REVIEWS

Displaywrite's menu-driven interface provides easy access to a variety of functions and features at the press of a function key — such as formatting and type styles.

While competition has improved and enhanced most word processors, Displaywrite has stayed put, thereby losing ground to increasingly powerful products. Thus this update and enhancement brings some welcome improvement. But while it is better than its predecessor, Displaywrite 4, Version 2.0 would not be a competitive office/professional word processor without its corporate parentage from IBM.

Displaywrite 4 Emerges With Welcome Enhancements

However, it still falls far short of word processors such as Microsoft Word and Word Perfect.

BY JOHN LOMBARDI CONTRIBUTING EDITOR

FEATURES:

Displaywrite 4 has always had a significant following, in part because of its Big Blue trademark, but also because it implements a highly structured, modular format driven by a carefully designed menuing system suited for common office tasks. As a word processor for people who produce standardized, structured, or mail-merged documents, Displaywrite 4 has many useful features. Nevertheless, even in this improved version, Displaywrite 4 cannot compete with the best in the field in features or flexibility.

Version 2 adds a range of common, non-IBM brand printers — including dot-matrix, daisy-wheel, and laser — but its printer support for proportionally spaced fonts is limited and there is no Postscript support. While it does a creditable job with standard office tasks, it lacks a host of common features, such as table of contents and index generation, now standard in competitive products. There are minimal cursor and editing commands, no nonprinting comments in the document, and no graphics preview or useful graphics inclusion. Displaywrite continues to use a slow and clumsy pagination system, although it paginates automatically as text is first entered.
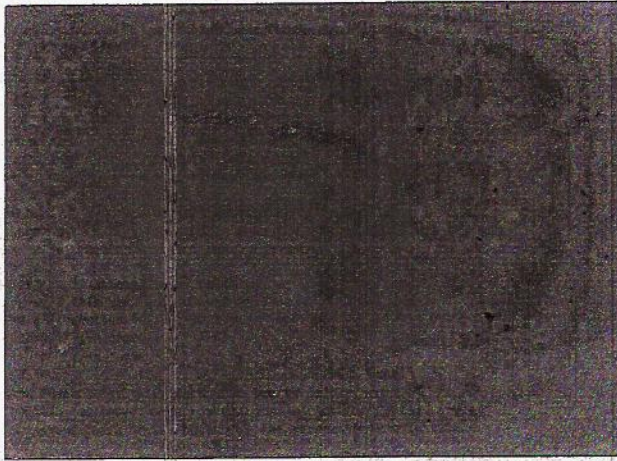
Among office and professional word processors, the improved Displaywrite 4 continues to rank below the likes of Microsoft Word, Word Perfect, Office Writer, or Wordstar 5.

PERFORMANCE:

Displaywrite's basic editing capabilities are generally adequate. Yet they lack frills and a few important elements, such as a search-and-replace feature that maintains capitalization. The program will not move the cursor from the first character on a line to the last character on the line above with the left arrow key (to do this, you must use Ctrl-key combinations). The program will not permit columnar cut and paste. Displaywrite 4, Version 2 does not support document tracking with either comments or a revision history.

A second document can be viewed while editing the first document, an enhancement over the previous version. Strikeout and revision marking is supported. Mouse support is minimal, however, being limited primarily to point and mark, and mouse movement is jerky.

With this plain-vanilla set of features and considering the few below-par implementations, we cannot give a higher rating than satisfactory for basic editing.

Formatting capabilities include support for multiple parallel columns, and you can create newspaper-style columns that even include a column balancing option not included in such products as Word Perfect. You can specify text as left or right justified or centered; moreover, centering can be done around any point on the ruler line. Widow lines can also be controlled.

However, there are no right/left page or portrait/landscape orientation options, and vertical units are still expressed in lines rather than inches. While there is no graphics print preview, a general preview is available that at least shows line and page breaks, if not a WYSIWYG layout. The page orientation problems, combined with mostly no-frills layout features, equate to a poor formatting score.

Font support lacks some styles, such as italics, although super- and subscripting and boldfacing are supported. Displaywrite won't support soft fonts on the HP LaserJet, only cartridge fonts. In addition, some functions normally handled by competing word processors on the LaserJet cannot be used with Displaywrite, such as changing fonts in the middle of a line, justification, and text column creation. We rate font support poor.

While no style sheet capability is offered, any existing Displaywrite documents imported into other Displaywrite documents retain their formatting. While this is no substitute for a style sheet feature, it will save time when trying to combine documents.

The 125,000-word spelling checker is improved over the previous version and includes a new synonym finder. But the speller doesn't maintain capitalization when replacing words, nor will it skip a variant spelling throughout the document. Displaywrite can keep three dictionaries active, and uses dictionary hyphenation. We rate spelling checking and thesaurus capabilities satisfactory.

The mail-merge and document-creation functions remain two of this product's stronger points, with automatic reformatting of merged text and conditionals. The program offers strong compatibility with other file formats for data from spreadsheets and databases including Lotus 1-2-3, Multiplan, and other standard files compatible with .WK1, .WKS, .WR1, .WRK, Sylk, DIF, PDS, or Dbase files for Versions III and III Plus. You also have access to some programming capabilities (e.g., conditionals). Displaywrite lacks, however, any reasonable error-correction facilities during a merge. In balance, we rate mail merging satisfactory.

While you can generate a simple outline and combine outline levels, you cannot collapse or expand an outline as in a traditional electronic outline. Since you can view a second document while you work, you can also view an outline. These capabilities are sufficient for a satisfactory outlining score.

Unlike most competitors, Displaywrite 4 supports neither table of contents nor index generation. A separate IBM

REPORT CARD — INFO WORLD

WORD PROCESSING SOFTWARE

Displaywrite 4
VERSION 2.0

Criterion	(Weighting)	Score
Performance		
Basic editing	(50)	Satisfactory
Formatting	(25)	Poor
Fonts	(20)	Poor
Style sheets	(20)	N/A
Spelling checker/thesaurus	(50)	Satisfactory
Mail merge	(25)	Satisfactory
Outlining	(20)	Satisfactory
TOC and indexing	(20)	N/A
Footnotes	(20)	Satisfactory
Macros	(25)	Good
Graphics	(30)	Poor
Printer support	(30)	Satisfactory
Compatibility	(40)	Satisfactory
Speed	(50)	Satisfactory
Documentation	(100)	Satisfactory
Ease of learning	(100)	Good
Ease of use	(200)	Satisfactory
Error handling	(75)	Satisfactory
Support		
Support policies	(25)	Good
Technical support	(25)	Satisfactory
Value	(50)	Satisfactory
Final score		**4.8**

PRODUCT SUMMARY

Company: IBM Corp., Displaywrite Product Support Center, 5 West Kirkwood Blvd., Roanoke, TX 76299; (800) IBM-2468, Ext. 126 for dealer information.
List Price: $495.
Requires: IBM PC; PC-DOS 2.1 or later (3.3 recommended); 380K of RAM; hard drive; versions available for OS/2 Standard or Extended (compatibility mode) 1.0, 1.1; works with Novell and 3Com networks; also supports IBM PC Network and Token Ring Network.
Pros: Effective mail merge; strong document assembly; good support of IBM-brand accessories; improved printer support.
Cons: Less-effective editing commands; no graphics support; clumsy reformatting for page breaks.
Summary: Displaywrite 4, Version 2 is an office/professional word processor best suited for environments with major document assembly and list processing tasks using mostly IBM-brand equipment.

product that provides this capability, Displaywrite Index Support, is available for $125.

Footnoting now supports spell checking in the footnote area as well as widow-line control. Displaywrite has facilities for maintaining a footnote library, a useful feature. While on-screen numbering is included, there is no way to distinguish a number as a footnote unless you paginate the document — it looks like a standard numeric character on the screen. Nevertheless, footnotes are implemented adequately and we rate them satisfactory.

Displaywrite supports macros quite well, letting you enter custom commands, record keystrokes, and store the macros in a separate file. User prompts are possible and function keys can be reassigned to different functions. We rate macro capabilities good.

In terms of graphics, however, Displaywrite only handles line drawing; you cannot integrate any graphics. As a result, we rate graphics poor.

IBM has improved Displaywrite's printer support by adding drivers for a number of popular printers including the Diablo daisy-wheel printer and the HP Laserjet, as well as a variety of popular dot matrix printers. The best printer support, however, still goes to IBM-brand printers. Displaywrite does not handle serial printers automatically, requiring you to set up the proper mode commands (which are described). There is no support for Postscript printers or the HP Deskjet or Deskjet Plus. We rate printer support satisfactory.

Compatibility includes file conversion for ASCII and RFT/DCA or FFT/DCA files. Displaywrite is also compatible with a host of IBM file formats, which is helpful for the office standardized on IBM software. We rate compatibility satisfactory.

While not out of range, Displaywrite's speed is slower in most categories than products such as Word Perfect and Microsoft Word, and is especially slow in reformatting with pagination. We rate speed satisfactory.

DOCUMENTATION:

Displaywrite's documentation is reasonably complete, but the indexes are only fair and the manual has no glossary. However, the quality of the *Getting Started* manual is quite good and the reference and technical manuals are useful.

All in all, documentation earns a satisfactory score.

EASE OF LEARNING:

This version of Displaywrite is relatively easy to learn, thanks to elaborate context-

"*Displaywrite's mail-merge and document-creation functions remain two of this product's stronger points.*"

sensitive help screens that let you find almost anything required to complete a task. Moreover, the transitions between Displaywrite's various functions (known as tasks in IBM parlance) are quick and virtually transparent. There is no on-line tutorial, but the *Getting Started* manual includes a good written tutorial. It is still difficult, though, for inexperienced users to learn how to manage some of the more complicated features. We rate ease of learning good.

EASE OF USE:

The combination of good menus and the extensive help screens also enhance ease of use. But while some functions can be called with a single keystroke, most require selection from a menu. Also,

pagination can be cumbersome. When you combine these hindrances with Displaywrite's limited cursor controls, the program's effectiveness for experienced users is reduced. We rate ease of use satisfactory.

ERROR HANDLING:

Displaywrite saves a backup file whenever you begin editing. An unanticipated termination can delete significant portions of newly entered text, although a special recovery utility improves the chances of getting your data back. The Undo command only recovers the most recent block deletion, and not deletions performed with the Backspace or Delete key.

We were able to hang the program after trying to merge data with a form-letter template, requiring a reboot to continue. Fortunately, each time we reproduced this apparent bug and restarted the computer, the merge had been successfully performed and data integrity was maintained.

Considering our problems along with Displaywrite's backup and recovery features, we rate error handling satisfactory.

SUPPORT:

We are delighted that IBM has finally decided to provide support for Displaywrite. One year of technical support includes a toll-free line and a product usability warranty. This support is not necessarily described in your manual, because it was added after the product shipped.

We rate support policies good.

We were able to reach technical support easily; they called us back promptly after leaving a message 10 minutes earlier. The answers were correct and adequate, and the support personnel were friendly. We rate technical support satisfactory.

VALUE:

While Displaywrite 4, Version 2 is better than the previous version, it still falls considerably below the standard of Microsoft Word or Word Perfect and is less of a value than Wordstar 5.5, for example. It does well with large, structured or mail-merged documents, however, and is a natural consideration for shops standardized on IBM equipment and software.

At $495, Displaywrite is a satisfactory value. □

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

InfoWorld Guide to Reviews

REVIEW SCORING

InfoWorld reviews only finished, production versions of products, never beta test versions.

Products receive ratings ranging from unacceptable to excellent in various categories. Scores are derived by multiplying the weighting (in parentheses) of each criterion by its rating, where:

Excellent = 1.0 — Outstanding in all areas.
Very Good = 0.75 — Meets all essential criteria and offers significant advantages.
Good = 0.625 — Meets essential criteria and includes some special features.
Satisfactory = 0.5 — Meets essential criteria.
Poor = 0.25 — Falls short in essential areas.
Unacceptable or N/A = 0.0 — Fails to meet minimum standards or lacks this feature.

Scores are summed, divided by 100, and rounded down to one decimal place to yield the final score out of a maximum possible score of 10 (plus bonus). Products rated within 0.2 points of one another differ little. Weightings represent average relative importance to *InfoWorld* readers involved in purchasing and using that product category.

You can customize the report card to your company's needs by using your own weightings to calculate the final score.
Average score (1988) for all products reviewed: **6.5.**

INDEXES

Indexes appear in the first issues of January, April, July, and October. For back issues, specify dates and send $2.95 per issue to *InfoWorld* Customer Service, P.O. Box 5994, Pasadena, CA 91107. Please allow six weeks for delivery.

Target Editions are sent only to volume buyers of target products.

REVIEWS POLICY

InfoWorld publishes each year in-depth reviews and product comparisons of approximately 1,000 microcomputer products we judge important, interesting, and useful to our readers. To submit a product for review consideration, send product announcements, marketing materials, demos, or ad copy describing the product to Reviews Editor, *InfoWorld*, 1060 Marsh Road, Suite C-200, Menlo Park, CA 94025. (Send news and new product announcements separately to News Editor.) Please do not send hardware. Unsolicited materials are not returned.

The editorial review board selects products for review for each cycle. If your product is selected, you will be contacted to arrange shipment of the product for review. We request two copies of software; we return hardware, but not software, after review.

Because of the volume of submissions, we regret we are unable to contact vendors regarding products not selected for review.

BENCHMARKS — INFO WORLD

Office/Professional Word Processors

	Displaywrite 4 Version 2.0	Microsoft Word Version 5.0	Microsoft Word Version 4.0	Word Perfect Version 5.0
File				
Load	6	1	1	2
Save & continue	4	2	4	4
Import ASCII	14	2	1	Varies[1]
Export ASCII	50[2]	2	55	8
Import DCA/RFT	15	1:01	59	20
Cursor movement				
Top to bottom	3	1	<1	2
Manual scroll	1:36	31	94	45
Reformat	3:53[3]	12	11	20[4]
Search				
Last word	5	2	2	2
Global replace	43[5]	10	14	6
Append document	6	2	<1	1

All times in seconds, unless otherwise noted (1:00 is one minute).
[1] Word Perfect's Import ASCII score varied from eight to 15 seconds.
[2] It took 20 seconds in Displaywrite to manually select a document one page at a time for exporting to ASCII.
[3] Pagination in Displaywrite required manually adjusting margins on each ruler, which took just over three minutes.
[4] Could not globally alter rulers/style sheets in Word Perfect. Score indicates the time required to alter each ruler/style sheet individually.
[5] Displaywrite allows up to three search strings at one time. To replace all occurrences of "the," we had to replace two strings ("The" and "the").