

## EXAMPLES FOR TESTING/CHECKING ELECTRONIC COMPONENTS



# **RESISTOR; COILS; WINDING ETC.**  
Input Impedance: AT 'O'=0-5MΩ('RED' lits UP).  
AT 'L'=0-50MΩ('GREEN' lits up & 'SOUNDS').  
AT 'H'=0-100MΩ('GREEN' lits up & 'SOUNDS').



# **CAPACITOR**  
'LED' lits 'ON' and then goes 'OFF'. Alternative testing same happens, means 'GOOD'.



# **DIODE; RECTIFIER;**  
'LED' lits UP at 'FORWARD' direction and NOT at 'REVERSE'. Try to check at 'REVERSE' with the switch to 'L/H'. (lits up means leakage).



# **TRANSISTOR (NPN TYPE)**  
Switch to 'O', it lits up at 'C' & 'E', with finger touching at 'B'.



# **TRANSISTOR (PNP TYPE)**  
Switch to 'O', it lits up at 'B', finger alternatively touching 'C' & 'E'.



# **CABLE; P.C.B.**  
The 'LED' lits up when 'CONTINUITY'.

## EXAMPLES FOR AUTO/MOTOR CYCLE



# **IGNITION CHECK**  
Switch to 'O', move the tester near to the High-voltage ignition wire, 'RED' lits up indicates High-voltage presence.



# **BULB; RELAY COILS; RELAY CONTACTS**  
Switch to 'O/L'. 'LED' lits up means 'GOOD' otherwise 'FAULT'.



# **FUSE; WIRING**  
SAME AS ABOVE.



# **SPEAKER; HEADPHONE**  
SAME AS ABOVE



# **DC VOLTAGE/POLARITY CHECK**  
Switch to 'O', 'RED' lits up at 'POSITIVE' (+) only. ('RED' lits up BRIGHTER than in 'continuity function'.)



# **FAULT FINDING**  
Check the fault condition of the wiring: such as the 'LOOSE' (BAD CONTACT) connection of the 'MAIN CABLE'; 'DRY JOINT' of the wire/ing.

Model  
#CT500AV

⚠ CAUTION ☐ Ins. Cat. II



## Quick Operating Guide

### Initial Preparation

#### Self-Test

\* **Guaranteed Indicating!**  
Prior to use, please perform a 'Self-Test' to ensure guaranteed indicating. Select switch to 'O' position, 'RED' LED lits up indicating 'Normal Functioning'. Alternatively, selecting switch to 'L/H' positions, both 'GREEN' LED lits up and buzzer 'BEEPS' indicating 'Normal Functioning'.



\*REMEMBER TO SWITCH BACK TO 'O' POSITION WHEN NOT IN USE\*

### Testing AC Voltage

#### 1. By Contact Method ('Red' Indicator)

##### ⚠ CAUTION

Switch to 'O' Position (Extra low sensitivity) when testing DIRECT in contact with the 'Live/Hot' part of the AC Voltage.

'Red' LED light up indicating the presence of AC Voltage. Whenever 'Neutral' or 'Earthing/ Ground' is disconnected, the 'Red' LED will also lights up indicating a 'Fault' line in the system

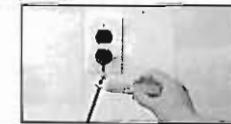


Note: When in direct 'contact method' mode, it is not recommended to touch the 'Metal Plate' of the tester. (Of course, it is absolutely safe even when touching it).

#### 2. By Non-Contact Method ('GREEN' Indicator & 'SOUND')

##### i. IDENTIFYING POLARITY OF AC VOLTAGE

Switch to 'L' Position (low sensitivity) for 'Non Contact' testing of AC voltage. To locate 'LIVE/HOT' side of a wire, gently 'Trace' the Tester onto the wire, 'LIVE/HOT' side is indicated by both 'LIGHT & SOUND'. 'FAULT' point in the 'LIVE/HOT' wire is indicated by an interruption in sound. If sensitivity is TOO HIGH, hold/grip the wire and 'Trace' inwards for accurate results.



## ii. IDENTIFYING POLARITY OF AC VOLTAGE

Switch to 'H' (High sensitivity) for 'Non Contact' testing of AC voltage. Instantaneous finding of AC voltage is obtained by the tester when placed near switch, socket, wire, plug, wire inside PVC conduit etc.



## iii. HIGH VOLTAGE/ELECTRICAL APPLIANCES/HIDDEN WIRE CHECK

Switch to either 'L' or 'H' position for high voltage detection, such as car ignition, high voltage in Transformer/Wire, improper connection of circuits and Ungrounding in Electrical Appliances, Wire inside wood/dry wall etc.



## iv. GREAT FOR MODERN HOME/DO-IT-YOURSELF

It is great for Education and a MUST for 'Modern Home'. It 'Beeps' when approached close to a TV (it picks up static radiation). 'Educates' children not to watch TV at a close distance. And also warns them it is dangerous to play/pull wire/cable, plug, socket, switch, home appliances etc.



### NOTES:

1. For higher sensitivity, please touch the metal plate when using.
2. To reduce the sensitivity, please place your other hand on to the object being tested.
3. The sensitivity may be reduced under high humidity environment.

## Continuity Test

BE SURE TO REMOVE AC Mains or High Voltage!

### 1. Polarity Check

Identifies the Polarity of DC Voltage (1.5-50VDC). 'Lights' up at 'POSITIVE' (+) only.



## 2. Electrical Check

TESTS and VERIFIES the connection of wire, plug, socket, fuse, bulb, heater/heating element, toaster, fan etc. Even women and children could easily identify 'Good' or 'Bad' fuse, bulb etc.

"JUST VERY SIMPLE TO OPERATE, MUCH EASIER THAN A MULTI-METER"



## 3. Electronic Component Check

Ideal for Electronic Personnel/Technician, since it can test/check/identify the condition of Rectifier, Diode, Resistor, Capacitor, Transistor, Cable, Computer Cable, PCB etc.



## 4. Battery Test

It can roughly test the condition of a battery cell (AA, AAA, C, D types). A 'NORMAL' battery is when the LED lights up at the 'Positive' (+) side, while a reverse indication shows a 'WEAK/DRAINED' battery.



(Normal)

(Weak/Drained)

## Also Very Helpful For Auto

Ideal and handy for Auto. Simple and Fast to check fuse, bulb, wiring, battery polarity etc. are some of the many applications this tester provides.



## EXAMPLES FOR HOME/D.I.Y.



### # BULB; FLUORESCENT LAMP; HEATING ELEMENTS

'LED' lit up indicates 'GOOD' condition.



### # WRONG CONNECTION CHECK

Switch to 'L/H', move the tester close to the Hand Dryer. If it 'SOUNDS' (when the switch of the dryer are 'OFF') means the plug base been 'WRONG' inserted.



### # GROUND/EARTHING DISCONNECTED CHECK

Switch to 'L/H', move the tester close to the Toaster. If it 'SOUNDS' (when the switch of the Toaster are 'OFF') means the 'GROUND/EARTHING' is disconnected.



### # PRESENCE OF AC VOLTAGE/FINDING AC VOLTAGE

Switch to 'L/H', when it lit up/sounds near the 'Switch' means the AC signal is presence.



### # 'PICKS-UP' STATIC RADIATION OF T.V.

Switch to 'L/H', it lit/sounds at a distance away from T.V.. Harmful for 'CLOSE WATCHING' T.V.



### # CHECKING HOME APPLIANCES

Ideal for Home/DIY. Instantly checking Home Appliances.