5ESS® SWITCHING EQUIPMENT
INTERNATIONAL MODEM POOLING
CABINET APPLICATION SCHEMATIC

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SECTION I - GENERAL DESCRIPTION

1. PURPOSE OF CIRCUIT

1.01 The International Modem Pooling Cabinet (MPC) houses terminal adapter - modem pairs providing access to X.25 analog modems from Digital Subscriber Lines (DSLs).

2. GENERAL DESCRIPTION OF OPERATION

2.01 Refer to Block Diagram 1 found on sheet H1 in SD-5X220-01.

From the user's terminal, the DSL customer originates the call on a 5ESS digital interface at the basic access rate using the 2B+D channel format and dials the address of the modem pool (each pool of modems are located within a multiline hunt group). The switch sets up the data call between the DSL and the modem pool digital interface through the Protocol Handler (PH). This four-wire digital "T" interface connects via X.25 protocol to the International Universal Data Module (IUDM) Terminal Adapters (TA) in the MPC using only the D channel from the DSL. The TA converts the X.25 protocol to a V.24 interface for the hard-wired connection to a modem. The analog side of the modem connects to an analog line interface having origination capability only. Once connected to the modem, the DSL customer instructs the modem to dial the number of the called party.

2.02 This is two stage dialing: the digital subscriber first dials the number of the modem pool, then after accessing the modem pool, dials the called number.

2.03 These calls are outgoing only. An analog subscriber cannot dial through the modem pool to a DSL customer.

SECTION II - DETAILED DESCRIPTION

1. GENERAL

1.01 The International Modem Pooling Cabinet (MPC), J5X100A-1, provides housing for up to sixteen independent terminal adapter - modem pairs.

1.02 The MPC is a stand-alone standard six-foot 5ESS cabinet with side panels and doors and equipped with a 110 volt outlet strip. If required, an optional blower can be equipped.

1.03 The 77A Data Mounting can house from one (1) to a maximum of eight (8) 7500A(13) L2 International Universal Data Modules (IUDM). The Data Mounting is equipped with IUDMs per office requirements. A maximum of two (2) 77A Data Mountings can be housed in the J5X100A cabinet.

1.04 The 7500A IUDM terminal adapters perform conversion and rate adaptation between the four-wire DSL "T" interface and the V.24 (RS-232) interface.

1.05 The 106A3 Data Mounting will house from one (1) to a maximum of eight (8) 2224G modems. The Data Mounting is equipped with modems per office requirements. A maximum of two 106A3 Data Mountings can be housed in the J5X100A cabinet.

1.06 The 2224G modems convert the digital V.24 data signals from the IUDM to analog data signals compatible with ordinary telephone lines. The modems have auto-dial capability and are segregated by speed into different multiline hunt groups.

2. POWER

2.01 An AC power strip and AC power cord is provided with each cabinet. AC power is provided to the cabinet from the switch 110 volt, 60 Hz, essential power source.

2.02 The 77A Data Mounting and the 106A3 Data Mounting plug into the power strip.

3. CONNECTIONS

IUDM To DF

3.01 The cable linking the 77A Data Mounting to the DF, is ED-5D666-11, G1. One is required per 77A Data Mounting.

106A3 Data Mounting To DF

3.02 The cable linking the 106A3 Data Mounting to the DF, is ED-5D666-11, G6. One is required per 106A3.

IUDM To Modem

3.03 The cable from the IUDM to the 106A3 Data Mounting is, M25B-87 (102269669). One is required per IUDM.

Alarm Connection

3.04 Alarm indicators are self contained in the 7500A IUDM terminal adapters and the 2224G modems.

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