

***TB 9-6625-2277-35**

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

CALIBRATION PROCEDURE FOR DIGITAL MULTIMETER, FLUKE MODELS 8010A, 8010A-01, 8010M, AND 8012A

Headquarters, Department of the Army, Washington, DC
19 May 2004

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*This bulletin supersedes TB 9-6625-2277-35, dated 13 March 1992.

SECTION I IDENTIFICATION AND DESCRIPTION

1. Test Instrument Identification. This bulletin provides instructions for the calibration of Digital Multimeter, Fluke, Models 8010A, 8010A-01, 8010M, and 8012A. The manufacturers' manuals and/or technical manuals were used as the prime data sources in compiling these instructions. The equipment being calibrated will be referred to as the TI (test instrument) throughout this bulletin.

a. Model Variations. Variations among models are described in text and tables.

b. Time and Technique. The time required for this calibration is approximately 1 hour, using the dc and low frequency technique.

2. Forms, Records, and Reports.

a. Forms, records, and reports required for calibration personnel at all levels are prescribed by TB 750-25.

b. Adjustments to be reported are designated (R) at the end of the sentence in which they appear. When adjustments are in tables, the (R) follows the designated adjustment. Report only those adjustments made and designated with (R).

3. Calibration Description. TI parameters and performance specifications which pertain to this calibration are in table 1.

Table 1. Calibration Description

Test instrument parameters	Performance specifications ±(% of reading + digits) (3 1/2 digit display)
Dc voltage	Range: ±200 mV, ±2V, ±20V, ±200V, ±1000V (±1200V) ¹ Accuracy: (0.1 + 1)
Ac Voltage	Range: 200 mV, 2 V, 20 V Accuracy: 45 Hz to 10 kHz (0.5 + 2) 10 to 20 kHz (1.0 + 2) 20 to 50 kHz (5.0 + 3) Range: 200 V Accuracy: 45 Hz to 10 kHz (0.5 + 2) 10 to 20 kHz (1.0 + 2) 20 to 50 kHz¹ (5.0 + 3) Range: 750 V Accuracy: 45 Hz to 1 kHz (0.5 + 2) Range: 1200 V¹ Accuracy: 45 Hz to 10 kHz (0.5 + 2) 10 to 20 kHz (1.0 + 2)

See footnotes at end of table.