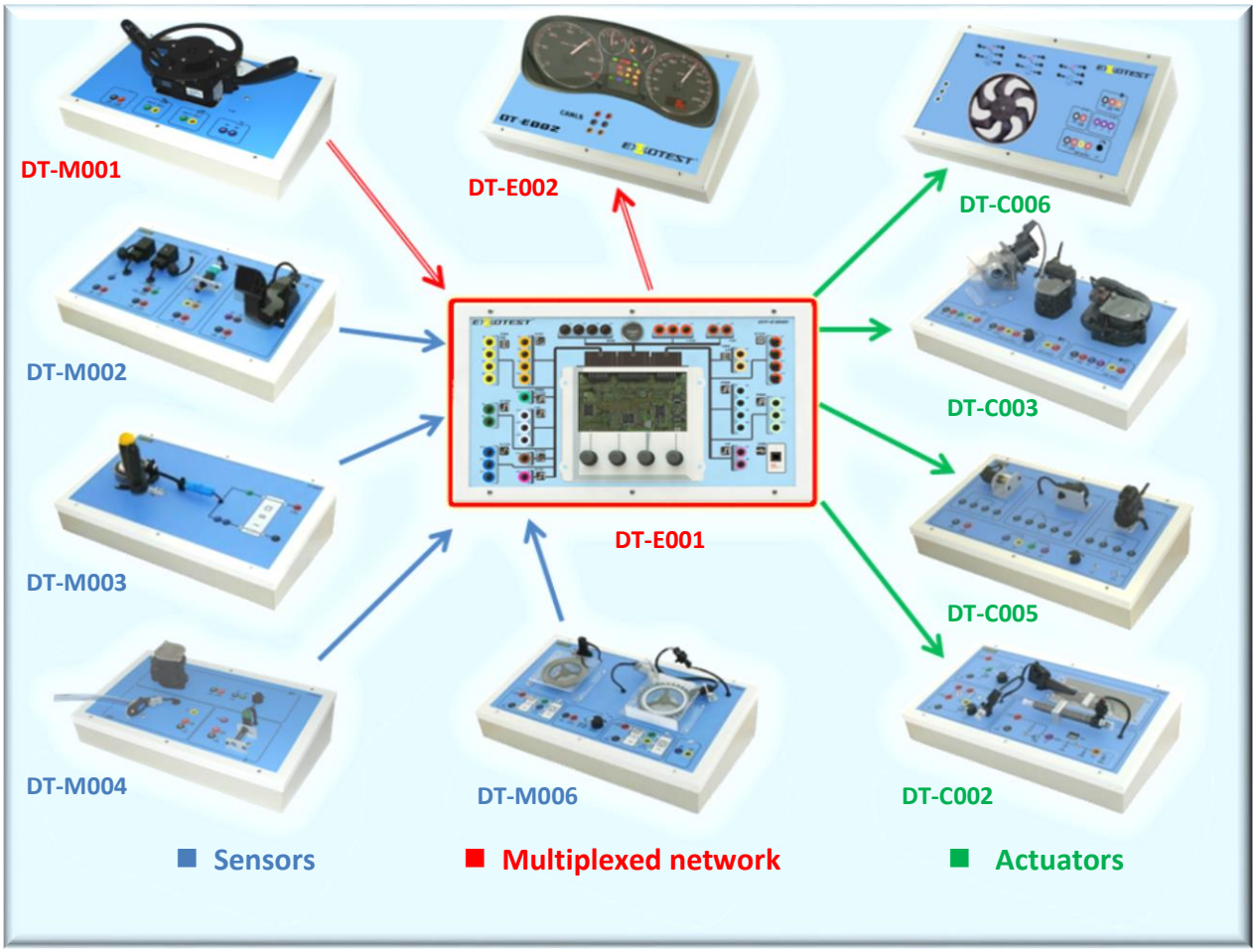
The EXEXXOTESTXOTEST® DT-E001 model is a teaching support that intended for studding of information processing as it is realized in the car's Electronic Control Unit. This model highlights the different types of order requests and strategies.

OBJECTIVES

- Recreating an information chain (control loop)
- Analyzing signals send by the sensors and understanding theirs conversion and digital processing.
- Studding ECUs information exchange and Multiplexage using (Binary – Hexadecimal conversion).
- Controlling the different types of actuators
- Studding of circuit's electrical diagrams
- Understand the diagnostic of systems using these sensors.

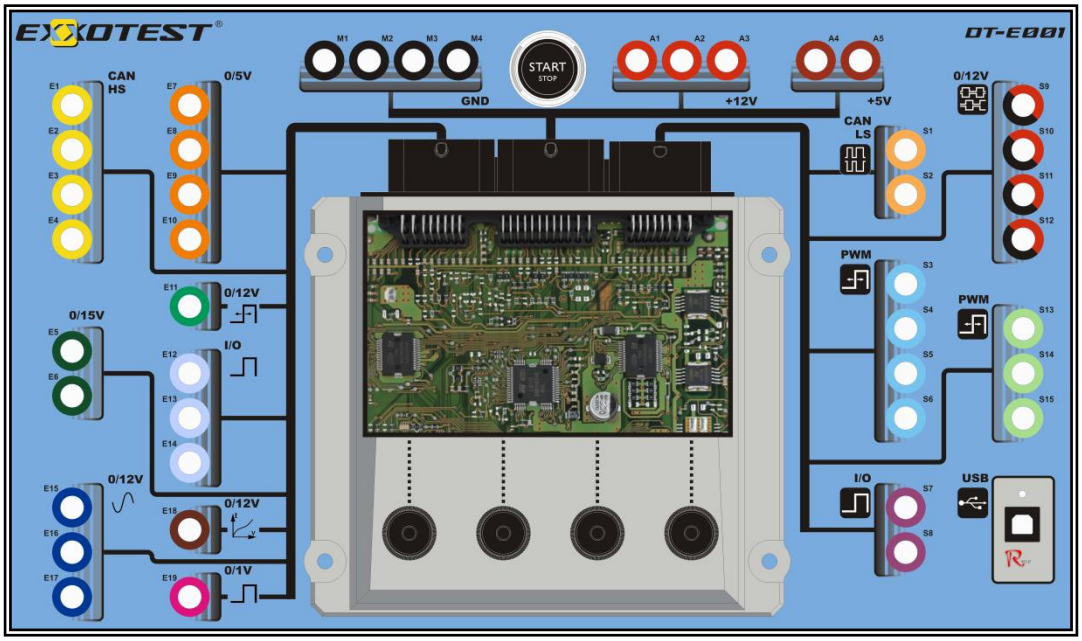
APPLICATION

You can use the DT-E001 alone and / or with the range of sensors and actuators modules DT-xxxx:



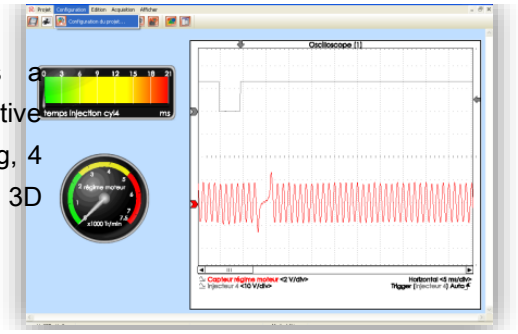
All sensors and actuators are wired and powered by the student.

DESIGN



Socket's number	Outputs	Signals	Socket's number	Outputs	Signals
A1	Model power	12 V, 10 A	A2 A3	Other models power	12 V, 10 A
M1		0 V	A4 A5	Other models power	5 V
E1	DT-M001 « Driving wheel », CAN HS	Can H	M2 M3 M4	Other models power	0 V
E2		Can L	S1	CAN LS to control desk model (DT-E002)	Can H
E3	DT-M001 « Driving wheel », CAN LS	Can H	S2		Can L
E4		Can L	S3	To DT-C003 : EGR	PWM 0 – 12 V
E5	DT-M001 Analog signal S1	Square-wave signal : 0 – 15 V	S4	To DT-C003 : Air distributor	PWM 0 – 12 V
E6	DT-M001 Analog signal S2	Square-wave signal: 0 – 15 V	S5	To DT-C003 : Motorized butterfly valves	PWM 0 – 12 V
E7	DT-M002 Accelerator control	Variable tension: 0 – 5 V	S6	To DT-C006 : GMV	PWM 0 – 12 V
E8	DT-M002 Accelerator control	Variable tension: 0 – 5 V	S7	To DT-C006 : speed 1 GMV	Control line ground
E9	DT-M002 Analog body height signal S1	Variable tension: 0 – 5V	S8	To DT-C006 : speed 2 GMV	Control line ground
E10	Analog signal	Variable tension: 0 – 5V	S9	To DT-C005 : +/- step-to-step motor	0V or 12V
E11	DT-M002 Analog body height signal S2	PWM 0 – 12 V with identifier	S10		
E12	DT-M002 Position sensor (front or rear)	0 or 12 V	S11		
E13	DT-M002 Brake pedal signal	0 or 12 V	S12		
E14	DT-M002 Brake pedal signal	0 or 12 V	S13	To DT-C002 : Ignition control	Control line ground
E15	DT-M006 Position and RMP signal	Square-wave signal: 0 – 12 V			
E16		Sinusoidal inductive signal, channel 1	S14	To DT-C002 : Petrol injection control	Control line ground
E17		Sinusoidal inductive signal, channel 2			
E18	DT-M004 Air masse signal	Square-wave signal, variable frequency: 0 – 12 V	S15	To DT-C002 : Diesel injection control	Control tension: 100 V
E19	DT-M003 Wheel's speed signal	Square-wave signal, variable frequency: 0 – 1 V			

ACCESSORIES



This module may be also associated to REFLET® that is a measurements logging system specifically designed for automotive applications. It allows real-time playback and recording, curves tracing, 4 channels Oscilloscope and more. REFLET® also provides a 3D instruments interface and dynamic visualization of 3D objects.

OTHER

- Delivered with:
  - use and teaching instruction book,
  - banana plug cable assemblies according to the module needs,
  - ALF1210 –12V / 1 Amp stabilised alimentation.
- Power supply: 220/110Vac – 50/60Hz.
- Size: 630 X 420 X 420 mm (transportation box).
- Gross weight : 15 Kg (ready to ship).
- Net weight: 12 Kg.

Tel : +33 (0)4 50 02 34 34 - Fax : +33 (0)4 50 68 58 93 - E-mail : courrier@exxotest.com