

# Multi-Function Smart Digital Multimeter (AC152)

# VALORE

Thank you for purchasing the Valore Multi-Function Smart Digital Multimeter (AC152).

- Non-contact AC voltage detection
- Automatic range measurement
- Overload protection

**Important:** Please read the user manual thoroughly before using your digital multimeter.

## Specifications:

### Voltage DC

- Range: 500V
- Resolution: 0.1V
- Accuracy:  $\pm (0.8\% + 3 \text{ counts})$

### Voltage AC

- Range: 500V
- Resolution: 0.1V
- Accuracy:  $\pm (1.2\% + 5 \text{ counts})$

### Resistance

- Range: 6000 $\Omega$
- Resolution: 1 $\Omega$
- Accuracy:  $\pm (1.2\% + 3 \text{ counts})$

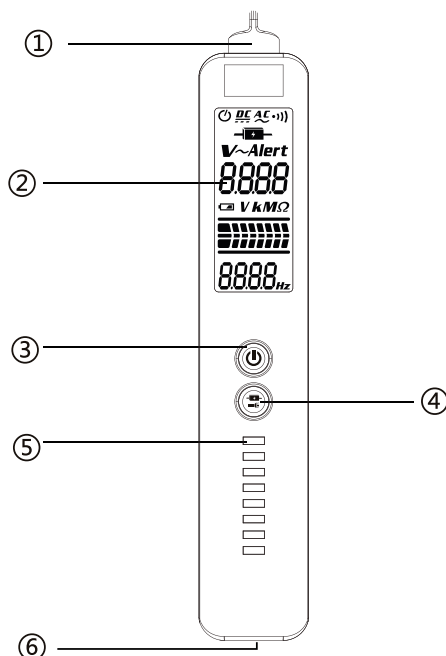
### Frequency

- Range: 1000Hz
- Resolution: 0.1Hz
- Accuracy:  $\pm (1.0\% + 5 \text{ counts})$
- Auto power off time: About 5 minutes
- Max display: 2000
- Battery capacity: 1.5V x 2 AAA battery (not included)
- Dimensions (L x W x D): 160 x 28 x 32mm
- Weight: 69g

## Package Contents:

- 2-way connectivity wireless keyboard with touchpad
- Wireless receiver


## UNDERSTANDING THE PRODUCT



1. V~Alert sensor area
2. Display
3. Power switch
4. High sensitivity mode/  
Flashlight switch
5. Voltage signal indicator
6. Input terminal

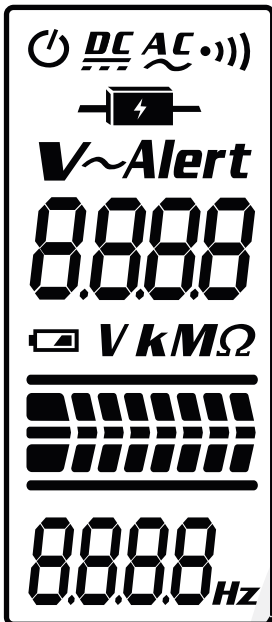
# START USING THE DIGITAL MULTIMETER








 Power switch

 Switch mode, flashlight switch button: long press to switch mode, short press to turn on the flashlight.

**COM** : "COM" Input terminal

**INPUT** : "INPUT" Input terminal



Symbol	Elaborate on
	Voltage AC
	Voltage DC
	Continuity
	Battery is low and should be changed
AUTO	Automatic range measurement mode
	Auto power off function indication
	Non-contact AC voltage detection/NCV
	Non-contact AC voltage detection high sensitivity mode
V	Voltage unit: volt
Hz	Hertz, Kilohertz, Megahertz
Ω, kΩ, MΩ	Resistance unit: Ohm, kilohm, mega ohm

## Technical index

### Accuracy

Accuracy applies within one year of calibration.

Reference conditions: environmental temperature 18 °C to 28 °C, relative humidity is not greater than 80.

#### 1. Voltage DC

Range	Resolution	Accuracy
500V	0.1V	±(0.8%+3counts)

Sensitivity: minimum 0.5V DC voltage

Input impedance: 1MΩ

Maximum input voltage : 500V DC&AC ( RMS )

#### 2. Voltage AC

Range	Resolution	Accuracy
500V	0.1V	±(1.2%+5counts)

Sensitivity: minimum 1V DC voltage

Input impedance: 1MΩ

Maximum input voltage : 500V DC&AC ( RMS )

Frequency range: 50Hz~60Hz, true RMS response.

### 3. Resistance

Range	Resolution	Accuracy
6000Ω	1Ω	±(1.2% +3counts)

Overload protection : 500V DC or AC ( RMS )

### 4. Frequency

Range	Resolution	Accuracy
1000Hz	0.1Hz	±(1.0%+5counts)

Frequency range: 40Hz~1000Hz.

### 5. Measure Continuity

Function	Accuracy
•)))	If the resistance is <30Ω, the continuity beeper sounds.

Overload protection : 500V DC or AC ( RMS )

### 6. V~Alert

Range	Explanation
Low-range	Green voltage signal indicator.The screen displays 1/3 analog bar,the buzzer sounds a slow alarm.
Mid-range	Yellow voltage signal indicator.The screen displays 2/3 analog bar,the buzzer sounds a quick alarm.
High-range	Red voltage signal indicator.The screen displays full analog bar,the buzzer sounds a very loud alarm.

Voltage range:90V~1000V AC

### 7. High sensitivity mode

Range	Explanation
Low-range	Green voltage signal indicator.The screen displays 1/3 analog bar,the buzzer sounds a slow alarm.
Mid-range	Yellow voltage signal indicator.The screen displays 2/3 analog bar,the buzzer sounds a quick alarm.
High-range	Red voltage signal indicator.The screen displays full analog bar,the buzzer sounds a very loud alarm.

Voltage range:6V~1000V AC

# Operation instruction

## 1. Voltage DC or AC/Frequency/Resistance/Measure Continuity

1. Insert the red test lead into the "INPUT" terminal, black test lead into the "COM" terminal.

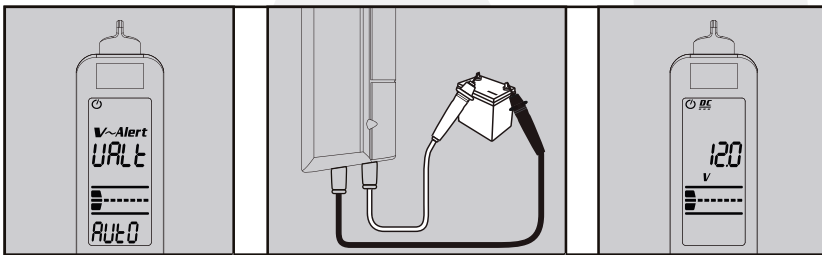
2 Connect the test leads in parallel to the circuit,power supply,tested resistor .The meter automatically Identify whether it is AC voltage,DC voltage or resistance,and shows the frequency on the screen.

3. When resistance is less than  $30\Omega$ , the buzzer sounds.

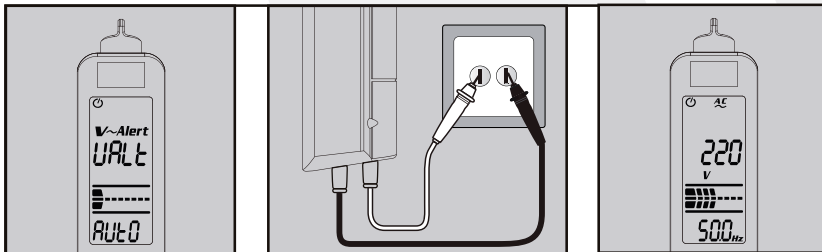
4. When measuring DC voltage, it can also shows the voltage polarity of the red test lead.

5. Read the measurement results from the display.

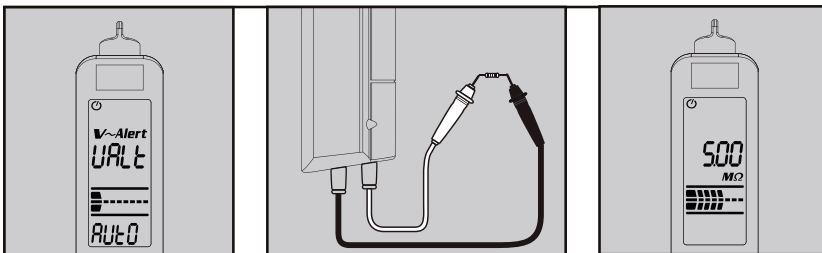
### Voltage DC



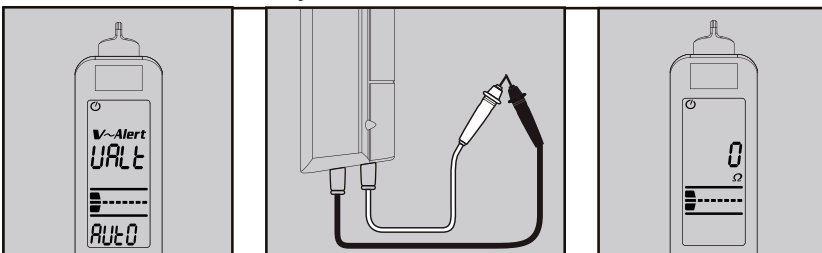
### Voltage AC Frequency



### Resistance



### Measure Continuity



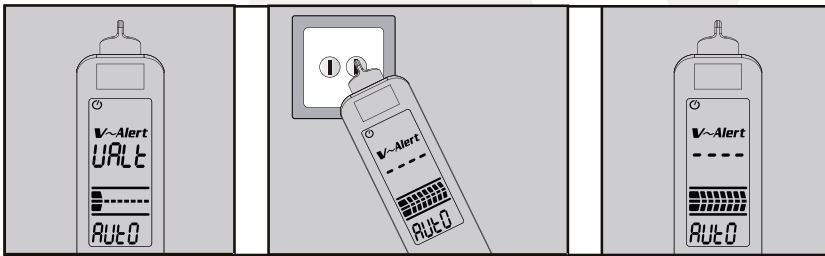
### Warning:

- Do not input voltages higher than 500V, showing higher voltage are possible, but it may destroy the meter.
- When measuring high voltage, be careful to avoid electric shock.
- Disconnect the test leads from the circuit when completed measurement.

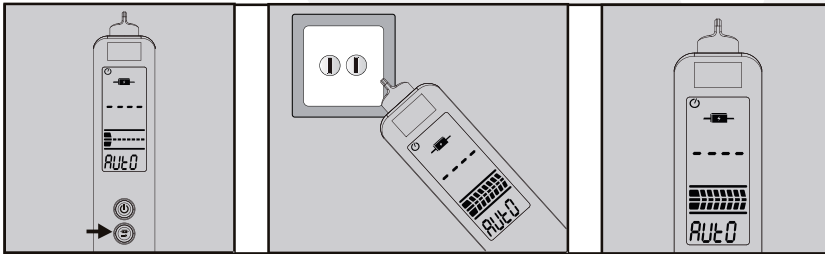
## 2. Socket live wire distinguish/Non-contact AC voltage detection high sensitivity mode

1. Press the power button.
2. Put the sensor head into the power outlet or near the electrified lead wire, and when the tester detects the AC voltage signal, the voltage signal flicks the signal, the bar value of the meter screen lights up, and the test is based on the intensity of the signal detected, lighting the corresponding signal strength indicator lights (high, medium, low), and the buzzer emits different frequencies of alarm sound.
3. Push the inductive head of the tester close to the wire, plug the probe into the jack. The tester detects that one of the strong induced signal is live wire, and the weak or non-sensing signal of the induction signal is neutral wire.
4. Long press the blue button for 2 seconds to switch to high sensitivity mode. In this mode, it can detect AC voltage in the range of 6V~1000V.

### Socket live wire distinguish



### Non-contact AC voltage detection high sensitivity mode



### Warning:

- Non-contact AC voltage and live wire detection operations may be influenced by the socket design, insulation thickness and class. Even without indication, the voltage may still exist. Do not use non-contact voltage detector to determine whether the voltage existence.
- When input voltage, the non-contact voltage sensing indicator may light on because of the existence of induced voltage.
- Outside environment (such as flash, motor, etc.) may influence the non-contact voltage detection.

## TECHNICAL SUPPORT & WARRANTY

- For Technical Support, email us at [v.info@valore.sg](mailto:v.info@valore.sg).
- For Warranty Registration, visit [www.valore.sg](http://www.valore.sg).

### Cautions:

Read all the instructions and warnings carefully prior to using this product.

- Do not store the product in a high temperature environment.
- Do not place the product near a fire or other excessively hot environments.
- Do not expose the product to moisture or submerge it in liquid. Keep product dry at all times.
- Do not attempt to charge the product using any other method or connection other than the product's provided charging cable.
- Do not disassemble this product or attempt to repair or modify it in any manner.
- Battery usage by children should be supervised
- Be cautious of excessive drops, bumps, abrasions or other impacts to this product. If there is any damage to the product such as dents, punctures, tears, deformities or corrosion, stop using the product and contact us immediately via email at [v.info@valore.sg](mailto:v.info@valore.sg), or return this product to the store where you have purchased it from.
- If the product produces an abnormal smell, high temperature (low temperature during normal use), discolours or changes shape abnormally, stop using the product and contact us immediately via email at [v.info@valore.sg](mailto:v.info@valore.sg).

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