

COMMON SYSTEMS SIGNALING
B1 FREQUENCY SHIFT PULSING
RECEIVING EQUIPMENT
EQUIPMENT DESIGN REQUIREMENTS
COMMON SYSTEMS

1. GENERAL

Scope

1.01 This specification, together with supplementary information listed herein, covers equipment design requirements for the equipment and circuits to be used in manufacture and installation of the FSP receiver in the incoming register unit of WADS. This specification will apply to the AT&TCo Special Boston-Atlanta installation as well as the AT&TCo Standard product.

Description

1.02 The equipment packaging of the FSP receiver is done on removable printed wiring assemblies that are referred to as circuit packages (CPs). The board has printed wiring on one side only, is 1/16 inch thick, approximately 5 inches wide, and 8-1/2 inches long. One end of the board forms a 20-terminal plug that mates with a 906B connector. The board is riveted to an extruded aluminum frame which provides protection for both the board and components. The frames are provided in widths of 0.550, 0.850, 1.150, and 1.450 inches. A faceplate, the same width as the frame, is attached to the front of the frame. The faceplate overlaps the frame by 1/2 inch at top and bottom and mounts quarter-turn fasteners to secure the assembly in the equipment tray. Test points are provided in the faceplate to facilitate testing under actual circuit conditions. A knob is provided for removing the circuit package assembly. (See Fig. 1.)

1.03 The equipment tray is fabricated of sheet aluminum and consists of a top piece, a bottom piece, and two end plates. The front flanges have slotted holes to engage the quarter-turn fasteners on the circuit package assemblies. The rear flanges mount the 906B connectors. The

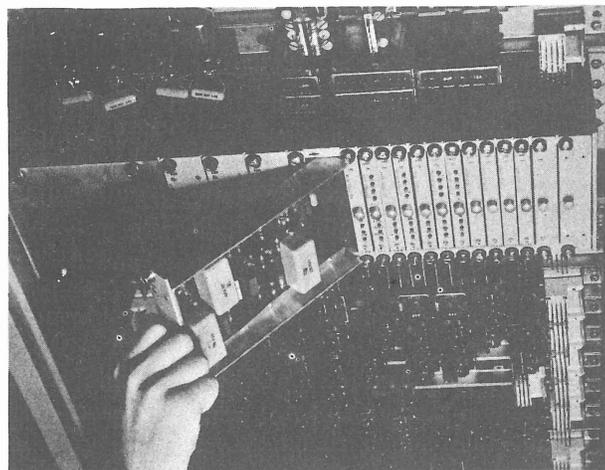


Fig. 1 — Equipment Packaging

inside tray dimensions are 5 inches high by 21 inches wide and 8 inches deep. The overall dimensions are 6 by 23 by 9 inches. The tray is designed to mount in a standard 23-inch No. 5 crossbar frame. The weight of the FSP receiver with power supply is 23 pounds.

1.04 The finish on the frame, tray, and faceplates for the standard product is light grey enamel (525A). The Boston-Atlanta Special product is an aluminum finish.

1.05 Each register is associated with an FSP receiver and a fully equipped 11-foot 6-inch incoming register frame mounts three registers. (See Fig. 2.)

1.06 The FSP receiver consists of 16 printed circuit plug-in package assemblies and one plug-in power supply (J87204A).

1.07 The function of the FSP receiver is to receive synchronously coded characters, in the form of frequency shift keyed signals, from a sender and to convert these signals into direct current pulses to operate appropriate combina-

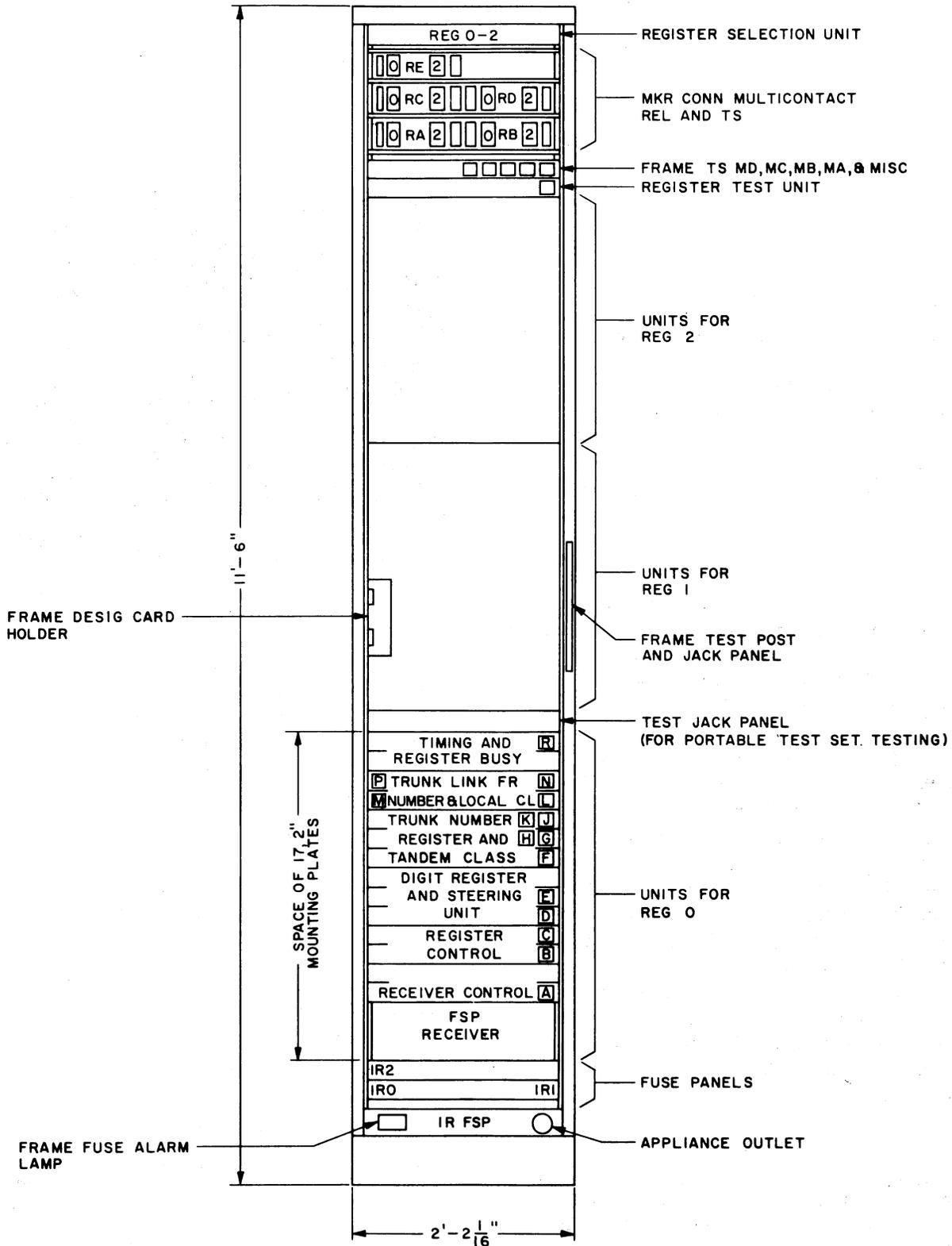


Fig 2 — Incoming Register Frame

tions of relays in an associated register circuit. The power requirement is -48 volts at 0.5 ampere. Most of this power is converted to +12 volts at 0.6 ampere by the plug-in power supply. When this supply is removed, all power is

removed from the FSP receiver. A complete description of the FSP receiving equipment appears in CD-99719-01 (AT&TCo Special) or CD-99301-01 (AT&TCo Standard) and CD-81608-01.

SUBDIVISIONS OF EQUIPMENT AND DETAILED INDEX

WECo J drawings should be ordered by referring to the prefix and base number and requesting the current dash (—) number.

EQUIPMENT CODE	RATING OF UNIT	TITLE	EQUIPMENT DRAWING	CIRCUIT DRAWING	CKT PER UNIT	MTG PLATES PER UNIT
J95114A	AT&TCo Special	Common Systems Signaling B1 Frequency Shift Pulsing Receiving Equipment for Boston-Atlanta	J95114A-()	SD-99719-01	1	3
J95114B	AT&TCo Standard	Common Systems Signaling B1 Frequency Shift Pulsing Receiving Equipment	J95114B-()	SD-99301-01	1	3

Circuit Schematic Index

CIRCUIT DRAWING	RATING	J95114 EQUIP GROUP
SD-99719-01	AT&TCo Special	A
SD-99301-01	AT&TCo Standard	B

2. SUPPLEMENTARY INFORMATION

- 800-600-000 — List of General Equipment Requirement Sections
- 801-000-000 — Equipment Design and General Requirements and Engineering Information — Common Systems
- ES-27631-01 — Register and Sender Test Circuit
- J27963 — 819-410-150 — Incoming Register Frames
- J27964 — 819-420-150 — Outgoing Sender Frames
- J70152 — 807-180-150 — B1 Data Carrier Terminal
- J79908 — 807-461-165 — 908A Pulse Indicator
- J87204 — 802-218-150 — Power Supply
- J95113 — 801-641-150 — FSP Transmitting Equipment
- SD-73026-02 — Current Drain Data (AT&TCo Special)
- SD-73027-02 — Current Drain Data (AT&TCo Standard)

- X-77045 — Manufacturing Testing Requirements Specification FSP Transmitter
- X-77046 — Manufacturing Testing Requirements Specification FSP Receiver

3. DRAWINGS

For additional drawings forming a part of this specification, see listings under Subdivisions of Equipment and Detailed Index.

Keysheets

- SD-25760-01 — Crossbar No. 5
- SD-73026-01 — B1 Data Trunking System (AT&TCo Special)
- SD-73027-01 — B1 Data Trunking System (AT&TCo Standard)

Circuits

- SD-73025-01 — Extender Board
- SD-81608-01 — Power Supply

Equipment

- ED-73172 — Extender Board
- ED-73174 — FSP Test Point Fixture (AT&TCo Standard)

CROSS REFERENCE TABLE

AT&TCo SPECIAL	AT&TCo STANDARD	FSP RECEIVING CIRCUIT PACKAGE ASSEMBLY	MNEMONIC DESIGNATION	KEY * POSITIONS
J95114A	J95114B	—	—	—
ED-73046-30	ED-73096-30	1	R CP1	3 & 6
ED-73047-30	ED-73097-30	2	R CP2	3 & 7
ED-73048-30	ED-73098-30	3	R CP3	3 & 8
ED-73049-30	ED-73099-30	4	R CP4	3 & 9
ED-73050-30	ED-73100-30	5	R CP5	3 & 10
ED-73051-30	ED-73101-30	6	R CP6	3 & 11
ED-73052-30	ED-73102-30	7	R CP7	3 & 12
ED-73053-30	ED-73103-30	8	R CP8	3 & 13
ED-73054-30	ED-73104-30	9	R CP9	3 & 14
ED-73055-30	ED-73105-30	10	R CP10	3 & 15
ED-73056-30	ED-73106-30	11, 12	R CP11, 12	3 & 16
ED-73057-30	ED-73107-30	13, 15	R CP13, 15	3 & 17
ED-73058-30	ED-73108-30	14, 16	R CP14, 16	9 & 13

* Keys are provided in the Standard rated product only. Key position 1 is between contacts 1 and 2.

4. EQUIPMENT

J95114A — AT&TCo Special — Common Systems Signaling B1 Frequency Shift Pulsing Receiving Equipment for Boston-Atlanta

List 1 — Equipment tray, power supply, wiring, and associated circuit package assemblies for one FSP receiver.

J95114B — AT&TCo Std — Common Systems Signaling B1 Frequency Shift Pulsing Receiving Equipment

List 1 — Equipment tray, power supply, wiring, and associated circuit package assemblies for one FSP receiver.

Bell Telephone Laboratories, Incorporated

Dept 5315