



VOT-50

VOLTAGE/CONTINUITY TESTER



INSTRUCTION MANUAL

INDEX	Page
1. INTRODUCTION.....	1
2. SAFETY NOTES.....	2
3. FEATURES.....	3
4. SPECIFICATIONS.....	4
5. INSTRUMENT LAYOUT.....	5-6
6. MEASUREMENT.....	7-8
7. MAINTENANCE.....	9-10

1. INTRODUCTION

NOTE

This voltage tester has been designed and tested According to CE Safety Requirements for Electronic Measuring Apparatus, IEC / EN 61010-1, IEC/EN 61243-3, EN 61326-1 and other safety standards. Follow all warnings to ensure safe operation.



Read "SAFETY NOTES" (next page) before using the voltage tester.

2. SAFETY NOTES

- Read the following safety information carefully before attempting to operate or service the voltage tester.
- Use the voltage tester only as specified in this manual. Otherwise, the protection provided by the voltage tester may be impaired.
- Rated environmental conditions:
 - (1) Indoor Use.
 - (2) Installation Category III.
 - (3) Pollution Degree 2.
 - (4) Altitude up to 2000 meters.
 - (5) Relative humidity 80% max.
 - (6) Ambient temperature 0°C~40°C.
- Observe the International Electrical Symbols listed below:



Meter is protected throughout by double insulation or reinforced insulation.



Warning ! Risk of electric shock.



Caution ! Refer to this manual before using the meter.

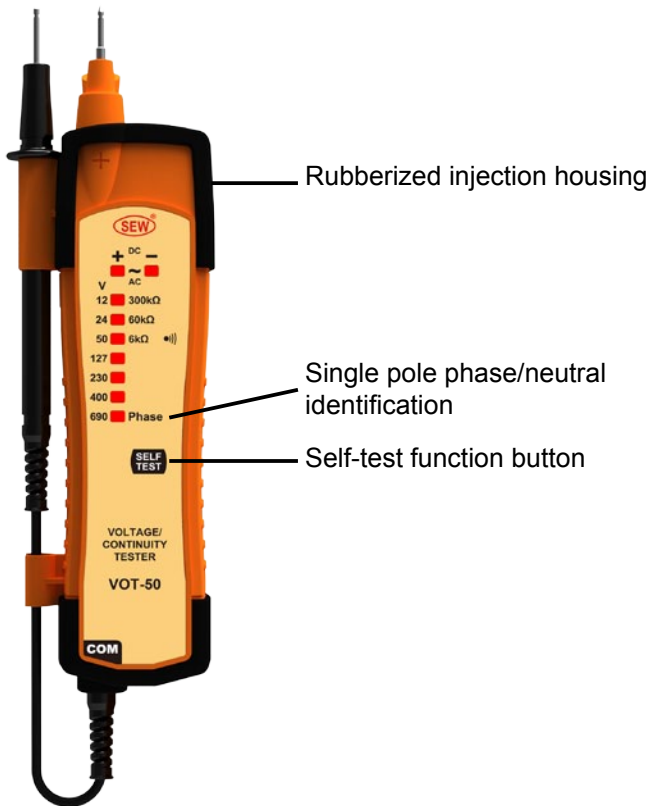
3. FEATURES

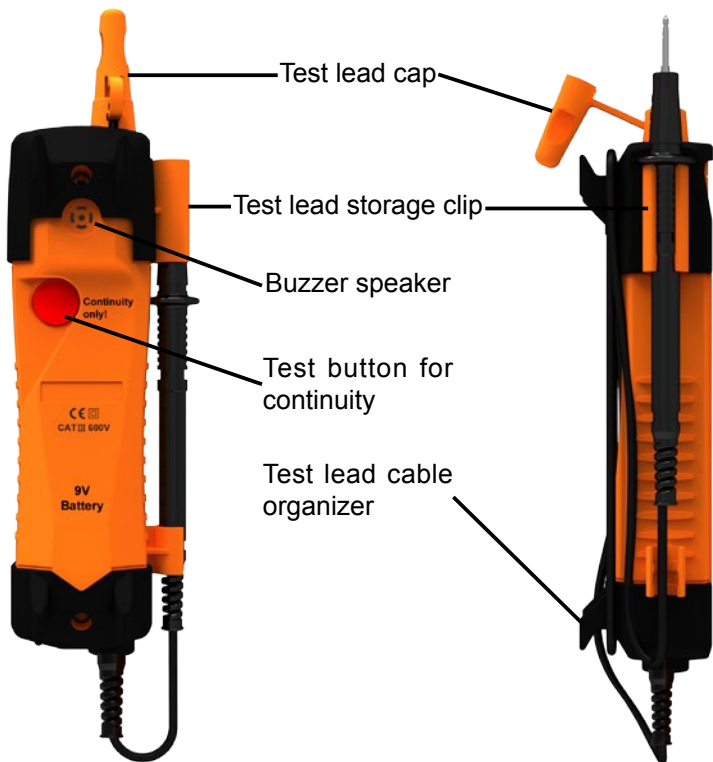
- Voltage test: 12V to 690V AC/DC (7 LEDs) with indication by buzzer
- Voltage range: 12V, 24V, 50V, 127V, 230V, 400V, 690V.
- Test leads positioned at 19mm apart.
- Polarity test: LED +/-
- Audible continuity test
- Self-test button to ensure proper function of the device prior to testing.
- Waterproof design, protection class: IP54
- Phase / Neutral identification
- Integrated storage clips for test probe.
- Rubberized injection molding.

4. SPECIFICATIONS

Voltage Test	12V to 690V AC/DC
Voltage Range	12V,24V,50V,127V,230V,400V,690V
Working Frequency	40 to 400 Hz
Voltage Protection	1000V DC / 700V AC
Continuity Range	6k Ω
Resistance range	6k Ω ,60k Ω ,300k Ω
Operating Temperature	0°C to 40°C
Operating Humidity	80%RH
Probe Distance	19mm apart
Power Source	9V (6F22,006P) battery x 1
Dimensions(mm)	206(L)x58(W)x42(D)mm
Weight	approx. 190g (battery included)
Electrical safety	IEC/EN 61010-1 CAT III 600V IEC/EN 61243-3 EN 61326-1
Accessories	Instruction manual Battery Pouch

5. INSTRUMENT LAYOUT





6. MEASUREMENT

Before proceeding with measurement, read the safety note.

(1) SELF-TEST

Self-test button to ensure proper function of the device prior to testing.

How to do the self-test:

Press the SELF-TEST button.

All the LED lamps light up and the buzzer comes on.

(2) VOLTAGE TEST

Always do a SELF-TEST before using the tester. Do not press the “continuity” button on the back of the tester when you measure voltage.

Performing a voltage test:

Connect the orange (+) test prod and the black (COM) test lead to the circuit or device under test. Do not press the “Self-test” button and the “continuity” button when measuring voltage.

Identify ACV or DCV

Both “+” and “-“ LED light up: AC voltage

The “+” LED lights up: positive DC voltage

The “-” LED lights up: negative DC voltage

No LED lights up: no voltage

Value of the voltage

7 LEDs: 12V, 24V, 50V, 127V, 230V, 400V and 690V

The last LED lit gives the level of voltage present. Lights up to approximately 70% of the nominal voltage.

When the “ 50V” LED lights up, the sound of the buzzer comes out. (the voltage is greater than the level of 50V)

Use of the instrument under bright sunlight may affect visual clarity of the LED display lights.

(3) PHASE / NEUTRAL IDENTIFICATION

Always do a SELF-TEST before using the tester.

Identify Phase or Neutral:

Hold the tester's body, then connect the black test lead to the circuit to be tested (such as a wall outlet). In the presence of Phase ($U > 100V$) the "Phase" LED flashes. In certain cases, the "Phase" LED may light up in the presence of static charges.

(4) CONTINUITY AND RESISTANCE TEST

Always do a SELF-TEST before using the tester.

Performing a continuity and resistance test:

Connect the test leads to the component or circuit under test. Press the "continuity" button on the back of the tester.

Value of resistance

3LEDs: 300k Ω , 60k Ω , 6k Ω

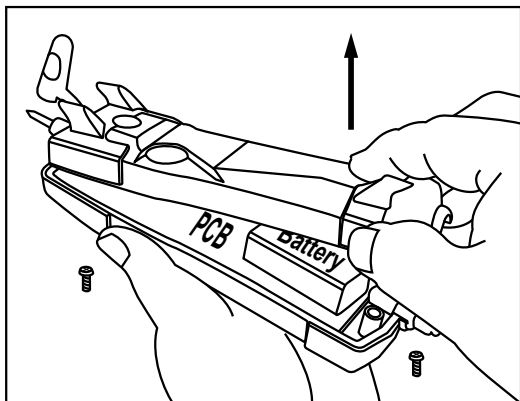
Range of continuity: 6k Ω

7. MAINTENANCE

Battery replacement:

When the battery drains, change new battery as follows:

- (1) Remove the two screws from the back of the case.
- (2) Hold the bottom end of the instrument and lift up the back cover.
- (3) Replace with new battery.
- (4) Close the case and secure with the two screws.



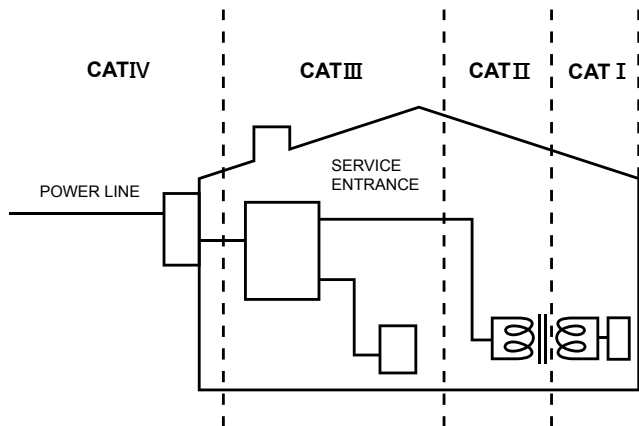
Cleaning and Storage:

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.

If the meter is not used for over 60 days, remove the battery for storage.



- Outside and service entrance
- Service drop from pole to building
- Overhead line to detached building
- Feeders and short branch circuits
- Distribution panel devices
- Outlets and long branch circuits
- Electronic Equipment

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.

Due to our policy of constant improvement and development, we reserve the right to change specifications without notice.