

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

CALIBRATION PROCEDURE FOR
DOWN CONVERTER, CV-3427(V) 1/U
(HEWLETT-PACKARD, MODEL 3730A WITH PLUG-IN
OSCILLATORS
MODELS 3736A, 3737A,
3738A, AND 3739A)

Headquarters, Department of the Army, Washington, DC
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REPORTING OF ERRORS

You can help improve this manual by calling attention to errors and by recommending improvements and stating your reasons for the recommendations. Your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms) should be mailed direct to Commander, US Army Communications and Electronics Materiel Readiness Command, ATTN: DRSEL-MA-Q, Fort Monmouth, NJ 07703. A reply will be furnished direct to you.

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SECTION I INTRODUCTION AND DESCRIPTION

1. Test Instrument Identification. This bulletin provides instructions for the calibration of Down Converter, CV-3427(V) 1/U (Hewlett-Packard Model 3730A with Plug-in Oscillators, Models 3736A, 3737A, 3738A, and 3739A). The manufacturer's instruction manuals were used as prime data sources in compiling these instructions. The above equipment will be referred to as the TI (test instrument) throughout this bulletin.

a. Model Variations. Model variations are described in text.

b. Time and Technique. The time required for this calibration is approximately 4 hours, using the microwave technique.

2. Calibration Data Card (DA Form 2416)

a. Forms, records, and reports required for calibration personnel at all levels are prescribed by TM 38-750. DA Form 2416 must be annotated in accordance with TM 38-750 for each calibration performed.

b. Adjustments to be reported on DA Form 2416 are designated (R) at the end of the sentence in which they appear. Report only those adjustments made and designated with (R).

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

Table 1. Calibration Description

Test instrument parameters	Performance specifications
Oscillator frequency range:	3736A Band 1: 1.7 to 3.0 GHz Band 2: 2.9 to 4.2 GHz 3737A Band 1: 3.3 to 5.0 GHz Band 2: 4.8 to 6.5 GHz 3738A Band 1: 6.3 to 7.4 GHz Band 2: 7.4 to 8.5 GHz 3739A 10.7 to 11.7 GHz
Accuracy:	± 20 MHz
Meter	
Range:	45 to 95 MHz
Accuracy:	± 0.5 MHz to 70 MHz, ± 2 MHz over rest of scale