100

EZ Digital Multimeter

Instruction Manual

SAFETY CONSIDERATIONS

WARNING: Please follow manufacturers test procedures whenever possible. Do not attempt to measure unknown voltages or components until a complete understanding of the circuit is obtained.

GENERAL GUIDELINES

ALWAYS

- Test the 100 before using it to make sure it is operating properly.
- Inspect the test leads before using to make sure there are no breaks or shorts.
- Double check all connections before testing.
- Have someone check on you periodically if working alone.
- Have a complete understanding of the circuit being measured.
- Disconnect power to circuit, then connect test leads to the 100, then to circuit being measured.

NEVER

- Attempt to measure unknown high voltages.
- Connect the test leads to a live circuit before setting up the instrument.
- Touch any exposed metal part of the test lead assembly.

CATEGORY RATINGS DEFINITIONS

IEC 1010
Over Voltage:
Cat II - 1000V
CAT III - 600V
Pollution Degree 2

CAT II - 1000V Installation Category (Overvoltage Category) II: Includes voltages encountered on the step down side of the transformer on the building and at a distance of 10 meters from the CAT III source.
CAT III - 600V Installation Category (Overvoltage Category III: Includes voltage encountered on the distribution level with short distance to the main service connection.
Pollution Degree 2 Normally only nonconductive pollution occurs. Occasionally temporary conductivity caused by condensation must be expected.

SPECIFICATIONS

Function	Range	Resolution	Accuracy
DCV	1.5V- 4V	0.001V	
	40.00V	0.01V	±(0.5% + 4)
	400.0V	0.1V	
	600V	0.1V	±(0.8% + 4)
ACV	1.7V-4V	0.001V	
	40.00V	0.01V	±(0.8% + 4)
	400.0V	0.1V	
	600V	1V	±(1.2% + 4)
OHM	400.0	0.1	
	4.000k	0.001k	
	40.00k	0.01k	±(0.8% + 4)
	400.0k	0.1k	
	4.000M	0.001M	
	40.00M	0.01M	±(2.0% + 4)

GENERAL SPECIFICATIONS

Power Supply	2 Each 1.5 Volt “AA” Batteries
Battery Life	560 hrs. Alkaline
Size (H x L x W)	45mm x 78mm x 153mm (1.8” x 3.1” x 6.0”)
Weight	340g (12 oz)

MEASURING AC/DC VOLTAGE

Make sure that the ground and positive leads are plugged into the proper receptacle for corresponding function positions.

⚠WARNING ***Do not attempt to make a voltage measurement of more than 500V or of a voltage that is unknown.***

Measurement Procedure:

1. Disconnect power to circuit to be measured.
2. Plug black test lead into the **COM** input jack.
3. Plug the red test lead into the **V/Ω** input jack.
4. Set the rotary switch to the “ON” position.
5. Connect test leads to circuit to be measured.
6. Reconnect power to circuit to be measured.
7. Read the voltage on the TPI 100.

Note: For Auto mode to operate properly, DC voltage must be between +0.7 and 600V. AC voltage must be between 3 and 500V.

MEASURING RESISTANCE

⚠WARNING ***Do not attempt to make resistance measurements with circuit energized. For best results, remove the resistor completely from the circuit before measuring.***

NOTE: To make accurate low ohm measurements, short the test leads together and record the resistance reading. Deduct this value from actual readings.

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4. Set the rotary switch to the "ON" position.
5. Connect test leads to circuit to be measured.
7. Read the resistance on the TPI 100.

MAINTENANCE

1. **Battery Replacement:** The 265 will display a battery symbol when the internal 9 Volt battery needs replacement. The battery is replaced as follows:

    a. Disconnect and remove all test leads from live circuits and from the 265.
    b. Loosen the screw from the back of the 265 battery cover.
    c. Remove the battery compartment cover.
    d. Remove old battery and replace with new battery. Observe the correct polarity on the battery.
    e. Reassemble the instrument in reverse order from above.

2. **Cleaning your 265:**
    Use a mild detergent and slightly damp cloth to clean the surfaces of the 265.

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The Value Leader™

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