

# 3-1/2 Digital Insulation Tester

## Operation Manual

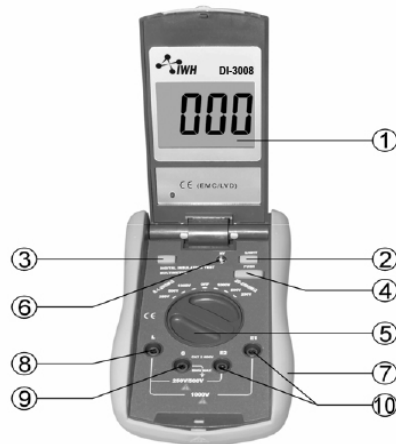
DI-3008



DI-3008

## Your Digital Insulation Tester

This instrument is a compact, battery operated, handheld Digital Insulation Tester with safety protector, and auto open top 3 ½ digit display. Please read this manual for a description of various operations and safety procedures before using the Tester.



- |                                  |                                      |
|----------------------------------|--------------------------------------|
| 1. Top                           | 6. HV red indication lamp            |
| 2. Backlight switch              | 7. Safety protector                  |
| 3. Power switch                  | 8. Black insulation test lead socket |
| 4. Insulation test switch 'PUSH' | 9. Shield Socket                     |
| 5. Function/Range switch         | 10. Red Insulation test lead Socket  |

### Safety Information

The following safety information must be observed to insure maximum personal safety during the operation of this meter.

1. Do not operate the meter if the body of meter or the test leads look broken.

2. Check the main function dial and make sure it is at the correct position before each measurement.
3. Do not perform insulation tests on a live power system.
4. When pressing the "HV" switch, the "HV" red indicator lamp will light. A DC 250V, 500V or 1000V high voltage output will be present between the "E" and "L" jacks. To avoid shock, please do not come into contact with the jacks.
5. Change the battery when the "low battery" symbol appears to avoid incorrect data.

### General Specifications

Display: 3 1/2 digit LCD with a max. reading of 1999.

Polarity: Automatic negative polarity indication.

Zero adjustment: Automatic.

Over range indication: Only the "1" or "-1" display.

Safety Standards: The meter is up to the standards of IEC1010 Double Insulation, Pollution Degree 2, Over voltage Category II.

Operating Environment: Temperature 32 ~ 104F(0 ~ 40C)  
humidity < 80%RH.

Storage Environment: Temperature -4 ~ 140F(-20 ~ 60C)  
humidity < 90%RH.

Power supply: 9V Zinc-carbon battery.

Size: 155mm×97mm×50mm

Weight: Approx 320g (including battery).

Accessories: operation manual, test leads, battery (6F22)

### Electrical Specifications

Test voltage	250V	500V	1000V
Range	0.1 MΩ-200MΩ		
	20MΩ-2000MΩ		
Accuracy	4.0%+20		
short circuit current	1.7mA	1.7mA	1.7mA

### **Battery replacement**

1. When the battery voltage drops below proper operation range the "low battery" symbol will appear on the LCD.
2. Before changing the battery, set the selector switch to "OFF". Open the cover of the cabinet with a screwdriver.
3. Replace the old battery with the same type battery.
4. Close the cover and fasten the screw.

### **Operation**

1. Connect the black insulation test lead to the "L" socket and the red insulation test lead to the "E1" or the "E2" socket.
2. Set the selector switch to desired "250V", "500V", or "1000V" position.
3. Connect the test leads to two points of a circuit and ensure contact.
4. Press the "**PUSH**" button, the HV red indication lamp will light, indicating high voltage output, read the insulation resistance value of the circuit being measured from the LCD panel.

**Note:** When you press the "**PUSH**" button and the HV red indication lamp lights, the socket will have a DC 250V, 500V, or 1000V high voltage charge between the "E" and "L". To avoid shock, please do not come into contact with the jacks.

### **Maintenance**

1. Before opening the cover, disconnect both test leads and never use the meter before the cover is closed.
2. To avoid contamination or static damage, do not touch the circuit board without proper static protection.
3. If the meter is not going to be used for a long time, take out the battery and do not store the meter in a high temperature or high humidity environment.
4. Repairs or servicing not covered in this manual should only be performed by a qualified personal.
5. Periodically wipe the case with a dry cloth and detergent. Do not use abrasives or solvents on this instrument.