

J99343SC 4-4 TRANSMISSION/INTERMEDIATE REPEATER MT44311

DATA SHEET

METALLIC FACILITY TERMINAL

The J99343SC 4-4 wire transmission terminal/intermediate repeater unit is a low-cost alternative to the J99343SA,L3 in terminal applications and the J99343SB,L3 in intermediate applications. The SC repeater provides gain or loss and equalization in both directions of transmission.

The J99343SC unit is designed for use in the transmission slot of any MFT frame. The SC unit is compatible with a companion signaling unit in a double-module arrangement. Section 332-912-101 contains additional information on the MFT mounting arrangements. For detailed information on this unit, see Section 332-912-136, CD- and SD-7C050-01 (CPS 28). Figure 1 illustrates the block diagram and lead plan of the J99343SC unit. Figure 2 illustrates the location of the switches.

GAIN SW: Ten miniature switches, designated **GAIN**, control the gain of the repeater. There is a separate

gain switch in each direction of transmission. These switches are labeled .1, .2, .4, .8, 1, 2, 4, 8, +10, and -20. The gain is adjustable from -20 dB to +23.5 dB in 0.1 dB increments with respect to the received signal level.

Note: The sum of rocker switches 1, 2, 4, and 8 should not exceed 12.

SLOPE: Five rocker switches, designated **SLOPE**, control the equalization of the repeater. There is a separate slope switch in each direction of transmission. These switches are labeled C, 1, 2, 4, and 8. A separate equalizer is provided for each direction of transmission. The sum of these switches determines the equalization. The C switch acts as a range selector and, when operated, provides a steeper degree of equalization. See Section 332-912-212 for prescription settings of the SLOPE switches.

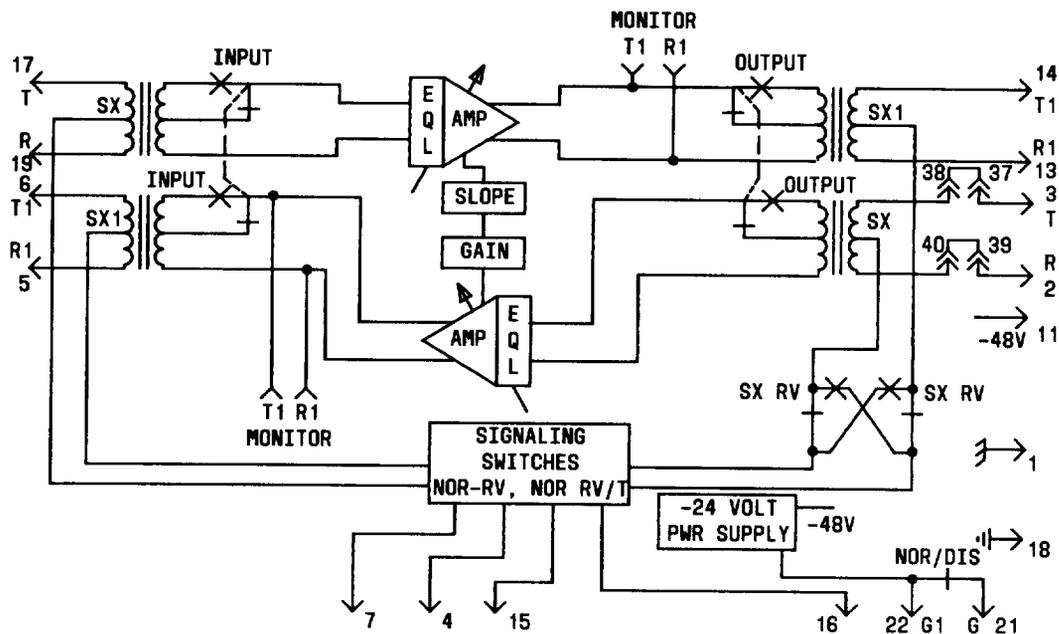


Fig. 1—Block Diagram of J99343SC Unit

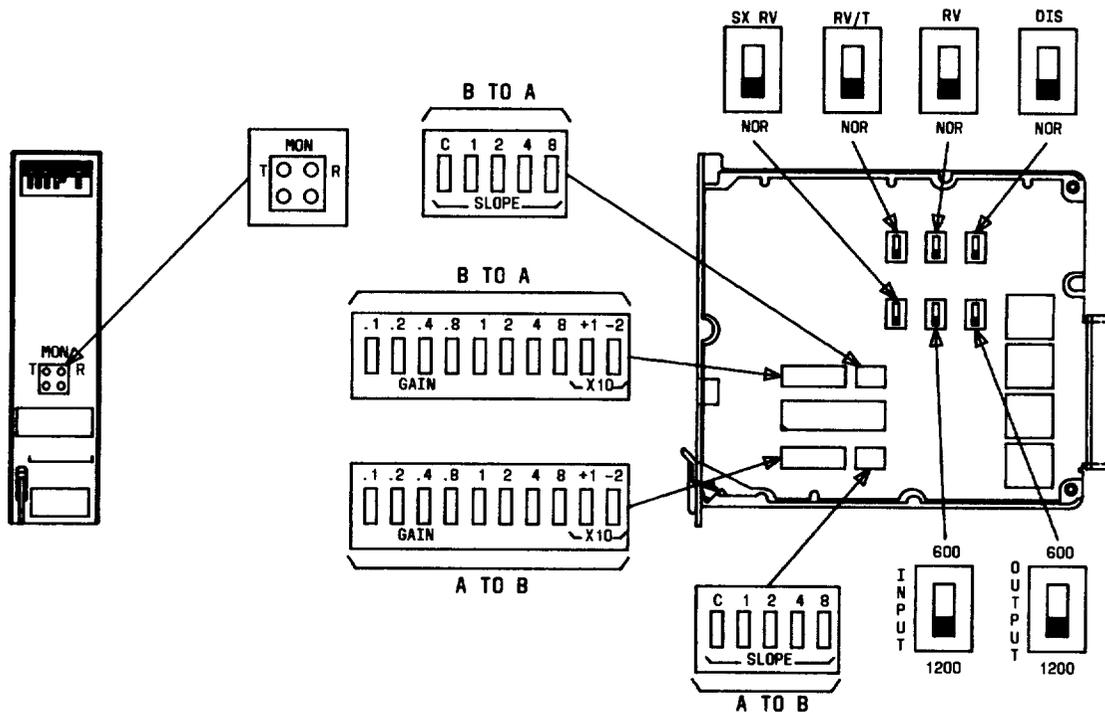


Fig. 2—Illustration of J99343SC Showing Location of Switches

NOR-RV and NOR-RV/T: These switches are used to establish a signaling mode of either normal, reverse, or through. These switches only affect the dc signaling path to the signaling unit.

Note: If no companion signaling unit is used, these switches should be set for the **through** mode.

NOR-SX RV: This switch is used to reverse the simplex signaling leads (SX and SX1) on the B-side of the repeater.

NOR-DIS: This switch permits any companion signaling unit having the disable function to control the power to the repeater. In the **DIS** position, the power

input to the repeater is removed during the idle circuit condition. In the **NOR** position, the power is continuous.

Note: If no companion signaling unit is used or if the signaling unit does not have the disabling function, the switch must be in the **NOR** position.

INPUT-OUTPUT: The input and output transformers that interface the cable facility are provided with a 600/1200-ohm impedance selection switch. The 1200 ohms is used for loaded cable and the 600 ohms for nonloaded cable. The impedance option switches are provided on both the A-side (INPUT) and the B-side (OUTPUT).