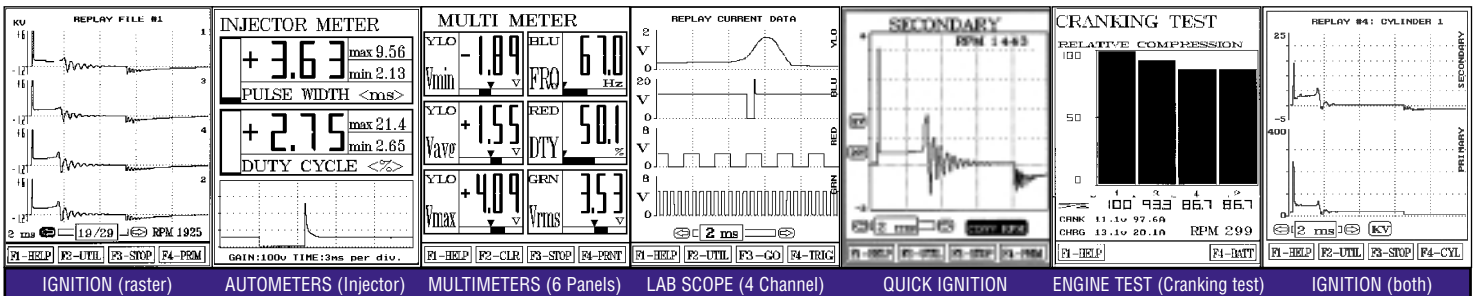


Personal Diagnostic Assistant Data Sheet

ENGINE/IGNITION ANALYZER WITH 4 CHANNEL SCOPE



PRODUCT KIT CONTENTS: PDA2100A, PDA main unit, ignition module, scope module PDA2100A software on PCMCIA card (4) color coded lab scope leads, PDAMACP milliamp probe, black ground lead, oxygen sensor probe, PDA2100A sync lead, PDA2100A secondary lead, EI (DIS) lead set, GM HEI secondary lead, amp probe, 4-pc backprobe kit, serial to parallel printer adapter, 12V isolated car battery adapter, A/C wall adapter/charger, PDA2100A user's manual, protective padded pouch, PDA2100A video and plastic blow molded storage case.

General System Features

- New** Complete hand held automotive diagnostic system PC compatible system with an improved high speed CPU
- Portable system, can be used on the road
- Simple, clearly marked, user friendly keypad; directional keys, enter/exit keys and 4 function keys
- Modular design enables user to add modules for added functionality and versatility
- New** Built-in, screen context sensitive HELP function Includes a WAVEFORM LIBRARY with up to 50 waveforms (good and bad)
- Field upgradeable software and hardware

General Function Features

LAB SCOPE

- Four channel Digital Storage Oscilloscope (DSO)
- Displays up to 4 different waveforms at a time
- AUTO scope setup
- Store and replay up to 8 waveform files (up to 50 screens in each file)
- User configurable probe menu for use with almost any type of third party probe

MULTIMETER

- Four channel digital multimeter
- Displays digital values for up to 4 signals at a time
- Digital displays up to 6 panels at a time
- User configurable probe menu for use with almost any type probe

AUTO METER

- Preconfigured meter, giving the user all necessary data for
- INJECTOR
- O2 sensor
- MAP/MAF ANALOG
- MAP/MAF DIGITAL
- TPS
- New** Glitch Capture Meter (captures a 250 microsecond glitch)

IGNITION SCOPE

- 5 MHz analog peak detect circuit to capture all max. spark signals
- Full DIS/Conventional ignition system waveform display capabilities (raster, parade and single cylinder) Shows primary or secondary waveform patterns for up to 8 cylinders a time

- Shows primary and secondary ignition waveforms on the same screen ("BOTH" mode)
- Shows DIS power and waste ignition waveforms for up to 8 cylinders at a time
- Shows DIS both power and waste on the same screen ("BOTH" mode)
- Extensive vehicle database

HISTOGRAMS

View primary or secondary up to 8 cylinders at a time

SINGLE CYLINDER TEST

Digital KV meter (polarity, min., max. and live KV)

ENGINE TESTS

- DIODE TEST (Alternator test)
- CYLINDER EFFICIENCY TEST (Cylinder Contribution test for computer controlled engines)
- New** Non intrusive DIS cylinder efficiency test, unique cylinder analysis capability
- CRANKING TEST (Relative compression and charging systems test for both conventional and DIS systems)
- POWER CHECK (Power balance test for non computer controlled engines)

Data Sheet

General Function Features (continued)

BARGRAPHS

- Spark KV/V bargraph (secondary or primary)
- Spark KV bargraph (DIS power or waste)
- Burn KV bargraph
- Burn time bargraph
- Dwell bargraph (percentage or degrees)

QUICK IGNITION

- Shows primary/secondary and DIS power/waste ignition waveform patterns
- Displays every ignition cycle on screen
- Stores and retrieves up to 8 ignition waveform files (up to 50 screens for each file)
- Digital ignition meter showing: polarity, min., max. and live KV

Cursor Functions

- Full cursor functions in Lab Scope, Ignition Scope and Quick Ignition
- Displays two measurement points and the difference between them
- Choice of 3 different cursor measurements
 - Volt difference
 - Time difference
 - Frequency (Hz)

Power Features

- Operates from 3 different power sources:
 - Vehicle battery, using the vehicle battery adapter
 - 6 AA rechargeable NiMH internal battery pack (up to 4 HRS. on a full charge)
 - A/C charger/converter
- Power Management, power saver feature
- Low battery indicator
- Rechargeable while in use
- Rechargeable with A/C adapter or vehicle battery adapter
- Fast charge in 1 hour

Printing

- Print any display screen
- Serial port links to any EPSON or HP graphics compatible printer

New Expanded printer support with full handshake implementation

Physical Dimensions (with module)

- Length: 10"/25 cm
- Width: 4.75"/11.87cm (max)
- Depth: 1.6"/4 cm (max)
- Weight: 2.2 lbs./1 kg

Environmental Operating Specifications

- Operating temp. 0°C to 45°C (humidity 20% to 85%)
- Storage temp: -5°C to 50°C (humidity 20% to 85%)
- Dust water and grease resistant
- Rubber bumpers and shock resistant

System Specifications

- Removable memory card (PCMCIA type II)
- Total of 24 save and replay files (up to 50 screens for each file)
- Total of 20 report screens available to save and print
- Total of 1220 screens (including replay files and reports)
- Time and date setup
- Shop information setup
- Power management
 - Power on time
 - Backlight on time
 - Sampling on time

Display Information And Screen Refresh Rate

- High resolution LCD super twist display: 256 X 320 pixels
- New** New and improved cold cathode fluorescent backlighting with on/off control, usable in total darkness
- Contrast control keys
- Screen refresh rate:
 - Lab scope : - @ 25 micro sec./div. = 10/sec.
@ 10 sec./div. = 1/min.
 - Multimeters : - Bar Graphs = 4/sec., digital = 3/sec.
 - Autometers : - Injector (scope) = 3/sec.
O2 = continuous
- New** MAP/MAF analog = continuous
Glitch capture - to 250 microseconds
MAP/MAF digital = 3/sec.
TPS = continuous
- Ignition Scope : - Below 1700 RPM = every third ignition cycle (example: 700 RPM = 2.5/sec.)
- Quick Ignition : - Below 1700 RPM = every ignition cycle (no RPM displayed)
- Above 1700 RPM = every other ignition cycle (no RPM displayed)
- Example: 700 RPM 5/sec. (with no RPM displayed)

Test Specifications

LAB SCOPE

- Sampling rate: 2.0 M/Samples per second
- Band width: 5MHz
- Sweep rate: 25 Micro Sec./div. to 10 sec./div.
- Voltage range: 125 mV/div. to 50 V/div.
- Accuracy: 0.5%
- Time base: 25 Microsec/Div. to 10 sec./div.
- Trigger with autosec capability

MULTIMETER

- Sampling rate: 2M samples per second for one channel
- Band width: 5MHz
- Sweep rate: 0.5 ms/div. to 10 sec./div.
- Min. 0.5% accuracy
- Max. 0.5% accuracy
- Avg. 0.5% accuracy
- RMS 0.5% accuracy
- Frequency (4Hz to 50 KHz)

IGNITION

- RPM range: 100 to 9999 RPM
- Primary voltage: 0 to 750 V
- Secondary display ranges
 - 9KV to 45KV
 - New** -7KV to 35KV
 - 5KV to 25KV
 - New** -3KV to 15KV
 - 1.2KV to 6KV
- Time base: 1.0 ms/div. to 10 ms/div.
- Burn time 0 to 10 ms (0.1 ms resolution)
- Dwell range:
 - Degrees, 0° to 360°, 1° resolution
 - Percent: 0 to 100%, 1% resolution

Additional Features Available

- ECVu - the ECM analyzer
- Portable 4-gas / 5-gas Emissions Analyzer
- Spanish, French, Italian, German, Dutch language software also available
- PC-Link; PDA2100A to PC real-time communication kit
- Milliamp probe
- OBD-II Scanner