

Quick Operating Guide

Initial Preparation

SELF-TEST

* Guaranteed Indicating!



Prior to use, please perform a 'Self-Test' to ensure guaranteed Indicating. While 'SELF-TEST' we must touch the 'DRIVER-BLADE' and the free hand touching the 'METAL PLATE'.

* 'Red' LED blinks indicating 'Normal Functioning' *



AC Voltage Test



1. BY CONTACT METHOD (70~250VAC)

• Safe !

When testing, the 'TIP' must be in direct contact with the 'Live/Hot' part of the AC Voltage. 'Red' LED lights up indicating the presence of AC Voltage. Also, whenever 'Neutral' or 'Earthing/Ground' is disconnected, the 'Red' LED will blink indicating a 'Fault' line in the system.



Note: When in direct 'Contact Method' mode, it is not recommended to touch the 'Metal Plate' of the tester. (Of course, it is absolutely safe even when touching it.)

2. BY NON-CONTACT METHOD (100~600VAC)

i) Identifying Polarity of AC Voltage

Hold the tester as shown for 'Non-contact' testing of AC voltage. To locate 'Live/Hot' side of wire, gently 'Trace' the tester along the wire. 'Live/Hot' side is indicated by the 'Red' LED blinking 'Fault' point in the 'Live/Hot' wire is indicated by an interruption in light. Instantaneous finding of AC voltage is also obtained by the tester when placed near plug, wire inside PVC conduit etc.



Note: To increase the sensitivity, touch the 'METAL PLATE' while testing.

Typical Applications



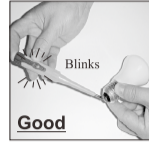
Wrong Connection Check

Move the Tester close to hair dryer with the power OFF. 'LED' blinks when the plug is inserted improperly, OR 'LIVE/HOT' wire is connected 'WRONGLY' to the socket.



Ground / Earthing Disconnected Check

Move the Tester close to a fan with POWER OFF. 'LED' lights up when 'Ground / Earthing' is not connected in the system.



Bulb : Relay Coil; Fuse; Speaker; Resistor

LED blinks means 'GOOD'.



Locating Broken Wire

Trace along on the wire, LED interrupts where the wire is broken.



'Picks-Up' Static Radiation Of T.V./Monitor/Ionizer

LED lights up at a distance away from T.V., harmful to 'Close watching' of T.V. Also, LED blinks near the 'Polarizing Filter' of a monitor, when 'Ground/Earthing' is not connected.



Instantaneously Checks AC Power

No need to remove the plug, easy to find out the presence of AC voltage (Power).



Do-It-Yourself / Fault Finding

Easy to check out proper connection of the wiring, just very simple to use.



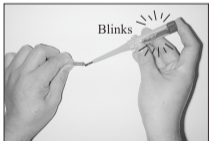
Polarity/Continuity Check



CAUTION : Be sure to disconnect any AC Mains or High Voltage!

Polarity Check

Identifies the Polarity of DC Voltage (1.5-36VDC). 'LED' blinks at 'POSITIVE' (+) only.



LED blinks (Positive)



LED does not blink (Negative)



Ionizer Check



Check operating condition of ionizer

LED lights up near the ionizer indication it is working.



Microwave Leakage Detection

CHECK YOUR MICROWAVE OVEN EVERY WEEK AND COOK WITH CONFIDENCE !

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



- 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 tester 'TIP' slowly over and around the door edge and also front glass of oven.

* LED blinks when leakage in microwave is detected.

BEFORE OPERATING

"SMART(I)" Digital tester is the Latest; Hi-tech; New Invention; and Safety

- 1) AC voltage test : Contact method from 70~250VAC
Non-contact method from 100~600VAC
- 2) Polarity check : 1.5V~36VDC
- 3) Continuity check : 80MΩ
- 4) Check operating conditions of ionizer
- 5) Microwave leakage detection : $\geq 5\text{mw/cm}^2$

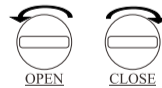
BATTERIES REPLACEMENT :

- Type : 392A ; AG3 ;LR41 ; 192 ; V3GA (1.5V x 2 alkaline or silver type)
- Battery life: Min. 5 hours of continuity operation

HOW TO REPLACE THE BATTERIES :

Loose the 'Metal Plate' in anticlockwise direction. Replace the batteries with 'NEGATIVE' side at inside position.

- CAUTION**
- a) Never attempt to take any parts out except replacing batteries.
 - b) Do not operate the tester with the 'Metal Plate' removed.



SUPER BRIGHT RED LED

DRIVER BLADE (TIP)

OPEN CLOSE

METAL PLATE

NOTES :

- 1) The tester should not be used to test voltages above the stated rated voltage.
- 2) Operating temperature within -10° 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 perceptibility of the indication can be impaired : in unfavourable lighting conditions. (e.g. in sunlight) or in unfavourable positions, (e.g. on wooden runged ladders etc.)
- 4) The tester must be tested for perfect function before use (Self-Test).
- 5) The tester must not be used in the presence of moisture, (e.g. dew or rain)
- 6) The screw-driver blade should only be used for testing voltage on live hot parts. Other work must not be carried out without isolating the voltage.
- 7) Damaged testers must not be used.
- 8) Static electricity may generate by rubbing the TIP/PLASTIC case thus causing false reading (indication).
- 9) As with any other electrical item, extreme care needs to be taken. Hence, we strongly suggest you to please read and follow instructions carefully.
- 10) If any doubt, please consult a qualified electrician.