tif 200 DIGITAL MULTIMETER

OWNER'S MANUAL

General Description

The TIF200 is a handheld digital multimeter with 7 voltage ranges, 5 DC current ranges and 6 resistance ranges with a special scale for testing diodes. The unit has a high input impedance for use in solid state circuits. The liquid crystal display has indications for polarity, low battery, and overrange.

Specifications

General

- Large Display: 3½ digit 0.5" LCD with a maximum reading of 1999.
- Polarity Indication: Negative input will display " – " sign.
- Overrange Display: "1_ _ _" or " – 1_ _ _" indicates an input above range selected.
- Display update speed: 2.5 times per second.
- Service temperature and humidity: 32°-102° F (0°-40° C) and below 80% RH.
- Power: 9V battery.
- Battery life: 200 hours approx.
- Dimensions: 6.4 x 3.4 x 1.1 inches (162 x 86 x 28 mm.)
- Weight: 7 ozs. (200 G.) Approx.

DC Voltage

Ranges	Resolution	Accuracy	Input Resistance	Overload Protection
200mV	100μV	(±0.8% rdg +1 dgt)	10M	AC/DC 300V
2V	1mV			DC 1000V
20V	10mV			AC 750 Vrms
200V	100mV			
1000V	1V			

AC Voltage

Ranges	Resolution	Accuracy	Input Resistance	Overload Protection
200V	100mV	±(1.2% rdg +3 dgt)	4.5M	DC 1000V
750V	1V			AC 750V

DC Current

Ranges	Resolution	Accuracy	Voltage Drop	Overload Protection
200μA	100nA	±(0.8%rdg +2dgt)	200mV	0.5A Fuse & Diode
2mA	1μA			
20mA	10μA			
200mA	100μA			
10A	10mA	±(2%rdg +2dgt)		Not Fused

Resistance

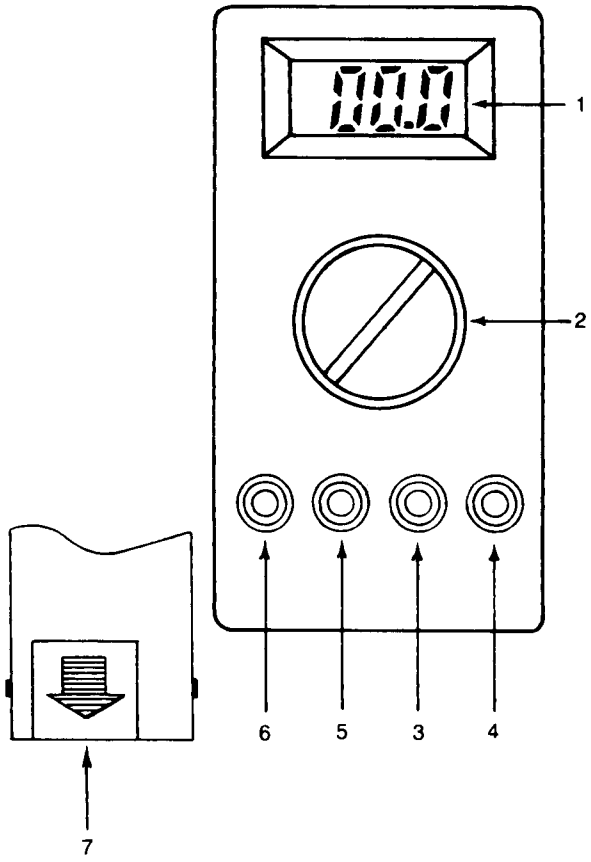
Ranges	Resolution	Accuracy	Voltage Drop	Overload Protection
200Ω	0.1Ω	±(1% rdg) +2 dgt)		AC/DC 250 Vrms
2KΩ	1Ω			
20KΩ	10Ω			
200KΩ	100Ω			
2MΩ	1KΩ			
20MΩ	10KΩ	±(1.8% rdg) +2 dgt)		

Diode Check →|←

→|←	1Ω		open voltage 3V	AC/DC 250V

Features

1) Large 3½ digit LCD display with indications for polarity, over-range, and low battery.
2) Rotary function/Range switch.
3) Common input socket.
4) Volt/Ohm input socket.
5) Low current input socket (200 MA Max).
6) High current input socket (10 AMPS Max).
7) Battery compartment cover.



Operation

AC and DC voltage measurements

1) Insert the leads, black to common, and red to volt/ohm.
2) Select function (volts AC or DC) and range.
3) Connect leads to circuit to be tested.
4) Voltage will be displayed.

DC current measurement

1) Insert the leads. Black to common, and red to the 200 MA or 10A input jack. Do not exceed the maximum current.
2) Set selector switch to desired current range.
3) Connect test leads to circuit to be tested.
4) Current value will be displayed.

Resistance measurements

1) Insert leads, black to common, and red to the volt/ohm jack.
2) Set range switch to desired resistance scale.
3) Connect test leads to circuit.
4) Resistance value will be displayed.
5) Turn switch to off on completion of test to conserve battery.

Diode measurements

1) Insert leads, black to common, and red to the Volt/Ohm jack.
2) Set selector switch to diode test position.
3) Connect the red lead to the anode and the black lead to the cathode.
   ANODE →|← CATHODE
4) Reading of "1.000" ± .30 indicates a good silicon diode.
5) Reverse the leads to the diode.
6) An overrange display indicates a good diode.

Maintenance

Battery replacement: "LO BATT" indication will turn on near end of battery life.

1) Set selector switch to off.
2) Remove test leads.
3) Slide off battery compartment cover.
4) Remove old battery and insert a new 9V battery.
5) Replace battery compartment cover.

Fuse replacement

A "000" display while using the low-amps input indicates a blown fuse.

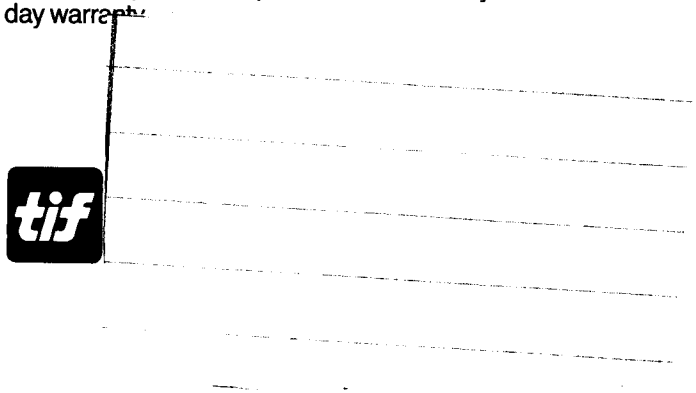
1) Set selector switch to off.
2) Remove test leads.
3) Open battery compartment.
4) Replace fuse with .5A 250V
   (Buss GMA ½, littlefuse type F, or equiv.)

CAUTIONS

1) Do not connect to voltages above 1000 VDC or 750 VAC.
2) Do not apply voltage to the inputs while in resistance mode.
3) Remove the battery for long term storage.

Limited Warranty and Repair/Exchange Policy

This instrument is designed and produced to provide unlimited service. Should it become inoperative after the user has performed the recommended maintenance, a no-charge repair or replacement will be made to the original owner within one year of the date of purchase. This applies to all repairable instruments which have not been tampered with or damaged. This warranty does not cover consumable items such as batteries, tips and fuses, nor physical damage and wear to components such as probes, sensors and adaptors. For repair service send your tool to the factory address on the back of the Owner's Manual. Repaired or replaced tools will carry a 90-day warranty.



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