

HP Series 100 Communicator

- Introducing
Condor 20-3 and
BPI Payroll
- Special
Condor/Wordstar®
Offer—see inside
back cover

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Welcome to Issue #4 of the Series 100 Communicator

Curt Gowan

This magazine presents information about your HP Series 100 computer which we think will interest you: application hints, programming tips, and helpful answers to some common questions. The Software Status Bulletin section is a current list of all known problems with available solution information. The articles span several levels of expertise—ranging from the casual user to the experienced programmer. In addition, we briefly describe new Series 100 products and how they affect you as a Series 100 owner.

How To Receive the Communicator

There are three ways to obtain copies of the *Series 100 Communicator*:

- A *Communicator* subscription is included as part of the HP 120/125 System Information Service (Product 45530K). This service includes phone-in consulting and appropriate manual updates. To order, call your HP Sales and Service Office—ask for “Computer Products Order Processing.”
- You may subscribe to the *Communicator* alone, by ordering the HP 45530N Series 100 Software Notification Service from your local HP office. Ask for “Computer Products Order Processing.”
- Individual copies, including back issues, are available through your dealer or from HP. See the “Ordering Information” section in this issue for details.

How to Become 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
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Sunnyvale, CA 94086 USA

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

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International System Summary

Dave Melin



For those of you who require local language systems, Hewlett-Packard offers seven international keyboard options for the Series 100 Computer: Swedish, Norwegian, German, U.K., Spanish, and two versions of French. Each of the international keyboards allows the user to both input and output local language characters.

The table below indicates whether or not a particular application is supported on an international system.

Contact your dealer or local Hewlett-Packard sales office for more information on the international Series 100 Systems.

	Swedish	Norweg.	German	U.K.	Spanish	French
Series 100/Graphics (45532B)	2	2	2	2	2	2
Graphics/125 (45532DA,EA)			1 (- DA)		1 (- EA)	
Series 100/VisiCalc (45531B)	2	2	2	2	2	2
VisiCalc/125 (45531DA,EA)			1 (- DA)		1 (- EA)	
Series 100/Word (45533B)				2		
Series 100/DSN/Link (45534B)	2	2	2	2	2	2
Link/125 (45534DA,EA)			1 (- DA)		1 (- EA)	
Series 100/BASIC/45535A)	2	2	2	2	2	2
WordStar/100 (45560A,DA,EA)	2 (- A)	2 (- A)	1 (- DA)	2 (- A)	1 (- EA)	2 (- A)
Condor Series 20 (45550)	2	2	2	2	2	2

Key:

- 1 = Total localization: manuals, application software commands, menus and error messages are all translated.
- 2 = Partial localization. Local characters can be typed and printed (or plotted), but the software and manuals are in English.



Through HP PLUS (Program to Locate User Software), HP has joined with selected software vendors to make enhanced versions of vendor programs available to Series 100 users. These packages support the HP peripherals... and they take advantage of the unique Series 100 features—such as soft keys. New introductions on this program include:

- Condor™ 20-3, which adds indexing and report writing capabilities to the popular Condor Relational Data Base Management System.
- BPI Payroll, which provides automated payroll processing interfaced with the optional BPI General Accounting program.

In addition, to provide users with more software for HP personal computers, standard CP/M programs from selected software vendors are being made available. Each of these programs will run on any system. These are industry-standard software packages, supported by the original designer, which run on the Series 80 and Series 100. These standard packages include:

- dBASE II™, for data base management
- Professional Tax Plan for professional tax planners
- Personal Tax Plan for individual tax planning

These products are available either through your local Hewlett-Packard Sales Office, from your local Authorized HP Personal Computer Dealer, or from the Hewlett-Packard Computer Supplies Operation, as described under "Ordering Information" in this *Communicator*.



New products and enhancements have been added to the Series 100/Condor family of data base management systems. Condor 20-3 adds advanced report writer capabilities and indexing to the Condor 20-2 relational database management system. A new upgrade product allows Condor 20-2 users to add new 20-3 features without purchasing the entire 20-3 product. Enhancements have been made to the existing 20-1 and 20-2 packages which are available to new and current users.

New Product—Condor 20-3

Condor 20-3 has all the relational database capabilities of Condor 20-2 plus advanced report writing and indexing features.

Advanced report writing capabilities allow you to easily define, revise, list, or print sophisticated computer reports from a Condor database. To create a report, you define a model on the Series 100 screen. You then modify the screen to further define the format of the report. In addition, you can easily define automatic page breaks with automatic totals, subtotals, and grand totals. Headers can be automatically printed with each page break. A wide variety of data item print formats can also be specified; and reports can be produced from any existing Condor database.

The index feature is used to quickly locate a record of information in a database. The index contains the value of one of the specific data items in a record, a "key", and the location of the record. Up to eight items can be selected for a database. Once indexed, Condor database management routines automatically update the index. Existing non-indexed databases can be indexed later. In addition to rapidly accessing large files, indexing options can check for the entry of duplicate keys and eliminate the need to pre-sort databases before printing or listing.

Upgrade to Condor 20-3

A new upgrade adds Condor 20-3 capabilities to 20-2 systems. All 20-2 enhancements are included along with the report writing and indexing capabilities of 20-3.

**New Versions of
Condor 20-1 and 20-2**

Condor 20-1 and 20-2 have been updated to level A.02.00. There are several enhancements included:

- Condor will now sort a database of up to 4 Mb instead of the current 128 Kb limit. The actual sort size is also dependent on the size of your disc drive volumes. For example, a 3.5" disc drive can sort databases up to 248K.

- A grid can be easily accessed to help lay out a database form.
- New keywords make it easier to perform numerous Condor commands.
(For example, you can link a database to different data, form, and definition files within the DEFINE command.)
- The LOG command has the ability to issue a user message for disc insertion.
- A one step REORG makes it easy to reorganize a database.

Refer to the "Software Status Bulletin" section of this *Communicator* for details of the software problems which have been corrected in the new versions of 20-1 and 20-2.

For instructions on updating your 20-1 or 20-2 to the current revision of 20-1 or 20-2 respectively, refer to the article "Ordering Updated Software and Manuals" in this *Communicator*. The Software Update Kits will be available in May, 1983.

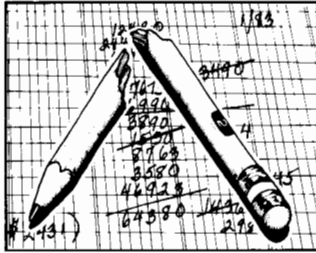
Summary of Series 100/Condor Products

Product No.	Product	Description
45550A	Condor 20-1	Data Base Management System
45550E	Condor 20-2	Relational (Multi-file) Data Base Mgt. System
45550H	Condor 20-3	20-2 plus Report Writer and Index
45550K	20-1 to 20-2 Upgrade	Migration from 20-1 to 20-2
45550N	20-2 to 20-3 Upgrade	Migration from 20-2 to 20-3
45550-1*000	20-1 Software Update Kit	New Version of 20-1
45550-1*001	20-2 Software Update Kit	New Version of 20-2

* = "3" for 3.5" Micro-Disc
 "5" for 5.25" Mini-Disc
 "8" for 8" Flexible Disc

Introducing BPI Payroll

David Pugmire



The BPI Payroll system is now available on the Hewlett-Packard Series 100. This full-function system provides for automatic payroll processing, check printing, and transfer of data to the optional BPI General Ledger.

Using standard double-entry accounting, the Payroll system will calculate all taxes and deductions, track vacation days and pay, sick days and pay, tips, advances, and reimbursements. It also allows for an employer-sponsored IRA (Individual Retirement Account). Employees may be salaried, hourly, or on commission. They can live in different states—they can even be on different pay cycles.

Note: BPI Payroll is intended for use only in the United States, due to the variation of employment tax laws from country to country.

Learning to Use Payroll

The BPI Owner's Manual is designed for the inexperienced user. You learn to process a payroll by actually doing a weekly payroll of a sample company. All of the needed data has been provided on a disc that accompanies the system. The manual takes you step-by-step, employee-by-employee through the weekly processing.

Many different pay situations and special circumstances are encountered in this learning process. You enter the data for each employee, print the checks, and produce detail and summary reports.

After doing the payroll for the sample company, you will be ready to set up your own payroll.

Putting Your Payroll on the Series 100

Converting your current payroll practices to the BPI System is a guided process using a set of work sheets provided with BPI Payroll. You answer each question on the work sheets following the guidelines and instructions in the manual.

The questions involve information about your company (Name, Address, Federal ID Number), your Chart of Accounts, deductions used (insurance, FICA etc.), commission schedules and employee information. After answering the worksheet questions, you enter the information on your computer using a set of screens that look similar to the worksheets.

Now you are ready to process your payroll on a routine basis. This entire process of learning to use the payroll system and setting up your business on it will normally take less than one day.

A Typical Pay Period

Once you have set up your payroll, the end of a typical pay period might go as follows:

- a. Turn on the computer and bring up Payroll using your company code and password.
- b. Select Automatic processing. All salaried employees and those who work standard hours are processed first. Next commissioned employees are displayed one by one so you may input the commission base. Finally, those employees who work by the hour are displayed so you can input hours worked.
- c. Print summary; review for accuracy.
- d. Manually select the employees where changes must be made.
- e. Distribute wages to appropriate accounts and make any necessary adjustments via the general journal.
- f. Print payroll checks.
- g. Print detail and summary reports.
- h. Transfer payroll information to the General Ledger (if you use the BPI General Accounting System).

The entire process can usually be completed in about one-half day for 100 employees.

BPI Payroll System Specifications	Payroll General Ledger	
	Number of accounts	70
	Account Numbers	4 digits
	Payroll Ledger	
	Number of employees per disc	100
	Employee number	4 digits
	Number of General Journal Entries Per Pay Period	100
	Deductions	
	Standard	3
	Optional	6
	Number of checks per pay period per employee	1

Methods of Compensation

Salary

Hourly

Regular

Overtime

Doubletime

Commission

Base pay plus percentage of sales

Base pay plus piece rate

Draw against commission

Other technique user specifies

Pay Periods

Weekly

Biweekly

Semimonthly

Monthly

Wage Distribution Prompts 5

Number of Departments 99

Tax Table:

Contains data for all fifty states, Maryland counties, Michigan cities, Indiana counties, New York City, and California State Disability Insurance. Also included are District of Columbia, Puerto Rico, New Jersey-New York, New Jersey-Pennsylvania, and Connecticut-New York. (Update service is available from BPI.)

Reports Produced

The major reports produced by the BPI Payroll system are:

Payroll Register

Check Register

Payroll General Journal

Earnings Records

Tax Report Information

Department Reports

Employee List

Payroll Register Summary

Earnings Records Summary

Current Hours and Pay

Year-to-Date Hours and Pay

Audit Report

Quarterly Wage Statement

W-2s

Schedules

Employee List (alphabetic and numeric)

Employee Information (alphabetic and numeric)

Commission Schedules

Deduction Schedules

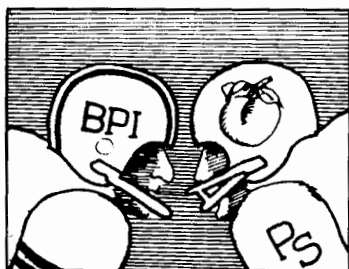
Ordering and Support

Payroll is available for the HP Series 100 as Hewlett-Packard product number 45553A.

Each payroll system comes with phone-in support, paid for by HP, and provided by the program developer—BPI Systems Inc. of Austin, Texas (512 454-2801.)

You can subscribe, at a nominal charge, to an update service from BPI that automatically provides employment tax table changes affecting the states and localities you operate in.

Refer to the “Ordering Information” section in this *Communicator* for ordering details.



Choosing the right accounting system for your HP personal office computer can be a difficult decision. Of the many accounting programs that work on the Series 100 computers, two have received recognition in the HP PLUS program.

HP distributes the BPI General Accounting System. HP references the Peachtree Software™ Series 8 Accounting System. Both products are available, are supported by their developers, and work well on the HP 120 and HP 125.

The purpose of this article is to help you understand the differences between the BPI and Peachtree Accounting programs and decide which is most appropriate for your business.

This comparison focuses on BPI's General Accounting System and Peachtree's General Ledger Package. Both companies have additional modules available that add further capabilities—the similarities and differences between BPI's and Peachtree's General Ledger packages are representative of the other accounting modules each company provides.

Note: These products are designed around U.S. accounting practices.

General Approach

BPI and Peachtree have taken somewhat different approaches to providing an accounting solution. An understanding of these differences will help you decide which package matches *your* approach to small business accounting.

BPI has sought to provide the users of their General Accounting System with a fully functioning product in one module. It has everything that is needed for basic accounting functions:

- Complete General Ledger
- Complete Financial Reports
- Limited Accounts Receivable
- Limited Accounts Payable
- Limited Payroll
- Check Writing

Additional capability can be added by installing another BPI Accounting module, such as a full-featured payroll, if that is needed.

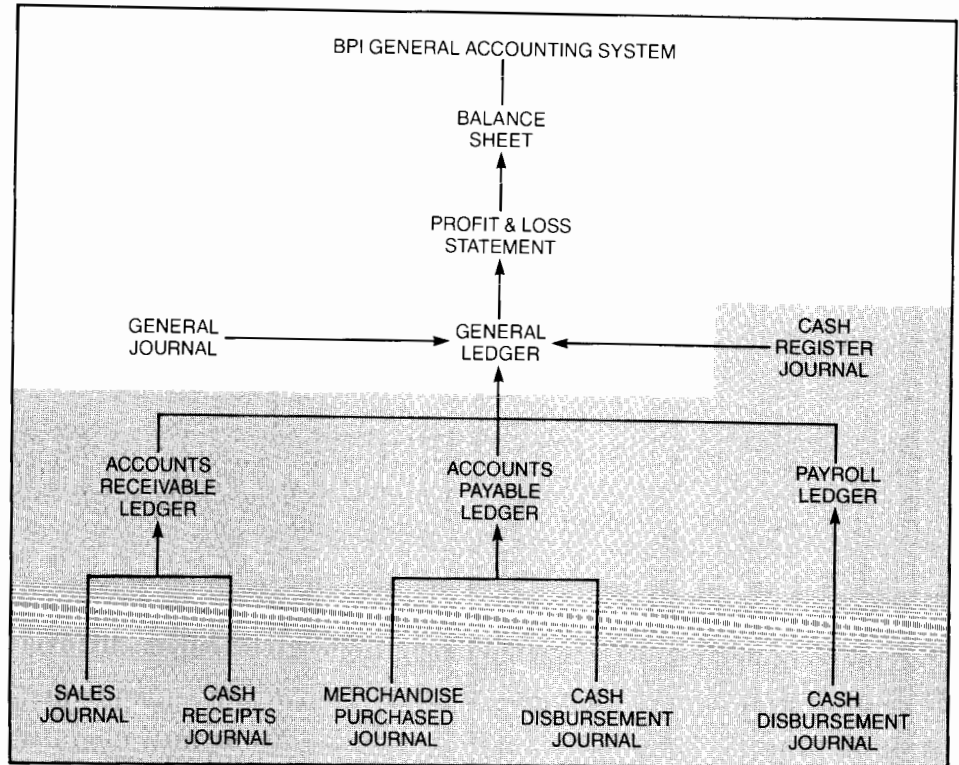
Peachtree's approach is to separate each accounting function into a different module. The general ledger provides:

- Complete General Ledger
- Complete Financial Reports

If any extra functions are needed, even for limited usage, you must add another module.

Figure 1 illustrates the key differences. The capability of the Peachtree General Ledger is represented in the unshaded area while the entire box represents the BPI General Accounting System.

Figure 1 System Flowchart



BPI has modeled their full-featured package after the terms and situations that are commonly found in business and used by business people. For example, everyone is familiar with a sales book. The BPI system has a sales journal which allows you to enter this information.

Peachtree's package is modeled after the accounting systems typically used by accountants. When a transaction is entered into the computer from a sales book, for example, a source code is specified. The translation from Sales book to source code (ie., "03") is done by the user.

A summary of these approaches would indicate that a business person would tend to be more comfortable with BPI while an accountant would tend to prefer Peachtree.

Point-by-Point Comparison

A point-by-point comparison of the capabilities of each system shows that they are very similar in power. Both packages are known to run well in small businesses (up to \$5 to \$6 million in annual sales). Over this limit, most businesses find a need for a larger computer that allows for faster entry of transactions by multiple users. This is not a hard-and-fast rule. Each business must decide if a personal computer will meet their specific needs.

A comparison of features is given in Table 1; a comparison of the reports generated by the programs is given in Table 2.



Table 1. Comparison of BPI General Accounting and Peachtree General Ledger

	BPI	Peachtree
Account Number (digits)	4	3 or 4
Total Accounts Available (Example 5¼" disc, 1200 Accounts, Transactions/month =)	1200 (3572)	depends on disc size (750)
Number of Departments	10	99
Transactions Allowed (Example for 250 Accounts, 5¼" disc)	depends on disc used (4600)	depends on disc used (2500)
Standard (Repeating) Journals	Yes	Yes
Audit Trails provided	Yes	Yes
General Ledger in Balance (Required)	Yes	No
Tracking of Employee Payroll Info. (Quarter & Year to Date)	Yes	No*
Accounts Receivable by customer with current transactions and balance forward	Yes +	No*
Accounts Payable by vendor with current transactions plus balance forward	Yes +	No*
Interface to other Accounting Systems	Yes	Yes
Depreciation Schedules	No	Yes
Check Printing	Yes	No
Password security	Yes	Yes
Tutorial	Extensive	Limited
Support available from vendor	Lifetime	30 day (with extended contract available.)

+ Basic capabilities included: enhanced capabilities are available with additional modules.

* Not in General Ledger, but additional module provides this plus additional capability.

Table 2. Reports Produced	Report	BPI	Peachtree
	Balance Sheet	X	X
	Profit & Loss (Income)	X	X
	Department Profit & Loss	X	X
	Comparative Financial Statements		X
	Subsidiary Schedules		X
	General Ledger	X	X
	Trial Balance	X	X
	Accounts Receivable Ledger	X	*
	Accounts Payable Ledger	X	*
	Payroll Ledger	X	*
	General Journal	X	*
	Cash Disbursements Journal	X	*
	Invoice Register	X	*
	Cash Receipts Journal (A/R)	X	*
	Merchandise Purchased	X	*
	Journal (A/P)	X	*
	Cash Sales Journal	X	*
	Depreciation Schedules		X
	Check Printing	X	
	Payee, Vendor, Employee, and Customer Lists	X	

**It is possible to define the Peachtree General Ledger so that reports approximating these areas will be printed.*

Advantages of Each Product	Even though BPI and Peachtree are very similar in power and capability, each has its own particular advantages.
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BPI Advantages:

- Designed for fast, easy data entry.
In the process of posting to the books each month, up to 70% of the entries may be similar to those for every other month. By making extensive use of user-defined prompts, the actual keystrokes are kept to a minimum. In addition, the second half of each entry in double-entry bookkeeping is usually identical, so the entry is made automatically. For example, each month you pay the phone company. You may define a prompt that remembers the accounts used when you write the check and you credit the checking account each time you write a check. Peachtree does not provide these prompts; both sides of a transaction must always be entered.
- Always in balance.
BPI's package is always in balance. You cannot accidentally leave your books out of balance by forgetting part of a transaction. With Peachtree, it is possible to have the books not balance.
- Check Writing, Payroll, Receivables, and Payables
All of these functions are available for limited usage in the BPI General Accounting system. Peachtree does not provide these in the basic package.

- Extensive tutorial.

The BPI manual includes a tutorial section to help you learn the system by doing a sample company's books. It is then easy to set up your own, often in one day. Peachtree's tutorial is limited—it gives a basic idea of how to do a few simple transactions.

Peachtree Advantages:

- Comparative financial statements.

By hand-loading the budget and last year's data, you can produce financial statements showing this month, year-to-date, budget, and last-year-this-month or year-to-date. BPI's statements show this month and year-to-date only. With BPI, you need to use VisiCalc to get comparative statements.

- Up to 99 departments.

Peachtree allows you to define up to 99 departments. BPI allows 10 departments. For each department you can track expenses and produce financial reports.

- Flexible Chart of Accounts.

Peachtree's Chart of Accounts gives greater ability to define summation levels and account type. This also leads to greater complexity in setting up the system.

Conclusion

You cannot easily define what type or size of business should purchase BPI or Peachtree. The decision comes down to the particular management style and accounting practices of each individual company. Both systems can do an excellent job of helping your business realize the advantages of personal computer accounting.

Ordering

Your dealer may carry Peachtree, or it can be ordered directly from Peachtree Software, Atlanta, Georgia at 404-239-2045.

Series 100/BPI General Accounting is distributed by Hewlett-Packard as product number 45552A. Included with the product is a certificate to be redeemed for support directly from BPI. Refer to the "Ordering Information" section of this *Communicator* or see your local HP dealer.



dBASE II™ is a standard CP/M software package from Ashton-Tate. A relational data base management system, it allows the user to define input screens, store data, and produce reports using the dBASE II command language.

With dBASE II you can:

- Create complete data base systems.
- Add, delete, edit, display and print data from your database, with a minimum of data duplication on the file.
- Gain a large measure of program/data independence, so that when you change your data you don't have to change your programs, and vice-versa.
- Generate reports from one or more databases, automatically do multiplication, division, sub-totals, totals, and other data manipulation every time you use the database.
- Use the full-screen editing capability to set up a screen format, so that you see exactly what you're going to get, and enter data by filling in the blanks.

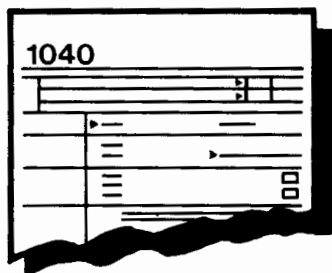
Ordering

dBASE II is available for the HP Series 100 (and HP Series 80) systems as Hewlett-Packard product number 45583A. Support has been prepaid by HP and is provided by the program developer, Ashton-Tate of Culver City, California.

Refer to the "Ordering Information" section in this *Communicator* for ordering details.

Two Tax Planning Packages

David Pugmire



Today's complex U.S. income tax laws make tax planning a difficult process due to the multitude of calculations that must be made. Aardvark Professional Tax Plan and Personal Tax Plan are standard CP/M products designed to aid Series 100 owners in the U.S. with tax planning.

Professional Tax Plan

Professional Tax Plan is designed specifically for professionals (CPAs, attorneys, accountants, tax consultants, financial planners, etc.) involved in tax planning. It was written by CPAs and has been approved by a "Big 8" accounting firm, Touche Ross and Company.

With Professional Tax Plan, you can look at up to five different tax alternatives at the same time. Each alternative is calculated independently of the others but using the same tax rates. In addition, projections can be made for a 5-year period. Appropriate tax tables are automatically used. Any carry-overs (capital loss, charitable contributions, etc.) which remain from one year will be used in successive calculations.

There are 91 inputs available, covering a broad spectrum of special tax situations that may arise. Data entry is accomplished through item-by-item prompting. Special features are built in that allow for quick entry of only the variables that change.

A sampling of areas covered by Professional Tax Plan include:

- Federal tax liability for 1982 and thereafter (utilizing appropriate tax tables and rate schedules, income averaging, maximum tax on earned income, and the "Special Rule" for Post-6/9/81 qualified net capital gain)
- add-on minimum and alternative minimum tax, including the 1981 limitation on qualified net capital gain
- ten-year averaging for lump-sum distributions
- the deduction for married couples with two incomes for 1982 and thereafter
- limitations for medical expenses, investment interest expenses, capital losses, and 50%, 30%, and 20% charitable contributions
- capital gain deductions
- indexing for tax years 1984 and thereafter

Personal Tax Plan

Personal Tax Plan is very similar to Professional Tax Plan in design and use. However, it is targeted toward individuals doing their own tax planning.

There are 69 inputs provided in Personal Tax Plan. The primary areas of difference from Professional Tax Plan are:

- variety of charitable contributions
- consideration of investment interest limitations

Limitations

Personal and Professional Tax Plan do not prepare tax returns for you. Their intent is to plan investment and expense strategies to minimize your tax liabilities. To exploit the full potential of either of these packages requires a good knowledge of tax law. If your understanding of tax law is limited, you can use these programs to organize your tax information—and your questions—to make the most effective use of the time spent with your tax advisor.

These packages are for use only by those who have United States Federal tax obligations.

Ordering

Professional Tax Plan and Personal Tax Plan are available for the HP Series 100 (and HP Series 80) systems as Hewlett-Packard product numbers 45585A and 45586A respectively. Support and update service are provided by the program developer, Aardvark Software Inc. of Milwaukee, Wisconsin.

Refer to the “Ordering Information” section in this *Communicator* for ordering details.

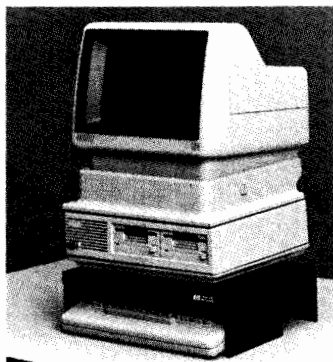
New Products for your System

New Accessories

Meg Weaver

HP provides a group of accessories for the HP 120 and HP 125—items which truly make your system efficient. These include a dust cover which keeps the equipment clean, a carrying case which allows you to transport your computer, and a turntable which allows several people to share the system.

For the HP 120...



The Display Tilt Unit and the Display Swivel Unit (92171V and 92171W) allow you to tilt the HP 120 CRT display up 10 degrees or down 10 degrees from a horizontal position as well as turn it 360 degrees (cabling may limit full rotation). This allows adjustment for glare and reflection and helps in reducing back and neck fatigue—without increasing the system footprint.

The 92171K Keyboard Park fits under the HP 120 system and allows for convenient storage of the keyboard when not in use. It saves desk space... and the keyboard is protected from accidental spills and other damage. An opening in the rear wall allows the keyboard cable to be neatly routed to the CRT. The Keyboard Park is made of smoke-colored acrylic plastic and is designed for the HP 120's standard keyboard.

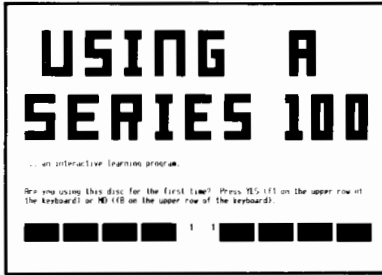
Another item especially designed for the HP 120 is the 13269P Carrying Case which holds the CRT, the standard keyboard, and the HP 9121 disc drive.

For the HP 125 and HP 120...

An HP 125 or HP 120 CRT and keyboard can be placed together on the 92171T Turntable, which will turn up to 360 degrees (depending on cable configuration) so that the system may be shared.

Other Accessories and Supplies

Refer to the "Ordering Information" section of this *Communicator* for a list of available supplies and accessories... plus information on how to get your copy of the *HP Personal Computer User's Catalog*.



We are pleased to announce our first computer-aided learning tool for personal computers. Shipped as standard with every HP 120 or HP 125B system, the Series 100/Computer Tutor is designed to be an introduction to the system for the first-time personal computer user.

What it does

The disc loads automatically when the system processor is turned on, and greets the user. Not only does Computer Tutor explain the components and general use of the system, it takes care of the terminal configuration ... and lets the user interact for some hands-on experience.

With Computer Tutor, each aspect of the computer's components is explained, then the program gives instructions for some practice. The keyboard, disc drives, printer, system processor, and plotter are all used, but *only* when the program lets it happen.

A first-time user doesn't have to know what the Terminal Configuration menu looks like. Computer Tutor asks if you have a printer; if you do, you press the softkey labeled with the name of the printer. Not only are all of the necessary configurations taken care of, but the disc tests each printer and plotter by printing the user's name on the device.

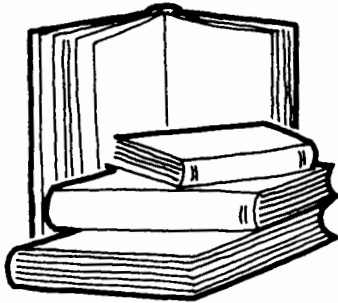
How to get it

The Series 100/Computer Tutor is shipped with each HP 120 or HP 125B.

If you have an HP 125A, you can obtain a Computer Tutor disc by ordering an Operating System and Utility Software Update Kit, as described in the "Ordering Information" section of this *Communicator*. These are available from HP or through your HP Personal Computer Dealer.

Books on Computing

John LaCava



Here are several computer books which we have found helpful. They are available from bookstores, HP Personal Computer Dealers, or directly from HP's computer supplies distribution center.

BASIC—Second Edition

Albrecht, Finkel, and Brown; Wiley & Sons, 1978

Suitable for the novice who has never programmed before. Every BASIC command is explained using a short working program and then illustrated in a variety of business applications. It should be remembered that BASIC varies slightly from computer to computer so users should use their system's BASIC reference manual in conjunction with this book. HP Product Number 92233D.

Osborne 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.

VisiCalc: Home and Office Companion

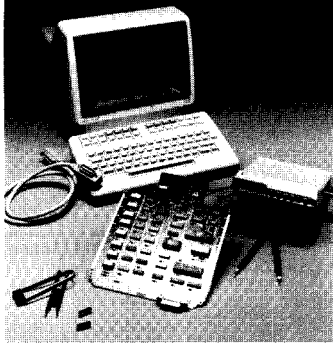
Castlewitz and Chisausky with Kronberg; Osborne-McGraw Hill, 1982

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.

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.



If you have 25 HP personal computers, terminals, floppy disc drives, or workstation printers or plotters at one site, then you may qualify for a new HP hardware support program. It is called Volume On-Site Repair Center Service (VRC) and is priced at return-to-HP rates.

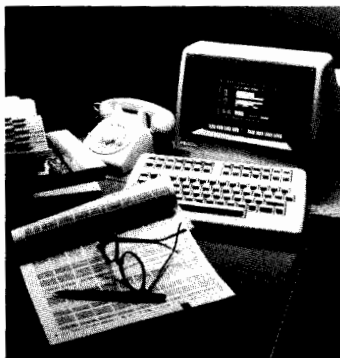
VRC provides scheduled weekly visits for any failed units. You call HP the day before the visit with information on what products need repair. You also allocate an approved work space for the Customer Engineer (CE) to use during the repair visit. You move any units needing repair to the work space before the CE arrives.

This new program can be an alternative to HP's four-hour and next-day on-site contracts—by combining a VRC contract with the use of spare units, you can provide high uptime at a low overall cost.

Contact your HP Sales and Service Office for more information on this program—ask for "Computer Customer Engineering".

Printing Mailing Labels from Condor

Cathy McEllhiney



Condor and word processing go well together. Have you ever had problems producing labels from Condor because of fixed length fields? Either Series 100/Word or Series 100/WordStar (with MailMerge) may be used to generate labels from information in a Condor Database. The following example is designed for generating 4" X 1" tractor feed mailing labels, but it can be easily modified for other size labels.

There are two stages in this procedure. First, you create a customer address file in Condor. Then, you create a "letter" in either of the word processing packages.

This example uses the "Customer" database shown below to create an address file containing the customer's first and last name, street, city, state, and zipcode only.

Example Database:	Example Entry:
CUSTOMER Database	CUSTOMER Entry
[Firstname]: _____	John
[Lastname] : _____	Smith
[Company] : _____	Hewlett-Packard
[Street] : _____	978 E. Arques
[City] : _____	Sunnyvale
[State] : _____ [Zipcode]: _____	CA 94086
[Date] : _____	1/9/83

When all the information on the customer database is to be used on the mailing labels, no projection of data fields is needed. In this example, however, only certain fields are required. These fields may be pulled from the records and stored in a Result database. This Result database is a subset of the original database and contains only that information which will be used on the mailing labels.

Condor Set-Up Procedure

```
>>Project CUSTOMER by Firstname, Lastname, Street, City, State, Zipcode<CR>
```

The Project command pulls the specified fields (Firstname . . . Zipcode) from the CUSTOMER Database and stores them in a database called RESULT.

The next step depends on whether you are using Word or WordStar. If you are using WordStar, skip to the WordStar section of this article.

Series 100/Word

Now, have Condor set up the database in the format for Word:

>>Write RESULT ADDRESS[M]<CR>

The write command with the [M] option (note: capital M) writes the information in the RESULT database to the ADDRESS database in a Mail List format (carriage return & line feed after each data field.)



>>System<CR>

The system command is used to exit from Condor.

ADDRESS looks like this:

John
Smith
978 E. Arques
Sunnyvale
CA
94086

The customer file, ADDRESS, has now been created.

Go into Word and design a "letter" which contains a modified Y-Table and prompts for the address items. The following four lines show an example "letter", which has been saved as a file named LETTER1.

.Y 1 6 0 1 10 1 0 65 8 12 1 0 35 5<
@1 @2<
@3<
@4, @5 @6<

NOTE: The modifications to the Y-Table are underlined. The "6" corresponds to 6 lines/page. If 1" long form feed labels are not being used, this value must be changed to reflect the length of the labels (1" = 6 lines). The second highlighted value, "1", corresponds to continuous print. If form feed labels are not being used, this value should be changed to "0".

Since both the customer list (ADDRESS) and customer "letter" (LETTER1) have been created and saved, the Mail Merge macro can be executed.

Action to take:

Softkey: macro features
Softkey: MAIL MERGE
Type: Y

Result:

Loads macro options
Loads Mail Merge Macro
Allows configuration changes

Fill in the Mail Merge Menu as follows:

***** MAIL MERGE *****

This Macrofeature allows you to fill in a letter with information from a customer mailing list file.

How many lines per customer record? : 7
0 for single sheet, 1 for continuous forms : 1
What is the filename of your letter : a:LETTER1
What is the filename of your customer file : a:ADDRESS

Explanation:

7 lines/customer record = 6 lines of data (Firstname, Lastname, Street, City, State, Zipcode) plus 1 for line feed between records.
"1" for continuous forms = Prints continuous labels.
Filename of your letter = a:LETTER1 is the example "letter" which is stored on disc drive a.
Filename of your list = a:ADDRESS is the file created on Condor and stored on disc drive a.

If labels will be printed often, this macro configuration can be saved. Indicate that this macro is to be saved and supply a filename (eg. LABELS) when prompted. When using Series 100/Word in the command mode, type AD, followed by the configuration file name, LABELS. The labels will begin automatically!

The last section of this article discusses the procedure for updating your Condor database.

WordStar/100:

To have Condor set up the database in the format for WordStar, follow these steps:

>>Write RESULT ADDRESS[B]<CR>

The write command with the [B] option (note: capital B) writes the information in the RESULT database to the ADDRESS database in a Basic format (data item in quotes, comma after each field, carriage return & line feed after each record).

>>System<CR>

The system command is used to exit from Condor.

ADDRESS looks like this:

"John", "Smith", "978 E. Arques", "Sunnyvale", "CA", "94086"<

The customer address file is now ready.



Go into WordStar and produce a "letter" which contains .DF (Data File command), .RF (Read Value command), .MT and .MB (suppress top & bottom margin command) and the data fields to be merged. The following ten lines contain an example letter, called LETTER2, which can be used in WordStar to create a 4" x 1" tractor feed labels.

```
.. LETTER2
.MT 0
.MB 0
.DF ADDRESS

    &Firstname& &Lastname&
    &Street&
    &City&, &State& &Zipcode&
```

Explanation

```
.. LETTER2    = Comment which gives the file name.
.MT 0         = Changes the number of blank lines at the top of the
               page to 0.
.MB 0         = Changes the number of blank lines at the bottom of the
               page to 0.
.DF ADDRESS   = Specifies ADDRESS as the data file.
```

NOTE: The total letter contains 6 lines: three blank lines after the dot commands and three lines for the body of the "letter". Six lines are required for the 4" x 1" labels.

Since both the customer list (ADDRESS) and the customer "letter" (LETTER2) have been created and saved, MailMerge can now be executed.

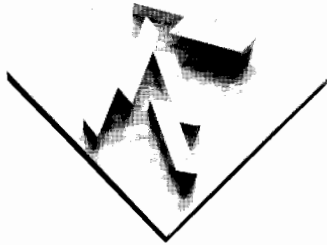
Action to take:	Result:
Softkey: Run MailMerge	Runs MailMerge Program
Type: LETTER2	Enters the name of file to MailMerge
Type: <CR>	Defaults to beginning
Type: <CR>	Defaults for end
Type: <CR>	Defaults to one copy
Type: <CR>	Defaults to no file output
Type: <CR>	Defaults to no form feed
Type: <CR>	Defaults to no suppression
Type: N	Specifies continuous print
Type: <CR>	Begins printing of labels

Updating Your Customer File (Word or WordStar)

If the customer file changes, the word processing document need not be revised. The only revision needed is to re-Project the CUSTOMER database and re-Write the Result file (with an option) so that the Address File (ADDRESS) represents the most current customer listing.

More On HPMAIL and the Series 100

Trevor Wing



HPMAIL supports personal computers connected to the HP 3000 as a normal terminal. But did you know that Series 100 users can include data from their local storage in HPMAIL messages? This is done at the push of a softkey.

The procedure is straightforward. First, load Link/125 or Series 100/DSN/Link, and then log on to the HP 3000 to run HPMAIL directly from the Link Main Menu. When you have signed on to HPMAIL, a message can be sent in the normal way. But now you have an added advantage. The softkey marked "COMMAND FILE" can be pressed to incorporate data. If you choose to do this, Link prompts for a file name.

Type the name of the text file—which can be a Word file saved in the "/1" format or a VisiCalc file saved as ".PRF" type. Link now transfers each line of text from the local file and adds it to the HPMAIL message as lines of text. Once the transfer is complete, Link asks you to press the Return key to continue. Now type "/" in the normal way and HPMAIL continues exactly as usual.

In the last *Communicator*, the article "HPMAIL Delivers VisiCalc Reports" gives some handy hints on transferring VisiCalc reports via HPMAIL. If you are mainly interested in *transferring* the contents of a report rather than allowing the recipient to *modify* it, you will find the method just described even easier.



Series 100 users frequently ask if it is possible to transfer files between the HP 120/125 and other computers without using Series 100/Link. Quite often this can be done by using the inherent capabilities of the terminal and CP/M.

First, we must assume that the correct hardware connection can be made from one machine to the other. This is impossible to specify in a general discussion because of the wide variety of RS-232 interfacing schemes. Items to pay attention to are cabling, software handshake, and hardware handshake.

Setting up the Series 100

Once the two machines are cabled together properly, we can establish the proper device maps at the HP 120/125. Our technique will be to map Port 1 to the CP/M "Reader" and "Punch" devices. This will allow us to use the Reader for PIP input and the Punch for PIP output. The maps are established by putting the HP 120/125 in local terminal mode (neither LOCAL OP SYS nor REMOTE selected) and entering the two escape sequences given below. (*Do not enter the spaces between the characters—they are shown for clarity.*)

ESC & i 0s 25d 4M

0s identifies Port 1 as the source
25d identifies the CP/M Reader as the destination
4M makes this an "additional" map

ESC & i 10s 16d 4M

10s identifies the CP/M Punch as the source
16d identifies Port 1 as the destination
4M makes this an "additional" map

Note that you will not see the escape sequences as you type them in. Also, it is possible to use Port 2 for file transfers, but the codes used in the escape sequences will be different. (Refer to Chapter 11 of the System Reference Manual for details of device mapping.)

Transferring to the Series 100

If we are transferring a file from another system to the HP 120/125, call up PIP at the HP 120/125 (receiving system) and type the following in response to the PIP prompt:

```
d:file.ext = RDR: <CR>
```

RDR: is the CP/M input device
d is the optional drive identifier
file.ext is the name of the file to be created



This leaves CP/M awaiting input from Port 1. At this point, you may initiate transfer of the file from the other system. How you do this, is, of course, dependent upon the operating system running on the other system. The key thing to remember is that the transfer must be terminated by the CP/M end-of-file (CTRL-Z).

Transferring from the Series 100

To transfer a file from the HP 120/125 to the other system, the reverse process is used. Once the other system is awaiting input, bring up PIP on the HP 120/125 and initiate transfer by typing:

```
PUN: = d:file.ext, EOF: <CR
```

PUN: is the CP/M output device

EOF: generates an EOF at the end of the data transfer (use only if other system requires a CTRL-Z)

d:file.ext is the source file.

If you use the above technique with another non-HP system, we would appreciate it if you would drop us a line and let us know what your hardware configuration is—that way we can build a reference library of remote connections.

Accessing a Plotter from BASIC

Peter Almeroth



HP graphic plotters have a powerful instruction set built into their firmware. You can access this HPGL (HP Graphics Language) capability from Series 100/BASIC with the aid of a small assembly language subroutine.

How to do it

The assembly language subroutine needed to send commands to the plotter can easily be poked into memory from BASIC. The following BASIC statements will completely generate and install such a subroutine. No additional assembly language programming is required.

```
10 FOR MEMORY = 65536 + &HB200 TO 65536 + &HB24D
20 READ CODE$
30 POKE MEMORY, VAL("&H" + CODE$)
40 NEXT MEMORY
50 DATA C3,03,B2,21,00,00,39,31,6D,B2,E5,FE,03,C2,48,B2,1A,47,13,EB
60 DATA 5E,23,56,EB,B7,CA,28,B2,5E,CD,34,B2,C2,42,B2,23,05,C2,1C,B2
70 DATA 21,00,00,EB,E1,F9,D5,2A,05,01,E3,C9,E5,C5,01,FF,76,16,05,CD
80 DATA 05,00,C1,E1,B7,C9,21,02,00,C3,2B,B2,21,01,00,C3,2B,B2
```

Now protect that subroutine and increase BASIC's stack size.

```
90 CLEAR ,45000,2000
```

Next a linkage or entry point for the subroutine is defined.

```
100 DEF USR0 = &HB200
```

Strings can now be sent to the plotter as follows.

```
200 STRING$ = "Data to plotter..."
210 RET.CODE = USR0(STRING$)
```

Statement 210 passes the string to the subroutine where it is sent to the plotter. The variable RET.CODE contains the return status of the call; 0 = all OK, 1 = plotter timeout, 2 = parameter passed not a string.

The first call to the plotter should be:

```
220 RET.CODE = USR0("DF" + ";")
230 IF RET.CODE <> 0 THEN << go to user written error routine >>
```

Statement 220 will establish the plotter connection and set default conditions. Important: when quoted strings are passed, the last byte (the semi-colon in this case) must be concatenated as shown.

It is usually only necessary to check the return status after the first call to ensure the plotter is set to HP-IB address 5 and is alive and well ... but care should be taken to ensure only strings are passed. One way to guarantee this is to use functions to create the strings.

Some Examples

Suppose we wanted a function that would redefine the plotting area; (i.e., override the P1 and P2 scaling points set by the user.) The function would be defined as follows:

```
110 DEF FNLIMIT$(P1X,P1Y,P2X,P2Y) = "IP" + STR$(P1X) + ","
    + STR$(P1Y) + "," + STR$(P2X) + "," + STR$(P2Y) + ","
```

Here's how to set P1/P2 programatically for a horizontal 8½ by 11 inch graph:

```
240 P1X = 100:P1Y = 100:P2X = 10000:P2Y = 7600
250 RET.CODE = USR0(FNLIMIT$(P1X,P1Y,P2X,P2Y))
```

The plotting area would then be scaled in user units and framed if desired. The two functions to accomplish this are called in an identical manner to the FNLIMIT\$ function and are included with this article.

Some plotter commands require integer parameters. (e.g., the plotting coordinates must be integers between ± 32767 in unscaled mode and ± 16383 in scaled mode.) This can be accomplished as shown in the example FNMOVE\$ function:

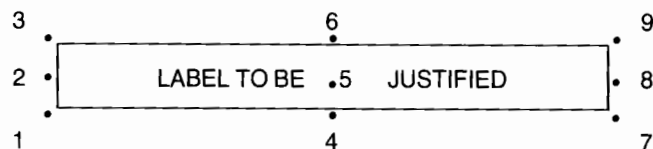
```
120 DEF FNMOVE$(X,Y) = "PU;PA" + STR$(CINT(X)) + ","
    + STR$(CINT(Y)) + ","
```

Another very useful function would be an FNLABEL\$ function. Suppose you want to put a label at a specific point. You obviously need a way to print the label, but you also need a way to specify the origin of the label with respect to that point. Some labels must be right justified, some left justified, and some must be centered. Some will even have to be top or bottom justified. Consider this label calling sequence:

```
300 RET.CODE = USR0(FNLABEL$(ORIGIN,TEXT$))
```

The following matrix shows the value of ORIGIN for various justifications.

JUSTIFICATION	LEFT	CENTER	RIGHT
TOP	3	6	9
CENTER	2	5	8
BOTTOM	1	4	7



To perfectly center the label on a point the value of ORIGIN would be 5. To justify the label at the left bottom corner ORIGIN would be 1. To right justify the label and still maintain centering the ORIGIN would be 8, and so on. The label function is a little tricky and one is included so you don't have to design your own. Also included are several other useful functions and a brief description of each. Note: to enter more than one line into BASIC, a control J (J^c) can be used any time to advance to the next line.

BASIC Graphics Functions

Generalized calling sequence for all functions:

```
RET.CODE = USR0(FNFUNCTION$(PARMn,PARMn + 1,...))
```

```
DEF FNLIMIT$(P1X,P1Y,P2X,P2Y) = "IP" + STR$(P1X) + "," + STR$(P1Y) + "," +
  + STR$(P2X) + "," + STR$(P2Y) + ","
```

This establishes the graphic plotting area. Parameters must be within the mechanical limits of the plotter. X from 0 to 16000 and Y from 0 to 11400

```
DEF FNSCALE$(XMIN,XMAX,YMIN,YMAX) = "SC" + STR$(XMIN) + "," +
  + STR$(XMAX) + "," + STR$(YMIN) + "," + STR$(YMAX) + ","
```

Scales the plotting area in user units. Parameters must be integers in the range ± 16383 ; XMAX must be greater than XMIN and YMAX must be greater than YMIN.

```
DEF FNFRAMES$(X1,Y1,X2,Y2) = "PU;PA" + STR$(X1) + "," + STR$(Y1) +
  + ";PD;PA" + STR$(X2) + "," + STR$(Y1) + "," + STR$(X2) + "," +
  + STR$(Y2) + "," + STR$(X1) + "," + STR$(Y2) + "," + STR$(X1) + "," +
  + STR$(Y1) + ";PU;"
```

Draws a frame around the scaled area. X and Y coordinates must be integers between $+32767$ with scaling off and ± 16383 with scaling on.

```
DEF FNMOVE$(X,Y) = "PU;PA" + STR$(CINT(X)) + "," + STR$(CINT(Y)) + ","
```

Picks up pen and moves to new X,Y location; X and Y same as FNFRAME\$ function

```
DEF FNDRAW$(X,Y) = "PD;PA" + STR$(CINT(X)) + "," + STR$(CINT(Y)) + ","
```

Drops pen before move, otherwise same as FNMOVE\$ function.

```
DEF FNRDRAW$(X,Y) = "PD;PR" + STR$(CINT(X)) + "," +
  + STR$(CINT(Y)) + ","
```

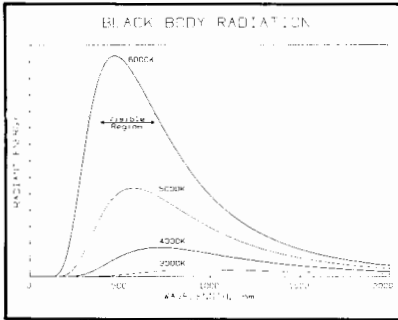
Drops pen and moves relative to current pen location; X and Y same as FNMOVE\$ function.

```
DEF FNXTICK$(X) = "TL.5;PR" + STR$(X) + ",0;PD;XT;PU;"
```

Typically used in a FOR/NEXT loop to draw axis. Draws a horizontal line X units long then generates a tick mark; pen stays put for next FNXTICK\$

```
DEF FNYTICK$(Y) = "TL.5;PRO," + STR$(Y) + ";PD;YT;PU;"
```

Vertical equivalent of FNXTICK\$



DEF FNPEN\$(PEN) = "SP" + STR\$(PEN) + ";"

Selects pen

DEF FNSIZE\$(W,H) = "SI" + STR\$(W) + "," + STR\$(H) + ";"

Sets character size for labeling. W and H specify width and height in centimeters; parameters must be in range of 0.004 to 127.999.

DEF FNLTYPE\$(LTYPE, LENGTH) = "LT" + MID\$(STR\$(LTYPE),
2, ABS(LTYPE < 7)) + LEFT\$(
" ," + STR\$(LENGTH), 9 * ABS(LTYPE < 7)) + ";"

Specifies linetype for FNDRAW\$ function. LTYPE from 0 to 7, where;

0) dots plotted at end points only

- 1)
- 2) — — — —
- 3) — — — —
- 4) — — — —
- 5) — — — —
- 6) — — — —
- 7) — — — —

LENGTH from 0.004 to 127.999 specifies one pattern length as a % of the diagonal distance between scaling points P1/P2. (e.g., if diagonal distance is 10 inches then FNLTYPE\$(1,8) would generate dot pattern every 0.8 inches.) LENGTH is ignored for LTYPE = 7.

DEF FNLDIR\$(D) = "DI" + STR\$((2 * COS(D * .017453))
* (ABS(ABS(COS(D * .017453)) > .01))) + "," + STR\$((2 * SIN(D * .017453))
* (ABS(ABS(SIN(D * .017453)) > .01))) + ";"

Specifies direction for labeling where D is in degrees between ± 360; 0 = horizontal labeling, 90 = vertical labeling

DEF FNLABEL\$(ORG, L\$) = "PU;CP" + STR\$(((ORG >= 4 AND
ORG <= 6) * LEN(L\$)) / 2
+ ((ORG > 6) * (LEN(L\$)))) + "," + STR\$(((ORG MOD 3 = 2) * .25)
+ ((ORG MOD 3 = 0) * .5)) + ";LB" + L\$ + CHR\$(3)

Draws label L\$ at current pen location using FNSIZE\$ AND FNLDIR\$ in effect; ORG specifies label origin.

Software Status Reports



The Software Status Bulletin is a cumulative list of all software problems that have been reported on the Series 100. New entries since the last issue are marked with a star.

Operating System— Release 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.

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

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.

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. Because WELCOME tries to recover from an error file every time it runs, WELCOME will keep aborting each time it is run.

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

WELCOME— Release 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.

Block-Format—Release 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.

VisiCalc/125—Release A.02.00

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.



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.

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.

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.

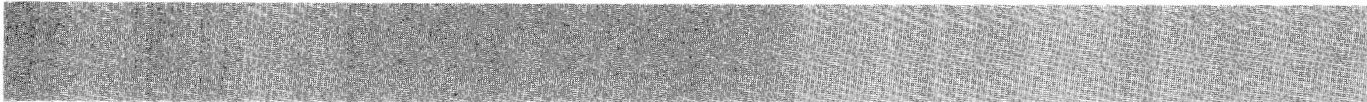
Workaround: "ERROR:DISK FULL" message is displayed if the disc does not have enough space. When this appears, try saving the file to a different disc before exiting from VisiCalc or reloading the file.

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.



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 or Ctrl-E can be used to allow further editing.

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.

Problem: Illegal exponents result in incorrect values.

Workaround: Don't use exponents larger than 127.

Graphics/125—Releases 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 Release 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 HP7225 and 7470. The user will have to change the pens manually as required. Specifying pen 9 when using the HP9872C causes pen 1 to be selected. Fixed in Release 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 Release 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 Release 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 this “fraction of an inch”, the slice is positioned in the wrong place.

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

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 Release A.01.02.

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 Release A.01.02.

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 Release A.01.02.

* **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.

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 Release A.01.01.

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 Release A.01.02.

* **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.

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.

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

Workaround: Fixed in Release A.01.01.

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 Release A.01.02.

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.

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 Release A.01.02.

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

Workaround: Fixed in Release A.01.02.

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

Workaround: Fixed in Release A.01.02.

Word/125—Release A.02.00



Problem: Print format table entries go to "32" when filename is too long. WORD/125 does not reject filenames or filetypes that are longer than CP/M filenaming conventions allow. Entering a too-long filename results in the following:

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

Workaround: Make sure that all filenames used in WORD/125 follow CP/M filenaming conventions. Fixed in Release A.02.02.

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.
-

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 columns 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.

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 an item to be used more than 9 times within a letter. A letter with 11 references to @ 1 of a customer file will print only 9 of them.

Workaround: Use 9 references or less. Or, change line 66 of file "mmerge.wpm" 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.

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

Link/125—Release 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.

BASIC/125—Release 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.

Condor—Release A.01.00



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

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

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

Workaround: Fixed in Release 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 Release A.02.00.

HP 125 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

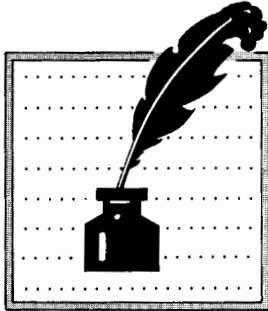
Problem: The NEXT PAGE key does not disable enhancement set for the previous page.

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.

Pen and Ink



This section presents corrections to the Series 100 manuals. Just write in these corrections to update your manuals. New entries since the last *Communicator* are marked with a star.

Getting Started With the HP 125 (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)

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 "'E" causes the character that follows to be an escape character. This is not true. Modify the text to say the "'E" 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: 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".

[Order the Series 100/VisiCalc Software Update Kit to obtain the new VisiCalc manuals plus the latest software.]

Graphics/125 Reference Manual
(7/81; Updated 3/82)

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.

[Order the Series 100/Graphics Software Update Kit to obtain the new Graphics manuals plus the latest software.]

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

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.

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.

[Order the Series 100/Word Software Update Kit to obtain the new Word manuals plus the latest software.]

BASIC/125 Reference Manual
(7/81)

Page 3-64: Line 100 in the example should be:
100 PUT #1, CK%
rather than
100 PUT #1,CK#

Page 3-80: Default text width on the screen is 72 characters. Change the number to 80 characters instead of 72.

Page H-4: On lines 1020 and 1030 in the example, place a "\$" after the "ESC".

System Reference Manual (7/81)

*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".

**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 AMOUNT[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."

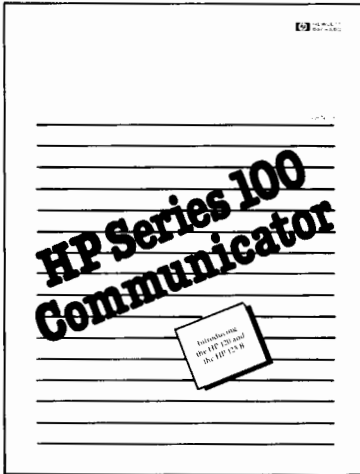
This is a summary of ordering information for the Series 100 software, updates, and manuals which are available from HP's Computer Supplies Distribution Center and through Authorized Series 100 Dealers.

The section is divided into five topics:

- Ordering *Communicator* back issues... to improve your Series 100 knowledge.
- Ordering software packages... to add additional capabilities to your system.
- Ordering updated software and manuals... to provide an updated version of software or manuals.
- Replacing damaged media... to obtain a new copy if a Master Disc has been damaged.
- Ordering supplies and accessories.

All of the items listed are available through your Authorized Series 100 Dealer or your HP Sales and Service Office.

Back Issues of the Series 100 Communicator



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”
- “Backing Up From HP 9134 and HP 9135 Disc Drives”
- “Things You Should Know About Random Access Files”
- “HP 9895—HP 9135 File Transfer”
- “Does Your 2601A Printer Print only in Column 1?”
- “Electronically Reading a Disc Reference Number”

Series 100 Communicator Issue #1—U.S. 5955-3930

Series 100 Communicator Issue #1—Intl. 5955-3937

Issue #2 includes the following major articles:

- “Hewlett-Packard Referenced Software and Hardware”
- “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”
- “Does your HP 82905B Seem to Stutter?”
- “HP-IB Time-out on the HP 82905B”
- “Computing Internal Rate of Return in VisiCalc”

Series 100 Communicator Issue #2—U.S. 5955-3943

Series 100 Communicator Issue #2—Intl. 5955-3947

Issue #3 includes the following major articles:

- “Series 100 Users Group”
- “Disc Formats on the HP Series 100”
- “New CP/M Compatible Software Catalog”
- “Non-Series 100 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 9121 Disc Drive with Your HP 125A”
 - Series 100 Communicator Issue #3—U.S. 5957-6203
 - Series 100 Communicator Issue #3—Intl. 5957-6213

Additional copies of this current issue are also available:

- Series 100 Communicator Issue #4—U.S. 5957-6204
- Series 100 Communicator Issue #4—Intl. 5957-6214



Ordering Software Packages

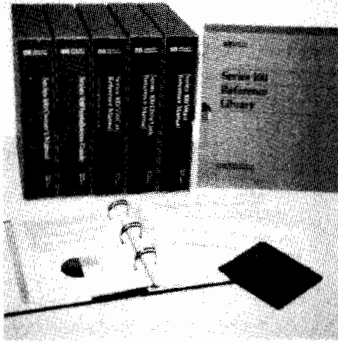
To add one of the software packages to your system, order a product and media option as shown. Be sure to specify one of the three media options—630, 650, or 680.

	Description	Product No.	Option	Price
Series 100 Application Software	Series 100/VisiCalc®	45531B		
	Software on: 3.5" Micro-Disc		630	
	5.25" Mini-Disc		650	
	8" Flexible Disc		680	
	Series 100/Graphics	45532B		
	Software on: 3.5" Micro-Disc		630	
	5.25" Mini-Disc		650	
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	Series 100/Word	45533B		
	Software on: 3.5" Micro-Disc		630	
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	Series 100/DSN/Link	45534B		
	Software on: 3.5" Micro-Disc		630	
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Software on: 3.5" Micro-Disc		630		
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Software on: 3.5" Micro-Disc		630		
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Series 100/Condor 20-3	45550H			
Software on: 3.5" Micro-Disc		630		
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Series 100/Condor 20-2 to 20-3 Upgrade Kit	45550N	
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dBASE II™	45583A	
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Aardvark Professional Tax Plan	45585A	
Software on: 3.5" Micro Disc		630
5.25" Mini-Disc		650
<hr/>		
Aardvark Personal Tax Plan	45586A	
Software on: 3.5" Micro Disc		630
5.25" Mini-Disc		650

Ordering Updated Software and Manuals



Software Update Kits contain the latest software and any manuals or manual updates issued since the original manual; they are provided at a nominal charge in exchange for your original Master Disc.

To replace damaged media, Software Update Kits are available for all Series 100 software packages—including the products which have not been updated. Refer to the next section of this *Communicator* for media replacement ordering Block/Format information.

If a manual is updated independently of the software, the manual update is automatically sent to subscribers on the corresponding HP System Information Service (SIS). Since each of the new 5½"x8" manuals requires a matching version of the associated software, they are made available as Software Update Kits.

Operating System (Current Version A.01.20)

—Operating System and Utility Update Kit

If you have an Operating System disc labeled "HP 125" (rather than "Series 100"), order this kit to obtain the new 5½"x8" Owner's and 125B Installation Manuals, the improved A.02.00 WELCOME utility, the new fixed disc BACKUP utility, and the new Series 100 Computer Tutor.

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 Utility.

Series 100 Op Sys & Utility Update Kit:

3.5" Micro-Disc	45900-13800
5.25" Mini-Disc	45900-15800
8" Flexible Disc	45900-18800

One original Operating System disc must be exchanged for each Op Sys and Utility Update Kit ordered. (Future Op Sys Update Kits will always include the utility and Computer Tutor discs current at that time—but only the Op Sys disc will have to be returned.)

—Additional copies of the Owner's and Installation Manuals are available. If you do not have the new Operating System, we recommend that you purchase the entire Software Update Kit—so that your new manuals will match your software.

Series 100 Owner's Manual Set	5061-3211
HP 125B Installation Manual Kit	5061-3212
HP 120A Installation Manual Kit	5061-3213

**Series 100/VisiCalc
(45531B—Current Version
A.02.00)**

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

Series 100/VisiCalc Update Kit:

3.5" Micro-Disc 45531-13800
5.25" Mini-Disc 45531-15800
8" Flexible Disc 45531-18800

Additional copies of the Series 100/VisiCalc Quick Reference Card are available in packages of 5:

Series 100/VisiCalc Quick Reference Kit 45531-60002

**Series 100/Graphics
(45532B—Current Version
A.01.02)**

If you have version A.01.01, order this kit to obtain the *Series 100/Graphics Reference Manual*, the *Series 100/Graphics Quick Reference Guide*, and the latest version of the software.

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

Series 100/Graphics Update Kit:

3.5" Micro-Disc 45532-13800
5.25" Mini-Disc 45532-15800
8" Flexible Disc 45532-18800

Additional copies of the Series 100/Graphics Quick Reference Card are available in packages of 5:

Series 100/Graphics Quick Reference Kit 45532-60002

**Series 100/Word
(45533B—Current Version
A.02.02)**

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

Series 100/Word Update Kit:

3.5" Micro-Disc 45533-13800
5.25" Mini-Disc 45533-15800
8" Flexible Disc 45533-18800

Additional copies of the Series 100/Word Quick Reference Card are available in packages of 5:

Series 100/Word Quick Reference Kit 45533-60004

**Series 100/DSN/Link
(45534B—Current Version
A.01.00)**

If you have Link/125, you may wish to upgrade to Series 100/DSN/Link.

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 for your HP 125" in *Communicator* Issue #3 for details).

Series 100/DSN/Link Upgrade Kit:

3.5" Micro-Disc 45534-13810

5.25" Mini-Disc 45534-15810

8" Flexible Disc 45534-18810

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

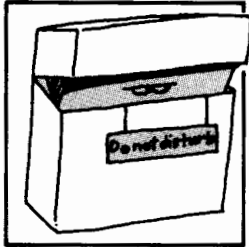
**Series 100/BASIC
(45535A—original version
A.05.21)**

Additional copies of the Series 100/BASIC Quick Reference Card are available in packages of 5:

Series 100/BASIC Quick Reference Kit 45535-60001

**For each kit ordered, return one original disc of the same product. (Use your working copy until the new disc arrives.) If 20 or more assorted software Update Kits are ordered at the same time, the price is discounted by 35%; no other discounts apply to Update Kits.*

Replacing Damaged Media



To replace damaged media after the warranty period, Software Update Kits are available for all Series 100 software packages—including the products which are still at the originally-released revision level. The kits contain the latest software and any manuals or manual updates issued since the original manual; they are provided at a nominal charge in exchange for your original Master Disc.

Product	Rev.	Order Part Number			Price Code, Note
		3.5" Disc	5.25" Disc	8" Disc	
Op sys—Series 100	A.01.20	45900-13800	45900-15800	45900-18800	3,4
VisiCalc	A.02.00	45531-13800	45531-15800	45531-18800	1,4
Graphics	A.01.02	45532-13800	45532-15800	45532-18800	1,4
Word	A.02.02	45533-13800	45533-15800	45533-18800	1,4
Link/125	A.02.00	45534-13800	45534-15800	45534-18800	1,6
DSN/Link	A.01.00	45534-13820	45534-15820	45534-18820	1,7
BASIC	A.05.21	45535-13800	45535-15800	45535-18800	1
Prog. Pkg.	A.01.00	45536-13800	45536-15800	45536-18800	1
Condor 20-1	A.02.00	45550-13800	45550-15800	45550-18800	1
Condor 20-2	A.02.00	45550-13801	45550-15801	45550-18801	1,5
Condor 20-3	A.02.00	45550-13802	45550-15802	45550-18802	1,8
BPI G/A	A.01.00	45552-13800	45552-15800	45552-18800	2
BPI Payroll	A.01.00	45553-13800	45553-15800	45553-18800	2
WordStar	A.01.00	45560-13800	45560-15800	45560-18800	1
SpellStar	A.01.00	45561-13800	45561-15800	45561-18800	1
MailMerge	A.01.00	45562-13800	45562-15800	45562-18800	1

Key to Price Codes:

1— }
 2— } Check with your dealer or HP office for prices in your country.
 3— }

Notes:

- 4—Refer to details under "Ordering Updated Software and Manuals", earlier in this section.
- 5—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.
- 6—Link/125 disc exchanged for Link/125 disc.
Refer to "Ordering Updated Software and Manuals" to upgrade Link/125 to Series 100 DSN/Link.
- 7—Series 100/DSN/Link disc exchanged for Series 100/DSN/Link.
Refer to "Ordering Updated Software and Manuals" to upgrade Link/125 to Series 100 DSN/Link.
- 8—Either a Condor 20-3 disc or a Condor 20-2 to 20-3 Upgrade disc may be exchanged for the Condor 20-3 disc.

**For each kit ordered, return one original disc of the same product. (Use your working copy until the new disc arrives.) If 20 or more assorted Software Update Kits are ordered at the same time, the price is discounted by 35%; no other discounts apply to Update Kits.*

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HP 120 Personal Office Computer

13269P Carrying Case
92171K Keyboard Park
92171T System Turntable
92171V Display Tilt Unit
92171W Display Swivel Unit

HP 125 Personal Office Computer

92160B Thermal Paper Black Print (Box of 24 rolls)
92171R Keyboard Palm Rest (for extended keyboard)
92171T System Turntable

For Disc Drives...

HP 92801M/S, 82902M/S, 9130A, 9135A 5½ inch Disc Drive

92190A Flexible Discs Double Sided (Box of 10 discs)

HP 9121D/S, 9133A 3½ inch Disc Drive

92191A Flexible Discs Single Sided (Box of 10 discs)

For Printers...

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92157C Printer Paper Microperforated Fan Fold (Box of 2400 sheets)
92252-series Plastic Print Wheels 96 character (Box of 6 wheels)

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 (1 each)
92263-series Plastic Print Wheels 98 character, International (1 each)

HP 2631A/B Dot Matrix Printer

92155A Ribbon Cartridges (Box of 3 cartridges)
92157A Printer Paper Fan Fold (Box of 2400 sheets)
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HP 2671A/G, 2673A Thermal Printer

92160B Thermal Paper Black Print (Box of 24 rolls)
92160N Thermal Paper Black Print (Box of 1320 fan fold sheets)

For Plotters...

HP 7225A/B, 7470A Plotter

5060-6810 Multi Color Pen Package (Package of 4 pens; 1 each red, blue, green and black)
9280-0589 Plotter Paper English (Pad of 50 small sheets)
9280-0588 Plotter Paper Metric (Pad of 50 small 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 (Box of 2400 sheets)
- 92154P Print Head

Books

- BASIC—Second Edition* Albrecht, Finkel, and Brown; Wiley & Sons, 1978
92233D
- Osborne CP/M User Guide* Hogan; Osborne-McGraw Hill, 1981
92233Y
- VisiCalc: Home and Office Companion* Castlewitz and Chisausky with Kronberg;
Osborne-McGraw Hill, 1982
92233Z
- Computer Networks* Tenenbaum; Prentice Hall, 1981
92233V

Information on Orders

A full list of HP computer supplies matched to your system for optimum performance is shown in the *HP Personal Computer User's Catalog*

In the U.S., for current prices or a copy of the catalog, call 800-538-8787. In California, Alaska, Hawaii call (408) 738-4133.

Outside the U.S., call your local sales office or one of the following numbers:

- U.K. 0734-792868 or -792959
- Germany 07031-667829 or -223133
- Netherlands 020-470639

Authorized HP Dealers generally stock quality Hewlett-Packard supplies and can provide them immediately.

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- Order between March 1 and April 30, 1983
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REMEMBER!

You can also order the following additional products:

- 45550K: Condor 20-1 to 20-2 Upgrade
- 45550N: Condor 20-2 to 20-3 Upgrade
- 45561A: SpellStar™/100
- 45562A: MailMerge™/100

