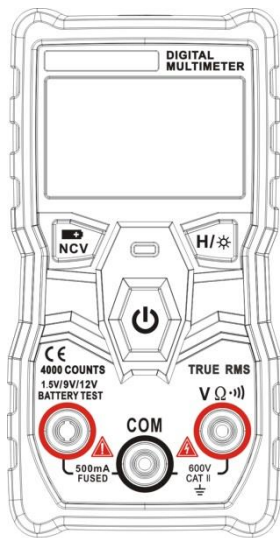


## User Manual



## 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

	<p>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.</p>
	<p>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.</p>
	<p>Keep pushing this button to enter the NCV testing mode. In this mode, you have to push the button always. When you put the test leads into the battery test terminal, the mode will change to 1.5V battery test, push the button shortly, you can change between 1.5v, 9v and 12v.</p>

## 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  $V \Omega$  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.

### Measure Resistance

1. Put the red lead into the  $V \Omega$  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 Continuity

1. Put the red lead into the  $V \Omega$  terminal, put the black lead to the COM terminal
2. The continuity measure will be auto matched.
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 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.

### Battery test

1. Put the red lead into the left battery terminal, put the black lead into the COM terminal.
2. When you test the batteries, press  button can change between 1.5v, 9v, and 12v.
3. Choosing the right testing mode according to the batteries.
4. Connect the probes to the positive and negative poles of the battery, then you can read the voltage on the screen. Or you can judge the voltage according to the color of central lighting.

### Specifications

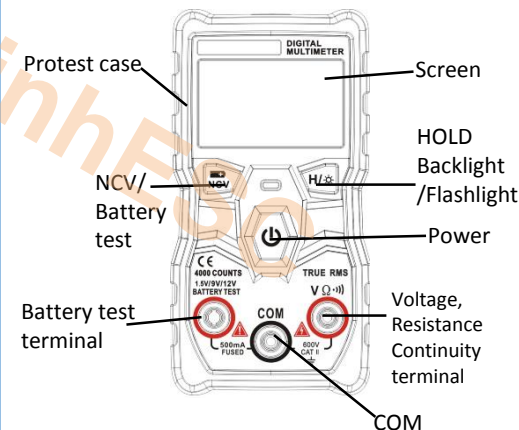
Environmental Specifications		
Operating	Temperature	0~40°C
	Humidity	<75%
Storage	Temperature	-20~60°C
	Humidity	<80%

General Specifications			
Display	4000 counts	Ture RMS	√
Ranging	Auto	Data Hold	√
Material	ABS+PVC	Backlight	√
Update Rate	3 / s	Flashlight	√
Low Battery Indication	√	Auto Power Off	√

Electrical Specifications				
Function	Range	Resolution	Accuracy	Max
DC VOLTAGE (V)	4.000V	0.001V	± (0.5%+3)	600V
	40.00V	0.01V		
	400.0V	0.1V		
	600V			
AC VOLTAGE (V)	4.000V	0.001V	± (1.0%+3)	600V
	40.00V	0.01V		
	400.0V	0.1V		
	600V	1V		
Resistance	4.000kΩ	0.001kΩ	± (1.5%+3)	40MΩ
	40.00kΩ	0.01kΩ	± (0.5%+3)	
	400.0kΩ	0.1kΩ		
	4.000MΩ	0.001MΩ	± (1.5%+3)	
	40.00MΩ	0.01MΩ		

Continuity	√
NCV	√
Frequency response at AC modes:	40Hz ~ 1kHz

Battery test		1.5V	9V	12V
load Current		10mA	10mA	200mA
Dump Energy	Green	≥ 1.30V	≥ 7.83V	≥ 10.44V
	Yellow	0.94V-1.29V	5.64V-7.82V	7.52V-10.43V
	Red	0.15V-0.93V	0.90V-5.63V	1.2V-7.51V
	No light	≤ 0.14V	≤ 0.89V	≤ 1.19V



### 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.