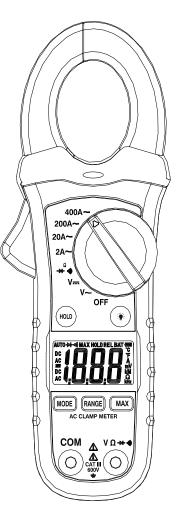
AC CLAMP METER



International Safety Symbols



Safety

This symbol, adjacent to another symbol or terminal, indicates the user must refer to the manual for further information.

This symbol, adjacent to a terminal, indicates that, under normal use, hazardous voltages may be present

Double insulation

SAFETY NOTES

- Do not exceed the maximum allowable input range of any function
- Do not apply voltage to meter when resistance function is selected.
- Set the function switch OFF when the meter is not in use.

WARNINGS

- Set function switch to the appropriate position before measuring.
- When measuring volts do not switch to current/resistance modes.
- When changing ranges using the selector switch always disconnect the test leads from the circuit under test.
- Do not exceed the maximum rated input limits.

CAUTIONS

Improper use of this meter can cause damage, shock, injury or death. Read and understand this user manual before operating the meter.

Always remove the test leads before replacing the battery.

Inspect the condition of the test leads and the meter itself for any damage before operating the meter. Repair or replace any damage before use.

Use great care when making measurements if the voltages are greater than 25VAC rms or 35VDC. These voltages are considered a shock hazard.

Remove the battery if the meter is to be stored for long periods.

Always discharge capacitors and remove power from the device under test before performing Diode, Resistance or Continuity tests.

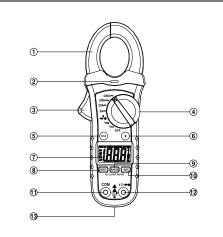
• Voltage checks on electrical outlets can be difficult and misleading because of the uncertainty of connection to the recessed electrical contacts. Other means should be used to ensure that the terminals are not "live".

• If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

Input Limits			
Function	Maximum Input		
A AC	400A		
V DC, V AC	600V DC/AC		
Resistance, Diode, Continuity ,	250V DC/AC		

Meter Description

- 1. Current clamp
- 2. Non-contact AC voltage indicator light
- 3. Clamp trigger
- 4. Rotary Function swith
- 5. Data Hold button
- 6. Back light button
- 7. LCD display
- 8. MODE select button
- 9. Range button
- 10. MAX hold button
- 11. COM input jack
- 12. V Ω CAP TEMPHz jack
- 13. Battery Cover



4

1 DC

AC

(2)

6708

AUTO +>>>) MAX HOLD REL BAT 4000

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1.	AC DC	AC (alternating current)	
		and DC (direct currrent)	
2.		Minus sign	
3.	8.8.8.8	2000 count (0 to 1999)	
		measurement reading	
4.	AUTO	AutoRange mode	
5.	REL	Relative mode	
6.	→	Diode test mode	
7.	•)))	Audible Continuity	
8.	HOLD	Data Hold mode	
9.	°C, °F, μ, π	$\mathbf{h}, \mathbf{V}, \mathbf{A}, \mathbf{K}, \mathbf{M}, \mathbf{\Omega}$, Units of measure list	
10.	MAX	MAX hold mode	

Specifications

Function	Range & Resolution	Accuracy (% of reading)
	2.000AAC	± (2.5 % + 10 digits)
AC Current	20.00AAC	± (2.5 % + 4 digits)
(50/60Hz)	200.0AAC	± (2.5 % + 4 digits)
	400.0 AAC	± (3 % + 4 digits)
DC Voltage	200.0 mVDC	± (0.8% + 2 digits)
	2.000 VDC	
	20.00 VDC	± (1.5% + 2digits)
	200.0 VDC	± (1.0% + 201913)
	600.0 VDC	± (2 % + 2 digits)
	200.0 mVAC	± (1.5% + 35 digits)
AC Voltage	2.000 VAC	
	20.00 VAC	± (1.8% + 8 digits)
	200.0 VAC	(· · · · · · · · · · · · · · · ·
	600.0 VAC	± (2.5% + 8 digits)

Resistance	200.0 Ω	± (1.0% + 4 digits)	
	2.000K Ω		
	20.00K Ω	± (1.5% + 2 digits)	
	200.0K Ω		
	2.000M Ω	± (2.5% + 3 digits)	
	20.00M Ω	± (3.5% + 5 digits)	

Clamp size	Opening 1.2" (30mm) approx	
Diode Test typical.	Test current of 0.3mA typical; Open circuit voltage 1.5V DC	
Continuity Check	Threshold <150 Ω ; Test current < 0.5mA	
Low Battery Indication	" 👔 " is displayed "OL" is displayed	
Overrange Indication	"OL [‴] " is displayed	
Measurements Rate	2 per second, nominal	
Input Impedance	10MΩ (VDC and VAC)	
Display	2000 counts LCD	
AC Current	50-60Hz (AAC)	
AC Voltage bandwidth	50-60Hz (VAC)	
Operating Temperature	41 to 104°F (5 to 40°C)	
Storage Temperature	-4 to 140°F (-20 to 60°C)	
Operating Humidity 104°F(40°C)	Max 80% up to 87°F (31°C) decreasing linearly to 50% at	
Storage Humidity	<80%	
Operating Altitude	7000ft. (2000meters) maximum.	
Over voltage	Category III 600V	
Battery	One 9V Battery	
Auto OFF	approx. 15 minutes	
Dimensions/Weight	197x70x40mm/183g	
Safety	For indoor use and in accordance with Overvoltage Category	
	II, Pollution Degree 2. Category II includes local level,	
	appliance, portable equipment, etc., with transient	
	averyaltarea leasthan Overyaltare Cat. III	

overvoltages less than Overvoltage Cat. III

NOTICES: Read and understand all **warning** and **precaution** statements listed in the safety section of this operation manual prior to using this meter. Set the function select switch to the OFF position when the meter is not in use.

AC Current Measurements

WARNING: Ensure that the test leads are disconnected from the meter before making current clamp measurements.

- 1. Set the Function switch to the **400.0A** ~ **2.000A** range.
- 2. If the range of the measured is not known, select the higher range first then move to the lower range if necessary.
- YES USE
- 3. Press the trigger to open jaw. Fully enclose one conductor to be measured.
- The clamp meter LCD will display the reading.

DC/AC Voltage Measurements

- 1. Insert the black test lead into the negative **COM** terminal and the red test lead into the positive **V** terminal.
- 2. Set the function switch to the V position.
- 3. Select AC or DC with the **MODE** button.
- 4. Connect the test leads in parallel to the circuit under test.
- 5. Read the voltage measurement on the LCD display.

Resistance Measurements

- 1. Insert the black test lead into the negative **COM** terminal and the red test lead into the positive terminal.
- 2. Set the function switch to the $\Omega \rightarrow \bullet$))) position.
- Touch the test probe tips across the circuit or component under test. It is best to disconnect one side of the device under test so the rest of the circuit will not interfere with the resistance reading.
- 4. For Resistance tests, read the resistance on the LCD display.

Diode and Continuity Measurements

- 1. Insert the black test lead banana plug into the negative **COM** jack and the red test lead banana plug into the positive diode jack.
- 2. Turn the rotary switch to the $\Omega \rightarrow \bullet$)) position.
- 3. Press the **MODE** button until "▶ " appears in the display.
- Touch the test probes to the diode under test. Forward voltage will indicate 0.4V to 0.7V. Reverse voltage will indicate "OL". Shorted devices will indicate near 0mV and an open device will indicate "OL" in both polarities.

Red Probe	Black Probe	Black Probe	Red Probe
ᆇᆮ		- *-	
Forwa	rd test	Reve	rse test

Non-Contact AC Voltage Measurements

WARNING: Risk of Electrocution. Before use, always test the Voltage Detector on a known live circuit to verify proper operation

- 1. Touch the probe tip to the hot conductor or insert into the hot side of the electrical outlet.
- 2. If AC voltage is present, the detector light will illuminate.
 - **NOTE**: The conductors in electrical cord sets are often twisted. For best results, rub the probe tip along a length of the cord to assure placing the tip in close proximity to the live conductor.
 - **NOTE**: The detector is designed with high sensitivity. Static electricity or other sources of energy may randomly trip the sensor. This is normal operation

MODE BUTTON

To select DC/ACV,OHM/ Diode/Continuity

Data Hold Button

To freeze the LCD meter reading, press the data hold button. The data hold button is located on the left side of the meter (top button). While data hold is active, the **HOLD** display icon appears on the LCD. Press the data hold button again to return to normal operation.

MAX Hold Button

The max. Hold position is used to measure the maximum value. The maximum measured value is up dated continuously. Press once again the button, will release the hold and allow a further measurement.

RANGE BUTTON

When the meter is first turned on, it automatically goes into AutoRanging. This automatically selects the best range for the measurements being made and is generally the best mode for most measurements. For measurement situations requiring that a range be manually selected, perform the following:

- 1. Press the RANGE button. The "Auto Range" display indicator will turn off, The "Manual Range" display indicator will turn on
- Press the RANGE button to step through the available ranges until you select the range you want.
 Press and hold the RANGE button for 2 seconds to

exit the ManualRanging mode and return to AutoRanging.

Battery Replacement

- 1. Remove the one rear Phillips head screw
- 2. Open the battery compartment
- 3. Replace the Requires One 9V Battery.
- 4. Re-assemble the meter

For Continuity tests, if the resistance is < 150Ω , a tone will sound.