

## 27A1 AND 27B1 DATA UNITS IDENTIFICATION

### 1. GENERAL

**1.01** This section contains information needed to identify and distinguish between the 27A1 and 27B1 data units (DU).

**1.02** This section is reissued to include information on the 27B1 DU. Since this reissue constitutes a general revision, arrows ordinarily used to indicate changes have been omitted.

**1.03** The 27A1 and 27B1 data units (Fig. 1) perform the interface function between a 28A1 data mounting and the terminal equipment in a data set 108- or 109-type multiple arrangement.

**1.04** In addition to the interface function, the 27B1 DU also has a loop-back feature which may be used in the performance of remote tests.

### 2. DESCRIPTION

**2.01** The 27A1 and 27B1 DUs are installed at multiple data set installations to interface up to eight terminal arrangements per DU with the 28A1 data mounting. They also provide options in the form of strapping arrangements. One 27B1 or two 27A1 DUs may be installed per mounting, allowing a maximum of 16 line facilities if 27A1 DUs are used or a maximum of 8 if the 27B1 is used.

**2.02** The 27A1 DU consists of eight toggle switches designated NORMAL OFF, eight 25-pin (EIA) connectors, one terminal board, and one 50-conductor cord and connector. The unit is 4-3/4 inches high, 7 inches wide, 1-1/2 inches deep, and weighs approximately 2 pounds. The primary use is in Data Line Concentrator Systems, although it may also be used in private line service.

**2.03** The physical characteristics of the 27B1 DU are identical to the 27A1 except for the toggle switches and the connecting cord. The switches on the 27B1 are designated TEST NORMAL

and the connecting cord is terminated in two 50-pin connectors instead of one. The 27B1 is used in private line service, usually with data sets 108D- or 108E-type. It may also be used with data sets 109E-type, but half of the slots in the 28A1 data mounting are not used.

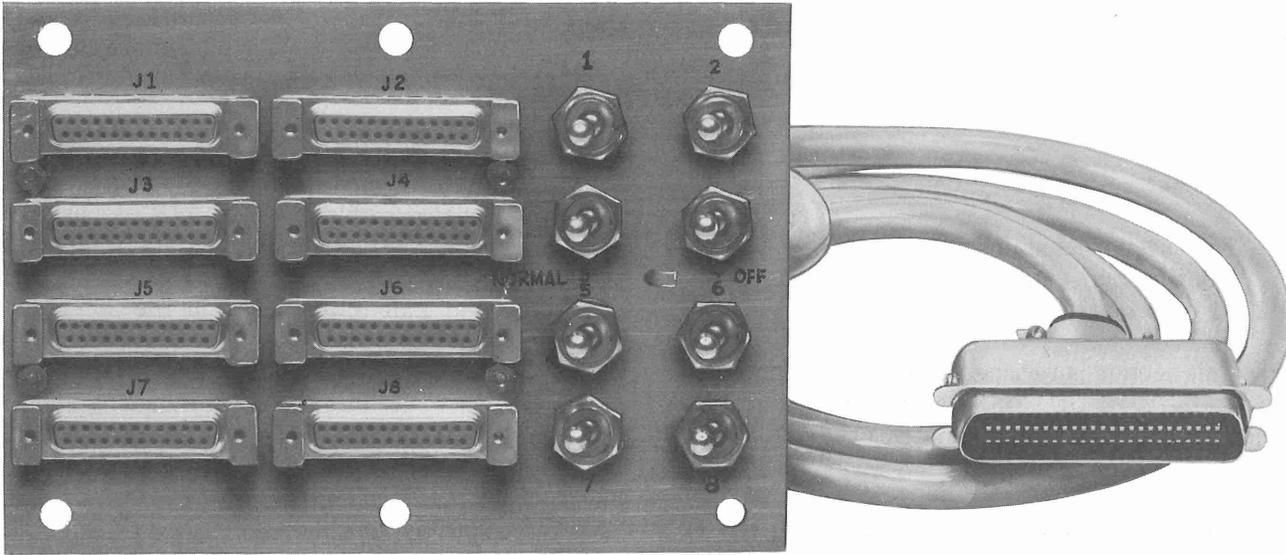
**2.04** The EIA outputs from the terminal equipment are connected to either DU through customer-provided cables which plug into J1 through J8 on the DU. The toggle switches on both data units are connected to allow normal data transmission when the switches are in the NORMAL position. If one of the switches on a 27A1 DU is operated to OFF, the data terminal ready (CD) lead is opened and the port appears out of service to the data line concentrator. When a switch on a 27B1 is operated to TEST, the associated transmit circuit is opened at the terminal interface and the receive circuit is looped back to the transmit circuit of the data set to permit remote testing. Both data units have various optional arrangements for the associated supervisory leads.

**2.05** Either data unit may be mounted on the rear of the 28A1 data mounting or installed in the customer interface compartment of cabinets such as the KS-20093-type.

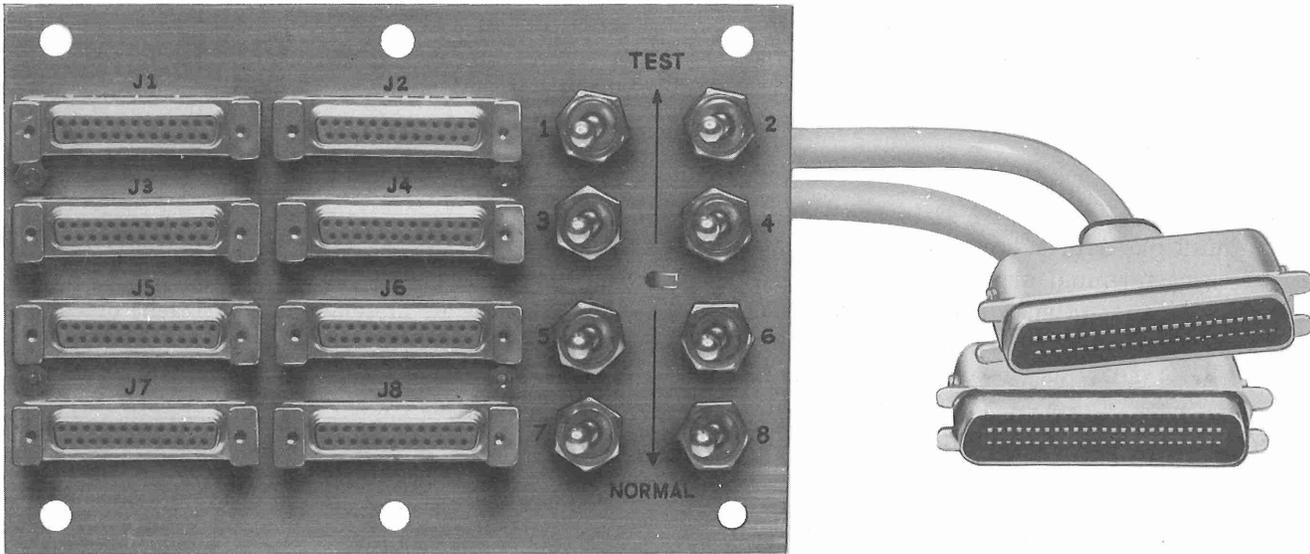
### 3. REFERENCES

**3.01** Additional information on the 27A1 and 27B1 data units is given in the following Bell System Practices:

SECTION	TITLE
591-036-101	Data Set 109E-Type Multiple Data Set Arrangement Using 28A1 Data Mounting and 27-Type Data Unit—Description
591-036-201	Data Set 109E-Type Multiple Data Set Arrangement Using 28A1 Data Mounting and 27-Type Data Unit—Installation and Connections



FRONT VIEW OF 27A1



FRONT VIEW OF 27B1

Fig. 1—27-Type Data Unit

591-028-202

Data Sets 108D- and E-Types,  
Multiple Private Line Station  
Arrangement Using 28A1 Data  
Mounting and 27B1 Data Unit,  
Installation and Connections

3.02 More detailed information is given in CD  
and SD-1D183-01—27-type Data Units.