

- Lattice C
- MultiMate
- Learning Packs

For users of the Portable,  
HP 12x, Touchscreen/150,  
and Vectra computers



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# The HP PC Newsline

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## Late-breaking news on HP personal computer products

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On June 1, 1986, Hewlett Packard's Personal Software Division will be discontinuing distribution of the following **Touchscreen/150** products due to very low demand. The associated upgrade kits, options, and local language versions will also no longer be distributed. To replace these packages, newer, more popular products which better meet the needs of our users are available.

If you are interested in purchasing any of these products from HP, now is the time to act. Consult the HP 150 Software brochure, or contact your dealer or local HP sales office for more information.

The following products are affected:

Transend COMPLETE.....	45414A
BPI Accounting Series .....	45455A-45461A
Microsoft Multiplan .....	45473D
Graphwriter .....	45484A
PFS:File & Report.....	45488A
PFS:Write .....	45489A
PFS:Graph .....	45490A
Dow Jones Spreadsheet Link.....	45511D
Touch Games I.....	92248AA

Packages such as Symphony, Lotus 1-2-3, WordStar, MultiMate, R:Base 5000, dBase II -- as well as many more -- continue to sell at a high level, and will continue to be distributed by HP. Concerning spreadsheets, the latest version of Symphony (Version 1.1) is available now. For personal productivity, the Executive Series (Executive MemoMaker, Executive Card Manager, and Executive Spreadsheet) and the Gallery Collection are popular because they are integrated with one another and with many other third-party programs. There is a wide selection of popular accounting packages available from independent vendors through HP's Listed Software Program. For communications, AdvanceLink has powerful facilities for data exchange and remote computer communication.

Following standard HP policy, support and media replacements for these products will be provided for five years after the date of discontinuance, as described on page 48 in the green pages of this issue.

\* \* \*

For the past two years, Hewlett-Packard has offered **MicroPlan**, **MicroPlan Consolidation Module** and **GraphPlan** for the **Touchscreen/150 PC**. Beginning June 1, 1986, you can purchase these products directly from the vendor, Chang Labs, under the provisions of HP's Listed Software Vendors Program. As of that date, HP will discontinue distribution of these products, and customers will be referred directly to:

Chang Labs  
5300 Stevens Creek Blvd.  
San Jose, CA 95129-1088  
(408) 246-8020

The Listed Software Vendors Program noted above exists to assist both the software vendors and Touchscreen/150 users. HP assists the many vendors who have written software for the Touchscreen/150 and makes product and order information available to Touchscreen/150 customers via publications such as the HP 150 Software Brochure. Over 500 software products are available from these various vendors, including applications for all types of business management, programming tools, personal and office productivity packages, and computer games.

If you would like more information about the Listed Software Vendors Program, contact your local Sales Representative or refer to the HP 150 Software Brochure.

\* \* \*

HP has instituted a new **Corporate Licensing Program** which gives you quantity discounts for purchases of fifty or more packages of any one of the products listed below. HP is the first major computer company to introduce this type of program. The percentage of your discount will depend on the quantity purchased -- the percentage of the discount gets significantly greater as the quantity purchased increases -- and on whether you want Volume Discounting or Corporate Licensing.

With Volume Discounting you receive multiple quantities of the software and the number of manuals you receive will be 10 percent of that quantity. You may order additional sets of documentation as needed.

Corporate Licensing allows you to make copies of the software on your site in accordance with a "Right-to-Copy" agreement signed by you and Hewlett-Packard. HP supplies pre-printed, serialized labels for each contractual set of copies. The number of manuals you receive will be 10 percent of that quantity. You may order additional sets of documentation as needed.

Products for the HP Touchscreen/150 under this Corporate Licensing Program include:

- AdvanceLink
- HP Access
- HP Message
- Executive MemoMaker
- Executive Card Manager
- Gallery Collection

Products for the HP Vectra PC under this Corporate Licensing Program include:

- AdvanceLink 2392
- HP Access
- HP Message
- Executive MemoMaker
- Executive Card Manager

Contact your local HP Sales Representative for more details.

\* \* \*

Hewlett-Packard is offering a **Lotus 1-2-3 to Symphony** upgrade program for Touchscreen/150 users. Symphony, from Lotus Development Corporation, is a fully integrated package that incorporates 1-2-3's popular spreadsheet, graphics and data base management with powerful word processing and communications capabilities. (See the Symphony article in Issue 13 of the HP PC Communicator.)

**In the U.S.**, to order the Lotus 1-2-3 to Symphony Upgrade, contact your HP dealer, call your local HP sales office, or call the HP Direct Marketing toll-free number, (800) 538-8787. (If in California, Alaska or Hawaii, call (408) 738-4133.) **If you live outside the U.S.** call your local HP Sales and Service Center for details. The upgrade program ends April 30, 1986.

To purchase the Symphony upgrade, order both the Symphony Upgrade Box (45564A) and Upgrade Kit (45565A). The Symphony Upgrade Box is free and is to be used to return the Lotus 1-2-3 manual and system master disc to DMK. It will include complete instructions on what you need to send back to DMK. Once the Upgrade Box has been received and approved by DMK, you will be sent the Symphony Upgrade Kit immediately. The Symphony Upgrade Kit is the regular Symphony product, complete with the documentation and software, and the book "From 1-2-3 to Symphony."

This program is available only for Touchscreen/150 users. Customers who would like to upgrade their 1-2-3 to Symphony for the HP Vectra PC should contact Lotus Development directly.

\* \* \*

If you purchase **tape backup product HP 9142A or HP 9144A** to use with a Touchscreen/150 computer, you must specify Option 150. The tape drive won't work without this utility. Some of the HP price lists fail to mention this no-cost option.

\* \* \*

**LaserControl 100** is now available. This printer driver program for the HP Vectra PC and IBM PC allows the LaserJet and LaserJet Plus to emulate an Epson, Diablo, Qume, or NEC printer.

LaserControl 100 has a Lotus-like menu; no long, complex escape sequences; high resolution graphics at 150 dots per inch; and adds LaserJet compatibility to over 25,000 programs.

LaserControl 100 is HP product number 35190J and can be ordered from your HP dealer or from HP as explained in the "How to Order" article in the green pages of this issue.

\* \* \*

The **HP-HIL barcode reader**, HP product number 92916A, is now available. It requires no modifications to hardware or software on the Touchscreen II. The HP Vectra PC requires an installable driver which is supplied with the barcode reader. Contact your HP Dealer or HP Sales Representative for more information.

\* \* \*

**BASIC** for Vectra (HP product number 45952A) is now available. Contact your **HP Dealer** or **HP Sales Representative** to order.

\* \* \*

**AdvanceWrite**, the high functionality word processor for the Vectra **PC**, is now available. The AdvanceWrite family -- AdvanceWrite I, II, III -- provides performance and functionality traditionally found only in dedicated word processors.

Some of the major features are:

- Current line and column number
- Horizontal scrolling up to 250 characters
- Footnoting
- Alternating headers and footers
- Section numbering
- Line drawing using cursor keys
- Typethrough mode
- Three levels of help
- Dual document display
- Glossary paragraph recall
- Automatic keystroke playback
- Index generation
- Table of contents generation
- Fully integrated spreadsheet
- Wordbase Manager
- Multicolumn text
- Math characters
- Spell Check

Contact your **HP Dealer** or **HP Representative** for more information on AdvanceWrite I (27506F), AdvanceWrite II (27507F), and AdvanceWrite III (27508F).

\* \* \*

**Vectra Office**, now available, has been designed to meet the demanding requirements of secretaries, support personnel, and other workers whose primary application is word processing.

Vectra Office combines the hardware performance of the Vectra **PC** with the power and elegance of AdvanceWrite. It comes pre-assembled for your convenience at no extra charge. The "Welcome to Vectra Office User Guide" makes installation/hook-up a snap, and walks the user through the entire process from opening boxes to printing out a document in AdvanceWrite.

Vectra Office is available in two configurations:

**Model I (72475A):** Includes SPU with two 360Kb flexible disc drives, 640Kb RAM, Multimode and Color Adapter Cards, Dual RS232 Card, Keylock, Keyboard, Operating System, Manuals, and Vectra Office Guidebook.

**Model 2 (72485A):** Includes SPU with one 360Kb flexible disc drive, and an internal 20Mb hard disc subsystem, 640Kb RAM, Multimode and Color Adapter Cards, Dual RS232 Card, Keylock, Keyboard, Operating System, Manuals, and Vectra Office Guidebook.

You must also order a 12-inch monochrome monitor (35731A) or a 12-inch color monitor (35741A), AND AdvanceWrite I (27506F), II (27507F) or III (27508F).

Call your HP Dealer or HP Sales and Service Office for more information on Vectra Office.

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## Welcome to the *HP PC Communicator*

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The *HP PC Communicator* is the backbone of HP's support program for personal computers and software. The magazine contains programming techniques, information on software updates, notes on using applications, and corrections for manuals. The *Communicator* also lists known software problems and their solutions, and introduces new members of the HP PC family.

This publication was formerly called the *Series 100 Communicator*—the new name, *HP PC Communicator*, reflects the increased breadth of the Hewlett-Packard personal computer product line.

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### **Subscriptions and Back Issues**

In many countries, you can order *Communicator* subscriptions and back issues by telephone. For details, see the "Ordering *Communicator* Subscriptions" and "Ordering Back Issues" sections in the Current Information insert.

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### **Becoming a Contributor**

Much of the material in this issue was submitted by users and HP field-support people. If you'd like to contribute an article, program, question, or suggestion, please send it to us at the following address:

Editor, *HP PC Communicator*  
Hewlett-Packard Company  
P.O. Box 486  
Sunnyvale, CA 94086 U.S.A.

By submitting information to the *Communicator*, you agree that the material will not be considered confidential, and that HP may use, copy, edit, modify, publish, or sell it without any liability and without any obligation to you or to anyone else. If we publish your contribution in the *Communicator*, your name will appear on the by-line. If you'd like us to return the material you submit, please enclose a stamped, self-addressed envelope with it.

We look forward to sharing your ideas with HP PC users throughout the world.

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## The Encyclopedia

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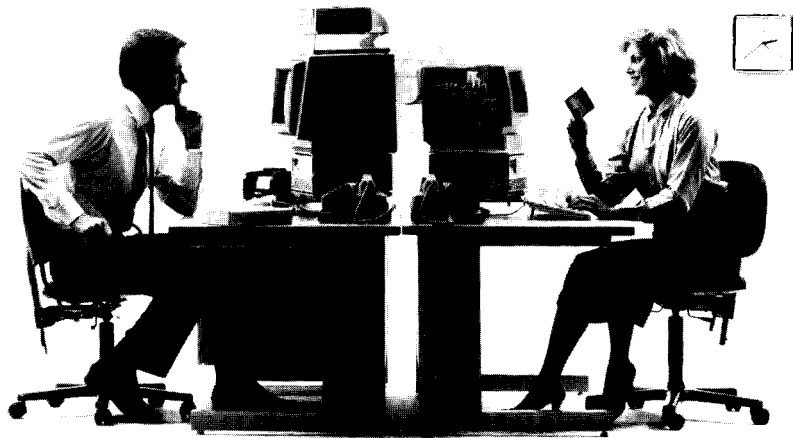
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**Touchscreen/150:  
Automatic Processing Using Condor and BASIC** Josh Salans

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There are times when Condor's commands are just not enough to finish a task which needs to be done against a database. It is at these times that transferring the data out of Condor, running a simple BASIC program to do the needed work against the data, and then returning to Condor to complete the process would be the answer to the problem. With the knowledge of command files and help screens in Condor, some knowledge of writing MS-DOS batch files, and programming skills in BASIC, an automatic process can be developed that can manipulate a database and its data, in both Condor and Basic.

It is possible to call BASIC from within a command procedure in Condor; however, the size of the BASIC program is severely limited by memory constraints. In this article I will show how an example user calls BASIC while working with Condor using an MS-DOS batch file as the controller. Using this method, both Condor and BASIC exit to MS-DOS when their respective tasks are completed, thus eliminating the memory constraint problem.

Our user needs to manipulate her database in Condor and then manipulate the data using a BASIC program, before finally returning to Condor and writing a report on this database. The following example shows how she can accomplish this task with minimal intervention.

Our user creates an MS-DOS batch file named EXAMPLE.BAT by using a word processing program (although, the COPY CON command in MS-DOS can be used instead of the word processing program). The batch file looks like this:

```
DBMS  
BASIC progname.bas  
DBMS
```

DBMS is the command in MS-DOS that starts Condor. BASIC is the command that starts BASIC and the program name that follows it is loaded and run automatically upon booting of BASIC. Thus, our user's simple batch file runs Condor, runs BASIC when Condor is exited, and then returns to Condor when BASIC is exited. (By using the SYSTEM command as the final line of the user's BASIC program, BASIC will exit automatically upon completion of the program.)

This batch file, in itself, does not allow our user to automatically manipulate the database in Condor and write the data for use in the BASIC program.

The secret to doing this lies in the creation of a particular command file in Condor.

When Condor boots up, it looks for a command file called BEGIN.CMD. If this command file does not exist then the user gets the A>> prompt. If BEGIN.CMD exists then it is executed automatically. By programming this command file, the database in Condor can be manipulated and written out, and then Condor can be exited. However, by just putting commands into BEGIN.CMD to do this process, the user would have the same process repeated upon returning to Condor as BEGIN.CMD would be run again.

---

To work around this, our user programs BEGIN.CMD with a one-line command that calls a help screen. This one-liner looks something like this:

HELP helpscreen.hlp

The help screen that is called is created by our user to look something like the following:

```
*****PROCEDURE XYZ HELP SCREEN*****  
PLEASE CHOOSE A NUMBER:  
(1) RUN INITIAL PROCEDURE [run initial.cmd]  
(2) EXIT [system]  
(3) RUN FINAL PROCEDURE [run final.cmd]
```

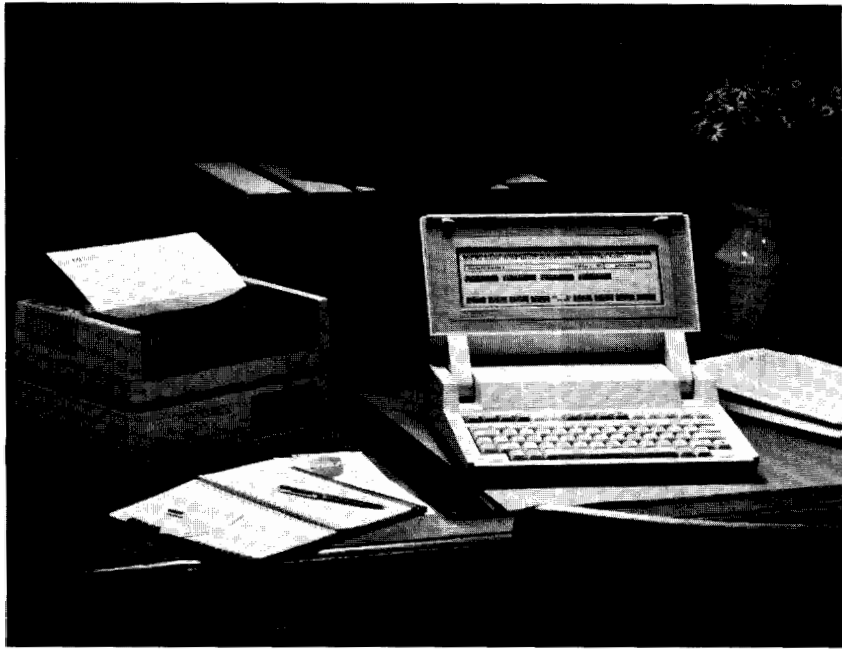
Now when Condor is called the first time and last time from the MS-DOS batch file EXAMPLE.BAT, the same screen appears automatically. Our user has programmed the command file initial.cmd to do all the things that need to be done to prepare the data within the database and write the data from the database for processing by BASIC. When our user selects option #1, this command file is executed. Upon completion of the initial.cmd command file, our user is returned to this help screen and she can select option #2, which will exit Condor and pass control to the batch file. The batch file will then call BASIC and run the user's BASIC program against the Condor generated data file. When Condor is called for the last time (after BASIC is complete) this same help screen will appear and our user can choose option #3 which runs the command file, final.cmd, which has all the commands needed for final processing of our user's database (writing the report for instance). Finally, when the final.cmd command file is finished processing, our user is again presented with the help screen, at which time exiting (option #2) will complete the process.

Our user now has an automatic process that will manipulate her database using both Condor and BASIC, and will write the report against her database from Condor. All our user has to do is run the MS-DOS command file, and select the correct options in the correct order, when presented with the help screen in Condor.

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**How it Works**

The DOS copy command performs many useful functions for the HP110 (The Portable) user. You can for example, create a file using **copy** without going into MemoMaker. Furthermore, you can use **copy** to place an escape sequence (or some of the control codes) within a file. (This feat is impossible using HP110 MemoMaker.) An escape sequence is a sequence of characters beginning with the **ESC (escape)** character (ASCII 27). In the HP world, escape sequences are used to tell the printer to do things like print condensed or to tell the screen to do things like redefine a function key.

For now, suppose you want to install the Time Manager program into PAM, that is, create a new box on the PAM screen called Time Manager. Assuming the Time Manager program (**tm.com**) is on the A drive, you need to create a two line file called **pam.mnu**. To do this using the copy command, from the PAM screen's top (DOS) line, type:

**copy con pam.mnu**

When you press the **Return** key, you find yourself at the beginning of the next line. At this point, type in the following two lines:

**Time Manager**  
**tm**

When you have typed in your file, hold down the **CTRL** key and press **z** and then **Return**. **pam.mnu** has now been created, and upon returning to PAM, a Time Manager box will appear in front of the MemoMaker, Lotus, Terminal, and DOS boxes.

The general form of the **copy con** command is:

**copy con file.ext**

where **con** stands for console and **file.ext** stands for a file name of your choosing. The command means copy whatever is about to be typed (until **CTRL z** and **Return** are pressed) to the file you name. (Note if a file already exists with that name, you will destroy that file.)

---

**Putting an Escape  
Character in a File**

You can embed an escape character into your file by pressing the **DEL ESC** key followed by the **&** key. When those two keys are hit in succession, a **^ [** appears on the screen denoting the **escape** character. Once an escape character is captured in a file you can do a DOS **print** to send the characters in the file to the printer, or DOS **type** to send the characters in the file to the screen.

Advanced Lotus users: Note that you can **file import text (/fit) prn** files containing escape sequences and control characters. If you think you can now fool MemoMaker into accepting escape sequences, forget it. MemoMaker wipes out any **escape** or control character when it reads in a file.

An example of embedding an escape character: with the command **copy con condense.prn**. you can create file **condense.prn** containing five characters: **^[&k2S**. (& gets typed twice, once to help create the **escape**, **^** character and again to create itself.) After you issue the command **print.condense.prn**, your ThinkJet printer until told otherwise will print in condensed print. Your printer manual contains the codes your printer accepts. Appendix D, pages 6–8 of "Using HP110" of the HP110 Owners Manual contain the escape sequences required to manipulate the screen and function keys.



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Here's how to convert the MemoMaker **f7, Help** key to a destructive backspace key: a backspace key that deletes the last character. (As you probably are well aware, the actual MemoMaker backspace key works identically to the left arrow key, performing no deletion.)

Most MemoMaker users will find a destructive backspace key useful; it saves having to hold down the **Extend char** key and the **-Char** key to delete a character. On the other hand, few MemoMaker users ever press **f7, Help**.

Only those who write programs or use the DOS **prompt** command to redefine function keys will be interested in the bug itself; the rest of you can safely skip this paragraph. If MemoMaker is called directly from DOS after redefining function keys, at first all looks well. However, for example, **f5, Get Memo** may not get your memo. Instead, the previous definition of the key remains intact, so pressing **f5** may only result in a few characters getting printed out on the MemoMaker screen. In other words, MemoMaker uses the previous function key definitions even though it properly labels the function keys.

The following procedure turns that bug into an advantage if you would prefer to have your **f7, Help** key function as a destructive backspace key.

Go into MemoMaker and create a file with the following lines.

```
prompt $e&f0a7k0d4L$eD$eP  
memomakr  
prompt $h$t$h$h$h$h$h$h$h ($p):
```

Save the file as MM.BAT. Then while still in MemoMaker create or recall the file PAM.MNU. Add the following two lines to the file.

```
MemoMaker  
mm
```

When you exit MemoMaker, two MemoMaker boxes will appear on your PAM screen. If you press **Return** at the first MemoMaker box (MemoMaker A), you will find that the **f7, Help** key has turned into a destructive backspace key. If you are using Time Manager, type **MM** to get into MemoMaker to retain the new backspace key.

Here is a brief explanation of what the two files do. In MM.BAT the first prompt command sends (the screen driver) the proper escape sequence to define f7 as the destructive backspace key. The second line issues the DOS command to start MemoMaker. After MemoMaker is exited the third prompt command resets the DOS prompt (**Fri 14:06 [A:\]:**) back to normal. The two added lines to the PAM.MNU file cause the second MemoMaker box to appear on the PAM screen.

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An \*END directive is not required at the physical end of the Condor 2.11 command procedure file; one is assumed. The Condor manual is not very explicit in the use of \*END at the end of a command procedure. If you use \*END as in the following example, a misleading error message will show on your screen:

```
A>>run datacmd
>*MESSAGE DO YOU WANT TO LIST DATAB: (Y/N)
>*GET $1
>*IF $1 NE Y
>  $ABORT
>*ENDIF
>LIST DATAB
>*END
```

ERROR on line 007 ERROR - ENDF without IF

The error message is pointing at line 007 with the \*END statement. The reason for this error is not known (the manual's explanation is incorrect), but there are two workarounds for this problem:

1. If you want to keep your command procedure the way it is, insert a \*MESSAGE between \*ENDIF and \*END.
2. Remove the \*END and that will fix the problem as well.





## Using Lattice C with the Portable

Larry Lynch-Freshner

<b>Equipment Needed</b>	<p>HP110 Portable computer and at least one of the following:</p> <p>9114 DD disk drive            9121 SS disk drive*            9122 DD disk drive*            9133 Winchester disk drive*</p> <p><i>*Requires 82169a HP-IL/HP-IB Interface.</i></p>
<b>Software Needed</b>	<p>Lattice C compiler package.            MemoMaker or other editor.            The utility DEBUG is also useful, but not necessary.</p>
<b>Installation</b>	<p>Copy the following files from the Lattice C master disks:</p> <p>LC1.EXE            LC2.EXE            LINK.EXE            all .H FILES</p> <p><i>If using a 9121, these go on a second disk:</i>            CS.OBJ (If using the s model)            TIPS.OBJ (s model)            LCS.LIB (s model)            LCMS.LIB (s model)            LCXS.LIB (s model)</p> <p><i>and optionally:</i>            LC.COM            EXE2BIN.EXE            CC.OBJ            PR.EXE</p> <p>Note: If working with a 9121 disk drive, you must first create a file on A:\ drive with the line:            'DEVICE = B:AMIGO.SYS \0#2', and call it 'CONFIG.SYS' (See the application note "Mass Storage and the Portable" available free of charge from the HP HELPLINE).</p> <p>To set up the Terminal Independence Package to work with the Portable, do the following:            Execute the file called TIP.EXE on the #5 master disk.            Choose option 1. (Extract record)            Type: TIP.D. (File name)            Press: Y (Extract for 110?)            Type: TDB (file name, no extension)            Press: (return) (To exit)</p>



Save the file TDB on the disc created above.  
This file must be present in the same directory  
as an executing program which uses the Terminal  
Independence Package.  
The system is now ready. Remember, the Terminal  
Independence Package is only needed when you  
port source code to other non-HP systems with a  
Lattice C compiler.

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Here at HP we get a number of calls from people with questions on accessing the serial ports of the Touchscreen/150 with a high level language. There are two languages supported by HP which do this well: GWBASIC and Lattice C. I will cover Lattice C in this article; the GWBASIC manual explains the use of GWBASIC quite sufficiently.

There are several reasons that most languages don't access serial ports satisfactorily. One reason is that they are not controlled simply through hardware I/O ports, if they were, IN and OUT statements would work nicely. Instead, the ports are implemented with what is called an *Interrupt Driven* system. Simply said, this means that the computer will continue to receive data even when the communications program is not specifically looking for it, which is a very nice feature. The way that a program must access a serial port is by opening COM1 or COM2 as a file, with port 1 mapped to COM1, and port 2 mapped to COM2 via the *Device Configure* program. Most languages have no problem with doing this, the problem is that the language expects the serial port to act like a file, that is, transmit and receive everything in blocks of data instead of character by character. In fact, there is no way to determine if there is any data ready before reading. This may be done properly in assembler, but we are trying to keep away from the hassle of passing parameters and linking programs and all that. It can also be done if the language used permits the user to call DOS functions directly. To date, Lattice C is the only language that does.

The routines that follow are very simple, *sinit* opens the com port for reading and writing, *stern* closes the file (when finished), *sget* gets a byte, *sput* sends a byte, and *srdy* checks to see if there are data ready to be read. The important function here is *srdy*, which uses function 44h, I/O control for devices to check the input status. The routines

are written assuming the s model, if using a larger model, they must be modified by adding the structure *sregs* and executing the *segread* (*sregs*) function call before the *intdos* call, which must be changed to: *intdosx* (*&inr, &or, &sregs*). All this assumes that the user knows something about Lattice C, but the user who has a DOS call function for their language and wishes to use this technique should be able to figure out what is going on, as the setup is straightforward. For further information, I recommend reading the *Series 100/MS-DOS Programmers Reference*, page 1-113 through 1-124, and the *Lattice C Compiler User's Guide*, pages 5-16, and 5-18.

```

/*****
 *
 *                               Serial Communication Functions.
 *
 * NOTE: below, n = 0 for COM1, or 1 for COM2.
 * sinit: initialize COMn port for i/o (c = sinit(n); c==1 if error)
 * sread: read a byte from COMn (c = sread(n); c==1 if error)
 * swrite: write a byte to COMn (c = swrite(n,b); c==1 if error)
 * srdy: check to see if COMn id ready for input (c = srdy(n);
 *       c==1 if ready)
 * sterm: terminate serial i/o ( sterm(n) )
 *
 * Written by: L. Lynch-Freshner
 *****/

#include <dos.h> /* header file defines the REGS union */

static int handle[1]; /* DOS file handle for COMn */
static char buffer[1],*buff; /* char buffer for i/o */

sinit(n) /* open COMn as a file/device */
int n;
{
    int fl;
    union REGS inr,or; /* REGS is a data structure that is used */
    char *pb; /* to hold processor registers */
    if((n>2) || (n<1))
        return(-1);
    pb = "com "; /* pointer pb points at the file name */
    *(pb+3) = n+49;
    inr.x.ax = 0x3d02; /* open for read and write */
    inr.x.dx = (int) pb; /* point to 'file' name */
    fl = 1 & intdos(&inr,&or); /* call DOS and isolate carry flag */
    if(!fl) /* if carry clear... */
        handle[n-1] = or.x.ax; /* set handle */
    if(fl)
        return(-1);
    else
        return(0);
}

sterm(n) /* terminate serial i/o */
int n;
{
    int fl;
    union REGS inr,or;
    inr.x.ax = 0x3E00;
    inr.x.bx = handle[n-1];
    fl = intdos(&inr,&or);
}

```

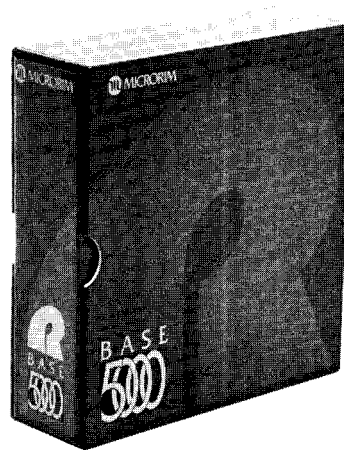
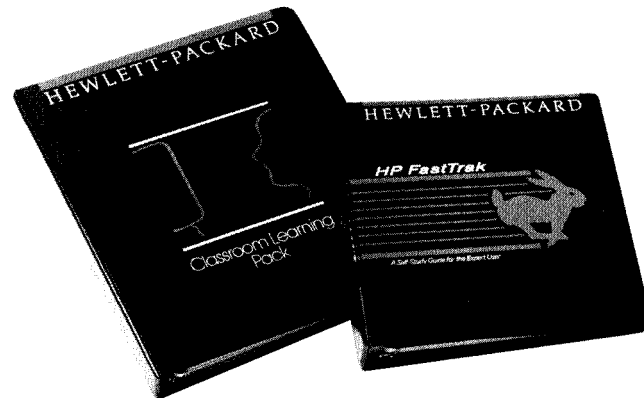
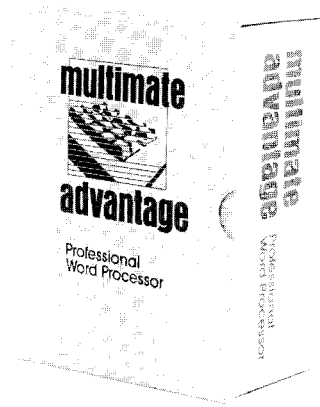
```

sread(n)                                /* read a byte from serial port */
int n;
{
    union REGS   inr,or;
    int fl;
    if((n<1) || (n>2))
        return(-1);
    buff = buffer;
    inr.x.ax = 0x3f00;                    /* read function */
    inr.x.bx = handle[n-1];              /* file handle */
    inr.x.cx = 1;                         /* read one byte */
    inr.x.dx = (int) buff;                /* and put it in buffer */
    fl = 1 & intdos(&inr,&or);           /* call DOS and isolate carry flag */
    if(fl)
        return(-1);
    else
        return( (int) *buff);
}

swrite(n,b)                              /* write a byte to the serial port */
char b;
int n;
{
    union REGS   inr,or;
    int fl;
    if((n<1) || (n>2))
        return(-1);
    buff = buffer;
    *buff = b;
    inr.x.ax = 0x4000;                    /* write function */
    inr.x.bx = handle[n-1];              /* file handle */
    inr.x.cx = 1;                         /* write 1 byte */
    inr.x.dx = (int) buff;                /* from buffer */
    fl = 1 & intdos(&inr,&or);           /* call DOS and get carry flag */
    if(fl)
        return(-1);
    else
        return(0);
}

srdy(n)                                  /* check the serial port for incoming data */
int n;
{
    int fl;
    union REGS   inr,or;
    if((n<1) || (n>2))
        return(0);
    inr.x.ax = 0x4406;                    /* IOCTL input status function */
    inr.x.bx = handle[n-1];              /* file handle */
    fl = 1 & intdos(&inr,&or);           /* call DOS and get carry flag */
    if(fl || (~fl && or.h.al == 0))      /* if not ready for input... */
        return(0);                      /* return no */
    else
        return(1);                       /* if ready, return yes */
}

```



## Introducing MultiMate for the HP Vectra PC and the IBM PC/XT/AT

Kathy Sulgit

---

Major Accounts and customers serviced through HP's direct sales force can now order MultiMate 3.3 Series and MultiMate Advantage for the Vectra PC and the IBM PC/XT/AT personal computers.

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### What is MultiMate and MultiMate Advantage?

MultiMate 3.3 Series is a fully functional word processor with a self-paced training disk, spelling checker and merge printing capabilities. As a beginner, you can be up and running within minutes. If you are an advanced user, you will appreciate the flexibility and wide range of applications. MultiMate is the number one choice for PC-based word processing in large corporations where they appreciate the product's Wang-like user interface.

MultiMate Advantage offers all of the features of regular MultiMate, plus:

- Automatic footnoting
- Forms generation and fill-in
- Section numbering and table of contents generation
- Line and Box drawing
- On-File information manager

MultiMate gives you the front-line of word processing technology and the most versatile features of any word processing package on the market today, including many that cost extra with other packages. MultiMate's resemblance to the WANG word processor makes it an instant success wherever WANG is standard. And, superior design and documentation make it easy for people who don't know WANG to be productive in no time at all.

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### MultiMate Fits Write In

MultiMate's extensive file conversion capabilities allow users to accomplish a host of tasks. You can create files with compatible formats in order to transfer documents from PC's to mainframes, IBM Displaywriters or WANG dedicated word processors. MultiMate can "talk" to database and spreadsheet programs like dBasell, VisiCalc, and Lotus 1-2-3.

MultiMate provides the features of a dedicated word processor to make work simpler and faster. You can produce professional text with proportional spacing, microjustification and printing capabilities that range from boldface and underlining, subscripts, superscripts and double underscore. You can format and reformat documents at will, send out a form letter to

hundreds of key customers, check spelling with an enhanced 80,000 word dictionary that's very clever about correcting mistakes, or retrieve boiler-plate copy from the "Library."

- *Printing Features*—Printer Action Table files are available to support more than 275 printers and sheetfeeders, including the proportional spacing (PS) mode of the B and F cartridges on the HP LaserJet printer.

Support for the newest and most popular printer features such as proportional spacing, micro-justification, and extended character sets. Range of printing capabilities include: underline, double underline, boldface, super/subscripts and various print styles.

- *File Conversion Utilities*—Powerful file conversion utilities allow users to import and export material to and from other software such as Lotus 1-2-3 and dBaseII. Conversion capabilities include:

MM: MultiMate document format. In most cases, either the file to be converted or the result of the conversion will be a MultiMate document.

ASCII: The widely used American Standard Code for Information Interchange. Many mainframe computers, data bases, spreadsheets, and text editors can output data as ASCII files. MultiMate documents may be converted into ASCII files such as those created by dBaseII or by WordStar (in "nondocument mode"), and vice versa.

COMM: Format specially designed for use with MultiMate documents in telecommunications applications. It creates a 7-bit ASCII intermediate document which can then be transmitted through a modem for use with electronic mail services and such communication packages as EasyLink.

Engineers, scientists and technicians also appreciate MultiMate's advanced features. Multiple directories allow you to divide hard-disks and crowded disks into more workable units. A faster, more powerful ASCII merge utility and a macro capability that's as easy to use as IBM's, but less limited increase MultiMate's versatility.

- *Editing Features*—Menu-driven, self-prompting system includes all basic text-editing functions and more: three insert modes; copy, move or delete by character, word, line, sentence, paragraph, or page; global search and replace; tab, indent and center.

Display features include: instant reformatting of screen during writing and editing, or when margins are altered; on-screen underlining; foreign language symbols; and showing spaces either as blanks or dots on screen.

Ability to print right-justified text, multi-line headers and footers, page numbering, and automatic date and time stamping.

Enhanced merge utility allows the use of lists created by almost any database and other non-MultiMate software.

Enhanced spelling checker finds spelling errors three times faster than before. Auto-correction mode identifies and corrects multiple identical mistakes in a document after the first time a new error is corrected during a spell/edit session.

Unlike ASCII, the COMM conversion preserves the flexibility of MultiMate document formatting—such as tabs, centering, soft carriage returns and special codes for printer features. MultiMate documents may be converted to COMM files and vice versa.

DIF: Data Interchange Format used by many spreadsheets to represent numerical data. The MultiMate File Conversion utility can convert a DIF file to MultiMate document format, but not the reverse. The most common spreadsheet used with this data interchange is Lotus 1-2-3.

VCDIF: VisiCalc Data Interchange Format designed for use with VisiCalc spreadsheets. A VCDIF file can be converted to the MultiMate document format, but not the reverse.

DCA: IBM's Revisable-Form-Text Document Content Architecture. IBM uses DCA to facilitate interchange of documents in revisable form among various office systems. MultiMate File Conversion will reformat documents to or from DCA.

DCA is used by IBM Displaywriter systems running 3270 emulation, and by other IBM computers and software, such as IBM 8100, IBM 5520, DisplayWrite 2, DISOSS host software and others.



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**Key Features of  
MultiMate Advantage**

MultiMate Advantage includes the complete MultiMate 3.3 Series, plus these special features:

Automatic footnoting feature tracks footnote positioning and consecutively numbers footnotes at printing time.

Information handling features include: forms generation with user designed templates; protected/unprotected fields; sort, search and replace on field; selection of specific data records for printing; ability to redefine templates; add, modify, or delete records; and print with template or use a primary merge document for filling preprinted forms or normal secondary merge operations.

Section Numbering Feature supports six levels with Roman and Numeric Styles.

Table of Contents generation directly from text.

Line and box drawing function lets the user draw horizontal or vertical lines, boxes and charts anywhere within a document.

Alternate Keyboard Function allows users to toggle between predefined character sets and to enter special graphic, math and foreign language characters into text.

New Replay feature permits users to re-execute a key procedure with just one keystroke.

New MultiMate On-File Information Manager supplies additional list handling and mail/merge capabilities without extra software or file conversion. Uses templates for easy entry of information and indexing.

MultiMate On-File makes it easy to organize any kind of information. Using the easy to understand concept of index cards, MultiMate On-File allows you to view, sort, edit, print, transfer, index, or cross reference your data.

Familiar Concept of Index Cards includes a subject area, eight color identifiers, Tickler/Action data, Index line for key words. Ten lines on the front and twelve lines on the back of card are available for inputting information.

Versatile options for organization include search by subject, index word, color, or data. You can scan and match for words or phrases, and sort up to three fields in either ascending or descending order. You can also create ASCII files from your data for use with other applications.

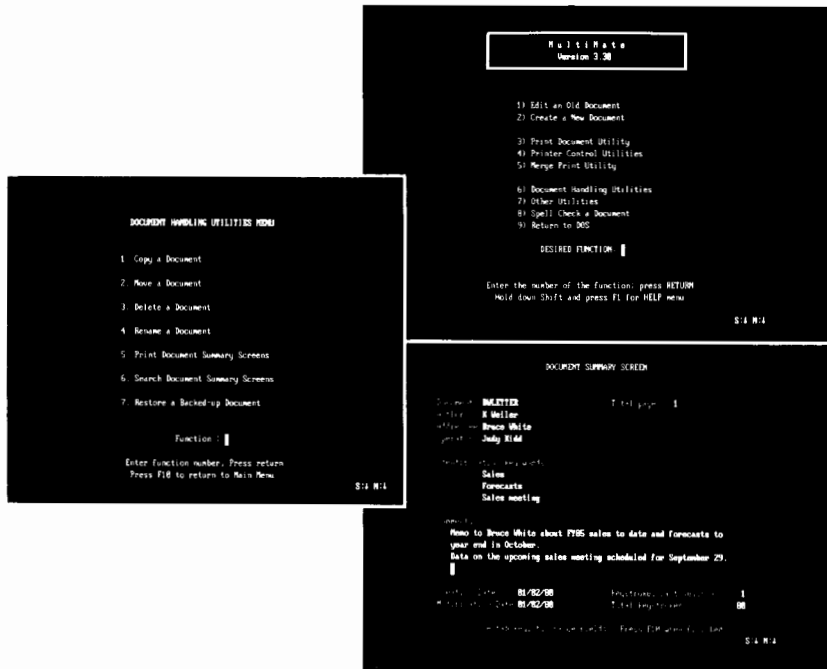
The number of file boxes you can maintain is limited only by disk space.

**Support and ordering information**

MultiMate is HP product number 68338F.

MultiMate Advantage is HP product number 68343F.

For more information contact your local HP Sales Office.





**HP Graphics Curator/3000:  
The Power of Touchscreen/150  
and Host Based Graphics**

Paula Dieli

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HP Graphics Curator/3000 is a new product which converts graphic images between the Gallery format, used by HP's Touchscreen/150 personal computer-based applications (Drawing Gallery, Charting Gallery), and the Figure format, used by HP's 3000-based applications (HPDraw, DSG/3000, HPEasyChart, HPMap). Graphics Curator/3000 provides an easy-to-use VPLUS user interface, and direct access from AdvanceLink command files. The design of Graphics Curator/3000 allows HP applications to read uploaded Gallery files or downloaded Figure files with little or no modifications.

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**Primary Benefit**

The primary benefit of HP Graphics Curator/3000 is to allow HP 3000 graphics users to download their many custom figures (numbering in the hundreds) to Drawing Gallery for further editing and plotting and for inclusion in Executive MemoMaker documents. This can result in a savings of hundreds of man years invested in the creation of customized figures.

Pictures from the picture libraries or pictures created using Drawing or Charting Gallery can be uploaded to the HP 3000 and converted to figures for use in HP Draw or in a TDP/3000 or HP Word document.

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**Increased Productivity**

HP Graphics Curator/3000 provides customers with a tremendous productivity advantage by allowing graphics users to offload some graphics creation time to the workstation while having access to the multi-user environment of the HP 3000, with more file storage for figure and base map libraries, and production graphics capability with DSG/3000. This provides the user with more flexibility and faster turnaround.

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**Ordering Information**

HP Graphics Curator/3000 is available as a standalone product (36926A) and the right to copy (36926R). The A product must be ordered with one of the following options: option #310 for Series 37 computers, option #315 for the upgrade from #310 to #320, option #320 for all other HP 3000 computers. The R product options are #310, #315, and #320 respectively.

HP Graphics Curator/3000 can also be purchased as the "Office Graphics Bundle" which includes HP Graphics Curator/3000 and five copies of the Gallery Collection for the Touchscreen/150 PC. The bundle is also available for the right to copy. For more information contact your HP representative.

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The Classroom Learning Pack is a new concept expressly designed for the instructor of a classroom course on personal computer software. We've developed ready-to-use materials—an instructor's guide, overhead transparencies, and student activity sheets—so that you can quickly prepare for a course. And the course is easy to teach because the focus is on extensive hands-on practice with the software. In some cases, computer based training (CBT) has also been developed and integrated with the learning program.

The first three Packs offered are Classroom Learning Pack for **Executive MemoMaker** on HP Vectra and IBM PC/XT/AT—product number 89912F, Classroom Learning Pack for **Executive Card Manager** on HP Vectra and IBM PC/XT/AT—product number 89913F, and Classroom Learning Pack for **HP Access** on the Touchscreen/150 PC—product number 89914A.

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Each course may be taught in approximately four hours. During most of this time the students will be actually using the software and the instructor will be serving as a coach, not a lecturer.

To help you prepare for your role in leading the class, each Classroom Learning Pack includes the corresponding HP FastTrak Guide for expert users. FastTrak is self-study, modular training on such topics as installation, configuration, demonstrations, software features, and integration with other software. You'll be well prepared to answer any questions that come up during class.

Not only will the students practice with the software, they'll also practice using the documentation that accompanies the product. After they leave the class they will be able to find valuable information in the manuals when they need it.

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### **Executive MemoMaker**

The Executive MemoMaker Learning Pack covers creating and revising memos, printing documents, using the keyboard, and using MemoSpeller with MemoMaker on Vectra or an IBM PC/XT/AT. Computer based training is used for several lessons and one student training disc (CBT) is included with the Pack. Each workstation in the class will require one training disc. Additional training discs are available in a pack of five as product number 89919F. The CBT may also

be given to students to take with them after class for use as a review tool.

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<b>Executive Card Manager</b>	The Executive Card Manager Learning Pack includes lessons on creating a cardfile; adding, updating and deleting cards; finding cards; and creating reports. This course may be used for teaching Executive Card Manager on the HP Vectra PC or an IBM PC/XT/AT.
<b>HP Access</b>	The HP Access Learning Pack covers basic database concepts, retrieving data, performing a query, sorting, summarizing, and placing a table in a document. Computer based training is incorporated in this course and one student training disc (CBT) is included with the Pack. Additional training discs are available in packs of five as product number 89921A. The CBT may also be given to students to take with them after class for use as a review tool.
<b>Ordering Information</b>	To order Classroom Learning Packs or Student Training Discs, contact your local HP dealer or HP office.

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HP FastTrak is comprehensive self-study training for user support personnel and expert users. Developed for Hewlett-Packard support personnel, FastTrak guides are now available for any user that desires information beyond the scope of the software documentation.

If you provide support services for personal computer users in your organization, HP FastTrak will make your job easier by helping you learn the ins and outs of the software quickly. Topics covered in each guide include product overview, supported configurations, features and uses, demo tips, integration with other personal computer applications, installation, performance, and technical tips. And, FastTrak is completely modular so you can learn what you want, when you want.

FastTrak can help you provide several software services: product evaluation, installation, configuration, and user support. Experienced end-users will also appreciate a copy for handy reference. The format is consistent with the software documentation to simplify the learning process.

HP FastTrak guides are now available for four software applications:

- Executive MemoMaker (89915F)
- Executive Card Manager (89916F)
- HP Access (89917A)
- AdvanceLink/AdvanceLink 2392 (89918F).

Each guide covers the Touchscreen/150 and Vectra versions of software. FastTrak for Executive MemoMaker and Executive Card Manager also include diskettes—one in 3½" format and one in 5¼" format—of demonstration files.

To order HP FastTrak, contact your local HP dealer or HP office.







**Touchscreen/150:  
Upgrade from R:BASE 4000  
to R:BASE 5000 Available**

Randy Kahle

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The R:BASE 4000 to R:BASE 5000 upgrade kit for Touchscreen/150 users is now available from Hewlett-Packard. With this moderately priced kit, current R:BASE 4000 users are able to trade up to the power, speed, and ease of use available from R:BASE 5000. R:BASE 4000 data bases can be converted easily with utilities included in R:BASE 5000. R:BASE 5000 includes enhanced features such as Application EXPRESS, an application generator, and FileGateway, which will import files to R:BASE 5000 from Lotus™ 1-2-3, PFS:File, dBASE™ II, ASCII and SYLK files.

To order your R:BASE 5000 upgrade (HP part number 45563-63002), follow the instructions in the Software Exchange Kits article in the Current Information section (the green pages) of this issue. No discounts apply.

The regular (not upgrade) R:BASE 5000 kit for the Touchscreen/150 is HP product number 45563A and for the HP Vectra PC is HP product number 68336F.









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# HP Vectra PC Tips

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## Late-breaking news on Vectra PC

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*[The HP Vectra PC is designed to be compatible with the most popular software and accessories. Its use of certain advanced features occasionally makes additional information necessary for the use of some third-party products. Here are a few notes to supplement the user documentation for several products.]*

**Spotlight.** If you want to run Lotus Development's Spotlight via the Personal Applications Manager (PAM), ask your HP Dealer or Sales Representative for a copy of the HP Vectra Personal Computer Application Note on Spotlight. If you prefer to use MS-DOS Commands, follow the instructions given in the Spotlight user documentation.

You can enter Spotlight from an application regardless of whether that application was started from PAM or from MS-DOS.

\* \* \*

**TopView.** Additional information is necessary to run TopView and to use TopView with an HP-HIL Mouse. Ask your HP Dealer or Sales Representative for a copy of the HP Vectra Personal Computer Application Note on TopView. It provides installation procedures for flexible-disc and hard-disc systems and instructions on selecting the TopView HP-HIL pointer driver provided with your system.

\* \* \*

**Sidekick and TurboLightning.** When using two products from Borland, Sidekick and TurboLightning, you should not use the MODE command with the 'P' parameter before invoking either of these programs. If this happens the system will have to be rebooted.

There are two solutions . . . The first is to use the MODE command after loading in the application. As an example, you can execute the MODE command and Sidekick from your AUTOEXEC.BAT file:

```
SK
MODE COM1:96,N,8,1,P
```

Alternatively, you can simply leave off the P parameter. The P parameter is used to indicate that the serial device is a printer. When you specify the P parameter, all attempts to print will be continuously retried. If you do not specify the P parameter, then the device could be timed-out. See page 12-80 of the Vectra *MS-DOS User's Reference* for additional information on the MODE command.

\* \* \*

**Framework and dBASE III.** These two Ashton-Tate products employ a copy protection scheme, SUPERLoK. Since SUPERLoK was originally written to be used on computers running at less than 8MHz, you may experience difficulties if you attempt to install and use backup copies of SUPERLoK-protected discs.

There are two major releases of SUPERLoK, Version 2.0.2 and 2.0.3. The SUPERLoK version number used may or may not appear when you run the application. If you are



unsure which version of SUPERLoK is being used on your copy of dBASE III (Version 1.1) or Framework (Version 1.1), contact Ashton-Tate, the software manufacturer.

SUPERLoK release 2.0.3 or those newer than 2.0.3 create no difficulties for users. The manufacturer of dBASE III and Framework requires backup copies to be made on a hard disc. Follow the directions in your application user manual for correct installation.

You will be able to install an application protected by SUPERLoK Version 2.0.2 on a hard disc only if you are using a 1.2MB flexible disc drive as your source drive. Any attempt to install applications protected by Version 2.0.2 with anything besides a 1.2MB disc drive will permanently alter your master disc. If the master disc is altered in this manner, you will still be able to execute the application from that disc, but you will not be able to use it for making backup copies. If you find that your copy of dBASE III or Framework cannot be installed because it has this version of SuperLok, contact Ashton-Tate, the software manufacturer. By giving them the serial number of your software, they will replace your application with one containing the latest release of SUPERLoK.

\* \* \*

**IBM PC/NET.** Some users have encountered difficulties in getting a Vectra PC running on the IBM PC/NET. The problem is not with the actual operation of the network, but with the Installation Aid that sets up the subdirectory structure and copies the files onto the PC.

Use of the Installation Aid is not necessary -- the documentation outlines how to install the software by using DOS commands. However, if you wish to use the Installation Aid, there are two changes that have to be made to the Vectra PC's discs.

The Installation Aid looks for particular files, IBMBIO.COM and IBMDOS.COM. These are operating system files present on the PC/AT, but not on Vectra. As far as the Installation Aid is concerned, the contents of these files are irrelevant. What is relevant, however, is that two files with these names exist. Contact your HP Dealer or Sales Representative for assistance.

\* \* \*

**Tecmar Graphics Master.** Some users may have experienced problems when bringing up a Vectra PC with the Tecmar Graphics Master installed. This is because the Vectra PC configuration isn't set up to recognize the Tecmar card.

Follow these steps:

1. Bring up the Vectra PC using a Multimode Card and Vectra PC operating operating system.
2. Run the Setup program, and select the Primary Display to be MONOCHROME. Run Setup to completion, it will hard reset the system.
3. Create/Modify the AUTOEXEC.BAT file so that it contains the line "GMBIOS -I". Also copy the file from the Tecmar disc onto the Vectra PC system disc.
4. Install the Tecmar Graphics Master, making sure that the switch is set to PRIMARY video.

5. Power up the system. Once the AUTOEXEC.BAT file is executed there should be no problem with the display.

\* \* \*

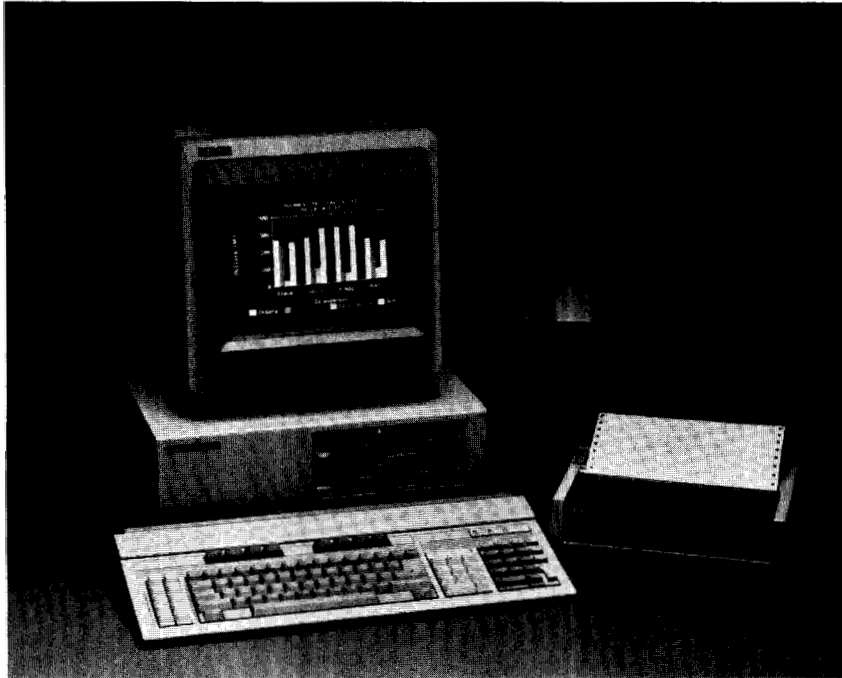
**80287 Math Co-Processor.** Two applications, Lotus 1-2-3 and Ryan-McFarland FORTRAN, written to take advantage of the the 80287 math co-processor, do not recognize the presence of the chip. Contact your HP Dealer or Sales Representative for the HP Vectra Customer Utility, which resolves this.

\* \* \*

**The HP Vectra PC, by the way, achieved the highest compatibility rating -- "Operationally Compatible" -- in tests performed by Future Computing, a leading personal computer research organization.**

\* \* \*

dBASE III (TM) is a trademark of Ashton-Tate  
Framework (TM) is a trademark of Ashton-Tate  
Graphics Master (TM) is a trademark of Tecmar, Inc.  
SideKick (R) is a registered trademark of Borland International  
Spotlight (TM) is a trademark of Lotus Development Corp.  
SUPERLOK (TM) is a trademark of Softguard Systems, Inc.  
TopView (TM) is a trademark of IBM  
Turbo Lighting (TM) is a trademark of Borland International





Welcome to the “Encyclopedia” section of the *Communicator*—bringing together all the news you need on each of the software packages and systems that you use.

Coupled with the manuals, your *Communicator* back issues and subscription provide everything you need to make the best use of your personal computer.

### What’s in the Encyclopedia?

For each major product, there is an Encyclopedia entry containing all or part of this information:

- Product Description—a one- or two-sentence explanation of what the product does.
- Encyclopedia Articles—a reference to any Encyclopedia articles in previous *Communicator* issues covering this product.
- News items about the product.
- Program Updates or Upgrades—how to obtain the new version of the program, if it has been revised. (New items since the last issue are marked with a “New” symbol.)
- Most Frequent Questions—with answers, based on the experience of HP’s Response Centers around the world. (New question listings since the last issue are marked with a star.)
- Software Problem Reports—a cumulative list of the major problems which have been reported. If you have a problem, check the “Encyclopedia” entry for the product. (New problem listings since the last issue are marked with a star.)
- Manual Corrections or Updates—a cumulative list of corrections to the manuals for the product. Check the products you use, write in any new corrections since the last issue (marked with a star), and your manuals are up-to-date.
- Related HP Publications—any Quick Reference Guides, textbooks, etc. available from HP for the product. (New items since the last issue are marked with a “New” symbol.)
- *Communicator* Articles—an index of articles in back issues of the *Communicator*.
- Courses—descriptions of courses available from HP for the product. (New items since the last issue are marked with a “New” symbol.)
- Data Files—a description of the files used by the product, to aid in data transfer.
- Integration Features—a summary of any features built into the product to facilitate data transfer to other products.

- Data Transfer Procedures—specific techniques which have been discovered for data transfer to specific products.

The Encyclopedia entries are arranged so that you can remove them for insertion in your manuals or a separate binder.

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**Which Products are Covered?**

To make the best use of space, the entire Encyclopedia is not repeated in every issue of the *Communicator*. The Encyclopedia Table of Contents, given at the front of the section, is updated in every *Communicator* . . . directing you to the issues containing the latest articles for each product.

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## The Portable

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**Q. Can information be shared between two Portables?**

A. Yes. In such a case, one Portable must be the controlling system or host computer, and the other Portable (and any peripherals attached) will be used as peripherals for the host Portable. Connect the Portables together with two HP-IL cables, making a complete loop. On the Portable to be used as a peripheral, type "HPLINK" into the PAM MS-DOS command line and press [RETURN]. In the SYSTEM CONFIG menu on the host Portable, set the "EXTERNAL DRIVES" field to "2". You can now use any MS-DOS commands on the host Portable to control the resources of the peripheral Portable. To exit the HPLINK program, press any key on the peripheral system.

**Q. I have my IBM XT connected to my Portable with the HPLINK card. When I run The Portable's Diagnostic program, I get a "BROKEN LOOP" message. All the cables are connected correctly, so why do I still get this message?**

A. First make sure that you have MS-DOS Version 2.0 or later on the IBM. Then use the ASSIGN.COM command from MS-DOS on the IBM to "ASSIGN B:=A:". This is necessary because the IBM PC and the IBM XT have an A:drive and a C:drive. The HPLINK program always assumes there is a B:drive on the IBM that has not been connected in the loop; ASSIGN makes this "connection."





## Condor...and the Touchscreen/150

Enrique Castillo

<b>Encyclopedia Articles</b>	This is the second Encyclopedia article on this product. Use this article with the Encyclopedia entry in Issue #11.
<b>Product Description</b>	Condor™ is a powerful yet easy-to-use relational database system.
<b>Data Transfer Procedures</b>	<p><b>To Lotus 1-2-3:</b></p> <p>Whenever you transfer data to Lotus, keep in mind that Lotus uses columnar format for fields and row format for records. To comply with this data structure, from Condor you have to write your data to a file using the B option. Your file should have a .PRN extension to be read by Lotus. Example:</p> <pre>WRITE DATABASE FILENAME.PRN [B]</pre> <p>Using Lotus create a blank spreadsheet. Bring up the commands menu using “/” and select File, Import and Numbers, then enter the name of your Condor file FILENAME.PRN. Lotus will display your file using alphanumeric as labels and numeric and dollar as values.</p> <p>To transfer data from Lotus to Condor, first display your datasheet. Write your data to an ASCII file using PRINT. Make sure you specify the right range and set top of left margin to zero. Using a word processor or editor, delete all the extra blank lines.</p> <p>In Condor create a data base with the appropriate lengths and types for each field.</p> <p><b>CAUTION: EVERY TIME YOU TRANSFER DATA FROM LOTUS TO CONDOR OR VICE VERSA, THE FIELD LENGTH IN CONDOR AND LOTUS HAS TO BE ONE CHARACTER LONGER THAN ITS ORIGINAL LENGTH. I.E. IF YOU HAVE A FIELD 10 CHARACTERS LONG IN CONDOR, THE LOTUS CELL SHOULD BE SET AT 11 CHARACTERS LONG. IF YOU HAVE A 10 CHARACTER CELL IN LOTUS, THE FIELD IN CONDOR SHOULD BE 11. MAKE SURE THERE ARE NO COMMAS IN THE DATA YOU ARE TRANSFERRING.</b></p> <p>Then read the file as follows:</p> <pre>READ DATABASE FILENAME.PRN</pre> <p><b>To MS Word:</b></p> <p>Refer to the article “MS Word: How to PRINT MERGE Condor Data” in <i>HP PC Communicator</i> Issue 13.</p>



**To dBASE II:**

See the article "Transferring Files from Condor to dBASE II" in *Communicator* Issue 12.

**To Series 100 Graphics:**

See the article "Plotting Condor Data with HP Graphics" in *Communicator* Issue 8.

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Note: To use these procedures, you need to be an experienced user of both software packages involved in the data transfer. You should also be aware that these procedures are *not* supported by Hewlett-Packard. They were developed to work with existing products—not included in the original product designs. These procedures may not work under all circumstances or with all version combinations.

Please send your additions or updates for this article to the *Communicator* editor—so that we may share them with other users in future issues.

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**dBASE II...for the Touchscreen/150**

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<b>Encyclopedia Articles</b>	This is the second Encyclopedia article on this product. Use this article with the Encyclopedia entry in Issue #11.
<b>Product Description</b>	dBASE II™ is the industry standard product in database management.
<b>Data Transfer Procedures</b>	<b>To MS Word:</b> Refer to the article "MS Word: How to PRINT MERGE dBASE II Data" in <i>HP PC Communicator</i> Issue 13. <b>To Series 100 Graphics:</b> Refer to the article "From Numbers to Charts on the HP 150" in <i>Communicator</i> Issue 9.

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**Diagraph...and the Touchscreen/150**

Vicky Spilman

<b>Encyclopedia Articles</b>	This the first Encyclopedia article on this product.
<b>Product Description</b>	Diagraph is a powerful, multifunction graphics product that fully utilizes the touchscreen capability of the HP Touchscreen/150. You can use Diagraph to create a variety of "clip art" presentation aids in addition to organizational charts, forms, signs, word charts and flow charts—even if you have little or no experience in graphic design.
<b>What About 8-bit (International Characters)?</b>	Diagraph does not recognize the eighth bit, therefore all characters are perceived as 7 bits. This means the majority of International Characters, which are 8 bits, cannot be used with this product. Any 8-bit characters will be interpreted as ASCII characters.





## HP Graphics Curator/3000... for the Touchscreen/150

Martha Seaver

<b>Encyclopedia Articles</b>	This is the first Encyclopedia article on this product.
<b>Product Description</b>	HP Graphics Curator/3000 is a new product which converts graphic images between the Gallery format, used by HP's Touchscreen/150 personal computer-based applications (Drawing Gallery, Charting Gallery), and the Figure format, used by HP's 3000-based applications (HPDraw, DSG/3000, HPEasyChart, HPMap). Graphics Curator/3000 provides an easy-to-use VPLUS user interface, and direct access from AdvanceLink command files. The design of Graphics Curator/3000 allows HP applications to read uploaded Gallery files or downloaded Figure files with little or no modifications.
<b>Most Frequent Questions</b>	<p><b>Q. What files does HP Graphics Curator/3000 convert between?</b></p> <p>A. <i>It converts Touchscreen/150 Gallery picture files (GAL) to HP3000 figure files and vice versa.</i>  <i>Gallery picture files are used by:</i>  <i>    Drawing Gallery</i>  <i>    Charting Gallery</i>  <i>    Executive MemoMaker</i></p> <p><i>HP3000 figure files are used by:</i>  <i>    HP Draw</i>  <i>    HP EasyChart</i>  <i>    DSG/3000</i>  <i>    HP Map</i>  <i>    TDP/3000</i>  <i>    HP Word</i></p> <p><b>Q. Can I convert an HP Draw drawing to a picture?</b></p> <p>A. <i>Since HP Graphics Curator/3000 converts pictures to figures and vice versa, you must first save an HP Draw drawing as a figure before converting it to a picture.</i></p> <p><b>Q. Can I convert an HP EasyChart chart to a Charting Gallery chart?</b></p> <p>A. <i>You cannot convert an HP EasyChart chart to a Charting Gallery chart using HP Graphics Curator/3000. The best way to use an HP EasyChart chart in Charting Gallery is to transfer the data file associated with the chart to the personal computer and then bring the data into a Charting Gallery chart using the Get Data function.</i></p>

**Q. Can I convert the figure or picture libraries that come with the HP graphics packages?**

A. *Certainly. Since the HP Draw figure library (e.g. figures in ANIMALS.FIGURE.SYS) are just figures, you can use HP Graphics Curator/3000 to convert them to pictures. Similarly, the Drawing Gallery picture libraries can be converted to figures.*

**Q. How does HP Graphics Curator/3000 work since a Gallery picture file is on the personal computer and a figure file is on the HP3000?**

A. *The HP Graphics Curator/3000 program runs on the HP3000 (not the personal computer). Therefore you must transfer a picture file to the HP3000 (using AdvanceLink or another file transfer program) before converting it to a picture. Conversely, after converting a figure to a picture, you must transfer the picture file to the personal computer for use with Gallery applications.*

**Q. How can I simplify the conversion process for personal computer users who are not very familiar with the HP3000?**

A. *The personal computer user need not be intimidated by HP Graphics Curator/3000. It is a very easy-to-use application—there is only one menu to use, and the help screens provide examples of how to use the menu. The personal computer user can also use AdvanceLink command files (included with the product) that semi-automate the transfer and conversion of a picture or a figure. These command files are described in the product reference guide.*

**Q. How long does the conversion process take?**

A. *Converting between graphics file types takes not much longer than doing a file copy. The complexity of the picture is the determining factor in the conversion time.*

**Q. I have been using HP Draw for several years and have accumulated many figures. Is there an easy way that I can convert all of them for use with Drawing Gallery?**

A. Yes. HP Graphics Curator/3000 includes a "use file" capability that lets you convert a list of figures (or pictures) with one command. To do this you create a "use file" which is a text file containing a list of conversion instructions. Then you run the CURATOR program, specifying the name of the "use file" to use for the conversions. A sample "use file" is included with the product. Also included is a sample AdvanceLink command file that you can modify and then use to transfer a group of converted pictures from the HP3000 to your personal computer with one command.

**Q. How does HP Graphics Curator/3000 handle the differing product features contained in pictures and figures?**

A. For the few features that are different within pictures and figures, HP Graphics Curator/3000 makes a "best fit" substitution. For example a thick line in a picture becomes a thin line in a figure; an italicized font in a figure is "un-italicized" in a picture. A complete list of the differences and substitutions can be found in the product's reference guide.

**Q. Once a picture or figure is converted, can it be edited?**

A. The editability depends on whether it is a picture or a figure. When a converted picture is brought into Drawing Gallery, each object (e.g. text string, line, polygon) can be edited individually; for example, if you have a picture converted from an HP EasyChart chart-figure, you can change the color of just one bar, or left-justify the titles. When a converted figure is brought into HP Draw, adjusting can be done only to the figure as a whole. That is, you can move, scale, and rotate the entire figure; you cannot edit individual text strings or lines within the figure.







## Lotus 1-2-3...on the Touchscreen/150

Enrique Castillo

<b>Encyclopedia Articles</b>	This is the third Encyclopedia article on this product. Use this article with the Encyclopedia entries in Issue 13 and Issue 11.
<b>Product Description</b>	Lotus™ 1-2-3™ incorporates three popular functions into one application (spreadsheet, business graphics, data management).
<b>Data Transfer Procedures</b>	<p><b>To Condor:</b></p> <p>To transfer data from Lotus to Condor, first display your datasheet. Write your data to an ASCII file using PRINT. Make sure you specify the right range and set top of left margin to zero. Using a word processor or editor, delete all the extra blank lines.</p> <p>In Condor create a data base with the appropriate lengths and types for each field.</p> <p>CAUTION: EVERY TIME YOU TRANSFER DATA FROM LOTUS TO CONDOR OR VICE VERSA, THE FIELD LENGTH IN CONDOR AND LOTUS HAS TO BE ONE CHARACTER LONGER THAN ITS ORIGINAL LENGTH. I.E. IF YOU HAVE A FIELD 10 CHARACTERS LONG IN CONDOR, THE LOTUS CELL SHOULD BE SET AT 11 CHARACTERS LONG. IF YOU HAVE A 10 CHARACTER CELL IN LOTUS, THE FIELD IN CONDOR SHOULD BE 11. MAKE SURE THERE ARE NO COMMAS IN THE DATA YOU ARE TRANSFERRING.</p> <p>Then read the file as follows:</p> <pre>READ DATABASE FILENAME.PRN</pre> <p>If you wish to transfer data from Condor to Lotus, keep in mind that Lotus uses columnar format for fields and row format for records. To comply with this data structure, from Condor you have to write your data to a file using the B option. Your file should have a .PRN extension to be read by Lotus.</p> <p>Example:</p> <pre>WRITE DATABASE FILENAME.PRN [B]</pre> <p>Using Lotus create a blank spreadsheet. Bring up the commands menu using "/" and select File, Import and Numbers, then enter the name of your Condor file FILENAME.PRN. Lotus will display your file using alphanumeric as labels and numeric and dollar as values.</p>

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Note: To use these procedures, you need to be an experienced user of both software packages involved in the data transfer. You should also be aware that these procedures are *not* supported by Hewlett-Packard. They were developed to work with existing products—not included in the original product designs. These procedures may not work under all circumstances or with all version combinations.

Please send your additions or updates for this article to the *Communicator* editor—so that we may share them with other users in future issues.

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**Picture Perfect...  
and the Touchscreen/150**

Vicky Spilman

<b>Encyclopedia Articles</b>	This is the second Encyclopedia article on this product. Use this article with the Encyclopedia entry in Issue #13.
<b>Product Description</b>	Picture Perfect™ is a very powerful chartmaking program on the HP150 that lets you make line, pie, bar, and scatter charts. You have a great deal of flexibility in changing the chart look by specifying title locations, bar types and placement, axis type and scaling, etc.
<b>What About 8-bit (International Characters)?</b>	Picture Perfect does not recognize the eighth bit, therefore all characters are perceived as 7 bits. This means the majority of International Characters, which are 8 bits, cannot be used with this product. Any 8-bit characters will be interpreted as ASCII characters.









**Current  
Information**





**Current Information**

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The level of capability provided by advanced personal computer software—together with the rapid evolution of this field—means that you may sometimes have questions that are not answered in the product manuals. Depending on where you purchased the specific software or hardware product, the best source of assistance for that product may be your own organization, your dealer, an independent vendor, or Hewlett-Packard.

This section is designed to guide you through the process of obtaining the most rapid resolution of any question that you have. It is organized in a series of steps:

Step 1: Is the answer in the *Communicator*?

Step 2: Is the answer available through CompuServe?

Step 3: Is support provided from within your own organization?

Step 4: Was this product purchased from a dealer?

Step 5: Was this product provided by an independent vendor?

Step 6: Telephone assistance from Hewlett-Packard

Step 7: Training or consulting

By following these steps, you can rapidly and inexpensively get the answer you need.

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**Step 1: Is the answer in the *Communicator*?**

The *Communicator* is the heart of our support program. This magazine brings you applications information, operational tips, programming techniques, information on software updates, manual corrections, and data on known software problems and their solutions.

The new Encyclopedia section, initiated with Issue #9, provides detailed, easily-accessed information on each major hardware and software product. Many of these sections are written by people from our HP HelpLine Response Centers, reflecting the most common questions and problems.

Refer to the article "Ordering *Communicator* Subscriptions" in the Current Information section of this issue for ordering details.

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**Step 2: Is the answer available through CompuServe?**

HP maintains a database on the CompuServe™ on-line information service called HP OnLine—it contains product news, answers to frequently-asked questions, and other information. HP also facilitates user interaction by hosting an open forum where users may post messages for general user response. Periodically, HP may respond to selected user questions.

To gain access to HP OnLine, you must have an account with CompuServe (you are billed for CompuServe connect time and network services) and you must have a 300- or 1200-baud modem.

The "Standard-Plus" class of membership in Interex, the International Association of Hewlett-Packard Computer Users, includes a subscription to CompuServe's Executive Information Service. For details on Interex, refer to the article "User Group: Interex" in this *Communicator*.

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**Step 3: Is support provided from within your own organization?**

If you work in an organization which has several HP personal computers, there is often one person who coordinates the purchase, set-up, and training for your company or institution. In a large organization, this function is often provided by the central MIS, office-automation, or data-processing department. (For example, each Hewlett-Packard division or office has an Office Automation Coordinator, usually part of the finance department, who provides personal computer training and assistance.)

Your internal support personnel have full knowledge of your organization's overall system: your internally developed programs, your particular operating and networking procedures ... and your specific hardware and software configuration. Your experts, in turn, have access to special resources within Hewlett-Packard. HP support services, such as training courses, are purchased to supplement your internal capabilities.

With centralized support within your organization, your support is localized and customized to your particular needs.

If you do not have an internal support capability, support for a product generally comes from the organization that sold you the product—the dealer or Hewlett-Packard.

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**Step 4: Was this product purchased from a dealer?**

If this product was purchased from a dealer or independent system supplier, they have worked with you to define your application and configure your system—perhaps selecting software or hardware not supplied or supported by Hewlett-Packard. Here, your dealer is the best source of assistance—knowing you, your needs, and your configuration well.

Authorized dealers are backed up by special support resources within HP . . . and, of course, the full range of Hewlett-Packard software and hardware support services may be purchased as a supplement to those provided by your dealer.

By buying your hardware, software, accessories, and supplies from an Authorized Hewlett-Packard Dealer who provides full support, you build up a continuing relationship—providing a local, personal, and uniquely-responsive support program customized for your business.

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**Step 5: Was this product provided by an independent vendor?**

Many products which run on HP personal computers are developed and marketed by independent organizations—referred to in the personal computer industry as “Independent Software Vendors” (ISVs) or “Independent Hardware Vendors” (IHVs).

Hewlett-Packard publishes catalogs and directories listing software and hardware products that the ISVs and IHVs have tested for operation on our systems. We refer to these as “verified” or “listed” products. Because of the specialized knowledge required, your support for one of these products comes either directly from the original developer or through the dealer from whom you purchased it.

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**Step 6: Telephone assistance from Hewlett-Packard**

Telephone assistance is available from the worldwide network of Hewlett-Packard Response Centers for most products distributed by HP. (For certain specialized non-HP-developed products which are distributed by HP under our product number, we have made arrangements for support to come directly from the original developer. This is indicated in the product data sheet and the documentation supplied with the product.)

For telephone assistance outside the U.S. and Canada, call your HP Sales and Service Office and ask for the Personal Computer Response Center.

In the U.S. and Canada, the telephone assistance program is called HP HelpLine.

Here is how the U.S./Canada HP HelpLine program works:

- The toll-free HP HelpLine number is:

1-800/858-8867

HP HelpLine is open Monday through Friday from 7 A.M. to 9 P.M. Eastern Standard Time (to 6 P.M. Pacific Standard Time).

- Calls to the HP HelpLine are paid for by one of three means:
  - By quoting a unique "certificate number" from a Call Certificate. Certificate packs are ordered by mail or telephone from HP's Direct Marketing Division.
  - By providing a VISA, Master Charge, or American Express charge authorization.
  - By identifying yourself as the Authorized Caller under a specific annual Software Support Agreement.
- When you call, a coordinator arranges for the appropriate HP support representative to return your initial call within two hours. Using a full set of software and documentation— together with computer knowledge, problem-solving skills, and access to further assistance via HP's worldwide telecommunications network—the support representative works with you to answer your question.
- HelpLine support does not extend to program development, program coding, isolation of coding errors, and implementation assistance. These areas are most economically resolved through on-site consulting and training, as described in Step 7, below.
- A call-incident is defined as a discussion of moderate duration focusing on one specific topic to resolve an inquiry or problem. A call-incident includes the time on the telephone discussing the question, time to research the solution, plus any additional call-backs required to clarify the question.
- The actual charge for a call-incident is not initiated until the call is closed. There is no charge if the call is the result of a specific documentation defect or software design problem . . . or if an answer cannot be found.

[Of course, this is only a summary of the new Personal Computer Assistance program. For details, please call the National Response Center at (800) 858-8867.]

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**Step 7: Training or consulting**

Perhaps your need for support is most efficiently and economically met by training or consulting:

- Classroom training is available to supplement the documentation that accompanies your product. Courses can help first-time computer users rapidly build confidence and gain new skills away from the distractions of the day-to-day job. As HP training courses are developed, they are listed in the *Communicator*.

These courses can be taught at your facility using your own systems. Also, training to suit your specific needs can be designed and given through HP's computer consulting service.

Many dealers teach similar courses or can arrange for Hewlett-Packard to teach a course in your area. To discuss training, call your local dealer or HP office.

- Consulting service, available from Hewlett-Packard by the hour or by the day, provides personalized assistance in system operation, recommendations for improved performance, or suggestions on application design. Your dealer or system house may also have consulting services available. To discuss consulting, call your local dealer or HP office.







**Get in Touch**



To get in touch with Vectra PC, Touchscreen/150, HP 12x, and Portable owners in your area—and worldwide—join Interex, the International Association of Hewlett-Packard Computer Users. Interex is an independent group of HP computer users, with chapters and regional groups in 21 countries. If you join Interex, you will receive, at no cost, an assortment of *HP Communicator* back issues which pertain to your computer model.

**Start a Local Chapter**

Local Interex Personal Computer chapters are now forming. For details on joining or starting a group in your area, contact Interex headquarters and ask for the pamphlet "Starting a Regional User Group."

**Membership**

Two levels of membership are available:

- **Standard Membership** includes a subscription to the magazine *Professional Computing*, a subscription to the *Interrupt* newsletter, and one disc from the Interex Contributed Software Library.

Standard Membership:

North America . . . . . \$70  
 Outside North America . . . . . \$120

- **Standard-Plus Membership**, available to users in North America, includes all the Standard Membership services *plus* a subscription to CompuServe's Information Service.

CompuServe's electronic communication network allows you to access an on-line Special Interest Group for HP users—which includes a bulletin board, online conferencing, and the *Interrupt* newsletter.

Your Standard-Plus Interex Membership gets you started with a CompuServe Information Service account and documentation . . . plus 2 hours of free connect time on the network. CompuServe bills you directly for additional on-line time. (If you already subscribe to CompuServe, then you should order the standard membership.)

Standard-Plus Membership  
 (not available outside North America) . . . \$100

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**How to Join**

To join, fill out the form on the next page.

For more information, contact:

Interex Membership Department  
Fourth Floor  
2570 El Camino Real West  
Mountain View, CA 94040  
U.S.A.  
(Telephone 415/941-9960)

U.K. residents can contact the HP 100 Users  
Group in England:

Tim Cullis  
HP 100 Users Group  
Trafalgar House  
Grenville Place  
Mill Hill  
London, NW7 3SA  
England

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Are you currently an HP 1000 or HP 3000 Interex member?

No     Yes: Membership # \_\_\_\_\_

Please send more information about Interex's other activities:

\_\_\_\_ HP 1000    \_\_\_\_ HP 3000

I understand that no membership dues will be refunded after the contributed software library disc has been sent from Interex.

Signature \_\_\_\_\_ Date \_\_\_\_\_

**Send this page with your full payment to:**

Interex  
Bank File #61054  
P.O. Box 60000  
San Francisco, CA 94160  
U.S.A.

**Touchscreen/150 Software  
Available from HP**

Marilyn Ruel  
Suzy Pollock

To determine which U.S. products are recommended for use with localized computers, check with your dealer or HP office.

Name	Product Number	Uses HP Touch	Special Requirements
<b>ACCOUNTING:</b>			
BPI General Accounting	45455A		
BPI Accounts Receivable	45456A		
BPI Accounts Payable	45457A		
BPI Inventory Control	45460A		
BPI Job Cost/150	45461A		
BPI Payroll	45458A		
BPI Personal Accounting	45459A		
<b>COMMUNICATIONS:</b>			
AdvanceLink—U.S.	45431A	•	
—German	45431AD	•	
Dow Jones Spreadsheet Link	45511D		
DSN/Link—German	45425AD	•	
—Spanish	45425AE	•	
—French	45425AF	•	
—Dutch	45425AH	•	
—Latin American	45425AM	•	
—Swedish	45425AS	•	
—Finnish	45425AX	•	
HPMessage	36568A	•	Corresponding 3000 software required
IBM 3278 Term. Emul. Acces.	45641B	•	
OfficeShare Network Server	50902A		Dedicated PC Plus User S/W Network Server
OfficeShare Network User	50903A		
Transend COMplete	45414A	•	
VT100 Terminal Emulator	45412A		
<b>DATA BASE MANAGEMENT:</b>			
Condor3	45416A	•	
dBASEII—U.S.	45468D		
—French	45468AF		
—German	45468AD		
Executive Card Manager	45421A	•	
ECM: Templates	45441D	•	
HP Access	36898A	•	Corresponding 3000 software required
Pers. Card File—Afrikaans	45422AA	•	
—German	45422AD	•	
—Spanish	45422AE	•	
—French	45422AF	•	
—Dutch	45422AH	•	

Name	Product Number	Uses HP Touch	Special Requirements
—Latin Amer.	45422AM	●	
—Norwegian	45422AN	●	
—Swedish	45422AS	●	
—Finnish	45422AX	●	
—Danish	45422AY	●	
—Italian	45422AZ	●	
PFS:File and PFS:Report	45488A	●	
R:Base 4000	45545A		
R:Base 5000	45563A		512K
<b>ENGINEERING DESIGN:</b>			
AutoCAD	47956A		512K
<b>GRAPHICS:</b>			
Diagraph	45463A	●	
Charting Gallery—U.S.	45513A	●	
—German	45513AD	●	
Drawing Gallery—U.S.	45411A	●	384K
—German	45411AD	●	384K
Gallery Pic. Library, Vol. II	45433A		
Gallery Collection—U.S.	45437A	●	384K
—German	45437AD	●	384K
—Italian	45437AZ	●	384K
GraphPlan by Chang Labs	45467A	●	
Graphwriter Basic Set	45484A	●	
Painter	45540A	●	
Picture Perfect	45462A	●	
PFS:Graph	45490A	●	
S/100 Graphics—Afrikaans	45410AA	●	
—Spanish	45410AE	●	
—French	45410AF	●	
—Dutch	45410AH	●	
—Latin Amer.	45410AM	●	
—Norwegian	45410AN	●	
—Swedish	45410AS	●	
—Finnish	45410AX	●	
—Danish	45410AY	●	
—Italian	45410AZ	●	
<b>INTEGRATED SOLUTIONS:</b>			
ExecuDesk—U.S.	45444A	●	
—German	45444AD	●	
—Danish	45444AY	●	
—Italian	45444AZ	●	
ExecuDesk System	45442A	●	384K
Symphony from Lotus	45498A	●	

Name	Product Number	Uses HP Touch	Special Requirements
<b>PROGRAMMING LANGUAGES AND DEVELOPMENT TOOLS:</b>			
BASIC by Microsoft	45445D		
BASIC Programmer's Library	45310A		
COBOL by Microsoft	45448A		
Compiled BASIC by Microsoft	45446D		
Cross Reference Utility	92248BA		
Forms Master	45443A	●	
FORTRAN by Microsoft	45449D		
GW-BASIC by Microsoft	45450D	●	
ICON Design System	45311A	●	
Lattice C Compiler	45452D		
Pascal by Microsoft	45447D		
Programmer's Tools	45435A		
<b>SPREADSHEETS:</b>			
1-2-3 from Lotus	45482A		
Financial Calculator	45423A		
MicroPlan	45465A	●	
MicroPlan Conso. Module	45466A		
Microsoft Multiplan	45473D	●	
Deluxe Visicalc/150—U.S.	45405A	●	
—French	45405AF	●	
Visicalc/150—Afrikaans	45405AA	●	
—German	45405AD	●	
—Spanish	45405AE	●	
—Dutch	45405AH	●	
—Latin American	45405AM	●	
—Norwegian	45405AN	●	
—Swedish	45405AS	●	
—Finnish	45405AX	●	
—Danish	45405AY	●	
—Italian	45405AZ	●	
<b>UTILITIES:</b>			
HP PLCPak	33406A		
Print Central/150	36890A		Corresponding 3000 software required



Name	Product Number	Uses HP Touch	Special Requirements
<b>WORD PROCESSING:</b>			
HPWORD/150 U.S. English	27505A	●	512K
HPWORD/150 U.K. English	27505AB		
Executive MemoMaker U.S.	45418A	●	
Executive MemoMaker— German	45418AD		
Executive MemoMaker— Italian	45418AZ		
MemoMaker—Afrikaans	45420AA	●	
—German	45420AD	●	
—Spanish	45420AE	●	
—French	45420AF	●	
—Dutch	45420AH	●	
—Latin Amer.	45420AM	●	
—Norwegian	45420AN	●	
—Swedish	45420AS	●	
—Hebrew	45420AT	●	
—Arabic	45420AV	●	
—Finnish	45420AX	●	
—Danish	45420AY	●	
—Italian	45420AZ	●	
Microsoft SPELL	45556D	●	
Microsoft WORD	45474D	●	
MultiMate	45424A	●	
PFS:Write	45489A	●	
WordStar—U.S.	45400D	●	
WordStar Professional	45427D		384K + dual double sided disk drive
WordStar Professional Options	45429D		384K + dual double sided disk drive

Name	Product Number	Uses HP Touch	Special Requirements
European WordStar/MailMerge Combo:			
—U.K. English	45313AB		
—German	45313AD		
—Spanish	45313AE		
—French	45313AF		
—Dutch	45313AH		
—Norway	45313AN		
—Swedish	45313AS		
—Finnish	45313AX		
—Danish	45313AY		
—Italian	45313AZ		





**Vectra PC Software  
Available from HP**

Marilyn Ruel, Suzy Pollock  
Audrey Stroub, Patty Brenner

To determine which U.S. products are recommended for use with localized computers, check with your dealer or HP office.

Name	Product #	Uses HP Touch	Special Requirements
<b>COMMUNICATIONS:</b>			
AdvanceLink 2392	68333F		
HP IRMA IBM3278/79 Term Emul	50920A		
HPMessage	36569E		Corresponding 3000 software required
OfficeShare Network Server	50902F		Dedicated PC Plus user software
OfficeShare Network User	50903F		Network Server
<b>DATA BASE MANAGEMENT:</b>			
Executive Card Manager (ECM)	68331F	•	
ECM: Templates	68335F	•	
HP Access	36898F	•	Corresponding 3000 software required
R:Base 5000	68336F		
<b>GRAPHICS:</b>			
TextCharts	45406E		
<b>INTEGRATED SOLUTIONS:</b>			
Symphony from Lotus	68339F		
<b>PROGRAMMING LANGUAGES AND DEVELOPMENT TOOLS:</b>			
MS BASIC Compiler	35190B		
MS BASIC Interpreter	35190A		
MS C Compiler	35186E		
MS COBOL Compiler	35186B		
MS FORTRAN Compiler	35186C		
MS Pascal Compiler	35186D		
<b>SPREADSHEETS:</b>			
1-2-3 from Lotus	68340F		
Executive Spreadsheet	68332F	•	
<b>UTILITIES:</b>			
HP PLC PAK	33406B		
Print Central/Vectra	36890F		Corresponding 3000 software required
Laser Control 100	35190J		



Name	Product #	Uses HP Touch	Special Requirements
<b>WORD PROCESSING:</b>			
AdvanceWrite I	27506F		
AdvanceWrite II	27507F		
AdvanceWrite III	27508F		
Executive MemoMaker	68330F	•	
MS Word	35190D		
MultiMate	68338F		
MultiMate Advantage	68343F		
WordStar	68345F		
WordStar Professional	68346F		
WordStar 2000	68341F		
WordStar 2000 Plus	68342F		
<b>MISCELLANEOUS:</b>			
Millionaire: Stock Market Simulation	922458A		
Sargon III	35182F		
Teach Yourself WordStar	35190G		
ThinkTank	35190H		
Tycoon: Commodities Market Simulation	92245EA		
Typing Tutor III	35190F		
Zork I	35180F		
Baron: Real Estate Simulation	92245AA		
Flight Simulator	35183F		
Harvard Project Manager	35190E		
Hitchhiker's Guide: Interactive Fiction	35181F		



**Portable/Portable Plus  
Software Available from HP**

Marilyn Ruel  
Suzy Pollock  
Jane Blando

To determine which U.S. products are recommended for use with localized computers, check with your dealer or HP office.

Name	Product Number	Portable	Portable Plus
<b>ACCOUNTING:</b>			
Rags to Riches Ledger	45520C	●	
Rags to Riches Sales	45521C	●	
Rags to Riches Receivables	45522C	●	
Rags to Riches Payables	45523C	●	
<b>COMMUNICATIONS:</b>			
Dow Jones Spreadsheet Link	45511D	●	
PC2622 for Portable PLUS	82861K		
	Opt.400		ROM
Reflection 1	82863K		
	Opt.400		ROM
<b>DATA BASE MANAGEMENT:</b>			
d:BASEII	45468D	●	●
<b>PROGRAMMING LANGUAGES AND DEVELOPMENT TOOLS</b>			
BASIC by Microsoft	45445D	●	
BASIC by Microsoft	82862K		
	Opt. 400		ROM
Compiled BASIC by Microsoft	45446D	●	●
FORTRAN by Microsoft	45449D	●	●
GW-BASIC by Microsoft	45450D	●	
Lattice C Compiler	45452D	●	●
Pascal by Microsoft	45447D	●	●
Programmer's Tools	45419C	●	●
<b>SPREADSHEETS:</b>			
1-2-3 from Lotus	45548K		
	Opt. 400		ROM
Microsoft Multiplan	45473D	●	

Name	Product Number	Portable	Portable Plus
WORD PROCESSING:			
MemoMaker/Time Management	45504K Opt. 400		ROM
Microsoft SPELL	45556D	•	•
Microsoft WORD	45474D	•	
Microsoft WORD	45549K Opt. 400		ROM
WordStar	45400D	•	



**Discontinued Software**

Product Name	Touchscreen/150:	
	Product #	Superseded by:
<b>DATABASES:</b>		
DSN/Link—U.S. English	45425A	AdvanceLink/150—45431A
—U.K. English	45425AB	AdvanceLink/150—45431A
Condor 1	45415A	Condor 3—45416A
Condor 1 to 3 Upgrade	45417A	Condor 3—45416A
dBASE II/150	45468A	dBASE II—45468D
Personal Card File/150	45422A	Executive Card Manager— 45421A
<b>GRAPHICS:</b>		
Charting Gallery/Executive MemoMaker Bundle	45440A	Sold separately: Charting Gallery—45513A and/or Executive MemoMaker— 45418A
Series 100 Graphics—U.S.	45410A	Charting Gallery—45513A
—German	45410AD	German Charting Gallery— 45513AD
<b>PROGRAMMING:</b>		
BASIC by Microsoft/150	45445A	BASIC by Microsoft—45445D
Compiled BASIC/150	45446A	Compiled BASIC—45446D
FORTRAN by Microsoft/150	45449A	FORTRAN by Microsoft— 45446D
GW-BASIC by Microsoft/150	45450A	GW-BASIC by Microsoft— 45450D
Pascal by Microsoft/150	45447A	Pascal by Microsoft/150— 45447D
<b>SPREADSHEETS:</b>		
Context MBA/150	45481A	None
Microsoft Multiplan/150	45473A	Microsoft Multiplan 45473D
VisiCalc/150—U.S. English	45405A	Deluxe VisiCalc/150—45405A
—French	45405AF	French Deluxe VisiCalc/150— 45405AF
<b>WORD PROCESSING:</b>		
MemoMaker/150—U.S. English Touchscreen	45420A	Executive MemoMaker/150— 45418A



<b>Product Name</b>	<b>Product #</b>	<b>Superseded by:</b>
WordStar/150—U.S. English	45400A	WordStar—45400D
—U.K. English	45400AB	U.K. WordStar/MailMerge Combo—45313AB
—German	45400AD	German WordStar/ MailMerge Combo— 45313AD
—Spanish	45400AE	Spanish WordStar/MailMerge Combo—45313AE
—French	45400AF	French WordStar/MailMerge Combo—45313AF
—Dutch	45400AH	Dutch WordStar/MailMerge Combo—45313AH
—Norwegian	45400AN	Norwegian WordStar/ MailMerge Combo— 45313AN
—Swedish	45400AS	Swedish WordStar/ MailMerge Combo—45313AS
—Finnish	45400AX	Finnish WordStar/MailMerge Combo—45313AX
—Danish	45400AY	Danish WordStar/MailMerge Combo—45313AY
—Italian	45400AZ	Italian WordStar/MailMerge Combo—45313AZ
MailMerge—U.S. English	45401A	Included in WordStar Professional—45427D or Professional Options— 45429D
—U.K. English	45400AB	U.K. WordStar/MailMerge Combo—45313AB
—German	45400AD	German WordStar/ MailMerge Combo— 45313AD
—Spanish	45400AE	Spanish WordStar/MailMerge Combo—45313AE
—French	45400AF	French WordStar/MailMerge Combo—45313AF
—Dutch	45400AH	Dutch WordStar/MailMerge Combo—45313AH
—Norwegian	45400AN	Norwegian WordStar/ MailMerge Combo— 45313AN
—Swedish	45400AS	Swedish WordStar/ MailMerge Combo—45313AS
—Finnish	45400AX	Finnish WordStar/MailMerge Combo—45313AX

Product Name	Product #	Superseded by:
—Danish	45400AY	Danish WordStar/MailMerge Combo—45313AY
—Italian	45400AZ	Italian WordStar/MailMerge Combo—45313AZ
SpellStar	45402A	SpellStar has been superseded by CorrectStar which is included in WordStar Professional—45427D and/or Professional Options—45429D. An Upgrade kit is available from CorrectStar to SpellStar for users with a dual single-sided disc drive.
WordStar/MailMerge/ SpellStar Combo	45404A	Superseded by WordStar Professional—45427D.

**HP Vectra PC and/or IBM PC/XT/AT:**

Product Name	Product #	Superseded by:
DATA COMMUNICATIONS:		
AdvanceLink	45431E	AdvanceLink 2392—68333F
Monitor/IBM PC	45439A	AdvanceLink 2392—68333F
DATABASES:		
Personal Card File	45422E	Executive Card Manager—68331F

**The Portable or the Portable Plus:**

Product Name	Product #	Superseded by:
DATABASES:		
DataFax	45408C	None





Here is a list of the most popular HP PC supplies and accessories.

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

For ordering information—or to obtain a copy of the *User's Catalog*—refer to the “How To Order” section in this Current Information section.

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### For Computers

#### ■ The Portable

13269K	Vinyl replacement case
13269U	Carrying case—Leather
13269V	System carrying case
13269W	Attaché case
13269Z	Leather briefcase
92221P	RS232C printer cable (1.5 meters)
92221M	RS232C modem cable (1.5 meters)
92222F	RS232C gender converter (female)
92222M	RS232C gender converter (male)
82167A	HP-IL cable (0.5 meters)

#### ■ HP 120 Personal Computer

13242H	RS-232C cable (use 13242-60011 for replacement)
13269P	Carrying case (for HP 120 with short keyboard plus 9121 disc drive; or HP 120 with extended keyboard)
92171C	Keyboard drawer park
92171J	Keyboard park—large
92171T	System turntable
82167B	HP-IL cable (1.0 meter)
92240A	Display tilt unit
92240B	Display swivel unit
92250D	Dust cover
92220R	Right-angle HP-IB cable (0.3 meters long)
92251P	“Stacked” dust cover (for computer and disk drive)

#### ■ HP 125 Personal Computer

92160A	Thermal paper, blue print (box of 24 rolls)
92160B	Thermal paper, black print (box of 24 rolls)
92171C	Keyboard drawer park
92171R	Keyboard palm rest (for extended keyboard)
92171T	System turntable
92207A	Anti-glare filter
92250B	Dust cover

#### ■ HP 150 Touchscreen Personal Computer

92160A	Thermal paper, blue print (box of 24 rolls)
92160B	Thermal paper, black print (box of 24 rolls)
92160C	Thermal paper, (page-perforated, box of 24 rolls)
13242H	RS-232C cable (use 13242-60011 for replacement)
13269BB	Carrying case for Touchscreen
13269C	Carrying case (for HP 150 and 9121 disc drive)

92250F Dust cover for 150  
 92250K Dust cover for Touchscreen  
 92171C Keyboard drawer park  
 92171J Large (extended) keyboard park  
 92171X ThinkJet printer stand for top of display  
 92208A Mobile PC Centre  
 92240A Light-gray tilt unit  
 92240B Light-gray swivel unit  
 92220R Right-angle HP-IB cable (0.3 meters long)

■ **HP Vectra PC**

24542D Parallel printer cable for the Vectra PC (2 meters)  
 24542G Serial printer cable for the Vectra PC (3 meters)  
 24542H Serial plotter cable for Vectra PC to 7550 plotter  
 24542M U.S./European modem cable (3 meters) for the Vectra PC  
 35178A Vectra PC three-piece carrying case  
 45741A Monochrome video extension cable  
 45742A Color video extension cable  
 45986A Security System Lock  
 45989A Floor Stand  
 92171X ThinkJet printer stand for top of display  
 92171Z Vectra PC keyboard park  
 92190X High-capacity 5.25-inch flexible discs, 1.2 MB formatted capacity for use on the Vectra PC's high capacity internal disc drive (box of 10 discs)  
 92190A 5.25-inch flexible discs, 360 KB formatted capacity (box of 10 discs)  
 92208A Mobile PC Centre  
 92259A Vectra PC dust cover for monochrome monitor and keyboard  
 92259B Vectra PC dust cover for color monitor and keyboard

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**For Disc Drives**

■ **HP 82901M/S, 82902M/S, 9130A, 9135A 5.25-inch Disc Drives**

92190A 5.25-inch flexible discs, double-sided (box of 10 discs)  
 92190L 5.25-inch flexible discs in Flex Files  
 92193K 5.25-inch flexible-disc drive-cleaning kit  
 92194N 5.25-inch rolltop file (capacity 120 discs)  
 92251A Dust cover (82901M/S)  
 92251B Dust cover (82902M/S)

■ **HP 9121D/S, 9133A/B, 9133V/XV, 9134 3.5-inch Disc Drives; 9114A, 9122D, 9122S, and 9133D Disc Drives**

92191A 3.5-inch micro flex discs—single-sided (box of 10)  
 92192A 3.5-inch micro flex discs—double-sided (box of 10)  
 92191D 3.5-inch micro flex disc desktop file (capacity 50)  
 92191H 3.5-inch micro flex disc album (capacity 20) (replaces 92191C)  
 92191R 3.5-inch micro flex disc roll-top file (capacity 50)  
 92251D Dust cover (9121 D/S)  
 13269T Disc-drive case for 9121

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**For Printers****■ HP 2225A/B/C/D ThinkJet**

92261A	Individual printhead ink cartridge
92261D	Accessory Kit (2 print heads, 500 sheets fanfold paper, 500 sheets cut paper, 1 dust cover & 1 printer stand)
92261L	Fan-folded ink-jet paper (1000 sheets)
92261M	Cut-sheet ink-jet paper (four 500-sheet packs)
92261N	Fan-folded ink-jet paper (five 500-sheet packs)
92261S	Desktop ThinkJet printer stand
92171X	Terminal top ThinkJet printer stand for 239X series terminals
92250V	Dust cover
13269TT	Carrying case

**■ HP 2601A Daisywheel Printer**

92151C	Multi-strike ribbon cartridges (box of 12 cartridges)
92151D	Fabric ribbon cartridges (box of 12 cartridges)
92157A	Printer paper, fan-folded (box of 2400 sheets)
92157C	Printer paper, microperforated fan-folded (box of 2400 sheets)
92177C	Sound enclosure
92210P	Printer stand
92177Q	Sheet-feeder
92252 Series	Plastic print wheels, 96 character (box of 6 wheels)
92153 Series	Metal print wheels (1 each)

**■ HP 2602A Daisywheel Printer**

92151H	Multi-strike ribbon cartridge (box of 12 cartridges)
92157A	Printer paper, fan-folded (box of 2400 sheets)
92177D	Sound enclosure
92157C	Printer paper, microperforated fan-folded (box of 2400 sheets)
92177R	Sheet-feeder
92262 Series	Plastic print wheels, 98-character, USASCII
92263 Series	Plastic print wheels, 98-character, International
92264 Series	Plastic print wheels, HP 150 International Keyboard Support

**■ HP 2932A/2934A Dot-Matrix Printer**

92154B	Print head (average life of 200 million characters)
92155L	Ribbon cartridges (box of 3 cartridges)
92157A	Printer paper, fan-folded (box of 2400 sheets)
92157C	Printer paper, microperforated, fan-folded (box of 2400 sheets)
92155M	OCR ribbon cartridge—for bar code applications (box of 3 cartridges)
92214P	Mobile printer stand

**■ HP 2671A/G and 2673A Thermal Printers**

92160A	Thermal paper, blue print (box of 24 rolls)
92160B	Thermal paper, black print (box of 24 rolls)
92160C	Thermal paper, blue print, page perforated (box of 24 rolls)
92160D	Thermal paper, black print (box of 4 rolls)
92160E	Thermal paper, black print (box of 330 fan-folded sheets)
92160M	Thermal paper, blue print (box of 1320 fan-folded sheets)
92160N	Thermal paper, black print (box of 1320 fan-folded sheets)

■ **HP 2686A LaserJet Printer**

92219H	RS232C cable to HP 150 (5 meters)
92219J	RS232C cable to IBM PC (5 meters)
92214P	Mobile printer stand
92215F	RS232C extension cable (15 meters)
92215T	RS232C extension cable (30 meters)
92285A	Toner (EP) cartridge—black
92285G	Toner (EP) cartridge—brown
92285B	8.5" x 11" paper tray
92285C	8.5" x 14" paper tray
92285F	LaserJet forward collator
92285D	Metric A4-size paper tray
92285E	Metric B5-size paper tray
92285P	Font Organizer
92286A	Plug-in type-font cartridge (Courier and Line Printer, compressed)
92286B	Plug-in type-font cartridge (Proportional Spacing)
92286C	Plug-in type-font cartridge (International Courier)
92286D	Plug-in type-font cartridge (Prestige Elite)
92286E	Plug-in type-font cartridge (Letter Gothic)
92286F	Plug-in type-font cartridge (Proportional Spacing II)
92286G	Plug-in type-font cartridge (Legal Elite)
92286J	Plug-in type-font cartridge (Math Elite)
92286H	Plug-in type-font cartridge (Legal Courier)
92286L	Plug-in type-font cartridge (Courier and Line Printer)
92286M	Plug-in type-font cartridge (Prestige Elite P + L)
92286N	Plug-in type-font cartridge (Letter Gothic P + L)
92286P	Plug-in type-font cartridge (Tms Rmn P + L)
92286Q	Plug-in type-font cartridge (Memo 1)
92286T	Plug-in type-font cartridge (Tax)
92286U	Plug-in type-font cartridge (Forms, "portrait"-style)
92286V	Plug-in type-font cartridge (Forms, "landscape"-style)

■ **HP 82905A/B Dot-Matrix Printer**

92156A	Ribbon cartridges (box of 2 cartridges)
92157A	Printer paper, fan-folded (box of 2400 sheets)
92157C	Printer paper, microperforated, fan-folded
92154P	Print head
92171S	Desktop printer stand
92250T	Dust cover

■ **HP 82906A Dot-Matrix Printer**

92156A	Ribbon cartridges (box of 2 cartridges)
92154N	Print head
92171N	Forms tractor unit
92157A	Printer paper, fan-folded (box of 2400 sheets)
92157C	Printer paper, microperforated, fan-folded (box of 2400 sheets)
92171S	Desktop printer stand

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**For HP 7470A and 7475A Plotters****■ Paper**

9280-0589	Fifty A-size sheets (blank)
9280-0517	Three hundred A-size sheets (blank)
9280-0588	Fifty A4-size sheets (blank)
9280-0519	Three hundred A4-size sheets (blank)
9280-0614	Fifty B-size sheets (blank)
9280-0518	Three hundred B-size sheets (blank)
9280-0615	Fifty A3-size sheets (blank)
9280-0610	Three hundred A3-size sheets (blank)
9280-0640	Fifty A-size sheets (gloss-finish heavy-weight)
9280-0642	Fifty A4-size sheets (gloss-finish heavy-weight)
9280-0641	Fifty B-size sheets (gloss-finish heavy-weight)
9280-0643	Fifty A3-size sheets (gloss-finish heavy-weight)

**■ Paper-and-Pen Kits**

5061-5070	Three hundred A-size sheets; pen holder; 20 fiber-tip pens (10 colors, 2 line-widths)
5061-5071	Three hundred A4-size sheets; pen holder; 20 fiber-tip pens (10 colors, 2 line-widths)

**■ Transparency Film**

17700T/9270-1126	Fifty A-size sheets (for the 7470A plotter)
17701T/9270-1181	Fifty A-size sheets (for the 7475A plotter)
17702T/9270-1182	Fifty A4-size sheets (for the 7475A plotter)

**■ Transparency Kits**

5061-7561	Fifty sheets of paper-backed A-size transparency film; 16 pens (7 colors, 2 tip-widths) (for the 7470A plotter)
5061-7583	Fifty sheets of paper-backed A-size transparency film; 16 pens (7 colors, 2 tip-widths) (for the 7475A plotter)
5061-7584	Fifty sheets of paper-backed A4-size transparency film; 16 pens (7 colors, 2 tip-widths) (for the 7475A plotter)

**■ Fiber-Tip Pens (for use with paper)**

5060-6784	Narrow line-width (0.3-mm) red pen (package of 5)
5060-6785	Narrow line-width (0.3-mm) blue pen (package of 5)
5060-6786	Narrow line-width (0.3-mm) green pen (package of 5)
5060-6787	Narrow line-width (0.3-mm) black pen (package of 5)
5060-6890	Wide line-width (0.7-mm) black pen (package of 5)
5060-6891	Wide line-width (0.7-mm) blue pen (package of 5)
5060-6892	Wide line-width (0.7-mm) green pen (package of 5)
5060-6893	Wide line-width (0.7-mm) red pen (package of 5)
5060-6810	Narrow line-width (0.3-mm) pens (package of 4: one each red, blue, green, and black)
5060-6858	Wide line-width (0.7-mm) pens (package of 4: one each red, blue, green, and black)
5060-6894	Narrow line-width (0.3-mm) pens (package of 6: one each orange, brown, violet, turquoise, gold, lime green)
5060-6895	Wide line-width (0.7-mm) pens (package of 6: one each orange, brown, violet, turquoise, gold, lime green)



■ **Transparency Pens (for use with film)**

5061-5010	Narrow line-width (0.3-mm) black pen (package of 5)
5061-5012	Narrow line-width (0.3-mm) red pen (package of 5)
5061-5015	Narrow line-width (0.3-mm) green pen (package of 5)
5061-5016	Narrow line-width (0.3-mm) blue pen (package of 5)
5061-5020	Wide line-width (0.7-mm) black pen (package of 5)
5061-5022	Wide line-width (0.7-mm) red pen (package of 5)
5061-5025	Wide line-width (0.7-mm) green pen (package of 5)
5061-5026	Wide line-width (0.7-mm) blue pen (package of 5)
5060-6818	Narrow line-width (0.3-mm) pens (package of 4: one each red, blue, green, and black)
5060-6819	Wide line-width (0.7-mm) pens (package of 4: one each red, blue, green, and black)
5060-6834	Narrow line-width (0.3-mm) pens (package of 4: one each orange, brown, violet, and black)
5060-6835	Wide line-width (0.7-mm) pens (package of 4: one each orange, brown, violet, and black)

■ **Solvent**

5060-6828	One ounce (29.6 ml) of solvent for refreshing dry transparency pens
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■ **Accessories**

92171S	Desktop stand (7470A)
92177V	Personal Plotter-pen organizer (for fiber-tip pens)
92177T	Plotter-pen organizer (for short pens)
92177U	Plotter-pen organizer (for tall pens)
92177W	ColorPro (7440A) graphics organizer
92177X	7475A graphics organizer
92250N	Dust cover (7470A)
92214P	Mobile support stand (7475)





Hewlett-Packard personal business computers and their application programs are designed for ease of use and ease of learning. Classroom training courses can help first-time computer users rapidly build confidence and gain new skills in a supportive environment away from the day-to-day job.

### **HP-Conducted Introductory Courses**

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

■ *Introduction to Personal Computers*

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

35119A (1 day)

■ *Getting Started With the Portable*

If you're a novice computer user interested in learning how to use the HP Portable, this workshop is for you. It includes instruction on P.A.M., MemoMaker, and Terminal, along with an introduction to Lotus™ 1-2-3™ and Personal-Desktop Link. You'll get hands-on experience with the computer, the built-in applications, and HP-IL peripherals.

35036C (1 day)

■ *Getting Started with your HP 150*

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

35036A (1 day)

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

■ *HP 12x User Course*

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

35042B (2 days)

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

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**HP-Conducted  
Application Courses**

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

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

■ *Introducing Lotus 1-2-3*

This introductory workshop familiarizes you with the features, worksheet, and command structure of Lotus 1-2-3. Using hands-on practice, you will learn how to create and format a spreadsheet; save a worksheet and print a report; create and use a database; and create, print, and plot a graph.

45688A (1 day)

■ *VisiCalc/150*

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

35125A (1 day)

■ *WordStar®/150*

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

35123B (1 day)

■ *MailMerge and SpellStar/150*

As a follow-on to WordStar, this workshop shows you how to merge files with MailMerge™ as well as proof your text using the SpellStar™ 20,000 word dictionary. In practice sessions, you will learn how to create a mailing

list database and then combine this with text files to print customized letters and memos. The majority of WordStar's dot commands are explained and illustrated.

35123C (½ day)

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

35123A (1½ days)

- *Condor/150 20-1*

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

35124B (1 day)

- *Condor/150 20-3*

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

35124C (1 day)

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

35124A (2 days)

- *HP 150 Applications: Sharing Information*

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

35037A (½ day)

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**HP-Conducted  
Programming Courses**

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

- HP 12x Programmer training is provided by the HP 12x Program Development Course, which covers CP/M®, the specifics of Series

100/BASIC, and the assembly language. This course is designed for those who have programming experience in both BASIC and an assembly language.

34043A (5 days)

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**HP Customized Training**

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

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**Dealer-Conducted Courses**

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

## Ordering *Communicator* Back Issues

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

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

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### HP 120 and HP 125

Issues #1 through #6 cover primarily the HP 12x. (8½" x 11" page size)

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

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

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

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

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

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

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

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

- "Disc Formats on the HP Series 100"
- "Non-HP 12x CP/M Programs—Will They Run?"
- "Long Documents with Series 100/Word"
- "Series 100/Word: Y Table Gymnastics"
- "Using Graphics to Your Advantage"
- "Condor Tips"

- “Adding Your Application Program to the WELCOME Menu”
  - “Using Softkeys on Non-HP Systems”
  - “Changing Printer Characters”
  - “Using The HP 2121 Disc Drive with Your HP 125A”
- Communicator Issue #3* . . . . . 5957-6213

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

- “International System Summary”
  - “Condor News”
  - “Comparing BPI and Peachtree Accounting”
  - “Printing Mailing Labels from Condor”
  - “More on HPMAIL and the Series 100”
  - “File Transfers Using PIP”
  - “Accessing a Plotter from BASIC”
- Communicator Issue #4—U.S.* . . . . . 5957-6204  
*Communicator Issue #4—Intl.* . . . . . 5957-6214

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

- “Enhanced Installation Program Available”
  - “Video Display Interface for the HP 125”
  - “Comparing Condor and dBASE II”
  - “Sending Escape Codes to Printers from WordStar and Condor”
  - “Interchangeability of Word and WordStar Text”
  - “Two-Column Print in WordStar”
  - “WordStar Quick Tips and Defaults”
  - “Getting VisiCalc to Round Dollar Values to Two Places”
  - “Word: Wandering HP 2601A Printer Margins with the Sheet Feeder”
  - “DSN/Link: Enhanced File Transfer Capabilities over Link/125”
  - “Connecting Two Series 100 Systems for ASCII File Transfer”
  - “Transferring IMAGE/3000 Data to a Condor Database”
  - “Transferring Data to the HP 2700 Color Graphics Terminal”
  - “Installing the Operating System on Your Fixed Disc”
  - “Using the HP 2631B HP-IB Printer with Series 100”
  - “Programming Challenge—Bypassing WELCOME”
- Communicator Issue #5—U.S.* . . . . . 5957-6205  
*Communicator Issue #5—Intl.* . . . . . 5957-6215

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

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

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

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

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**HP 150 Touchscreen and HP 12x**

Issues #7 and #8 cover primarily the HP 150 Touchscreen and HP 12x. (5½" x 8½" page size)

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

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

*Communicator* Issue #7—U.S. . . . . . 5957-6207

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

**Issue #8 includes the following major articles:**

- “HP 150 Goes Worldwide”
- “HP 12x Fixed Disc Support Now Available”
- “Future Plans for the HP 120 and HP 125”
- “Using Plotters with the HP 150”
- “Installing dBASE II on the HP 150”
- “Three-Column Print in Word/12x”
- “Plotting Condor Data with HP Graphics”
- “Transferring Data Between a Series 100 Computer and an IBM PC”
- “Accessing Plotters from BASIC/150”



- “BASIC: How Do You Make RND More Random?”
  - “Install Your BASIC/150 Application in PAM”
  - “Decrease BASIC/150 Debugging Time with Cross Reference Utility
- Communicator Issue #8 . . . . . 5957-6218*

**Portable, HP 150  
Touchscreen, HP 12x**

Issues #9 and onward cover the Portable, HP 150 Touchscreen, and HP 12x. (5½" x 8½" page size)

**Issue #9 includes the following major articles:**

- “PIPPing Files on Your HP 12x”
- “From Numbers to Charts on the HP 150: dBASEII to Series 100 Graphics”
- “HP 150 Graphics: From the Screen to Your Printer”
- “Using Lotus/150 1-2-3 with the 7475A Plotter and B-size Paper”
- “Running Applications from MS-DOS on Your HP 150”
- “Word/12x: Rapid Returns”
- “Localizing Your HP 150”
- “Using Record Mode on the HP 150”
- “Escaping in High-Level Languages”
- “Access to the Touchscreen via MS-Pascal/150”
- “So You Want to Write Programs for the HP 150”
- “Introducing PFS:File and PFS:Report for the HP 150”
- “GraphPlan: New Integrated Spreadsheet and Graphics Software”
- “New Simulations—and a Chess Game—for the HP 150”
- “Challenging New Recreational Software for Series 100 PC Users”
- “The Portable: Desktop Capability in a Notebook-Sized Package”
- “The Portable: Compatibility with the HP 150”
- “Battery-Powered Peripherals for The Portable”
- “dBASEII for The Portable . . . and a New Version for the HP 150”

*Communicator Issue #9 . . . . . 5957-6219*

**Issue #10 includes the following major articles:**

- “Removing Soft Hyphens in WordStar/12x”
- “Adding Data Points to Linear Charts in Graphics/12x”
- “Internal Rate of Return: Using the Iteration Option in Multiplan”
- “Lotus 1-2-3: Disc Drives, Peripherals, and Data Bases”
- “Setting User-Defined Function Keys in dBASE II”

- “A ‘Help’ Menu for CP/M Utilities”
  - “Transferring Fixed-Length ASCII Records via DSN/Link”
  - “A Feature-by-Feature Comparison of the HP 150 and HP 2623A Terminals”
  - “Saving HP 150 Screen Graphics”
  - “BAT/150: A Fast, Easy Way to Obtain an .EXE File”
  - “Graphics on the HP 150: Filling Polygonal Areas”
  - “The Newest Members of the HP 150 Family”
  - “Two New Programming Tools for HP 150 Users”
  - “Double-Sided Disc Drives for the HP 150B”
  - “Announcing the EtherSeries/150 Local-Area Network”
  - “The HP 150B and the IBM PC Speak to Each Other”
  - “Enhanced Condor Software Now Available for the HP 150”
  - “Enhanced MicroPlan for the HP 150”
- Communicator Issue #10 . . . . . 5958-0250*

**Issue #11 includes the following major articles:**

- “Inverting the Order of Items on Lists in Word/12x”
  - “Using Memory Effectively in Lotus 1-2-3”
  - “Moving Blocks of Text in MemoMaker”
  - “Headings and Footings in Word/12x”
  - “Installing the ThinkJet Printer with WordStar”
  - “Writing Your Own Menu Routines”
  - “Using Escape Codes to Create Function Keys in COBOL”
  - “Reads with Handshaking in HP 150 BASIC”
  - “Double’s No Trouble”
  - “Precision Problems in Microsoft Languages”
  - “Presenting The Graphics Gallery”
  - “Introducing Dow Jones Spreadsheet Link”
  - “The BPI Family of Accounting Packages”
  - “Turbo Pascal: A Hot Item”
  - “Special Upgrade for Word/12x”
  - “From Keyboard to Printer with Type-a-Line”
  - “PFS: . . . for the HP 150”
  - “MultiMate and Friends”
  - “HP 125 Software Obsolescence”
- Communicator Issue #11 . . . . . 5958-0251*

**Issue #12 includes the following major articles:**

- “The HP Personal Computer Assistance Program”
- “How to Use Diagraph”
- “Transferring Files from Condor to dBASE II”

- “File Transfers—Every Which Way—with The Portable”
  - “MemoMaker on The Portable: Differences”
  - “LaserJet Support under MultiMate and WordStar”
  - “HP 120/125 Word and WordStar with the LaserJet”
  - “Macros in WordStar”
  - “File Transfers from VisiCalc to Condor”
  - “What’s So Special about BASIC?”
  - “Useful Functions in BASIC”
  - “General-Purpose Input Routines”
  - “BASIC Relational and Logical Operations”
  - “Fun with the Calendar”
  - “Introducing the Touchscreen II”
  - “ExecuDesk and the ExecuDesk System”
  - “New Personal Productivity Center Release”
  - “Introducing Print Central”
  - “HPWORD/150—HP 3000 Word Processing”
  - “HPAccess/Touchscreen and HPAccess Central”
  - “Data-Storage Solutions for HP PCs”
  - “Microsoft Word”
  - “MS-DOS Manual Update for Touchscreen II Owners”
  - “Announcing Deluxe VisiCalc”
  - “Introducing VT100 Emulation for the HP 150B”
  - “The Touchscreen 3278 Emulation Upgrade”
- Communicator* Issue #12. . . . . 5958-0252

**Issue #13 includes the following major articles:**

- “Condor/150: Computations Against Computed Values”
- “Condor/150: Sending Escape Sequences to Your Printer”
- “Diagraph and Picture Perfect: Positioning Multiple Pictures”
- “Lotus 1-2-3: Transferring Files to and from PCF”
- “MS Word: How to PRINT MERGE Data from dBASEII”
- “MS Word: How to PRINT MERGE Data from Condor”
- “WordStar: Installing Multiple Copies on One Fixed Disc”
- “WordStar: Installing Multiple Copies on One Flexible Disc”
- “Helpful Hints for Compiling BASIC Programs”
- “Double-Referencing Variables in Compiled BASIC”
- “The 64 Dollar/K Question”
- “BASIC Floating Point Internal Representation”
- “BASIC General Purpose Error-Handling Routines”

- “A Complete Guide to BASIC Strings”
  - “Introducing the Vectra PC”
  - “Upgrading Your HP 150A or Touchscreen to a Touchscreen II”
  - “Independent Software Vendor Program Update”
  - “Introducing Executive Card Manager”
  - “Symphony for the Touchscreen/150”
- Communicator Issue #13* . . . . . 5958-0253

**Issue #14 includes the following major articles:**

- “Word/12x: Printing the Unique Spanish Characters”
- “WordStar: Letter Quality Printing with an Okidata Printer”
- “WordStar: Underlining with an Okidata Printer”
- “Running the Vectra SETUP Program”
- “Programming Screen Enhancements on HP Vectra PC”
- “Video and the HP Vectra PC”
- “Graphing Data from Your BASIC Program”
- “Assembly Language Subroutines for BASIC Programs”
- “Introducing HP OfficeShare PC Local Area Network”
- “Introducing the New 1-2-3 for HP Vectra PC”
- “The Executive Series”
- “MicroPro Products for Hp Vectra PC”
- “New Supplies and Accessories”

*Communicator Issue #14* . . . . . 5958-0254

*Additional copies of this current issue are available:*

*Communicator Issue #15* . . . . . 5958-0255





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This section lists the software exchange kits available for The Portable, HP 120/125, Touchscreen/150, and HP Vectra PC. These kits contain the latest software and any manual updates issued since the original release.

**Exchange kits are provided at a nominal charge.** You return your original master disc as proof of purchase and continue operating as usual with your work copy of the software.

Software Exchange Kits are provided for several different purposes:

- **Updates.** Software is revised to add new features, to work with new peripherals, or to correct problems. You can update your program and manuals at a nominal cost by ordering the appropriate Software Exchange Kit.

The *Encyclopedia* article for your product explains the capabilities added or problems fixed in the latest version.

- **Upgrades.** When major features are added to a software product, you can order a Software Exchange Kit at a low cost—"trading in" your older version for one with the latest capabilities and documentation.

The *Encyclopedia* article for your product gives the details of new features.

- **Media Replacement.** The master-copy/work-copy technique used is designed to minimize the risk of damage to your master software due to handling or human error. If this happens, Software Exchange Kits are available at a nominal charge. If the product has been updated since your original purchase, the Exchange Kit contains the latest version and any manual updates issued since the original release.

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**Ordering**

To order:

- In the U.S., Software Exchange Kits are available through your HP dealer or by mail from HP's Direct Marketing Division, using the form given later in this magazine.
- Outside the U.S., contact your HP dealer or HP sales and service office for details.

For each kit ordered, along with your payment submit one corresponding original master disc. This is the disc with the HP software product number and description printed on the label.

**Be sure to make working copies before sending your master disc.**

**To determine the price for a kit,** contact your dealer or HP office—or call the HP telephone order number for your country. (See the “How to Order” section later in this Current Information insert.) HP cannot accept orders submitted without the correct master disc.

Refer to the tables on the next pages for Exchange Kit part numbers.

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**HP Internal Orders**

For HP Internal Orders of Software Exchange Kits, return the original master discs to:

Software Product Marketing, Building 78  
or Hewlett-Packard  
Attn: Software Product Marketing  
P.O. Box 60008  
Sunnyvale, CA 94088

Reference your HP Internal Order number on the package.

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**Replacement Media for Discontinued Software**

We are committed to sustain support for Hewlett-Packard products well after technology advances and market demand cause us to discontinue offering a product for sale.

It is HP corporate policy to ensure availability of parts and full support services for your computer for five years beyond discontinuance. Specifically, this means:

- Replacement Media Exchange Kits available for five years from date of last HP shipment, as indicated for each product in the “Discontinued Software” table in this section.
- Availability of telephone assistance through Hewlett-Packard Help Line Response Centers.
- Continuing coverage in this magazine—the *HP PC Communicator*. (By the way, you can help—share your tips and ideas with other users—just send a note to the *Communicator* editor.)

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**Products Not Listed**

Because entertainment software packages are low-priced, there are no exchange kits for these products. Re-order the original product to replace damaged discs.

For information on other products not listed, contact your dealer or HP Sales and Service Office.

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**Touchscreen/150  
Software Exchange Kits**

Product	Version	Order Part #	Notes
<b>Touchscreen (HP 150B) Operating System and Utilities</b>		45626-63007	3
Sys Master Disc			
MS-DOS	B.02.02		
MS-DOS	B.02.02		
COMMANDS			
P.A.M.	B.02.02		
HPBIOS	B.02.02		
FORMAT	B.02.00		
DEV CONFIG	B.02.00		
Appl Master Disc			
COPY/BACKUP	B.02.02		
INSTALL	B.02.02		
SET UP P.A.M.	B.02.02		
MS-DOS	B.02.03		
UTILITIES			
<b>Touchscreen II Operating System and Utilities</b>		45847-63004	4
MS-DOS	2.11		
MS-DOS	2.11		
COMMANDS			
P.A.M.	C.01.00		
HPBIOS	C.01.02		
FORMAT	C.01.00		
DEV CONFIG	C.01.00		
EASY CONFIG	C.01.00		
COPY/BACKUP	C.01.00		
INSTALL	C.01.00		
SET UP	C.01.00		
SAVERAM	C.01.01		
MS-DOS	C.01.00		
UTILITIES			
OP SYS			
MASTER:			
European Spanish		45847-63005	
French		45847-63006	
German		45847-63007	
Dutch		45847-63008	
Norwegian		45847-63010	
Swedish		45847-63011	
UK		45847-63012	
Finnish		45847-63013	
Danish		45847-63014	
Italian		45847-63015	



<b>Product</b>	<b>Version</b>	<b>Order Part #</b>	<b>Notes</b>
AdvanceLink	A.03.02	45431-63002	
BASIC Interpreter	A.01.01	45445-63002	
BASIC Compiler	A.01.01	45446-63002	
BPI General Acctg.	A.01.00	45455-63001	
BPI Personal Acctg.	A.01.11	45459-63001	
BPI Accounts Rec.	A.01.11	45456-63001	
COBOL	A.01.00	45448-63001	
Condor 3	*A.02.11	45416-63002	1
CorrectStar (hard-disc upgrade)	3.31	45429-63002	
CorrectStar to SpellStar Upgrade	3.31	45429-63001	
dBASE II	*A.02.41	45468-63001	
Diagraph	A.03.00	45463-63001	
Financial Calculator	n/a	n/a	2
DSN/Link	A.01.01	45424-63001	
Forms Master	A.01.00	45443-63001	
FORTTRAN	A.01.00	45449-63001	
FORTTRAN Upgrade	A.01.00	45449-63003	
Graphics (bar disc, pie disc, line disc, text disc, examples disc)	*A.03.01	45410-63001	
GraphPlan	1.00.T2	45467-63001	
GraphWriter	A.01.01	45484-63001	
GW BASIC	A.01.00	45450-63002	
HP Word	A.00.00	27505-63001	
Lattice C Compiler	A.01.00	45452-63001	
Lotus 1-2-3:			
System Disc	1A.2	45482-63001	
System Disc	1A.2	45482-63004	
Utility	1A.2	45482-63002	
Tutorial 1&2	1A.2	45482-63003	
Printgraph	1A.2	45482-63005	

Product	Version	Order Part #	Notes
MailMerge	A.03.30	45401-63001	
MemoMaker	B.01.02	45420-63001	
MicroPlan	4.04.T2	45465-63001	
MicroPlan Consol.	4.04.T2	45466-63001	
MS Word	B.01.00	45474-63002	
MultiMate	3.29	45424-63001	
MultiPlan	A.01.10	45473-63001	
Pascal	A.01.00	45447-63001	
PCF	B.00.02	45422-63001	
Picture Perfect	A.03.00	45462-63001	
PFS: File & Report	A.02.41	45488-63001	
Prog. Tools/Portable	A.01.00	45419-63001	
Prog. Tools/150	A.01.00	45435-63001	
R:Base 4000	1.1	45545-63001	
R:Base 5000	1.1	45563-63002	
SpellStar	A.03.30	45402-63001	
Symphony	1.1		
Prog. Disc, Tutorial, Help		45498-63001	
Printgraph, Utility Discs		45498-63002	
Install Prog., Library Discs		45498-63003	
Tutorial1, Tutorial2 Discs		45498-63004	
Transend COMplete	A.01.00	45414-63001	
VisiCalc	B.01.02	45405-63004	
VT100 Terminal Emulator	A.01.00	45412-63001	
WordStar	*A.03.3B	45400-63001	
WordStar Upgrade	3.3.3	45400-63031	

\*Revised since original release

†For each kit ordered, along with your payment submit one corresponding original master disc. This is the disc with the HP software product number and description printed on the label. Be sure to make working copies before sending your master disc.

**To determine the price for a kit**, contact your dealer or HP office, or call the HP telephone order number for your country. (See the "How to Order" section later in this Current Information Insert.) Orders submitted without the correct master disc cannot be accepted. If you want a kit with 5.25" discs, please indicate this preference on your order. Otherwise 3.5" disc will be shipped, regardless of the size of your returned master disc.

### Notes

- 1—Either a Condor 20-3 disc or a Condor-20-1-to-Condor-3 Upgrade disc can be exchanged for the Condor 3 disc.
- 2—Low-priced package. Re-order the original product to replace damaged media.
- 3—Three double-sided discs, written in single-sided format, to exchange for damaged HP 150A or Touchscreen (HP 150B) media. To upgrade an HP 150A to the **Touchscreen (HP 150B)** operating system, order this kit. To update an HP 150A or Touchscreen to the **Touchscreen II** operating system, order the Touchscreen II Upgrade Kit (45849-63006) from your dealer or HP office. The upgrade kit includes the new operating system disc and the ROM integrated circuits required by the new disc; it is not user-installable. (Refer to the article "Upgrading Your HP 150A or Touchscreen to a Touchscreen II" in *Communicator* Issue #13 for details).
- 4—Double-sided exchange disc for damaged Touchscreen II media. To upgrade an HP 150A or Touchscreen (HP 150B) to the Touchscreen II operating system, order the Touchscreen II Upgrade Kit (45849-63006) from your dealer or HP office. The upgrade kit includes the new operating system disc and the ROM integrated circuits required by the new disc; it is not user-installable. (Refer to the article "Upgrading Your HP 150A or Touchscreen to a Touchscreen II" in *Communicator* Issue #13 for details.)

### Vectra PC Media Replacement

Product	Version	Order Part #	Notes
Op Sys Disc		45951A	1
BASIC Interpreter		45952A	1
MS-DOS Macro Assembler		45953A	1

### Notes

- 1—Because an exchange kit would be priced at approximately the same price as the original product, the order number is for the original product.

### Portable Software Exchange Kits

Product	Version	Order Part #	Notes
BASIC Interpreter	A.01.01	45445-63002	
BASIC Compiler	A.01.01	45446-63002	
DataFax	A.01.01	45408-63001	
dBASEII	*A.02.41	45468-63001	
Prog. Tools	A.01.00	45419-63001	

\*Revised since original release.



**Discontinued Software  
Replacement Media Exchange Kits**

Product (Notes)	Version	Order Part Number†		Exchange Available Through
		3.5" Disc	5.25" Disc	
<b>HP 12x:</b>				
Op Sys/Util/12x	*A.02.00	45900-13810	45900-15810	April, 1990
Op Sys/Util/12x (6)	*A.02.00	45900-13800	45900-15800	April, 1990
VisiCalc/12x (6)	*A.02.01	45531-13800	45531-15800	April, 1990
Graphics/12x (6)	*A.01.03	45532-13800	45532-15800	April, 1990
Word/12x	*A.02.03	45533-13800	45533-15800	April, 1990
Link/12x (3)	A.02.00	45534-13800	45534-15800	April, 1990
DSN/Link/12x	A.01.01	45534-13810	45534-15810	April, 1990
BASIC/12x	A.05.21	45535-13800	45535-15800	April, 1990
Programming/12x	A.01.00	45536-13800	45536-15800	April, 1990
Condor 1/12x (5)	A.02.00	45550-13800	45550-15800	April, 1990
Condor 3/12x (4)	*A.02.01	45550-13802	45550-15802	April, 1990
BPI G/A/12x	A.01.00	45552-13800	45552-15800	April, 1990
BPI Payroll/12x	A.01.00	45553-13800	45553-15800	April, 1990
WordStar/12x	A.01.00	45560-13800	45560-15800	April, 1990
SpellStar/12x	A.01.00	45561-13800	45561-15800	April, 1990
MailMerge/12x	A.01.00	45562-13800	45562-15800	April, 1990
MicroPlan/12x	A.01.00	45670-13800	45670-15800	April, 1990
MicroPlan Cons./12x	A.01.00	45671-13800	45671-15800	April, 1990
<b>Touchscreen/150:</b>				
Condor 1/150	A.02.11	45415-63002	n/a	April, 1990
Context MBA/150	A.02.03	45481-63001	n/a	April, 1990

See notes on next page.

\*Revised since original release.

† For each kit ordered, along with your payment submit one corresponding original master disc. This is the disc with the HP software product number and description printed on the label. Be sure to make working copies before sending your master disc.

To determine the price for a kit, contact your dealer or HP office—or call the HP telephone order number for your country. (See the "How to Order" section later in this Current Information Insert.) Orders submitted without the correct master disc cannot be accepted.

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### Notes

- 3—This kit is to exchange your Link/125 disc for a Link/125 disc. (If you want to *upgrade* to Series 100 DSN/Link, order part number 45534-13810 or 45534-15810.)
- 4—A Condor 3 disc, a Condor 20-2 or 3 Upgrade disc, or a Condor 20-1 to 3 Upgrade disc may be exchanged for the Condor 3 disc.
- 5—A Condor 2 disc or a Condor 1 to 2 upgrade disc may be exchanged for the Condor 2 disc.
- 6—Exchange Kit includes complete new 5½" x 8½" manuals.

All of the items listed in this issue, except software update/upgrade kits and HP-conducted training courses, are available from your dealer or HP:

- Your local HP Dealer can often provide immediate delivery. (To locate a dealer, call 800/FOR-HPPC in the U.S. or contact your local HP office—ask for "Personal Computer Dealer Sales.")
- Your HP Sales and Service Office will transmit your order to the appropriate HP distribution center.

**Ordering by Telephone from HP**

Except for systems, peripherals (such as disc drives and printers), and training courses, the items listed in this issue are also available by telephone from Hewlett-Packard:

- Australia ..... (03) 895-2645  
(03) 895-2615  
(03) 895-2815  
(03) 895-2861
- Austria ..... (0222) 2500-615  
(0222) 2500-616
- Belgium/Luxembourg ..... (02) 762 32 00
- Canada  
Toronto local ..... (416) 671-8383  
Ontario ..... 1-800-387-3417  
Quebec ..... 1-800-387-3417  
British Columbia ..... 112-800-387-3154  
Other Provinces ..... 1-800-387-3154
- Denmark ..... (02) 816640-258
- Finland ..... (90) 887 2361
- France ..... (1) 692 83 264  
(1) 690 77 825
- Greece ..... (81) 6471673
- Italy ..... (02) 9236 9437  
(02) 9236 9478  
(02) 9236 9585
- Middle East  
Athens ..... (01) 6828811
- Norway ..... (02) 171180
- South Africa  
Johannesburg ..... (011) 8025111  
Cape Town ..... (021) 537954
- Spain ..... 91-6374013  
91-6370011
- Sweden ..... (08) 7502028  
(08) 7502027  
(08) 7502204

- Switzerland . . . . . (057) 31 22 54  
(857) 31 22 53  
(057) 31 22 59
- The Netherlands . . . . . (020) 547 6606
- United Kingdom . . . . . (0734) 697201
- United States . . . . . 800-538-8787  
Alaska, California, and Hawaii . . . 408-738-4133
- West Germany . . . . . (0130) 3322

For countries not listed, call your local HP Sales and Service Office.

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**Ordering HP-Conducted Training Courses**

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

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**Ordering Software Update and Upgrade Kits**

Your original master disc must accompany an order for software update or upgrade kits. Therefore, they are available only through your local dealer or from HP by mail.

For ordering instructions, refer to the article "Software Exchange Kits" elsewhere in this Current Information section.

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**HP Internal Users**

Have your purchasing department enter an I2 order on the supplying entity shown for the item on the Corporate Price List or the Parts Price List.

If you are ordering a Software Exchange Kit, return the original master disc to:

Software Administrator/Internal Orders,  
Building 78/5

or to:

Hewlett-Packard  
P.O. Box 60008  
Sunnyvale, CA 94088  
Attn: Software Administrator/  
Internal Orders

Reference your HP Internal Order number on the package.

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**HP Employees**

Check with the Employee Computer Program Coordinator in your personnel or purchasing department for ordering instructions.



The *HP PC Communicator* is the heart of the support program for The Portable, the HP 150 Touchscreen, the HP 12x, and the Vectra PC.

This publication contains articles on how to best use your system—plus each issue includes sections of the “HP PC Encyclopedia.”

The “HP PC Encyclopedia” brings together all the current information you need, in addition to the manuals, for each of the software packages that you use. New and revised Encyclopedia articles are sent to you as part of the *Communicator*.

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

- HP PC Communicator—  
U.S. . . . .45530A
- HP PC Communicator—  
Canada/Mexico . . . . .45530B
- HP PC Communicator—  
International . . . . .45530C

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

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

<b>Address Corrections for Communicator Subscribers</b>	Change the information on the mailing label by sending us the Change of Address form which appears at the end of this Current Information Insert. Allow 6 to 8 weeks for the change to take effect.
<b>HP Internal Users</b>	Have your purchasing department enter an I2 order on HP division A5 (DMK).
<b>HP Employees</b>	Check with the Employee Computer Program Coordinator in your personnel or purchasing department for Direct Marketing Division (DMK) ordering instructions.







# Mail Order Form for HP Personal/Desktop Computer Software Update Kits

Use this form only for HP Personal/Desktop Computer Software Update Kits. Supplies matched to your HP Computer System can be ordered with update kits.

Ordering instructions:

1. Print or type all requested customer information.
2. Order software update kit(s) for your HP Personal/Desktop Computer. The original disc must be sent to HP with your order for the software update kit; see instruction 7.
3. You may also order computer supplies using this form. Obtain current prices by calling toll-free 800-538-8787. In California, Alaska and Hawaii call (408) 738-4133 collect.
4. Compute state/local taxes on the total cost of items ordered (HP is required to collect taxes; their omission delays your order). If tax exempt, you must provide your tax exemption/resale number.
5. Fill in any special shipping instructions, as required. HP pays freight to U.S. addresses on mail orders, EXCEPT you will be charged extra for special expedited shipping methods; and you will be charged freight on heavy, bulky items weighing more than 30 lbs., such as furniture or printer paper.
6. Fill in credit card information or enclose cashier's check for fastest shipment. Payment by personal or company check will delay shipment up to 10 days. Make check payable to Hewlett-Packard Co. All orders subject to credit approval. **Do not send currency, coin, stamps or purchase orders.**

7. Before your software update kit(s) can be shipped, you must send with your order one original disc (containing the software being updated) for each update kit ordered. This is the disc with the HP software product number and description printed on the label. Be sure to make a working copy before sending the original.

8. Mail this form, along with credit card information (or check), and the original disc to:

HEWLETT-PACKARD DIRECT MARKETING  
Mail Order Dept., P.O. Box 60008, Sunnyvale, CA 94088

For carriers other than U.S. Mail, the address is:

HEWLETT-PACKARD DIRECT MARKETING  
Mail Order Dept., 1320 Kifer Road, Sunnyvale, CA 94086

**Thank you for your order!**

Your Name \_\_\_\_\_ Phone ( ) \_\_\_\_\_ Date \_\_\_\_\_

Disc Size: \_\_\_\_\_ 5.25" \_\_\_\_\_ 3.5"

Product Number	Description	Quantity	Unit Price	Amount
1			*	*
2			*	*
3			*	*
4			*	*
5			*	*

Tax Exempt?  No  Yes

Tax Exempt or Resale Number \_\_\_\_\_

Subtotal \_\_\_\_\_

State/Local Taxes \_\_\_\_\_

**TOTAL** \_\_\_\_\_

**Ship To**

Company \_\_\_\_\_ Bldg./Room \_\_\_\_\_

Attn Of \_\_\_\_\_

Street Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Special Shipping Instructions \_\_\_\_\_

Standard Shipping Method Is \_\_\_\_\_




UPS Surface \_\_\_\_\_

**Payment Method**

Purchase Order (Number \_\_\_\_\_)

Check Enclosed (Payable to Hewlett-Packard Co.)

Credit Card (Check one, provide all information, and sign)

Account No. \_\_\_\_\_

Expiration Date \_\_\_\_\_

Name on Card \_\_\_\_\_

Address \_\_\_\_\_

Signature \_\_\_\_\_

Use this form for prepaid U.S. orders only **POD 1/84** (Over)

## Change of Address Form for *Communicator* Subscribers

If the information on your *Communicator* mailing label is no longer correct, please let us know. Fill in this form and mail it to **Hewlett-Packard, Subscriptions Marketing Department, P.O. Box 60008, Sunnyvale, CA 94088 U.S.A.** Allow 6–8 weeks for change to take effect.

*(please print)*

**Old Address:**

**(attach mailing label or fill in information as it appears on mailing label)**

Name \_\_\_\_\_ (Title) \_\_\_\_\_

(Company) \_\_\_\_\_

Address \_\_\_\_\_ (Bldg No./Mail Stop) \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Country \_\_\_\_\_

**New Address:**

**(exactly as it should appear on the mailing label)**

Name \_\_\_\_\_ (Title) \_\_\_\_\_

(Company) \_\_\_\_\_

Address \_\_\_\_\_ (Bldg No./Mail Stop) \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Country \_\_\_\_\_





Direct Marketing Division  
P.O. Box 60008  
Sunnyvale, CA 94086

Bulk Rate  
U.S. Postage  
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Packard

**ADDRESS CORRECTION REQUESTED**

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