



# Digital Insulation Tester

## Model : DIT 99



### Instruction Manual

## 1. SPECIFICATIONS

### 1.1 General Specifications

- Display : 3½ digit liquid crystal display (LCD) 17mm height with a maximum reading of 1999.
- Overrange Indication : (1) or (-1) is displayed at MSD
- Low battery : " " is displayed when the battery voltage drops below the operating voltage.
- Safety standard : Meets the requirement of IEC 1010 for installation category II, 1000V phase to earth.
- Measurement rate : 2.5 measurements per second nominal.
- Operating conditions : 0°C to + 50°C 0-75% RH
- Storage conditions : -20°C to + 60°C, 0-80% RH with battery removed.
- Accuracy : Accuracy specifications at 23 ± 5°C, less than 75% RH.
- Power Supply : 9 volts. 6 x 1.5V battery, Eveready
- Dimensions : 144.5(H) x 95(W) x 56.5(D) mm.
- Weight : 395 grams approx. including batteries type 1015 or equivalent.
- Accessories : Test leads (pair) 6 X 1.5V battery, instruction manual, carrying case.
- Dielectric Strength : 3.5kV @ 50Hz for 1 min. between Input terminals and case
- Insulation Resistance : More than 50MΩ at 500V between circuit and case.

### 1.2 Electrical Specifications

Accuracies are ± (% reading plus number of digits at 23 ± 5°C, and humidity of less than 75% RH.

Model	DIT99A	DIT99B	DIT99C	DIT99D	DIT99E
Rated Voltage	100V	250V	500V	1000V	1000V
Range	20MΩ	200MΩ	200MΩ	200MΩ	2000MΩ
Resolution	0.01MΩ	0.1MΩ	0.1MΩ	0.1MΩ	1MΩ
Max. no load voltage	+25% of rated voltage				
Short circuit current Accuracy	<2mA ± (3%rdg + 2dgt)				

## 2. SAFETY INFORMATION

1. The circuit under test must be de energised and isolated before connections are made .
2. Circuit connections must not be touched during a test.
3. After Insulation tests capacitive circuits must be allowed to be discharged.
4. Test leads must be in good order, dean and have no cracked or broken insulation.
5. Do not push the test button before all connections and preparations are done. The instrument must only be used by suitably trained and competent persons.

### Warning and safety symbols

- Caution refer to this manual before using the meter.
- Dangerous voltages.
- Comply with IEC1010-1

## 3. OPERATION

Before taking any measurements, read the safety Information section. Always examine the instrument for damage, contamination (excessive dirt, grease, etc.) end defects Examine the teat leads for cracked or frayed Insulation. If any abnormal conditions exist do not make any measurements.

### 3.1 PRECAUTIONS

1. Disconnect all power from the circuit under test when making measurements. If any voltage is present in the test circuit an erroneus reading will result.
2. When the test switch la pressed a high voltage ls generated between '+' and '-' terminals. Do not touch any live parts ln the circuit during measurement.

