BELL SYSTEM PRACTICES
DATA SHEET SPECIFICATION

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1. GENERAL

1.01 This section provides requirements and guidelines for preparing data sheets that will be issued as Bell System Practices (BSP).

1.02 Whenever this section is reissued, the reason(s) for reissue will be provided in this paragraph.

1.03 Recommendations for changes to this section should be submitted as specified in Section 000-010-015, Commenting Procedure.

2. DATA SHEET CONCEPT

A. Use

2.01 When needed, data sheets are prepared for transmission plug-in units containing switches and/or controls. They provide:

- Unit descriptions that can be used as a guide when selecting a plug-in unit
- Concise instructions concerning location, function, and settings of switches and controls that affect transmission characteristics.

Refer to Fig. 1 in this section for a typical example of a data sheet.

2.02 Because of a 2-page space limitation, a data sheet cannot contain all variations of control settings to obtain optimum performance from a plug-in unit; therefore, the data sheet must be used in conjunction with existing office and loop plant records, as well as companion BSPs.
B. Application

2.03 Historically, data sheets have been prepared for plug-in units for transmission products. The concept could be applied to other product lines.

C. Responsibility of Development

2.04 The responsibility for preparing a data sheet will be shared by the assigned writing organization and the design engineer.

2.05 The writing organization shall be responsible for writing and formatting and for meeting a delivery schedule that will permit the printed copy to be available when a new plug-in unit is introduced.

2.06 The design engineer shall be responsible for supplying technical data to the writing organization and for reviewing the technical accuracy of the data sheet prior to its release.

3. NUMBERING

3.01 Each data sheet shall be assigned a unique 9-digit number. The assigned 9-digit numbers will be in the appropriate BSP division and the middle three digits will always be 005. This arrangement will allow up to 900 data sheets for a given division.

4. TITLING

4.01 The title of a data sheet shall be confined to three lines (see Fig. 1) as follows:

(a) First Line: The first line shall contain, in the order listed, the following:

- The J-code or other plug-in unit identifier
- The name and designator for the plug-in unit (abbreviations may be used as long as the meaning is clear)
- The Common Language Equipment Identification (CLEI) code, if one is assigned.

(b) Second Line: The second line shall always be DATA SHEET.

(c) Third Line: The third line shall contain the equipment, office, facility, service, system, etc, in which the unit is used.

5. FORMAT

5.01 A data sheet shall be limited to two pages, that is, the front and back of one sheet. Because of this 1-sheet limitation, certain format requirements for data sheets are different than those for other BSPs.

5.02 Unless otherwise noted in the following paragraphs, the format requirements for data sheets are the same as those for all BSPs. Refer to Section 000-200-011, Typesetting Specification.

A. Text Arrangement

5.03 The information in a data sheet, excluding illustrations and tables, is presented as unnumbered paragraphs of text formatted in two 20-pica columns. The first line and all succeeding lines of a paragraph shall be justified at the left margin of the column. Text is typeset in 10-point Century Light Expanded, leaded 2 points (10 on 12). See Fig. 1.

B. Text Headings

5.04 The only text heading allowed in the data sheet is the paragraph heading. A paragraph heading starts at the left margin of the column and consists of the word(s) followed by a colon. The first word and all subsequent words including hyphenated words shall begin with initial capitals except conjunctions, articles, and prepositions with less than four letters. Text begins 1 pica after the colon. Paragraph headings are typeset in 10-point Century Bold Italic.

6. CONTENT

6.01 Each data sheet shall provide information for only one plug-in unit. Each data sheet shall contain the following material.

- A brief description of the pertinent features of the unit shall be included.
- References to items that are supplied to the customer, such as companion BSPs and applicable drawings, shall be included.
- A block diagram showing the signal flow paths from the unit input terminals to the output terminals shall be included. Options for setting switches and controls shall be included in the block diagram.
A pictorial component layout diagram showing the location of controls and switches shall be included.

Description of the settings for the controls and switches for each application for which the plug-in unit is designed shall be included.

A. Table of Contents

6.02 Because of space limitations, a table of contents shall not be used in a data sheet.

B. Unit Identification

6.03 The introductory paragraphs of a data sheet shall address the following items.

- The plug-in unit and the pertinent features not implied in the name of the unit shall be included.
- Compatible equipment configurations in which the unit may be used shall be included.
- References to items that are supplied to the customer and are to be used with the data sheet, such as companion BSPs and applicable drawings, shall be included.
- References to Figures 1 and 2 of the data sheet shall be included.

Comparison between units should be avoided.

C. Control and Switch Settings

6.04 A separate paragraph shall be allotted to describe the settings for each control or switch. Each paragraph shall have a paragraph heading and this heading shall consist of the exact labeling of the control or switch being described. Exception: When two or more switches or controls are interactive, it is permissible to group them in a single paragraph with a composite heading.

D. Admonishments and Notes

6.05 Admonishments and notes shall not be used in a data sheet.

E. Illustrations and Tables

6.06 Illustrations shall be used to support the text of a data sheet; tables may be used but are discouraged. Refer to Parts 7 and 8 for illustrations and tables, respectively.

7. Illustrations

7.01 Two illustrations shall be used in a data sheet. The following requirements apply.

- Each illustration shall not exceed 42 picas in width.
- Each illustration shall be of minimum height to conserve space for text.
- Each character on the illustration shall not be below 8-point type size.

Exception: Characters, such as stampings, may be below 8-point type size if that area of the illustration, including the characters, is to appear either in an exploded view or a flysketch.

A. Fig. 1 of Data Sheet

7.02 The first illustration shall be a block diagram of the plug-in unit showing all switches and controls. (See Sheet 1 of Fig. 1.) A given switch or control will have different settings for different options. The signal flow path from the unit input terminal to the output terminal for the setting for each of these options must be shown in the block diagram.

7.03 This illustration shall be identified with the abbreviation Fig., the number 1, a dash, and a 1-line title. The illustration shall be placed at the bottom of Page 1 and be centered horizontally within the 42-pica width.

B. Fig. 2 of Data Sheet

7.04 The second illustration shall be a line pictorial showing the location and equipment stampings of all controls and switches. The preferred technique is (a) to use small unit face plate and chassis drawings to show the location and (b) to use flysketches to show the detail. (See Sheet 2 of Fig. 1.)

7.05 This illustration shall be identified with the abbreviation Fig., the number 2, a dash, and a 1-line title. The illustration shall be placed at the top of Page 2 and centered horizontally within the 42-pica width.
The J99343PL, L2, 2-Wire Dual Terminal (L) Repeater consists of two identical 2-wire terminal repeaters incorporated into a single MFT plug-in unit. This unit is recommended for message service applications or message trunk services (MTS) only (not special services). For a detailed description of this unit, see Section 332-912-141, CD-1C359-01, and SD-1C359-01. The set-up procedure is covered in Section 332-912-241. A block diagram is shown in Fig. 1. Switch designations are shown in Fig. 2.

**GAIN ADJ:** The gain for each of the two repeaters in the J99343PL, L2 unit is controlled by five miniature switches. Two sets (ten switches) of the GAIN ADJ switches are located on the front panel. Each set is labeled .25, .50, 1.0, 2.0, and 4.0. These switches are ganged to provide the same gain for both directions of voice frequency transmission in each repeater.

**LBOC:** Each repeater in the J99343PL, L2 unit contains an LBOC facing the B-side cable facility. The controls for each LBOC consist of a group of six rocker switches labeled 002, 004, 008, 016, 032, and 064. These switches control the selection of capacitor values from 0 to 0.126 μF in 0.002 μF increments. The LBOC settings are listed in Section 332-912-241.

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**NOTICE**

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

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GAUGE: The GAUGE switches consist of eight rocker switches. Four switches are labeled 19, 22, 24, and 26 and four are labeled 25. The numbers correspond to the cable gauge of the facility with which the repeater interfaces. To set the unit to 25-gauge cable, all four switches labeled 25 must be operated toward 25. For a mixed gauge facility, the predominant gauge determines the gauge setting. Only one gauge setting may be used at a time.

CKT 1, 2 (ON-OFF): Two connector plug-type switches designated CKT 1, 2 are incorporated into the J99343PL L2 repeater unit to control the −48 Vdc power supply. The switches are mounted on the faceplate as shown in Fig 2. The CKT 1 switch controls the −48 Vdc power supply to the terminal repeater mounted on the top half of the internal printed wiring board (PWB). The CKT 2 switch controls the −48 Vdc power supply to the terminal repeater mounted on the bottom half of the PWB. When either one or both of the power control switches are operated to the ON position, power is supplied continuously to the corresponding repeater. In the OFF position, power to the corresponding repeater is disconnected.
8. TABLES

8.01 The use of tables in a data sheet is discouraged. An effort should be made to incorporate this information into Fig. 1 or Fig. 2 or within the text. Refer to Section 000-205-010, Effective Use of Tables.

8.02 A table shall be assigned an alpha designator but not a title. A table that is 20 picas or less in width shall be placed immediately after the first reference or as near to it as possible. A table that exceeds 20 picas in width shall be placed at the bottom of Page 2 and be centered horizontally within the 42-pica width.

9. REISSUES

9.01 Data sheets can be reissued any number of times. If a data sheet is reissued, the second paragraph shall be used exclusively for the reasons for reissue. Change arrows shall not be used.