

173A Auto Ranging DMM

LCD Display

4000 count with 42 segment bar graph.

REC (Record Mode)

Store minimum and maximum readings over a measurement period.

RANGE

Manually select the appropriate range

AC/DC

Manually select AC or DC measurement function.

Toggle between continuity buzzer or diode test on Ohm function.

High Resolution DCmV Range

Additional 40 millivolt range with 0.01mV resolution for improved accuracy when performing low voltage measurements.

ACV (AC Volts)

Measure the voltage of ABS wheel sensors.

DCV (DC Volts)

Measure the voltage of circuits and sensors.

Hz/Duty (Duty Cycle)

Measure in percent the "ON" time of sensors or other devices.

REL (Relative Mode)

Factor out lead resistance for improved low ohm measurements or compare readings to a known standard. Can also be used for differential measurements.

HOLD

Lock the reading on the display for hard to read locations for future reference.

Ω (Ohms, Resistance)

Measure the resistance of spark plug wires, coils, sensors, and continuity of wiring.

AC/DC Current Functions (Amps)

Measure the parasitic draw from the battery with ignition off.

Hz (Frequency)

Measure the frequency of sensors and signals.

Auto Ranging DMM



CAP (Capacitance)

Measure the capacitance of condensors or capacitors found in today's hybrid automobiles.

Built in Tilt Stand

The tilt stand is built into the instrument housing.

Quickly Test Condition of Internal Fuses

You can determine the status of the internal fuses before you open the battery/fuse compartment. Simply set the instrument to the diode test function, plug the black test lead into the "VO2" input jack and touch the prod end of the black lead to the metal inside the "A" or "UAmA" input jack. If the meter reads "OL, the fuse is blown. If there is a reading on the LCD besides "OL", the fuse is good.

Separate Fuse/Battery Compartment

Easily replace fuses and batteries in this separate compartment .

Fuses are clearly labeled with preplacement part number.





Safety!

cULus 61010-1 Listed Meets CE and IEC61010-1 safety standards.

Function	Range	Resolution	Accuracy	Impedance	
DC Volts	40mV	0.01mV			
	400mV	0.1mV			
1000V DC	4V	0.001V	±(0.5% + 2 digits)	$10M\Omega$	
Max. Input	40V	0.01V	8		
	400V	0.1V			
	1000V	1V			
AC Volts	40mV	0.01mV	$\pm (0.5\% + 2 \text{ digits})$		
	400mV	0.1mV			
750V AC	4V	0.001V	±(0.75% + 5 digits)	$10M\Omega$	
Max. Input	40V	0.01V	3 20 30 30		
	400V	0.1V			
	750V	1V	$\pm (1.0\% + 5 \text{ digits})$		
DC Amps	40μΑ	0.1μΑ	$\pm (0.8\% + 2 \text{ digits})$		
	400μΑ	1μA		Fuse	
	4mA	0.01mA	±(0.8% + 5 digits)	0.5 Amp	
	40mA	0.1mA	5 50 50 10		
	400A	0.01A			
	4A	0.001A	±(1.2% + 5 digits)	Fuse	
	10A	0.01A		10 Amp	
AC Amps	400μΑ	1μA			
	4mA	0.01mA	±(1.2% + 5 digits)	Fuse	
	40mA	0.1mA	1 (2) (2) (3)	0.5 Amp	
	400mA	0.01A			
	4A	0.001A	±(1.5% + 10 digits)	Fuse	
	10A	0.01A	2 30 20	10 Amp	
Ohms	400Ω	0.1Ω	$\pm (1.0\% + 5 \text{ digits})$		
	4kΩ	$0.001 \mathrm{k}\Omega$		600 V DC	
600V DC	40k Ω	0.01kΩ	$\pm (0.5\% + 3 \text{ digits})$	or	
or Peak AC	400kΩ	$0.1k\Omega$		Peak AC	
Max. Input	$4M\Omega$	$0.001 \mathrm{M}\Omega$	±(1.0% + 3 digits)		
	40 ΜΩ	$0.01 \mathrm{M}\Omega$	±(1.5% + 10 digits)		
Capacitance	40nF	0.01nF			
	400nF	0.1nF		600 V DC	
	4uF	0.001nF	$\pm (3.0\% + 10 \text{ digits})$	or	
	40uF	0.01uF		Peak AC	
	400uF	0.1uF			
	4000uF	1uF	±(7.0% + 10 digits)		
Frequency	10Hz	0.01Hz			
	100Hz	0.1Hz			
	1KHz	0.001KHz		600 V DC	
	10KHz	0.01KHz	$\pm (0.05\% + 3 \text{ digits})$	or	
	100KHz	0.1KHz	5 1 S	Peak AC	
	1MHz	0.001MHz			
	10MHz	0.01MHz			
Duty Cycle	Range 0.1 ~99.9% (0.5Hz to 500kHz, Width > 2uS)				
	Accuracy (0.1% + 0.05% / kHz) +1 Count				
Diode Test	Test Voltage				
	2.7V	Approx. 1mA 600 V DC or Peak AC			
Continuity	Test Voltage				
Buzzer	0.4 ~ 0.6V < 30Ω 600 V DC or Peak AC				

General Specification	18		
Max. Volt. between any Input and Ground		1000V	
Fuse Protection mA:		0.5Amp/600VAC	
	A:	10Amp/600VAC	
Display Type		4000 Count, with 34 segment bargraph.	
Operating Temp.		-0° to 40°C (32° to 104°F)	
Storage Temp.		-10° to 50°C (14° to 122°F)	
Relative Humidity		0% to 80%	
Power Supply		2 each 1.5 Volt "AA" Batteries	
Battery Life		200 hrs. Typical	
Size (H x L x W)		61mm x 97mm x 203mm	
		$(2.4in \times 3.8in \times 8.0in)$	
Weight		680g (24oz)	

