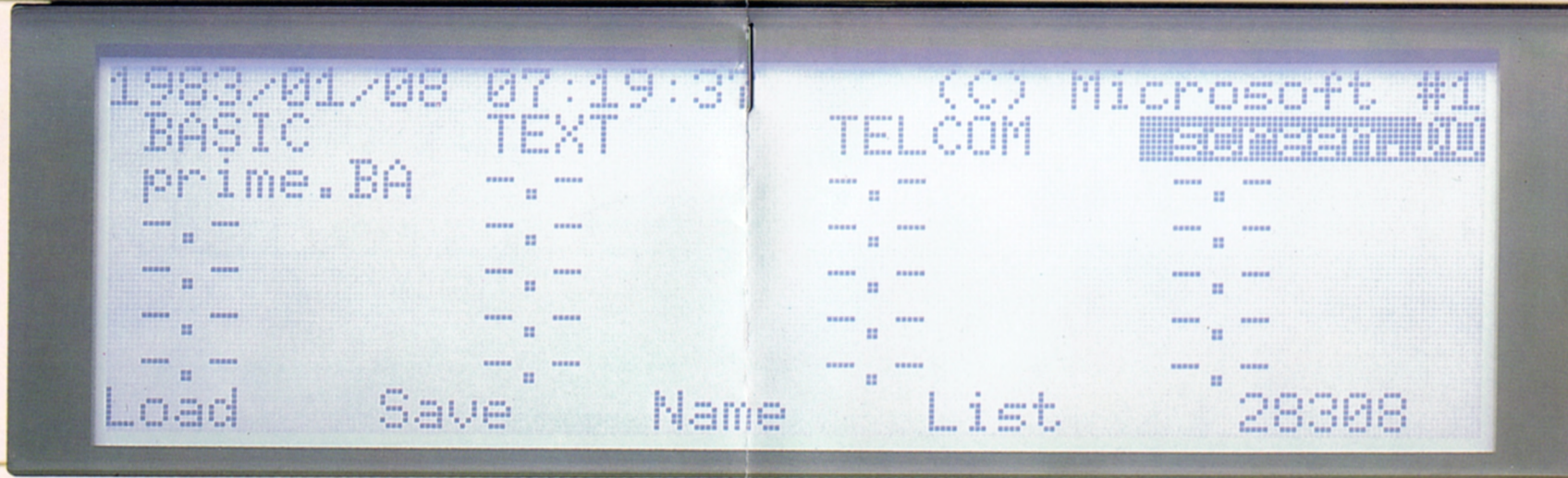
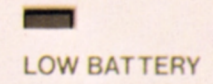


**NEC PC-8200 Personal Computer**  
**The Small Wonder**

Unit shown actual size.



NEC PC-8201A



**NEC**

NEC Home Electronics (U.S.A), Inc.  
Personal Computer Division  
1401 Estes Avenue  
Elk Grove Village, IL 60007  
NEC Corporation, Tokyo, Japan

## You can take it with you.

### True Portability

At last, a full-powered micro-computer that really does go anywhere you do.

The PC-8200 weighs only 3.8 pounds and is no bigger than a three-ring binder. Yet it gives you the same power and features as other so-called "portables" that can weigh up to 18 pounds.

On the top of that, the PC-8200 can run on batteries as well as AC power. That means you can use it wherever you go—on a plane, at the beach, in the car—without having to plug it in. A special "protect" feature saves all data for up to 26 days, even if the batteries fail or the computer is accidentally turned off.

### Features make it Number One.

No other portable gives you as much for your money as the PC-8200.

For openers, you start with 16K RAM, 32K ROM—twice as much as you get from our leading competitor. And the PC-8200 is expandable up to 160K total memory with NEC's exclusive 32K RAM cartridges.

A special three-way "menu" comes alive when you turn the PC-8200 on. All you do is position the cursor on the program you want and hit RETURN.

The computer puts you immediately into the application you want. Menu includes word processing, terminal communications and BASIC.

The PC-8200 is physically easy to use, too. You get a full-size typewriter keyboard with ten function keys for convenient operation. And the big four-way "cursor cluster" lets you put your finger on the spot you want, quickly and accurately.

The power-saving LCD display shows you eight lines at a time, with up to 40 characters

per line (or a matrix of 240 x 64 dots in graphics mode). A variable control lets you adjust the display contrast for comfortable, strain-free viewing.

### Let it make your life easier.

Whether you're a student, an executive, a journalist, or practically anything else, the PC-8200 can be a big help to you.

The word processing makes it easy to take notes or type letters, papers or stories no matter where you are. Plug it

into a printer for hard copy, or (with optional adaptor) into a video display terminal.

NEC's Personal Plan Spreadsheet\* gives you the ability to make estimates or contingency projections anywhere virtually at the push of a button.

The scheduler bundled with the PC-8200 lets you keep track of appointments, phone numbers, and any other valuable information you need to have at your fingertips. And its built-in beeper will alert you to important appointments.

The PC-8200's sophisticated telecommunications program gives you access to a wide range of data banks as well as to information stored in other personal computers, such as the IBM PC. It interfaces through a modem or other

coupling device.

The powerful N82 BASIC lets you write your own programs or select from the enormous library of prewritten programs that already exist in BASIC, such as those published by Osborne/McGraw Hill.



## What you need is what you get.

### Compatibility

An 8-bit computer itself, the PC-8200 can work with *either* 8-bit or 16-bit computers via a communications link.

### Peripherals

With the PC-8200 you can get a wide range of options. The modem provides a telecommunications data link to other computers and databases. The battery-operated thermal printer gives you fast hard-copy capability no matter

where you are. And the data recorder provides convenient long-term storage for your files.

In addition, now you'll be able to link your PC-8200 with its own floppy disk drive, CRT, and a variety of NEC printers including the PC-8023A, PC-8025A, and the Authentic 15LQ.

### Software

This is what it all boils down to. A computer isn't worth a dime without software, and the

PC-8200 gives you more FREE software than anybody. You get 14 valuable programs on cassette free with the system.

Here are a few of the software packages you get FREE with the PC-8200:

- Memory calculator—computes a series of "calculator style" operations but maintains each transaction in memory. Corrections can be made and all subsequent calculations will be adjusted accordingly.

- Loan evaluator—given any three of the four variables (amount of loan, interest rate, principal, and term in months), the program computes the fourth value. Optional amortization schedule can be displayed on the screen or printer.

- Investment portfolio—evaluates a portfolio of stocks using current market data. Holdings and cost data are kept in data statements. Current market prices are entered by keyboard in response to queries.

- Linear forecaster—accepts up to 30 data points and forecasts out to a total of 30 data points using linear regression. Output includes actual and forecasted data and bar chart on LCD.

- Other programs include character definer, text formatter, appointment scheduler, barcode reader, terminal mode selector, bank switch utility, music data, music, and two games.



# Specifications

Computer	
<b>CPU</b>	80C85 (CMOS version of 8085), 2.4 MHz.
<b>RAM</b>	16K-byte CMOS RAM (standard). Up to 64K-byte RAM can be mounted in the main unit, in 8K-byte segments. An optional 32K-byte RAM cartridge available in the system slot.
<b>ROM</b>	32K-byte CMOS ROM (standard). Up to 64K-byte ROM can be mounted in the main unit.
<b>LCD</b>	Effective display area: 191.2mm length, 50.4mm width. Resolution: 240 x 64 dots. Dot size: 0.73 x 0.73mm. Dot pitch: 0.8mm. Display characters: 40 characters per line x 8 lines. Reverse display possible by means of escape sequence.
<b>Keyboard</b>	67 keys. 5 function keys, and 5 more using the SHIFT key. 4 cursor movement keys. 58 additional keys.
<b>RS-232C Interface</b>	Connector: DSUB 25 pin. Data length: 6, 7, 8 bits. Parity: None, Odd, Even. Stop bits: 1, 2 bits. Baud rates: 75, 110, 300, 600, 1200, 2400, 4800, 9600, 19200.
<b>Printer Interface</b>	Standard Centronics parallel printer interface.
<b>SIO1 Interface</b>	Connector: 6 pin DuPont BERG modular jack or equivalent. Transmission distance: 3m Min. Data length: 8 bits. Parity: None. Baud rate: 19200. Stop bits: 1, 2 bits.
<b>SIO2 Floppy Disk Interface</b>	Connector: 8 pin DuPont BERG modular jack or equivalent. Transmission distance: 3m Min. Data length: 8 bits. Baud rate: 19200. Parity: None. Stop bits: 1, 2 bits.
<b>CMT Cassette Interface</b>	Connector: 8 pin DIN plug. File format N-BASIC compatible. Transmission distance: 1.5m Min. Output level MIC level. Baud rate: 600.
<b>Bar Code Reader Interface</b>	1 ch of Hewlett-Packard specified interface (standard). 9 pin DSUB connector.
<b>System Slot</b>	Accepts 32K-byte RAM cartridge with Piezoelectric buzzer or CRT adapter. A system bus must be used when the CRT adapter is employed. 16mm height.
<b>Battery Case</b>	Four AA batteries. Special Ni-Cad battery pack (optional). AC adapter/recharger (optional). External dimensions: 70mm width, 80.5mm depth, 19mm thickness. Length of operation: AM-3 Up to 18 hours (during constant use at normal temperatures). SUM-3 Up to 6 hours (during constant use at normal temperatures).
<b>Batteries for Emergency Operation</b>	50mA/h 3.6 V Ni-Cad batteries installed within the PC-8201. Trickle-chargeable from whatever batteries are used as the electrical power source for the basic unit. A battery discharge prevention switch is included. Emergency operation battery backup time limit: Up to 7 days (with 64K RAM at normal temperatures). Up to 26 days (with 16K RAM at normal temperatures).
<b>Power-Off</b>	Manual power-off by means of the electrical power switch. Controllable by means of a POWER command in BASIC. Automatic power shutoff when no key has been input after 10 minutes (this possible input period can be varied between 1 minute and 25 minutes).
<b>Low Voltage Display LED</b>	The LED will light up when the electrical power decreases below a standard value.
<b>Changing Batteries</b>	After the basic PC-8201 unit has become inoperable: 7 days (with 64K RAM). 26 days (with 16K RAM).
<b>Environmental Conditions</b>	Ambient Temperature: 41°F - 99°F. Relative Humidity: 20% - 80% (with no dew formation).
<b>Dimensions</b>	11½"(L) x 8¼"(W) x 1¼"(H) front-2"(H) back.
<b>Weight</b>	Approx. 1.7 kg, 3.8 lbs.
<b>Optional Accessories</b>	
<b>Nickel-cadmium Battery Cartridge PC-8201-90</b>	500 mA/h. Rechargeable by AC adapter or floppy disk interface. Passage to the PC-8201 basic unit from the unit's electrical power source. Duration of retention of charge: Up to 15 hours. Batteries not exchangeable. External dimensions: 70mm length, 80.5mm width, 19mm thickness.
<b>32K-byte RAM Cartridge PC-8206</b>	Contents: 32K-bytes 8K-byte RAM packs (4 separate packs contained within). Lithium battery included as backup power. Duration of backup power: Up to 6 months (at normal temperatures). "Write protect" switch included. Battery exchange can be conducted (so that the contents on the RAM cartridge will not be erased) when the AC adapter designed for and used with the basic PC-8201 unit is plugged into the jack on the side of the PC-8206 RAM cartridge. (Use only the AC adapter.) External dimensions: 100.5mm length, 85mm width, 16mm height.
<b>AC Adapter</b>	Standard output: 8.5 V 100mA. No-load output: 11 V. Input voltage, frequency: 100 V ± 10% 50/60Hz.
<b>Authentic 300 MD Modem</b>	This is a small, direct connect and battery operated modem. Just the right size to travel with you and let you communicate with the world from your office, home or hotel room. It works at 300 baud. Most standard RS-232C acoustic coupler or direct connect modems will work with the PC-8200.
<b>CRT Adapter</b>	Plugs into the PC-8200 system slot. Output: Color, Composite, Monochrome and T.V. Can be used with the NEC composite color or monochrome monitors. Screen composition: 40 columns by 24 lines. RF modulator included.
<b>Floppy Disk Drive</b>	Portable, battery operated 3½" disk drives.

Printer	
<b>Printing Function</b>	Printing system: Thermal dot matrix (serial single direction printing). Printing head: Vertical 8 dot thin film, thermal type. Printing speed: Abt 40 chrs/sec (in case of ASCII character printout in standard characters at supply voltage of 5 V). Type of printing: Characters: 5 x 7 dot matrix. Graphics: Vertical 8 x N dot (N = 1 to 320/line). May be mixed with characters. Type of characters: 96 types (ASCII code standard). Number of printing digits: 40 characters/line (standard characters) 20 characters/line (doubled width characters) 320 dots/line (graphics).
<b>Papers Used</b>	Model: PC-8221-P1. Type: Thermally sensitive rolled paper (black luminant). Paper width: 80 +0 mm. -0.8 mm. Roll length: Abt 5 m.
<b>Interface</b>	8 bit parallel interface (conforming to Centronics Specifications).
<b>Power Source</b>	Internal power: DC 6V, alkali-manganese dry cells LR 6 (AM3) ... 4 pcs. External power: DC 5V (used for AC adapter PC-8271-02). Power consumption: When in stand-by state ... 0.05W. When operating ... 1.5W average 4W max.
<b>Operating Conditions</b>	Operating temperature and humidity: 0 to 40° C, 30 to 85% RH. Storage temperature and humidity: Body -25 to 60° C, 5 to 90% RH. Rolled paper 0 to 40° C, 5 to 90% RH 0 to 30° C, 30 to 85% RH (long storage).
<b>Weight</b>	320 g (body only) 440 g (body, one roll of paper, 4 dry cells).
<b>Dimensions</b>	110 (W) x 40 (H) x 130 (D) mm.
<b>Input Format of Data and Codes</b>	Input system: Serial and 8 bit parallel. Input code: ASCII 8 bit codes. Dot graphic 8 bit code. Data buffer: For 1 line + 1 byte. 41 bytes (standard character mode). 21 bytes (doubled width character mode). 32 bytes (graphics mode).

Data Recorder	
<b>Circuit System</b>	2 track monoral.
<b>Tape Speed</b>	4.75 cm/sec.
<b>Recording System</b>	AC bias.
<b>Erasing System</b>	DC erasure.
<b>Wow &amp; Flutter</b>	0.16% (WRMS).
<b>Frequency Response</b>	300 to 8000 Hz.
<b>Power Consumption</b>	1 W.
<b>Power Source</b>	DC 1V (SUM-3 x 4) External power jack (DC 6V, center pin "+", optional AC adapter PC-8271-02 is used).
<b>CMT IN Jack</b>	35Ω, input impedance 4.7 K Ω input sensitivity 1 mV.
<b>CMT OUT Jack</b>	35Ω, (applicable load: 16 Ω to 100 Ω).
<b>REMOTE Jack</b>	2.5Ω.
<b>Battery Hold Time</b>	About 4 hours (when EIAJ/SUM-3/NN is used).
<b>Dimensions</b>	186 (W) x 32 (H) x 116 (D) mm.
<b>Weight</b>	525 g (including dry cells).
<b>Accessories</b>	Dry cells (SUM-3 x 4), instruction manual service network list, guarantee card.
<b>Optional Accessories</b>	AC adapter PC-8271-02 (AD-30).

The above specifications are subject to change without notice.

