

# Wangwriter

## 2236DE Interactive Terminal Emulation

With the Wang 2236DE Interactive Terminal Emulation software W4-FTC-2236 and Model W4-FTC communications controller, a Wangwriter text processing system can be connected either locally or remotely to a 2200 Series LVP, MVP, or SVP system and thus provide access to all 2200 Series data processing applications. Wangwriter text-processing functions are available when the 2236DE terminal emulation is not in use.

With direct 2200 system access, the Wangwriter can also send documents from, or receive documents to, a Wangwriter minidiskette. Furthermore, the Wangwriter printer is supported as a 2200 terminal local printer, for on-line print functions.

### CONNECTION METHODS AND TRANSMISSION SPEEDS

Local and remote connections to a 2200 system are allowed with the Wangwriter 2236DE Interactive Terminal Emulator. Depending on the method of connection to the 2200 Series central processor, transmission speeds of 300, 600, 1200, 2400, 4800, 9600, or 19,200 bits per second (bps) are user-selectable during 2236DE Interactive Terminal emulation.

### Local Connections

Data rates up to 19,200 bps are possible when using direct local connection at distances up to 2,000 feet (610 meters) to either the 4-port 2236MXD Terminal Processor or the single-terminal 22C32 Triple Controller.

Since the 2200SVP is a single-user system, the RS-232-C/V.24-compatible cable that interconnects the central processor and a standard or Wangwriter-emulated 2236DE is plugged directly into a rear-panel connector on the SVP central processor; interconnection distances up to 50 feet (15.3 meters) are allowed.

### Remote Connections

With the addition of an RS-232-C/V.24-compatible asynchronous modem to the Wangwriter, it can function as a remote 2236DE interactive terminal. Data rates up to 9600 bps over point-to-point switched or leased lines are supported.

At the 2200 system, another modem must already be attached to a 2200 terminal controller. Local and remote modems must support 11-bits-per-character transmission.

### CONFIGURATIONS

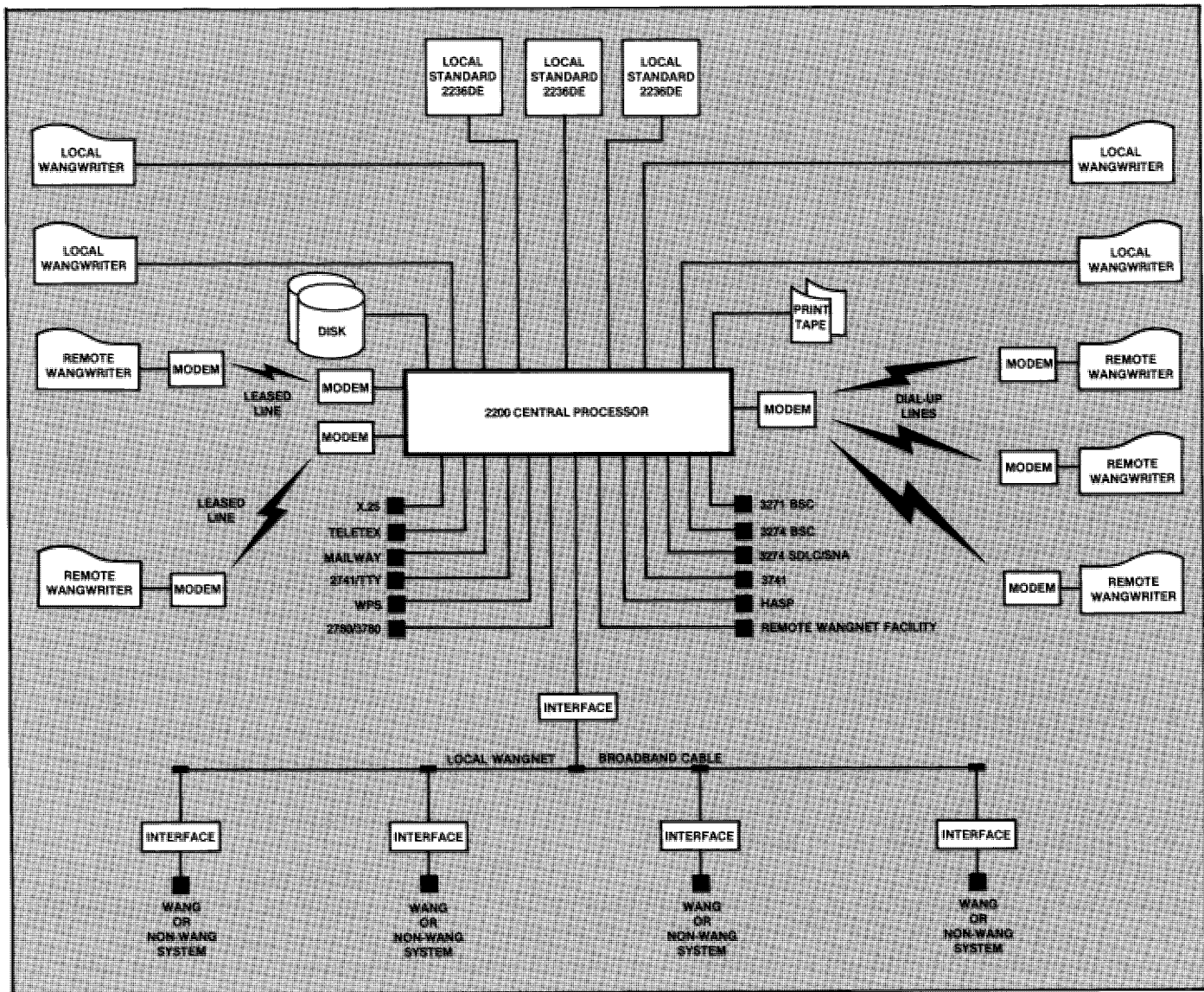
As many as 13 Wangwriters can be locally attached to a 2200LVP or MVP central processor; a single Wangwriter can be locally attached to a 2200SVP. Multiple Wangwriters can share access to a single 2200, with up to twelve 2200 terminal ports available for remote connections (one 2200 terminal port is reserved for a local terminal). Furthermore, each remote Wangwriter can also have dial-up access to different 2200 sites.

### NEW CAPABILITIES FOR THE WANGWRITER

In addition to acquiring access to the high-level languages (BASIC-2, -3 or COBOL) and multiprogramming capabilities of 2200LVP, MVP, and SVP systems, the Wangwriter can access 2200 systems with different peripheral devices. Depending on the particular central processor, 2200 configurations may include the following devices.

#### Disk Storage

2200LVP and MVP systems can be configured with multiple fixed/removable disk drives with storage capacities up to 80.4 MB per drive. Fixed/removable disk drives can be used for archiving documents from Wangwriter minidiskette. Other disk capabilities are available as well, including the following:



General Wangwriter/2200-System Configuration

- A Winchester-style, fixed disk drive is optionally available in 2-, 4-, 8-, 16-, and 32-MB storage capacities.
- A 1-MB, dual-sided, double-density diskette drive is standard equipment on 2200LVP and SVP CPUs; an optional second DSDD diskette drive is available on the 2200SVP.

### Printers

2200 Series LVP, MVP, and SVP systems support a wide variety of printer devices, including the following types.

- High-speed, draft-quality printers
- High-speed, solid-character printers
- Low-speed, typewriter-quality, standard and wide-carriage, daisy-wheel character printers

Note that the 2200SVP central processor has a connector for one system printer; any of the printer device types described above can be used for this purpose. Since the 2200SVP is a single-user system, a Wangwriter-emulated 2236DE attached as the system terminal also provides a local print capability, but the Wangwriter printer is used for this purpose.

### Tape Drives

2200LVP and MVP central processors can accommodate nine-track, 800 or 1600 bytes-per-inch Wang tape drives as system peripherals.

### Applications

2200 Series LVP, MVP, and SVP systems support a wide variety of application software, including the following.

- 2200 IDEAS™ Release 2 is an application development tool that creates BASIC-2 applications for the 2200 Series product line. The IDEAS Release 2 utilities establish and maintain data files, generate screen formats, produce reports, and create programs to solicit and validate operator-entered data, and sort data files.
- The Wangwriter 2236DE emulation can also support applications written for 2236DW terminals.

### 2200 COMMUNICATIONS VIA WANGWRITER 2236DE EMULATION

With 2236DE emulation capability, the Wangwriter can utilize 2200 integrated communications services. Through these services, many additional capabilities are gained.

### Utilities

Advanced Communications and Background Task Scheduling Utilities provide an effective combination for off-line preparation of both interactive and batch communications sessions and for on-line transfer of documents and files.

### User-Programmable Communications and Task Scheduling

For programmers, the Wang 2200LVP/MVP/SVP allows direct access to standard interface subroutines: Telecommunications Interface (TCI), File I/O (FIOI), Communication Job Queue (CJQI), and Background Job Queue (BJQI). With these subroutines, custom-tailored communication and background scheduling tasks can be written.

### Communications Protocols

By functioning as a 2236DE interactive terminal, the Wangwriter has access to all 2200 data communications protocols. For example, a 2228D controller in a 2200LVP system can emulate a 3274 control unit; any local or remote Wangwriter running 2236DE emulation could then logically attach as a 3278 display station, thereby allowing the Wangwriter to access 3270 applications.

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2200LVP, MVP, and SVP central processors, in conjunction with the 2228D Communications Controller (Option 28D for 2200SVP), are capable of supporting the following communication protocols: 2741/TTY ASC, 2780/3780 BSC, 3271 BSC, 3274 BSC, 3274 SDLC/SNA, X.25 (Packet Network Interface), and X.21 and RS-366 connection procedures. Also, the 2228B and 2228C support HASP and 3741; the 2228C additionally supports 3275 BSC.

#### Electronic Mail Services

- MAILWAY® is a centrally-controlled, automatic, electronic mail-and-message collection and distribution system used by Wang VS, OIS, and 2200 Series systems.
- The 2200 Teletex terminal facility is another electronic message delivery system offered by Wang. This system permits 2400-bps, non-interactive, page-oriented message communications with CCITT Teletex-compatible devices.

#### WangNet

Using any combination of local or remote Wangwriter-to-2200 connections, access to a variety of Wang or non-Wang systems can be achieved through 2200 connection to a WangNet cable system. Among the possibilities are: (1) connection to a VS host via 2200, with both processors attached to the same

WangNet broadband cable; (2) connection to a VS host via 2200, with both processors attached to a Remote WangNet link; and (3) connection to non-Wang systems via 2200, with both processors attached to the same WangNet broadband cable.

### PRODUCT CHARACTERISTICS

#### Ordering Information

W4-FTC-2236 (dual-sided double-density minidiskette) software  
 W4-FTC (communications controller) hardware

For a Wangwriter already equipped with the W4-FTC Communications Controller, only the software need be ordered.

#### Protocol

Asynchronous; full-duplex; 11 bits per character

#### Data Transfer Rate

300, 600, 1200, 2400, 4800, 9600, or 19,200 bps. On the Wangwriter, data transfer rate is a user-selectable parameter of the 2236DE emulation software; however, switch settings on the 2200 terminal controller determine selection of this parameter on the Wangwriter. Furthermore, for remote dial-up connections, data transfer rates may differ, depending on the particular 2200 system being accessed.

#### Electrical Interface

EIA RS-232-C and CCITT V.24-compatible

#### Modem Selection

For connection over a leased or switched telephone line, an asynchronous, RS-232-C/V.24-compatible modem, capable of supporting the desired data transfer rates and the required 11 bits per character (e.g., a Wang WA3451 Asynchronous/Synchronous Modem) can be used. For connections up to 50 feet (15.3 meters) over RS-232-C-compatible cables, a wang null modem is required.

#### Cable

One RS-232-C/V.24-compatible cable is used for connection of a modem to the W4-FTC Communications Controller. For local connections, standard 2236DE direct-connect cables can be used.

### ORDERING SPECIFICATIONS

A communications capability that allows connection of a Wangwriter to Wang 2200 Series LVP, MVP, and SVP systems. The capability must permit the Wangwriter to emulate the Wang 2236DE Interactive Terminal and to exercise all 2200 capabilities.

*Standard Warranty Applies*

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