# J99343GG,L2 2-2 WIRE T(L)—I(L-NL)/LSO CFU MTC2132A <br> DATA SHEET <br> METALLIC FACILITY TERMINAL 

The J99343GG,L2 is a cost-reduced 2-2 wire terminal (L) or intermediate (L-NL) loop-start only (LSO) CFU. This unit provides gain, equalization, and signaling range extension on 2 -wire circuits between a loaded facility or terminal equipment and a nonloaded facility. The J99343GG,L2 will function in either a single-module frame or in the transmission slot of a double-module frame.

For a detailed description of this unit, see Section 332-912-158, CD-7C050-01, and SD-7C050-01 (CPS 20). The set-up procedure is covered in Section 332-912-258. A block diagram is shown in Fig. 1. Figure 2 provides switch identification.

GAIN ADJ and 8DB: Five miniature switches (GAIN ADJ) and one other switch (8DB) control the gain of the repeater. The GAIN ADJ switches, accessible through the front panel, are labeled $.25, .50,1.0,2.0$,
and 4.0. These switches are ganged to provide the same gain in both directions of transmission. The 8DB switch, located on the component board, can provide 8 dB of additional gain in each direction. The maximum gain should be limited to 12 dB .

SLOPE: Four rocker switches (designated 1, 2, 4, and 8) adjust the SLOPE equalization for both directions of transmission simultaneously.

GAUGE: The gauge switches consist of ten rocker switches. Four switches are labeled 19, 22, 24, and 26, four are labeled 25, and two are labeled T. The numbers correspond to the cable gauge of the facility that the repeater interfaces. To set the unit to match $25-$ gauge cable, all four switches labeled 25 must be depressed toward 25 . For a mixed-gauge facility, the predominant gauge determines the gauge setting. Only one gauge setting may be used at a time. The


Fig. 1-Block Diagram of the J99343GG,L2


Fig. 2-J99343GG,L2-Component Layout
two switches labeled $T$ allow the transmission section of the unit to operate as a 900 -ohm terminal (NL) repeater.

LBOC: The controls for the LBOC consist of a group of six rocker switches labeled $02,04,08,16,32$, and 64 . These switches control the selection of capacitor values from 0 to $0.126 \mu \mathrm{~F}$ in $0.002 \mu \mathrm{~F}$ increments.

PBN (R1, R2, Z): The precision balance network (PBN) provides hybrid balance by matching the impedance of nonloaded cable. The PBN adjustments are controlled by three sets of switches: R1 (4,2,1), R2 (8, 4, $2,1)$, and $\mathrm{Z}(16,8,4,2,1)$.

TST-NOR: In the TST position, continuous power is supplied to the transmission portion of the repeater. In the NOR position, the power to the transmission portion is controlled by the signaling section. The NOR position is used during normal operation.

NOR•RV: In the NOR position, the switching equipment signaling interface is on the A -side and the station line feed is on the B -side. In the RV position, the signaling paths are interchanged between the $A$ - and B-sides.

NOR-DRR: This switch controls the ringing circuitry. In the NOR position, "ring-ping" signals and all distinctive ringing patterns will be reproduced. In the DRR position, the unit converts all ringing signals greater than 140 ms into 2 -second ringing output and rejects ring-ping signals.

SWG BOR (IN-OUT): The switching-side build-out resistor ( $B O R$ ) is provided to limit the switching-side loop current on short loops. In the IN position, the BOR is inserted in the A-side circuitry. In the OUT position, the BOR is removed from the circuit.

