



# 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.

## (Continuity Buzzer and Diode Test)

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.

## $\Omega$ (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 condensers 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 replacement part number.



CAT II-1000V, CAT III-600V  
POLLUTION DEGREE 2

**Safety!**

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

Function	Range	Resolution	Accuracy	Impedance	
<b>DC Volts</b> 1000V DC Max. Input	40mV	0.01mV	±(0.5% + 2 digits)	10MΩ	
	400mV	0.1mV			
	4V	0.001V			
	40V	0.01V			
	400V	0.1V			
<b>AC Volts</b> 750V AC Max. Input	40mV	0.01mV	±(0.75% + 5 digits)	10MΩ	
	400mV	0.1mV			
	4V	0.001V			
	40V	0.01V			
	400V	0.1V			
<b>DC Amps</b>	40μA	0.1μA	±(0.8% + 2 digits)	Fuse 0.5 Amp	
	400μA	1μA			
	4mA	0.01mA	±(0.8% + 5 digits)		
	40mA	0.1mA			
	400A	0.01A			
	4A	0.001A			±(1.2% + 5 digits)
	10A	0.01A			
<b>AC Amps</b>	400μA	1μA	±(1.2% + 5 digits)	Fuse 0.5 Amp	
	4mA	0.01mA			
	40mA	0.1mA			
	400mA	0.01A			
	4A	0.001A			±(1.5% + 10 digits)
10A	0.01A				
<b>Ohms</b> 600V DC or Peak AC Max. Input	400Ω	0.1Ω	±(0.5% + 3 digits)	600 V DC or Peak AC	
	4kΩ	0.001kΩ			
	40kΩ	0.01kΩ			
	400kΩ	0.1kΩ			
	4MΩ	0.001MΩ			±(1.0% + 3 digits)
40MΩ	0.01MΩ	±(1.5% + 10 digits)			
<b>Capacitance</b>	40nF	0.01nF	±(3.0% + 10 digits)	600 V DC or Peak AC	
	400nF	0.1nF			
	4uF	0.001uF			
	40uF	0.01uF			
	400uF	0.1uF			
<b>Frequency</b>	10Hz	0.01Hz	±(0.05% + 3 digits)	600 V DC or Peak AC	
	100Hz	0.1Hz			
	1KHz	0.001KHz			
	10KHz	0.01KHz			
	100KHz	0.1KHz			
	1MHz	0.001MHz			
<b>Duty Cycle</b>	Range	0.1 ~99.9%(0.5Hz to 500kHz, Width > 2uS)			
	Accuracy	(0.1% + 0.05% / kHz) +1 Count			
<b>Diode Test</b>	Test Voltage	Max Test Current	Over Load Protection		
	2.7V	Approx. 1mA	600 V DC or Peak AC		
<b>Continuity</b>	Test Voltage	Threshold	Over Load Protection		
<b>Buzzer</b>	0.4 ~ 0.6V	< 30Ω	600 V DC or Peak AC		

### General Specifications

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 x 3.8in x 8.0in)
Weight	680g (24oz)

