

## Operating Instruction for Non-Contact AC Voltage Detector

### 1. ⚠️ WARNINGS

- Read and understand and follow safety rules and operating instructions in the manual before using this tester.
- The tester's safety features may not protect the user if not used in accordance with the manufacturer's instructions.
- Check on a known live source within the rated AC voltage range of the tester before use to ensure it is in working order.
- Insulation type and thickness, distance from the voltage source, shielded wires, and other factors may affect reliable operation. Use other methods to verify live voltage, if there is any uncertainty.
- Do not use if the tester appears damaged or if it is not operating properly. If in doubt, replace the tester.
- Do not use on voltages that are higher than as marked on the tester.
- Use caution with voltages above 30 volts AC as a shock hazard may exist.
- Comply with all applicable safety codes. Use approved personal protective equipment when working near live electrical circuits-particularly with regard to arc-flash potential.
- Do not operate tester if Low Battery warning occurs. Replace batteries immediately.

### 2. International Safety Symbols

⚠️ Potential danger. Indicates the user must refer to the manual for important safety information.

⚡ Indicates hazardous voltages may be present.

☐ Equipment is protected by double or reinforced insulation.

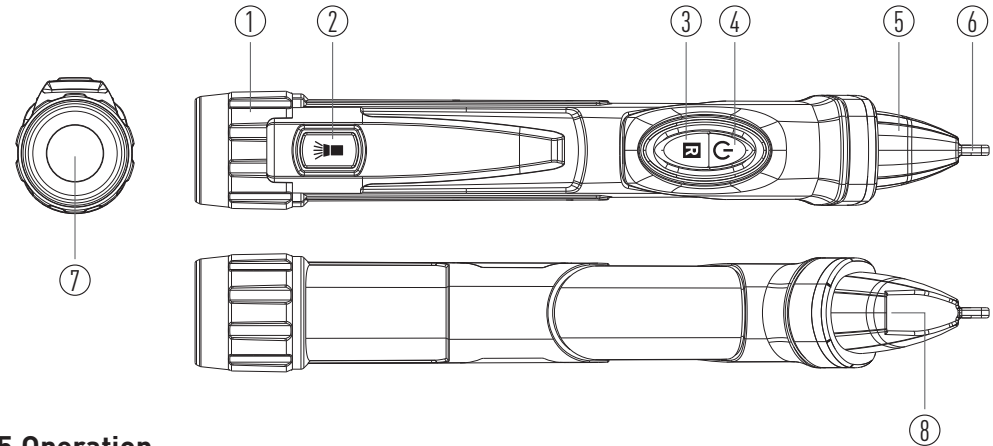
### 3. General Specifications

Voltage Detection Range	100V to 1000VAC, 12V to 1000VAC
Frequency Range	50/60Hz
Batteries	Two AAA 1.5V batteries
Operating Temperature	0 to 50°C (32 to 122°F)
Storage Temperature	-10 to 60°C (14 to 140°F)
Humidity	80% max.
Altitude	2000 meters
Pollution Degree	2
Safety Compliance	CAT IV 1000V
IP Rating	IP67
Dimensions	157 x 26 x 23mm (6.18 x 1.02 x 0.90in)
Weight	57g (2.0oz)

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### 4. Detector Description

- |                          |                        |              |
|--------------------------|------------------------|--------------|
| 1-Screw on Battery Cover | 4-Tester ON/OFF Button | 7-Flashlight |
| 2-Flashlight Button      | 5-LED Indicators       | 8-Worklight  |
| 3-Range Select Button    | 6-Detector Tip         |              |



### 5. Operation

#### 5-1. Turning the Tester On and Self-test

Momentarily press the tester On/Off button, the tester will perform a self-test.

##### Self-test pass:

- The beeper will beep once and the range LED will flash twice rapidly to indicate that the tester is on and ready for use.
- The tester will self-test every five seconds with AC voltage out of range, the range LED will flash twice rapidly every self-test pass.

##### Self-test fail:

- The beeper will beep and all indicator LED will flash five times, and then turn off to indicate that the tester can not work.

The self-test function makes it easy to tell if the tester is in normal working condition or cannot work.

#### 5-2. Turning the Tester Off

- Momentarily press the **ON/OFF** Button, The tester will beep twice and all indicator LED will turn off to indicate that NCV function is off.

#### 5-3. Turning the Beeper Off

- With the tester off, press and hold the **ON/OFF** Button until the range LED (green or yellow) is illuminated, the tester will now operate without the beeper.
- It is not possible to turn the beeper off while the tester is activated.

#### 5-4. Verify Operation

- Before using tester, (1) Make sure the range LED is glowing, (2) Check tester on a known live AC voltage that is within the defined detection range of the tester.

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### 5-5.High Voltage Mode (100V to 1000VAC)

- The green range LED indicates that the tester is working in High Voltage Mode. While the tester is on, place the tip of the tester near an AC voltage.
- If the tester detects voltage within the defined detection range, the tester will light a steady red LED and the beeper will beep rapidly.

### 5-6.Low Voltage Mode (12V to 1000VAC)

- The yellow range LED indicates that the tester is working in Low Voltage Mode. While the tester is on, place the tip of the tester near an AC voltage.
- If the tester detects voltage within the defined detection range, the yellow LED will turn off, the red LED will flash and the beeper will beep.
- The flash rate and beeping rate will increase as the tester gets closer to the voltage source.
- If the tester detects high voltage, the red LED will change to a steady glow and the beeper will beep rapidly.

### 5-7.Change Voltage Range Mode

- Press the "R" (Range) Button when the tester is on and in NCV mode. The tester will change the voltage range mode between low voltage mode and high voltage mode.
- The yellow range LED indicates the tester is working in Low Voltage Mode. The green range LED indicates the tester is working in High Voltage Mode.

### 5-8.Low Battery Indication

- Replace the batteries if the range LED does not turn on.
- When the tester is on and the batteries are too low for reliable operation, the beeper will beep three times and the range LED will turn off indicating the tester is not operational.
- Replace the batteries to restore operation.

### 5-9.Auto Power Off

- To conserve battery life, the tester will automatically turn off after approximately 5 minutes of inactivity.
- When powering down, the beeper will beep twice and all LED will turn off.

### 5-10.Flashlight

- Momentarily press the Flashlight button to turn the flashlight on or off.
- To conserve battery life, the flashlight will automatically turn off after approximately 5 minutes.
- The beeper will beep twice as the flashlight turns off.

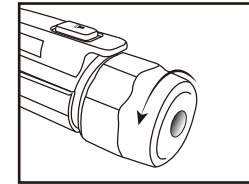
### 5-11.Worklight

- Press and hold the **ON/OFF** button for approximately two seconds when the tester is in NCV mode. The tester will turn the work light on or off.
- The status of the work light can only be changed by a long press of the **ON/OFF** button

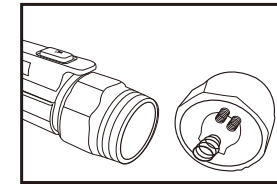
**NOTE:** The tester cannot determine the actual voltage. The voltage level where the tester switches from the low to high voltage mode is affected by insulation type and thickness, distance from the voltage source, and other factors.

## 6.Changing Batteries

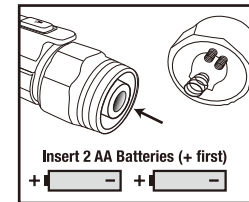
- 1.Carefully unscrew battery cap at the rear(flashlight end)of the tester.
- 2.Replace batteries with two AAA 1.5V batteries. Observe polarity.
- 3.Carefully align cover with tester as shown below.
- 4.Screw cover onto tester until it feels tight. Do not use excessive force.
- 5.Verify operation by using the tester on a known live AC voltage within the defined detection range of the tester.



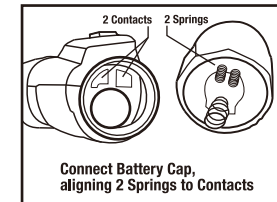
End of the Tester



Cap with springs to align



Observe correct polarity when installing batteries.



Push IN and Rotate Cap back onto Tester Body

**NOTE:** When batteries are loaded for the first time, please remove the white, rectangular security strip before installing batteries.

**NOTE:** When replacing the batteries, be sure to secure the cap firmly to maintain IP67 water and dust protection. A loose or overtightened battery cap may compromise water and dust protection.

## 7.Care and Maintenance

- Do not immerse the instrument in water.
- Wipe the dirt with a soft cloth dampened with pure water.
- Do not use aggressive cleaning agents or solutions.
- Do not mix different types of batteries such as alkaline, carbon-zinc, or rechargeable batteries.
- Handle the instrument with care.
- Please take out the battery when the instrument is not used for a long time.