

AC/DC CURRENT MINI DIGITAL CLAMP-ON TESTER

Instruction
Manual MODEL **240**

MULTI

Thank you very much for selecting our digital AC/DC clamp-on tester.

This model is complex instrument and employ a very reliable mechanical/electronic design.

Before you use your new instrument, read this Instruction Manual completely and familiarize yourself thoroughly with all functions.

With proper use and care, your tester will give you years of satisfactory service.

MULTI MEASURING INSTRUMENTS CO.,LTD.

Akihabara Murai Bldg.,7F,
1-26 Kanda Sakuma-cho,
Chiyoda-ku,Tokyo,101-0025
JAPAN

TEL: +81-3-3251-7013

FAX: +81-3-3253-4278

Home Page: <http://www.multimic.com/>

Email: multi@multimic.com

3. SPECIFICATIONS

Measuring method	Dual Integration mode
Display	3.5 digit LCD
Jaw opening capability	φ30mm
Over range Indication	Blanking of all digits except MSDI
Maximum Indication	1999
Low battery Indication	"B" mark on LCD readout
Sampling	2 times/s
Limitation of circuit voltage	Less than AC/DC 500V
Withstanding voltage	AC 1000V, 1 minute(Between outer case and core of CT)
Insulation resistance	10MΩ or more(Between internal circuit and core of CT)
Operating temperature	0°C to 40°C, < 80% RH
Storage temperature	-10°C to 60°C, < 70% RH
Power supply	SR-44(1.55V)×2 or LR-44×2
Power consumption	7mW
Battery life	SR-44 : 30 hours, LR-44 : 16 hours
Size	45 (W)×148(H)×20(D)mm
Weight	Approx. 80g
Accessories	Soft case1 Instruction Manual1 Batteries (LR-44)2

Accuracy: (23°C±5°C, 80% RH or less)

Range	Input range	Resolution	Accuracy	Max. input current
AC	20A 0~19.99A	10mA	±1.5%rdg±5dgt(50/60Hz) ±2.0%rdg±5dgt(20Hz~500Hz)	500A peak
	200A 0~150.0A	100mA	±2.0%rdg±5dgt(50/60Hz)	
	150.1~199.9A		±2.5%rdg±5dgt(20~500Hz)	
			±3.0%rdg±5dgt(50/60Hz) ±4.0%rdg±5dgt(20~500Hz)	
DC	20A 0~±19.99A	10mA	±1.5%rdg±3dgt	500A peak
	200A 0~±150.0A	100mA	±2.0%rdg±3dgt	
	±150.1~±199.9A		±3.0%rdg±3dgt	

1. FEATURES

- Useful for DC A measurement for automobile service.
- Data-hold function. Especially useful when working in dark or hard to get areas.
- Accurate gearing mechanism for closing of CT.
- Ultra compact size.

2. CAUTION

- Before operating this instrument, familiarize yourself with all instructions outlined in this manual.
- Always check to make sure that the function switch is set to the proper position.
- When making measurements, use CAUTION as dangerous voltages may be present in normally safe areas.
- To avoid electrical shock, use CAUTION when working above 60V DC or 25V AC rms.
Such voltages pose a shock hazard.
- Never make measurements with the battery cover OFF.
- Never fail to keep the maximum tolerable input.
- Never operate this instrument if it becomes wet, damp or has any liquid condensation build up on any part of the instrument.

4. DIMENSIONS AND PANEL FUNCTION

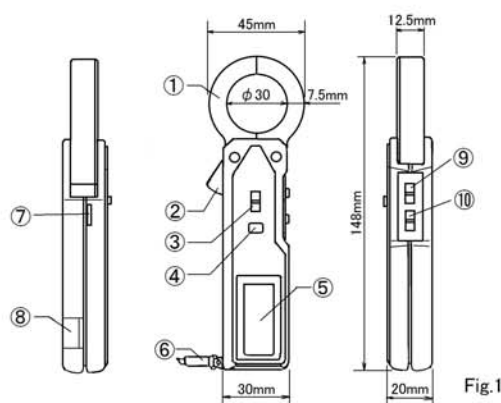


Fig.1

- ① Current transducer (Jaw)
- ② Jaw opening lever
- ③ Range switch
- ④ Data hold switch
- ⑤ LCD display
- ⑥ Wrist strap

- ⑦ Zero adjustment knob
- ⑧ Battery cover
- ⑨ AC/DC switch
- ⑩ Power switch

5. METHOD OF MEASUREMENT

- (1) Set the power switch to "ON" position.
- (2) Set the AC/DC switch to AC or DC depending upon the signal to be measured.
Note : In AC current measurement, even if "1" is displayed in the least digit without input, however, it is not abnormal and no influence for the measurement accuracy.
- (3) Set the range switch to the desired range.
- (4) Adjust the zero adjustment knob to read zero for the DC current measurement.
- (5) Clamp the conductor of the circuit under test with the current transducer.
Note : Clamp around only one conductor in the circuit to be measured.
- (6) Read the displayed value.
- (7) After measurement, set the power switch to "OFF".

Caution

This tester is designed for low voltage applications.
To avoid electrical shock or damage, the measurement is limited to the circuit under 500V AC/DC.

APPENDIX

When making the power switch on and off several times quickly for the short period, the display may show "O.L" according to circumstances.
Make switching power on/off with the interval more than 2sec.

6. REPLACEMENT OF BATTERIES

When the battery becomes exhausted or drops below the operating voltage, the "B" mark is displayed. Turn the power switch to "OFF", prior to installing batteries.
To install the batteries, remove the battery cover located on the unit back. (See Fig.2)
Insert the two LR-44 or SR-44 into the battery case making sure that proper polarity is observed. (See Fig.3)
Always replace both batteries at the same time. If the difference between the voltages of the batteries is big, the measurement error may be caused.

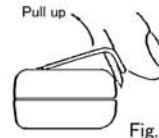


Fig.2

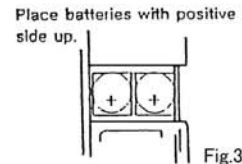


Fig.3

7. MAINTENANCE

When making requests for repair service, please bring the instrument directly to the dealer. If this is impossible, however, send the instrument directly to our sales office.
When mailing this instrument, always pack it in its original or equivalent packing material and pack together with name, address, telephone number and the warranty documentation.
● To ensure speedy and reliable repair, always include information as the type of failure and cause.
● If required, always return accessories with the instrument.
● When contacting us, provide the model number and serial number of your instrument.