

DATA AUXILIARY SET 820G-TYPE IDENTIFICATION

1. GENERAL

1.01 This section identifies the Data Auxiliary Set (DAS) 820G-type, which is the station controller of an 85A1 or 85A2 Data Selective Calling Service (DSCS) outlying station. The DAS 820G-type station controllers are 820G1, 820G-L1/2, 820G-L1/3, 820G-L1/4, and 820G-L1/5.

1.02 This section is reissued to provide information on the DAS 820G-L1/2, 820G-L1/3, 820G-L1/4 and the 820G-L1/5 station controllers. Coverage of the DAS 820G1 is retained to provide information on the equipment which is still available. Since this reissue covers a general revision and extensive changes have been made throughout the section, change arrows have been omitted.

1.03 The 820G-type station controller is designed to be mounted inside an 85A1 or 85A2 outlying station teletypewriter (TTY) stand or cabinet.

1.04 The physical dimensions of the DAS 820G-type are the same for all controllers. Figure 1 illustrates the physical dimensions for DAS 820G1. The DAS 820G-L1/4 is shown in Fig. 2 with arrows indicating the visible differences between the DAS 820G1 and the other 820G-type controllers.

2. DESCRIPTION

2.01 The DAS 820G-type station controllers are for half-duplex (HDX) service and are used in conjunction with different teletypewriters and station controller mounting brackets as given in Table A. For a given service, the DAS 820G1 controllers cannot be mixed with the DAS 820G-L1/4 or 820G-L1/5 controllers, which are not compatible because of the addition of the modified CAN response feature. In addition, a somewhat different station operating procedure exists because of the improved paper change feature. In services where the echoplex (EPX) feature (normally not offered) is desired, only DAS 820G1 with 108A data set can be used.

2.02 The DAS 820G-type station controller consists of a 59C Apparatus Mounting Assembly which includes a 24A Power Unit, a terminal strip for connecting the line, a maintenance switch, a carrier squelch switch (not available with the DAS 820G1), and two connectors. The 59C Assembly also provides ten connectors for plug-in AR-type printed circuit packs (see Table B). Nine of the circuit packs are associated with station logic circuits while the tenth circuit pack contains circuitry for interfacing with the appropriate teletypewriter terminals (see Table A).

In addition, Data Set 109A or 108A is required which is not part of the 820G-type controller and must therefore be ordered separately. The 820G-type controller weighs approximately 19 pounds and operation of the 820G-type station controller requires 115V ac power, 60 Hz, at 50 watts. A 748A card extracting tool is provided with the DAS 820G-type to remove circuit packs.

2.03 Circuit pack (CP) designations for all the DAS 820G-type controllers are given by the AR-type CP and slot number in Table B. The slot numbers are common to different AR-type CPs; however, the different CPs are *not* interchangeable. Circuit packs which are the same AR-type are identical; however, the CPs may not have the switches in the same positions because of available options.

2.04 The basic functions of the 820G-type controllers operating in an 85A1 or 85A2 DSCS outlying station are:

- (1) To recognize ASCII characters, especially when combined into control sequences, from the line and data terminal.
- (2) To generate responses to the line in the form of ASCII characters in accordance with the status of the station.
- (3) To interconnect with the line through a data set.

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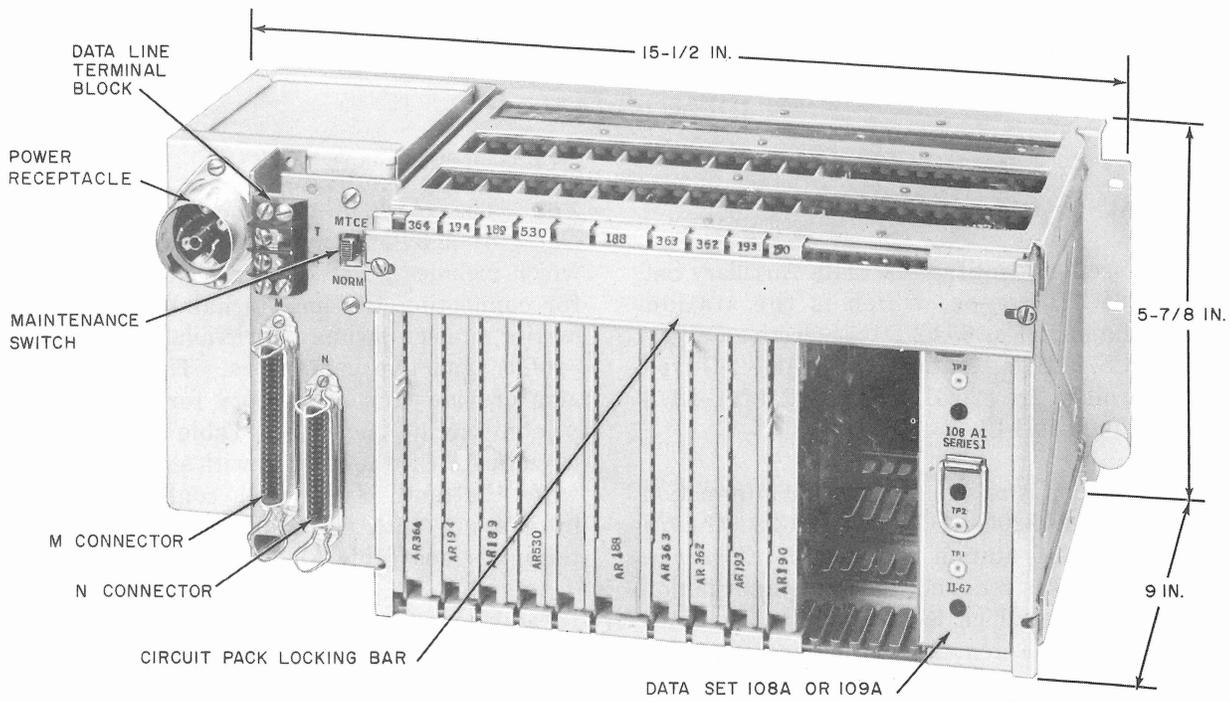


Fig. 1—Data Auxiliary Set 820G1

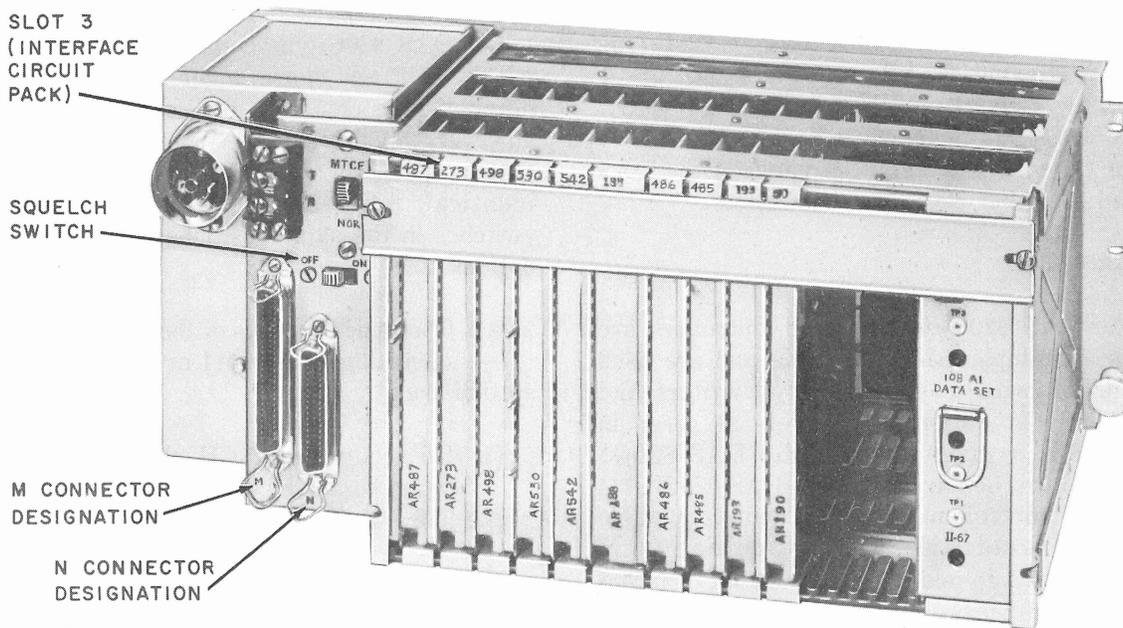


Fig. 2—Data Auxiliary Set 820G-L1/4

TABLE A
EQUIPMENT FOR USE WITH DAS 820G-TYPE CONTROLLERS

STATION ARRANGEMENT	STATION CONTROLLER‡	TTY* MACHINE	STATION CONTROLLER MOUNTING BRACKET
85A2 (150 wpm)	820G-L1/2	37	93A
		37 RO	93A
	820G-L1/3	37 ROTR	95A†
85A1 (100 wpm)	820G-L1/4 or 820G1 (see 2.01)	M35 ASR	92A
		M33 ASR	91A
		M35 RO	92A
		M33 RO	91A
	820G-L1/5 or 820G1 (see 2.01)	M35 ROTR	95A

* The TTY machine abbreviations: RO indicates Receive Only, ASR indicates Automatic Send Receive, and ROTR indicates Receive Only Typing Reperforator.

† The 95A Bracket is used to mount the controller in a KS-20018-L1, -L2, -L3, or -L4 Cabinet.

‡ See Table B for circuit packs.

TABLE B
CIRCUIT PACK DESIGNATIONS

SLOT NUMBER	820G1	820G-L1/2	820GL1/3	820G-L1/4	820G-L1/5
1	AR364	AR487	AR487	AR487	AR487
3*	AR194	AR274	AR269	AR273	AR268
5	AR189	AR498	AR498	AR498	AR498
7	AR191 or AR530	AR530	AR530	AR530	AR530
9	AR192	AR542	AR542	AR542	AR542
11	AR188	AR188	AR188	AR188	AR188
14	AR363	AR486	AR486	AR486	AR486
16	AR362	AR485	AR485	AR485	AR485
18	AR193	AR193	AR193	AR193	AR193
20	AR190	AR190	AR190	AR190	AR190
28	Data Set 108A or 109A				

* In DAS 820G-L1/2, 3, 4, and 5, the circuit packs in Slot No. 3 interface each DAS with the appropriate TTY. In DAS 820G1, only one circuit pack in Slot No. 3 is used for all applications (see Table A).

(4) To interconnect with a data terminal through an interface circuit (part of the controller), especially designed for the type of terminal in use. (Only M33, M35, and M37 interface circuits are presently available.)

(5) To perform logic functions associated with the automatic operation of the station.

3. REFERENCES

3.01 The following schematic drawing and circuit description include information pertaining to DAS 820G-type: SD- & CD-3D041-01

3.02 Additional information for the DAS 820G-type is covered in the following Bell System Practices:

SECTION	TITLE
581-131-100	85A1 Data Selective Calling Service-Outlying Station for 100-Word Per Minute Operation-Description and Operation
581-131-101	85A2 Data Selective Calling Service-Outlying Station for 150-Word Per Minute Operation-Description and Operation
598-064-180	Data Auxiliary Set 820G-Type Summarizing Specification

SECTION	TITLE
581-130-100	85A-Type Data Selective Calling Service-System Description