

ONE INDUSTRIAL AVENUE. LOWELL. MASSACHUSETTS (1851, TEL. (617) 851-4111, TWX 710-343-6769, TELEX 94-7421

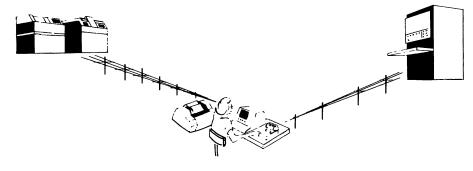
The 9019B Communications Controller, in conjunction with Wang-developed turn-key software packages, adds both binary synchronous and asynchronous data transmission and reception capabilities to the computer capabilities of the multiplexed-disk based Wang 2200 WS. Built-in flexibility suited to a wide range of communications applications resides in the hardware unit which fits inside the housing of the 2200 WS.

The controller has its own microprocessor, read-only-memory, random-access-memory, and multicharacter input and output buffers; thus, separate tasks related to data transmission and reception can be performed by the controller and the central processor concurrently. Although the controller is designed primarily to implement synchronous type communications protocols, asynchronous type protocols can be handled also. Microcode defining the protocol-related tasks to be performed by the controller is produced only by Wang Laboratories and included in terminal emulation software packages along with a set of program modules defining tasks to be performed by the central processor.

Three currently available software packages emulate the binary synchronous communications (BSC) protocol of IBM 2780, 3780 and 3741 terminals, respectively. With the controller and one of the BSC packages, a Wang 2200 WS can serve as a remote batch workstation in communication with an IBM 360/370 host computer system and requires no changes in existing IBM 360/370 software, or the Wang system can communicate with any mainframe computer which customarily communicates with terminals using the 2780, 3780 or 3741 line protocol.

Wang's BSC software packages permit the 2200 WS multiplexed disk to serve as the batched data input device in combination with a printer or the disk as the batched data output device. The keyboard is active for transmission of sign-on and other messages to the remote site, and the CRT is active for display of the prompts and error messages built into each software package to ensure operational simplicity.

For interactive communications with a host computer system, an asynchronous package emulating the widely-used Teletype[®] protocol is available. The package also includes an alternative protocol which emulates an IBM 2741 Selectric[®] Typewriter Terminal. The keyboard is active for character-by-character transmission to the remote site, and the CRT is active for character-by-character reception from the host computer. If desired, the Teletype or 2741 protocol can be used to transmit files from a disk and receive files to a printer or disk.



MODEL 9019B COMMUNICATIONS CONTROLLER The modem connector for the 9019B Communications Controller satisfies the EIA (Electronic Industries Association) Standard RS-232-C and the internationally recognized CCITT V.24 specifications. For synchronous communications, the modem plugged into the connector must provide the transmitter and receiver clock signals. Modems are not available from Wang Laboratories but may be rented from the telephone company serving the locality where a Wang system is installed or may be purchased from a modem vendor.

A modem must be compatible with the software package being used with the communications controller; furthermore, modems used at both ends of a communications line must be equivalent. For primary applications using Wang's 2780, 3780 or 3741 emulation software, the compatible dial-up modems and supported line speeds are as follows:

Modem	
(Bell type or equivalent)	Line Speed
201A	2000 bps
201C	2400 bps
208C	4800 bps

For secondary applications using Wang's Teletype or 2741 emulation software, the compatible modems are:

Modem	•
(Bell type or equivalent)	Line Speed
103A or 103J	Up to 300 baud
202C or 202S	(full duplex) Up to 1200 baud
	(half duplex)

Cost-effective transmission and reception of batched data is provided by a Wang 2200 WS equipped with the 9019B Communications Controller since the CPU with its comprehensive, easy-to-use BASIC language can preprocess and postprocess communicated data for a wide range of data processing applications. Data can be generated, edited, and stored on a multiplexed disk while the system is operating offline. Similarly, received data can be stored for subsequent offline processing.

9019B SPECIFICATIONS

Power Requirements

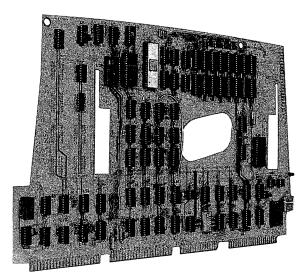
Supplied by the 2200 WS CPU.

Electrical Connection

A 25-pin RS-232-C, CCITT V.24 compatible female plug (located on the back of the 2200 WS) facilitates hookup of a modem.

Cable

A 12-foot (3.6 m) cable, equipped with 25-pin RS-232-C compatible male connectors on each end, is supplied as an accessory.



Standard Warranty Applies

ORDERING SPECIFICATIONS

An RS-232-C compatible communications controller with a microprocessor, memory, buffers, and transmitter/receiver circuits capable of performing specific tasks related to data transmission/reception via dial-up communications links when installed in a 2200 WS and operating under program control provided by a terminal emulator program (including microcode) prepared by Wang Laboratories.

Wang Laboratories reserves the right to change specifications without prior notice.



LABORATORIES, INC.