SomovWorld

Non Contact Voltage Detector

Model E-VD6910

User Manual
Introduction

Congratulations on your purchase of the SomovWorld E-VD6910 Non Contact Voltage Detector.

Purpose of this manual

This instruction manual is intended to familiarize the customer with the safe operation and maintenance procedures for the SomovWorld E-VD6910 Non Contact Voltage Detector.

Keep this manual because you may need to refer to it later. Replacement manuals are available upon request at no charge. Proper use and care of this meter will provide many years of reliable service.

Safety

Safety is essential in the use and maintenance of SomovWorld tools. This instruction manual and any markings on the tool provide information for avoiding hazards and unsafe practices related to the use of this tool. Observe all of the safety information provided.

WARNING: It is important that users of this voltage detector read, understand, and follow all warnings, cautions, safety information, and instructions in this manual before operating or servicing this detector. Failure to follow instructions could result in death or serious injury.

Description

![Diagram of SomovWorld E-VD6910 Non Contact Voltage Detector]
Replacing the batteries

Please refer to the picture below to replace the batteries

1. Press the locking tab and pull it up.
2. Put the batteries in. Be careful about the directions of their poles.
3. Align the two parts and slide the locking tab until it cracks.

**NOTE:** To avoid corrosion from leaking batteries, remove the batteries when the unit is not in use for an extended period.

Flashlight

Press and hold the flashlight ON/OFF button to turn on the flashlight.

Operating

**WARNING:** Before you use the unit, always do a test of the Voltage Detector on a known live circuit to make sure that it operates correctly.

**WARNING:** The voltage detector must be gripped fully and firmly around the hand grip to obtain optimum and consistent sensitivity. A loose grip during testing may reduce the detector’s sensitivity.
To check for the presence of AC electrical voltage in an outlet:
1. Touch the probe tip to a cord plugged into the outlet, or insert the probe tip into all the outlet holes.
2. If AC electrical voltage is present, the LED light will flash and the audible warning will sound.

To check for the presence of AC voltage in a wire or cable:
1. Touch the probe tip to the cable.
2. When testing for the presence of voltage in multicore cables always run the probe tip along a short length of cable so as to overcome the shielding effect of the natural twist in conductors.
3. If AC electrical voltage is present, the LED light will flash and the audible warning will sound.

**WARNING:** From some directions the neutral and earth conductors in cables will shield the live, so it is important that a cable is probed from all directions.

**NOTE:** Random beeps and flashes due to detection of static charges are normal. Detection of “live” conductors will produce a steady flash and beep.

**WARNING:** Be aware that if the presence of AC voltage is not indicated, voltage could still be present. The unit indicates active voltages in the presence of electrostatic fields. If the field strength is low the unit may not indicate. This could be due to factors such as:

- Low mains voltage (<90V AC)
- Shielded wire/cables
- Thickness and types of insulation
- Distance from the voltage source
Operation Requirements

- Make sure the voltage detector is dry, clean and free from dust, grease and moisture while in use to avoid the danger from electric shock due to surface leakage.
- Place the tip of the detector close to the AC voltage source radiating unimpeded.
- Hold the body of the detector with your bare hand.
- Stand on or be connected to earth ground.
- Operate on normal air humidity (50% relative humidity).
- Hold the detector still.

**WARNING:** Testing for a voltage that exceeds the specified limits of the voltage detector may damage the tool and may expose the operator to a shock hazard. Always check the voltage detector’s specified limits before use.

Troubleshooting

If no indication, voltage could still be present. Often this does not mean that your detector is broken. There are several reasons that your detector **WILL NOT** detect voltage:

- The wire is shielded.
- You are not grounded or otherwise isolated from an effective earth ground.
- The voltage is DC.

The detector **MAY NOT** detect voltage if:

- You are not holding the detector.
- You are insulated from the detector with a glove or other materials.
- The wire is partially buried or in a grounded metal conduit.
- The detector is at a distance from the voltage source.
- The field created by the voltage source is being blocked, dampened, or otherwise interfered with.
• This unit is used near equipment that generates electromagnetic interference.
• The frequency of the voltage is not a perfect sine wave between 50 and 500Hz.
• The detector is outside of operation conditions (listed in Specifications section).
• Operation may be affected by differences in socket design and insulation thickness and type.

**WARNING:** Never assume neutral or ground wires are de-energized. Neutrals in multi-wire branch circuits may be energized when disconnected and must be retested before handling.

There may be times when your detector does not operate properly. Here are some common problems that you may have and some easy solutions to them.

1. Always read all the instructions in this manual before use.
2. Check to be sure the batteries are properly installed.
3. Check to be sure the batteries are good.
4. If the battery is good and the detector still does not operate, check to be sure that both ends of the fuse are properly installed.
5. If everything else seems to be correct then the batteries may not contact properly. Open the detector, extract the batteries and find the little metal plate in the bottom. Catch it with tweezers and pull out to bend it a little so that it will truss the batteries firmly.

**Specifications**

- Detection range: 90~1000V AC
- Measurement category: Cat IV
- Operating Temperature: 32 to 122F (0 to 50degree)
- Storage Temperature: -4 to 140F (-20 to 60degree)
- Humidity: < 85%RH
- Battery: 2 * 1.5V AAA Batteries
- Flash light: white
- Detection Light: red
Maintenance

Cleaning

Periodically wipe the case with a damp cloth and mild detergent; do not use abrasives or solvents. Make sure the detector is completely dry prior to operation. Do not use alcohol, ammonia or cleaners containing solvents to clean detector.

Storage and care

1. Keep the detector dry. If it gets wet, wipe it off.
2. Use and store the detector in normal temperatures. Temperature extremes can shorten the life of the electronic parts and distort or melt plastic parts.
3. Handle the detector gently and carefully. Dropping it can damage the electronic parts or the case.
4. Keep the detector clean. Wipe the case occasionally with a damp cloth. DO NOT use chemicals, cleaning solvents, or abrasive detergents.
5. Use only fresh batteries of the recommended size and type. Remove old or weak batteries so they do not leak and damage the unit.
6. If the detector is to be stored for a long period of time, the batteries should be removed to prevent damage to the unit.

WARNING: Do not expose the product to extremes in temperature or high humidity.

WARNING: Avoid severe mechanical shock or vibration.

Disposal

Do not throw used batteries away. Please recycle properly.

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