

**PERFORMANCE REQUIREMENTS  
SIGNAL DELAY AND DIGIT STORAGE CIRCUIT  
AND 2-DIGIT DC TO DIAL PULSE  
CONVERTER ARRANGED FOR  
USE WITH "TOUCH-TONE®" RECEIVERS  
AND SS1 OR SS1A  
PRIVATE SERVICE SYSTEMS**

**1. GENERAL**

**1.01** This section covers the performance requirements which the signal delay and the dial pulse converter circuits must meet after installation and before acceptance by the telephone company.

**1.02** Refer to Section AA630.001 which supplements and forms part of this section and which contains general performance requirements, definitions, and additional information necessary for the proper application of the requirements.

**1.03** In addition to tests covered by this section, all circuits must conform to requirements specified in the SDs and CDs listed in 1.04.

**1.04** The information contained in this section is derived from the following:

- (a) CD- and SD-1G249-01 — Signal Delay and Digit Storage Circuit.
- (b) CD- and SD-1G251-01 — 2-Digit DC to Dial Pulse Converter — Arranged for use with TOUCH-TONE receivers and SS1 or SS1A.

**2. INDIVIDUAL CIRCUIT TEST REQUIREMENTS**

**2.01** All features of the circuit that can be tested by test equipment specified in CDs and SDs listed in 1.04 or by placing calls from an operating station, shall be tested twice. All wiring which cannot be verified by this method shall be checked by a single test. Troubles disclosed shall be cleared as found and circuit checked by a repeat test.

**3. SUPPLEMENTARY TESTS**

**3.01** These tests are applied once to check circuit features that cannot be tested under 2. or to check other circuit operations in order to disclose troubles that would result in a serious switching reaction. Troubles disclosed shall be cleared as found and the circuit checked by a repeat test.

**GENERAL SUPPLEMENTARY TESTS**

**3.02** These circuits provide a means to improve talk-off in the C1 TOUCH-TONE receiver and convert the decimal output of a TOUCH-TONE receiver to dial pulses for use with the SS1 or SS1A selective signaling system. The features of the circuit can be tested by test equipment specified in the SDs and CDs listed in 1.04 and the SS1 monitor and lamp display test unit (J99252BR).

**INDIVIDUAL CIRCUIT SUPPLEMENTARY TESTS**

**3.03** Signal Delay and Digit Storage Circuit:

- (a) Check the operation of the delay circuit to verify the  $40 \pm 2$  msec delay time.

**3.04** 2-Digit DC to Dial Pulse Converter Circuit:

- (a) Check that the voltage at the TOUCH-TONE receiver input is 0.35 to 0.70 volts rms when dial buttons 1 and 2 are operated simultaneously.
- (b) Check that only the digit 3 enables the converter circuit.
- (c) Check that the interdigital time is adjusted to  $750 \pm 250$  msec.

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(d) Check that the converter times out  $2.5 \pm 0.25$  seconds after the enabling digit or first code digit has been dialed.

(e) Check that the pps rate is  $10 \pm 1$  pps.

(f) Check that the percent break is 61.5 to 65.5 percent.

(g) Verify the converter outpulsing by using the SS1 monitor and lamp display test unit.