ADL7103
THREE INSTRUMENTS IN ONE

☐ 2 Channel Digital Storage Oscilloscope
☐ TRMS Graphing Multimeter
☐ OBDII Code Reader

Quickly diagnose automotive faults from making voltage checks, reading codes, resetting malfunction indicator lamps to viewing signal waveforms.

The ADL7103's combination of features also includes a library of known good patterns with preset test parameters for common automotive signals. Each test can be fine tuned to view any portion of the signal for further analysis.

You won't find many dual channel scopes that offer these powerful features and none provide the combination of useful tools, creating a new level of value not found in the market today.

Digital Storage Oscilloscope

- Sample rate 25 Meg per second
- 51 Pre-set waveforms that include sensor, actuator, electrical and ignition patterns
- DC to 5 MHz Bandwidth
- Sweep rate 1µS to 50 seconds in the scope mode
- "Glitch Snare" mode captures, displays and optionally saves abnormal signal patterns in Scope or Component Test modes
- Secondary Ignition displays the waveform and includes spark voltage, RPM, burn time and burn voltage
- Parade pattern on secondary ignition "Parade" mode
- Built in 'Help' includes test procedure showing how to connect to the circuit, a sample of the expected waveform, theory of operation and troubleshooting tips
- Optional Diesel accessory to test injector pump timing and RPM

Specifications

Horizontal

Sample Rate:	25 Mega sample/second
Record Length:	1000 points
Update Rate:	Real time roll
Accuracy:	±(0.1% + 1 pixel)
Sweep Rate:	1µs to 50 sec in a 1,2,5 sequence (scope mode)
	5 s to 24 hours in a 1. 2. 5 sequence (GMM mode)

Vertical

Band Width:	DC to 5MHz; –3 Db
Resolution:	8 bit
Channel:	2 Channel
Coupling:	AC, DC, GND
Input Impedance:	1 MΩ
Max Input Voltage:	DC or AC 600 Vrms
Volt Division:	50mV~100V in a 1,2,5 sequence
Accuracy:	±3%

Trigger

Trigger Source:	CH A, CH B, External
Modes:	Single shot, normal, auto
Coupling:	AC, DC
Slop:	Rising and falling edge

Others

Glitch Snare:	Scope mode
Setup Memory:	8 Waveform & setup
Reference Waveform:	51 Waveform & setup
Cursor:	Time & Volt
Instrument Setup:	Language, Contrast, Graticule
Screen Size:	280 x 240 pixels (active area) with backlight (EL)
Battery Life:	4 hours without backlight
Battery:	Rechargeable NiMH

CALRIGHT INSTRUMENTS

The Right Source For Your Test & Measurement Needs

2222 Verus Street Suite C San Diego CA 92154 USA
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Email: sales@calright.com http://www.calright.com

Graphing Multimeter

- TRMS Graphing Multimeter
- 5 seconds to 24 hour sweep rate
- AC / DC Volts
- Ohms, Continuity, Diodes
- Frequency, Duty Cycle, Dwell
- Ignition Peak and Burn Volts, Ignition Burn Time
- Amps (with optional adapter)
- Temperature (with optional adapter)

Specifications

RPM

Range	Resolution	Accuracy
120~12,000	1 RPM	±2 RPM

FREQUENCY

Function	Range	Resolution	Accuracy
Frequency	10Hz	0.001Hz	±0.1% +3d
	100Hz	0.01Hz	"
	1kHz	0.1Hz	"
	10kHz	1Hz	"
	100kHz	10Hz	"
	1MHz	100Hz	"
	5MHz	1kHz	"
% Duty	2.0~98%	0.1%	
Dwell	3.6°~356.4°	0.1°	1.2°/krpm+2d
Pulse Width	2µs~450ms (Pulse Width > 2µs)		

DC VOLTAGE

Range	Resolution	Accuracy
500mV	0.1mV	±0.3% +5d
5V	0.001V	"
50V	0.01V	"
600V	0.1V	"
> Input Impedance 10MΩ		

AC VOLTAGE

Range	Resolution	Accuracy 40~400Hz	Accuracy 400Hz~20kHz
500mV	0.1mV	±0.5% +5d	±0.2% +5d
5V	0.001V	"	"
50V	0.01V	"	"
600V	0.1V	"	"
> Input Impedance 10MΩ			

AC+DC

Range	Resolution	Accuracy 40~400Hz	Accuracy 400Hz~10kHz
500mV	0.1mV	±0.8% +5d	±3.0% +5d
5V	0.001V	"	"
50V	0.01V	"	"
600V	0.1V	"	"

OHMS

Range	Resolution	Accuracy
500Ω	0.1Ω	±0.5% +5d
5kΩ	0.001kΩ	"
50kΩ	0.01kΩ	"
500 kΩ	0.1kΩ	"
5MΩ	0.001MΩ	±0.75% +5d
30MΩ	0.001MΩ	±0.75% +10d

DC AMPS (CURRENT PROBE OUTLET)

Range	Resolution	Accuracy
30mA~20A	1mV~10mA	±1.5% +20mA
100mA~40A	1mV~100mA	±2.0% +20mA
40A~60A	1mV~100mA	±4.0% +0.3A

AC AMPS (CURRENT PROBE OUTLET)

Range	Resolution	Accuracy 40Hz~1kHz	Accuracy 1~5kHz
30mA~20A	1mV~10mA	±2.0% +20mA	±4.0% +30mA
100mA~40A	1mV~100mA	"	±6.0% +30mA
40A~60A	1mV~100mA	±8.0% +0.3A	±8.0% +0.3A

CONTINUITY

Test Voltage	Threshold	Response Time
1.2V	Approx. 70Ω	1mS

DIODE TEST

Range	Open Circuit Voltage	Accuracy
2.0V	3.0V	±2.0% +5d

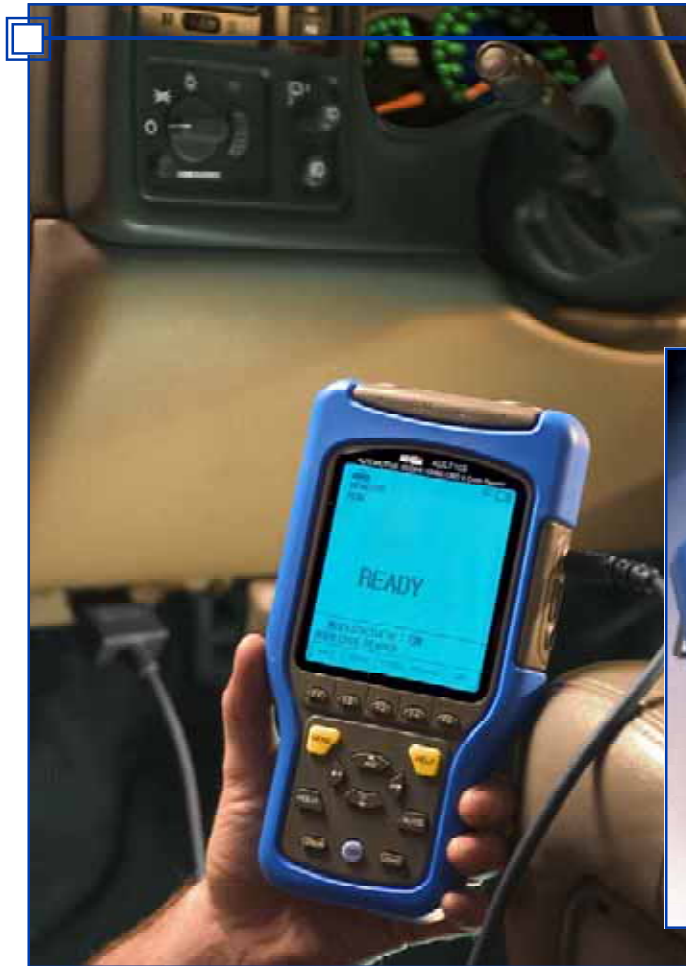### TEMPERATURE

Range	Resolution	Accuracy
-58~2372°F	1°F	±5°F
-50~1300°C	0.1°C	±3°C

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OBDII Code Reader

- Active and Pending Codes
- Generic and Manufacture Specific Definitions (GM, Ford, Chrysler, Toyota and Honda)
- I/M Readiness Monitor Status Indication
- Erase DTC's (diagnostic trouble codes) and reset MIL capability
- USB Interface easily supports future updates (software sold seperatly)

Accessories

Standar d
InductivePick-up	ADL7100A10
3-Way AlligatorClip	ADL7103AC5W
AC Adapter	ADL7103ACDC
Battery	ADL7103BAT
Back-probetips (1 red, 1, black, 1 yellow)	ADL7103BP
Ground Lead	ADL7103GL
OBD II Cable	ADL7103OBD
2mm Probe Tip (1 red, 1 black, 1 yellow)	ADL7103PT
SecondaryGround Probe	ADL7103SG
SecondaryIgnitionProbe	ADL7103SIP
Test Leads (1 red, 1 yellow)	ADL7103TL
Carry Case	ADL7103CC

Optional
Diesel InterfaceProbe	ADL7103ADP
Battery to CigarettePlug Adapter	ADL7103BCA
Cigarette Lighteradapter	ADL7103CA
Temperature Probe	ADL7103TEMP
USB InterfaceKit	ADL7103USB

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