ATD-5544 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 SWITCH
3. 3-1/2 DIGIT LCD DISPLAY
4. FUNCTION AND RANGE SWITCH
5. "V Ω mA" JACK
6. "COM" JACK

SPECIFICATIONS
DISPLAY: 3-1/2digit LCD with a max reading of 1999
POLARITY: Automatic(-)negative polarity indication
ZERO ADJUSTMENT: Automatic
OVER RANGE INDICATION: only the digit '1' is 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 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:
Remove from any 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, this indicates that the battery should be replaced. To replace battery remove screw in the bottom of case - 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.
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