

April 1985

THE TOUCHSCREEN II PERSONAL COMPUTER



The Easy-to-Use Computer for Business

Hewlett-Packard has announced the Touchscreen II, the newest member of HP's family of Personal Computers. The Touchscreen II Personal Computer combines the benefits of the original touchscreen PC with additional benefits to make the Touchscreen II the best solution ever for the business professional. It's easy to use -- yet expands to meet the demands of the most sophisticated business needs.

The Touchscreen II is designed to be completely compatible with previous members of the 150/Touchscreen family. This means that with the Touchscreen II you still get ease of use -- from the Personal Applications Manager, softkeys, HP Touch, and Easy Config to set up your peripherals, and you can still choose from more than 600 software packages already available for HP Touchscreen computers. Complete hardware compatibility means users have access to all of the available hardware accessories to meet expansion needs.

SYSTEM FEATURES

Like the previous members of the 150/Touchscreen family, the Touchscreen II features the MS-DOS (2.11) Operating System, powered by the Intel 8088 16-bit microprocessor. The Touchscreen II also comes standard with 256K of RAM memory and may be expanded to a maximum of 640K. In addition, the Touchscreen II offers a whole host of new features including a new ergonomic display, enhanced graphics capability, new accessories, and new peripherals.

Designed for the office, the Touchscreen II has a high-resolution 12-inch display with built-in display tilt. It offers the best resolution available today on a personal computer, providing users with crisp, clean text and graphics. The Touchscreen II with its larger display and new ergonomic design still provides the same footprint of the original HP 150 -- 12.8 inches wide by 12 inches deep.

The Touchscreen II also offers room to expand with four accessory slots in addition to three standard ports. Users can easily add accessories such as memory cards, an internal modem, a Centronics interface, and other available hardware accessories. Hardware accessory cards are easily installable through the Touchscreen II's removable top panel.

Recognizing the importance of communications, the Touchscreen II comes standard with three ports: one HP-IB parallel port for

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peripherals, including mass storage, printers, and plotters; one RS232/RS422 communications port for state-of-the-art communication; and one standard RS232 port that supports up speeds up to 19.2 KBaud.

In addition, the Touchscreen II offers the HP - Human Interface Loop (HP-HIL) which allows users to simultaneously daisy chain up to seven input devices, including the HP Mouse, graphics tablet, and bar code reader, to the keyboard. The HP-HIL provides flexibility and expandibility so personal computer users can operate input devices interchangeably, moving from the HP Mouse to the keyboard to the touchscreen.

ADVANCED ERGONOMICS

The Touchscreen II is ergonomically designed for user comfort and convenience. It includes built-in tilt that allows you to adjust the high-resolution, 12-inch display for optimal viewing. The power switch, brightness control, and keyboard connection are located on the front and side panels for easy access. The new design also includes a cable management system that eliminates exposed cables and enables the Touchscreen II to set flush against a wall.

NEW ACCESSORIES AND PERIPHERALS

In addition to the already available accessories from the 150/Touchscreen family, new accessories are available with the Touchscreen II. HP Touch is now offered as a user-installable accessory for the Touchscreen II for users who desire touch capability to enhance the user interface. The Touchscreen II also supports the new 8087 Math Co-processor (available summer '85) that allows users to speed up scientific and other real number intensive applications.

Several new mass storage options are available for the Touchscreen II family. The Touchscreen II System offers the new 9123D dual 3-1/2" floppy disc drive with a capacity of 710K Bytes each. The Touchscreen II Max offers a choice of Winchester disc drives with an integrated 3-1/2" floppy disc drive including 10 MB, 20 MB, and 40 MB versions.

SUPPORT

The Touchscreen II comes with some of the best support the industry has to offer. A national response center that's never more than a phone call away. Plus training classes to help you get up to speed in a hurry, and stay current on the latest software and hardware.

NEW CONFIGURATIONS

The Touchscreen II is offered as a base system that does not include a disc drive. This is designed to allow maximum ordering flexibility. The base system includes the system processing unit with the integrated display, the keyboard, all system software, and complete documentation. Users can order the base system and then add the mass storage desired.

Touchscreen II Terminal

45850A	HP 150 II personal computer with a high resolution 12-inch display, built-in tilt, a full-function keyboard with numeric keypad, 256K of RAM memory, one RS-232C port, one RS232C/RS-422 port, one HP-IB port and four expansion slots. Also included are:	\$2730
35723A	HP Touch Accessory (user installable).	300 \$3030

Touchscreen II Personal Computer System

45851A	HP 150 II personal computer with a high-resolution 12-inch display, built-in tilt, a full-function keyboard with numeric keypad, 256K of RAM memory, one RS-232C port, one RS-232C/RS-422 port, one HP-IB port and four expansion slots. Also included are the MS-DOS (TM) 2.11 operating system, the Personal Applications Manager (PAM), additional utility programs, HP-IB cable and full documentation.	\$2830
35723A	HP Touch Accessory (user installable).	300
9123D	3-1/2 inch dual double-sided microfloppy disc drive with 710K bytes formatted capacity (for Touchscreen II only).	715

System price: \$3845

The Touchscreen Max II Personal Computer System

45851A	HP 150 II personal computer with a high-resolution 12-inch display, built-in tilt, a full-function keyboard with numeric keypad, 256K of RAM memory, one RS-232C port, one RS-232C/RS-422 port, one HP-IB port and four expansion slots. Also included are the MS-DOS (TM) 2.11 operating system, the Personal Applications Manager (PAM), additional utility programs, HP-IB cable and full documentation.	\$2830
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35723A	HP Touch Accessory (user installable).	300
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9153A	10M bytes (formatted capacity) Winchester and 710K bytes (formatted capacity) 3-1/2 inch double-sided microfloppy disc drive.	1940
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System price: \$5070

OR

45851A	The HP 150 II personal computer (described above).	\$2830
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35723A	HP Touch Accessory (user installable).	300
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9133H	20M bytes (formatted capacity) Winchester and 710K bytes (formatted capacity) 3-1/2 inch double-sided microfloppy disc drive.	2740
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System price: \$5870

OR

45851A	The HP 150 II personal computer (described above).	\$2830
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35723A	HP Touch Accessory (user installable).	300
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9133L	40M bytes (formatted capacity) Winchester and 710K bytes (formatted capacity) 3-1/2 inch double-sided microfloppy disc drive.	4240
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System price: \$7370

HARDWARE

The Facts

CENTRAL PROCESSING UNIT/MICROPROCESSOR

Intel 8088 16-bit microprocessor running at 8 Megahertz clock rate.

INTERNAL MEMORY

160K bytes of Read Only Memory (ROM).

256K bytes of Random Access Memory (RAM) standard in the main system, expandable to 640K bytes.

EXPANSION CAPABILITIES

Four expansion slots.



TERMINAL CAPABILITIES

HP 2622A Data Entry Terminal Features in data processing mode. Supported by VPLUS/3000 software.

HP 2623A Graphics Terminal features. Supported by HP and third party graphics software.

HP 150 native mode with complete alphanumeric terminal features. Supported by VPLUS/3000 software.

Display enhancements like inverse video, underline, half-bright, blinking, or any combination.

Two pages of screen memory, and block/forms mode.

On-screen Time-of-Day Clock with battery back-up.

Configuration via menus with battery back-up.

Complete backward compatibility (works with all previous versions) for both the HP 2622A and HP 2623A terminals.

OPERATING SYSTEM (for Personal Computer configuration only)

MS-DOS (TM) 2.11 (Standard)

DISPLAY

12-inch diagonal, green phosphor (P31) cathode ray tube (CRT), 216mm by 153mm.

Display size, Alphanumerics: 196.9mm by 145.3mm.

Graphics 210.0mm by 149.9mm.

Screen Space: 27 lines by 80 columns, with lines 25 and 26 designated for labeling of function keys and line 27 for system status/error messages.

640 x 378 pixel, alphanumeric screen resolution.

512 x 390 pixel, bit-mapped graphic display.

640 x 400 pixel, alternate graphics resolution (not supported by firmware/terminal mode).

HP Touch accessory (user installable) (35723A).

Character Set: Roman8, line drawing, Math Standard, bold and italics depending on applications. Total of 896 characters.

6 x 9 enhanced dot matrix in 8 x 14 dot character cell.

Character Size: 1.54mm by 3.08mm (50% aspect ratio).

Display enhancements like inverse video, underlining, blinking, half-bright, security, and all combinations.

Cursor: blinking underline or blinking square.

Built-in display tilt.

60Hz refresh rate.

Tension band implosion protection.

Real-time clock with battery back-up.

KEYBOARD

Detachable, typewriter-style with 8-foot (2.43 m) coiled cable.

Full ASCII code.

Eight screen-labeled function keys and 12 programmable function keys.

One HP-HIL device port.

Auto-repeat, N-key rollover, and cursor controls.

18-key numeric/graphics pad.

PHYSICAL CHARACTERISTICS

27 lbs (12.3 Kg.) system weight, not including keyboard.

4.7 lbs (2.14 Kg.) keyboard weight.

System unit without disc drives measures 12.8 inches wide by 14.6 inches deep by 13.4 inches high (325mm x 370mm x 342mm).

System footprint (without keyboard) is 1.3 square feet (.12m²).

Keyboard dimensions when flat are 18 inches wide by 8.9 inches deep by 1.2 inches high (456mm x 225mm x 30mm)*.

Keyboard dimensions when standing are 18 inches wide by 8.9 inches deep by 2.3 inches high (456mm x 225mm x 58mm).

DATA COMMUNICATIONS

Four built-in data channels: 1 HP-IB port, 1 RS-232C/RS-422 port, 1 RS-232C port, 1 HP-HIL port for use by keyboard, additional HP-HIL port on keyboard for use by HP Mouse or Graphics Tablet. One port for user-installable HP Touch accessory.

Data communication rates for the RS-232C ports: 110, 150, 300, 600, 1200, 2400, 4800, 9600, 19200 baud (general asynchronous communications).

Port 1: EIA standard RS-232C and CCITT V.24; hardware and XON/XOFF handshaking available; RS-422 communication capability.

Port 2: EIA Standard RS-232C and CCITT V.24; hardware and XON/XOFF handshaking available.

* Home-row height as per ZH1/618 (German Ergonomic Standard).

PERIPHERALS (with ordering numbers)

DISC DRIVES

3-1/2 inch, dual double-sided microfloppy, 710K bytes formatted capacity each drive (9123D) (exclusive to the Touchscreen II PC due to power requirements).

3-1/2 inch single double-sided microfloppy with 710K bytes formatted capacity (9122S)*.

5-1/4 inch single, IBM PC format, flexible (9125S)**.

10M byte Winchester disc and 3-1/2 inch, double-sided microfloppy with 710K bytes formatted capacity (9153A).

10M byte stand-alone Winchester disc (9154A)*.

20M byte Winchester disc and 3-1/2 inch, double-sided microfloppy with 710K bytes formatted capacity (9133H).

20M byte stand-alone Winchester disc (9134H)*.

40M byte Winchester disc and 3-1/2 inch, double-sided microfloppy with 710K bytes formatted capacity (9133L).

40M byte stand-alone Winchester disc (9134L)*.

16.7M byte (or 67M byte) 1/4 inch tape backup subsystem (9144A)*.

13M byte (or 52M byte) 1/4 inch tape backup system (9142A)*.

PRINTERS

ThinkJet Personal Printer with HP-IB interface (2225A), HP-IL interface (2225B), Centronics interface (2225C), or RS-232C interface (2225D).

LaserJet Professional PC Printer with RS-232C interface (2686A).

Daisywheel serial printer (2601A) with RS-232C interface (opt. 242).

* Supported only as add-on drive to a system with a dual flexible disc drive or combination Winchester and microfloppy disc drive.

**Provides data compatibility with the IBM PC using 5-1/4 inch discs. Dot-matrix serial printer with RS-232C interface (2932A) or HP-IB interface (opt. 046).

Dot-matrix/letter-quality serial printer with RS-232C interface (2934A) or HP-IB interface (opt. 046).

Dot-matrix serial printer (82906A) with HP-IB interface. Available for 100V (opt. 001), 120V (opt. 002), 220V (opt. 003), or 240V (opt. 004).

PLOTTERS

Graphics two-pen (7470A) with RS-232C interface (opt. 001) or HP-IB interface (opt. 002).

Graphics six-pen (7475A) with RS-232C interface (opt. 001) or HP-IB interface (opt. 002).

Graphics eight-pen (7550A), with both HP-IB and RS-232C interfaces.

INPUT DEVICES

HP Mouse for use with HP-HIL interface (46060A).

Graphics Tablet (A size) for use with HP-HIL interface (46087A).

ACCESSORY BOARDS

256K RAM Memory Board (45631A)

384K RAM Memory Board (45632A)

Language board (45635A)

Language board with 256K bytes RAM (45637A)

8087 Co-processor Accessory (45885A) (HP field or dealer installer--does not occupy accessory slot)

1200/300 baud Internal Modem (45640A)

Touchscreen 3278 Emulation with File Transfer (45641B)

Extended I/O Accessory Board (45643A) (for output through the Centronics and HP-IL interfaces)

EtherLink(TM)/150 Accessory Board (45649A)

EtherStart(TM)/150 (45649A) (plug-in module for EtherLine(TM)/150 board).

TRADEMARKS

EtherLink(TM)/150 and EtherStart(TM)/150 are U.S. trademarks of 3Com Corporation.

MS-DOS(TM) is a U.S. trademark of Microsoft, Inc.