

J99343PR UNIVERSAL ADAPTIVE REPEATER MT22F33BAA

DATA SHEET

METALLIC FACILITY TERMINAL

The J99343PR UA (Universal Adaptive) Repeater provides continuous automatic balancing for both H88 loaded and 19, 22, 24, 25, 26 gauge nonloaded 2-wire facilities on the A- and B-sides using digital techniques. There are no manual balance controls. However, the gain and equalization for both directions of transmission are adjusted manually using controls that interface with the digital electronics of the repeater. In addition to interfacing with loaded and nonloaded cable, the PR repeater can impedance match 600-ohm 2-wire switches and equipment or 900-ohm 2-wire switches and equipment. The J99343PR repeater is designed to replace all J99343P()-type repeaters except the J99343PL dual repeater. Modification or wiring changes of the MFT

(Metallic Facility Terminal) bay will not be required for the UA repeater.

The J99343PR repeater can be used in either a single- or double-module mounting arrangement. It can be mounted in any slot of a single-module shelf. When this repeater is used in the double-module arrangement, it is mounted in the transmission unit slot. A companion signaling unit may be installed in the signaling unit slot if signaling treatment is required. For a detailed discussion of the PR repeater, see AT&T Practice 332-912-163, CD-7C122-01, and SD-7C122-01. A block diagram is shown in Fig. 1. Figure 2 gives switch designs.

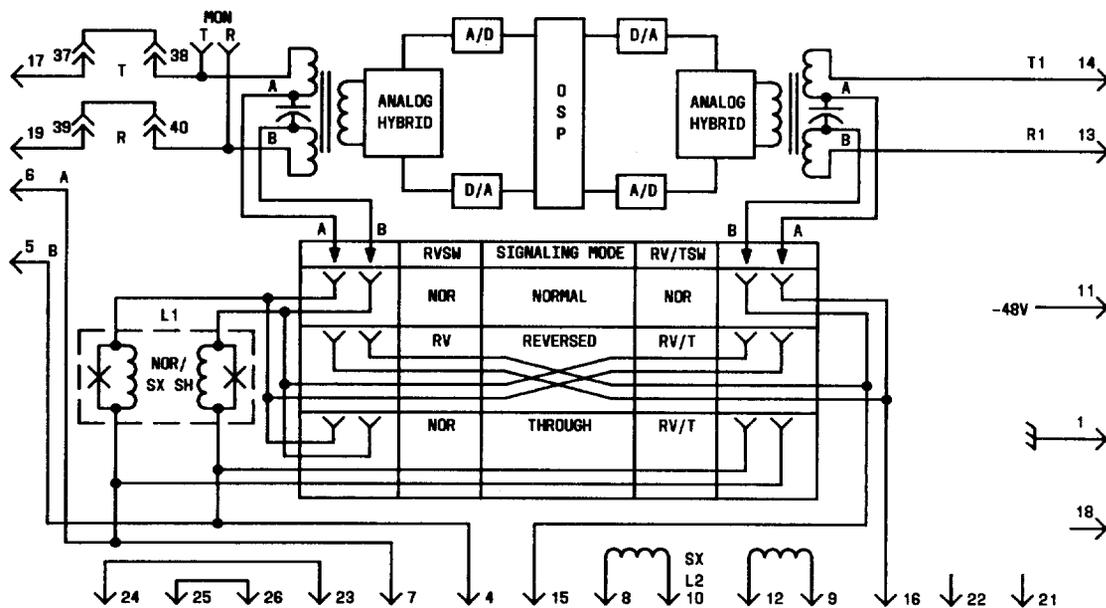


Fig. 1—Block Diagram of the J99343PR UA Repeater

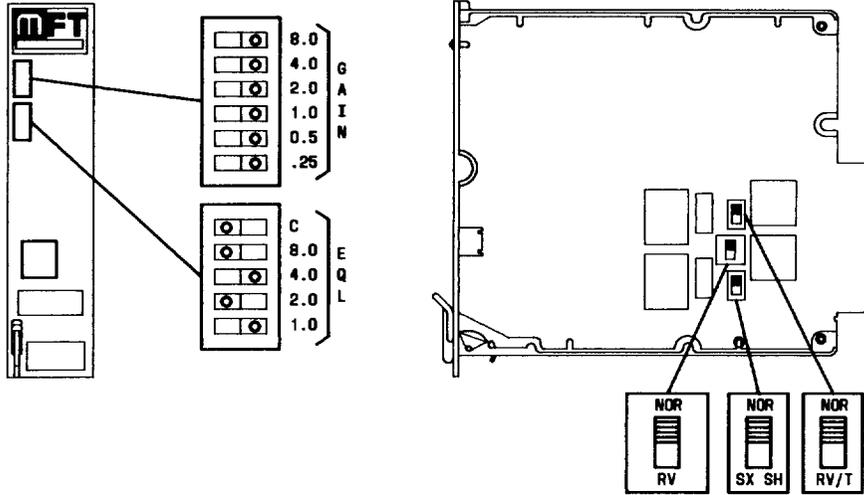


Fig. 2—J99343PR Repeater—Component Layout

GAIN: Six miniature switches, labeled GAIN, control the gain of the repeater. The GAIN switches, accessible through the front faceplate, are individually designated 8.0, 4.0, 2.0, 1.0, .50, and .25 (dB). These switches provide the same gain in both directions of transmission simultaneously.

EQL: Five slide switches labeled EQL and individually designated C, 8, 4, 2, and 1, adjust the equalization for both directions of transmission simultaneously. The C switch acts as a range selector, and when operated toward the designation, it introduces a steeper degree of equalization or slope across the voiceband. The other four numerical switches (1, 2, 4, 8) allow selection of 16 different equalizer shapes for each position of the C switch. The operated sum of the values of the numerical switches and the C switch posi-

tion determine the equalization. See Section 332-912-212 for prescription settings of the equalization switches.

NOR-RV and NOR-RV/T: These switches are used to establish the normal, reverse or through signaling modes with respect to the transmission circuit of the J99343PR repeater. These switches only affect the dc signaling path.

NOR-SX SH: The NOR-SX SH switch permits shorting of the A-side SX inductor when it is not required such as in E & M type signaling. The SX inductor is shorted when the NOR-SX SH switch is operated to the SX SH position.