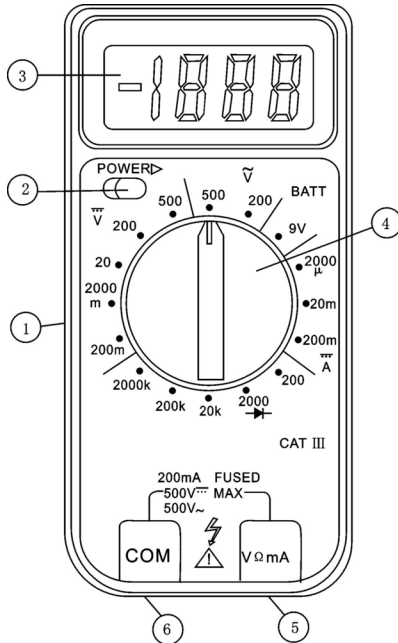


OPERATOR'S INSTRUCTION MANUAL MINI DIGITAL MULTIMETER



GENERAL

Before attempting to operate the instrument, become familiar with each control. A thorough understanding of how the instrument operates will avoid undue mistakes and minimize measurement errors, instrument damage and the possibility of personal injury.

FRONT PANEL DESCRIPTION

1. CASE
2. POWER
3. 3-1/2 DIGIT LCD DISPLAY
4. FUNCTION AND RANGE SWITCH
5. "VΩmA" JACK
6. "COM" JACK

SPECIFICATIONS GENERAL

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 MSD '1' displayed.

POWER: 12V Alkaline Manganese button cells A23
E12 (Japan) or optional.

DIMENSIONS: 100mm long x 48mm wide x 26mm thick

NET WEIGHT: 104g (including battery)

ELECTRICAL SPECIFICATIONS

Accuracies are guaranteed for 1 year, 23°C ± 5°C less than 75% RH

DC VOLTAGE

200m, 2V, 20V, 200V, 500V ± 0.5% rdg ± 2d

Impedance: 1M ohm

OVERLOAD PROTECTION: 500V rms

AC VOLTAGE

200V, 500V(40Hz-400Hz)±2.0%rdg±5d

Impedance: 450k ohm

OVERLOAD PROTECTION: 500V rms

RESISTANCE:

200,2000,20k,200k,2000k±1.5%rdg±4d

DC CURRENT:

2000 μ , 20m, 200mA±2.0%rdg±2d

OVERLOAD PROTECTION: 200mA/250V fuse

DIODE TEST

Test current: 1.6mA MAX

Test voltage: 3.2V MAX

BATTERY TEST

Range: 9V

Test current: 6mA

OPERATION:

- The mark "1" is for warning that the input voltage should not exceed the indicated values. This is to prevent damage to the internal circuitry.
- The range switch should be set to the range which you want to test before operation

DC VOLTAGE MEASUREMENT

Set the FUNCTION and RANGE switch to desired DCV position and connect the test leads across the source or load under measurement if the voltage range is not known beforehand.

Set the range switch to the highest range and work down, the polarity of the red lead connection will be indicated at the same time as the voltage.

AC VOLTAGE MEASUREMENT

Set the FUNCTION and RANGE switch to desired ACV position and connect the test leads across the source or load under measurement.

DC CURRENT MEASUREMENT

Set the FUNCTION and RANGE switch to DCA position. Connect test leads IN to a circuit turn.

RESISTANCE MEASUREMENT

Set the FUNCTION and RANGE switch to desired ohm range, if the resistance being measured is connected to a circuit turn off power and discharge all capacitors before applying probes.

DIODE TEST

Set the FUNCTION and RANGE switch to 2k/Diode position, connect test leads across the diode. RED probe to the anode of the diode and black to the cathode.

BATTERY TEST

Set the FUNCTION and RANGE switch to BATT position. Connect test leads to the terminals of the battery under test. Read display value and decide if the battery is OK

MAINTENANCE CAUTION:

From and energized circuits to avoid shock hazard.

Fuse rarely need replacement and blow almost always as a result of operator error. If "BAT" appears on display, it indicates that the battery should be replaced.

To replace battery remove the screw in the bottom of the case, simply remove the old, and replace with a new one. Be careful to observe polarity.

To replace Fuse (200mA/250V) remove the screw in the bottom of the case, simply remove the old and replace with a new one.