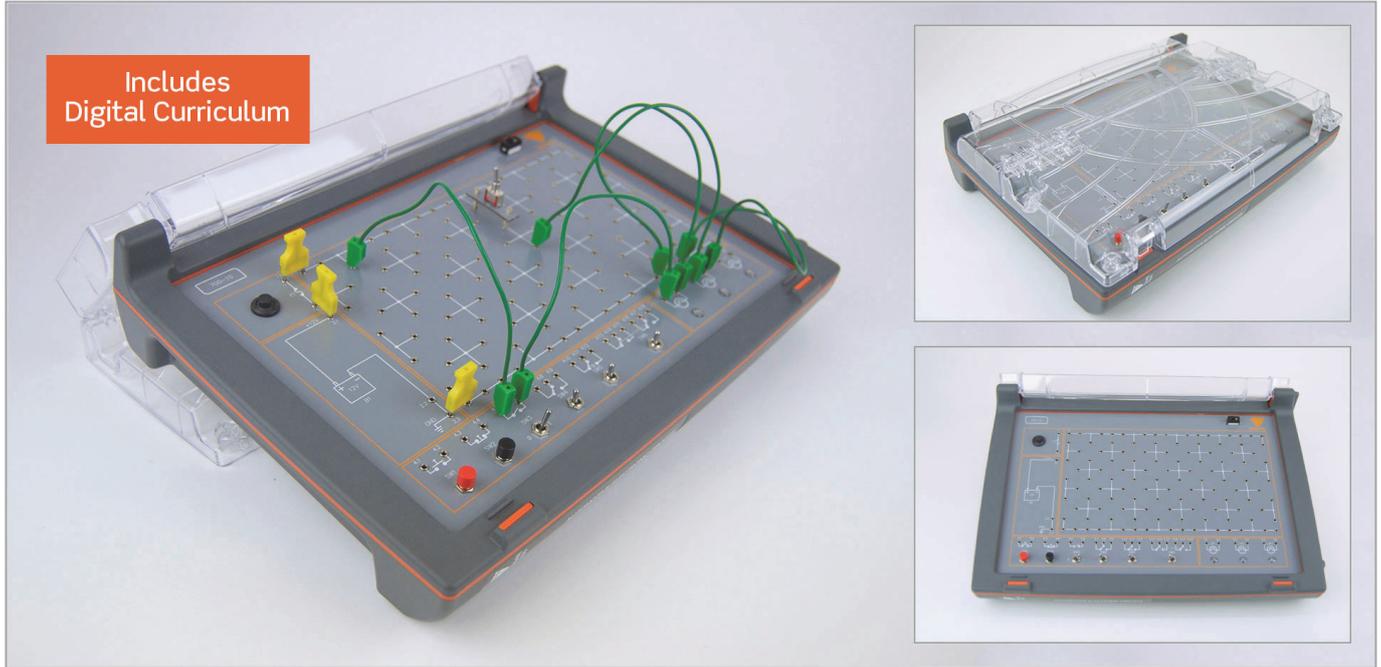


Product Information Sheet

Auto Electronics Trainer



Includes
Digital Curriculum



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.

The unique design of the unit includes a heavy-duty casing with transparent protective cover. When in use, the cover folds back to provide an angled support for the workstation. With the cover closed, units become stackable for easy storage.

The trainer includes access to digital curriculum materials including practical learning tasks, as well as theory support resources.

Students are set tasks that encourage them to explore circuits practically, to help develop their understanding of electrical components, circuits and systems. They also develop diagnostic and fault-finding skills using real test equipment.

This resource 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
- Battery, fuse, switch and lamp components
- Common ground circuits
- Wiring diagrams
- Current flow
- Power
- Circuit faults
- Lamps in series and parallel
- Switches in series and parallel
- Two- and three-position switches
- Ohm's Law and 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 circuit
- 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 workstation provides the following features:

- Storage case with folding protective cover
- Patching area for carrier-mounted components
- 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, 0.4W (x2)
 - 12V, 1W

For more information visit www.ljcreate.com

Product Information Sheet (Continued)

Auto Electronics Trainer



The carrier-mounted component set includes:

- 12V, 0.35W lamp (x2)
- 12V, 0.7W lamp (x2)
- Resistors (330 Ω , 1k Ω , 10k Ω)
- Toggle switch (2-position off-on)

Items included:

- Patch board in storage case
- Carrier-mounted component set
- Shorting links and connecting leads
- Curriculum in digital format

Other items required:

- Digital multimeter

General information:

Trainer Dimensions: 360 x 80 x 250 mm (W, H, D)

Trainer Weight: 1.2 kg

Packed Volume: Approx. 0.01 m³

Packed Weight: Approx. 2.8 kg

Order Code: 700-10

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For more information visit www.ljcreate.com