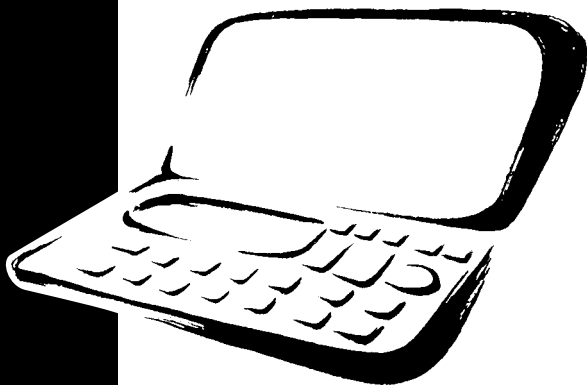


SF-4990

SF-6990

SF-7990

User's Guide



CASIO

**GUIDELINES LAID DOWN BY FCC RULES FOR USE OF THIS UNIT IN THE U.S.A.
(not applicable to other areas).**

NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
Proper connectors must be used for connection to host computer and/or peripherals in order to meet FCC emission limits.

Connector SB-63 SF Unit to SF Unit
Connector SB-65 SF Unit to PC

Declaration of Conformity

Model Number: SF-4990/SF-6990/SF-7990
Trade Name: CASIO COMPUTER CO., LTD.
Responsible party: CASIO, INC.
Address: 570 MT. PLEASANT AVENUE, DOVER, NEW JERSEY 07801
Telephone number: 973-361-5400

This device complies with Part 15 of the FCC Rules, Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

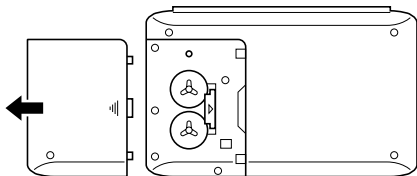
IMPORTANT!

Please keep your manual and all information handy for future reference.

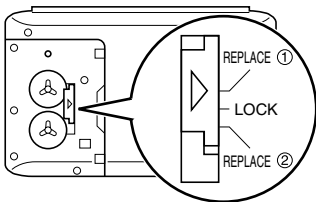
Before using the unit for the first time

Use the following procedure to load batteries and reset the unit before using it for the first time.

1. Slide the battery compartment cover in the direction indicated by the arrow.



2. Slide the battery switch to the "REPLACE ①" setting.



3. Load the new battery into the battery compartment, making sure that the positive (+) side of the new battery is facing up (so you can see it).
4. Slide the battery switch to the "REPLACE ②" setting and repeat step 3 for the other battery.
 - Be sure to load two new CR2032 batteries only. Never mix an old battery with a new one.
5. Slide the battery switch to the "LOCK" setting.

6. Replace the battery compartment cover.
7. Press **ON/OFF** to switch power on.

```
THE RESET  
OPERATION DELETES  
ALL DATA IN  
MEMORY! DO YOU  
WANT TO CONTINUE?  
ENTER/ESC
```

- If message does not appear, open the battery compartment and press the **RESET** button.
8. Press **ENTER**.

```
THE NEXT STEP  
STARTS DATA  
DELETION AND  
UNIT RESET!  
OK TO CONTINUE?  
ENTER/ESC
```

9. Press **ENTER**.
- After the **RESET** operation is complete, the **LANGUAGE** screen appears on the display.
10. Use the procedure under "To select the system language" on page 5 to select a system language.
11. Check the Home Time setting and make changes if necessary (page 65).

About the EL backlight

- This unit is equipped with an EL backlight that allows easy viewing of display contents in a theater, or anywhere else where lighting is dim.
- Note, however, that frequent or extended use of the EL backlight, or using it under cold conditions shortens battery life.

The following shows how backlight use affects battery life under controlled test conditions.*

Backlight Operation	Battery Life
3 minutes per hour	Approximately 45 hours
15 minutes per hour	Approximately 25 hours

* Test Conditions

- Temperature: 25°C
- “Battery Life” is the number of hours before battery failure when the unit is left on with 5 minutes of a processing operation and 55 minutes of continuous display only (no processing operation) per hour, plus the backlight operation described below.
- “Backlight Operation” is the number of minutes the backlight is turned on per hour during the display only (no processing operation) period.
- The above battery life values are based on Panasonic CR2032 batteries.

Important!

- The EL backlight may fail to operate when battery power is low, in order to conserve remaining battery power and protect data stored in memory.
- The low battery message may appear even when battery power is not low if you turn on the EL backlight under cold conditions. We recommend that you do not use the EL backlight under cold conditions.

Introduction

SF-4990/SF-6990/SF-7990

Congratulations on your selection of CASIO's new SF-4990/SF-6990/SF-7990 (referred to as SF Unit in this manual). This innovative new personal data management tool features a selection of powerful functions, including:

- Telephone Directory
- Memo Mode
- Schedule Keeper
- To Do Mode
- Expense Mode
- Anniversary Mode
- Calendar
- Clock with Home Time and World Time functions
- Calculator
- Conversion Mode
- Secret Function
- Data Communication

Functions are specially designed to be easy to understand and use, making your personal data management easier than ever before.

- All data stored in memory is erased if the SF Unit should malfunction, when you have it repaired, when the batteries go dead, and whenever you remove the batteries. **Be sure to make written back up copies of all important data.**

- CASIO COMPUTER CO., LTD. assumes no responsibility for any damage or loss resulting from the use of this manual.
- CASIO COMPUTER CO., LTD. assumes no responsibility for any loss or claims by third parties which may arise through the use of the SF Unit.
- CASIO COMPUTER CO., LTD. assumes no responsibility for any damage or loss caused by deletion of data as a result of malfunction, repairs, or battery replacement. Be sure to back up all important data on other media to protect against its loss.

- Company names and product names used in this manual may be registered trademarks or trademarks of others.

Multiple Language Capability

Your SF unit is capable of producing messages in any one of six different languages (English, French, Spanish, German, Italian, Portuguese). Use the following procedure to select the language you want.

To select the system language

1. Press **ON/OFF** to switch power on.
2. Enter the Telephone Directory Mode.
 - You could enter Memo, Anniversary, Schedule Keeper, To Do, Expense, Calendar, Home Time or World Time here.
3. Press **FUNCTION** once or twice to display the function menu.
4. Press the applicable number key to select **LANGUAGE**.
 - The above operation causes a list of six languages to appear on the display. The language that is currently selected is highlighted on the display.
5. Select the language you want to use.
 - You can directly specify a language by pressing the number key that corresponds to the language you want to use.



- You can also select a language by using **▲** or **▼**, to move the highlighting around the menu until the language you want to use is highlighted.
6. While the language you want to use is selected (highlighted), press **ENTER**.
 - To exit the language-selection menu without changing the current language, press **ESC**.
 - You also need to specify the system language you want whenever you perform the **RESET** operation (page 19).

About this manual...

This manual is divided into 7 parts.

PART 1 Getting Started

Be sure to read this part of the manual before doing anything else! It includes important information that you need to know in order to use the SF Unit correctly.

PART 2 Operation Reference

This part of the manual gives you more detail about the fundamental operation of the SF Unit. It provides all of the detail you need to help you use the SF Unit to its full potential. It also helps you to get acquainted with the keys, features, and functions of the SF Unit. It tells you where everything is located, what the display indicators mean how to adjust the display contrast, and other important information.

PART 3 Data Management Functions

This part of the manual details the versatile data management functions of the SF Unit. It describes the procedures required for data storage, recall and editing in the Telephone Directory, the Memo Mode, the Schedule Keeper, the To Do Mode, the Expense Mode, and the Anniversary Mode.

PART 4 Timekeeping Functions

Your SF Unit includes powerful timekeeping functions that help to keep you on time all the time. The Home Time function lets you set the current time for your home, specifying 12-hour or 24-hour format, standard time or summer time, even your hometown name. The World Time function gives you instant access to the current time in any one of 33 cities around the globe.

PART 5 Calculator Functions

The SF Unit also gives you the capability to perform all of the mathematical operations available on today's calculators.

Conversion modes describe functions for converting between three national currencies, or between metric and yard denomination.

PART 6 Data Communications

The data communications capabilities of the SF Unit let you transfer data between two SF Units, or between the SF Unit and a personal computer.

PART 7 Technical Reference

This part of the manual provides technical information on troubleshooting, user maintenance, specifications, etc.

Manual conventions

This manual uses the following conventions when mentioning key operations and functions within text.

- Keys are indicated using upper-case bold characters **LIKE THESE**.
- When a key has more than one function, only the function under discussion at that time will be noted. With the **ON/OFF** key, for example, **ON** will be used to indicate switching the SF Unit on, while **OFF** will be used to indicate switching the SF Unit off.
- Text that appears on the display of the unit is represented in this manual using a font that is different from the explanatory text. The display text "NAME?" for example represented as: **NAME?**.
- Note that operation of this unit's **SHIFT** key is different from that normally found on a computer's keyboard. For the operation **SHIFT .com**, for example, you should not hold down the **SHIFT** key while you press **.com**. Instead, you should press and then release the **SHIFT** key, and then press the **.com** key.

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Getting Started

Read this first!

You must be familiar with the following information in order to use the SF Unit correctly. It tells you what to do in order to avoid losing important data stored in memory. Please be sure to read the following before using the SF Unit!

Make back up copies of important data!

Your SF Unit employs electronic memory, which makes it possible to store large volumes of data and to recall stored data quickly and easily. Data is retained as long as power is supplied by the batteries. This means that should batteries go dead, or if you make a mistake while replacing batteries, the data stored in memory may be damaged or lost entirely. Data contents can also be damaged or lost due to strong electrostatic charge, strong impact, or extremes in temperature and humidity.

All of this means that you should make back up copies of important data in a notebook in case any of the above conditions occur.

About the “DATA ERROR!.....” message...

Whenever you turn on the power of the SF Unit, it performs a self-check before beginning operation. If a problem is discovered during the self-check, the SF Unit displays the “DATA ERROR!.....” message.

Note

- The above message always appears in English, regardless of the system language setting.

If this is the first time you ever turned on the SF Unit...

Perform the RESET procedure under “Before using the unit for the first time” on page 1, starting from step 9.

If this is not the first time you are using the SF Unit...

There is probably a problem with the data in memory (data error). Note that once data is lost it cannot be recovered. Such data errors are generally caused by one of the following problems.

- Interruption of battery power.
- Severe electrostatic charge, impact, change in temperature, or change in humidity.
- Hardware problem.

After a data error is discovered, you will not be able to input or edit data. In order to return memory to normal (allowing further input and editing of data), you must perform the RESET operation to clear the memory of all data.

“THE RESET OPERATION DELETES ALL DATA IN MEMORY! DO YOU WANT TO CONTINUE?”

Press **ENTER** to reset the unit.

If you still have trouble after trying the RESET operation, you may have a hardware problem. If so, consult with your nearest CASIO dealer.

General Precautions

- Never try to take the SF Unit apart.
- Avoid strong impact and sudden temperature changes.
- At very low temperatures, the display response time may slow down or the display may fail completely. This is temporary and correct operation should return at normal temperature.
- To avoid serious damage to the SF Unit caused by leaking batteries, replace batteries once every two years, regardless of how much you use the SF Unit during that time.
- Never use thinner, benzene or other volatile agents to clean the exterior of the SF Unit. Instead, wipe it off with a soft cloth dampened in a solution of water and a mild, neutral detergent. Wring the cloth out until it is almost dry.
- If the SF Unit is exposed to strong electrostatic charge, the display may dim or the SF Unit may lock up. To correct this situation, switch power off, and then remove and then replace the batteries.
- Do not press the keys with a pen, pencil or other sharp object.
- The SF Unit may cause interference with radio or television reception. Keep it away from such appliances when you are using it.

Leaving the backlight on for long periods greatly reduces battery life!

About the Power Supply

The SF Unit is powered by two CR2032 lithium batteries. Replace batteries as soon as possible after low battery power is indicated by any of the following.

- Low battery message appears on the display
- Blank display when power is turned on
- Dim display figures even after display contrast is adjusted
- Failure of the backlight to turn on

Caution

- **All data stored in memory is lost if you remove both batteries at the same time.**
- **Be sure that you keep a separate copy of all important data that you store in the SF Unit.**

Low Battery Message

A message appears on the display to warn you when the batteries power drops below a certain level. Should battery power drop too low, data in memory may be corrupted or lost. Whenever a low battery power message appears on the display, be sure to stop operation of the SF Unit and replace batteries as soon as possible.

Important!

- Whenever the message “WEAK BATTERIES! CONSULT YOUR USER’S GUIDE IMMEDIATELY!” appears, be sure to replace all batteries.
- The low battery message may appear even when battery power is not low if you turn on the EL backlight under cold conditions. We recommend that you do not use the EL backlight under cold conditions.
- Actual battery life is affected by a variety of factors including battery manufacturer, the amount of time batteries spend in storage before you use them, and the temperature of the location where you are using the SF unit.

Battery Precautions

Incorrectly using batteries can cause them to burst or leak, possibly damaging the interior of the SF Unit. Note the following precautions.

- Be sure that the positive (+) side of each battery is facing up (so you can see it).



- Never mix batteries of different types.



- Never mix old batteries and new ones.



- Never leave dead batteries in the battery compartment.
- Remove the batteries if you do not plan to use the SF Unit for a long period.
- Replace batteries at least once every year, no matter how much you use the SF Unit during that period.
- Never try to recharge the batteries supplied with the SF Unit.



- Do not expose batteries to direct heat, let them become shorted, or try to take them apart.



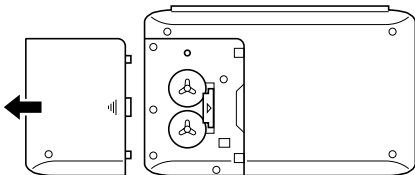
- Should a battery leak, clean out the battery compartment of the SF Unit immediately, taking care to avoid letting the battery fluid come into direct contact with your skin.

Keep batteries out of the reach of small children. If swallowed, consult with a physician immediately.

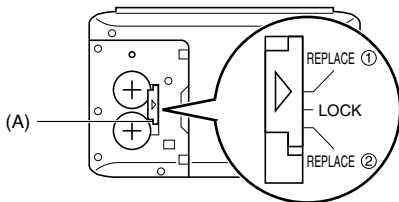
The batteries that come with this unit discharge slightly during shipment and storage. Because of this, they may require replacement sooner than the normal expected battery life.

To replace the batteries

1. Press **ON/OFF** to switch power off.
2. Slide the battery compartment cover in the direction indicated by the arrow.



3. Slide the battery switch to the “REPLACE ①” setting.
Insert a thin, pointed object into (A) and remove the old battery.



Caution

Be sure to remove only one battery at a time. Otherwise, you will lose all data stored in memory.

4. Replace the old battery with a new one, making sure that the positive (+) side of the new battery is facing up (so you can see it).
5. Slide the battery switch to the “REPLACE ②” setting and repeat step 4 for the other battery.
 - Be sure to load two new CR2032 batteries at the same time . Never mix an old battery with a new one.
6. Slide the battery switch to the “LOCK” setting.
7. Replace the battery compartment cover.

Resetting the SF Unit's Memory

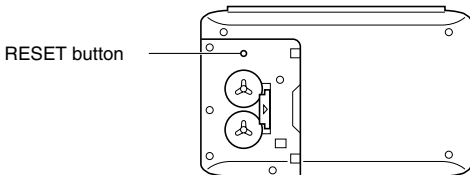
Warning!

The following procedure erases all data stored in the memory of the SF Unit. Perform the following operation only when you want to delete all data and initialize the settings of the SF Unit.

Remember – you should always keep copies of important data by writing it down, by transferring it to a personal computer or other SF Unit (SF-4990, 6990, 7990 only).

To reset the SF Unit's memory

1. Press **ON/OFF** to switch power on.
2. Open the battery compartment and press the **RESET** button.



- At this time the following message appears on the display.

```
THE RESET
OPERATION DELETES
ALL DATA IN
MEMORY! DO YOU
WANT TO CONTINUE?
ENTER/ESC
```

3. Press **ENTER**.

```
THE NEXT STEP
STARTS DATA
DELETION AND
UNIT RESET!
OK TO CONTINUE?
      ENTER/ESC
```

Warning!

The next step deletes all data stored in the SF Unit's memory. Make sure that you really want to delete the data before you continue!

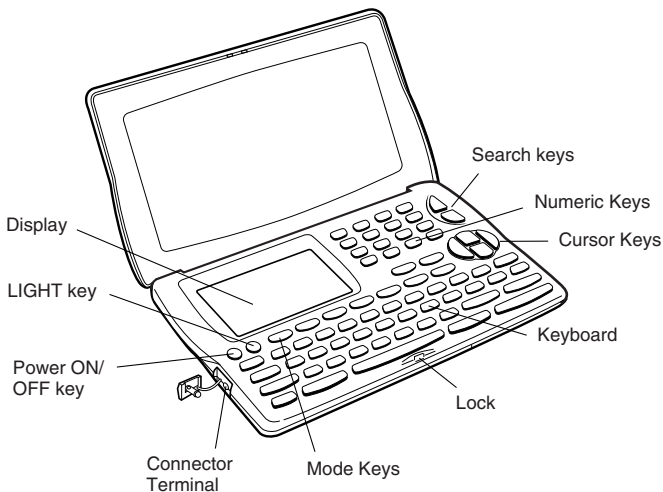
4. Press **ENTER** to start the RESET procedure.
- After the RESET operation is complete, the LANGUAGE screen appears on the display.
5. Use the procedure under "To select the system language" on page 5 to select a system language.
- After you set the system language, the Home Time Screen appears.
6. Check the Home Time setting and make changes if necessary (page 65).

Following the reset operation described above, the Home Time display appears and the SF Unit settings are initialized as noted below.

Home Time:	NEW YORK
	TUE 1/JAN/ 2002
	12:00 AM
	12-hour format
World Time 1:	LONDON
World Time 2:	TOKYO
Daily Alarm:	12:00 AM
Sound:	Schedule alarm — ON
	Daily alarm — OFF
	Key — ON
Messages:	English
Character input:	CAPS

Operation Reference**General Guide**

The following illustration shows the names of the main controls of the SF-4990/SF-6990/SF-7990.



Setting Up the SF Unit

After batteries are loaded, use the following procedures to set up the SF Unit for operation.

To switch power on and off

1. Press **ON/OFF** to switch power on.
 - The initial screen for the mode that was selected when you last switched power off appears on the display.
 - If the message shown on page 13 appears on the display, follow the procedures described on page 14.
 - If a low battery power message appears on the display or if the display remains blank when you turn power on, replace batteries as soon as possible.
2. Press **ON/OFF** again to switch power off.

About the Auto Power Off function...

The SF Unit is equipped with an Auto Power Off function that switches power off automatically whenever you do not perform any key operation for about six minutes. To restore power, press **ON/OFF**.

To turn on the EL backlight

Pressing **LIGHT** causes the backlight to turn on for about 8 seconds, and then turn off automatically.

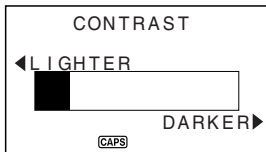
Leaving the backlight on for long periods greatly reduces battery life!

You can manually turn the backlight off by pressing **LIGHT** again.

Failure of the backlight to turn on indicates low battery power. Replace batteries as soon as possible.

To adjust the display contrast

1. Enter the Telephone Directory Mode.
 - You could enter any mode except the Calculator Mode and Conversion Mode here.
2. Press **FUNCTION** once or twice to display the function menu.
3. Press the applicable number key to select **CONTRAST**.
4. Use the ◀ and ▶ keys to adjust the contrast.



5. After you are finished, press **ESC** to clear the contrast adjustment display.

To select a mode

Press one of the mode keys to select the mode you want.

In cases where two modes are assigned to the same key, each press of a key toggles between the two modes.



Telephone Directory Mode for storage personal name, company name, home phone number, work phone number, fax number, mobile phone number, e-mail address, Web page URL, and street address, plus one user-definable field. There are two Telephone Directory Mode storage areas named TEL1 and TEL2. Each press of this key toggles between them.



- Displays any monthly calendar from January 1901 through December 2099.
- Schedule Keeper Mode for storage of appointments scheduled for specific dates and times, and setting of Schedule Alarms to remind you of your appointments.



- The Expense Mode lets you store expense data, including payment date, payment method, description, etc. You can also produce total for a specific period of time.
- The Anniversary Mode lets you store information about anniversaries and other regularly occurring events.



Memo Mode for storage of unformatted data in a kind of electronic notebook.



To Do Mode for storage of reminders of things to do. You can affix a check mark to items as you complete them.



Home Time/World Time 1, 2 Modes for display of the current time in your hometown and other locations around the globe. For example, you can set New York as your home time and London as the world time.



The Conversion Mode lets you select between currency conversion and metric conversion.

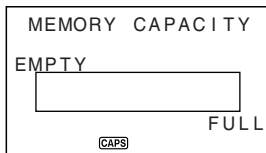


Calculator Mode for basic calculations with the touch of a key.

To check the memory status

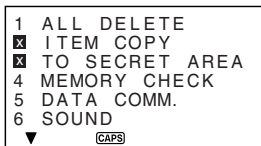
Press the **FUNCTION** key to display the function menu, and then select **MEMORY CHECK**.

You can enter any mode except the Calculator Mode, Conversion Mode and Home/World Time Mode here.



To use the FUNCTION key

Press the **FUNCTION** key to display a function menu that makes it possible to perform functions that are not marked on the unit's keys.

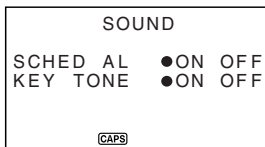


Just like in the above example display, all of the functions included in a function menu have a number at the beginning. Press the number key that corresponds to the function you want to perform.

Whenever a function menu item's leading number is replaced by "X", it means you can't select that menu item in the operation you are performing.

About the SOUND menu...

The sound menu lets you switch the key input tone and the Schedule Alarm of the SF Unit on and off.



The on/off status of each SOUND menu item is indicated by a dot (●) as shown above.

- For information about turning the Daily Alarm on and off, see "To set the Daily Alarm" on page 66.

To switch the key input and schedule alarm tone on and off

1. Press **FUNCTION** once or twice to display the function menu.
2. Press the applicable number key to select **SOUND**.
3. Use the ▲ and ▼ keys to move the dot to the item you want to change.
4. Use ◀ and ▶ to switch the key input tone or an alarm tone on and off.
5. Press **ENTER** to store your setting and clear the SOUND menu.

About alarm types

This unit has two types of alarms: the Daily Alarm and Schedule Alarm. The following describes each of these alarms.

Daily Alarm

The Daily Alarm sounds at the same time everyday, when the Home Time reaches the time you have set as the Daily Alarm (page 66).

Schedule Alarm

The Schedule Alarm sounds at the specified time on a specified date. Use the Schedule Keeper Mode to set this type of alarm (page 42).

An alarm tone sounds for about 20 seconds and an alarm message appears on the display whenever an alarm time is reached, even if unit power is switched off. You can stop the alarm by pressing any key and then press **ESC** to return to the display that was shown before the alarm began to sound.

Important!

- An alarm will not sound if that type of alarm is switched off on the SOUND menu. This is especially important to remember when you want to use Schedule Alarms. For details on how to switch alarms on, see “About the SOUND menu...” on page 25.
- If the Daily Alarm set in the Home Time Mode and a Schedule alarm set in the Schedule Mode are set for the same time, the Schedule alarm takes precedence. This means that the Schedule message appears on the display when the alarm time is reached.
- The alarm does not sound if you are performing a data communications operation when the alarm time is reached.
- The alarm may fail to sound if battery power is too low.

Note

If the message “**SECRET DATA!**” appears on the display, it means that an alarm time set in the secret memory area (see page 60) was reached.

Inputting Letters, Numbers and Symbols

The following describes the basic input operations for the SF Unit. Note that you can use the following operations to input data only in the Telephone Directory, the Memo Mode, the Schedule Keeper, the To Do Mode, the Expense Mode, and the Anniversary Mode.

In all of the following operations, the input or correction is performed at the current cursor location. To move the cursor around the display, use the ▲, ▼, ◀ and ▶ cursor keys.

Note

Every character and symbol you input is counted as an input character. New-line (↵) symbol is also counted as input characters. The maximum number of input characters that can be stored for each data item is 384.

To input letters and numbers

Press the key that is marked with the letter or number that you want to input.

To input upper-case and lower-case letters

Press **CAPS** to switch the keyboard between upper-case and lower-case letters. The indicator “CAPS” on the display shows that the keyboard is shift-locked for upper-case letters.

- The upper-case/lower-case setting you make with **CAPS** remains in effect until you change it, even when you switch the SF Unit off.
- A shift-lock operation using **CAPS** affects the letter keys only. It does not shift the number keys for punctuation symbol input.

To shift the keyboard

Press **SHIFT** to temporarily shift the keyboard. Pressing **SHIFT** and then the Q, W, E, R, T, Y, U, I, O or P key inputs the symbol marked above the key. Pressing **SHIFT** and then the L key inputs “.com”. The indicator “SHIFT” on the display shows that the keyboard is shifted.

To input accented characters

Press the **CODE** key and confirm that the “CODE” indicator is on the display. Next, input the character. The following character accents are available.

- Umlaut (Ä, Ê, Î, Ö, Ü, ä, ê, î, ö, ü) **CODE V**
- Acute Accent (Á, É, Í, Ó, Ú, á, é, í, ó, ú) **CODE Z**
- Grave Accent (À, È, Ì, Ò, Ù, à, è, ì, ò, ù) **CODE X**
- Circumflex (Â, Ê, Î, Ô, Û, â, ê, î, ô, û) **CODE C**
- Tilde (Ã, Õ, Ñ, ã, õ, ñ) **CODE B**
- Cedilla (Ç, ç) **CODE N**
- Eszett (ß) **CODE M**

To input other symbols

1. Press **SYMBOL** to display a menu of numbered symbols.
- There are a total of 8 symbol menu screens.

\$!	"	#	\$	%	&	'
()	*	+	,	-	.	/
:	;	<	=	>	?	@	[
\	\]	^	{	|	}	~	i
ı	ı	Æ	Å	Ø	¶	©	ıı
æ	â	ø	£	¥	Ω	ª	º
x	÷	±	°	²	³	μ	½
¼	¾	f	|	Fr	←	→	√
€	-						

- To clear the symbol menu from the display without inputting a symbol, press **ESC**.
2. Use **▲** and **▼** to scroll through the symbol menu screens until the one that contains the symbol you want appears on the display.
 3. Press the number key (**1** thru **8**) that matches the number to the left of the symbol you want to input. The symbol is input at the current cursor position and the symbol menu is cleared from the display.

To input the date stamp

To input the date, press **SHIFT** and then press **CODE**. The date stamp can be used during text data input.

To correct, delete or insert characters

To correct a character, simply move the cursor to the location of the character and input the character you want to change to.

To delete a character, move the cursor to the character you want to delete and press **DEL**.

To insert a character, move the cursor to the desired position. Press **INS** and then type the character you want.

Date and time input

The following guidelines apply to inputting dates and times in the Schedule Keeper and Anniversary Modes, and dates in the Expense Mode.

- Years can be input within the range of 1901 through 2099.
- Use 12-hour format if the Home Time is set for 12-hour format or 24-hour format if the Home Time is set for 24-hour format.
- You do not have to input the minutes if they are "00".
- If you are using 12-hour time format, press **AM/PM** to specify AM or PM.
- All illegal input (13 for the month, for example) is ignored.

Data Management Functions

This part of the manual describes how to input and store data in the Telephone Directory, Memo, Schedule Keeper, To Do, Expense and Anniversary Modes. It also describes how the Calendar Mode can be used in combination with the Schedule Keeper Mode.

To enter a mode

Press the mode key that corresponds to the mode that you want to enter. When you enter the Telephone Directory, Memo Mode, To Do Mode or Anniversary Mode, an initial screen appears on the display.

In cases where two modes are assigned to the same key, each press of a key toggles between the two modes.



About display formats

There are two display formats used in the Telephone Directory, Memo Mode, Schedule Keeper, To Do Mode, Expense Mode and Anniversary Mode: a data display format and an index display format. The data display shows all of the data entries contained in a data item, while an index display abbreviates each data item into one or two lines. The index display makes it possible to quickly scroll through data items to find the one that you want.

Press **ENTER** to change from the index display to the data display. To return to the index display from the data display, press **ESC**.

Data Display

```
JACKSON ERIC
H: 123 - 4567
W: 987 - 5432
F: 777 - 7777
C: 888 - 8888
e r i c @ * * * . c o m
CAPS
```

You can scroll through a data display line-by-line using the ▲ and ▼ cursor keys. If you press ▲ and ▼, the display scrolls data item-by-data item.

Index Display

```
CASIO
W: 000 - 9999
JACKSON ERIC
H: 123 - 4567
CAPS
```

You can scroll through an index display data item-by-data item using the ▲ and ▼ cursor keys. If you press ▲ and ▼, the display scrolls one screen at a time.

Using the Telephone Directory

The innovative Telephone Directory Mode of the SF Unit lets you input ①NAME/COMPANY ②HOME ③WORK ④FAX ⑤CELL ⑥E-MAIL ⑦URL ⑧ADDRESS ⑨FREE for instant look up when you need them. It also gives you a user-definable item that you can use to record birthdays, hobbies, or any other information you want. Each Telephone Directory data item can contain up to 384 characters (including newline symbols).

The Telephone Directory Mode has two storage areas named TEL 1 and TEL 2. Pressing **TEL** while you are inputting or editing data in one storage area discards the data you are working on and displays the initial screen of the other storage area.

Inputting Telephone Directory data

Use the following procedure to input Telephone Directory data.

Note

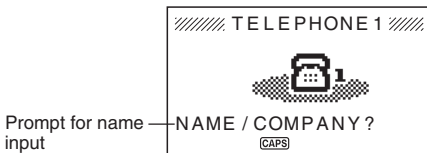
- Telephone Directory data is automatically sorted according to NAME/COMPANY entries. See "Auto Sort Sequence" for information on how this unit sorts data.

To input Telephone Directory data

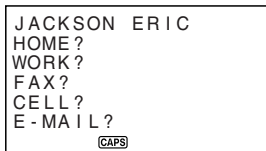
Example: To input the following data.

Name: ERIC JACKSON
Phone Number: 123-4567(HOME), 987-5432(WORK)
FAX: 777-7777 CELL: 888-8888
E-mail address: eric@***.com
URL: http://www.eric-jackson/com
ADDRESS: 1910 T.D. STREET
FREE: BIRTHDAY MAY 5th.1975

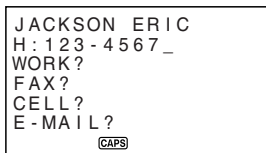
1. Enter the Telephone Directory Mode.



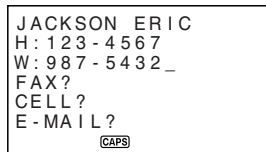
2. Input the name with the last name first (or company name), since the data is sorted according to the name entry.
3. Press **ENTER**. You can press the ▼ key in place of the **ENTER** key.



4. Input the HOME telephone number.



5. After inputting a telephone number, press **ENTER** to advance to WORK telephone number input.



6. Input data for the WORK, FAX, CELL, E-MAIL, URL, and ADDRESS entries.
7. After inputting all of the data in step 6, press **ENTER** to advance to the FREE entry.
8. Input any other information you want.
9. After inputting all of the data you want, press **ENTER** to store it in memory.

```
JACKSON ERIC  
H: 123 - 4567  
W: 987 - 5432  
F: 777 - 7777  
C: 888 - 8888  
eric@***.com
```

CAPS

- Press **ENTER** after inputting the last item (FREE) to store the record.

Where to find other information

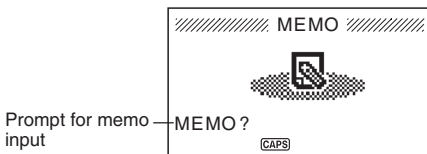
- For information on searching for and recalling data already stored in memory, see “Recalling data stored in memory” on page 55.
- For information on editing, deleting and copying data already stored in memory, see “Editing, Deleting and Copying data” on page 57.

Using the Memo Mode

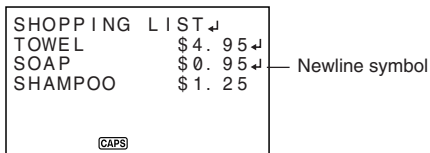
The Memo Mode of the SF Unit is like a pad of electronic memo paper that lets you store information in any format you want. You can input Memo Mode data by adding new memos to the end of data already in memory, or you can insert new memo data between two existing Memo Mode data items. Each Memo Mode data item can contain up to 384 characters (including newline symbols).

To input Memo Mode data

1. Enter the Memo Mode.



2. Input the first line of memo data you want to store, and then press ↵.
 - Note that the first line of memo data is treated as the memo's name. Because of this, it is a good idea to use a short descriptive title as the first line.
3. Input the rest of your data.



4. After inputting all of the data you want, press **ENTER** to store it in memory.

To insert a new Memo Mode data item between two items in memory

1. Enter the Memo Mode.
 2. Recall the data item you want to come after the new data item you are about to input, and move the name of the data item into the top line of the display. (See “Recalling data stored in memory” on page 55)
 3. Input the new data item.
 4. Press **SHIFT ENTER** to store the new data item.
- If you press **ENTER** without pressing **SHIFT**, the new data item is automatically stored at the end of the data already existing in memory.

Where to find other information

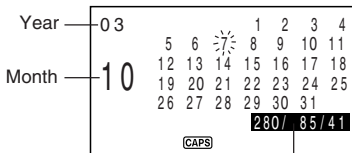
- For information on searching for and recalling data already stored in memory, see “Recalling data stored in memory” on page 55.
- For information on editing, deleting and copying data already stored in memory, see “Editing, Deleting and Copying data” on page 57.

Using the Calendar

The calendar is pre-programmed to display full-month calendars of any month from January 1901 through December 2099.

To display the calendar

Press **CALN/SCHD** to enter the Calendar Mode.



These values indicate (from left to right) the day number from the beginning of the year, the number of days until the end of the year, and the week number from the beginning of the year. The week number count uses Sunday as the first day of the week. The first week of each year starts with January 1 no matter what day of the week it falls on.

- The dates on each calendar are shown starting from Sunday (on the far left) through Saturday (on the far right).
- The above procedure displays the calendar that contains the date currently set in the Home Time display.
- If you press **CALN/SCHD** while the Home Time display is shown, the calendar appears with the current date flashing within the calendar.
- When you press **CALN/SCHD** right after you are in the Schedule Keeper or the Expense Mode, the calendar that contains the Schedule Keeper or the Expense Mode date you were viewing appears. In this case, the Schedule Keeper or the Expense Mode date you were viewing appears flashing within the calendar.

To scroll through calendars

1. Press **CALN/SCHD** to enter the Calendar Mode.
2. Use the ▲ and ▼ cursor keys to scroll sequentially through the calendars. Holding down either key scrolls at high speed.
 - Use ▲ and ▼ to scroll through the calendars one month at a time.
 - Holding down either key scrolls at high speed.

About the date cursor...

- The date cursor flashes at a date in a calendar to indicate that the date is selected.
- You can move the date cursor around the calendar using the ▲, ▼, ◀ and ▶ cursor keys.
- You can also move the date cursor using **+** and **-**. **+ 3** moves it forward three days while **- 4** moves it back four days.

To specify a month and date for display in the Calendar Mode

1. Press **CALN/SCHD** to enter the Calendar Mode.
2. Input the year, month and date of the calendar you want to display.
3. Press **ENTER**.
 - This displays the calendar for the date you specified.

Example: To display January 1, 2002

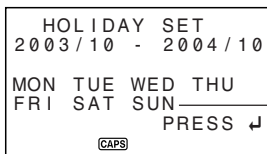
1. While the calendar is on the display, input 2002 01 01 to specify the year, month, and day.
2. Press **ENTER**.
 - This displays the calendar for January 2002, with the date cursor located at January 1.

To highlight and unhighlight specific dates

1. Press **CALN/SCHD** to enter the Calendar Mode.
2. Display the calendar that contains the date you want to highlight.
 - You can either scroll through calendars using ▲ and ▼, or you can specify the year, month and date.
3. Use the date cursor to select the date that you want to highlight.
4. Press ◀ to highlight the date currently selected by the date cursor.
 - To unhighlight the date, press ◀ again.

To highlight days of the week for multiple months

1. Press **CALN/SCHD** to enter the Calendar Mode.
2. Press **FUNCTION** once or twice to display the function menu.
3. Press the applicable number key to select **HOLIDAY SET**.
 - To clear the function menu without highlighting anything, press **ESC**.
4. Move the cursor, input the period you want to set, and then press **ENTER**.
5. Use the cursor keys to select the day of the week you want to highlight.



SUN flashes because it is selected.

6. Press ← to specify the currently selected day of the week for highlighting.
 - When a day of the week is specified for highlighting, its abbreviation appears highlighted (reverse field) on the display.
 - To deselect (unhighlight) a day of the week, select it and press ←.
7. After specifying all of the days of the week you want highlighted during the period you specified in steps 2 through 4 above, press **ENTER** to highlight the applicable dates.

To unhighlight days of the week for multiple months

1. Press **CALN/SCHD** to enter the Calendar Mode.
2. Press **FUNCTION** once or twice to display the function menu.
3. Press the applicable number key to select **HOLIDAY CLEAR**.
 - To exit function menu without unhighlighting anything, press **ESC**.
4. Perform steps 4 through 6 under "To highlight days of the week for multiple months" above to select the days of the week you want to unhighlight.
5. Press **ENTER** to unhighlight the applicable dates.

Using the Schedule Keeper

The Schedule Keeper lets you store data about your appointments to keep you on time all the time. It lets you input the time and a description of your appointment. You can even set Schedule Alarms that remind you when it is time to get ready for your appointments. When you input data for a specific date, a marker appears next to that date on the calendar to let you keep track of your schedule at a glance. Each Schedule Keeper data can contain up to 384 characters, including newline symbols.

Note

- When there is a lot of Schedule Keeper data stored in memory, operations such as display of the calendar and data communication take more time.

To enter the Schedule Keeper

You can use either of the two following methods to enter the Schedule Keeper.

- Press **CALN/SCHD** twice. The Schedule Keeper screen for the current date set on the Home Time display appears.
- Display the calendar and move the cursor to the date you want, then press **CALN/SCHD**. The Schedule Keeper screen for the day you select appears on the display.

To specify a date

Schedule Keeper data is stored along with its date, with the date being treated as a separate data entry. You can use either of the two following methods to specify a date.

- Press **CALN/SCHD** to enter the Calendar Mode, and then use **▲** and **▼** to display the calendar that includes the date you want to specify.
- Move the flashing cursor to the date you want to specify, and then press **CALN/SCHD**.

An index display appears if the date already has data assigned to it. If the date does not have any data assigned to it, an initial screen appears.

About Schedule Keeper data and initial displays...

Schedule Keeper information is stored under dates, with each date acting as a unit called a data item. Each data item is made up of a number of data entries.

In the Schedule Keeper, the appearance of the currently displayed date depends on whether or not Schedule Keeper data is already stored under that date.

No data stored

```

1 / NOV / 2003 SAT
DESCRIPTION?
TIME?
(CAPS)
  
```

Data already stored
(Index Display)

```

1 / NOV / 2003 SAT
8 : 00AM WORK
(CAPS)
  
```

Schedule Keeper
data entry

To input Schedule Keeper data

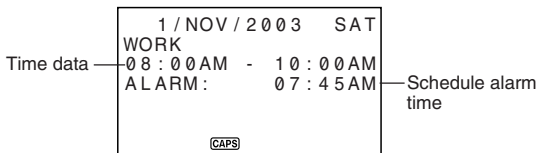
1. Enter the Schedule Keeper, and specify the date as described under "To specify a date".
2. Input a description of the appointment.
3. Press **ENTER** (or ▼).
 - If you are using 12-hour time format, press **AM/PM** to specify AM or PM.
4. Press **ENTER**.
 - This causes "ALARM?" to flash on the display. If you want to set a schedule alarm, input the schedule alarm time. See "To set a schedule alarm when inputting data."
 - If you do not want to set a schedule alarm, advance to the next step without inputting anything.
5. Press **ENTER** to store the Schedule Keeper record.

Using Schedule Alarms

You can set schedule alarms for Schedule Keeper data entries to help you keep on time for important appointments.

To set a schedule alarm when inputting data

1. Enter the Schedule Keeper and input data, using the procedures described in steps 1 through 4 under “To input Schedule Keeper data” on page 41.
2. Whenever the prompt “ALARM?” is flashing on the display, input the schedule alarm time. Use the **▶** and **◀** cursor keys to move between the hour and minutes setting.



- Whenever the schedule alarm setting is flashing on the display, press **DEL** to clear the alarm time and display the prompt “ALARM?”. Input the alarm time using the same procedure described above.
3. After inputting the data, press **ENTER** to store it into memory.
- If you attempt to set a schedule alarm time that is already set for another data entry, the message “ALARM TIME ALREADY USED OR PASSED!” appears on the display. Then the data is stored without a schedule alarm.
 - If you attempt to set a schedule alarm time that is already passed, the message “ALARM TIME ALREADY USED OR PASSED!” appears on the display. Then the data is stored without a schedule alarm.

To set or change a schedule alarm for an existing data entry

1. Enter the Schedule Keeper and recall the data for which you want to set or change a schedule alarm. Press **EDIT**.
2. Press **▼** until the cursor moves to the Schedule Alarm time.
3. Input the schedule alarm time. Use the **◀** and **▶** cursor keys to move between the hour and minutes setting.
 - Whenever the schedule alarm setting is flashing on the display, pressing **DEL** clears the alarm time and displays the prompt "**ALARM?**". Input the alarm time using the same procedure described above.
4. After inputting the data, press **ENTER** to store it into memory.
 - Schedule alarm times are also displayed on the data display.

To view a data entry's current schedule alarm setting

To view a schedule alarm setting, enter the Schedule Keeper Mode and display the data display for the applicable date.

To delete a specific schedule alarm

1. Enter the Schedule Keeper and recall the data for which you want to delete the schedule alarm. Press **EDIT**.
2. Press **▼** until the schedule alarm time flashes.
3. Press **DEL** to delete the currently set schedule alarm time.
4. After deleting the alarm time, press **ENTER** to store the entry into memory.

Where to find other information

- For information on searching for and recalling data already stored in memory, see "Recalling data stored in memory" on page 55.
- For information on editing, deleting and copying data already stored in memory, see "Editing, Deleting and Copying data" on page 57.

Using the Expense Mode

The Expense Mode lets you store expense data, including payment date, payment amount, payment method, expense type and description. You can also produce total for other period of time.

About Expense Mode data items and data entries...

Each Expense Mode data item is made up of the following five data entries.

Data Entry	Description
Date	Year/Month/Date
Amount	Numbers up to eight digits long can be input
Expense Type	6 expense types, including "MEAL," "MISC" "ENTER'T" and others are preset for you to choose from. These preset labels can be edited freely.
Payment Type	4 payment types, including "CASH," "CARD", "CHEQUE" and "OTHER" are preset for you to choose from.
Note	Up to 331 Characters

- You can edit the 6 Expense Type labels using the procedures described on page 46.

About Expense Mode Display formats

As with the other modes, Expense Mode data can be displayed using an Index Display or a Data Display. The following describes the contents of each type of display.

Index Display

The Index Display shows data day-by-day.

1 / OCT / 2003	WED
MEAL	100.
HOTEL	150.
CAPS	

- In the Index Display, only the first seven characters of the name are shown.
- Up to three entries are shown, along with payment type or expense type.

Data Display

The Data Display shows all of the details for a specific entry.

1 / OCT / 2003	WED
AMOUNT	100.
MEAL	
CASH	
CAPS	

- Press **ENTER** to change from the index display to the data display. To return to the index display from the data display, press **ESC**.

To enter the Expense Mode

You can use either of the two following methods to enter the Expense Mode.

- Press **EXP/ANNI**. The Expense Mode screen for the current date (as noted on the Home Time display) appears*.
- Display the calendar, move the cursor to the date you want, and then press **EXP/ANNI**. The Expense Mode screen for the day you selected appears on the display.

* If you press **EXP/ANNI** while in the Schedule Keeper Mode, the Expense Mode screen for the date you were viewing in the Schedule Keeper Mode appears.

To edit labels

Use the following procedure to change the labels assigned to expense.

1. Press **EXP/ANNI** to enter the Expense Mode.
2. Press **FUNCTION** once or twice to display the function menu.

```

1 REPORT
2 EXP TYPE EDIT
3 ALL DELETE
X ITEM COPY
X TO SECRET AREA
6 MEMORY CHECK
      (CAPS)
  
```

3. Press the applicable number key to select **EXP TYPE EDIT**.

```

1 MEAL
2 HOTEL
3 PHONE
4 FARES
5 ENTER' T
6 MISC
      (CAPS)
  
```


4. Use ▲ and ▼ to select the item whose label you want to change.
5. While the label you want to change is selected, input the text for the label to which you want to change.
 - Labels can be up to 14 characters long.
6. After you make all of the changes you want, press **ENTER** to store them in memory.
 - The new labels will be displayed when you next input new data.

To specify a date

Expense Mode data is stored along with its date, with the date being treated as a separate data entry. You can use either of the two following methods to specify a date.

- Press **CALN/SCHD** to enter the Calendar Mode, and then use ▲ and ▼ to display the calendar that includes the date you want to specify.
- Move the flashing cursor to the date you want to specify, and then press **EXP/ANNI**.

An index display appears if the date already has data assigned to it. If the date does not have any data assigned to it, an initial screen appears.

To input Expense Mode data

1. Press **EXP/ANNI** to enter the Expense Mode, and specify a date using the procedure described under "To specify a date."
2. Input the amount of the expense and press **ENTER**.
 - You can input an amount up to 99999999.
3. The list of expense type labels takes up two screens. Use ▲ and ▼ to switch between screens. While a screen is displayed, use number keys 1 through 6 to select the expense type label you want.

4 / OCT / 2003	SAT
AMOUNT	200.
MEAL	
PAYMENT TYPE	
1 CASH	
2 CARD	
▼	CAPS

4. The list of payment type labels takes up two screens. Use ▲ and ▼ to switch between screens. While a screen is displayed, use number keys 1 through 4 to select the payment type label you want.

```

  4 / OCT / 2003  SAT
AMOUNT          200.
MEAL
CASH
NOTE ?
.....
                CAPS

```

5. Input a note of the expense, along with any other comments you want to include.
6. After you finish inputting data, you can use the ▲ and ▼ keys to scroll through the data entries and make any changes that you want.

```

  4 / OCT / 2003  SAT
AMOUNT          200.
MEAL
PAYMENT TYPE
1 CASH
2 CARD
▼                CAPS

```

- Whenever you return to the expense type or payment type item, the currently selected label is highlighted on the display.
7. Press **ENTER** to store the data item in memory.

To calculate expense totals for a specific period

Use the following procedure to calculate totals (subtotals for each type and grand total) for data in the Expense Mode.

1. Press **EXP/ANNI** to enter the Expense Mode.

2. Press **FUNCTION** to display the function menu, and then select **REPORT**.

```

REPORT
FROM 2003/10/01
TO   2003/10/01
PAYMENT TYPE
      ▼      [CAPS]
  
```

3. Use **▶** and **◀** to move the cursor, input a starting date (FROM) and ending date (TO), and then press **ENTER**.

```

REPORT
FROM 2003/10/01
TO   2003/10/05
PAYMENT TYPE
1 CASH
2 CARD
      ▼      [CAPS]
  
```

4. Select a **PAYMENT TYPE** and input its number.
 5. Press **ENTER** to calculate totals for the period you specified in accordance with the conditions you specified.

```

TOTAL AMOUNT
CASH AMOUNT      850.
MEAL              500.
                  100.
      ▼      [CAPS]
  
```

- This operation produces a total for each **PAYMENT TYPE** or **EXPENSE TYPE**, plus a grand total. This example here shows totalization according to **EXPENSE TYPE**.

```

TOTAL AMOUNT
CASH AMOUNT      850.
MISC              500.
                  150.
      ▲▼      [CAPS]
  
```

- If all of the data cannot fit on the display, use **▼** and **▲** to scroll two lines at a time.

6. To return to the normal Expense Mode screen, press **ESC**.

About the total amount display

The amount for each type subtotal and the grand total can be an amount with an integer up to 10 digits long. This means that the maximum value is 9,999,999,999. Any value greater than this is displayed as "*****".

Where to find other information

- For information on searching for and recalling data already stored in memory, see "Recalling data stored in memory" on page 55.
- For information on editing, deleting and copying data already stored in memory, see "Editing, Deleting, and Copying data" on page 57.

Using the To Do Mode

The To Do Mode gives you a handy list of things to do. You can input To Do data by adding new items to end of those already in memory. Each To Do Mode item can contain up to 384 characters (including newline symbols).

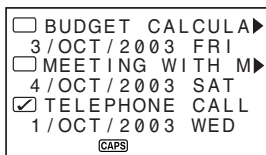
To input To Do Mode data

1. Enter the To Do Mode.
2. Input the text you want in the To Do list.
 - A check box is automatically inserted at the beginning of the To Do item. After you finish the task described in the To Do list, you can check it or delete it.
3. After inputting data, press **ENTER** to store it.
4. Input a date and then press **ENTER** to store the data.

About the To Do list

Items in the To Do list are sorted by the date.

There are two types of items: *unchecked items* and *checked items*. Unchecked items come first in the To Do list, and they always start with a blank box. Checked items are at the bottom of the To Do list, and they start with a box that has a check mark inside.



To check and uncheck To Do items

1. Enter the To Do Mode.
2. Use the search procedures described under “Recalling data stored in memory” on page 55 to find the item you want to check or uncheck.
3. Using the procedure described under “To locate data using index search”, move the item you want to check or uncheck into the top line of the Index Display.

4. Press **ENTER**.

<input type="checkbox"/>	TELEPHONE CALL
	1 / OCT / 2003 WED
CAPS	

<input checked="" type="checkbox"/>	TELEPHONE CALL
	1 / OCT / 2003 WED
CAPS	

5. When the data display is on the screen, press **ENTER** again.
- This input a check mark into the check box.
 - To remove the check mark from a check box, display the data display and then press **ENTER**.

Where to find other information

- For information on searching for and recalling data already stored in memory, see “Recalling data stored in memory” on page 55.
- For information on editing, deleting and copying data already stored in memory, see “Editing, Deleting and Copying data” on page 57.

Using the Anniversary Mode

You can use the Anniversary Mode to store data about anniversaries, and other events that occur on a yearly basis. Each anniversary item can contain up to 384 characters (including new line symbols).

About Anniversary Mode Display formats

As with the other modes, Anniversary Mode data can be displayed using an index display or a data display. The following describes the contents of each type of display.

Index Display

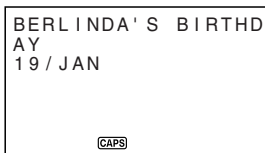
The index display shows data day-by-day.



- Only the first eight characters of the description appears on the index display.
- Data is sorted by date.

Data Display

The data display shows all of the details for a specific entry.



To enter the Anniversary Mode

Press **EXP/ANNI** twice. This displays the Anniversary Mode initial screen.

To input Anniversary Mode data

1. Press **EXP/ANNI** twice to enter the Anniversary Mode.
2. In response to the “**DESCRIPTION?**” prompt, input a description of the appointment.
3. Press **ENTER**.
 - This inputs the current data for the appointment data and causes the “**WHEN?**” prompt to disappear.
4. Use **▶** and **◀** to move the cursor, and input the date.
5. Press **ENTER** to store the appointment in memory.

Where to find other information

- For information on searching for and recalling data already stored in memory, see “Recalling data stored in memory” on page 55.
- For information on editing, deleting and copying data already stored in memory, see “Editing, Deleting and Copying data” on page 57.

Recalling data stored in memory

The following search capability lets you recall data stored in memory quickly and easily.

- With index search, you scroll through an index display of data items.
- With initial character search, you specify the data item you are looking for by inputting the first few letters of an entry.
- With mode search, you specify the data item you are looking for by inputting characters that might occur anywhere in any one of its entries.

Note

- If you perform a mode search in the Telephone Directory, however, only the NAME/COMPANY entries are searched. Other entries are not searched.

Each of the above search procedures produces an index display of the found data items. You can then use **ENTER** to switch to the full data display of the data item you want.

To locate data using index search

1. Enter the mode you want to search.
2. Press **▲** or **▼** to scroll through the index display. You can also scroll to the next page of items by pressing **▲** or **▼**.
 - In the Telephone Directory, Memo Mode, To Do and Anniversary Mode, pressing **▼** when the initial screen of the mode is displayed starts the index display from the first data item, while pressing **▲** starts from the last data item.
3. When the data item you are looking for is in the top of the display (the line immediately below the date in the Schedule Keeper Mode and Expense Mode), press **ENTER** to switch to the full data display.

To locate data using initial character search

1. Enter the mode you want to search.
2. Enter the first few characters of the entry for the data item you want to look for.
 - You can input one or more characters.

3. Press **▼** or **▲** to start the search. An index display of all data items in the mode whose initial characters match those that you specified appears on the display.
 - To clear the “**SEARCH**” indicator from the display (and cancel the current search operation), press **ESC**. The search operation is also canceled when you change modes, or by any data edit or input operation.
 - If no data item matches your specification, or there is no data stored in memory, the message “**NOT FOUND!**” appears on the display.
4. Scroll through the index display item-by-item using **▲** and **▼**. You can also scroll to the next page of items by pressing **▲** or **▼**.
5. When the entry of the data item you are looking for is in the top line (second line in the Schedule Keeper Mode) of the display, press **ENTER** to switch to the full data display.

To locate data using mode search

Use the same procedures as described under “To locate data using initial character search”, but press **SHIFT** and then **▼** or **▲** to start the search.

Editing, Deleting and Copying data

To edit a data item

1. Enter the mode you want to edit a data item.
2. Use index search, initial character search, or mode search to find the data item you want to edit.
3. Move the entry of the data item you want to edit into the top line (second line in the Schedule Keeper Mode and the Expense Mode) of the index display.
 - At this point, you may want to switch to the full data display by pressing **ENTER**. The following steps are the same regardless of whether you are continuing from the index display or the data display.
4. Press **EDIT**.
5. Make any changes you want.
 - To cancel the editing operation without making any changes, press **ESC**.
6. After making the changes you want, press **ENTER** to store the data item with its new changes.

To delete a single data item

1. Enter the mode you want to delete a data item.
2. Use index search, initial character search, or mode search to find the data item you want to delete.
3. Move the entry of the data item you want to delete into the top line (second line in the Schedule Keeper Mode and the Expense Mode) of the index display.
4. Press **DEL**.
5. Press **ENTER** to clear the data item you selected or **ESC** to abort the operation without deleting anything.
 - Remember that the delete operation cannot be undone.

To delete all data items in a mode

Important!

Use the following procedure to delete all data items in the Telephone Directory, Memo Mode, To Do Mode and Anniversary Mode. To delete multiple data items in the Schedule Keeper Mode and Expense Mode, see the procedure under "To delete multiple data items in the Schedule Keeper Mode or Expense Mode".

1. Enter the mode where you want to delete all data items.
2. Press **FUNCTION** once or twice to display the function menu.
3. Press the applicable number key to select **ALL DELETE**.
 - To clear the function menu without deleting anything, press **ESC**.
4. Press **ENTER** to delete all data items in the current mode or **ESC** to abort the operation without deleting anything.
 - Remember that the delete operation cannot be undone.

To delete multiple data items in the Schedule Keeper Mode or Expense Mode

1. Enter the Schedule Keeper Mode or Expense Mode.
2. Press **FUNCTION** once or twice to display the function menu.
3. Press the applicable number key to select **ALL DELETE**.
 - To clear the function menu without deleting anything, press **ESC**.

DELETE ALL ?	
FROM	1901 / 01 / 01
TO	2004 / 01 / 01
ENTER / ESC	
<small>CAPS</small>	

- You can use the ◀ and ▶ keys to move the cursor between the starting date and ending date and change the days, months, and years.
4. Input the year, month and date up to which you want to delete Schedule Keeper or Expense Mode data.
 5. Press **ENTER** to delete all Schedule Keeper or Expense Mode data items during the period that you specified above, or **ESC** to abort the operation without deleting anything.
 - Remember that the delete operation cannot be undone.

To move a Schedule Keeper data to a different date

You can move Schedule Keeper Mode data from one date to another by changing the date on the EDIT screen. See "To edit a data item" on page 57 for more information.

To move an Expense Mode data item to a different date

You can move Expense Mode data from one date to another by changing the date on the EDIT screen. See "To edit a data item" on page 57 for more information.

To copy a data item

The Copy Function lets you duplicate selected data. This function helps to cut down input time when you have multiple data items with similar data. You simply copy the original and then make any necessary changes to create a new data item.

1. Enter the mode you want to copy a data item.
2. Search for and display the data you want to copy.
3. Press **FUNCTION** once or twice to display the function menu.
4. Press the applicable number key to select **ITEM COPY**.
 - At this time, the copy of the data you selected in step 2 above appears, along with the cursor.
5. Make any changes you want.
 - In the case of Schedule Keeper, Expense Mode, To Do and Anniversary data, you can also change the date setting.
6. After you are finished making changes, press **ENTER** to store the new data in memory.

Memory Management Operation

Performing the memory management operation cleans up the addresses of user data in RAM, which increases the size of the memory area that is available for storage.

Note

- The memory of your SF Unit is designed to make your normal data input and recall operations as quick and efficient as possible. After repeated storage and deletion of data, however, you may find that you are unable to store new data, even though the number of data items in memory is less than the specified maximum. When this happens, you need to perform memory management, which cleans up data memory and frees up more space.
1. Enter any mode besides the Calculator Mode or the Conversion Mode.
 2. Press **FUNCTION** once or twice to display the function menu.
 3. Press the applicable number key to select **MEMORY MANAGE**.
 4. Press **ENTER**.
 - To cancel the memory management operation, press **ESC**.

- To cancel the memory management operation, press **ESC**.

Using the Secret function

The Secret Function ensures that your personal data is kept private, but providing you with the means to restrict access to those who know your secret password. You can store Telephone Directory, Memo Mode, Schedule Keeper, To Do Mode, Expense Mode and Anniversary Mode data in the secret memory area.

Important!

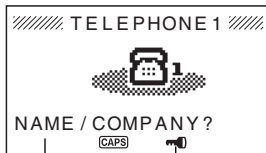
Once you register a password, there is no way to delete it without performing the RESET operation described on page 19. If you forget your password, you will not be able to recall data stored in the secret memory area, and you also will not be able to use the Secret Function unless you perform the RESET operation. Be sure that you do not forget your password!


To create a secret memory area

- Enter the Telephone Directory, Memo Mode, Schedule Keeper, To Do Mode, Expense Mode or Anniversary Mode.
- Press **SECRET** to display the password input screen.



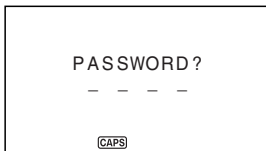
- Enter the word you want to use as your secret password, and then press **ENTER**.
 - You can use up to 4 letters, numbers and symbols in a password.
- Enter the password again, and then press **ENTER**.
 - The following shows an example display for the Telephone Directory.



5. While in the secret memory area, you can change modes, input data, edit data, recall data, and delete data using the procedures explained under each mode in this manual.
6. To exit the secret memory area (and return to the open memory area), press **SECRET**.
 - At this time, the “” indicator disappears from the display.

To enter an existing secret memory area

1. Enter the Telephone Directory, Memo Mode, Schedule Keeper, To Do Mode, Expense Mode or Anniversary Mode.
2. Press **SECRET** to display the password input screen.



3. Enter the password.
4. Press **ENTER** to enter the secret memory area for the mode you selected in step 1 above.
 - If the password you enter in step 3 does not match the one that is registered, the message “**PASSWORD MISMATCH!**” appears.

To edit an existing password

1. Use the procedure under “To enter an existing secret memory area” to enter the secret memory area.
2. Press **FUNCTION** once or twice to display the function menu.
3. Press the applicable number key to select **PASSWORD EDIT**.
 - This displays the message “**PASSWORD EDIT NEW PASSWORD?**”
4. Input a new password and then press **ENTER**.
 - This displays the message “**PLS RE-TYPE NEW PASSWORD!**”
5. Re-input the password you input in step 4.
6. Press **ENTER**.
 - If the password matches the one you input in step 4, the message “**PASSWORD OK!**” appears, and the new password is registered.
 - If the two passwords do not match, the message “**PASSWORD MISMATCH!**” appears, and the password input screen in step 4 reappears.

To transfer data from the open memory area to the secret memory area

1. While not in the secret memory area, enter the Telephone Directory, Memo Mode, Schedule Keeper, To Do Mode, Expense Mode, or Anniversary Mode.
 - Note that this procedure will not be possible if you do not have a password registered. Register a password first.
2. Search for and display the data you want to move.
3. Press **FUNCTION** once or twice to display the function menu.
4. Press the applicable number key to select **TO SECRET AREA**.
 - At this time, a prompt appears on the display asking you for the password registered for the secret memory area.
5. Enter the password.
6. Press **ENTER** to transfer the selected data from the open memory area to the secret memory area, or **ESC** to abort the operation without transferring anything.
 - If the password you enter in step 5 does not match the one that is registered, the message "PASSWORD MISMATCH!" appears.
 - When you transfer data to the secret memory area, it is automatically deleted from the open memory area.

To transfer data from the secret memory area to the open memory area

1. Enter the Telephone Directory, Memo Mode, Schedule Keeper, To Do Mode, Expense Mode, or Anniversary Mode.
2. Enter the secret memory area.
3. Search for and display the data you want to move.
4. Press **FUNCTION** once or twice to display the function menu.
5. Press the applicable number key to select **TO OPEN AREA**.
6. Press **ENTER** to transfer the selected data from the secret memory area to the open memory area, or **ESC** to abort the operation without transferring anything.
 - When you transfer data to the open memory area, it is automatically deleted from the secret memory area.
 - After data transfer is complete, the data display of the area to which you transferred data appears.

Timekeeping Functions

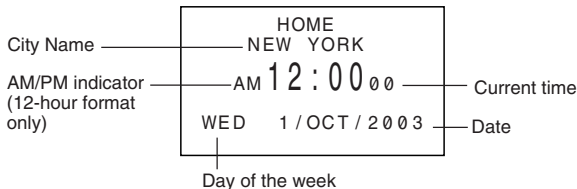
Using the Home Time function

The Home Time function shows you the current time and date in the time zone you preset as your Home Time zone. You also can set a daily alarm that sounds at the same time each day.

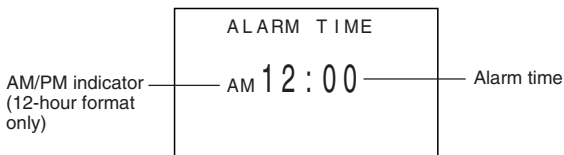
About Home Time displays...

There are two types of Home Time displays.

Home Time Display



Alarm Display



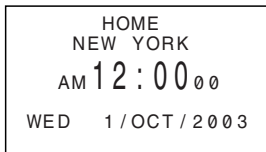
Use **CLOCK** to switch between the Home Time display and the Alarm display.

To display the Home Time

Press **CLOCK** to display the current Home Time.

To set the Home Time zone

1. Press **CLOCK** to display the current Home Time.



2. Press **FUNCTION** to display the function menu.
3. Press the applicable number key to select **TIME ZONE**.



4. Use the ▲ and ▼ cursor keys to change the flashing time zone.
 - Note that the city name changes as you do.
5. When the time zone that you want for the Home Time is flashing (and the city name you want is shown on the display), press **ENTER** to register the new zone.



To set the Home Time

1. Display the current Home Time.
2. Press **EDIT**.
 - The current hour setting on the display flashes because it is *selected*.
3. Use the ◀ and ▶ cursor keys to move the flashing selection around the Home Time display. When any number is selected (flashing), you can change it by entering a new value.
 - You can change the Home Time setting even if summer time (DST) is selected.
 - Use 12-hour format if the Home Time is set for 12-hour format or 24-hour format if the Home Time is set for 24-hour format.
 - Each press of **AM/PM** toggles between AM and PM.
 - All illegal input (26 for the hour, 65 for the minutes) is ignored.
 - Years can be input within the range of 1901 through 2099.
4. After you set the time and date, press **ENTER** to store them.
 - The seconds count of the timepiece resets to "00" when you press **ENTER**.

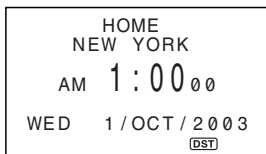
To switch the Home Time between 12-hour and 24-hour format

Pressing **12/24** while the Home Time is displayed toggles it between 12-hour format and 24-hour format.

- The 12-hour/24-hour setting is set up as a *toggle* setting. This means that each time you select the **12/24 HOURS** item in the function menu, the Home Time display switches from its present setting to the opposite one.
- The 12-hour/24-hour setting you make is applied for the time displays in the Schedule Keeper, Home Time and World Time display.

To switch the Home Time between standard and daylight saving time

1. Display the current Home Time.
2. Press **DST** to toggle DST on and off.
 - The standard/DST setting is set up as a *toggle* setting. This means that each time you press **DST** key, the Home Time display switches from its present setting to the opposite one.
 - The following shows an example display with the **DST** indicator (which indicates that **DST** is on).



To set the Daily Alarm

1. Display the current Home Time.
2. Press **CLOCK** several times to display the current daily alarm setting.
3. Press **EDIT**.
 - The alarm's hour setting on the display flashes because it is *selected*.
4. Use the ◀ and ▶ cursor keys to move the flashing selection between the hour and the minutes setting. When either value is selected (flashing), you can change it by entering a new value.
 - Use 12-hour format if the Home Time is set for 12-hour format or 24-hour format if the Home Time is set for 24-hour format.
 - Each press of **AM/PM** toggles between AM and PM.
 - All illegal input (26 for the hour, 65 for the minutes) is ignored.
5. After you set the alarm time, press **ENTER**.
6. Use ◀ and ▶ to select the Daily Alarm on/off setting you want.
7. Press **ENTER** to store it.
 - The "👉" on the display indicates that the daily alarm is turned on.

About the daily alarm...

Once you set the daily alarm, it sounds at the same time every day (as long as the **ALARM TIME** setting is **ON**).

To select the date format

1. Display the current Home Time.
 2. Press **FUNCTION** to display the function menu.
 3. Press the applicable number key to select **DATE FORMAT**.
 4. Select a format by entering its number.
- The following shows an example of each format

1 D/M/Y: 1/JAN/2004

2 M/D/Y: JAN/1/2004

3 Y/M/D: 2004/1/1

- The date format you specify here is applied in the Schedule, Expense, Anniversary, and To Do modes.

Using the World Time function

With the World Time function, you can view the current time in any one of 33 cities around the world. You can register two cities as World Time cities. The times and dates that appear in the World Time displays are based on the current Home Time setting.



To display the World Time

While the Home Time is shown, press **CLOCK** to display the World Time 1. Pressing the **CLOCK** key again displays World Time 2.

- The time zone that you last selected when displaying the World Time appears on the display.

To set the World Time zone

Enter the World Time Mode and perform the same procedure as that described under "To set the Home Time zone" on page 64. You can make separate settings for World Time 1 and World Time 2.

To switch a World Time zone between standard and daylight saving time

Select the World Time zone that you want to set summer time for, and then perform the same procedure as that described under "To switch the Home Time between standard and daylight saving time" on page 66.

City List

Time Difference	City Name	Other Cities in Zone
- 11		
- 10	HONOLULU	
- 09	ANCHORAGE	
- 08	LOS ANGELES SAN FRANCISCO	Seattle, Las Vegas
- 07	DENVER	El Paso
- 06	MEXICO CITY	Dallas, Houston, Chicago
- 05	NEW YORK LIMA	Washington D.C., Boston, Montreal
- 04	CARACAS	Santiago
- 03	RIO DE JANEIRO	Buenos Aires
- 02		
- 01		
+ 00	LONDON	Greenwich Mean Time
+ 01	PARIS ROME	Madrid, Amsterdam
+ 02	CAIRO ATHENS ISTANBUL	Helsinki, Beirut, Jerusalem
+ 03	MOSCOW	Kuwait, Nairobi
+ 3:30	TEHRAN	
+ 04	DUBAI	Abu Dhabi
+ 4:30	KABUL	
+ 05	MALE	
+ 5:30	DELHI	Mumbai, Calcutta, Colombo
+ 06	DHAKA	
+ 07	BANGKOK	Jakarta, Hanoi
+ 08	HONG KONG BEIJING DENPASAR	Taipei, Singapore, Manila
+ 09	TOKYO	Seoul, Pyongyang
+ 9:30	ADELAIDE	Darwin
+ 10	SYDNEY GUAM	
+ 11:00	NOUMEA	
+ 12:00	AUCKLAND	Wellington

Calculator Functions

Using the Calculator

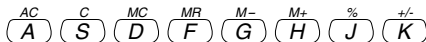
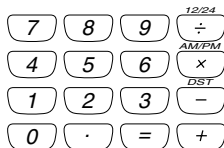
Whenever you enter the Calculator Mode, some of the keys on the SF Unit keyboard take on calculator functions.

To enter the Calculator Mode

Press **CAL** to enter the Calculator Mode.

About the Calculator Mode keys...

The following illustration shows the SF Unit keys that are used in the Calculator Mode.



- **AC** — clears the calculator completely (except the calculator memory).
- Use **C** to clear a value if you have not yet entered the operator following that value.
- Use the number keys (**0** through **9**) to enter values. Press **.** to input a decimal point.
- Use **MC**, **MR**, **M-** and **M+** for calculator memory operations.
 - MC** — clears the calculator memory.
 - MR** — recalls the current calculator memory contents.
 - M-** — subtracts the currently displayed value from the current memory contents. You can also press **M-** to execute a calculation, with the result being subtracted from the memory contents.
 - M+** — adds the currently displayed value to the current memory contents. You can also press **M+** to execute a calculation, with the result being added to the memory contents.
- Use **+**, **-**, **x** and **÷** to specify the arithmetic operation that is marked above each key.
- Use **+/-** to change the sign.
- **=** — executes a calculation and displays its result.
- Use **%** for percentage calculations.

To perform calculations

$53 + 123 - 63 =$	$53 \boxed{+} 123 \boxed{-} 63 \boxed{=}$	0.
$963 \times (23 - 56) =$	$23 \boxed{-} 56 \boxed{\times} 963 \boxed{=}$	113.
$(56 \times 3 - 89) \div 5.2 + 63 =$	$56 \boxed{\times} 3 \boxed{-} 89 \boxed{\div} 5.2 \boxed{+} 63 \boxed{=}$	- 31779.
$123456 \times 741852 =$	$123456 \boxed{\times} 741852 \boxed{=}$	78.19230769
$2 \times (-3) =$	$2 \boxed{\times} 3 \boxed{+/=} \boxed{=}$	E 9.158608051
$12 + 23 =$	$23 \boxed{+} 23 \boxed{+} 12 \boxed{=}$	9.158608051
$45 + 23 =$	$45 \boxed{=}$	- 6
$78 + 23 =$	$78 \boxed{=}$	K + 35.
$7 - 5.6 =$	$5.6 \boxed{-} 7 \boxed{=}$	K + 68.
$2 - 5.6 =$	$2 \boxed{=}$	K + 101.
$2.3 \times 12 =$	$12 \boxed{\times} 2.3 \boxed{=}$	K - 1.4
$4.5 \times 12 =$	$4.5 \boxed{=}$	K - -3.6
$45 \div 9.6 =$	$9.6 \boxed{\div} 45 \boxed{=}$	K \times 27.6
$78 \div 9.6 =$	$78 \boxed{=}$	K \times 54.
12% of 1500	$1500 \boxed{\times} 12 \boxed{\%}$	K + 4.6875
Percentage of 660 against 880	$660 \boxed{\div} 880 \boxed{\%}$	K + 8.125
15% add-on of 2500	$2500 \boxed{\times} 15 \boxed{\%} \boxed{+}$	180.
25% discount of 3500	$3500 \boxed{\times} 25 \boxed{\%} \boxed{-}$	75.
What will the selling price and profit be when the purchasing price of an item is \$480 and the profit rate to the selling price is 25%?	$480 \boxed{+} 25 \boxed{\%} \boxed{-}$	2875.
If you made \$80 last week and \$100 this week, what is the percent increase?	$100 \boxed{-} 80 \boxed{\%}$	2625.
$80 \times 9 = 720$	$80 \boxed{\times} 9 \boxed{M+}$	M 720.
$(-) 50 \times 6 = 300$	$50 \boxed{\times} 6 \boxed{M-}$	M 300.
$(+) 20 \times 3 = 60$	$20 \boxed{\times} 3 \boxed{M+}$	M 60.
480	\boxed{MR}	M 480.

To perform constant calculations



3 **+** **+** 2



1. Enter the Calculator Mode.
2. Enter the calculation, pressing the arithmetic operator key twice. This will cause the "K" indicator to appear on the display to indicate a constant calculation.
 - You can use this constant calculation technique for addition, subtraction, multiplication, and division.
3. Press = to display the initial result (in this case, 5).
4. Press = again to add 3 to the result (in this case, $5 + 3 = 8$).
 - You can repeat the above operation as many times as you like. Each time you press =, the previous result obtained is added to, subtracted from, multiplied by, or divided by the value to the left of the arithmetic operator.
 - To clear a constant calculation, press **AC**.

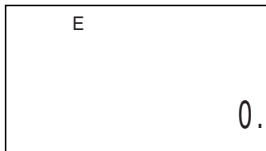
To correct errors in calculations

If you enter a wrong value, press **C** and then enter the correct value.

If you press the wrong arithmetic operator key (**+**, **-**, **×**, **÷**), simply press the correct key before entering anything else.

About calculation errors...

Whenever an error occurs, the indicator "E" appears on the display.



The following conditions all result in errors.

- When the number of digits in the mantissa of an intermediate or a final result exceeds 10 digits.
- When the number of digits in the mantissa of a value stored in memory exceeds 10 digits. In this case, the SF Unit automatically retains the last value stored that did not exceed 10 digits.
- Division by zero.

To clear errors

Press **C** to continue with the same calculation. If you want to clear the calculation and start again, press **AC**.

Using the Currency Conversion Mode

The Currency Conversion Mode lets you perform currency conversions. You can also define cross rates to perform conversions between different currency pairs.

To enter the Currency Conversion Mode

1. Press **CONVERSION** to enter the Conversion Mode.
2. Press **1** to select **CURRENCY CON.**

	CURRENCY	◀ - ▶	CON.
1	USD	◀ - ▶	€
2	USD	◀ - ▶	JPY
3	C 1	◀ - ▶	C 2
4	C 1	◀ - ▶	C 3
5	C 2	◀ - ▶	C 3

To set an exchange rate

- Initially this mode is set up to convert between dollars (\$), euro (€), and yen (¥).
- Be sure to set the correct rates before performing currency conversions.
- You can change currency names and specify the exchange rate to use for conversions.

Example

Set the following conversion rates.

\$1 ① = €1.14 ②

1. Enter the Currency Conversion Mode.
2. Press **1** to select **1 USD ◀ - ▶ €**.
3. Press **EDIT**.
4. Press **▼**.
5. Input the current exchange rate for the number of euros ② per dollar ①.
6. Press **ENTER**.

To view the current Currency Conversion Mode rates

In the Currency Conversion Mode, select the currency whose rate you want to check, and then press **EDIT** then **▼** to display the rate.

To perform a currency conversion

Example

How many euros (€) are \$50 (dollars)?

1. Enter the Currency Conversion Mode.
2. Press **1** to select **1 USD ◀ – ▶ €**.
3. Enter 50.
4. Press **▶** to convert from dollars to euros.
 - The converted value appears on the display.
 - Pressing **◀** converts from euros to dollars.

To change the currency name and rate

Example 1

To specify an exchange rate of €1 (euro) = £1.63(GBP)

1. Enter the Currency Conversion Mode.
2. Press **3** to select **C1 ◀ – ▶ C2**.
3. Press **EDIT**.
4. Input €.
5. Press **▶** as many times as necessary to move the cursor to **C2** and then input **G B P**.
 - You can input up to five characters for a currency name.
6. Use the **▼** key to move the cursor to the **RATE** input item.
7. Enter **1 . 6 3**.
 - If you make a mistake while inputting the value, press **C** to clear it, and then re-input.
8. Press **ENTER**.
 - This stores the input value.

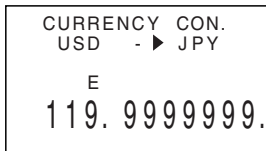
Example 2

To specify an exchange rate of € 1 (euro) = DM1.948261 (DEM)

9. Press **ESC** to go back to the Current Conversion Mode initial display.
 - This displays the rates you set in Example 1.
10. Press **4** to select **C1** ◀ – ▶ **C3**.
 - If there is already a rate assigned to C1, it appears at this time. In this example, “€” is input for C1, so the display shows € ◀ – ▶ C3.
11. Press **EDIT**.
12. Press ▶ as many times as necessary to move the cursor to C3, and then input **D E M**.
13. Use the ▼ key to move the cursor to the **RATE** input item.
14. Enter **1 . 9 4 8 2 6 1**.
 - You can input up to 10 digits for a rate.
15. Press **ENTER**.
 - This stores the input value.
 - Conversion No.5 will be automatically set when No.3 & 4 have been registered. The currency name and exchange rate of No.5 are changed automatically.

About conversion errors...

Whenever an error occurs, the indicator “E” appears on the display.



The following condition results in error.

- When the number of digits in the mantissa of an intermediate or a final result exceeds 10 digits.

To clear errors

Press **AC** or **C** to clear the conversion errors.

Using the Metric Conversion Mode

Use this mode to convert between meters and yards, kilograms and pounds, Fahrenheit and Celsius, etc.

To enter the Metric Conversion Mode

1. Press **CONVERSION** to enter the Conversion Mode.
2. Press **2** to select **METRIC CON**.

To perform a metric conversion

Example 1

To convert 5 yards to meters.

1. Enter the Metric Conversion Mode.
2. Press **1** to select **yd** \blacktriangleleft - \blacktriangleright **m**.
3. Enter 5.
4. Press \blacktriangleright to convert from yards to meters.
 - The result of the conversion appears on the display.
 - Pressing \blacktriangleleft converts from meters to yards.

Example 2

To convert 28 degrees Celsius to Fahrenheit

1. Enter the Metric Conversion Mode.
2. Press \blacktriangledown .
3. Press **2** to select $^{\circ}\text{C}$ \blacktriangleleft - \blacktriangleright $^{\circ}\text{F}$.
4. Enter 28.
5. Press \blacktriangleright to convert from Celsius to Fahrenheit.
 - The result of the conversion appears on the display.
 - Pressing \blacktriangleleft converts from Fahrenheit to Celsius.
 - When converting to Fahrenheit, the result is rounded off to an integer. When converting to Celsius, the result is rounded off to one decimal place.

Data Communications

Data communications capabilities let you transfer data between two CASIO SF Units, or between this unit and a personal computer. You can perform such operations in the Telephone Directory, Memo, Schedule Keeper, Calendar, To Do, Expense or Anniversary modes.

Data communication is supported with the following SF Unit models.

SF-4990, SF-6990, SF-7990.

Data transfer to other SF Units is possible by connecting to computer running FA-127 Version 1.5 software.

Setting Up for Data Communications

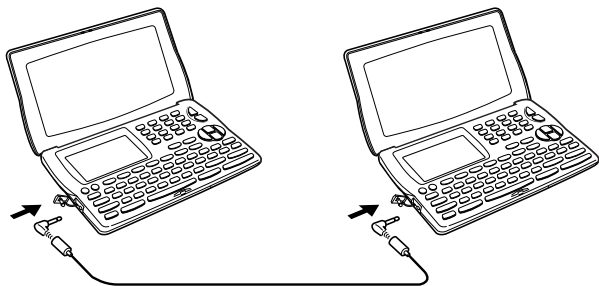
The following describes what you should do to set up for data communications between two SF Units, or between this unit and a personal computer.

To connect the SF-4990/SF-6990/SF-7990 to another SF Unit

1. Make sure that the power of both units is switched off.
2. Open the covers of the data communication jacks of the two SF Units.
3. Connect the two units using the optional SB-63 cable.
 - The 3-pin plug of the SB-63 cable is a two-step type. When attaching the plug, be sure to push it firmly into the jacks as far as it will go.

Important!

- Be sure to close the connector covers of the SF Units when you are not performing data communications.



Performing data communications between an SF Unit and a personal computer

See the manual that comes with FA-127 Version1.5 for details on connecting to a computer and setting up for communication.

Note

- The CASIO Data Communication Package may not be included with certain SF Units models. If your unit does not come with the Data Communication Package, contact your dealer about purchasing one. Please note that there are a number of different CASIO Data Communication Packages to suit various computers and SF Unit types. Because of this, you should note the following important points when purchasing a Data Communication Package. If you have any question about which package you need, consult with your dealer.
 - Make sure the Data Communication Package is designed for use with your particular model of personal computer.
 - If the proper Data Communication Package is not yet available in your area, consult with your dealer to find out when it is scheduled to go on sale.
 - For information on how to connect the SF Unit with a personal computer, see the user's manual that comes with a Data Communication Package.

To set the SF Unit hardware parameters

1. Press **FUNCTION** once or twice to display the function menu.
2. Press the applicable number key to select **DATA COMM.**
3. Press **3** to select **SET UP PAR.**

```

SET UP PAR.
PARITY           E O N
BIT LENGTH       7 8
BPS              4800 9600
  
```

- The highlighted items on the display are the parameters that are currently set.
 - The **PARITY** parameter is flashing because it is *selected*.
4. Use the ▲ and ▼ cursor keys to change the selected parameter on the display.
 5. Use the ◀ and ▶ cursor keys to change the highlighted setting of the currently selected parameter.
 6. When the parameters are set the way you want them, press **ENTER** to store them in memory.

About communications parameters...

Communications parameters make it possible for two communicating units to understand each other. The following explanations are provided for your information only. The only thing you need to remember is that the parameters of the send unit and the receive unit must be identical. Otherwise you will not be able to transfer data successfully.

PARITY

Parity is used for error detection during data exchanges. You can set the SF Unit parity as even (E), odd (O), or none (N).

BIT LENGTH

The bit length parameter states how many bits are to be used for each character. You can set the SF Unit bit length as 7 bits or 8 bits.

BPS

The letters "BPS" stand for "bits per second," and this setting represents the speed at which data is sent. The SF Unit lets you set a speed of either 4800 or 9600.

To set up the SF Unit to receive data

1. While an initial screen is displayed, press **FUNCTION** once or twice to display the function menu.
- If you want the received data to be stored in the secret memory area, you should also enter the secret memory area at this point. If you are in the open memory area on the receiving unit, received data is stored into the open memory area.
2. Press the applicable number key to select **DATA COMM.**
3. Press **2** to select **RECEIVE**.

RECEIVE OK

TO STOP PRESS ESC

- This message indicates that the receive unit is standing by for data. Perform the required procedures to start sending data from another SF Unit, or a personal computer (see the Interface Unit manual for details).
 - To abort the receive operation at any time, press **ESC**.
 - This procedure is the same regardless of whether the data is received from another SF Unit, or from a personal computer.
4. The display changes to the following once the SF Unit starts receiving data.

RECEIVING

ITEM NO

16

TO STOP PRESS ESC

— Receive data item count

- The number of data items received is counted on the display.
- If an error occurs during the receive operation, the message “**TRANSMIT ERROR!**” appears on the display. Press **ESC** to clear the error message.
- Received data is added to the data already stored in memory. If the memory becomes full during the receive operation, the message “**MEMORY FULL!**” appears and data transfer stops. Press **ESC** to clear the error message.
- If an alarm (Daily Alarm or Schedule Alarm) is reached while data is being received, the alarm does not sound until the data receive operation is complete.

Sending Data

This section tells you how to operate the SF Unit to send data to another SF Unit, or to a personal computer. There are a number of possible procedures you can use, depending on the mode and how many data items you want to send.

About data transfer types...

There are a number of different ways you can transfer data.

- **Mode Data Items**

This method is used to send all data items stored in the Telephone Directory, Memo Mode, To Do Mode, Calendar or Anniversary Mode from the SF Unit. With the Schedule Keeper or Expense Mode, this procedure can be used to send all the data stored in a specific period (from one date to another). For the Calendar Mode, this procedure makes it possible to send all the highlight data in a specific period (from one month to another).

- **Month Data**

This method lets you send the highlight data for a specific month in the Calendar Mode.

- **All Data Items**

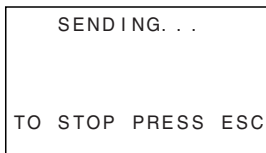
With this method, you can send all data items stored in the Telephone Directory, Memo Mode, Anniversary Mode, Schedule Keeper, To Do Mode, Expense Mode and the Calendar from the SF Unit.

Note

- If an alarm (Daily Alarm or Schedule Alarm) is reached while data is being sent, the alarm does not sound until the data send operation is complete.

To send all data items

1. While an initial screen is displayed, press **FUNCTION** once or twice to display the function menu.
- Note that this operation sends all open memory area data or all secret memory area data. Make sure you are in the memory area you want (open or secret) before proceeding.
2. Press the applicable number key to select **DATA COMM.**
3. Press **1** to select **SEND.**
4. Press **2** to select **ALL DATA.**
5. Press **ENTER** to start the send operation or **ESC** to abort the operation without sending anything.



- Data is sent in the sequence: Telephone Directory, Memo Mode, Anniversary Mode, Schedule Keeper, Calendar, To Do Mode, Expense Mode.
 - To abort the send operation at any time, press **ESC**.
 - If an error occurs during the send operation, the message "**TRANSMIT ERROR!**" appears on the display. Press **ESC** to clear the error message.
 - When sending data to a personal computer, certain mode data may be disregarded, depending upon the version of software you are using for SF data handling on the personal computer.
6. After the send operation is complete, the display returns to the screen of the mode you were in when you started this procedure.

To send one month of Calendar data (highlights)

1. In the Calendar Mode, press **FUNCTION** once or twice to display the function menu.
2. Press the applicable number key to select **DATA COMM**.
3. Press **1** to select **SEND**.
4. Press **1** to select **MODE DATA**.
5. Specify the period whose highlights you want to send.
6. Press **ENTER** to start the send operation or **ESC** to abort the operation without sending anything.
 - If the corresponding calendar in the receiving unit already contains highlighted dates, the received data is ignored. You have to clear the corresponding data in the receiving unit before it can receive highlight data.
 - To abort the send operation at any time, press **ESC**.
 - If an error occurs during the send operation, the message “**TRANSMIT ERROR!**” appears on the display. Press **ESC** to clear the error message.
7. After the send operation is complete, the display returns to the initial screen when you started this procedure.

To send all Telephone Directory, Memo Mode, To Do Mode, or Anniversary Mode data

1. In the Telephone Directory, Memo Mode, To Do Mode, or Anniversary Mode, press **FUNCTION** once or twice to display the function menu.
 - You can perform the following operation while in the open memory area or the secret memory area.
2. Press the applicable number key to select **DATA COMM**.
3. Press **1** to select **SEND**.
4. Press **1** to select **MODE DATA**.
5. Press **ENTER** to start the send operation or **ESC** to abort the operation without sending anything.
 - To abort the send operation at any time, press **ESC**.
 - If an error occurs during the send operation, the message “**TRANSMIT ERROR!**” appears on the display. Press **ESC** to clear the error message.
6. After the send operation is complete, the display returns to the initial screen of the mode you were in when you started this procedure.

To send all Schedule Keeper, Calendar or Expense Mode data in a specific period

- In the Schedule Keeper, Calendar or Expense Mode, press **FUNCTION** once or twice to display the function menu.
 - You can perform the following operation while in the open memory area or the secret memory area.
- Press the applicable number key to select **DATA COMM.**
- Press **1** to select **SEND.**
- Press **1** to select **MODE DATA.**

SEND DATA ?	
FROM	1901 / 01 / 01
TO	2002 / 01 / 01
ENTER / ESC	

- Using the ◀ and ▶ keys to move the cursor, input the starting and ending date of the period.
 - To send the data from January 1, 2004 to April 1, 2004, for example, press ▶ to move the cursor under the month (2004/01/01) and press 4.
- After you specify the ending date, press **ENTER.**
Press **ENTER** to start the send operation or **ESC** to abort the operation without sending anything.
 - To abort the send operation at any time, press **ESC.**
 - If an error occurs during the send operation, the message "TRANSMIT ERROR!" appears on the display. Press **ESC** to clear the error message.
- After the send operation is complete, the display returns to the Schedule Keeper, Calendar or Expense Mode screen.

Technical Reference**Keys**

Key Cap	Name	Function
ON/OFF	Power On/Off key	Press this key to switch power on/off.
LIGHT	Light key	Press this key to light up the display.
TEL	Telephone Directory key	<ul style="list-style-type: none"> • Press this key to enter the Telephone Directory. • Press this key to toggle between TEL 1 and TEL 2.
CALN/SCHD	Calendar/Schedule Mode key	Press this key to enter the Calendar Mode or Schedule Keeper.
EXP/ANNI	Expense and Anniversary Mode key	Press this key to enter the Expense Mode or Anniversary Mode.
MEMO	Memo Mode key	Press this key to enter the Memo Mode.
TO DO	To Do Mode key	Press this key to enter the To Do Mode.
CAL	Calculator Mode key	Press this key to enter the Calculator Mode.
CLOCK	Clock key	Press this key to display the current Home Time, World Time and Alarm Time.
SECRET	Secret key	Use this key to register a password, to access the secret memory area, and to exit the secret memory area.
CONVERSION	Conversion Mode key	Press this key to enter the Currency or Metric Conversion Mode.
ESC	Escape key	<ul style="list-style-type: none"> • Press this key to interrupt any operation. • Press this key to switch from the data screen to the index screen.

Key Cap	Name	Function
CAPS	Caps key	Press this key to shift-lock the keyboard between upper-case and lower-case characters.
SHIFT	Shift key	Press this key to temporarily shift the keyboard for one character.
CODE	Code key	Use this key to input accented characters.
FUNCTION	Function key	Press this key to display function menus.
SPACE	Space key	Press this key to input a space.
SYMBOL	Symbol key	Press this key to display a menu of symbols on the display.
ENTER	Enter key	<ul style="list-style-type: none"> • Press this key to store input data into memory. • Press this key to switch from the index screen to the data screen.
EDIT	Edit key	Use this key to edit data in any mode.
INS	Insert key	Press this key to open a space at the current cursor position.
DEL	Delete key	Press this key to delete the character at the current cursor position.
↵	Newline key	<ul style="list-style-type: none"> • Press this key to create a new line within a data entry. • Press this key to highlight and unhighlight dates in the Calendar Mode.
▲ ▼	Search key	Press this key to start a search for data stored in memory.

Key Cap	Name	Function
▶	Cursor Right key	Press this key to move the cursor to the right.
◀	Cursor Left key	Press this key to move the cursor to the left.
▲	Cursor Up key	Press this key to move the cursor up, or to scroll the display.
▼	Cursor Down key	Press this key to move the cursor down, or to scroll the display.
1 } 0	Numeric keys	Press these keys to enter the corresponding number.
A } Z	Letter keys	Press these keys to enter the corresponding letter. Use the CAPS to switch between upper-case and lower-case letters.

For information on the **AC**, **C**, **MC**, **MR**, **M-**, **M+**, **%**, **+/-**, **+**, **-**, **x**, **÷**, and **=** keys, see “About the Calculator Mode keys...” on page 70.

Storage Capacity

The 256K (SF-4990)/512K (SF-6990)/1M (SF-7990) bytes memory capacity includes a 258,696 (SF-4990)/520,840 (SF-6990)/1,045,128 (SF-7990) bytes user area. The following shows examples of what this means for the storage of data in each mode.

Telephone Directory

Approximately 7,300 (SF-4990)/14,800 (SF-6990)/29,800 (SF-7990), under the following conditions:

- 8-character name
- 10-character telephone number

Approximately 4,700 (SF-4990)/9,400 (SF-6990)/19,000 (SF-7990), under the following conditions:

- 8-character name
- 10-character telephone number
- 20-character E-mail

Memo

Approximately 8,900 (SF-4990)/17,900 (SF-6990)/36,000 (SF-7990), 20-character memos.

Schedule Keeper

Approximately 6,100 (SF-4990)/12,400 (SF-6990)/24,800 (SF-7990), under the following conditions:

- 1 item per day, 20 characters per item
- 30 days per month
- Starting time specified, alarm time set

Approximately 6,100 (SF-4990)/12,400 (SF-6990)/24,800 (SF-7990), under the following conditions:

- 1 item per day, 20 characters per item
- 30 days per month
- Starting time specified, no alarm time

To Do

Approximately 7,600 (SF-4990)/15,300 (SF-6990)/30,700 (SF-7990), 20-character items.

Expense

Approximately 7,300 (SF-4990)/14,800 (SF-6990)/29,800 (SF-7990), under the following conditions:

- 4 items per day, 30 days per month
- up to \$999.99 per amount item
- 8-character payment type
- 8-character expense type

Anniversary

Approximately 11,700 (SF-4990)/23,600 (SF-6990)/47,500 (SF-7990), under the following conditions:

- 10 characters per item

Auto Sort Sequence

Telephone Directory data items are automatically sorted in alphabetical order according to the first letter in the NAME entry. The following table shows the sequence used for data sorts.

1	§	31	=	61	[	91	{	121	â	151	ij
2	(space)	32	>	62	\	92	!	122	ê	152	æ
3	!	33	?	63	]	93	}	123	î	153	ç
4	"	34	@	64	^	94	~	124	ô	154	â
5	#	35	A	65	a	95	Á	125	û	155	ø
6	\$	36	B	66	b	96	É	126	¿	156	£
7	%	37	C	67	c	97	Í	127	Ä	157	¥
8	&	38	D	68	d	98	Ó	128	Ë	158	Ω
9	'	39	E	69	e	99	Ú	129	Ï	159	ª
10	(	40	F	70	f	100	À	130	Ö	160	º
11	)	41	G	71	g	101	È	131	Ü	161	×
12	*	42	H	72	h	102	Ì	132	Ä	162	÷
13	+	43	I	73	i	103	Ò	133	Ö	163	±
14	,	44	J	74	j	104	Ù	134	Ñ	164	°
15	—	45	K	75	k	105	Â	135	IJ	165	²
16	.	46	L	76	l	106	Ê	136	Æ	166	³
17	/	47	M	77	m	107	Î	137	Ç	167	μ
18	0	48	N	78	n	108	Ô	138	À	168	$\frac{1}{2}$
19	1	49	O	79	o	109	Û	139	Φ	169	$\frac{1}{4}$
20	2	50	P	80	p	110	ı	140	Β	170	$\frac{3}{4}$
21	3	51	Q	81	q	111	á	141	¶	171	f
22	4	52	R	82	r	112	é	142	ç	172	|
23	5	53	S	83	s	113	í	143	ä	173	Fr
24	6	54	T	84	t	114	ó	144	ë	174	←
25	7	55	U	85	u	115	ú	145	ï	175	→
26	8	56	V	86	v	116	à	146	ö	176	√
27	9	57	W	87	w	117	è	147	ü	177	€
28	:	58	X	88	x	118	ì	148	ã		
29	;	59	Y	89	y	119	ò	149	õ		
30	<	60	Z	90	z	120	ù	150	ñ		

Message Table

Message	Meaning	Action
NOT FOUND!	Data specified in search operation does not exist in memory or no data is stored in memory.	Change specification or cancel search.
MEMORY FULL!	No more room in memory for storage of data.	Delete unnecessary data items from memory, and then perform the memory management procedure (page 59).
ALARM TIME ALREADY USED OR PASSED!	Attempt to set a Schedule Keeper alarm time that is already used for another entry or time is already passed.	Set a different alarm time or change the existing alarm time to another one. Set a different alarm time (for a future time/date).
SECRET DATA!	Alarm for a secret memory area data item is sounding.	Enter the secret memory area to view details of the alarm.
PASSWORD MISMATCH!	Attempt to enter the secret memory area using a password that does not match the one preset for the secret area.	Use the correct password.
TRANSMIT ERROR!	Error during data communications.	Cancel the data communications operation and try again.
DATA ERROR! CHECK YOUR USER'S GUIDE FOR PROCEDURE!	Data corrupted by strong impact, electrostatic charge, etc.	See page 13 of this manual.

Message	Meaning	Action
WEAK BATTERIES! CONSULT YOUR USER'S GUIDE IMMEDIATELY!	The batteries are getting weak.	Replace batteries immediately (page 16).

Specifications

Model: SF-4990/SF-6990/SF-7990

Main Modes:

Telephone Directory 1, 2, Memo, Schedule Keeper, To Do, Expense, Anniversary, Calendar, Home Time, World Time, Calculator, Currency Conversion and Metric Conversion.

Data storage:

Storage and recall of telephone, memo, schedule, to do, expense, anniversary data; calendar display; secret memory area; editing; memory status display

Clock:

Home Time, World time 1, 2; schedule alarm; daily alarm; accuracy under normal temperatures: average ± 3 seconds per day

Calculation:

10-digit arithmetic calculations; arithmetic constants (+, -, \times , \div); independent memory; percentages; 20-digit approximations; other mixed calculations

General:

Display element: 17-column \times 6-line LCD

Memory capacity: SF-4990: 256KB

SF-6990: 512KB

SF-7990: 1MB

Main component: LSI

Power supply: 2 lithium batteries (CR2032)

Power consumption: 0.1W

Battery life: Approximately 1 year under the following test conditions:
Unit turned on one hour each day (5 minutes operation, 55 minutes no operation), with two backlight operations, one Daily Alarm operation per day and Hourly Time Signal turned on.

Auto power off: Approximately 6 minutes after last key operation

Operating temperature: 0°C ~ 40°C (32°F ~ 104°F)

Dimensions:

Unfolded: 11.1H × 145W × 178D mm ($\frac{7}{16}$ "H × $5\frac{11}{16}$ "W × 7"D)

Folded: 14.7H × 145W × 91D mm ($\frac{9}{16}$ "H × $5\frac{11}{16}$ "W × $3\frac{9}{16}$ "D)

Weight: Approximately 130g (4.6 oz) including batteries

CASIO®

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