

DIGITAL CLAMP METER

MODEL YF-8050



OPERATING MANUAL


Thank you for your patronage. Before using this instrument, please read thoroughly the instruction manual to obtain best performance.

1. FEATURES:

- * Max. opening size up to 53mm.
- * Auto-indication of measuring units and functions.
- * Peak Hold functions.
- * Current measurement protection up to 1200A.
- * Rugged, tough and reliable quality.

2. SPECIFICATION

2-1. General Specification:

- (1) Display: 3 3/4 dgt. LCD with max. reading 3999, units, decimal point and signs.
- (2) Overload: display highest "OL" at left side.
- (3) Low battery indication: When LCD displays "  ", the battery need to

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Auto range frequency

| Range | Resolution | Accuracy | Max. Sensitivity | Overload Protection |
|--------|------------|-----------|------------------|---------------------|
| 4KHz | 1Hz | ±(0.8%+3) | 3Vrms | 600Vrms |
| 40KHz | 10Hz | | | |
| 100KHz | 100Hz | | | |

Inductive Clamp Jaw measuring frequency of ranges: 10Hz~4 KHz

| Measurement | Range | Sensitivity |
|-------------|-------------------|-------------|
| | 10Hz ~ 200Hz | 2A |
| | 201Hz ~ 400Hz | 3A |
| | 401Hz ~ 600Hz | 4A |
| | 601Hz ~ 800Hz | 5A |
| | 801Hz ~ 1000Hz | 6A |
| | 1.001KHz ~ 1.9KHz | 10A |
| | 1.91KHz ~ 4KHz | 20A |

3. PARTS DESCRIPTION

- (1) Inductive Clamp Jaw.

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be replaced.

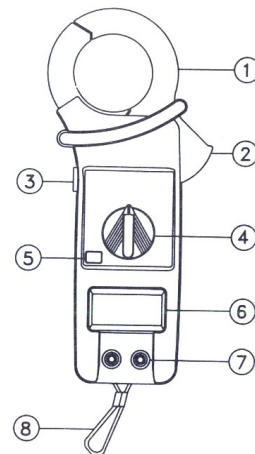
- (4) Battery life: about 200 hours.
- (5) Sampling time: 2.5 times/sec.
- (6) Peak Hold: for measuring peak value of AC current and voltage.
- (7) Power supply: 1 pc of battery 006P 9V.
- (8) Operating temperature & humidity: 0°C~40°C, below 80%RH.
- (9) Size: 250(L)×70(W)×35(H)mm.
- (10) Max. conductor size: 52mm.
- (11) Weight: Approx. 420g(including battery).
- (12) Accessories: Test leads for measuring voltage & resistance, operating manual, case each one set.

2-2. Electrical Specification:

General measurement(23°C±5°C, below80%RH)
Accuracy: ±(...%+...dgt)

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- (2) Clamp Movable Handle.
- (3) Range Hold Switch.
- (4) Range Selector Switch.
- (5) Power Switch.
- (6) Liquid Crystal Display. (LCD)
- (7) Jack for Voltage & Resistance & Frequency Measurement.
- (8) Wrist Strap.



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ACV

| Range | Resolution | Accuracy | Impedance | Overload Protection |
|-------|------------|----------|-----------|---------------------|
| 400V | 0.1V | ±(1%+4) | 10MΩ | DC 1000V |
| 750V | 1V | | | AC 750Vrms |

ACA

| Range | Resolution | Accuracy 50Hz~60Hz | Overload Protection |
|-------|------------|--------------------|---------------------|
| 40A | 0.01A | ±(1.5%+3) | 1200A (60 sec.) |
| 400A | 0.1A | ±(1.5%+4) | |
| 1000A | 1A | ±(1.5%+4) | |

Resistance(Ω)

| Range | Resolution | Accuracy | Open Voltage | Overload Protection |
|-------|------------|-----------|--------------|---------------------|
| 4000Ω | 1Ω | ±(1.0%+2) | 3.1V~3.5V | 600V rms |

Continuity (•))

| Range | Resolution | Sound Indication | Open Voltage | Overload Protection |
|-------|------------|------------------|--------------|---------------------|
| •)) | 1Ω | Below300Ω | 3.1V~3.5V | 600V rms |

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4. OPERATION

1. Notes:

- (1) Check if the battery are put in correctly.
- (2) Be sure LCD and range indicator show the same as the function desired.
- (3) For general measurement, Peak Hold should be off to raise accuracy.
- (4) When changing ranges, Please put away tested conductor or circuit to avoid accident.
- (5) Always keep hand through the wrist strap to prevent carelessly dropping the meter. Also any unnecessary vibration and impacts should be avoided so as not to damage the meter itself.
- (6) When changing ranges or releasing Peak Hold, be sure the LCD shows "0" before next measurement.
- (7) Do not measure or connect circuit over AC1200A or 750V.
- (8) When measuring resistance, do not put

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on voltage between ends, since overstrong voltage is liable to lead to malfunction, although there is a protection function.

- (9) Take off test lead of voltage & resistance measurement when measuring current.
- (10) Strong current beside clamp jaw will affect accuracy.
- (11) This meter is not available for DC current & voltage, wave or unordinary AC current measurement, otherwise will cause great error.
- (12) When measuring current, put the tested conductor at middle of clamp jaw to acquire correcter reading.

2. ACA measurement

General current measurement

- (1) Put the power switch on.
- (2) Select a proper ACA range, Always start from the top range for any unknown current.
- (3) After changing ranges, before to make

further measurement, be sure the indicator has displayed AC 000A. Sometimes, due to the effect of temperature and humidity, it will display AC 002 digit, and that is normal.

- (4) Press the jaw trigger and insert the conductor to be tested to the middle of jaw area.
- (5) Read the indicating value. Highest position "OL" at left means overload, and a higher range is required.

Peak current measurement

This function is the best for measuring peak value, for instance, the starting current of motor.

- (1) Push the peak switch on.
- (2) Select a proper ACA range. Start from the top range for any unknown current.
- (3) Press the jaw trigger, clamp the conductor to be tested on.
- (4) Read the indicating value.

3. ACV measurement


- (1) Select a proper ACV range 400V or 750V (in red letter). Start from the top range if the voltage is unknown.
 - (2) Connect the test lead of voltage & resistance into the jack of meter.
 - (3) Push the power switch on.
 - (4) Be sure the indicator displays AC000V. Sometimes, due to the effect of temperature and humidity, it will display AC 002 digit, and that is normal.
 - (5) Connect the two long ends of test leads to the desired circuit in parallel, and read the indicating value.
 - (6) Peak Hold functions are both available for voltage measurement. For operation, please refer to current measurement.
- ## 4. Resistance(Ω) & continuity measurement (•)))
- (1) Adjust the range selector on 4000 Ω /•)) position.
 - (2) Connect the test lead for voltage &

resistance measurement into the jack of meter.

- (3) Push the power button switch on, and it will show overload.
- (4) Connect the two long ends of test leads to the desired circuit, and read the indicating value.
- (5) When making resistance measurement, there should be no voltage in circuit. Any capacitor should be discharged first.

5.MAINTENANCE:

Battery replacement

Thre sign "  "showing up on the indicator means the battery should be replaced.

- (1) Put off the power switch.
- (2) Take away the test lead or object under test.
- (3) Open the bottom battery cover .
- (4) Loose the battery and the pin with care, and take out the battery.

- (5) Connect the new battery and the pin, put it back to the compartment.
- (6) Put on the battery cover.

6.STORAGE

- (1) This is a precision instrument. The operation should be in compliance with the above description to avoid damage and danger.
- (2) Keep it away from high temperature, humidity or under direct sunlight.
- (3) Be sure to put it off after use. For long storage, the battery should be taken out lest the leakage of battery liquid damage the interior parts.