

## DATA SET 407C IDENTIFICATION

### 1. GENERAL

1.01 This section provides a brief physical and functional description of data set (DS) 407C.

1.02 When this section is reissued, the reason for reissue will be presented in this paragraph.

1.03 DS 407C is a low-speed data transmitter-receiver which accepts parallel 2-out-of-8 signals produced by a TOUCH-TONE® or Transaction telephone at up to 10 characters per second. The transmitter responds with frequency shift keyed (FSK) signals. The primary purpose of DS 407C is in digital inquiry/FSK answer-back systems used for credit and check approval by merchants inputting into a credit bureau or banks' centralized computer.

1.04 DS 407C is a dual data set. Each data set serves two telephone (data) lines and two computer ports.

1.05 DS 407C performs all the functions of DS 407A and 407B, and also provides the following additional features:

- Serial interface
- Inquiry/response protocol
- Error control
- LOGON procedure
- Buffering of incoming TOUCH-TONE messages
- Automatic punctuation of outgoing ASCII messages.

### 2. PHYSICAL DESCRIPTION

2.01 DS 407C consists of two circuit packs (CP1 and CP2) mounted together (Fig. 1). Two KS-19087-type 25-pin connectors are located on the

front of the data set, which provide the interface with customer-provided terminal equipment. Printed wiring board terminals are located on the rear of the data set, which enables the data set to plug into a 57-type data mounting and connect to the data lines and power source.

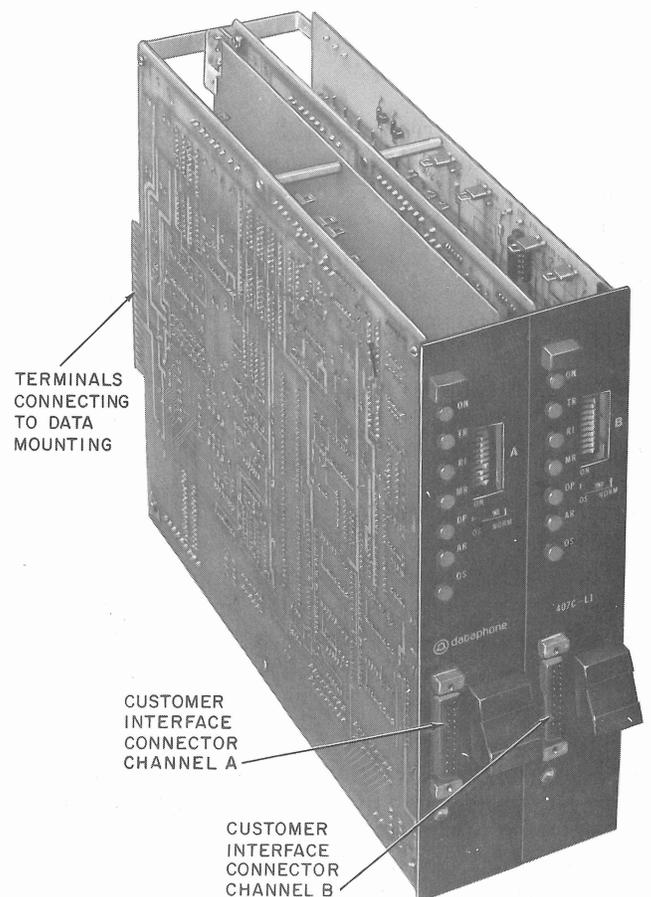


Fig. 1—Data Set 407C—Overall View

### NOTICE

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**2.02** DS 407C is housed in a 57-type data mounting, which in turn is housed in a KS-20018-L20 cabinet.

**2.03** Up to four data sets can be mounted in a 57-type data mounting. Two data mountings (up to eight data sets) may be housed in one KS-20018-L20 cabinet, which is provided with forced air ventilation and thermal protection. When more than eight data sets are required, multiple cabinets must be used. **Only the KS-20018-L20 cabinet is recommended for DS 407C, because of thermal limitations.**

**2.04** The data set measures 10 inches high, 13.2 inches deep, and 3.7 inches wide, and weighs about 5.5 pounds.

**2.05** DS 407C requires +12 volts, -12 volts, +5 volts, and -5 volts for operation. A 229A power unit supplies four independent sets of these voltages. Thus, one power unit provides power for all data sets in a 57-type data mounting. The 229A power unit is energized by customer-provided 117-Vac 60-Hz power.

**2.06** DS 407C will operate in an ambient temperature range of 40 to 120°F, with a relative humidity of less than 95 percent.

### 3. FUNCTIONAL DESCRIPTION

**3.01** Unlike the DS 403 family and DS 407A and B, DS 407C is a dual, or twin data set intended only for multiple installations. Each data set serves two incoming lines and two computer ports simultaneously.

**3.02** DS 407C may be optioned for either parallel or serial operation. In the parallel mode, it may be optioned for either contact closure equivalent or Electronic Industries Association (EIA) voltage interface. In the serial mode, DS 407C always presents a voltage interface in accordance with EIA Standard RS-232-C.

**3.03** There are 22 telephone company (telco) options and 36 customer options on the data set. The telco options are implemented by Cambion switches (shorting plugs), backplane wiring, and a strap on the 229A power unit. Customer options are implemented by means of two groups of ten

switches on the front panel of the data set. Only nine switches in each group of ten are presently used. All of the options are described in detail in Section 594-800-202.

**3.04** Seven status light emitting diodes (LEDs) are provided on the front panel of each data set section to monitor certain functions and the state of interface leads.

**3.05** A switch is provided on the front panel of each data set section to take the channels out of service.

### 4. REFERENCES

**4.01** The following documents contain additional information on DS 407C and related equipment.

NUMBER	TITLE
SD&CD 1D279-01	Data Systems Station—407C Data Station
SECTION	TITLE
590-100-133	47A1 Data Unit—Identification
590-100-137	51A1 Data Unit—Description
590-102-143	57-Type Data Mountings—Description
594-800-102	407C Multiple Data Station—Description
594-800-182	407C Multiple Data Station—Summarizing Specification
594-800-202	407C Multiple Data Station—Installation and Connections
594-800-302	407C Multiple Data Station—Maintenance
594-800-501	407-Type Multiple Data Station Using 2B Automatic Call Distributor—Test Procedures
594-800-502	407C Multiple Data Station—Test Procedures