

DATA SET 201D-TYPE IDENTIFICATION

1. GENERAL

1.01 This section identifies data set (DS) 201D-type.

A brief description and references pertaining to the DS are provided. Primary information on DS 201D is contained in Section 312-811-100, Data Set 201D-Type—Description.

1.02 DS 201D is intended for internal Bell System use in an environment of a central office (CO), such as the Traffic Service Position System (TSPS) and the Common Channel Interoffice Signaling (CCIS) System. In these applications, the DS is operated under control of a stored program processor or an automatic terminal controller.

1.03 DS 201D uses a 4-level, phase-shift-keyed (PSK) modulation scheme to transmit and receive serial binary data synchronously at the rate of 2400 bps on a 3002-type 4-wire private line (PL) channel with C2 or no conditioning. Synchronization is achieved by a 2400-Hz clock provided by either the DS (transmit and receive clocks) or the terminal equipment (transmit clock only).

1.04 DS 201D has similar basic functions as the commercial DS 201C. Both DSs operate at a speed of 2400 bps using 4-level PSK modulation and both have digital and analog loopback tests. Some differences are the type of interface connectors used and the test capability. DS 201C can be tested directly with the 914B or 914C, while DS 201D cannot.

2. DESCRIPTION

2.01 This part briefly presents the physical and functional descriptions of DS 201D (Fig. 1 and 2).

PHYSICAL

2.02 DS 201D consists of seven AR-type circuit packs (CPs) including a 102A power unit, a 58B apparatus mounting, and a mounting bracket. The DS is a self contained unit and may be mounted by four screws into a CO frame. A male 50-pin terminal interface connector (KS-16671-L1) is located at the rear of the DS and provides all DS connections and signal paths. This includes the leads from the 24-volt CO battery and two 4-wire telephone lines. Plug KS-16671-L1 mates with the recommended connectors KS-16786-L1 and KS-16672-L17 for use in TSPS and CCIS applications, respectively. Other equivalent connectors may be used as determined by the KS specification of the plug.

FUNCTIONAL

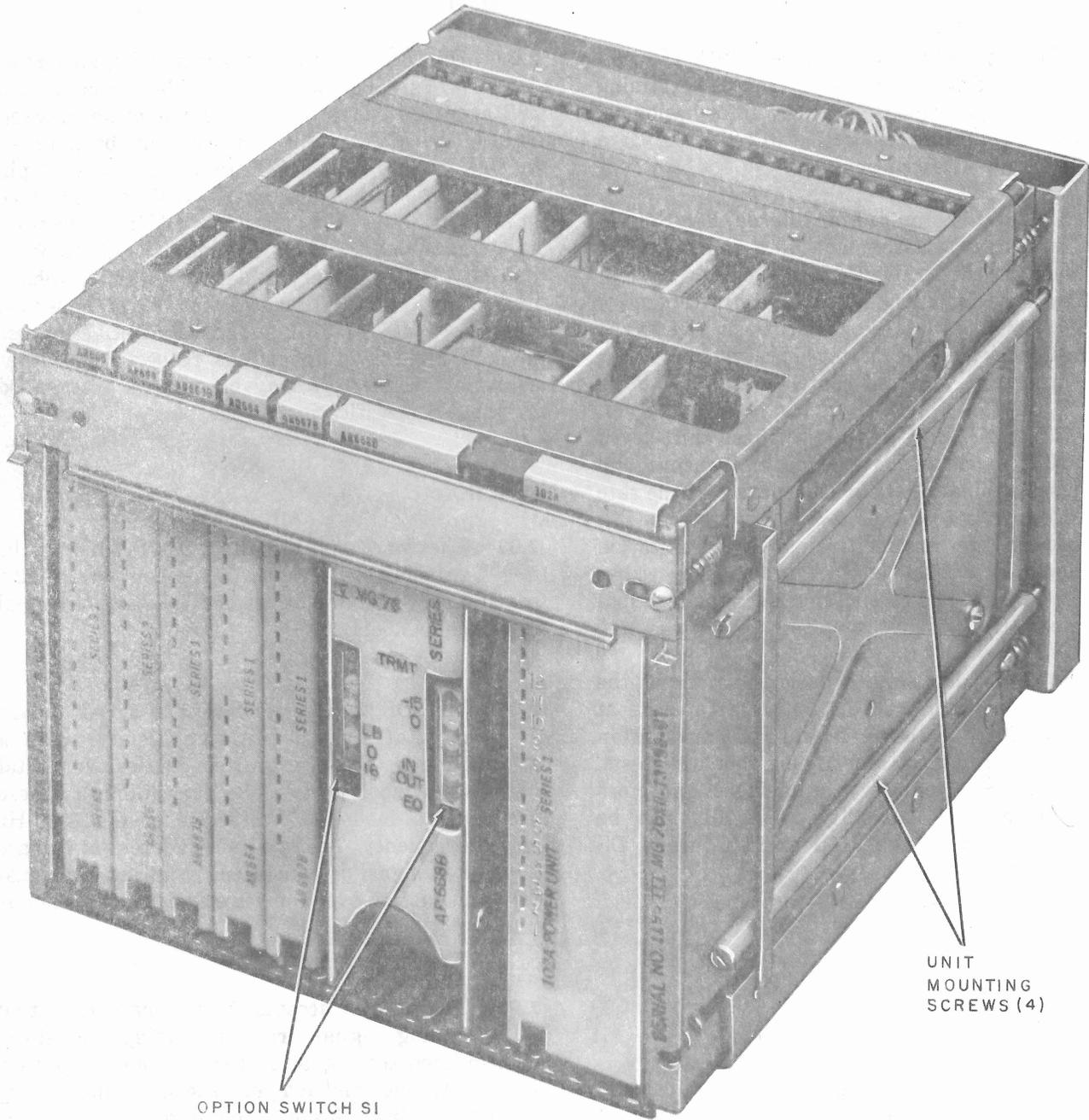
2.03 The functional circuitry of DS 201D is the transmitter, receiver, dc-dc converter (102A power unit), and the telephone line and terminal interface (AR668B CP).

2.04 The DS transmitter accepts serial binary data at 2400 bps in synchronism with a 2400-Hz clock. The transmitter encodes the digital data into symbols of two bits each (dibits). These are used to modulate the phase of the 1800-Hz carrier frequency. The resultant differential 4-phase modulated signal is converted to an analog signal for transmission over the voice frequency telephone line.

2.05 The receiver accepts the far-end transmitted analog signal from the telephone lines, demodulates the signal to recover the serial data and bit timing, and delivers the data and timing to the terminal through the interface connector (P7).

NOTICE

Not for use or disclosure outside the
Bell System except under written agreement



OPTION SWITCH S1

UNIT
MOUNTING
SCREWS (4)

Fig. 1—Data Set 201D-L1A (Front View)

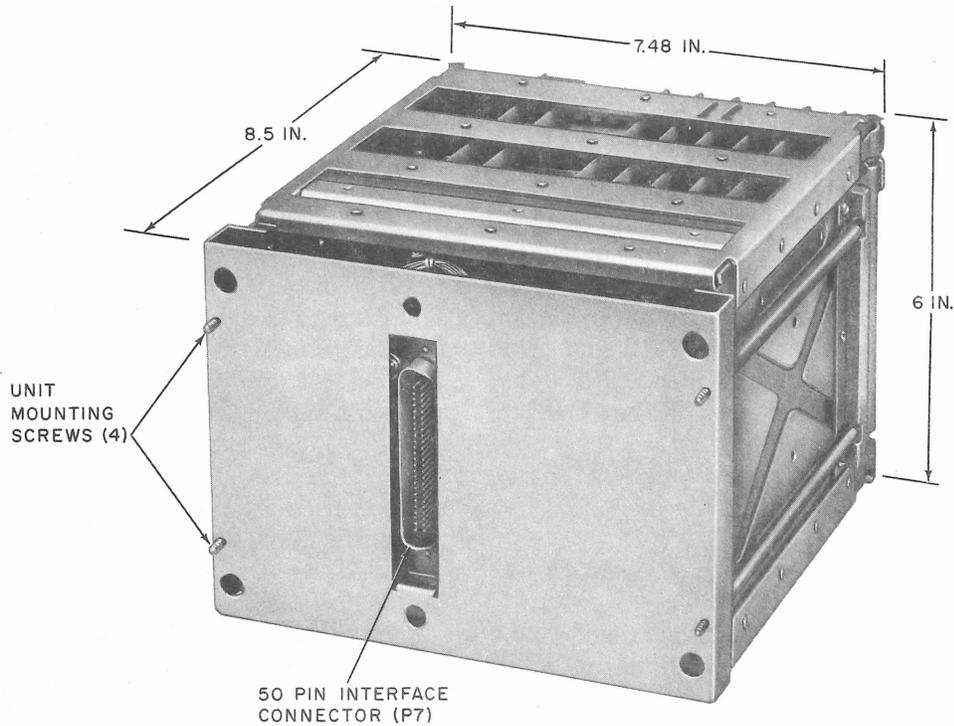


Fig. 2—Data Set 201D-L1A (Rear View)

3. REFERENCES

	312-811-100	Data Set 201D-Type—Description
3.01 Additional information may be obtained from the following:	592-033-180	Data Set 201D-Type—Summarizing Specification
CD- & SD-73090-01 Data Systems Central Office—Data Set 201D	592-029-ZZZ	Data Set 201C—Transmitter-Receiver