

Safety Information

Do not operate the tester if the body of meter or the test lead looks broken.


Check the main function selector and make sure it is at the correct position before each measurement.

Do not perform resistance and continuity test on a live power system.

Do not apply voltage between the test terminals and test terminal to ground that exceed the maximum limit record in this manual.

Exercise extreme caution when measuring live system with voltage greater than 60V DC or 30V AC.

Keep the fingers after the protection ring when measuring through the test lead.

Change the battery when the  symbol appears to avoid incorrect data.

Environmental Conditions :

Altitude up to 2000 meters.

Operating temperature : 0 ~ 40 , < 80% RH, non-condensing


Storage temperature : -10 ~ 60 , < 70% RH, battery removed

Pollution Degree : 2

Installation Categories

Explanation of Symbols :

 WARNING ! Refer to Operation Instructions.

Approvals:  IEC 1010 600V CAT , 300V CAT

Specification

General Specification

Digital Display :


3 1/2 digits LCD display with maximum reading 1999

Over Load :

When the indication is larger than the 1999 counts, the LCD will show 1000 with blinking 1.

Sample Rate : 2 times/sec

Low Power Indication :

When the battery is under the proper operation range,  symbol will appear on the LCD display.

Power Source :

R03(UM-4) or AAA 1.5V battery × 2.

Battery Life : 500 hr approx.

Clamp opening size : 25mm

Clamp diameter : 30mm

Dimension (L × W × H) :

187 × 50 × 29mm

Weight :

DCM60L 210g(include battery),

DCM60 200g(include battery)

Accessory :

DCM60L Instruction Manual, Carrying Case (C-DCM60L),
Test Lead (TL-88), Battery 1.5V × 2

DCM60 Instruction Manual, Carrying Case (C-DCM60),
Battery 1.5V × 2

Electrical Specification

The accuracy specification is defined as $\pm (... \% \text{reading} + ... \text{count})$

At 23 ± 5 , 80%RH

DCM60L

ACV(Autorange)

Range	Resolution	Accuracy	Overload Protection
		50Hz ~ 500Hz	
200V	0.1V	$\pm 1.5\% \text{rdg.} + 5 \text{dgt.}$	660Vrms
600V	1V		

ACA (Autorange)

Range	Resolution	Accuracy		Overload Protection
		50Hz ~ 60Hz	60Hz ~ 500Hz	
200A	0.1A	$\pm 2\% \text{rdg.} + 5 \text{dgt.}$	$\pm 2.9\% \text{rdg.} + 5 \text{dgt.}$	600Arms
600A	1A			

Ohm ()

Range	Resolution	Accuracy	MAX Test Voltage	Overload Protection
200	0.1	$\pm 1.9\% \text{rdg.} + 3 \text{dgt.}$	1.6VDC	500Vrms

Continuity ()

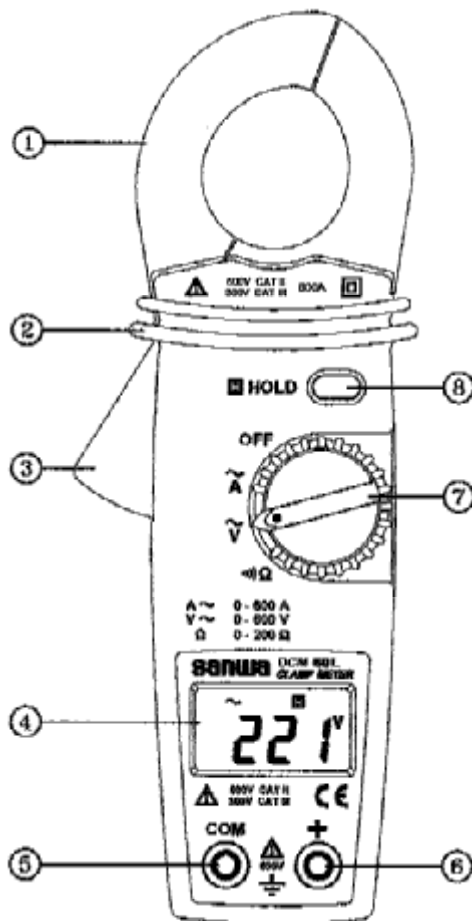
Range	Active Region	MAX Test Voltage	Overload Protection
)	<Approx.100 Ohm	1.6VDC	500Vrms

DCM60

ACA

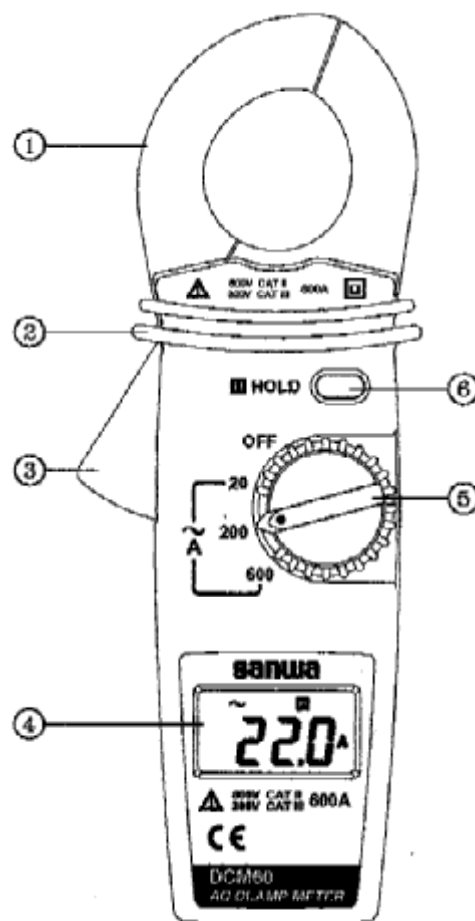
Range	Resolution	Accuracy		Overload Protection
		50Hz ~ 60Hz	60Hz ~ 500Hz	
20A	0.01A	$\pm 2\% \text{rdg.} + 5 \text{dgt.}$	$\pm 2.9\% \text{rdg.} + 5 \text{dgt.}$	200Arms
200A	0.1A			600Arms
600A	1A			

Instrument Familiarization



DCM60L

Current Sensing Clamp
Safety protection ring
Clamp opening handle
LCD display
COM input terminal
Positive input terminal
Main function selector
Data hold button



DCM60

Current Sensing Clamp
Safety protection ring
Clamp opening handle
LCD display
Main function selector
Data hold button

Symbol Definition

DCM60L



DCM60



Low battery indication



Hold Data indication



Continuity function indication

V

Voltage measurement indication

A

Current measurement indication

~

Alternative source indication

Resistance

Measuring Instruction

AC Current Measurement

Switch the main function selector to \tilde{A} range.

Open the clamp by pressing the jaw-opening handle and insert the cable to be measured into the jaw.

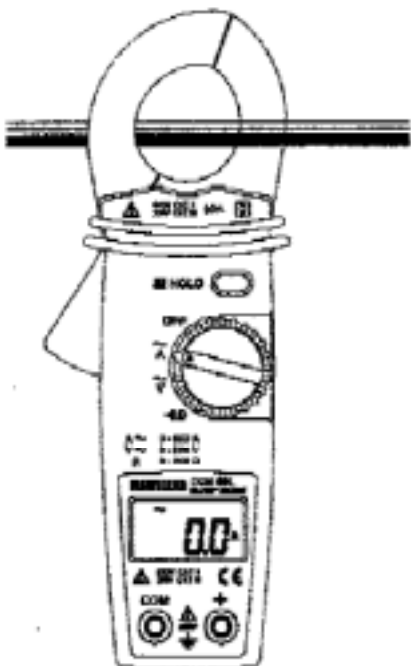
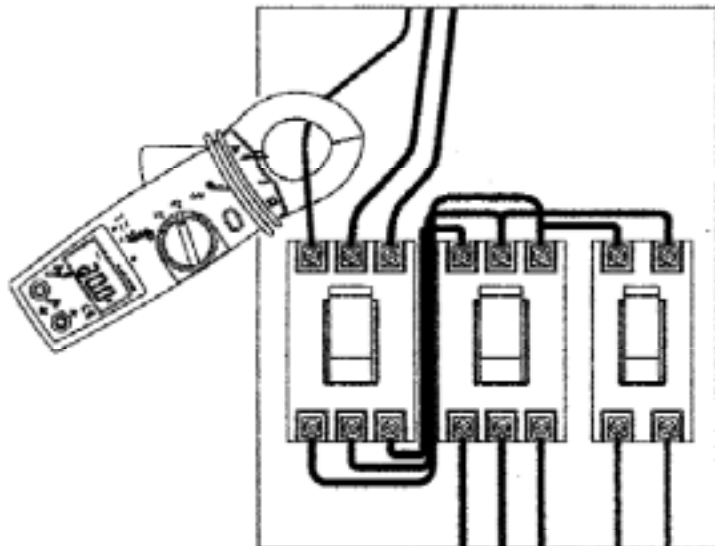
Close the clamp and get the reading from the LCD display.

Note:

Before this measurement, disconnect the test lead with the meter for safety.

In some occasion that the reading is hard to read, push the HOLD button and read the result later.

CORRECT



INCORRECT

ACV Measurement – Only DCM60L

WARNING!

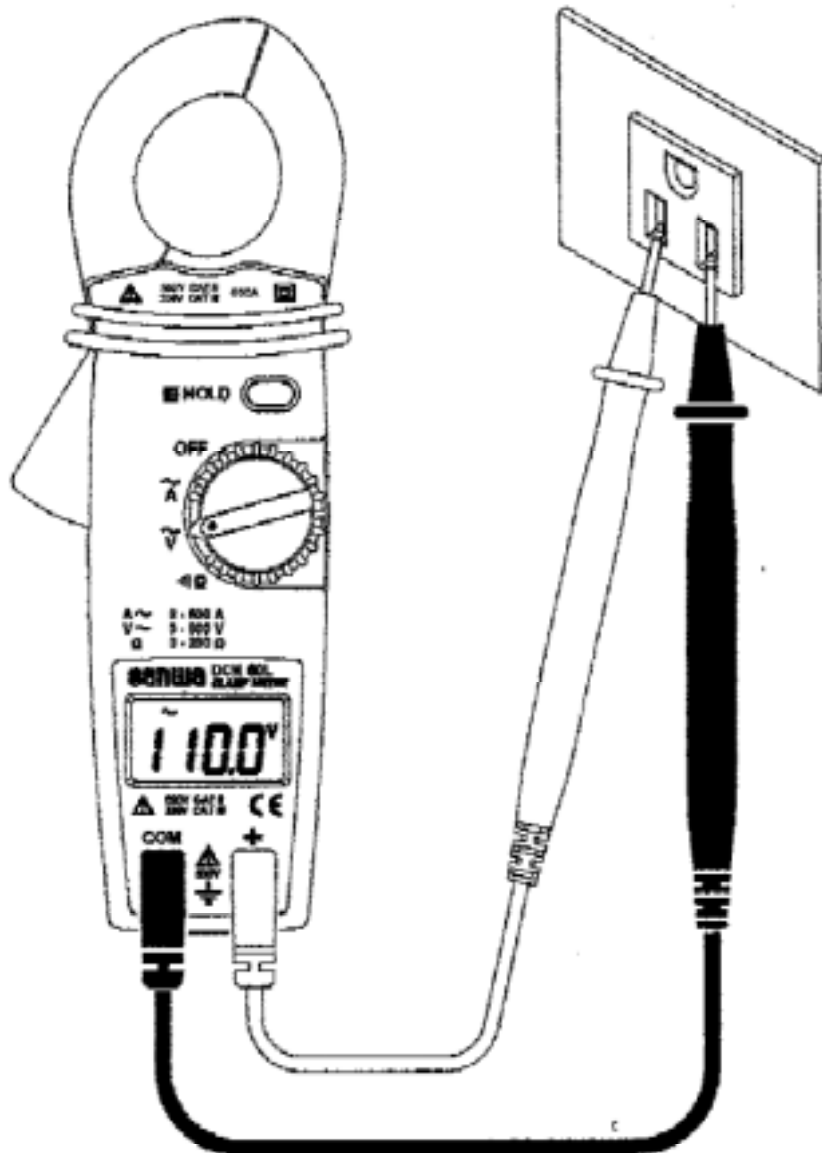
Maximum Input Voltage is 600V AC. Do not attempt to take any voltage measurement that may exceed to avoid Electrical shock hazard and/or damage to this instrument.

Switch the main function selector to \tilde{V} range.

Connect red test lead to “+” terminal and black one to the “COM” terminal.

Measure the voltage by touching the test lead tips to the test circuit where the value of voltage is needed.

Read the result from the LCD display.



Resistance Measurement – Only DCM60L

Switch the main function to Ω range.

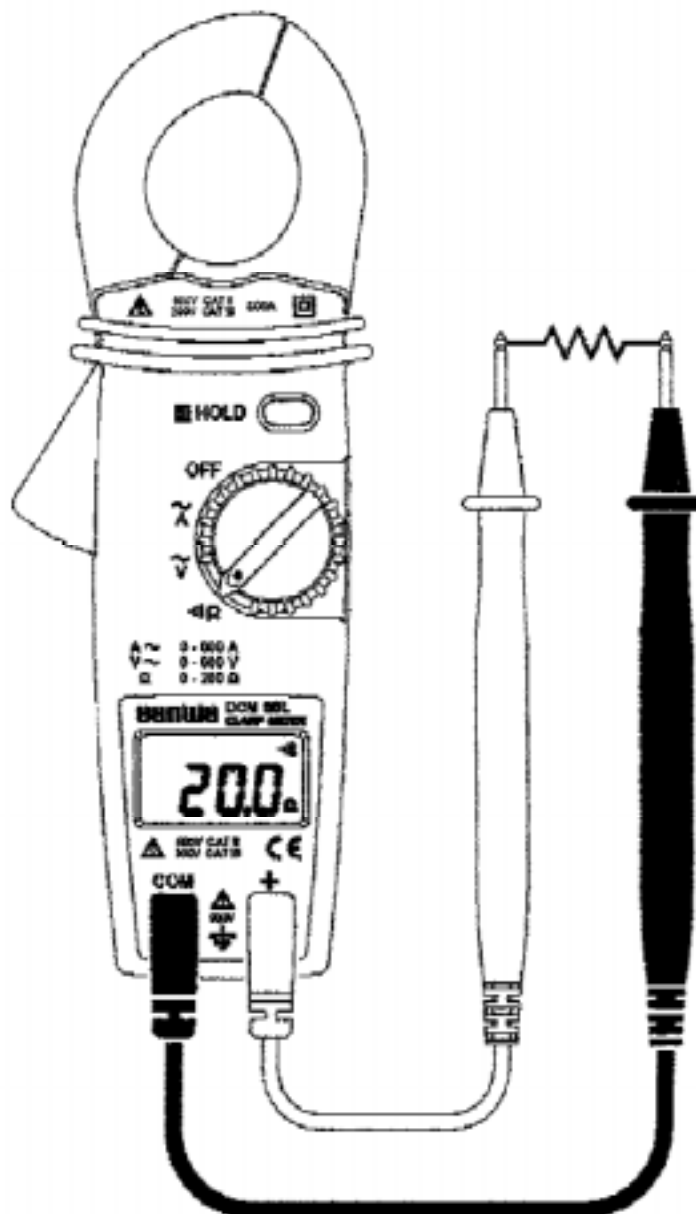
Connect red test lead to “+” terminal and black one to the “COM” terminal.

Connect tip of the test leads to the points where the value of the resistance is needed.

Read the result from the LCD display.

Note :

When take resistance value from a circuit system, make sure the power is cut off and all capacitors need to be discharged.



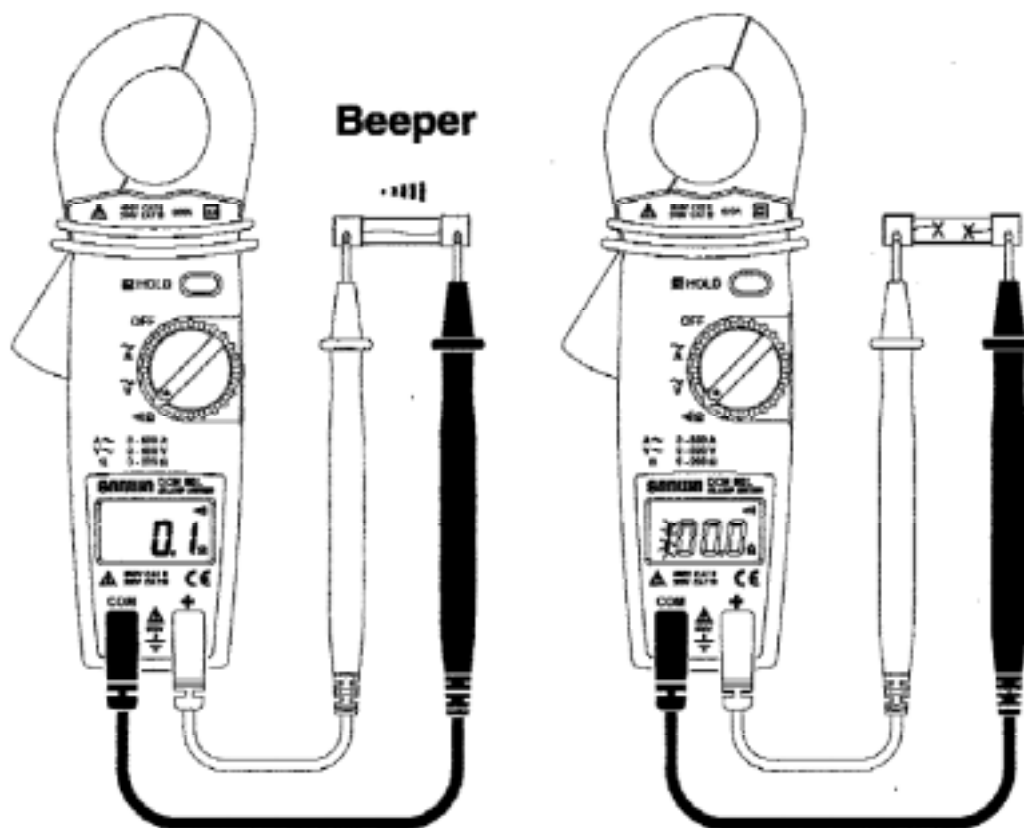
Continuity Test – Only DCM60L

Switch the main function to  range.

Connect red test lead to “+” terminal and black one to the “COM” terminal.

Connect tip of the test leads to the points where the conduction condition needed.

If the resistance is under 100 Ω , the beeper will sound continuously.



Short circuit


Open circuit

Battery Changing



WARNING!

To prevent electrical hazard or shock, turn off clamp meter and disconnect test leads before removing battery cover.

1. When the battery voltage drop below proper operation range, the  symbol will appear on the LCD display and the battery needs to be changed.
2. Before changing the battery, switch the function selector to “OFF” and disconnect test leads. Open the back cover by a screwdriver. Replace the old batteries with two UM-4 or AAA size batteries.
3. Close the back cover and fasten the screw.

Maintenance

Warning

Before open the battery door, disconnect both test leads and never use the meter before the battery door is closed.

Caution

To avoid contamination or static damage, do not touch the circuit board without proper static protection.

Remark

1. If the meter is not going to be used for a long time, take out the battery and do not store the meter in high temperature or high humidity environment.
2. When take current measurement, keeping the cable at the center of the clamp will get more accurate test result.
3. Repairs or servicing not covered in this manual should be done only by qualified personnel.

Clearing

Periodically wipe the case with a dry cloth and detergent. Do not use abrasives or solvents on this instruments.