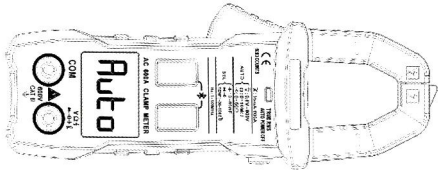


User Manual



- 1 -

- A. Introduction**
This product is a battery-powered, true-rms, auto ranging digital clamp multimeter with a 6000 counts LCD display and a backlight.
- B. Safety information**
To avoid possible electrical shock, fire, or personal injury, please read all safety information that comes with the product.
(1) Do NOT exceed the "maximum value" indicated in the Specification.
(2) Examine the connection of the test leads and the insulation of the product before measuring voltage higher than 36V DC or 25V AC.
(3) Disconnect the test leads from the circuit before changing the mode.
(4) Misuse of mode or range can lead to hazards, be cautious. "OL" will be shown on the display when the input is out of range.
(5) Safety symbols:

	Hazardous voltage		Earth
	Resistor insulation check		Battery
	Peak of open check		N/L Wire judgement
	the 25V Manual		

C. Specifications

Function	Range	Resolution	Accuracy	MAX Value	Frequency Response
DC Voltage (V)	6.000V	0.001V	±(0.5%+3)	600V	
AC Voltage (V)	600.0V	0.01V	±(1.0%+3)	600V	40Hz-1kHz
AC Current (A)	6.000A	0.001A	±(5%+30)	600A	40Hz-1kHz
	600.0A	0.1A	±(2.5%+30)		

- 2 -

Function	Range	Resolution	Accuracy	MAX Value	Frequency Response
Resistance	6.000kΩ	0.001kΩ	±(1.5%+3)	60MΩ	40Hz-1kHz
Frequency	9.999kHz	0.001kHz	±(0.1%+2)	9.999MHz	40Hz-1kHz
Capacitance	9.999μF	0.001μF	±(5.0%+20)	4.000mF	40Hz-1kHz
Diode	0.000V	0.001V	±(5.0%+5)		
Impedance	30.000Ω	1Ω			
Peak Current	1.200A	0.001A			
Flashlight	1.200A	0.001A			
Temperature	-32.000°C	1°C			
	-7.200°F	1°F			

General Specifications:

Display (LCD)	6000 counts
Backlight	Auto
Material	ABS
Update Rate	3 times/second
Low Battery	V
Auto Power Off	V

Mechanical Specifications:

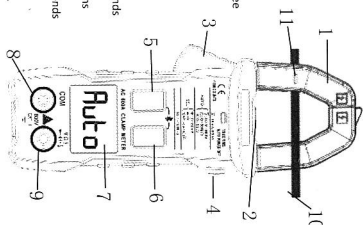
Dimension	122x41x42mm
Weight	172g
Battery Type	1.5V AA Battery * 2
Warranty	One year
Environmental Specifications	
Temperature	0~70°C
Humidity	<75%
Storage	-20~60°C
Humidity	<85%

- 3 -

D. Instruction

(1) Front panel (see the picture on the right)

1. Jaw
2. Flashlight
3. Jaw release
4. Hold / Inrush Current / Peak Hold
5. HOLD: To press this button once and you will see "HOLD" on the display; to press this button twice and you will see "INCRSH" on the display; Peak hold: to press this button twice and you connecting the "HOLD" on the display
6. Power / Save: Press this button for more than 2 seconds to turn on / off
7. Select: Press this button for switching functions after connecting test leads to the Terminals.
8. Frequency / NCV: Press this button over 2 seconds into NCV mode and exit from release.
9. LCD display
10. COM: Common terminal for all measurements.
11. * * * : Input terminal for voltage, resistance, capacitance, temperature, frequency, impedance, diode measurements and judging N/L wires.
12. Wire to be measured
13. Marked position



- 4 -

(2) Measure AC/DC Voltage

1. The minimum voltage of this product is 0.8V. When the measured voltage is higher than 0.8V, the product will display the reading.
 2. Connect the black test lead to the COM Terminal and connect the red test lead to the "V", Terminal.
 3. The DC or AC voltage will be matched automatically.
 4. Touch the probes to the correct test points of the circuit to measure the voltage.
 5. Read the measured voltage on the display.
- * Caution:
a. Do not measure voltage that exceeds the MAX Value as indicated in the Specifications.
b. Do not touch high voltage circuit during measurements.

(3) Measure AC Current Only

1. Turn power switch on
 2. Push the jaw release and center the wire within the clamp jaws (as in the picture).
 3. The wire should be in the marked position to keep measurement accuracy.
 4. Read the measured current on the display.
- Color:
1. Read the measured current that exceeds the MAX Value as indicated in the Specifications.
 2. Measure one wire at a time because current moving in different directions will cancel each other out.

(4) Measure Resistance

1. Connect the black test lead to the COM Terminal and connect the red test lead to the Ω Terminal.
 2. Press the Ω button once; the display will be cleared automatically.
 3. Touch the probes to the desired test points of the circuit to measure the resistance.
 4. Read the measured resistance on the display.
- *Caution:
- a. Disconnect circuit power and discharge all capacitors before you test resistance.
 - b. Do not input voltage at the Resistance Mode.

(5) Measure Continuity / Diode

1. Connect the black test lead to the COM Terminal and connect the red test lead to the Ω Terminal.
 2. Press SET / Power once to toggle to the Continuity/Diode Mode.
 3. Touch the probes to the desired test points of the circuit.
 4. The built-in beeper will beep when the resistance is lower than 50 Ω , and the indicator light will be on.
 5. Measure diode: Connect the red probe to the anode side and the black probe to the cathode side.
 6. Read the forward biased voltage value on the display.
 7. Reverse the test leads and read the reverse biased voltage with diode polarity or the diode is broken; the display reading shows "OL".
- *Caution:
- Do not input voltage at the Continuity / Diode Mode.

(6) Measure Capacitance

1. Discharge all capacitors before you test capacitance.
2. Connect the black test lead to the COM Terminal and the red lead to the μF Terminal.
3. Push Power button twice to enter the Capacitance Mode.
4. Connect the red probe to the anode side and the black probe to the cathode side of the capacitor to be tested.
5. Read the measured capacitance value.

(7) Measure Frequency

1. Connect the black test lead to the COM Terminal and connect the red test lead to the Ω Terminal.
2. Press the Ω button once for AC current frequency without connecting the test leads to the terminals.
3. Press Hz / NCV button once to enter the Frequency Mode for DC voltage frequency after connecting the test lead to Terminal.
4. Touch the probe to the desired test points of the circuit.
5. Read the measured frequency value on the display.

(8) Measure NCV

1. Press Hz / NCV Over 2 seconds to toggle to the NCV Mode.
2. Hold the product and move it around; the built-in beeper will beep when the inner sensor detects AC voltage nearby. The stronger the voltage is, the quicker the beep.
3. Put the red probe into the Ω Terminal, then use the black probe to touch the Live line and Neutral line of the Main supply. You can judge the Line or N-line by the beeps. If you can hear the strong beeps, this is the Line, or it's a N-line.

(9) Measure Temperature

1. Connect the black thermocouple probe to the COM Terminal and connect the red thermocouple probe to the Ω Terminal.
2. Press the Ω button once to enter the Temperature Mode after connecting the test lead to Terminals, and the display will show the room temperature; to switch C/F , press SET / POWER button once again.
3. Touch the probes to the desired test points.
4. Read the measured temperature on the display.
5. Do not input voltage at the Temperature Mode.

(10) Measure Inrush current

1. Turn power on, and press HOLD twice to toggle to Inrush Current Mode; the display will show "MAX".
2. Be in the marked position to keep measurement accuracy; the wire should be in the marked position to keep measurement accuracy.
3. Turn on the engine or motor equipment, and the product will capture the maximum current within 100ms when motor is starting.
4. Read the measured temperature on the display.

(11) Peak Hold

1. Turn power on, and press HOLD once after connecting the test lead to Terminals.
2. Be in the marked position to keep measurement accuracy; the display will show "PEAK HOLD".
3. Touch the probe to the desired test points of the circuit.
4. Read the measured voltage value on the display.

(12) Auto Power Off

1. The product automatically powers off after 15 minutes of inactivity.
2. The built-in beeper beeps 5 times 1 minute before power off.
3. To restart the product, press SELECT button.
4. To disable the Auto Power Off function, hold down the Hz / NCV button when turning on the product; you will hear five beeps if you have successfully disabled the function.

E. General Maintenance

- Besides replacing batteries and fuses, do not attempt to repair or service the product unless you are qualified to do so and have the relevant calibration, performance test, and service instructions.
- (1) Do not operate the product around hot, wet, flammable, explosive or magnetic environments.
 - (2) Clean the product with damp cloth and mild detergent; do not use abrasives or solvents.
 - (3) Remove the input signals before you clean the product.
 - (4) Remove the batteries if you not use the product for a long time to prevent possible battery leak.
 - (5) When the screen on the display, batteries shall be replaced as below:

1. Remove the battery cover.
2. Replace the used batteries with new batteries of the same type.
3. Place the battery cover back and fasten the screw.
- (6) Replace fuses as above steps. Use only fuses of the same type as the original ones.

F. Link to Bluetooth App

- (1) Turn on the power.
- (2) Press "Power" and "Hz" at the same time, the screen will show "Bluetooth".
- (3) Open e-Bull on mobile to search "Bluetooth OMM" to link.
- (4) Please refer to relative explanation of the Bluetooth App.

Warning:

1. Do NOT exceed the "maximum value" indicated in the Specification.
2. Do NOT input voltage at the Current Mode, the Resistance Mode, the Diode Mode, the Continuity Mode, or the Temperature Mode.
3. Do NOT use the product when the batteries or the battery cover is not placed correctly.
4. Turn off the product and remove the test leads from the test points before changing batteries or fuses.

F. Troubleshooting

If your product do not function as normal, the following steps may help you. If the problem still cannot be solved, please contact your dealer.

Problem	Possible Reason
Display malfunction	Low battery; replace batteries
Symbol	Replace batteries
No current input	Replace fuse

LIMITED WARRANTY AND LIMITATION OF LIABILITY

Customers enjoy one-year warranty from the date of purchase. This warranty does not cover fuses, disposable batteries, or damage from accident, neglect, misuse, alteration, contamination, or abnormal conditions of operation or handling.

All rights reserved. Specifications are subject to change without notice.