The Personal Computer With More
PC-8800
Personal Computer

More computer...
for business and
professional applications

Personal computers are *not* all alike. Sometimes a personal computer can be just *too* personal. Although the machine seems fine when you first sit down to the keyboard, it loses some of its luster when you discover its limitations.

Maybe there is not enough memory to handle word processing or your sophisticated business applications. Perhaps the graphics are not as rich and varied as you would like them to be. Or you discover that the "library" of applications software is much too tiny.

The problem may be as large as a printer that balks at multi-paged jobs...or as small as an annoying little keyboard quirk that cuts into your productivity. Whatever the symptom, it signals a computer that is a nice "toy," but is simply not suitable for the office.

Now NEC—the computer and communications company—has the logical answer: It is the PC-8800, a remarkable new personally priced computer that gives you office-sized capabilities. It is the personal computer with more:

- **More memory**...for business and professional applications
- **More usability**...for faster, easier data handling and processing
- **More colour**...for more sophisticated displays
- **More powerful language**...for more control
- **More software**...for more applications
- **More options**...for communications, control—and more.

More Memory

The "heart" of any personal computer is its microprocessor. And like the most economical personal computers, the PC-8800 uses an 8-bit microprocessor for cost-efficiency and reliability.

Unlike most personal computers, however, the PC-8800 marries this microprocessor to more memory capacity than you thought possible in a machine of this size. The ROM and RAM areas together give the PC-8800 a big 184K bytes of memory— more than twice the usual size.

This added memory means the PC-8800 has the capacity so necessary for word processing, large "spreadsheets" such as SuperCalc, and other sophisticated office and business applications. It means the PC-8800 can consume office-sized quantities of data with ease, and handle financial forecasting, budgeting, modelling, and "what if" projections.

More memory means you can concentrate on professional solutions, without worrying about exceeding the capacity of your personal computer.

More Usability

Along with the added memory, NEC has imbued the PC-8800 with the little "extras"— ease-of-use features to perfectly complement its power.
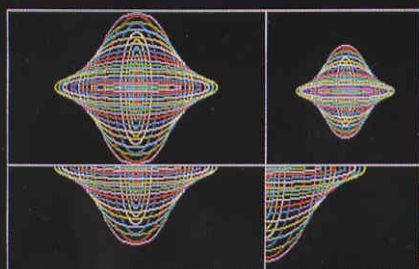
Take the stylish keyboard, for instance. It is attached to the display via a flexible coiled cable, so you can place it on your lap or locate it wherever you wish. The importance of this small feature looms much larger during long hours of operation. Data entry has been simplified, too. The handy 10-key pad will be quite familiar to anyone used to conventional adding machines.

There is a choice of CRT displays, from economical monochrome to stunning colour models. And whatever CRT display you choose with your PC-8800, you will find it is designed to reduce eye fatigue. At your command, the display can show either 40 characters or 80 characters per line, so you can select just the right mode for easy-to-read text or information-packed graphics or numbers. There is switching between 20 lines and 25 lines per screen, for the same reason.

User-definable keys, reverse video, blinking display, secret video—it is all there to make the PC-8800 easier and more straightforward to use.
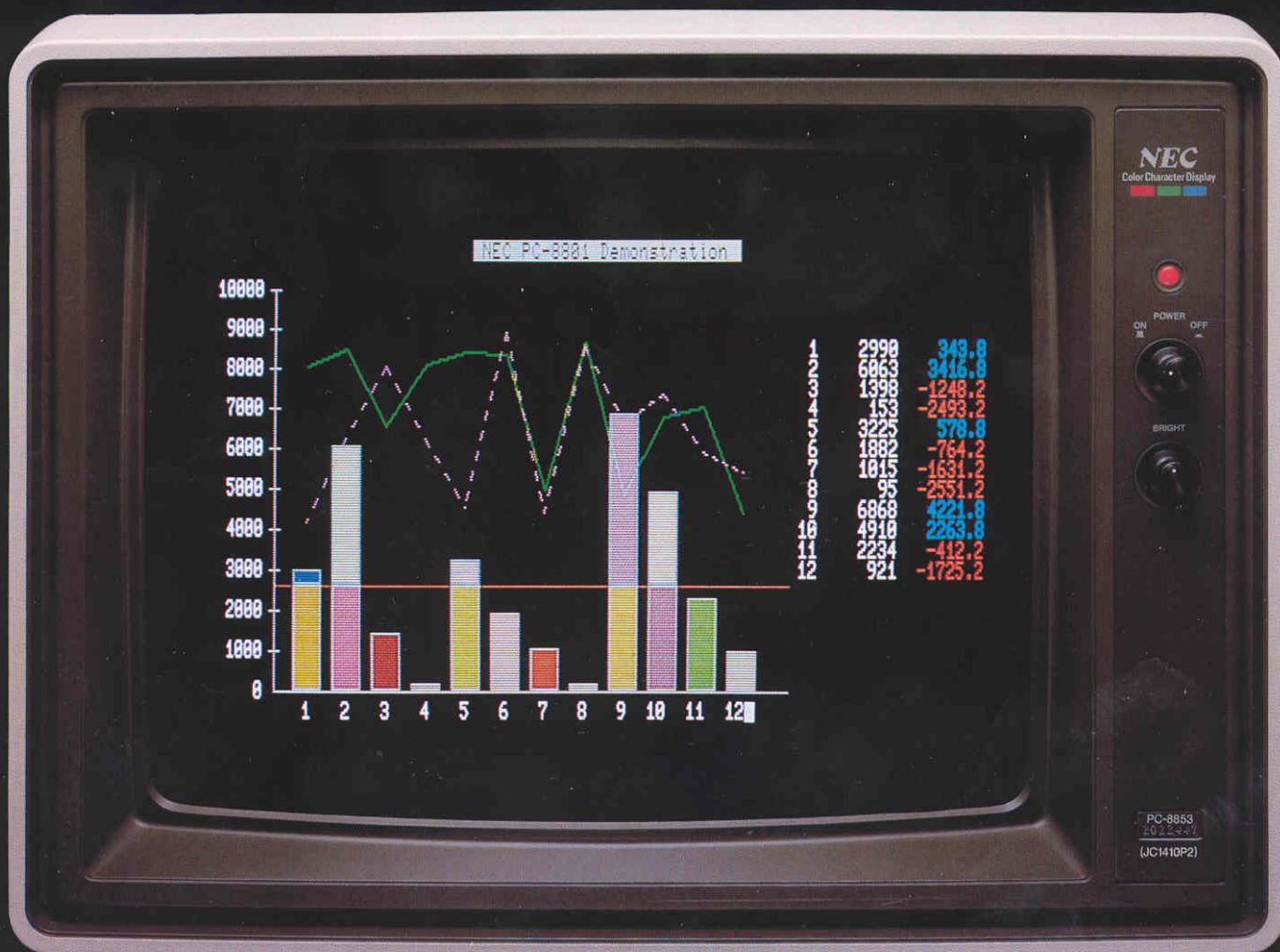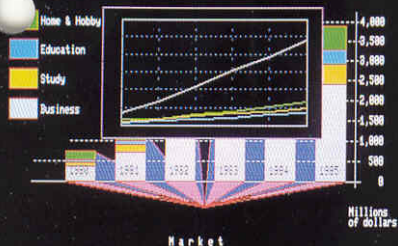
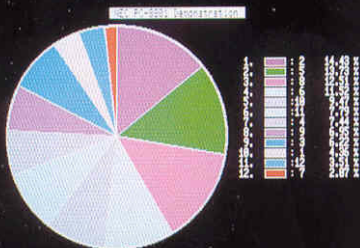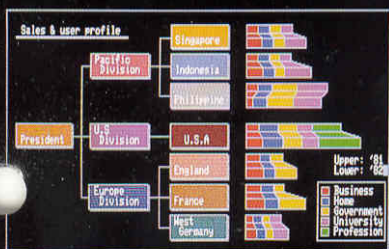# More colour...
for more graphic displays

A splash of colour can enliven any computer output. And whether you are viewing data in the form of charts, plots, histograms, graphics or drawings, you will find eye-catching colour graphics easier to read and easier to create, thanks to a host of special features in the PC-8800.

A More Colourful Display

A unique high-resolution 14″ monitor gives you crisp, complex patterns in eight vivid colours. The screen of this monitor is made up of a matrix of 640×400 dots—that is about *twice* the resolution of a conventional colour screen—so your displays are richer and more detailed.

Naturally, there are other display options— in fact, there are four types of CRT display available for you to choose—but it is in the high-resolution colour display that your output will be in its best light.

More Colourful Language, Too

Computer experts know that a computer's *language*—the actual instructions used to create the programs for it—is vitally important in determining the computer's flexibility and usefulness. And besides supporting CP/M, the PC-8800 employs both N-BASIC and a powerful new N88-BASIC language.

The CP/M operating system can be run on the PC-8800 without the use of a separate software card. CP/M is among the most popular operating systems in the world, and has become virtually *the* standard of the microcomputer industry. What this means is that the PC-8800 immediately has an entire library of software for a host of applications available and ready to run. Thanks to CP/M, you have access to an almost limitless supply of third-party software.

The PC-8800 is a programmer's delight, too. Its N-BASIC language makes the PC-8800 compatible with programs written for its popular cousin, the NEC PC-8000 Personal Computer. The PC-8800 also features N88-BASIC, which contains a comprehensive set of colour and graphics commands that are especially designed to take full advantage of the stunning capabilities of the high-resolution colour monitor.

For the programmer, this means that the colour of literally every single dot on the screen can be expressly controlled, without the necessity of writing complicated routines. For the user, this translates into software that is faster to run, and that presents data more brilliantly and effectively. You can mix graphics and text on the screen, so your plots and charts can be explicitly detailed. And N88-BASIC is provided with its own separate memory, saving valuable PC-8800 memory for programs and data.

Until you have actually seen the PC-8800 "paint" colours on the screen, you have no idea how intense and varied your displays can become.

A more powerful total package for you

Although the hallmark of the personal computer is its affordability, it nevertheless represents a not insubstantial investment. You want to wring the most out of that investment: A wide variety of tasks, long years of service, flexibility for future expansion.

The PC-8800 is backed by all the resources and know-how of NEC, an acknowledged leader in computer and electronic technology and one of the world's largest electronics companies. This means that the PC-8800 is not only a superb technological achievement; it is also blessed with the software, peripheral devices, and support that ensure maximum usability over the long haul.
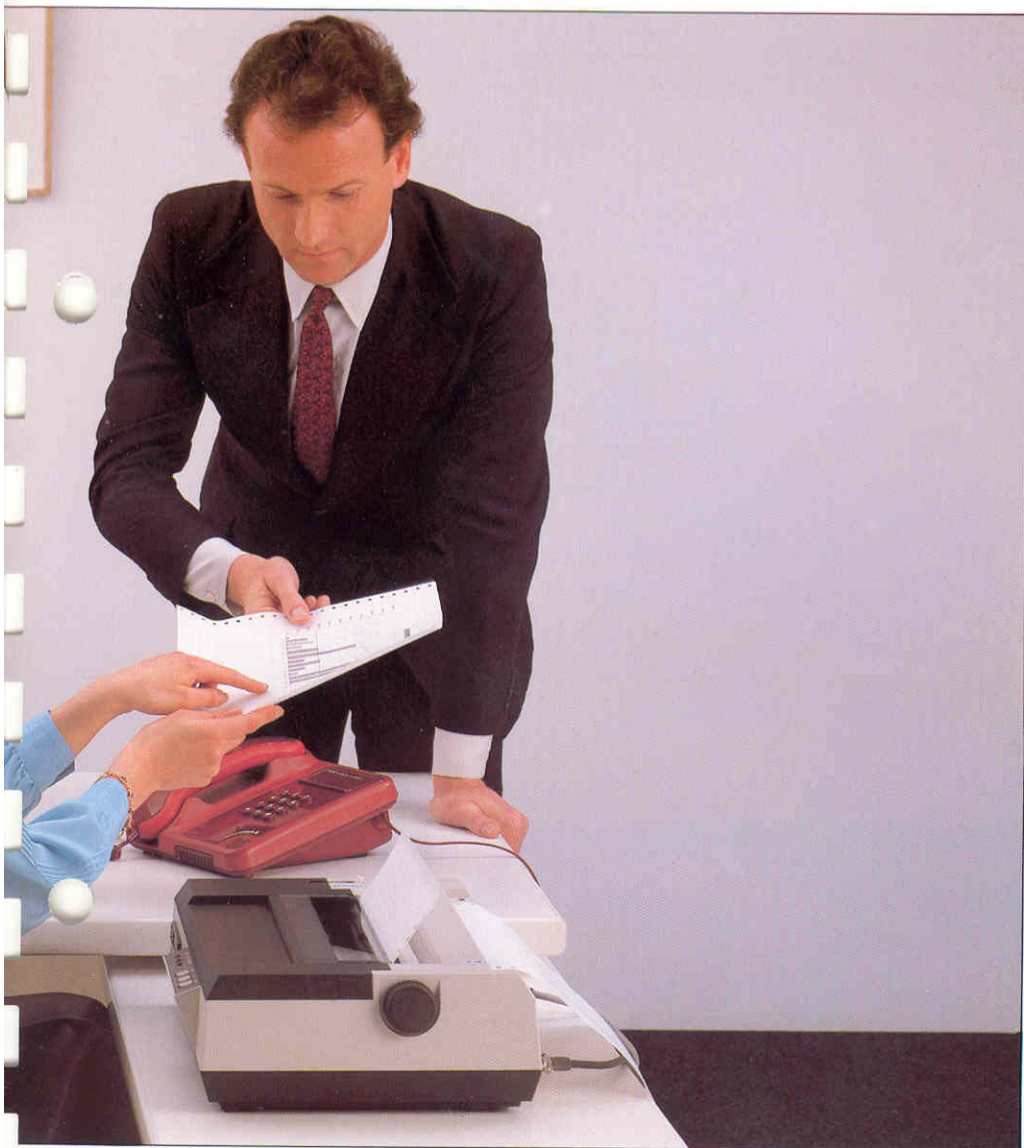
More Software

Technical features are fine for the engineer or programmer. But if you are like most users, you want the personal computer to be a solution; and like as not that means a "canned" program, a disk or cassette tape that can be quickly read into the computer for such problems as stock control, sales ledger, word processing, purchase ledger, future projections, communications, etc. You want software. The PC-8800 Personal Computer can handle an astonishing variety of software. Besides applications programs written expressly for it, the PC-8800 easily handles software written for the NEC PC-8000 Personal Computer, giving it access to this extensive library of "canned" programs.

In addition to CP/M, the powerful MS-DOS operating system is also available when a plug-in card is added. This permits the PC-8800 to run software designed for 16-bit machines, too, making it an economical but remarkably powerful answer to your computing problems.

More Peripheral Devices

Because the main parts of the PC-8800 Personal Computer system are available as separate components, you can configure just the system you need. And for building or expanding into your ideal system, NEC peripheral devices are the perfect answer.

This economical little machine can pump out the pages at up to 120 characters per second, whether at 80 or 132 characters per line.

Then there is the legendary NEC Spinwriter. This versatile letter-quality printer is perfect for word processing, and it has earned a richly deserved industry-wide reputation for extreme reliability.

Some other options for memory and control

- PC-8012-02 RAM Board: Expands RAM in 32K byte segments.
- PC-8045 Light Pen: Selects items from the CRT screen by "pointing" at them; also "writes" on the CRT.

There is also a wide variety of options available for communications and other specialized applications.

See your NEC dealer for a full list of the options and peripheral devices available for the PC-8800.

More Applications

With its attractive styling and powerful computational ability, the PC-8800 is ideally suited to business and professional applications. And thanks to the four expansion ports in the PC-8800—where you can add peripherals as needed, connect the computer into a network, or use it as a remote terminal via a modem— you are prepared for future expansion or reconfiguration.

SuperCalc is a trademark of Sorcim. CP/M is a trademark of Digital Research, Inc. MS-DOS is a trademark of Microsoft Corporation.

The PC-8800 Series is compatible with most peripherals from the NEC PC-8000 Personal Computer Series, and it also has its own unique peripheral devices.

The wide range of peripherals and accessories helps you create the perfect system for your own particular application.

Four types of CRT display options

There are four kinds of CRT displays available for the PC-8800, ranging from the high-resolution colour monitor to an economical 12″ monochrome display.

- PC-8853: 14″ colour, high-resolution display.
- PC-8851: 14″ monochrome, highresolution display.
- PC-8043: 12″ colour display.
- PC-8041: 12″ green display.

Two types of floppy disk drive add memory capacity

The PC-8800 can handle a 5-1/4″ or 8″ floppy disk interface. Two types of disk drive are available to help you match memory capacity to application.

- PC-8881: Slim 8″ floppy disk drive. 2M bytes per unit.
- PC-8831: Slim 5-1/4″ floppy disk drive. Double sided, double density, 0.64 M bytes per unit. DMA interface.

A variety of printers

A wide variety of line printers and letter-quality printers are available for the PC-8800.

For instance, there is the NEC PC-8023-N, a high-speed dot-matrix printer that handles input on a dot-by-dot or character-by-character basis for maximum flexibility.

PC-8800 performance...
have a closer look.

PC-8801 Specifications

CPU	μPD780C-1 (Z80A compatible), 4 MHz
ROM	N-BASIC and monitor: 32K bytes
	N88-BASIC: 40K bytes
	Expandable up to a maximum of 56K bytes (8K bytes by 7 banks)
RAM	User RAM: 64K bytes
	When N88-BASIC is running: text work area is 32K bytes; memory used by text video RAM, variables and work area is 31K bytes.
	Video RAM for graphics: 48K bytes
	Expandable in 32K byte segments via switching
CRT	
Text	Choice of 80 characters × 25 lines, 80 characters × 20 lines, 40 characters × 25 lines, or 40 characters × 20 lines
	Reverse, blink, secret (character by character)
	8 colours: Black, blue, red, magenta, green, cyan, yellow, and white
Monochrome Graphics (N88-BASIC)	Choice of 640 × 200 dots (3 screens) or 640 × 400 dots (1 screen, available when using high-resolution colour display)
	Mixture of characters and graphic patterns possible
	8 colours (character by character)
Colour Graphics (N88-BASIC)	640 × 200 dots (1 screen)
	8 colours (dot by dot)
	Mixture of characters and graphic patterns possible
Background Colour	8 colours
Border Colour	8 colours (not available when using high-resolution colour display)
Video Output	RGB separate output (colour)
	Composite video signal output (monochrome)

Keyboard	Separate; connected to main unit with flexible coiled cable
	Features English upper/lower case characters, 10-key pad, control keys, 5 shifted function keys, capital lock, HELP and COPY keys
Expansion Ports	4 slots available
Cassette	600 baud/1200 baud
GP I/O	Input: 4 bits
	Output: 1 bit
	Interrupt: 1 ch
Printer Interface	Parallel interface (standard Centronics printer interface)
Serial Interface	Conforms to RS-232C standards
8″ Floppy Disk Interface	Incorporated in slot within main unit
5-1/4″ Floppy Disk Interface	Incorporated in slot within main unit
Light Pen	PC-8045 can be used
Calendar Clock	Has internal battery backup
Power Supply	AC 120 V, 50/60 Hz: A version
	AC 220/240 V ±10%: B version
Dimensions	
Main Unit	496 (W) × 342 (D) × 107 (H) mm
Keyboard	464 (W) × 214 (D) × 72 (H) mm
Weight	
Main Unit	7.1 kg
Keyboard	2 kg

Specifications subject to change without notice.

The PC-8800 is available in two versions: the PC-8800A and PC-8800B.
Choose according to the line voltage.

NEC NEC Corporation