

designed for the man and woman on the go

TELECOMMUNICATIONS
PERSONAL FILER

Calc-To-Go™

WordStar-To-Go™

INCLUDES QUICK COMMANDS FOR:

QUICK GUIDE

PC-8500

NEC



NEC

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The PC-8500 Quick Guide is a concise version of the four other PC-8500 manuals. It's been designed to help you quickly find information about specific PC-8500 subjects. It's also been designed so you can take it anywhere you carry your PC-8500 portable computer.

Although most of the information you need to operate the PC-8500 is included in this Quick Guide, you should read the other manuals first for a more complete description of the capabilities of the PC-8500.










Section 1 covers general information such as power supply, startup and the keyboard. Section 2 includes information about the PC-8500 MENU.

Section 3 lists information about compatible peripherals.

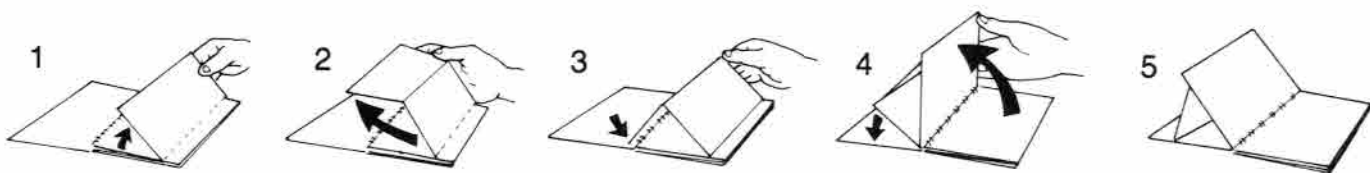
Section 4 through 7 are Quick Guides for each ROM-based application program included in the PC-8500.

Section 8 outlines procedures for accessing electronic data services and communicating with other computers via the RS-232C interface.

Notations used in this Quick Guide are:

- BOLD FACE CAPS** Type in the command exactly as written.
-  Press **RETURN** key.
-  Function Key
-  Press **SHIFT** and **f.1 — f.5** Keys simultaneously.
-  Press **CONTROL** Key.
-  Press **D** Key (Single-key command).
-  Press **CONTROL** and **B** Keys simultaneously (Two-key command).
-  Press **CONTROL** and **Q** Keys, then **C** Key. (Three-key command).
-  Press **.**, then **M**, then **T** Keys (Dot command).
-  Program option key used only within a previously entered command.
- n* Any number.
- Filename Insert your own filenames for these example filenames.
- Filename.EXT Filename example with an extension.
- A> Prompt symbol. Indicates the PC-8500 operating system is prepared to accept a command.

BUILT-IN-EASEL



NEC

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1. USING THE NEC PC-8500 PORTABLE COMPUTER

POWER SOURCES

- The PC-8500 can operate on 4 size C batteries, either alkali or standard.
- The PC-8500 can operate on ordinary household current (AC120V) by attaching an DC 9 V adapter (PC-8471A-01).
- The PC-8500 can also operate on rechargeable NiCad batteries, which must be recharged externally (not available from NEC).

INITIAL POWER ON

For initial Power ON or Power ON after extended storage:

1. Insert 4 size C batteries, 4 NiCad batteries or connect the PC-8471A-01 DC 9 V adapter.
2. Turn ON the back-up battery switch on the bottom of the PC-8500.
3. Turn ON the power switch on the right of the PC-8500. (The switch cannot be turned ON unless the back-up battery switch is ON.)
4. Push the reset button on the back of the PC-8500.
5. Format RAM #1, the 32K internal RAM disk, using the FORMAT command **F-10** . Then choose **F-1** for RAM #1. Answer **Y** . The internal RAM disk will now be formatted.

RESET

The PC-8500, at power ON, always defaults (or returns) to its status at the last power OFF. This is a convenient feature because you can quickly resume working after a break or an interruption with a minimum effort.

Reset initializes the PC-8500 but does not initialize file storage areas, including the internal RAM disk. To perform RESET:

1. Push in the RESET button when power is ON.
2. Press **SHIFT STOP** at the same time you turn the power switch ON. A RESET is also performed if you change the device configuration while power is OFF.

NOTE: Be sure to RESET when connecting peripherals to or disconnecting peripherals from the system slot.

After a RESET, the PC-8500 automatically returns to the 32K CP/M mode and the LCD is the selected display.

Battery Life Summary

Power Supply	Battery Life (at normal temperature)
4 Alkali C Batteries Battery Indicator Light ON	Up To 9 Hours About 1 Hour Of Power Left
4 Standard C Batteries Battery Indicator Light ON	Up To 3 Hours About 30 Minutes Of Power Left
Back-up Battery (250mA/h 3.6V NiCad battery) without C Batteries	About 60 Days
4 New Alkali Batteries will store Files	40 Days
4 New Standard Batteries will store Files	20 Days
AC Adapter (PC-8471A-01) will store Files	Forever

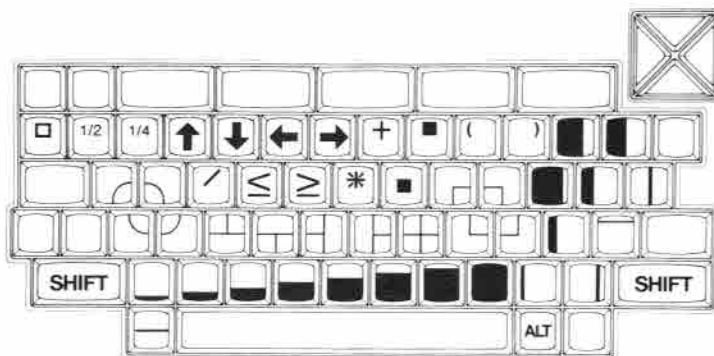


ALTERNATE CHARACTER SET

with **ALT**



with **SHIFT + ALT**



HARDWARE FUNCTIONS OF PC-8500

LCD

This is the 80 column by 25 line screen.

SLEEP INDICATOR

The indicator blinks continuously in the sleep mode.

LOW BATTERY INDICATOR

When using battery power, replace batteries if the indicator lights up.

Warm Boot from the MENU is performed by typing **STOP** or **CTRL C**. Be sure to perform a Warm Boot immediately after a floppy disk is replaced.

BATTERY CASE

Put 4 C batteries or 4 rechargeable NiCad batteries in here.

LOCK BUTTON

This control positions the LCD for the best viewing angle.

POWER SWITCH

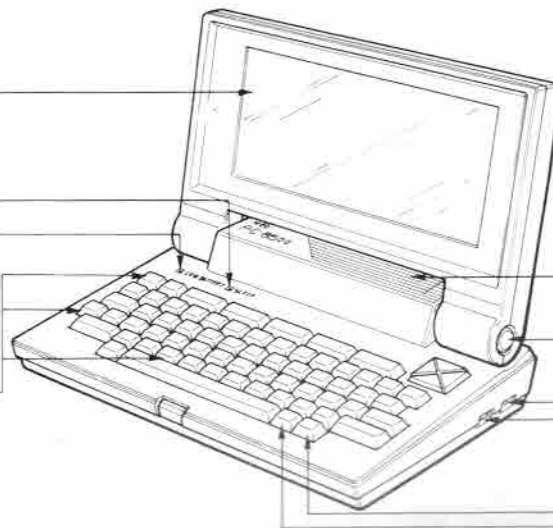
CONTRAST ADJUSTMENT KNOB
LCD contrast adjustment.

NUMERIC KEY (Integrated Key Pad)

With this key down and locked, 4, 5, 6, 1, 2, 3 and 0 are input when U, I, O, J, K, L or M key is typed, respectively.

ALTERNATE CHARACTER KEY

With this key down and locked, the keyboard can be used to input Greek and graphic letters. (Refer to alternate character diagram on the previous page).



DC IN

Plug AC adapter, PC-8471A-01, in here.

RESET

When power is initially turned ON, or when each device is plugged in or removed from the system slot, the RESET button must be pushed. This operation is called a PC-8500 RESET.

LINE

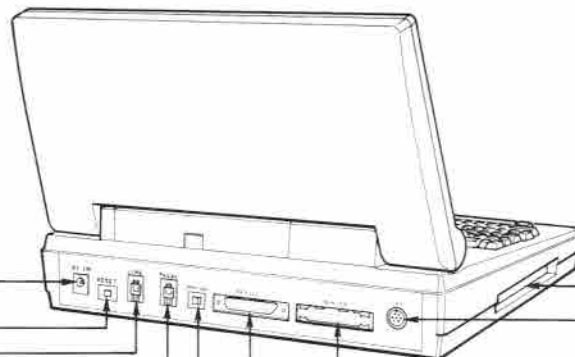
Connect the telephone system cable here, when using built-in modem or optional 1200 baud Modem.

PHONE

Connect the phone cable here to the telephone when using the internal modem or the optional 1200 baud Modem Unit.

300/1200

Switches between built-in 300 baud Modem and the optional 1200 baud Modem Unit (PC-8461A).



SYSTEM SLOT

RAM Cartridge, CRT/Disk Adapter and 1200 baud Modem Unit are connected here.

QMT

Connect a data recorder here.

PRINTER

Connect a parallel printer here.

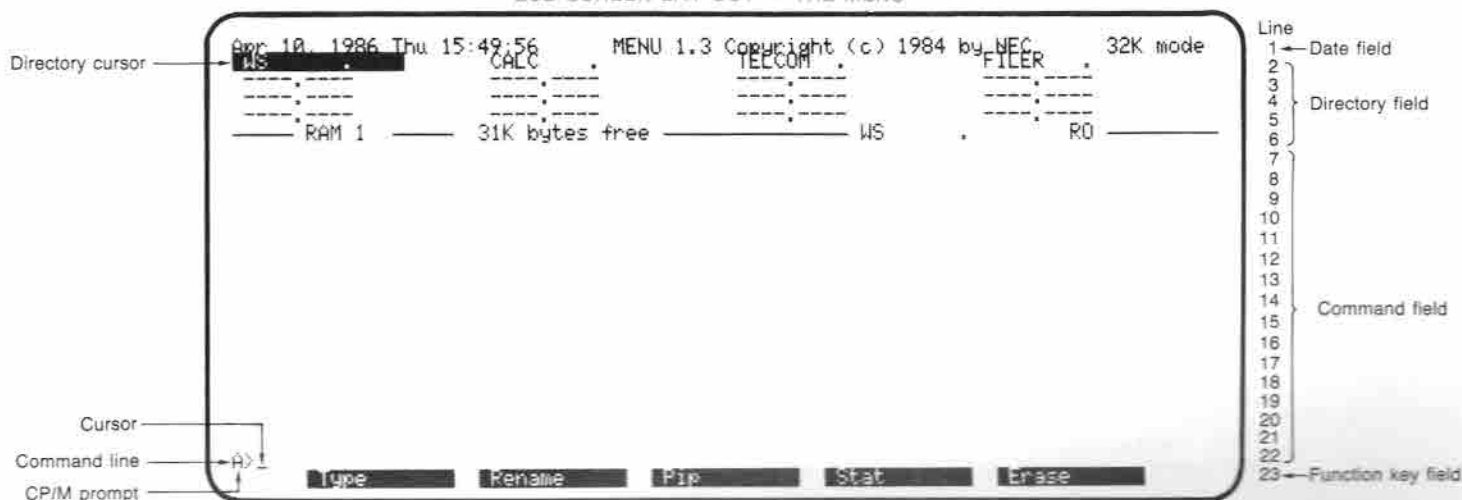
RS-232C

Connect a serial printer, an external modem or directly connect to another computer here.

The MENU of the PC-8500 is its easy way to inform you of what files are stored on its RAM disks or micro floppy disks. The MENU provides a visual interface for easy operation of the PC-8500.

Besides the four software programs built-into the ROM of the PC-8500, an operating system, CP/M, is also in the PC-8500 ROM. CP/M commands are executed from the MENU for a friendly method of computer operation.

LCD SCREEN LAY-OUT — THE MENU



MENU KEY OPERATIONS

Some of the key operations in the PC-8500 MENU can be performed in more than one way. The alternative method is listed below the main method in parentheses.



Moves the directory cursor to select a filename on the directory field.

(**SPACE**)



The return key can be used in several ways.

(**CTRL M**)

1. Moves the files selected by the directory cursor to the command line.
2. Input of this key again executes the file on the command line.
3. Executes a command or program typed in from the keyboard.

INS/DEL

(**CTRL H**)

Deletes the previous keystroke from the command line.

STOP

(**CTRL C**)

Warm Boot. Be sure to perform a warm boot when swapping floppy disks.

CTRL L

Clears the command field screen. Works only when no characters are typed on the command line.

CTRL U

Cancels a command line and moves the cursor to the next line. To return to the A> prompt, must be followed by **CTRL L** or **CTRL C**.

CTRL P

Printer echo ON/OFF toggle switch. Printer can also be turned OFF by **CTRL C**.

CTRL S

Temporarily stops the display on the screen. Program execution resumes when **CTRL S** is typed again.

VIEWING THE DIRECTORY FIELD FROM THE MENU

The directory field can display 16 filenames at one time. If you're storing files on either the internal RAM disk or an external RAM disk, you can save a maximum of 31 files. If you're storing files on the micro floppy disk drive, you can save a maximum of 128 files.

If more than 16 files are saved on the current logged drive, you must scroll the directory field to view all the files. Use or **SPACE** to scroll the directory field.

FUNCTION KEY COMMANDS

Most of these commands are executed by typing the function key and then **↵**. Some may require arguments.

Main Function Keys and Sub Function Keys

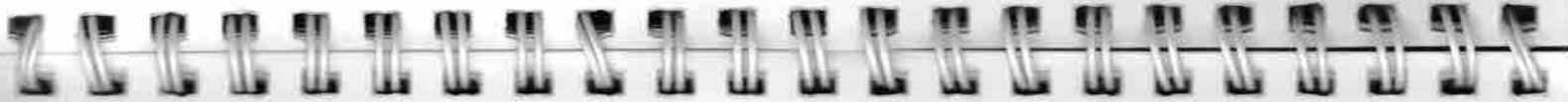
- Type **F-1**
- Rename **F-2**
- Pip **F-3**
- Stat **F-4**
- Erase **F-5**
- Key **F-6**
- Option **F-7**

- Time **F-1**
- Power **F-2**
- Set IPL **F-3**
- Mode **F-4**
- Screen **F-5**
- Wakeup **F-6**
- Sleep **F-7**
- Printer S/P **F-8**
- Termttype **F-9**
- Exit **F-10**

- Print **F-8**
- Submit **F-9**
- Format **F-10**

Function Key Command Summary

Type F-1	Type filename, EXT	Display ASCII file from current disk onto the screen
	Type d:filename, EXT	Display ASCII file from designated disk onto the screen
Rename F-2	Ren(ame)newname,EXT = oldname,EXT	Rename file on current disk
	Ren(ame)d:newname,EXT = oldname,EXT	Rename file on designated disk
Pip F-3	Pip d: = s:filename,EXT	Copy named file from s: disk to d: disk
	Pip d:newname,EXT = s:oldname,EXT	Copy & change filename from s: disk to d: disk
	Pip d: = s:* *	Copy all files from s: disk to d: disk
	Pip newfile,EXT = file1,EXT, file2,EXT	Join file1,EXT and file2,EXT and copy to the named newfile,EXT
	Pip cas: = filename,EXT	Copy filename,EXT to cassette tape at 1200 baud
	Pip cas1: = filename,EXT	Copy filename,EXT to cassette tape at 1200 baud
	Pip cas2: = filename,EXT	Copy filename,EXT to cassette tape at 600 baud
	Pip d: = cas1: * *	Load all files on cassette tape to



Pip /v cas: = * *

Stat **F-4**
Stat (d:)

Stat (d:) filename, EXT

Stat (d:) * *

Stat R/O

Stat filename,EXT \$R/O
Stat filename,EXT \$R/W

Erase (can use all wild cards) **F-5**

Era(se) filename, EXT

Era(se) * *

Era(se) *.EXT

Era(se) d:filename,EXT

Era(se) filename. *

designated disk at 1200 baud (stop by typing **STOP**).

Verify that all files on cassette tape are the same as the current disk files they were copied from.

Display status (R/W or R/O) and available disk space of designated disk and the currently logged disk.

Display the size and status of filename,EXT

Display the size and status of all files on the designated disk.

Change designated disk to Read-Only status.

Change named file to Read-Only status.

Change named file to Read-Write Status.

Erase named file on current disk.

Erase all files on current disk.

Erase all files with designated extension.

Erase all files on designated disk with designated extension.

Erase all files with designated filename on current disk.

Key **F-6**

Turn ON/OFF function key display. Key command is a toggle switch.

Print **F-8**

Print filename,EXT
Print d:filename,EXT

Printout named file from current disk.
Printout named file from designated disk.

Submit **F-9**

Submit (d:)filename

Execute commands in the designated submit file. Like batch processing. Submit file should have "SUB" extension.

Format

Format the specified disk (dis: RAM disks, micro floppy disks). Operate according to the message.

Option **F-7**

10 optional subcommands are available under this command.

TIME **OPT>** **F-1**

Set the new date, day of the week and time.

Power **OPT>** **F-2**

Set the "Auto Power Off Time" interval.

SetIPL **OPT>** **F-3**

Set IPL command (initial program load).

Mode **OPT>** **F-4**

Change CP/M mode to 32K or 64K.

Screen **OPT>** **F-5**

Select display console, CRT or LCD.

Wakeup **OPT>** **F-6**

Set "Wake up" time.

Sleep **OPT>** **F-7**

Enter sleep mode.

Printer S/P **OPT>** **F-8**

Select either serial or parallel printer.

Termttype **OPT>** **F-9**

Select either VT100 terminal emulation or SOROC IQ terminal emulation.

Exit **OPT>** **F-10**

Exit from Option command level.

3. PERIPHERALS

The following tables list NEC peripherals compatible with the PC-8500 and any special cabling or hardware requirements.

PERIPHERALS COMPATIBLE WITH PC-8500

Special Requirements:

Power Supply

PC-8471A-01	AC Adapter for PC-8500	Included with the PC-8500
PC-8271A-06	AC Adapter for PC-8441A-K or PC-8461A	Included with PC-8441A-K and PC-8461A.

Disk Unit

PC-8431A	Micro Floppy Disk Unit	CRT/Disk Adapter (PC-8441A-K) is necessary. Utility disk (PC-8434A) and cable (PC-8498A) are included with the PC-8431A.
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RAM Cartridge

PC-8406A	32K byte RAM cartridge	No special requirements.
PC-8407A	128K byte RAM cartridge	

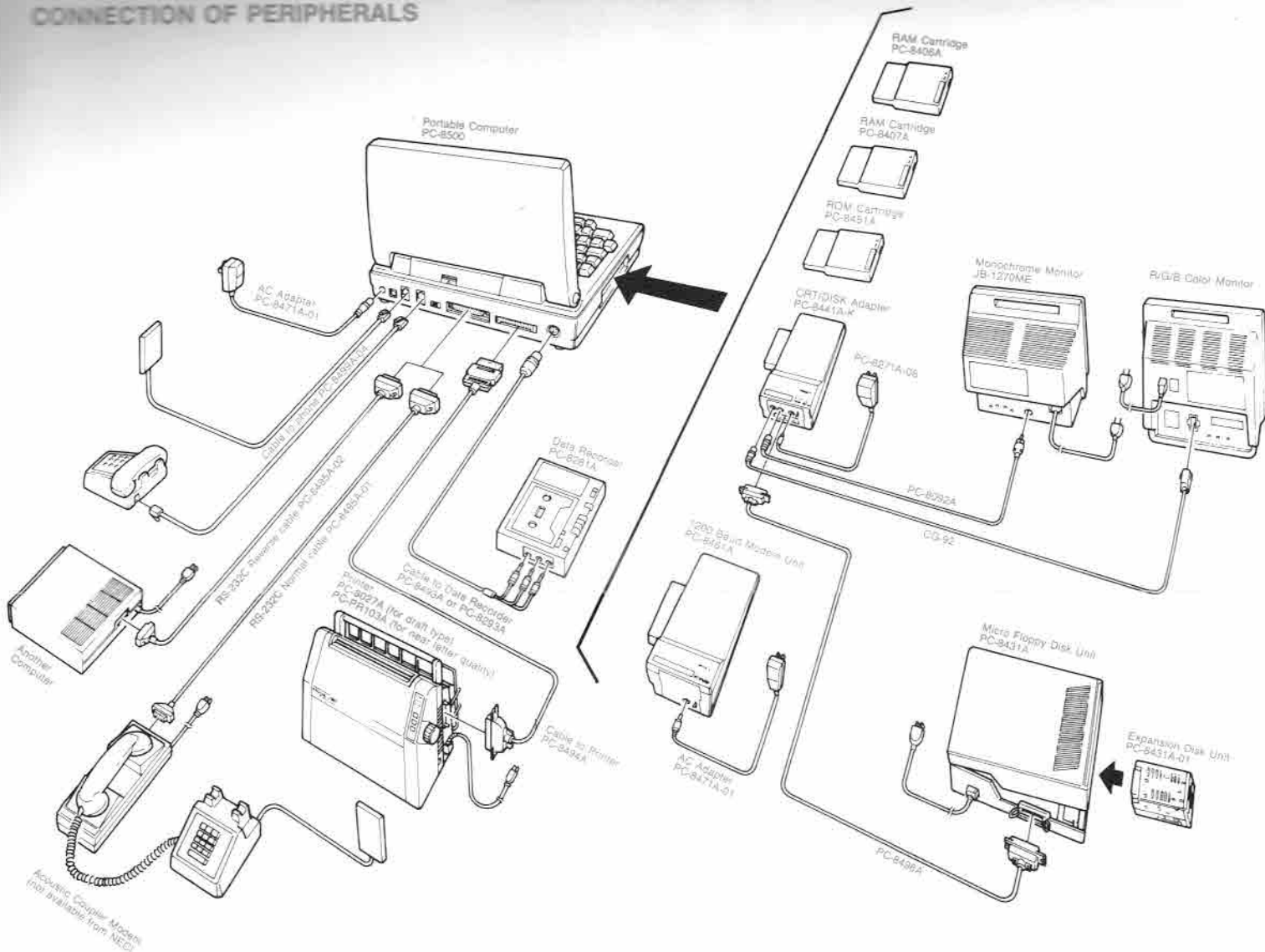
Date Recorders

PC-8281A	Battery Operated Portable Data Recorder	Cable (PC-8293A) included with the PC-8500.
PC-6082A	Cassette Data Recorder	

NEC Parallel Printers

PC-PR103A	Tri Mode Dot Matrix Printer	Cable (PC-8494A) necessary.
PC-PR105A	Tri Mode Dot Matrix Printer	
PC-8023A-N	80 Column Dot Matrix Printer	
PC-8025A	136 Column Dot Matrix Printer	
PC-8027A	80 Column Transportable Printer	Cable included with PC-8221A.
PC-8221A	Battery Operated Thermal Printer	

CONNECTION OF PERIPHERALS



NEC SpinWriter Series Parallel Interface Printers

Model 3530	3500 Series Letter Quality Printer	} Cable (PC-8494A) necessary
Model 3550	IBM Compatible 3500 Series Letter Quality Printer	
Model 2030	2000 Series Letter Quality Printer	
Model 2050	IBM Compatible 2000 Series Letter Quality Printer	

NEC Monochrome Monitors

JB-1270MA	12 inch green with dark bulb	} CRT/Disk Adapter (PC-8441A-K) required. Cable (PC-8092A) included with PC-8441A-K.
JB-1275MA	12 inch amber with dark bulb	
JB-1201MA	12 inch green	
JB-1205MA	12 inch amber	
JB-1260MA	12 inch affordable green	

NEC R/G/B Color Monitors (Recommended Models)

JC-1203DHA	12 inch high resolution	} CRT/Disk Adapter (PC-8441A-K) and Cable (CG-92) required.
JC-1216DFA	12 inch affordable high resolution	
JC-1460DA	14 inch medium resolution	
CT-1305A	13 inch R/G/B monitor & component TV	

For Telecommunications

PC-8461A	1200 baud Modem Unit	} Optional Included with the PC-8500.
PC-8495A-01	RS-232C Cable (normal)	
PC-8495A-02	RS-232C Cable (reverse)	
PC-8499A-04	Phone Cable	

4. WORDSTAR-TO-GO

NOTE: Be sure the file storage area you are using is formatted if you are using your PC-8500 for the first time. Refer to Chapter 2.5 of the PC-8500 *User's Guide* for this information.

STARTING WORDSTAR-TO-GO — OPENING AND SAVING A FILE

OPEN A FILE

WordStar-To-Go is stored under the filename WS in the directory field of the PC-8500 MENU. Move the directory cursor over the name WS

using **⌘** or **SPACE**. Then type **↵**. The WS string will appear following the A> prompt on the command line.

If **↵** is typed again, the WordStar-To-Go program will start. To open a document file from within the program, type **D** at the OPENING MENU and enter a filename at the prompt NAME OF FILE TO EDIT?. A filename is 1-8 letters or digits followed by an optional period and an optional 1-3 letter extension.

To open a non-document file, type **N** at the OPENING MENU and enter a filename at the prompt NAME OF FILE TO EDIT?.

A file can be opened on a drive other than the currently logged drive by typing a drive designator before the filename.

A file can be opened by typing the filename on the command line next to the WS string.

If the file has a .DOC extension you can open the file directly by placing the directory cursor over the filename and typing **↵** twice. WordStar-To-Go will start and the selected file will open automatically.

SAVE A FILE

To save a file and resume working in the same file, type **CTRL K S**. The file is saved and the file stays open. To move the cursor to the position prior to saving the file, type **CTRL Q P**.

To save a file and return to the OPENING MENU, type **CTRL K D** or **F-10**.

To save a file and return to the PC-8500 MENU, type **CTRL K X**.

To exit a file without saving any changes, type **CTRL K Q**.

WORDSTAR-TO-GO MENUS

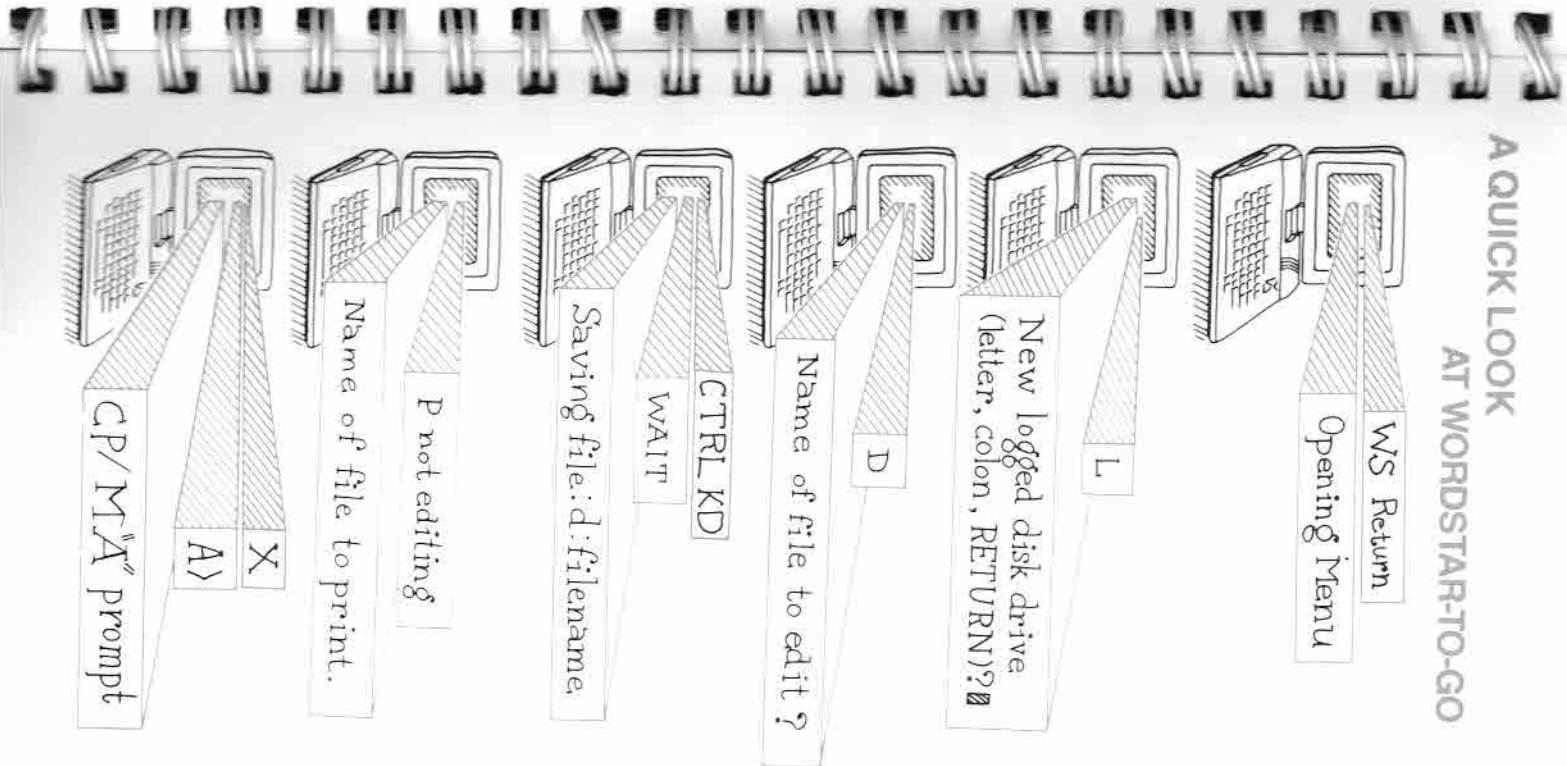
THE OPENING MENU

The first menu to appear in the WordStar-To-Go program is the OPENING MENU.

To open a new or existing file, type **D** or **N**, then type the filename at the prompt NAME OF FILE TO EDIT? and **↵**.

To change the currently logged drive, type **L**. Use **CTRL K L** to change the logged drive while editing.

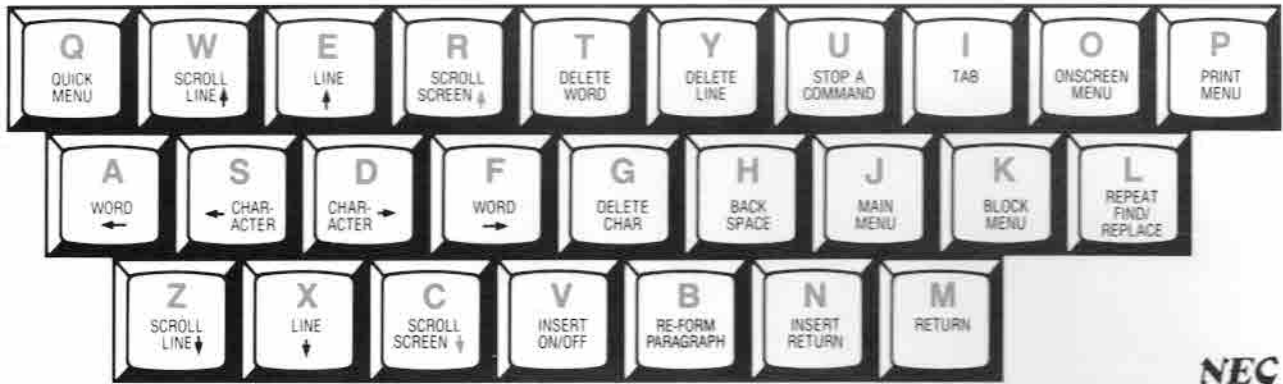
To print a file, type **P** then type the filename to print at the prompt NAME OF FILE TO PRINT? and **↵**. Or type **CTRL K P** to print one file while editing another.



A QUICK LOOK
AT WORDSTAR-TO-GO

WORDSTAR-TO-GO™

MAIN MENU COMMAND KEYS



NEC

MENU MAP

OPENING MENU



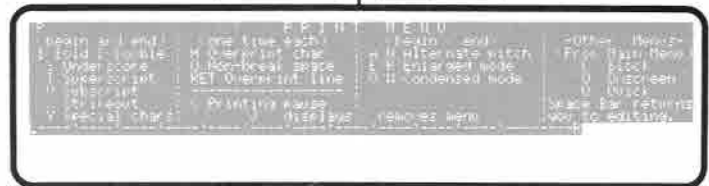
MAIN MENU



BLOCK MENU



PRINT MENU



ONSCREEN MENU



QUICK MENU



