

Voltage Tester User Manual

Security Information

Warning

In order to avoid possible safety accidents such as electric shock or personal injury, please observe the following specifications:

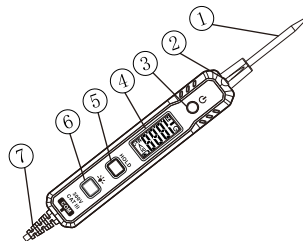
- Before using the instrument, please read this manual carefully, and strictly follow the operation of this manual to use this instrument, otherwise the protection function provided by the instrument may be damaged or weakened.
- Please be careful when measuring in excess of 60VDC. This kind of voltage has the danger of electric shock.
- Do not measure voltage higher than the rated value between

terminals or between terminals and ground.

- Check if the instrument is working properly by measuring the known voltage. Do not use if it is abnormal or damaged.
- Before using the instrument, please check whether there is a crack in the instrument case or damaged plastic parts, if there is please do not use.
- Please use the instrument according to the measurement category and voltage rating specified in the instrument or manual.
- Please observe local safety regulations. Wear personal protective equipment (such as approved rubber gloves, masks and fire-retardant clothing) to prevent electrical shock and arc injuries when dangerous live conductors are exposed.

- When low battery indicator appears, please replace the battery in time to avoid measurement error.
- Do not use the instrument in the presence of explosive gas or steam or in a humid environment.
- Do not use the meter when the meter is removed or the battery cover is opened.

Instrument panel instructions



- ① Positive probe
- ② Flashlights
- ③ Power key
- ④ LCD
- ⑤ Hold key

- ⑥ Light/Backlight key
- ⑦ Negative clamp

Measurement operation

POWER ON

Press the power button for about 2 seconds to boot.

DATA HOLD

After booting, when the data is measured, press the HOLD key 1 sec to lock the data, and then press to release the lock.

FLASHLIGHT

Press the Light/Backlight key 2 sec to turns on or off the lights.

BACKLIGHT

Press the Light/Backlight key 1 sec to turns on or off the backlight.

AUTO POWER OFF

- After power on, about 15 minutes without any operation, the instrument will automatically shut down.
- Hold down the Light/Backlight key and turn on the instrument

power, it will cancel the automatic shutdown function. Reboot, resume the function of automatic shutdown.

Smart measurement mode

This measurement mode is the default on boot. In this mode, DC voltage, resistance and on-off can be measured, and the measuring signal can be recognized automatically by the instrument.

- 1) Press the power button to open the instrument power, instrument display"----", into the intelligent measurement mode.
- 2) The meter will automatically recognize the current measured signal by touching the probe to the power supply or the resistance (parallel) .
- 3) When the resistance is measured, Resistance< 50Ω , the buzzer sounds。
- 4) Read the measurement results

from the display screen.

Note: minimum discernible voltage in this mode is:0.8 V

Warning

- **Do not measure voltage above 110V, or you may damage the instrument.**
- **Pay special attention to safety when measuring high voltage to avoid electric shock or personal injury.**
- **Before use, use the instrument to test the known voltage and confirm the function of the instrument.**


Note: when the measuring circuit is on or off, the reading may be affected by other channels between the meter and pen.

General Technical Indicators

- Environmental conditions for use:

CAT.III 300V; pollution level: 2; Altitude < 2000m.

Working temperature and humidity : 0~40°C(<80% RH , <10°C Non-condensing)
Storage temperature and humidity : -10~60°C(<70% RH, remove the battery).

- Maximum allowable voltage between the measuring terminal and the Earth: 300V
- Sampling rate: about 3 times/sec
- Indication of excess range: display“OL”.
- Battery low voltage indication: display“

Precision Index

The accuracy shall be applicable within one year after calibration
Benchmark conditions : Ambient

temperature 18°C~28°C 、 humidity<80%

Accuracy: ± (%reading+5 word)

DC voltage

| range | Resolution | Accuracy |
|-------|------------|-----------------------|
| 2V | 0.001V | ±(1.0%reading+5 word) |
| 20V | 0.01V | |
| 100V | 0.1V | |

Voltage range: 0.8V~100V

Resistance

| range | Resolution | Accuracy |
|---------------------------|------------|-----------------------|
| 2000Ω | 1Ω | ±(1.2%reading+5 word) |
| 20kΩ | 0.01kΩ | |
| 200kΩ | 0.1kΩ | |
| 2MΩ | 0.001MΩ | |
| 20MΩ | 0.01MΩ | |
| Overload protection: 250V | | |

Continuity

| | |
|-----|---|
| o)) | Resistance < 50Ω , A buzzer inside the instrument will sound. |
|-----|---|

Maintenance

CLEAN

Stop measuring and turn off instrument power. Wipe the case with a damp cloth or mild detergent.

Do not use abrasives or solvents.

Warning

Please keep the inside of the instrument clean and dry at all times to prevent electric shock or damage to the instrument.

Change the battery:

- 1) Turn off the power.
- 2) Use a screwdriver to unscrew the battery cover and remove it.
- 3) Remove the old battery and replace it with a new one of the same size. Please note the polarity of the battery. There is a

positive and negative polarity mark for each battery in the battery case.

- 4) Put the battery cover back in its original position and lock the battery cover with screws.

Warning

- **To avoid incorrect readings that may result in shock or personal injury, replace the battery immediately if it is low. Do not short-circuit or reverse the polarity of the battery to make the battery discharge.**
- **In order to ensure safe operation and maintenance of the instrument, when long-term unused, please remove the battery, in order to prevent battery leakage caused by damage to the product.**