

MetroTel

Model MT-8455 Volt-Ohmmeter

INSTRUCTIONS

BATTERY REQUIRED
USE EVEREADY 455
OR EQUIVALENT.

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1.0 INTRODUCTION

This document provides information on the MT-8455 VOM, sometimes described as a KS Meter or Kick Meter. Included is a description of the unit and its operating procedures, specifications and warranty. This document is designed to assist technicians in the best use of the device. This is Issue III and any changes will be incorporated as addendum to this document. Specifications and operating procedures are subject to change.

2.0 GENERAL DESCRIPTION

2.1 Model MT-8455 is a portable test set for measuring resistance and DC voltage, designated as points.

2.2 The test set is housed in a rugged ABS plastic molded case.

2.3 Type List 1 (L1) is furnished with 6' test leads terminated with alligator clips and a carrying case with strap. The case permits full view of the meter and access to the controls.

2.4 Type List 2 (L2) is furnished with the instrument alone.

2.5 The instrument operates on a Type 455 45V battery, not supplied.

3.0 METER AND CONTROLS

3.1 The meter has a 2.5" face with two scales. One is for measuring DC voltage, the second for measuring resistance with a range of 0 to 2 megohms with 100,000 ohms midscale.

3.2 ON(ohms)/OFF(volts) Switch selects either the voltage or resistance scale. ON is for ohms; OFF is for volts.

3.3 REVERSE Switch reverses the test lead polarity when checking DC voltage.

3.4 ADJ 0 Control is used to zero the ohmmeter for proper resistance checks.

3.5 R/10 Control is a non-locking push button switch that allows a more precise reading of resistance under 20,000 ohms.

4.0 OPERATING PROCEDURE

4.1 VOLTAGE MEASUREMENT: Set ON/OFF Switch to the OFF/Volts position. Connect the black test lead to the tip side of the pair (positive). Connect the red test lead to the ring side of the pair (negative). Read voltage/points on the lower scale. If meter pointer deflects to the left, throw the reverse switch to correct the polarity.

4.2 RESISTANCE MEASUREMENT: Set the ON/OFF switch to the ON/ohms position. Connect the test leads of the meter together. Rotate the ADJ 0 control until the meter pointer indicates 0 ohms. Connect the test leads to the circuit to be tested. Read resistance value on the upper scale.

4.21 For more precise readings of resistance under 20,000 ohms, use the R/10 control. Depress the R/10 and divide the reading on the meter scale by 10. For example, if the resistance indicated on the meter reads 8,000 ohms, depressing the

R/10 control will cause the meter pointer to deflect to the left indicating 80,000 ohms which when divided by 10 gives the original reading of 8,000.

4.3 Caution - when the meter is not being used always place the function switch in the OFF/volts position to avoid battery drain.

5.0 MAINTENANCE

5.1 When it is no longer possible to zero the meter on the ohms scale the battery should be replaced. Failure to do so may result in damage to internal parts due to battery leakage which is not covered by warranty.

5.2 To replace the battery, remove the four screws from the front panel. Gently lift the front panel and remove the battery connector strip from the defective battery and replace with a new battery. Secure the battery in the base of the meter. Replace the front panel with the four screws.

5.3 Spare parts and technical assistance is available from the factory. For assistance call: 408-946-4600

5.4 Send repairs and returns to:

Metro Tel
250 S. Milpitas Blvd
Milpitas CA 95035

6.0 SPECIFICATIONS

Applicable Standard

- Bell CKO8455, Issue 4, 1986

DC Volts/Points

- 0 to 100 range

Resistance

- 0 to 2 megohms
- 100,000 midscale

Accuracy

- Volts at +/-2% full scale
- Resistance at +/-2% of scale arc length

Battery / Battery Conversion Option

- 45V Eveready 455
- 9 Volt Battery Pack Conversion Kit PN: 99-0110-B

Size

- Meter alone is 3 $\frac{5}{8}$ "W x 3"D x 5 $\frac{1}{2}$ "H

Weight

- Meter alone is 11 oz.
- L1 with battery is 26 oz.

Models

- L1: meter, leads, case, manual
- L2: meter, manual

7.0 WARRANTY

7.1 The MT-8455 is warranted for a period of 90 days from date of purchase. The warranty does not cover abuse or negligence. Units are repaired or replaced at the option of the factory. For service, return the instrument prepaid to the factory with a description of the problem.

MetroTel Corp
11640 Arbor St. Suite 100 Omaha, NE 68154
Phone: 402-498-2964
Fax: 402-493-5100
Toll Free: 888-998-8300
www.metrotelcorp.com