

AC DIGITAL CLAMP METER

MODEL YF-8070



OPERATING MANUAL

Thanks for your patronage. Please read thoroughly this manual before use in order to operate correctly, decrease damages, and obtain the best performances of this meter.

I. Features

- * The maximum opening size of the jaw up to 36mm.
- * The inner dimension of the jaw for clamping test leads is $\phi 35\text{mm}$.
- * The meter is double insulated and designed for your safety requirements.
- * With safety sockets design.
- * With indication of measurement units and functions.
- * With Peak Hold function.
- * In continuity test, reading below 80Ω approx. will be in company with a buzz.
- * With Data Hold function.

II. Specifications

* General Specifications

1. Display: 3 1/2 digit LCD with maximum

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by using lamp jaw.

Frequency region by clamp jaw	Test region	Max. Sensitivity
10Hz ~ 4KHz	10Hz ~ 200Hz	2A
	201Hz ~ 400Hz	3A
	401Hz ~ 600Hz	4A
	601Hz ~ 800Hz	5A
	801Hz ~ 1000Hz	6A
	1.001KHz ~ 1.9KHz	10A
	1.91KHz ~ 4KHz	20A

III. Names of Parts

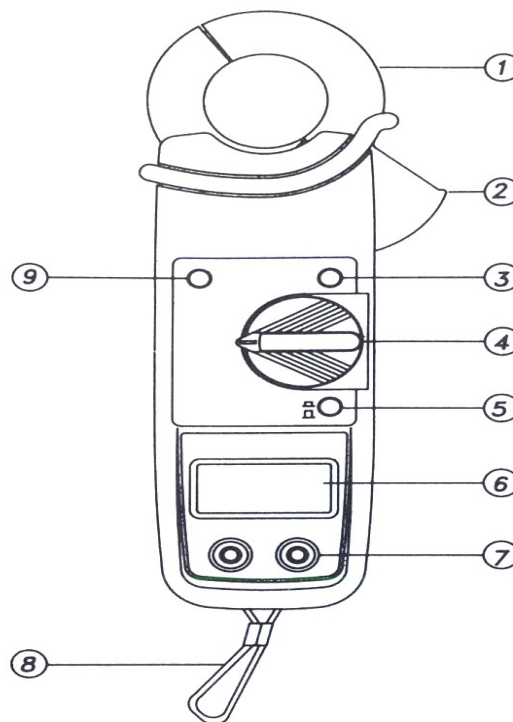
1. Inductive clamp jaw
2. Jaw trigger
3. Data hold switch button
4. Rotary range selector
5. Power switch
6. LCD
7. V/ Ω /Hz test socket
8. Wrist strap
9. Peak Hold switch button

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- reading 1999, units, decimal point signs.
2. Overload indication:
Display the highest "OL" at left side.
3. Low battery indication:
Replace battery as LCD displays " "
4. Battery life: About 300 hours.
5. Sampling time: 2.5 times/sec.
6. Peak Hold: To hold the maximum reading of the measured peak value.
7. Data Hold: To hold the reading.
8. Power supply: 1 pc of battery 006P 9V.

9. Rated environmental conditions:
Indoor use
Altitude up to 2000m.
Ambient temperature 5°C to 40°C
Relative humidity 80%
Installation categories II
Pollution degree 2
Double and Reinforce Insulation
10. Storage Temperature and Humidity:
 $-10^{\circ}\text{C} \sim 60^{\circ}\text{C}$, below 70%RH.
11. Size: 221(L) x 62(W) x 35(H)mm.
12. Weight: about 333g(including a battery).
13. Accessory: Test leads 1 set, instruction manual, carrying case, and battery 1 pc.

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* Electrical Specifications

Accuracy: $\pm(\dots\% \text{rdg} + \dots \text{dgt})$

AC Current

Range	Resolution	Accuracy 50Hz~500Hz	Overload Protection
200A	0.1A	$\pm(1.5\%+4)$	800A(within 60 sec.)
600A	1A		

AC Voltage

Range	Resolution	Accuracy 50Hz~500Hz	Input Impedance	Overload Protection
200V	0.1V	$\pm(1.2\%+4)$	10M Ω	DC 1000V AC 750V
600V	1V			

Resistance

Range	Resolution	Accuracy	Max. Open Voltage	Overload Protection
2000 Ω	1 Ω	$\pm(1.0\%+2)$	0.35V approx.	600Vrms

* Also with buzz function for continuity purpose, buzz will sound as the measured resistance is below 80Ω .

Frequency (Auto-range)

Range	Resolution	Accuracy	Max. Sensitivity	Overload Protection
2KHz	1Hz	$\pm(0.8\%+3)$	3Vrms	600Vrms
20KHz	10Hz			
100KHz	100Hz			

* Above measurements can also be completed

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IV. Operation

4-1. Notes

1. Check if the battery is installed correctly.
2. Check if the LCD and the range indicator show the same as the function desired.
3. As changing range, please remove the tested conductor or electrical circuit in advance from the clamp jaw in order to avoid any accident.
4. Always keep your hand through the wrist strap to avoid drop of the meter due to carelessness. Also, any serious vibration or impacts should be avoided so as not to damage the meter.
5. Do not test or connect to any circuit with voltage or current exceeding the specified overload protection.
6. As measuring resistor, please do not add any voltage. Though there is a protection circuit, excessive voltage will still cause malfunction easily.

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* General current measurement

1. Select a proper range.
2. Open the clamp and put the tested conductor in the center of the clamp jaw.
3. In the dark or where the reading is difficult, press the peak hold switch button to hold the obtained value. Unless a bigger value is re-obtained, the previously obtained value would maintain permanently.
4. To release the reading, just press the switch button again.
5. The Data Hold switch button is used to hold the obtained value permanently. To release this function, just press the switch button again.

4-3. ACV measurement


1. Select the ACV range.
2. Connect the test leads of Voltage/Resistance plug into the sockets, plug the red plug into V/ Ω /Hz socket, and black plug into COM socket.
3. Connect the two long ends of test

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leads to the desired circuit, then reading will be displayed.

4. Peak Hold and Data Hold functions are effective here.

4-4. Resistance measurement

1. Select the range of 2000 Ω /  .
2. Connect the test leads of Voltage/Resistance plug into the sockets, plug the red plug into V/ Ω /Hz socket, and black plug into COM socket.
3. Connect the two long ends of test leads to the desired circuit, then reading will be displayed.
4. As measuring resistance, any voltage existing in circuit is not allowed. If a capacitor is installed, it must be discharged before test.
5. Data hold function is effective here. Please refer to Subitem 4-2. for instruction.
6. With a buzz for continuity purpose. A buzz will sound as the measured resistance is below 80 Ω .

4-5. Frequency Measurement

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1. Select the Hz range.
2. Connect the test leads into the sockets, plug the red plug into V/ Ω /Hz socket, and black plug into COM socket.
3. Connect the two long ends of test leads to the desired circuit, then reading will be displayed.
4. An alternative way for measuring is to clamp the desired circuit with clamp jaw. But this method must be done in company with the max. sensitivity and the frequency region.
5. As measuring frequency, it is auto-ranged.

V. Maintenance

5-1. Replace battery as LCD displays " ".

1. Put off the power switch.
2. Remove the test leads or the objects to be tested.
3. Remove the screws from the battery cover, and detach the battery cover from the bottom cover.
4. Take out the battery from the battery

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fastener carefully.

5. Set the new battery with battery fastener, then put it back to the battery case.
6. Put the bottom cover back to its position and be fastened with screws.




5-2. Storage

1. This meter is a precision instrument. Whether in use or in store, please donot exceed the specification requirements to avoid any possible damage or danger during use.
2. Do not place this meter at the location that is in high temperature or humidity or in exposure to direct sun ray.
3. Be sure to put the meter off after use .For long time storage, take out the battery to avoid leakage of battery liquid which will damage the interior parts.

5-3. Maintenance and Cleaning:

Only use the dry cloth to clean the plastic case.

VI. Description of Symbols:

1. \perp :Earth (ground) TERMINAL.
2.  :Equipment protected throughout by DOUBLE INSULATION or REINFORCED INSULATION.
3.  :Caution, risk of electric shock.
4.  :Caution (refer to accompanying documents)
5. \sim :Represent AC.