AT&T

SLC® Series 5 Carrier System

AUA152 Office Channel Unit (OCU) Dataport - 5SCU48Z

Data Sheet

This data sheet describes the AUA152 office channel unit (OCU) dataport (COMCODE 106018526) and is intended for the end-user of the unit. The AUA152 OCU is primarily intended for use in an end-link of a digital data system (DDS) private line data service. An *end-link* is the part of the service between a customer and the local central office. The AUA152 OCU may also be used in a local data service. For DDS applications, the AUA152 OCU is always located in the remote terminal (RT). For local data applications, the unit may be used in the central office terminal (COT) as well as the RT.

Figure 1 is a functional block diagram of the AUA152 unit, and Figure 2 shows the faceplate. More details about the AUA152 OCU can be found in AT&T 363-205-100.

The AUA152 OCU provides one channel of service and serves as the interface between full-duplex synchronous digital data (bipolar return-to-zero format) on a 4-wire customer loop and the bitstream. The digital rate may be 2.4, 4.8, or 9.6 kb/s (called subrates) or 56 kb/s.

For all applications of the AUA152 OCU, the Series 5 system must be synchronized to the composite clock. The interface to the DDS clock is the AUA3 office timing unit (OTU) - 5SCS604, which is used in the COT. An OTU is not required in the RT since the RT is loop-timed to the COT.

This unit supplies the proper sealing current to the T/R and T1/R1 leads when the external load is less than 4050 ohms.

The AUA152 OCU has options that must be set before service can be provided. All options for the channel unit are set by entering commands into the Series 5 craft interface unit (CIU) (J99404TA) which then transmits the option information to the bank control unit (BCU) which stores it in nonvolatile system memory. The BCU then writes the options into memory registers on the channel unit when the

channel unit is installed. If the channel unit is already installed, the BCU writes the option information into the channel unit registers immediately after it receives the information from the CIU. Unplugging the channel unit does not erase the option information stored in system memory — reinserting the channel unit causes the options to be rewritten immediately into the channel unit registers by the BCU.

The CIU is also used during manual testing of the transmission performance of the AUA152 OCU. The procedures for setting options and performing tests with the CIU are described in AT&T 363-205-402. The CIU is described in AT&T 363-205-101.

Table 1 lists the options and the range of the options for the AUA152 OCU.

ALL-ZERO-CODE: When the ALL-ZERO-CODE option is set to YES, the AUA152 OCU will allow eight consecutive zeros to be transmitted toward the digital line. If the option is set to NO, two of the zeros, in a string of eight zeros, will be set to ones. This option should always be set to NO if the line interface unit (LIU) is set for zero code suppression. If the LIU is set for B8ZS line coding, either OCU ALL-ZERO-CODE option may be chosen.

⇒ **NOTE:**
Future applications may result in a change in this guideline.

ERROR CORRECTION: For a 56-kb/s service, the error correction options are second channel error correction (SCEC) or NONE. For a data service at one of the subrates, any of the error correction options may be chosen, although majority vote error correction (MVEC) is the normal selection. When SCEC is used, both pulse code modulation (PCM) time slots associated with a plug-in slot are used — the odd-numbered time slot is used for data and the even-numbered time slot is used for error correction. For MVEC, the odd-numbered time slot is used for both purposes.

SECONDARY CHANNEL: SECONDARY CHANNEL should not be confused with SCEC. A secondary channel is a low-speed telemetry channel added to the customer's data bits. The secondary channel capability should be used only when suitable customer premises equipment is available.

The guidelines for selecting options for the AUA152 OCU are provided in AT&T 915-710-116 — this AT&T Practice also describes the various applications for the unit.

The AUA152 OCU can be used in any channel unit slot and can be used in combination with any mix of the other Series 5 channel units. If required, all 48-channel unit slots in a bank can be equipped with AUA152 OCUs. When the AUA152 OCU unit is used in a Feature Package D system and optioned for 56-kb/s with SCEC, the next higher numbered channel unit slot *must* be left vacant.

The AUA152 OCU is end-to-end compatible with the AUA152 and AUA52 (5SCU480) OCUs, the AUA34 DS0 dataport CU (5SCU380), a D4- or D5-type OCU, and a D4- or D5-type DS0 CU. Further compatibility and application information can be found in AT&T 915-710-116.

The AUA152 OCU can be used only in a Series 5 system equipped with Feature Package B (FPB/SS/U), (FPC), FPC/AutoCut, FPD, or Integrated Network Access-RT (INA-RT).

Table 1. Range of Settings for AUA152 Channel Unit Options

Option	Range
All-Zero-Code Allowed	Yes or No
Error Correction	SCEC, NONE, or MVEC
Secondary Channel Used	Yes or No
Subscriber Data Rate	2.4, 4.8, 9.6, or 56 kb/s

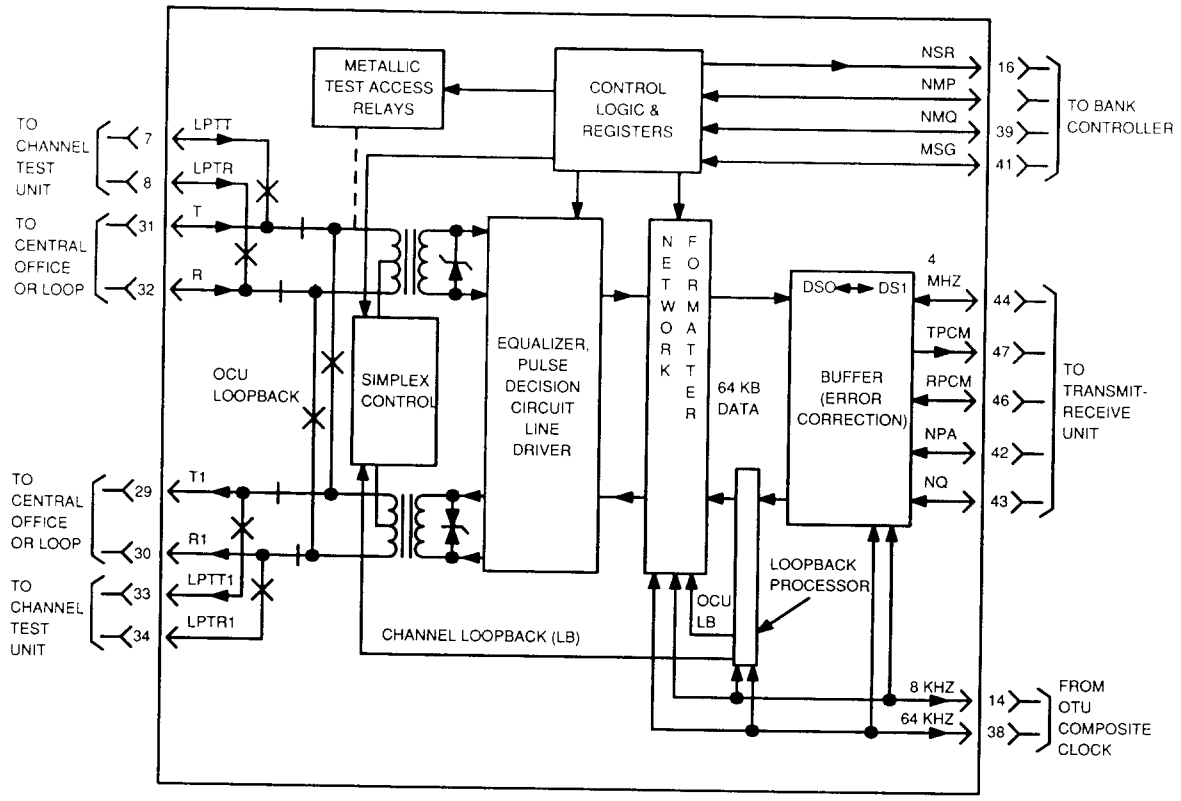

Figure 1. AUA152 Block Diagram

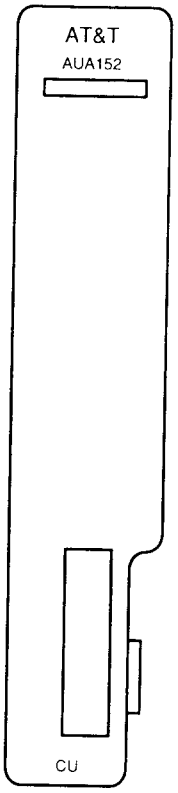

Figure 2. AUA152 Faceplate

In-hours or emergency out-of-hours technical assistance for the *SLC*® Series 5 Carrier System can be obtained by calling the Regional Technical Assistance Center at **1-800-225-RTAC**.

Additional copies of this document (AT&T 363-005-302) are available from the Customer Information Center — call 1-800-432-6600.

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