

B&A Test Equipment

GRT1000

CLAMP ON GROUND RESISTANCE

TESTER

Operating Instructions



CAUTION

The equipment covered in these operating instructions should be used by qualified employees trained in and familiar with the safety related work practices, safety rules and other safety requirements associated with this type of equipment. These instructions are not intended as a substitute for adequate training, nor do they cover all details or situations which could be encountered in relation to the operation of this type of equipment.

WARNING

Before powering the device an inspection shall be made to ensure the jaws of the device are free of contaminants and will close sufficiently. During the powering process the jaws should remain closed until the calibration routine is completed and the “OL Ω” is displayed. Failure to do so could result in false reading and equipment damage. The dismantling, calibration, or maintenance of this device shall be performed by an authorized repair facility.

NOTICE

Before operating this equipment, read, understand and follow all instructions contained in this manual. Keep instructions with equipment

DESIGN and FUNCTION

A clamp on ground resistance tester is a major breakthrough in traditional ground resistance measuring. It is widely needed in the power, telecommunications, meteorology, oilfield, construction, industrial, and electrical utility industry. For a loop grounding system, the operator can measure the ground resistance and test for continuity without having to break down the grounding wire, or use auxiliary electrodes (sometime referred to as “stakes”). It is safe, fast and simple in use.

The clamp head is specially designed to reduce calibration errors by increasing the clamp pressure and the robust design of the transformers.

Snapping the jaws or opening and closing several times should not be needed.

How it Works: One transformer induces a voltage on the conductor while the other transformer provides a current measurement through the loop allowing a resistance measurement to be displayed.

NOTE 1: The maximum resistance value that can be displayed is 1000 Ω . A resistance value in excess of the maximum will display as OL Ω . A resistance measurement of less than 0.01 Ω will display as L0.01 Ω

NOTE 2: To ensure accuracy and safety, the maximum voltage present on the conductor to be tested shall not exceed 150V and the maximum current through the conductor shall not exceed 50A.

TESTING the Ground Resistance Tester & Functions

- Before pressing the “Power” button make sure the clamp head closes securely and is not clamped around anything.
- Press the “Power” button and wait until “OL Ω ” displays.
- Using the test ring provided, clamp around the ring. 5.1 Ω +/- .3 Ω should display on the meter indicating the meter is in good operating condition
- Press the “Hold” button on the panel and remove the ring from the tester, the value should remain on the display. Press the “Hold” button again to release the display.

NOTE 3: If the device does not test properly, see panel display information for troubleshooting on back page / repair and calibration contact information.

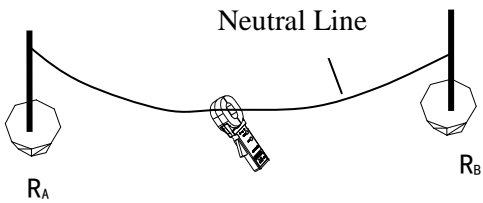
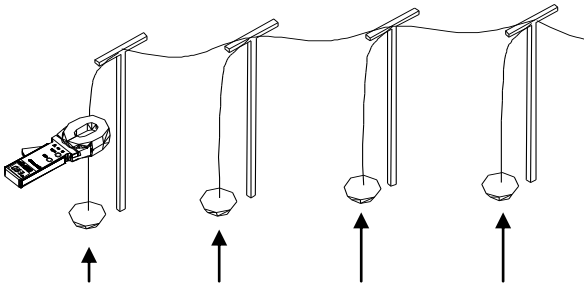
OPERATION INSTRUCTION

Ground Resistance Measurement

1. see “Testing the Ground Resistance Tester” before operating tool.
2. Press “Power” button and wait for tester to display “OL Ω”. During this time no conductor should be under test and the jaw shall not be opened.
3. Clamp on to the conductor under test and read the display to obtain the loop resistance measurement.
4. If you cannot see the display, press the “Hold” button to lock the display. After the reading is obtained, press the “Hold” button again to release the display.

NOTE 4: While the device is powered, it is common to hear a presence of noise coming from the tester; this is normal.

COMMON RESISTANCE MEAUREMENTS



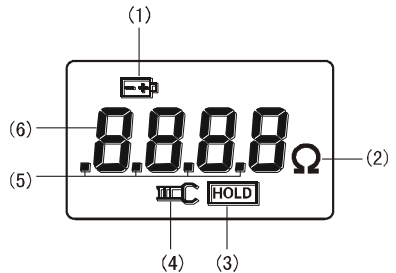
Included Items:

- 1) **Ground Resistance Tester**
- 2) **Test Ring**
- 3) **4 – 1.5V Alkaline Batteries**
- 4) **Operating Instruction Manual**
- 5) **Storage Case w/ Foam Padding**

Function	Key
Turn On / Turn Off	POWER
Lock / Release Display	HOLD

1. LCD Screen

- (1) Low battery symbol
- (2) Resistance symbol
- (3) Hold display symbol
- (4) Jaw is not closed securely
- (5) Metrication decimal point
- (6) 4-digit 7 segment LCD display



This product is warranted to be free from defects in workmanship and material, under normal use and service conditions for a period of one year.

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