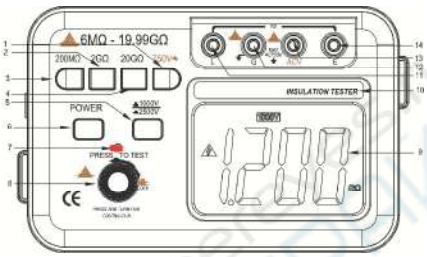
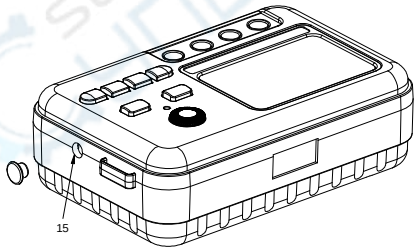
INSULATION TESTER INSTUCTION MANUAL

1. Introduction

The digital megohmmeter uses the DC-excited transducer to convert DC 12V to DC high voltage 2500V/5000V. The main amplifier tests the insulation voltage by the current ratio measurement of traditional megger. The input terminal uses micro-current to test anti-interference circuit and the output terminal adopts the division function of double integrating digital voltmeter to process the data conversion. It is characteristic of strong loading capacity, high anti-interference of electric field, portable operation, wide range, backlight display and so on. It could also be used to test commercial electric power. With its stable performance and high grade appearance, it is widely used to test the insulated voltage resistance for electrical equipment, instrumentation, cables and so on.

2. Appearance Description





1.2.3.4. Voltage Selection Switch (It includes AC750V/2GΩ/ 20GΩ/200GΩ)
5. Voltage Selection Switch (2500V/5000V) (except AC750V)
6. Power Switch: Self-locking power switch (POWER).
7. High voltage indication: LED display.
8. Test Switch
9. LCD display: display the measuring value and unit symbol.
10. Instrument mode
11. L: jack for circuit under test.
12. G: Protection jack. When the object under test is requested to add the protection ring to eliminate leakage effects, the electrode wire of protection ring should be connected to "G" jack.
13. ACV: Input end for AC voltage measurement.
14. E: Jack for object under test.
15. Power adapter jack （+-◎--）.

3. Technical Features

3.1. General Features

(1) Display: 84.8×59.8mm LCD display. The max display “1999”.

(2) Over range indication: the MSD shows "1" when it is over ranged.

(3) Alarm function: the meter will alarm automatically when the tested resistance is below the lower range and the reading is invalid.

(4) Power supply: #5 batteries LR6 (1.5) ×8.

(5) Low battery indication: “[-+]” displays

(6) Operation environment: temperature 0～40℃， 30% R.H- 85% R.H

(7) Weight: Approx. 630g (including batteries)

Technical index

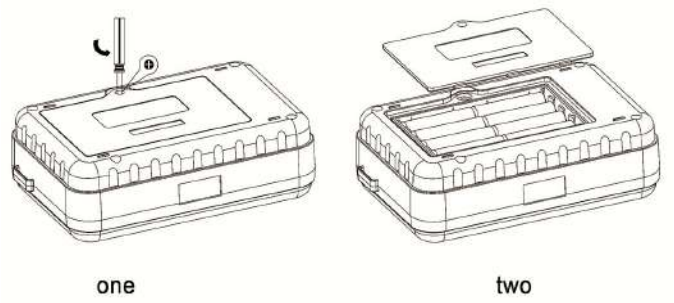
Basic function	Range	Basic accuracy
Output Voltage	2500V/5000V	±10%
Short-circuit current	<4mA	√
Insulated Resistance 2500V	2GΩ:0.05-1.999GΩ	±(5%±5 digit)
	20GΩ:0.5-19.99GΩ	±(5%±5 digit)
	200GΩ:5.0-199.9GΩ	±(10%±5 digit)
Insulated Resistance 5000V	2GΩ:0.05-1.999GΩ	±(5%±5 digit)
	20GΩ:0.5-19.99GΩ	±(5%±5 digit)
	200GΩ:5.0-199.9GΩ	±(10%±5 digit)
Voltage Measurement	AC750V	±（1% +6 digit）
Jack Position	Insulated Resistance: L、E AC750V: ACV G	

ACV750V input impedance: 1MΩ.

ACV750V frequency response:（50～200）Hz.

4. Operating Instruction

1. Open the back cover of the battery case and put the 5# batteries (8) (see the pictures). Be sure the batteries are placed in correct polarity.



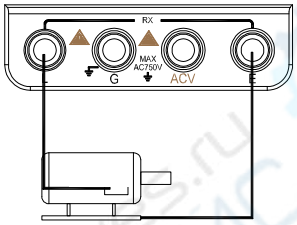
2. Push the power switch button "POWER".
3. Selected the voltage under test according to measurement needs (2500V/5000V)
4. Selected the range switch according to measurement needs
5. L： High voltage output terminal, which connects to tested circuit by special cable.

G:Protection terminal, which connects to the protection terminal of three electrodes and eliminate the leakage effect of the tested surface.

E: Ground terminal, which connects to the GND of the tested objects. For example, connects to the metal shell of tested polarity, transformer core, the cable shield, the earth and the artificial discharge wand.

6. Press the test switch, and the test starts. The reading is available when the display value becomes stable. After the reading is finish, release the test switch.
7. If the MSD displays "1", it means over range, please set a higher range to read data.

5. Insulated Resistance Measurement



6. Safety Precautions

1. Pay attention to safety! L is high voltage output terminal! E terminal must be connected to ground; the tested object must be removed from power network and could only be connected or disconnected after artificial discharge to prove safety. During measurement, try to avoid high voltage sparking discharge. Frequent sparking will cause damage to the instrument.
2. When measuring, please check if the selected testing voltage accords with the voltage supplied by LCD or panel.
3. The symbol "⊟" indicates lack of battery power, please replace batteries accordingly.
4. When measuring, unstable reading may caused due to environmental interference or unstable insulated material. Please connect "G" terminal to the shied side of the tested object to get a stable reading.
5. Keep the instrument away from humid place and avoid direct sunlight in case the life of LCD Monitor is affected.
6. To guarantee the safety of measurement, the silicone rubber cable line is used. Don't replace the measuring line at random.
7. When the external adapter is used, it will disconnect the battery power automatically. Please don't charge the batteries at this time. Note: Please select （+—◎—-）power supply mode.

7. The Whole Components of the Instrument

① Megohmmeter one
② Measuring cable one
③ Silicone rubber cable one
④ #5 batteries (1.5v) ×8 eight
⑤ Instruction Manual one