

TECHNICAL BULLETIN
CALIBRATION PROCEDURE
FOR
TEST SET, ELECTRONIC SYSTEMS AN,'UKM-5
(NSN 6625-01-073-9858)

HEADQUARTERS, DEPARTMENT OF THE ARMY
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**CALIBRATION PROCEDURE FOR
TEST SET, ELECTRONIC SYSTEMS AN/UKM-5
(NSN 6625-01-073-9858)**

**REPORTING ERRORS AND RECOMMENDING
IMPROVEMENTS**

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms) direct to: Commander, US Army Communications and Electronics Materiel Readiness Command, ATTN: DRSELME-MQ, Fort Monmouth, New Jersey 07703. In either case, a reply will be furnished direct to you.

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Section I.

IDENTIFICATION AND DESCRIPTION

1. Test Instrument Identification

a. This technical bulletin provides calibrator procedures for Test Set, Electronic Systems AN/UKM-5. The AN/UKM-5 is used for bench testing, aligning, calibrating, and troubleshooting the following equipment:

(1) Transmitting Set, Radar Data AN/AKT- 18B (Encoder, Video KY-865/AKT-18B).

(2) Receiving Set, Radar Data AN/TKQ-2B (Decoder, Video KY-871/TKQ-2B).

(3) Test Set, Electronic Systems AN/UKM-5 (Test Set, Electronic Systems TS-3796,'UKM-4).

b. The AN/UKM-5 contains two major components which require calibration: Test Set, Electronic Systems AN/UYM-7 (digital tester) and Test Set, Electronic Systems TS-3796,'UKM-4 (control-interface unit). When interconnected they function as a single operating unit. The digital tester (fig. 1) supplies the test number being run, test stimuli and module test power to the control-interface unit (fig. 2). The test number input is a verification check for proper switch settings on the control-interface unit. The control interface unit, through switching devices, supplies the test power and stimuli from the digital tester to the microprocessor or standard logic card being tested. Digital outputs from the card being tested are supplied to the control interface unit, which feeds this data back to the digital tester for comparison. Procedures for calibrating and testing the digital tester are provided in TM 11-6625-2951-13. Additional data on the control-interface unit is listed below.

Nomenclature.

----- Test Set, Electronic Systems TS-3796/'UKM-4 (control-interface unit)

Size -----13.76 x 17.25 x 17.30 inches

Weight -----37 pounds

Reference -----TM 11-6625-2937-13

TM 11-6625-2937-23P

*Specifications:**Input power*

requirements ----- AC: 115+5 V ac line-to-neutral, 3 phase, 4 wire, 400 Hz at 50 watts
DC: +5V, 5; amperes; +15 V, 100 milliamperes; +15 V, 1 ampere and -15 V, 1 ampere

DC voltage output $\pm$ 50.1 V

+15+0.1 V

+28±0.2 V

AC voltage output 115+5 V ac line-to-neutral, 3 phase, 4 wire, 400 Hz

2. Calibration Description

Table 1 lists the parameters to be calibrated and the performance specifications for the control-interface unit.

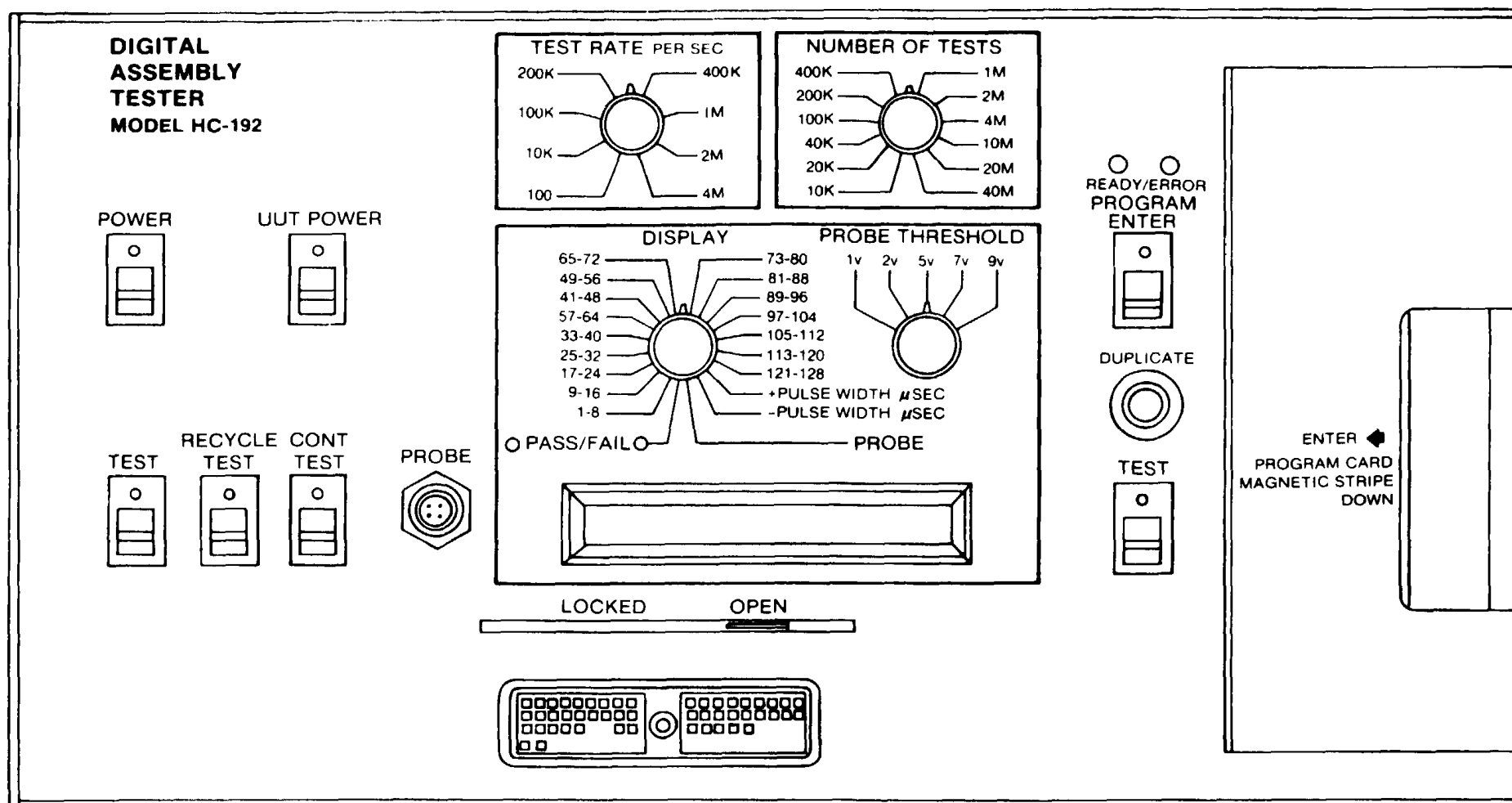
Table 1. Calibration Description

Parameters	Performance specifications
Dc voltage output levels	+5+0.1 V +15+0.1 V +28+0.2 V
Processor test clock output	4 MHz±1000 Hz.
Phase lock waveforms	Waveforms as shown in figure 6 with zero displacement + 100 msec.
System test clock output	4 MHz_1000 Hz.

3. Calibration Reporting

a. Forms, records, and reports required for calibration personnel at all levels are prescribed in TM 38-750. DA Form 2416 (Calibration Data Card) 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).



FRONT VIEW

Figure 1. Test Set Electronic Systems AN/UYM-7 (sheet 1 of 2).