

# HIGH VOLTAGE DETECTOR

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**INSTRUCTION MANUAL**

# 1. Caution

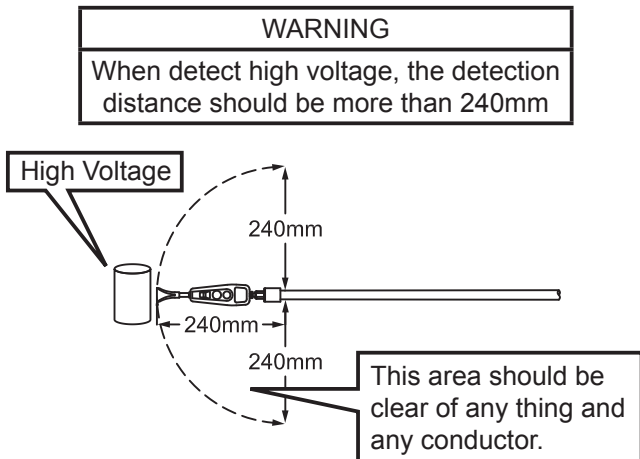
- This detector has been designed with your safety in mind. However, no design can completely protect against incorrect use. Electrical circuits can be dangerous and/or lethal when lacking of caution or poor safety practices are used.
- When working under high voltage systems, please wear the insulation gloves and rubber shoes.
- When working, don't touch any portion other than grip, because danger is involved.
- Use Protective gear.



Caution, risk of electric shock.



Caution, refer to the user's manual.



The detector detects a high and extra high voltage in AC lines. An elongate insulation rod permits checking of high voltage circuits at safe distance for voltage. Also it is telescopic, compact, light-weight, easy to use and handle.

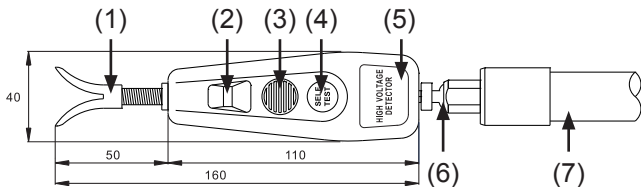
## 2. Features

- Telescopic, compact, light-weight.
- Light weight, easy to use and handy.
- High-voltage detectable  
The equipment, whether in stretched state is available for high voltage detection 6kV~36.5kV (Model A)/6kV~81.5kV(Model B)
- Easy to recognize indication  
Intermittent lighting in red of a high intensity light emitting diode and intermittent audible sound of an electronic buzzer are readily recognizable at a full daylight or a noisy location.
- Water proof  
The detecting head, being tightly enclosed, is free from any trouble due to dust or water.
- Meets IEC 61243-1  
IEC 60068-2-6  
IEC 60068-2-32  
IEC 60068-2-14

### 3. Specifications and ratings

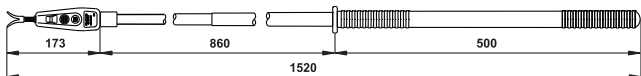
Model		Model A	Model B
Measuring voltage range		6kV~36.5kV	6kV~81.5kV
Operation start voltage (To ground)		2.7kV	2.7kV
Display		Light : Flashing red light. Sound : Intermittent sound 50 dB apart 3 m.	
Overall length	Retracted	893 ± 50mm	1370 ± 50mm
	Extracted	1520 ± 50mm	2450 ± 50mm
Frequency		50/60Hz	
Operating temperature		-10°C~50°C	
Battery		2 button-cells LR44(1.5V)	
Weight		485g (battery included)	590g (battery included)
Accessory		Instruction manual Carrying case	
Withstand voltage (On insulating rod)		100kV / 300mm : 5 minutes	
Insulation resistance		2000MΩ min by 1kV / DC megger at the same testing location as withstand voltage	
Leakage current		100uA or less than 100uA at withstand voltage test	
Construction		Water proof(detaching head impervious to water)	

## 4. Construction

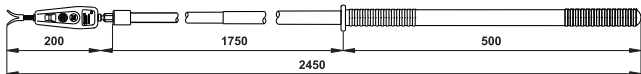


- |                     |                    |
|---------------------|--------------------|
| (1) Sensing tip     | (5) Name plate     |
| (2) Indicator light | (6) Flexible joint |
| (3) Buzzer          | (7) Insulation rod |
| (4) Test switch     |                    |

### Model A



### Model B



## 5. How to use

- Voltage Detection before use
  - a. Wear the insulation gloves and rubber shoes.
  - b. Inspect the appearance and structure of the machine for dirty spots or damages.
  - c. Extend the Insulating rod to check for proper operation and check for cracks or loose parts.
  - d. Pushing down the Switch Button to initiate the Self-Test by. Check the internal circuits for proper operation. As a precaution, operate with a known working circuit so you can make sure that the machine functions properly.



- e. For the sake of personal safety, do not operate in humid weather or rainy days.

- Handling and safekeeping
  - a. Put the front metal in contact with the subject line to detect voltage, hold the grip portion and identify by sound and flashing red light.
  - b. When inspecting a high voltage line, don't touch any portion other than the grip, because danger is involved.



## 6. Maintenance

- Battery replacement

If lighting is dim or sounding is too low, or if the equipment does not operate, replace the battery by a new one.

  - a. Use a screwdriver to unscrew the screw on back cover then slide the cover, take out the batteries and replace with new batteries type(button-cell LR44 1.5V).
  - b. Place back cover and secure bay screw.

- Clearing and storage
  - a. Avoid heavy blows and placing heavy weights on the machine. Avoid dropping the machine.
  - b. Please clean the machine after use. Wipe the machine gently with soft cloth and mild detergent to avoid using volatile solvents.
  - c. Keep the surface of the machine clean and store the machine in dry places. Avoid exposing the machine to direct sunlight. Avoid placing the machine in hot, dry, and enclosed indoor areas with insufficient ventilation.
  - d. Perform Insulation Testing every six months to ensure the machine is safe to use.
  - e. If the machine is not going to be used for a long time, remove the batteries and store them separately. This is to avoid battery liquefaction and corrosion of internal components which will cause loss of performance.
  - f. This machine is operated at high-voltage. If it malfunctions, please send it to our company or an authorized dealer for repair. It is absolutely forbidden to dismantle the machine by yourself for repair. Our company is not liable for any damage caused by repairing the machine by yourself. You are responsible for any unfortunate consequence caused by the unauthorized repair.