

TB 11-6625-620-35-1

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

CALIBRATION PROCEDURE FOR TELETYPEWRITER TEST SET TS-799/UGM-1

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SECTION		Paragraph	Page
SECTION	I. IDENTIFICATION AND DESCRIPTION		
	Purpose and scope	1-1	1
	Reporting of technical bulletin improvements	1-2	1
	Descriptive data	1-4	2
	General instructions	1-4	2
	Difference among models	1-5	2
	II. EQUIPMENT REQUIREMENTS		
	Equipment required	2-1	2
	Accessories required	2-2	2
	III. PRELIMINARY OPERATIONS		
SECTION	IV. CALIBRATION PROCESS		
	Precautions	3-1	3
	Test Instrument controls	3-2	3
	Baud rate frequency test	4-1	3
	Distortion generation test	4-2	4
	Power supply test	4-3	4
	Final procedure	4-4	4

SECTION I IDENTIFICATION AND DESCRIPTION

1-1. Purpose and Scope. This bulletin provides information for the 'periodic calibration of Teletypewriter Test Set TS-799/UGM-1. It is to be used by personnel trained and qualified in the use of calibration equipment. Since calibration personnel are trained and qualified in the usage of test and measuring equipment, detailed instructions concerning the operation and use of these equipments are not contained in this bulletin.

1-2. Reporting of Technical Bulletin Improvements. The reporting of errors, omissions, and recommendations for improving this bulletin is authorized and encouraged. Submit reports on DA Form 2028 (Recommended Changes to Publications and Blank Forms) direct Commander, US Army Elec-

tronics Command, ATTN: AMSEL-MA-DS, Fort Monmouth, NJ 07703.

1-3. Descriptive Data. Teletypewriter Test Set TS-799/UGM-1 is a transistorized test set, consisting of three main functional circuits: the test message generation logic, the distortion generation logic, and the output circuits. Additional data is listed in *a*, *b*, and *c* as follows:

a. Identification.

Nomenclature Test Set, Teletypewriter TS-799/UGM-1
Federal stock number 6625-975-0196
Size 82 3/32 x 17 1/8 x 8 7/16 in.
Weight 21 lb
References TM 11-6625-620-12
TM 11-6625-620-45-1

b. Specifications.

Output signal pattern Test message ("quick brown fox" message); selected characters, reversal (dot cycle)

Output signal reversal (dot cycle) speeds 100, 75, 37.5, 37, 23 Hz,

Test message, alternate R and Y characters selected characters 7 unit code at 45 or 150 baud
7.6 unit code at 45, 50, 74 or 75 bauds

Signal distortion available Mark bias, space bias, space end mark end

Percent of signal distortion available 0 to 50%

Accuracy of signal distortion output $\pm 2\%$

Types of output current:

Neutral operation, internal supply 20 milliamperes (mA); 60 mA

Neutral operation, external loop used 60 mA, maximum

Polar operation, external batteries required 30 mA

Power requirements:

Voltage 115 or 230 volts ac $\pm 10\%$

Frequency 50 to 60 Hz

Power consumption 25.5 watts

c. Calibration.

Time required

Technique Dc-low frequency

Interval In accordance with TB 43-180

1-4. General Instructions. a. Calibration Reporting. During the performance of this procedure, annotate DA Form 2416 (Calibration Data Card) in accordance with TM 38-750.

b. Test Instrument. Teletypewriter Test Set TS-799/UGM-1 will be referred to as the Test Instrument.

1-5. Difference Among Models. None

SECTION II EQUIPMENT REQUIREMENTS

NOTE

Minimum use specifications are the principal parameters required for performance of the calibration, and are included to assist in the selection of alternate equipment, which may be used at the discretion of the calibrating activity. Satisfactory performance of alternate items shall be verified prior to use. All applicable equipment must bear evidence of current calibration.

2-1. Equipment Required. Equipment required for calibration performance tests is listed in table 2-1.

for calibration performance tests are listed in table 2-2.

2-2. Accessories Required. Accessories required

Table 2.1. Equipment Required

Item	Minimum use specifications	Calibration equipment ^a
Frequency Meter	Range: 0 to 2 MHz Accuracy: ± 1 count $\pm$ time base accuracy	AN/USM-207
Multimeter	Range: 15 to 250 Vdc Accuracy: $\pm 3\%$ fs	TS-352B/U (Phoastron B)
Oscilloscope	Range: 2 Hz to 50 MHz Accuracy: $\pm 3\%$	OS-8C/U or AN/USM-281A

^a The calibration equipment utilized in this procedure was selected from those known to be available at Department of Defense facilities, and the listing by make or model number carries no implication of preference, recommendation, or approval by the Department of Defense for use by other agencies. It is recognized that equivalent equipment produced by other manufacturers may be capable of equally satisfactory performance in the procedure.

Table 2-2. Accessories Required

Item	Description
1 Cable Assembly, Radio Frequency	36 in. RG-58/U BNC and double banana plug termination FSN 4931-739-4412
2 Adapter	Double banana jack to phone plug FSN 4931-739-4421
3 Adapter	BNC Tee UG-274B/U FSN 5935-683-7892
4 Cable Assembly, Radio Frequency	30 in. RG-58/U BNC plug termination FSN 4931-843-2792
5 Attenuator	Tektronix part No. 011-0069-01 50 ohms, 2X, 2 watt