

AUA78 T1 LINE FAULT-LOCATE TEST ADAPTER — 5SCSJ45AXX *

DATA SHEET

SLC® SERIES 5 CARRIER SYSTEM

The AUA78 FLTA (fault-locate test adapter) (COMCODE 105482269) is used in the LIU (line interface unit) slot while fault-locating a T1 digital line from a SLC Series 5 carrier system COT (central office terminal) or RT (remote terminal).

This practice is reissued to include information about the revised AUA78 FLTA — (CLEI† code 5SCSJ45AXX). The revised FLTA provides a switch to select between 64 kb/s operation and 32 kb/s FPD (Feature Package D) operation.

Figure 1 is a functional block diagram of the test adapter, and Figures 2 and 3 show the board and faceplate.

In the transmit direction, the adapter has an input jack (TRMTG) that accepts a DS1 signal meeting the requirements to be compatible with the specifications for the DSX-1 cross connect. This signal is routed through switch-selectable pads (0 dB, 7.5 dB, 15.0 dB, and 22.5 dB) that allow the output signal to meet T1 line route-junction level coordination and end-section design requirements. The adapter provides two line-powering options — it can power the T1 line with a 60 mA current feed that is voltage limited to -130 V, or it can loop the received line-powering current back to the T1 output. The unit also has a switch to command a remote line loopback (the switch is only usable at a COT), and jacks to measure the line-powering voltage and current.

In the receive direction, the AUA78 uses an automatic line build-out and switch selectable 0 dB and 7.5 dB pads to provide compatibility with short end sections, and to allow from 0 dB to 33.5 dB of

loss in the end section. The received DS1 signal is regenerated and appears at the output jack (RCVG) at a level that is compatible to DSX-1.

POWER CONVERTER (S200) Option: Four switches (1, 2, 3, 4) determine whether the FLTA powers the T1 line under test or if it loops the received line-powering current. Normally, the line powering positions are used when fault-locating from the COT. The power-looping positions are used when working at an RT (except for back-powered T1 lines). Four selections for S200 (5SCSJ40AXX) are available:

SWITCH	LINE POWERING (NOTE)	POWER LOOPING (NOTE)
1	OPEN	CLOSED
2	OPEN	CLOSED
3	CLOSED	OPEN
4	CLOSED	OPEN

Note: OPEN — depress toward the desired number.

Four selections for S200 (5SCSJ45AXX) are available:

SWITCH	LINE POWERING (REPLACES AUA62) (NOTE)	POWER LOOPING (REPLACES AUA64) (NOTE)
1	PWR	LP
2	PWR	LP
3	PWR	LP
4	PWR	LP

Note: ON — depress toward the desired function.

* Replaces 5SCSJ40AXX.

† COMMON LANGUAGE is a registered trademark and CLEI, CLLI, CLCI, and CLFI are trademarks of Bell Communications Research, Inc.

TRANSMIT PAD (S300) Option: Four switches (TRANS- 1, 2, 3, 4) select the amount of loss inserted in the transmit path to meet route-junction and end section requirements:

TRANSMIT PAD SETTING vs. INSERTED LOSS				
TRANS- (NOTE)				INSERTED LOSS
1	2	3	4	
OFF	OFF	OFF	ON	22.5 dB
OFF	OFF	ON	OFF	15.0 dB
OFF	ON	OFF	OFF	7.5 dB
ON	OFF	OFF	OFF	0.0 dB
Note: ON — depress toward the number.				

RECEIVE PAD (S700) Option: On the AUA78 (5SCSJ40AXX), the first two switches (1, 2) select the receive pad and equalization:

RECEIVE PAD SETTING vs. INSERTED LOSS		
1 (NOTE)	2 (NOTE)	INSERTED LOSS
CLOSED	OPEN	0.0 dB
OPEN	CLOSED	7.5 dB
Note: OPEN — depress toward the number.		

On the AUA78 (5SCSJ45AXX), the first two switches (RCV- 1, 2) select the receive pad and equalization:

RECEIVE PAD SETTING vs. INSERTED LOSS		
RCV- (NOTE)		INSERTED LOSS
1	2	
ON	OFF	0.0 dB
OFF	ON	7.5 dB
Note: ON — depress toward the number.		

The third switch (64/32) selects 64-kb/s operation or 32-kb/s LBRV (low bit-rate voice) operation:

64/32 SWITCH SETTING (NOTE)	
3	OPERATION
64	64 kb/s
32	32 kb/s (LBRV)
Note: ON — depress toward the number.	

The fourth switch position is not used.

FAR END LOOP: This switch can only be used while the FLTA is being used in a COT. While activated, this switch causes the RT line interface unit to loop the received signal back toward the COT.

TRMTG: The transmit jack (type 310) for DS1 — a DSX-1 level signal is required. The signal passes through the selected pad and is transmitted on side 1 of the T1 line.

RCVG: The receive jack (type 310) for DS1. The signal received from side 2 of the T1 line passes through the selected pad, is regenerated, and appears as a DSX-1 level signal at the RCVG jack.

-V, +V, +I, -I: Four pin jacks are used to make voltage (line powering) and current (transmit and receive) measurements:

- Line Powering Voltage — +V to -V
- Side 1 (Transmit) Current — +V to -I
- Side 2 (Receive) Current — +I to -V

Technical assistance for the SLC Series 5 carrier system can be obtained by calling the Regional Technical Assistance Center at 1-800-225-RTAC. This telephone number is staffed 24 hours per day.

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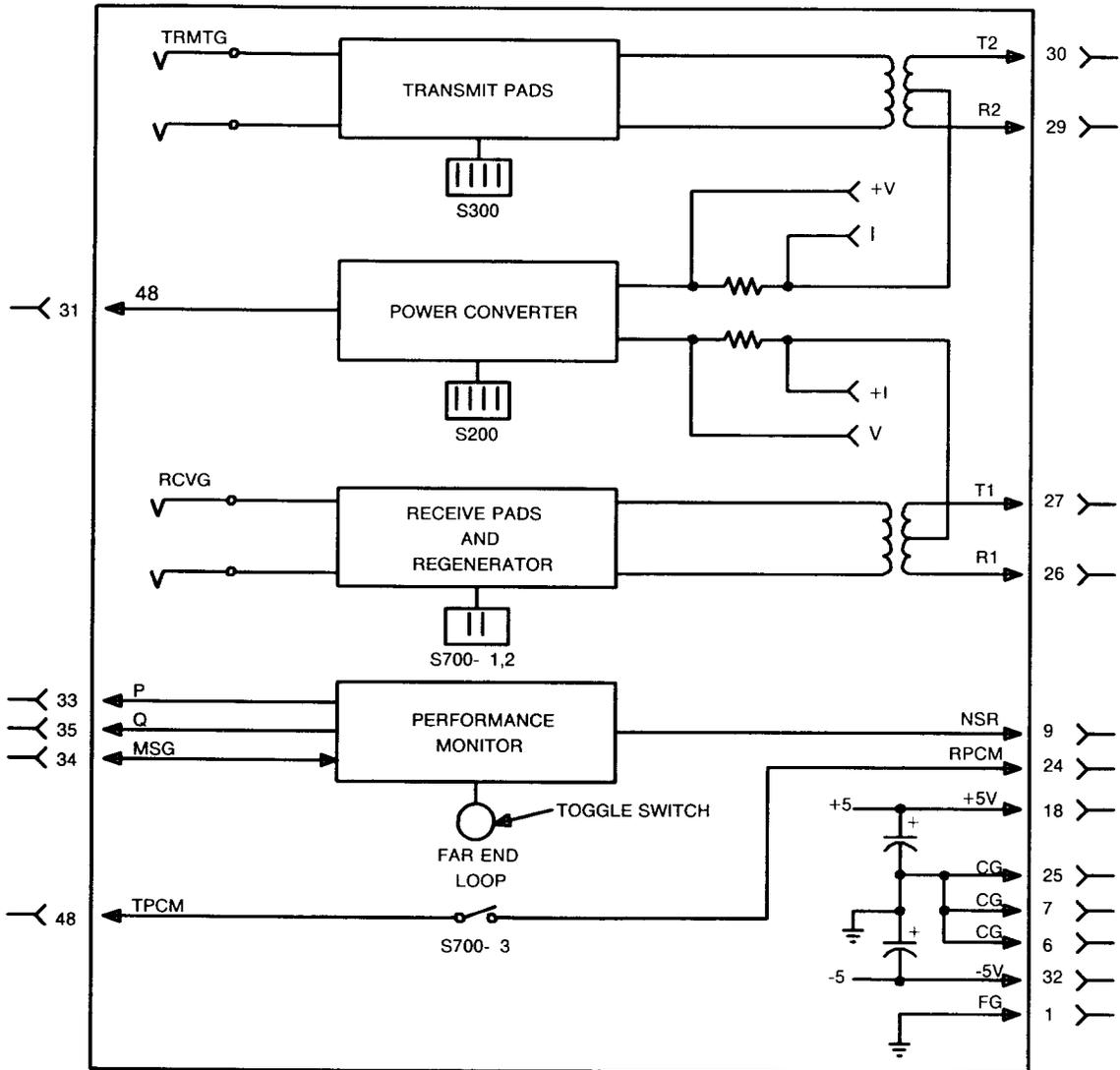


Figure 1—AUA78 (5SCSJ45AXX) Block Diagram

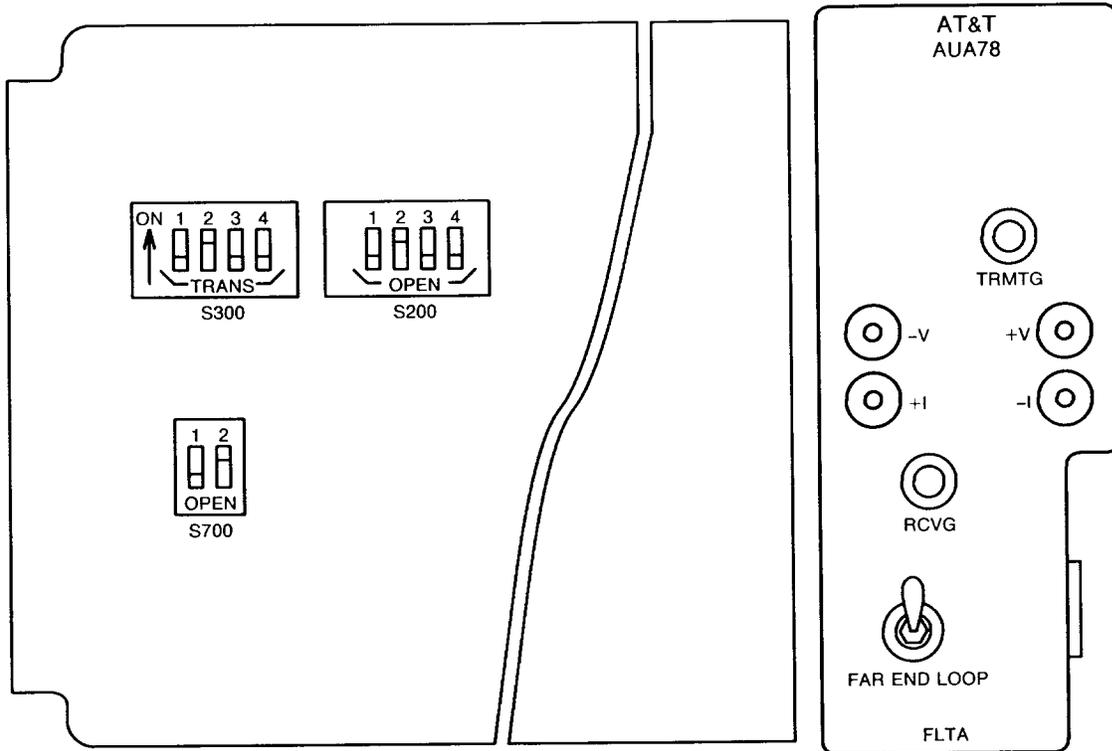


Figure 2—AUA78 (5SCSJ40AXX) Board and Faceplate Diagram

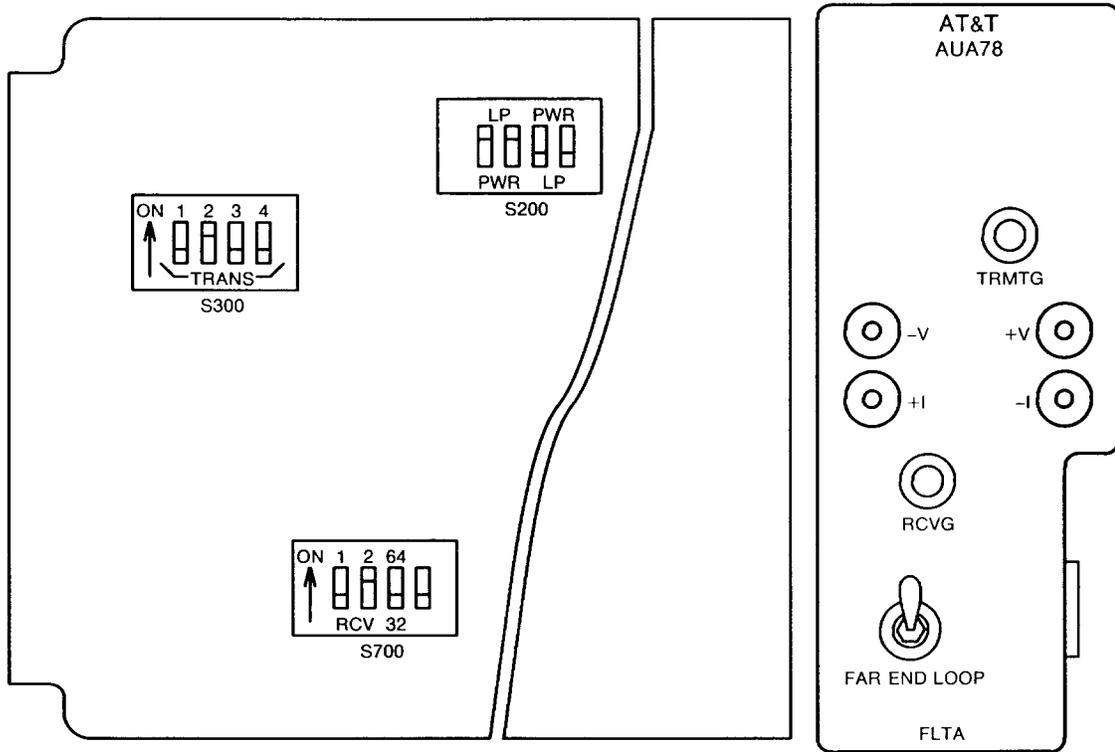


Figure 3—Revised AUA78 (5SCSJ45AXX) Board and Faceplate Diagram