

**KUSAM-MECO®**

### LIST OF PRODUCTS

- \* Digital Multimeter
- \* Digital AC & AC/DC Clampmeter
- \* AC Clamp Adaptor
- \* AC/DC Current Adaptor
- \* Transistorised Electronic Analog & Digital Insulation Resistance Testers(upto 10 KV)
- \* Digital Sound Level Meter & Sound Level Calibrator
- \* Digital contact & Non-contact Type Tachometer
- \* Digital Non-contact (infrared) Thermometer & Portable Infrared Calibrator
- \* Thermo Hygrometer / Anemometer Digital Absolute pressure meter
- \* Wood, Paper & Grain Moisture Meter
- \* Distance Meter & Network Cable Tester
- \* Digital Hand Held Temperature Indicators
- \* Digital Lux Meter
- \* Thermal Imaging Camera
- \* Power Factor Regulator
- \* Maximum Demand Controller/Digital Power Meter
- \* Earth Resistance Tester
- \* Digital Panel Meters & DC Power Supplies
- \* Digital Storage / Analog Storage Oscilloscope.
- \* Coating Thickness Guage
- \* Process Calibrators & Multifunction Calibrators
- \* Gas Analysers & Waterproof Pen Testers
- \* Frequency Counter / Function Generator
- \* Phasing Sticks & High Voltage Detector
- \* Transducer & Transmitter
- \* Digital Milli Ohm Meter
- \* Solar Power Meter
- \* EMF/ELF Detector / RF Field Strength Meter

**KUSAM-MECO®**

An ISO 9001:2015 Company

## NON-CONTACT HIGH VOLTAGE DETECTOR MODEL - 277HP



## INSTRUCTION MANUAL

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### 1. INTRODUCTION

#### NOTE

*This detector has been designed and tested according to  
CE Safety Requirements for Electronic Measuring Apparatus.  
Follow all warnings to ensure safe operation.*



#### WARNING

**READ “SAFETY PRECAUTION” (NEXT PAGE) BEFORE  
USING THE HIGH VOLTAGE DETECTOR.**

## 2. SAFETY PRECAUTION

Electricity can cause severe injuries with high voltages. Therefore it is very important to read the following info before using the Non-contact High Voltage Detector.

This must only be used and operated by a competent trained person & in strict accordance with the instructions. We will not accept liability for any damage or injury caused by misuse or non compliance with instructions & safety procedures.

Examine the Non-contact High Voltage Detector to make sure it is clean & dry. If it is not, wipe with a clean dry, lint-free cloth.

The high voltage detector test should always be used as an indication only.

Read all safety information carefully before attempting to operate or service the High Voltage Detector.

Use the High Voltage Detector only as specified in this manual. Otherwise, the protection provided by the High Voltage Detector may be impaired.

Please keep in your mind to wear high insulated gloves when you test high voltages between 600V ~ 1.5kv.

Please keep in your mind to wear high insulated gloves & to use the hot stick when you test high voltages between 1.5kV ~ 132kV.

## 3. APPLICATIONS

- Non-contact detection of live voltages
- Find faults in cables
- Check & detect live high voltage cables
- Trace live wires
- Check high frequency radiation
- Check grounding equipment
- Detect residual or induced voltages

## 4. FEATURES & SPECIFICATIONS

- Power ON/OFF function
- Circuit Test function  
Press the test button to make sure the whole circuit is working well before testing actual high voltage circuits.
- 2 ranges for selection (2 function buttons)  
Low : 50V ~ 1.5kV  
Press the LOW button, the detector is ready for low voltage detection.  
High : 1.5kV ~ 132kV  
Press the HIGH button, the detector is ready for high voltage detection.
- Power Consumption :  
Off : Less than 5μA  
Low voltage detection mode : Less than  
High voltage detection mode : Less than
- Duty Cycle : Continuous
- Response Time : Instantaneous

**Operating Temperature :** 0 ~ 50°C

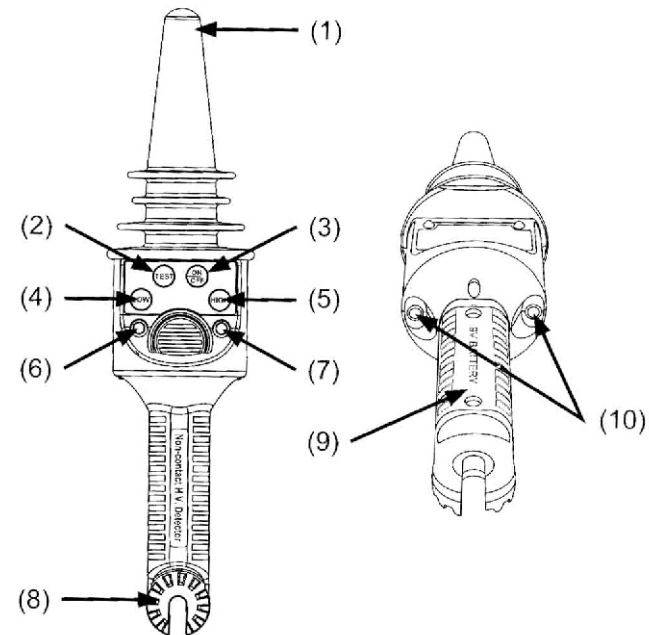
**Power Source :** Alkaline battery 9V x1

**Dimensions :** 318(L) x 75(W) x 71(D)mm

**Weight :** Approx. 227g. (Battery included)

**Accessories :** User manual, Battery & Carrying case.

## 5. Instrument Layout



(1) Voltage Sensor

(2) TEST Button

(3) ON/OFF Button

(4) LOW range Button

(5) HIGH Range Button

(6) LOW Range LED

(7) HIGH Range LED

(8) The connection point  
of Hot Stick

(9) Battery Cover

(10) Blue LEDs fo detection

## 6. Operation

### ● ON/OFF Button

When users turn on the detector, the 2 blue LEDs will Flash & the buzzer will generate a sound intermittently. The red LED of the HIGH range will be turned on. The original mode is the HIGH range.

### ● TEST Button

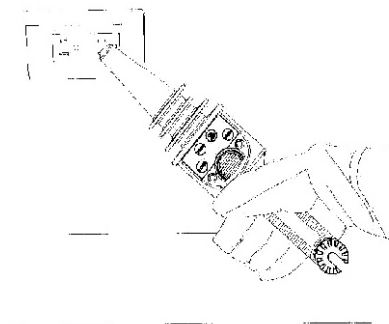
Press the TEST button to do the self-test first, this is to make sure the circuits inside the detector is ok. When you press the TEST button, the 2 blue LEDs will glow & the buzzer will generate a sound continuously. The red LED of the HIGH range will be still on (the original mode). If the 2 blue LEDs do not glow & the continuous sound doesn't be generated, please replace with a new battery.

### ● LOW range button (Low Voltage Detection)

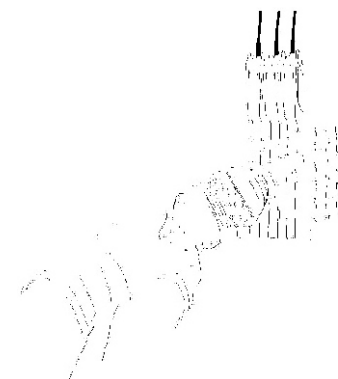
Press the ON/OFF button to turn on the high voltage detector. Press the LOW range button, the 2 blue LEDs will flash & the buzzer will generate a sound intermittently. The red LED of the LOW range will be turned on.

The LOW range for low voltage detection: 50V ~ 1.5kV  
Place the probe sensing tip of the high voltage detector near a low voltage line (50V ~ 1.5kV), but not touching the line. The blue LEDs will flash very fast & the frequency of the sound will be at the same rate if a voltage is present.

When the probe sensing tip makes contact or is very close to the voltage line, the blue LED's will glow & the sound will last continuously.



Voltage detection for a wall outlet.



For finding a breaker

• **HIGH range (High voltage detection, Hot stick must be attached)**

Press the ON/OFF button to turn on the high voltage detector.

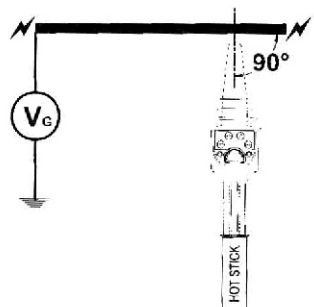
The 2 blue LEDs will flash and the buzzer will generate a sound intermittently. The red LED of the HIGH Range will be turned on.

The original mode is the HIGH range for high voltage detection : 1.5kV~132kV.

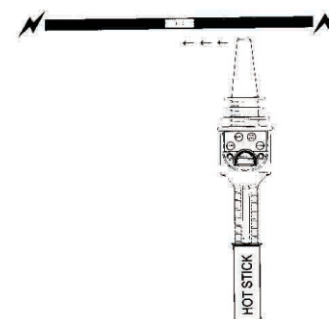
Place the probe sensing tip of the high voltage detector near a high voltage source (1.5kV~132kV), but not touching the high voltage source.

The blue LEDs will flash very fast and the frequency of the sound will be at the same rate if a high voltage is present.

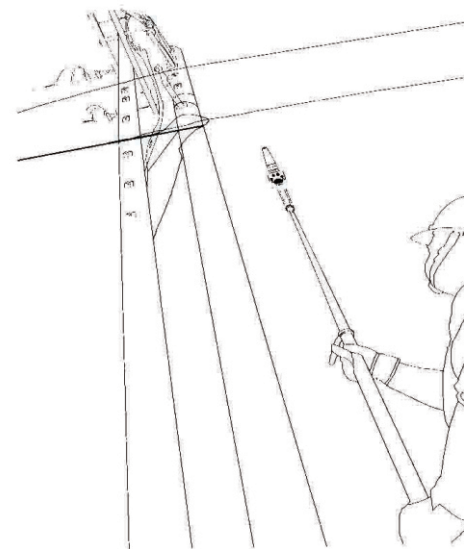
When the probe sensing tip is getting closer to the High voltage source, the blue LEDs will glow and the sound will last continuously.



The ideal detection angle



For finding a break of cable



Voltage detection for a line



MUMBAI

## TEST CERTIFICATE

### NON-CONTACT HIGH VOLTAGE DETECTOR

This Test Certificate warrants that the product has been inspected and tested in accordance with the published specifications.

MODEL NO. 277HP

SERIAL NO. \_\_\_\_\_

DATE: \_\_\_\_\_

ISO 9001  
REGISTERED



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## WARRANTY

Each "KUSAM-MECO" product is warranted to be free from defects in material and workmanship under normal use & service. The warranty period is one year (12 months) and begins from the date of despatch of goods. In case any defect occurs in functioning of the instrument, under proper use, within the warranty period, the same will be rectified by us free of charges, provided the to and fro freight charges are borne by you. This warranty extends only to the original buyer or end-user customer of a "KUSAM-MECO" authorized dealer.

This warranty does not apply for damaged Ic's, burn't pcb's, fuses, disposable batteries, carrying case, test leads, or to any product which in "KUSAM-MECO's" opinion, has been misused, altered, neglected, contaminated or damaged by accident or abnormal conditions of operation or handling.

"KUSAM-MECO" authorized dealer shall extend this warranty on new and unused products to end-user customers only but have no authority to extend a greater or different warranty on behalf of "KUSAM-MECO". "KUSAM-MECO's" warranty obligation is limited, at option, free of charge repair, or replacement of a defective product which is returned to a "KUSAM-MECO" authorized service center within the warranty period.

THIS WARRANTY IS BUYER'S SOLE AND EXCLUSIVE REMEDY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. "KUSAM-MECO" SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSSES, INCLUDING LOSS OF DATA, ARISING FROM ANY CAUSE WHATSOEVER.

All transactions are subject to Mumbai Jurisdiction.



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