

User Manual



Introduction

This product is a battery-powered, auto-ranging, true RMS digital multimeter with a 4000 counts LCD display.

Safety Information

To avoid possible electrical shock, fire, or personal injury, please read all safety information before you use the product. Please use the product only as specified, or the protection supplied by the product can be compromised.

- Examine the case before you use the product. Look for cracks or missing plastic. Carefully look at the insulation around the terminals.
- The measurement must be made **within the allowable measuring range**.
- Do not use the product around explosive gas, vapor, or in damp or wet environments.
- When the voltage to be measured exceeds 36V DC or 25V AC, the operator shall be careful enough to avoid electric shock.
- 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.
- Low level of a battery will result in incorrect readings. Change the batteries when battery level is low. Do not make measurements when the battery door is not properly placed.

Instruction Buttons

	Push this button over 2 seconds to turn on or turn off the product. The product automatically powers off after 15 minutes of inactivity and the built-in beeper beeps 5 times 1 minute before auto power off. To cancel auto power off, push NCV before turning on the product, after 5 beeps to cancel the auto power off successfully.
	Push once to hold the current reading on the display; Push for more than 2 seconds to turn on the flashlight backlight. And long-push again to turn off.
	Press this button to enter auto mode. Automatically switch to enter other functions include temperature, frequency, AC/DC voltage, resistance and continuity.
	Keep pushing this button to enter the NCV testing mode. When testing, you can stop pushing.
	Press this button to enter current test mode.
	In AC voltage mode, it can identify frequency Automatically.
	Press to test temperature.

Measurements

Measure DC/AC Voltage (>0.8V)

1. Only when the voltage is higher than 0.8V, this product will show the display.
2. Put the red lead into the  terminal, put the black lead to the COM terminal.
3. The DC or AC voltage will be auto matched.
4. Touch the probes to the correct test points of the circuit to measure the voltage.
5. Read the measured voltage on the display.

Test for Current

1. Put the red lead to  terminal and put the black lead to COM terminal. The current measure will be auto matched when you put the leads in.
2. Touch the probes to the correct test points of the circuit to measure the current.
3. Read the measured current on the display.

Measure Resistance

1. Put the red lead into the  terminal, put the black lead to the COM terminal.
2. The resistance measure will be auto matched.
3. Touch the probes to the desired test points of the circuit to measure the resistance.
4. Read the measured resistance on the display.

Test for frequency

1. In AC mode, press Hz to enter frequency test mode.
2. Touch the probes to the desired test points of the circuit

to measure the frequency.
3. Read the measured frequency value on the display.

Measure Temperature

1. Press **C/F** to enter in temperature test mode;
2. Connect the black thermocouple probe to the COM terminal and the red probe to the ° C/° F terminal;
3. Touch the probes to the desired test points.
4. Read the measured temperature on the display.

Continuity test

1. This product can test continuity automatically.
2. Touch the probes to the desired test points.
3. The built-in beeper will beep when the resistance is lower than 50Ω, which indicates a short circuit while the central LED light will light .

Test for NCV

1. Keep pushing the NCV button to enter 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 beeper beeps while the central LED light will twinkle.

Specifications

General Specifications	
Display (LCD)	4000 counts
Range	Auto
Material	ABS/PVC
Update Rate	3times/Second
True RMS	✓
Data Hold	✓
Backlight	✓
Auto Power Off	✓
Low Battery Indication	✓

Electrical Specifications				
Function	Range	Resolution	Accuracy	Max
DC volatge (V)	4. 000V	0. 001V	± (0. 5%+3)	600V
	40. 00V	0. 01V		
	400. 0V	0. 1V		
	600V	1V		
AC volatge (V)	4. 000V	0. 001V	± (1. 0%+3)	600V
	40. 00V	0. 01V		
	400. 0V	0. 1V		
	600V	1V		
DC current	999. 9mA	0. 1mA	± (1. 0%+4)	9. 999A
	9. 999A	0. 001A		
AC current	999. 9mA	0. 1mA	± (2. 0%+3)	9. 999A
	9. 999A	0. 001A		
Resistance	4. 000kΩ	0. 001kΩ	± (0. 5%+3)	40MΩ
	40. 00kΩ	0. 01kΩ		
	400. 0kΩ	0. 1kΩ		
	4. 000MΩ	0. 001MΩ		
	40. 00MΩ	0. 01MΩ		
Frequency	4. 000Hz	0. 001Hz	± (1%+2)	100. 0kHz
	40. 00Hz	0. 01Hz		
	400. 0Hz	0. 1Hz		
	4. 000kHz	0. 001kHz		
	40. 00kHz	0. 01kHz		
100. 0kHz	0. 1kHz			

Temperature	-30~1000° C (-22~1832° F)
Continuity	✓
NCV	✓
Frequency response at AC modes:	40Hz ~ 1kHz

Environmental Specifications		
Operating	Temperature	0~40°C
	Humidity	<75%
Storage	Temperature	-20~60°C
	Humidity	<80%



LIMITED WARRANTY AND LIMITATION OF LIABILITY

Customers enjoy one-year warranty from the date of purchase.

This warranty does not cover fuses, disposable batteries, damage from misuse accident, neglect, alteration, contamination, or abnormal conditions of operation or handling, including failures caused by use outside of the product's specifications, or normal wear and tear of mechanical components.