

VIAGRAM

Information Note



Subject: Model 6003/6004/6005
Communication Adapters

No: 9

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VIATRON's Model 6003, 6004, or 6005 Communication Adapter is used in conjunction with a System 21 Terminal to control the transmission of data over standard, voice-grade telecommunications lines. The adapter provides a standard EIA RS232-C interface to a Microprocessor data channel for performing half-duplex, asynchronous data communication operations. The adapter uses a 7-level, 11-unit USASCII transmission code for compatibility with virtually all kinds of communications equipment.

The adapter models differ in operating speed, providing considerable flexibility in configuring the adapter and associated modem to specific processing requirements, as reflected in the table below.

COMMUNICATION ADAPTER CHARACTERISTICS

Adapter Model	Transmission Speed (Baud Rate)	Applicable Modem
6003	110 or 247.5	VIATRON 605, Bell 103A2, or equivalent, or Acoustic Coupler (Feature Code 606).
6004	600 or 1,200	VIATRON 607, Bell 202C or 202D, or equivalent.
6005	Any speed up to 1,200	To 300 baud, VIATRON 605, Bell 103A2, or equivalent. From 300 to 1,200 baud, VIATRON 607, Bell 202C or 202D, or equivalent.

OPERATOR CONTROLS

A means of regulating all communication adapter functions is provided through the adapter control panel located on the Microprocessor. In conjunction with the keyboard, all data communication operations between another terminal or computer are initiated and controlled by the adapter.

The adapter control panel provides for selecting one of two transmission speeds (high or low), as application requirements dictate. (Both the sending and receiving adapters must be set to operate at the same transmission rate.)

A control is also provided to ensure that the transfer of data between VIATRON terminals is properly synchronized. To ensure synchronization, the receiving adapter automatically sends a return pulse to the transmitting adapter to acknowledge receipt of a record and to indicate readiness to accept the next record. Once the operator initiates a data transfer operation, the "hand-shaking" between terminals proceeds without further operation action.

An optional adapter control panel feature allows the adapter to be used unattended on a 2111 Microprocessor equipped with the Automatic Multiple Input option (Feature Code 104). With this option, the operator is not required to answer or terminate calls. In addition, an automatic time-out of 15 seconds occurs if a supervisory signal does not arrive after a call is initiated, providing protection against "wrong number" calls. The unattended operation feature of the adapter cannot be used with the Model 2101 Terminal.

ERROR DETECTION

A character parity error occurring in the input data stream to an adapter is detected by the receiving microprocessor, illuminating an indicator on the Microprocessor control panel and causing a question mark to appear on the display in place of the character. The question mark remains a part of the record until corrected by the operator after data transfer operations are completed.

TYPICAL ADAPTER APPLICATION

The Communication Adapter is used most frequently in batch transfer operations between System 21 Terminals, e.g., transferring data from VIATAPE or computer-compatible tape from one terminal to a similar storage medium at another terminal.

Terminal-to-computer operations can also be performed in which data is collected locally at a terminal and then later batch transferred for processing by a remote central computer.