

Product Name :
Vehicle Displays Principles Systems Trainer**Product Code :**
AutomobileLab0004**Description :**

Vehicle Displays Principles Systems Trainer

Technical Specification :

This trainer should be designed to teach students principles of Vehicle Display System and warning systems through comprehensive practical activities. The activities include instrument cluster, fuel system warning system, engine sensor warning system, automotive lighting instrumentation, passenger safety warning system, ABS failure warning system and engine failure warning system.

The trainer is neatly laid out to represent the typical layout of automobile with sensors and switches and a visual representation of vehicle dashboard system. The unit contains a circuit board with electrical components, system diagrams, power supply, electrical test leads, and student experiment manual presented in hard copy and pdf format. PCB's should be made from fiberglass, coated with epoxy to prevent corrosion and suitable for harsh environments. Labeled components with powder coated base.

The experiment exercises start with relevant theory of vehicle display and warning systems and proceed to practical activities using the circuit board and multi-meter for measurement and troubleshooting. Manual provided, must clearly show the following educational Objectives are met.

Circuit board features:

On-board graphic representation of a car showing : Seat-belt switch, Door switches, Impact sensor, Fuel level sensor, Speed sensor, SRS sensor, ultrasonic parking sensor, Coolant temperature sensor, Throttle Position Sensor, Accelerator, Brake switch, Parking switch, Headlight switch, Ignition switch, CAM sensor and CRANK sensor.

Instrument Cluster showing: Average speed, Average economy, Distance to empty, Time lapse, Oil pressure, Fuel level, Engine RPM counter, ABS warning light, Engine service light, SRS warning light, parking light, brake light, head light indicator, and turn light indicators.

Accessories:

Experiment manual.

Power cord.

Include Additional Items:

Computer Aided Instruction software which should be compatible with Class Room Management System. The CAI contains theory, presentation, workshop job-sheet and student activities with assessment questions.

Digital Multimeter

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