



DMO-850 D-SCOPE 2

USB/WIRELESS AUTOMOTIVE SCOPE

MODULAR STRUCTURE

BATTERY POWER SUPPLY

WIRELESS CONNECTION



DMO-850 and D-SCOPE 2

are automotive scopes, equipped with a USB.2.0 interface for the PC connection, that may consent the analysis of all types of electrical and electronic signals present on board of the vehicle. **D-SCOPE 2** version, the best in its range, is also equipped with an integrated Bluetooth® module.

The modular structure of **DMO-850** and **D-SCOPE 2** enables the use of different measuring modules special to their typology of function in the same central unit. The 2 channel lab-module is supplied with the basic configuration, and its performances enable the analysis of fast signals such as **CAN BUS**, within a voltage range that goes from $\pm 100\text{mV}$ to $\pm 50\text{V}$.

The central unit is equipped with an internal memory in which to register minutes of acquisition.

The rich supply of accessories and optional measuring modules enables car mechanics building themselves an optimal configuration based on their own needs.

WAVE.net

The powerful software **WAVE.net**, supplied as part of this new scope line, enables the exploitation to the utmost of the instrument's capabilities, by integrating the classic **LAB-SCOPE** functions but with additional **DMM** and **DATA LOGGER** functions. Applicative is supplied with online helps that makes the learning of all available functions extremely simple. The automatic update via web enables operating with the last available version of **WAVE.net**.

LAB-SCOPE. The powerful graphic interface performed for the **LAB-SCOPE** function places at the user's disposal a series of standard functions (channel coupling configurations; selection of probe attenuation factor per channel, antistatic filter; wave-shape measuring rulers and cursors) that render the device extremely flexible for all kinds of diagnosis or for simple signal measurements.

DMM. Multimeter functions which are used together with **LAB-MODULE**, to measure voltage, electric resistance, current (with optional amperometric clamps) and diode tests.

PC DATA LOGGER. It enables recording in the **PC** the signals displayed during the functioning of the device; recordings shall be filed in a proper database and viewed subsequently.

STAND ALONE DATA LOGGER. An exclusive **WAVE.net** function, it enables the operator to memorise 2 measurement setups directly inside the scope (F1 and F2) and to use the device in the absence of connection to the PC, for the acquisition of signals. The recording **START/STOP** buttons are commanded by simply pressing the corresponding buttons F1 and F2 present on the device. By subsequently connecting the device to the PC, using the **WAVE.net** software the operator shall be able to download the recordings performed for their visualization, analysis and filing.

Technical Features

DMO-850 / D-SCOPE 2 with **LAB-MODULE**

Vertical Resolution: 12 Bits
Number of Channels: 2 channels with a "common ground" BNC connector
Input impedance: 1M Ω
Buffer memory: 512K
Memory Data Logger: internal microSD (256 MB min)
Sampling Frequency: 6MSPS
Analogical input passband: 0/3MHz
Voltage Precision DC: $\pm 1\%$
Scale (Volt): from $\pm 100\text{mV}$ to $\pm 50\text{V}$
Input overvoltage protection: $\pm 100\text{V}$
Time/Div.: from 1 μs to 50s
Trigger: internal programmable on Ch 1 or Ch 2 in Automatic, Normal or Single mode

Multimeter functions (DMM-CH1):
AUTORANGE DC/AC Voltmeter with a capacity of until $\pm 50\text{V}$;
AUTORANGE Ohmmeter with a capacity of until 1M Ω ;
diode test with a trial voltage of 2VDCmax

PC Data Logger function to record Ch1 and Ch2 signals in the PC
Stand-alone Data Logger function for the measurement setup configuration of buttons F1 and F2
Communication interface: Optoisolated and/or BLUETOOTH $\text{\textcircled{R}}$ V2.0 USB (only for **D-SCOPE 2**)
Power supply:
2,2Ah Internal rechargeable Li-Ion battery with autonomy of >8 hours
External charger supplied

System Minimum requirements for WAVE.net

Windows $\text{\textcircled{R}}$ XP or higher
Processor: Celeron 1MHz or higher
Hard Disk: 100 MB free
Monitor: 16 bit colour depth; minimum resolution 800x600
Internet connection: recommended for automatic update

Standard sale configuration

> DMO / D-SCOPE 2 central unit, with integrated Li-Ion battery pack
Measurement LAB-MODULE
Power supply 15VDC @18W for the battery charger
2 scope probes
Multimeter cable
Attenuator module 10:1
Accessories (crocodile clips and perforation rods)
Instructions manual
WAVE.net Installation CD
Case

Optionals:

DMO DataBank - Data bank with wave-shape samples and motor vehicle electric schemes
Motor tester module 6 Ch to measure high voltage and analyse ignition systems
AC/DC Amperometric clamps CC-60 for measurements until 60A CC-600 for measurements until 600A