



Vibration Digital Tester

(True LIVE (ACV) Feature)



CAUTION

Ins. CAT. II

Model no.:TS500

BEFORE OPERATING

This is a compact pen size multi-function non-contact tester, which combines latest digital technology with advanced powerful intelligent sensor enable to distinguish high/low AC Voltage. Treble indication perform by LED, Buzzer and also with VIBRATION. The final solution for the user who works at any environment.

Advanced features:

Non-contact method sense AC voltage from 70-600VAC

- a) TV/Monitor radiation check
- b) Microwave leakage detection: $\geq 5\text{mw/cm}^2$

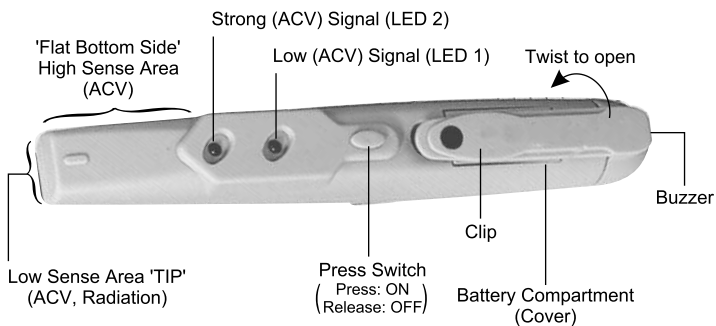
BATTERIES REPLACEMENT :

Type : LR44; 157; AG13; A76 etc. (1.5V x 4pcs.)

HOW TO REPLACE THE BATTERIES :

Twist the clip either left or right hand side and pull the cover out, replace the fresh batteries with 'NEGATIVE' at left side and then place the cover back.

CAUTION: Do not operate the tester with cover out.



NOTES :

- 1) The tester should not be used to test voltages above the stated rated voltage.
- 2) Operating temperature within -10°C to $+50^{\circ}\text{C}$ (14° to 122°F) and the frequency range from 50 to 500Hz. But best environmental temperature range up to 30°C , humidity 80% at altitude up to 2,000 meter.
- 3) The tester must be tested on a known voltage source to make sure it is operating properly.
- 4) The tester must not be used in the presence of moisture, (e.g. dew or rain)
- 5) Damaged tester must not be used.
- 6) Static electricity may be generated by rubbing the 'BODY' of the tester (when pressing the switch) thus causing LED blinks, it is NORMAL.
- 7) In case of doubt, please consult a qualified technician.
- 8) Save this instructions.



Self-Test Function

Prior to use, please perform a 'Self-Test' to ensure guaranteed indication.

Before testing AC Voltage



Press the switch and place the 'sensor' towards 'known AC Voltage source'.

* LED blinks buzzer sounds Vibration generates indicating presence of AC voltage.



Detecting AC Voltage

Press the switch when testing



Move the tester to detect AC voltage from the unshielded wire located inside the wooden/dry wall (for more accuracy and lower detections sensitivity, place your free hand onto the wall).

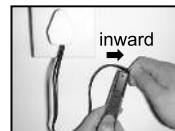


For more accuracy in locating the 'Broken Point' or 'Live/Hot' side of the wire, hold the wire with free hand to reduce the sensitivity. The 'Broken Point' is indicated when the signal is interrupted. (Make sure the wire is connected to a 'Live/Hot' power source)

Result: *LED blinks, buzzer sounds and tester vibrates indicating presence of 'AC' voltage.

Typical Examples

NOTE: TESTING THROUGH THE WIRE SHOULD BE UNSHIELDED.



Identifying polarity of AC Voltage of the wire

To locate 'LIVE/HOT' side of the wire, hold/grip the wire with your free hand and gently 'TRACE' inwards.



Broken wire/Fault finding

'FAULT/BREAK' point in the 'LIVE/HOT' wire is indicated by an interruption in sound.



Proper Connection Check

Move the tester close to the hair dryer with the power OFF. The buzzer comes ON when the plug is inserted improperly, OR if the 'LIVE/HOT' wire is improperly connected to the plug.



Ground/Earthing Check

Move the tester close to the fan, toaster, electric kettle, dryer machine, microwave oven, etc.. The buzzer comes ON if the 'Ground/Earthing' is not connected in the wiring.



Picks-up Static Radiation of T.V./ Monitor

Buzzer sounds when too close to the T.V.. Also, buzzer sounds near the 'Polarizing Filter' of a monitor, when 'Ground/Earthing' is NOT connected.

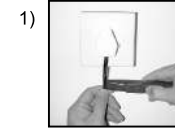


Microwave Leakage Detection

- 1) Place a cup of water or food inside the oven.
- 2) Set the oven to 1 minute at 'HIGH' and turn ON.
- 3) Move the 'TIP' side of tester slowly over and around the door edge and also front glass of oven.

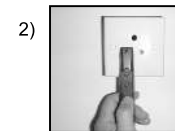
NOTE: THE PLUG OF THE MICROWAVE OVEN SHOULD BE CONNECTED TO 'EARTH/GROUND'.

NOTES :



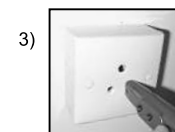
To reduce sensitivity

If sensitivity is too high, hold/grip the wire and 'TRACE' inwards for accurate results.



High sensitive sense

For more sensitive detection, use 'Flat Bottom Side' (near the 'TIP') towards the AC voltage.



Low sensitive sense

For lower sensitive detection, use 'TIP' side towards the AC voltage.

- 4) Due to 'auto sense' feature, LED 1 starts blinking, buzzer sounds, and vibrates when AC Voltage presents. Simultaneously when the tester approaches near the AC voltage LED 2 starts blinking, buzzer tone changes, the vibration getting stronger.
- 5) Static electricity may be generated by rubbing or banging the plastic housing thus cause false indication (LED blinks).
- 6) The sensitivity may be reduced under high humidity environment.