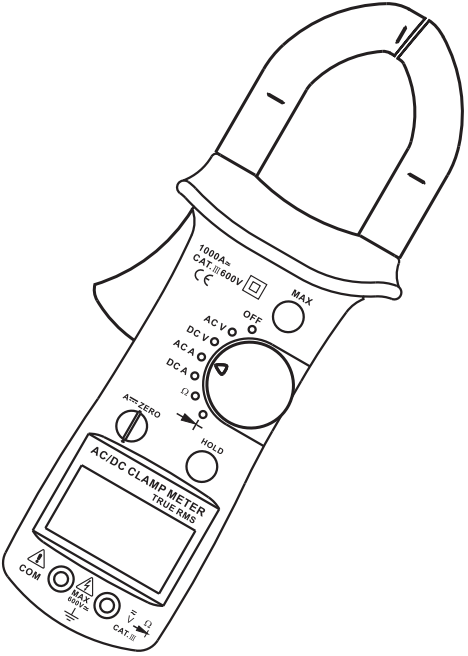
TRUE RMS CLAMP METER



INSTRUCTION MANUAL

1.INTRODUCTION

NOTE

This meter has been designed and tested according to CE Safety Requirements for Electronic Measuring Apparatus, EN 61010-1, EN 61010-2-32 and other safety standards. Follow all warnings to ensure safe operation.

WARNING

READ "SAFETY NOTES" (NEXT PAGE) BEFORE USING THE METER.

2.SAFETY NOTES

Read the following safety information carefully before attempting to operate or service the meter.

- Use the meter only as specified in this manual, otherwise the protection provided by the meter may be impaired.
- Always keep hands behind the meter barrier.
- Use extreme caution when clamping around uninstalled conductors or bus bars.
- Never clamp around any conductor carrying a voltage above 600V R.M.S.
- Rated environmental conditions：
  1. Indoor use.
  2. Installation Category Ⅲ.
  3. Pollution degree Ⅱ.
  4. Altitude up to 2000 Meter.
  5. Relative Humidity 80% Max.
  6. Ambient Temperature 0~40°C.
- Observe the international Electrical Symbols listed below：


Meter protected throughout by double insulation or reinforced insulation.


Warning ! Risk of electric shock.


Caution ! Refer to this manual before using the meter.


Alternating current.


Earth (ground) terminal.

3.FEATURES

- Provide ture RMS value.
- Full auto-range for all functions.
- "Data Hold" function freezes the reading.
- "Max Hold" function holds the absolutely maximum of readings.
- Low battery indication.
- Safety design throughout with no exposed metal parts.
- Shielded banana plugs and recessed input terminals.
- "Ohm" function ideal for checking continuity of relays, transformers and motor coils.
- "Diode check" function.

4.SPECIFICATIONS

Ranges(Auto)：

AC Voltage ：400.0/600 V
AC Current ：400.0/1000 A
DC Voltage ：400.0/600 V
DC Current ：400.0/1000 A
Resistance ：400.0/2000 Ω
Diode ：400.0/2000 mV at 1mA

ACV / ACA

Range	Resolution	Accuracy
400 V	0.1 V	±(1.0%rdg+3dgt)
600 V	1 V	
400 A	0.1 A	±(1.5%rdg+3dgt)
1000 A	1 A	

★ Frequency Response 40Hz~500Hz

DCV / DCA

Range	Resolution	Accuracy
400V	0.1V	±(0.75%rdg+3dgt)
600V	1V	
400A	0.1A	±(1.5%rdg+3dgt)
1000A	1A	

Resistance

Range	Resolution	Accuracy
400Ω	0.1Ω	±(1.0%rdg+3dgt)
2000Ω	1Ω	

★ Buzzer sounds below 38.0Ω

Diode

Range	Resolution	Accuracy
400 mV	0.1 mV	±(1.0%rdg+3dgt)
2000 mV	1 mV	

★ At 1mA current

Overload protection

ACV	750V rms.
DCV	1000V
Diode & Ohm	600V rms.

Conductor Size

Approx. 40mm Max.

Operating Pirnciple: Dual slope integration.

Over Rage Indication: "O.L" indicated.

Low Battery Indication: " ⊟ " sign appears on the display.

Response Time:

Approx.1 second.

Sample Rate:

Approx.2 times per second.

Temperature & Humidity for Guaranteed

0°C ~ 40°C at 80% max. relative humidity.

Storage Temperature & Humidity:

-10°C ~ 50°C at 80% max. relative humidity.

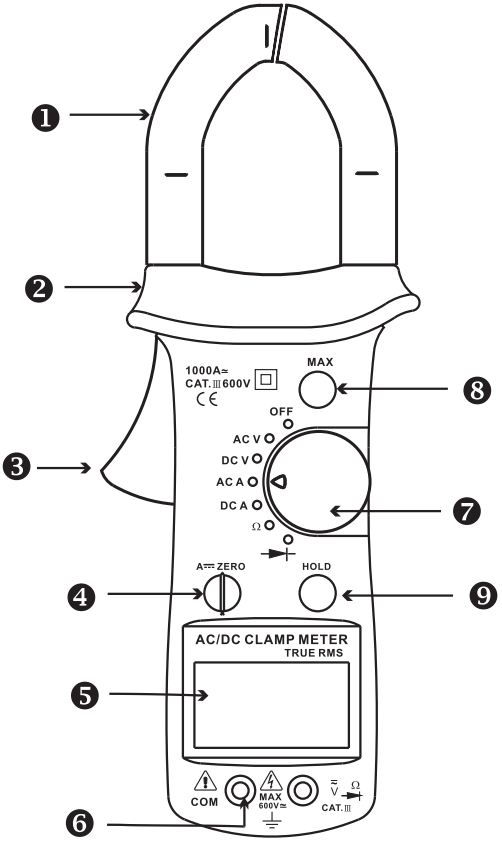
Dimensions
255(L) x 80(W) x 35(D)mm

Weight
Approx. 420g (battery included)

Power Source
9V (6F22) x 1

Accessories:
Test leads.
Carrying case.
Instruction manual.
9V (6F22) x 1.

5.Instrument Layout



(1) Transformer Jaws
Pick up the conductor within the jaws center.

(2) Barrier
Provide a protective distance from hands to conductor.

(3) Jaw Trigger
Press to open the jaws.

(4) DCA zero adjust shaft

(5) LCD Display
3¾ digit LCD with the maximum reading of 3999.

(6) Input Terminal

(7) Rotary Switch

(8) Max Button
Hold the absolute maximum of readings with "MAX" indicated.

(9) Data Hold Button
Freeze the reading for all ranges with "HOLD" indicated.

6.MEASUREMENT

Before proceeding with measurement ,read the safety notes.

(1)Voltage measurement

- Insert the BLACK test lead to COM and the RED one to the other terminal.
- Switch to AC V range for AC voltage or DC V range for DC Voltage.
- Use the test lead tip to the circuit and read the reading of display directly.
- If the reading exceed 600V, maybe the reading value is wrong and it is dangerous. (refer to the safety notes)

(2)Current measurement

- Switch to AC A range for AC current or DC A for DC current.
- If the initial reading of DC A is not zero, use the DC A zero adjust shaft to adjust.
- Make sure that the test lead is not connect to the Terminal.
- Press the jaw trigger to open the transformer jaws and clamp onto one conductor only.
- Read the display reading directly.

(3)Ohm & Diode Measurement

For ohm test：

- Switch to OHM range and make sure there is no power in the circuit being measured.
- Insert the BLACK lead to the COM and the RED one to another.
- Connect the test leads to the circuit under test and read the display directly.

For diode test：

- Connect the test leads to the diode under test.
- Read the forward voltage of diode directly from display. If connect reversely, the display shows O.L.

7.MAINTENANCE

Battery Replacement：

When low battery warning appears, change a new battery as follows：

Disconnect the test leads from the instrument and turn off power. Unscrew the battery cover and replace a new battery.

Cleaning and Storage：

WARNING

To avoid electrical shock or damage to the meter, do not get water inside the case.

Periodically wipe the case with a damp cloth and detergent. Do not use abrasives or solvents.

If the meter is not to be used for a long time over 60 days, please remove the battery for storage.