

  
MicroPro®



**WORDSTAR<sup>®</sup>**  
**CP/M<sup>®</sup> EDITION**

WHAT'S NEW

# **WORDSTAR<sup>®</sup>**

## **CP/M<sup>®</sup> EDITION**

Release 4

### **What's New**



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33 SAN PABLO AVENUE • SAN RAFAEL, CALIFORNIA 94903 • USA

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# What's New

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A lot has changed in WordStar! New commands have been added and old ones have been updated. And, if you want to change the way certain commands work, almost every feature can be adjusted to work just the way you want it to.

Files created with previous versions of WordStar are compatible with this release of WordStar.

At the back of this booklet is a chart showing each new and changed command. Here's a summary of what's new in WordStar.

**Unerase** In addition to interrupting a command, ^U will now restore the most recently deleted segment of text. Use it to restore text deleted with ^Y, ^T, ^KY, ^Q Del, ^QT, and ^QY. See *Undo and unerase* in the "Reference Guide."

**Shorthand** Create up to 36 keystroke macros for strings of text or commands. Press Esc and type the shorthand character and WordStar executes the long sequence of keystrokes. See *Shorthand* in the "Reference Guide."

**User number support** Edit a file in any user number by specifying the number. See *Logged drive and user numbers* and *User numbers* in the "Reference Guide."

## What's New?

**Onscreen display** Bold and underlined text are now shown onscreen on many terminals. Use ^OB to display plus signs (+) that indicate soft spaces in your document. See *Soft spaces and carriage returns* in the "Reference Guide."

**Proportional spacing** .PS turns proportional spacing on and off if your printer supports it. Use the ^P@ command to align columns of proportionally spaced text when you print. Even if you use a proportional font, text preceded by ^P@ will always line up. See *Columns and Proportional spacing* in the "Reference Guide."

**Embedded ruler lines** ^OO places a copy of the current ruler line into your document, or you can type an embedded ruler line with the .RR command. These ruler lines are saved with your document and remain active when the document is reopened. New text that you type below a .RR ruler line will conform to its tabs and margins settings. You can modify the ruler line at any time, just like any other text. See *Ruler lines* in the "Reference Guide."

**Go to page/line** In document mode, ^QI moves the cursor to the page number you specify. In nondocument mode, you can specify a line number. See *Finding your place* in the "Reference Guide."

**Math** WordStar now supports 4 mathematical operations. While you are editing, you can solve a math equation with the ^QM command or calculate the sum of the numbers in a marked block with ^KM. See *Block math and Calculator* in the "Reference Guide." (Note: Some systems may not have enough TPA memory available for this function.)

The .MA command sets a merge print variable to the result of a mathematical equation. You can use it to figure out invoice totals while your document is printed. See *Merge printing* in the "Reference Guide."

**Run a program** You can now run a program from inside WordStar. Use R from the Opening Menu. See *Running a program* in the "Reference Guide."

**Multi-user support** WordStar Release 4 is optimized to run on multi-user systems. WordStar now supports file-locking under the most popular operating systems. See your dealer for licensing information.

**Better use of the keyboard** The Backspace and Del keys work differently: Backspace erases the character to the left of the cursor; Del erases the character at the cursor. See *New and Changed Commands* in this booklet for

a complete list. You can change the way these keys work if you want to. See Appendix C, "Customizing WordStar."

**Improved speed for all users** Whether you have a two floppy disk system, or a hard disk computer, WordStar is faster than ever. With all its added functionality and new features, WordStar can still be run from a single floppy disk. See "Starting" and Appendix E, "Making the Best Use of User Numbers."

**Multiple-line headers and footers** You can have up to three header lines and three footer lines on any page in your document. Use .H1, .H2, and .H3 or .F1, .F2, and .F3 to define them. See *Footers and headers* in the "Reference Guide."

**Enhanced printer support** When you print a file, you can specify which printer to use and how many copies to print. You can customize WordStar for your special printing needs by modifying the CUSTOM and SIMPLE printer drivers. See *Printer drivers* and *Printing a file* in the "Reference Guide" and look at the README file on the WordStar Installation disk.

Create ASCII disk files with the ASCII printer driver. See *Printing to disk* in the "Reference Guide."

Support for the HP Laser Printer is improved. You are now able to print in proportional fonts on both the B and F cartridges, and print in portrait and landscape modes. In addition, you can also use the following laser printers: Canon LBP8, Corona LP-300, and Ricoh LP 4080.

**Installation and customization** There are now two programs for installing and customizing WordStar. WINSTALL is designed to get you up and running quickly and easily. WSCHANGE lets you customize almost anything in WordStar to your needs and preferences. Use the new auto patcher to save your changes as a nondocument file and read them in to other copies of WordStar. *Note:* Patches created for previous versions of WordStar won't work with WordStar Release 4. Use WSCHANGE instead. See Appendix C, "Customizing WordStar."

**Cleaner menus** As soon as you start up WordStar, you'll notice a cleaner, more organized look. The new menus give you lots of information efficiently and attractively.

## What's New?

**New documentation** The WordStar documentation has been completely redone for this release.

- “Learning” includes new lessons which are quick and easy to do. They cover everything from basic word processing to sophisticated applications.
- The “Reference Guide” now lists subjects in alphabetical order for easy access.
- Appendices like the “Command Summary,” with every WordStar command and its parameters, and “Customizing WordStar,” a guide to WSCCHANGE, are found at the back of the manual.

**Improved indentation** Use the .LM and .RM commands to change your left and right margins--onscreen and when you print. Use the .PM command to change the left margin for the first line of each paragraph. You can realign your whole document, without losing your indentation, by using the ^QU command. And you can save the tab and margin settings in your document with ^OO and .RR. See *Indenting, Margins, and Tab stops* in the “Reference Guide.”

**Continuous underlining** Use the .UL command to turn continuous underlining on and off. See *Underlining* in the “Reference Guide.”

### **New merge printing commands**

- Conditional commands have been improved and simplified. *Note:* Any .EF, .EX, .AND, or .OR commands will be ignored. You'll get different results when you print old files containing .IF commands with this release of WordStar. New commands (.EL, .EI, and .GO) have been added. See *Merge printing conditional commands* in the “Reference Guide.”
- Dot commands that used to take effect only when merge printed will now work in all documents, unless the commands require variable substitution.
- You can specify the format of a variable to be left justified, right justified, or centered. Just type a slash (/) and a one-character label after the variable. You have a variety of choices for numeric variables. See *Merge printing variable formatting* and *Merge printing variable number formatting* in the “Reference Guide.”

- You can now set the margins that are in effect when merge print data is inserted and the document is printed.
- Final commas at the end of records in your data file are considered empty fields. Fields can now be separated by carriage returns, as well as by commas.
- The following “standard” variables can be used. They are replaced at print time with information from your system or from the file itself. See *Merge printing* in the “Reference Guide.”

&#&    current page number  
&\_&    current line number

### Opening Menu changes

- Once you turn on file display with F, you can ‘filter’ the file directory with wild-card characters, \* and ?. You can also use these wild cards to delete groups of files.
- At help levels 2 and 3, when you type a filename that doesn’t already exist, WordStar asks if you want to create a new file. If you misspelled the filename you wanted, you can correct your error.

**Column replace mode** ^KI lets you overwrite existing text with a column block, or leave adjacent text undisturbed when a column is moved. See *Column blocks* in the “Reference Guide.”

**Convert characters to lowercase/uppercase** ^K' and ^K" convert characters in a marked block to lower- or uppercase, respectively. See *Case conversion* in the “Reference Guide.”

**Align rest of document** Use ^QU to align your document from the cursor location to the end of the file. Use the .AW command to indicate whether a section of text should be realigned or not. See *Aligning a paragraph* in the “Reference Guide.”

## What's New?

**Help** Use ^J to get help for each command on the Opening and Edit Menus. The way you use the help system has been greatly improved. See *Help levels* and *Help messages* in the "Reference Guide."

### **New find and find/replace features**

- You can now locate words or phrases that span lines or page breaks.
- You can find phrases that contain soft spaces due to justification.
- There is a new find/replace option:

**R** replaces every instance of the find string from the cursor location to the beginning or end of the document.

See *Finding and replacing* in the "Reference Guide."

**Insert soft hyphen** When you type ^OE, WordStar inserts a soft hyphen at the cursor position. The soft hyphen is displayed as an equal sign (=) when it occurs midline and as a regular hyphen (-) at the end of a line. See *Hyphenation* in the "Reference Guide."

**Cursor to next character** ^QG moves the cursor to the next occurrence of the character you specify; ^QH moves the cursor to the previous one. See *Finding your place* in the "Reference Guide."

**Delete text to next character** Type ^QT and the character to erase to. All text from the cursor up to and including the first occurrence of that character will be deleted. You can also remove a sentence (^QT.) or a paragraph (^QT Return). See *Deleting text* in the "Reference Guide."

**Character count at cursor** ^Q? displays the number of characters from the beginning of the file to the cursor position. See *Word count* in the "Reference Guide."

**Protect files** Use C from the Opening Menu to prevent files from being changed. When you open a protected file, you'll see special menus that don't allow you to make editing changes. Use this method to safeguard final copies of documents from accidental changes. See *Protecting a file* in the "Reference Guide."

**Index and table of contents** I from the Opening Menu begins the indexing function. Index every word in a file or just the words and phrases you mark with .IX and ^PK commands. (You can exclude words and phrases from the index by adding them to a special exclusion file.) Mark table of contents entries with the .TC command. Then use T from the Opening Menu to generate a table of contents with the correct page numbers. See *Indexing* and *Table of contents* in the "Reference Guide." *Note:* The index and table of contents features are different from the StarIndex<sup>R</sup> program. If you have StarIndex, you can still run it from the command line.

**Log on to a different drive/user number** With L or ^KL, you can now log on to another user number, as well as to another drive. See *Logged drive and user numbers* in the "Reference Guide."

**Better block moves** The size limit for any block move depends on the amount of space on your disk. Practically speaking, you can now move a block of any size. You can now read (^KR) and write (^KW) a column block of text. See *Blocks* and *Column blocks* in the "Reference Guide."

**The status line** now indicates the status of Column mode, Column Replace, and more. It will warn you if your file is getting so large that disk buffering is necessary. It will tell you if the document you're editing is protected and if you have reached the limit of dot commands in your file. See *Status line* in the "Reference Guide."

**The flag column** now gives you more information about dot commands. See *Flag column* in the "Reference Guide."

**Dot commands** Many dot commands now take effect while you're editing. When you move your cursor past the dot command, new text you type conforms to the dot command settings. Dot commands that used to work only in merge-printed documents now work for all documents (unless variable substitution is required). See *Dot commands* in the "Reference Guide."

**Define custom print controls while editing.** .XQ, .XW, .XE, and .XR allow you to redefine the custom print controls (^PQ, ^PW, ^PE, and ^PR) while editing. You can also define the custom print controls in WSCHANGE. See *Custom print controls* in the "Reference Guide."

## What's New?

**Italics/color** Use ^PY to select an italic font or alternate print color, depending on what your printer supports. See *Color* and *Italics* in the "Reference Guide."

**Letter quality print** .LQ turns letter quality mode on and off for certain printers. See *Near letter quality printing* in the "Reference Guide."

## New and Changed Commands in WordStar

### Opening Menu

<b>D</b>	Checks before creating a new file, allows user numbers, allows you to point to filename choice
<b>J</b>	Help for Opening Menu commands
<b>L</b>	Allows user numbers
<b>P</b>	Allows you to specify printer, print multiple copies, print to disk with special drivers, and maintain margins Options at Print screen: <b>^U</b> cancels printing <b>P</b> pauses printing <b>C</b> continues printing after pause
* <b>C</b>	Protects a file from accidental changes
* <b>I</b>	Indexes a document
* <b>T</b>	Creates a table of contents
* <b>Esc</b>	Shorthand
* <b>?</b>	Displays serial number and size of TPA

### Editing Menu

<b>Del</b>	Deletes character at cursor
<b>Backspace</b>	Deletes character to left of cursor
<b>^I</b>	Moves only to tab stops on the same line
<b>^J^n</b>	Help with command sequence <i>n</i> . ^J^J sets help level. Use <b>Esc</b> to move between help screens.
* <b>^O</b>	Sets tab width (nondocument mode)
* <b>^U</b>	Interrupts command in progress or restores text erased by ^Y, ^T, ^KY, ^Q Del, ^QT, ^QY
* <b>^^</b>	Converts a hard return to a soft one (document mode) Turns auto indent on/off (nondocument mode)

\* indicates a new command

- \* *All menus* On/off indications on menus show what command status will be *if you toggle it* (not what it is currently). Toggles revert to their default settings when you save your file.

### Shorthand

- \* **Esc ?** Displays and/or changes definitions
- \* **Esc *n*** Enters defined text (*n* is the shorthand character)
- \* **Esc =** Enters result from last **^QM** or **^KM** math
- \* **Esc \$** Enters formatted number
- \* **Esc #** Enters last **^QM** equation

### Block Menu

- ^K1-9** Sets and deletes markers (use **^KH** to hide markers)
- ^KC** Original block remains the marked block
- ^KL** Can log on to user numbers as well as drives
- ^KN** Can now Block Read and Block Write column blocks
- ^KS** Saves document and returns cursor to previous position
- ^KW** Cursor moves to the beginning of the marked block
- ^KY** Cursor moves to the position of the deleted block
- \* **^KI** Turns column replace on/off
- \* **^KM** Adds all numbers within a block (memory dependent)
- \* **^K"** Converts characters in marked block to uppercase
- \* **^K'** Converts characters in marked block to lowercase

### Onscreen Menu

- ^OE** Inserts a soft hyphen at cursor position
- ^OG** Uses only tabs, not decimal tabs
- ^ON** Requires **#** (before column number or Esc) to clear decimal tabs
- ^OR** Maximum right margin is now 255
- \* **^OB** Turns plus sign display for soft spaces on/off
- \* **^OO** Embeds current ruler line as a **.RR** command

\* indicates a new command

## What's New?

### Print Menu

- ^PB** Shows bold onscreen (on some hardware)
- ^PS** Shows underline onscreen (on some hardware)
- ^PF/^PG** Many dot matrix and laser printers will print phantom (special) characters
- ^PK** Marks beginning/end of index entry (replaces **^PP**)
- ^PY** Selects alternate print color or italics
- \* **^PI** Inserts an 8-column tab
- \* **^P@** Aligns text at a fixed position on the page

### Quick Menu

- ^Q1-9** Moves cursor to markers (if markers are hidden, redisplay with **^KH**)
- ^QA/^QF** Includes new options:
  - G** Starts at beginning/end of file
  - ?** Wild card
  - \* **R** Replaces for rest of document
  - \* **^P** Finds Ctrl sequence that follows (can now find/replace **^PS**, **^PA**, **^PN**, etc.)
- \* **^QG** Moves cursor forward to specified character
- \* **^QH** Moves cursor back to specified character
- \* **^QI** Goes to page (document mode); goes to line (nondocument mode)
- \* **^QM** Calculator (memory dependent)
  - + add
  - subtract
  - \* multiply
  - / divide
- \* **^QT** Deletes to next specified character
- \* **^QU** Realigns entire document (document mode)  
Strips high-order bits (nondocument mode)
- \* **^Q?** Displays character count to cursor position

\* indicates a new command

## Merge Printing

<b>.AV</b>	Can't limit number of characters in response
<b>.DF</b>	Allows choice of data separator character; can include user number for data file
<b>.IF</b>	Begins condition. If <i>true</i> , text prints (or dot commands are executed) until <b>.EI</b> or <b>.EI</b>
*	You can use carriage returns to separate fields in a data file
* <b>.EI</b>	End of <b>.IF</b> condition
* <b>.EL</b>	Reverse sense of last <b>.IF</b> condition
* <b>.GO</b>	Skip to top/bottom of file
* <b>.MA</b>	Sets variable to result of math equation
* <b>/</b>	Formats variable data as left justified, right justified, centered, or in various numeric formats
* <b>&amp;#&amp;</b>	Substitutes current page number
* <b>&amp;_&amp;</b>	Substitutes current line number
*	<b>.IF</b> and complex conditionals ( <b>.AND</b> , <b>.OR</b> ,) are not supported (Use <b>.IF</b> and <b>.EL</b> instead.)

## Dot Commands

<b>.CW</b>	Sets character width (now works for dot matrix printers)
<b>.FI</b>	Can now be used when printing
<b>.LH</b>	Sets line height (active while editing; now works for dot matrix printers)
<b>.OJ</b>	on/off (active while editing; active while printing if <b>.PF</b> is on)
<b>.PF</b>	Can now be used when printing
<b>.PL</b>	Sets page length based on 6 LPI (calculates number of lines per page automatically when line height is changed)
<b>.PN</b>	Sets page number (now active while editing)
<b>.CS</b>	Can now be used when printing
<b>.DM</b>	Can now be used when printing
* <b>.AW</b>	Turns word wrap and paragraph alignment on/off
* <b>.F1</b>	First line of footer (can also use <b>.FO</b> )
* <b>.F2</b>	Second line of footer
* <b>.F3</b>	Third line of footer
* <b>.H1</b>	First line of header (can also use <b>.HE</b> )
* <b>.H2</b>	Second line of header
* <b>.H3</b>	Third line of header
* <b>.IX</b>	Enters index text

\* indicates a new command

## What's New?

- \* **.LM** Sets left margin (active while editing; active while printing if **.PF** is on or if variables are being substituted)
- \* **.LQ** Turns letter quality print on/off (if supported by printer)
- \* **.LS** Changes line spacing (active while editing; active while printing if **.PF** is on or if variables are being substituted)
- \* **.PG** Restores default page numbers
- \* **.PM** Sets paragraph margin for first line of subsequent paragraphs
- \* **.PS** Turns proportional spacing on/off
- \* **.RM** Sets right margin (active while editing; active while printing if **.PF** is on or if variables are being substituted)
- \* **.RR** Sets ruler line (active while editing; active while printing if **.PF** is on or if variables are being substituted)
- \* **.TC** Enters table of contents text
- \* **.UL** Turns continuous underlining on/off
- \* **.XL** Redefines form feed character
- \* **.XE** Redefines custom print function **^PE**
- \* **.XQ** Redefines custom print function **^PQ**
- \* **.XR** Redefines custom print function **^PR**
- \* **.XW** Redefines custom print function **^PW**

## Flag Characters

- 1** Dot command on line works best at beginning of page; affects onscreen display and printout
- :** Dot command on line affects printout only
- .** Dot command on line affects onscreen display and printout
- F** Line contains a form feed

## Status Line Display

- \* **Column** Column mode on
- \* **ColRepl** Column Replace on
- \* **Spacing-n** Current line spacing
- \* **Dot-Limit** Maximum number of dot commands
- \* **Large-File** Disk buffer warning
- \* **Prtect** File is protected
- \* **Align** Alignment on
- \* **Auto-In** Auto-indent on (nondocument)

\* indicates a new command