J98726AL-3, L3, A; L4 OFFICE INTERFACE UNIT-2 (OIU-2)

DATA SHEET

D4 CHANNEL BANK

DESCRIPTION

The OIU-2 circuit pack provides a D4 or DCT channel bank with timing options to meet various synchronization requirements. The options include external timing (**EXT**), loop timing (**LT**), and local timing (**LOC T**). See Figure 1. It also provides both internal and external timing signals required to operate and maintain D4 dataport channel units in Digital Data System (DDS) or local digital data network applications.

This data sheet is reissued to include information about the J98726AL-3, L3, A and L4 versions of the OIU-2 and supersedes Issue 1. Revision arrows indicate significant changes.

◗ The J98726AL-3, L3, A and J98726AL-3, L4 versions of the OIU-2 are functionally equivalent. Differences are in faceplate nomenclature, COMCODEs, and ***CLEI**** codes. The COMCODE and ***CLEI*** codes for both versions are as follows:

J98726AL-3	COMCODE	*CLEI*
L3, A	601282155	D4OI21GKAA
L4	601282163	D4OI21GKAB ◖

FEATURES

The OIU-2 provides the following:

- Two regenerated composite clock outputs at rates of 8 kb/s and 64 kb/s for timing distribution to other equipment, such as other D4 channel banks, *SLC*® 96 carrier system terminals, or data multiplexers
- Data clock outputs (8- and 64-kHz clocks) for interfacing with the ED-3C792 D3/D4 interface test unit (clock box)
- Integrated autonomous switching from the primary control digroup to the alternate (secondary) digroup upon a digroup receive failure, thereby improving data throughput
- ◗ Enhanced noise suppression on the composite clock input. ◖

OPTIONS

Two white pin-plugs are used to set options on the OIU-2. One plug is used to select the required timing mode. The other pin-plug is used to designate either digroup A or B as the primary control digroup with the remaining digroup as the secondary control digroup.

Select the required timing mode by inserting a white pin-plug in one of the following positions:

◗ **EXT** - This position (external) synchronizes the primary and secondary control digroups to an 8- and 64-kHz composite clock source such as DDS office timing supply (OTS), synchronization distribution expander (SDE), or a timing signal generator (TSG).

LT - This position (loop time) synchronizes the selected primary and secondary control digroup transmit pulse streams to the primary digroup's incoming DS1 receive pulse stream from the far-end equipment such as a digital switching system or a digital cross-connect system.

LOC T - This position selects an internally generated stratum-4 clock as the transmit timing reference source. It allows the transmit and receive circuits of the channel bank to free-run independently of any other timing source or allows the transmit circuit to function as a master timing source in a local synchronous network.

Select the primary and secondary control digroups

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by inserting a white pin-plug into one of the following positions:

> ***Note:*** This option selection designates the primary and secondary control digroups used in the bank timing architecture. The autonomous switching function of the OIU transfers the reference timing from the primary control digroup to the secondary control digroup after an integration period. A switch is initiated if the primary control digroup experiences a receive failure or if it is looped by the ACU.

A DGP - This position designates digroup A as the primary control digroup and digroup B as the secondary control digroup.

B DGP - This position designates digroup B as the primary control digroup and digroup A as the secondary control digroup.

ENGINEERING

The composite clock input requires a 133-ohm termination which is provided on the D4 channel bank per SD-3C304-02 and is provided by list option on the bank or bay frame. The DCT frame provides two terminations and requires two composite clock inputs for external timing.

Connection to the composite clock outputs from the OIU-2 are specified in the D4 channel bank and DCT application schematics, SD-3C304-02 and SD-3C316-01, respectively. ◀

REFERENCES

The following publications contain description, engineering, and maintenance information on the D4 channel bank.

PRACTICE	TITLE
365-170-000	D4 Channel Bank - (TOP)
365-170-100	D4 Channel Bank - Description
365-170-400	D4 Transmission Module User's Manual
801-505-155	D4 Channel Bank Equipment - For Use With Digital Transmission Systems - Equipment Design Requirements - Common Systems
855-351-103	D1, D2, D3, and D4 Digital Channel Banks and D5 Digital Terminal System - Application Engineering - Carrier Engineering

DRAWING	TITLE
SD-3C304-02	D4 Channel Bank - Application Schematic
SD-3C316-01	Digital Carrier Trunk/Universal Trunk (DCT/UT) Frame Application Schematic

PRECAUTIONS

This circuit pack contains devices that are subject to damage or decreased reliability from electrostatic discharges. When handling this unit, proper antistatic measures should be taken. Refer to AT&T 365-170-100 for detailed information about the handling of the D4 channel bank circuit packs.

WARRANTY

The terms and conditions of sale will include a five year warranty.

REGIONAL TECHNICAL ASSISTANCE

Technical assistance for the D4 channel bank can be obtained by calling the Regional Technical Assistance Center at **1-800-225-RTAC**. This telephone number is staffed 24 hours per day.

ISSUING ORGANIZATION

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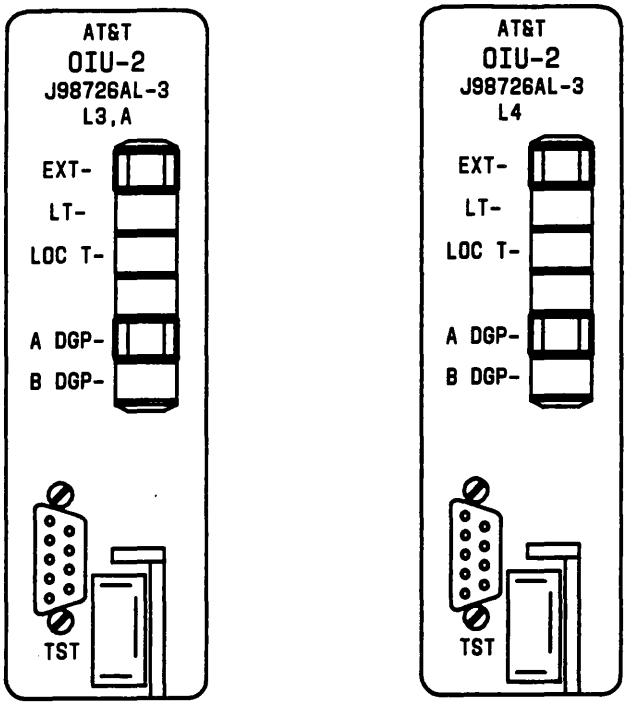

Figure 1—♦ J98726AL-3, List 3, A and List 4 OIU-2 Faceplates ♦