



Digital hand held multi-meter Part 0-798-00

Introduction

This meter is designed to measure DC and AC voltage, DC current, Resistance, Diode and Audible continuity test and Temperature. A combined On/Off multi-function switch selects the various functions and ranges. Red and Black leads are provided for electrical measurements, also a separate lead assembly is provided for temperature measurement. Maximum display: "1999" Working environment: 0 - 40°C. Humidity: < 75%. Tests are carried out with the black lead in the socket "COM" and the red lead in "V ΩmA C F" socket UNLESS otherwise stated. Reverse polarity indication by minus sign. Accuracy figures are quoted for ambient temperatures 23°C ± 5°C. Over range is indicated by displaying "1". If unsure of reading select highest range.

DC Voltage

Five ranges up to 500 volts.

Accuracy: ±0.7% of reading ± 2 digits. Overload protection up to 600V DC or AC peak.

DC Current

Four ranges up to 10 Amps.

For the 10 Amp range only, the red lead is plugged into the "10Amax" socket. Accuracy ±1.0% of reading ± 2 digits. Overload protection: 200mA fuse. Note: 10 A range 10A fuse.

AC Voltage

Two ranges: 250 volts and 200 volts.

Accuracy: ±1.2% of reading ±3 digits. Frequency range: 40Hz to 400Hz sinusoidal wave form. Overload protection up to 250V.

Resistance

When measuring resistance the power to the item under test must be turned off. Five ranges up to 20MΩ. Accuracy: 200.0Ω ±1.0%±2 digits. 2000.0Ω to 200.0kΩ ±0.8% ±2 digits. 20MΩ±1.2% ±2digits. Overload protection up to 250VRMS DC or AC.

Temperature

Range: -40°C to +1000°C (-40°F to +1832°F)

Accuracy: -40°C to +40°C. (-40°F to 104°F) ±4°C

>40°C to +500°C (-104°F to 932°F) ±1% ±4 digits

>500°C to 1000°C (>932°F to 1832°F) ±2% ±4 digits

The special lead assembly is used for temperature measurements, black plug into "COM" and the red plug into "VΩmA C F". The tip of the probe must be held firmly in contact with the surface to be measured, wait until the reading stabilizes.

Diode and audible continuity test

With the red lead connected to the anode of a diode and the black lead to the cathode the reading is the approximate forward voltage of the diode. With the leads reversed the display will show an over range indication of "1". The buzzer sounds if the resistance between the probes is less than approximately 10Ω.

Notes:

When the battery voltage is too low the battery symbol will appear on the display. Readings may then be inaccurate. To change the battery: Turn the meter "OFF" and disconnect the test leads, undo the screw on the back of the unit and carefully remove the battery cover, remove the old battery and replace with 2 x AAA batteries. Replace the cover. If no reading of current is obtained on the lower ranges, remove the back cover by removing the 2 screws and check the internal fuse. Replacement fuses are F1 0.2A/250V Ø5mm x 20mm ceramic tube, F2 10A/250V Ø5mm x 20mm ceramic fuse. The unit automatically shuts down after 15 minutes of no operation. To disable the auto power off function turn the dial to OFF and hold down the hold button whilst turning the dial ON. A beep will confirm the action was successful and "APO" disappears from the screen.

Always switch the multi-meter off when not in use to conserve the battery.



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WARNING



Be sure to read the warnings and follow the instructions in this manual. Incorrect use may put the user in danger.

The following legend apply to this manual:



Danger High voltage



Ground/Earth



Warning! Refer to the instruction manual



Direct Current (DC)



Alternating current (AC)



Fuse with correct amp rating



Double insulated (protection Class II)

10amps Maximum!

**To avoid electrical shock, remove test leads
before opening the case**

Do not use abrasives or solvents on the meter!



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