DATA AUXILIARY SET 820L-TYPE

IDENTIFICATION

1. GENERAL

1.01 This section identifies the data auxiliary set (DAS) 820L-type automatic send-receive (ASR) controller (Fig. 1), which is used in an 85A1 or 85A2 data selective calling service (DSCS) station. The DAS 820L-type station controllers are 820L-L1/2 used for 85A1 (100 words per minute) and 820L-L1/3 used for 85A2 (150 words per minute). The appropriate DAS attendant sets for use with teletypewriter (TTY) equipment are listed in Table A.

1.02 This section is reissued to add AR751 circuit pack (CP), which is used instead of data set (DS) 108- or 109-type to provide Electronic Industries Association (EIA) interface leads BA, BB, AA, and AB for interconnecting with a 1A data station single channel arrangement (SCA). The CP also provides a means for station testing at the customer's location using a 911P EIA test adapter and a 911NA data test set.

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

1.04 The 820L controller measures 15-1/2 inches long by 5-7/8 inches wide by 8-1/2 inches high. The 820L controller and associated circuit packs are shown in Fig. 1.
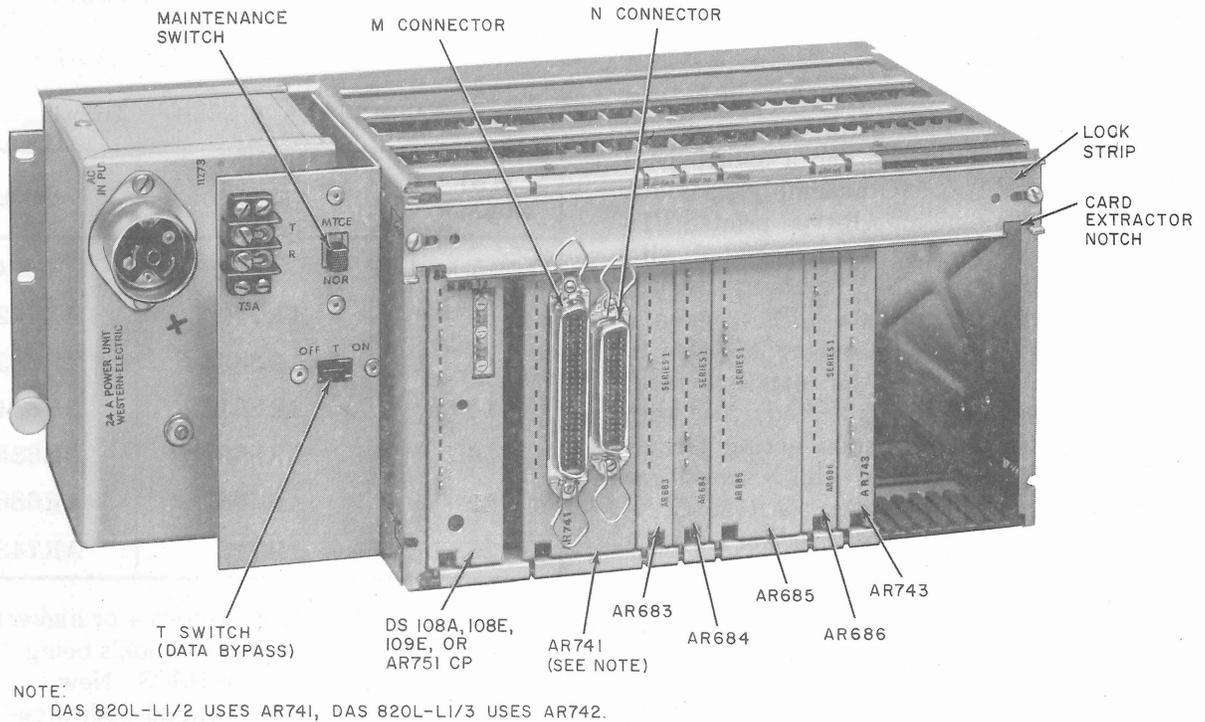

NOTE:
DAS 820L-L1/2 USES AR741, DAS 820L-L1/3 USES AR742.

Fig. 1—Data Auxiliary Set 820L-Type Controller

TABLE A

EQUIPMENT FOR USE WITH DAS 820L-TYPE CONTROLLERS

STATION ARRANGEMENT	STATION CONTROLLER*	TTY MACHINE	STATION ATTENDANT SET	CONTROLLER MOUNTING BRACKET	AUX RCVR TTY (OPTIONAL)
85A1 (100 wpm)	820L-L1/2	33 ASR	804N5	91A	33 RO†
		35 ASR	804N5	92A	35 RO/ROTR†
85A2 (150 wpm)	820L-L1/3	37 ASR	804R5	93A	37 RO/ROTR

* See Table B for CPs.

† RO indicates Receive Only; ROTR indicates Receive Only Typing Reperforator.

2. DESCRIPTION

2.01 The DAS 820L-type station controllers are for half-duplex (HDX) service and are used in conjunction with various TTYs and station controller mounting brackets as given in Table A.

2.02 The DAS 820L-type station controller consists of six or seven AR-type circuit packs, a 59C apparatus mounting assembly which includes a 24A power unit, a terminal strip for connecting the line, a maintenance switch, and a data bypass switch (T switch). The 59C assembly provides seven connectors for plug-in, AR-type printed CPs (Table B). Five of the CPs are associated with station logic circuits, the sixth CP contains circuitry for interfacing with appropriate TTY terminals, and the seventh CP is a data set or AR751 CP. The AR741 or AR742 CP is the interface card. AR683, AR684, and AR743 CPs are equipped with rocker-type switches used for selecting circuit options. AR685 CP is equipped with a screw-type switch which controls clock speed. AR686 CP is equipped with rocker-type switches used for encoding and decoding special ASCII characters used in 85A system dialogue, ie, station calling code (SCC) and station identification code (SIC). In addition, data set 108A (series 4 or higher), 108E (series 4 or higher), 109E, or AR751 CP and the appropriate DAS 804-type are required. The data set or AR751 CP is not part of the 820L-type controller and must, therefore, be ordered separately. The 820L-type controller weighs approximately 16 pounds and requires 117 Vac power, 40 watts at 60 Hz. A lock strip extractor is provided with the DAS 820L-type to remove CPs.

2.03 Circuit pack designations for all DAS 820L-type controllers are given by the AR-type and slot number in Table B. Circuit packs which bear the same AR-number are identical; however, they may not have the rocker switches or screw switches preset in the correct position for a particular option.

→TABLE B←

CIRCUIT PACK DESIGNATIONS

SLOT NUMBER	820L-L1/2	820L-L1/3
1	DS or CP*	DS or CP*
6	AR741	AR742
12	AR683	AR683
14	AR684	AR684
16	AR685†	AR685†
21	AR686	AR686
23	AR743	AR743

* Data sets 108A, 108E (series 4 or higher), and 109E are the current models being produced for use in the DSCS. New installations will be equipped with these sets. AR751 CP is used to provide an EIA interface for a 1A data station single channel arrangement (SCA) or local station testing.

† AR685 CP contains two screw switches which are closed for DAS 820L-L1/2 (85A1) and open for DAS 820L-L1/3 (85A2).

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

(a) To recognize ASCII characters, especially when combined into control sequences, from the line and data terminal.

(b) To generate responses to the line in the form of ASCII characters in accordance with station status.

(c) To interconnect with the line through a data set or circuit pack.

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

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

3. REFERENCES

3.01 The following schematic drawings (SDs) and circuit descriptions (CDs) include information pertaining to DAS 820L-type:

NUMBER	TITLE
SD- &CD-1D198-01	Data Set 109E-L1

NUMBER	TITLE
SD- &CD-1D229-01	Central Office and Station Data Set 108E-Type
SD- &CD-1D244-01	DAS 820J-Type Receive Only Controller and 820L-Type ASR Controller
SD- &CD-1D258-01	EIA Interface Coupler (AR751 CP)
SD- &CD-3D041-01	Controller and Data Auxiliary Sets 804N3, 804N5, 804R5, and 804R7 Attendant Sets.

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

SECTION	TITLE
581-131-102	85A1 and 85A2 Data Selective Calling Service Stations Using Data Auxiliary Sets 820J and 820L Controllers.