

FOR TEC

APT AUTOMOTIVE PROFESSIONAL TECHNOLOGIES



WHERE AUTO-DIAGNOSTICS
ENDS...

MAXIMUM TEST

POWERED BY **microtronics**
Professional Instruments

www.microtronics.it

ACTIVATIONS
MEASUREMENTS
SIMULATIONS

MULTI-FUNCTION INSTRUMENT FOR THE CAR REPAIR MECHANIC



MAXIMUM TEST

From the long-standing experience of qualified technical engineers in the automotive sector, who know only too well the needs of modern car repair shops, comes **Maximum Test**, the new digital tester for **operation tests** on electromechanical parts of cars. Where auto-diagnostics ends, it is essential to get to the root of the problem causing the error code, and this is possible thanks to **Maximum Test**: the analysis of continuous and pulse signals (pwm) is much simpler than with the traditional oscilloscope and **control of the electromechanical components** enables immediate checks on operation.

Maximum Test is a multifunctional device that is extremely simple to use, as it **changes its function according to wiring attached**. Thanks to its versatility and complete expandability, **it is like having a set of tools all in one**.

With the innovative system of smart wiring, to add a new function to **Maximum Test** that wasn't there before, you simply need to update the instrument firmware and connect the new cable to it! **The development of new updates and applications is continuous**, to keep up to speed with modern automotive technologies.



ACTIVATIONS

ACTIVATION OF ELECTROMECHANICAL ACTUATORS

EGR valves, throttle bodies, pressure regulators, HPV valves, IMV valves, pneumatic actuators, etc. with selection of the duty-cycle and activation frequency.

INJECTOR ACTIVATION

Petrol, LPG and CNG, diesel coil and piezoelectric ignition, with the option of modifying the frequency of activation and injection time.

SPARK PLUG TEST

Operation test on spark plugs of all nominal voltages, even without disassembly from the engine

MEASUREMENTS

ENGINE MASS TEST

Measurement of engine mass potential with automatic display of test results.

INDUCTIVE SENSOR

Test on activation of power components via electromagnetic sensor without electrical contact, with pulse readings in real time.

MULTIMETER FOR CONTINUOUS VOLTAGE AND PWM SIGNALS

Measurement of maximum and minimum voltages, frequency and duty-cycle of input signal. This includes a function to read minimum voltage of the battery during start-up.

SIMULATIONS

DC VOLTAGE GENERATOR

Simulation of output of analogue signals with integrated electronics.

PWM SIGNAL GENERATOR

Simulation of electronic sensors with modulated PWM output.

VARIABLE RESISTANCE SIMULATOR

Simulation of resistive sensor output.



TECHNICAL SPECIFICATIONS OF WIRING AND FUNCTIONS CURRENTLY AVAILABLE:

DC and PWM multimeter: max. and min. voltages from 0.0 to 100.0V; frequency from 0 to 20KHz; duty cycle from 1 to 99%

DC Generator: from 0.0 to 12.0Vdc; internal resistance=250ohm

Variable resistance simulation: 220ohm-25Kohm with steps of approx. 200ohm

Spark plug test: nominal voltage adjustable from 3.3 to 12V; max. current 20A; ignition time adjustable from 5 to 20sec.; display of current absorption and filament resistance in real time.

Pwm signal: signal amplitude from 0 to 12V; frequency from 1Hz to 15KHz; duty cycle from 1 to 99%

Pwm power with activation of negative pwm: batt. voltage (12V nom.); frequency from 1Hz to 1000Hz; duty-cycle from 1 to 99%; max. current 10A

Activation of electromechanical injectors: with negative activation, frequency and injection time variable according to the type of fuel (petrol, diesel, gas).

Activation of piezoelectric injectors: nominal voltage at 120V and variable frequency.

Electromagnetic sensor: inductive detection of pulses/sec on power drives

Engine mass test: display of voltage readings and test results

MAXIMUMTEST TECHNICAL SPECIFICATIONS:

2-line alphanumerical display

Multi-function knob with digital encoder

USB port for connection to PC (update of FW and application programs)

Power supply voltage: 9-15Vdc directly from battery

Protection against inversion and voltage surges

Protection against current overload via external fuses

Maximum current: 20A

Riccardo Gaggini ☎ +39.328.7926957

Fiorenzo Tirota ☎ +39.328.7928624



APT AUTOMOTIVE PROFESSIONAL TECHNOLOGIES

www.fortecsrls.it