

# DIGITAL MEGOHMMETER

## INSTRUMENT OPERATION MANUAL

### 1. INTRODUCTION


The digital megohmmeter uses surge DC transducer to convert DC 12V to DC 2500V/5000V. It is widely use to test insulation voltage in electricity equipment, instrument and meter, cable and electrical.

### 2. FRONT PANEL DESCRIPTIONS

1. LCD displaying: display the measure value and M $\Omega$ , G $\Omega$  unit
2. Power switch (POWER)
3. Voltage select switch (VOLTAGE)
- 4.5.6. Resistance range switch (20G, 2G, 200M $\Omega$ )
7. Test switch: (PUSH)
8. High voltage indication: LED display
9. L: jack for circuit under tested
10. G: Protection jack
- 11.12. E: GND jack for tested object
13. Power jack

### 3. TECHNICAL DATA

#### 3-1. General character

- (1) displaying : 60 $\times$ 32mm large LCD, max . displaying “1999”
- (2) Over range indication: only the MSD “1” display
- (3) Alarm function: when tested resistance is below the lower limited, and reading is invalid, the meter will alarm automatically.
- (4) Power supply: 8  $\times$  1.5V (5#) battery
- (5) Low battery indication: “” displays
- (6) Operation environment: temperature 0 $\sim$ 40 $^{\circ}$ C, 30% R.H- 85% R.H
- (7) Weight: Approx. 1200g(including battery and case)


#### 3-2. Technical index

Range	2G $\Omega$	20G $\Omega$	200G $\Omega$
Test Voltage			
2500V $\pm$ 10%	0.05 $\sim$ 1.999 G $\Omega$	0.5 $\sim$ 19.99 G $\Omega$	
5000V $\pm$ 10%	0.05 $\sim$ 1.999 G $\Omega$	0.5 $\sim$ 19.99 G $\Omega$	5.0 $\sim$ 199.9 G $\Omega$
Accuracy	$\pm$ (5%+2d)		$\pm$ (10%+5d)
Max short circuit current	4 $\sim$ 5mA		

### 4. OPERATION

1. Press down “POWER” key
2. To select test voltage according to requirement (2500V/5000V selectable).
3. To select testing range switch according to requirement.
4. Meter connection
  - L: High voltage output terminal, connect to tested circuit by special cable.
  - G: Protection terminal, it connects to the protection terminal of three electrodes, avoid leakage domino affect of the tested surface.
  - E: Ground terminal, connects to the GND of the tested objects.
5. Press down the “PUSH” key to start measuring, read the value when displaying is stable, after reading, release “PUSH” key.
6. If only the MSD “1” is displayed, it means over range and must be set to a higher range

### 5. WARNING

1. Note safety! L is high voltage output terminal! E terminal must connect to ground, the tested object must be removed from electrified net and fully discharged by manpower before connection or disconnection.
2. Before measuring, check if the selected testing voltage is the same as that of LCD displaying or panel description.
3. Replace the batteries when a “” symbol appears on the LCD.
4. During measuring, it is possible that the reading is unstable which caused by the environment interference or insulation material, connect “G” terminal to the shielding terminal of the tested object can make the reading stable.
5. Keep the instrument away from humidity place, and avoid direct sunlight.
6. To ensure safety, use the original test leads and do not replace them with others.