# **SURFACE**

# **RESISTANCE TESTER**

# **USER'S MANUAL**

#### 1. General

Surface resistance tester is an instrument which tests the surface resistance of the object. Attach two parallel electrodes of the instrument to the surface of the object to measure the resistance value of the object surface, and judge that the measured object is conductive, static dissipative, insulative. At the same time, the instrument can also measure the surface resistance value of irregular objects, which is suitable for various anti-static fields.

### 2. Open-package inspection

Open the packing box and take out the meter. Please check carefully if any objects are missing or damaged.

- 2.1. Operating manual-1pc
- 2.2. Auxiliary electrode test line-1pc
- 2.3. 9V tandem cell-1pc
- 2.4. Carrying bag-1pc

Please contact with your supplier, if you find out any problems.

#### 3. Product function

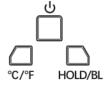
- 3.1. HD LCD and backlight display
- 3.2. Ambient temperature measurement
- 3.3. Low battery Prompting function
- 3.4. Celsius/Fahrenheit temperature unit convert
- 3.5. Data hold function

### 4. Key introduction

- 4.1. Use Key: Short press this key to power on and long press this key to power off.
- 4.2. °C/°F key: Press this key to switch the temperature unit between "Celsius and Fahrenheit" (only applied to the current ambient temperature measurement).

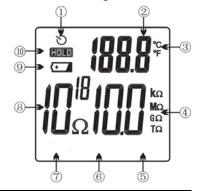
### 4.3. HOLD/BL key:

HOLD: Press this key to hold the measurement data, press again to exit the data hold.

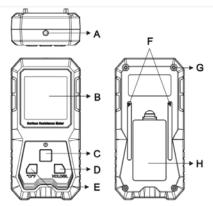


BL: Long press this key to turn on the screen backlight, and long press again to turn off the backlight.

# 5. Display instruction



	1)	Automatic Shutdown	2	Ambient Temperature
				Value
	3	Temperature Unit	4	Resistance Unit Display
		Display		
	(5)	Insulative display	0	Static Dissipative
				Display
	7	Conductive Display	8	Resistance Value Display
	9	Low Battery Display	10	Data Hold Display



A.	Auxiliary electrode test line jack	B.	LCD display
C.	Power key	D.	Data hold/backlight key
E.	Celsius/Fahrenheit key	F.	Resistance measure electrode
G.	Screw hole position *4	H.	Battery cover

## 6. Technical Specification

Resistance measuring range	$10^3 - 10^{10}\Omega$	
resistance measuring range	10 10 22	
Resistance measurement error	± one order of magnitude	
Temperature measuring range	0~50°C (32~122°F)	
Temperature measuring accuracy	±2°C/±3.6°F	
Working temperature	0 ~ 40°C (32 ~ 104°F)	
Storage temperature	0 ~ 60°C (32 ~ 140°F)	
Relative humidity	0~70%RH (non-condensing)	
Backlight	Yes	
Power supply	9V 6F22 Battery	
Automatic shutdown time	About 5 minutes	

Size (length x width x height)	131x65x35mm	
Weight	About 180g	

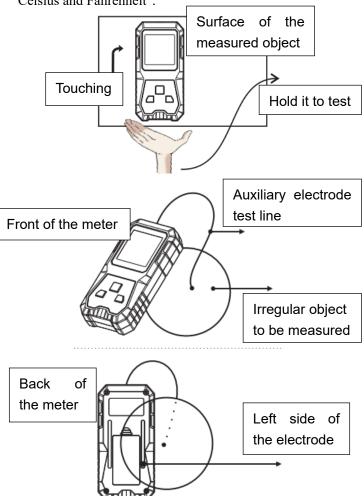
The maximum resistance range of this product is  $20k M\Omega$ . The  $10^{11}$  and  $10^{12}$  displayed on the meter are estimated concept, not accurate values, or the measurement exceeded the maximum range.

Examples of resistance measurement errors: when a resistor is  $10^{10}$  and its surface resistance reading is  $10^9$  or  $10^{11}$  are within the margin of error.

#### 7. Operation introduction

- 7.1. Short press <sup>6</sup> key to start the meter, LCD enter the normal measurement screen, at the same time display the environment temperature value.
- 7.2. Attach the poles of the meter against the surface of the measured object. After a few seconds, the surface resistance value and conductive character display on the LCD, indicating that the measured object is a conductor, anti-static or insulator.
- 7.3. Irregular object measurement: insert the auxiliary electrode test line into the jack of the meter's head, and connect the auxiliary electrode test line to the irregular object to be measured, press the left side of the electrode against the surface of measured object ,The resistance value display on the LCD is the surface resistance value of the irregular object to be measured.(Now the right side of the pole can't touch the surface of the tested object.)
- 7.4. Data hold: After measuring the data, short press the HOLD key to keep the data display on the LCD screen. Then press the HOLD key to exit the data hold function.
- 7.5. Backlight control: At the startup state, long press the HOLD/BL key, the backlight open, it is convenient to test at night, and long press again to close the backlight.

7.6. Temperature unit conversion: At the startup state, long press °C/°F key to switch the temperature unit between "Celsius and Fahrenheit".



# 8. Reading introduction

- 8.2. If the resistance is less than  $10^3$ , LCD display  $10^3$

8.3. For example: If the meter shows resistance reading  $10^9 \Omega$  (1.0G $\Omega$ ), the measured material is static dissipative.

#### 9. Cautions

- 9.1. Read carefully and make sure well understanding of the Manual before using this instrument, keep the Manual in good condition for reference whenever necessary.
- 9.2. When the power voltage is lower than specified value, the LCD screen will display low battery symbol and you should replace the battery in time.
- 9.3. Do not heavily drop or collide the meter to avoid damage.
- 9.4. Do not store the meter with solvents, acids or other corrosive substances to avoid damage to the meter
- 9.5. Remove the battery if the meter is not used for a long time to avoid damage of the meter caused by battery leakage.
- 9.6. The manual is subject to change without notice.
- 9.7. The content of the Manual is regarded as correct. Whenever any user finds its mistakes, omission, etc., he or she is requested to contact the manufacturer.
- 9.8. This company is not liable for any accident and hazard arising from the customer misuse or inadvertent operation.
- 9.9. The functions described in this Manual should not be used as grounds to apply this product to a particular purpose.