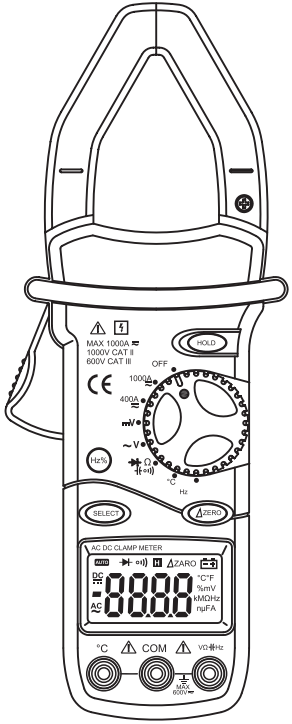
AC / DC CLAMP METER

OPERATOR'S MANUAL



1. Set the rotary switch to the °C Position. The LCD display will show “OL”.
2. Connect the red lead of“K” type thermocouple into the“°C ”jack and the black lead of “K” type thermocouple into the “COM” jack. The LCD display will show the current environment temperature.
3. Touch the tip of the thermocouple to the test object.
4. Read the measurement on the display.

Duty Cycle Test

1. Insert the black and red test leads into the **COM** and **V Ω ⊣⊢ Hz** input terminals respectively.
2. Set rotary switch to the **Hz** position.
3. Push the Hz% button to select duty cycle mode and connect the test leads in parallel with the circuit to be measured. Be careful not to touch any electrical conductors.
4. Read the measurement on the display.

Specifications

Accuracy is given as ±(% of reading + number of least significant digits) at 18°C to 28°C, with relative humidity up to 80%. All specifications assume less than 1 year since calibration.

General

Maximum voltage	CAT II 1000V and CAT III 600V.
Display	LCD 3999 counts. Updates2-3/sec.
Ranging method	Auto range mode
Polarity indication	“ - ” display for negative polarity.

Overrange indication	Only figure “OL” on the display.
Jaw capability	42mm (Max conductor size)
Power	Battery 9V⎓ IEC 6F22 JIS 006P NEDA 1604 type.
Low battery	“⊟+”appears on the display
Operating	5°C to 35°C
Storage temperature	-10°C to 50°C
Temperature coefficient	0.1×specified accuracy) /°C (<18°C or >28°C)
Altitude	2000m
Size	250mm×99mm×43mm
Weight	Approx. 416g.

DC Voltage

Range	Resolution	Accuracy
0.4V	0.1mV	±0.7% of rdg 1 ±digit
4V	1mV	
40V	10mV	
400V	0.1V	
1000V	1V	±0.8% of rdg 3 ±digits

Input Impedance: 10MΩ
Overload Protection: 1000V DC or 750V AC RMS

AC Voltage

Range	Resolution	Accuracy
4V	1mV	±0.8% of rdg 5 ±digits
40V	10mV	
400V	0.1V	
750V	1V	±1.0% of rdg 10 ±digits

Input Impedance: 10MΩ
Frequency range: 40Hz to 400Hz.
Overload Protection: 1000V DC or 750V AC RMS

DC Current

Range	Resolution	Accuracy
400A	0.1A	±3.0% of rdg 3 ±digits
1000A	1A	

Overload Protection 120% ranges for 60 seconds max.

AC Current

Range	Resolution	Accuracy
400A	0.1A	±3.0% of rdg 3 ±digits
1000A	1A	

Overload Protection:
120% ranges for 60 seconds max.
Frequency range: 50Hz to 60Hz.

Resistance

Range	Resolution	Accuracy
400Ω	0.1Ω	±1.2% of rdg 1 ±digit
4KΩ	1Ω	
40KΩ	10Ω	
400KΩ	0.1KΩ	
4MΩ	1KΩ	
40MΩ	10KΩ	±2.0% of rdg 3 ±digits

Overload Protection: 250V dc or rms. ac for all ranges.

Capacitance Measurement

Range	Resolution	Accuracy
4nF	1pF	±4.0% of rdg 10 ±digits
40nF	10pF	
400nF	0.1nF	
4μF	1nF	
40μF	10nF	

Overload Protection: 250V dc or rms. ac for all ranges.

Frequency Measurement

Range	Resolution	Accuracy
40Hz	0.01Hz	±2.0% of rdg 1 ±digit
400Hz	0.1Hz	
4kHz	1Hz	
40kHz	10Hz	
100kHz	0.1kHz	

Measurement range: 1V to 10V rms. 10Hz to 100kHz.

Duty Cycle

Range	Resolution	Accuracy
0.1%~99.9%	0.1%	±2.0% of rdg 2 ±digit

Temperature

Range	Resolution	Accuracy
400°C~750°C	1°C	±1.0% of rdg ± 5°C
0°C~400°C	1°C	±1.0% of rdg ± 3°C
-40°C~0°C	1°C	±1.0% of rdg ± 6°C

Audible Continuity And Diode

Range	Description
	If continuity exists (about less than 40Ω), built-in buzzer will sound.
	Shows the approx. forward voltage of the diode.

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Auto Power Off

To extend the life of the battery, the meter has an Auto Power Off function. If no buttons are pressed or the rotary switch is not moved for about 15 minutes. the meter will automatically turn itself off. To turn the meter back on, move the rotary switch or press any button.

Replacing The Battery

⚠ WARNING

To avoid electrical shock or personal injury, remove the test leads and any input signals before replacing the battery. Replace only with same type of battery.

When the display shows the "  " symbol or the backlight is not very bright, the battery should be replaced to assure proper operation. Use the following procedure to replace the battery:

1. Turn the rotary switch to the OFF position. Disconnect test leads from any live source and remove the test leads from the input terminals.
2. Remove screws on the battery cover and open the cover.
3. Remove the used battery and replace with a new 9V battery(IEC 6F22 JIS 006P NEDA 1604 type).
4. Never use the multimeter unless the battery cover is in place and fastened securely.

Replacing Test Leads

Replace test leads if the insulation appears worn or tips are damaged.

⚠WARNING:
Replacement leads must meet EN 61010-031 standards, rated CAT III 600V, 10A or greater.

Accessories

- Operator's instruction manual
- Set of test leads
- “K” type thermocouple
- Storage Case
- 9 volt battery
  (IEC 6F22 JIS 006P NEDA 1604 type).

⚠ **WARNING**

Using this appliance in an environment with a strong radiated radio frequency electromagnetic field (approximately 3V/m) may influence its measuring accuracy.