

Issue No. 8

# HP Series 100 Communicator

# 123

Worldwide Edition

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## late-breaking news on Series 100 products

**Thinkjet--a quiet dot-matrix printer--works with your Series 100 computer to print characters and graphics. Using the ink-jet technology, Thinkjet prints by spraying ink from tiny holes in its small, flat printhead. The printhead never touches the paper, making its operation quiet. It prints 150 characters a second. Thinkjet is available from your HP dealer and HP directly.**

**Lotus 1-2-3 is proving to be extremely popular on the HP 150. Here are two configuration tips from the Phone-In Software Assistance Center: 1) If you have a fixed disc, you may get a disc error when you first run 1-2-3. Use the 1-2-3 UPDATE command (Appendix A) to change the 1-2-3 default directory to match your MS-DOS device configuration. 2) After selecting your print option number in 1-2-3, invoke the UPDATE command to change the defaults.**

**Compilers for the HP 150 by Microsoft now available: Compiled BASIC (HP product number 45446A), Pascal (45447A), COBOL (45448A), and FORTRAN (45449A). You can buy them from your HP dealer or HP directly.**

**European HP Users Conference, July 14-18: The first European HP 100/3000/RTE/BASIC joint user conference will be held in England at the University of Exeter. Register by May 31--contact Tim Cullis, 69 Grasmere Gardens, Harrow Weald, Middx. HA3 7PS ENGLAND (Tel. 01-863 2428).**

**Attention Software Developers: If you are interested in marketing software you have developed for the HP 150, participate in the software submissions program. This program enables you to promote your software through the HP Software Catalog which will be used extensively by HP dealers and HP sales reps. For more information, call 408/773-6332 in the U. S.**

continued....

**Introducing BPI Personal Accounting/150**--With this program, you can bring the power of the computer to the task of managing your income and expenses. Use it to establish a budget, keep track of net worth, or manage any task where your money counts. Order HP product number 45459A from your HP dealer or HP directly.

**PFS:FILE and PFS:REPORT are now available** on the HP 150. Both applications come as a single product and incorporate HP Touch. Buy HP product number 45488A from your HP dealer or directly from HP.

**GraphPlan/150, an integrated spreadsheet-and-graphics package** with HP Touch, is now available--product number 45467A from your HP dealer or HP directly.

**Graphics/150 has added enhancements:** support for the new HP 7550 plotter; 50% increase in character size within Pie, Bar, and Line charts; increased speed of on-screen and plotter graphics; and new box annotation feature added to Text charts. Update kits are now available from HP--ordering information appears in the Current Information Insert of this issue.

**A new independent magazine for HP personal computer owners, Personal Computing**, is now available. To subscribe, call the publisher, John Wiley and Sons, at 800/526-5368 (in New Jersey, call 201/342-6707); or write publisher at 605 Third Ave., New York, NY, 10153 USA.

**Smaller binders** for storing the small-size (5 1/2" x 8 1/2") Communicator issues are available from HP. The binder, which comes packaged in a slipcase, has "Series 100 Communicator" printed on its spine. Order HP product number 5958-0209.

**Communicator subscriber--has your address changed?** The Current Information Insert now has a Change of Address form to make it easy for you to let us know. (Save your mailing label to make it even easier.)

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**For information on these products**, or to locate your HP dealer, call 800/FOR-HPPC (800/367-4772) in the U.S. or call your local HP sales and Service Office.

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The *Series 100 Communicator* is the heart of the Series 100 support program. It contains application information, operational tips, programming techniques, information on software updates, manual corrections, and data on known software problems and their solution. The *Communicator* is both a reference to everything current on the system and your window into the continually expanding world of the Series 100.

Some sections contain information which is updated for every *Communicator* issue. This material is located in the Current Information insert.

The *Communicator* has a 5½" by 8½" page size, so that it can be kept with your Series 100 manuals.

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**Subscriptions and Back Issues**

In many countries, *Communicator* subscriptions and back issues are orderable by telephone. See "Ordering *Communicator* Subscriptions" and "Ordering Back Issues" in the Current Information insert.

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**Becoming a Contributor**

Much of the material in this issue came from users and HP field support people. If you would like to contribute, address your article, program, suggestion or question to:

Series 100 Communicator Editor  
Hewlett-Packard Company  
P.O. Box 486  
Sunnyvale, CA 94086 USA

If you submit an article or program to the *Communicator*, you agree that the material is not confidential and that HP may use, duplicate, modify, publish, or sell it without obligation or liability to you or anyone else. If HP publishes the item in the *Communicator*, we will acknowledge you as the author. Material that you send to us may not be returned.

We look forward to bringing your ideas to the attention of the worldwide Series 100 user community through the *Communicator*.

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1-2-3™ from Lotus Development Corporation, is now available for the HP 150. In addition to the largest available electronic spreadsheet (2048 rows and 256 columns), 1-2-3 offers fully integrated information management and graphics capabilities.

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**Key Features of 1-2-3**

- **Spreadsheet.** The large number of rows and columns in 1-2-3 provides ample space for related data on a single worksheet. This is very important for applications where, for example, you want to keep an entire year of financial data on one spreadsheet, rather than breaking up the data into 4, 6, or 12 separate spreadsheets. (In this type of application, extra memory may be necessary for the HP 150.)
- **Information Management.** 1-2-3 provides true data base management, using commands that are very similar to commands used in other parts of 1-2-3. Because of this, you can learn to use the data base manager along with the rest of 1-2-3. Building a data base is the same as creating any other spreadsheet table. Once this is done, data can be sorted, in ascending or descending order, using alphabetic or numeric keys. Searching for data is accomplished through the use of several subcommands of the Data Query command. Finally, 1-2-3 has a special set of statistical functions that operate only on information stored in the data base and perform essentially the same tasks as their spreadsheet counterparts.
- **Graphics.** 1-2-3 provides five basic graph types: bar, stacked bar, line, scatter, and pie. The graphics capability is linked directly to the spreadsheet, so there is no need to create a separate communications file to transfer information. This direct link also allows users to easily and quickly perform "what if" analysis on the graphs, simply by updating the spreadsheet and then selecting "View" to see the new data reflected in the previously created graph.

- **Keyboard Macros.** The alternative to typing commands from the HP 150 keyboard is to group the commands together and give them a name, essentially creating a small program within the 1-2-3 spreadsheet. For example, a common task in budget building is typing the names of months as column headings in a spreadsheet. This task can be programmed into a macro, reducing the required typing to a single keystroke. The manual provides thorough instructions to help you create more sophisticated macros. Experience in BASIC or another programming language is also helpful to fully use this capability.

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**Benefits of 1-2-3**

Lotus™ has designed 1-2-3 around the concepts of "Easy to Learn" and "Easy to Use." 1-2-3's overall design, command syntax, and built-in functions are based on the conventions used by VisiCalc®. The backslash key (/) evokes a two-line command tree where the top line is a list of available commands—each command a complete word—and the second line is a description of what you can expect to have happen when any one command is highlighted and selected. In addition, an on-line "help" function is available at every point in the program, to answer your questions by displaying one of over 250 different screens of information.

Ease of learning is accomplished through a two-disc series of on-line tutorial lessons. Lesson A, the first lesson, is a brief introduction to the concept of spreadsheeting in general. The next three lessons present the 1-2-3 spreadsheet. Lessons E and F demonstrate graphics and data management. When used with the 1-2-3 manual, the tutorials enable you to quickly master 1-2-3.

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**Ordering Information**

1-2-3 for the HP 150 is available as HP product number 45482A. Refer to the "How to Order" section in this issue for ordering details.



## The HP 150 Goes Worldwide

Pamela Blizzard

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### International Introduction

The HP 150 has now been introduced all over the world—and in 16 different languages! The introduction began in January with the United Kingdom and Australasia. In February we covered France, Germany, Italy, and the Netherlands, and finished off in March with Spain, Scandinavia, Canada, and Latin America.

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### International Systems Now Available

The HP 150 systems that are sold in Europe and the Americas come with complete international capabilities, including access to HP's full international character set, access to 16 different keyboards and 9 languages, and the ability to print with international daisywheels. These HP 150s are sold fully "localized," as we call it, with translated manuals, PAM, and Utilities, plus local date and time format in MS-DOS. A wide range of HP 150 software is also available in all languages.

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### Ordering Information

The product numbers for HP 150 international products are specified by appending the appropriate suffix to the standard product numbers. For example, an Italian HP 150 with dual 3.5" disc drives is product number 45650AZ; Norwegian VisiCalc is product number 45405AN. The table below shows available keyboards and languages and the countries where they are primarily sold.

Country	Language	Keyboard	Suffix
Belgium	Dutch	Flemish	W
Canada	French	Fr. Canadian	C
Canada	U. S.	Eng. Canadian	L
Denmark	Danish	Danish	Y
Finland	Finnish	Finnish	X
France	French	French	F
Germany	German	German	D
Italy	Italian	Italian	Z
Latin America	Spanish	Latin Spanish	M
Netherlands	Dutch	Dutch	H
Norway	Norwegian	Norwegian	N
Spain	Spanish	Eur. Spanish	E
Sweden	Swedish	Swedish	S
Switzerland	French	Swiss French	Q
Switzerland	German	Swiss German	R
U. K.	U. S.	U. K.	U

To order, contact your dealer or local HP sales office. They can also provide information on which software is available in the language you want.

Context MBA™, an integrated software package offering spreadsheet, graphics, word processing, data management, and telecommunications capabilities, is now available for the HP 150. It provides the advanced user a sophisticated tool to solve complex problems and then communicate the results.

Context MBA/150 is enhanced to take advantage of key features on the HP 150—touchscreen and softkeys. Cursor placement is incorporated with HP Touch so the user can touch the screen to position the cursor in the worksheet or move it into a different window. Softkey functions are activated when the user either touches the appropriate screen label or presses the corresponding key on the keyboard.

The HP 150's standard memory configuration of 256K is sufficient for operation of Context MBA/150. However, for optimum performance and increased user satisfaction, we recommend 512K of memory. Not only does this give the user a substantially larger workspace, it also greatly improves the performance of the software by allowing more program code to reside in memory, thus reducing the amount of necessary code swapping from disc.

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**A Note to  
Fixed Disc Users**

Context MBA/150 uses the p-System for its code and file structure. This requires the p-System code and the MBA code to reside at the beginning of the fixed disc. Due to this requirement, there are two conditions for using MBA on a fixed disc:

- First, all files existing on the fixed disc must be saved on flexible discs. Then the fixed disc must be reformatted using the FORMAT utility. Context MBA/150 can then be installed on the fixed disc. Finally, all files that were initially removed from the fixed disc can then be moved back onto the fixed disc.
- The fixed disc drive must be configured as drive E. This means that the HP 150 cannot load the operating system from the fixed disc drive and must load it from the flexible disc drive.

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**Ordering Information**

Context MBA/150 is available as HP product number 45481A. For ordering details, refer to the "How to Order" section in the Current Information Insert of this issue.

The popular dBASE II™ by Ashton-Tate is the newest relational database management tool for the HP 150. Features of dBASE II include natural-language commands, sophisticated programming capabilities, a large variety of customized applications available from third parties, and many accessory programs and documentation. When you purchase dBASE II, you receive a 30-day free trial period with a limited-capability version of the software which is included in the package. (If you decide to keep the software, open the sealed, fully-functioning system disc in the package.)

dBASE II extends the power of the HP 150 to tasks normally reserved for larger computers. It helps you construct and manipulate numeric and character files for a variety of applications—including general ledger, accounts payable, sales tax records, payroll, check management and writing, time billing, inventory control, job costing, tax computing, and document cross-referencing.

A special feature of dBASE II is its straightforward command language. You can SORT, EDIT, or DISPLAY a database directly from the keyboard, yet write menus and programs to support your specific applications—all with the same command language. This flexibility provides both ease of use for new users and power for advanced users to create menu-driven applications programs.

The broad market acceptance of dBASE II assures the availability of programs already written for popular applications. Over 800 customized applications programs exist as part of the Ashton-Tate RunTime library for users who choose not to design their own databases.

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**dBASE II Commands****CREATING FILES**

CREATE sets up new structured databases  
COPY copies databases, their structures, or their data to a new file  
REPORT generates information to your specifications, selecting only the information you want, with or without totals and sub-totals  
SAVE copies memory variables to a file for later use  
INDEX creates an index file for faster data location

**ADDING DATA**

APPEND adds records onto the end of a database  
CREATE allows data entry when the file is created  
INSERT puts records into a file

**EDITING DATA**

EDIT alters specific database records and fields  
REPLACE changes the contents of specified fields  
CHANGE edits specified fields in the database  
DELETE marks records for deletion  
RECALL erases the deletion mark  
PACK deletes the marked records

**DISPLAYING DATA**

DISPLAY and LIST show records, fields and expressions  
? shows the value of variables or expressions  
REPORT formats and displays data according to specifications, with or without totals  
READ shows prompting information and data  
SUM totals the fields you specify in a database  
TOTAL totals specified fields to a new database

**FILE MANIPULATION**

DO starts execution of a command file sequence  
APPEND adds data from other files (even non-dBASE II)  
SELECT switches between two databases in use  
SORT organizes the database sorted on a field

**MEMORY VARIABLE COMMANDS**

ACCEPT stores character data for later use  
INPUT accepts character, numeric or logical data  
WAIT accepts a single character input  
GET works like the INPUT command, used in the interactive full-screen entry mode  
SUM saves totals to memory variables  
SAVE stores memory variables in a disk file

RESTORE retrieves the stored memory variables

**OTHER COMMANDS**

FIND locates an indexed record

LOCATE finds records that meet specified conditions

SKIP moves you forward or back in the database

DO WHILE allows repetitive operations

IF...ELSE allows you to make choices

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**dBASE II Specifications**

Records per database file	65535 max
Characters per record	1000 max
Fields per record	32 max
Characters per field	254 max
Largest number	$\pm 1.8 \times 10^{63}$ approx
Smallest number	$\pm 1 \times 10^{-63}$ approx
Numeric accuracy	10 digits
Character string length	254 characters max
Command line length	254 characters max
Report header length	254 characters max
Index key length	100 characters max
Expressions in SUM command	5 max

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**Ordering Information**

dBASE II/150 is available as HP product number 45468A. For ordering details, refer to the "How to Order" section in the Current Information Insert of this issue.

The Ashton-Tate RunTime Library programs are available from Ashton-Tate. A RunTime catalog with ordering information is included with the software.



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	<p>Multiplan™ by Microsoft® is now available on the HP 150. Multiplan is a versatile, easy-to-learn and easy-to-use spreadsheet which has built-in features for forecasting, planning, budgeting, and analysis. These features are enhanced on the HP 150 because Multiplan uses HP Touch extensively.</p>
<b>Easy to Learn and to Use</b>	<p>Multiplan is menu driven. The main menu, which appears at the bottom of the screen, makes it easy to select the next step simply by touching the desired command. Softkeys are also used to simplify spreadsheet operations. This means quicker results with less time trying to remember command sequences.</p> <p>The on-screen "help" prompt displays additional information so you don't have to search through the manual for answers to your questions. In essence, you have an "on-line" reference manual. You can move between cells by touching the desired cell location, by using a simple name, or by using absolute or relative locations.</p>
<b>Spreadsheet Features</b>	<ul style="list-style-type: none"><li>■ Multiplan allows you to build a worksheet up to 255 rows and 63 columns. You can easily insert or delete rows or columns.</li><li>■ Spreadsheet linkage allows you to link the current spreadsheet and data contained on spreadsheets filed on the disk. This automatic data interchange allows you to break up complex problems into manageable segments.</li><li>■ Adding or changing values anywhere in the spreadsheet results in automatically recalculated values in the rest of the spreadsheet. "What-if" questions can thus be answered quickly and easily.</li><li>■ The Multiplan screen allows you to scroll throughout the worksheet. You can also view up to eight different parts of the worksheet simultaneously.</li><li>■ Built-in functions simplify arithmetic, finance, conditional, and trigonometric calculations. Formulas can be easily constructed to apply to whole rows or columns just by moving the cursor.</li><li>■ Important data can be protected from accidental erasure or modification by using the locked cell feature.</li></ul>

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**Presentation Features**

- Multiplan's special formatting options include: left-justify, right-justify, center, percentages, and floating dollar signs.
- Columns can have variable widths, and lines of text such as titles can be typed across columns.
- You can sort entries either alphabetically or numerically as well as present the results of a formula either alphabetically or numerically.
- Multiplan can automatically break your spreadsheet into pages even if it is larger than the page you are printing it on.

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**Ordering Information**

Multiplan for the HP 150 is available as HP product number 45473A. Refer to the "How to Order" section in this issue for ordering details.

## New "Edu-tainment" Software for the HP 150

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In response to your requests, we now have a new line of "edu-tainment" software for the HP 150. These products provide opportunities for entertainment and learning in a non-threatening environment for first-time personal computer users. They range from best-selling adventure games to software that teaches skills like touch typing. Most of them have been converted to take advantage of the HP 150's touchscreen, eliminating the need to remember commands and key sequences.

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### Winning Deal

Try out your skill and luck on these single-player games with HP Touch:

- **Klondike Solitaire:** the most popular version of solitaire.
  - **Accordion Solitaire:** The HP 150 deals the entire deck, then it's up to you to maneuver all of the cards into one stack.
  - **Streets and Alleys Solitaire:** A game for the dedicated player. Devise a plan to move all of the cards from eight streets to four alleys.
  - **Blackjack:** Hone your skills with this casino-style version of Blackjack. The HP 150 is your dealer and even counts cards if you choose.
  - **Concentration:** Test your memory with this classic card game. Play at one of six skill levels.
- 

### Type Attack™

This exciting arcade-style game improves touch-typing skills while you have fun. Combinations of letters or words appear which must be typed correctly to zap them off the screen. Thirty-nine preprogrammed lessons were designed by an experienced typing instructor. The pace of the game can be varied from one to 99 words per minute and additional lessons for specific letters or words can be created by the user.

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### Milky Way Merchant

You're in command of a merchant fleet with a license to buy, sell, and transport supplies to settlements across the Interstellar Federation. The environment is continually evolving; existing star systems can change their demands or new trading centers can emerge. Your objective is to accumulate the maximum amount of wealth in a specified time period. A strategy game for one to four people.

<b>Planetfall™</b>	As a proud member of the Stellar Patrol, you carry the Third Union's peaceful message of a benevolent central bureaucracy to the thousands of worlds lost after the Great Collapse.
<b>Starcross™</b>	Starcross launches you headlong into the year 2186 and the depths of space. This popular adventure game by Infocom™ allows you to explore a complex world and come face-to-face with other worldly beings, both helpful and harmful.
<b>Zork I®</b>	Zork I by Infocom™ is the best-selling adventure game ever written. Its Great Underground Empire confronts you with perils and predicaments as you discover its treasures.
<b>Zork II®</b>	The second chapter in the story of the Great Underground Empire takes you further into the deepest recesses of the earth to discover the secrets of sorcery and to confront the evil Wizard of Frobozz.
<b>Temple of Apshai™</b>	One of the most popular adventure games ever written, Temple of Apshai allows you to discover treasures, fight off monsters, slip through secret doors, and evade hidden traps. The HP 150 version fully utilizes the HP 150's touch screen and high-resolution graphics.
<b>Cyborg</b>	This science fiction thriller is the first text adventure game to feature a true plot. Its puzzles logically add up to the equivalent of a short science fiction story. Cyborg is half man, half machine. Your sole objective is to complete your assigned mission.
<b>Adventure</b>	Adventure was written at the Artificial Intelligence Labs at MIT and Stanford. As you explore Colossal Cave in search of its many hidden treasures, the HP 150 acts as your eyes and hands by responding to your one- or two-word commands.
<b>Suspended™</b>	This science-fiction adventure wires your brain to a network of underground computers that manipulate six robots specializing in sight, hearing, and information processing. Through the robots, you solve the intertwined mysteries awaiting you.

<b>The Witness™</b>	It's February, 1938. As chief police detective, you have 12 hours to untangle an intricate knot of motives and alibis. The only evidence you can trust is that which you see with your own eyes.
<b>Tycoon: The Commodity Market Simulation™</b>	Tycoon is an authentic economic simulation of the commodities market. News headlines and an array of graphic price-trend data provide the information both novice and expert traders need to make their fortunes. Traders start with \$10,000 to speculate on some of the world's most important raw materials in a highly volatile marketplace.
<b>Ricochet™</b>	The on-screen graphics in Ricochet remind you of a billiards table with additional barriers added to increase the challenge. Ricochet offers a unique form of play action and plenty of strategy. You can play either against the computer or a friend.
<b>Touch Games I</b>	<p>This collection of four games includes:</p> <ul style="list-style-type: none"> <li>■ <b>3D Tic-Tac-Toe:</b> Win by the traditional methods across one level or traverse all four levels to ace out the computer.</li> <li>■ <b>Blackjack:</b> A single-player Blackjack game.</li> <li>■ <b>Wumpus XIV:</b> The deadly Wumpus dragon lives in a cave system of 20 rooms. You must find and exterminate the Wumpus to survive.</li> <li>■ <b>Biorhythms:</b> Chart the ups and downs of your "physical," "emotional," and "cognitive" cycles.</li> </ul>
<b>Ordering Information</b>	<p>These products are orderable by the product numbers below. For ordering details, refer to the "How to Order" section in the Current Information Insert of this issue.</p>
	<ul style="list-style-type: none"> <li>■ Adventure . . . . .92243AA</li> <li>■ Cyborg . . . . .92243NA</li> <li>■ Milky Way Merchant . . . . .92243BA</li> <li>■ Planetfall . . . . .92243PA</li> <li>■ Ricochet . . . . .92243GB</li> <li>■ Starcross . . . . .92243DA</li> <li>■ Suspended . . . . .92243FA</li> <li>■ Temple of Apschai . . . . .92243GA</li> <li>■ The Witness . . . . .92243QA</li> <li>■ Touch Games I . . . . .92248AA</li> <li>■ Tycoon . . . . .92243HA</li> <li>■ Type Attack . . . . .92243EA</li> <li>■ Winning Deal . . . . .92248CA</li> <li>■ Zork I . . . . .92243CA</li> <li>■ Zork II . . . . .92243RA</li> </ul>

The HP 120 and HP 125 personal computers now support 5Mb and 10Mb fixed disc drives. This support comes in the form of an upgrade kit which contains version A.02.00 of the Operating System Disc and Version A.02.01 of the Utilities Disc for the HP 12x personal computers. Also included in this kit is an update for the Installation Guide.

The new operating system can be used with several fixed disc drives, including our current line of fixed disc drives (9133V, 9133XV, and 9134XV) as well as the previous line (9133A/B, 9134A/B, and 9135). Figure 1 gives a summary of all the fixed disc drives supported on the HP 12x. We have also provided a summary of the technical specifications for our newer disc drives in Figure 2.

Even with this new operating system running with your 5Mb or 10Mb disc drive, you may see this message:

Disc did not identify at address zero

You now have three options:

- ignore the message by pressing the [RETURN] key and load the operating system by pressing the "LOAD OPSYS" softkey;
- or, reconfigure the fixed disc to Drive E as described in the update to the Installation Guide;
- or, have a new Read Only Memory (ROM) chip installed in the system (ordering information is at the end of this article). This eliminates the message.

**Figure 1: Fixed Drives Supported on HP 12x**

Description	Previous	Current
5Mb Standalone	9134A	
10Mb Standalone	9134B	*9134XV Opt. 010
5Mb Fixed/3.5" Flexible	9133A	*9133V
10Mb Fixed/3.5" Flexible	9133B	*9133XV Opt. 010
5Mb Fixed/5.25" Flexible	9135	

\*The 9133V, 9133XV, and 9134XV are single-volume disc drives. BPI General Accounting and BPI Payroll do not work on single-volume, 10Mb fixed disc drives.

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**Figure 2: Technical Specifications**

These specifications for the current fixed disc drives are applicable when the drives are used with an HP 12x computer.

	9133V	9133XV	9134XV (Opt. 010)
■ formatted storage of fixed disc	4.68Mb	8.19Mb	8.19Mb
■ number of volumes	1	1	1
■ max. number of files/volume	293	384	384
■ minimum file size	16K	16K	16K
■ maximum file size	4.67Mb	8.17Mb	8.17Mb
■ flexible disc size	3.5"	3.5"	none

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**Ordering Information**

For details on the Operating System upgrade, refer to the information in the "HP 12x Software Updates and Upgrades" section of the Current Information Insert in this issue.

To have a new ROM installed, call your local HP Sales and Service Center. Refer to Service Note 120-03 or Service Note 125-13. This work must be performed by authorized repair personnel of an HP Personal Computer dealer or at an HP Field Repair Center.

---

Are you running software on the HP 120 or HP 125 that is not provided by HP? If you are, we would like to know about it. It is important for all of us who use HP 12x computers to have a complete list of software that is available. We have a good start on the list, but we know that it is not complete. Your responses will be compiled and published in a future issue of the *Communicator*.

When you tell us about the software, please provide the following information:

- name of software package
- type of software (for example: word processing, accounting)
- manufacturer's name, address, and phone number
- price
- media size.

Send the information to:

Pervez Qureshi  
Hewlett-Packard Company  
P. O. Box 3486  
Sunnyvale, CA 94088-3486

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**Currently Available  
HP 12x Software**

The HP 12x software products currently available from HP are listed in the Current Information Insert of this issue of the *Communicator*.



With the introduction of the HP 150, there has been a sharp decline in the demand for the HP 120 and HP 125 personal computers. At this stage of Hewlett-Packard's entry into the personal computer market, it is necessary to have a mainstream product behind which HP can focus its marketing and manufacturing resources. Consequently, HP plans not to sell the HP 120 and HP 125 after May 1, 1984.

However, we are committed to sustain support of the HP 12x well after May 1. It is HP corporate policy to ensure availability of parts and full repair services for your computer for five years beyond this date. We will also continue to sell our complete line of HP 12x software, and you can take advantage of HP's free Phone-In Software Assistance service for answers to your questions on HP 12x applications. The *HP Series 100 Communicator* continues to be a source of information to enhance your effectiveness with your system.

---

**Maintain Your  
Productivity**

We suggest that you do the following to continue your productive use of your HP 12x:

- maintain your subscription to the *Communicator*;
- use the free Phone-In Software Assistance service as necessary;
- share your tips and ideas with the HP 12x user community—just send a note to the *Communicator* editor.

We stand behind your investment in the HP 12x and look forward to continuing as your partner in the expanding world of personal computing.

You can increase the power and effectiveness of your HP 150 personal computer by adding a low-cost graphics plotter. The two plotters that are supported on the HP 150 are the HP 7470A two-pen plotter and the new HP 7475A six-pen plotter. Adding the Graphics/150 package gives you a powerful graphics workstation capable of producing colorful graphs, charts, and diagrams.

The HP 150 has two communication interfaces: HP-IB and RS-232C. The option number of your plotter determines which interface to use on the computer.

Here are the hardware and configuration requirements for each interface type.

### HP-IB Interface in a Local Mode

- Products
  - HP 150 personal computer
  - 7470A plotter, option 002 or
  - 7475A plotter, option 002
- Cables (Note: These are purchased separately.)
  - 45529A One Meter HP-IB Cable or
  - 45529B Two Meter HP-IB Cable
- Configuring the HP 150
  - Set the System Device "PLT:" to "HP-IB" address "5" as follows:
    1. Run the DEVICE CONFIG application on your system disc (see the PAM chapter of the *HP 150 Owner's Guide*).
    2. Move the cursor to the field labeled "PLT:".
    3. Touch the "NEXT CHOICE" label until the field contains "HP-IB." The address field then defaults to "5."
    4. Touch the "Save Config" label.
    5. Touch the "Exit CONFIG" label and return to PAM.

- Configuring the Plotter
  - Set the plotter switches as follows:

7470A		7475A	
1	1	1	1
2	0	2	0
4	1	4	1
8	0	8	0
16	0	16	0
A4/US	*	A4/A3	*
		MET/US	*

\*Your choice.

Switches 1, 2, 4, 8, and 16 are used to set the HP-IB address of the device. The remaining switches configure the plotter for the paper size and metric features. (Refer to the plotter manual for more information.)

### RS-232 Interface in a Local Mode

- Products
  - HP 150 personal computer
  - 7470A plotter, option 001 or
  - 7475A plotter, option 001
- Cables (Note: This is purchased separately.)
  - 13242G printer cable
- Configuring the HP 150
  - First, set the System Device "PLT:" to be "Port 2" as follows:
    1. Run the DEVICE CONFIG application on your system disc (see the PAM chapter of the *HP 150 Owner's Guide*).
    2. Move the cursor to the field labeled "PLT:".
    3. Touch the "Next Choice" label until the field contains "Port 2."
    4. Touch the "Save Config" label.
    5. Touch "Exit CONFIG" and return to PAM.
  - Next, configure Port 2 for 9600 baud and CS(CB)Xmit enabled as follows:
    1. Run the MSDOS COMMANDS application on your system disc (see the PAM chapter of the *HP 150 Owner's Guide*).
    2. Press the [System] key twice. (This key is next to f5).
    3. Touch the "config keys" label.

4. Touch the "port 2 config" label.
5. Touch the "system defaults" label.
6. Touch the "DEFAULT VALUES" label.
7. Move the cursor to the field labeled "Baud Rate."
8. Touch the label "NEXT CHOICE" until the field contains "9600."
9. Move the cursor to the field labeled "CS(CB)Xmit."
10. Touch the label "NEXT CHOICE" until the field contains "Yes."
11. Touch the "SAVE CONFIG" label.
12. Type  
PAM [RETURN]  
to return to PAM.

■ **Configuring the Plotter**

—Set the plotter switches as follows:

7470A		7475A	
B1	0	B1	0
B2	1	B2	1
B3	0	B3	0
B4	1	B4	1
A4/US	*	A4/A3	*
D/Y	0	MET/US	*
S1	0	D/Y	0
S2	0	S1	0
		S2	0

\*Your choice.

Switches B1 through B4 are used to set the baud rate of the device. Here they are configured for 9600 baud. The remaining switches configure the plotter for the paper size, metric features, parity, and eavesdrop mode. (Refer to the plotter manual for more information.)

The current version of dBASE II, Version 2.4, does not come pre-installed under PAM. However, this article shows how you can easily install dBase II yourself.

The procedure below describes how to create the DBASE.IN\$ file from MS-DOS on either fixed or dual flexible disc drives. Once you have this file, you can install the application using the procedure outlined in the *HP 150 Owner's Guide*.

You can also create the DBASE.IN\$ file using one of the HP 150 word processing applications. (If you decide to use WordStar<sup>®</sup> make sure you create a non-document file.)

---

**Procedure**

1. Using the COPY/BACKUP Utility make a copy of your dBASE II master on a blank, formatted disc.
2. Insert the MS-DOS command disc in drive A.
3. Insert the copy of dBASE II in drive B.
4. Create the DBASE.IN\$ file on the same disc as the copy of dBASE II by typing the following (but don't type the explanations that appear to the right of each line):  
A>COPY CON B:DBASE.IN\$  
dBASE II (PAM label)  
2.4 (Version number)  
DBASE.COM (Program name)  
(Leave a blank line)  
132096 (Program size in bytes)  
DBASE.COM (These are  
DBASEOVR.COM the essential  
INSTALL.COM dBASE II  
DBASEMSG.TXT files)
5. Terminate input with a Control-Z (hold down the CTRL key and press the Z key).
6. Press the RETURN key. The MS-DOS prompt then returns.
7. At the prompt, type: EXIT to return to PAM menu.
8. Place the Disc Applications disc in drive A, then press the "Reread Discs" softkey.
9. Start the INSTALL application (refer to the *HP 150 Owner's Guide*, page 6-2).
10. After INSTALL program is loaded, place a blank, formatted disc in drive A. NOTE: There is not enough room to copy the operating system and dBASE II on the formatted disc.

11. With the copy of dBASE II in the B drive, INSTALL the application on drive A.
12. Once the dBASE II software is loaded on drive A, create your data files on an alternate drive, e.g., use the dBASE II command, "SET DEFAULT TO B:"

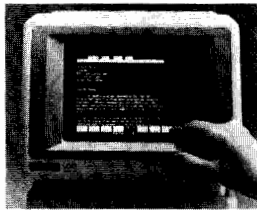
---

**For More  
Information**

To find out more about dBASE II, read the article in this issue titled, "dBASE II Now Available for the HP 150."

## Free WordStar/150 Upgrade Kit Available

Kathy Weiler



You can now get a free upgrade kit for WordStar®/150 from HP. This upgrade, which contains Version 3.3B of WordStar, significantly improves the performance of previous Versions 3.3A and 3.30. Improvements include increased printer speed (10% to 40% faster) and faster program loading, cursor movement, screen responsiveness, and horizontal scrolling.

Additional printer features are also included in the upgrade. Support for the 2674A Internal Printer using perforated paper has been added to the Printer Menu. Enhancements have been added to work on non-HP printers: Okidata printers now have underline capabilities, and the Diablo 630 printer has superscript and subscript enhancements.

### How to Get Your Free Upgrade Kit

Fill out the special form in the Current Information Insert, using the bottom section as the mailing label. Then send us the form with your master WordStar disc—with HP label and serial number attached—and we will mail to you WordStar Version 3.3B and an update for the *WordStar/150 Self-Paced Training Guide*. (Continue to use your work copy of WordStar Version 3.3A or 3.30 until you receive the upgrade kit.)

This exchange program ends August 31, 1984; we must receive all returns by that date.

**Three-Column Print**

Printing two columns of text in Word/12x is easy with the two-column print macro, but how about three-column print? The procedure below formats and segments a regular text file for printing in three columns. It uses the .Y, J, and .T commands (i. e., reformat, verify page format off-screen, and vertical tab commands, respectively).

The .Y command is placed at the top of the workspace to format the size and position of the first column. The J command then finds the last word that fits in the first column, using the .Y format as a guide. The .T command is placed after the last word of the first column; it makes the printer vertically tab the paper back to the top line of print in preparation for printing the second column. The other columns are formed in a similar manner.

Multi-column print works only with letter-quality printers. Be sure the Y-table printer type is 0 and destination is 2.

**Procedure**

In this example, each column is 10 lines long and 25 characters wide.

1. With the cursor at the top of the workspace, fetch the Y-table.
2. Go into edit mode.
3. Change the Y-table, replacing underlined variables as follows:  

```
.Y 1 10 255 0 5 1 0 25 8 12 1 0 35 5
```

(LINES PER PAGE 10, CRS PAGE END 255,  
INDENT 5, WIDTH 25)
4. Type the text of the file.
5. Home the cursor to the top of the workspace.
6. Go into command mode.
7. Find the end of the first column by typing:  

```
j [RETURN]
```

(Note: Command in upper case works, too.)  
Hyphenate as prompted. When this command is finished, the cursor is after the last word that fits in the first column.
8. Go into edit mode.
9. Press [INS LINE].



10. Type  
[RETURN] .T [RETURN]  
to insert a vertical tab command after the first column of text.
11. Press [INS LINE] again.
12. Go into command mode.
13. Fetch the Y-table.
14. Go into edit mode.
15. Indent the second column of text by making the following change to the Y-table:  
.Y 1 10 255 0 32 1 0 25 8 12 1 0 35 5
16. Go into command mode.
17. Type:  
j [RETURN]  
Hyphenate as prompted.
18. Go into edit mode.
19. Press [INS LINE].
20. Type:  
[RETURN] .T [RETURN]
21. Press [INS LINE] again.
22. Go into command mode.
23. Fetch the Y-table.
24. Go into edit mode.
25. Make the following change to the Y-table:  
.Y 1 10 255 0 59 1 0 25 8 12 1 0 35 5
26. Go into command mode.
27. Type:  
j [RETURN]  
Hyphenate as prompted.
28. Go into edit mode.
29. Press [INS LINE].
30. Type  
[RETURN] .E [RETURN]  
to indicate end of page.
31. Press [INS LINE] again.
32. Home the cursor to the top of the workspace.  
The cursor is now at the first Y-table.

33. Make the following change to the Y-table:

```
.Y 1 12 255 0 5 1 0 25 8 12 1 0 35 5
```

(The LINES PER PAGE variable must be changed from 10 to 12 after using 10 with the J command in order to read the .Ts.)

34. Home the cursor.

35. Go into command mode.

36. Print the page.

37. Repeat steps 1 through 36 for the remaining text following the .E end-of-page indicator.

Are you interested in seeing the data from your Condor database in graphical form? This article goes through the steps to create a graphics data file from the information in a Condor database for plotting with Graphics/12x or Graphics/150.

In the procedures that follow, the Condor database is CLIENTS, the graphics data file is CGRAPH, and the data disc is in the B: drive.

---

**HP 12x Procedures**

1. In Condor, WRITE out the database to create a new data file formatted for use with Graphics/12x:  

```
B>>WRITE CLIENTS CGRAPH.OUT [G]
```

Note that the data file CGRAPH needs an extension; .INF or .OUT are good ones. The [G] option is needed to format the data file for Graphics/12x.
2. Exit Condor.
3. Start up Graphics/12x, using the chart type of your choice. The Chart Menu now appears on the screen.
4. Fill in the File Name field with the data file created from the Condor database:  

```
File Name B:CGRAPH.OUT
```
5. Fill in the File Type field with type C (for data file in column format).
6. Press the GET DATA function key to bring in the data file.
7. If you are making bar or pie charts, press the VIEW FILE function key to view the data. Otherwise, press the DATA PAGE function key to view the data.
8. Note the following when examining the data:
  - If a blank spot appears in the data matrix, you should edit the data to have 0's (zeros) instead of blanks. (A blank spot, which corresponds to a blank field in the Condor database, acts as a delimiter between two fields when Graphics/12x reads the data to plot. This has the undesirable effect of moving up the data by one field.)
  - Slashes in the data (as in a date) act as delimiters between data fields. Therefore, Graphics/12x treats dates as three separate numeric fields. This happens whether you want to plot this information or just want to skip over it to get to the next numeric field.

- Graphics/12x does not count alphanumeric data (such as names) as columns of data to be plotted. Such information is ignored.
- 9. If you are making bar or pie charts, press the RETURN key to return to the Chart Menu. Otherwise, press the MAIN MENU function key to return to the Chart Menu.
- 10. Fill in the Chart Menu with the plotting options you want.
- 11. Press the PLOT function key to plot the chart.
- 12. If you want to save your new chart and data, first remove the extension from the file in the File Name field:

File Name *B:CGRAPH*

Press the SAVE MENU function key to save the new chart and data. Graphics/12x appends an extension to the file name which indicates the chart type (.BAR or .PIE, for example). Then when you want to plot this chart again, you need only specify the file name without any extensions.

---

#### HP 150 Procedures

1. In Condor, WRITE out the database to create a new data file formatted for use with Graphics/150:  

```
B>>WRITE CLIENTS CGRAPH.OUT [G]
```

Note that the data file CGRAPH needs an extension; .INF or .OUT are good ones. The [G] option is needed to format the data file for Graphics/150.
2. Exit Condor.
3. Start the Graphics/150 application of your choice (line, bar, or pie chart).
4. Touch the "Get a Chart" label to bring up the Charts Menu.
5. In the Data File Information section, fill in the directory block field with the data file created from the Condor database:  

Directory: *B:CGRAPH.OUT*
6. Touch the "Transfer DataIn" label until an asterisk (\*) appears in the label.
7. Touch the "Data" label to bring up the Data Menu so you can look at data.

8. Note the following when examining the data:
  - If a field is blank in the Condor database, the data in the next field for the same record is moved over. However, each record will be on its own line in the Data Menu. As a result, you may have to edit the data.
  - Graphics/150 limits five data items per record. The first character string encountered is used to fill in the label portion of the Data Menu.
  - If you are making a pie chart, only one column of data is used. Specify the column of data you want by touching the "Next Column" label until the column you want is selected.
9. When you are satisfied with the data, touch the "Preview" or the "Plot" label and prepare to plot.
10. If you want to save the new chart and data after plotting, touch the "Save" label to bring up the Save Menu, then specify a new file name and the directory for the chart.

Touch the "Start Save" label to save the new chart and data. Graphics/150 appends the appropriate file extension to the name.

## Transferring Data Between a Series 100 Computer and an IBM PC

Margaret Price

### New Software Available from HP

It is now easy for you to transfer files in either direction between a Series 100 computer and an IBM Personal Computer. File Transfer Monitor for the IBM PC, the new software, runs on the IBM computer while DSN/Link operates on your HP 12x or HP 150. If you are familiar with DSN/Link, you will recognize that File Transfer Monitor for the IBM PC operates very much like MONITOR on the Series 100 computers.

Both ASCII and binary files can be transferred. Files can be sent over hardwired or modem connection. This is a physical transfer and does not provide for compatibility of data or programs transferred across systems.

### Operational Requirements

You need the DSN/Link software for your HP 120, HP 125, or HP 150. If you have hardwired connection, use the HP 13242H cable.

In addition to the File Transfer Monitor program, the IBM PC or IBM PC-XT must be running PC-DOS Version 2.0 or later, have an IBM Asynchronous Communications Adapter, and have a minimum 128K of memory.

### Ordering Information

The products below are available from HP or through your local HP Series 100 Dealer. See the Current Information Insert in this issue for details on ordering these products.

Product	Product No.
File Transfer Monitor for the IBM PC (on a 5¼" IBM-formatted disc)	45439A
DSN/Link/12x for the HP 120 and HP 125	45534B
DSN/Link/150 for the HP 150	45425A
RS-232C Cable (for hardwired connections)	13242H



Using the HP 7475 and HP 7470 plotters with the Graphics/150 application provides you with a quick means of creating presentation graphics on the HP 150. But suppose you want to make your own graphs, charts, and slides on the plotter through a BASIC/150 program?

You can, by controlling the plotter with HP-GL commands sent from your program. (HP-GL commands access the powerful instruction set built into the firmware of HP graphic plotters.) In order to do this, you first must set the hardware configuration properly, then create a communication link in your BASIC program between the HP 150 and the plotter to send the commands through. This article explains how to do these tasks to programmatically access a plotter with an RS-232 interface from BASIC/150.

### Hardware Configuration

To set the hardware configurations of both the HP 150 and the plotter, refer to the article in this issue titled, "Using Plotters with the HP 150."

### Sample Program

To create the link in BASIC to the plotter, two files are opened and mapped to the "PLT" logical device of MS-DOS: file #1 is a random file of six bytes for getting information from the plotter, and file #2 is an output file for sending commands to the plotter. By "PRINTing" the HP-GL commands to the output file, you control the plotter.

In this program, the HP-GL command "OI" queries the plotter for its identification and the GET statement reads the ID of the plotter. The PRINT statements 90 through 110 select a pen and draw a frame on the plotter.

```

10 CLOSE
20 OPEN "R",#1,"PLT",6
30 OPEN "O",#2,"PLT"
40 FIELD #1,6 AS A$
50 PRINT #2,"IN;"
60 PRINT #2,"OI;"
70 GET #1,1
80 PRINT A$
90 PRINT #2,"SP1; IP1250,750,9250,6250;"
100 PRINT #2,"SC1,12,0,150;"
110 PRINT #2,"PU1,0 PD 12,0,12,150,1,
    150,1,0 PU;"
120 CLOSE
    
```

---

**For More  
Information**

To learn more about the HP-GL commands we used, obtain the programming manual for your plotter: "Interfacing and Programming Manual for the HP 7475A Graphics Plotter," part number 07475-90001; "Interfacing and Programming Manual for the HP 7470A Graphics Plotter," part number 07470-90001. You can order these manuals by phone from HP; see the "How to Order" section in the Current Information Insert of this issue for details.

If you want to access the plotters through BASIC with your HP 120 or HP 125, refer to the article in *Communicator* issue #4 titled, "Accessing a Plotter from BASIC."

Refer to *Communicator* issue #4 to see examples of pre-defined graphic commands for BASIC function calls.



## BASIC—How Do You Make RND More Random?

Brian Rainie

Each time a BASIC program is run, the random number seed is reset to the same starting value. This means that simulation routines and games will keep getting the same random numbers each time they are executed. One method of altering the starting value is to use the RANDOMIZE statement. This solves the problem, but it requires user input.

A more interesting solution exists in the subroutine shown below. By asking a user a question, accepting the response a character at a time, and resetting the RND seed as the input comes across, the final starting seed will be dependent on how long the user takes to respond. This can give a much better random starting point.

```
1000 REM ***** SUBROUTINE: ACCEPT USER INPUT *****
1010 REM This subroutine accepts the user's input one character at a
1020 REM time, waiting for a carriage return as a terminator. It
1030 REM also alters the random number generator seed by performing
1040 REM a constant GET from the RND function until the user's input
1050 REM has been received.
1060 REM The user's response will be stored in the variable IN$.
1070 REM NOTE: This routine performs a block mode input to retrieve
1080 REM the information right off the display. This insures that
1090 REM the final edited version is accepted.
1100 REM
1110 REM
1120 REM Get the row and column of the current cursor position.
1130 REM
1140 PRINT CHR$(27);"a";CHR$(17); ' Request for cursor position
1150 CPOSIT%=INPUT$(12) ' Read answer
1160 CPOSIT=VAL(MID$(CPOSIT$,4,3)) ' Compute column number
1170 REM
1180 REM Get user's inputted characters, echo them back and wait
1190 REM for the carriage return. Alter RND values.
1200 REM
1210 IN$="" ' Clear input variable
1220 WHILE IN$<>CHR$(13) ' Carriage return
1230 IN$=INKEY$ ' Get character from kbd
1240 PRINT IN$; ' Print it out
1250 TMP=RND ' Change RND seed
1260 WEND
1270 REM
1280 REM Position cursor at beginning of user's answer, then read it
1290 REM
1300 PRINT CPOSIT%;
1310 PRINT CHR$(27);"d";CHR$(17); ' Request line from display
1320 LINE INPUT IN$ ' Read the line
1330 IN$=MID$(IN$,CPOSIT+1) ' Trim preceding prompt
1340 REM
1350 RETURN
```

Here's an example showing you how to install your BASIC program so that it comes up on the HP 150 PAM menu.

The following listing is the source for a short BASIC program to request and then double a number. It was created using Microsoft BASIC and saved as the file SOURCE.BAS.

```
10 PRINT "Multiplies by two"  
20 INPUT "Enter the number (or 0 to stop) ";A  
30 IF A = 0 THEN SYSTEM  
40 PRINT "The answer is ";A*2  
50 GOTO 20
```

The next listing is an installation file to install SOURCE.BAS in PAM under the name "Progame." This file, called INSTFILE.IN\$, was created using MemoMaker. You can also create the installation file with WordStar (as a non-document file) or you can enter the file with the MS-DOS command "COPY CON INSTFILE.IN\$" (enter a control-Z as the last line).

```
Progame  
A.01.00  
BASIC.COM  
SOURCE  
1024  
SOURCE.BAS  
*  
BASIC.COM
```

(The asterisk indicates that the application, SOURCE.BAS, is on a disc different from the one containing BASIC/150.)

To install Progame, you need the Disc Applications Disc with the INSTALL program, the disc with your source program, and the BASIC/150 disc. Follow the directions given in the *HP 150 Owner's Guide* to run INSTALL. The Guide also includes an explanation of the meaning of each line in the INSTFILE.IN\$ file, with one correction: to derive the fifth line, round up the size of each of the files to the nearest disc allocation unit—1024 if you have a flexible-disc system, 4096 for a fixed disc—then add up the grand total.

Try this example ... it's easy (and fun) to have your own program appear in the PAM menu.

---

Cross Reference Utility is now available as a productivity aid to programmers using BASIC on the HP 150. Using your standard BASIC program file, you can generate a complete cross-reference listing.

The listing is organized alphabetically by variable name. After each variable is a tally of all line numbers at which the variable appears. Then for each line number follows information to tell you what's going on in that line. This information includes:

- the BASIC function that appears in that line
- resolved and unresolved line references
- mathematical operators.

This programming utility is easy to operate and its performance is optimized for fast execution. Output can be directed to a printer or to a disc file for easy storage.

---

**Ordering Information**

Cross Reference Utility is available as HP product number 92248BA. For ordering details, refer to the "How to Order" section in the Current Information Insert in this issue.

# Answers to the Most Frequently-Asked HP 150 Questions

This section is a compilation of responses to the most often-asked questions on the HP 150 personal computer, based on the experience of HP's Phone-In Software Assistance Center. We hope that you find this information useful.

We are including a Reader Comment Sheet at the end of this section. Use it to provide the Assistance Center with feedback and information that you feel would make a good addition to this list.

(All commands that appear in the answers are activated by pressing the [Return] key after typing the appropriate command string.)

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## WordStar/SpellStar/MailMerge

**Q. How do I change the pitch on my 82906A? How can I print in compressed mode on my internal printer?**

A. Insert a Control PA (^PA) in your text to change the pitch on an 82906A. To return to the default pitch, insert a Control PN (^PN).

To set your internal printer to compressed mode, insert a Control PA (^PA) in your text, and a Control PN (^PN) will return the printer to normal mode.

**Q. How do I turn off Microjustification?**

A. Insert the dot command .UJ 0 (the number 0) into your document. The dot command to resume microjustification is .UJ 1 (the number 1).

**Q. How many words can I add to the SpellStar Supplemental Dictionary?**

A. There is room on the dictionary disc for approximately 6,000 to 7,000 words. This allows a total of approximately 26,000 words for the combined Main and Supplemental Dictionaries.

**Q. Why does my printer seem to print more slowly when I use WordStar?**

A. The WordStar program is designed to print at a speed that insures the printer buffer won't overflow. The 3.3B and 3.3A versions of WordStar have already been improved to increase printer speed, but if you have version 3.30 of WordStar, you may increase the speed of only the primary printer with the following:

- Run WINSTALL. Answer the questions as usual until you reach the INSTALLATION MENU. Instead of answering A, B, C or X, type in a + (plus sign).
- The program will ask for a confirmation, which is done by pressing return. It will then ask for a starting address. Respond with :HAVBSY followed by a return.
- The WINSTALL program will respond that this corresponds to address 7CA. It will ask if this is the response you want. If is, so answer YES.
- The WINSTALL program will display the address, its current value (which should be 00), and will ask for a new value. Type in FF then press return.
- WINSTALL will then ask for a value to put in the next address. Nothing else should be changed, so enter a period (.) followed by a return.
- WINSTALL will now give you a chance to get back to the INSTALLATION MENU by entering an X. Do this now, and make any other changes if desired then save the changes as usual.

**Q. How do I add SpellStar and MailMerge to my WordStar work disc?**

- A. *SpellStar and MailMerge are not installable programs. They are WordStar utilities which are copied onto your WordStar work disc using the following procedure:*
- Place your WordStar work disc in drive A
  - Place the SpellStar or MailMerge disc in drive B
  - Select the function key File Options
  - Select the function key Copy File
  - For SpellStar, copy the files SPELSTAR.OVR and SAMPLE.TXT
  - For MailMerge, copy the file MAILMERG.OVR
  - The SpellStar Dictionary (SPELSTAR.DCT) should be copied to another disc.

**Q. When I output from WordStar, why do I get garbage?**

- A. *This occurs when WordStar is first run but the printer is not correctly configured. To fix this, you need to run the WINSTALL procedure as outlined in the WordStar Self-Paced Training Manual, Appendix A (Installation Procedures), Page A-9.*

**Q. Can subdirectories be accessed through WordStar?**

- A. *No. WordStar does not utilize subdirectory capabilities at this time.*

**Q. Is there a way to save certain margins and tabs with my WordStar file so that I don't have to figure out which values I used each time and then individually reset them?**

- A. *Yes, just create your own ruler:*

*First, create a comment line in the file by placing two dots (periods) starting in the first column.*

*Enter a Control P (^P) and then press Return. The cursor will immediately move to the next line, and a hyphen will appear in the flag column (extreme right hand column of your screen). This hyphen indicates that the line the cursor is on will overprint the line above it.*

*Starting at the current position (first column of the line below the double dots), enter hyphens (-), exclamation points (!), and pound signs (#) to represent spacing, tabs and margins for the ruler you want.*

*For example:*

```
..                                     >  
                                     >  
                                     - >  
-----!-----!-----!!-----#-----!----- >  
                                     >
```

*Once you have this ruler line in your file, simply move the cursor anywhere on the sample ruler and type Control O F (^OF). The actual ruler at the top of the WordStar screen will change to reflect the ruler in your file.*

*To set margins from previous text: If you are not concerned with tabs and have previously entered text material that has the margins you want, you can place the cursor on any line of this text and type Control O F (^OF). The right and left margins will immediately change to match those of the line that the cursor is presently located on. Tabs will remain unchanged.*

## MemoMaker

**Q. How do I reformat my text after changing my margins or editing a paragraph?**

- A. Press the function key Block Keys. Position the cursor to the beginning of a block of text, and press Align Block. The message Use cursor to define a block then select Block OK will appear.

*After the block is selected, press the function key Block OK. The message Select Alignment OK if the new alignment is correct will appear.*

*Press Alignment OK and the text will be reformatted.*

**Q. Can I extend my right margin beyond 80?**

- A. No.

**Q. How can I get another memo without exiting MemoMaker?**

- A. Press the function key Get Memo. The message Do you want to save the current memo as Nameless or the current filename.

*If you want to save anything, press the function key Yes, Save. The prompt Enter File Name (or use File Manager) will be displayed. Enter a valid file name of another memo and your new memo will be displayed on the screen.*

**Q. How do I print the portion of the memo that can be displayed on the screen?**

- A. Make sure your cursor is positioned at the place where you want to begin printing, then press the Print Memo function key. This will print out the contents of the memo to the end of memory.

*You may selectively print out sections of text by placing .PA commands in your text, and position your cursor before the command, such as at the beginning of a paragraph. When you press the Print Memo softkey, only the contents of the memo from the cursor to the .PA command will be printed.*

**Q. When I bring a MemoMaker file into WordStar, why is the left margin so wide?**

- A. WordStar automatically gives you a left margin which is one inch wide. MemoMaker does not. If you were to put in a one inch wide left margin in a MemoMaker document, and bring that memo up in WordStar, the result would be a two inch wide left margin. To avoid having to reformat your text every time, put in the dot command .PO 0 (the number 0) at the top of your WordStar document before printing it out.

## Personal Card File (PCF)

**Q. How many cards can I have in a cardfile, and how many characters can I have on a card?**

A. *Provided there is enough disc space available, you can create up to 550 cards in a cardfile, at 1520 characters per card (19 lines by 80 columns). The number of cards per cardfile increases or decreases depending on the amount of disc space available.*

**Q. How can I modify my cardfile after I have created the form and entered data into it?**

A. *First transfer your current data out of your cardfile, using the Transfer Out function key. Create a new cardfile, using the Show Old Form function key. Modify the fields you wish. Transfer the data back into the new cardfile using the Transfer In function key.*

*The above procedure will allow you to:*

- *Shorten or lengthen your fields.*
- *Add additional fields at the bottom of the card.*
- *Rename your fields.*
- *Add additional descriptive text.*

*You cannot delete fields or insert new fields in the middle of the card or change the order of the fields.*

**Q. Sometimes, when I press Exit Select I completely exit PCF. Why?**

A. *This key (both Touch and the Softkey) is very sensitive. When you press Exit Select, be sure to touch the key very quickly, and do not hold your finger on the key. Key strokes are buffered, and it is possible to activate Exit PCF if you hold your finger on the key.*



## DSN/Link

- Q. Every time I try to upload Link/100 to my HP3000 host system, I get the error message Unable to Install Host Program File. What am I doing wrong?**
- A. You should check for all of the following:
- You need to be logged on as MANAGER.SYS in order to load anything into the PUB.SYS account, where the Link/100 program must reside.
- Your TERMTYPE must be set at 10. If you're not, set it during your logon procedure, for example: HELLO MANAGER.SYS; TERM = 10
- The terminal configuration for your 150 should reflect a baud rate matching that of your HP 3000 port.
- Q. Why do I get the error message "Cannot Find Local File" when I try to install the Format Conversion Utility?**
- A. You should install the DSN/Link and UPLOAD programs on one disc, but do not install the MONITOR program since it will not fit in the remaining space. This should permit you to upload now.
- Q. The messages "Cannot Start HP3000 Transfer Program. Link/100 must be installed" or "File Inaccessible" or "Wrong Version of Link file" is displayed. What's the problem?**
- A. The user must correctly install the latest version of LINK/100 on the system. As of this printing, the current version of Link/100 is A.02.00. It is also possible that the user did UPLOAD, but not into the PUB.SYS account on the HP3000.
- Q. When I transfer program files to the HP3000, they come out in a different format. What can I do to maintain the correct structure?**
- A. You may need to preserve the original file by using a file equate to reset the structure. For example:
- ```
FILE filename; REC = - 256,, F, BINARY; DISC = , 1, 1; CODE = PROG
```
- When you're in the transfer menu use \*filename as the host destination file name.

## Data Communications

**Q. Are there any communications programs for the HP150?**

A. *Hayes introduced SMARTCOMM II for the HP 150 at COMDEX. The HP150, besides being a PC, is also a high performance terminal. In the HP3000 environment, it has the functionality of the HP2622 and HP2623.*

**Q. How do I talk to the datacomm ports on the HP150?**

A. *Through the use of files. Com 1 is associated with Port 1, and Com 2 is associated with Port 2, by default. By modifying the Device Configuration, these files can be remapped to Port 1, Port 2 or Remote, if desired.*

**Q. How do I get two HP150s to "talk" to each other?**

A. *In either a hardwired configuration or through the use of modems, HP's DSN/Link package is designed to make communication easy.*

**Q. How do I connect an HP150 to a HP3000?**

A. *Just as you can connect two 150s together, you can either hardwire or use modems to connect the 150 to a 3000. Here again, use the DSN/Link package.*

**Q. Can HP150s communicate with computers other than the HP3000?**

A. *Yes, either as another computer system, in which case you can use DSN/Link, or as a terminal closely emulating the HP2623. HP's DSN/Link software may not work on another host and may not upload or operate properly. HP supports this software product only when loaded on an HP3000. The absence of this software defeats the error checking capability of the DSN/Link product.*

## Graphics

### **Q. How do I transfer data from a VisiCalc file to the Series 100 Graphics on the HP 150?**

A. First you must save the data as follows:

- Load the desired file into VisiCalc
- Delete all column headers and formats (e.g. \$ , etc.). Leave row or column headings which will be used for the X-axis heading.
- Type in the sequence /S#S
- Save the file under a new file name
- Select C for column if X-axis labels are in a column, or R for row if X-axis labels are in a row.
- Exit VisiCalc

To transfer VisiCalc data into Graphics:

- Enter the Graphics application
- Select the Get a Chart function
- Press the Transfer Data In function key until an asterisk (\*) is present in the softkey label
- Tab to Data File Directory: and type in the appropriate directory and file name, for example A: \EXAMPLE.DIF
- Select the Data function key
- Perform the desired graphics functions (Note that the chart definition—Y Min and Max—will not change)

### **Q. How do I configure my HP150 to output to an HP-IB plotter?**

A. In the Device Configuration menu, the PLT DEV should be HP-IB and the ADDRESS should be 5 to represent the address of the plotter (verify that the plotter is set to address 5 as well—see the article titled, "Using Plotters with the HP 150" in this issue of the Communicator for more detailed information).

### **Q. How do I configure my HP 150 to output to an RS-232 plotter?**

A. In the Device Configuration menu, the PLT DEV must be Port 1 or Port 2, depending on which one the cable from the plotter is connected to. Some plotters have switches which must be set correctly to ensure communication between the two devices, as outlined in the HP150 Owners Manual. (See the article titled, "Using Plotters with the HP 150" in this issue of the Communicator for more detailed information).

**Q. Can I dump the graphics I have on my screen to the internal printer of the HP150?**

- A. Yes, you can dump graphics directly to the internal printer or to an external 82906A printer. The HP150 must be appropriately configured for the desired printer (see page 6-7 of the HP 150 Terminal User's Guide), and by pressing the Graph Copy key (the Enter key on the graphics pad) the graphics is dumped to the printer. The 82905A and B printers do not support this graphics dumping capability.

**Q. How can I use my HP150 to run the HP3000 graphics programs like DSG/3000 or HPDraw?**

- A. With all but the newest release of the HP3000 graphics programs, you need to configure your HP150 to be a 2623 terminal. Make sure you have a valid connection to the HP3000 and also make sure you have changed the Terminal ID field in the terminal configuration menu to be 2623A instead of 150A. With this configuration, HP-IB plotters are not supported.

With the newest release (i.e. HPEasyChart A.02.00, HPDSG/3000 A.03.00 and HPDraw A.02.00), the 150A is supported as a terminal. You do not have to change the Terminal ID field.

**Q. When I'm running the HP3000 graphics programs, can I plot to a 7470 or 7475 plotter attached to the HP150?**

- A. Yes, but the way you connect the plotter depends on whether or not you have the latest release of the HP3000 graphics programs.

With the newest release (i.e. HPEasyChart A.02.00, HPDSG/3000 A.03.00 and HPDraw A.02.00), you can use HP-IB plotters provided the Terminal ID field is set to 150A ). An RS-232 plotter can be used if it is connected in eavesdrop mode between the HP3000 and the HP150, using cable number 07470-60090.

**Q. Why are the segment names in the Pie Charts program so small when they appear on the preview screen?**

- A. The picture of the chart appearing on the screen is approximately 20% the size of the final chart which will be plotted out when finished. The preview screen is designed to let you interact with a rough cut of what the final chart will look like, not to give the final appearance of the chart.

## BASIC

**Q. How do I access the serial ports from BASIC?**

A. Use the following statements:

1. OPEN "O", #1, "COM1"
2. PRINT #1, list of data

*The logical file names such as COM1 (Port 1) can be found in the Device Configuration Program.*

**Q. Does BASIC allow you to use all your memory?**

A. No. BASIC uses 64K in which both the program and your data must reside. The BASIC interpreter itself has its own memory.

**Q. What are the escape sequences for Device Mapping on the 150?**

A. The HP150 does not support Device Mapping—therefore, there are no corresponding escape sequences.

**Q. Why does the terminal lock up when I try to use the transmit function key option when creating my own Function Keys in BASIC?**

A. Straps G and H in the terminal configuration must be set to "Yes" before the softkeys will work properly.

## Computer Tutor

### Q. How do I get the Computer Tutor to work?

- A. 1. Make sure that only the REMOTE KEY has an asterisk. No other MODES softkey should contain this softkey.
2. DEVICE CONFIG should be the following for disc drives:
- A: HPIB Address 0 Drive 0
  - B: HPIB Address 0 Drive 1
  - C: NO DEVICE
  - D: thru L: NO DEVICE

Notes: ■ TUTOR will not run on winchester (fixed) disc drives

- You cannot copy or backup the TUTOR because it contains its own operating system
- The TUTOR must use a non-hidden IO.SYS file. (This is the reason it won't coexist with PAM on winchester based systems.)

### Q. Can I run the Tutor from a fixed disc?

- A. The original version of Tutor was designed to run only in a dual flexible disc configuration. Version 1.1 of Tutor runs in a dual disc configuration, but also runs on any 9133 Winchester disc provided there is more than 256kB in the HP150. In summary:

| VERSION | WORKS ON<br>DISC<br>DRIVES                                                                                                                                                    |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.0     | HP 9121D                                                                                                                                                                      |
| 1.1     | HP 9121D<br>HP 9133A If extra memory is present in the computer<br>HP 9133B If extra memory is present in the computer<br>HP 9133X If extra memory is present in the computer |

### Q. When I type in my name, why do the letters appear at the top of the screen instead of where the cursor is?

- A. Before Tutor begins, function keys at the bottom of the screen are momentarily displayed. If any function key besides the Remote Mode key has an asterisk (\*) in it, Tutor will not work properly. To remove the asterisk, just touch the function key and the asterisk should turn off.

## Condor

**Q. How do you sort a dataset that takes up more than half of the space available on the disc?**

- A. The following outlines the procedure for a dual disc drive system, but can be slightly modified to work with a fixed disc system:
- Place the Condor disc in the A drive and a blank formatted disc in the B drive.
  - Start the Condor application and at the A>> prompt, type  
COPY B: = A:SORT.DBM
  - Replace the Condor disc in the A drive with the disc which contains your dataset.
  - At the A>> prompt, type B: (return)
  - At the B>> prompt, type SORT A:FILENAME BY DATAITEM where FILENAME is the name of your dataset, and DATAITEM is the item you want to sort. Condor will now begin sorting your dataset.

**Q. Can Condor and the HP150 Operating System be placed on the same disc?**

- A. No. This is an error in the Condor manual which will be corrected in the next printing. After you've created the disc containing only the Condor application, this disc is placed in drive A, and can be started after re-reading your discs from P.A.M.

**Q. Can a datafile encompass more than one screen?**

- A. No, Condor only allows one screen per form per dataset.

**Q. What is the purpose of the RESULT dataset, and what can I do if I accidentally destroy this dataset?**

- A. The RESULT dataset is created by Condor for the purpose of storing intermediate files that are the result of commands such as PROJECT, SELECT, JOIN, etc. If at all possible, the RESULT dataset should never be DESTROYed. If the RESULT dataset is not needed at the present time, simply EMPTY RESULT to gain extra disc space.

If you happen to inadvertently DESTROY the RESULT dataset, you must manually enter it into the DATA DICTIONARY. To do this you must:

- 1) Type ENTER DATA.DIC at the B>> prompt (or the drive where the RESULT dataset has been DESTROYed).
- 2) In the area designed for title, type RESULT, then type R\$ in each of the form, definition and data file areas.



**Q. How can I print mailing labels from my Condor dataset using WordStar?**

A. To transfer data to WordStar from Condor, use the following procedure:

Type PROJECT DATABASE BY ITEM1, ITEM2, ITEM3, ... ITEM32 (up to 32 items) where DATABASE is the name of your dataset and ITEM1 through ITEM32 are the particular items you need for your mailing list such as name, street, city, state, zipcode, etc.

Type WRITE RESULT NEWFILE [B] to write the results into a file named NEWFILE. It is important to append the [B] to this command.

This creates a file that can be input to MailMerge and used against a form for addressing letters, envelopes or labels. The same file can be read into WordStar as a document using the READ A FILE softkey.

**Q. Can I use the Condor datasets I've created on my HP120 or HP125 with the HP150?**

A. Yes. Refer to the HP150 Owner's Guide, page 7-20; Converting CP/M files to MS-DOS files.

**Q. How can I make a copy of my dataset disc?**

A. It is good practice to always keep a current copy of your dataset. You can:

1. Use the COPY/BACKUP UTILITY in P.A.M. Refer to the HP150 Owner's Guide, page 7-10.

2. Use the COPY command in MS-DOS. Refer to the HP150 Owner's Guide, page 8-4.

3. Use the COPY command in Condor. Refer to the Condor Reference Manual, page 2-14. An example using this last process:

- Place your CONDOR disc in drive A and a blank, formatted disc in drive B.
- At the A>> prompt, type COPY B: = A:COPY.DBM
- Remove the CONDOR disc from A and replace it with a disc containing your dataset.
- At the A>> prompt, type B:.
- At the B>> prompt, type COPY B: = A:DATABASE where DATABASE is the name of your dataset.

Using the above procedure, all extensions to the dataset are automatically copied as well, e.g. the .DAT, .DEF, .FRM, .RPT, .IDX etc. files, along with the DATA.DIC file.

If you have a fixed disc, and the dataset is larger than your flexible disc, use the COPY/BACKUP UTILITY in P.A.M. Refer to the HP150 Owner's Guide, page 7-18 for more information.



**Q. Are there any Condor Training classes available?**

A. Yes—for details refer to the “To Learn More” section in this issue of the Communicator.

**Q. How can I prevent continuous printing over the perforation of the paper?**

A. The Condor PRINT command prints all records continuously, and you need to use the TITLE command to perform form feeds on printers that use continuous sheets of paper. (Refer to the Condor Reference Manual, page 2–108). Make sure your PRINT command follows the appropriate TITLE command.

*The command TITLE TOP,56 will form feed every 56 lines, which leaves approximately one inch at the bottom of every sheet.*

*If you want a text title with your output, use the command TITLE TOP, 56 “text” where text is the text of your title. The TITLE command executes from left to right; therefore you will get a form feed to the next sheet and then the text of your title will be printed.*

*The TITLE command is cleared only by another TITLE command, or by exiting Condor. Therefore the most recent TITLE command will execute with any subsequent PRINT commands.*

**Q. How can I modify the structure of my dataset after I have it defined?**

A. There are different methods depending on what you’re modifying:

*If you want to cosmetically alter the form or change field names, use the FORMAT command. Refer to the Condor User’s Manual, page 9-4. Caution: be sure not to alter the lengths of the fields or the order of the fields when using this command!!*

*If you only want to change the minimum, maximum and default values, use the UPDATE command on the .DEF file of your dataset. Refer to the Condor User’s Manual, page 9-8.*

*If you want to add, delete or reorder fields, use the REORG command. Refer to the Condor User’s Manual, page 9-16.*

*The FORMAT, UPDATE and REORG commands can be used on a dataset regardless of whether or not it contains data.*

*If you want to change a field type or field length, use the DEFINE command. If your dataset contains data, you must first write the data out to a temporary file, restructure the dataset and then read the data back into the dataset from the temporary file. Refer to the Condor User’s Manual, pages 9-18 and 9-19.*

*Before you make any changes, make sure that your data is compatible with the desired modifications, i.e., if shortening a field the existing data does not exceed the new length, and if you change a field type—from AN to N, for example—the existing data does not contain any alpha characters. If your data is not compatible, you will not be able to successfully read the data into your modified dataset!*

*The following is an example of how to alter the field type or length. Skip the FORMAT command if only changing a field type. The example uses a dataset named CARDFILE:*

- It is suggested that you first make a copy of your dataset using the command `COPY TEMP = CARDFILE`, which will copy the contents of `CARDFILE` into a file called `TEMP`.
- Write out the data to a file named `TEMPFILE` in Basic format using the command `WRITE TEMP TEMPFILE [B]` (be sure to add the `[B]`).
- The command `FORMAT TEMP` will allow you to change the field length.
- The command `DEFINE TEMP` will allow you to change the definition specifications. At this point Condor will ask you to choose an option: Re-define? to which you type `R`. With a file containing data, Condor will prompt `Data file is not empty: OK to delete all records (Y/N)`, to which you answer affirmatively. Use the carriage return to position the cursor on the field line to be modified. Use the backspace key, not the arrows, to move the cursor.
 

If changing the field length for a field defined as `NAME: ANR,30,0,30`, " " you can backspace to the first comma, use the space bar and erase everything to the last quote mark. Hit return and let the program input the size, minimum and maximum requirements. This method ensures that the definition will agree with the form.

If changing the field type for a field defined as above: backspace to the field type (`ANR`) and overstrike with a new field type. Use the space bar to erase everything to the last quote mark. Hit return and let the program input the size, minimum and maximum requirements.
- After all modifications are made, use the command `READ TEMP TEMPFILE` to read the data back into the dataset.
- `LIST TEMP` to verify the data.
- To rename the dataset, use the `COPY CARDFILE = TEMP` command. Since the dataset already exists, you will be asked to verify whether or not you want to replace the original. Answer affirmatively.
- `DESTROY TEMP` will destroy the `TEMP` dataset.
- `DESTROY TEMPFILE*` will destroy the `TEMPFILE` file.

(Note that the above procedure differs slightly from the one given in the Condor User's Manual).

## **dBASE II**

### **Q. How do I install dBASE II on the HP150?**

A. *For instructions, refer to the article titled, "Installing dBASE II on the HP150" in this issue of the Communicator.*

## **Context MBA**

### **Q. Does the HP150 version of Context MBA utilize the touch capability?**

A. *Yes, using the 8 function keys f1 through f8. The 8 functions are: /E (Edit), > (Goto), /WXY (Draw Grf), /WXN (Clear Grf), END, CNTL-C, ! (Recalc) and ? (Help). The touch capability can also be used for positioning the cursor within a window and moving the cursor to any other window.*

### **Q. How many discs are required to run Context MBA on the HP150?**

A. *Three program and one demo disc are included with the HP150 version of Context MBA. They are labelled MBA1, MBA2, MBA3, and DEMOS.*

### **Q. Will Context MBA on the HP150 run in the standard 256 kB memory configuration?**

A. *Yes, version 2.3 of Context will run in the standard configuration, but depending on your requirements, it may run slower due to more frequent access of workspace on your mass storage device. You may wish to purchase additional memory for faster operation if the system slows for your application.*

### **Q. How much workspace is available for data on the HP150 version of Context MBA if I have the standard 256 kB memory configuration?**

A. *There are two options available for your workspace, which translates to about 110 Pascal blocks of memory in the default configuration, and about 225 Pascal blocks for the maximum possible workspace.*

## VisiCalc

**Q. Why is it that when I input the number 65.6 it appears on the command line as 65.599999999999?**

A. *The computer translates the number from the actual value to an internal representation and then back to an alphanumeric representation. Page 1-16 of the VisiCalc Procedure Manual explains the considerations used in displaying and rounding numbers.*

**Q. When I want to load a spreadsheet from drive B, why does it automatically give me the directory for the A drive?**

A. *The default drive is always the one you load the VisiCalc program from. To change this, use the File Manager and the VisiCalc Directory keys. In version A.01.03 there is a command /S\ and a softkey to allow a change of the current drive and directory.*

**Q. How can I get more memory to handle a larger VisiCalc spreadsheet?**

A. *There are two ways to do this:*

- 1. Buy additional HP150 memory. This is recommended if your spreadsheet contains more than 1200 cells or has many formulae or labels.*
- 2. Disabling P.A.M. will also allow the user to gain more spreadsheet memory.*

**Q. How do I disable P.A.M.?**

A. *To do this, use the MS-DOS RENAME command to rename the CONFIG.SYS file on the working disc of your operating system to any name not already present on the disc. The HP150 Owner's Manual explains the RENAME command in more detail.*

*Now reboot the system and run the VisiCalc program directly from MS-DOS by typing VC after the MS-DOS prompt. P.A.M. can be restarted by typing PAMCODE after the MS-DOS prompt. This will provide you with normal P.A.M. capabilities, and you can disable P.A.M. at any time by pressing the EXIT PAM softkey.*

*To restore your system back to its original state, rename your file back to CONFIG.SYS and reboot your system. P.A.M. will now come up automatically, with less memory available for your spreadsheet.*

**Q. If I have disabled P.A.M., how do I run VisiCalc?**

A. *It is recommended that you have your MS-DOS prompt be A>, and place your VisiCalc application disc in drive A. Now type VC to begin VisiCalc.*

**Q. When I reload my spreadsheet from the disc, some of the cells have the word "ERROR" or some portion of the word displayed in them. What can I do to prevent this?**

A. *The ERROR in the cell is the result of the order in which cell's contents are calculated. The order is based on the formula contained in the cell. If the value for the cell is calculated based on cells not yet calculated or having old values in them, ERROR is displayed in the cell to reflect this fact. This is known as forward referencing, and is explained in the VisiCalc Procedures Manual, page 1-17. Portions of the ERROR message are displayed if the width of the cell is less than 5. One or several manual recalculations (press the exclamation key—!) may be needed to clear up all ERROR messages in the cells. The permanent solution is to reorganize the worksheet, avoiding all forward references.*

### Lotus 1-2-3

**Q. How much memory does 1-2-3 take up? How much memory will I have available on a 256K machine? How many cells can I fill up?**

A. *The HP150 standard memory configuration is 256K. After the operating system, P.A.M. and 1-2-3 are loaded, there is approximately 40K of worksheet space remaining. Filling cells with just numbers allows a user to fill 10,000 cells, whereas using formulae and filling every cell, a user can fill about 2,000 cells.*

**Q. What is the largest number I can store in 1-2-3? How accurately is it stored?**

A. *The largest number that 1-2-3 can store internally is  $10^{300}$ . The largest number than can be displayed is  $10^{99}$ . 1-2-3 stores numbers up to 15 digits of precision.*

**Q. Can I use my VisiCalc and dBASE II files with 1-2-3? What other programs will 1-2-3 exchange data with?**

A. *1-2-3 will accept the transfer of files from VisiCalc and dBASE II, as well as any DIF (Data Interchange Format) files. Files can be exported from 1-2-3 to dBASE II and any DIF file programs.*

**Q. Are there any special considerations when I use a plotter with 1-2-3?**

A. *Depending on the type of plotter you intend to connect (see the article, "Using Plotters with the HP150" in this issue of the Communicator for detailed information on the 7470 and 7475 plotters), we recommend setting the AUX device in your Device Configuration Menu to be HP-IB address 5 or Port 2— whichever is appropriate and then when configuring your output device in 1-2-3, select Interface 4. Port 1 may also be specified for an RS-232 configuration as well. For more information, please refer to the PRINTGRAPH section of the HP150 Lotus 1-2-3 manual.*

## **BPI Accounting**

**Q. Does BPI work faster on a Winchester disc drive as opposed to a flexible disc drive?**

A. *The Winchester does operate faster (it has a faster access and transfer rate) than a flexible drive; accordingly, the Winchester processes data faster. Also, by having all of the BPI Start-Up and Program discs on the Winchester, you save the additional time it takes to insert and remove flexible discs as you operate the particular package.*

**Q. Can I get some more specifications on BPI?**

A. *The General Accounting Package has 2000 accounts available for use in General Ledger Accounts, Employees, Vendors, Customers and Payees/Payors. Up to ten departments are available, along with a variety of reports. The demo disc that comes with each BPI package contains information relevant to the particular package.*

**Q. Does BPI incorporate HP Touch in its packages?**

A. *Yes, it uses HP Touch on the softkeys in various operations.*

## Configuration

**Q. What is the HP150's main memory capacity?**

A. 640 kB maximum main memory. Not all application programs can utilize all of the available memory.

**Q. I can't seem to get my HP printer to work with my HP150. Any idea what's wrong?**

A. Most of the time, the problem can be remedied by doing the following:

*Make sure everything is well connected (double check if necessary) and the printer is turned on. The printer and the computer both need to be plugged in and the correct cable used to connect the printer to the HP150. Make sure the configuration menus in the HP150 are set correctly and the DIP switches on the printer are correct.*

*Resources for printer configurations are the HP150 Owner's Guide, beginning at page 2-41, as well as the MS-DOS configuration information in Appendix A, beginning on page A-23. You may also need to set your system softkeys correctly, which is covered beginning on page 9-19.*

**Q. What are the differences between a standard Epson MX-80 printer and the HP 82905A/B or 82906A printers?**

A. Hewlett Packard purchases the Epson MX-80 printer for use in the HP82905A/B dot matrix printers, and the Epson FX-80 for use in the HP82906A dot matrix printer. The obsolete HP82905A used the standard Epson MX-80, including standard firmware. The HP82905B uses the basic Epson MX-80 printer with HP-modified firmware, and the HP82906A uses the basic Epson FX-80 printer with HP-modified firmware. Therefore, the standard Epson printers may not work with Series 80 and Series 100 graphics or other application software.



**Q. How can I connect my non-HP printer to my HP150?**

A. *There are two methods to connect the HP150 to a printer: RS-232 or HP-IB (HP's implementation of IEEE-488). RS-232 and IEEE-488 are industry standards which define only the connector and signal lines. The detailed usage of signal lines varies from vendor to vendor—and the printer control sequences sent via the interface are typically unique to each printer. Hewlett-Packard performed limited operational testing on the following non-HP printers:*

- DIABLO 630 API
- DIABLO 620 API
- NEC 3510
- NEC 7715
- QUME 1140
- C. ITOH F10-40
- EPSON FX-80
- EPSON RX-80
- BROTHER HR-15
- OKIDATA 92
- OKIDATA 2410
- MANNESMANN TALLY-SPIRIT 80

*Application briefs on the use of these printers are available from your HP dealer or HP Sales and Service Office. (Note that HP's testing of non-HP printers does not include measurement of radio-frequency emission. You are responsible for any radio/TV or other interference consequences which result from configuration of non-HP printers with the system.)*

**Q. How do I format my 9133XV 15 MB disc drive, and how long does it take to format it?**

A. *The HP150 Owner's Guide describes the operation of the Disc Formatting Utility on pages 7-5 through 7-9. This utility program is compatible with the 9133 XV disc. It takes approximately 30 minutes to format this 15 MB drive.*

**Q. I recently configured my HP150. When I load P.A.M., it seems to take approximately one minute to load. Why is it so slow, and is this normal?**

A. *With the default disc configuration, this is a normal amount of time. When more discs are logically defined or specified than are physically connected to the HP150, a longer time to load is caused by device timeout on the non-existent discs. Place a NO DEVICE in the device configuration menu where physical discs do not exist, and P.A.M. will come up more quickly.*

**Q. Can I connect my serial 2631B dot matrix printer to my HP150? Does HP support this type of configuration?**

- A. Although not full supported, the serial 2631B can successfully operate with the HP150. With regards to device configuration, the serial 2631B should be configured identical to the 2932, 2933 or 2934 printers from HP. The cable used to connect the serial 2631B to the HP150 is the 13242G. Switch settings are as follows:

*(RS-232C) 2631B Switch Configuration*

*S1 on Serial Interface Adapter (Real Panel)*

|   |                       |        |
|---|-----------------------|--------|
| 1 | XON/XOF Operation     | Open   |
| 2 | ENQ/ACK Operation     | Closed |
| 3 | SCA Line              | Closed |
| 4 | Operation             | Closed |
| 5 | CD Line               | Closed |
| 6 | Operation             | Closed |
| 7 | External CB Signal    | Open   |
| 8 | Auto Modem Disconnect | Closed |

*Front Panel (Left Switch)*

|   |                  |     |
|---|------------------|-----|
| 1 | Duplex           | OFF |
| 2 | Parity           | OFF |
| 3 | Parity           | OFF |
| 4 |                  | OFF |
| 5 | Baud Rate (2400) | OFF |
| 6 | Baud Rate (2400) | ON  |
| 7 | Baud Rate (2400) | OFF |
| 8 | Baud Rate (2400) | OFF |

*Front Panel (Right Switch)*

|   |                  |     |
|---|------------------|-----|
| 1 | Lines Per Inch   | OFF |
| 2 | Print Pitch      | OFF |
| 3 | Print Pitch      | OFF |
| 4 | Perforation Skip | OFF |
| 5 | Length           | OFF |
| 6 | Length           | OFF |
| 7 | Length           | OFF |
| 8 | Length           | OFF |

**Q. How do I configure my 7470 or 7475 plotter with the HP150?**

- A. For instructions, refer to the article titled, "Using Plotters with the HP 150" in this issue of the Communicator.

## Miscellaneous

- Q. When I run the HP150 Datacommunication Test, I get an error A111. What's wrong?**
- A. *The Datacommunications test is designed to operate correctly with two test connectors on Ports 1 and 2. These test connectors are used by trained service personnel to verify correct port operation. Running the Datacommunications test without these connectors on Ports 1 and 2 provides the A111 error.*
- Q. Can I copy HP120 or HP125 files over to my HP150?**
- A. *Yes! Use the COPY/BACKUP utility program as outlined in the HP150 Owner's Guide, pages 7-11 through 7-13. If different size discs are required, the disc units/drives must be properly configured on the HP150. To convert CP/M files to MS-DOS files, follow the discussion beginning on page 7-20 of the Owner's Manual.*
- Q. Can I take programs from the IBM PC and run them on the HP 150?**
- A. *The 150, like the PC, runs MS-DOS. In general, software written for the IBM needs some modification to run on the 150. Many industry packages utilize techniques that are not part of the MS-DOS standard; when this has been done, conversion work is needed before the software will operate on either the HP150 or IBM-PC.*
- Q. How can you transfer programs and data from the IBM PC?**
- A. *For information, refer to the article titled, "Transferring Data Between a Series 100 Computer and an IBM PC" in this issue of the Communicator.*
- Q. Why did HP choose 3½ inch discs?**
- A. *To achieve higher quality, reliability, performance and a smaller system footprint.*

- Q. Do 3½ inch discs cost more than the 5¼ inch disc?**  
A. *Prices are comparable.*
- Q. How much data can I store on a 3½ inch disc?**  
A. *About 260 kB, formatted.*
- Q. How much workspace is left over after MS-DOS and P.A.M. are loaded?**  
A. *About 140 kB.*
- Q. Does the screen on the HP150 show smudges?**  
A. *The HP150 screen has been specially smudge-resistant coated.*
- Q. Do you always use your finger to operate the software?**  
A. *No. The keyboard can do anything that touch does.*
- Q. What software is available for the HP150?**  
A. *Refer to the "HP 150 Software Available from HP" section in the Current Information insert of the Series 100 Communicator for the many available applications.*
- Q. Do you have games and educational software?**  
A. *Yes; refer to the article titled, "New 'Edu-tainment' Software for the HP 150" in this issue of the Communicator.*
- Q. How do I install applications into subdirectories?**  
A. *You don't . . . P.A.M. will only find applications that are installed in the root directory.*
- Q. Why do I keep running out of memory when I try to run any program?**  
A. *It may be caused when you return to P.A.M. from MSDOS Commands—you should type "EXIT" instead of "PAMCODE". Each time PAMCODE is executed, another copy of P.A.M. gets loaded into memory. EXIT simply executes the P.A.M. code that already resides in memory.*



# READER COMMENT SHEET

HP Personal Computer Systems  
Answers to the Most Frequently Asked HP150 Questions

HP Series 100 Communicator Issue #8

We welcome your evaluation of this material. Your comments and suggestions will help us with future publications such as this. Please mail to:

HPCOACH Assistance Center  
Attn: Information Booklets  
3410 Central Expressway  
Santa Clara, California 95051

- Is this material technically accurate?  Yes  No
- Are the concepts and wording easy to understand?  Yes  No
- Is the format of this material convenient in size, arrangement, and readability?  Yes  No

Comments:

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FROM: \_\_\_\_\_ Date \_\_\_\_\_

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

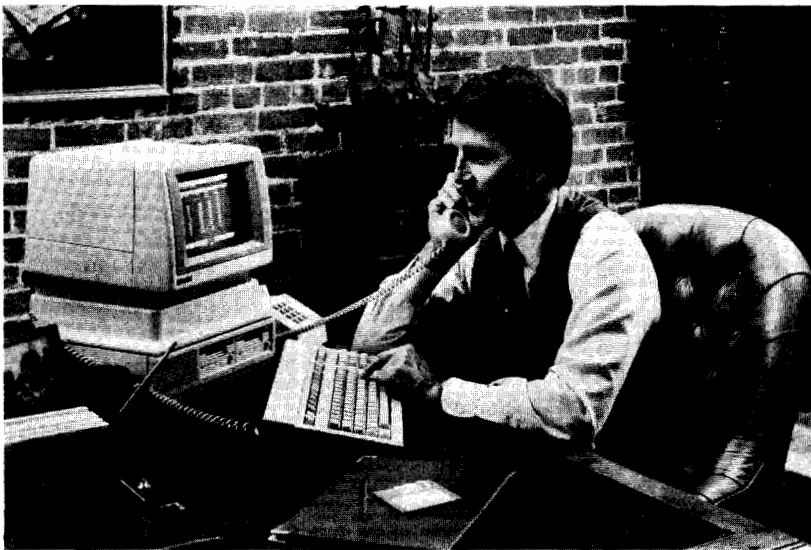
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We stand behind every product we sell—including not only the software developed by Hewlett-Packard but also the industry-standard software packages we provide.

The level of capability provided by advanced personal computer software—together with the rapid evolution of this field—means that you will occasionally have questions which are not answered in the product manuals or in the *Communicator*.

Depending on how your system is purchased and how it is used, the optimum source of assistance may be Hewlett-Packard, your dealer, or your own organization:





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**Your Direct Line to Hewlett-Packard**

To provide answers to your questions on software distributed by Hewlett-Packard, HP's Phone-In Software Assistance service is available to you at no charge. You call a Phone-In Software Assistance Center in your region or country; a phone-in coordinator determines the type of question and arranges for the appropriate HP support representative to call you. Using a full set of Series 100 software and documentation— together with computer knowledge, problem-solving skills, and access to further assistance via HP's worldwide telecommunications network—the support representative works with you to resolve your question.

For software assistance:

- In Canada, call 1-800/267-6115.
- In the U.K., call 0344-777110
- In the U.S., call 800/HPCOACH (800/472-6224)
- In other countries, call your HP Sales and Service Office—ask for "Personal Computer Phone-In Assistance."

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**Assistance from Your Local Dealer**

If your system is purchased from a dealer or system house, they have worked with you to define your application and configure your system—perhaps selecting software or peripherals not supplied or supported by HP. Here, your dealer is the best source of assistance—knowing you, your needs, and your configuration well. Of course, your dealer is backed up by special support resources within HP.

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**Optimized Assistance from Your Own Organization**

If yours is a large organization using Series 100 systems in a networking environment, the best software support source may be your central MIS or data processing department. They have full knowledge of your organization's overall system: your internally developed programs, your unique operating and networking procedures ... plus your specific hardware and software configuration. The central support personnel, in turn, can call on special resources within Hewlett-Packard.

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**Software from Third Parties**

Some Series 100 software packages were designed by other companies but are marketed and supported by Hewlett-Packard. There are many other products for the Series 100 which are marketed by independent organizations—referred to as "third parties" or "independent software vendors." Support for these products comes from the software vendor or the dealer who supplied the software.

### Training Courses



The Series 100 and its application programs are designed for ease of use and ease of learning. Classroom training courses can help your first-time computer users rapidly build confidence and gain new skills in a supportive environment away from the day-to-day job.

#### HP-Conducted Introductory Courses

Hewlett-Packard provides Series 100 training courses at HP Customer Training Centers using HP-provided equipment; they can also be taught by HP at your facility using your own systems. To order, call your HP Sales and Service Office.

- *Introduction to Personal Computers*

For managers and professionals with limited knowledge of personal computers. Content: General personal computer usage including basic computer literacy, lots of hands-on use of VisiCalc, some hands-on use of word processing and graphics; summary of how PCs can work for you.

35119A (1 day)

- *Getting Started with your HP 150*

This workshop was created especially for beginners—so your first experience with your new computer will be a positive one. You'll learn how to define basic computer terms, start up the system, handle discs properly, prepare new discs, and install application software.

35036A (1 day)

This course, or equivalent knowledge, is a prerequisite for all applications and programming training on the HP 150.

- *HP 12x User Course*

For any user of the HP 120/125. Content: Introduction to the HP 12x and the use of Word/12x; second day covers Graphics/12x, VisiCalc/12x, and DSN/Link/12x.

35042B (2 days)

This course, or equivalent knowledge, is a prerequisite for all applications and programming training on the HP 12x.

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**HP-Conducted  
Application Courses**

We have structured the curriculum for maximum flexibility. You can attend whatever functional area course you want—spreadsheet analysis, word processing, data base management, or integrated software—without having to go through material you are not interested in. For further efficiency, *WordStar/150* and *Condor/150* are each divided into two modules, allowing you to choose the depth of understanding you wish to attain.

All of these classes stress hands-on work with the HP 150 during class time for maximum effectiveness.

■ *VisiCalc/150*

A solid introduction to the elements of a VisiCalc worksheet is provided in this workshop. Participants will learn to create, edit and print worksheets, identify and use 16 commands, activate the function keys, and store and load worksheets.

35125A (1 day)

■ *WordStar/150*

The WordStar workshop will help you get started with word processing and its many capabilities. By the end of the workshop you will know how to start WordStar, create a new document, and then edit, save and print documents.

35123B (½ day)

■ *MailMerge and SpellStar/150*

As a follow-on to WordStar, this workshop shows you how to merge files as well as proof your text using SpellStar's 20,000 word dictionary. In practice sessions, you will learn how to create a mailing list database and then combine this with text files to print customized letters and memos. The majority of WordStar's dot commands are explained and illustrated.

35123C (½ day)

- *WordStar/100 and MailMerge/SpellStar/150* are available as a single unit.

35123A (1 day)

- *Condor/150 20-1*

This workshop will introduce you to Condor—an easy-to-use, yet powerful database management system. After you understand what a database system is you'll learn how to use one by designing a form for entering data, creating a simple dataset, editing information, sorting and creating simple reports, and reorganizing a dataset.

35124B (1 day)

- *Condor/150 20-3*

The Condor 20-3 workshop will provide you with in-depth experience using Condor's advanced database management and report writing capabilities including indexing a new or existing dataset, joining unlike datasets, creating, printing and revising reports, and creating and running a help screen and command procedure.

35124C (½ day)

- *Condor/150 20-1 and 20-3* can be ordered as a single unit.

35124A (1½ days)

- *HP150 Applications: Sharing Information*

Because you may use the same information in different ways, this workshop was created to teach you how to pass information from one software application to another. The following applications are covered: Condor, PCF, MailMerge, MemoMaker, SpellStar, WordStar, HPGraphics, and WordStar.

35037A (½ day)

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**HP-Conducted  
Programming Courses**

*Refer to "Books on Personal Computing", just before this section, for self-study texts on programming.*

- HP 12x Programmer training is provided by the *HP 12x Program Development Course*, which covers CP/M, the specifics of Series 100/BASIC, and the assembly language. This course is designed for those who have programming experience in both BASIC and an assembly language.

34043A (5 days)

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**HP Customized  
Training**

These courses can be taught at your facility using your own systems—or training to suit your specific needs can be designed and given through HP's Business Computer Consulting Service. Contact your HP Sales and Service Office for details.

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**Dealer-Conducted  
Courses**

An HP Personal Computer Dealer may teach similar courses or may arrange for a Hewlett-Packard instructor to teach courses in your area. Contact your dealer for details.

The *Series 100 Communicator* is the heart of the Series 100 support program. It contains application information, operational tips, programming techniques, information on software updates, manual corrections, and data on known software problems and their solution. The *Communicator* is both a reference to everything current on the system and your window into the continually expanding world of the Series 100.

You can order a subscription just as you order supplies and accessories—through your dealer, by using HP's special telephone orderlines, or through your local HP office. (See the "How To Order" section in this insert for the special HP telephone number for your area.)

Series 100 *Communicator*—  
U.S. Edition . . . . . 45530A  
Series 100 *Communicator*—  
Canada/Mexico . . . . . 45530B  
Series 100 *Communicator*—  
International . . . . . 45530C

(Subscriptions outside the U.S. are sent by accelerated mail.)

*Note: We are unable to start your subscription with an issue which has already been mailed; to complete your set of Communicator issues, order individual copies as described in the next section.*

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**Address Corrections  
for *Communicator*  
Subscribers**

Change the information on the mailing label by sending us the Change of Address form which appears at the end of the Current Information Insert. Allow 6 to 8 weeks for the change to take effect.



## Ordering *Communicator* Back Issues



The application information, operational tips, and programming techniques included in the *Communicator* make back issues valuable—to increase your productivity and improve your system knowledge.

To order, refer to the “How to Order” section at the end of this insert.

The following back issues are currently available:

**Issue #1 includes the following major articles:**

- “Single and Multi-line Page Headings with Word”
- “Searching for Enhanced Text in Word”
- “Making Invisible Characters Visible in Word”
- “Directory Scrolling in VisiCalc”
- “Sending Escape and Control Codes to a Printer from VisiCalc”
- “Warning: PASCAL”
- “Things you should Know About Random Access Files”
- “HP 9895 to HP 9135 File Transfer”
- “Electronically Reading a Disc Reference Number”

Communicator Issue #1 . . . . . 5955-3937\*

**Issue #2 includes the following major articles:**

- “Making Graphs from VisiCalc Worksheets”
- “Word and VisiCalc Go Together”
- “Printing Formulas from VisiCalc Worksheets”
- “Printing Multiple Copies From Word”
- “More on Search and Replace in Word”
- “Chaining from One Executable Program File to Another”
- “A BASIC Subroutine Library”
- “Sort and Back Up Operations with Large Data Bases”
- “Using COPY DISC to Back Up Data Files on Drive B”
- “Computing Internal Rate of Return in VisiCalc”

Communicator Issue #2-U.S. . 5955-3943\*

Communicator Issue #2-Intl. . 5955-3947\*

**Issue #3 includes the following major articles:**

- “Disc Formats on the HP Series 100”
- “Non-CP/M Programs-Will They Run?”
- “Long Documents with Series 100/Word”
- “Series 100/Word: Y Table Gymnastics”
- “Using Graphics to Your Advantage”
- “Condor Tips”
- “Adding Your Application Program to the WELCOME Menu”
- “Using Softkeys on Non-HP Systems”
- “Changing Printer Characters”
- “Using the HP 2121 Disc Drive with Your HP 125A”

Communicator Issue #3 . . . . . 5957-6213\*

**Issue #4 includes the following major articles:**

- “International System Summary”
- “Condor News”
- “Comparing BPI and Peachtree Accounting”
- “Printing Mailing Labels from Condor”
- “More on HPMAIL and the Series 100”
- “File Transfers Using PIP”
- “Accessing a Plotter from BASIC”

Communicator Issue #4-U.S. . 5957-6204 \*

Communicator Issue #4-Intl. . 5957-6214 \*

**Issue #5 includes the following major articles:**

- “Enhanced Installation Program Available”
- “Video Display Interface for the HP 125”
- “Comparing Condor and dBASE II”
- “Sending Escape Codes to Printers from WordStar and Condor”
- “Interchangeability of Word and WordStar Text”
- “Two-Column Print in WordStar”
- “WordStar Quick Tips and Defaults”
- “Getting VisiCalc to Round Dollar Values to Two Places”
- “Word-Wandering HP 2601A Printer Margins with the Sheet Feeder”
- “DSN/Link-Enhanced File Transfer Capabilities over Link/125”
- “Connecting Two Series 100 Systems for ASCII File Transfer”



- “Transferring IMAGE/3000 Data to a Condor Database”
- “Transferring Data to the HP 2700 Color Graphics Terminal”
- “Installing the Operating System on Your Fixed Disc”
- “Using the HP 2631B HP-IB Printer with Series 100”
- “Programming Challenge—Bypassing WELCOME”

Communicator Issue #5-U.S. . . . . . 5957-6205\*

Communicator Issue #5-Intl. . . . . . 5957-6215\*

**Issue #6 includes the following major articles:**

- “CSC Graphics Available on the Series 100”
- “New Auto Shutter for 3½ inch Micro Flexible Discs”
- “Introducing Enhanced DSN/Link”
- “Microsoft BASIC Compiler”
- “Using Block/Format on the Series 100”
- “Correction—Printing Mailing Labels From Condor”
- “WordStar/100 Multiple Column Print Update”
- “Remote Access to the HP 125”
- “Using the 92911A Bar Code Reader on the HP 125”
- “Configuring the Series 100 for use with the Diablo 630 Printer”
- “An Alternative to ALPHASORT for Series 100/Word”

Communicator Issue #6-U.S. . . . . . 5957-6206\*

Communicator Issue #6-Intl. . . . . . 5957-6216\*

**Issue #7 includes the following major articles:**

- “Telecompute with your Series 100”
- “Transferring Files Between the HP 12x and HP 150”
- “Data Compatibility Between HP 12x and HP 150 Applications”
- “HP 12x: PIP, COPY, and BACKUP”
- “Comparing VisiCalc and MicroPlan”
- “WordStar Microspace Justification”
- “Configuring WordStar/150 for your Printer”
- “Condor Tips”
- “Correction: Remote Access to the HP 120/125”
- “BASIC/150: Block Mode Transfers”

Communicator Issue #7-Intl. . . . . . 5957-6217\*

**Additional copies of this current issue are also available:**

Communicator Issue #8-Worldwide . . . 5957-6218\*

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**Binders**

Three-ring binders are available to organize your *Communicator* back issues.

8½" x 11½" page size; 1½" capacity . . . . .5955-3982

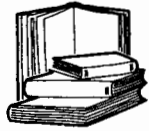
5½" x 8½" page size; 1¼" capacity;  
with slipcover . . . . .5958-0209

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*\*If 10 or more copies of a single Communicator issue are ordered from HP at the same time, the price is discounted by 25%.*

## Books on Personal Computing

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This section lists several personal computer books which we have found helpful.

For ordering information, refer to the "How to Order" section at the end of this insert.

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### Applications

#### **VisiCalc Programs Made Easy**

*Castlewitz*; Osborne-McGraw Hill, 1983

For first time users of VisiCalc, this step-by-step tutorial uses a series of "hands on" lessons that introduce the program's format and its many commands. In the final section, advanced uses and special tricks are covered that extend the capabilities of VisiCalc programs.

HP Product Number 92233Q

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#### **VisiCalc: Home and Office Companion**

*Castlewitz and Chisausky with Kronberg*;  
Osborne-McGraw Hill, 1982

A book for both beginners and experts. For the novice, it contains 50 models that can be used immediately for personal and business applications. For the experienced user, it is a source of new ideas and techniques. Arranged by application, the book provides models for loans and investments, advertising and sales, inventory control, personnel, household aids, and more. Each model includes the VisiCalc entry grid, a descriptive narrative, and sample printed report.

HP Product Number 92233Z

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**Writing in the Computer Age: Word Processing Skills and Style for Every Writer**

*Fluegelman and Hewes;*

Anchor Press/Doubleday, 1983

This book demystifies word processing and explains how it can be the ultimate tool in creating and refining your work. Topics include: hardware and software—what they are and what they do; the mechanics of working on word processors; screen and print formatting; setting up, organizing, and maintaining file systems; techniques for editing and polishing; styles and strategies; and more. This is a generic book on word processing that thoroughly covers the subject without being directed at any one word processor.

HP Product Number 92233N

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**Everyman's Database Primer:  
Featuring dBASE II**

*Byers; Ashton-Tate, 1982*

Written for the novice, this book is a tutorial on relational database management systems on a personal computer. It features dBASE II™ as the database management system used to illustrate the main points.

HP Product Number 92233R

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**Data Base Management Systems:  
A Guide to Microcomputer Software**

*Krugliniski; Osborne-McGraw Hill, 1983*

This book provides an introduction to data bases on personal computers. It presents information which will enable you to select a data base management system to meet your requirements. A number of packages are examined in detail—including Condor and dBASE II.

HP Product Number 92234A

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**System Management****CP/M User Guide**

*Hogan*; Osborne-McGraw Hill, 1981

Written for all levels of expertise, this book introduces the reader to CP/M's function within a microcomputer system as well as the use of built-in and transient commands, assembly language utilities, high-level languages and applications programs.

HP Product Number 92233Y

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**Networking****Touring Datacomm: A Data Communications Primer**

Hewlett-Packard, 1983

This is an introductory text which guides you through the basic concepts of data communications. It begins with a discussion of simple communications concepts and gradually introduces increasingly more complex topics. Topics include hardware and software; transmission methods and channels; line configurations and interfaces; signal conversion; multiplexing; common carrier services; and networks. Designed for readers with little or no previous knowledge of data communications.

HP Product Number 5957-4622

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**Computer Networks**

*Tenanbaum*; Prentice-Hall, 1981

This introduction to computer networks emphasizes network architectures and protocols from the physical layer to the application layer, and from local networks to satellite networks. No prior background in computer networks is assumed, though a general familiarity with computer systems and programming is desirable.

HP Product Number 92233V

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**Programming****BASIC For Home Computers**

*Albrecht, Finkel, and Brown; Wiley, 1978*

Teach yourself Microsoft™ BASIC with this step-by-step self-teaching guide. (Series 100/BASIC is a version of Microsoft BASIC.) This book is suitable for the novice who has never programmed before. Commands are explained using a short working program and then illustrated in a variety of applications.

HP Product Number 92234D

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**Microsoft BASIC**

*Knecht; Dilithium Press, 1983*

This book is appropriate for a person who already programs in another version of BASIC or another language and who wants to learn this version of BASIC. This book is not as elementary as *BASIC for Home Computers* and it covers more of the advanced features of Microsoft BASIC.

HP Product Number 92234E

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**The Investor's Computer Handbook**

*Packer; Hayden Books, 1982*

This book gives programs and examples directed toward the stock market, which are transferable to other types of dynamic markets and portfolios. Types of programs explained: portfolio management and trading, research filing and retrieval, chart generation and portfolio management. The demonstration programs are written in Microsoft BASIC.

HP Product Number 92234G

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# HP 12x Software Status

## HP 12x Software Available from HP

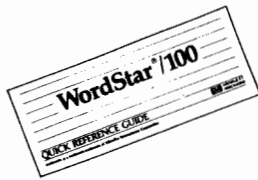
Editor

| HP 12x Application Software                              | Product No.† | Media Option‡ |     |     |
|----------------------------------------------------------|--------------|---------------|-----|-----|
|                                                          |              | 630           | 650 | 680 |
| VisiCalc®/12x                                            | 45531B       |               |     |     |
| Graphics/12x                                             | 45532B       |               |     |     |
| Word/12x                                                 | 45533B       |               |     |     |
| DSN/Link/12x                                             | 45534B       |               |     |     |
| BASIC/12x                                                | 45535A       |               |     |     |
| Programming Package/12x                                  | 45536A       |               |     |     |
| Condor™ 20-1/12x**                                       | 45550A       |               |     |     |
| Condor 20-2/12x**                                        | 45550E       |               |     |     |
| Condor 20-3/12x*                                         | 45550H       |               |     |     |
| Condor 20-1 to 20-2/12x Upgrade Kit**                    | 45550K       |               |     |     |
| Condor 20-2 to 20-3/12x Upgrade Kit*                     | 45550N       |               |     |     |
| Condor 20-1 to 20-3/12x Upgrade Kit*                     | 45550P       |               |     |     |
| BPI General Accounting/12x*                              | 45552A       |               |     |     |
| BPI Payroll/12x*                                         | 45553A       |               |     |     |
| WordStar®/12x                                            | 45560A       |               |     |     |
| SpellStar™/12x*                                          | 45561A       |               |     |     |
| MailMerge™/12x                                           | 45562A       |               |     |     |
| Picture Perfect™/12x*                                    | 45603A       |               |     |     |
| MicroPlan®/12x*                                          | 45670A       |               |     |     |
| MicroPlan Consolidation/12x                              | 45671A       |               |     |     |
| <b>Standard CP/M Application Software for the HP 12x</b> |              |               |     |     |
| Milestone™                                               | 45580A       |               |     |     |
| Datebook II™                                             | 45581A       |               |     |     |
| Personal Datebook™*                                      | 45582A       |               |     |     |
| dBASE II™                                                | 45583A       |               |     |     |
| Aardvark Professional Tax Plan                           | 45585A       |               |     |     |
| Aardvark Personal Tax Plan                               | 45586A       |               |     |     |
| Peachtree General Ledger*                                | 45589A       |               |     |     |
| Peachtree Accounts Receivable*                           | 45590A       |               |     |     |
| Peachtree Sales Invoicing*                               | 45591A       |               |     |     |
| Peachtree Inventory Control*                             | 45592A       |               |     |     |
| Peachtree Accounts Payable*                              | 45593A       |               |     |     |
| PeachPay™ Payroll*                                       | 45594A       |               |     |     |

\*Not supported on single disc drive system

\*\*Not recommended for use on single disc drive system

†Media option must be specified with product number (630 for 3.5" disc; 650 for 5.25" Disc; 680 for 8" disc)



Quick Reference Guides for most application packages are available for the HP 120/125 ... as well as Reference, Owner's, and Installation manuals for the system.

*Application* manuals are available only with the associated discs in complete software packages. (Please disregard "Kit Numbers" given on some HP 12x binders—these items are not orderable.)

To update your current documentation, refer to "HP 12x Manual Corrections and Updates", later in this *Communicator*.

To order Quick Reference Guides and Manuals, refer to the "How To Order" section at the end of this insert.

**HP 12x Quick Reference Guides**

Most HP 12x software packages include a Quick Reference Guide. This is a pocket-sized booklet or foldout card providing a summary of the program's commands and functions—for use once you are familiar with the application. Additional copies for the other users of your system are available from your dealer or HP:

- VisiCalc/12x Quick Reference Kit  
(5 cards) . . . . . 45531-60002
- Graphics/12x Quick Reference Kit  
(5 cards) . . . . . 45532-60002
- Word/12x Quick Reference Kit  
(5 cards) . . . . . 45533-60004
- BASIC/12x Quick Reference Kit  
(5 cards) . . . . . 45535-60001
- Condor/12x Quick Reference Kit  
(5 cards) . . . . . 45550-60001
- WordStar/12x Quick Reference Kit  
(5 booklets) . . . . . 45560-60001
- MicroPlan/12x Quick Reference Kit  
(5 booklets) . . . . . 45670-60001

**System Reference Manual**

The *HP 125 System Reference Manual* (included in the 45536A Series 100 Programming Package) may be ordered separately. It applies to both the HP 120 and the HP 125.

- HP 125 System  
Reference Manual . . . . . 45536-90000



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**System Owner's and  
Installation Manuals**

Additional copies of the Owner's Installation Manuals are available. If you do not have Operating System A.01.20 or a newer version, we recommend that you purchase the entire Software Update Kit—so that your new manuals will match your software. These are listed in the *Communicator* under "HP 12x Software Update and Upgrade Kits."

Series 100 Owner's Manual Kit  
(120/125) . . . . . 5061-3211  
HP 125B Installation Guide Kit . . . . . 5061-3212  
HP 120A Installation Guide Kit . . . . . 5061-3213

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**Binders**

Three-ring Series 100 binders are available to organize your *Communicator* back issues.

8½" x 11" page size; 1½" capacity . . . . . 5955-3982  
5½" x 8½" page size; 1¼" capacity;  
with slipcover . . . . . 5958-0209

## HP 12x Manual Corrections and Updates

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This section presents corrections to the HP 120/125 ("HP 12x") manuals. Just write in these corrections to update your manuals. **New entries since the last Communicator are marked with a star.**

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**HP 120  
Installation  
Guide  
HP 125B  
Installation  
Guide  
(11/82)**

Page 7-20 incorrectly lists the steps used to copy an operating system to your fixed disc. Use the following steps:

24. Press CHANGE COPY (f3) until SYSTEM appears in the COPY field at the top of the screen.
  25. Press *start copying* (f5).
  26. Press PROCEED (f5).
  27. Press CHANGE COPY (f3) until FILES appears in the copy field.
  28. Press *start copying* (f5).
  29. Press PROCEED (f5). When the Names of files are requested, type \*.\* [RETURN].
  30. Press the EXIT function key (f8) when the files have finished copying.
  31. Remove the flexible discs from the drive.
  32. Turn the drive off.
  33. Change your disc drives address as shown.
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**Getting Started  
With the  
HP125  
(7/81; Updated  
2/82)**

Page 4-6: Table 4 states that the 2601A printer should be configured with the Xon/Xoff field set to "Recv". Change "Recv" to "Xmit".

**VisiCalc/125  
Reference  
Manual (7/81;  
Updated 2/82)**

*[Order the VisiCalc/12x Software Update Kit to obtain the new manuals plus the latest software.]*

Page 1-11: Under the paragraph "Cells and Cell Contents" it states that a VisiCalc cell can contain up to 255 characters. Wrong; a cell can contain up to 125 characters.

Page 5-8: Change the exponentiation example on the top of the page to read  $2^5$  [RETURN]).

Page 5-16: The first example incorrectly describes the use of the NPV function. The example should read "@NPV(B8.B2.B6)+B1" not @NPV(B8,B1.B6). Also the result at B10 on the worksheet should read "288.2545" not "250.6561".

Page 6-3: Incorrectly states that the [CTRL] E command can be used to edit replicate commands. In fact, replicate commands cannot be edited with [CTRL] E. Delete the sentence "As with any other entry...by using [CTRL] E."

Page 9-3: States that the "AE" causes the character that follows to be an escape character. This is not true. Modify the text to say the "AE" sends an escape character.

Page A-3: The @IF function description should end with "the value w if b is false" *not* "the value w if v is false".

Page A-3: Change the description of the @NOT function to read "Results in the logical not of the Boolean value b."

Page B-11: Should read:  
"1020 OPEN "I",1,F\$"  
instead of "1020 OPEN F\$"

Page B-11: Line 1130 should be "INPUT T".  
Line 1150 should end with a "J" not an "I". Line 3030 should have a semicolon before "NV" not a colon.

Page B-12: Line 5030 should read "OPEN,2,F\$". The REM statement after line 6620 should be line 7000. Line 7020 should read "IF T1 <> -1 THEN 9000".

|                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Graphics/125<br/>Reference<br/>Manual (7/82;<br/>Updated 3/82)</b> | <p><i>[Order the Graphics/12x Software Update Kit to obtain the new manuals plus the latest software.]</i></p> <p>Page 6-12: Fourth line, and the following line before the sentence that begins "now the 24 months...": "Units between X Tics should be changed to 1". Also delete the 24th row of data shown in the example—only 23 rows can be entered on the screen.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Word/125<br/>Reference<br/>Manual (7/81; Updated<br/>2/82)</b>     | <p><i>[Order the Word/12x Software Update Kit to obtain the new manuals plus the latest software.]</i></p> <p>Page 1-13: Artwork is missing from the bottom of the page. Drawings for the "up arrow" and "down arrow" cursor control keys should be inserted in the blank spaces at the bottom of the page. Draw the keys in, using the keys on page 1-7 of the WORD/125 manual as examples.</p> <p>Page 2-9: In the middle of the page, the text reads: "See the information on marks in Chapter 5 for more information". Change the reference to Chapter 6 instead of Chapter 5.</p> <p>Page A-10: In the middle of the page, delete the paragraph that begins, "You should put a '.E' at the bottom..." Replace it with the following: "The '.E' and '.S' commands produce a page eject between letters and terminate the letter, respectively. These commands are automatically inserted at the end of the form letter by the MAIL MERGE macro."</p> |
| <b>DSN/Link/12x<br/>Reference Manual<br/>(11/82; Updated 3/83)</b>    | <p>★Page 1-5: Delete the entry on "System Programmer's Quick Reference".</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>BASIC/12x<br/>Reference<br/>Manual (7/81)</b>                      | <p><i>A BASIC/125 Reference Manual Update Package, part number 45535-99001, is available through your dealer or HP. It applies to HP 120 and HP 125 systems.</i></p> <p>Page 3-64: Line 100 in the example should be: "100 PUT #1, CK%" rather than "100 PUT #1, CK#"</p> <p>Page 3-80: Default text width on the screen is 72 characters. Change the number to 80 characters instead of 72.</p> <p>Page H-4: On lines 1020 and 1030 in the example, place a "\$" after the "ESC".</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

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**HP 12x System  
Reference  
Manual  
(7/81)**

Page 9-41: Table 9-5 should read:  
"04H Seek to Unwritten extent; 06H Seek  
past end-of-disc" instead of "04H Seek to  
unwritten data;6H Seek past end-of-file."  
Page 10-11: Change the maximum length of  
Subfunction 123 (window message string) from  
80 to 79 .  
Page 15-18: In the table listing XTHL and its  
definition, delete the word "Data" (beside it)  
and change the definition to read "Exchange the  
data on top of the stack with the contents of  
the HL register pair".  
Page A-7: Change the Key Code A9 from  
"enhance Linergins" to "Enhance Line".

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**Condor Series  
20 User's  
Manual (2/82)**

Page 6-11: Delete the comma just after  
"ORDERS" in the JOIN command. In the two  
PROJECT commands, change "TOTAL" to  
"AMOUNT". In the second PROJECT command  
change "COMPANY" to "FIRM".  
Page 8-5: First paragraph, last sentence  
should have the words "Bar charts and"  
deleted. Add a sentence to this paragraph as  
follows: "For Bar charts, the database to be  
plotted may contain a label item and up to 5  
value items per record."  
Page 8-5: The tabulate command in the first  
example should read: "TABULATE ORDERS BY  
REGION AND COMPUTE TOTAL  
AMOUNTS[S]"  
Page 8-5: Include the following between the  
PROJECT and SORT commands of the second  
example: "NOTE: The item MONTH must be  
numeric because the linear charts program  
accepts numeric values only."

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**BPI General  
Accounting/12x  
Manual (8/82)**

★Page 2-3: Replace the procedure for installing the  
application on a fixed disc drive by the following  
text: Install disc 1—data entry and maintenance,  
then PIP disc 2—posting and listing. Use A>PIP  
A: = E:\*.\*[RV] (where A = destination, E =  
flexible disc source).

## HP 120/125 Software Problem Reports



The software Status Bulletin is a cumulative list of all software problems that have been reported on the HP 120/125. **New entries since the last issue are marked with a star.**

### Operating System Version A.01.20

**Problem:** Upon using extended system function call 125 to send an 80-character message to message window, the 80th character is lost and the window is displayed in inverse video.

**Workaround:** Limit messages to 79 characters.

**Problem:** A file with a leading "\$" in the name causes WELCOME not to load on bootup.

**Workaround:** Don't use "\$" in file names.

**Problem:** When the Series 100 encounters a deleted file on an IBM 3740 type disc, it displays a "worn disc" error message and the disc operation is aborted after a number of retries.

**Workaround:** Fixed in Version A.01.40

**Problem:** From BASIC, when successive read and write record operations are made to two random files that begin at the same physical location in different disc drives, incorrect data gets read or written to these two files.

**Workaround:** Fixed in Version A.01.40

**Problem:** The operating system over-writes records between two files that are located in the same physical sectors in separate discs. The operating system does not remember the drive designator and gets confused as to which drive to act on.

**Workaround:** Fixed in Version A.01.40

**★Problem:** Unable to erase all files on a disc using the command, "ERA \*.\*".

**Workaround:** Make sure that Auto Linefeed mode is disabled.



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**★Problem:** When loading the system from a fixed disc, one of these messages appears: “\*\*\*Sector read/write error on drive A—Press return to warmboot” or “Check disc in drive A for excessive wear.”

**Workaround:** Copy existing data from the fixed disc to a backup disc, reformat the fixed disc, then recopy data from the backup disc to the just-formatted fixed disc.

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**WELCOME** Version A.01.20 (on Operating System A.01.20 discs marked “HP 125”)

**Problem:** When WELCOME is Read Only, an attempt to install an application will cause WELCOME to fail with a write to R/O file error.

**Workaround:** Change WELCOM.COM to a R/W file (i.e. STAT WELCOM.COM\$R/W). **Fixed in Series 100 Operating System—Software Update Kit available.**

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**Problem:** WELCOME does not update the softkey label if the application is reinstalled with a changed label.

**Workaround:** First delete application with original label. (CTRL-SHIFT-DEL function of WELCOME) and then re-install it. The delete function will remove the label. **Fixed in Series 100 Operating System—Software Update Kit available.**

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**Problem:** If application disc has a “R/W” file with the same name as an “R/O” file on the work disc, WELCOME fails on a “WRITE TO R/O” file error.

**Workaround:** Change file to a R/W file using STAT. **Fixed in Series 100 Operating System—Software Update Kit available.**

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**WELCOME** Version A.02.00 (on Operating System A.01.20 discs marked “Series 100”)

**Problem:** If you attempt to install an application onto a disc which has a full directory, you get a misleading error message—“Operation aborted. File open error.”

**Workaround:** If you get this message, delete a file (or files) then attempt installation again. If the problem persists, install the application on another disc.

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**Block-Format** Version A.02.00

**Problem:** After Block-format has loaded, the loader program quits without resetting the User Key labels.

**Workaround:** Reset them yourself in the User Key menu.

---

**Problem:** If a space terminates a value entry, only 2 backspaces instead of 3 are required to clear the line.

**Workaround:** If value entry is accidentally terminated by typing a space, use /E or Ctrl-E to edit the number.

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**Problem:** When replicating a column and the target range is smaller than the source range and at the edge of the worksheet, the replicate will wraparound and destroy the data in the target column.

**Workaround:** Always avoid replicating more data than the target range can accommodate.

---

**Problem:** An equation that is larger than the VisiCalc edit line will not replicate properly. Only half the equation is replicated.

**Workaround:** Do not attempt to replicate equations longer than the edit line.

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**Problem:** When saving a VisiCalc file to a bad or worn-out disc, the system will hang until a hard reset is performed, thus losing all the data.

**Workaround:** Verify that the disc can be written to before entering VisiCalc.

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**Problem:** Sending a set-up string to an HP-IB printer which is turned off or disconnected may cause VisiCalc to hang. Reset may not be able to clear the condition.

**Workaround:** Ensure that printer is on and ready before sending setup string.

---

**Problem:** VisiCalc fails if escape sequences are turned off prior to VisiCalc being invoked.

**Workaround:** If escape sequence processing is disabled, it must be re-enabled before other applications or programs are invoked.

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**Problem:** Entering a non-digit character during value entry causes VisiCalc to assume that entry mode is being transmitted.

**Workaround:** This is consistent with information in the manual, including the function of the ";" key. If a non-digit is accidentally pressed during value entry then /E for Ctrl-E can be used to allow further editing.

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**Problem:** Certain cell definitions which are syntactically incorrect can be entered. This is inconsistent with most cases, where incorrect syntax is not accepted.

e.g. @ NPV(1,2)  
@ Lookup (aq...cl.)

Ranges are accepted for values and vice versa.

**Workaround:** If an incorrect definition is accepted, ERROR is displayed in the cell to warn the user that a problem exists.

---

**Problem:** If the RETURN key is held down after the /SL command, VisiCalc will load the first VisiCalc file on disc but not display the filename.

**Workaround:** The first RETURN sent on the blank edit line causes a catalog of the disc to be requested. Since the RETURN is an auto-repeat key, another RETURN character is sent, before the first filename is displayed, and causes the first file to be loaded. Don't hold down the RETURN key.

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**Problem:** Illegal exponents result in incorrect values.

**Workaround:** Don't use exponents larger than 127.

---

**Problem:** Attempt to backspace over a value and enter a "(" enters a "0" instead.

**Workaround:** None

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**Problem:** Repeating label fields are not saved and retrieved correctly in DIF™ files.

**Workaround:** This may not be a serious problem if the labels are cosmetic (i.e., dashed lines) but it would be best not to use the "/-" command if the data is to be stored in a DIF file.

---

**Problem:** Saving to an existing file on a full disc results in a corrupt file.

**Workaround:** "ERROR:DISK FULL" message is displayed if the disc does not have enough space. When this appears, try saving the file to a different disc before exiting from VisiCalc or reloading the file.

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★**Problem:** When transferring a VisiCalc/150 worksheet to VisiCalc/12x, the top left cell of data is lost.

**Workaround:** Re-enter the cell contents.

**Graphics Version**  
A.01.00 and A.01.01



**Problem:** Allows embedded blanks in filenames, but these files cannot be processed with CP/M commands DIR,ERA.

**Workaround:** The blank must be substituted with a question mark. Example: ERA FILE 1 should be ERA FILE?1. **Fixed in Version A.01.02.**

**Problem:** Allows the user to specify pen number 9 when only 8 pens are valid.

**Workaround:** Treat pen 9 as a valid pen number. This allows the user to specify up to 9 pen numbers on the HP 7225 and 7470. The user will have to change the pens manually as required. Specifying pen 9 when using the HP 9872C causes pen 1 to be selected. **Fixed in Version A.01.02.**

**Pie**

**Problem:** Pie segment labels are not positioned properly when the segment approaches 0.5%.

**Workaround:** Sort the segments with the sort option. **Fixed in Version A.01.02.**

**Problem:** In pie charts, the labels will be plotted over exploded segments in certain instances.

**Workaround:** Use the auto sort option or avoid exploding segments. **Fixed in Version A.01.02.**

**Bar**

**Problem:** When using stacked bar charts, small solid slices are not always drawn in the correct place on the bar chart. The slice is most often drawn too high on the chart or, if small enough, may not be drawn at all. This problem occurs because solid slices in stacked bar charts are drawn a "fraction of an inch" short, so that the solid portion does not bleed on the other sections of the bar chart. If the small slice is smaller than the "fraction of an inch," the slice is positioned in the wrong place.

**Workaround:** Avoid graphing bar chart segments of very small size. **Fixed in Version A.01.02.**

**Problem:** If a solid (shade #7) segment of a stacked bar chart is less than 0.5% of the chart's range, the small solid segment may be drawn too high—causing the segment above to be drawn on top of the smaller segment.

**Workaround:** Rescale your y-axis so that the smallest segment is greater than 0.5% of the chart's range. **Fixed in Version A.01.02.**

**Problem:** In bar charts, if the x-axis labels are too long they will write over one another when plotted.

**Workaround:** Either use fewer bars per chart or use shorter text in your labels. **Fixed in Version A.01.02.**

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**Problem:** The top of a bar on a bar chart touches the border on some normal and comparative charts.

**Workaround:** Define the Y-axis labels such that the bars don't reach the border. **Fixed in Version A.01.02.**

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**Problem:** The default Y-axis scaling on some normal bar charts is too large, therefore the bars may be very small.

**Workaround:** User can set own scaling to values that will produce satisfactory results. **Fixed in Version A.01.02.**

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**Problem:** Bar charts won't plot when YMAX is less than 20% greater than YMIN.

**Workaround:** Choose values with greater than 20% differential. **Fixed in Version A.01.02.**

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**Problem:** Bar Charts gives an ambiguous error message if Ymin and Ymax are equal.

**Workaround:** Check that Ymin does not equal Ymax. Error message is more definitive in Rev. A.01.02.

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## Linear

**Problem:** The labels on the linear charts are rounded to the nearest tenth. For example the values 0, 0.25, and 0.50 will be plotted as 0, 0.3, and 0.5.

**Workaround:** Use numbers which are accurate to one decimal place. **Fixed in Version A.01.01.**

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**Problem:** Part of the last letter of a label on a linear chart may not be drawn on the X-axis.

**Workaround:** Use a label with fewer characters. **Fixed in Version A.01.02.**

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**Problem:** If only two points are specified for line type 6 in a linear chart (left and right border points only), the line does not plot all the way across the graph because of an HP-IB timeout.

**Workaround:** Line type 6 takes too long to plot, so use a different line type or insert an additional data point in the middle of the graph. Timeout is increased in Version A.01.02.

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**Problem:** If local echo is on in the terminal configuration, an attempt to plot a linear chart (Plot or Axis softkey) will give a "too many tics" error.

**Workaround:** Graphics now turns local echo off before loading linear charts. **Fixed in Version A.01.02.**

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**Slide**

**Problem:** After plotting many slides, SLIDE loses inverse video and seems to lock up.

**Workaround:** EXIT from GRAPHICS by typing 'EXIT' then re-enter to do the slide over again. Improved in Release A.01.02.

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**Problem:** Italic characters (from slide) are considerably shorter than other characters of the same designated size.

**Workaround:** **Fixed in Version A.01.01.**

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**Problem:** The SLIDE program will ask for pen number 0 when using the one-pen plotter (7225).

**Workaround:** Ignore message and press return. **Fixed in Version A.01.02.**

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**Problem:** In SLIDE, when Roman characters are plotted on the same line with normal characters, they are slightly raised above the normal characters.

**Workaround:** **Fixed in Version A.01.01.**

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**Problem:** Backslash and underscore aren't plotted in Roman or Italic fonts by Slide.

**Workaround:** Use normal or slanted Font for these characters. **Fixed in Version A.01.02.**

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**Problem:** All slides must be plotted on 8½ by 11 inch media.

**Workaround:** **Fixed in Version A.01.02.**

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**Problem:** Vertical slides could not be made on the 7470A or 7225B plotter.

**Workaround:** **Fixed in Version A.01.02.**

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**Problem:** Print format table entries go to "32" when filename is too long. Word does not reject filenames or filetypes that are longer than CP/M filenaming conventions allow. Entering a too-long filename results in the following:

1. The size of the file is listed in the directory as an impossibly high number (e.g. 520K on a 256K byte disc.)
2. All of the Y Table values are changed to 32.

**Workaround:** Make sure that all filenames follow CP/M filenaming conventions. **Fixed in Version A.02.02.**

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**Problem:** A line is printed at the wrong location with two column print. The two column print macro will occasionally print the last line of the first column in the second column. Also, dot commands are not always handled correctly.

**Workaround:** Some of the two column macro problems can be avoided by using a "manual method" for creating two columns of text rather than using the macro. "Manual method" instructions are as follows:

1. Imbed a .Y command at the top of the document to specify the width and length of the first column.
2. Use the J command to find the start of the second column.
3. Imbed a .T (to reposition the page) and a .Y (to format the second column) at the beginning of the second column. The .T command works only with printers capable of negative line feed, such as the HP 2601A.
4. Repeat steps 1, 2, and 3 for the entire document.

---

**Problem:** Bottom of screen filled with unwanted characters if the cursor is on the line below the last line of text (not in column one) and the cursor is homed down (moved to column 1 with the home key).

**Workaround:** To clear the unwanted characters from the screen, complete the following steps:

1. Go to Command Mode.
2. Type "Z" and then press the RETURN key. This will display the screen to set tabs.
3. Press the ESC key to exit from the tab screen.
4. Go to Edit mode.



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★**Problem:** The Mail Merge macro is ejecting two pages between printing letters.

**Workaround:** Delete the .E and .S commands at the end of your letter file since the macro automatically inserts the commands.

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**Problem:** Tabs set past column 80 on the screen are not always set correctly. If the screen is set to a line length of 150 and tabs are set between 80 and 150, the tabs will not stay where they are set on the screen. Most often an extra tab appears at column 81 on the screen.

**Workaround:** If you must set tabs past column 80, realize that you will have an extra tab at column 81.

---

**Problem:** When printing decimal tabs in proportional spacing, the right margin is no longer aligned.

**Workaround:** Place a .Y statement before and after the tabbed section. Replace each value (except the proportional spacing value) in the .Y statement with a slash. In the .Y statement before the tabbed section, turn the proportional spacing "off" (0); after the tabbed section, turn proportional spacing back "on" (1).

---

**Problem:** When using a character-oriented print routine, hyphenated phrases (e.g., phone numbers) may be split at the end of a line.

**Workaround:** Enhance the hyphen, then turn off the enhancement with the !7 command prior to the hyphen. Remember to reset the enhancements after the hyphen.

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**Problem:** There is a discrepancy between file sizes reported by WORD and those reported by the CP/M command "DIR".

**Workaround:** The file sizes reported by CP/M are correct.

---

**Problem:** With the line length set to 70, approx 75 characters are entered on a line, some wrap to next line. This 2nd line ends with a carriage return. There is an unindented 3rd line. Changing the line length to 79 pulls up the 2nd line to the end of the first (properly), but doesn't get rid of the "INDENT TO TAB", as the 3rd line is now the 2nd line, "INDENTED".

**Workaround:**

1. Start with line length set to where you intend it ultimately to be.  
OR
2. Fix it up afterwards with "CLEAR INDENT".

---

**Problem:** When WORD/125 encountered the sequence "?!?" in a document "?" was used as a value for the Y-Table Special Character entry. The entry was changed from 0 (bold) to 15. (This is illegal—no 15 entry exists).

**Workaround:** Don't use characters immediately after "!" or (2) replace "?!?" with "? ! ? !" or (3) replace "?!?" with "?!H?".

---

**Problem:** Cursor motion keys don't work as expected on "Indent to tab" lines when changes have been made on the line.

**Workaround:** Watch the cursor and position it where you would like it.

---

**Problem:** The MAILMERGE macro will not allow any item to be used more than 9 times within a letter. A letter with 11 references to @1 will print only 9 of them.

**Workaround:** Use 9 references or less. Or, change line 66 of file "mmerge.wmp" that starts off "9s/@%4". Change the "9" to a number greater than or equal to the number of times a variable is referenced.

---

**Problem:** Decimal tab does not always terminate properly. Simple case to show problem:

1. Type on screen: 123456789 <
2. Put cursor on middle "6" 6
3. Type ?Z followed by "aaa" 1234567890 <
4. Hit down arrow once
5. Go to Command mode, type Z, ESCAPE
6. The "aaa" is gone type Z, ESCAPE (6) the "aaa" is gone.

**Workaround:** Terminate Decimal tab with other than up or down arrow.

---

**Problem:** In edit mode when you have a long word towards the end of a sentence, it truncates the word—putting the remaining part on the next line rather than the whole word as it should do with wraparound. This problem only occurs with words that are 16 characters or more in length.

**Workaround:** Try to limit words that might exceed the line margins to 15 characters.

---

**Link**  
Version A.02.00



**Problem:** Link does not handle the page break conventions used by MicroPro's WordStar. The first character of each page is lost. If the first line of the page is empty, the transfer may hang.

**Workaround:**

1. Make a copy of the file using PIP option (Z) to clear the 8th bit.
  2. Leave a dummy blank at the start of each page.
- Fixed in series 100/DSN/Link.

---

**DSN/Link/12x**  
Version A.01.00

**Problem:** If a file transfer is attempted with an HP 3000 Series 64 to a device with Device Reference Table (DRT) number greater than 127, the file transfer will be aborted. The error message you see is "Host Pascal error".

**Workaround:** None. Fixed in Version A.01.01.

---

**Problem:** If you answer a Yes/No question with characters other than Y, N, y, or n, DSN/Link hangs.

**Workaround:** Answer with "Yes" or "No". Fixed in Version A.01.01.

---

**Problem:** In command mode, if you press 'stop command' and then 'CONFIRM STOP' softkeys after you entered a command, all softkey labels will be cleared.

**Workaround:** Press the 'MODES' key to restore the command mode softkey labels. Fixed in Version A.01.01.

---

**Problem:** DSN/Link cannot work across an X.25 communication line.

**Workaround:** None.

---

**Problem:** If the HP 3000 is sending data to the screen when DSN/Link is exited, Remote Mode appears not to work.

**Workaround:** Press the RESET key to clear the data communication line. Fixed in Version A.01.01.



---

**Problem:** In the "Transfer-To-Host" menu, if you press the 'host rec size' softkey and then press the 'ASCII/BINARY' key before entering a record size, the 'ASCII/BINARY' key request is ignored.

**Workaround:** Press the 'ASCII/BINARY' key twice. **Fixed in Version A.01.01.**

---

**Problem:** If a command file contains two &DSCOPY commands in a row and the HP 3000 used is a Series 64, the second &DSCOPY may fail.

**Workaround:** Insert a "&PAUSE 1" command between the two &DSCOPY commands. **Fixed in Version A.01.01.**

---

**Problem:** If you set the block size to 1, the first file transfer works, but following file transfers may fail.

**Workaround:** Use a block size greater than 1.

---

**Problem:** If you define a softkey label with more than 16 characters using the &KEY command, the excess characters will appear on the screen when that softkey is pressed.

**Workaround:** Do not use more than 16 characters in a softkey label.

---

**Problem:** If you specified a record size greater than 512 in a &DSCOPY command, unpredictable results will occur.

**Workaround:** Use a record size less than or equal to 512. **Fixed in Version A.01.01.**

---

**Problem:** If you press the 'STOP TRANSFER' key to abort a file transfer that was initiated by a &DSCOPY command and then press the 'TIMEOUT EXIT' key twice, the 'Waiting for host response' message will be left on the screen. However, control is returned to the Main Menu.

**Workaround:** After pressing the 'CONFIRM STOP' key, wait for a normal termination response from the host.

---

**Problem:** DSN/Link returns an error message "Host arithmetic error" if you perform the following sequence of operations: press 'transfer to host', enter a local filename, enter a nonexistent host filename, press 'main menu', press 'transfer to host', change to Binary file transfer, and press 'START TRANSFER'.

**Workaround:** Enter the host filename again before pressing the 'START TRANSFER' key. **Fixed in Version A.01.01.**

---

**BPI General Accounting/12x**  
Version A.01.00

**Problem:** Unable to install BPI General Accounting on a hard disc (9133A, 9134A, 9135A) using WELCOME A.02.00.

**Workaround:** Install with WELCOME A.01.20.

---

★**Problem:** Can't create a company (command 71) nor install General Accounting on a fixed disc drive.

**Workaround:** Install disc 1—data entry and maintenance, then PIP disc 2—posting and listing. Use the command pip A: = E:.\*[RV] (where A is the destination and E is the flexible disc source). **NOTE: This workaround replaces the one that appeared in previous issues.**

---

★**Problem:** Unable to install the application on a 10Mb fixed disc drive that is configured as a single volume.

**Workaround:** Don't use this application with a single-volume, 10Mb fixed disc drive, as it is not supported by the software.

---

**BPI Payroll/12x**  
Version A.01.00

★**Problem:** Unable to install the application on a 10Mb fixed disc drive that is configured as a single volume.

**Workaround:** Don't use this application with a single-volume, 10Mb fixed disc drive, as it is not supported by the software.

---

**BASIC/12x**  
Version A.05.21

**Problem:** Overflow error 'hangs' BASIC. "Print 2^127" intermittently hangs, reports syntax error, or reports overflow. "Print 2^128" works, and larger numbers seem OK.

**Workaround:** Avoid this value.



---

**Problem:** Using the Chain Merge command inside a subroutine appears to affect the subroutine return information.

**Workaround:** A possible solution to the problem is to place the entire subroutine in the file being CHAINED rather than only putting a piece of the subroutine in it.

---

**Condor/12x**  
Version A.01.00



*[Order a Condor/12x Software Update Kit to obtain the latest software and manuals.]*

**Problem:** Extra characters are left on the command line after leaving EDIT.

**Workaround:** Backspace to the Condor prompt.  
**Fixed in Version A.02.00.**

---

**Problem:** The PROJECT command can lose, shift, or garble data in certain databases.

**Workaround:** Add an extra character to the definition of an alphanumeric field. **Fixed in Version A.02.00.**

---

**Problem:** With some databases, the UPDATE command locks the system and forces a reboot.

**Workaround:** Add an extra character to the definition of an alphanumeric field. **Fixed in Version A.02.00.**

---

**Problem:** If a format name has more than 7 characters, REORG will not assume the extension is .FRM.

**Workaround:** **Fixed in Version A.02.00.**

---

**Problem:** Options on many commands are not accepted if in lowercase letters (i.e., write filename [b] the "[b]" will not be accepted.)

**Workaround:** Use uppercase letters for options.  
**Fixed in Version A.02.00.**

---

**Problem:** Return to system from procedure file doesn't bring up WELCOME screen when executed from drive "A".

**Workaround:** Place procedure file on drive B or alternate drive; this is good practice since there is very little space left on the A drive with 5¼ or 3½ inch discs.

---

**Problem:** Print options of UPDATE and ENTER commands produce illegible output on printout.

**Workaround:** Select records to be printed to RESULT and use print option of LIST command.  
**Fixed in Version A.02.00.**

---

**Problem:** Extent errors occur indicating disc or file full for no apparent reason.

**Workaround:** Append two or three records from an identical database to the original database—this will increase the size of the original database so that it crosses the 16K boundary that caused the extent error. **Fixed in Version A.02.00.**

---

**Problem:** READ command treats commas as item delimiters. This means that if an item contains embedded commas, the READ command will assume that character strings separated by commas are separate items—the result is a corrupt database.

**Workaround:** Write out data in BASIC [B] format.

---

**Problem:** "DEL LINE" and "INS CHAR" are overbuffered—easy to delete too many lines.

**Workaround:** Pause when repeating these keys.

---

**Problem:** ENTER command does not continue inverse video on next line.

**Workaround:** This is cosmetic only—you may still enter up to 127 characters in the field.

---

**Condor**  
Version A.02.00

**Problem:** When deleting an item from an indexed database, the index may become corrupt.

**Workaround:** Re-index the database.

---

**HP 12x Firmware**

**Problem:** Soft reset doesn't set "DC1 received" flag.

**Workaround:** None

---

**Problem:** The HP 125 may fail to send the second DC2 if two block transfers are stacked up, such as when the user presses ENTER and the host program issues a cursor position request. Some host programs send a cursor position request after an ENTER to better understand what data is being sent. Does not occur when Block/Format is loaded.

**Workaround:** Use Block/Format utility. (Available with Operating System Update Kit).

---

**Problem:** There are cases where the keyboard is locked by a host program and is released by the firmware prematurely. This happens when the host requests status bytes or cursor position. There is an unconditional keyboard unlock after these short block transfers.

**Workaround:** None

---

**Problem:** The NEXT PAGE key does not disable enhancements set for the previous page.

**Workaround:** Disable or set enhancements for next page.

---

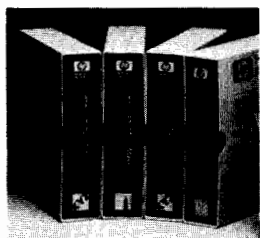
**Problem:** The "Esc d" escape sequence is processed incorrectly. (The "Esc d" sequence allows emulation of the ENTER key function). This problem is not clearly visible when trying to execute the escape sequence from a BASIC/125 program. The cursor stays on any blank line.

**Workaround:** Press the RETURN or ENTER key to clear the cursor from the blank line.

---

**★Problem:** The terminal configuration occasionally changes for no apparent reason.

**Workaround:** Replace the two batteries that maintain the configuration setting when normal power is off. Use Duracell 1.5 volt, size N batteries (HP product number 1420-0255 or Mallory Duracell product number MN9100).



The set of software for the HP 120/125 is revised as needed to add new features, to work with new peripherals, or to correct problems.

Software Update or Upgrade Kits contain the latest software and any new manuals or manual updates issued since the original manual. Kits are provided at a nominal charge—your original master disc is returned as proof of purchase. (You continue operating as usual with your work copy of the software.)

To replace damaged media, Software Update Kits are available for all software packages—including the products which have not been updated. Refer to the next section of this *Communicator* for media replacement ordering information.

Refer to the “HP 12x Software Problem Reports” section of this *Communicator* for details on the problems fixed in the latest version of each software product.

To order:

- In the U.S., updated software and manuals are available through your Series 100 Dealer or they may be ordered by mail from HP’s Computer Supplies Distribution Center using the form given later in this section.
- Outside the U.S., they are available through your Series 100 Dealer or your HP Sales and Service Office.

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### Operating System (Current Version A.02.00)

- **Operating System and Utility Upgrade Kit**  
If you have an A.01.20 Operating System disc labeled “HP 125” (rather than “Series 100”), order this kit to obtain the following items:
  - The new 5½” x 8” Owner’s Manual, with slipcase.
  - The new 5½” x 8” HP 125B Installation Manual, with slipcase.
  - An A.02.00 Operating System disc, which includes the improved A.02.00 WELCOME utility, the single-disc A.02.00 COPY utility, and the single-disc INSTALL utility.
  - A Utility Disc, containing the new fixed-disc BACKUP utility.
  - The new Computer Tutor Disc, a computer-aided introduction to the 120/125 system for the first-time user.

If you have Operating System A.01.10, ordering this kit will also add support of the 9134/9135 fixed disc drive to your system, and provide the BACKUP Utility.

**HP 12x Op Sys & Utility Upgrade Kit**

Software on: 3.5" Disc . . . 45900-13800\*  
5.25" Disc . . . 45900-15800\*  
8" Disc . . . . 45900-18800\*

**One original HP 125 Operating System disc** must be exchanged for each Op Sys and Utility Upgrade Kit ordered. (This kit includes the current Utility and Computer Tutor discs—but only the Op Sys disc will have to be returned.)

■ **Operating System and Utility Update Kit**

If you have a A.01.20 version labeled "**Series 100**", we have an Operating System Update Kit which provides an A.02.00 Operating System disc (with the single-disc A.02.00 COPY utility), plus the corresponding updates to the Series 100 Owner's, the HP 120 Installation, and HP 125B Installation Manuals.

**HP 12x Op Sys & Utility Update Kit**

Software on: 3.5" Disc . . . 45900-13810\*  
5.25" Disc . . . 45900-15810\*  
8" Disc . . . . 45900-18810\*

For each kit ordered, return an original **Series 100** A.01.20 Operating System disc. (This kit includes the current Utility and Computer Tutor discs—but only the Op Sys disc will have to be returned.)

---

*\*For each kit ordered, submit one original master disc as described in the text. This is the disc with the HP software product number and description printed on the label. Be sure to make working copies before sending your master disc. Orders submitted without the correct master disc cannot be accepted. If 20 or more copies of a single Software Update or Upgrade Kit are ordered at the same time, the price is discounted by 35%; no other discounts apply to these kits.*

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**VisiCalc/12x  
(45531B—Current  
Version A.02.00)**

Order this kit to obtain *Getting Started With Series 100/VisiCalc*, the *VisiCalc Reference Manual*, the *VisiCalc Quick Reference Card*, and the latest version of the software.

**VisiCalc/12x Upgrade Kit**

Software on: 3.5" Disc . . . . . 45531-13800\*  
5.25" Disc . . . . . 45531-15800\*  
8" Flexible Disc . . . . . 45531-18800\*

For each kit ordered, return an original VisiCalc/125 disc. (Use your working copy until the new disc arrives.)

---

**Graphics/12x  
(45532B—Current  
Version A.01.02)**

If you have Version A.01.01, order this kit to obtain the *Graphics Reference Manual*, the *Graphics Quick Reference Card*, and the latest version of the software.

If you have version A.01.00, ordering this kit will also add the ability to use the 7470A plotter to your system.

**Graphics/12x Upgrade Kit**

Software on: 3.5" Disc . . . . . 45532-13800\*  
5.25" Disc . . . . . 45532-15800\*  
8" Disc . . . . . 45532-18800\*

For each kit ordered, return as original Graphics/125 disc. (Use your working copy until the new disc arrives.)

---

**Word/12x  
(45533B—Current  
Version A.02.02)**

Order this kit to obtain *Getting Started With Series 100/Word*, the *Word Reference Manual*, the *Word Quick Reference Card*, and the latest version of the software.

**Word/12x Upgrade Kit**

Software on: 3.5" Disc . . . . . 45533-13800\*  
5.25" Disc . . . . . 45533-15800\*  
8" Disc . . . . . 45533-18800\*

For each kit ordered, return an original Word/125 disc. (Use your working copy until the new disc arrives.)



**Condor/12x  
(45550—Current  
Version A.02.00)**

- If you have Condor 20-1, you may wish to *update* your copy. If so, order:

Condor/12x 20-1 Update Kit:

Software on: 3.5" Disc . . . . . 45550-13800\*  
5.25" Disc . . . . . 45550-15800\*  
8" Disc . . . . . 45550-18800\*

For each kit ordered, return one original Condor/12x 20-1 disc. (Use your working copy until the new disc arrives.)

- If you wish to *upgrade* your copy to Condor 20-3, refer to the section "HP 12x Software Available from HP," earlier in this issue.

- If you have Condor 20-2, you may wish to *update* your copy. If so, order:

Condor/12x 20-2 Update Kit:

Software on: 3.5" Disc . . . . . 45550-13801\*  
5.25" Disc . . . . . 45550-15801\*  
8" Disc . . . . . 45550-18801\*

For each kit ordered, return one original Condor/12x 20-2 disc. (Use your working copy until the new disc arrives.)

- If you wish to *upgrade* your copy to Condor 20-3, refer to the section "HP 12x Software Available from HP," earlier in this issue.

**DSN/Link/12x  
(45534B—Current  
Version A.01.01)**

- If you have **Link/125**, you may wish to *upgrade* to Series 100/DSN/Link for the HP 12x.

In order to use DSN/Link, verify with your system manager that your HP 3000 has operating system MPE IV C.00.20 (or later) installed. On an HP 3000 Series 64, the MPE Version must be D.00.20 or later. (Refer to the article under "New Products" in *Communicator* Issue #3 for details).

These Upgrade Kits include a second disc containing the program DSN/MONITOR. This software allows files to be transferred between two Series 100 products in either ASCII or binary mode with error checking.

DSN/Link/12x *Upgrade Kit*:

Software on: 3.5" Disc . . . . . 45534-13810  
5.25" Disc . . . . . 45534-15810  
8" Disc . . . . . 45534-18810

For each kit ordered, return one original **Link/125** disc. (Use your working copy until the new disc arrives.)

- If you have **Series 100/DSN/Link** for the HP 12x, you may wish to *update* your copy to the A.01.01 level, plus add a second disc containing the program DSN/MONITOR. This software allows files to be transferred between two Series 100 products in either ASCII or binary mode with error checking.

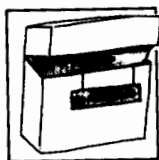
DSN/Link/12x *Update Kit*

Software on: 3.5" Disc . . . . . 45534-13820\*  
5.25" Disc . . . . . 45534-15820\*  
8" Disc . . . . . 45534-18820\*

For each kit ordered, return one original **Series 100/DSN/Link** disc. (Use your working copy until the new disc arrives.)

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*\*For each kit ordered, submit one original master disc as described in the text. This is the disc with the HP software product number and description printed on the label. Be sure to make working copies before sending your master disc. Orders submitted without the correct master disc cannot be accepted. If 20 or more copies of a single Software Update or Upgrade Kit are ordered at the same time, the price is discounted by 35%; no other discounts apply to these kits.*



The master-copy/work-copy technique used by the Series 100 is designed to minimize the risk of damage to your master software due to handling or human error. Should this occur, Software Update Kits are available for Series 100 software packages—including the products which are still at the originally-released revision level. The kits contain the latest software and any new manuals or manual updates issued since the original manual; the kits are available at a nominal charge upon return of your original master disc as proof of purchase.

To order:

- In the U.S., Software Update Kits are available through your Series 100 Dealer or they may be ordered by mail from HP's Computer Supplies Distribution Center using the form given later in this section.
- Outside the U.S., they are available through your Series 100 Dealer or your HP Sales and Service Office.

| Product         | Version† | Order Part Number  |                    |                    | Price Code, Notes |
|-----------------|----------|--------------------|--------------------|--------------------|-------------------|
|                 |          | 3.5" Disc          | 5.25" Disc         | 8" Disc            |                   |
| Op Sys          | A.02.00  | 45900-13810        | 45900-15810        | 45900-18810        | A,1               |
| VisiCalc        | A.02.01  | 45531-13800        | 45531-15800        | 45531-18800        | A                 |
| Graphics        | A.01.03  | 45532-13800        | 45532-15800        | 45532-18800        | A                 |
| Word            | A.02.03  | 45533-13800        | 45533-15800        | 45533-18800        | A                 |
| Link/125        | A.02.00  | 45534-13800        | 45534-15800        | 45534-18800        | A,2               |
| DSN/Link        | A.01.01  | 45534-13820        | 45534-15820        | 45534-18820        | A,3               |
| BASIC           | A.05.21  | 45535-13800        | 45535-15800        | 45535-18800        | A                 |
| Prog. Pkg.      | A.01.00  | 45536-13800        | 45536-15800        | 45536-18800        | A                 |
| Condor 20-1     | A.02.00  | 45550-13800        | 45550-15800        | 45550-18800        | A                 |
| Condor 20-2     | A.02.00  | 45550-13801        | 45550-15801        | 45550-18801        | A,4               |
| Condor 20-3     | A.02.01  | 45550-13802        | 45550-15802        | 45550-18802        | A,5               |
| BPI G/A         | A.01.00  | <b>45552-13800</b> | <b>45552-15800</b> | <b>45552-18800</b> | C                 |
| BPI Payroll     | A.01.00  | 45553-13800        | 45553-15800        | 45553-18800        | B                 |
| WordStar        | A.01.00  | 45560-13800        | 45560-15800        | 45560-18800        | A                 |
| SpellStar       | A.01.00  | 45561-13800        | 45561-15800        | 45561-18800        | A                 |
| MailMerge       | A.01.00  | 45562-13800        | 45562-15800        | 45562-18800        | A                 |
| MicroPlan       | A.01.00  | 45670-13800        | 45670-15800        | 45670-18800        | A                 |
| MicroPlan Cons. | A.01.00  | 45671-13800        | 45671-15800        | 45671-18800        | A                 |

Key to Price Codes:

- A\*
- B\*
- C\*

See notes on next page.

†Version number shown in **bold** if revised since original release.

Notes:

- 1—This kit is to *update* an A.01.20 version of the **Series 100 Op Sys**; an *upgrade* kit to move from earlier **HP 125** versions is also available—refer to details under “Ordering Software Update or Upgrade Kits,” earlier in this section. This kit includes the current Operating System disc, the current Utility Disc, (A.02.01) the current Computer Tutor Disc, and all Owner’s and Installation manual updates issued since the initial 5½ x 8” editions.
- 2—Link/125 disc exchanged for Link/125 disc. Refer to “Ordering Software Update or Upgrade Kits” to *upgrade* Link/125 to Series 100 DSN/Link.
- 3—Series 100/DSN/Link disc exchanged for Series 100/DSN/Link. Refer to “Ordering Software Update or Upgrade Kits” to *upgrade* Link/125 to Series 100 DSN/Link.
- 4—Either a Condor 20-2 disc or a Condor 20-1 to 20-2 Upgrade disc may be exchanged for the Condor 20-2 disc.
- 5—A Condor 20-3 disc, a Condor 20-2 to 20-3 Upgrade disc, or a Condor 20-1 to 20-3 Upgrade disc may be exchanged for the Condor 20-3 disc.

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*\*For each kit ordered, submit one original master disc as described in the text. This is the disc with the HP software product number and description printed on the label. Be sure to make working copies before sending your master disc. Orders submitted without the correct master disc cannot be accepted. If 20 or more copies of a single Software Update or Upgrade Kit are ordered at the same time, the price is discounted by 35%; no other discounts apply to these kits.*

# HP 150 Software Status

## HP 150 Software Available from HP

Editor

| HP 150 Application Software        | Product No.† | Media‡        |                  |
|------------------------------------|--------------|---------------|------------------|
|                                    |              | 3.5" Standard | 5.25" Option 650 |
| WordStar®/150                      | 45400A       |               |                  |
| MailMerge™/150                     | 45401A       |               |                  |
| SpellStar™/150                     | 45402A       |               |                  |
| WordStar, MailMerge, and SpellStar | 45404A       |               |                  |
| VisiCalc®/150                      | 45405A       |               |                  |
| Graphics/150                       | 45410A       |               |                  |
| Condor™ 20-1/150                   | 45415A       |               |                  |
| Condor 20-3/150                    | 45416A       |               |                  |
| Condor 20-1 to 20-3 Upgrade/150    | 45417A       |               |                  |
| MemoMaker/150                      | 45420A       |               |                  |
| Personal Card File/150             | 45422A       |               |                  |
| Financial Calculator               | 45423A       |               |                  |
| DSN Link/150                       | 45425A       |               |                  |
| File Transfer Monitor/IBM-PC       | 45439A*      |               |                  |
| BASIC/150                          | 45445A       |               |                  |
| Compiled BASIC/150                 | 45446A       |               |                  |
| Pascal/150                         | 45447A       |               |                  |
| COBOL/150                          | 45448A       |               |                  |
| FORTRAN/150                        | 45449A       |               |                  |
| BPI General Accounting/150         | 45455A       |               |                  |
| Picture Perfect™/150               | 45462A       |               |                  |
| Diagraph™/150                      | 45463A       |               |                  |
| MicroPlan®/150                     | 45465A       |               |                  |
| MicroPlan Consolidation/150        | 45466A       |               |                  |
| dBASE II™/150                      | 45468A       |               |                  |
| Multiplan™/150                     | 45473A       |               |                  |
| Context MBA™/150                   | 45481A       |               |                  |
| 1-2-3™/150                         | 45482A       |               |                  |
| Adventure                          | 92243AA**    |               |                  |
| Milky Way Merchant                 | 92243BA**    |               |                  |
| Zork I®                            | 92243CA**    |               |                  |
| Starcross                          | 92243DA**    |               |                  |
| Type Attack™                       | 92243EA**    |               |                  |
| Suspended                          | 92243FA**    |               |                  |
| Temple of Apshai™                  | 92243GA**    |               |                  |
| Ricochet™                          | 92243GB**    |               |                  |
| Tycoon™                            | 92243HA**    |               |                  |
| Cyborg                             | 92243NA**    |               |                  |
| Planetfall™                        | 92243PA**    |               |                  |
| The Witness™                       | 92243QA**    |               |                  |
| Zork II®                           | 92243RA**    |               |                  |
| Touch Games I                      | 92248AA      |               |                  |
| Cross Reference Utility            | 92248BA      |               |                  |
| Winning Deal                       | 92248CA      |               |                  |

†Media option must be specified with product number for 5.25" Disc.

\*File Transfer Monitor/IBM-PC is on a 5.25", IBM-formatted disc.

\*\*These products available on 3.5" discs only.

Insert-46



## HP 150 Quick Reference Guides and Manuals Editor



Quick Reference Guides for most application packages are available for the HP 150 ... as well as the Owner's and Terminal manuals for the system.

*Application* manuals are available only with the associated discs in complete software packages.

To update your current documentation, refer to "HP 150 Manual Corrections and Updates", later in this *Communicator*.

To order Quick Reference Guides and Manuals, refer to the "How To Order" section at the end of this insert.

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### HP 150 Quick Reference Guides

Most HP 150 software packages include a Quick Reference Guide. This is a pocket-sized booklet or foldout card providing a summary of the program's commands and functions—for use once you are familiar with the application. Additional copies for the other users of your system are available from your dealer or HP.

|                                           |              |
|-------------------------------------------|--------------|
| WordStar/150 Quick Reference Guide .....  | 45400-90000* |
| VisiCalc/150 Quick Reference Guide .....  | 45405-90000* |
| Graphics/150 Quick Reference Guide .....  | 45410-90000* |
| Condor/150 Quick Reference Guide .....    | 45415-90000* |
| MemoMaker/150 Quick Reference Guide ..... | 45420-90000* |
| PCF/150 Quick Reference Guide .....       | 45422-90000* |
| DSN/Link/150 Quick Reference Guide .....  | 45425-90000* |
| BASIC/150 Quick Reference Guide .....     | 45445-90000* |

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*\*If 50 or more copies of a single Quick Reference Guide are ordered from HP at the same time, the price is discounted by 20%.*

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### HP 150 Manuals

|                                                                                       |        |
|---------------------------------------------------------------------------------------|--------|
| HP 150 Personal Computer Owner's Guide (Contains System Software on 3.5" discs) ..... | 45621A |
| HP 150 Terminal User's Guide .....                                                    | 45623A |

## HP 150 Manual Corrections and Updates

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This section presents corrections to the HP 150 manuals. Just write in these corrections to update your manuals. **New entries since the last *Communicator* are marked with a star.**

---

### HP 150 Personal Computer Owner's Guide (9/83)

- ★Page 2-53: The illustration of the switch setting is for an RS-232 cable connection. If you have an HP-IB cable, only switch 3 should be on.

---

  - ★Page 2-83: The illustration of the switches shows them as seen from the front of the 7470A plotter, not from the rear of the plotter as implied.

---

  - ★Page 2-87: The illustration of the switches shows them as seen from the front of the 7475A plotter, not from the rear of the plotter as implied.

---

  - ★Page 8-5: Delete the command "DISKCOPY" and its description. There will be no DISKCOPY utility.

---

  - ★Page A-39: In the top configuration menu: replace the value in the Parity field by "Even"; replace the value in the Check Parity field by "Yes"; the value in the EnqAck field need not be "No" as this protocol is not used by these printers.

---

  - ★Page A-39: In the bottom configuration menu, the value in the EnqAck field need not be "No".

---

  - ★Page A-40: Replace the value in the XmitPace field by "None". Replace the value in the DM(CC)Xmit by "Yes". The value in the EnqAck field need not be "No".
- 

### Wordstar/150 Installation Guide (9/83)

- ★Page 1-2. "Copying Wordstar." Change the file called WSU.COM to WS.COM.

---

  - ★Page 1-3 through and including 1-5. Incorrectly lists the steps for running WINSTALL Program. For the correct procedure, refer to your *Self-Paced Training Manual*, Appendix A ("Installation Procedures").
- 

### Condor/150 User's Manual (9/83)

- ★Page 2-115: Add the following paragraph to the bottom of the page: "When redefining a database, you need to WRITE out the existing data to a file before redefining. Use the [B] option of the WRITE command when saving the existing data."

---

★Page 3-9: Add the following paragraph to the bottom of the page: "Condor allows specification of the field-size immediately following the data type specification. Allow the field-size parameter to default by Condor."

---

**DSN/Link/150  
Manual  
(9/83)**

★Page 3-1. Installing the SDTODIF Utility. The files SDTODIF.COM, SDTODIF, CSDTODIF must be on the currently selected drive. It is suggested that you install UPLOAD and DSN/Link on the same disc, and later delete UPLOAD.

---

★Page 6-4. Logging to a printer: By default, DSN/Link talks to the device PRN. (PRN is the HP-IB printer, if you do not have one, the logging attempt will produce a printer error message). You can change this by going into File Manager prior to logging and performing a "set printer" function.

---

★Page 9-4. Addition to "Software Requirements". The Series 100/DSN/Monitor program includes RUN.EXE and SYSLIB.PAS, used in uploading Monitor.

---

★Page 9-6. Note in "Setting Up a Password" implies that "Enter Password" comes up automatically after touching Time/Out Exit. The message appears only after you press Return.

---

★Page 9-20. Message in note should read "directory of remote drive X:"

---

★Page B-1. Add missing ampersand (&) in reference to &ASSIGN command.

---

★Page B-2. Under "HP 150 Commands" correct command to read: &CHAIN filename {parameter 1, parameter 2, . . .etc}

---

**BASIC/150 Manual  
(9/83)**

★Pages C-19 through C-21. Headings indicate that the escape sequences are of the form "ESC &"; they should be "ESC \*".

---

**BPI General  
Accounting/150  
Manual  
(9/83)**

★Page E-5: At the bottom of the page, delete the section on creating subdirectories. Version A.01.03 of Sys-Master (of the operating system) does not support installing applications on to subdirectories.



**HP 150 Terminal  
User's Guide**  
(9/83)

- 
- ★Page 2-13: In the section on Terminal Control Group keys, the STOP key is omitted. Insert the following text: "**Pausing.** Pressing the STOP key pauses operation of the computer and locks the keyboard except for the STOP key itself. This might be used to 'freeze' the screen display momentarily. To resume normal operation of the computer, press the STOP key a second time. **Terminal-to-PC Switch.** Simultaneously pressing the STOP key and the SHIFT key switches the HP 150 from a terminal to a personal computer."

---

  - ★Page 2-13: In the description of soft reset, replace the first sentence by "Pressing the SHIFT and RESET keys simultaneously results in a 'soft reset'."

---

  - ★Page 2-15: Replace the subheading "User Keys Key" by "User-Defined Function Keys."

---

  - ★Page 2-15: To the last paragraph, add this sentence: "Pressing the SHIFT and USER keys simultaneously activates the function key labels that are associated with the application program which is currently running."

---

  - ★Page 3-6: Near the top of the page, add the label "set time" below function key f7.

---

  - ★Page 3-6: Delete the sentence in the second paragraph that begins, "Since the label for f4 is capitalized..." All of the labels have lower case letters.

---

  - ★Page 3-6: In the second paragraph, second sentence, delete the word "other," and replace the word "Aids" by "User/System."

---

  - ★Page 3-7: In the second paragraph, replace the word "Aids" by "User/System."

---

  - ★Page 3-7: In the service keys description, replace "or for selecting Monitor Mode" by "and Touch Screen Alignment." The HP 150 does not have Monitor Mode.

---

  - ★Page 3-10: Near the top of the page, delete the label "EXPAND PRINT" below function key f5. The HP 150 does not have this mode.

- 
- ★Page 3-11: Delete the section on EXPAND PRINT.

---

  - ★Page 3-18: At the bottom of the page, add the label "accessory config" to function key f6.

---

  - ★Page 3-19: After the terminal configuration function key description, insert another description: "accessory config—this is reserved for future use."

---

  - ★Page 3-24: In Step 10, replace the "AIDS" key by the "USER/SYSTEM" key.

---

  - ★Page 5-2: Near the top of the page, delete the section on Background Inverse. The HP 150 does not have this feature.

---

  - ★Page 5-2: In the paragraph below the row of video enhancement function keys, delete all references to "Background Inverse."

---

  - ★Page 5-9: Fill in the three blank function keys with "EXTEND CHAR."

---

  - ★Page 5-9: In the middle of the second paragraph, replace "SHIFT W" by "SHIFT E."

---

  - ★Page 6-2: In the last paragraph, replace all references to "Shift" by "CTRL."

---

  - ★Page 6-3: In the middle of the page, replace the "SHIFT" key by the "CTRL" key and delete the words "NUM PAD."

---

  - ★Page 7-7: In the last sentence, replace the first "Section ?" by "Section 8" and the second "Section ?" by "Section 9."

---

  - ★Page 9-5: In Step 1, replace the "AUTO LF" key by the "USER SYSTEM" key.

---

  - ★Page 9-6: In the last sentence, replace "Chapter 7" by "Chapter 2."

---

  - ★Page A-12: At the top of the page, replace "Ec &p <x>D" by Ec &p <a>d <b>d <c>D" and "device 'x' as the destination device" by "devices 'a,' 'b,' and 'c' as the destination devices."

---

  - ★Page A-17: In the middle of the page, replace "<string length>l" by "<string length>L."

## HP 150 Software Problem Reports

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This is a cumulative list of all software problems that have been reported on the HP 150. **New entries since the last issue are marked with a star.**

---

DSN/Link/150  
Version A.01.01

**Problem:** If the Upload program is run over a modem, the file is not transferred to the host.

**Workaround:** If you are using a modem to run the UPLOAD program, you must be logged onto the HP 3000 as TERMTYPE 10. For example:

```
HELLO user.account/password;TERM = 10
```

---

**Problem:** When transferring a binary file from an HP 150 to an HP3000, an error message indicating that lines have been truncated appears at the top of the screen and the file is not transferred.

**Workaround:** The user must change the ASCII/BINARY field to BINARY. It is not sensed automatically.

---

**Problem:** If an HP 3000 program file is transferred to an HP 150 and then transferred back to an HP 3000, it no longer has the parameters of a program file and therefore cannot be run.

**Workaround:** A file equation must be used on the HP 3000 to which the file is transferred and the filename must be back-referenced on the DSN/Link screen.

on the HP 3000:

```
FILE filename;REC = 128,,F,  
BINARY;DISC = ,1,1;CODE = PROG
```

on the DSN/Link screen:

```
*filename
```

---

**Problem:** Why can't just any RS-232 cable be used to connect two Series 100 computers?

**Workaround:** Any cable with pins 2 & 3 crossed and pin 7 to pin 7 can be used. Crossing pins 2 & 3 connects the transmit pin to the receive pin in both directions.

---

**★Problem:** Can't make the Hayes Smartmodem hang up from a command file.

**Workaround:** None.

---

★**Problem:** Transferring an ASCII file other than type 0 from the HP 3000 to the HP 150 sometimes doesn't work.

**Workaround:** Transfer the file as a binary file instead of ASCII. Because DSN/Link does not allow you to override the file type when transferring from the HP 3000, you must BUILD on the HP 3000 an identical file to the one you wish to transfer except specifying it as binary. Use FCOPY to copy from the ASCII file to the HP 150 using DSN/Link. To transfer the file back up to the HP 3000, transfer the file as a binary file. Then BUILD an ASCII file identical to the original ASCII file (remember to specify the correct file code) and use FCOPY to copy from the binary file to the ASCII file you just built.

---

**Sys-Master**  
Version A.01.03

★**Problem:** Redefining the standard MS-DOS prompt to be the default disc drive specification and then selecting a drive configured as No Device in the Device Configuration utility causes the system to enter an error loop:

```
A> PROMPT $P
A:\ n:
Bad unit error reading drive N
Abort, Retry, Ignore?
```

where n is a valid drive specification, although it is configured as No Device within the Device Configuration disc application.

Ensure that this PROMPT specification is given only with disc devices that are configured through the Device Configuration utility. If the current default disc drive is a flexible disc, the disc must be inserted.

**Workaround:** Hard reset (CTRL Shift Reset) to clear the system.

---

★**Problem:** Printing large documents to the HP 2602A printer, option 046 (HP-IB interface), may halt after partial printing of the document and display one of the following error messages:

- Abort, Ignore, Retry:
- Disc error writing to device PRN
- Device not available
- Can't print to current printer

**Workaround:** Contact your dealer or HP Phone-In Software Assistance Center.

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Disc Applications</b><br>Version A.01.01 | <p><b>★Problem:</b> Can't copy a file from a CP/M fixed disc to MS-DOS fixed disc directly using COPY/BACKUP.</p> <p><b>Workaround:</b> Copy the CP/M file onto a flexible disc first, then use COPY/BACKUP to copy from the flexible disc onto the fixed disc. (NOTE: Compressed files can't be copied with COPY/BACKUP.)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>WordStar/150</b><br>Version 3.30         | <p><b>★Problem:</b> When printing on a bidirectional printer, the left margin sometimes disappears.</p> <p><b>Workaround:</b> Turn off the bidirectional print (.BP OFF) or change your text line count to an odd number by changing either the margin width or the page length. In a short letter, printing the page with the margin problem separately will produce a correctly printed page.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Condor 20-3/150</b><br>Version A.02.10   | <p><b>★Problem:</b> Having difficulties in updating data in a form that uses an underscore (_) in a cosmetic border.</p> <p><b>Workaround:</b> Redraw the data entry form using the FORMAT command and eliminate the underscores in the border. Safe characters include, but are not limited to, the following: plus sign (+), asterisk (*), hyphen (-), pound sign (#), and exclamation point (!).</p> <hr/> <p><b>★Problem:</b> Tabulate and search won't work properly on numeric fields.</p> <p><b>Workaround:</b> May be caused by not using the default number of bytes in the database definition phase. Redefine the database using the DEFINE command, and choose the default value when specifying the field size.</p> <hr/> <p><b>★Problem:</b> Can't read in data correctly after redefining a database.</p> <p><b>Workaround:</b> When redefining a database, first WRITE out the existing data using the [B] option. Whenever you WRITE out data to a file, always use the [B] option of the command unless you intend to read the data into an application that requires another option.</p> |

---

**BPI General  
Accounting/150  
Version A.01.00**

★**Problem:** When retrieving a saved printer configuration, "Printer Not Ready" message appears.

**Workaround:** Don't save printer configuration on the data disc if "Serial (RS232)" is chosen as the printer type using command 6. Use command 6 to configure the printer whenever you want to print from BPI.

---

★**Problem:** After retrieving a saved printer configuration, the "Print Uppercase Only" value in the configuration menu exceeds expected values of 1 or 2.

**Workaround:** Don't save printer configuration on the data disc if "Serial (RS232)" is chosen as the printer type using command 6. Use command 6 to configure the printer whenever you want to print from BPI.

---

★**Problem:** It is not clear how to change the print type from BPI.

**Workaround:** Using command 6—the printer configuration mode—type in the ASCII codes for the escape sequence required by the printer separated by commas. For example: on an HP 82905B, the escape sequence for compress mode is ESC & k 2 S. In the control characters row of the printer configuration, you would type the corresponding ASCII codes as follows: 27, 38, 107, 50, 83.

---

**dBASE II/150  
Version 2.4**

★**Problem:** Cursor arrow keys appear to work in edit mode, but modifications made using these keys are in the wrong place.

**Workaround:** Use the control characters to move cursor. Refer to Page 23 of Part B of the dBASE II User Manual for a list of the control characters.

---

**Context MBA/150**  
Version 2.3

**★Problem:** When the HELP function is used, nothing happens.

**Workaround:** Make sure that disc MBA2 is in the right drive when using HELP.

---

**★Problem:** Error messages refer to unit numbers that do not apply to the HP 150.

**Workaround:** Refer to the Conversion Chart in the HP 150 insert of the Context MBA/150 package. For example, it shows that Unit 5 is equivalent to Drive B.

---

**HP 150**  
**Terminal**  
**Firmware**

**★Problem:** When powering on an HP 150 configured with an HP 9121D, one of the following error messages may appear:

- Load OP Sys failed, OP sys device not found
- Load OP Sys failed, OP sys disc not found

These error messages will be followed by the statement: "Press Return to clear"

**Workaround:** If a unit is experiencing this problem:

- Press the Return key on the keyboard
- Press Shift Stop to access the disc and load the system

A hard reset (CTRL Shift Reset) can alternately be used to access the disc and load the operating system.

---

**★Problem:** When printing to any HP-supported serial or HP-IB printer using the terminal function keys, the following error may appear:  
"Illegal or No Destination Device"

**Workaround:** Follow this sequence:

- Hard reset (CTRL Shift Reset).
- From P.A.M. select the Terminal function (f6).
- Ensure that Caps mode is off.
- Touch the Remote function key (f4) to enter local mode. (This removes the asterisk from the Remote function key label.)
- Press the User System key on your keyboard.
- Touch device control (f1).
- Touch "to" devices (f3).
- Type the following keyboard sequence:  
ESC & p 4 D (The asterisk should appear in the SERIAL DEVICE key label if this has been entered correctly.)

This sequence selects the SERIAL DEVICE as your destination device and disables any prior selections that may exist on your HP 150. To select your HP-IB device, touch SERIAL DEVICE (f2) to turn this selection off, and HP-IB DEVICE (f4) to turn the HP-IB device on. Press Shift Stop to return to P.A.M.

If the problem persists, power off the system and remove the battery (located on the rear panel of the HP 150), for a minimum of 1 hour. This will return your HP 150 to its system default configuration values and will eliminate the problem.

Applications can programmatically select the "to" device using escape sequences. This may result in the selection of an invalid destination device unknowingly by the user. Although the above steps correct the problem, there is no way to restrict the use of such escape sequences by applications and therefore no way to ensure that the problem will not reoccur.





---

**★Problem:** Selection of the HP-IB DEVICE as the printer destination device, using the following escape sequence, does not display an asterisk in the function key label. Esc &p5D

**Workaround:** No current workaround.

---

**★Problem:** The calendar function incorrectly increments the date and day of the week when the HP 150 is powered off on the 29th of a month. The date and day of the week are incremented two days upon power on of the system.

**Workaround:** Keep your HP 150 system unit powered on or check the date each time that you power on your system.

---

**★Problem:** When logging data to the HP 2674A Integral Thermal Printer using the "LOG BOTTOM" function key, the keyboard will be locked while the printer is active. If a soft reset (Shift Reset) is performed to discontinue printing, the Status Line (line 27) may appear twice on the display.

**Workaround:** A hard reset (CTRL Shift Reset) can be used to clear the duplicate status line from the display.

---

**★Problem:** Forms defined using the line drawing character set appear with broken vertical lines when printed to the HP 2674A Integral Thermal Printer.

**Workaround:** No current workaround.

---

**★Problem:** Changes to fields within the port 1 or port 2 configuration menu for serial device use do not become active after they are saved.

**Workaround:** A hard reset (CTRL Shift Reset) is required to put these new values into effect.

---

**★Problem:** Attempts to save the port 2 configuration as a FULL DUPLEX MODEM result in the following error message:

```
Configuration Must Be FULL DUPLEX  
HARDWIRED  
Press RETURN To Clear
```

**Workaround:** Press the Return key. Use the FULL DUPLEX HARDWIRED configuration menu to configure the modem. The additional fields not available in the standard FULL DUPLEX MODEM menu (SRRXmit, SRRInvert, and CS(CB)Xmit), can be set to their off states.

---

**★Problem:** When an HP 82906A printer and an HP 7475A plotter are both connected via the HP-IB interface, logging data to the HP 82906A printer using the terminal function keys may fail and give the following message:

HP-IB Device Error  
Press RETURN To Clear

**Workaround:** Follow this sequence:

- Press the Return key.
- Turn off the power on the HP 7475A plotter.
- Hard reset the HP 150 (CTRL Shift Reset).

---

**★Problem:** When printing HP 3000 Slate documents from the HP 150, underlined text does not print correctly. (The text is printed on the next line directly beneath the underline characters.)

**Workaround:** Before printing, select "typewriter" as the device type.

---

**★Problem:** Logging data to the HP 2674A Integral Thermal Printer using COMPRESS PRINT prints only 96 characters.

**Workaround:** Avoid using COMPRESS PRINT.

The set of software for the HP 150 is revised as needed to add new features, to work with new peripherals, or to correct problems.

Software Update or Upgrade Kits contain the latest software and any new manuals or manual updates issued since the original manual. Kits are provided at a nominal charge (except WordStar, which is at no cost to you)—your original master disc is returned as proof of purchase. (You continue operating as usual with your work copy of the software.)

To replace damaged media, Software Update Kits are available for all software packages—including the products which have not been updated. Refer to the next section of this *Communicator* for media replacement ordering information.

Refer to the "HP 150 Software Problem Reports" section of this *Communicator* for details on the problems fixed in the latest version of each software product.

To order:

- In the U.S., updated software and manuals are available through your Series 100 Dealer or they may be ordered by mail from HP's Computer Supplies Distribution Center using the form given later in this section.
- Outside the U.S., they are available through your Series 100 Dealer or your HP Sales and Service Office.

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**Graphics/150  
(45410A—Current  
Version A.03.00)**

If you have version A.01.01, order this kit to obtain version A.03.00. The new version provides support for the 7550A plotter, increased performance, larger default characters within Pie, Bar, Line, and Scattergrams, and a new box annotation feature within Text Charts. Also included in the kit are additional pages for the manual.

Graphics/150 Software Update Kit

Software on: 3.5" Disc . . . . . 45410-63001\*  
5.25" Disc . . . . . 45410-65001\*

For each kit ordered, return your original Graphics/150 master discs. (Use your working copies until the new discs arrive.)

**PRE-AUTHORIZED RETURN FORM  
HP 45400A WORDSTAR (R) SOFTWARE UPDATE PACKAGE**

- (1) This is the only authorized form for the WordStar(R) upgrade for HP 150 Exchange Program.
  - Fill in the number of individual disc(s) being returned at this time, and print or type your address to which we should ship the new disc(s) on the FAST RESPONSE label. Put this part of the form *inside* the package you are returning to us.
  - Fill in your address on the PRE-AUTHORIZED RETURN label, and securely attach it to the *outside* of the box of package you are returning to us.
  - In order to receive your replacement software, you must include with this form your original disc(s). **(DO NOT RETURN THE MANUAL, ONLY THE DISC)**
- (2) We will ship you the same number of replacement software disc(s) as you have returned.
- (3) You may photocopy this form if you make several returns to us over a period of time.
- (4) THIS EXCHANGE PROGRAM ENDS August 31, 1984; HP must receive all returns by that date.

**QUANTITY OF INDIVIDUAL DISC(S) ENCLOSED**

\_\_\_\_\_ HP 45404A WordStar (R) only ..... (45400-63002)  
\_\_\_\_\_ HP 45400A WordStar (R) ..... (45400-63002)  
\_\_\_\_\_ HP 45400Y WordStar (R) Demo ..... (45400-63003)

WordStar (R) is a trademark of MicroPro International Company.

----- (do not detach) -----

**FAST RESPONSE LABEL**  
WordStar EXCHANGE PROGRAM

FROM: Hewlett-Packard  
Computer Supplies Operation  
1326 Kifer Road  
Sunnyvale, CA 94086

TO: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

ATTN: \_\_\_\_\_

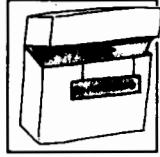
**PRE-AUTHORIZED RETURN**  
WordStar EXCHANGE PROGRAM

FROM: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TO: Hewlett-Packard  
Computer Supplies Operation  
1326 Kifer Road  
Sunnyvale, CA 94086

ATTN: WordStar Update





The master-copy/work-copy technique used by the Series 100 is designed to minimize the risk of damage to your master software due to handling or human error. Should this occur, Software Update Kits are available for Series 100 software packages—including the products which are still at the originally-released revision level. The kits contain the latest software and any new manuals or manual updates issued since the original manual; the kits are available at a nominal charge upon return of your original master disc as proof of purchase.

To order:

- In the U.S., Software Update Kits are available through your Series 100 Dealer or they may be ordered by mail from HP's Computer Supplies Distribution Center using the form given later in this section.
- Outside the U.S., they are available through your Series 100 Dealer or your HP Sales and Service Office.

| Product              | Version† | Order Part Number |             | Price Code, Notes |
|----------------------|----------|-------------------|-------------|-------------------|
|                      |          | 3.5" Disc         | 5.25" Disc  |                   |
| Op Sys:              |          | 45621-63001       | 45621-65001 | B                 |
| Sys Master           | A.01.03  |                   |             |                   |
| Disc Applic          | A.01.01  |                   |             |                   |
| Tutor-A              | 1.0      |                   |             |                   |
| Tutor-B              | 1.0      |                   |             |                   |
| WordStar             | 3.3B     | 45400-63001       | 45400-65001 | A                 |
| SpellStar            | 3.30     | 45402-63001       | 45402-65001 | A                 |
| MailMerge            | 3.30     | 45401-63001       | 45401-65001 | A                 |
| VisiCalc             | A.01.01  | 45405-63001       | 45405-65001 | A                 |
| Graphics:            |          | 45410-63001       | 45410-65001 | C                 |
| Bar                  | A.02.01  |                   |             |                   |
| Pie                  | A.02.01  |                   |             |                   |
| Line                 | A.02.01  |                   |             |                   |
| Text                 | A.02.01  |                   |             |                   |
| Examples             | A.02.01  |                   |             |                   |
| Condor 20-1          | A.02.10  | 45415-63001       | 45415-65001 | A                 |
| Condor 20-3:         |          | 45416-63001       | 45416-65001 | A,1               |
| Build Commands       | A.02.10  |                   |             |                   |
| Run Commands         | A.02.10  |                   |             |                   |
| MemoMaker            | A.02.01  | 45420-63001       | 45420-65001 | A                 |
| PCF                  | A.01.02  | 45422-63001       | 45422-65001 | A                 |
| Financial Calculator | A.01.00  | 45423-63001       | 45423-65001 | A                 |
| DSN/Link:            |          | 45425-63001       | 45425-65001 | A                 |
| DSN/Monitor          | A.01.01  |                   |             |                   |
| Upload               | A.01.01  |                   |             |                   |
| BASIC                | A.05.28  | 45445-63001       | 45445-65001 | A                 |

If the product is not listed, contact your Phone-In Software Assistance Center for information.

See notes on next page.

†Version number shown in **bold** if revised since original release.

Key to Price Codes:

A\*

B\*

C\*

1—Either a Condor 20-3 disc or a Condor 20-1 to 20-3 Upgrade disc may be exchanged for the Condor 20-3 disc.

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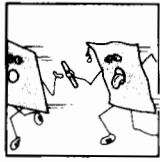
*\*For each kit ordered, submit one original master disc as described in the text. This is the disc with the HP software product number and description printed on the label. Be sure to make working copies before sending your master disc. Orders submitted without the correct master disc cannot be accepted. If 20 or more copies of a single Software Update or Upgrade Kit are ordered at the same time, the price is discounted by 35%; no other discounts apply to these kits.*





## Supplies and Accessories

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Here is a list of the most popular Series 100 supplies and accessories.

A full list of HP computer supplies matched to your system for optimum performance is shown in the HP Personal Computer User's Catalog.

For ordering information—or to obtain a copy of the User's Catalog—refer to the "How To Order" section in this insert.

### For Computers

#### HP 120 Personal Computer

|        |                                                                                                        |
|--------|--------------------------------------------------------------------------------------------------------|
| 13242H | RS-232C Cable                                                                                          |
| 13269P | Carrying Case (for HP 120 with short keyboard plus 9121 disc drive; or HP 120 with extended keyboard.) |
| 92171K | Keyboard Park                                                                                          |
| 92171T | System Turntable                                                                                       |
| 92240C | Display Tilt Unit                                                                                      |
| 92240D | Display Swivel Unit                                                                                    |
| 92250D | Dust Cover                                                                                             |
| 92220R | Right-Angle HP-IB Cable                                                                                |

#### HP 125 Personal Computer

|        |                                              |
|--------|----------------------------------------------|
| 92160A | Thermal Paper, Blue Print (Box of 24 rolls)  |
| 92160B | Thermal Paper, Black Print (Box of 24 rolls) |
| 92171R | Keyboard Palm Rest (for extended keyboard)   |
| 92171T | System Turntable                             |
| 92207A | Anti-Glare Filter                            |
| 92250B | Dust Cover                                   |

#### HP 150 Personal Computer

|        |                                                   |
|--------|---------------------------------------------------|
| 92160A | Thermal Paper, Blue Print (Box of 24 rolls)       |
| 92160B | Thermal Paper, Black Print (Box of 24 rolls)      |
| 92160C | Thermal Paper, (Page perforated, box of 24 rolls) |
| 13242H | RS-232C Cable                                     |
| 13269C | Carrying Case (for HP 150 and 9121 disc drive)    |
| 92250F | Dust Cover                                        |
| 92171J | Large (extended) Keyboard Park                    |
| 92240A | Light Gray Tilt Unit                              |
| 92240B | Light Gray Swivel Unit                            |
| 92220R | Right-Angle HP-IB Cable                           |

## **For Disc Drives**

### **HP 82901M/S, 82902M/S, 9130A, 9135A 5.25 inch Disc Drives**

|        |                                                             |
|--------|-------------------------------------------------------------|
| 92251A | Dust Cover (82901M/S)                                       |
| 92190A | 5.25 inch Flexible Discs, Double Sided<br>(Box of 10 discs) |
| 92193K | 5.25 inch Flexible Disc Drive Cleaning Kit                  |
| 92251B | Dust Cover (82902M/S)                                       |

### **HP 9121D/S, 9133A/B, 9133V/XV, 9134 3.5 inch Disc Drives**

|        |                                           |
|--------|-------------------------------------------|
| 92251D | Dust Cover (9121 D/S)                     |
| 13269T | Disc Drive Case (for 9121)                |
| 92191A | 3.5 inch Flexible Discs (Box of 10 discs) |

## **For Printers**

### **HP 2601A Daisywheel Printer**

|              |                                                              |
|--------------|--------------------------------------------------------------|
| 92151C       | Multistrike Ribbon Cartridges (Box of 12 cartridges)         |
| 92151D       | Fabric Ribbon Cartridges (Box of 12 cartridges)              |
| 92157A       | Printer Paper, Fan Fold (Box of 2400 sheets)                 |
| 92157C       | Printer Paper, Microperforated Fan Fold (Box of 2400 sheets) |
| 92252 Series | Plastic Print Wheels, 96 character (Box of 6 wheels)         |
| 92153 Series | Metal Print Wheels (1 each)                                  |

### **HP 2602A Daisywheel Printer**

|              |                                                              |
|--------------|--------------------------------------------------------------|
| 92151H       | Multistrike Ribbon Cartridges (Box of 12 cartridges)         |
| 92157A       | Printer Paper, Fan Fold (Box of 2400 sheets)                 |
| 92157C       | Printer Paper, Microperforated Fan Fold (Box of 2400 sheets) |
| 92262 Series | Plastic Print Wheels, 98 character, USASCII                  |
| 92263 Series | Plastic Print Wheels, 98 character, International            |

### **HP 2631 A/B Dot Matrix Printer**

|        |                                                              |
|--------|--------------------------------------------------------------|
| 92155A | Ribbon Cartridges (Box of 3 cartridges)                      |
| 92157A | Printer Paper, Fan Fold (Box of 2400 sheets)                 |
| 92157C | Printer Paper, Microperforated Fan Fold (Box of 2400 sheets) |

**HP 2671A/G, 2673A Thermal Printers**

92160A Thermal Paper, Blue Print (Box of 24 rolls)  
92160B Thermal Paper, Black Print (Box of 24 rolls)  
92160C Thermal Paper, Blue Print, Page  
Perforated (Box of 24 rolls)  
92160M Thermal Paper, Blue Print (Box of 1320 Fan  
Fold sheets)  
92160N Thermal Paper, Black Print (Box of 1320  
Fan Fold sheets)

**HP 82905A/B Dot Matrix Printer**

92156A Ribbon Cartridges (Box of 2 cartridges)  
92157A Printer Paper, Fan Fold (Box of 2400  
sheets)  
92157C Printer Paper, Microperforated Fan Fold  
92154P Print Head  
92171S Desktop Printer Stand  
92250T Dust Cover

**HP 82906A Dot Matrix Printer**

92156A Ribbon Cartridges (Box of 2 cartridges)  
92154N Print Head  
2171N Forms tractor unit  
92157A Printer Paper, Fan Fold (Box of 2400  
sheets)  
92157C Printer Paper, Microperforated Fan Fold  
(Box of 2400 sheets)

**For Plotters****HP 7225A/B, 7470A, 7476A Plotters**

5050-6810 Multi-Color Pen Package (Pkg of 4 pens;  
1 each red, blue, green, and black)  
9280-0589 Plotter Paper, English (Pad of 50 sheets)  
9280-0588 Plotter Paper, Metric (Pad of 50 sheets)  
92250N Dust Cover (7470A)



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|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ordering HP-Conducted Training Courses</b>    | Hewlett-Packard provides Series 100 training courses at HP Customer Training Centers using HP-provided equipment; they can also be taught by HP at your facility using your own systems. To order, call your HP Sales and Service Office.                                                                                                                                                                                                                                                                                                                      |
| <b>Ordering Software Update and Upgrade Kits</b> | Your original master disc must accompany an order for software update or upgrade kits. Therefore, they are available only through your local dealer or from HP by mail: <ul style="list-style-type: none"><li>■ In the U.S., updated software and manuals are available through your Series 100 Dealer or they may be ordered by mail from HP's Computer Supplies Distribution Center using the form given later in this section.</li><li>■ Outside the U.S., they are available through your Series 100 Dealer or your HP Sales and Service Office.</li></ul> |
| <b>HP Internal Users</b>                         | Have your purchasing department enter an I2 order on the supplying entity shown for the item on the Corporate Price List or the Parts Price List.                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>HP Employees</b>                              | Check with the Employee Computer Program Coordinator in your personnel or purchasing department for ordering instructions.                                                                                                                                                                                                                                                                                                                                                                                                                                     |

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# Mail Order Form for HP Personal/Desktop Computer Software Update Kits

**Use this form only for HP Personal/Desktop Computer Software Update Kits. Supplies matched to your HP Computer System can be ordered with update kits.**

Ordering instructions:

1. Print or type all requested customer information.
2. Order software update kit(s) for your HP Personal/Desktop Computer. The original disc must be sent to HP with your order for the software update kit; see instruction 7.
3. You may also order computer supplies using this form. Obtain current prices by calling toll-free 800-538-8787. In California, Alaska and Hawaii call (408) 738-4133 collect.
4. Compute state/local taxes on the total cost of items ordered (HP is required to collect taxes; their omission delays your order.) If tax exempt, you must provide your tax exemption/resale number.
5. Fill in any special shipping instructions, as required. HP pays freight to U.S. addresses on mail orders. EXCEPT you will be charged extra for special expedited shipping methods; and you will be charged freight on heavy, bulky items weighing more than 30 lbs., such as furniture or printer paper.

6. Fill in credit card information or enclose cashier's check for fastest shipment. Payment by personal or company check will delay shipment up to 10 days. Make check payable to **Hewlett-Packard Co.** All orders subject to credit approval. **Do not send currency, coin, stamps or purchase orders.**

7. Before your software update kit(s) can be shipped, you must send with your order one original disc (containing the software being updated) for each update kit ordered. This is the disc with the HP software product number and description printed on the label. Be sure to make a working copy before sending the original.

8. Mail this form, along with credit card information (or check), and the original disc to:

HEWLETT-PACKARD  
Mail Order Dept., P. O. Box 60008, Sunnyvale, CA 94088

**Thank you for your order!**

(Over)




Your Name \_\_\_\_\_ Phone ( ) \_\_\_\_\_ Date \_\_\_\_\_

| Product Number | Description | Quantity | Unit Price | Amount |
|----------------|-------------|----------|------------|--------|
| 1              |             |          | .          | .      |
| 2              |             |          | .          | .      |
| 3              |             |          | .          | .      |
| 4              |             |          | .          | .      |
| 5              |             |          | .          | .      |

Tax Exempt?  No  Yes

Tax Exempt or Resale Number \_\_\_\_\_

|                   |   |
|-------------------|---|
| Subtotal          | . |
| State/Local Taxes | . |
| <b>TOTAL</b>      | . |

|                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Ship To</b></p> <p>Company _____</p> <p>Attn Of _____ Bldg/Room _____</p> <p>Street Address _____</p> <p>City _____ State _____ Zip _____</p> <p>Standard Shipping Method Is _____</p> <p>UPS Surface _____</p> <p>Special Shipping Instructions _____</p> | <p><b>Payment Method</b></p> <p><input type="checkbox"/> Check Enclosed (Payable to Hewlett-Packard Co.)</p> <p><input type="checkbox"/> Credit Card (Check one, provide all information, and sign)</p> <p><input type="checkbox"/> </p> <p><input type="checkbox"/> </p> <p><input type="checkbox"/> </p> <p>Account No. _____</p> <p>Expiration Date _____</p> <p>Name on Card _____</p> <p>Address _____</p> <p>Signature _____</p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Use this form for prepaid U.S. orders only POD 1/84 (Over)

## Change of Address Form for *Communicator* Subscribers

If the information on your *Communicator* mailing label is no longer correct, let us know. Fill in this form and mail to **Hewlett-Packard, Subscriptions Marketing Department, P.O. Box 60008, Sunnyvale, CA 94088 USA.**  
Allow 6-8 weeks for change to take effect.

*(please print)*

**Old Address:**

**(attach mailing label or fill in information as it appears on mailing label):**

Name \_\_\_\_\_ Title \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_ Bldg No./Mail Stop \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Country \_\_\_\_\_

**New Address:**

**(exactly as it should appear on the mailing label)**

Name \_\_\_\_\_ Title \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_ Bldg No./Mail Stop \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Country \_\_\_\_\_





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