

This eTraining Package for the Autotronics laboratory represents, together with the hardware of the laboratory, the newest and most advanced solution for the study of the systems and of the electronic components of a motor vehicle.

This laboratory has been designed starting from the consideration that it is not possible to face the study of the autotronics by using the traditional educational equipment that contains real components of a car.

The very rapid technological development, the high complexity of the circuits, the specific techniques of each manufacturer, the integration of the functions in single integrated circuits make this approach no more acceptable.

The answer to this new reality is only: Simulators + eTraining Packages.

Educational Simulators to simulate the complex reality of real systems.

The Autotronics laboratory is composed of a series of Simulators covering the study of the operation of all the main electrical/electronic systems and components of a car. Through the simulators it is possible to study in detail the components, the devices and the circuits in a basic way, therefore without being tied to a specific construction peculiarity of the different manufacturers.

It is possible to operate, in troubleshooting, on any interesting part, without problems of accessibility to the part.

All these operations are guided by the relevant software that controls the simulator and 'enlivens' the devices as if you were working on real devices.

eTraining Packages for supporting all the study and experimentation phases.

That is, the Internet technologies (hypertexts, multimedia, etc.) for training, as tools for complementing the traditional educational technologies.

All the study and laboratory activities are performed under control of these softwares that guide the students in the optimum learning path and are also a great help for the professor in his teaching activity.

In troubleshooting, for example, the Training Software automatically inserts the faults in the simulator, asks questions to the student to find the consequences of the fault and its position, controls and checks whether the answers are correct.

The subjects that are analysed in this laboratory are the following:

- Air conditioning for automobiles
- Engine starting
- Electric circuits
- Engine operation
- Sensors and controls

- Emission control system
- Electric power subsystem
- Electric components
- Electric components of big vehicles
- Big vehicles starting subsystem
- Hydraulic brakes
- Electronic fuel injection
- Ignition systems
- ABS braking system
- Diesel engine management
- Common rail direct injection system for diesel engines
- Safety devices in motor vehicles



Required PC configuration:

- Operating system: Windows 95/98/Me/NT-4/2000
- Parallel Port for connecting to the Simulators DLAMxx
- CD-ROM driver

