



AN ISO 9001:2015 COMPANY

**PERSONAL
SAFETY VOLTAGE DETECTOR
MODEL - 287SVD**



USER MANUAL



LIST OF PRODUCTS

- * Digital Multimeter
- * AC Clamp Adaptor
- * Thermo Anemometer
- * Distance Meter
- * Network Cable Tester
- * Earth Resistance Tester
- * DC Power Supplies
- * Calibrators
- * Frequency Counter
- * Phasing Sticks
- * Waterproof Pen Testers
- * EMF Detector
- * Wood, Paper & Grain Moisture Meter
- * 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
- * Maximum Demand Controller/Digital Power Meter
- * Digital Hand Held Temperature Indicators
- * Digital AC & AC/DC Clampmeter
- * AC/DC Current Adaptor
- * Thermo Hygrometer
- * Digital Lux Meter
- * Power Factor Regulator
- * Digital Panel Meters
- * High Voltage Detector
- * Gas Analysers
- * Function Generator
- * Battery Tester
- * Solar Power Meter



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INTRODUCTION

The personal safety voltage detector is a sensor for sensing AC High Voltage. It provides electric engineering personnel, power engineering personnel, firefighting personnel & instrument equipment workers with prominent warning when approaching high voltage & for taking necessary safety action, preventing illusion & misjudgment which could lead to electric shock to person.

When a person wearing the personal safety voltage detector is approaching high voltage source or equipment, the sensor will detect automatically & buzzer will generate a “BeBe” sound for warning & LED will flash to remind operators that the user is approaching a high voltage source & special attention shall be given to the safety of operations.

FEATURES

- Designed for detecting un-shielded cables. If the shielding of the cable is connected to the ground, it can't work.
- Compact, easy to wear & convenient in use.
- Usable both indoor & outdoor.
- Water-proof design IP65.

- Equipped with self-testing functions.
- Sound & flash light warning on different frequencies varied positively with sensed voltages.
- Able to sense all kinds of AC High Voltage System.
- Low power consumption.
- Meets : EN61326-1
- CE Certified.
- Voltage Detection:

Voltage	Detection Angle	Detection distance
6.6kV (3.8kV phase to ground)	90°	40cm ± 20%
11.4kV (6.6kV phase to ground)	90°	55cm ± 20%
19.7kV (11.4kV phase to ground)	90°	80cm ± 20%
22.8kV (13.2kV phase to ground)	90°	85cm ± 20%

SPECIFICATION

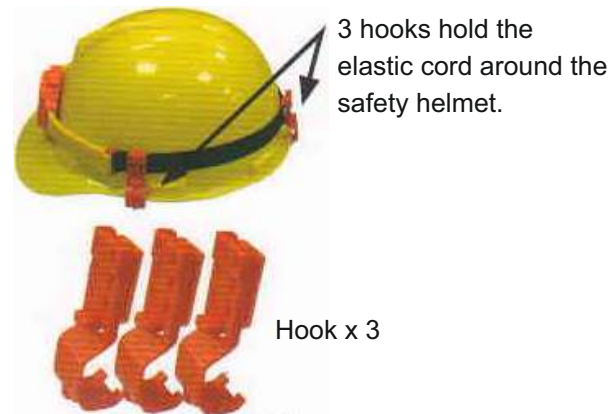
- **Distance of starting warning:**
85cm for 22.8kv (phase to phase)
- **Applicable Frequency :** 50 / 60Hz
- 110V ~ 22.8kV
- **Volume :** >70dB at 1 meter distance
- **Operating Temp & Humidity :**
0°C ~ 40°C / 80% R.H. Max.
- **Outside Dimensions :** 61(L) x 62(W) x 18.5(D)mm
- **Weight :** 70g. (including battery)
- **Battery to use :** Cr2032 x 1
- **Battery Life :** 50 hours for continuous use
- **Accessories :** user manual, Elastic cord x 2, Battery, Hook x 3, Elastic cord adjustment x 1, Connection ring x 2.

METHOD OF USE**1. Inspection before use**

- (1) Check the appearance & structure for any abnormality.
- (2) Press Self-Test switch (about 10 seconds) to confirm all functions are working normally.
- (3) To be careful & to avoid misjudgment, test the unit by contacting AC 110V insulated wire with its front side to see if it sounds and flashes.

2. Wearing

- (1) Wear the unit in front of the safety helmet.



- (3) Wear the unit to the outer side of forearm with the sensing side faces outwardly.



The effect is best when the sensing side is facing high voltage in right angle (90 Deg.). When it is worn at the inner side of arm or is covered by cloth, the sensitivity is poor.

CLEANING & REPLACING BATTERY

1. Sensing side shall maintain clean. The case may be cleaned with soft fabric and mild detergent. No solvent or corrosive agent may be used.

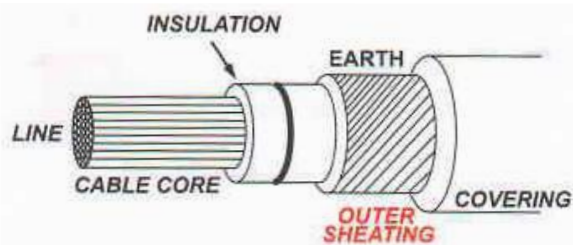
2. Replacing Battery :

1. When the sound become weak, the battery shall be replaced.
2. Use coin to open battery cover & remove used battery. Place new battery into slot with the battery positive (+) face up and fasten battery cover with coin.

CAUTIONS

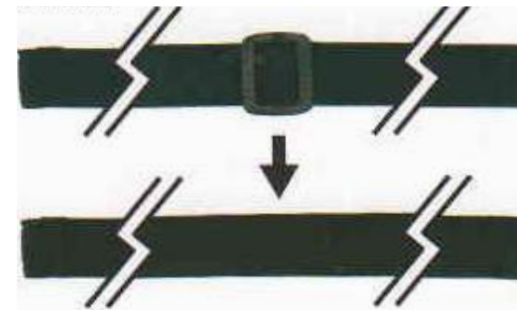
1. This instrument is an auxiliary testing unit & is only for obtaining warning as additional protection. Never use this instrument as substitution for Tester. Electrical Test shall be the prime electric testing instrument.
2. Other than affected by now you wear, the sensing and warning distance may be influenced by direction of electric article, ambient environment, shielding objects and weather conditions.
3. Buzzer has inner water-proof film. Do not pierce it with sharp article.

4. Do not store this instrument outdoor or inside of car for long time to avoid direct sunbeam & high temperature.
5. The instrument shall not be dropped or impacted heavily. If such situation does happen, perform inspection and self-test to ensure no damage occurred before using again.
6. If the instrument is rinsed by rain, remove battery & place it at cool place for natural dry.
7. The personal safety voltage detector can't detect the HV cable which has an outer sheathing that is connected to the ground.



COMBINATION OF THE DETECTOR

- Separate the elastic cord and the elastic cord adjustment.



Elastic cord adjustment

- The connection ring can be assembled.

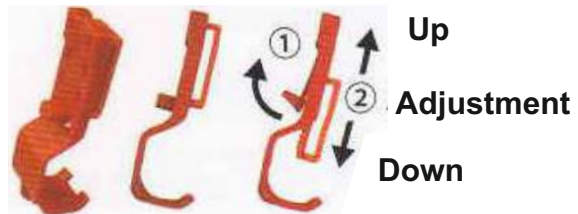


- The hook can be disassembled.

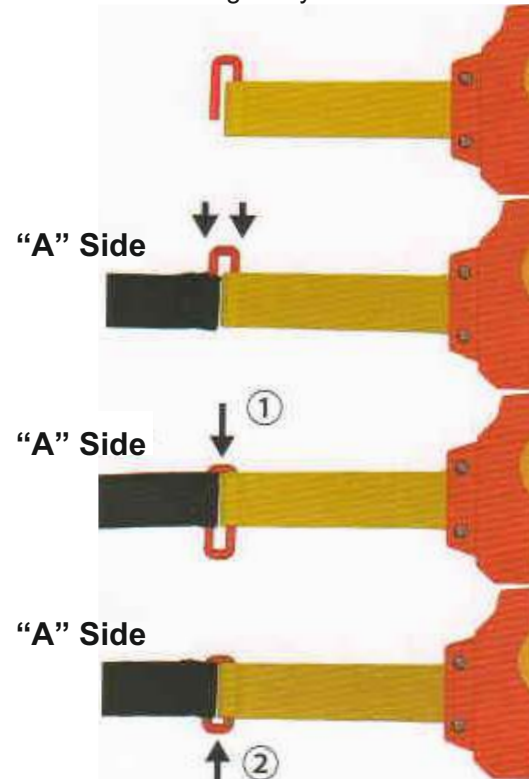
(1) The combination of the hook,



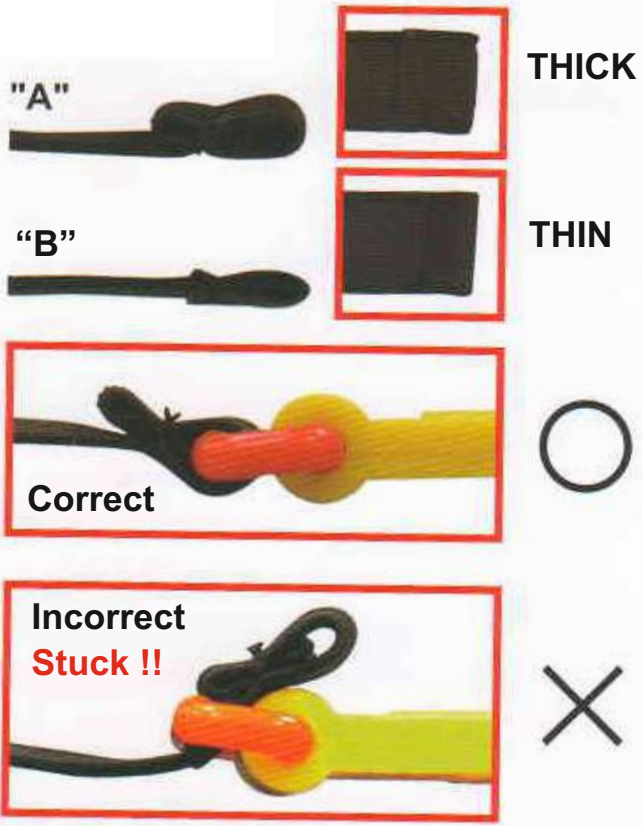
(2) The hook can be adjusted according to the user's requirement.



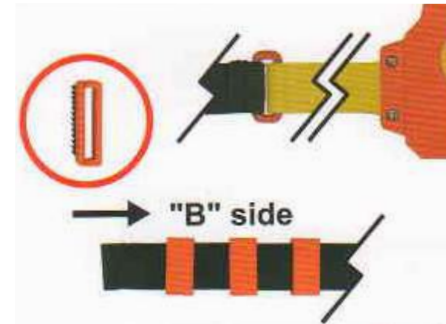
1. Before assembling the connection ring, take the upper part of the connection ring pass through the elastic cord & one side of the detector. Assemble the connection ring firmly.



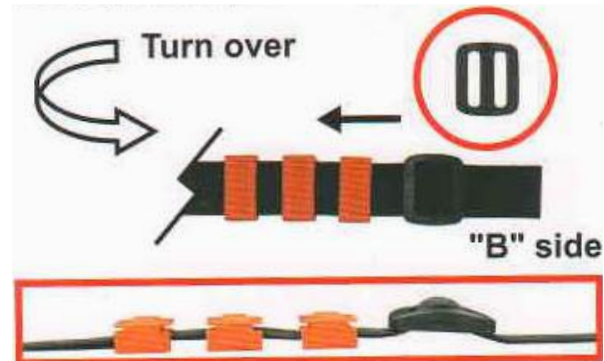
- **Attention** : this elastic cords strip must be "A" side



2. Take three buckles pass through the elastic cord from "B" side.



3. Turn over the elastic cord & take the elastic cord adjustment pass through from "B" side.



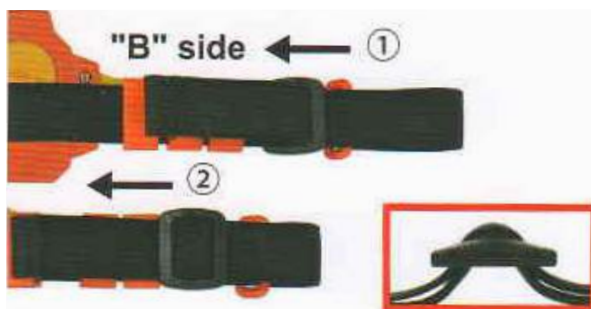
4. First assemble the connection ring of the other side.



5. Take the elastic cord "B" side pass through the space of the connection ring as below.



6. Turn over the elastic cord pass through the elastic cord adjustment as below.

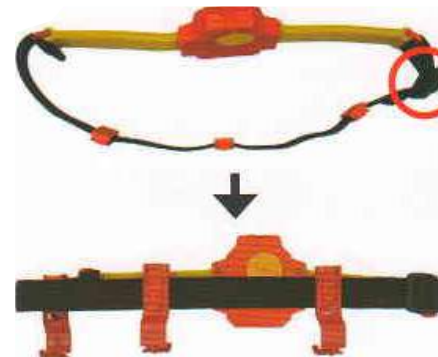


• **Attention :**

The second combination is different.



7. Use the elastic cord adjustment to adjust the length of the elastic cord, then assemble the hooks.

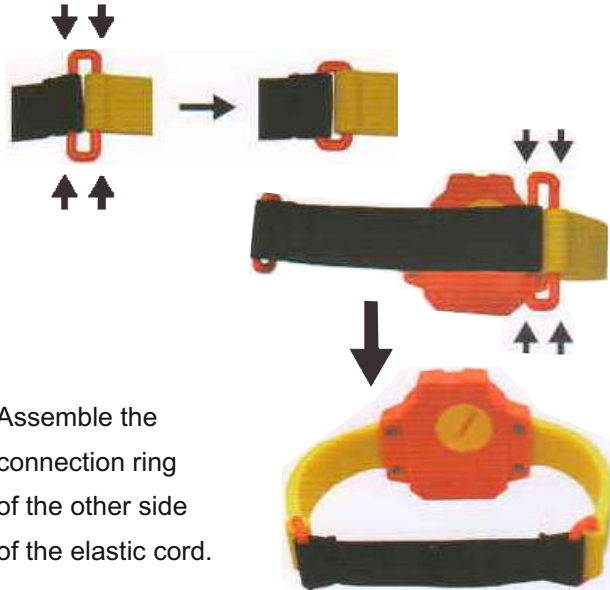


8. Fix the detector to the helmet.



SHORT ELASTIC CORD

- Before assembling the connection ring, take the upper part of the connection ring pass through the elastic cord and one side of the detector. Assemble the connection ring firmly.



- Assemble the connection ring of the other side of the elastic cord.

MUMBAI

TEST CERTIFICATE

PERSONAL SAFETY VOLTAGE DETECTOR

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

MODEL NO. 287SVD

SERIAL NO. _____

DATE: _____

ISO 9001
REGISTERED





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, fuses, burnt PCB's, 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 transaction are subject to Mumbai Jurisdiction.



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