- HP Vectra RS/20C and RS/25C

- Graphics Gallery 3.0

- HP Vectra Questions and Answers

For users of
HP Personal Computer
Products

HEWLETT
PACKARD

Publication Data

Notice

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The HP PC Newsline

Late-breaking news on HP personal computer products

The newest member of the HP Vectra PC family is the **HP Vectra QS/20 PC**. This 20 MHz, 80386-based system relies on a combination of advanced microprocessor, memory, and hard disk designs that result in performance several times that of 80286 systems. The HP Vectra QS/16 and QS/20 together are HP's most powerful desktop PCs for the office power user and for entry level CAD applications.

For more information, contact your dealer or HP sales representative.

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HP is enhancing its position in multi-vendor connectivity by offering the **StarLAN 10 PC card** as a stand alone product that is certified by Novell[R] for use with Advanced Netware Version 2.15 networking software. The HP StarLAN 10 PC Card (HP Product Number 27236A) is supported in the HP Vectra PC family and IBM PC/XT/ATs.

In addition, HP is now offering two new **StarLAN 10 PC Adapter Cards** that will significantly enhance the network's price/performance. The new link products are the HP StarLAN 10 PC Link II for the HP Vectra PC family and IBM PCs with AT backplanes, (HP Product Number D1808A, Option 100), and the HP StarLAN 10 Micro Channel Link for IBM PS/2s with Micro Channel backplanes (Model 50 and over), (HP Product Number D1808A, Option 200). Two main features of the new cards are their improved performance, and the ability to connect Micro Channel IBM PS/2s. Contact your dealer or HP sales representative for more information on these products.

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All versions of the **HP Vectra Office** software packs are now available on either 3 1/2-inch or 5 1/4-inch IBM format disks. The new 3 1/2-inch version is useful if you have an HP Portable Vectra CS, an HP Vectra LS/12 Laptop, an HP Vectra with a 3 1/2-inch drive, or an IBM PS/2, and you want HP's integrated PC office solution.

The Entry Pack (HP 68306F) includes Executive MemoMaker, Lotus[R] 1-2-3[R], and AdvanceLink. The Professional Pack (HP 68300F) contains the applications in the Entry Pack, plus Graphics Gallery, Executive Card Manager, and AdvanceMail. The Assistant Pack (HP 68301F) includes all of the Professional Pack applications, plus AdvanceWrite Plus. To order any of these products, call your dealer or HP sales representative.

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A new addition to HP's LaserJet printer font product line is the **ProCollection Font Cartridge** (HP 92286PC), designed for ASCII symbol set applications. Here are some of the features of this new font cartridge:

* Compatibility with all LaserJet printers, including the original LaserJet printer (HP 2686A)
* 65 fonts in one cartridge for general purpose word processing and spreadsheet applications
* Lineprinter, Courier, Prestige Elite, Letter Gothic, TmsRmn and Helv typefaces (in regular, bold and italic)
* Legal symbol set support with the TmsRmn and Helv typefaces
* Letter Gothic in 3.6 point (27.27 characters per inch), and 6 point (18.75 characters per inch)
* All fonts offered in portrait and landscape orientations except for TmsRmn and Helv which are portrait only

To order the ProCollection font cartridge (HP 92286PC) call your dealer or HP sales representative, or call HP DIRECT. For the phone number of the nearest HP DIRECT office, refer to the "How to Order" section in the green pages.

•••

Aldus PageMaker$^{(R)}$ is a desktop publishing package which has been sold by HP as a bundled product (HP D1200A) and as a standalone product (HP 45964A). HP has discontinued sales of these products due to low sales demand; however, PageMaker will continue to be available to you through dealers.

Following standard HP policy, support for PageMaker 3.0 will be provided for five years after discontinuance. The bundled product was discontinued in August 1988, and the standalone PageMaker product on March 1, 1989. If you upgrade to a future version of PageMaker, you will receive support from Aldus.

•••

HP has introduced a new, 8-bit grayscale, flatbed scanner, the **HP ScanJet Plus Scanner, Model 9195A**. The HP ScanJet Plus Scanner provides high quality reproductions of photographs, line art, or illustrations, which you can incorporate into desktop publishing and sophisticated word processing packages. In addition to final documents, you can also use the HP ScanJet Plus Scanner to develop proofs for professionally printed literature.

Other features of the new scanner include:

* 256 levels of grayscale
* A scanning speed of 10 seconds for A4 or letter size, line art or dither mode
* Output resolution of 12-15000 dpi, selectable in one dpi increments

The HP ScanJet Plus Scanner connects to the HP Vectra PC family and IBM PC and compatibles, IBM PS/2 systems, and with the Macintosh Plus, SE and II. For more information, contact your dealer or HP sales representative.

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On February 1, 1989, HP introduced the **Premier Collection** of typefaces for the LaserJet printer family. Premier Collection includes the Type Director$^{(TM)}$ font management program (an MS-DOS$^{(R)}$ software application), and three scalable typeface products .

The Type Director program utilizes a font scaling technology licensed by HP from Compugraphic Corporation. With the Type Director font management program, you can:

* Create fonts in sizes from 4 to 200 points (in 0.5 point increments) from the scalable typefaces
* Create matching screen fonts for WYSIWYG applications
* Minimize memory (printer and PC) requirements, by creating fonts of reduced symbol sets
* Install screen fonts into applications like Aldus PageMaker$^{(R)}$, Microsoft Windows$^{(R)}$, and Xerox Ventura Publisher$^{(R)}$
* Create font metrics files for applications like Microsoft Word$^{(R)}$ and additional applications as support becomes available
* Manage and download your soft fonts

Using the Type Director program, any brand of soft font compatible with the LaserJet printer is supported (except for scaling or rotating).

You can use the three scalable typeface products, CG Times, Univers$^{(R)}$ 1, and Decorative 1, licensed by HP from Compugraphic Corporation, to create both printer fonts and WYSIWYG (What You See Is What You Get) screen fonts. Each scalable typeface contains a master symbol set of over 500 characters, enabling you to create most symbol sets used in PC applications, including HP, IBM, Adobe, Microsoft, and Ventura symbol sets. The set of characters also include math and scientific (Greek) symbol sets.

To order Premier Collection choose either a 5.25-inch disk (HP C2054A #ABA), or a 3.5-inch disk (HP C2052A #ABA). You can order Type Director (HP C2051A #ABA), CG Times (HP C2050A #D01), Univers 1 (HP C2050A #D02) or Decorative 1 (HP C2050A #D03) separately. All products can be ordered either by calling your dealer or HP sales representative, or call HP DIRECT. For the phone number of the nearest HP DIRECT office, refer to the "How to Order" section in the green pages.

* * *

A five-hour set of three VHS video tapes entitled "**How To Use The HP Portables**" can be ordered from Personalized Software. The tapes demonstrate the fundamentals of using HP's 110 Portable and Portable PLUS computers, and include important details, tips, and tricks not covered in the user manuals. The set of tapes is not just for beginners -- intermediate and advanced computer users will find special features explained clearly and concisely.

For more information, contact Personalized Software, P.O. Box 869, Fairfield, Iowa 52556, or call (515) 472-6330 in the U.S. Personalized Software, in addition to publishing The Portable Paper, offers many software products and accessories in the IBM PC market, customized for users of the HP 150/Touchscreen PC and HP Portables. Personalized Software also buys and sells previously owned HP 150/Touchscreen PCs and HP Portable Computers, peripherals and software.

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The HP PC Bugline

Latest information about HP PC questions, problems, and solutions

The hard disk on the **HP Vectra LS/12 Laptop PC** is pre-initialized at the factory. However, HP recommends highly that you re-initialize the hard disk before using the LS/12. The initialization process checks the hard disk for bad spots that could have occurred during shipment, and marks those bad spots as unusable.

Don't worry if it takes a while to re-initialize the hard disk. The "Initialize Internal Hard Disk" (Option #3 on the SETUP's main menu), is found on the LS/12 Utilities and Drivers Disk. It is a three step process: first the hard disk is scanned, then it's initialized, and finally it's analyzed. For a 40 MB hard disk, this could take as long as 2 1/2 hours, and for a 20 MB hard disk, a little over an hour.

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Have you ever been away from the office, using your **HP Vectra LS/12 Laptop PC** powered by the battery pack, and wished that you had a battery operated printer? Well, HP's battery operated ThinkJet Printer, HP Product Number 2225P, has been tested and works well with the LS/12 Laptop PC. There is just one thing to keep in mind. You **must** turn on the ThinkJet printer **first**, followed by the LS/12. When you are finished, turn off your LS/12 first, and then the printer. The ThinkJet printer will only work with the LS/12 if you turn on the equipment in this order.

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If you wish to install **OS/2** distributed by HP on an HP Vectra PC, here is a list of hardware requirements:

* HP Vectra ES, ES/12, RS/16, RS/20, RS/20C, RS/25C
* 640 KB of base memory
* A minimum of 1 MB extended memory (2 MB is recommended to run MS-DOS applications, or 4 MB to run multiple OS/2 applications)
* An internal hard disk with at least 5 MB of free memory
* At least one high density flexible disk drive

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Here are some of the differences between the old **HPWORD/150** software, and **HPWORD/PC**. HPWORD/PC used to be called HPWORD/150 when it ran on the HP 150/Touchscreen PC only. It was replaced by HPWORD/PC, which is supported on the HP Vectra PC family and the HP 150/Touchscreen PC. These are some new features of HPWORD/PC:

- User Variables
- Help in design and layout of forms
- A wider range of typefaces and paper sizes
- Conversion of WORD/PC documents to ASCII files, and vice-versa
- Integration into a network using HP ThinLAN
- Use of wildcard characters in catalogs
- Simultaneous configuration of up to four different printers
- Automatic restart and recovery after a fatal error

* * *

In **Executive Card Manager** (ECM), if you receive the error message "Cannot complete the save. Check for a full disk." when attempting to save a cardfile, check the contents of your CONFIG.SYS file.

If the number in your files = <number> command is less than or equal to eight, you will receive this error message, whether you are saving to a full or empty disk. This configuration command tells MS-DOS how many files it, and the application running, may use at one time. Unless specified otherwise, this number will default to eight, which is not enough for ECM to save cardfiles. Setting the number to ten will eliminate the problem, but a number between 20 and 30 will ensure no problems within ECM or most other applications.

Please note that raising the limit on open files increases the amount of memory that MS-DOS uses by 48 bytes for each additional file. Therefore if memory is scarce, setting files to a large number such as 99 is not recommended.

* * *

The manual **Setting Up Vectra QS** contains an error in Chapter 4 "Installing Memory Upgrade Modules or a Coprocessor", in the section entitled "Installing an 80387 Coprocessor." Please disregard the information in step 3, and substitute the following.

3. Locate the chamfered corner of the coprocessor. Locate the white dot marked on the CPU board, next to one of the coprocessor socket corners. To install the coprocessor correctly, match these two items.

* * *

Welcome to the *HP PC Communicator*

WELCOME

The *HP PC Communicator* is the heart 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 *HP PC Communicator* also lists known software problems and their solutions, and introduces new members of the HP PC family.

Subscriptions and Back Issues

To order subscriptions, see "Ordering *HP PC Communicator* Subscriptions" in the Current Information green pages. To order individual copies and back issues, see "Ordering *HP PC Communicator* Back Issues" also in the Current Information green pages.

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:

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

CompuServe

Articles appearing in the *HP PC Communicator* are carried in the HP PC Forum on the CompuServe Information Service. For more information, see "Answers to Your Questions" in the Current Information green pages.

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HP Vectra PC Family:
Hardware Questions and Answers   Lise Shade

Here are some hardware-related questions and answers on the HP Vectra PC Family.

RS Initialization

Q: **I am setting up my HP Vectra RS PC for the first time. Do I need to initialize the hard disk before installing the operating system?**

A: If you have an HP ESDI, high capacity hard disk in your system (103, 155, or 310 MB), you do not need to run the initialize option. These high capacity drives are initialized at the factory. If you have a 40 MB hard disk (TYPE 44), then you will need to initialize the hard disk before installing the operating system.

Crosstalk

Q: **On my HP Vectra RS or QS PC, I am using Crosstalk that comes with the Vectra 2400 baud internal modem. The modem dialing delay goes by too fast and the modem never dials.**

A: The 80386 processor speed of the Vectra RS requires Crosstalk version 3.61. As a workaround, if you do not have 3.61, you can try switching the RS processor speed to 8 MHz. See the next question on adjusting processor speeds.

Processor Speed

Q: **How can I adjust the processor speed on the HP Vectra ES, QS, and RS PCs?**

A: There are three methods that you can use to adjust the processor speed. For the Vectra ES, you can switch between 12 MHz (HIGH speed) and 8 MHz (LOW speed). For the Vectra RS/16 and QS/16, you can switch between the HIGH speed of 16 MHz and 8 MHz (LOW speed). For the RS/20, the HIGH speed is 20 MHz and the LOW speed is 8 MHz.

Note: The new HP Vectra RS/20C and RS/25C PCs have three speeds. See the *Learning About the HP Vectra Keyboard* documentation that came with your system.

Method 1

By using a sequence of keystrokes from the keyboard you can switch the speed. Hold down the CTRL ALT \ keys simultaneously to switch the speed between HIGH and LOW. If you hear one beep after pressing CTRL ALT \, you have toggled to LOW speed. If you hear two beeps after pressing CTRL ALT \, you have toggled to HIGH speed.

Method 2

You can use the HPMODE command to toggle the speed between HIGH and LOW. The HPMODE.EXE file is located on the Vectra ES and Vectra RS SETUP Program disks. You can use HPMODE at the MS-DOS command level, or you can include it in a DOS batch file. Use the following commands:

> **HPMODE SPEED LOW** (to toggle to LOW speed)
>
> **HPMODE SPEED HIGH** (to toggle to HIGH speed)

Method 3

You can alter the default speed setting of your system by running the SETUP Program option "Computer Speed Selection." This option will allow you to toggle the default processor speed between HIGH and LOW.

ES Expanded Memory

Q: **Can the memory on the Vectra ES Expanded Memory Card, HP 45944A, be divided between extended and expanded memory?**

A: If you have more than 2 MB of memory on the board, you can divide the memory between expanded and extended memory in increments of 2 MB. If you have only 2 MB of memory on the board, you must use the memory as either expanded or extended.

Refer to your *HP 45944A Vectra ES Expanded Memory Card* manual for details on how to divide the memory on boards that have more than 2 MB. The memory banks are assigned via DIP switches on the board.

40 MB Tape Backup

Q: **What type of tape cartridges should I purchase for my 40 MB Vectra Internal Tape Backup Subsystem (HP D1671A)?**

A: The 40 MB Vectra Internal Tape Backup Subsystem uses DC-2000 ¼-inch tape cartridges. The HP part number for a set of five tape cartridges is HP 92192T. To order, see "How to Order" in the green pages.

CS and Mouse

Q: **I would like to add an HP mouse to the HP Vectra CS PC. What do I need to do?**

A: To add an HP mouse to a Vectra CS, you need to purchase the Vectra CS HP-HIL Accessory Interface (HP D1171A). This card will give you an HP-HIL port into which you can plug your HP mouse.

VGA with Pre-ES

Q: **How do I configure a VGA adapter for use in a pre-ES Vectra PC?**

A: To configure the VGA adapter for the original Vectra PCs, you should set all four of the switches on the adapter card to the OFF position. This is the factory default position. Setting the switches to OFF will select 8 bit operation for the card. The card will use memory locations C0000H through C7FFFH for its video ROM BIOS.

Keyboard Click

Q: **Can I disable or adjust the keyboard click on my HP Vectra PC?**

A: If you have a pre-ES Vectra, you can adjust the volume of the keyboard click (the sound that occurs when you press a key) by doing the following:

■ Hold down the CTRL ALT + keys simultaneously to increase the volume of the keyboard click. You must use the + key on the **numeric** keypad.

■ Hold down the CTRL ALT − key to decrease the volume of the keyboard click. You must use the − key on the **numeric** keypad.

If you have a Vectra ES, QS, or RS PC, in addition to using the CTRL ALT +/− keys you can completely disable the keyboard click by running the ES or RS SETUP utility and choosing the option entitled "Keyboard Click ON/OFF." This will allow you to toggle between having the keyboard click enabled or disabled. In addition, if you have the keyboard click enabled on the Vectra ES, QS, or RS, you can adjust the volume using the same keystrokes as on the pre-ES Vectra (see above).

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Here are some questions and answers on software applications and MS-DOS 3.3 on the HP Vectra Family of PCs.

EGA Screen Saver

Q: **How can I adjust the timeout value on the EGA screen saver utility on my HP Vectra PC?**

A: To adjust the time out value on the EGA screen saver utility, start the utility with the following command:

HPEGA SAVE:n

where "n" represents the number of minutes that you want the utility to wait, if there has been no keyboard input, before it turns the screen off. The value can range from 1 to 32768.

Parallel Port Timeouts

Q: **On my HP Vectra PC, I am having intermittent problems with a parallel port timing out during printing. I am receiving the following error message:**

> **WRITE FAULT ERROR WRITING DEVICE LPTX**
> **ABORT, RETRY or IGNORE?**

where X is the port number of the parallel port having problems.

A: You can help to avoid timing out problems on parallel ports by issuing the following mode statement for the port in your AUTOEXEC.BAT file:

MODE LPTX:,,P

The P option causes MODE to continually retry sending output to the printer if a time out occurs.

DOS 3.3
Backup

Q: **Can I create a log file on my HP Vectra PC that will show the files that have been backed up with the MS-DOS backup command?**

A: MS-DOS 3.3 offers a new option on the BACKUP command that will create a log file with BACKUP log entries in the root directory of the source drive. The default file name is BACKUP.LOG. If this log file already exists, the log entries are appended to the file. The option to create this log file is the /L option, which is a new feature of MS-DOS 3.3.

The first record in the backup log contains the date and time of the backup. Each remaining record contains the full path name of all files backed up, along with the disk number on which the file resides.

DOS 3.2
Multivolume

Q: **I am installing MS-DOS 3.2 on my HP Vectra PC, and I have run FDISK, FORMAT and MVBUILD. When these programs boot off the hard disk and try to access their multivolume partition (usually the D drive) created by MVBUILD, the following error occurs: "Invalid Drive Specifier."**

A: Before your machine can access a multivolume partition created by MVBUILD, you must start the Vectra with the following line in the CONFIG.SYS file:

Device = multivol.sys

The multivol.sys driver is located on the MS-DOS 3.2 Supplemental disk. If you have MS-DOS 3.1, it is located on your Hard Disk Multivoluming Utility disk. If you have MS-DOS 3.3, you should not be using MVBUILD. In MS-DOS 3.3 this functionality is replaced by FDISK's extended DOS partition. Refer to the section *Installing Your Operating System* in your MS-DOS 3.3 manual for details on why you should not use MVBUILD for DOS 3.3.

Setup

Q: **Can I save my HP Vectra RS and QS PC configuration information (from SETUP) to a file?**

A: You can save your Vectra RS SETUP information to a file if you run SETUP with the /SA option. The SETUP program will prompt you for a file name to transfer the information from non-volatile RAM (CMOS) to a file. Running SETUP with the /SA option will save the current configuration to the file you specify.

If you want to restore the configuration information from a file, you must run SETUP with the /RE option. The SETUP program will then prompt you for the file name from which you want to restore the SETUP information. It will then copy the saved configuration from the file to the non-volatile RAM (CMOS). For example:

A> SETUP /RE
A> SETUP /SA

where the A> is the MS-DOS prompt.

Cache

Q: **I am using HPCACHE on my HP Vectra PC. What are the default cache sizes and how can I modify these?**

A: When loading HPCACHE with the default parameters, a base memory cache of 96 KB is configured. If you load HPCACHE in extended or expanded memory, the default cache size is 256 KB. The largest base memory cache you can configure is 512 KB. The largest cache you can configure in expanded or extended memory is 1024 KB (1 MB).

To specify a cache size other than the default, use the /S:XXX option with the HPCACHE command, where XXX is the cache size in KBs.

Here are some examples:

HPCACHE	specifies a cache size of 96 KB in base memory
HPCACHE /E	specifies a cache size of 256 KB in extended memory
HPCACHE /S:384	specifies a cache size of 384 KB in base memory
HPCACHE /S:512 /A	specifies a cache size of 512 KB in expanded memory

Q: I am loading the HPCACHE utility that came with my HP Vectra PC. Is there any way to display the parameters in effect?

A: If you run HPCACHE with the /P option all the parameters in effect when HPCACHE is started will be displayed.

Q: Can you disable HPCACHE on the HP Vectra PC without restarting the PC?

A: You can disable HPCACHE at any time by using the /U option. However, MS-DOS will allow only the last memory resident program installed to be disabled. Thus, if you loaded HPCACHE before another memory resident utility was loaded, you will receive the following error message when using the /U option:

"Cannot uninstall—other programs above."

You will need to disable the other memory resident utility before you will be able to disable HPCACHE. In the future you may want to make sure that HPCACHE is the last memory resident utility that you load.

Date and Time

Q: I am using the MS-DOS DATE and TIME command to set the date and time on my HP Vectra PC running MS-DOS 3.2. This change only takes effect until I restart my Vectra.

A: With MS-DOS 3.2, the DATE and TIME commands do not change the date and time kept by the Vectra's system clock. The system clock is the battery powered clock that keeps track of the system date and time even if the Vectra is powered down. To change the system clock, you must run the SETUP program that came with your Vectra and choose the option to "set the date and time" on the system.

With MS-DOS 3.3, the DATE and TIME command does update the date and time of the Vectra's internal clock.

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HP Vectra LS/12 Laptop PC:
Questions and Answers

Bhupinder Saluja

Here are some commonly asked questions and answers about the recently introduced HP Vectra LS/12 Laptop PC.

Microprocessor

Q: What kind of 80286 microprocessor does the HP Vectra LS/12 Laptop use?

A: The new Laptop PC uses an 80L286 (low power NMOS) device, which consumes power similarly to an 80C286 (CMOS) device.

OS/2

Q: Is the character-based OS/2 Version 1.0A, currently available from HP, supported on the HP Vectra LS/12 Laptop PC?

A: OS/2 Version 1.0 is primarily an evaluation release. As such, HP does not plan to support Version 1.0 on the HP Vectra LS/12 Laptop PC.

5.25" File Exchange

Q: How can I exchange files with a PC with 5.25-inch flexible disk drives?

A: There are several ways to exchange data. These include:

1. Using file transfer software such as Traveling Software's Laplink or White Crane Systems' Brooklyn Bridge. These require a serial connection between the laptop PC and the PC.

2. Modem-to-modem transfer.

3. File transfer through a host computer (for example, using AdvanceLink).

4. Using a PC that supports both 5.25-inch and 3.5-inch flexible disk drives.

CGA	Q: **What is double-scan CGA?**
	A: Standard CGA resolution is 640x200 in Graphics mode. When using a 640x400 display such as the LS/12 display, Double Scan CGA provides the benefit of maintaining the aspect ratio of graphics by displaying each pixel on two consecutive lines of display. Circles look like circles, not ellipses. When using a 640x400 display for Text mode, Double Scan CGA improves the resolution from 640x200 to 640x400.
NewWave	Q: **Will I be able to run HP NewWave Software on my HP Vectra LS/12 Laptop PC?**
	A: No, the HP NewWave application environment requires at least EGA video support and more than 2 Mbytes of memory.
Mouse	Q: **Can I use a mouse with the HP Vectra LS/12 Laptop PC?**
	A: Yes, a mouse does operate on the HP Vectra LS/12 Laptop PC. HP does not distribute a mouse for the Vectra LS/12, but the Microsoft® Mouse and the Logitech® Mouse work.

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Here are some commonly asked questions and answers on AdvanceWrite PLUS.

Proportional Fonts

Q: **I am using AdvanceWrite PLUS version F.02.00. When using multiple proportional and fixed pitch fonts in a document, the text is not centering and spacing correctly when printing to an HP LaserJet printer.**

A: It is important to have AdvanceWrite calculate margins according to the font which is used in the main body of the document. Set the default typeface to this font and the margins to a number which would correspond to the body text. For example, for a 10 point Times Roman soft font printing on 8.5-inch paper with 1-inch margins, the number of columns between left and right margins should be around 105. AdvanceWrite also uses the first character in your document in its margin calculation, so it is important to put a required space (DO–spacebar) in the very first position. The next column can contain the typeface change (Mark–W) to change to the font used for the heading or title.

If you are using a large proportional font, or you have many capital letters on one line, the line may run across the right margin. To prevent this, use Line Adjust (under Select–Proof) to break the line so it will fit into the margins properly.

Degree Symbol

Q: **How can I access the degree symbol in AdvanceWrite PLUS version F.02.00 when printing to an HP LaserJet Series II printer?**

A: You can access the degree symbol if you are using a font which has the PC or legal symbol set. The HP LaserJet Series II printer Internal Courier Font has the degree symbol. In AdvanceWrite, specify this font as either the default or alternate typeface on your default page, or use typeface change marks (Mark–W) in the document. To type the symbol, use Select–K–6 to change to the alternate keyboard. Hold down the shift key and press \ to type the degree symbol. To change back to the normal keyboard, use Select–K–1.

Footnotes

Q: **I am using AdvanceWrite PLUS version F.02.00 and the last footnote in a document is not printing correctly. The footnote does not print on the same page as the Mark and is split onto two pages.**

A: This problem can occur if there is no carriage return at the end of the footnote. Edit the footnote and add a carriage return at the end of the text, and the footnote will print correctly.

Duplex Printing

Q: **Can AdvanceWrite PLUS version F.02.00 print duplex (double-sided) to an HP LaserJet IID printer?**

A: The current version of AdvanceWrite PLUS will not print duplex to a LaserJet IID printer.

Headers

Q: **I am having problems printing my AdvanceWrite PLUS headers. What can I check?**

A: If you are having problems with headers not printing in your AdvanceWrite PLUS documents, check the following:

1. Headers will print only if you are printing the entire document. They do not print if you print by page.

2. Make sure that the "Print Headers/Footers" option in the print options is set to YES.

3. Make sure that you have two carriage returns at the top of your header if you are printing to an HP LaserJet printer. This will allow for the ½-inch unprintable region at the top of the LaserJet printer's page.

4. Make sure that you repage before printing.

5. Make sure that you have set the top margin of your document large enough to allow the header to print.

6. Make sure that you do not have a blank header in the document.

You can check to see how many headers and footers are in your document by doing a MARK M H. Remember that sectional headers will only print on the referenced page if they are the first line of the page.

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Here are some questions and answers on desktop publishing with HP Vectra PCs and HP printers.

ReadRight™

Q: **I am using ReadRight with a ScanJet to provide optical character recognition and am getting multiple spaces between words, even though they do not appear in the original. My output file type is ASCII WYSIWYG and I am translating from the ASCII file to a word processor. What is the easiest way to eliminate the extra spaces?**

A: When using the ASCII WYSIWYG file type, ReadRight will attempt to reproduce the same number of spaces between words that it reads and may not always be accurate. ASCII WYSIWYG may be useful if you are scanning tables. When scanning text to convert to word processing, you will probably want to choose one of the other ASCII file type options.

ASCII WP (Word Processing) places one space between words, two spaces between sentences, and a carriage return at the end of each sentence.

ASCII DP (Desktop Publishing) places one space between words, one space between sentences, and a carriage return at the end of paragraphs. An end of paragraph is identified as a blank line.

PrintJet

Q: **I am using the new Windows PaintJet driver, and all my graphics images are printing mirror image of how they appear in my document. Why?**

A: The Windows PaintJet driver contains an option to turn Mirror Image Mode On for printing.

To check whether Mirror Image has been inadvertently turned on, you can run CONTROL.EXE from the Windows sub-directory. Pull down the SETUP menu and select the Printer option. Click on the PaintJet driver and then click on OK. This will bring up the PaintJet configuration window. Pull down the OPTIONS menu. If there is a check mark next to the Mirror Image option, then Mirror Image is turned on. If you toggle Mirror Image off you will no longer see the problem.

Charting Gallery	**Q: I am using Charting Gallery version B.03.00. Is there a way to print the chart at the top of the page and a table of the data at the bottom?**
	A: There is no way to do this in Charting Gallery B.03.00. However, you can combine the data and chart using desktop publishing. For example, input the data into a Lotus spreadsheet. Bring the worksheet into Charting Gallery to create your chart there, and draw to TIFF. Then use PageMaker to combine the TIFF and Lotus worksheet.
Scanning Gallery	**Q: Why is printing slower in Scanning Gallery version A.02.01 than in version A.01.02?**
	A: In Scanning Gallery A.02.01 there are two ways to print images. If you choose "Print," Scanning Gallery will use the printer specifications in the Windows Control Panel. The printing is slower in this option, but you have more control over the output and can print images that are more than one page. To speed up printing in this method, you can disable the Windows spooler. The "Print" option was not available in version A.01.02.
	The second option, "HP Direct Print," is available in both versions. It bypasses the Windows Control Panel settings and is faster, but more limited than "Print." The image is printed in the upper left corner of the page, and the size will change depending on the resolution. "HP Direct Print" also requires less memory and disk space than "Print."
PaintJet and Fontware	**Q: Can I use Fontware fonts on an HP PaintJet printer?**
	A: Fontware fonts are not supported on the HP PaintJet printer. Fontware can create fonts for dot matrix or PCL level 4 (LaserJet style) fonts. The only soft fonts currently supported on the PaintJet are HP PaintJet Soft Fonts for Microsoft Windows, HP part number 17301A. The fonts available in this package include Tms Rmn and Helv typefaces, 8, 10, 12, and 14 point sizes, and medium, bold, and italic styles. To order, call HP DIRECT. For the phone number of the HP DIRECT office nearest you, see "How to Order" in the green pages.

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Here are some commonly asked questions and answers on PageMaker,® version 3.0.

Multimode Monitor

Q: **Will PageMaker work with a Multimode monitor?**

A: PageMaker is a Windows application and video support is a function of Microsoft Windows. If you are using a full Windows package, a Multimode driver is included with HP Windows version 2.03, or with MS Windows/286 version 2.1. MS Windows 2.03 does not have a Multimode driver.

If you are using PageMaker with runtime Windows and do not have the Multimode choice during installation, select "CGA color monitor." Multimode can emulate CGA, but will give lower resolution in this mode.

Master Pages

Q: **In PageMaker version 3.0, I have set up master pages with footers, a logo, and so on. On a few pages of the publication I wish to have a different format. Can the master items be deleted?**

A: When you display the page from which you wish to remove the master items, pull down the Page menu and uncheck "Display Master Items." This will remove all items which are on the master page. An alternative method is to create a second publication with a different master page format and manually collate the pages after printing the two publications.

RAM Drive

Q: **I am following the instructions in the PERFORM.TXT file on my PageMaker 3.0 disks to set up a RAM drive in either extended or expanded memory. When I try to run PM.EXE from the D: drive, I receive an error message, "Cannot find user (or supplemental) dictionary."**

A: This can be confusing since the supplemental dictionary does exist in the C:\PM subdirectory, which is part of the path statement.

Here's what happens: If the various dictionaries (RAM, Disk, and User) are not in the same subdirectory as PM.EXE, you need to tell PageMaker where they are. Also, if you want your defaults file (PM.CNF) and additions to the supplemental dictionary to be saved to a subdirectory other than where PM.EXE is located (on your hard disk rather than a RAM disk), you must tell PageMaker to do so. You can tell PageMaker where the various files are located by adding the following lines in your WIN.INI files, under the PageMaker heading:

```
[PageMaker]
Defaults = C:\PM\PM.CNF
User Dictionary = C:\PM\PMUSER.TXT
Help = C:\PM\PM.HLP
Disk Dictionary = C:\PM\PMUSDISK.DCT
RAM Dictionary = C:\PM\PMUSRAM.DCT
```

AdvancePrint

Q: **Can the soft font installer that comes with PageMaker 3.0 be used to download fonts and print out PageMaker documents using AdvancePrint?** *[AdvancePrint is a program that allows you to print from your PC to an HP 3000.]*

A: In order to answer this question, we need to think about how the printer drivers work. In order to print a PageMaker document at all, you have to choose a target printer. The only selections available for target printers are those printers for which you have Windows printer drivers installed. If there is a printer driver for the type of printer you have connected to the HP 3000 in Windows, then you may print your PageMaker document using AdvancePrint.

As for using the soft font installer to download soft fonts, the soft font installer is part of the PCL/LaserJet printer driver. Unless your target printer is an HP LaserJet printer, you will not be able to use the soft font installer to download soft fonts to your printer.

AdvanceLink and Configuration Control

Ken Stasi

In AdvanceLink Version B.01.00 there are currently no AdvanceLink commands available to dynamically change the values of certain fields in the Global or Terminal Config screen. For example, you cannot use an AdvanceLink command to toggle the Typeahead field from YES to NO in the Terminal Config screen, or to change the Terminal Mode field in the Global Config screen from Alphanumeric to Graphics.

But there is a way to change these configuration fields indirectly. Let's look at the following example of how you can change the Typeahead field from YES to NO dynamically.

1. Press F6 Config Keys, followed by F5 Terminal Config and set the Typeahead field to YES. Press F1 Save Config.

2. Press F8 Main to return to the Main Menu, followed by F3 Commands, and issue the AdvanceLink command **&MAKECONFIG TYPEON.** This saves the configuration file which has Typeahead ON to a file called TYPEON.

3. Press F6 Config Keys, followed by F5 Terminal Config to return to the Terminal Config screen, and set Typeahead to NO. Press F1 Save Config.

4. Press F8 Main followed by F3 Commands, and issue the AdvanceLink command **&MAKECONFIG TYPEOFF.**

5. Depending on whether you want Typeahead ON or OFF, you can issue the AdvanceLink command **&USE TYPEON** or **&USE TYPEOFF.**

6. You could take this a step further by setting up an AdvanceLink function key using the AdvanceLink &FASTKEY command to execute the &USE command. For example, the command

   &FASTKEY 7, "TYPEON", "&USE TYPEON"

   will set function key 7 as TYPEON. When F7 is pressed the AdvanceLink command &USE TYPEON will be executed.

You can follow this procedure and set up various configuration files to dynamically change Terminal Mode, HP Mode, Screen Size, and Memory Size in the Global Config screen, and the Large + Key in the Terminal Config screen. Any configuration field which cannot be changed directly by an AdvanceLink command can be changed this way.

☐
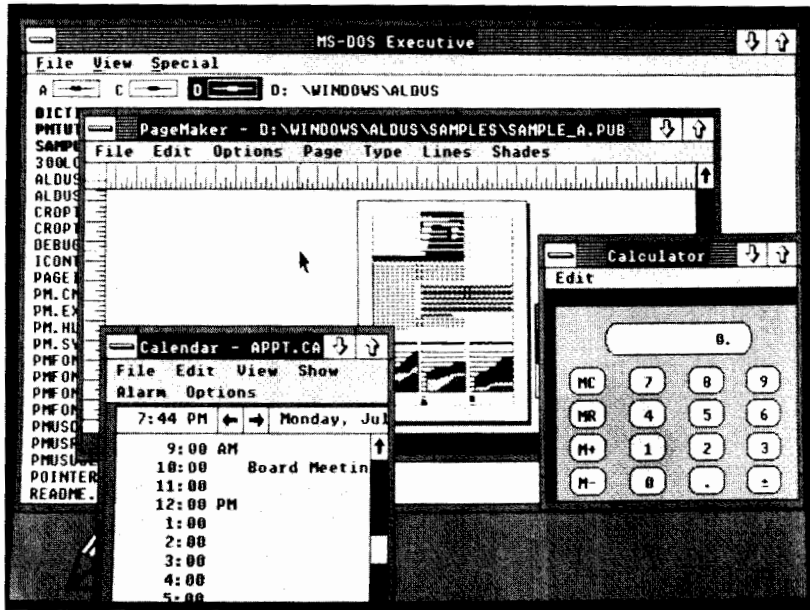
With a single command from MS-DOS you can run Microsoft Windows, run an application, and open a file. For example, if you want to open a file in PageMaker you can issue a single command to do the job:

WIN PM C:\PM\PUBFILE.PM3

This command will run Windows, run PageMaker and open a file named PUBFILE.PM3.

Here are four ways to use the WIN command.

1. **WIN [Windows Application]**

   This command runs Windows and runs a Windows application. Path statements to Windows and the Windows application are specified in the AUTOEXEC.BAT file. For example,

   WIN PM

   runs Windows and PageMaker, provided that paths to Windows and PageMaker subdirectories are specified in the AUTOEXEC.BAT file.

2. **WIN [Windows Application] [Application File Name]**

   This command runs Windows, runs the Windows application, and opens the file, if the path for the file is specified in the command line. For example,

   WIN PM C:\PM3\PUBFILE.PM3

   runs Windows and PageMaker and opens the PageMaker file named PUBFILE.

3. **WIN [File Name]**

This command runs Windows, runs the Windows application that matches the file extension found in WIN.INI, and opens the file. For example,

WIN C:\DOC\ABC.TXT

runs Windows and NotePad, and opens the file named ABC.TXT. Note here that TXT is specified in WIN.INI under the Extensions Heading as an extension for NOTEPAD.

4. **WIN [PIF File]**

This command runs Windows and runs the DOS application from the PIF file. For example,

WIN C:\EMM\EMM.PIF

runs Windows and Executive MemoMaker (EMM), if the EMM subdirectory is specified as the "Initial Directory" in the PIF file.

The path is very important to the WIN command. Unless you specify the path, the system will not know where to look for Windows and your applications.

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Is your printer output from Microsoft Windows or Windows applications not what you expect it to be? Wait, there's hope. You could be using the wrong software driver for your printer.

The following tables provide an overview of popular HP printer drivers from Microsoft Windows and major Windows-based products.

Microsoft Windows for HP Vectra PC, Version A.01.03

Printer Model or Series	MS-DOS Driver Name	Product Disk Name	Disk Size and Format	Version Number
DeskJet	—	—	—	—
LaserJet	HPLASER.DRV[1]	Utilities	5.25", 360KB	2.3
	HPLASERP.DRV[2]	Utilities	5.25", 360KB	2.3
PaintJet	—	—	—	—
QuietJet	QUIETJET.DRV	Utilities	5.25", 360KB	1.0
ThinkJet	HPTJ.DRV[3]	Utilities	5.25", 360KB	1.0
	THINKJET.DRV[4]	Utilities	5.25", 360KB	1.0

1. For HP LaserJet I printer
2. For HP LaserJet PLUS printer
3. For HP ThinkJet printers Model A (HP-IB) and Model B (HP-IL)
4. For HP ThinkJet printers Model C (parallel) and Model D (serial)

Microsoft Windows for HP Vectra PC, Version B.02.03*

Printer Model or Series	MS-DOS Driver Name	Product Disk Name	Disk Size and Format	Version Number
DeskJet	—	—	—	—
LaserJet	HPPCL.DRV	Utilities 1	5.25", 360KB	2.0
PaintJet	—	—	—	—
QuietJet	QUIETJET.DRV	Utilities 2	5.25", 360KB	2.0
ThinkJet	THINKJET.DRV	Utilities 2	5.25", 360KB	2.3

*Windows/386 Version 2.03 (B.02.03) has the same drivers except for the QuietJet driver. For QuietJet printers you can use the ThinkJet driver.

Microsoft Windows/286 2.1 and Microsoft Windows/386 2.1

Printer Model or Series	MS-DOS Driver Name	Product Disk Name	Disk Size and Format	Version Number
DeskJet	DESKJET.DRV	Display 2 and Utilities 1	5.25", 1.2MB	A.01.01
LaserJet	HPPCL.DRV	Display 2 and Utilities 1	5.25", 1.2MB	3.00
LaserJet Series II with JetScript board	PSCRIPT.DRV	Utilities 2 and Fonts	5.25", 1.2MB	3.03
PaintJet	PAINTJET.DRV	Display 2 and Utilities 1	5.25", 1.2MB	2.0
QuietJet	—	—	—	—
ThinkJet	THINKJET.DRV	Utilities 2 and Fonts	5.25", 1.2MB	2.3

Aldus PageMaker 1.0A

Printer Model or Series	MS-DOS Driver Name	Product Disk Name	Disk Size and Format	Version Number
DeskJet	—	—	—	—
LaserJet	HPPCL.DRV	Drivers	5.25", 360KB	1.05A

Aldus PageMaker 3.0

Printer Model or Series	MS-DOS Driver Name	Product Disk Name	Disk Size and Format	Version Number
DeskJet	DESKJET.DRV	Drivers, Filters, Templates	5.25", 1.2MB	A.01.01
LaserJet	HPPCL.DRV	Drivers Filters, Templates	5.25", 1.2MB	3.00
LaserJet Series II with JetScript board	PSCRIPT.DRV	Drivers, Filters, Templates	5.25", 1.2MB	3.0

Microsoft Excel 2.01*

Printer Model or Series	MS-DOS Driver Name	Product Disk Name	Disk Size and Format	Version Number
DeskJet	—	—	—	—
LaserJet	HPPCL.DRV	Utilities	5.25", 1.2MB	2.00
PaintJet	—	—	—	—
QuietJet	—	—	—	—
ThinkJet	THINKJET.DRV	Utilities	5.25", 1.2MB	2.3

*Not distributed by HP

Microsoft Excel 2.1*

Printer Model or Series	MS-DOS Driver Name	Product Disk Name	Disk Size and Format	Version Number
DeskJet	DESKJET.DRV	Utilities	5.25", 1.2MB	A.01.01
LaserJet	HPPCL.DRV	Utilities	5.25", 1.2MB	3.01
PaintJet	PAINTJET.DRV	Utilities	5.25", 1.2MB	2.0
QuietJet	—	—	—	—
ThinkJet	THINKJET.DRV	Utilities	5.25", 1.2MB	2.3

*Not distributed by HP

HP LaserROM A.01.00

Printer Model or Series	MS-DOS Driver Name	Product Disk Name	Disk Size and Format	Version Number
DeskJet	—	—	—	—
LaserJet	HPLASER.DRV[1]	HP LaserROM	CD ROM Disk	2.3
LaserJet	HPLASERP.DRV[2]	HP LaserROM	CD ROM Disk	2.3
PaintJet	—	—	—	—
QuietJet	QUIETJET.DRV	HP LaserROM	CD ROM Disk	1.0
ThinkJet	HPTJ.DRV[3]	HP LaserROM	CD ROM Disk	1.0
ThinkJet	THINKJET.DRV[4]	HP LaserROM	CD ROM Disk	1.0

1. For HP LaserJet I printer
2. For HP LaserJet PLUS printer
3. For HP ThinkJet printers Model A (HP-IB) and Model B (HP-IL)
4. For HP ThinkJet printers Model C (parallel) and Model D (serial)

HP LaserROM A.02.00

Printer Model or Series	MS-DOS Driver Name	Product Disk Name	Disk Size and Format	Version Number
DeskJet	DESKJET.DRV	HP LaserROM	CD ROM Disk	A.01.01
LaserJet	HPPCL.DRV	HP LaserROM	CD ROM Disk	3.00
PaintJet	PAINTJET.DRV	HP LaserROM	CD ROM Disk	2.0
QuietJet	—	—	—	—
ThinkJet	THINKJET.DRV	HP LaserROM	CD ROM Disk	2.3

HP Scanning Gallery A.02.01

Printer Model or Series	MS-DOS Driver Name	Product Disk Name	Disk Size and Format	Version Number
DeskJet	—	—	—	—
LaserJet	HPLASER.DRV[1]	Utilities	5.25", 360KB	2.3
LaserJet	HPLASERP.DRV[2]	Utilities	5.25", 360KB	2.3
PaintJet	—	—	—	—
QuietJet	QUIETJET.DRV	Utilities	5.25", 360KB	1.0
ThinkJet	HPTJ.DRV[3]	Utilities	5.25", 360KB	1.0
ThinkJet	THINKJET.DRV[4]	Utilities	5.25", 360KB	1.0

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3. For HP ThinkJet printers Model A (HP-IB) and Model B (HP-IL)
4. For HP ThinkJet printers Model C (parallel) and Model D (serial)

Tips for Trouble-Free Operation

- Always read the documentation that comes with the product, especially the README files on the disks. You will learn of problems that have been corrected, as well as new features of the product.

- Check the version number, which is the main identifier of your printer driver, to determine if your application is compatible. If your driver has already been installed, do the following to find your version number:

  1. Run CONTROL.EXE from Windows
  2. Select the SETUP menu
  3. Select Printer
  4. Highlight your printer/port name
  5. Click on OK

A dialog box for the driver will then appear with the version number and the original vendor's name displayed in the right hand corner of the screen.

■ When you add a new Windows application to your HP Vectra PC system, your Windows environment may require changes. For example, if you are using Microsoft Windows for the HP Vectra PC, Version B.02.03, with its HP LaserJet printer driver and you acquire PageMaker 3.0, you must remove the old HPPCL.DRV driver and install the updated one from PageMaker. Proper operation of the soft fonts in PageMaker requires that you use the latest driver.

Note: All Windows applications will be able to use this updated driver.

To re-install a driver, do the following:

1. Run CONTROL.EXE from Windows
2. Go to the INSTALLATION menu
3. Select Delete Printer and remove the old driver
4. Return to the INSTALLATION menu
5. Select Add New Printer and add the new driver

■ *Never* attempt to use drivers from the Windows 1.x environment for applications that run in the Windows 2.x environment, or vice-versa.

If you have to use both environments, be sure to keep the files of each product in completely separate drive volumes or directories. Furthermore, if you use the MS-DOS PATH statement, make sure it does not point to both subdirectories.

■ Upgrade your applications as soon as new versions are available.

■ Operate your applications from the latest Windows/286 or Windows/386 product. You will avoid potential incompatibility problems as well as retain disk space that would be otherwise used for redundant environment files.

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This is to Certify that

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President   December ...   *Chaircreature*

Most word processors offer a feature called Mail Merge which allows you to insert data from a mailing list into the cover page of a letter or onto a certificate.

However, when that letter or certificate is formatted into PageMaker, the word processor's merge function can no longer be used to patch in the data.

There is a way you can merge this data into PageMaker version 3.0, using a combination of the Autoflow feature and variable margin settings. Here are the instructions to do this.

Certificates

To create certificates, follow these steps:

1. Since you will have only the person's name merged on to the certificate, you need to create a data file with your word processor which includes a list of names only, one name per line.

2. In PageMaker 3.0, create a single-sided publication one page long. Click on the Master Page icon in the lower left. (The page will be marked "R").

3. Create your certificate on this page.

4. Use the File/Page Setup menu to re-define your margins. You want the margins to form a box around the line in the certificate on which you want to put the recipient's name. The bottom margin should be right on that line. The left and right margins should be on the left and right sides of the line. The top margin depends on the size of type you are using for the names. The distance between the bottom and top margins should be slightly more than the height of the type size you are using. For instance, 48-point type is ⅝ inches (4 picas) high, so allow ¾ inches (5½ picas) between the bottom and top margins for this size type.

5. Go to page 1. Your certificate will be drawn again on this page, since anything created on the master page will print on all pages of the publication.

6. Turn on Options/Autoflow.

7. Choose the type specification you would like for the names.

8. Use the File/Place feature to choose the data file with your names. Move the text icon to the upper left corner of your new margins and click. PageMaker will put the first name on the first page, and create extra pages until it runs out of data from your names file.

Printing Certificates

There are three methods you can use to print the certificates:

1. **Direct printing.** Use the File/Print function now. If you are printing more than 10 certificates, this has two disadvantages. First, because PageMaker needs to compose and print the entire certificate for each page, it will take a lot of time. Second, if you are using a laser printer, it uses a lot of toner. To save time and toner, see the next two printing techniques.

2. **Two-pass printing.** Print your blank certificates first, then feed them through the printer a second time to add the names. To do this:

   a. Click on the Master Page

   b. Click on Edit/Select All

   c. Click on Edit/Cut

   d. Click on Page/Insert and insert a single page after the master. PageMaker will place you on page 1, which will be blank.

   e. Click on Edit/Paste. The contents of your Master Page will appear on page 1.

   f. Click on File/Print and change the "Copies" selection to the number of certificates you want to print. Change "Pages" from "All" to "From page 1 to page 1." Click on Okay.

   g. When the certificates are printed, load them into the printer again. If you are using an HP LaserJet printer or HP JetScript printer, they go into the sheet feeder face-up, with the top of the certificate toward the printer. If your certificate is in landscape mode, the top should go to the right hand side of the printer. Allow some time for the toner on the certificates to cool, and ruffle the pages so they do not stick together. Warm toner will stick to the back of the next page, and will cause a messy paper jam.

h. Click on File/Print and change "Copies" to "1", and change "Pages" to "From page 2 to page x" where x is the last page of your publication.

3. **Two-pass printing with copying.** This assumes you have a good quality copier.

    a. Do steps a through e in #2 above.

    b. Click on File/Print. Keep "Copies" at 1. Change "Pages" to "From page 1 to page 1." Click on Okay.

    c. Use a copier to make as many copies of the master certificate as needed.

    d. Follow steps g through h in #2 above.

Letters	1. To create letters, follow the steps for making certificates, but remember that your data file will have names, addresses and salutations. You will probably need to use trial and error to get the correct margin settings, and you may need to adjust the format of your data file. For example, your salutation line will probably need to be separated from the name and address by an extra blank line, but there would be no blank line between two blocks of data. You will be working with small type sizes, so the margin settings will be more critical.
	2. When you create your Master Page, set the Autoflow option off. This will limit the letter to its first page. Turn Autoflow back on when it is time to merge your data.
	3. Use the same printing methods described above for certificates.

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Here are some hints on how you can use a Personal Card File (PCF) or an Executive Card Manager (ECM) file with Microsoft® Word Version 1.1, for a mail merge on the HP 150/Touchscreen PC. Mail merge allows you to insert data from a mailing list into a letter, or on to labels.

Prepare your Personal Card File or Executive Card Manager file as follows:

1. In PCF or ECM, use Transfer Out to create a quoted basic file. Give it a name with a .DOC extension, for example KKLIST.DOC.

2. Use an editor, like Edlin, on this file to add a line at the beginning that lists all of the field names in order, separated by commas and containing no spaces. For example:

   name,address,city,state,zip
   "John Smith","10 Oak Rd.","San Diego","Ca.","11111"
   "Jane Doe","4 River Pl.","Sunnyvale","Ca.","11199"

3. In MS Word, create your form letter that begins with < <DATAKKLIST.DOC> >, where KKLIST is the name of the quoted basic PCF or ECM file you created in Step 1. Notice that there is no space between DATA and the name of the quoted basic file.

4. In the MS Word document containing the form letter, type the text that you desire, making sure that you reference the field names surrounded by < < > >'s. For example:

   < <name> >
   < <address> >
   < <city> >, < <state> > < <zip> >

   Dear < <name> >:
     You have been selected . . .

5. Use Print Merge with the document on the screen. This will print your personalized letters, as follows:

   John Smith
   10 Oak Rd.
   San Diego, Ca. 11111

   Dear John Smith:
     You have been selected . . .

   Jane Doe
   4 River Pl.
   Sunnyvale, Ca. 11199

   Dear Jane Doe:
     You have been selected . . .

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When you use the MS-DOS PRINT command, your HP Vectra PC will print by default to the PRN (LPT1) device. However, there are several ways to specify that you want the document to print to a serial (COMX) device (where X is the designator of the serial port). Here are three methods you can use.

■ The first time you issue the MS-DOS PRINT command, you are prompted for the "Name of list device." At this point you can either press Enter, which will default to the PRN (LPT1) device, or you can input a device specifier such as COM1 or COM2. This will set the PRINT command output device to the serial port until you restart your system and issue the PRINT command with a different parameter.

■ Another way to accomplish the same thing is to use the /D:<device> parameter when you first issue the PRINT command. This option is used to specify the output device that you want to use. You can use any device name that is valid for your system, such as PRN, COM1, COM2, COM3, LPT1, LPT2 or LPT3. This option must be the first option specified on the command line. For example:

PRINT /D:COM1 <File name>

Once again, the printer that you specify as the output device will remain in effect until you restart your system and reissue the PRINT command with a different parameter.

■ If you do not have a parallel printer on your system, and you want the PRN device to be rerouted to a COM port, you can issue a MODE statement from your AUTOEXEC.BAT file to do this. The MODE statement would read:

MODE LPT1: = COMX (where X is the designator of the serial port)

The above statement would cause any output sent to LPT1 (PRN device) to go automatically to the COM port.

The important point to remember about the MS-DOS PRINT command is that the first time you issue the command, the parameters are set until you restart your system and reissue the command with different parameters.

For details on the MS-DOS PRINT command, refer to your *MS-DOS User's Reference Manual Volume II.*

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Lotus 1-2-3:
Configuring Your HP Vectra Monitor   Lise Shade

If your system does not respond when you try to load Lotus® 1-2-3® Version 2.01 on your HP Vectra PC, and the software does not load, your monitor may be configured incorrectly in the Lotus INSTALL program.

Here is how you can check if your monitor is configured correctly for Lotus 1-2-3.

Run the Lotus INSTALL program and start the option to "Change Selected Equipment." Go to the "Screen Display Option." You will be asked to specify how many monitors you have, then what type of monitor you have. Refer to the table below for suggestions on how to configure HP monitors.

HP Adapter/Monitor	Configure As
HP Multimode Adapter, Monochrome Monitor	IBM Color Card, Single Color Monitor
HP Multimode Color Adapter (HP 45984A), and RGB monitor	IBM Color Card, Color Monitor
HP EGA Adapter, EGA Monitor	Enhanced Graphics Adapter
HP Video Graphics Adapter, HP VGA Monochrome or Color Monitor	Enhanced Graphics Adapter (Lotus 2.01 does not have a VGA driver)
HP Monochrome Plus Video Adapter, Monochrome Plus Monitor	Hercules Card (80x25)

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Computer
Museum

Here are some notes on the HP Vectra RS Volume Expansion Utility—what it is, and where it can be found.

The RS Volume Expansion Utility partitions and formats your hard disk. It can create up to eight partitions on a hard disk. It is found on the Vectra RS SETUP AND UTILITIES disk included with your HP Vectra RS PC.

The Volume Expansion Utility can create four different types of partitions on your hard disk:

1. **MS-DOS System partition.** This is the partition of 32 MB or less that contains the operating system.

2. **Compatible partition.** This is a 32 MB or less partition that is fully compatible with MS-DOS.

3. **Extension partition.** This is a partition that can be greater than 32 MB and is fully compatible with most MS-DOS applications.

4. **SpanDrive partition.** This is a partition that can be greater than 32 MB and can span two drives. A SpanDrive has the same compatibility as an Extension partition.

The Volume Expansion Utility consists of two separate utilities, AUTOPART and MENUPART.

AUTOPART is the automatic partitioning portion of the utility. It executes the partitioning and formatting for your hard disk(s). It is recommended that you use AUTOPART to partition your drives. AUTOPART automatically copies the MS-DOS system files onto the first partition of the hard disk.

MENUPART allows you to select customized partitioning manually. It also allows you to delete, reorder, or change the status of partitions. If you use MENUPART, you must copy the MS-DOS system files manually.

For more detailed information, refer to the Volume Expansion Utility section in your *Setting Up Vectra RS* manual.

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The following Memory Matrix will help you determine what kind of additional memory you can install into your HP Vectra PC, and how to use it. Please note that this chart assumes a basic understanding of expanded and extended memory on HP Vectra PCs.

HP VECTRA MEMORY CARD MATRIX

Card	CS Expanded Memory Card	ES Expanded Memory Card	HP Memory Expansion Card	RS SIMMs
Supported In	HP Vectra CS	HP Vectra ES and ES/12	Pre-ES Vectras, HP Vectra ES and ES/12	HP Vectra QS/16 HP Vectra RS/20C and RS/25C
Product Numbers	D1174A Opt 001 (1 MB) Opt 002 (2 MB)	45944A Opt 001 (2 MB) Opt 002 (4 MB) Opt 003 (8 MB)	45973A (½ MB) 45974A (1 MB)	D1540A (1 MB for /16) D1541A (8 MB for /16) D1640A (1 MB for /20) D1641A (8 MB for /20)
Memory Upgrades	D1008A (1 MB Upgrade)	D1354A (2 MB Upgrade)	None	See Above
Memory per Card	2 MB	8 MB	½ MB 1 MB	256 KB/SIMM 1 MB/SIMM
Total Cards per System	4 (8 MB)	1 (8 MB)	5 (5 MB)	16 (16 MB)
Speed	7.16 MHz	12 MHz	8 MHz	16 or 20 MHz
Wait States	2 Wait States	1 Wait State	1 Wait State	<1 Wait State
Supported Memory Types	Expanded	Expanded Extended (2 MB increments)	Extended	Expanded Extended
LIM H/W Version	3.2	4.0	N/A	N/A (s/w emulation)
Expanded Memory Manager Version	3.2	4.0	N/A	4.0
RAM Disk Driver (memory)	RAMDISK.SYS (expanded)	HPEMDSC.SYS (expanded)	None—use VDISK (extended)	None—use VDISK (extended)
Print-Spooler driver (memory)	EMSPOOL.SYS (expanded)	None	None	None

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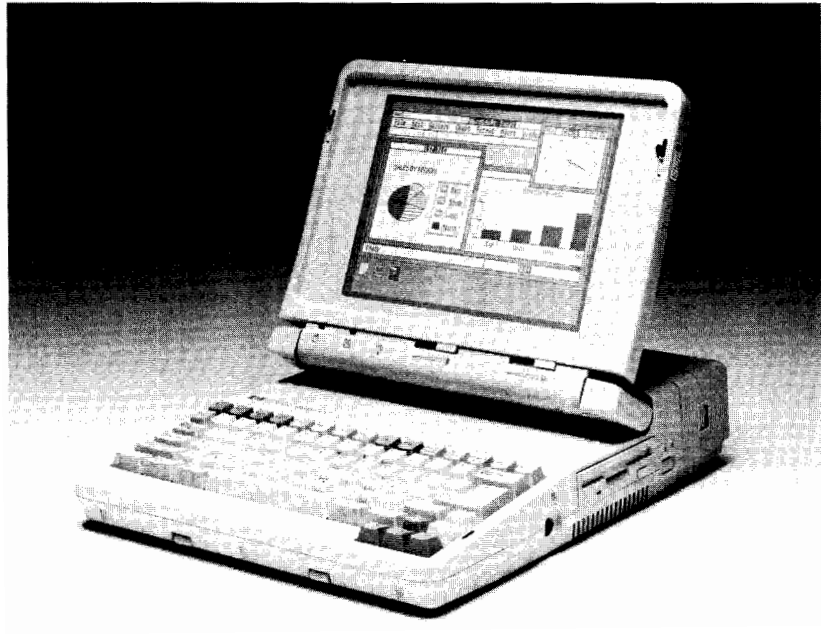
Many of you may be familiar with HPMODE commands on the HP Vectra CS, ES, and RS PCs. But do you know the options and settings included in the HP Vectra LS/12 Laptop PC's HPMODE commands?

The HPMODE file is located on the HP Vectra LS/12 Utilities and Drivers Disk that comes with every LS/12 Laptop Computer. Below is the HPMODE command syntax, and the options with their descriptions and settings.

HPMODE [option] [<setting>]

Option	Description	Setting
SPEED	Change computer processing speed	SLOW | FAST | SMART
DISK	Turn off the hard disk motor	NO (spins continuously) 5-1270 (increments of 5 seconds)
LIGHT	Turn off the LCD backlight	ON (on continuously) OFF (off continuously) 1–98 (increments of 1 minute)
PALETTE	Change the LCD palette number	0–9
MODEM	Turn the modem on or off	ON | OFF
SCROLL	Change the scroll mode	JUMP | SMOOTH

Here are some examples of how you can use HPMODE commands.

■ If you want to change the processing speed of the HP Vectra LS/12 Laptop PC from 12 MHz (FAST) to 6 MHz (SLOW), type the following command:

HPMODE SPEED SLOW

The SMART setting runs the processor at 12 MHz, but for disk I/O, it slows down the processor to 6 MHz. This is useful with speed sensitive software. For more information, refer to the *LS/12 Utilities and Drivers* packet shipped with your system.

■ If you want to conserve battery power, you can use the LIGHT option to turn off the backlight when the computer is not in use. For example, the following command will turn off the backlight five minutes after the keyboard was last used.

HPMODE LIGHT 5

When the LCD backlight turns off, the display will appear much dimmer. To turn the backlight back on, simply press any key.

For a more detailed explanation of the HPMODE commands refer to the *LS/12 Utilities and Drivers* packet.

□

The HP Vectra LS/12 Laptop PC comes with 1 MB
of memory, compared to other AT-type machines
such as the HP Vectra ES/12 PC, which come with
640 KB of memory. Memory from 0 to 640 KB is
called Base Memory (also known as Conventional
or User Memory). Memory from 640 to 1024 KB is
called Reserved Memory. The Base Memory is
typically used for MS-DOS, applications, and
data, and the Reserved Memory for System ROMs
and Video ROM.

Since the HP Vectra LS/12 Laptop PC has one full
megabyte of memory, 256 KB can be used as
Expanded Memory. Here are three commonly
asked questions about the 256 KB of Expanded
Memory on the LS/12:

**Q: Does every LS/12 come with 1 MB of memory,
and can I use 256 KB for Expanded Memory?**

A: Yes, all LS/12s come with a full 1 MB of
memory, and you can use 256 KB as Expanded
Memory.

**Q: How can I configure my LS/12 to take
advantage of 256 KB of Expanded Memory?**

A: It's very easy. Just follow these steps.

1. Run the SETUP program that is found on
the LS/12 Utilities and Drivers Disk. Within
the SETUP program:

   A. Set the Memory Option to "Expanded
   (EMS) Memory"

   B. Set the Expanded (EMS) Memory size
   to the appropriate setting. For example,
   if you do not have the 1 MB add-on
   memory card, set the value to 0 (zero).
   If you have the 1 MB add-on memory
   card, set the value to 1024 KB.

2. Install the Expanded Memory Manager into
CONFIG.SYS. The line should look like
this:

   DEVICE = EMM.SYS

   The Expanded Memory Manager file
   (EMM.SYS) can be found on the LS/12
   Utilities and Drivers Disk Version A.00.01.
   Copy this file to the root directory on your
   hard disk.

   Note: Please see the article "HP Vectra
   LS/12 Laptop PC: New Version of SETUP
   Disk" elsewhere in this issue.

Q: What can I use the 256 KB of Expanded Memory for?

A: This question has several answers. HP recommends that you use this area for a Disk Cache. The Disk Cache software (HPCACHE.COM) can be found on the LS/12 Utilities and Drivers Disk. The recommended setting for the Disk Cache in AUTOEXEC.BAT is:

HPCACHE /A /S:128

The 256 KB of Expanded Memory can also be used as a RAM Disk. However, this is not recommended since 256 KB is not very large for a RAM Disk. If you decide to set up a RAM Disk in this area, the RAM Disk file called HPEMDSC.SYS is on the LS/12 Utilities and Drivers Disk. This file will set up a RAM Disk in Expanded Memory ONLY. To use the 256 KB of Expanded Memory for a RAM Disk, add the following line to your CONFIG.SYS file:

DEVICE = HPEMDSC.SYS 256

For more information on HPEMDSC.SYS, refer to the *LS/12 Utilities and Drivers* packet shipped with your system. You can also use the 256 KB of Expanded Memory with applications that are written to take advantage of Expanded Memory, such as Windows and Lotus 1-2-3.

□

The HP Vectra LS/12 Laptop PC comes in the following two models. Both models have a built-in 3.5-inch flexible disk drive. Please note that the 20 MB hard disk model cannot be upgraded to the 40 MB model.

HP Product	Hard Disk Capacity	Hard Disk Drive Type
1024A	20 MB	Type 6
1044A	40 MB	Type 44

The 3.5-inch flexible disk drives will read and write to 1.44 MB, 720 KB, and 710 KB (for the HP 150/Touchscreen PC) media. However, here are a few points to remember.

1. The 1.44 MB medium supplied by HP is the black high density disk. The LS/12's Flexible Disk Drive will not recognize IBM's high density disk because IBM's disks are lacking the "second notch", that is, the media density hole in the jacket of the flexible disk.

2. The 720 KB medium supplied by HP is the gray, double-sided, double-density disk. To format this disk in the LS/12 you must use the /N:9 parameter on the Format Command line.

3. The 710 KB medium supplied by HP is the gray, double-sided, double-density disk, formatted with the FOR150 command. To read and write to this disk you must first add the following lines to your CONFIG.SYS file:

   DEVICE = INDSKBIO.SYS /D:0
   DRIVPARM = /D:0 /F:7 /H:2 /S:18 /T:80

   Be sure to copy the INDSKBIO.SYS file located on the LS/12 Utilities and Drivers Disk to your hard disk.

   Note: You can run the 35INSTAL.BAT file located on the LS/12 Utilities and Drivers disk. This batch file will automatically insert the above two lines into CONFIG.SYS and will copy the INDSKBIO.SYS file to your hard disk for you.

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HP Vectra RS/20C and RS/25C— New High End PCs

Wolfgang Baltes, Christian Rey

Two new high end members of the HP Vectra PC family, the HP Vectra RS/25C and RS/20C PCs, are now available. As replacements for the HP Vectra RS/16 and RS/20 PCs, the new products establish higher performance levels for HP's Vectra PC family. The new products offer all the benefits of the award-winning HP Vectra RS/20 PC (*PC Magazine* "*Editor's Choice*" June 28, 1988) and are the most powerful PCs that HP offers today.

The new HP Vectra RS PCs are ideal as CAD/CAM stations, as hosts for multiuser systems, LAN servers, and for demanding business applications such as very large spreadsheets and databases.

Performance

The HP Vectra RS/25C and RS/20C PCs feature the Intel 80386 microprocessor, operating at 25 and 20 MHz speeds respectively, to provide the necessary power reserve for the most demanding applications. In addition, a memory cache system has been added to each system to boost the performance. Memory cache enables the new HP Vectra RS PCs to approach zero-wait state memory accesses by using very fast static RAM components. On memory-intensive applications, the RS/20C is 25 percent faster, and the RS/25C is 40 percent faster, than the HP Vectra RS/20 PC.

To better support calculation intensive applications, there are two sockets for optional math coprocessors on the microprocessor board. One is for the Intel 80387 Numeric Coprocessor (available from HP), and the other is for the new single chip Weitek 3167 Floating Point Accelerator (available from third parties).

Premium performance is obtained not only by fast processor speed. The new HP Vectra RS PCs use high performance ESDI drives. The RS/20C comes in 103 and 155 MB models, and the RS/25C comes in 103, 155, and 310 MB models. Furthermore, both the RS/20C and RS/25C can support an additional 103, 155, or 310 MB ESDI drive internally. Each system is supplied with HPCACHE, a disk caching software which makes disk data available to the CPU at an even higher speed.

Expandability	To provide the flexibility of configuration for a large variety of applications, the new HP Vectra RS PCs offer eight expansion slots and six mass storage shelves, backed by an ample, 200 Watt (continuous) power supply.
Compatibility	The new RS/25C and RS/20C PCs are IBM PC/AT compatible, so you can use virtually any of the applications and accessory cards currently available for the IBM PC/AT. Operating systems that are compatible include MS-DOS 3.3, SCO XENIX, Microsoft OS/2, and Microsoft Windows/386.
CAD/CAM Stations	The new HP Vectra RS PCs combine the power of a dedicated CAD/CAM station with the ability to run MS-DOS personal productivity software packages in one product. An HP Vectra RS PC and an HP plotter for high quality output is an ideal solution for the design/engineering/architectural department.
Multiuser Applications	The computing power of the new RS PCs is ideal for multiuser systems for small businesses, law or medical offices. HP works with developers of multiuser operating systems such as SCO's XENIX to ensure optimal performance and reliability of both hardware and software. While the new HP Vectra RS PCs are ideal as hosts for such workgroup solutions, HP's ASCII terminals and PC terminals are designed to equip the connected workstations.
LAN Servers	The new HP Vectra RS PCs have been tested as servers for LANs such as Token Ring, Novell,® and HP's StarLAN. Because of the large number of expansion slots, you can add numerous accessory cards such as the LAN interface, I/O ports for multiple printers and plotters, as well as modems. Its large internal mass storage capacity is sufficient for the software and data for all the stations connected to the LAN.

Ordering Information All of the following HP Vectra RS/20C and RS/25C models come with the main hardware components already installed. To order, contact your dealer or HP sales representative.

HP Product Number*	PC	Model Number	Flexible Disk	Hard Disk	RAM
D2002A	RS/20C	100e	5.25"	103 Mbyte	1 Mbyte
D2003A		150e	5.25"	155 Mbyte	1 Mbyte
D2004A		154e	5.25"	155 Mbyte	4 Mbyte
D2022A	RS/25C	100e	5.25"	103 Mbyte	1 Mbyte
D2023A		150e	5.25"	155 Mbyte	1 Mbyte
D2024A		154e	5.25"	155 Mbyte	4 Mbyte
D2025A		304e	5.25"	310 Mbyte	4 Mbyte

*All systems include the SPU, keyboard, and the PC kit. A language option must be specified when ordering any of these systems.

The following system literature is also available:

HP Vectra RS Hardware Technical Reference Manual Kit	5061-8986
HP Vectra System BIOS Technical Reference Manual Kit	45945-60031
HP Vectra Accessories Technical Reference Manual Kit	5061-8983

To order, call HP DIRECT. For the phone number nearest you, check the "How to Order" section in the green pages.

New Graphics Gallery Version 3.0
Now Available

Frank Sabella

Graphics Gallery Version 3.0 (C.00.00) for the HP Vectra PC family, IBM PC/XT/AT and compatibles, and IBM PS/2 PCs, is now available. Both 5.25 and 3.5-inch media are included in each copy of Drawing Gallery, Charting Gallery, and Gallery Collection.

Key product enhancements include many new chart types, new color and black and white palettes, expanded file compatibility between Gallery and other applications, support for many new output devices, and a 35mm overnight slide service. Expanded support for new file formats has greatly enhanced Gallery's ability to work with other software applications. Gallery now exports and imports ANSI standard Computer Graphics Metafile (CGM) pictures, imports ASCII text files (into Drawing Gallery), and saves to Encapsulated PostScript™ (EPS) file format to output to PostScript printers.

Graphics Gallery is a leading presentation graphics software package, offering an easy to learn and use solution for production of high quality presentation graphics. Graphics Gallery also provides support for all of HP's top-of-the-line peripherals (as well as for many third party peripherals), giving you maximum flexibility to produce graphics on paper, transparencies, or 35mm slides.

The Graphics Gallery Version 3.0 product family includes Drawing Gallery, Charting Gallery, the Gallery Collection (both Charting and Drawing Gallery), and four picture portfolios: HP Draw, Office Activities, Chemical/Petrochemical, and Business Management (included in the Gallery Collection). Both Drawing Gallery and the Gallery Collection also include a fifth portfolio, the Basic Portfolio, which cannot be ordered separately.

Key New Features

Here are some of the new features of Charting Gallery and Drawing Gallery.

Charting Gallery:

- All chart types in one integrated package
- Deep and Shallow 3-D Bar Charts
- 3-D Pie Charts
- Hi-Low-Open-Close (HLOC) Charts
- 100% Y Scale Area Charts
- 100% Vertical and Horizontal Stacked Bar Charts
- Line Scatter, and XY Charts available with Log X Scale, Log Lin Y Scale, Lin Log Y Scale, Dual Log Y Scale
- Date labels
- Label selection
- New Layout Feature puts multiple charts on a page
- Production Charting—Command File Interface lets you update and produce charts automatically. Spreadsheet links can also be developed to eliminate repetitive data entry and speed production of regularly created charts and graphs.

Drawing Gallery:

- Full Color Palette—130 on-screen colors (EGA)
- Black and White Pattern Palette—8 patterns
- Black and White Gray Scale Palette—8 gray scales
- Background Fill—either color, gray scale, or B & W pattern
- Graduated Color Palettes—(selected subset of available colors)
- Custom Color Palettes—(selected subset of available colors)
- Color, gray scale and B & W palettes applied to shapes, lines, and text
- Bring to Front
- Customized Grid Size
- Custom Text Point Size (set from 1 to 901)
- Skew Text
- New line editing features—smooth, simplify, reshape, break, and join
- 8 Line Widths, 7 Line Styles
- ASCII Text File Import

Charting and Drawing Gallery:

- Softkey to move between Charting and Drawing Gallery

- Computer Graphics Metafile (CGM)—Converts charts and pictures to CGM format for use with other software programs, and imports CGM files from other programs.

- Encapsulated PostScript™ (EPS) File Format—Draws charts and pictures to EPS for use with PostScript output devices.

- PostScript Printer Support

- Print Part of a Picture

- Batch printing and Slide Shows via the Command File Interface

- Plotter Pen Shielding—Prevents drawing of hidden objects in back of other objects

- Overnight 35mm Slide Service from MAGICorp

Ordering Information

New Gallery Users

Product numbers are for U.S. versions. Please note that Graphics Gallery 3.0 is not available for the HP 150/Touchscreen PC.

HP Product	Description
D1709A	Drawing Gallery
D1710A	Charting Gallery
D1711A	Gallery Collection (includes Drawing and Charting Gallery)
68324F	Office Activities Portfolio
68326F	Business Management Portfolio
68325F	Chemical/Petrochemical Portfolio
68327F	HP Draw Figures Portfolio
D1716A	Gallery Collection FastTrak (advanced user's guide, available Spring 1989)
D1711L	Gallery Collection Site License (one set of master disks, documentation, and ten right to copy certificates)
D1710L	Charting Gallery Site License (one set of master disks, documentation, and ten right to copy certificates)

To order any of these products, or for more information, contact your dealer or HP sales representative.

Upgrades

Software upgrades to Graphics Gallery Version 3.0 are available to current users of Versions 1.0 and 2.0 of the Graphics Gallery family of products.

If you purchased Version 2.0 of Drawing Gallery, Charting Gallery, or the Gallery Collection (stand-alone or site license) after December 1, 1988, you can request a free upgrade to the corresponding new product. You must send a proof of purchase (a dated sales receipt or purchase order) to HP DIRECT with your upgrade order.

For more information on how to order upgrades refer to "Software Exchange Kits" in the green pages of this issue.

HP Product	Product Upgrades
D1709-60001	Drawing Gallery
D1710-60001	Charting Gallery
D1711-60001	Gallery Collection
D1711Z	Gallery Collection Site License (one set of master disks, documentation, and ten right to copy certificates)
D1710Z	Charting Gallery Site License (one set of master disks, documentation, and ten right to copy certificates)

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Graphics Gallery 3.0 and the
HP SketchPro Graphics Tablet   Kevin Lai

Partners	Now you can team up the convenience of the HP SketchPro Graphics Tablet (HP 7060A) with the power and flexibility of Graphics Gallery Version 3.0 (HP D1711A) for partners in productivity. Graphics Gallery 3.0 is supported on the HP Vectra PC family, IBM PC/XT/AT and compatibles, and IBM PS/2 PCs. Graphics Gallery version 3.0, Drawing Gallery, and Charting Gallery come with everything you need to use the HP SketchPro in true tablet mode: a tablet driver file and set-up instructions.
Why Use A Tablet	Why do interactive graphics users prefer a tablet to a mouse?

- A tablet is 3.5 times faster at positioning the cursor in interactive applications.
- A tablet is easier to operate than a mouse and is designed to substantially reduce arm fatigue.
- If you trace your drawings, you simply can't do it with a mouse.
- For applications where accuracy is important, the HP SketchPro has five times the resolution of a mouse.

In a nutshell, the HP SketchPro Graphics Tablet offers convenience, precision, and speed, and comes with everything you need: stylus, puck, and cables. If you run multiple applications on the same computer, SketchPro is an ideal solution for you. With the touch of a softkey, you can switch from tablet to MicroSoft Mouse mode—and back again.

Ordering Information	For more information on Graphics Gallery Version 3.0, and how to order it and the software upgrade, refer to the article "New Graphics Gallery Version 3.0" in this issue. To order the HP SketchPro Graphics Tablet, contact your dealer or HP sales representative and request HP product number 7060A.

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A new version of the SETUP and Utilities Program Disk for the HP Vectra LS/12 Laptop PC is now available for those of you who received the earlier version, A.00.00, with your LS/12. The new version, A.00.01, includes the following changes:

■ Addition of the LIM 4.0 driver

■ A modified Install Utility

LIM 4.0 Driver

Version A.00.00 of the SETUP and Utilities Program Disk did not contain the LIM 4.0 driver. Instructions for installing the driver are included with the new SETUP disk.

Install Utility

The modified INSTALL utility, in addition to the functions of the previous version, copies the LIM 4.0 driver to the hard disk, adds a line to CONFIG.SYS for the LIM driver, and adds a line to AUTOEXEC.BAT to set up a disk cache for 128 KB of expanded memory.

To obtain Version A.00.01 of the SETUP and Utilities Disk, mail in the Reply Card you received with your LS/12, or contact your dealer or HP sales representative.

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New Accessories for the HP Vectra LS/12 Laptop PC

Peter Neidecker

Here is a list of accessories available for the recently introduced HP Vectra LS/12 Laptop PC.

- **1 MB Memory Expansion Card (HP D1054A)**

  If you feel that 1 MB of memory just won't be enough, the 1 MB Memory Expansion Card allows you to manipulate large files and use software requiring up to 2 MB of memory, such as Microsoft Windows. The 1 MB Memory Card also supports LIM (Lotus-Intel-Microsoft) EMS (Expanded Memory Specification) 4.0, which circumvents MS-DOS limitations by swapping data and program segments from memory above 650 Kbytes.

- **Intel 80C287 Numeric Coprocessor (HP D1053A)**

  You can greatly increase the efficiency of mathematical computations with an Intel 80C287 Numeric Coprocessor, which has an operating speed of 12 MHz.

- **2400 BPS Internal Modem (HP D1052A)**

  This Internal Modem allows you to access data from the mainframe, or transfer critical files while away from the office. The modem operates at 300, 1200 or 2400 BPS for full compatibility with other modems. Its auto-dial and auto-answer features allow you to send or receive information at any time. The modem connector is located inside the SPU, and you can install it in seconds.

- **NiCad Battery Pack (HP D1057A) and External Battery Charger/AC Adapter (HP D1058A)**

  If you require more than 3 to 4 hours of battery power, you may want to carry an extra Battery Pack. You can also order a Battery Charger/AC Adapter to charge extra batteries.

- **Carrying Case (HP 35178F)**

  A carrying case protects the computer and is padded for carrying comfort. Pockets are built in for an extra battery or disks.

- **Monitor Stand (HP 92166K)**

  The Monitor Stand elevates the internal monitor above the SPU.

To order these products, contact your local dealer or HP sales representative. The last two items can be ordered only from HP DIRECT. For the phone number nearest you refer to "How to Order" in the green pages.

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The new A.00.03 version of the HP Terminal Program (HP 24597A) has been released. It contains all the features of its predecessor plus the following:

- Color alphanumeric characters. Eight different color pairs (foreground and background) can be configured from a palette of eight colors.

- Support for the new VGA monochrome and color adapters.

- A forms cache to store data entry forms in the PC's memory and disk for faster forms access.

- Underline capability. This video enhancement is now available on EGA and VGA color monitors, in addition to blinking, inverse video, and half-bright.

- Support for the following keyboards: French Canadian, Cyrillic, Portuguese, Greek, and Turkish

- Localized files (English, French and German) for softkey labels, messages, the HELP screen and the README.DOC file. The language must be selected during the installation procedure. The upgrade/exchange kit is available with the English User Manual only.

The above features are described in the updated HP Terminal Program documentation and will also be integrated in AdvanceLink Version B.02.00.

An Upgrade/Exchange kit is available from HP DIRECT. To order the Upgrade/Exchange Kit, see the instructions in "Software Exchange Kits" in the green pages of this issue. To order the HP Terminal Program Version A.00.03, contact your dealer or HP sales representative.

HP Product	Description
24597A	HP Terminal Program Version A.00.03
24597-65010	HP Terminal Program Upgrade/ Exchange Kit Version A.00.03 (disks plus updated English User Manual)

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New Accessories For   Wolfgang Baltes,
HP Vectra RS and QS PCs   Christian Rey

New Accessories

The following three new accessories for HP's 80386-based PC products, the HP Vectra RS and QS PC lines, are now available:

- 4 MB Memory Upgrade Kit, 100 ns with four 1 MB Memory Modules (HP product number D1542A)

- 4 MB Memory Upgrade Kit, 80 ns with four 1 MB Memory Modules (HP product number D1642A)

- Intel 80387 Numeric Coprocessor, 25 MHz (HP product number D2070A)

The two new 4 MB Memory Upgrade Kits replace the 8 MB Memory Upgrade Kits, HP product numbers D1541A and D1641A, which have been discontinued. If you require 8 MB of additional memory, you should order two 4 MB Memory Upgrade Kits instead of one 8 MB Upgrade Kit.

The following table summarizes the memory upgrades and coprocessors available and supported for HP's 80386-based PCs. To order, contact your dealer or HP sales representative.

Accessory	RS/25C	RS/20C	RS/20	RS/16	QS/16
1 MB Memory Upgrade Kit	D1640A	D1540A	D1640A	D1540A	D1540A
4 MB Memory Upgrade Kit	D1642A*	D1542*	D1642A	D1542A	D1542A
Intel 80387 Numeric Coprocessor	D2070A*	D1670A	D1670A	D1570A	D1570A

New

**Memory Upgrade Path
for RS/20C and RS/25C**

The memory upgrade path for the new HP Vectra RS/20C and RS/25C PCs has been designed to better match your PC memory requirements, simplify upgrade paths, and provide more flexible upgrade possibilities.

To better meet your needs, the new HP Vectra RS PCs are configured with either 1 MB of memory (four memory modules of 256 KB each) or 4 MB of memory (four memory modules of 1 MB each.) The 1 MB systems can be easily upgraded to 2, 4, or 10 MB, and the 4 MB systems can be upgraded to 8, 10 or 16 MB, as shown below:

Memory Upgrade Path for RS/25C & RS/20C

```
 ┌──────────┐   Add one 1-Mbyte kit   ┌──────────┐   Add two 1-Mbyte kits   ┌──────────┐
 │ 1-Mbyte¹ │ ──────────────────────> │ 2-Mbyte  │ ──────────────────────> │ 4-Mbyte³ │
 └────┬─────┘                         └──────────┘                         └──────────┘
      │                                              ╲
  Replace standard                                     Add two 4-Mbyte kits
  1-Mbyte  with                                          ╲
  one 4-Mbyte kit                                          ╲
      │                                                      ╲
      ▼                                                       ╲
 ┌──────────┐   Add one 4-Mbyte kit   ┌──────────┐   Add two 4-Mbyte kits   ┌──────────┐
 │ 4-Mbyte² │ ──────────────────────> │ 8-Mbyte  │ ──────────────────────> │ 10-Mbyte │
 └──────────┘                         └──────────┘                         └──────────┘
                                                     ╲
                                                       Add two 4-Mbyte kits
                                                         ╲
                                                           ▼
                                                       ┌───────────┐
                                                       │ 16-Mbyte⁴ │
                                                       └───────────┘
```
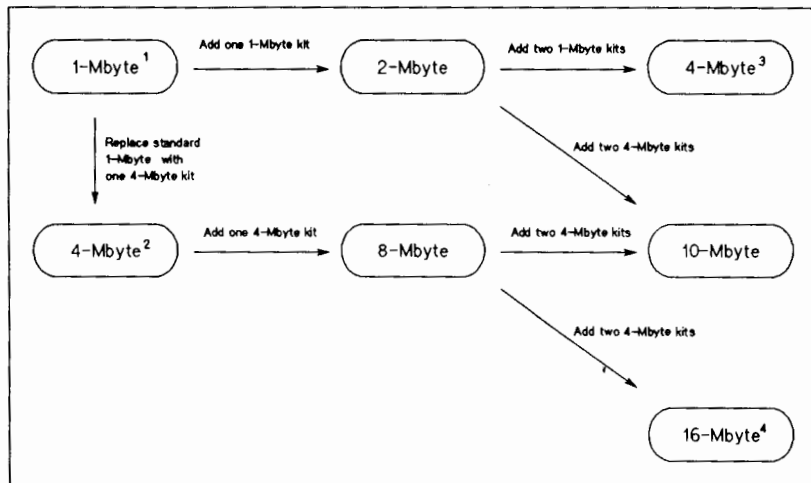
Notes:
1. This is the standard configuration for RS/25C and RS/20C models 100 and 150.
2. This is the standard configuration for RS/25C and RS/20C models 154 and 304.
3. In this configuration all 16 memory slots are occupied by 256-Kbyte memory modules.
4. In this configuration all 16 memory slots are occupied by 1-Mbyte memory modules.

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Index

HP PC Communicator Index

The index includes all major articles from every issue, including the Encyclopedia articles of past issues. The Encyclopedia articles are shown with the letter "E-" in front of the page number. Earlier issues of the Communicator contained an Insert section. Articles which appeared there are shown with the letter "I-" in front of the page number.

There is no index for Newsline and Bugline column items which appear in each issue.

The articles are listed in four sections:

For HP Product Numbers for each issue, turn to "Ordering *HP PC Communicator* Back Issues" in the green pages.

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HP 120 and HP 125   Issue   Page

HP 120 and HP 125   Issue   Page

HP 150/Touchscreen PC

HP 150/Touchscreen PC   **Issue**   **Page**

HP Portables   **Issue**   **Page**

HP Portables

HP Vectra PC Family Issue Page

HP Vectra PC Family   **Issue**   **Page**

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HP Vectra PC Family   Issue   Page

Current Information

Depending on where you purchased a software or hardware product, the best source of assistance for that product may be your own organization, your dealer or value-added reseller, the original developer, or Hewlett-Packard.

Is support provided from within your own organization?

If you work in an organization which has many personal computers, there is often one person who coordinates the purchase, set-up, and training. (For example, each HP division or office has an Office Automation Coordinator, usually part of the Information Systems Department.)

Your internal support people have full knowledge of your organization's overall system: your internally-developed programs, your unique operating and networking procedures ... and your specific configuration.

Your experts, in turn, have access to special resources through your dealer or HP. Support services, such as consulting, can be purchased from HP or your dealer to supplement your internal capabilities.

Was this product purchased from a dealer or value-added reseller?

If you purchased this product from a dealer or value-added reseller (VAR), they have worked with you to define your application and configure your system—perhaps selecting software or hardware not supplied by HP. Here, your dealer or VAR is the best source of assistance—knowing you, your needs, and your configuration well.

Authorized dealers and VARs are backed up by special resources within HP ... and, of course, you have access to HP's full range of support services as a supplement.

By buying your hardware, software, accessories, and supplies from an authorized HP dealer or VAR who provides full support, you build up a continuing relationship—providing a local, personal, and uniquely-responsive support program customized for you.

Was this product purchased from a dealer or value-added reseller?	If you purchased this product from a dealer or value-added reseller (VAR), they have worked with you to define your application and configure your system—perhaps selecting software or hardware not supplied by HP. Here, your dealer or VAR is the best source of assistance—knowing you, your needs, and your configuration well.
	Authorized dealers and VARs are backed up by special resources within HP...and, of course, you have access to HP's full range of support services as a supplement.
	By buying your hardware, software, accessories, and supplies from an authorized HP dealer or VAR who provides full support, you build up a continuing relationship—providing a local, personal, and uniquely-responsive support program customized for you.
Was this product provided by an independent vendor?	If the product was developed by an independent software vendor (ISV) or an independent hardware vendor (IHV), support—because of the specialized knowledge required—comes either directly from the original developer or through the dealer or value-added reseller from whom you purchased it.
Telephone assistance from HP	You can obtain telephone assistance 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, we have arranged for support directly from the original developer—as indicated in the product data sheet and documentation.)
	While specifics vary somewhat from country to country, here's how the U.S./Canada program works.
	■ The toll-free U.S./Canada HP HelpLine is open Monday through Friday from 7 a.m. to 9 p.m. Eastern Standard Time.
	■ In the U.S. and Canada, calls are paid for by one of three means:
	—By identifying yourself under a specific support contract. To order, refer to the article "HP PC Software Support" later in this issue.
	—By quoting a unique "certificate number" from a Call Certificate. Certificate packs can be ordered as product number HP 35159A from HP DIRECT.
	—By providing a VISA, MasterCard, or American Express charge authorization.

- When you call, a coordinator arranges for the appropriate HP person to call you within two hours. Using a full set of software and documentation—together with computer knowledge, problem-solving skills, and access to others via HP's worldwide tele-communications network—we work with you to answer your question.

Is the answer available through CompuServe?	Many of the answers to your questions about HP personal computers are available through the CompuServe Information Service—the largest electronic information service in the world.
	Through CompuServe you can use the Hewlett-Packard PC Forum, which is maintained jointly by HP and HP users. HP maintains libraries on the Forum, containing questions and answers, application notes, and supported patches. The user community offers programs, utilities, and other information.
	The Forum also provides an easy way for you to communicate with other users. By leaving a message, you can exchange information to help you resolve problems or make decisions.
	To access the HP PC Forum, you must have an account with CompuServe, a modem, and communication software such as AdvanceLink. For information about the CompuServe Information Service and how to subscribe, you can talk to your HP Dealer, or call CompuServe at 1-800-848-8199 or 614-457-0802 in Ohio, U.S.A. Or you can write to CompuServe Inc., Telephone Sales, P.O. Box 20212, Columbus, Ohio 43220.
Training or consulting	Your need for support may be most efficiently and economically met by training or consulting:
	■ Training is available from your dealer, your VAR, or HP to supplement the documentation that accompanies your product. Courses can help users rapidly build confidence and gain new skills away from the distractions of their job. These courses can be taught at your facility using your own systems. Training to suit your specific needs can be designed and provided.
	■ Consulting service—available from your dealer, your VAR, or HP—provides personalized assistance in system operation, recommendations for improved performance, or suggestions on application design.

□

Users Group: Interex JoLynn Werner

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 60 countries. If you join Interex, you will receive, at no cost, an assortment of *HP PC Communicator* back issues which pertain to your computer model. (There is a limited supply for some computer models.)
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."
Member Services	**Standard Users Support Service** includes a subscription to *INTERACT* Magazine, a subscription to the *Interrupt* newsletter (Portable Users will receive *The Portable Paper*, and *INTERACT*), an annual diskette from the Interex Contributed Software Library, and the option to purchase other diskettes at only $10.00 each. Ask for your free listing of Series 100 or Vectra programs. **Standard Users Support Service:** $80
How to Join	To join, fill out the form on the next page. For more information, contact: Interex Member Services Department 680 Almanor Ave. Sunnyvale, CA 94086 U.S.A. Telephone 408/738-4848 Telex #4971527 FAX (408) 736-2156

Interex

*The International Association
of Hewlett-Packard Computer Users*

Application for
Personal Computer Services

Enclosed is my full payment for:

Standard Users Support Services. $80

**Of this amount, \$49.50 is for a one-year, monthly subscription to INTERACT
Magazine, and \$30.50 is allocated annually for Interrupt Newsletter.*

Payment Method:

☐ Check Enclosed   Check Number _____
                               (if a company check)

     Mastercard # _____

☐ Bill Visa # _____ Expires _____

☐ Bill MasterCard # _____

     Interbank # _____ Expires _____

HP User Information:

Name _____

(Title) _____

(Company) _____

Address _____

City _____ State _____ ZIP _____

Country _____

Telephone _____

(over)

Computer		**Disk Format**
☐ The Portable (HP 110)	☐ 3½-inch	
☐ Portable Plus	☐ 3½-inch	
☐ HP 120 or HP 125	☐ 3½-inch	☐ 5¼-inch
☐ HP Touchscreen/150	☐ 3½-inch single-sided	☐ 3½-inch double-sided
☐ HP Vectra		☐ 5¼-inch

Please send my free *Communicator* back issues ☐

Are you currently receiving Interex services for HP 9000, HP 1000, or HP 3000 computers?

☐ No   ☐ Yes: ID # _____

Please send more information about Interex's other activities:

_____ HP 1000   _____ HP 3000   _____ HP 9000

I understand that payment will not be refunded after the contributed software library disk has been sent from Interex.

Signature _____ Date _____

Send this page with your full payment to:
  Interex
  Department #1530
  P.O. Box 61000
  San Francisco, CA 94161
  U.S.A.   Ref. 11

The HP Vectra Personal Computer Systems

Marjorie Cannon, Peter Neidecker, Dave Shaw, Michael Weir

The HP Vectra Personal Computers are a family of high-performance PCs designed to provide hardware and software compatibility with industry standards. Members of the Vectra PC family include the following:

The Vectra CS PC, a 7.16 MHz 8086-compatible, is the entry-level member of the Vectra PC family that delivers exceptional value for basic office computing needs.

The Vectra ES PC, an 8 MHz Intel 80286 IBM PC/ AT compatible, offers mainstream business users growth to the next generation operating systems (OS/2) at an economical price.

The Vectra ES/12 PC, based on the 12 MHz Intel 80286 processor, provides superior performance and IBM PC/AT compatibility for the demanding business user.

The new **Vectra LS/12 Laptop PC,** a 12MHz Intel 80L286 portable, offers industry standard compatibility, and is ideal for the professional who demands both performance and flexibility.

The Vectra QS/16 PC offers the power and performance of the 16 MHz Intel 80386 microprocessor in a desktop package.

The new **Vectra RS/20C PC** offers all the benefits of the expandable, floor-mount RS/20 PC, but adds a memory cache to gain even greater performance from the 20 MHz 80386 chip.

The new **Vectra RS/25C PC** incorporates a 25 MHz 80386 processor in a floor-mount package. The combination of a memory cache and the 25 MHz processor carries the RS/25C to the forefront of microcomputer performance.

The Vectra CS PC

Each of the following models includes a 7.16 MHz processor, compatible with the Intel 8086, 640 Kbytes RAM, both serial and parallel I/O interfaces, the HP Terminal Program, HP Vectra Disk Cache Program, the Enhanced Vectra PC keyboard, user documentation, and video adapter cards and disk storage as indicated.

D1110A Vectra CS Model 10*
Includes one 5.25-inch 360 KB flexible disk drive.

D1115A Vectra CS Model 15*
Includes one 3.5-inch 1.44 MB flexible disk drive.

D1116A Vectra CS Model 16*
Includes two 5.25-inch 360 KB flexible disk drives and an HP Video Graphics Adapter.

D1120A Vectra CS Model 20*
Includes one 5.25-inch 360 KB flexible disk drive and a 20 MB hard disk.

D1126A Vectra CS Model 26*
Includes one 5.25-inch 360 KB flexible disk drive, a 20–Mbyte hard disk, and an HP Video Graphics Adapter.

D1127A Vectra CS Model 27*
Includes one 3.5-inch 1.44 MB flexible disk drive, a 20 MB hard disk, and an HP Video Graphics Adapter.

*Must Order Language Option. Option ABA is U.S. English. International language versions are available. See your dealer or HP sales representative for more information.

The Vectra ES PC

The Vectra ES may be purchased in a variety of configurations for flexibility in assembling specific systems.

Each of the following models includes an 8 MHz Intel 80286 processor, 640 KB of RAM, a flexible and hard disk controller, both a serial and parallel I/O interface, an HP-HIL port, the HP Terminal Program, HP Vectra Disk Cache Program, the Enhanced Vectra PC keyboard, user documentation, and video adapter cards and disk storage as indicated.

D1210A·Vectra ES Model 10*
Includes one 5.25-inch 1.2 MB flexible disk drive.

D1215A Vectra ES Model 15*
Includes one 3.5-inch 1.44 MB flexible disk drive.

D1220A Vectra ES Model 20*
Includes one 5.25-inch 1.2 MB flexible disk drive and a 20 MB hard disk.

D1226A Vectra ES Model 26*
Includes one 5.25-inch 1.2 MB flexible disk drive, a 20 MB hard disk, and an HP Video Graphics Adapter.

D1227A Vectra ES Model 27*
Includes one 3.5-inch 1.44 MB flexible disk drive, a 20 MB hard disk and an HP Video Graphics Adapter.

*Must Order Language Option. Option ABA is U.S. English. International language versions are available. See your dealer or HP sales representative for more information.

The Vectra ES/12 PC

The Vectra ES/12 may be purchased in a variety of configurations for flexibility in assembling specific systems.

Each of the following models includes a 12 MHz Intel 80286 processor, 640 KB of RAM, a flexible and hard disk controller, both a serial and parallel I/O interface, an HP-HIL port, the HP Terminal Program, HP Vectra Disk Cache Program, the Enhanced Vectra PC keyboard, user documentation, and video adapter cards and disk storage as indicated.

D1310A Vectra ES/12 Model 10*
Includes one 5.25-inch 1.2 MB flexible disk drive.

D1315A Vectra ES/12 Model 15*
Includes one 3.5-inch 1.44 MB flexible disk drive.

D1320A Vectra ES/12 Model 20*
Includes one 5.25-inch 1.2 MB flexible disk drive and a 20 MB hard disk.

D1326A Vectra ES/12 Model 26*
Includes one 5.25-inch 1.2 MB flexible disk drive, a 20 MB hard disk, and an HP Video Graphics Adapter.

D1327A Vectra ES/12 Model 27*
Includes one 3.5-inch 1.44 MB flexible disk drive, a 20 MB hard disk, and an HP Video Graphics Adapter.

D1340A Vectra ES/12 Model 40*
Includes one 5.25-inch 1.2 MB flexible disk drive and a 40 MB hard disk.

D1346A Vectra ES/12 Model 46*
Includes one 5.25-inch 1.2 MB flexible disk drive, a 40 MB hard disk, and an HP Video Graphics Adapter.

D1347A Vectra ES/12 Model 47*
Includes one 3.5-inch 1.44 MB flexible disk drive, a 40 MB hard disk, and an HP Video Graphics Adapter.

*Must Order Language Option. Option ABA is U.S. English. International language versions are available. See your dealer or HP sales representative for more information.

The Vectra LS/12 Laptop PC	The HP Vectra LS/12 Laptop PC is available in two hard disk configurations. Both of the following models include a 12 MHz Intel 80L286 (low power NMOS) microprocessor, a 16 bit memory bus, 1 MB RAM memory (presently expandable to 2 MB RAM), one serial and one parallel port, connectors for an external flexible disk/tape drive, numeric keypad and RGB monitor, internal slots for a modem, memory expansion, and 80C287 numeric coprocessor, and a full-function 79-key keyboard.
	D1024A Vectra LS/12 Laptop Model 24 Includes one 3.5-inch 1.44 MB flexible disk drive and a 20 MB hard disk.
	D1044A Vectra LS/12 Laptop Model 44 Includes one 3.5-inch 1.44 MB flexible disk drive and a 40 MB hard disk.
The Vectra QS/16 PC	Each of the following models of the HP Vectra QS/16 PC includes a 16 MHz Intel 80386 processor, 1 MB RAM, a combination flexible disk controller and hard disk controller with serial and parallel I/O interfaces, an HP-HIL port, the HP Terminal Program, HP Vectra Disk Cache Program, the Enhanced Vectra PC Keyboard, user documentation, and video adapter cards and disk storage as indicated.
	D1400A Vectra QS/16 Model 10* Includes one 5.25-inch 1.2 MB flexible disk drive.
	D1401A Vectra QS/16 Model 40* Includes one 5.25-inch 1.2 MB flexible disk drive and a 40 MB hard disk.
	D1402A Vectra QS/16 Model 46* Includes one 5.25-inch 1.2 MB flexible disk drive, a 40 MB hard disk, and an HP Video Graphics Adapter.
	D1404A Vectra QS/16 Model 47* Includes one 3.5-inch 1.44 MB flexible disk drive, a 40 MB hard disk, and an HP Video Graphics Adapter.
	*Must order country/language option. Option ABA is U.S. English. International versions are also available. See your HP dealer or sales representative for more information.

The Vectra RS/20C and RS/25C PCs

The Vectra RS PCs may be purchased in a variety of configurations for flexibility in assembling specific systems.

The Vectra RS/20C and RS/25C PC configurations have a 20 MHz (RS/20C) or 25 MHz (RS/25C) 80386 microprocessor, a 32 KB memory cache subsystem, a 1.2 MB, 5.25-inch flexible disk drive, a hard disk (ESDI) and a flexible disk controller, and one serial and one parallel port. They also include a system manual, software utilities, dual locks, and the 101-key PC/AT-type DIN keyboard.

D2002A Vectra RS/20C Model 100e*
Includes 1 MB of system memory, one 5.25-inch 1.2 MB flexible disk drive, and a 103 MB ESDI hard disk.

D2003A Vectra RS/20C Model 150e*
Includes 1 MB of system memory, one 5.25-inch 1.2 MB flexible disk drive, and 155 MB ESDI hard disk.

D2004A Vectra RS/20C Model 154e*
Includes 4 MB of system memory, one 5.25-inch 1.2 MB flexible disk drive, and a 155 MB ESDI hard disk.

D2022A Vectra RS/25C Model 100e*
Includes 1 MB of system memory, one 5.25-inch 1.2 MB flexible disk drive, and a 103 MB ESDI hard disk.

D2023A Vectra RS/25C Model 150e*
Includes 1 MB of system memory, one 5.25-inch 1.2 MB flexible disk drive, and a 155 MB ESDI hard disk.

D2024A Vectra RS/25C Model 154e*
Includes 4 MB of system memory, one 5.25-inch 1.2 MB flexible disk drive, and a 155 MB ESDI hard disk.

D2025A Vectra RS/25C Model 304e*
Includes 4 MB of system memory, one 5.25-inch 1.2 MB flexible disk drive, and a 310 MB ESDI hard disk.

*Must Order Language Option. Option ABA is U.S. English. International language versions are available. See your HP dealer or sales repesentative for more information.

☐

U.S. Touchscreen/150 Software Available from HP

Harry Cruickshank, Joni Kapeckas, Ray Rafiti, Marilyn Ruel, Michael Weir

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

Name	HP Product Number	Version	Special Requirements
COMMUNICATIONS			
AdvanceLink*	45431A	A.04.04	
AdvanceMail	27534A	A.01.00	Requires HP DeskManager B.00.00 or later on the HP 3000
HPMessage	36568A	A.00.02	Requires HP Desk Manager A.03.01 on the HP 3000
HP Message Disk Pack	36568S	A.00.02	
HP Message Doc Pack	36568T	A.00.02	
HP Message Corp. Lic.	36568Q	A.00.02	
IBM 3278 Term. Emul. Acces.*	45641B		
VT100 Terminal Emulator	45412A		
Office Talk (Phone Voice Mgmt.)	24520A	A.01.02	512K
NETWORKING SOFTWARE			
Services			
Network Services— User Services Option OA9	50923F†		
Network Services— User Services— License for 10 Users Option 0AA	50923F		
Network Services— User Services— License for 50 Users	50923F		
Net IPC/RPM Development Package	50924F		
Links and Services			
HP ThinLAN Server Kit for HP Touchscreen PCs	50907A		Dedicated Network Server, 512K Memory Required
HP StarLAN 10 User Link Kit for HP Touchscreen PCs	D1803A		

*Uses HP Touch

Name	HP Product Number	Version	Special Requirements
HP StarLAN 10 Server Kit for HP Touchscreen PCs	D1804A		
HP ThinLAN User Link Kit for HP Touchscreen PCs	50908A		512K Memory Required
HP SERIAL Network User Link Software for HP Touchscreen PCs	50910A		

Configuration and Diagnostics

Name	HP Product Number	Version	Special Requirements
LAN PC User Configuration and Diagnostics Package for Touchscreen PCs	50929A		
Option OA9 10 User License	50929A		
Option OAA 50 User License	50929A		
SERIAL Network PC User Config and Diagnostics Package for Touchscreen PC	50930A		
Option OA9 10 User License	50930A		
Option OAA 50 User License	50930A		

Upgrades for Earlier Versions of OfficeShare

Name	HP Product Number	Version	Special Requirements
Upgrade for OfficeShare Server Software	50915A		Includes HP ThinLAN Server and PC Config and Diagnostics Software and License for PCs; Must Return OfficeShare Master Disks
Upgrade for OfficeShare User Software	50916A		Must Return OfficeShare Master Disks

Upgrade for HP 3Com Networks

Name	HP Product Number	Version	Special Requirements
HP ThinLAN Server Software for HP Touchscreen PCs	50913A		Software, 512K Memory Required
HP ThinLAN User Software for HP Touchscreen PCs	50914A		Software, 512K Memory Required

Name	HP Product Number	Version	Special Requirements
ENVIRONMENT MANAGER			
Microsoft Windows	45875A	1.03	DOS 3.2, 384K memory (512K is recommended), dual flexible disk system (one 710K byte disk is needed) or single flexible disk (260K or 710K) with hard disk
DATA BASE MANAGEMENT			
Executive Card Manager*	45421A	A.02.02	
R:Base 5000	45563A	1.01	512K
GRAPHICS			
The Graphics Gallery Collection*	45437A		384K
HP Graphics Curator/ 3000 (36926R gives you "right to copy")	36926A or 36926R		For use with HP 3000. Curator RTU 36926A S/3X #310 S/5X #320 S/7X #330 Curator RTC 36926R S/3X #310 S/5X #320 S/7X #330
PROGRAMMING LANGUAGES AND DEVELOPMENT TOOLS			
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		
Pascal by Microsoft	45447D		

*Uses HP Touch

Name	HP Product Number	Version	Special Requirements
SHARED RESOURCES			
AdvancePrint	32584A		For use with HP 3000
SPREADSHEETS			
Lotus 1-2-3*	45566A	2.01	384K
UTILITIES			
HP PLCPak	33406A		
WORD PROCESSING			
HPWORD/150 U.S. English*	27505A	A.00.00	512K
Executive MemoMaker*	45418A	C.03.00	384K for text 512K for text and graphics
Microsoft WORD*	45474D	1.10	Now includes Microsoft Spell
MultiMate*	45424A	3.29	
WordStar Professional	45427D	3.34	384K + dual double sided disk drive

□

*Uses HP Touch

U.S. Vectra Family PC Software Available from HP

Joni Kapeckas, Miles Mikasa, Ray Rafiti, Marilyn Ruel, Bill Woodson

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

A worldwide corporate Site Licensing Program offering customers up to 75 percent savings is now available for large quantity purchases of specified software. Below these products are marked with a "†" sign. Contact your HP sales office for specifics.

★Software available in 3.5-inch media for the HP Vectra Computers and IBM and compatibles. Order Option 003 unless stated otherwise.

◆Software available for the HP Vectra LS/12 Laptop PC and the HP Portable Vectra CS in 3.5-inch media. Order Option 003 unless stated otherwise.

Name	HP Product Number	Version	Special Requirements
COMMUNICATIONS			
AdvanceLink† Opt. 100 AdvancePrint (5.25-inch media) Opt. 103 AdvancePrint (3.5-inch media)	◆★68333F	B.02.00	
HP IRMA IBM3278/79 Term Emul	50920A		
HPMessage†	36569E		Requires HPDesk Message A.03.01 on the HP 3000
AdvanceMail†	◆★27535F	B.00.00	Requires HPDesk Manager on the HP 3000

NETWORKING SOFTWARE

Note: All networking software except HP Product D1805A comes with both 5.25-inch and 3.5-inch disks.

Name	HP Product Number	Version	Special Requirements
Services			
Network Services— User Services	50923F		
Option OA9 Network Services— User Services— License for 10 Users	50923F		

†Corporate Site Licensing also available

Name	HP Product Number	Version	Special Requirements
Option OAA Network Services— User Services— License for 50 Users	50923F		
Net IPC/RPM Development Package	50924F		
PC Server Software for HP Vectra PCs	50925F		
Links			
StarLAN Vectra PC Link	50926F		
StarLAN 10 Vectra PC Link	D1802A		
ThinLAN Vectra PC Link	50927F		
SERIAL Network Vectra PC Link	50928F		
LAN Micro Channel PC Link Software	D1805A		
Configuration and Diagnostics			
LAN PC User Configuration and Diagnostics for Vectra and IBM PCs	50929F		
Option OA9 10 User License	50929F		
Option OAA 50 User License	50929F		
SERIAL Network PC User Configuration and Diagnostics Package for Vectra and IBM PCs	50930F		
Option OA9 10 User License	50930F		
Option OAA 50 User License	50930F		
Upgrades for HP 3Com Networks			
HP ThinLAN Server Software for HP Vectra PCs	50913F		
HP ThinLAN User Software for HP Vectra PCs	50914F		

Name	HP Product Number	Version	Special Requirements
ENVIRONMENT MANAGER			
Microsoft Windows/286			
5¼-inch media	D1318A	#ABA	
3½-inch media	◆D1318B	#ABA	
Microsoft Windows/386	◆D1651A	#ABA	
includes 5¼-inch and			
3½-inch media)			
DATA BASE MANAGEMENT			
Executive Card	◆★68331F	A.01.08	
Manager			
(ECM)*†			
R:Base 5000	68336F	1.01	512K memory required
GRAPHICS			
Drawing Gallery	◆D1709A	C.00.00	384K memory and
(includes 5.25"			mouse required
and 3.5" media)			
Charting Gallery†	◆D1710A	C.00.00	
(includes 5.25"			
and 3.5" media)			
The Graphics Gallery	◆D1711A	C.00.00	384K memory and
Collection†			mouse required
(includes 5.25"			
and 3.5" media)			
Office Activities	◆★68324F	A.01.00	
Portfolio			
Business Mgmt.	◆★68326F	A.01.01	
Portfolio			
Chemical/	◆★68325F	A.01.00	
PetroChemical			
Portfolio			
HPDraw Figures	◆★68327F	A.01.00	
Portfolio			
for Drawing			
Gallery			

*Uses HP Touch

★Available in 3½-inch media for the HP Vectra PC. Order Option 003 unless stated otherwise.

◆ Available in 3½-inch media for HP Vectra LS/12 Laptop PC and the HP Portable Vectra CS. Order Option 003 unless stated otherwise.

†Corporate Site Licensing also available

Name	HP Product Number	Version	Special Requirements
HP Graphics Curator/3000 (36926R gives you "right to copy")	36926A or 36926R		For use with HP 3000. Curator RTU 36926A S/3X #310 S/5X #320 S/7X #330 Curator RTC 36926R S/3X #310 S/5X #320 S/7X #330

SHARED RESOURCES

AdvancePrint	♦★32583F		For use with HP 3000

UTILITIES

FontLoad	33407B	Version 1.0	
LaserControl 100***	35190J	Rev. 3	
Laserplotter	35188A		

WORD PROCESSING

AdvanceWrite Plus† (includes 5.25" and 3.5" media)	♦ D1712A	F.03.00	
Executive MemoMaker*†	♦★68330F	A.03.00	

PRINTER UTILITIES

iPrint	35188D		
Jetplotter	35190P		

OFFICE SOFTWARE PACKS

HP Vectra PC Office Professional Pack	♦★68300F		
HP Vectra PC Office Assistant Pack	♦★68301F		
HP Vectra PC Office Entry Pack	♦★68306F		

OPERATING SYSTEM

Microsoft MS-DOS 3.3**			
5¼-inch media	45951D		
3½-inch media	45951E		

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***Manufacturer Supported
†Corporate Site Licensing also available

HP Portable/Portable PLUS
Software Available from HP*

Ron Avignone

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

Name	HP Product Number	Portable	Portable Plus
COMMUNICATIONS:			
REFLECTION 1 (ROM)	82863K Opt. 400		●
YTerm	82867K Opt. 630		●
AdvanceMail (ROM)	82870K Opt. 400		●
DATA BASE MANAGEMENT:			
Executive Card Manager (ROM)	45555K Opt. 400		●
PROGRAMMING LANGUAGES AND DEVELOPMENT TOOLS:			
BASIC by Microsoft	45445D	●	
BASIC by Microsoft (ROM)	82862K Opt. 400		●
Compiled BASIC by Microsoft	45446D	●	●
FORTRAN by Microsoft	45449D	●	●
GW-BASIC by Microsoft	45450D	●	●
Pascal by Microsoft	45447D	●	●
Programmer's Tools	45419C	●	●
Technical Reference Manual	45559K		●
WORD PROCESSING:			
Microsoft WORD	45474D	●	
Microsoft WORD (ROM)	45549K Opt. 400		●
MultiMate (ROM)	45554K Opt. 400		●

□

*For HP Portable Vectra CS and HP Vectra LS/12 Laptop PC software see "U.S. Vectra Family PC Software" elsewhere in the green pages.

Asian HP Vectra Software
Available from HP

Jenny Chiang

For Asian countries only:

Name	HP Product Number	Special Requirements
COMMUNICATIONS:		
Japanese AdvanceLink 2392	68333WJ	
Traditional Chinese AdvanceLink 2392	68333W Opt. ZAA	Minimum 384K Memory
Korean AdvanceLink 2392	68333W Opt. ZAB	Minimum 384K Memory
SPREADSHEETS:		
Japanese Executive Spreadsheet	68332WJ	
Traditional Chinese Executive Spreadsheet	68332W Opt. ZAA	Minimum 384K Memory
Korean Executive Spreadsheet	68332W Opt. ZAB	
WORD PROCESSING:		
Traditional Chinese Executive MemoMaker	68330W Opt. ZAA	Minimum 384K Memory
Korean Executive MemoMaker	68330W Opt. ZAB	
GRAPHICS:		
Asian Drawing Gallery	68351W	
Asian Drawing Gallery English Extension	68351W Opt. ZAN	
Traditional Chinese Drawing Gallery Fonts (Taiwan version)	79308A Opt. ZAA	
Asian Drawing Gallery Korean Extension	68351W Opt. ZAB	
Korean Drawing Gallery Fonts	79308A Opt. ZAB	
Asian Graphics Gallery (Taiwan version)	68352W Opt. ZAA	

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Localized HP 150/Touchscreen Software Available from HP

Sue Nennemann

Here is a summary of the software that has been localized for the HP 150/Touchscreen. To order contact your local dealer (for some products) or sales representative. Some products may not be available or may not be supported in all countries.

Name	HP Product Number	Country	Revision
AdvanceLink	45431AD	Germany	A.04.00
AdvanceMail/150	27534AD	Germany	A.01.02
AdvanceMail/150	27534AE	Spain	A.01.02
AdvanceMail/150	27534AF	France	A.01.02
AdvanceMail/150	27534AH	Netherlands	A.01.02
AdvanceMail/150	27534AN	Norway	A.01.02
AdvanceMail/150	27534AX	Finland	A.01.02
AdvanceMail/150	27534AY	Denmark	A.01.02
AdvanceMail/150	27534AZ	Italy	A.01.02
Charting Gallery	45513AD	Germany	B.02.00
Charting Gallery	45513AF	France	B.02.00
Drawing Gallery	45411AD	Germany	A.02.01
Drawing Gallery	45411AF	France	A.02.01
Exec.Card Manager	45421AD	Germany	A.02.01
Exec.Card Manager	45421AZ	Italy	A.02.01
ExecuDesk	45444AD	Germany	A.02.00
ExecuDesk	45444AE	Spain	A.02.00
ExecuDesk	45444AF	France	A.02.00
ExecuDesk	45444AS	Sweden	A.02.00
ExecuDesk	45444AX	Finland	A.02.00
Executive MemoMaker	45418AD	Germany	C.02.00
Executive MemoMaker	45418AF	France	C.02.00
Executive MemoMaker	45418AX	Finland	C.02.00
Executive MemoMaker	45418AZ	Italy	C.02.00
Gallery Collection	45437AD	Germany	B.02.00
Gallery Collection	45437AF	France	B.02.00
Gallery Collection	45437AX	Finland	B.02.00
Gallery Collection	45437AZ	Italy	B.02.00
Gallery Pic.Lib. VII	45433AF	France	A.01.00

Name	HP Product Number	Country	Revision
HP Access	36898AD	Germany	A.01.01
HPMessage	36568DA	Germany	DA.00.01
HPWord	27505AB	U.K.	A.02.00
HPWord	27505AC	Canada	A.02.01
HPWord	27505AD	Germany	A.02.01
HPWord	27505AF	France	A.02.01
HPWord	27505AH	Netherlands	A.02.01
HPWord	27505AN	Norway	A.02.01
HPWord	27505AX	Finland	A.02.01
HPWord	27505AY	Denmark	A.02.01
HPWord Corp Lic.	27505QB	U.K.	A.02.00
HPWord Disk Pack	27505SB	U.K.	A.02.00
HPWord Doc Pack	27505TB	U.K.	A.02.00
MemoMaker	45420AV	Arabic	A.01.01
MemoMaker	45420AV #ZAG	Arabic/French	A.01.02
MemoMaker	45420AT	Hebrew	A.01.01
Info Access 10 User License	32596LY	Denmark	
VisiCalc II	45405AF	France	B.01.02

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Localized HP Vectra Software Available from HP

Sue Nennemann,
Miles Mikasa

Below is a list of the HP Vectra software that has been localized. To order contact your dealer (for some products) or sales representative. Not all products are available or are supported in all countries.

Name	HP Product Number	Country	Revision
AdvanceMail	★27535FY	Denmark	A.01.02
AdvanceMail	★27535FX	Finland	A.01.02
AdvanceMail	★27535FF	France	A.01.02
AdvanceMail	★27535FD	Germany	A.01.02
AdvanceMail	★27535FZ	Italy	A.01.02
AdvanceMail	★27535FH	Netherlands	A.01.02
AdvanceMail	★27535FN	Norway	A.01.02
AdvanceMail	★27535FE	Spain	A.01.02
AdvanceMail	★27535FS	Sweden	A.01.02
AdvanceMail	★27535FZ	Italy	A.01.02
AdvanceMail Site Lic.	27535LF	France	
AdvanceMail Site Lic.	27535LD/ QD/SD	Germany	
AdvanceWrite III	27508FY	Denmark	F.01.03
AdvanceWrite III	27508FX	Finland	F.01.03
AdvanceWrite III	27508FZ	Italy	F.01.02
AdvanceWrite III	27508FH	Netherlands	F.01.03
AdvanceWrite III	27508FN	Norway	F.01.03
AdvanceWrite III	27508FE	Spain	F.01.03
AdvanceWrite III	27508FS	Sweden	F.01.02
AdvanceWrite Plus Site License	27546LF/ZF	France	F.02.01
AdvanceWrite Plus Site License	27546LD/ZD	Germany	F.02.01
Charting Gallery	68350FF	France	B.03.00
Charting Gallery	68350FD	Germany	B.03.00
Drawing Gallery	68351FF	France	B.03.03
Drawing Gallery	68351FD	Germany	B.03.00
Executive CardManager	★68331FX	Finland	A.01.08
Executive CardManager	★68331FF	France	A.01.06
Executive CardManager	★68331FD	Germany	A.01.06
Executive CardManager	★68331FZ	Italy	A.01.06
Executive CardManager	★68331FH	Netherlands	A.01.06
Executive CardManager	★68331FN	Norway	A.01.06
Executive CardManager	★68331FE	Spain	A.01.06
Executive CardManager Site License	68331L*	All languages	

★Software available in 3½-inch media. Order Option 003.

Name	HP Product Number	Country	Revision
Executive MemoMaker	★68330FY	Denmark	A.03.01
Executive MemoMaker	★68330FB	Eur. English	A.03.01
Executive MemoMaker	★68330FX	Finland	A.03.01
Executive MemoMaker	★68330FF	France	A.03.01
Executive MemoMaker	★68330FD	Germany	A.03.01
Executive MemoMaker	★68330FH	Netherlands	A.03.01
Executive MemoMaker	★68330FN	Norway	A.03.01
Executive MemoMaker	★68330FE	Spain	A.03.01
Executive MemoMaker	★68330FS	Sweden	A.03.01
Executive MemoMaker Site Lic.	68330L*/Z*	All languages	
Gallery Collection	★68352FY	Denmark	B.03.00
Gallery Collection	★68352FX	Finland	B.03.00
Gallery Collection	★68352FF	France	B.03.00
Gallery Collection	★68352FD	Germany	B.03.00
Gallery Collection	★68352FZ	Italy	B.03.00
Gallery Collection	★68352FH	Netherlands	B.03.00
Gallery Collection	★68352FN	Norway	B.03.00
Gallery Collection	★68352FE	Spain	B.03.00
Gallery Collection	★68352FS	Sweden	B.03.00
Gallery Site Lic.	68352L*/Z*	All languages	
HPWord Site Lic.	27536LF/QF/SF	Eur. English	
HPWord Vectra	27536FC	Canada	A.02.01
HPWord Vectra	27536FY	Denmark	A.02.01
HPWord Vectra	27536FB	Eur. English	A.02.01
HPWord Vectra	27536FX	Finland	A.02.01
HPWord Vectra	27536FF	France	A.02.01
HPWord Vectra	27536FD	Germany	A.02.01
HPWord Vectra	27536FH	Netherlands	A.02.01
HPWord Vectra	27536FN	Norway	A.02.01
HP Access Vectra	36898FD	Germany	F.01.01
Info Access 10 User License	32596LY	Denmark	

★Software available in 3½-inch media. Order Option 003.

Name	HP Product Number	Country	Revision
MS-DOS	†45951DC	Canada-French	3.3
MS-DOS	†45951DD	Germany	3.3
MS-DOS	†45951DE	Spain	3.3
MS-DOS	†45951DF	France	3.3
MS-DOS	†45951DH	Netherlands	3.3
MS-DOS	†45951DM	Latin America	3.3
MS-DOS	†45951DN	Norway	3.3
MS-DOS	†45951DP	Switzerland-German	3.3
MS-DOS	†45951DQ	Switzerland-French	3.3
MS-DOS	†45951DS	Sweden	3.3
MS-DOS	†45951DU	United Kingdom	3.3
MS-DOS	†45951DW	Belgium	3.3
MS-DOS	†45951DX	Finland	3.3
MS-DOS	†45951DY	Denmark	3.3
MS-DOS	†45951DZ	Italy	3.3
MS-DOS	†#45951EC	Canada-French	3.3
MS-DOS	†#45951ED	Germany	3.3
MS-DOS	†#45951EE	Spain	3.3
MS-DOS	†#45951EF	France	3.3
MS-DOS	†#45951EH	Netherlands	3.3
MS-DOS	†#45951EM	Latin America	3.3
MS-DOS	†#45951EN	Norway	3.3
MS-DOS	†#45951EP	Switzerland-German	3.3
MS-DOS	†#45951EQ	Switzerland-French	3.3
MS-DOS	†#45951ES	Sweden	3.3
MS-DOS	†#45951EU	United Kingdom	3.3
MS-DOS	†#45951EW	Belgium	3.3
MS-DOS	†#45951EX	Finland	3.3
MS-DOS	†#45951EY	Denmark	3.3
MS-DOS	†#45951EZ	Italy	3.3
Vectra Office Assist. Bundle	68301FB	Eur. English	
Vectra Office Prof. Bundle	68300FB	Eur. English	
Vectra Office Prof. Bundle	68300FF	France	
Vectra Office Prof. Bundle	68300FD	Germany	
Vectra Office Prof. Bundle	68300FH	Netherlands	
Vectra Office Prof. Bundle	68300FE	Spain	

□

†MS-DOS products are not supported on non-HP personal computers.
#Software available in 3½-inch media. Do not specify Option 003.

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.

This section lists the localized software exchange kits available for the Touchscreen/150 and the 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 disk as proof of purchase and continue operating as usual with your work copy of the software.

Ordering

To order, call HP DIRECT. For the appropriate phone number for your country, see "How to Order" in the green pages of this issue.

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

Product	Country	Version	Order HP Part #
Touchscreen/150 Upgrade Kits			
HPWord/PC	Denmark	A.02.01	27505-60015
HPWord/PC	Finland	A.02.01	27505-60013
HPWord/PC	France	A.02.01	27505-60010
HPWord/PC	Germany	A.02.01	27505-60012
HPWord/PC	Netherlands	A.02.01	27505-60014
HPWord/PC	Norway	A.02.01	27505-60011
HP Vectra PC Upgrade Kits			
AdvanceWrite Plus	Eur. English		27546-60003
AdvanceWrite Plus	French		27546-60006
AdvanceWrite Plus	German		27546-60007

Product	Country	Version	Order HP Part #
Executive MemoMaker	Danish		68330-60016
Executive MemoMaker	Europe	A.03.01	68330-60008
Executive MemoMaker	Finland	A.03.01	68330-60015
Executive MemoMaker	France	A.03.01	68330-60011
Executive MemoMaker	Germany	A.03.01	68330-60009
Executive MemoMaker	Italy	A.03.01	68330-60017
Executive MemoMaker	Netherlands	A.03.01	68330-60012
Executive MemoMaker	Norway	A.03.01	68330-60013
Executive MemoMaker	Spain	A.03.01	68330-60010
Executive MemoMaker	Swedish		68330-60014
Gallery Collection	Denmark	B.03.00	68352-60012
Gallery Collection	Eur. English		68352-60001
Gallery Collection	Finland	B.03.00	68352-60011
Gallery Collection	France	B.03.00	68352-60007
Gallery Collection	Germany	B.03.00	68352-60005
Gallery Collection	Italy	B.03.00	68352-60013
Gallery Collection	Netherlands	B.03.00	68352-60008
Gallery Collection	Spain	B.03.00	68352-60006
Gallery Collection	Sweden	B.03.00	68352-60010
HPWord/PC	Denmark	A.02.01	27536-60007
HPWord/PC	Finland	A.02.01	27536-60005
HPWord/PC	France	A.02.01	27536-60002
HPWord/PC	Germany	A.02.01	27536-60004
HPWord/PC	Netherlands	A.02.01	27536-60006
HPWord/PC	Norway	A.02.01	27536-60003

□

| **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 at least five years beyond discontinuance. Specifically, this means:

- Replacement Media Exchange Kits available for five years from date of last HP shipment for each product in the table below.

  See the Software Exchange Kits article in this issue for information on the Kits.

- Availability of telephone assistance through Hewlett-Packard Help Line Response Centers.

- Continuing coverage in this magazine—the *HP PC Communicator.*

| | **Touchscreen/150:** | |
Product Name	**HP Product #**	**Superseded by:**
ACCOUNTING:		
BPI General Accounting	45455A	None
BPI Accounts Receivable	45456A	None
BPI Accounts Payable	45457A	None
BPI Inventory Control	45460A	None
BPI Job Cost	45461A	None
BPI Payroll	45458A	None
BPI Personal Accounting	45459A	None
COMMUNICATIONS:		
Dow Jones Spreadsheet	45511D	None
PFS:File and Report	45488A	None
Transend COMplete	45414A	Available from Transend Corp.

Product Name	Touchscreen/150: HP Product #	Superseded by:
DATABASES:		
Condor 1	45415A	Available from Condor Corp.
Condor 1 to 3 Upgrade	45417A	Available from Condor Corp.
Condor 3	45416A	Available from Condor Corp.
dBASE II/150	45468A	dBASE II—45468D
DSN/Link—U.S. English	45425A	AdvanceLink/150—45431A
ECM Templates	45441D	Now included with Executive Card Manager
Personal Card File/150	45422A	Executive Card Manager—'45421A
R:Base 4000	45545A	R:Base 5000—45563A
GRAPHICS:		
Charting Gallery/Executive MemoMaker Bundle	45440A	Sold separately: Charting Gallery—45513A and/or Executive MemoMaker—45418A
Charting Gallery	45513A	Graphics Gallery Collection—45437A
Drawing Gallery	45411A	Graphics Gallery Collection—45437A
HPDraw Figures Portfolio	45571A	None
Office Activities Portfolio	45568A	None
Business Mgmt. Portfolio	45570A	None
Chemical/PetroChemical Portfolio	45669A	None
Graphplan by Chang Labs	45467A	Available from Chang Labs
Graphwriter Basic Set	45484A	None
PFS: Graph	45490A	None
Series 100 Graphics—U.S.	45410A	Charting Gallery—45513A
INTEGRATED SOLUTIONS:		
ExecuDesk System	45442A	ExecuDesk sold separately—45444A
ExecuDesk System	45444A	None
Symphony from Lotus	45498A	None

Product Name	HP Product #	Superseded by:
SPREADSHEETS:		
Context MBA/150	45481A	None
Financial Calculator	45423A	None
MicroPlan	45465A	Available from Chang Labs
MicroPlan Consolidation Module	45466A	Available from Chang Labs
Microsoft Multiplan/150	45473A	None
Microsoft Multiplan	45473D	None
VisiCalc Deluxe	45405A	None
VisiCalc/150—U.S. English	45405A	None
WORD PROCESSING:		
MemoMaker/150— U.S. English Touchscreen	45420A	Executive MemoMaker/150— 45418A
PFS: Write	45489A	None
Microsoft Spell	45556D	Included in Microsoft Word (45474D)
WordStar/150—U.S. English	45400A	WordStar—Professional— 45427D
MailMerge—U.S. English	45401A	Included in WordStar Professional—45427D
SpellStar	45402A	SpellStar has been superseded by CorrectStar which is included in WordStar Professional— 45427D. An Upgrade kit is available from CorrectStar to SpellStar for users with a dual single-sided disk drive.
WordStar/MailMerge/ SpellStar Combo	45404A	Superseded by WordStar Professional—45427D.
WordStar	45400D	Included in WordStar Professional (45427D)
WordStar Professional Options	45429D	

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

Product Name	HP Product #	Superseded by:
DATA COMMUNICATIONS:		
AdvanceLink	45431E	AdvanceLink—68333F
Monitor/IBM PC	45439A	AdvanceLink—68333F
DATABASES:		
ECM Templates	68335F	Now included with Executive Card Manager
Personal Card File	45422E	Executive Card Manager—68331F
R:Base System V	68328F	Available from Microrim, Inc.
INTEGRATED SOLUTIONS:		
Symphony from Lotus	68339F	Available from Lotus Development Corp.
WORD PROCESSING:		
Memomaker/IBM PC	45420E	Executive Memomaker—68330F
WordStar	68345F	Available from MicroPro, Inc.
WordStar Professional	68346F	Available from MicroPro, Inc.
WordStar 2000	68341F	Available from MicroPro, Inc.
WordStar 2000 PLUS	68342F	Available from MicroPro, Inc.
MultiMate	68338F	Available from MultiMate International Corp.
MultiMate Advantage	68343F	Available from MultiMate International Corp.
SPREADSHEETS:		
Executive Spreadsheet	68332F	

The Portable or the Portable Plus:

Product Name	HP Product #	Superseded by:
SPREADSHEETS:		
Lotus 1-2-3 Release 1A	45548K #400	45539K #400 (1-2-3 ver. 2.01)

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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.

For Computers

■ HP Vectra PC

24542D	Parallel printer cable for the Vectra PC (2 meters)
24542G	Serial printer/plotter cable for the Vectra PC (3 meters)
24542H	Serial plotter cable for Vectra PC to 7550 plotter (3 meters)
24542M	U.S./European modem cable (3 meters) for the Vectra PC
35178A	Vectra PC three-piece carrying case
35178C	Vectra Portable carrying case
35178F	Vectra LS/12 carrying case
35184E	Deskplotter software (allows DeskJet to do plotter graphics)
35188A	LaserPlotter software (allows laser to do plotter graphics)
35190J	LaserControl software (print Lotus sideways)
35190P	Jetplotter software (allows InkJet printers to emulate plotters)
45986A	Security System Lock
46296A	Backup Power Supply
92165A	2 plug surge suppressor
92165B	4 plug surge suppressor
92165C	6 plug surge suppressor
92165R	RS-232C surge protector
92166A	Vectra PC keyboard park
92171C	Vectra PC keyboard park drawer
92171X	ThinkJet printer stand for top of display
92190A	5.25-inch flexible disks, 360 KB (formatted capacity), double-sided, unformatted (box of 10 disks)
92190X	High-capacity 5.25-inch flexible disks, 1.2 MB (formatted capacity), for use on the Vectra PC's high capacity internal disk drive, double-sided, unformatted (box of 10 disks)
92190Z	Box of 100, high capacity 5.25-inch flexible disks, 1.2 MB (formatted capacity), for use on the Vectra PC's high capacity internal disk drive, double-sided, unformatted
92192A	3.5-inch micro flex disks, 710/720 KB, (formatted capacity) double-sided (box of 10)
92192T	205' long formatted/certified mini data cartridge, 40 MB formatted (box of 5)
92192X	3.5-inch micro flex disks, high-density 1.42/1.44 MB (formatted capacity), double sided (box of 10)
92208A	Mobile PC Centre
92259A	Vectra PC, Vectra ES dust cover for monochrome monitor and keyboard

92259B	Vectra PC, Vectra ES dust cover for color/EGA monitor and keyboard
92259K	Vectra CS/ES/RS dust cover for monochrome monitor and C1405A keyboard
92259L	Vectra CS/ES/RS dust cover for EGA/VGA color monitor and C1405A keyboard
92259M	Vectra CS/ES/RS dust cover for monochrome VGA monitor and C1405A keyboard
92261R	ThinkJet paper catcher (use with 92171X printer stand)
92268A	4 metre StarLAN cable. 8-pin connectored/4 twisted pair unshielded cable with RJ45 connectors
92268B	8 metre StarLAN cable. 8-pin connectored/4 twisted pair unshielded cable with RJ45 connectors
92268C	16 metre StarLAN cable. 8-pin connectored/4 twisted pair unshielded cable with RJ45 connectors
92268D	32 metre StarLAN cable. 8-pin connectored/4 twisted pair shielded cable with RJ45 connectors
92299F	Compact workstation kit for Vectra PC

For Disk Drives

■ HP 9122C and 9153C 3.5-inch Disk Drives

92191E	FlexFiles for 3.5-inch disks (Pkg. of 5 FlexFiles—each unit holds 10 disks)
92191F	Portable album file for 3.5-inch disks (capacity 20 disks)
92191M	Micro carrying case pack for 3.5-inch disks (Pkg. of 3 cases—each case holds 5 disks)
92191P	Hanging file pages for 3.5-inch disks (capacity 40 disks)
92191Q	Compact file for 3.5-inch disks (capacity 40 disks)
92191T	Micro disk case for 3.5-inch disks (capacity 10 disks)
92192A	3.5-inch micro flexible disks—double-sided (box of 10)
92192N	3.5-inch micro flexible disks—double-sided (box of 100)
92192X	3.5-inch high density microflexible disks (box of 10)

■ HP 45812A Internal 1.2 MB 5.25-inch Disk Drive for the Vectra PC

92190X	5.25-inch high capacity flexible disk (box of 10)
92194A	Compact file for 5.25-inch disks (capacity 60 disks)
92194E	FlexFiles for 5.25-inch disks (Pkg. of 5 FlexFiles—each unit holds 10 disks)
92194G	Portable album file for 5.25-inch disks (capacity 20 disks)
92194P	Hanging file pages for 5.25-inch disks (Pkg. of 10—capacity 20 disks)

■ HP 45813A Internal 1.44 MB 3.5-inch Disk Drive for the Vectra PC

92191E	FlexFiles for 3.5-inch disks (Pkg. of 5 FlexFiles—each unit holds 10 disks)
92191F	Portable album file for 3.5-inch disks (capacity 20 disks)
92191M	Micro carrying case pack for 3.5-inch disks (Pkg. of 3 cases—each case holds 5 disks)
92191P	Hanging file pages for 3.5-inch disks (capacity 40 disks)
92191Q	Compact file for 3.5-inch disks (capacity 40 disks)
92191T	Micro disk case for 3.5-inch disks (capacity 10 disks)

92192A	3.5-inch micro flexible disks—double-sided (box of 10)
92192N	3.5-inch micro flexible disks—double-sided (box of 100)
92192X	3.5-inch high density microflexible disks (box of 10)

■ HP D1671A Cartridge Tape Drive

92192Q	Storage tray for 92192T tapes (holds up to 18 tapes)
92192T	205' formatted/certified mini data cartridge, 40 MB formatted (box of 5) for the Vectra D1671A tape drive

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For Printers

■ HP 3630A PaintJet Color Graphics Printer

17301A	PaintJet softfonts for Microsoft Windows
35190P	JetPlotter software (allows PaintJet to emulate plotter)
51606A	Black ink print cartridge
51606C	Color ink (cyan, magenta, yellow) print cartridge
51630P	Z-fold PaintJet printer paper (250 sheets)
51630Q	PaintJet transparency film (50 sheets with sleeves)
51630R	Z-fold PaintJet paper, A4 size (250 sheets)
51630S	PaintJet transparency film, A4 size (250 sheets)
51630Y	Cut-sheet PaintJet printer paper (250 sheets)
51630Z	Cutsheet PaintJet paper, A4 size (250 sheets)
92171X	Terminal top ThinkJet stand
92177Z	DeskJet organizer
92261G	Paper catcher for 92269A printer stand
92261S	ThinkJet printer stand
92261T	QuietJet PLUS printer stand
92261U	QuietJet printer stand
92250Z	PaintJet printer dust cover
92269A	Desktop stand for PaintJet Printer

■ HP 2225A/B/C/D ThinkJet Printer

35178C	Carrying Case
51604A	Plain paper ink cartridge (black)
51605B	Jet Paper ink cartridge (blue)
51605G	Jet Paper ink cartridge (green)
51605R	Jet Paper ink cartridge (red)
35190P	Jetplotter software (allows ThinkJet Printer to emulate plotter)
51630A	Fan-fold Jet Paper (500 sheets/box)
51630J	Cut-sheet Jet Paper (500 sheets/box)
51630L	Pressure sensitive ink jet labels (2 across, 2000/box)
92171X	Terminal top ThinkJet printer stand for 239X series terminals
92250V	Dust cover
92261A	Jet Paper ink cartridge (black)
92261D	Accessory Kit (2 Jet Paper cartridges, 500 sheets fanfold paper, 500 sheets cut paper, 1 dust cover, and 1 printer stand)
92261N	Fan-folded Jet Paper (five 500-sheet packs)
92261R	Paper catcher for use with 92261S and 92171X stands
92261S	Desktop ThinkJet printer stand

■ HP 2227A/B QuietJet/QuietJet Plus

51604A	Plain paper ink cartridge (black)
51605B	Jet Paper ink cartridge (blue)
51605G	Jet Paper ink cartridge (green)
51605R	Jet Paper ink cartridge (red)
51630B	Z-fold wide Jet Paper for QuietJet Plus (500 sheets)
51630D	Z-fold wide Jet Paper for QuietJet plus (2500 sheets)
92250X	QuietJet dust cover
92250W	QuietJet Plus dust cover
92261A	Jet Paper ink cartridge (black)
92261G	Paper catcher for 92261T/U printer stands
92261P	QuietJet Plus accessory kit (1 each black, blue, green, and red Jet Paper cartridges, printer stand, dust cover, printer paper)
92261T	QuietJet Plus printer stand
92261U	QuietJet printer stand
35190P	Jetplotter software (allows QuietJet to emulate plotter)

■ HP 2235A/B/C/D RuggedWriter Printer

35190R	Matrix Plotter software (allows RuggedWriter to do graphics at 180 x 360 D.P.I.)
92156S	Ribbon cartridges (box of 3 cartridges)
92166A	Desktop printer stand
92157A	Printer paper, fan-folded (box of 2400 sheets)
92157C	Printer paper, microperforated, fan-folded (box of 2400 sheets)

■ HP 2276A DeskJet Printer

22707A	128K RAM cartridge for use with soft fonts
22707E	Epson FX-80 printer emulation cartridge
22708A	TmsRmn/Helv soft font (requires additional 128K or 256K RAM, depending on application)
35184E	Deskplotter software (allows DeskJet to do graphics by emulating plotters)
51608A	Black print cartridge
92250R	DeskJet printer dust cover

Font Cartridges for HP 2276A DeskJet Printer:

22706A	Courier
22706B	Prestige Elite
22706C	Letter Gothic
22706D	TmsRmn 8 & 10 Point
22706E	TmsRmn 12 Point
22706F	TmsRmn 14 Point
22706G	Helv 8 & 10 Point
22706H	Helv 12 Point
22706J	Helv 14 Point
22706M*	Presentations
22706P*	TmsRmn ASCII
22706Q*	Helv ASCII
22707K	Landscape upgrade cartridge
22707L	Landscape fonts cartridge (must use with 22707K only)

*This font cartridge contains ASCII characters only and may not be suitable for use in countries requiring non-English characters and symbols.

■ HP 33440A LaserJet Series II Printer

35188A	LaserPlotter software (allows LaserJets to do graphics by emulating plotters)
35190J	LaserControl software (to control LaserJet fonts and paper handling)
92157K	1″ labels (other sizes also available)
92211B	Mobile printer cabinet
92214	Universal support stand for LaserJet printer
92259G	Dust cover
92285J	Transparencies
92295A	Toner (EP-s) cartridge
92295B	8.5″ x 11″ paper tray (letter/standard size)
92295C	8.5″ x 14″ paper tray (legal size)
92295D	A4 paper tray (metric size)
92295E	7.25″ x 10.5″ paper tray (executive size)

■ HP LaserJet/LaserJet Series II Printer Fonts

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)
92286H	Plug-in type-font cartridge (Legal Courier)
92286J	Plug-in type-font cartridge (Math Elite)
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)
92286R	Plug-in type-font cartridge (Presentations 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)
92286X	Plug-in type-font cartridge (EAN/UPC/OCR-B)
92286Y	Plug-in type-font cartridge (PC Courier 1)
92286Z	Plug-in type-font cartridge (Microsoft 1)

HP Soft Fonts for MS-DOS—5.25-inch disks (HP Vectra/IBM/IBM compatibles)

33412AC	Soft font (TMS Rmn/Helv Base Set—USASCII)
33412AD	Soft font (TMS Rmn/Helv Base Set—ROMAN 8)
33412AF	Soft font (TMS Rmn/Helv Supplemental—ROMAN 8)
33412DA	Soft font (Letter Gothic Base Set)
33412EA	Soft font (Prestige Elite Family)
33412RA	Soft font (Garamond)
33412SA	Soft font (Century Schoolbook)
33412TA	Soft font (Zaph Humanist)
33412UA	Soft font (Headline Typeface, Collection 1)
35188A	LaserPlotter software (allows full page graphics output by emulating plotters)
35190J	LaserControl (allows font downloading and selection)

For HP ColorPro, 7470A, 7475A and 7550A Plotters

■ **Non-Glossy Plotter Paper**

	Size/Sheets
17800P	A/50
17801P	A/250
17802P	A4/50
17803P	A4/250
17804P	B/50
17805P	B/250
17806P	A3/50
17807P	A3/250

■ **Glossy Plotter Paper**

	Size/Sheets
17900G	A/100
17901G	A4/100
17902G	B/100
17903G	A3/100

■ **Transparency Plotter Film**

	Size/Sheets
17700T	A/50 (7440/70)
17701T	A4/50 (7440/70)
17702T	A/50 (7475 + others)
17703T	A4/50 (7475 + others)

■ **Fiber-Tip Paper Pens**

.3mm	.7mm	Single-color (5 pens/pkg)
17825P	17826P	Black
17827P	17828P	Green
17829P	—	Aqua
17831P	17832P	Blue
17833P	—	Violet
17835P	—	Brown
17837P	—	Yellow
17839P	—	Orange
17841P	17842P	Red
17843P	—	Red-Violet
		Multi-color
17845P	17846P	Std Assort
17847P	17848P	Cool Assort
17849P	17850P	Warm Assort

■ Fiber-Tip Transparency Pens

.3mm	.7mm	Single-color (5 pens/pkg)
17725T	17726T	Black
17727T	17728T	Green
17729T	—	Aqua
17731T	17732T	Blue
17733T	—	Violet
17735T	—	Brown
17737T	—	Yellow
17739T	—	Orange
17741T	17742T	Red
17743T	—	Red-Violet
		Multi-color
17745T	17746T	Std Assort
17747T	17748T	Cool Assort
17749T	17750T	Warm Assort

■ Accessories

07550-60210	Dust cover (7550A)
07440-60006	Dust cover (Color Pro)
07475-60010	Dust cover (7475A)
92166E	Plotter sound enclosure (for ColorPro, 7470A & 7475A plotters only)
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
92177Y	7550 graphics organizer
92214P	Mobile support stand (7475)
92250N	Dust cover (7470A)
92269A	Desktop stand (7470A, ColorPro)

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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 training courses at HP Customer Education 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 office or Education Center.

- *Getting Started—Vectra*

  This class is designed to acquaint the novice Vectra PC user with the machine's many capabilities. Topics covered include installing applications, P.A.M., MS-DOS commands, disk formatting, file management, and system configuration.

  HP 72401A (1 day)

- *Getting Started—The Portable*

  This class teaches new computer users to operate the Portable using P.A.M., to write and save a memo, and to dial an electronic information service. You will also gain an understanding of compatibility issues between desktops and The Portable.

  HP 45689A (1 day)

- *Getting Started—The Touchscreen*

  This workshop was created especially for beginners—so your first experience with your new HP 150/Touchscreen PC computer will be a positive one. You'll learn how to define basic computer terms, start up the system, handle disks properly, prepare new disks, and install application software.

  HP 35036B (1 day)

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

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, database 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 provide hands-on work with the HP 150 during class time for maximum effectiveness.

■ *Advanced Lotus 1-2-3*

This class teaches Lotus 1-2-3 users advanced 1-2-3 features such as Data Sort, Data Query and Data Table commands, database statistical functions, keyboard macros, programming with the /X commands, and advanced file commands.

HP 05097A (1 day)

■ *MultiMate*

This class is designed for secretaries and clerks with little or no prior word processing experience. You will learn how to create, edit, format, and print documents.

HP 51400A (1 day)

■ *MS-Word*

This class is designed for business professionals, word processing specialists and clerical personnel. You will learn to create, edit, format and print documents. In addition, you will learn to create multi-columnar documents, to set up glossaries and to understand the use of windowing.

HP 51401A (1 day)

■ *AdvanceWrite Plus Course 1*

Provides AdvanceWrite Plus users with an introduction to the basic features of AdvanceWrite Plus. Students develop expertise in creating, editing and formatting documents. Students will also be introduced to file use and directories.

HP 27542A

- *AdvanceWrite Plus Course 2*

  Provides AdvanceWrite Plus users with the ability to use the mailmerge facility to produce standard letters, to use Wordbase Manager, to create tables of contents and indices, to use the spreadsheet feature, and to use other advanced features of AdvanceWrite Plus.

  HP 27543A

- *AdvanceWrite Plus Course 3*

  Provides AdvanceWrite Plus users with an overview & understanding of the major new product features. Students will practice the integration of graphic images into a document, using advanced formatting capabilities, and using the printing options available in AdvanceWrite Plus.

  HP 27544A

- *AdvanceWrite Plus*

  Covers the material in HP 27542A, HP 27543A and HP 27544A for MS-DOS-compatible keyboards and the enhanced HP Vectra PC keyboards.

  HP 27547A

- *AdvanceWrite Plus Advanced Features*

  Covers the material in HP 27543A & HP 27544A.

  HP 27548A

- *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.

  HP 45688A (1 day)

- *Learning 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.

  HP 35125A (1 day)

- *WordStar®/Word Processing*

  The WordStar® workshop for the HP 150/ Touchscreen PC 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.

  HP 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.

  HP 35123C (½ day)

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

  HP 35123A (1½ days)

- *Condor/150 20-1 and 20-2*

  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.

  HP 35124B (1 day)

- *Learning 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.

  HP 35124C (1 day)

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

  HP 35124A (2 days)

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.
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.

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Classroom Learning Packs   Brian Egan, Roger Williams
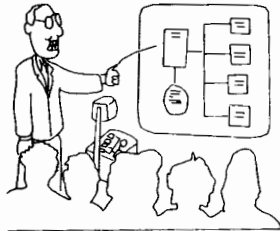
The Classroom Learning Pack is a new concept expressly designed for the instructor of a classroom course on personal computer software. We've developed ready-to-use materials—an instructor's guide, overhead transparencies, and student activity sheets—so that you can quickly prepare for a course. And the course is easy to teach because the focus is on extensive hands-on practice with the software.

Classroom Learning Packs are offered for:

AdvanceMail (A.02.00)/Vectra and
   IBM PC/XT/AT includes materials
   for 10 students . . . . HP 27535V

   Additional Student Learners' Packs
   (10 pack) . . . . HP 27535-60001

Executive Card Manager/Vectra and IBM
   PC/XT/AT . . . . HP 89913F

During most of the course 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, the Executive Card Manager 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.

AdvanceMail	With the AdvanceMail Customer Education Trainer's Pack you can teach users the effective use of AdvanceMail version A.02.00, HP's electronic mail system.
	The trainer's pack has a modular format which allows you to customize the course to your needs. The course provides guidance on selected modules and sample curricula for common training scenarios. Student Reference Cards provide seamless customization of student materials. In addition, you can personalize the course by editing the overhead slides using Graphics Gallery files supplied on disk.
	The pack supports an initial class of 10 students. For subsequent classes you can order Learners' Packs (product number HP 27535-60001) which comprise 10 sets of student materials.
Executive Card Manager	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.
Ordering Information	To order Classroom Learning Packs and Student Learners' Packs, contact your local dealer or HP office.

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HP FastTrak, FastTrak PLUS and ExpertGuide
Self-Study Packs
Linda Swett

HP FastTrak, FastTrak PLUS, and ExpertGuide are comprehensive self-study training packs for user support personnel and expert users.

If you provide support services for personal computer users in your organization, or if you need information beyond the scope of the software documentation, these self-study packs will make your job easier by helping you learn the ins and outs of the software quickly.

Topics covered include product overview, supported configurations, features and uses, demo tips, integration with other personal computer applications, installation, performance, and technical tips. The format is consistent with the software documentation to simplify the learning process. In addition, the guides are completely modular so you can learn what you want, when you want.

HP FastTrak

HP FastTrak guides are now available for the following software applications:

Executive MemoMaker (HP 89915F)
Executive Card Manager (HP 89916F)
AdvanceLink (HP 89918F)
Gallery Collection (HP 68352X)
(includes Charting and Drawing Gallery FastTraks)

Each guide covers the Touchscreen/150 and HP Vectra versions of software. FastTrak guides for Executive MemoMaker, Executive Card Manager, and Gallery Collection also include a 3½-inch and 5¼-inch disk of demonstration files.

HP Vectra Office FastTrak PLUS

The HP Vectra Office FastTrak PLUS (HP 68321F) is available to provide training on integrating, customizing, and automating your HP Vectra Office products. FastTrak PLUS contains information and labs designed to help office automation specialists who provide application level programming, training and general consulting to HP 3000 workstation users.

This self-paced course enables you to demonstrate the flow of data between applications within the Vectra Office, customize and automate this flow of data for specific user needs, and provide custom solutions, tightly integrating Vectra Office with the HP 3000 and HP DeskManager.

	The HP Vectra Office FastTrak PLUS includes product integration training on AdvanceWrite, Executive MemoMaker, AdvanceLink, AdvanceMail, Executive Card Manager, Lotus 1-2-3, Graphics Gallery, and HP DeskManager B. Included also is a data disk in 5¼-inch format that contains sample batch jobs automating various real-life scenarios used in the labs, and command files for automating and customizing Vectra 3000 and HP DeskManager B.
Windows HP ExpertGuide for Microsoft Windows	If you desire technical user information beyond the scope of the Microsoft Windows User's Guide, a Windows HP ExpertGuide is available for version A.01.03 of Windows. The Windows HP ExpertGuide for Microsoft Windows (HP 5958-7685) is a self-study reference and learning tool composed of readings, labs, examples, and quick reference information for Windows on the HP 150 and HP Vectra.
Ordering Information	To order any of these products, contact your local dealer or HP sales office.

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Vectra PC Family Fundamentals:
A Computer-Based Tutorial

Darcy Van Vuren

The First Step Toward Effective Vectra Use	**Vectra PC Family Fundamentals: A Computer-Based Tutorial** is a computer-based software package designed to introduce users of all Vectra PCs to the system as well as to provide more in-depth lessons for the more experienced user. This tutorial is highly interactive and its modular format permits users to learn at their own pace and at their own convenience.

This computer-based tutorial is an ideal way to come up to speed on Vectra PC basics and to obtain efficiently the solid background necessary to be a productive applications user. Upon completion of the four-to-six hour tutorial, users will have gained:

■ An understanding of basic microcomputer terms and concepts;

■ An understanding of how to start and stop the Vectra PC;

■ Experience in the use of the keyboard;

■ An understanding of the components of the computer and their functions;

■ The ability to differentiate between an operating system and application software;

■ The ability to use PAM to perform basic file management and directory management tasks; and

■ An ability to use sixteen of the most essential MS-DOS commands. |
| **To Order** | To order Vectra PC Family Fundamentals, contact HP DIRECT or your sales office and request HP product number 51410B. |

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If you can't wait long for answers to questions about application software and hardware configurations, you should know about HP's Personal Computer Assistance services. They give you access to experts at HP Response Centers, five days a week. Utilizing state-of-the-art telecommunications and knowledge databases, these professionals can quickly pinpoint solutions.

HP offers two Personal Computer Assistance services for the mid- to large-size company with an internal support staff.

- **Workgroup Coordinator Assistance—Business Software** provides designated staff members with unlimited telephone assistance for application software used on a variety of HP personal computers. With a response time of two hours or less, this service makes sure you receive the prompt and expert attention your business demands. You also receive a subscription to this magazine, the bi-monthly *HP PC Communicator.*

- **Workgroup Coordinator Assistance—Vectra Office** provides workgroup coordinators with unlimited telephone support, specifically for the HP Vectra office software used on HP Vectra PCs. You also receive a subscription to *HP PC Communicator.*

HP also offers support services for the small business or individual user:

- **PC User Assistance** makes the same Response Center specialists available to individual users interested in peak productivity. Unlimited telephone assistance and a two-hour response time ensure that you are getting the most from our popular software packages. The *HP PC Communicator* subscription is included with this service also.

- **HelpLine** provides you with a pay-as-you-go alternative for software support. If you don't often need assistance, this service may be right for you. You receive direct access to Response Center specialists with the same two-hour response time. Special certificates let you purchase assistance in advance or you can charge the toll-free call to your personal or company credit card. (Available U.S. and Canada only.)

Ordering Information

To order the personal computer software support that best meets your support requirements, call HP's Support Telemarketing Center at (800) 835-HPHP in the U.S., or call your local HP sales office. All contractual services must be purchased for a minimum of three months coverage. All PC software support services apply only to software classified as HP-supported. Listed below is ordering information for some of the telephone assistance products.

Telephone Assistance for Internal Support Personnel:

- Workgroup Coordinator Assistance—
  Business Software
  Response Center caller plus
  one alternate — HP 99062A + D00
  Each additional caller — HP 99062A + P00

- Workgroup Coordinator Assistance—
  Vectra Office
  Response Center caller plus
  one alternate — HP 99090A + D00
  Each additional caller — HP 99090A + P00

Telephone Assistance for the End-User:
- PC User Assistance

HP Vectra Pre-Assembled Personal Computer Systems:
HP Vectra Publisher PC — HP D1200A + E00

HP Vectra CS Personal Computers:

Vectra CS Model 10	HP D1110A + E00
Vectra CS Model 11	HP D1111A + E00
Vectra CS Model 12	HP D1112A + E00
Vectra CS Model 16	HP D1116A + E00
Vectra CS Model 20	HP D1120A + E00
Vectra CS Model 21	HP D1121A + E00
Vectra CS Model 22	HP D1122A + E00
Vectra CS Model 26	HP D1126A + E00

HP Vectra ES Personal Computers:

Vectra ES Model 10	HP D1210A + E00
Vectra ES Model 20	HP D1220A + E00
Vectra ES Model 21	HP D1221A + E00
Vectra ES Model 22	HP D1222A + E00
Vectra ES Model 26	HP D1226A + E00

HP Vectra ES/12 Personal Computers:

Vectra ES/12 Model 10	HP D1310A + E00
Vectra ES/12 Model 20	HP D1320A + E00
Vectra ES/12 Model 21	HP D1321A + E00
Vectra ES/12 Model 22	HP D1322A + E00
Vectra ES/12 Model 26	HP D1326A + E00
Vectra ES/12 Model 40	HP D1340A + E00
Vectra ES/12 Model 41	HP D1341A + E00
Vectra ES/12 Model 42	HP D1342A + E00
Vectra ES/12 Model 46	HP D1346A + E00

HP Vectra RS/16 Personal Computers:

HP Vectra RS/16 Model 40	HP D1500A + E00
HP Vectra RS/16 Model 100	HP D1502A + E00
HP Vectra RS/16 Model 106	HP D1501A + E00

HP Vectra RS/20 Personal Computers:

HP Vectra RS/20 Model 40	HP D1600A + E00
HP Vectra RS/20 Model 100	HP D1602A + E00
HP Vectra RS/20 Model 106	HP D1601A + E00
HP Vectra RS/20 Model 150	HP D1603A + E00
HP Vectra RS/20 Model 300	HP D1604A + E00
HP Vectra RS/20 Power User	HP D1606A + E00

HP Portable Vectra CS Personal Computers:

Portable Vectra CS	HP D1001A + E00
Portable Vectra CS 20	HP D1009A + E00

HP Portable Plus Personal Computers:

Portable PLUS	HP 45711E + E00

HP Vectra LS/12 Laptop Personal Computer:

HP Vectra LS/12	HP D1044A + E00
HP Vectra LS/12	HP D1024A + E00

The Touchscreen Personal Computers:

Touchscreen II	HP 45851A + E00

■ HelpLine*:
Individual support calls may be charged to
personal or company credit cards by calling
(800) 858-8857. In addition, users may prepay
for five calls by purchasing HelpLineCall
Certificate Packs (HP 35159A) from HP DIRECT
at (800) 538-8787.

*HelpLine services are available in the U.S. and
Canada only.

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The following is a list of manuals which can be ordered for the HP 150/Touchscreen PC and the HP Vectra PC family. To order, refer to the "How to Order" section in the "green pages" of this issue.

■ **HP Touchscreen/150**

45624A	MS-DOS User's Guide for HP 150 (Includes binder and manuals 45624-90001, 90005, and 90006)
45625-90002	Technical Reference Manual Supplement
45625A	HP 150 Technical Reference Manual (Includes 45625-90001 and 45625-90002)
*45626-90003	More About Connecting HP Printers, Plotters, and Disk Drives
*45626-90004	Using Your HP Touchscreen Personal Computer
*45626-90005	Using Your HP Touchscreen Personal Computer as a Terminal
45643-90002	45643A Extended I/O Accessory Card Service Manual
*45644-90002	45644A Etherlink/150 Accessory Service Manual
45847-60017	Using Your HP Touchscreen II as a Personal Computer Manual
45847-90001	Getting Started With Your HP Touchscreen II as a Personal Computer (150C)
45847-90044	Getting Started With Your HP Touchscreen II Personal Computer Manual
45847-90051	New Index—Using Your HP Touchscreen II Personal Computer
45847-90061	Using Your HP Touchscreen II Personal Computer Update
45848-60001	Using Your Touchscreen II as a Terminal (150C)
45848-90015	Using Your Touchscreen II as a Terminal Supplement
45849-60202	MS-DOS User's Guide for the HP 150/Touchscreen
45849-60204	HP 150 Programmer's Reference Manual
45849-90002	Touchscreen II Service Manual
45849-90046	Touchscreen II Personal Computer Operational Upgrade Instructions
45890-90002	HP 150 Expanded Memory Board Users and Installation Manual

*These manuals are for products or product versions that have been discontinued. You may receive a photocopy rather than an original manual.

■ HP Vectra PC Family

45897-90001	Vectra Hard Disk Multi Voluming Instruction Guide
45911-90002	45911A Graphics Tablet User's Manual
45918A	HP-HIL Technical Reference Manual
45932-90001	See Kit D1100-90001
*45934-90001	Setting Up Vectra
*45934-90002	Connecting Peripherals To Vectra
*45934-90004	Vectra Installing Internal Options Chart
*45935-90059	Vectra CE Handbook
45945-60031	Vectra System BIOS Technical Reference Manual Kit (Contains manual 45945-90012 and binder)
45945-90011	See Kit 5061-8982
45945-90012	See Kit 45945-60031
45951-90066	MS-DOS 3.2 Condensed Reference Guide
5061-8971	MS-DOS 3.2 Programmer's Reference
5061-8982	HP Vectra ES Hardware Technical Reference Manual Kit (Contains manual 45945-90011 and binder)
5061-8983	HP Vectra Accessories Technical Reference Manual Kit (Contains manual 5959-6759 and binder)
5061-8986	Vectra RS Technical Reference Manual Kit (Contains manual 5959-2654 and binder)
5062-5527	Vectra LS/12 Technical Reference Manual Kit (Contains manual D1024-90010 and binder)
5958-7685	HP Expert Guide for Microsoft Windows
5959-2650	HP Vectra RS Personal Computer Service Manual
5959-2654	See Kit 5061-8986
5959-6759	See Kit 5061-8983
D1001-90029	Setting Up the Portable Vectra CS Literature Pak
D1100-90001	HP Vectra CS PC Technical Reference Manual Kit (Contains manual 45932-90001 and binder)
D1103-60005	Vectra CS PC Service Manual Kit—2nd Edition (Contains manual D1103-90002 and binder)
D1211-60003	HP Vectra ES Personal Computer Service Manual Kit—2nd Edition (Contains manual D1211-90002 and binder)
D1350-90104	Vectra ES Series Set Up and HP Mode Configuration Bulletin
D1410-90001	HP Vectra QS Service Manual
D1410-90002	HP Vectra QS Hardware Technical Reference Manual

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*These manuals are for products or product versions that have been discontinued. You may receive a photocopy rather than an original manual.

Software Exchange Kits—
Upgrades, Updates, and Replacements
for Damaged Disks

Robert Millier

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 disk 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.

- **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.

- **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.

Ordering

To order:

- In the U.S., Software Exchange Kits are available by mail from HP's Direct Marketing Division, using the form provided at the end of this article.

- Outside the U.S., contact your dealer or HP sales office for details.

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

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 disk.

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

HP Internal Orders	For HP Internal Orders of Software Exchange Kits, return the original master disks to: Software Administrator, Building 78/3 or Hewlett-Packard Attn: Software Administrator P.O. Box 60008 Sunnyvale, CA 94088 Reference your HP Internal Order number on the package.
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 at least 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 *HP PC Communicator* editor.)
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 disks. For information on other products not listed, contact your dealer or HP sales and service office.

Product	Version	Order Part Numbert	Notes
Touchscreen (HP 150B) Operating System and Utilities		45626-63007	1
Sys Master Disk			
MS-DOS	2.11		
MS-DOS COMMANDS	2.11		
P.A.M.	B.02.02		
HPBIOS	B.02.02		
FORMAT	B.02.00		
DEV CONFIG	B.02.00		
Appl Master Disk			
COPY/BACKUP	B.02.02		
INSTALL	B.02.02		
SET UP P.A.M.	B.02.02		
MS-DOS UTILITIES	B.02.03		
Touchscreen II Operating System and Utilities	2.11	45847-63004	2
MS-DOS	2.11		
MS-DOS COMMANDS	2.11		
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 UTILITIES	C.01.00		
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	

Product	Version	Order Part Number†	Notes
Touchscreen Operating System (upgrade)	3.2	45849-63031	
Touchscreen II Operating System and Utilities		45847-63017	
MS-DOS	3.2		
MS-DOS COMMANDS	3.2		
P.A.M.	E.01.01		
HPBIOS	E.01.01		
FORMAT	E.01.01		
DEV CONFIG	E.01.01		
COPY/BACKUP	E.01.01		
INSTALL	E.01.01		
SET UP	E.01.01		
SAVERAM	E.01.01		
STORE CONFIG	E.01.01		
MS-DOS UTILITIES	E.01.01		
System Master Exchange Kit		45847-63030	
MS-DOS	3.2		
MS-DOS COMMANDS	3.2		
P.A.M.	E.01.01		
HPBIOS	E.01.01		
FORMAT	E.01.01		
DEV CONFIG	E.01.01		
EASY CONFIG	E.01.01		
Application Master Exchange Kit		45847-63031	
COPY/BACKUP	E.01.01		
INSTALL	E.01.01		
SET UP	E.01.01		
SAVERAM	E.01.01		
STORE CONFIG	E.01.01		
Utility Master Exchange Kit			
MS-DOS UTILITIES	E.01.01	45847-63032	

Product	Version	Order Part Number†	Notes
AdvanceLink (upgrade)	A.04.04	45431-63002	
AdvanceLink (update)	A.04.04	45431-63001	
Application Master (150 B)	B.02.00	45626-63006	
BASIC Interpreter	*A.01.01	45445-63002	
BASIC Compiler	A.01.00	45446-63002	
COBOL	A.01.00	45448-63001	
Compiled BASIC	A.01.00	45446-63002	
DSN/Link	A.01.01	45425-63001	
ExecuDesk	A.01.01	45444-63001	
Executive Card Manager (Upg/rp)	A.02.00	45421-63004	
Executive MemoMaker (replacement) Gold, Utility and Fonts master	C.03.00	45418-63005	
Set-up and Dictionary master	C.03.00	45418-63007	
Executive MemoMaker (C.02.00 to C.03.00 upgrade)	C.03.00	45418-63006	
Forms Master	A.01.00	45443-63001	
FORTRAN	A.01.00	45449-63001	
FORTRAN Upgrade	*A.01.00	45449-63003	
Gallery Collection			
Bar, Line & Pie Charts	B.03.00	45513-63001	
Basic Portfolio Disks 1 & 2	B.03.00	45411-63004	
Basic Portfolio Disks 3 & 4	B.03.00	45411-63005	
Business Management Portfolio Disks 1–3	B.03.00	45570-63001	
Gold Master	B.03.00	5061-9914	
Set-up & Utility	B.03.00	5061-9917	
HP Message to AdvanceMail (upgrade)	A.00.02	27534-63007	
HP-IB Command Library (upgrade)	B.01.00	14857-63002	
HP-IB Command Library for MS-DOS	B.01.00	14857-63001	
HP Message	A.00.02	36568-63001	
HP Message to AdvanceMail	A.01.02	27534-63007	
HP Terminal Program	A.00.01	24597-65002	
HP Word	A.00.00	27505-63001	
HP Word/PC (upgrade)	A.03.00	27505-60016	
Lotus 1-2-3:			
System Disk and Help Disk	2.01	45566-63001	
Install and Print Graph Disks	2.01	45566-63002	
Translate/View	2.01	45566-63003	

Product	Version	Order Part Number†	Notes
MemoMaker Time Manager	A.02.00	45504-64002	
MS Word	B.01.00	45474-63002	
Pascal	*A.01.00	45447-63002	
PC Interface with HP 150	A.01.00	61060-63001	
PCF to Executive Card Manager (upgrade)	A.02.01	45421-63005	
Print Central	A.01.01	36890-63001	
Print Central Upgrade	A.03.00	32593-63001	
R:Base 5000	1.1	45563-63001	
R:Base 4000 to 5000	1.1	45563-63002	
Symphony	1.1		
Prog. Disk, Tutorial, Help		45498-63002	
Printgraph, Utility Disks		45498-63003	
Install Prog., Library Disks		45498-63004	
Tutorial1, Tutorial2 Disks		45498-63005	
VT100 Terminal Emulator	A.02.00	45412-63001	
VT100 Terminal Emulator	A.01.00	45412-63001	
Windows Kernal	A.01.03	45875-63001	
Windows Write/Paint	A.01.03	45875-63002	
X.21 Interface	26.22	18154-17101	

(See Notes on next page)

*Revised since original release

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

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 disk cannot be accepted. If you want a kit with 5.25" disks, please indicate this preference on your order. Otherwise 3.5" disk will be shipped, regardless of the size of your returned master disk.

Notes

1—Three double-sided disks, 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 (45849-63024) from your dealer or HP office. The upgrade kit includes the new operating system disk and the ROM integrated circuits required by the new disk; 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).

2—Double-sided exchange disk 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 (45849-63024) from your dealer or HP office. The upgrade kit includes the new operating system disk and the ROM integrated circuits required by the new disk; 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
Software Exchange Kits

Product	Version	Order Part Number†	Notes
AdvanceMail Upgrade (5.25″)	A.02.00	27535-60002	
AdvanceWrite I to AdvanceWrite Plus (Upgrade)	F.02.00	27546-60001	
AdvanceWrite II to AdvanceWrite Plus (Upgrade)	F.02.00	27546-60002	
AdvanceWrite III to AdvanceWrite Plus (Upgrade)	F.02.00	27546-60003	
AdvLink Replacement (5.25″)	B.02.00	68333-65016	
AdvanceLink Replacement (3.5″)	B.02.00	68333-63003	
AdvanceLink (upgrade)			
5.25″	A.02.00	14753-61006	
3.5″	A.02.00	14753-61005	
AdvanceLink (upgrade)	B.02.00	68333-60011	
5.25″ & 3.5″			
BASIC Interpreter	2538	45952A	1
BASIC Interpreter (Upgrade/Replacement)	3.22	45952-63001	
CAT Replacement			
5.25″	A.02.00	14753-61006	
3.5″	A.02.00	14753-61005	
CAT Upgrade			
5.25″	A.02.00	14573-61001	
3.5″	A.02.00	14753-61003	
Charting Gallery 3.0 Upgrade (contains 3.5″ and 5.25″)	C.00.00	D1710-60001	
Charting Gallery 3.0			
Setup/Utility and Application/Gold (3.5″)	C.00.00	D1710-63001	
Setup, Utility, Application, and Gold (5.25″)	C.00.00	D1710-65001	
Drawing Gallery 3.0 Upgrade (contains 3.5″ and 5.25″)	C.00.00	D1709-60001	
Drawing Gallery 3.0		D1709-63001	
Setup/Utility and Application/Gold (3.5″)	C.00.00		
Portfolio 1 & 2 (3.5″)	C.00.00	D1709-63002	
Set, Utility, Application and Gold (5.25″)	C.00.00	D1709-65001	
Portfolio 1, 2, & 3 (5.25″)	C.00.00	D1709-65002	

Product	Version	Order Part Number†	Notes
Executive Card Manager	A.01.03	68331-65001	
Executive Card Manager Upgrade (5.25″)	A.01.08	68331-65002	
Executive MemoMaker	A.01.02	68330-65001	
Executive MemoMaker Upgrade	A.03.00	68330-60005	
Executive MemoMaker			
Application & Utility (5.25″)	A.03.00	68330-65002	
Gold & Dictionary (5.25″)	A.03.00	68330-65003	
Gallery Collection 3.0 Upgrade (contains 3.5″ and 5.25″)	C.00.00	D1711-60001	
Gallery Collection 3.0			
Setup/Utility and Application/Gold (3.5″)	C.00.00	D1711-63001	
Portfolio 1, 2, & 3 (3.5″)	C.00.00	D1711-63002	
Setup, Utility, Application, & Gold (5.25″)	C.00.00	D1711-65001	
Portfolio 1, 2, 3, 4, & 5 (5.25″)	C.00.00	D1711-65002	
Gallery Collection			
Application Master (5.25″)	B.03.00	68351-65002	
Application Master (3.5″)	B.03.00	68351-63001	
Bar, Line & Pie Charts (5.25″)	B.03.00	68350-65001	
Bar, Line & Pie Charts (3.5″)	B.03.00	68350-63001	
Basic Portfolio Disks 1, 2 & 3 (5.25″)	B.03.00	68351-65001	
Basic Portfolio Disks 1 & 2 (3.5″)	B.03.00	68351-63002	
Basic Portfolio Disk 3 (3.5″)	B.03.00	68351-63003	
Business Management Portfolio Disk 1 (5.25″)	B.03.00	68326-65001	
Business Management Portfolio Disk 2 (5.25″)	B.03.00	68326-65002	
Business Management Portfolio Disk 3 (5.25″)	B.03.00	68326-65003	
Business Management Portfolio Disks I & II (3.5″)	B.03.00	68326-63001	
Business Management Portfolio Disk III (3.5″)	B.03.00	68326-63002	
Gold & Utility Master (5.25″)	B.03.00	5061-9915	
Gold Master (3.5″)	B.03.00	5061-9919	
Set-up Master (5.25″)	B.03.00	5061-9916	
Graphics Gallery Update	A.01.00	68352-65002	

Product	Version	Order Part Number†	Notes
HP-IB Command Library (Upgrade)		82990-65001	
HP Message	A.00.02	36569-65001	
HP Message to AdvanceMail (Upgrade)	A.01.02	27535-65009	
HP Terminal Program	A.00.03	24597-65010	
HP Word/PC (Upgrade) (5.25")	A.03.00	27536-60008	
MS-DOS Op Sys Disk	A.01.02	45951-60001	
MS-DOS Op Sys Disk	A.01.04	45951-63001	
MS-DOS Op Sys Disk	B.01.01	45951-63017	
MS-DOS 3.3 (5.25")	C.01.01	45951-60029	
MS-DOS 3.3 (3.5")	C.01.01	45951-60030	
MS Macro Assembler	4.0	45953-60001	
MS Windows/286 2.1 (upgrade) (5.25")	B.02.10	D1318-65002	
MS Windows/286 2.1 (upgrade) (3.5")	B.02.10	D1318-63001	
MS Windows Kernel (5.25") Set-up, Build & Display Disks	B.02.00	45954-60002	
MS Windows Kernel (3.5") Set-up, Build & Display Disks	B.02.00	45954-60005	
MS Windows Fonts & Utilities (5.25")	B.02.00	45954-60003	
MS Windows Fonts & Utilities (3.5")	B.02.00	45954-60006	
Multiple Character Set Utilities MCS	A.01.01	5061-8970	
Office Talk	A.01.02	24520-15001	
PageMaker	3.0		2
PC Instrument Data Acquisition	A.02.00	14856-65001	
PC Instrument System	B.01.00	61061-65001	
PC Instrument System	B.01.00	61061-65002	
Print Central	A.01.00	36890-65001	
Print Central (Update)	A.03.00	32593-63001	
R:Base 5000	2537	68336-65001	
R:Base Program Interface		68337-65001	
R:Base System V	1.1	68328-65012	
Scanning Gallery	A.02.00	68357-65001	
Scanning Gallery MS Windows Run-Time Version	A.01.00 & A.02.00	88290-10150	

Product	Version	Order Part Number†	Notes
Scanning Gallery Plus			
5.25"			
Applications & Installation	A.03.00	68358-65001	
Setup, Build, Display 1 & 2, Utilities 1–4	A.03.00	68358-65002	
3.5"			
Applications & Installation	A.03.00	68358-63001	
Setup & Build, Displays, Utilities 1 & 2, and Fonts	A.03.00	68358-63002	
Set-up/Utilities Disk Vectra CS (3.5")	B.03.00	D1102-60041	
Set-up/Utilities Disk Vectra CS (5.25")	B.03.00	D1102-60040	
Set-up/Utilities Disk Vectra ES (3.5")	B.03.00	D1351-60053	
Set-up/Utilities Disk Vectra ES (5.25")	B.03.00	D1351-60054	
Symphony	2538	68339-65001	
VT 100 Terminal Emulator	A.02.00	45412-63001	
1-2-3 by Lotus	2.01	68340-65001	

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.
2—Aldus Corporation, 411 First Ave. South, Suite 200, Seattle, WA 98104 U.S.; (206) 622-5500.

Portable
Software Exchange Kits

Product	Version	Order Part Number†	Notes
BASIC Interpreter	A.01.01	45445-63002	
BASIC Compiler	A.01.01	45446-63002	
Lotus 1-2-3 Upgrade (ROM)	2.01	45539-64001	
Prog. Tools	A.01.00	45419-63001	

*Revised since original release.

Discontinued Software
Replacement Media Exchange Kits

Product (Notes)	Version	Order Part Number† 3.5" Disk	Exchange Available Through
Touchscreen/150:			
3278 Emulation	A.01.00	45641-63001	September, 1989
BPI Gen. Acctg.	A.01.00	45455-63001	June, 1990
BPI Personal Acctg.	A.01.11	45459-63001	June, 1990
BPI Accts. Rec.	A.01.11	45456-63001	June, 1990
Charting Gallery	B.02.00	45513-63001	October, 1993
Condor 1/150	A.02.11	45415-63002	April, 1990
Condor 3	A.02.11	45416-63002	January, 1992
Condor 3*	A.02.11	45415-63002	April, 1992
Context MBA/150	A.02.03	45481-63001	April, 1990
CorrectStar	3.32	45427-63002	September, 1992
CorrectStar hard-disk upgrade	3.32	45429-63002	September, 1992
CorrectStar to SpellStar	3.32	45429-63001	September, 1992
Diagraph	A.03.01	45463-63001	September, 1992
Drawing Gallery	A.02.01	45411-63002	October, 1993
EtherMail	2.1	45639-63001	October, 1991
EtherShare	2.1	45645-63002	October, 1991
EtherShare/150 Server	1.0	45649-63002	October 1991
EtherLink	2.1	45844-63002	October, 1991
Gallery Picture Library Vol. II	A.01.00	45433-63001	September, 1992
Graphics (bar disk, text disk, pie disk, line disk, examples disk)	A.03.01	45410-63001	April, 1990
GraphPlan	1.00.T2	45467-63001	
GraphWriter	A.01.01	45484-63001	May, 1991
Lattice C Compiler	A.01.01	45452-63001	June, 1992

Discontinued Software
Replacement Media Exchange Kits

Product (Notes)	Version	Order Part Number† 3.5" Disk	Exchange Available Through
Lotus 1-2-3	1A		January, 1992
System Disk		45482-63001	
System Disk & Backup disk		45482-63004	
Utility		45482-63002	
Tutorial 1&2		45482-63003	
Printgraph		45482-63005	
MailMerge	A.03.30	45401-63001	March, 1990
MemoMaker	B.01.02	45420-63001	December, 1991
MicroPlan	4.04.T2	45465-63001	May, 1991
MicroPlan Consol.	4.04.T2	45466-63001	May, 1991
MS Spell	A.01.00	45556-63001	September, 1992
MultiMate	3.29	45424-63001	September, 1992
MultiPlan	A.01.10	45473-63002	May, 1991
Painter	A.01.00	45540-63001	September, 1992
PCF	B.01.02	45422-63001	December, 1990
PFS: File & Report	A.02.41	45488-63001	May, 1991
Picture Perfect	A.03.01	45462-63001	September, 1992
R:Base 4000	1.1	45545-63001	December, 1991
SpellStar	A.03.30	45402-63001	March, 1990
Transend COMplete	A.01.00	45414-63001	May, 1991
VisiCalc	B.01.02	45405-63004	April, 1990
HP Vectra:			
CAT (5.25")	A.01.00	14753-61002	September, 1993
CAT (3.5")	A.01.00	14753-61004	September, 1993
Exec. Spreadsheet	A.01.01	68332-65001	September, 1992
MS Windows Kernal	A.01.03	45954-63001	November, 1993
MS Windows Write/ Paint	A.01.03	45954-63002	November, 1993
MS Windows 2.0 Kernal	B.02.00		December, 1993
5.25"		45954-60002	
3.5"		45954-60005	

Discontinued Software
Replacement Media Exchange Kits

Product (Notes)	Version	Order Part Number † 3.5" Disk	Exchange Available Through
MS Windows 2.0 Fonts & Utilities	B.02.00		December, 1993
5.25"		45954-60003	
3.5"		45954-60006	
MS Windows 2.0 Applc 5.25"	B.02.00	45954-60004	December, 1993
TextChart	A.02.00	45406-65001	August, 1990
Portable/110:			
DataFax	A.01.01	45408-63001	December, 1990
dBaseII	*A.02.41	45468-63001	September, 1992
PC 2622 (Reflection)	1.0	82861-64001	March, 1991
Rags to Riches			
Ledger	A.01.00	45520-17301	December, 1992
Sales	A.01.00	45521-17301	December, 1992
Receivables	A.01.00	45522-17301	December, 1992
Payables	A.01.00	45523-17301	December, 1992
Reflection	1.0	82861-64002	March, 1991

*Revised since original release.

Discontinued Software
Replacement Media Exchange Kits

Product (Notes)	Version	Order Part Number†		
		3.5″ Disk	5.25″ Disk	8″ Disk
HP 12x: Exchange Available Through April, 1990				
Op Sys/Util/12x	*A.02.00	45900-13810	45900-15810	
VisiCalc/12x	*A.02.01	45531-13800	45531-15800	45531-18800
Graphics/12x	*A.01.03	45532-13800	45532-15800	
Word/12x	*A.02.03	45533-13800	45533-15800	45533-18800
Link/12x (3)	A.02.00	45534-13800	45534-15800	
DSN/Link/12x	A.01.01	45534-13810	45534-15810	45534-18810
BASIC/12x	A.05.21	45535-13800	45535-15800	45535-18800
Programming/12x	A.01.00	45536-13800	45536-15800	45536-18800
Condor 1/12x (5)	A.02.00	45550-13800	45550-15800	45550-18800
Condor 3/12x (4)	*A.02.00	45550-13802	45550-15802	45550-18802
BPI G/A/12x	A.01.00	45552-13800	45552-15800	45552-18800
BPI Payroll/12x	A.01.00	45553-13800	45553-15800	
WordStar/12x	A.01.00	45560-13800	45560-15800	45560-18800
SpellStar/12x	A.01.00	45561-13800	45561-15800	45561-18800
MailMerge/12x	A.01.00	45562-13800	45562-15800	45562-18800
MicroPlan/12x	A.01.00	45670-13800	45670-15800	
MicroPlan Cons./12x	A.01.00	45671-13800	45671-15800	
WordStar	3.31	n/a	68345-65001	May, 1992
WordStar Professional	3.31	n/a	68346-65001	May, 1992

See notes on next page.

*Revised since original release.

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

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 disk cannot be accepted.

Notes

3—This kit is to exchange your Link/125 disk for a Link/125 disk. (If you want to *upgrade* to Series 100 DSN/Link, order part number 45534-13810 or 45534-15810.)

4—A Condor 3 disk, a Condor 20-2 or 3 Upgrade disk, or a Condor 20-1 to 3 Upgrade disk may be exchanged for the Condor 3 disk.

5—A Condor 2 disk or a Condor 1 to 2 upgrade disk may be exchanged for the Condor 2 disk.

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 disk 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 disk (containing the software being updated) for each update kit ordered. This is the disk 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 disk 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!

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 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 disk drives and printers), and training courses, most items listed in this issue are also generally available by telephone (HP Direct) from Hewlett-Packard:

- Australia . . . . (03) 895-2645
  (03) 895-2615
  (03) 895-2815
  (03) 895-2861

- Austria . . . . (0222) 2500-614
  (0222) 2500-615
  (0222) 2500-616

- Belgium/Luxembourg . . . . (02) 761 31 11
- Canada. . . . . (800) 387-3154
  Toronto local . . . . (416) 671-8383
- Denmark 04 30 16 40
- Finland . . . . (90) 887 2361
- France . . . . (1) 69 86 17 25
- Greece . . . . (01) 672 6090
- Hong Kong 584 8756
- Italy . . . . (02) 9236 9702
- Mexico 676 7892
- Middle East
  Athens . . . . (01) 6828811
- Netherlands 06-0501
- Norway . . . . (02) 24 60 90
- Singapore 279 8824
- South Africa
  Johannesburg. . . . . (011) 8025111
  Cape Town . . . . (021) 537954
- Spain 91-6374013
  91-6370011

- Sweden . . . . (08) 7502400
- Switzerland . . . . (057) 31 24 90
- The Netherlands . . . . (020) 547 6606
- United Kingdom . . . . (0734) 697201
  (0734) 441212
- 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.

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.
Ordering Software Update and Upgrade Kits	Your original master disk 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.
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 disk 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.
HP Employees	Check with the Employee Computer Program Coordinator in your personnel or purchasing department for ordering instructions.

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Ordering *HP PC Communicator* Back Issues

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

All *HP PC Communicator* back issues are available. Some of the early issues may be supplied as photocopies.

To help you decide which issues you need, the table below shows which products are covered in each issue, and when each product line was introduced. Not all issues have articles on all products.

All articles, including the Encyclopedia articles of past issues, are listed in the HP PC Communicator Master Index in the "yellow pages" of this issue.

To order back issues, check the HP Product Number in the table below, and call HP DIRECT. For the phone number nearest you, see "How to Order" in the green pages.

Issue	Order Number	HP 120/125	HP 150	HP Portables	HP Vectras
1	5955-3937	X			
2	5955-3943 U.S. 5955-3947 Intl.	X			
3	5957-6213	X			
4	5957-6204 U.S. 5957-6214 Intl.	X			
5	5957-6205 U.S. 5957-6215 Intl.	X			
6	5957-6206 U.S. 5957-6216 Intl.	X			
7	5957-6207 U.S. 5957-6217 Intl.	X	X HP 150 introduced		
8	5957-6218	X	X		
9	5957-6219	X	X	X Portable introduced	
10	5958-0250	X	X	X	
11	5958-0251	X	X	X	
12	5958-0252	X	X	X	
13	5958-0253		X		X Vectra introduced

Issue	Order Number	HP 120/125	HP 150	HP Portables	HP Vectras
14	5958-0254	X	X		X
15	5958-0255		X	X	X
16	5958-0256	X	X	X	X
				Portable PLUS introduced	
17	5958-0257	X	X	X	X
18	5958-0258		X	X	X
19	5958-7673		X		X
20	5958-7674		X		X
21	5958-7675		X		X
22	5958-7676		X	X	X
23	5958-7677		X	X	X
				Portable Vectra CS introduced	
24	5958-7678		X		X
					Vectra CS, ES, ES/12, RS/16, RS/20 introduced
25	5958-7679		X		X
26	5958-7680		X		X
27	5958-7681		X	X	X
28	5958-7682		X		X
29	5959-6765		X	X	X
30	5959-6766		X	X	X
					Vectra QS/16 introduced
31	5959-6767		X	X	X
				Vectra LS/12 Laptop introduced	

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Ordering *HP PC Communicator* Subscriptions

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

This publication contains articles on how to best use your system, including programming techniques, information on software updates, notes on using applications, and corrections to manuals. The *HP PC Communicator* also lists known software problems and their solutions, and introduces new members of the HP PC family.

To order your *HP PC Communicator* subscription:

■ Call (415) 372-6002 in the U.S.

or

■ Complete the Subscription Order Form found on the next page, and mail it to the address given.

HP product numbers 45530A/B/C for *HP PC Communicator* subscriptions are no longer available through the HP sales offices.

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 article "Ordering HP PC Communicator *Back Issues" in this Current Information section.*

Address Corrections for *HP PC Communicator* Subscribers

Change the information on the mailing label by sending us the Change of Address form which appears at the end of the Current Information green pages. Allow six to eight weeks for the change to take effect.

HP Internal Users and HP Employees

Call (415) 372-6002 in the U.S., or complete the Subscription Order Form on the next page and mail it in. Then get reimbursed through petty cash. The Subscription Order Form can also be requested on HP Desk from Order Communicator/HP 4200/02.

Due to the cost of processing, please use HP purchase orders for multi-subscription orders only.

□

HP PC Communicator Subscription Order Form

Name _____ Phone _____

Company _____

Street Address _____

_____ State _____ Zip _____

City _____

Country _____

Please check one:

☐ U.S. $44.00 U.S. funds

☐ Canada or $52.00 U.S. funds
   Mexico

☐ All other $64.00 U.S. funds
   countries   (shipped airmail)

Bill to:

Name _____

Company _____

Street Address _____

_____ State _____ Zip _____

City _____

Country _____

Payment Method:

☐ Bill me
☐ Check enclosed (Payable in **U.S. funds** to
   Hewlett-Packard Co.)
☐ Credit Card (Check one, provide all information,
   and sign)
☐ MASTER CARD   ☐ VISA

Account   ☐☐☐☐☐☐☐☐☐☐☐☐☐☐
No.

Expiration   ☐☐ - ☐☐
Date

Name on Card _____

Address _____

Signature _____

Mail this form to: HP PC Communicator
                        P.O. Box 2678
                        Martinez, CA 94553 USA

Phone: (415) 372-6002 U.S.

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HEWLETT PACKARD

Personal Computer Group

HP PC Communicator
P.O. Box 2678
Martinez, CA 94553

ADDRESS CORRECTION REQUESTED