

Multi-Diag Scope

The assembly is designed to connect to a PC personal computer (PC not included)

- Two channel Oscilloscope and Multimeter
- Record Analyzer
- System includes:
 - Multi-Diag Scope interface
 - Multi-Diag Scope Cables (Cables and case)
 - Multi-Diag Scope software
 - Host computer (PC) is not included in the set
- Multi-Diag Scope is a part of a modular system Multi-Diag



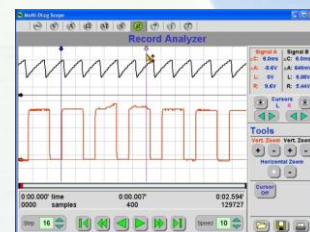
Host computer requirements:

- Windows 2000 / XP / VISTA / 7
- Processor: Intel Pentium 400 MHz compatible and faster
- VGA 800x600/16bits
- RAM 512 MB, CD ROM drive
- Free RS 232 or USB port

Handy 2 Plus

Record Analyzer

- Allows recording of measured waveforms
- The maximum length of recording depends on the selected time base, it ranges from:
 - minimum: 1ms/div record length: 8 sec. (1 channel)
..... 4 sec. (2 channels)
 - maximum: 2,5 s/div record length: 5,5 h. (1 channel)
..... about 2,5 hours (2 channels)
- When the time base is below 1 ms/div "copies of screen" are captured instead and stored as a chain of pictures
- The recorded waveforms can be displayed in an animated form or statically with comfortable navigation
- It is possible to control channel sensitivities, time base, zero base levels and other parameters
- The records can be saved to disk and reloaded at any time later and all waveforms can be printed out



Technical parameters

• Oscilloscope

Parameter	Value
Sample Rate - one channels	10 MSPS
Sample Rate - two channels	10 MSPS
Bandwidth	min. 600kHz (-3 dB)
Vertical Resolution	min. 8 bits
Input Impedance	2x1 MOhm
Input Sensitivity	50 mV ... 50 V/Div
Separation of inputs	Differential inputs
Time Base - one channel	5 µs ... 2,5 s/Div **
Time Base - two channels	5 µs ... 2,5 s/Div **
Displayed samples	50/Div *
Record Length	1024 samples ***
Trigger Position in Records	0 ... 90 %
Trigger Mode	Auto / Trig / Single
Duty cycle	1...99 %
Frequency	1...10000 Hz

Parameter	Value
Trigger Source	Chan. A or B
Trigger Level	in range of screen
Graticule	10x10 Div
Save of signals	Yes
Automatic setting	Yes
Cursor measurement	Yes

* Time base > 2,5 µs/Div
** For ZOOM 5x = 1 µs/Div

*** Depending on the selected time base is possible in several modes save the scanned time slope into the memory as a files (see User manual)

• Multimetre

Parameter	Sensor Type	Range	Resolution	Accuracy	Notes
DC Voltmeter	Probe A / B (Oscilloscope) (part of the oscilloscope)	0 ... 2 V	1 mV	±1,5% of MV	±5 mV
		2 ... 20 V	10 mV	±1,5% of MV	±20 mV
		20 ... 400 V	0,1 V	±1,5% of MV	±0,2 V
AC Voltmeter	Probe A / B (Oscilloscope) (part of the oscilloscope)	0 ... 2 V	1 mV	±2% of MV	±5 mV
		2 ... 20 V	10 mV	±2% of MV	±20 mV
		20 ... 400 V	0,1 V	±2% of MV	±0,2 V
DC Amperemeter (current probe)	Current probe 5/50A - AT114 3016	0 ... 5 A	0,01 A	±1,5% of MV	±0,005 A
	Current probe 500A - AT114 3015	0 ... 50 A	0,1 A	±4% of MV	±0,2 A
AC Amperemeter (current probe)	Current probe 5/50A - AT114 3016	0 ... 5 A	0,01 A	±2% of MV	±0,005 A
	Current probe 500A - AT114 3015	0 ... 35 A	0,1 A	±8% of MV	±0,2 A
High voltage Voltmeter	HV probe N - AT111 4018 HV probe C1 - AT111 4017	0 ... 25 kV	0,1 kV	±10% of MV	Measurements of the High Voltage reference cable AT111 4056
				±15% of MV	
				±20% of MV	
Ohmmeter	HV probe C1 - AT111 4017			±30% of MV	Measurement of the commonly used high-voltage cables
				±2% of MV	

MV - measured value

Current probe (option)

New Current Probes (5/50A and 500A) with reset right on the current probe

Current probe 5/50A AT114 3016



Current probe 500A AT114 3015



High-Voltage probe (option)

HV probe N AT111 4018 with reference cable



HV probe C1 AT111 4017 with reference cable



Touch HV sensor AT 111 3016 (option)

The HV touch sensor serves for the informative detection of HV courses on the ignition systems, in particular on such systems where **are not the ignition cables**

The sensor does not detect absolute values of flashover voltage, but only provides values to compare the functioning of individual ignition modules

The sensor is attachable to the oscilloscope and also to the motortester, or minitester

To access the measuring points more easily, a flexible adaptation (turning) of the sensor end is available according to operator's immediate requirements.



Universal interconnection kit AT535 5001 (option)



Kit includes 73 pieces adapters for various uses

To find a fault in an electronic system, we often need to perform some measurements on related circuit, which may be difficult to access on the new vehicle models. Piercing of wire insulation is not allowed, so it is necessary to use other way of connection.

The Universal interconnection kit, which allows to establish such connections, is a suitable accessory for Multi-Diag Scope.

The set includes several adapters allowing connecting an Multi-Diag Scope to the measured element or cabling connector. The measured element can be disconnected from or connected to the circuit, and the measurement may be performed during its functioning, i.e. for example during a driving test.