OPERATION MANUAL
MANUAL DE OPERACION

CASIO PF-8000

CASIO®

Dear customer,

Thank you very much for purchasing the Casio PF-8000.
This is a highly portable 10-digit electronic calculator capable of storage/recall
in the two separate categories, namely, telephone numbers and memorandum.
Please read this instruction manual carefully so that you can fully understand
each of the calculator's functions and handle it properly.

*Special care should be taken not to damage the unit by bending or drop-
ping. For example, do not carry it in your hip pocket.*

CONTENTS

CONTENTS

Prior to Use

This calculator has been manufactured using Casio's advanced electronics technology under strict quality control conditions.

■Use precautions

- This calculator is composed of precision electronic components. Never attempt to take it apart. Avoid shock such as throwing or dropping. Do not subject it to sudden temperature changes. Do not leave or store it in hot, humid or dusty places. At low temperatures the display may have a slower response or fail to light up. It will return to normal when the temperature becomes normal.
- Replace the batteries at least every 2 years even when the calculator is not used. Do not leave old batteries in place since the electrolyte may leak out and cause damage.
- Avoid using thinner, benzine or other volatile, liquid to clean the calculator. Wipe it with a dry cloth or a cloth dipped in a neutral detergent and wrung dry.
- When strong static electricity is applied to this calculator, the display contrast may weaken or functions may not work properly. In such cases, remove and reinstall the main batteries then resume normal operation.

CAUTION: **USE FINGER ONLY**

Characters should only be drawn on the screen by finger.

Avoid using a pointed object as it could damage the screen or internal circuit.

Power Supply and Battery Replacement

The calculator uses two CR2032 lithium batteries for calculation/display. It also uses one CR1220 lithium battery for memory backup. If display contrast is low even when the contrast control (p. 8) adjusted to the maximum, it indicates that the batteries have become weak. Replace the batteries as soon as possible using the procedure described below. If the old batteries are not replaced, memory may be lost. Even when the calculator functions normally, replace batteries every 2 years.

### ■How to replace the batteries:

1. Calculation/display batteries
(1) Turn off the power switch, remove the two screws on the back of the unit and take off the back cover.

Please refer the figure shown below.
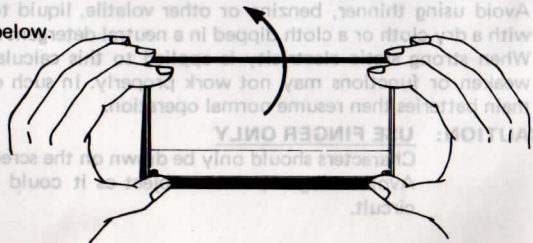
(2) Remove screw Ⓐ and remove the battery-retaining plate.
(3) Take out the both old batteries.
(4) Wipe the surfaces of the two new batteries well with a dry cloth and insert them with their (+) sides (flat sides) on top.
(5) Hold down the new batteries with the battery-retaining plate and replace screw Ⓐ .
(6) Hook the back cover claw to the main body and replace the two screws.
***Be sure to replace both batteries.**
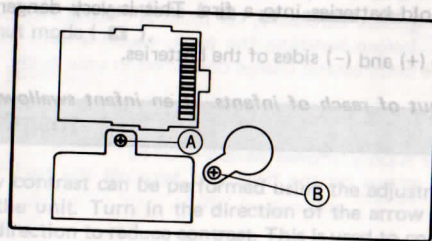
2. Memory backup battery

Turn off the power switch and follow the same procedure as in the case of main battery replacement, beginning by removing screw Ⓑ. Replace this auxiliary battery every 2 years irrespective of main battery replacement.

Note:

If the main batteries for calculation/display and the auxiliary battery for memory back up are removed at the same time, the memory contents will be lost. Be sure to keep either in place.

* Never throw the old batteries into a fire. This is very dangerous because they are likely to explode.
* Never confuse the (+) and (–) sides of the batteries.

Store the batteries out of reach of infants. If an infant swallows a battery, consult a physician at once.
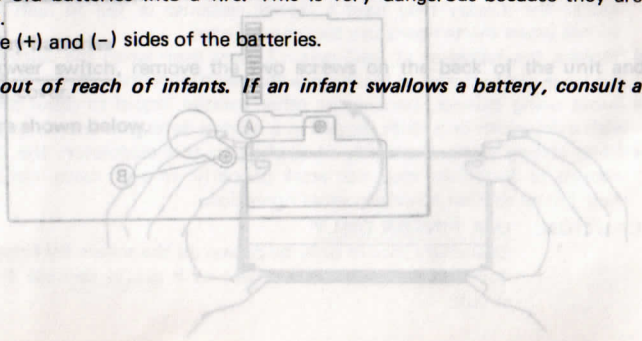
Auto Power Off

This is an automatic power saving function for preventing wasteful power consumption that will result should you forget to turn off the power switch. The power supply is automatically cut off about 6 minutes after completion of operation.
In this case, power can be resumed by pressing the $\frac{AC}{ON}$ key or turning the power switch off and then on again.

* Even when the power is off, independent memory and data memory contents are retained. However, mode designations (🔲 , 🔲 , ▆▆▆▆ , etc.) are canceled except that of the finger input mode (🔲).

Contrast Adjustment

Adjustment of display contrast can be performed using the adjustment control located on the right side of the unit. Turn in the direction of the arrow to increase contrast. Turn in the opposite direction to reduce contrast. This is used to compensate contrast of the display in accordance with battery capacity or to adjust to compensate for the viewing angle.
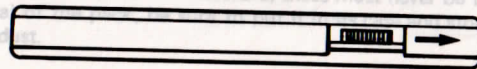
RAM Pack for Expansion (option)

The RAM area of this calculator's data memory is 929 characters (approximately 1 kilobyte), but the addition of the optional RAM Pack (OR-20) increases the area to 2977 characters (approximately 3 kilobytes).

■ How to install the RAM pack (OR-20)

<Preparation>

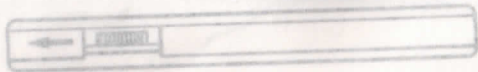If the RAM pack is handled carelessly, its internal circuit may be destroyed by static electricity. Therefore, before handling the pack, touch a door knob or other metallic object to discharge the electrostatic charge contained in your body.

<Procedure>

1) Turn off the power supply. (Power switch → OFF)
2) Remove the two screws on the back and take off the back cover. (See page 5)

3) Move the clasp of the RAM pack downward. Insert the pack in the socket of the main body and slide it in while holding the clasp.
   * Never touch the connector on PCB pad of the RAM pack.

PCB pad   Socket   Slide to secure the pack   Clasp
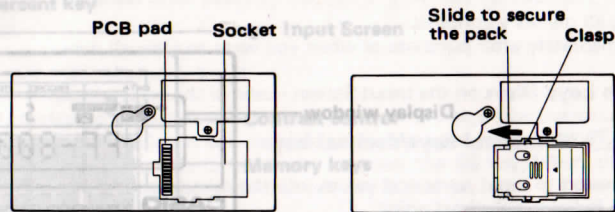
4) Screw on the back cover.
5) Press the "All Reset" button using pointed object after turning on the power switch.

   *If this button is not pressed, memory contents may be changed or a meaningless display may appear.

6) Confirm the display shows "L 2977:U 95" by pressing [COMMAND] [EXE] using the CAPACITY command (see page 46).

   * If dust, fingerprints, etc. are allowed to get onto the connector or PCB pad of the pack, poor contact may result. Therefore, these must never be touched.
   * After removal of the pack, be sure to put it in its case and store it in a place which is free from dust.
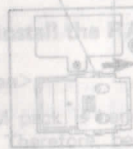
Display window
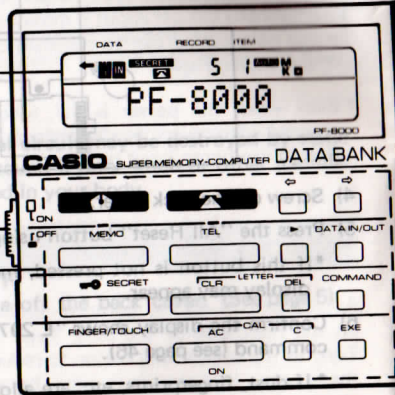
Power switch

Special operation keys

DATA   RECORD   ITEM

S I

PF-8000

PF-8000

CASIO SUPER MEMORY-COMPUTER DATA BANK

ON
OFF

MEMO   TEL   DATA IN/OUT

SECRET   CLR   LETTER   DEL   COMMAND

FINGER/TOUCH   AC   CAL   C   EXE

ON

Percent key

Finger Input Screen

INPUT

MC   MR   M-   M+

OK   7   8   9   ÷

√   4   5   6   ×

C   1   2   3   -

AC   0   ·   =   +
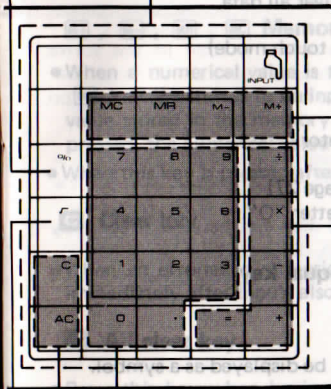
Contrast control

Memory keys

Arithmetic operation keys

All Reset button

RESET

CASIO PF-8000

Numerical keys/decimal key

Clear keys

Root key

11   12

■Nomenclature

● RESET **All reset button** (On the back panel)

- For clearing all memory contents.
- Use this immediately after purchase or when you want to clear all data.

■Calculation keys (Keys on the Input Screen - used in the touch mode)

⓪ ~ ⑨ , ⊡ **Numerical keys/decimal key**

- These are pressed to input numerical values into the calculator.
  Press ⊡ to indicate a decimal point.
- These keys are also used when a phone number is input. (Page 27)
- The ⓪ key is displayed "∅" to avoid confusion with the letter "O".

➕ , ➖ , ✖ , ➗ , �' **Arithmetic operation keys/equal key**

- Press the necessary keys for arithmetic operation.
- The ➋ key obtains an answer.
- When these are pressed after pressing the ⌫ key, each will be displayed as a symbol.
  (Page 27)

％ **Percent key**

- Press this key to percentage calculations.
- When this key is pressed after pressing the ⌫ key, it will be displayed as a symbol.

M+ , M- , MR , MC **Memory keys**

- When a numerical value is to be input into the memory as a positive value, press the M+ key. When it is to be input as a negative value, press the M- key. When a numerical value stored in the memory is to be displayed, press the MR key. When the MC key is pressed, the numerical value stored in the memory is deleted.
- When this key is pressed after pressing the ⌫ key, it will be displayed as a character.

C **Clear key**

- When an erroneous numerical value is input, it can be cleared by pressing this key immediately after input; also releases overflow or error check.

AC **All clear key**

- Press this key when beginning a calculation or when starting completely over again; also releases overflow or error check.

■ Special operation keys (Keys below the display window)

FINGER/TOUCH Finger/Touch mode key

- Finger mode (▣ mark appears) — 48 types of characters (alphabet, numerals and symbols) can be input by finger writing using the Input Screen.
  There are many kinds of writing forms in the world.
  This unit recognizes only standard alpha-numeric characters written in the forms shown on page 21.
- Touch mode (▣ mark disappears) — Numerical and arithmetic operation keys on the Input Screen can be input.
  (Symbolized here as F/T).

DATA IN/OUT Data input/output mode key

- Press this key for data storage. ▥ will be displayed and data can be input. This key is also pressed with performing data correction or deletion. (Page 35, 36)
- If this key is pressed while ▥ is displayed, ▥ will disappear and the output mode will be designated.
  (Symbolized here as DATA).

CLR Display clear key

- Press this key to clear the display.
- This key is also pressed when deleting data. (Page 36, 42)
- After this key has been pressed, arithmetic operation key input will be displayed as symbols. (Page 27)

15

↰ , ↱ Cursor keys

- Press these keys when the cursor position is to be shifted. When one of these keys is pressed once, a shift of one display location results. If it remains depressed, the shift is automatically repeated.

DEL Delete key

- Press to delete one character to the left of the blinking cursor. (Page 28)

COMMAND Command key

- Each time this key is pressed, five commands are displayed.
- When the desired command is displayed, press the EXE key and the command will be executed. (Page 46)
- In the input mode, after "BUZZER ON(OFF)" is displayed "AUTO INPUT→" and "AUTO INPUT↓" are displayed but these commands can't be executed.
  (Symbolized here as COM .)

EXE Execute key

- This key is used to execute the command specified using the COM key. (Page 46)

TEL TEL input/output key

- Press this key to input/output telephone numbers, etc. (Page 26)

16

MEMO MEMO input/output key

● Press this key to input/output schedule memos, etc. (Page 37)

→SECRET Secret key

● Press to designate the keyword for the secret area, or to designate/cancel the secret area. (Page 43)
(Symbolized here as ▭ .)

Data output key

● Press this key to output names and telephone numbers in sequence. (Page 31)

C Clear key

● When an erroneous numerical value is input, it can be cleared by pressing this key immediately after input; also releases overflow or error check. (This key can be used both in the finger mode and touch mode.)

AC All clear key

● Press this key when beginning a calculation or when starting completely over again; also releases overflow or error check. This key overrides the auto power-off function. (This key can be used both in the finger mode and touch mode.)

17

Finger Writing Function

This unit has a "FINGER WRITING" function which allows characters etc. to be outlined by finger on the Input Screen. The writing forms which allow to be recognized are shown on page 21.
Be sure to write characters covering the full area of the Finger Input Screen.

■ Usage

Example: Input character "A".
(1) Turn the power on.
(2) When ◘ mark is not lit on the display, select the finger mode by pressing F/T key.
(3) Press the CLR key.
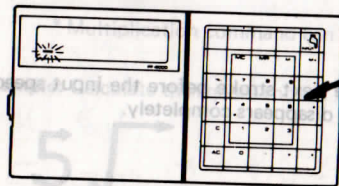
Finger Input Screen (5 X 6 matrix)

Cursor blinks at the leftmost position of the display.

* Finger input speed can be changed (see page 50).

18

(4) Write "A" by finger, covering the full area of the Finger Input Screen.
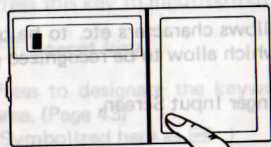
When the finger contacts the Finger Input Screen, an input speed indicator lights up.
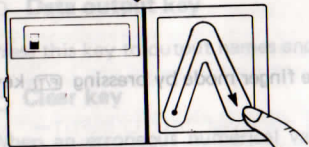
After the first stroke of "A" is written and the finger is lifted from the screen, the input speed indicator will diminish gradually.
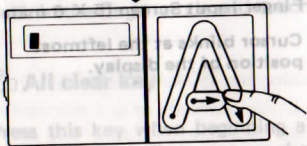
Write the next stroke before the input speed indicator disappears completely.

* Finger input speed can be changed (see page 50).

(5) "A" is displayed at the leftmost position on the display, and the cursor blinks at the next position.
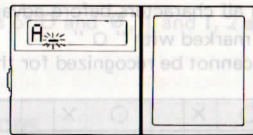
Example: Calculate 123 X 45. (Be sure to press the $\underline{AC}$ key when beginning a calculation.)

$$123 \times 45 \Rightarrow \Rightarrow \quad 5535.$$

* Multiplication command can be input as both " X " and " * ".

Example: Calculate the square root of 5 ($\sqrt{5}$).

$$5\sqrt{} \quad \Rightarrow \quad 2.236067977$$

■ Examples of pattern recognition by finger writing

There are 48 kinds of characters (alphabet, numerals and symbols) which can be input by finger writing. Practice inputting all characters before advancing to the next section.

Correct formations of characters are marked with " O ".

Be sure that the other writing forms cannot be recognized for this unit.

O	X	O	X	O	X	O	X	O	X	O	X
A	A	I	I I	Q	Q	Q Y	Y Y Y	6	6	6	÷
B B	B B	J	J	J R	R	Z	Z	7	7 7 7	·	·
C	C	K K	K K	S	S	0	0	U 8	8	=	= ⇒
D D	D D	L	L	T	T	1	1 / 1	9 9	9 %		
E E	E	M	M M	U	U	2	2	√ √	√	:	;
F F	F	N N	N	V	V V	3	3	3 +	+	(«	((
G	G	O O	O	W	W	4	4	−	−	) »	))
H H	H	P	P	X	X X	5 5	5 5	* *	*	⊔	→

Space

O — Written patterns which allow easy input of characters.
X — Written patterns which cannot be input or may be mistaken.

* Take care the difference of O and $\emptyset$, 1 and I, 2 and Z, U and V, X and $*$, space and dash.

Data Bank Functions

This calculator is capable of data storage and recall using finger input and a touch input system in the data bank function. Its functions can be separated into two classifications depending on the use.

Classification	Key used	Data storage format		Principal uses
TEL	TEL	NAME	NUMBER	● Telephone Directory
		→ Max. 253 divisions		● Address book
MEMO	MEMO	MEMO		● Appointment schedule
		→ Max. 253 divisions		● Train timetable
				● General memo

■ Data storage format

- A maximum of 60 characters can be stored on each line. (The cursor blinks up to the 55th character. After that, " ■ " begins to blink.
- The maximum number of vertical divisions in each category is 253.
- In the case of "TEL", names are automatically stored in alphabetical order.

* 929 characters (approximately 1 kilobyte) can be stored in the two categories combined (e.g., names and telephone numbers of about 50 to 60 persons).

■ How to count the number of stored characters

1) If nothing is stored in the Data Bank, it is possible to store up to 929 characters. (Page 47)
2) When storing characters (data to be stored in the memory), in the case of the TEL, MEMO areas respectively, in addition to the input characters, extra spaces are also necessary as shown below.

Data Type	Method for obtaining the number of memory spaces used.
TEL	Number of input characters + 1
MEMO	Number of input characters + 1
Keyword for the SECRET area	Number of characters – 1

Example:

TEL	ROGERS	0166-23-8581
	↑	↑
	6 Characters	12 Characters → 18 Characters + 1 = 19

for extra space

MEMO	PROFIT ␣ 30%
	↑ ↑ ↑
	6 1 3 → 10 characters + 1 = 11 characters

* The space between "PROFIT" and "30%" must also be counted.

SECRET	ABCDE
	↑
	5 → 5 characters − 1 = 4 characters

■TEL function

Permits storage of telephone numbers, addresses, etc. Up to 60 characters can be input on each data line.

<Input procedure>

(1) Select the finger mode by pressing the F/T key. " ◨ " mark appears.
(2) Select the input mode by pressing the DATA key. "◨" will be displayed.
(3) Clear the display by pressing the CLR key. The cursor will blink on the left of the display.
(4) Write a name by finger using the Input Screen. Be sure to input each characters separately.
   "NUMBER:?" will be displayed. Then input the telephone number and press the TEL key.
   Both finger input and touch input can be used for telephone numbers.
   (Operation examples here use finger input.)
(5) When the TEL key is pressed after inputting the telephone number, "NAME:?" will be displayed. Repeat the name and number for the desired number of persons.

Example: Inputting **TALBOT**   03-347-4811
                    JACKSON   0236-42-8018

<Operation>

(Input mode)

F/T DATA CLR

TALBOT | TALBOT_ |

Indicates telephone number input.

| NUMBER:? |

03→347→4811 | 03-347-4811_ |

| NAME:? |

JACKSON | JACKSON_ |

| NUMBER:? |

"⟵" indicates that 12 digits or more have been input.

0236→42→8018 | 236-42-8018_ |

Press ⊙ to confirm undisplayed portions. (If this key remains depressed, automatic shift will result.)

⊙ | 0236-42-8018→ |

TEL | NAME:? |

— ◨ and ◨ light up.
  Make sure to be in the finger mode.

— Name input. (Finger mode)

— The number of RECORD indicates the numbers of data (in this case, the number of names).
  For the number of ITEM 1 indicates the name and 2 indicates the telephone number.

— The name of the next person is requested. The "2" indicates that this is the second person's name input.

— In this example, after name input, the RECORD number will change to a "1" due to automatic sorting in alphabetical sequence.

— Indicates nondisplayed characters exist to the right of the currently displayed characters.

— The character in the last display location blinks.

— Operation so far has resulted in the storage of the telephone numbers of two persons. ⊙

* Telephone numbers can also be input in the touch mode.
Another operation for the number mentioned just before.
(Input mode)

(F/T)(CLR)0236■42■8018   236-42-8018_

Make sure to be in the touch mode.
In this case the "■" (minus sign) is used as a dash.

NAME:?

* To cancel the input mode, press the [DATA] key.

Example: Inputting BRANES, DAVID: 1000 PARK AVE, LONDON
(Input mode)
(F/T)(DATA)(CLR)

■ and ■ lights up.
Make sure to be the finger mode.

–

BRANES→DAVID   RANES DAVID_
Space

To insert a space, input a straight line "→" at the lowest or second lowest line of the matrix on the Input Screen.

(TEL)   NUMBER:?

10000→   10000_

"10000" is input by mistake.

PARK→AVE.LONDON   AVE.LONDON_

Return cursor to the home position to perform confirmation

(←...→)   10000 PARK A→

Replace "10000" with "1000".

(→→→→→)   10000_PARK A→

Move the cursor to the right of the location of the desired deletion.

(DEL)   1000_PARK AV

Press (DEL) and ∅ of the left of the cursor will be deleted.

(→...→)   LONDON_

Shift the display to the right while confirming the contents of the entry.

(TEL)   NAME:?

Input complete.

* To revise which has been input prior to pressing the (TEL) key, simply press (CLR) and reinput the data.
* When all data has been input, press (TEL) for confirmation. For correction of stored data, see page 35.

<Output procedure>

● Prior to output

First press the "All Reset" button, then designate the finger mode and input mode (▣ and ▣ will be displayed) and input the following list.
(Since the "All Reset" button erases all data, do not press it if data is already stored which you want to retain. Here this button is pressed only as an example.)

⓪	NAME	NUMBER
①	JONES, BOB	045-211-0821
②	ELLIS, MIKE	0236-42-8018
③	YOUNG, JIM	03-347-4811
④	BROWN, JANE	06-314-2681
⑤	WATTS, GAIL	011-231-2343
⑥	ELLIS, JAN	03-862-4141
⑦	SULLIVAN, ELIZABETH	075-351-1161
⑧	HOYT, MARY	092-411-2684
⑨	SMITH, JOHN	0992-56-3575
⑩	MILLS, PAUL	06-362-8182

When all the names and telephone numbers have been input, press the ▣ key to switch to the output mode. The following explanation assume that the list shown above has been input.

There are three output methods:

(1) Sequential search　　**(2) Direct search**　　**(3) Initial search**

29

---

(1) Sequential search

Press the ⊡ key and the names will be recalled sequentially from the beginning. When the display reaches the last name, it returns to the beginning. Since the names have been automatically sorted in alphabetical order, they are displayed as follows:

① - ④ - ⑥ ······ ⑦ - ⑤ - ③ - ⓪

Press ▷ when reaching a name whose number you want to know, and the number will be displayed.

Example:　Recalling the telephone number for SMITH, JOHN.

(Output mode)

AC	▣ 0 1 ‾‾‾‾‾ 0	— Select ITEM number 1.
TEL	▣ 0 1 ‾‾‾ NAME	— Indicates that a name will be displayed.
TEL	▣ 1 1 ‾‾‾ BROWN JANE	— Indicates display of first name. — Display of the first name stored in alphabetical order.
TEL	▣ 2 1 ‾‾‾ ELLIS JAN	
TEL	▣ 3 1 ‾‾‾ ELLIS MIKE	— In this case of persons with the same last name, their order is determined by the initial letters of their first names.

30

TEL `[🔲 ↓ ⁴¹ ]` `HOYT MARY`

TEL `[🔲 ↓ ⁵¹ ]` `JONES BOB`

TEL `[🔲 ↓ ⁶¹ ]` `MILLS PAUL`

TEL `[🔲 ↓ ⁷¹ ]` `SMITH JOHN` ──── **Indicates the seventh name stored.**
Display of the name whose telephone number is desired.

▶ `[🔲 ↓ ⁷² ]` `0992-56-3575` ──── **Indicates the telephone number for the seventh name.**
Display of the telephone number for SMITH JOHN.

* For name recall, perform after pressing ⏚ᴬᶜ and TEL and designating ITEM 1.

● Data output key ▶ can be used to search for a name and number in normal alphabetical order.

TEL▶ : The number is recalled after the name display and then the next name is displayed, and so on.

31

---

(2) Direct search

Press the TEL key after inputting a name and the telephone number will be displayed.

Example:

What is the telephone number for HOYT, MARY?
What is the telephone number for JONES, BOB?

(Output mode)

⏚ᴬᶜ TEL (F/T) `[🔲 🔲 ↓ ⁰¹ ]` `NAME` ──── **Be sure to designate ITEM No. 1.**
Make sure to be in the finger mode.

HŌYT⇒MARY `[🔲 🔲 ↓ ⁰¹ ]` `HOYT MARY_`

TEL `[🔲 🔲 ↓ ⁴² ]` `092-411-2684`

⏚ᴬᶜ TEL `[🔲 🔲 ↓ ⁰¹ ]` `NAME` ──── **Use the ⏚ᴬᶜ key below the display window in the finger mode.**

JŌNES⇒BŌB TEL `[🔲 🔲 ↓ ⁵² ]` `045-211-0821`

32

(3) Initial search

When the initial letter of a stored name is input, the first stored name containing that letter is displayed. This comes in handy when the name is long or when many names are stored.

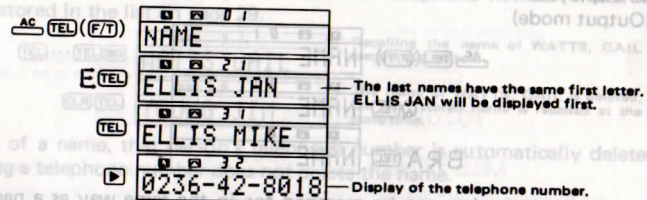**Example:** What is the telephone number for MILLS, PAUL?

(Output mode)

AC TEL (F/T)

⊡ ⊡ 0 1
NAME
— Be sure to designate ITEM No. 1.

M

⊡ ⊡ 0 1
M_

TEL

⊡ ⊡ 6 1
MILLS PAUL
— Display of a name with the first letter "M".

▶

⊡ ⊡ 6 2
06-362-8182
— Display of the telephone number.
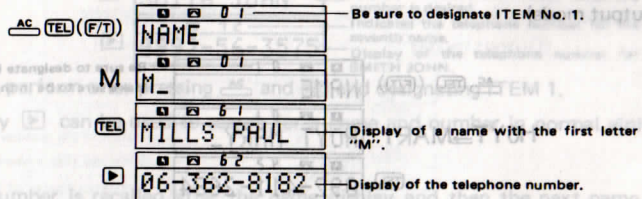
* If more than one name has the same first letters, search is performed based on the alphabetical order of the second letters.

Example: What is the telephone number for ELLIS, MIKE?

(Output mode)

AC TEL (F/T)

⊡ ⊡ 0 1
NAME

E TEL

⊡ ⊡ 2 1
ELLIS JAN
— The last names have the same first letter. ELLIS JAN will be displayed first.

TEL

⊡ ⊡ 3 1
ELLIS MIKE

▶

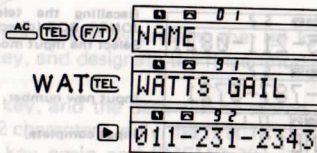| ⊡ ⊡ 3 2 |
|---|
| 0236-42-8018 |
— Display of the telephone number.

* 2 or more letters can be input to search a stored name.

Example: What is the telephone number for WATTS, GAIL?

(Output mode)

AC TEL (F/T)

⊡ ⊡ 0 1
NAME

WAT TEL

⊡ ⊡ 9 1
WATTS GAIL

▶

⊡ ⊡ 9 2
011-231-2343

* If the initial is not stored, or if the wrong spelling is input, nothing but "NAME" will be displayed.

(Output mode)

⏚AC TEL F/T │NAME░░01░░│ (TEL)GFT╌AC

Q TEL │NAME░░01░░│

BRA TEL │NAME░░01░░│

* A telephone number can be searched for in the same way as a name by designating ITEM 2.

■Correction of the stored data

Example: Correct the telephone number for JONES, BOB which has been stored in the list on page 29.

CLR (F/T) JŌNES→BŌB TEL MTA │045-211-0821│ — Recalling the telephone number for JONES, BOB (direct search). Select the input mode.

03→787→3721 │03-787-3721│ — Input new number.

TEL │NAME:?│ — Input complete.

* Input data is confirmed by pressing TEL key.

35

■Deletion of the stored data

Example: Delete the name of WATTS, GAIL and her telephone number which has been stored in the list on page 29.

(Input mode) TEL ⋯ TEL MTA │WATTS GAIL│ — Recalling the name of WATTS, GAIL (sequential search).

CLR TEL │YOUNG JIM│ — The name of WATTS, GAIL is deleted, the next stored name is recalled at the same time.

* By the deletion of a name, that person's telephone number is automatically deleted. However, deleting a telephone number does not delete the name.

■MEMO function

● This function makes possible the storage of appointment schedules, train timetables, etc. A maximum of 60 characters can be input for each data item and a maximum of 253 data items can be stored.

<Input procedure>

(1) Designate the input mode by pressing the MTA key.
(2) Press the CLR key, and designate the finger mode by pressing F/T key.
(3) Input the data.
(4) Press the MEMO key, and the data will be stored and the cursor will disappear. If the data exceeds 12 characters, only the first 12 characters will be displayed.
(5) Press the MEMO key again and "MEMO:?" will be displayed indicating readiness to accept the next data input.
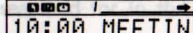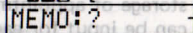
36

Example: Inputting a 10:00 MEETING.
(Input mode)

F/T DATA CLR

Clear the display.
Make sure to be in the finger mode.

10:00

10:00 _

MEETING

:00 MEETING_
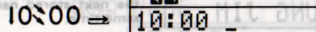
Indicates "MEMO" input.

MEMO

10:00 MEETIN

1 indicates first data record.
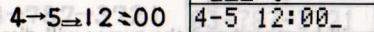Input complete.

(MEMO)

MEMO:?

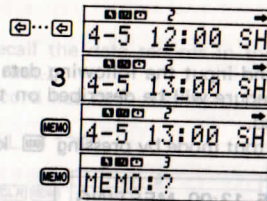Request for the next data item.

This key operation can be omitted.

● When input data contains many characters, revisions can be made without using CLR .

Example: 4—5 13:00 SHOPPING
Continuing from the above operation.

4→5→12→00

4-5 12:00_

"12" is input by mistake.

→SHOPPING

00 SHOPPING_

⊕···⊕

4-5 12:00 SH
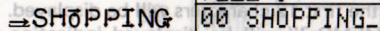
Move the cursor to the point of revision.

3

4-5 13:00 SH

Input the correct character.

MEMO

4-5 13:00 SH

Input complete.

MEMO

MEMO:?

* DEL deletes one character to the left of the cursor.
* For deletion of data which has been stored by pressing the MEMO key, see page 42.

<Output procedure>

● Prior to output

First press the "All Reset" button and input the following data in the same way as described on page 36. The output procedure will be described on the assumption that the following data has already been stored.

After inputting all data, select the output mode by pressing [DATA] key.

| 8–25 13:00 MEETING |
| TRAIN TIMETABLE |
| 17: 10 30 50 |
| 18: 15 30 45 |
| 19: 10 35 |
| 20: 00 40 |
| SALES 1700 |
| PROFIT 30% |

There are two output methods.

(1) Sequential search
(2) Spelling search

---

(1) Sequential search

● Use the [MEMO] key to recall the data records in the order in which they were input. ("MEMO" is displayed first.)

● When the last data record has been displayed, the display returns to the first data record.

Example: Display of SALES 1700

(Output mode)

[CLR] [MEMO]   `MEMO`   First "MEMO" is displayed.

[MEMO]   `8-25 13:00 M`   "1" indicates the first data record.

[MEMO]   `TRAIN TIMETA`   Second data record.

[MEMO]   `17: 10 30 50`

[MEMO]   `18: 15 30 45`

[MEMO]   `19: 10 35`

[MEMO]   `20: 00 40`

[MEMO]   `SALES 1700`   Indicates the seventh data record stored.

● The same displays can be obtained by pressing [MEMO] [▶].

(2) Spelling search

Press MEMO after inputting the first character and the first data item record which begins with that input character will be displayed.

Example: Display of TRAIN TIMETABLE.

(Output mode)

(F/T) CLR MEMO	MEMO
	T_
MEMO	TRAIN TIMETA

Make sure to be in the finger mode. "MEMO" is displayed.

Input of initial letter.

Example: Display of train timetable between 18:00 and 18:59

(Output mode)

(F/T) CLR MEMO	MEMO
I 8	18_
MEMO	18: 15 30 45

● When two or more data item records have the same initial letter, the one input first will be recalled.

Example:
(Output mode)

(F/T) CLR MEMO	MEMO
I MEMO	17:00 30 50

Third item record.

● Operate I MEMO again and the nearest data item record which begins with a "1" will be displayed.

I MEMO	18: 15 30 45

In this case, item record 4 is the next data item record which begins with a "1", so it is displayed.

* If no item containing that initial number or letter has been input, only "MEMO" will be displayed.

■ Deletion of the stored data

Example: Delete the train timetable between 18:00 and 18:59 which has been stored in the list on page 39.

(Input mode)

DATA MEMO ··· MEMO	18: 15 30 45
CLR MEMO	19: 10 35

Select the input mode.

Recalling the train timetable between 18:00 and 18:59

The train timetable between 18:00 and 18:59 is deleted, and the next stored data is recalled.

■ SECRET function

When it is undesirable for stored data to become known to others, it can be stored in a special secret area with a keyword attached. This is an information protection function used so that people who do not know the keyword cannot see the contents of this data.

<How to store the secret keyword>

1) Select the input mode (**IN** mode).
2) Input the keyword containing from 1 to 60 letters.
3) Press the **→** key.

* After storing a keyword it can't be changed except by pressing All Reset button.

Example: Store the keyword "CASIO".
(Input mode)

(F/T) CLR DATA   Make sure to be in the finger mode.

CASIŌ   Keyword input.

→   SECRET symbol lights.
Indiates that the keyword "CASIO" has been stored.

After this operation, the keyword becomes "CASIO".

● After storing a keyword to designate a secret area, data can be input into that area using the **TEL** , **MEMO** keys.

Example: Store the telephone number for GILBERT in the secret area.

Continuing from the last operation
(Input mode)

GILBERT **TEL**   NUMBER: ?   Name input.

03→347→4837 **TEL**   NAME: ?   Telephone number input.

→   Removal from the secret area.

DATA   Switch to the output mode.

* Removal from the secret area can be done both in the input mode and output mode.
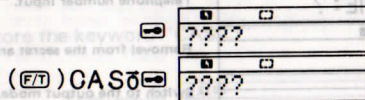
After designating the secret area by recalling the keyword, data in the secret area can be recalled.

Example: Recalling the telephone number for GILBERT in the secret area.
(Output mode)

(F/T)CASIŌ⊟ 　`CASIO`

GILBERT⒯ 　`03-347-4837`

* The secret area will not be designated if the ⊟ key is pressed without inputting a keyword, or if the keyword is incorrect.

Example:

⊟ 　`????`

(F/T)CASŌ⊟ 　`????`

* Two or more keyword cannot be stored at the same time.

45

■COMMAND function

The five COMMAND functions are as follows:
(1) **CAPACITY command:** Indicates the number of characters in the Data Bank plus the number of characters being used.
(2) **AUTO DISP → command:** The data in TEL or MEMO are automatically displayed in the → direction.
(3) **AUTO DISP ↓ command:** The data in TEL or MEMO are automatically displayed in the ↓ direction.
(4) **FINGER SPEED command:** In the finger mode, designates the finger input speed. There are 9 levels for finger input speed.
(5) **BUZZER command:** Turns the key sound on or off.

(1) CAPACITY command

● Displays the number of character storage space remaining in the Data Bank and that in use. This is useful for knowing how much data can be input. This command can be used both in the input and output mode.

CW 　`CAPACITY`
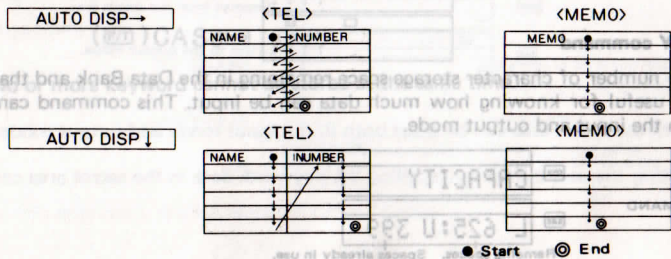
To execute COMMAND
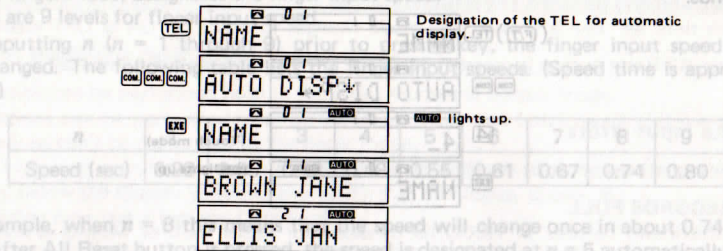press ⎕ key. EXE 　`L 625:U 399`
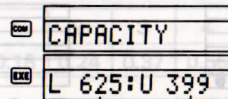
Remaing spaces.　Spaces already in use.

46

* In a unit without an optional RAM pack, L and U become 1024 when added together.
* If no data is being stored (after RESET), the CAPACITY command display will show L 929: U 95 (L 2977: U 95 with optional RAM pack). This U figure of 95, represents the amount of space required to handle TEL, MEMO etc. Accordingly, after any data input, the figure which subtract 95 from the figure of U will be the number of characters of stored data.

(2) AUTO DISP ➡ command
AUTO DISP ↓ command

* These commands can be used both in the input mode and output mode.
* The display of AUTO DISP➡and AUTO DISP↓ are as shown in the following diagram:

AUTO DISP→

<TEL>

NAME	● → NUMBER

<MEMO>

MEMO

AUTO DISP ↓

<TEL>

NAME	●	NUMBER

<MEMO>

● Start   ◎ End

Example:

|	☐ 0 1	
(TEL)	NAME	Designation of the TEL for automatic display.
(COM)(COM)(COM)	☐ 0 1 AUTO DISP↓	
(EXE)	☐ 0 1 AUTO NAME	AUTO lights up.
	☐ 1 1 AUTO BROWN JANE	
	☐ 2 1 AUTO ELLIS JAN	

The data will be displayed automatically.

* By inputting *n* (*n* = 1 through 9) prior to pressing the (EXE) key, the display speed can be changed. The following table lists the display speed. (Here speed time is approximate.)

n	1	2	3	4	5	6	7	8	9
Speed (sec.)	0.18	0.24	0.37	0.55	0.79	1.16	1.7	2.56	3.84

For example, when $n = 4$, this means that the display will change once in about 0.55 seconds.

(F/T)(TEL)｜NAME
(COM)(COM)｜AUTO DISP→
④｜4_　　　(Touch mode)
(EXE)｜NAME　　AUTO lights up.
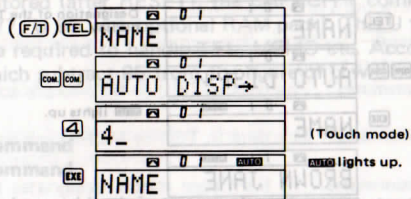
In cases where "n" has been omitted or where "0" or a letter of the alphabet has been input, the display occurs at the same speed as when $n = 6$. If "n" occupies more than two places, the speed will be determined by the first digit of that number only. ($n = 1$ and $n = 123$ will produce the same display speed.)

* While the AUTO DISP→ ($\downarrow$) command is in operation, the display can be stopped temporarily by pressing the (EXE)key. Operation can be continued by simply pressing the (EXE)key once more.

---

(3) FINGER SPEED command
● In the finger mode, designates the finger input speed.
There are 9 levels for finger input speed.
* By inputting n ($n = 1$ through 9) prior to press (EXE) key, the finger input speed can be changed. The following table lists the finger input speeds. (Speed time is approximate.)

n	1	2	3	4	5	6	7	8	9
Speed (sec)	0.29	0.35	0.42	0.48	0.55	0.61	0.67	0.74	0.80

For example, when $n = 8$ this means that the speed will change once in about 0.74 seconds. After All Reset button is pressed, the speed is designated at $n = 5$ automatically.

(F/T)(TEL)(COM)···(COM)｜FINGER SPEED
⑧｜8_　　　(Touch mode)
(EXE)｜SPEED=8
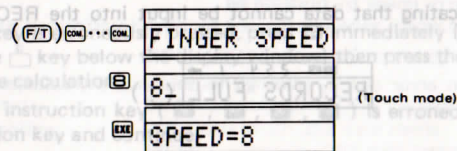
In cases where "n" has been omitted or where "0" or a letter of the alphabet has been input, the previous set speed will not change.
If "n" occupies more than two places, the speed will be determined by the first digit of that number only. ($n = 1$ and $n = 123$ will produce the same speed.)

(4) BUZZER command

- This command turns the key sound on or off.
  Each time 🔲 key is pressed, the mode changes to BUZZER ON or OFF alternately.
- After All Reset button is pressed, BUZZER OFF is designated automatically.

■ Data input errors

Errors sometimes occur in the Data Bank at the time of input.

(1) RECORDS FULL

The maximum number of RECORD divisions for either TEL or MEMO is 253. If an attempt is made to input a 254th RECORD division, the unit displays a "RECORDS FULL!" warning, indicating that data cannot be input into the RECORD above this number.

(Display)

```
   ━━ 254 1 →
RECORDS FULL ( ! )
```

(2) DATA FULL

The total combined memory capacity for TEL and MEMO is 929 characters. If an attempt is made to input over that amount, the unit displays a "DATA FULL!" warning, indicating that input over this amount cannot be made.

(Display)

```
DATA FULL!
```

51

■ Prior to beginning calculation

- Calculation can be performed both in the input mode and output mode.
- Calculations can be performed both in the finger mode and touch mode. But memory calculations can't be performed in the finger mode.
- When beginning calculation, press the 🔲 key (in the finger mode, be sure to press the ⎯ᴬᶜ key below the display window) and verify that the display shows 0 .
- Calculation does not affect the Data Bank.

■ Corrections

- If a numerical key is erroneously pressed, press 🔲 immediately (in the finger mode, be sure to press the ⎯ᶜ key below the display window) then press the correct numerial key and continue the calculation.
- If a calculation instruction key (🔲 , 🔲 , 🔲 , 🔲) is erroneously pressed, press the correct instruction key and continue.
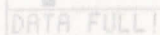
52

■Error check

If a calculation contains an excessive number of digits, "E" will be displayed and further calculation cannot be made (error check).

■Error occurs:

1. When the integer portion of the intermediate or final result exceeds 10 digits. In this event, the numerical value displayed along with the "E" is the approximate answer with the decimal point shown 10 positions to the left of the actual decimal point.
2. When the integer portion in the independent memory exceeds 10 digits. In this event, the numerical value just prior to the overflow will remain. To recall it, press MR after releasing the error check by pressing C.
3. When a calculation in which a value is divided by zero is performed such as 6 ÷ 0 = .

   * In the event of an error check, press C to continue the calculation or press AC to restart.

53

Specifications

■Model: PF-8000

● Calculator

Functions:	Four basic calculations, constants, memory calculations; percentage calculations including add-ons/discounts and mark-ups, square roots and various other calculations.
Number of digits:	10
Memory:	Independent memory, 10 digits.
Decimal system:	Full-floating with underflow
Error check:	Indicated by the "E" sign, locking the calculator.

● Data Bank

Functions:	TEL, MEMO storage/recall, SECRET function, COMMAND function
Memory capacity:	929 characters (2977 with optional RAM pack)
Data input capability:	TEL, maximum 253 data items. MEMO, maximum 253 data items.

* However, within the memory capacity.

● **Read-out:**   12-digit dot matrix display (liquid crystal)

54

Specifications

- **Main component:** C-MOS-LSI
- **Power source:** Calculation/display → 2 lithium batteries (CR2032)
  Memory protection → 1 lithium battery (CR1220)
- **Power consumption:** 0.03W
- **Battery life:** Main power source - approximately 340 hours
  (continuous use)
  Memory protection battery - approximately 2 years
- **Auto power off:** After approximately 6 minutes
- **Ambient temperature range:** 0°C - 40°C (32°F - 104°F)
- **Dimensions:** 9.9 mmH x 137 mmW x 72 mmD
  ($\frac{3}{8}$"H x 5$\frac{3}{8}$"W x 2$\frac{7}{8}$"D)
- **Weight:** 106 g (3.7 oz) including batteries.
- **Options:** RAM pack (OR-20)