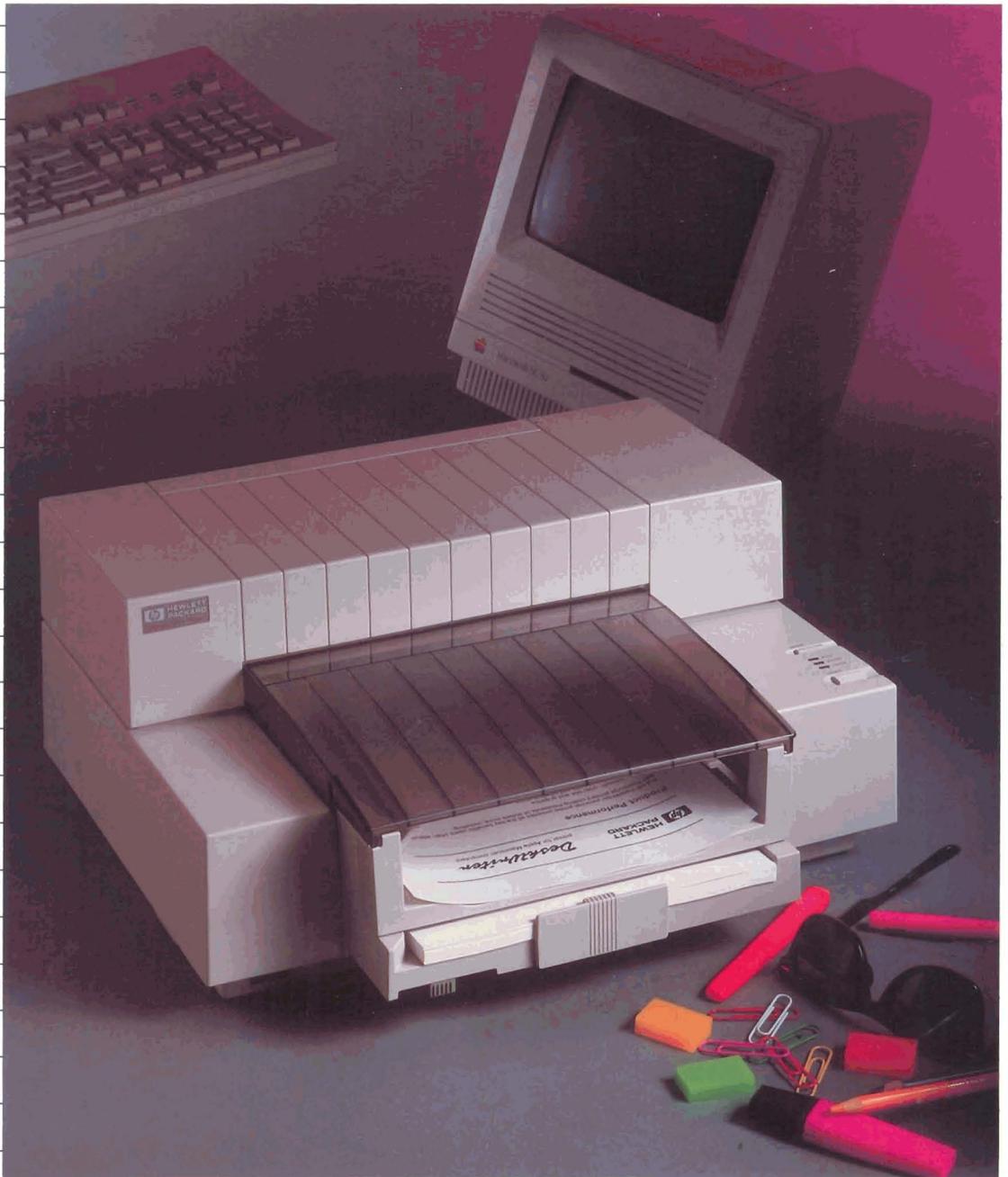


# HP CHANNELS

Information For Hewlett-Packard's Value-Added Businesses

July 1989



**Introducing the HP DeskWriter printer  
Exclusively for the Macintosh**

*Inside: January through June 1989 Article Index*

# HP CHANNELS

Volume 8, No. 9

Editor  
**Tracy Wester**

*HP Channels* is published monthly for Hewlett-Packard's value-added businesses to provide you with information about HP's products and services to help you be more successful.

For further information on any of the products and services discussed in *HP Channels*, please contact your HP sales rep.

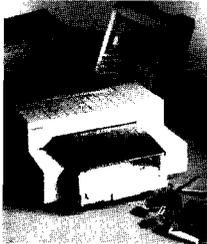
**See back cover for subscription information.**

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**On the cover**

## HP CHANNELS



Introducing the HP DeskWriter printer  
Exclusively for the Macintosh  
A new printer through the HP Direct Pack

The new HP DeskWriter printer was designed exclusively for the Macintosh user. The HP DeskWriter printer combines laser-quality output and personal desktop convenience at an affordable price. See articles beginning on page 12.

HP CHANNELS  
July 1989

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**Customer Support**

Support

**August 1 support obsolescences: UB-Delta-2 and 4 and MPE XL 1.0**

On August 1, 1989, the releases listed below will no longer be supported, and will be removed from the HP Price List.

This article is an advance warning of the obsolescences. These obsolescences

are coordinated with HP's plan for the obsolescence of release support.

For additional information on MPE V MIT obsolescences, contact your HP representative.

MPE OS	Release name	Date code	Media product	Version option
V	UB-Delta-2	2706	51450A	322
V	UB-Delta-4	2731	51450A	324
XL	1.0	2815	51453A	201

**Business Computers**

General

**AdvanceLink — the ideal alternative to the HP Terminal Program**

With the announcement of the withdrawal of the Terminal Program from the HP Vectra Kit (see "HP Terminal Program to be discontinued"), AdvanceLink is now the ideal alternative. AdvanceLink contains the functionality users are demanding — terminal emulation plus file transfer and command language capabilities.

The latest release of AdvanceLink (B.02.00) includes several major enhancements to its capabilities:

- LAN TELNET support for terminal emulation on OfficeShare LAN to HP 9000
- Forms caching
- Support for the EICON X.25 card providing connections from PC or LAN over X.25
- Reduced memory requirements for graphics support under OfficeShare

- VGA support
- AdvancePrint support
- HP Vectra LS/12 laptop PC support

**Commitment to the future with AdvanceLink**

Buying AdvanceLink buys users a stake in the future. As NewWave takes off as the standard interface, AdvanceLink will follow. Initially, AdvanceLink will be available as a level 2 encapsulated application and, subsequently, as a full native mode application.

In addition, HP will soon be announcing plans to extend the AdvanceLink range of products to take in other new platforms and environments. Look for these announcements in future issues of *HP Channels*.

**Ordering information**

Product No.	Description
68333F	AdvanceLink 5¼-inch media
Opt. 003	AdvanceLink 3½-inch media
68333L	AdvanceLink 10-user right to copy

\*The site license option contains both 5¼- and 3½-inch media.

General

**HP Terminal Program to be discontinued**

Effective July 15, 1989, the HP Terminal Program will no longer be supplied with the HP Vectra PC Kit.

The reasons for this are that the HP Terminal Program does not have file transfer and command file capabilities requested by users and required to support HP's strategy of fully integrating the PC into the HP 3000 environment.

These functions, and many more, are available with the AdvanceLink software package (see article entitled, "AdvanceLink — the ideal alternative to the HP Terminal Program").

For users who still require the HP Terminal Program, it is still available as a stand-alone product:

Product No.	Description
24597A	HP Terminal Program (English manual only)

However, effective November 1, 1989, HP plans to remove this product from the HP Price List.

HP 3000

## **HP 3000 Series 955 to support larger peripheral configurations**

Consistent with our objective to continue expanding supported peripheral configurations commensurate with high-end performance, the HP 3000 Series 955 will exceed the HP 3000 Series 950 in mass storage capacity and the number of supported workstations. The HP 3000 Series 955 will support a maximum of 600 concurrent sessions by the first half of calendar year 1990 (see table below). Although 600 concurrent sessions will be supported, the effective maximum number of users for optimal performance will vary due to application-specific differences. The HP 3000 Series 955 will also support 64 disk drives and 36.5 Gbytes of disk storage in this same time frame.

### **Series 955 configuration maximums**

	Today	First half 1990
Main memory	160	192
Sessions	400	600
Disk drives	30	64
Disk storage	17.4 Gbytes	36.5 Gbytes

HP 3000

## **HP 3000 Series 955 requires MPE XL 1.2**

The HP 3000 Series 955 is supported on MPE XL 1.2 and all future releases of MPE XL. If your product plans include an HP 3000 Series 955, select MPE XL 1.2 or a later version of the MPE XL operating system. When upgrading from the HP 3000 Series 950 using P/N A1117A, add MPE XL 1.2 or a later version of the MPE XL operating system before installing your HP 3000 Series 955. Contact your HP representative for more information.

### **Also in this issue**

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### **Technical Computers**

General

## **Introducing new HP BASIC Language Processor-Release II**

On July 1, 1989, HP announced the introduction of the HP 82300C BASIC Language Processor-Release II. This is a major revision of the current HP BASIC Language Processor with new performance and capabilities.

The HP BASIC Language Processor and PC Instrument Controllers offer the power and ease of programming of HP BASIC and the flexibility of an MS-DOS personal computer.

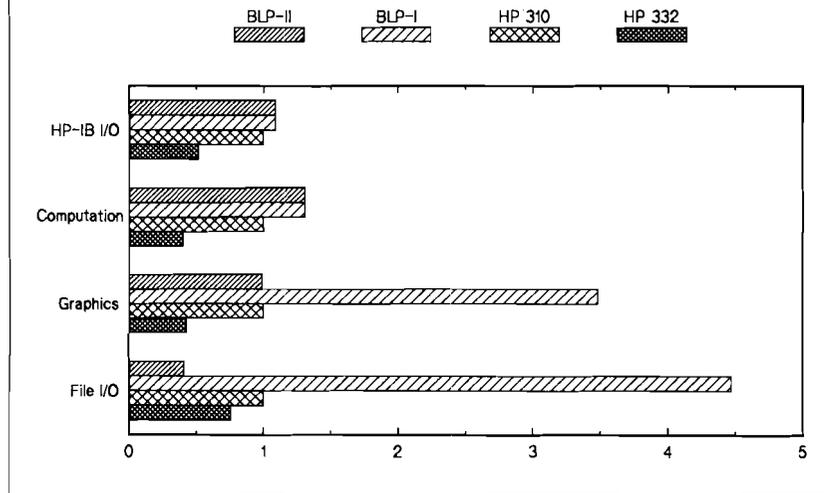
Now they also offer the speed and sophistication of HP 9000 Model 310 BASIC workstations at a fraction of the cost. And they run HP Series 300 BASIC software virtually unchanged while retaining access to the thousands of MS-DOS applications.

HP now has a full line of new PC Instrument Controllers to choose from, including three QS and RS 80386 bundles. In addition to the new 82300C BASIC Language Processor (BLP-II), HP is introducing a full series of six new PC-300 Instrument Controllers, including three new 80386-based models, and an Upgrade Kit (HP 82323A) for convenient conversion of the installed base to the full benefits of BLP-II.

You're already familiar with the HP BASIC Language Processor. You know how it enables a PC to become a cost-effective, flexible controller running HP BASIC. Now, Release II (HP 82300C) provides a much improved, more capable product. The

## BLP-II PERFORMANCE COMPARISON

(on Vectra ES/12)



hardware hasn't changed, except for new boot ROMs and 1 Mbyte of RAM now standard on the card. New software is the key to all these new features:

- Overall HP BASIC 5.13 performance equivalent to that of an HP Model 310 BASIC workstation.

(The performance comparison graph above compares the outstanding performance of BLP-II compared to the current product and to HP Series 300 workstations. It shows the relative time to complete a task, normalized to the HP 310. The shorter the bar the higher the performance.)

- Graphics performance up to 3.7 times faster than on the current product.
- Bit-mapped Series 300 compatible display model eliminates graphics clipping and utilizes the entire display.
- HP BASIC boots in less than 10 seconds, an improvement of 10 times.
- Use of the DOS file system allows easy access to any subdirectory or file and allows easy interaction with DOS applications.
- Disk file access speed is improved by five to six times. It is now comparable to the HP Model 332 workstation.

- New BASIC-DOS communication features: Release II provides the exciting capability of bidirectional communication between HP BASIC, running in background, and DOS applications. As data is acquired by BASIC, it can be transmitted, virtually in real time, to an active DOS application such as Lotus 1-2-3, MemoMaker, and others, as well as to DOS data files on the internal hard disk. Because this capability

is bidirectional, DOS applications can send commands or data to background BASIC programs if desired.

This combination of capabilities, offered only by Release II, offers users a productivity boost that's simply not available on other instrument controllers even at a higher price.

- Optional file system compatibility with BLP-I allows software to be run without MSI modifications (with old performance).
- RAM-based operation (old ROM BASIC is not supported) provides improved performance and flexibility for easy software upgrades.
- New, expanded documentation provides an easy-to-use introduction to the DOS world and in-depth information on programming and using HP BASIC. The porting guide saves time and support costs in converting existing HP BASIC software to the BLP-II.

These products are available for orders worldwide on July 1, 1989. Contact your HP representative for more information about these exciting new products.

### Ordering information

Product No.	Description
82300C	BASIC Language Processor with MC 68000 processor, Release II Software (on both 5¼- and 3½-inch disks) and documentation.
82323A	BASIC Language Processor-Release II Upgrade Kit. Provides Release II Software and documentation for complete upgrade.

### PC-300 Controller bundles

Product No.	PC Controller designation	Vectra SPU	Display	Floppy drive(s)	Hard disk
82314E	PC-308ML	ES/12	VGA Mono	3½-inch 1.44-Mbyte	20-Mbytes
82315E	PC-308CL	ES/12	VGA Color	3½-inch 1.44-Mbyte	20-Mbytes
82319E	PC-308CM	ES/12	VGA Color	3½-inch 1.44-Mbyte	40-Mbytes
82332E	PC-312CL	QS/16S	VGA Color	3½-inch 1.44-Mbyte	40-Mbytes
82333E	PC-312CM	QS/20	VGA Color	3½-inch 1.44-Mbyte	40-Mbytes
82334E	PC-315CN	RS/25C	VGA Color	3½-inch 1.44-Mbyte 5¼-inch 1.2-Mbyte	103-Mbytes

General

## Upgrade kit for HP BASIC Language Processor now available

The HP 82323A upgrade kit provides HP BASIC Language Processor users with full Release II functionality, including improved boot, graphics, and disk I/O performance. The upgrade consists of new software, documentation, and boot ROMs; thus, your investment in language processor hardware is fully preserved, no matter when the original product was purchased. The HP 82323A BASIC Language Processor upgrade kit is on the July 1 HP Price List.

The new Boot ROMs can be installed by the user if the original system was purchased after August, 1988. Earlier processor boards with soldered boot ROMs will require installation at HP Field Repair Centers. An enclosed installation certificate provides this service free to the owners of boards with soldered ROMs.

Two options are offered to PC-300 Instrument Controller users and other users of HP 82304B ROM BASIC,

providing additional RAM at an economical price. The 82304B ROM is not supported by the new BLP-II and should be replaced with an additional 512 Kbytes of RAM to maintain a comparable system. Options 001 and 002 for the HP 82323A Upgrade Kit provide the user with the needed RAM at a reduced price in exchange for their old ROM.

A technical datasheet, P/N 5953-3784, "Upgrading to the HP 82300C HP BASIC Language Processor II," provides complete information about choosing and ordering the right configuration, and more details about the product.

The following chart shows how to choose the appropriate RAM expansion product or upgrade option depending on the system configuration. The language processor boot screen displays the information shown in the first two columns.

System type	BLP boot screen display RAM Bytes*	Product to order
:ROM B B	524114 Bytes	HP 82323A Option 001
	1048402 Bytes	HP 82323A Option 002
	1572960 Bytes to 3669842 Bytes	HP 82323A or HP 82323A Option 001
	4194130 Bytes	HP 82323A
:HP 9122 FIXD,1500,2,0 1B SYSTEM__BA5 (or similar, but not :ROM)	524114 Bytes	HP 82323A plus HP 82303A
	1048402 Bytes to 4194130 Bytes	HP 82323A

\*These values will vary slightly depending on configuration

## Ordering information

Product No.	Description
82323A	HP BASIC Language Processor-Release II upgrade kit — provides Release II software, documentation, and boot ROMs for complete upgrade
Opt. 001	BASIC ROM trade in for additional 512 Kbytes RAM — provides 82303A RAM expansion kit for users with other than 1 Mbyte RAM, in return for 82304B BASIC ROM
Opt. 002	BASIC ROM trade in for additional 512 Kbytes RAM — provides 82305A RAM expansion board for users with exactly 1 Mbyte RAM, in return for 82304B BASIC ROM.

Contact your HP representative for more information about the BLP-II upgrade kit.

HP 9000

## New HP 9000 Model 815S expands Series 800 family

The new HP 9000 Model 815S low-end multiuser UNIX system offers compatibility with all HP 9000 Series 800 systems and supports the applications and HP software available on the Series 800, as well as many of the peripherals. Priced well below the HP 9000 Model 825, the Model 815S offers performance ranging from 75 to 95 percent of the Model 825S, depending upon the application.

The HP 9000 Model 815S includes support for 16 to 24 active users, with a maximum limit of 50 terminals. It provides users with a low-end entry to a broad Series 800 family. Affordable object-code compatibility provides a cost-effective growth path to over 400 terminal connections — leveraging your software investment and training.

The HP 9000 Model 815S system's bundled 300-Mbyte disk, cartridge tape drives, and factory-installed HP-UX mean short installation time. The complete system comes in a single package shipment. Installation is easy — just connect the power cords.

The diskless client capability of the Model 815S lowers disk investment cost since several systems share one disk, and offers greater potential for environmental tolerance with a disk on a LAN at a remote location.

MAP 3.0 functionality reduces costs and increases productivity for computer-integrated manufacturing (CIM) by integrating multivendor systems based on industry standards. X.25, LAN, SNA, and X.11 leverage the user's existing hardware investment, permitting interoperability between HP systems from other vendors. HP-UX 7.0 functionality gives users greater ease of use, enhanced security (C2), and leading application portability (POSIX, XPG2 compliance).

Also new with the HP 9000 Model 815S is its backplane implementation for I/O and memory. Instead of Channel I/O (CIO), the Model 815S has HP Precision Bus, which supports processor, memory, and I/O cards on a common bus.

Contact your HP representative for more information about the new HP 9000 Model 815S.

## Ordering information

Product No.	Description
A1071A	HP 9000 Model 815S 16-user integrated system bundle <ul style="list-style-type: none"> <li>▪ System processing unit including HP-PA CPU, hardware documentation, 8-Mbyte error-correcting memory, 2 serial ports, 12-slot box, and HP-UX 16-user license and general usage documentation set</li> <li>▪ HP-IB interface and cables</li> <li>▪ Two 8-channel serial multiplexers</li> <li>▪ HP 7959B 304-Mbyte disk</li> <li>▪ HP 9144A 67-Mbyte ¼-inch tape drive</li> <li>▪ Battery backup</li> <li>▪ Cable for system console</li> <li>▪ Customer convenience kit including preinstalled I/O and memory cards, HP-UX preconfigured and preinstalled on disk, single-package shipment, and power-up documentation</li> <li>▪ 90-day on-site warranty</li> <li>▪ Design Plus cabinet</li> </ul>
Opt. 002	Additional 8 Mbytes ECC memory
Opt. 828	Add floating-point coprocessor
Opt. 009	Add HP 7963B 304-Mbyte expandable disk drive, delete HP 7959B 304-Mbyte disk drive
Opt. 004	Add HP 9145A 134-Mbyte tape drive, delete HP 9144A 67-Mbyte tape drive
Opt. 012	Add LAN link (2 slots), ARPA, and NFS Services
Opt. 020	HP-UX on cartridge tape with system administration documents
A1410A	Model 815S system processing unit including HP-PA CPU, hardware documentation, 8 Mbytes ECC memory, 2 serial ports, 12-slot box (11 slot available), HP-UX 16-user license and general usage documentation set (5 books), on-site installation, and 90-day on-site warranty
Opt. 828	Add floating-point coprocessor
<i>Model 815S accessories</i>	
A1404A	8 Mbytes ECC memory
A1407A	Battery back-up subsystem
A1406A	Field upgrade floating-point processor
28650A	HP-IB interface and cable
40299A	8-channel serial multiplexer
98189A	LAN link
36944A	X.25 link
28651A	GPIO (parallel) interface

HP 9000

## Announcing HP 9000 Model 815S networking services

Effective July 1, the following networking services are available on the HP 9000 Model 815S, the newest addition to the HP-PA Series 800 line: Network Services/9000 (P/N B1015A), ARPA Services/9000 (P/N B1016A), and Network File System Services/9000 (P/N B1017A). These services will allow the Model 815S to connect to the other HP-UX systems of the HP 9000 line, as well as HP 3000 and 1000 computers, and systems from other vendors, such as Sun Microsystems and Digital Equipment Corporation.

Product No.	Description
B1015A	NS/9000 on the Model 815S
Opt. AA0	Software on ¼-inch tape
Opt. AA1	Software on ½-inch mag tape
B1016A	ARPA/9000 on the Model 815S
Opt. AA0	Software on ¼-inch tape
Opt. AA1	Software on ½-inch mag tape
B1017A	NFS/9000 on the Model 815S
Opt. AA0	Software on ¼-inch tape
Opt. AA1	Software on ½-inch mag tape

*Note:* The software is a cost option. This allows users who plan to run the Model 815S as a diskless node to order the networking software without having to purchase the media.

The ARPA/9000 and NFS/9000 products will be available as an option to the Model 815S bundle (P/N A1071A). This Option 012 will include the networking services (P/N B1016A and B1017A) and the LAN interface (P/N 98189A) at a discount. The discount is available only if purchased at the time of the Model 815S purchase. Contact your HP representative for more information.

HP 9000

## New ease-of-use functionality for HP 9000 Series 300

Effective June 1, HP users ordering HP 9000 Models 340, 360, or 370 workstation bundles will be able to receive HP-UX preloaded and preconfigured on an HP 7958S or 7959S SCSI disk. Provided with this product, called DSL/300, is a preconfigured X Window System environment that provides a log-in screen and a friendly work environment with on-line help facilities.

DSL/300 provides a basis for future easy-to-use environments from HP based on OSF/Motif and NewWave. DSL/3000 offers significant productivity gains for users as installation time and trouble are kept to a minimum. These features are provided at no extra cost over the sum of the components. Look for the following new options:

- Option 404 — 162-Mbyte SCSI disk drive with HP-UX installed, includes HP-UX beginner guides and a pre-configured X.11 window environment; requires Option 011 (SCSI interface board)
- Option 405 — same as Option 404 but with a 323-Mbyte SCSI disk drive

Contact your HP representative for more information.

HP 9000

## Introducing HP 9000 Model 332 MMAX and CMAX bundles

On July 1, two new bundles of the HP 9000 Model 332 appeared on the HP Price List. These are monochrome and color bundles that include HP-UX, HP BASIC/UX, and all of the SPU accessories necessary to configure the system. Now measurement automation (MA) users have a new and powerful HP-UX platform offering:

- Low cost
- Expandability
- High performance

The HP 9000 Model 332 uses the same 16.7 MHz MC68030 processor as the highly successful HP 9000 Model 340. This gives it the performance to not only make an outstandingly powerful HP BASIC/WS platform, but to run HP-UX applications at workstation speeds too. Now the new RMB/UX bundles give controller users a system for using their HP BASIC applications on HP-UX, while vastly improving their performance, and still accessing all of the additional advantages of HP-UX. The HP 9000 Model 332 is the ideal workstation for this strategy due to its expandability, low cost, and the large base of loyal users it inherits from the HP 9000 Model 310.

Two bundles are offered. The first is the HP 9000 Model 332 MMAX (P/N 98580CX), which provides 1024 × 768 monochrome graphics on our 17-inch monitor. The other, the HP 9000 Model 332 CMAX (P/N 98581CX), has C+ graphics. It includes 1024 × 768 resolution, six color planes, and the 16-inch monitor.

Besides the graphics, the MMAX and CMAX include all of the following:

- HP 9000 Model 332 SPU
- 4 Mbytes RAM
- MC 68882 floating-point coprocessor
- Two-user license-to-use for both HP-UX and HP BASIC/UX
- Media and manuals for HP-UX and HP BASIC/UX
- Two-button mouse and ID module

The options to these bundles are similar to those for the HP 9000 Model 360 MMAX (P/N 98580CX) and CMAX (P/N 98581CX):

Option	Description
003	(MMAX only) Delete monitor and high-resolution graphics interface, substitute medium-resolution (512 × 400) graphics interface and no monitor
100	Delete all media and documentation
108	Add 4 Mbytes RAM for a total of 8 Mbytes
402	152-Mbyte 7958B disk drive with all software installed, high-speed HP-IB interface
403	304-Mbyte 7959B disk drive with all software installed, high-speed HP-IB interface

These workstations, like the Model 340, are rated at 4 MIPS. Hewlett-Packard has run extensive benchmarks using HP BASIC and HP BASIC/UX on the HP 9000 Model 332 and various other MA platforms. Below are a few of the results. The results indicate that Rocky Mountain BASIC/HP-UX (RMB/UX)

applications are much faster in computation on the HP 9000 Model 332 than stand-alone HP BASIC on the HP 9000 Model 310. As you would expect, the HP 9000 Model 360 offers yet another big step-up in performance. All benchmarks are normalized to the HP 9000 Model 310 with HP BASIC (for example, the HP 9000 Model 332 runs a computation benchmark using HP BASIC/UX four times as fast as an HP 9000 Model 310 running it with stand-alone HP BASIC).

Computation device	I/O	File	I/O
Model 310 HP BASIC	1.0	1.0	1.0
Model 332 HP BASIC	4.3	2.6	1.6
Model 332 RMB/UX	4.0	1.9	1.8
Model 360 RMB/UX	6.0	2.4	2.1

Now we have a full line of HP BASIC/UX workstations to satisfy the needs of HP controller users. The HP 9000 Model 340 is not bundled with RMB/UX, but the software can be added to make our lowest-cost system. The HP 9000 Model 360 rounds out our line with the highest performance plus DIO-II expandability.

## Personal Computers

General

# ***AutoCAD driver performance enhancement for HP Intelligent Graphics Controller***

Hewlett-Packard introduces a high-performance AutoCAD release 10 display list driver for the HP Intelligent Graphics Controller (IGC) graphics board. The 1024 × 768 × 16 graphics board introduced in March is HP's first high-resolution board offering in the PC graphics market and is already being sold by over 300 dealers worldwide. The new driver, which uses display-list processing, is the first performance enhancement being offered for the IGC and underscores HP's commitment to customer investment protection and support. This driver allows AutoCAD zoom, pan, and redraw commands to run up to five times faster than the already quick AutoCAD driver originally introduced with the IGC.

The new AutoCAD driver is based on the recently announced Texas Instrument Graphics Architecture (TIGA) software interface. The TIGA interface optimizes communications between the host PC's processor and the IGC's on-board TMS34010 graphics processor. TIGA also allows for efficient partitioning of display-related tasks between the host PC and the IGC. HP plans to provide additional TIGA-based drivers in the future as part of its commitment to being a leader in high-performance graphics for personal computers and customer satisfaction.

HP's new display list driver supports AutoCAD Release 10 and is ADI 4.0 compatible, including multiple viewports and AUI pull-down menus. With zoom, pan, and redraw in seconds instead of minutes, AutoCAD users spend more time developing their designs and less waiting for their computers to catch up with them. As an example, AutoCAD's sample drawing

of St. Paul's cathedral can be redrawn in less than one second. This performance is available using standard AutoCAD commands, no special commands are necessary.

The new driver stores its display list information in expanded memory, on disk, or both. The IGC's on-board memory is used as a cache for display list data, allowing lightning-fast zoom, pan, and redraw operations. For maximum performance, the IGC's local memory can be expanded from the standard 512 Kbytes to a maximum of 2 Mbytes.

The new driver will be included with all IGCs shipped after July 1. Owners of IGCs shipped before this date can get the driver upgrade kit from HP dealers who sell the IGC or may purchase the kit from HP DIRECT. The Driver Upgrade Kit (P/N 82328-64001) includes media, manual, and shipping cost. Dealers may download the drivers from HPNN with the necessary documentation and distribute to customers. Dealers can return their existing stock to HP and get new Intelligent Graphics Controllers with the new manuals and drivers or order the driver upgrade kit through HP DIRECT.

To order the driver Upgrade Kit, send the 82328A (IGC) User Disk to HP DIRECT, P.O. Box 60008, Sunnyvale, CA 94088, Attn: Software Upgrade. If you have any questions, call HP DIRECT (see phone listing in Supplies section).

*AutoCAD is a U.S. trademark of MicroPro International Corporation.*



Desktop

## Hard-diskless models introduced for HP Vectra RS/20C and RS/25C PCs

In response to input from users, Hewlett-Packard is introducing hard-diskless models of the HP Vectra RS/20C and RS/25C PCs. The hard-diskless models will appear on the July 1 HP Price List.

The new additions to the HP Vectra PC product line are listed below:

Product No.	Description	RAM
D2001A	HP Vectra RS/20C Model 10e PC	1 Mbyte
D2021A	HP Vectra RS/25C Model 10e PC	1 Mbyte

The HP Vectra RS Model 10e PCs are absolutely identical to the Model 100e and Model 150e PCs except for the fact that the hard disk drive is removed. Thus, the Model 10e configuration includes:

- ESDI controller and disk drive cables
- One 5¼-inch flexible disk drive
- No VGA adapter or monitor

Contact your HP representative for more information on the hard-diskless HP Vectra RS PCs.

Desktop

## HP Vectra PC price changes

Effective July 1, 1989, the price of the HP Vectra RS/25C PCs will be reduced, while the price of the HP Vectra ES PCs will be increased. The recent price decreases on the

HP Vectra ES/12 PC and the introduction of the HP Vectra QS/16 and the HP Vectra QS/20 PCs, demonstrates that Hewlett-Packard has focused its primary attention on being a leader in the high-performance 80286 market and the entry-level and high-performance 80386 markets.

The HP Vectra RS/25C PC and HP Vectra ES PC products affected are listed below:

Product No.	Description
D2025A	HP Vectra RS/25C Model 304e
D2004A	HP Vectra RS/25C Model 154e
D2003A	HP Vectra RS/25C Model 150e
D2022A	HP Vectra RS/25C Model 100e
D1227A	HP Vectra ES Model 26
D1226A	HP Vectra ES Model 27
D1220A	HP Vectra ES Model 20
D1210A	HP Vectra ES Model 10
D1215A	HP Vectra ES Model 15

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- Introducing new HP BASIC Language Processor-Release II* 2
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### Peripherals

Mass Storage

## HP 7980XC tape drive supported on HP 3000 MPE XL systems

Hewlett-Packard announces support for the HP 7980XC high-performance ½-inch streaming tape drive on HP 3000 MPE XL systems. The HP 7980XC tape drive offers an advanced method of data compression built into the tape drive electronics. Standard ½-inch tape reels can now hold from two to five times more data than previously possible. With the HP 7980XC tape drive, fewer tapes need to be purchased, stored, retrieved, archived, cleaned, and audited. The extra capacity leads directly to significant time savings for backup, since fewer tapes are loaded, rewound, and handled; an additional benefit is a reduction in operator errors.

HP 3000 host performance also is not reduced by the compression process. An advanced data-compression algorithm is executed in the hardware. The algorithm adapts to the data and compresses it in real time. The HP 7980XC tape drive writes and reads tapes in industry-standard 1,600 and 6,250 characters per inch (cpi) densities. The compressed format, not an industry standard, is accessible via the front panel control for HP 3000 systems.

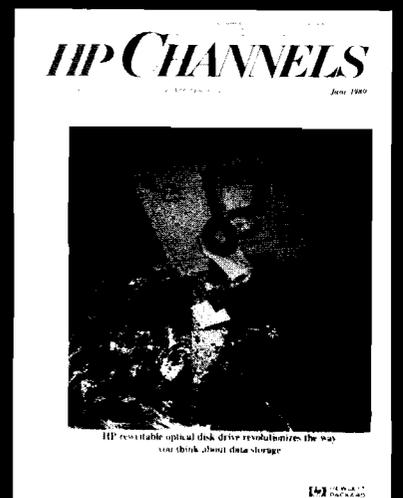
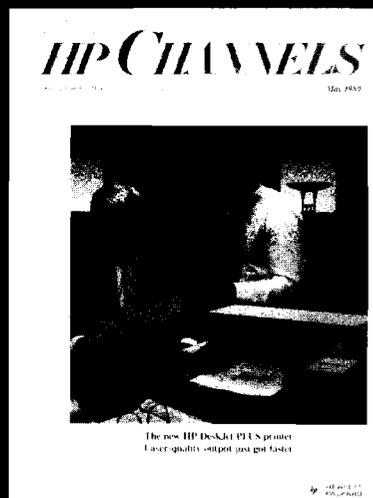
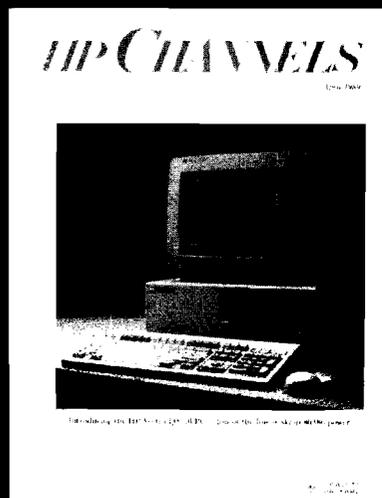
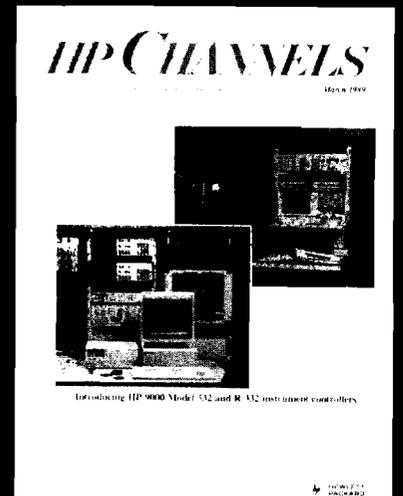
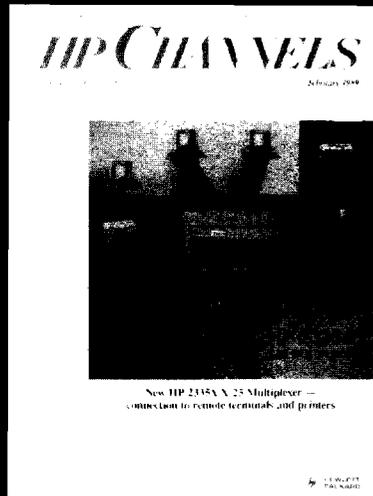
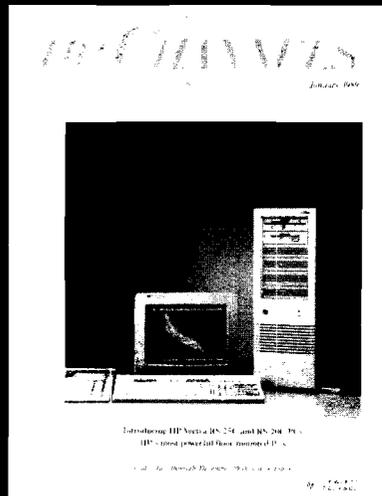
The HP 7980XC tape drive is supported on HP 3000 Series 925LX, 925, 935, 950, and 955 systems with MPE XL Release 1.2 and later versions. Maximum configuration for all supported systems is four tape drives per system. For all HP 3000 systems, access to the data compression feature is via the front panel only.

Contact your HP representative for more information.

# HP CHANNELS

Information For Hewlett-Packard's Value-Added Businesses

July 1989



Index for January through June 1989 issues

# HP CHANNELS

Index for January through June 1989 issues

Editor  
Tracy Wester

HP Channels is published monthly to provide Hewlett-Packard's value-added businesses with information about HP's products and services to help them be more successful.

This index includes articles that appeared in HP Channels from January through June 1989.

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## High-capacity hard disks now available on HP Vectra QS/20 PCs

Effective July 1, 1989, HP Vectra QS/20 PC users can order high-performance, high-capacity, 5¼-inch half-height ESDI drive accessories for their systems. There are two capacity versions available — 108 Mbytes (P/N D1445A) and 152 Mbytes (P/N D1446A). Each offers outstanding performance with an average seek time of less than 17 ms, 4 ms track-to-track, a sustained transfer rate of 800 Kbytes per second, and 1 to 1 interleave. Features such as these make the D1445A and D1446A among the best performing drives in their capacity range.

Not only is the performance level near the leading edge, but both of these drives have been subjected to a rigorous set of tests which are in excess of typical industry limits for either drive or system manufacturers. Consequently, the mean time between failure (MTBF) reliability estimate for these products is over 50,000 hours.

These two drive accessories are supported on the HP Vectra QS/20 PC Models 10e and 15e, where the "e" designation indicates that an ESDI controller is already installed in the system. There is an additional bundled configuration now available for the HP Vectra QS/20 PC, the Model 100e (P/N D1425A), that contains the 108-Mbyte drive and its ESDI controller. This model also includes a 5¼-inch flexible disk drive and 1 Mbyte of system memory, but no video adapter card.

Regarding software support, both the D1445A and D1446A drives have been qualified for use with major operating systems such as DOS, OS/2, Xenix, Novell, and 3Com.

### Ordering information

Product No.	Description
D1445A	108-Mbyte, half-height ESDI hard disk drive
D1446A	152-Mbyte, half-height ESDI hard disk drive
D1425A*	HP Vectra QS/20 PC Model 100e

\*A language option must be specified when ordering.

### Networks

## Rack cabinets for the DTC

Since October, 1988, cabinets have been available to rack the Distributed Terminal Controller (DTC), P/N 2345A. This article summarizes racking alternatives for the DTC.

EIA 19-inch cabinets are available to rack DTCs. These cabinets were not specifically designed for the DTC, but are part of a line of cabinet products offered by HP DIRECT.

HP DIRECT offers three different sized basic cabinets (720-mm, 1,000-mm, 1,600-mm). The basic cabinet includes frame, top panel, two side panels, caster, and name plate. HP DIRECT also offers cabinet accessories, including front doors, rear doors, and filler panels.

### How many DTCs can be racked in each cabinet?

The 720-mm cabinet is capable of racking two DTCs, the 1,000-mm cabinet is capable of racking three DTCs, and the 1,600-mm rack is capable of racking five DTCs.

### Support considerations when using the 1,600-mm cabinet

Front and rear doors are supported on the 720-mm and 1,000-mm cabinets when racked with DTCs. However, due to cooling concerns, rear doors are not supported on the 1,600-mm cabinet when racked with five DTCs. The front door is supported on the 1,600-mm rack.

It is also recommended that no more than 150 cables are housed in the 1,600-mm cabinet. If there are more than 150 cables, a DTC card cannot be changed without removing all of the cables in the cabinet. In situations where more than 150 ports must be connected, individual cables should be consolidated to save space. This can be achieved by using octopus cables and punch-down blocks.

### How to rack DTCs

For each DTC racked, the DTC Rack Mount Kit (P/N A1052A) is necessary. This kit includes rails and cable management.

### Racking DTCs in the A1001A cabinet

When racking a DTC with an HP 3000 Series 925, 925LX, or 935 in an A1001A cabinet, Option 1A4 on the cabinet must be ordered to provide the necessary racking hardware for the DTC. The Rack Mount Kit (P/N A1052A) should not be ordered. Only one DTC is supported in the A1001A cabinet.

### Racking DTCs in non-HP cabinets

Racking specifications are available to rack DTCs in non-HP cabinets. These specifications may be found in the DTC Installation and Service Manual (P/N 02345-90001).

*continued on next page*



## Cabinet accessories

In addition to front doors, rear doors, and filler panels, HP DIRECT offers sliding drawers, antitip foot kit, and work surfaces. HP DIRECT also offers front caps, which are used to cover up mounting screws. For more information on these accessories, contact HP DIRECT.

## Who is responsible for installation?

The user is responsible for the installation of the DTC into the expansion cabinet. However, this installation can be performed by an HP customer engineer for a fixed fee.

## Ordering information

Product No.	Description
<i>DTC rack kit</i>	
A1052A	DTC Rack Mount Kit provides racking rails and cable management for one DTC.
<i>Racks</i>	
46298A	19-inch EIA 720-mm basic rack
46298B	19-inch EIA 1,000-mm basic rack
46298C	19-inch EIA 1,600-mm basic rack
<i>Doors</i>	
46298E	Front door for 720-mm rack
46298F	Front door for 1,000-mm rack
46298G	Front door for 1,600-mm rack
46298H	Rear door for 720-mm rack
46298J	Rear door for 1,000-mm rack
<i>Filler panels</i>	
40101A	Filler panel, 1¼-inches
40102A	Filler panel, 3½-inches
40103A	Filler panel, 5¼-inches
40104A	Filler panel, 7-inches
40105A	Filler panel, 8¾-inches
40106A	Filler panel, 10¾-inches

Contact HP DIRECT for more information (phone listing at end of Supplies section).

## Networks

# X.25 solutions for 900 Series HP 3000 systems now available

X.25 networking is a key requirement for many users seeking to migrate to the 900 Series HP 3000. HP now has two X.25 solutions for 900 Series HP 3000 systems available and shipping: the NS X.25 3000/XL server and a special distributed terminal controller (DTC)/2335A MUX product bundle.

## The NS X.25 3000/XL server — for system-to-system and terminal-to-system traffic

The NS X.25 3000/XL server (P/N 30041A) is now shipping. Over 200 NS X.35/XL servers have been ordered and many are already installed.

The NS X.25/XL server supports the NS 3000/XL network services (P/N 36920A) for HP 3000-to-HP 3000 communications, such as network file transfer, virtual terminal, and remote file access. The NS X.25/XL server also supports remote terminal connections (PAD access) to a 900 Series HP 3000. In most cases, the NS X.25/XL server provides functionality for MPE XL systems similar to what the NS X.25 3000/V network link (P/N 24405A) provides for MPE V systems.

The NS X.25/XL server supports 20 to 25 "casual" remote terminal users; up to three servers can be used for PAD access to a single 900 Series HP 3000 system.

## The DTC/2335A MUX product bundle — for terminal-to-system traffic

For users with high performance or large requirements for PAD access to a 900 Series HP 3000 system, a special DTC/2335A MUX product bundle is

also available. These products allow a 900 Series HP 3000 system to support up to 36 PAD sessions with remote terminals, printers, or PCs connected to an X.25 network. More than one product bundle can be used with a single 900 Series HP 3000 system, but the product bundle does *not* support system-to-system communications.

The DTC/2335 MUX product bundle will support both character mode and HP VPLUS block mode applications; the response time performance is equal to or better than the NS X.25/V link.

For more information on the special DTC/2335 MUX product bundle, including pricing and an upgrade path to future X.25 solutions, contact your HP representative.

The current X.25 solutions for MPE XL systems offer upgrade credits towards future X.25 products. The DTC/2335A MUX product bundle also provides an upgrade path to future X.25 solutions.

Most users will not be able to take delivery on the future X.25 products until the first calendar quarter of 1990. With the NS X.25/XL server and DTC/2335A MUX product bundle offering X.25 solutions for XL systems today, users can migrate now to the power and performance of the 900 Series HP 3000 systems.

Networks

## **HP 18223A XNS protocol interpreter for the HP 4972A LAN protocol analyzer**

The manager of an Ethernet/IEEE 802.3 network can now examine the traffic on the network in an easy-to-use and understandable fashion. The LAN manager's need for analyzing the protocol operation of the network includes capturing and displaying the data in a decoded format for troubleshooting and tuning the network. For intervender LAN environments, this means having an analyzer that can decode the Xerox Networking System (XNS) protocol information in a mnemonic (plain English) display.

The HP 18223A XNS protocol interpreter is a software package for the HP 4972A LAN protocol analyzer that allows decode and display of the Xerox Networking protocol suite. These interpreters decode the level-1 and -2 (comparable to ISO levels 3 and 4) protocols of:

- IDP — Internet Datagram Protocol
- RIP — Routing Information Protocol
- ERR — Error Protocol
- ECHO — Echo Protocol
- SPP — Sequenced Packet Protocol
- PEP — Packet Exchange Protocol

Other features include the use of a network address list that allows the user to define names to be used in the display of information. Addresses that do not have a user-defined name are displayed in the appropriate numeric format. The interpreter will also flag checksum errors and illegal frame lengths.

Program utilities are included that allow the user to do conversational capture and to trigger on events to allow further analysis, such as capture error

messages of specific type, capture one conversation start to finish, capture on connection control flags.

This software runs on the high-performance HP 4972A LAN protocol analyzer for Ethernet/IEEE 802.3 networks. The HP 4972A includes performance analysis software that provides statistical information on network, node, or connection-level network operation data. The analyzer is also well equipped for troubleshooting problems using a traffic generator and various types of stimulus-response testing.

Look for more protocol interpreters in the future. Call your HP representative for more details.

Networks

## **MTS products, HP 2333A, and HP 2334A discontinuance**

Given the introduction of the HP 2335A X.25 multiplexer and the declining demand for the multipoint terminal support (MTS) products, the HP 2333A, HP 2334A, and MTS products will be removed from the January 1, 1990, HP Price List.

### **Products to be removed**

#### *MTS products*

- HP 32025A/R MTS services
- HP 32026A MTS data link connection
- HP 32027A MTS synchronous modem link
- HP 32028A MTS 3270 device link

#### *HP 2333A products*

- HP 2333A multipoint cluster controller
- HP 40250A serial communications processor module

- HP 40251A second host system adapter for HP 2333A
- HP 3074AQ data link adapter
- HP 3074M modem data link adapter
- HP 92901A connection boxes
- HP 92902A data link cable
- HP 92905A device link cable
- HP 92906A multipoint cable
- HP 92908A data link tester
- HP 92909A link test cable

#### *HP 2334A products*

- HP 2334A Plus X.25 multiplexer
- HP 40223B upgrade kit from HP 2333A Plus to HP 2334A Plus
- HP 40224B upgrade kit from HP 2334A to HP 2334A Plus

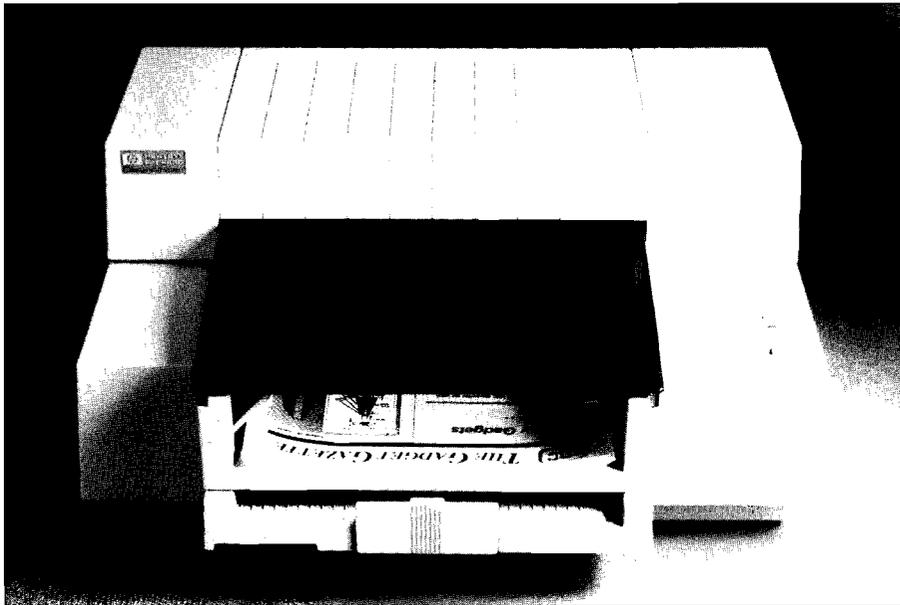
MTS and HP 2333A products have provided the multipoint functionality on HP 3000 MPE V systems. To provide a migration path for users moving to MPE XL systems, HP has referenced the Micom multipoint box type 2 (MB2) statistical multiplexer. This migration path is only applicable to users of the MTS modem link. It does not apply to those using the MTS data link connection or MTS 3270 link. Users needing to migrate from MTS data link should use standard IEEE 802.3 LAN, while users migrating from MTS 3270 link should look at third-party products.

The HP 2335A replaces the HP 2334A. The HP 2335A is less expensive than the HP 2334A offering equivalent functionality. The HP 40261A, which provides an additional four modem connect ports for the HP 2334A, will remain on the HP Price List for at least two years. This ensures that the number of ports on the existing HP 2334A may be increased.

There is no migration path between the HP 2334A and the HP 2335A because the HP 2335A is backward compatible. Contact your HP representative for more information.

Printers

## Introducing the HP DeskWriter printer



The new HP DeskWriter printer (P/N 2278) in an Apple Macintosh printer for the business user who desires laser-quality output and personal desktop convenience. It uses the inkjet technology and award-winning engine that made the HP DeskJet family successful. The DeskWriter printer combines laser-quality output and desktop convenience at an affordable price — \$1,195 (U.S. list).

### Getting your own with the HP DeskWriter printer

Currently, 60 percent of Apple Macintosh business computer users share a laser printer, usually with five to eight others. The HP DeskWriter personal printer helps users be more productive since they don't have to leave their desk or wait in line for their daily printing needs. With an HP DeskWriter printer, they can also print whenever they want without worrying about confidential work going public.

### Laser-quality printing: The power to look your best

The HP DeskWriter printer provides laser-quality printing at 300 dots-per-inch resolution, with jet-black text and sharp, crisp edges. The HP DeskWriter prints in both portrait (vertical) and landscape (sideways) formats and can combine both text and graphics on the same page. It comes with four popular font families familiar to the Macintosh user: Times, Helvetica, Courier, and Symbol screen fonts and the corresponding printer fonts. With the addition of the optional DeskWriter Font Collection (\$395 U.S. list), the HP DeskWriter printer matches the Apple LaserWriter II NT/NTX standard font capabilities.

### Setting up: a snap with an HP DeskWriter printer

The HP DeskWriter printer plugs in just like an Apple ImageWriter printer and even uses the same interface cable. A Quick Setup Guide comes with the printer and walks users through complete printer setup and font installation.

### HP DeskWriter printer features: speed, software compatibility, and reliability

The HP DeskWriter printer is based on the Apple Macintosh Quickdraw imaging system and works with hundreds of Apple Macintosh software application packages. Software designed according to Apple's guidelines will work with the HP DeskWriter printer. Users will be able to print their work on the HP DeskWriter printer using the software they already have.

The HP DeskWriter printer often prints at speeds comparable to popular high-end laser printers, and it's quiet. Users can print, talk on the phone and think, all at the same time.

A special feature, the "Back-to-Front" print capability, allows users to print a multipage document in reverse order and have it placed in the correct order in the output tray.

Hewlett-Packard backs the DeskWriter printer with a full one-year warranty and timely updates to the printer resource (driver) as necessary whenever the Apple Macintosh operating system changes. Users can rely on HP's dependability and high level of support with the HP DeskWriter printer.

### HP DeskWriter printer: the Apple Macintosh laser-quality, personal printer solution

The HP DeskWriter printer is the only printer to provide Macintosh users the convenience and confidentiality of a desktop printer they can call their own without having to forfeit laser-quality printing.

Read the following articles for more information about the HP DeskWriter printer.

## ***HP DeskWriter printer — exclusively for the Macintosh***

The HP DeskWriter printer was designed exclusively for the Apple Macintosh computer user. It will be the first printer in its class to offer seamless Macintosh operation. It even offers keypad options consistent with Apple printers and matches Apple's platinum grey color. The HP DeskWriter printer follows Apple's standard user interface. By developing both the printer and the printer resource (driver) in combination, HP has achieved a level of consistency and integration with the Macintosh system unapproached by third-party vendor solutions.

### **Speed**

The HP DeskWriter printer typically prints up to five times faster than the HP DeskJet printer connected to a Macintosh using a third-party vendor software package. This speed is possible because HP uses a standard Macintosh interface and implements a unique high-speed data compression and transfer technique.

### **Full system integration**

The HP DeskWriter printer uses familiar Macintosh print dialog boxes and a standard Apple system peripheral-8 cable. The HP DeskWriter printer rigorously follows Apple computer's printing standards in order to get maximum application software compatibility.

### **Font capabilities**

The HP DeskWriter printer provides a wide variety of font styles. Fonts are scalable from 4 up to 250 points and can be rotated in ninety-degree increments. The HP DeskWriter printer

comes standard with fonts familiar to the Macintosh user: Times, Helvetica, Courier, and Symbol (screen and corresponding printer fonts). Users who want to match the font capabilities available on Apple's LaserWriter II NT/NTX high-end laser printers can purchase seven additional font families as a set or individually.

### **Support**

The HP DeskWriter printer is wholly supported by HP, with a full one-year guarantee. HP guarantees users a tested, reliable product and timely future updates to the printer resource (driver) as the Apple Macintosh operating system changes.

### **Third-party DeskJet-to-Macintosh software vendors**

The DeskJet-to-Macintosh connect products currently available from third-party vendors may be a consideration for users who want to use one printer to support both Macintosh and DOS systems. Since HP had no involvement in the development of these DeskJet-to-Macintosh printer drivers, we do not support them and do not have the resources to help dealers or customers using this connection. Questions or problems related to the DeskJet-to-Macintosh drivers should be directed to the third-party vendor that developed the printer driver.

## ***HP DeskWriter printer integrated with Macintosh software***

Hewlett-Packard developed the HP DeskWriter printer resource (driver) to meet Apple development standards. Because of HP's adherence to Apple standards, any software written for the Apple Macintosh that meets Apple standards will print on the HP DeskWriter printer. Software integration problems do exist in a few software packages that do not completely follow Apple standards.

Certain versions of a few software packages do not support all the features of the HP DeskWriter printer. In many cases, the problems exist only in early versions of existing software, and upgrading to the most recent versions corrects the problem. Questions regarding any packages not providing all printing compatibility should be addressed to the specific software vendor rather than HP. Software integration problems fall into three categories:

- Software packages that print at 72 dots per inch
- One software package that does not use high-quality printer fonts
- Software packages that do not print on the HP DeskWriter printer

### **Continually increasing compatibility**

HP will continue to work closely with developers of Apple Macintosh software application packages to provide high levels of hardware and software integration. For more information on software questions relating to the HP DeskWriter printer, call your HP representative.

Printers

## Fonts for HP DeskWriter printer

The HP DeskWriter printer has been designed as a personal laser-quality printer, offering seamless Macintosh operation. A significant part of achieving this seamless operation involves the precise matching of the Apple Macintosh font characteristics. Apple LaserWriter II NT/NTX users are accustomed to powerful, sophisticated font usage and they can get these same features with the HP DeskWriter

printer. Now users have the choice of producing output on either their personal HP DeskWriter printer or their shared LaserWriter and having the page layout and fonts match.

The HP DeskWriter printer comes standard with four Apple Macintosh screen font families and their corresponding printer outline fonts:

### Screen Font

Times  
Helvetica  
Courier  
Symbol - Σψμβολ

### Printer Font

CS Times  
CS Triumvirate  
CS Courier  
CS Symbol - ΧΣ Σψμβολ

These outline fonts are fully scalable, so users get smooth, crisp fonts up to 250 points. They can even be rotated in 90-degree increments, for further flexi-

bility. The four font families include regular, bold, italic, and bold italic, and support all the Apple Macintosh enhancements including:

Underline - **Shadow** - *Outline*

### Quality

The quality of the HP DeskWriter printer fonts is exceptional. Their superior quality is a result of Hewlett-Packard's breakthrough in inkjet technology and the licensing of high-quality fonts from ITC (International Typeface Corporation) and AGFA Compu-

graphic, and screen fonts from Apple Computer, Inc.

### Optional fonts

Optional fonts allow the user to duplicate some or all of the fonts standard on the Apple LaserWriter II NT/NTX printers:

### 22709A Font Collection:

- CS Palacio (corresponds to Palatino screen font)
- CS Century Schoolbook
- CS ITC Bookman
- CS ITC Avant Garde Gothic
- CS Triumvirate Condensed (corresponds to N Helvetica Narrow screen font)
- CS ITC Zapf Chancery And
- CS ITC Zapf Dingbats †\* ☆\*† ●◻\* †\*■\*◻●▼▲

- 22709B CS Palacio (corresponds to Palatino screen font)
- 22709C CS Century Schoolbook
- 22709D CS ITC Bookman
- 22709E CS ITC Avant Garde Gothic
- 22709F CS Triumvirate Condensed (N Helvetica Narrow screen font)
- 22709G CS ITC Zapf Chancery And
- CS ITC Zapf Dingbats †\* ☆\*† ●◻\* †\*■\*◻●▼▲

The HP DeskWriter printer with the 22709A Font Collection has the same font capabilities as the Apple LaserWriter II NT/NTX — 11 font families representing 35 fonts. All demo units should be ordered with the 22709A Font Collection to show the DeskWriter printer at its best.



Printers

## HP RuggedWriter 480 printer positioning clarified

The HP RuggedWriter 480 printer is an excellent solution for personal computer users whose volume usage is less than 5,000 pages per month. The product has had excellent reviews and is selling well in those applications.

However, we are no longer recommending the HP RuggedWriter for HP 3000 users. Effective November 1, 1989, Hewlett-Packard will withdraw HP 3000 support from the HP RuggedWriter printer. There are *no* plans to discontinue the HP RuggedWriter printer, and *we will continue to support our installed base of HP RuggedWriter printers on HP 3000 systems.* However, HP service contracts will not be offered on HP RuggedWriter printers *delivered after November 1, 1989, in any configuration where an HP 3000 sends data to the printer.*

This decision has been made in response to the dissatisfaction of some HP 3000 users where the HP RuggedWriter printer has been used in inap-

appropriate environments. Specific concerns have been:

- HP 3000 and 293X/256X incompatibility (the HP RuggedWriter printer is not plug compatible with the HP 293X/256X printers).
- Inability to control the 5,000 pages-per-month maximum supported print volume.
- Suitability of HP RuggedWriter printer as a personal computer printer, not as a higher-volume printer for HP 3000 systems.

HP will continue to provide the HP 2934A printer for HP 3000 systems. At 12,000 pages-per-month maximum print volume, it provides a strong solution for HP 3000 customers. Contact your HP representative for literature on the HP 2934A printer.

The HP RuggedWriter printer is still the fastest 24-wire printer in its class. User satisfaction is very high where the HP RuggedWriter is used appropriately. Over 90 percent of the 400 experienced HP RuggedWriter printer owners who returned surveys last year indicated that they would recommend the printer to a friend. The HP RuggedWriter printer provides an excellent solution for personal computer users who need fast, high-quality printing but print fewer than 5,000 pages per month.

Printers

## ***New HP DeskJet PLUS/WordPerfect font cartridges offered***

Two industry leaders — Hewlett-Packard and WordPerfect — have teamed up to provide users of HP's new DeskJet PLUS printer and WordPerfect's 4.2 and 5.0 with a great word processing solution.

The WordPerfect font cartridges (HP P/N 22706W) contain two popular typefaces in a new character set — DeskTop — developed jointly by Hewlett-Packard and WordPerfect under agreement with Compugraphics, Inc. DeskTop is a truly international character set designed to meet the needs of 4.2 and 5.0 users. It contains a unique set of symbols including most Western language characters, European accents and ligatures, legal characters, and presentations characters in two popular typefaces and a variety of point sizes. CG Times, a serif typeface, is popular for simple text. It also offers 18- and 24-point sizes which make attractive headlines. Univers is a sans-serif typeface offered in 14, 18, and 24 point only. It is a very clean-looking typeface popular for presentations and headlines. All fonts on the WordPerfect Font Cartridges are proportionally spaced portrait fonts.

The two WordPerfect Font Cartridges are contained in one box the same size as other HP DeskJet PLUS printer font cartridges. The cartridges install easily into the HP DeskJet PLUS printer and are selectable through the printer's keypad or through the software's menu. The HP DeskJet PLUS personal printer featuring laser-quality output was introduced worldwide on May 1. The WordPerfect font cartridges, for use with the HP DeskJet PLUS printer only, will be available July 1. HP DeskJet PLUS printer drivers for the new cartridges are included in versions of WordPerfect 4.2 and 5.0 that ship after June 1, 1989. If the updated drivers are not included in the version you receive, users in the U.S. can call WordPerfect Corporation toll free at 1-800-321-4566 (users outside the U.S. should call 801-225-5000).

Printers

## ***Introducing scalable typefaces for Type Director and HP LaserJet printer***

Hewlett-Packard's February 1989 introduction of the Type Director font management program and three scalable typeface products, CG Times, Univers, and Decoratives 1, was followed by the May introduction of CG Triumvirate, ITC Avant Garde Gothic, and ITC Lubalin Graph scalable typefaces. In June, HP introduced Futura II, Microstyle, and CG Century Schoolbook scalable typefaces.

On July 1, 1989, HP introduced three more scalable typeface products. Each product contains both 5¼- and 3½-inch disks. All contain four typefaces or treatments: regular, bold, italic, and bold italic.

Product No.	Description
C2050A D10	ITC Souvenir
C2050A D12	Univers Condensed
C2050A D14	Garamond Antiqua

These products are to be used with Type Director, an MS-DOS® font management program. With Type Director and HP scalable typefaces, users can create fonts in sizes from 4 to 200 points (in .5 point increments). This allows one typeface product to meet a myriad of printing requirements.

These scalable typefaces can be used to create both printer and screen fonts (for WYSIWYG operations). Each scalable typeface contains a master symbol set of almost 600 characters — more than twice the symbols supported in the Apple laser printer environment.

*continued on next page*

This strong symbol set support enables users to create most symbol sets used in PC applications, including HP, IBM, Adobe, Microsoft®, and Ventura symbol sets. The extensive set of characters also includes math and scientific symbol sets. Another feature permits Type Director users to create a reduced symbol set for very large characters, allowing users to minimize printer and PC memory requirements.

Look forward to three more scalable typeface products that will be introduced in August.

For more information, contact your HP representative.

*MS-DOS® and Microsoft® are U.S. registered trademarks of Microsoft Corporation.*

#### Terminals

## Data-entry keyboard layout now available with HP 700/94 terminal

A new data-entry keyboard layout is now available. This user-installable special (P/N C1068A) adds the IBM 029 Keypunch layout to the HP 700/94 terminal. It includes a ROM card that plugs into the front of the terminal, mylar stickers, and a user's manual supplement.

#### Features of the new data entry layout

- Full use of all standard HP 700/94 features
- Mylar stickers for keycaps to convert the standard U.S. keyboard into a 029 Keypunch layout
- An alphabetic mode to use uppercase and lowercase ASCII characters

- A numeric mode that gives access to the 029 Keypunch layout (both numbers and symbols)
- An escape sequence that allows applications to invoke the numeric keyboard layout

This product may be ordered with a new HP 700/94 terminal or as an upgrade to an existing HP 700/94 terminal.

*Note:* Only terminals with serial number prefixes of 2749 or higher can be upgraded with Special Product C1068A.

Contact your HP representative for more information.

### Also in this issue

- AdvanceLink — the ideal alternative to the HP Terminal Program* 1
- HP Terminal Program to be discontinued* 1
- HP 3000 Series 955 to support larger peripheral configurations* 2
- New HP 9000 Model 815S expands Series 800 family* 4
- Announcing HP 9000 Model 815S networking services* 5
- Hard-diskless models introduced for HP Vectra RS/20C and RS/25C PCs* 8

### Supplies

#### Supplies

#### HP DIRECT order phone numbers

HP DIRECT Fast Phones—the easy, direct way for users to order supplies, accessories, media, furniture, and software from HP DIRECT.

Location	Telephone Number
Australia	(03) 895-2645 (03) 895-2615 (03) 895-2815 (03) 895-2861 (03) 895-2619 (800) 339-861 (toll-free) (0222) 2500-614/615/616
Austria	(02) 761 31 11
Belgium/Luxembourg	800-387-3154
Canada	416-671-8383
Toronto Local	(043) 01 640
Denmark	(90) 887 2361
Finland	(1) 69 86 17 25
France	(01) 672 6090
Greece	(02) 9236 9702
Italy	
Japan	
Osaka	06 300 3150
Sagamihara	0427 59 1321
Middle East/Africa,	
Geneva	(022) 831212
Norway	(02) 24 60 90
South Africa	
Johannesburg	(011) 802 5111
Cape Town	(021) 537 954
Spain	(91) 637 4013 (91) 637 0011
Sweden	(08) 750 2400
Switzerland	(057) 31 24 90
The Netherlands	06-0501
United Kingdom	(0734) 44 12 12
United States	800-538-8787
West Germany	(0130) 3322

## Software Packages Available and Wanted

If you have a software package available for cross-licensing, or are looking for a package to cross license, this section will help you. Your entry will appear for two months; the most recent additions are shaded. To list your company in the Cross-Licensing Classifieds (at no charge), see the address at the end of this section.

### Software Packages Available

**Industry:** *Cross Industry — fixed assets recording*

**Abstract:** Fixed Assets was developed by IMAGE Software Pty. Ltd. of Australia. The software package provides an easy means of recording and accounting for all fixed assets, using a comprehensive register system. It is tailored to suite international market requirements. Since the product is table driven, the system can be easily suited to any company's needs.

#### Features

The Fixed Assets package allows users to establish the periods for which depreciation and/or payments are to be allocated. Up to 26 periods per year can be set up, using date ranges to establish the actual breakdown. This permits varying processing cycles (i.e., calendar month, 445 or 454 cost months, quarterly, half yearly, fortnightly, etc.)

The system also allows for multiple occurrences of companies, divisions, departments, groups of assets, etc. Once all this information is established up front, it provides a method of processing asset details best suited to the user's needs.

Other features of the package include:

- The option to use one or more of the depreciation schedules provided
- Up to five depreciation methods can be used for depreciation calculation of assets
- Full Leased Assets interface — details on leased items relate to payment period, payment amount, residual percentage and amount, and lease term. Full lease schedules can be produced to show buy-out details for leases on request.
- Option for interface to General Ledger — The General Ledger interface is done through a table of asset categories that correlate to a General Ledger account code. In all instances, however, any General Ledger updates (either via direct interface or manual) will have the necessary supporting journal printout for audit purposes.
- A comprehensive reporting system — Reports are available on details in the reference files, master asset details, and financial asset reporting.

- Audit of maintenance on files — A comprehensive audit on maintenance of asset and financial processing is provided by means of audit reports.
- Budget Forecasting facilities — The budget feature of the system allows for budget forecasting on depreciation, leasing, and ledger updating.

**Requirement:** HP 3000 system (any series)

**Company Name:** Image Software Pty. Ltd.

**Address:** 2 Brunswick Road  
Mitchem, Vic. 3132  
Australia

**Phone:** 613-874-3633

**Contact Person:** Michael Loh  
General Manager

**Type of Distributor Wanted:** Open

**Geographic Coverage:** Worldwide

You can list your company in the **Cross-Licensing Classifieds** (either Software Packages Available or Software Packages Wanted) by sending the information in the format used here to:

Hewlett-Packard Company  
Value-Added Channels Development  
Attn: Marcia Nowicky  
19091 Pruneridge Ave.  
Building 46UV  
Cupertino, CA 95014  
U.S.A.

Entries will run for two months. The most recent additions are shaded. Be sure to send the information in at least one month before you wish it to appear.

**How to get your name added to the distribution for *HP Channels***

If you work for a company that is a value-added business for Hewlett-Packard and want to receive a courtesy subscription to *HP Channels*, call Hewlett-Packard and have your sales rep add your name to the distribution list.

**HP sales reps only:** To add *new* U.S. or Canadian accounts to the distribution for *HP Channels*, please fill out a copy of "The Data Kit for Value-Added Businesses," P/N 5954-9091D, and return it to the appropriate contact listed on the cover page of the data kit. To add additional contact names to existing accounts, use your VALID edit sheets.

**For accounts outside of the U.S. and Canada:** contact Tracy Wester for the name of the person responsible for the distribution of *HP Channels* in your country.

Please address editorial correspondence to Tracy Wester at address listed below.

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