

## AUTOMOTIVE LIGHTING SYSTEM TRAINER



The ConsuLab CL-1918-3 trainer has been developed to teach modern automotive lighting systems through student led learning exercises where students develop their understanding of the system through the physical wiring all circuits. The learning exercises are developed at two levels to allow both entry level and advanced level students to expand their skills. The product is used for teaching Ohm's law, basic circuits, advanced circuits, relay controlled, power side and ground side-controlled circuits, and there is an included fault box on each side with 12 real world faults that include open circuits, short circuits, high resistance circuits that will require voltage drop testing to verify, ground faulted circuits and more. The trainer is configured with 4mm wiring sockets and all wiring is completed using the 4mm jumper wires. There are also 2mm test sockets located throughout the system to allow testing of key points in the circuits.

### EDUCATIONAL ADVANTAGES

- Students can build a complete automotive lighting system or individual circuits.
- Includes : Head, Park-Tail (LED), Stop (LED), CHMSL(LED), Backup, License Plate, Side Marker, Hazard & Turn (LED), horn, Ignition Switch and Fuse Box.
- Students learn from "hands-on" assignments and activities written at three different competence levels.
- Can easily be used for instruction of Ohm's and Kirchhoff's Law's.
- Fault box provides "real-world" problems requiring diagnosis and repair procedures.
- Uses industry standard electrical wiring diagrams.
- Available double-sided trainers maximize student engagement and space utilization.
- Robust design allows students to make mistakes without damage to the trainer.

## AUTOMOTIVE LIGHTING SYSTEM TRAINER



### FEATURES

- 4mm sockets for wiring circuits.
- 2mm sockets for testing circuits.
- Standard automotive components are used.
- Upright stand will fit through a standard door.
- 4 swivel casters with 2 locking casters.
- Stand is made of steel and is powder coated.
- Wire holders included.
- Drawer for each side.
- Power supply is integrated into the trainer.
- CSA/UL approved 30A power supply.
- Provided with operation manual, student manual and instructors manual.

### COMPONENTS LIST

- **CL-1918-01A** Front Lights Moduponent® (#53143)
  - Incandescent headlamps with low/high beam.
  - LED turn signals.
  - Incandescent marker lamps.
  - 2 ISO 5 pin relays.
- **CL-1918-02A** Control Panel Moduponent® (#53024)
  - Ignition, hazard, brake, backup, horn, and multi function switches.
  - Horn.
  - Electronic flashers for both hazard and signals.
  - 8 fuses.
  - Removable 5 pin mini relay.
  - Standard 5 pin ISO relay.
  - Indicator lamps.
  - Fault box.
- **CL-1918-03A** Rear Lights with turn/brake lights Moduponent® (#53141)
  - LED turn signals, brake/tail, reverse, center high mount stop lamps.
  - Incandescent marker and license lamps.
- **CL-1918-12C** Set of 83 jumper wires (#53169) (1)
- **CL-1918-11** 120VAC to 12VDC CSA/UL approved 30A power supply (#92564) (1)

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### BUYERS GUIDE

- Available single sided (#53170) or double sided (#53171).
- Meter test points located at lights for diagnostic procedures.
- Electronic fault box with 12 faults.

### OPTIONS

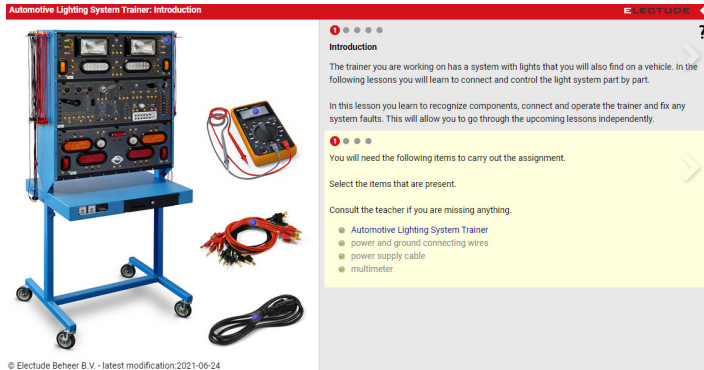
- EM-1200-1918 Dust Cover (#24586-1).
- CL-1918-10S-02 Table Stand (#52547-1).
- CL-1918-3U Upgrade Kit (#52514-2) — This upgrade kit converts a single sided trainer to a double sided.

### PHYSICAL SPECIFICATIONS

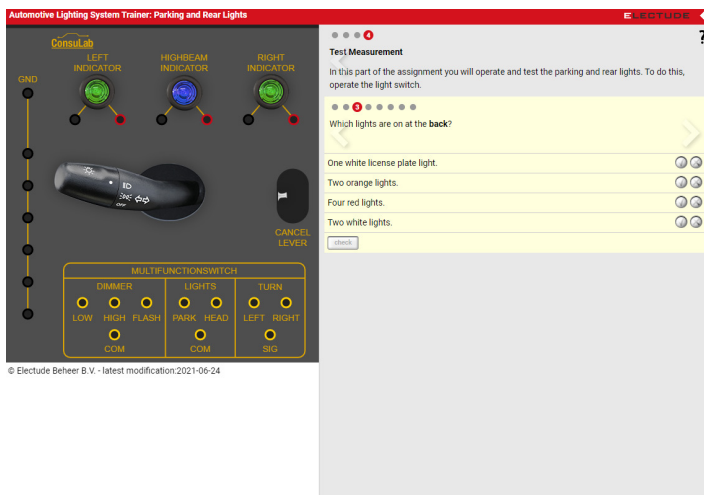
- Input voltage: North America 120VAC 60Hz, others: 220VAC 50Hz.
- Available in English and French.
- **Dimensions:** 29 W x 31 L x 73 H inch (73.6 x 78.7 x 185.4 cm) / 48 W x 40 L x 79 H (121.9 x 101.9 x 200.6 cm) with packaging.
- **Weight:** 177 lb (80.4 kg) / 237 lb (107.7 kg) with packaging.



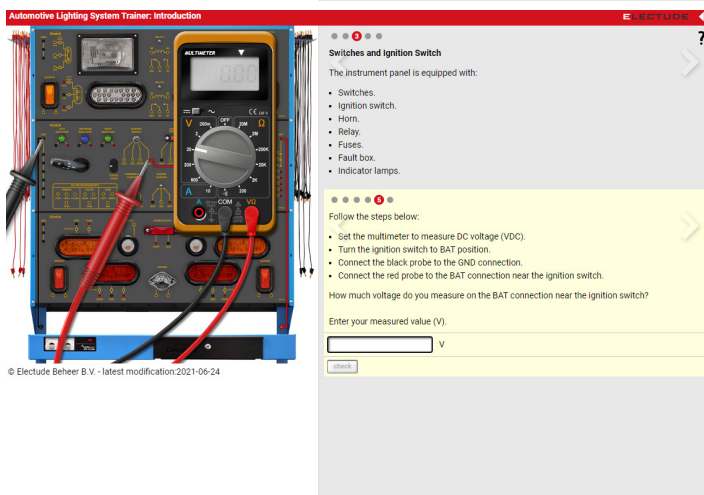
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# ELECTUDE

**THE CONSULAB CL-1918-3 AUTOMOTIVE LIGHTING SYSTEM TRAINER IS NOW AVAILABLE WITH ELECTUDE COURSEWARE (SOLD SEPARATELY).**

The Automotive lighting system Trainer consists of a practical setup and the associated E-learning. The practical setup consists of three panels with all components that represent the lighting system of a vehicle. The components are connected to each other using the corresponding wiring set. In addition, the set-up is extremely suitable for teaching diagnostic work. Through guided troubleshooting and 12 work orders (incl. Complaint description) practical situations are simulated in which the participant can practice in a safe learning

Through the preparatory theory and practical assignments, the participant learns:

- To recognise the function and applications of the various components.
- To identify components of the lighting system.
- To connect the lighting systems step by step using an electrical diagram.
- To test the lighting system and take simple measurements on it.
- To carry out a V4 measurement for diagnostic work.
- To carry out a current measurement on the lighting system.
- To predict measured values.
- To analyse measured values.
- Guided fault finding.
- Finding a failure on the basis of a complaint description and work order (12x).

**Includes 24 learning modules for a total of 25.5 hours of instruction.**