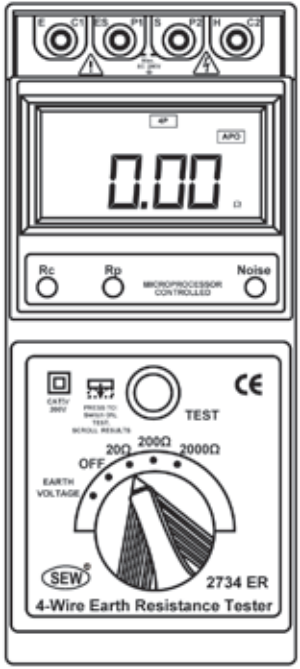
2734 ER
4-WIRE
EARTH RESISTANCE TESTER



INSTRUCTION MANUAL

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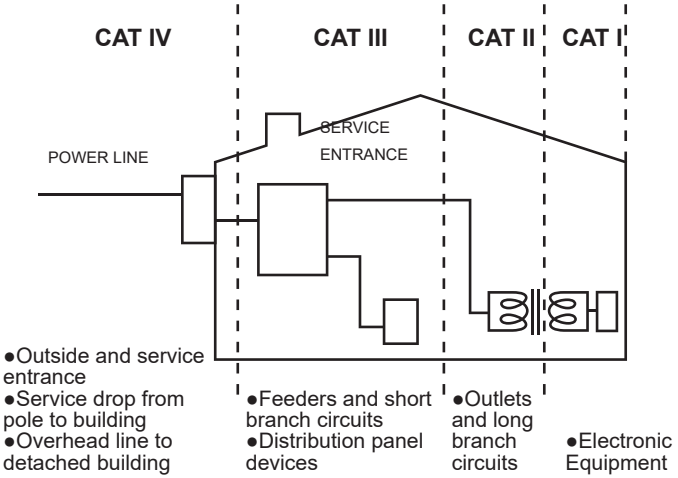
1. INTRODUCTION

This meter has been designed and tested according to EN 61010-1, EN61326-1, EN61557-1, EN 61557-5 and other safety standards.

Follow all warnings to ensure safe operation.



CAT IV - Measurements performed at the source of the low-voltage installation

CAT III - Measurements performed in the building installation.

CAT II - Measurements performed on circuits directly connected to the low-voltage installation.

CAT I - Measurements performed on circuits not directly connected to mains.

2. SAFETY NOTES

• Read the followings safety information carefully before attempting to operate or service the detector.

• Use the meter only as specified in this manual. Otherwise, the protection provided by the meter may be compromised.

● Rated enviromental conditions:
(1)Indoor & outdoor use.
(2)Installation & Category 200V.
(3)Pollution Degree2.
(4)Altitude up to 2000m
(5)Relative Humidity 80% max.
(6)Ambient temperature 0~40

• Observe the International Electrical Symbols listed below:


Detector is protected throughout by double insulation or reinforced insulation.


Warning! Risk of electric shock.


Caution! Refer to this manual before using the detector.


Earth (ground) terminal.


Equipment complies with current EU directives

3. FEATURES

- Microprocessor-controlled.
- 3½ digit(2000 counts)
- 68x34mm large LCD display.
- Earth Voltage measuring:0-200Vac
- Automatic C spike check
- 4-wire test only
- Auto power off
- Auto data hold
- Protective cover for terminals
- Robust, compact and easy carry.
- Meets: EN61010-1 CAT 200V
  EN61326-1
  EN61557-1
  EN61557-5

4. SPECIFICATION

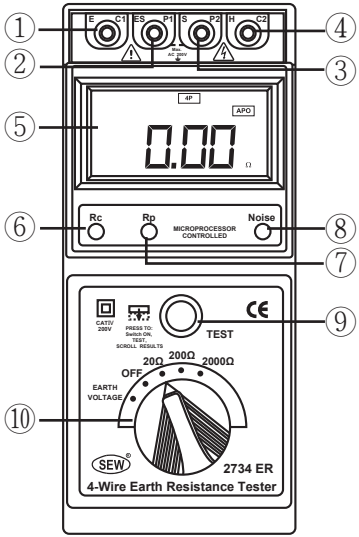
Measuring Ranges	Earth Resistance 0-20.00Ω/0-200.0Ω/0-2000Ω Earth Voltage 0-200Vac
Accuracy	Earth Resistance ±(2%rdg+3dgt) Earth Voltage ±(2%rdg+3dgt)
Earth Resistance Resolution	0-20Ω:0.01Ω 0-200Ω:0.1Ω 0-2000Ω:1Ω
Measurement System	Earth resistance by constant current inverter 820Hz approx. 2mA
Display LCD	3½ digit (2000 counts)
Low Battery Indication	
Over Range Indication	OL
Data Hold indication	HOLD
Auto-OFF indication	APO
Temperature & Humidity	Operating:0 -50 ≤80%R.H. Storage:-10 -60 ≤80%R.H.
Power Source	1.5V(AA)x6 batteries
Dimensions	205(L)x90(W)x55(D)mm
Weight	Approx. 490g (batteries included)

Accessories	Test leads (red-15m, black-10m,yellow-10m, green-5m) Auxiliary earth spikes x 3 Instruction manual Batteries Carry case

Notes:

- Data Hold feature instructions:
  Press "TEST" button to begin test. When results are displayed, press "TEST" button again for HOLD display. Press "TEST" button again to resume test.
- Auto-OFF feature instructions:
  To disable Auto-OFF feature, turn on the device to your desired range. Push and hold the "TEST" button until the APO display disappears (Approx. 3 sec).

5. INSTRUMENT LAYOUT



①C1 terminal (Black test lead connection)
②P1 terminal (Green test lead connection)
③P2 terminal (Yellow test lead connection)
④C2 terminal (Red test lead connection)
⑤LCD display ⑩Function switch
⑥Rc LED
⑦Rp LED
⑧Noise LED
⑨Test button

6. MEASURING METHODS

Battery voltage check

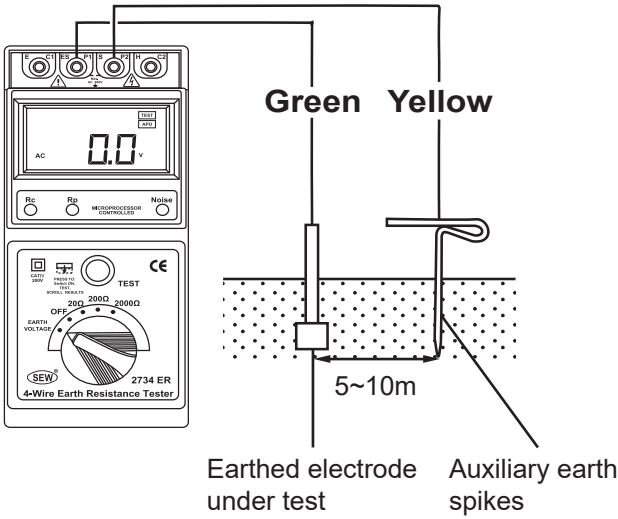
a.Before testing, rotate the function switch to "20Ω" range, if the [−+] appears on the display, replace with new batteries.

b.Prior to measuring, if [−+] appears on the display, replace with new batteries.

Do not apply voltage between the measuring terminals at earth resistance measurements.

11 Earth voltage measurement:

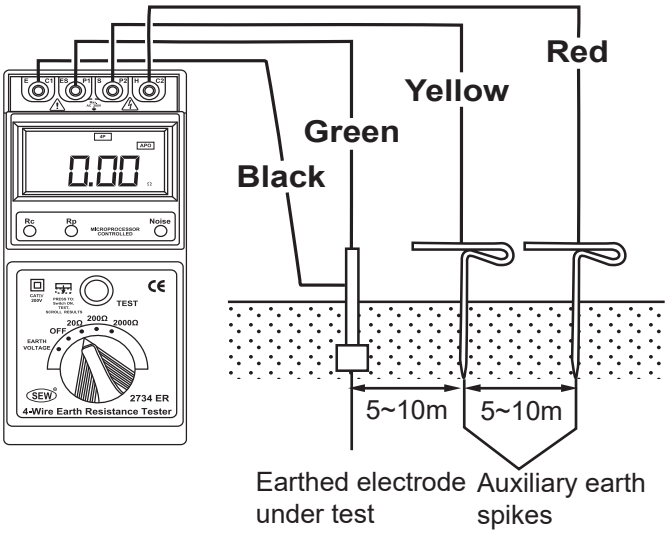
(1)Test leads connection



(2)Rotate the function switch to"Earth Voltage" position, earth voltage will display on the LCD. When earth voltage is more than 10V. it may result in errors in earth resistance measurement

2. Earth resistance measurement:

(1) Connection of Auxiliary earth spikes and test leads.



(2)Select a Ω range (20Ω, 200Ω or 2000Ω) when the connection is done and press the "TEST" button.

(3)Take the reading on the display.

Avoid test leads twisting, tangling and making contact with one another as this may affect the measurement results.

Notes:

Check the following prior to proceeding with measurement:
1.Checking if Auxiliary Earth Spikes are connected correctly when the "Rc" LED lit.

2.Indicator for "Rc" & "Rp"
Rc: When the "Rc" LED is lit, this is an indicaton that there is no test current output.

Rp: When the "Rp" LED is lit, the "R" value on the LCD will display "OL", This is an indicaton that test Earth Resistance value is over 2 range.

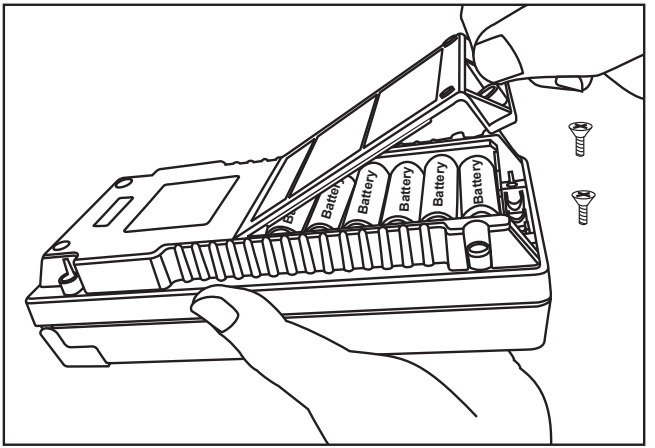
3.Indication for "Noise":
When the "Noise" is lit, this is an indication that there is possible interference at the testing circuit

7. MAINTENANCE

When the appears on the display, replace the batteries as follows:

WARNING
Do not mix new and old batteries together.
Battery replacement:

(1)Disconnect the test leads from the instrument and remove the battery cover and the batteries.
(2)The batteries are situated under the tester.
(3)Replace with six 1.5V AA light batteries, taking care to observe correct polarity.
(4)Reinstall battery holder and the battery cover.



Cleaning and storage:

WARNING
To avoid electrical shock or damage to the meter, do not get water inside the case.

Periodically wipe the case with a damp cloth and detergent. Do not use abrasives or solvents.

Due to our policy of constant improvement and development, SEW reserves the right to change specifications without notice