

Update to Wordstar Will Find a Home With Touch-Typists

Version 6.0 has improved paragraph style function, superb page preview, strong printer support.

BY JOHN LOMBARDI
CONTRIBUTING EDITOR

Wordstar's Versions 4 through 5.5 brought the program within reach of many of the best professional word processing programs, and this most recent revision, numbered 6.0, offers some useful improvements. For example, Wordstar now supports the Hewlett-Packard Laserjet III printer and several new printer fonts. For a more comprehensive look, refer to the January 29 product comparison on word processing (Page 89) and the July 3, 1989 review (Page 55).

FEATURES:

Version 6.0 continues with the Wordstar tradition of enhancing the program by attachment. In this, as in the previous version, the basic Wordstar word processing engine includes attachments that bring extra features to the user without requiring a major rewrite of the underlying program.

One of Wordstar's most attractive features has always been its orientation toward touch-typists, those skilled technicians whose distaste for function keys is exceeded only by their fundamental distrust of mice and other pointers. This version, like 5.5, has pull-down menus accessed by Alt-key combinations and a point/select system for using these menus. Everything can still be done with Ctrl-key combinations.

This update improves the program's paragraph style function, which attaches a group of characteristics including fonts, margins, justification, and line heights to a paragraph and all subsequent paragraphs until the next style code is inserted. These styles can be saved by name and attached as a group, a concept pioneered in microcomputer word processing by Microsoft Word and adopted by most heavy-duty systems. Wordstar's implementation of this feature is reasonably strong and is now well documented in the manuals. The program also supports a variety of new printer fonts, such as the scalable fonts used in Postscript and the new Hewlett-Packard Laserjet III printer.

Wordstar 6.0 has page preview, although no editing is possible in the preview mode. The preview shows text in a wide array of formats, such as magnified sections of a page, single pages, facing pages, myriad thumbnail views, and multiple pages per screen. Its graphics capabilities remain fair, as Version 6.0 uses the same add-on program, Inset, to insert screen-capture images into a document. This system is relatively primitive compared to what is available in Ami Professional, Microsoft Word for Windows, and Word Perfect 5.1, for example.

Wordstar 6.0 includes a file conversion program called Star Exchange, another add-on that works about as well as similar utilities included with such products as Microsoft Word or Word Perfect. Another utility program, Profinder, provides a file manager and DOS shell, with a set of utilities for creating menus to select programs, and a file management system that lists, sorts, views, moves, copies, deletes, and otherwise handles file management chores. Profinder also has a utility that allows you to copy a block from a viewed file into a Wordstar file.

As in the previous version, Wordstar has a telecommunications module that

has been optimized for use with regular information utilities such as Compuserve and includes the Xmodem and Xmodem-CRC file transfer protocols. PC-Outline, a competent add-on product from Brown Bag Software, is minimally integrated into Wordstar but uses a significantly different command syntax and cannot print from Postscript printers.

In an enumeration of features, Wordstar 6.0 comes off well in comparison

with the heavy-duty market leaders, but it is still missing several items, such as sophisticated graphics, cross-referencing, and mouse support.

PERFORMANCE:

Wordstar's general editing capabilities are equal to the competition in many areas, and touch-typists will love the Ctrl-key editing. Wordstar can edit two files simultaneously, but like most character-

based software, it lacks the windowing flexibility of GUI applications. Wordstar continues to suffer from some minor limitations, including no right justification (not to be confused with full justification, which the product supports), a status line that lacks helpful information such as which font is currently selected, an inflexible tab leader feature, and a somewhat limited date-and-time stamping facility. Lacking these

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refinements. Wordstar's generally powerful editing tools rate very good.

Wordstar 6.0's spelling checker and thesaurus remain unchanged from Version 5.5. The program maintains capitalization and supports user dictionaries and foreign language dictionaries (at an extra cost). Spelling checker and thesaurus features are rated very good.

Mail merge, also unchanged, was one of the first add-ons to the classic Wordstar. It offers good functions with the basic features for preparing form letters, selecting records, and reformatting text as letters are merged. We rate Wordstar's mail merging very good.

Wordstar 6.0 has better-than-average layout capabilities, although it does not show multiple columns side by side on the screen. It does automatically set up newspaper columns, and the page preview is effective. If your text goes beyond the right of the screen, you will have to scroll horizontally to view the rest of the text. Layout is rated good.

Inset, an add-on program, provides less-than-adequate graphics integration. While the program will handle such things as signature files, Wordstar 6.0 attaches a graphic image with a special nonprinting tag line inserted in the text and does not automatically make space for the image. Consequently, Inset does not make Wordstar competitive with the market in flexibility or ease of use. Inset has much to offer as a stand-alone graphics screen-capture utility, but it does not compare with either Word Perfect or Microsoft Word in graphics integration. We rate graphics poor.

The features included in PC-Outline are quite extensive, but as an add-on program with a different command syntax, PC-Outline's integration with the rest of the program is less effective than it should be. Outlining earns a score of good.

Wordstar's table of contents and indexing have not been changed in this update. While you can have multilevel tables of contents, the process is needlessly tedious. We rate table of contents and indexing good.

Style sheets have been slightly upgrad-

ed and better documented from their first appearance in Version 5.5. You can define paragraph styles by name and store them either with the document or in an external file. You cannot, however, record styles by example nor can you view the style changes before you apply them. Style sheets are good.

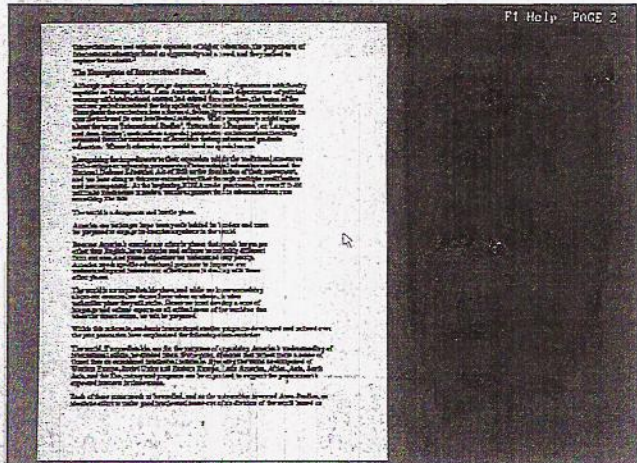
Font support in Wordstar 6.0 includes soft fonts of various types and a comprehensive printer driver and font width table modification program. Font changes are easy; the page preview has the added advantage of including screen fonts derived from the printer fonts so that the preview will be even more exact. However, the font selection system in Wordstar allows you to select more soft fonts than a Laserjet, for example, can hold, and this can overload the printer's memory. Also, the download program is much less effective and transparent to the user than Word Perfect's. Wordstar 6.0 adds scalable fonts for use with a Laserjet III and Postscript printers that will allow downloading. We rate Wordstar 6.0's fonts very good.

The program's footnoting capability remains the same, allowing endnotes and footnotes to be used in the same document. A dot command will convert endnotes to footnotes, comments to notes, and the like, a useful enhancement. We rate footnoting very good.

Macros, called shorthand macros in Wordstar, provide the basic keystroke capture with text and commands that can be stored in a file and reused. Although the Wordstar macro feature is an acceptable implementation, it cannot double as a word processing programming language for complex tasks requiring constructs or variables, for example, as is possible in Word or Word Perfect. We rate macros satisfactory.

Wordstar 6.0's printer support is strong. The program supports a wide range of printers including scalable font, Postscript, and soft font laser printers, and it has a good printer modification program for custom adjustment. Printer support rates excellent.

Compatibility is also very competitive



Wordstar 6.0's preview screen shows line breaks and typesets, as well as other paging and viewing options.

because Star Exchange, an add-on file utility, translates standard formats such as ASCII, DCA/RFT, Word Perfect, Word, Multimate, and others. In addition to the file conversion, Wordstar will import Lotus 1-2-3-compatible worksheets without conversion using either entire sheets or named ranges. We rate Wordstar 6.0's compatibility very good.

Wordstar's speed results were mixed, with several fast scores (importing an ASCII file, loading a document, and appending a file), but with some slower scores on other procedures (importing a DCA/RFT file, jumping from top to bottom of a document). Overall, Wordstar is quick. We rate speed good.

DOCUMENTATION:

Compared to Version 5.5, Wordstar 6.0 has improved documentation, including installing and customizing, training and applications, reference, and companion program books. There is also a pocket Wordstar booklet with command summaries and other handy information. Wordstar 6.0 comes with an on-screen tutorial and a separate set of lessons that lead users through the different tasks.

The manuals and booklets are clear and well presented. The indexes are good and the sections on each of the separate modules are complete and include sufficient examples and illustrations.

Error messages are clear, on-line help is reasonably complete, and the menu system is clear and effective, whether using the classic menus or the pull-down style. Wordstar's documentation earns a very good.

EASE OF LEARNING:

Font selection in printer installation is easy and printer setup is as good as any in the business. Wordstar 6.0 has a fine set of auto-install procedures that effortlessly move the program from the distribution disks to a hard disk. Wordstar is somewhat hard to learn because of its user interface. The program's commands quickly become intuitive, though they are not so at first. Errors or misunderstandings in the installation process can easily be recovered, and the user can reinstall or change the installation setup with considerable ease. We rate Wordstar 6.0's ease of learning good.

EASE OF USE:

Several hours will be required to gain a reasonable level of competence for daily work. But once learned, the basic engine

is remarkably easy to use, especially for touch typists. Wordstar includes a superior customization program that allows a wide range of operational characteristics.

The patchwork nature of the user interfaces of each of these separate modules plus the lack of automatic white space for the graphics inclusion prevent this program from scoring higher than good.

ERROR HANDLING:

Wordstar never calls up the original file on disk but only a copy. When Wordstar saves a file it always saves the working file, then changes the name of the original file to carry the .BAK designation, and then deletes the image of the working file from memory. Consequently, any power failure or other defect will lose only the information changed or added since the file was last saved. The program will not let you abandon a changed file without giving you an opportunity to save it. An undo will handily restore most deleted text. We rate error handling and data integrity good.

SUPPORT:

Wordstar International offers a 30-day warranty guaranteeing the product will do what the manual says it will do. The company has a toll-free technical support line and a Compuserve special interest group. We rate Wordstar International's support policies very good.

Our calls to Wordstar International technical support were well received, a marked improvement over our previous experience. The answers to our questions were well informed and correct. There is also a Compuserve Wordstar forum where technical questions are answered by other users and sometimes by Wordstar employees. We rate the improved technical support very good.

VALUE:

At \$495, Wordstar 6.0 is within the price range of the heavy-duty word processing packages such as Word Perfect and Microsoft Word. It is less powerful than those packages as a word processing workhorse, but it does include an outline (not available in Word Perfect, for example), and it has a telecommunications module (not available in either of the market leaders). Further, some users will prefer the user interface offered by Wordstar as opposed to the menus, speed keys, mouse, or function key approaches used by Microsoft Word or Word Perfect. Wordstar 6.0's page preview is superb, its

BENCHMARKS

INFO WORLD

Office/Professional Word Processors

	Wordstar Version 6.0	Microsoft Word ¹ Version 5.0	Word Perfect ² Version 5.1
File*			
Load	0:02	0:01	0:02
Save	0:07	0:02	0:01
Import ASCII	0:32 ³	0:02	0:15
Export ASCII	0:23	0:02	0:08
Import DCA/RFT	0:41	1:01	0:14
Cursor movement			
Top to bottom	0:04	0:01	0:07 ³
Manual scroll	1:06	0:31	0:49
Reformat	0:32	0:12	2:16 ⁴
Search			
Last word	0:05	0:02	0:07
Global replace	0:20	0:10	0:12
Append file	0:04	0:02	0:01

*File size approximately 50K/17 pages.

Time in minutes:seconds, unless otherwise noted.

Tests performed on an 8-MHz IBM AT Model 339 80286 with a 30-megabyte hard drive, EGA, and 640K of RAM.

¹Microsoft Word and Word Perfect reviewed in product comparison of January 29 (Page 89).

²Wordstar combines two timings: opening a file and reformatting text.

³Second timing was significantly faster in Word Perfect (three seconds).

⁴We could not globally alter rulers/style sheets in Word Perfect. Time indicates how long it took to alter each ruler/style sheet individually.

math function is better than the leaders, but its annotation, footnoting, headers and footers, cross-references, and graphics integration are less effective. We rate Wordstar 6.0 a good value.

John Lombardi is president of a major university and author of five books. He has been working with computers since 1967.

REPORT CARD INFO WORLD

OFFICE/PROFESSIONAL
WORD PROCESSOR

Wordstar

VERSION 6.0

Criterion	(Weighting)	Score
Performance		
Basic editing	(60)	Very Good
Spelling checker/thesaurus	(60)	Very Good
Mail merge	(20)	Very Good
Layout	(60)	Good
Graphics	(50)	Poor
Outlining	(20)	Good
TOC and indexing	(20)	Good
Style sheets	(20)	Good
Font support	(50)	Very Good
Footnoting	(25)	Very Good
Macros	(25)	Satisfactory
Printer support	(60)	Excellent
Compatibility	(60)	Very Good
Speed	(50)	Good
Documentation	(75)	Very Good
Ease of learning	(75)	Good
Ease of use	(130)	Good
Error handling	(40)	Good
Support		
Support policies	(20)	Very Good
Technical support	(20)	Very Good
Value	(50)	Good
Final score		6.7

PRODUCT SUMMARY

Company: Wordstar International, 201 Alameda del Prado, Novato, CA 94949; (800) 227-5609.

List Price: \$495.

Requires: IBM PC, PS/2, or compatible; MS-DOS 2.0 or later; 384K of RAM (512K for full function) and two disk drives (a hard disk is recommended for page preview and add-on modules); graphics card required for preview. Supports monochrome, EGA, and VGA graphics; network support available.

Pros: Strong editing tools; very good mail merge and telecommunications module; good add-on outliner; good page preview.

Cons: Inconsistent user interface among modules; limited headers and footers; poor graphics integration.

Summary: Keyboard-intensive and relatively powerful, Wordstar 6.0 has a host of features and a number of less well-integrated add-on modules. Superb for editing and writing, somewhat less effective for complex documents with large amounts of graphics, it is recommended for users with a wide range of needs and strong touch-typing skills.

HP Vectra 486 Features Disk Speed and Compatibility

Its board design and EISA architecture make the 25-MHz 486 easy to configure and expand.

BY ANDRE KVITKA TEST CENTER
AND TRACEY CAPEH
ASSOCIATE REVIEWS EDITOR

After a rocky start caused by bugs in the Intel 80486 chip and compatibility problems with the EISA chip set, Hewlett-Packard Co. has released its most powerful PC, the Vectra 486. Announced in October 1989, HP started shipping its newest addition to the HP Vectra line of computers in February. The Vectra 486 features a 25-MHz 80486 processor, tower design, Extended Industry Standard Architecture (EISA), and a 330-megabyte hard disk.

The Vectra 486's primary market will be file servers and CAD environments. However, for this first review, we scored the Vectra's performance using our stand-alone workstation CPU- and disk-intensive throughput tests. In an upcoming file server product comparison we will look at the Vectra's capabilities as a server. The CPU test measures the speed of a computer's CPU and memory architecture running common business applications. We time how long the computer takes to process files in Autocad, Version 10; Lotus 1-2-3, Release 2.2; Lotus 1-2-3, Release 3.0; and Word Perfect 5.0.

The disk-intensive test measures the accumulated time it takes to modify data files in Dbase III Plus, Dbase IV, and Paradox 386. Modifying files in these applications requires more work from the hard disk than the CPU. (For more details on how we test and score 80486 CPUs, see "Real Applications in Real 486 Computers" in our 486 product comparison of March 12, Page 57).

Although the Vectra 486 has no external RAM cache (the Intel 80486 chip has 8K of internal RAM cache), its overall performance is above average. It completed our CPU test in 12 minutes and 11 seconds—about 7 percent slower than the fastest 486 system we've reviewed (the ALR Powercache 4e—

another EISA machine), and slightly above the mean for the group.

The Vectra 486 proved surprisingly fast running our disk-intensive test. It took just 28 minutes and seven seconds—three minutes, nine seconds faster than the Blackship 486/25, our previous disk-intensive throughput leader.

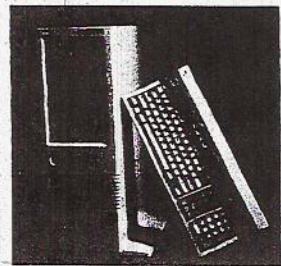
The Vectra has exceptional hardware and software compatibility. It ran without difficulty our entire suite of software, including more troublesome multitasking applications such as Quarterdeck's Desqview and Microsoft Windows. Other than

"The HP Vectra has exceptional hardware and software compatibility."

changing the ROM address on our IBM Token Ring network adapter, we did not find any hardware compatibility problems.

The Vectra has an unusual combination of expandability features. Instead of a single system board, the Vectra has separate, removable CPU and RAM memory cards attached to a backplane. Several computer manufacturers use similar architectures to give their systems an upgrade path. According to Hewlett-Packard, the Vectra 486 has removable CPU and memory cards for easier servicing. The Vectra's backplane also has eight 32-bit EISA slots, each of which can also work as an 8- or 16-bit ISA slot. The CPU card contains the Intel 80486 chip and the system ROMs, and plugs into a massive, proprietary 420-pin connector.

REPORT CARD INFO WORLD



25-MHz 486 EISA COMPUTER

HP Vectra 486

Criterion	(Weighting)	Score
Performance		
Speed		
CPU-intensive applications	(100)	Very Good
Disk-intensive applications	(100)	Excellent
Fastest time of all 486s reviewed.		
Software compatibility	(150)	Excellent
Hardware compatibility	(125)	Excellent
Expandability	(75)	Excellent
Documentation	(50)	Very Good
Well organized; ample number of diagrams.		
Setup	(100)	Very Good
Removable CPU card; no jumpers or switch blocks.		
Serviceability		
System design	(50)	Good
EISA architecture; rugged construction; only a few patches on CPU card and system board; CPU card easily removed.		
Support policies	(50)	Poor
One year warranty; dealer-only support.		
Technical support	(75)	Excellent
Based on InfoWorld reader survey.		
Value	(125)	Satisfactory
Final score		8.1

PRODUCT SUMMARY

Company: Hewlett-Packard Co., 19310 Pruneridge Ave., Cupertino, CA 95014; (800) 752-0900.

List Price: \$18,296 as configured.

Features: 25-MHz zero-wait-state 80486 CPU, speed switchable via software; two serial, one parallel, one mouse port; no Waitt coprocessor support; 264-watt power supply.

Peripherals: Enhanced keyboard; HP 16-bit Super VGA adapter.

Storage and Memory: 330-megabyte HP hard disk with ESDI 1:1 controller; 1.2-megabyte 5 1/4-inch floppy drive; 4 megabytes of 80-nanosecond RAM in SIMMs (64 megabytes maximum).

Pros: EISA architecture; nicely designed; exceptional hard disk speed.

Cons: Comparatively high price; dealer-only support.

Summary: The Vectra 486 PC, true to HP's reputation, is a rugged, well designed, and very compatible machine at a premium price.

APPLICATIONS TESTS

INFO WORLD

25-MHz 486 Computers

(test times in minutes:seconds)

	Hewlett-Packard Vectra 486 PC	ALR Powercache 4 ¹	AST Premium 486/25 ¹	IBM PS/2 Power Platform 486 ¹
CPU-intensive	12:11	11:35	11:51	14:09
Disk-intensive	28:07	31:50	31:56	51:42
Autocad, Release 10	02:21	02:09	02:17	02:53
Dbase III Plus 1.1	12:56	15:49	16:10	26:47
Dbase IV 1.0	07:09	07:15	07:09	10:52
Lotus 1-2-3, Release 2.2	03:56	03:52	03:53	04:29
Lotus 1-2-3, Release 3.0	04:43	04:34	04:40	05:27
Paradox 3/386	08:02	08:46	08:37	14:03
Word Perfect 5.0	01:11	01:00	01:01	01:20

¹ALR, AST, IBM machines reviewed in product comparison of March 12, Page 49.

Our applications suite of common business programs tests different aspects of system performance, including video (Autocad), expanded memory (Lotus 1-2-3, Release 2.2), extended memory (Lotus, Release 3.0), and 32-bit operation (Paradox). If you plan to buy a machine for a specific application, you should compare times for that program. Lower numbers indicate better performance.