



<b>Product Name</b>	GAOTek AC/DC Clamp Meter
<b>Product SKU</b>	GAOTek-CM-101
<b>Product URL</b>	<a href="https://gaotek.com/product/gaotek-ac-dc-clamp-meter/">https://gaotek.com/product/gaotek-ac-dc-clamp-meter/</a>

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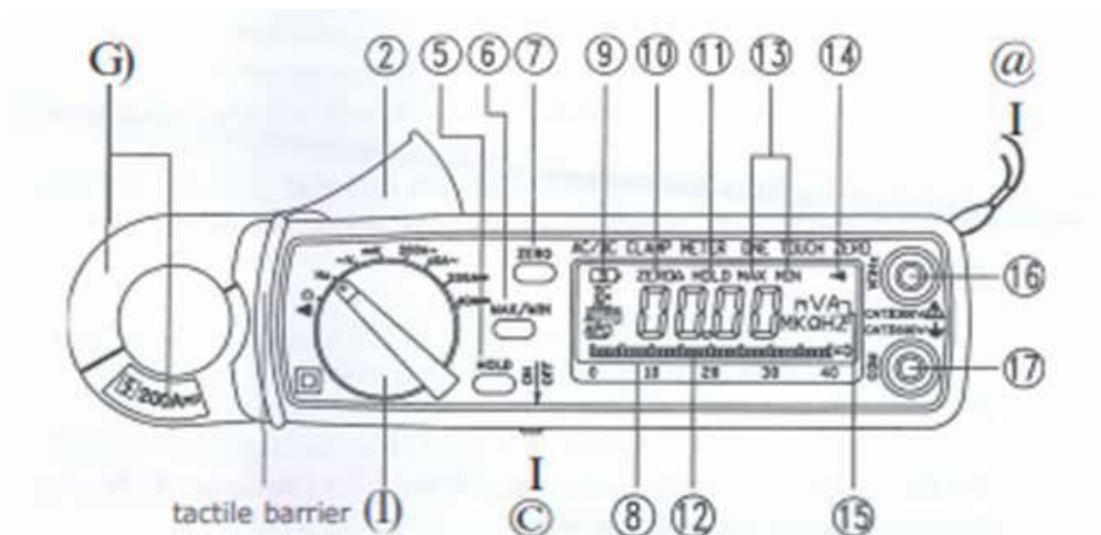
## 1. Features

1. Accurate AC/DC Clamp Meter for current measurement.
2. 10mA high resolution on 40A DC/AC range.
3. One touch zero for DCA adjustment.
4. 23 mm diameter jaw.
5. Large 3 3/4 digits LCD
6. Fast bar graph display (30 times/sec.) for transient observation.
7. Continuity and frequency measurements.
8. Max/Min and Data Hold functions.
9. 600V overload protection for ohm measurement.
10. Easy single rotary switch for any function selection.
11. Ideal for works in the crowded switch box or cable areas.

## 2. Panel Description

1. Transformer Jaw: This is used to pick up the current signal. To measure DC/AC, the conductor is enclosed by the jaw.
2. Transformer Trigger: This is used to open the jaw.
3. Function Selector Switch: This is used to select the function the user desires, such as DCA,ACA, DCV, ACV, Hz, Ohm, and Continuity.
4. On/Off Switch This is used to turn the power on or off.
5. Data Hold Button: Once this button is pushed, the reading shall be held on the LCD. Press again to release it. This button is not available in the continuity function.
6. Max/Min Hold Button: This button is used to enable the maximum or minimum value to be displayed and updated during measurement. Press once, the minimum value shall be displayed and updated. Press again, maximum value shall be displayed and updated. Zero function will be disabled if MAX/MIN is enabled. This button is not available in continuity or Hz function.
7. Zero/Relative Button: Once this button is pressed, the current reading shall be set to zero and be used as a zero reference value for all other subsequent measurements. The function is also used to remove the offset value caused by the residual magnetism remaining in the core for the DC measurement. The Zero/Relative function will be disabled if the MAX/MIN button is pressed. This button is not available in continuity or Hz function.
8. LCD: This is a 3 3/4 digits Liquid Crystal Display with a maximum indication of 3999. Function symbols, units, bar graphs, signs, decimal points, low battery symbols, max/min symbols, and zero symbols are included.
9. Low Battery Symbol: When this symbol appears, the battery voltage drops below the minimum required voltage. Refer to Section V for battery replacement.
10. Zero/Relative Symbol When this symbol appears, it means a reference value has been subtracted from the actual reading. The reading shown is an offset value. Press and hold the zero button for 2 seconds to disable this function.

11. Data Hold Symbol: Once the hold button is pressed, this symbol appears on LCD.
12. The bar graph has forty segments. It displays segments proportional to the actual reading. Each segment represents one count.
13. Max/Min Hold Symbol: Once the max/min button is pressed, either MAX or MIN shall be displayed on LCD.
14. Continuity Symbol: If ohm and continuity function is selected, this symbol shall appear on LCD.
15. Units Symbols: Once a function is selected, corresponding unit (V, n, A, or Hz) shall be displayed on LCD.
16. VnHz Input Terminal: This terminal is used as input for voltage, ohm/continuity, or frequency measurements.
17. COM Terminal: This terminal is used as common reference input.
18. Hand Strap Put your hand through the hole of hand strap to avoid accidental drop of the clamp 4 meter.



## 3. Operation Instructions

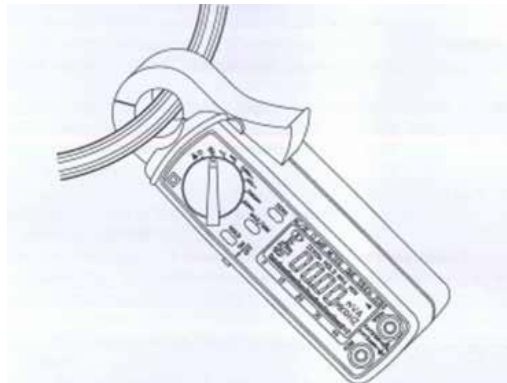
### 3.1. DC/AC Current Measurements

#### 3.1.1. DC Current

- a. Set the rotary switch at 40A DC or 200A DC.
- b. Push the zero button to adjust the reading to zero.
- c. Press the trigger to open the jaw and fully enclose the conductor to be measured. No air gap is allowed between the two half jaws.
- d. Read the measured value from the LCD display.

### 3.1.2. AC Current

- a. Set the rotary switch at 40A AC or 200A AC
- b. Press the trigger to open the jaw and fully enclose the conductor to be measured. No air gap is allowed between the two half jaws.
- c. Read the measured value from the LCD



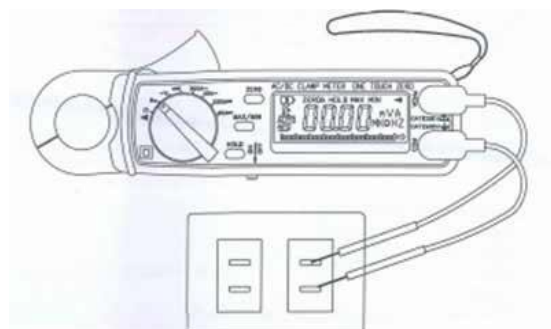
## 3.2. DC/AC Voltage Measurements

### 3.2.1. DC Voltage

- a. Set the rotary switch to V DC.
- b. Insert the test leads into the input jack.
- c. Connect the test prods of the test leads in PARALLEL to the circuit to be measured.
- d. Read the measured value from the LCD.

### 3.2.2. AC Voltage

- a. Set the rotary switch at V AC
- b. Insert the test leads into the input jack.
- c. Connect the test prods of the test leads in PARALLEL to the circuit to be measured.
- d. Read the measured value from the LCD.





### 3.3. Resistance and Continuity Measurement

- 3.3.1. Set the rotary switch at n
- 3.3.2. Insert the test leads into the input jack.
- 3.3.3. Connecting the test prods of the test leads to the two ends of the resistor or circuit to be measured.
- 3.3.4. Read the measured value from the LCD.
- 3.3.5. If the resistance is lower than 40 n, a beeping sound shall be heard.

### 3.4. Frequency {Hz} Measurement

- 3.4.1. Set the rotary switch to Hz.
- 3.4.2. Insert the test leads into the input jack.
- 3.4.3. Connect the test prods of the test leads in PARALLEL to the signal or circuit to be measured.
- 3.4.4. Read the measured value from the LCD.

### 3.5. Relative Reading Measurements

The zero button also can be used to make a relative measurement. Once the button is pushed, the current reading is set to zero and a zero symbol shall be displayed on LCD. All the subsequent measurements shall be displayed as a relative value concerning the value being zero. Press the zero button again to return to normal mode. But this function is disabled if the MAX/MIN function is enabled. Please watch for symbols displayed on the LCD.

#### NOTE:

1. The ZERO button is disabled if ohm and continuity or Hz function is selected.
2. LCD displays relative numerical value without bargraph.

### 3.6. Holding the LCD Reading

Press the HOLD button, then the reading shall be held and kept on LCD.

**NOTE:** The HOLD button is disabled if ohm and continuity function is selected.

### 3.7. Finding the MAX/MIN Value

Press the MAX/MIN button to enable the maximum and minimum values to be

recorded and updated during measurement. Push the button once, the maximum value shall be displayed and updated. The LCD toggles between the MAX and MIN values. To exit the MAX/MIN function, press and hold the MAX/MIN button for more than 2 seconds. If the MAX/MIN button is pressed, the ZERO function will be disabled, and the ZERO symbol will disappear from the LCD.

**NOTE**  
The MAX/MIN button is disabled if ohm and continuity or Hz function is selected.

## 4. Specifications

### DC Current:

0-150A	100mA	$\pm 1.0\% \pm 2\text{dpts}$	DC400A
150-200A	100mA	$\pm 2.2\% \pm 2\text{dpts}$	DC400A
40A	10mA	$\pm 1.0\% \pm 2\text{dpts}$	DC400A
Range	Resolution`	Accuracy	Overload Protection

### AC Current:

Range	Resolution	Accuracy		Overload Protection
		50/60Hz	40-1KHz	
40A	10mA	$\pm 1.0\% \pm 3\text{dpts}$	$\pm 1.5\% \pm 4\text{dpts}$	AC400A
0-150A	100mA	$\pm 1.0\% \pm 3\text{dpts}$	$\pm 1.5\% \pm 4\text{dpts}$	AC400A
150-200A	100mA	$\pm 2.2\% \pm 3\text{dpts}$	$\pm 2.5\% \pm 4\text{dpts}$	AC400A

### DC Voltage:

Range	Resolution	Accuracy	Overload Protection
400V	0.1V	$\pm 1.0\% \pm 2\text{dpts}$	DC 1000V

### AC Voltage:

Range	Resolution	Accuracy		Overload Protection
		50/60Hz	40-1KHz	



400V	0.1V	$\pm 1.5\% \pm 2\text{dgts}$	$\pm 2.0\% \pm 4\text{dgts}$	AC800V
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### Resistance (n) and Continuity:

Range	Resolution	Accuracy	Beeping	Overload Protection
40400Q	0.1n	$\pm 1.0\% \pm 2\text{dgts}$	<40.0 n (approx.)	AC600V

### Frequency:

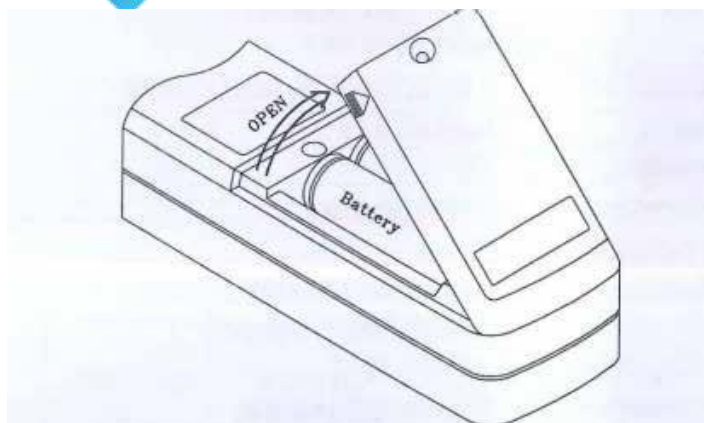
Range (Hz)	Resolution (Hz)	Accuracy	Sensitivity	Overload Protection
1-100K	0.001 - 100	$\pm 0.5\% \pm 2\text{dgts}$	10v	AC600V

## 5. Battery Replacement

When the low battery symbol is displayed on the LCD, replace the old batteries with two new batteries.

- 5.1. Turn the power off and remove the test leads from the damp meter.
- 5.2. Remove the screw of the battery compartment.
- 5.3. Lift and remove the battery compartment.
- 5.4. Remove the old batteries.
- 5.5. Insert two new 1.5V SUM-3 batteries.
- 5.6. Replace the battery compartment and secure the screw.





## 6. Maintenance & Cleaning

Servicing not covered in this manual should only be performed by qualified personnel. Repairs should only be performed by qualified personnel. Periodically wipe the case with a damp cloth and detergent; do not use abrasives or solvents.

