

# CLAMP METER

# HK588E

## User's Manual



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# Safety

## International Safety Symbols



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 parts before use.

Use carefully 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	1000A
V DC, V AC	600V DC/AC
Resistance, Diode, Continuity, Capacitance, Frequency, Duty Cycle	600V DC/AC

## Meter Description



## Specifications

**DC and AC voltage:** 600mV...600V

**DC and AC current:** 60A...1000A

**Resistance:** 600Ω...60MΩ

**Capacitance:** 10nF, 100nF, 1μF, 10μF, 100μF, 1mF, 10mF, 100mF

**Frequency, Temperature (with thermocouple type K), diode test, continuity check**

**Non-contact voltage detection (NCV)**

**Data hold function**

**Display:** backlit LCD

**Operating Temperature:** 0 to 50°C

**Storage Temperature:** -14 to 140°F (-30 to 60°C)

**Relative Humidity:** 90% (0°C to 30°C); 75% (30°C to 40°C); 45% (40°C to 50°C)

**Safety Level:** CAT III 600V

**Battery:** 1.5Vx3 Battery (AAA)

**Auto OFF**

**Dimensions:** 194X92X35mm

**Weight:** 230g



## Capacitance Measurements

**WARNING:** To avoid electric shock, disconnect power to the unit under test and discharge all capacitors before taking any capacitance measurements. Remove the batteries and unplug the line cords.

1. Set the rotary function switch to the Capacitance position.
2. Insert the black test lead banana plug into the **COM** terminal. Insert the red test lead banana plug into the **INPUT** terminal.
3. Touch the test leads to the capacitor to be tested.
4. Read the capacitance value in the display.


## Frequency or % duty cycle measurements

1. Set the rotary function switch to the “Hz” position.
2. Insert the black lead banana plug into the negative **COM** terminal and the red test lead banana plug into the **INPUT** terminal.
3. Select Hz or % duty with the **Hz/%** button.
4. Touch the test probe tips to the circuit under test.
5. Read the frequency on the display.

## Data Hold and Backlight

To freeze the LCD meter reading, press the data hold 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.

The backlight function illuminates the display and is used when the ambient light is too low to permit viewing of the displayed readings.

Press the  button for one second to turn the backlight on and press the button a second time to turn the backlight off.

## REL (relative value measurement)

REL key is the relative measurement key that acts with trigger. Except Hz/Duty, Diode and continuity, other functions can do the relative value measurement.

## Manual Ranging

The meter turns on in the autoranging mode. Press the **RAN** button to go to manual ranging. Each press of the range button will step to the next range as indicated by the units and decimal point location. Press and hold the **RAN** button for two seconds to return to autoranging. Manual ranging does not function in the DC/AC Current, Diode and Continuity check functions.

## Battery Replacement

1. Remove the one rear Phillips head screw.
2. Open the battery compartment.
3. Replace the batteries.
4. Re-assemble the meter.