



MVD 145

Voltage Detector

Instruction Manual



Particulars Furnished

The company accepts no legal responsibility for any consequences arising from the use of this product. The company reserves the right to modify product design or manual content at any time without prior notice.

Part Number : 7603301
GTIN: 6298043998055



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A. Introduction

This product is powered by two AAA batteries and functions as an AC voltage detector with dual sensitivity switching. It features an acousto-optic alarm, flashlight, and additional utility functions.

Warning

To prevent electrical shock or personal injury:

Operate this detector strictly as instructed in this manual; improper use may compromise its protective functions.

Do not use if the power indicator is off.

Verify proper operation by testing on a known live power source before use.

Absence of sound or light alarm does not guarantee no voltage; detection occurs only when AC voltage produces an electrostatic field of sufficient intensity.

Low electric field intensity may prevent detection. Performance may also be influenced by factors including shielded wires or cables, insulation type and thickness, distance from the source, complete insulation layers, and socket design variations.

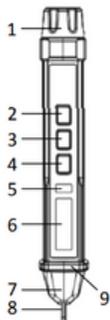
Do not use if the detector is damaged or malfunctioning.

Do not apply voltage exceeding the rated specification.

Exercise extreme caution when testing voltages above AC 30V to avoid shock hazards.

Follow all local and national safety codes and use protective equipment as required by regulatory standards.

Panel Description



1 Battery cover

2 Sensitivity reduction / temperature switch button

3 Sensitivity increase / flashlight button (signal intensity indicator activates in high sensitivity)

4 Power on/off button

5 Power / low battery indicator

6 LED display

7 Flashlight

8 NCV inductive head

9 Signal indicator

Operation Instructions

- Power On/Off
- Press and hold the power button for two seconds. The buzzer sounds and all indicators (flashlight, signal bars, sensitivity button, and battery light) flash to confirm startup. When no AC voltage is detected, the power light enters a breathing standby state. Press the power button again to turn the detector off.
- Low/High Sensitivity
- The detector defaults to low sensitivity with a detection range of 48–1000V AC. Press the S button to activate high sensitivity (12–1000V AC). The illuminated button confirms the active mode. Press again to switch between low and high sensitivity depending on application needs.
- Flashlight Control
- When powered on, press the flashlight button to enable or disable the built-in light. This feature enhances visibility in dark or confined environments, improving measurement accuracy and safety.
- Automatic Power Off
- The detector automatically powers down when idle or when no AC voltage signal is detected. This prevents unnecessary battery drain and extends operating life.
- AC Voltage Detection
- Insert the probe into a socket or bring it close to a live conductor. The LCD displays signal strength as bars, while the buzzer and signal light vary in frequency with intensity. At maximum detection, the bar is full, the LCD changes from green to red, and audible/visual alerts reach peak intensity for clear indication.
- Neutral/Live Wire Identification
- Separate wires as much as possible, then place the probe near each conductor or insert it into a socket. A strong induced signal identifies the live wire; a weak or absent signal indicates the neutral line. This function provides quick and reliable line identification.
- Battery Low Voltage Warning
- When battery voltage is low, the power/low battery indicator remains solid red. Replace the batteries promptly to maintain accurate and safe operation.
- Temperature Display
- If no AC voltage is detected after startup, the LCD automatically displays ambient temperature in Celsius. To switch to Fahrenheit, press and hold the button. This feature adds convenience by integrating temperature monitoring into the device.

Specification

AV voltage range :	High sensitivity: about 12-1000V(The detection range indicator is on)
Frequency	50 Hz /60Hz
Alert	Sound and light double alarm
Flashlight	White LED
Automatic power off	√
Low battery alert	√
Use temperature	0~40°C
Storage temperature	-10~50°C
Altitude	<2000m
Safety level	CE CAT.II 1000V
Power supply	2 x 1.5V AAA
Dimension	23*28*156mm
Weight	33g (without battery)

Limited warranty and liability scope

This product carries a one-year warranty from the date of purchase. The warranty excludes disposable batteries and damage resulting from accident, negligence, misuse, modification, contamination, or operation in abnormal environments.

This manual may be updated without notice. All information is considered accurate at the time of publication. Users discovering errors or omissions should contact the manufacturer. The company is not liable for accidents or hazards caused by improper use. Functions described in this manual do not authorize use of the product for purposes beyond its intended design.