

J99343SG, L2 SINGLE FREQUENCY SIGNALING / 4-4 WIRE REPEATER COMBINED FUNCTION UNIT—DATA SHEET—MTC4212AAB METALLIC FACILITY TERMINAL

The J99343SG, L2 CFU (combined function unit) incorporates a 4-4 wire repeater (similar to the J99343SB, L3) and an FWA J99335WA 2600-Hz SF signaling unit. This CFU will function either in a single-module frame or in the transmission slot of a double-module frame of the MFT (metallic facility terminal) or the CPFT (customer premise facility terminal).

The J99343SG, L2 CFU provides conversion between E&M and 2600-Hz SF signaling. It also provides gain and equalization between loaded or nonloaded facilities. For a detailed description of this unit, see Section 332-912-151, CD-7C050-01, and SD-7C050-01 (CPS 31). The setup procedure is covered in Section

332-912-251. A block diagram of the J99343SG, L2 is shown in Fig. 1. Figure 2 provides switch identification.

XMT(A and B) and RCV(A and B): A set of four DIP (dual in-line package) switches control the flat gain of the unit. These switches, labeled XMT(A and B) and RCV(A and B), control gain in the transmit and receive paths, respectively. Operating a switch in the direction of the XMT/RCV designation provides +10 dB of gain.

SLOPE, HT, and BW: Three groups of DIP switches adjust the equalization for each direction of transmission. These switches are labeled SLOPE(NL, 1, 2, 4, 8), HT(1, 2, 4, 8), and BW(1, 2, 4, 8).

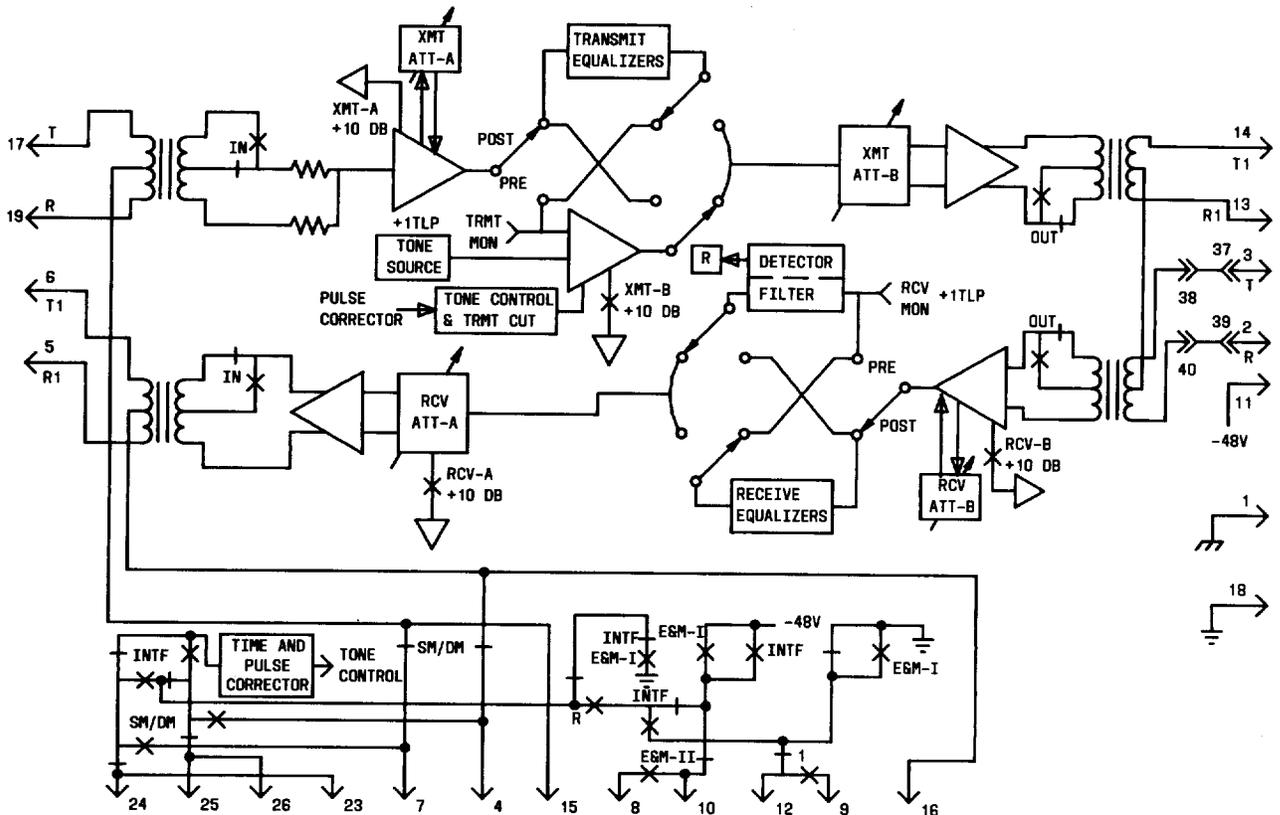


Fig. 1—Block Diagram of the J99343SG, L2 CFU

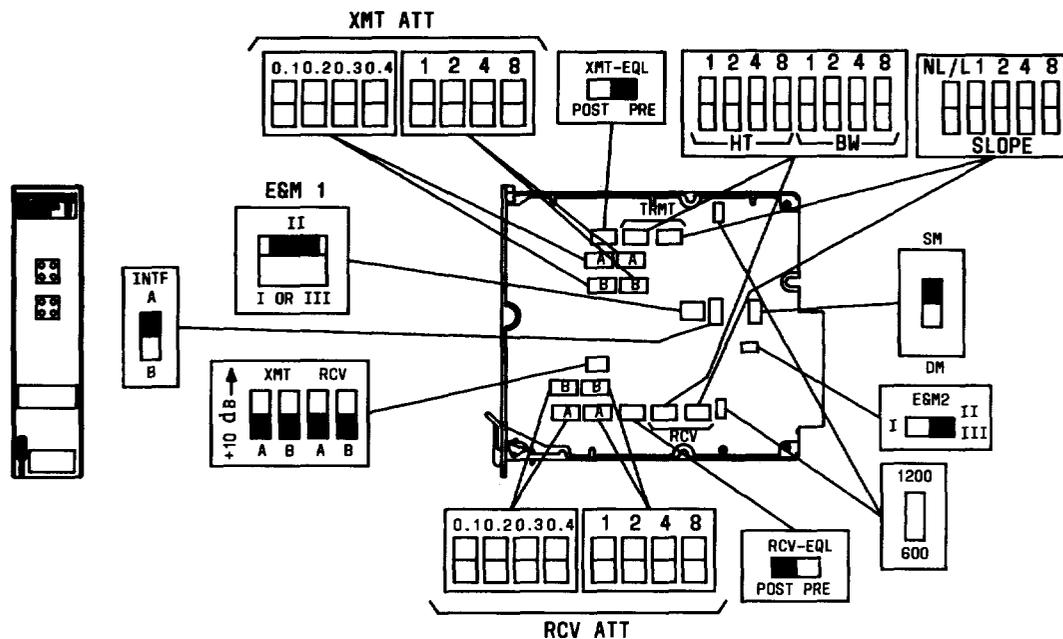


Fig. 2—J99343SG, L2 Component Layout

XMT-EQL and RCV-EQL (POST/PRE): Two slide switches are provided to set the integrated equalizer for either pre- or post-equalization. These switches, labeled XMT-EQL and RCV-EQL, control the type of equalization for the transmit and receive directions, respectively. In the PRE position, the equalizer is set for pre-equalization. In the POST position, post-equalization is selected.

XMT ATT(A and B) and RCV ATT(A and B): These four groups of switches control the amount of gain the unit provides by inserting 0 to -16 dB of loss in 0.1-dB steps. Each group of switches is labeled IN-OUT (1, 2, 4, 8, 0.1, 0.2, 0.4, 0.8). Each switch is activated when operated toward its designation. The XMT ATT attenuator controls the gain in the transmit direction. The RCV ATT attenuator controls the gain in the receive direction.

IN and OUT: The IN and OUT switches select either a 600-ohm (nonloaded) or 1200-ohm (loaded) termination to the A-side and B-side facilities, respectively.

E&M 1 and E&M 2: These switches are used in conjunction with each other to select either type I, II, or III E&M signaling. Table A gives the required switch positions for the E&M signaling modes.

TABLE A		
SIGNALING TYPE	E&M1 SWITCH	E&M2 SWITCH
Type I E&M	I	I or III
Type II E&M	II or III	II
Type III E&M	II or III	I or III

INTF: This switch configures the unit to operate as a trunk circuit on the A-side or as a signaling circuit on the B-side when either the A or B position is selected. In the A position, only type I or II E&M interface is provided. In the B position, type I, II, or III interface is provided.

DM/SM: This switch establishes signaling lead connections for single- and double-module shelves. If the CFU is mounted in a double-module shelf, the DM/SM switch should be set in the DM position. If mounted in a single-module shelf, the DM/SM switch should be set in the SM position.