#### Lab Scope and DVOM Standard Accessories

- 4-lead set
- · Channels 1 and 2 are shielded
- Secondary probe
- RPM probe

#### MODIS™ System Optional Accessories

ran rillers (5 pack)	EARU203DUZA
Auxiliary Battery Pack	EAK0253B05A
Additional Battery Pack Charger	EAA0273B06A1
Low Amps Probe	EETA111A
Soft Carry Case	2 - 01965A 02
SIA 2000	EAK0242E14A

#### Lab Scope/DVOM Module Optional Accessories

Expanded Labscope and DVOM capabilities with these optional probes. DC Current amps, pressure, vacuum, secondary ignition, coil on plug and distributorless ignition systems

Ignition Coil Adapters

Stick	EAC0056L03A
Single Flag	EAC0056L00A
Two Flag	EAC0056L01A
Three Flag	EAC0056L02A
Split Lead Adapter	FFMS301A05

100 PSI Pressure /

EEPV302AL Vacuum Transducer w/cable • 500 Pressure Transducer w/cable EEPV302AT • 5000 Pressure Transducer w/cable EEPV302AH EAX0024B30A Transducer Extension Cable

#### **Specifications**

Lab Scope

Function	Range	Accuracy/Comments
Channels	1 - 4	Common Ground
Sample Rate	6.0 Mega samples per second	Simultaneous Across 4 Channels @ 1.5 MS/
		per Channel
Bandwidth	V dc - 3 Mhz	3 dB point @ MHz
Input Impedance	10 MOhm @ V dc	All channels
	5.8 kOhm @ 3 MHz	
VDC (Full Scale)	100 / 50 / 20 / 10 /	
	5/2/1 V dc	
	500 / 200 / 100 m V	
V~ (Full Scale)	50 / 20 / 10 / 5 / 2 / 1 V dc	
Peak to Peak Voltage	500 / 200 / 100 mV	
RPM Measurement 0 - 10000 RPM		
Secondary Ignition	1 - 50 kV	Channels 1 and 2
DVOM		
Function	Range	Comments
Input Channels	3 & 4	Isolated Ground
Input Impedance	10 MOhm	
Glitch Capture	± 50 ms	
Resistance	40 / 4 MOhm	Auto Ranging
	400 / 40 / 4 kOhm	
	400 Ohm	
V dc/V ac	400 / 40 / 4 / 0.4	Auto Ranging
V ac in Peak to Peak	400 / 40 / 4 / 0.4	
Voltages		
Diode Test	2 Volt scale	



Nothing contained within this publication is intended to extend any warranty or representation, expressed or implied, regarding the products described herein. Any such warranties or other terms or condition of sale of products shall be in accordance with Snap-on/Sun Standard Terms and Conditions of Sale for such products, which are available on request. The manufacturer reserves the right to change or delete models and/or specifications without prior notice. Snap-on and SUN are registered trademarks.



# The Standard in Information and Diagnostic Systems

## MODES

# Modular Diagnostic Information System

This 1st MODIS™ upgrade for 2005 sees the addition of new software, information and functionality to assist the modern vehicle technician diagnose faster and with greater accuracy.

With the introduction of our 3 NEW Asian titles, Toyota, Honda and Nissan, MODIS™ now boasts 20 major manufacturer titles, covering over 5000 vehicle model and engine combinations. Add to this the powerful EOBD (European On-Board Diagnostic) software and our experienced based TroubleShooter™\* information, MODIS™ is the diagnostic tool for today and tomorrow.

## NEW Asian titles covering 2002 and 2003 year models

- Honda 16 model/engine combinations
- Toyota 23 model/engine combinations
- Nissan 18 model/engine combinations

Providing engine codes, data and functional tests, plus automatic transmission, ABS and Airbag codes.

### 11 ENHANCED major vehicle manufacturers titles covering up to 2003 and 2004 year models

- Alfa Romeo
- Lancia
- Opel/Vauxhall
- MG
- · VW
- SEAT

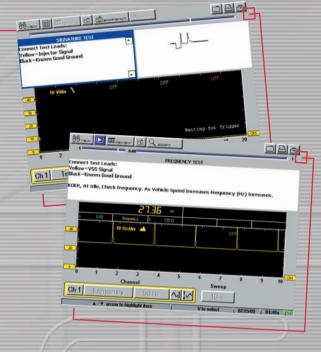
- Fiat
- Landrover/Range Rover
- Ford
- Rover
- Audi

cted languages only

Skoda

#### **EOBD European On-Board Diagnostics Expanded Features**

- Industry 1st Communications with the NEW Volvo V50 and S40 models
- · Rate based monitoring/in use performance tracking expanded visabilty of all EOBD tests



#### **New Feature**

 MODIS™ Component Test Meter (CTM) 46 individual key components, plus abbreviations and descriptions.

24 Pick-up digital

27 Solenoids

28 Switches

29 TDC AC Type

31 Pick-up AC Type

33 Pick-up digital type

30 TPS Linear

32 TPS Switch

34 VSS AC Type 35 TDC Digital Type

36 TDC Hall Effect

38 VSS Digital type 39 ABS WSS

40 Output haft AC

41 Output haft DIG

42 Turbine Shaft AC

43 Turbine Shaft DIG

44 Shift Solenoid

37 Themo-time Switch

25 Injector (-) Control

26 Injector (+) Control

1 Baro Sensor

2 Knock Sensor

3 EGR Solenoid 4 MC Solenoid

5 Cold Start Injector

6 Air Flow Meters

7 CKP AC Type

8 ECT Sensor

9 IAC 2-wire

10 CKP Digital Type

11 CKP (TDC) Hall Effect

12 CMP AC Type

13 CMP Digital Type

14 IAT Switch

15 IAT Themistor

16 ICM

17 EGR Position Sensor

18 ISC DC Motor

19 IAC Valves

20 MAP Analog

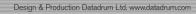
21 O2S Heater

22 O2S Zirconia

23 Pick-up AC

45 TCC Solenoid % 46 TCC Solenoid On/Off

flexibility, adaptability, profitability



#### **Standard Features**

- Colour, liquid crystal, full VGA backlit display 640 x 480
- Mouse style, multidirectional thumb pad navigation
- Infrared output for compatible wireless printers
- USB and serial ports for future expandability
- VGA output for remote display or projection interface
- · Two Compact Flash slots for regular software updates, storage, and wireless communication

#### Scanner<sup>™</sup> On-Board Diagnostics Features

- Enhanced coverage of multiple systems for 20 major automotive manufacturers
- · Includes code retrieval with detailed definitions, code clearing, live data for most systems, functional tests, and movie capture for over 5,000 vehicle configurations
- Parameter data readings presented in multiple graph modes or table list
- · Regular software updates deliver powerful new functionality



# Multiple Secondary Ignition capability

- Ignition scope actively displays the full ignition system status
- Parade, Raster, Superimposed and 5ms Single Ignition Views
- Conventional, Wasted Spark, and COP ignition compatible
- SIA 2000 required

#### **Ignition Scope**

Secondary Ignition Parade Mode

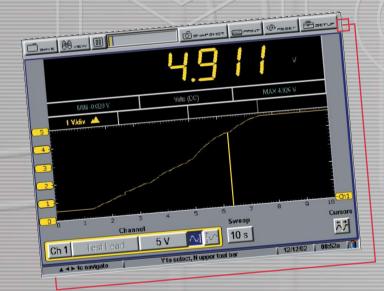
- Parade cylinder firing in a series across one channel - for distributor and direct ignitions
- · Parade cylinder firing in a series across two channels for wasted spark systems

#### Multiple Secondary Ignition

· Raster and superimposed functions aid waveform diagnosis by stacking the firing cylinders

#### Single Cylinder Mode

- New Cylinder 5ms mode displays a single cylinder regardless of ignition type
- The auto trigger on RPM produces a consistent view of the waveform



#### **Dual Graphing Multimeter and DVOM**

- Actively graph 2 channels in the Multi-Meter mode
- · Display intermittent faults and glitches like no other Multi-Meter
- Apply the power of lab scope into an easy to use application
- Auto scaling, high-impedance DVOM measurement system
- · Pinpoint measurement of:
  - DC volts AC Volts RMS
  - Continuity with audible beep
- Digital display turns red to alert out-of-calibration condition
- Min and Max capture displays drop and peak values

For full details of the software and information coverage provide by MODIS™, please refer to the Sun Software and Applications Guide, a copy is available on request from your local Sun representative.

## Lab Scope Plug-In

- 4-Channel Scope: Captures and displays "live" signals with up to four traces graphed from 6 million samples every second
- · Displays digital readout along with each waveform to determine voltage at any selected point on the waveform as well as min and max values
- Snapshot: Capture and review up to 263 sweeps continuously saved into a buffer
- Easy Scroll: Streamlines selection of menu and toolbar items
- AC Coupling: Provides the ability to enlarge the alternating current (AC) component of a signal for closer examination
- · Invert: Flip waveform to adjust for flexible hookups and easier viewing
- · Autofind: Automatically pre-configure the vertical scale
- Load Configuration: Designed to allow the user to select factory preset screens or define a custom setup to retrieve for regular use; frequent tests are automatically configured to help diagnose the performance of sensors, actuators and circuits on a vehicle



# Power/Weight/Dimensions

- Batteries: Nickel-metal hydride battery pack.
- Dimensions:

Width	Depth	Height	Weight with Plug-in
14 inches	3-3/8 inches	s 7-3/4 inches	5-11 lbsoz.
356 mm	86mm	197 mm	2579 g