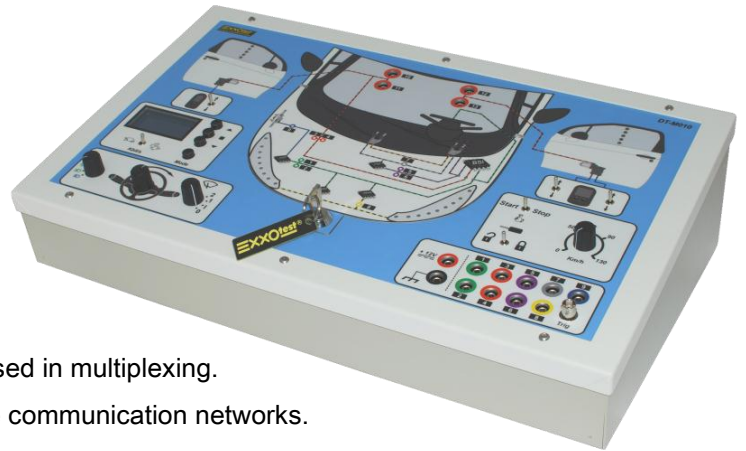The **EXXOTEST**® **DT-M010 model is a teaching support that allows observation and understanding of the multiplexed communication networks functioning.**

OBJECTIVES

- Identify the multiplexed communication network used by simulated sensors and study CAN High Speed – CAN Low Speed - LIN communication protocols.
- Diagnose communication networks.
- Understanding the different network technologies used in multiplexing.
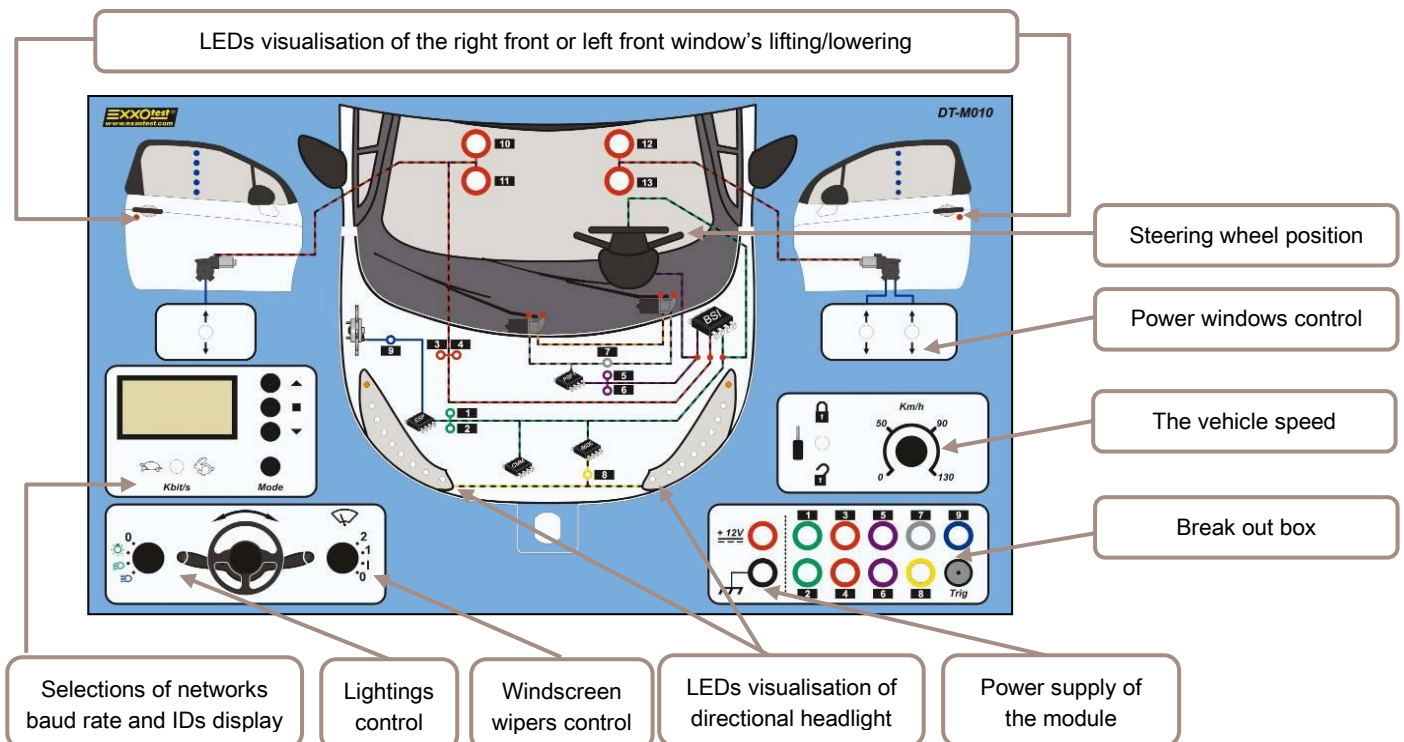- Analyze the nature of information exchanged on the communication networks.

DESIGN

The teaching module is equipped with an integrated "break-out" box accessible by the teacher through a locked compartment. Every multiplexed communication networks are associated to a fuse and accessible on this "break-out" box placed on the front panel.

The **EXXOTEST**® DT-M010 consists of:

- Windows electrical motors;
- Windscreen wipers;
- Direction headlight.

The real analogue signals from steering angle sensor, windscreen wipers control, and wheel speed sensors can be measured through the sockets.

LEDs visualisation of the right front or left front window's lifting/lowering

Steering wheel position

Power windows control

The vehicle speed

Break out box

Selections of networks baud rate and IDs display

Lightings control

Windscreen wipers control

LEDs visualisation of directional headlight

Power supply of the module

The five communication networks to be accessed:

- 1 CAN High Speed "Inter-system", 500 Kbits/s;
- 1 CAN Low Speed "Body", 125 Kbits/s;
- 1 CAN Low Speed "Comfort", 125 Kbits/s;
- 1 LIN "Windscreen wipers", 19200 bits/s
- 1 LIN "Directional headlights", 19200 bits/s

Network	Real mode	Slow mode
CAN High Speed "Inter-system"	500 Kbits/s	12 Kbits/s
CAN Low Speed	125 Kbits/s	
LIN	19,2 Kbits/s	2,44 Kbits/s

The networks baud rate can be adjusted from "real" to "idle" (this adapting to all scopes having a band with mode or slow mode (adapted to any oscilloscope having a bandwidth exceeding 10 MHz) for frames visualization and decoding.

ACCESSORIES

This module may be associated with the USB-MUX-4C4L that allows interfacing between PC type computer (or Pocket PC) and communication networks as CAN HS, LS/FT, Single Wire and LIN/ISO9141 through a USB or Ethernet link.

Channels available:

- 4 CAN high speed channels (ISO 11898) standard or CAN low speed – fault tolerant or CAN single wire to be configured by software.
- 4 LIN master or slave channels or ISO9141 (K) to be configured by software.
- 12 analog or digital 0-32V inputs.
- 4 ISO9141 (L) or digital outputs, 6 digital/PWM outputs.

OTHER

- Delivered with:
  - use and teaching instruction book,
  - banana plug cable assemblies according to the module needs,
  - 12V and / or 5V power supply according to the module's needs,
  - AL841B – the 12V 1 A stabilised alimentation.
- Power supply: 220/110Vac – 50/60Hz.
- Size: 600 X 400 X 300 mm (transportation box).
- Gross weight :   6,5 Kg (ready to ship).
- Net weight: 5,5 Kg.

Find all *EXXOTEST*® products on the Internet: www.exxotest.com