EXHIBIT C

User Manual

INFORMATION TO THE USER

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.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device. Pursant 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.

This booklet is available from the US government Printing Office *washington, DC 20402, Stock NO. 004-000-00345-4.

CAUTION: Any changes of modifications not expressly approved by the grantee of this device could void the users authority to operate the equipment.

Cordless telephones operate at frequencies that may cause interference to nearby TVs and VCRs;to minimize or prevent such interference,the base of the cordless telephone should not be placed near of a TV or VCR; and, if interference is experienced,moving the cordless telephone farther away from the TV or VCR will often reduce or eliminate the interference.

SONY

3-000-000-11 (1)
3-866-975-11 (1)

Cordless Telephone

Operating Instructions

Manual de instrucciones

US

ES

Spread Spectrum 900 MHz

CALLER ID with call waiting

SPP-S9101

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Owner's Record

The model and the serial numbers are located at the bottom of the unit. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. SPP-S9101

Serial No. _____

IMPORTANT SAFETY INSTRUCTIONS

When using your telephone equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

1. Read and understand all instructions.
2. Follow all warnings and instructions marked on the product.
3. Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use this product near water, for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.
5. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
6. Slots and openings in the cabinet and the back or bottom are provided for ventilation. To protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the product on the bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation unless proper ventilation is provided.
7. This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your dealer or local power company.
8. Do not allow anything to rest on the power cord. Do not locate this product where the cord will be abused by persons walking on it.
9. Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.
10. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock. Never spill liquid of any kind on the product.
11. To reduce the risk of electric shock, do not disassemble this product, but take it to a qualified service personnel when some service or repair work is required. Opening or removing covers may expose you to dangerous voltages or other risks. Incorrect reassembly can cause electric shock when the appliance is subsequently used.

12. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

    A. When the power cord or plug is damaged or frayed.

    B. If liquid has been spilled into the product.

    C. If the product has been exposed to rain or water.

    D. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions because improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.

    E. If the product has been dropped or the cabinet has been damaged.

    F. If the product exhibits a distinct change in performance.

13. Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.

14. Do not use the telephone to report a gas leak in the vicinity of the leak.

SAVE THESE INSTRUCTIONS

CAUTION:

To reduce the risk of fire or injury to persons by battery, read and follow these instructions.

1. Use only the following type and size battery pack: Sony BP-T31
2. Do not dispose of the battery pack in a fire. The cell may explode. Check with local codes for possible special disposal instructions.
3. Do not open or mutilate the battery pack. Released electrolyte is corrosive and may cause damage to the eyes or skin. It may be toxic if swallowed.
4. Exercise care in handling battery pack in order not to short the battery with conducting materials such as rings, bracelets, and keys. The battery or conductor may overheat and cause burns.
5. Charge the battery pack provided with or identified for use with this product only in accordance with the instructions and limitations specified in the instruction manual provided for this product.
6. Observe proper polarity orientation between the battery pack and battery charger.

INFORMATION FOR GENERAL TELEPHONES

1. This equipment complies with Part 68 of the FCC rules. On the bottom of this equipment is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.
2. The applicable registration jack (connector) USOC-RJ11C is used for this equipment.
3. This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack which is Part 68 compliant.

   The FCC compliant telephone cord and modular plug is provided with this equipment.
4. The REN is used to determine the quantity of devices which may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company.
5. If your equipment (SPP-S9101) causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

US

02/02-04_SPP-S9101.11US 3 2/25/99, 11:21 AM
SPP-S9101 3-000-000-11.US

6. The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.
7. If trouble is experienced with this equipment (SPP-S9101), for repair or warranty information, please contact Sony Direct Response Center: Tel 1-800-222-7669. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.
8. All repairs will be performed in an authorized Sony service station.
9. This equipment cannot be used to party lines or coin lines.
10. This equipment is hearing aid compatible.

If your telephone is equipped with automatic dialers

When programming emergency numbers and (or) making test calls to emergency numbers:

1. Remain on the line and briefly explain to the dispatcher the reason for the call.
2. Perform such activities in the off-peak hours, such as early morning or late evenings.

Caution

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Note

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.

Note on Warranty

Be sure to save the receipt and attach it to your warranty card when having your equipment repaired at an authorized Sony service station.

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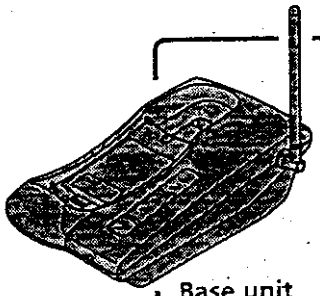
Read this first

Before you use your phone, you must set it up. Here's a quick way to set up your phone: Steps 1, 2, 3 and 4.

Step 1 (page 7)

First, unpack the phone and the supplied accessories.



Base unit

Step 2 (pages 8 to 10)

Next, you need to do three things to set up the base unit, including finding the best location for the base unit.

Handset

Step 3 (pages 11 to 12)

Then, you need to insert the battery pack into the handset and charge it for more than 12 hours.

Step 4 (page 14 to 16)

Finally, you need to enter the area code to use the Caller ID service.

That's it!

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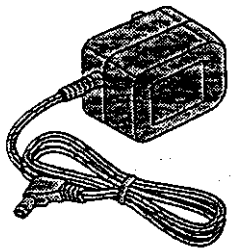
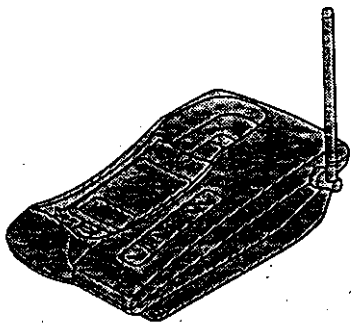
Step 1

Checking the package contents

Make sure you have received the following items in the package.
If anything is missing, contact your local Sony dealer.

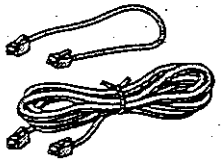


AC power adaptor (AC-T123)

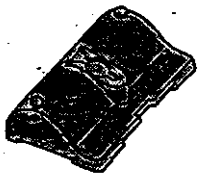


Base unit

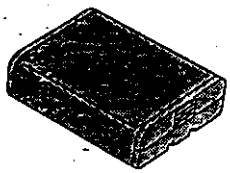
Handset



Telephone line cords (2)



Wall bracket for base unit



Rechargeable battery pack (BP-T31)

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Step 2

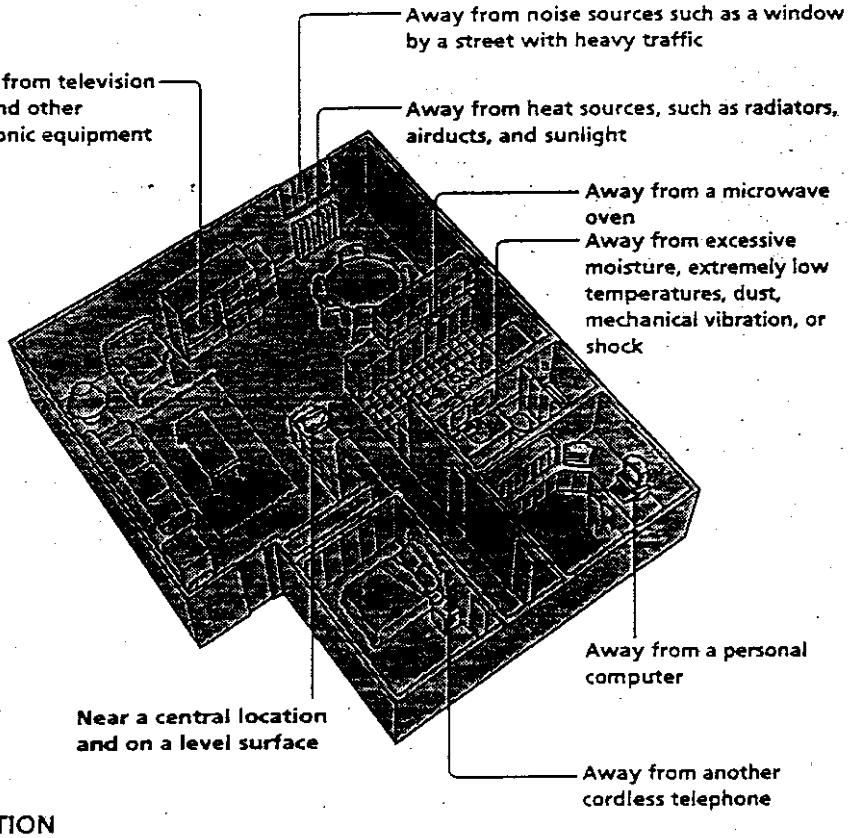
Setting up the base unit

Do the following steps:

- Choose the best location
- Connect the base unit
- Choose the dialing mode

Choose the best location

Where you place the base unit affects the reception quality of the handset.



CAUTION

- The cordless telephone operates at a frequency that may cause interference to nearby TVs and VCRs; the base unit should not be placed near or on the top of a TV or VCR; and, if interference is experienced, moving the cordless telephone farther away from the TV or VCR will often reduce or eliminate the interference.
- Should you experience intermittent loss of audio during a conversation, try moving closer to the base unit or move the base unit from other noise sources.

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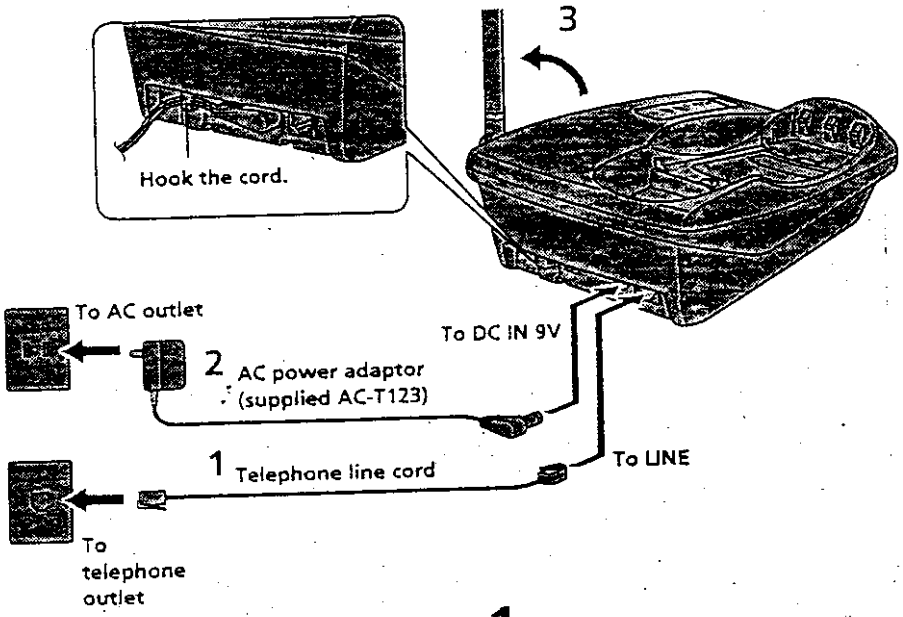
Connect the base unit

If you want to hang the base unit on the wall, see page 38.



1 Connect the telephone line cord to the LINE jack and to a telephone outlet.

2 Connect the AC power adaptor to the DC IN 9V jack and to an AC outlet.

3 Raise the antenna. Make sure it points toward the ceiling.

continued

Step 2: Setting up the base unit (continued)

Notes

- Use only the supplied AC-T123 AC power adaptor. Do not use any other AC power adaptor.
- Connect the AC power adaptor to a continuous power supply.
- Place the base unit close to the AC outlet so that you can unplug the AC power adaptor easily.

Polarity of the plug

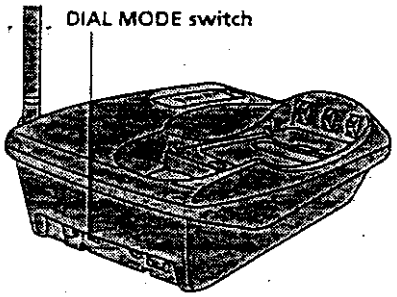
Tip

If your telephone outlet is not modular, contact your telephone service company for assistance.

Modular

Choose the dialing mode

For the telephone to work properly, select an appropriate dialing mode (tone or pulse).



Depending on your dialing system, set the DIAL MODE switch as follows:

If your dialing system is	Set the switch to
Tone	T
Pulse	P

If you aren't sure of your dialing system

Make a trial call with the DIAL MODE switch set to T.
If the call connects, leave the switch as is; otherwise, set to P.

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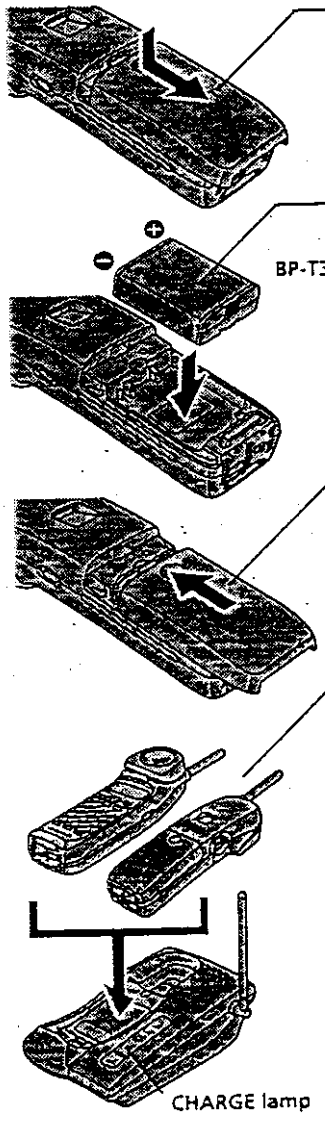
Step 3

Preparing the battery pack

Charge the battery pack for more than 12 hours before you start using your phone.



1 Slide open the battery compartment lid of the handset.

2 Insert the battery pack into the battery compartment.

3 Close the battery compartment lid.

4 Place the handset on the base unit.

You can place either side facing up.

The CHARGE lamp lights up when the handset is properly seated on the charge terminals of the base unit. Charge the battery pack for more than 12 hours so that the battery is fully charged. The CHARGE lamp remains lit even after charging is completed.

continued

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Step 3: Preparing the battery pack (continued)

Battery duration

A fully charged battery pack lasts for about:

- 6 hours when you use the handset continuously
- 10 days (RING ON mode) or a month (RING OFF mode) when the handset is in standby mode.

Notes

- The battery pack will gradually discharge over a long period of time, even if not in use.
- If you leave the battery pack in the handset without charging it, the battery pack will be completely discharged.
  It may require several times of charging to recover to its full capacity.
- While charging, the battery pack warms up. This is not a malfunction.

To obtain the best performance from the battery

Do not place the handset on the base unit after each call. The battery works best if the handset is returned to the base unit after two or three calls. However, do not leave the handset off the base unit for a long period of time as this will completely discharge the battery pack.

When to purchase a new battery pack

If the battery lasts only a few minutes even after 12 hours of charging, the usable life of the battery has expired and needs replacement. Contact your local Sony authorized dealer or service center, and ask for Sony BP-T31 rechargeable battery pack.

Note

Battery life may vary depending on usage condition and ambient temperature.

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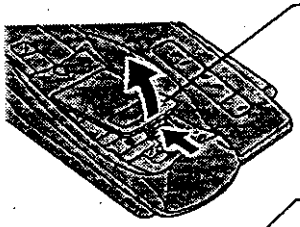
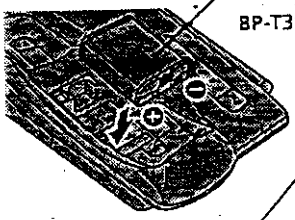
Handset spare battery usage

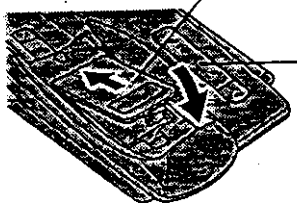
As only one battery pack is supplied with this unit, it is necessary to purchase an additional battery pack (optional) for use as a handset spare battery pack.



1 Open the battery compartment lid of the base unit.



2 Insert the battery pack (optional) into the battery compartment.



3 Close the battery compartment lid.

The SPARE BATTERY lamp lights up. Charge the battery pack for more than 24 hours so that the battery is fully charged. The SPARE BATTERY lamp remains lit even after charging is completed.

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Step 4

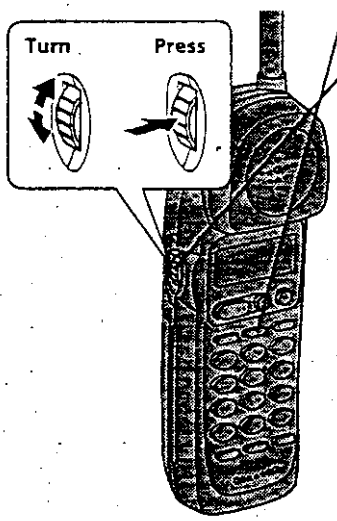
Entering the area code

When you use this phone for the first time, or move to an area that has a different area code, you must enter your home area code.

This is necessary because the phone must distinguish local or long distance calls to properly dial calls from the Caller ID list.

For the local area code, up to five codes can be entered.

To enter your home area code



1 Press (PGM).

2 Turn Jog Dial up to make "AREA" flash.

DIRECTORY=AREA=

3 Press Jog Dial.

=HOME=LOCAL

4 Press Jog Dial again.
"ENTER AREA CODE" appears on the display.

5 Enter three digits of your home area code using the dialing keys.

6 Press (PGM).
You hear a long confirmation beep.

Notes

- If the home area code is already entered, it appears on the display in step 4. To enter a different home area code, see "To change the home area code" on page 15.
- Do not allow more than 20 seconds to elapse between each step of the procedure.
- If the home area code has not been entered, calling back from the Caller ID list and storing the Caller ID data into the Phone Directory cannot be performed.

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Tips

- You may press Jog Dial instead of (PGM) in step 6 on page 14.
- To check the current home area code, perform steps 1 to 4 on page 14. The home area code appears on the display for about 20 seconds.

To change the home area code

1 Perform steps 1 to 4 on page 14.

The current home area code appears on the display.

2 Turn Jog Dial down to erase the current home area code.

3 Enter a new home area code using the dialing keys.

4 Press (PGM).

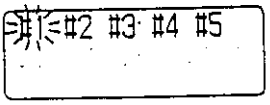
You hear a long confirmation beep.

To enter the local area code

1 Perform steps 1 to 3 on page 14.

2 Turn Jog Dial up to make "LOCAL" flash.

3 Press Jog Dial.



4 Select the number ("#1" to "#5") to enter the local area code by turning Jog Dial.

5 Press Jog Dial.

"ENTER AREA CODE" appears on the display.

6 Enter three digits of the local area code using the dialing keys.

7 Press (PGM).

You hear a long confirmation beep.

continued

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Step 4: Entering the area code (continued)

Notes

- If the local area code is already entered, it appears on the display in step 5. To enter a different local area code, see "To change the local area code" below.
- Do not allow more than 20 seconds to elapse between each step of the procedure.

Tips

- You may press Jog Dial instead of (PGM) in step 7.
- To check the current local area code, perform steps 1 to 5 on page 15. The local area code appears on the display for about 20 seconds.

To change the local area code

1 Perform steps 1 to 5 on page 15.

The current local area code appears on the display.

2 Turn Jog Dial down to erase the current local area code.

3 Enter a new local area code using the dialing keys.

4 Press (PGM).

You hear a long confirmation beep.

To erase the local area code

You can erase the local area code. Perform steps 1 and 2 above, then press (PGM).

The local area code will be erased, and you hear a long confirmation beep.

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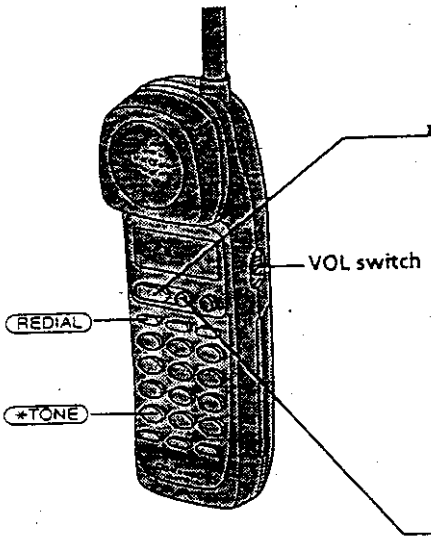
Making calls



1 Pick up the handset from the base unit.

2 Press (TALK) and wait until "TALK" appears on the display.

The dialing keys light up.

You then hear a dial tone. If you hear five short error beeps and "OUT OF RANGE" appears on the display, move closer to the base unit.

3 Dial the phone number.

4 When you're done talking, press (OFF) or replace the handset on the base unit.

The display goes off.

Additional tasks

To	Do this
Adjust the handset volume	Set the VOL switch to H (high), M (middle) or L (low).
Switch to tone dialing temporarily	Press (*TONE) after you're connected. The line will remain in tone dialing until disconnected.

Notes

- When you increase the sound volume, in some cases the background noise may be increased as well. You should adjust the volume accordingly.
- If the handset beeps every second during conversation and "OUT OF RANGE" appears on the display, move closer to the base unit; otherwise, the call will be disconnected after one minute.

continued

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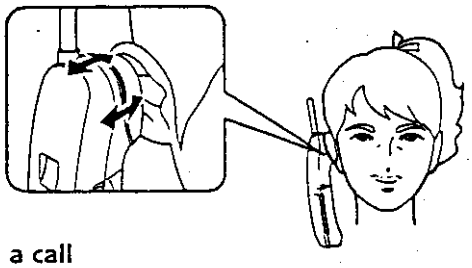
EZfit

The "EZfit" adjusts to fit any shape ear, thereby ensure clear voice reception.



If the battery becomes weak during a call

The handset will beep every three seconds, and "BATTERY LOW" appear on the display. Finish your call and charge the battery pack.

For optimum performance, charge the battery for a full 12 hours.

Note that during the initial charge time (approx. 10 minutes), and "BATTERY LOW" appear on the display and the phone cannot be used.

After and "BATTERY LOW" go off, you **may** be able to use the phone, but the battery duration will be **very short**; thus it is recommended that you **fully charge** the battery before next use.

Redialing

1 Press (TALK) and wait until "TALK" appears on the display.

2 Press (REDIAL) to redial the number last dialed.

Note

If the number exceeds 32 digits, five short error beeps will alert you that the number cannot be dialed.

To check the phone number before redialing

While the handset is not in use, press (REDIAL).

The number last dialed is displayed for five seconds.

To dial the number, press (TALK) while the number is displayed.

Note

The number will not be displayed if the last dialed number exceeds 32 digits or if it is erased.

To erase the last phone number dialed

While the handset is not in use, press (REDIAL) twice.

The number will be erased from the memory, and you will hear a long confirmation beep.

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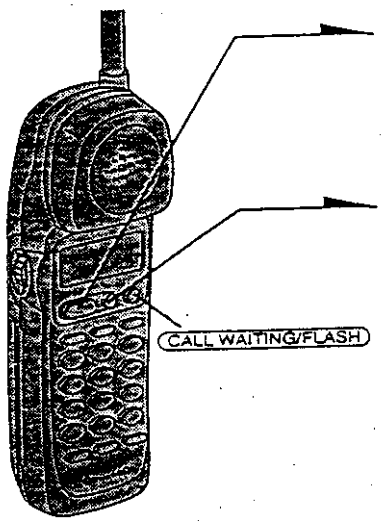
Receiving calls



1 When you hear the phone ring, pick up the handset from the base unit, and press (TALK).

"TALK" appears on the display.

2 When you're done talking, press (OFF) or replace the handset on the base unit.

The display goes off.

Tip

If you have subscribed to the Caller ID service:

- the caller's number and/or name appears on the display when you receive a call (see page 27)
- the ringer sound changes to a higher tone if the call matches the number stored on ONE-TOUCH DIAL buttons or in the Phone Directory (memory match function; see page 27).

To switch to another call ("call waiting" service*)

Press (CALL WAITING/FLASH).

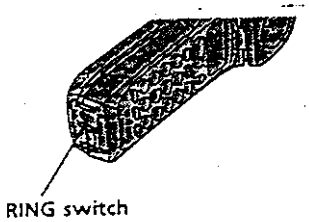
Press the button again to get back to the first caller.

* Contact your telephone company to subscribe to this service.

To turn the ringer off

Set the RING switch on the bottom to OFF.

The handset won't ring. You can still make calls, and also receive calls if another telephone connected to the same line rings to inform you on incoming calls. You can also page the handset from the base unit.



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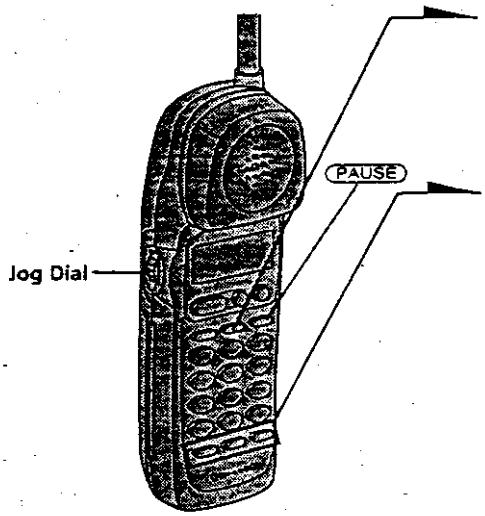
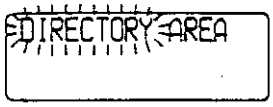
One-touch dialing

You can dial with one touch of a key by storing a phone number on a one-touch dialing button.

Storing phone numbers

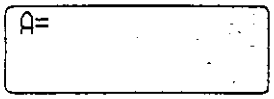


1 Press (PGM).



2 Press one of the three ONE-TOUCH DIAL buttons (A) to (C).

You hear a confirmation beep.

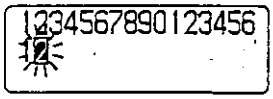


If a number is stored, it appears on the display. To store a new number, turn Jog Dial down to erase it.

3 Enter the phone number you want to store.

You can enter up to 20 digits, including a tone and a pause, each of which is counted as one digit.

When the phone number of more than 17 digits has been entered, the phone number appears in two lines.



4 Press (PGM).

You hear a long confirmation beep, and the number is stored. The display goes off.

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Note

Do not allow more than 20 seconds to elapse between each step of the procedure.

Tips

- When the phone number of more than 17 digits has been entered, "–" is displayed next to 15th digit in step 4 on page 20.
- If you have entered a wrong number in step 3 and have not pressed (PGM) (step 4) yet, just turn Jog Dial down to erase it. Then enter the correct number.
- You may press Jog Dial instead of (PGM) in step 4.

To store a number to be dialed via Private Branch Exchange (PBX)

Before entering a phone number in step 3 on page 20, do as follows:

1 Enter the outside line access digit (e.g., 9).

2 Press (PAUSE).

To change a stored number

1 Press (PGM).

2 Press one of the ONE-TOUCH DIAL buttons (A) to (C).

The current number appears on the display.

3 Turn Jog Dial down to erase the current number.

4 Enter a new number.

5 Press (PGM).

Note

You can replace the stored number with a new number, but you cannot just erase it.

Tip

When the phone number of more than 17 digits has been entered, "–" is displayed next to 15th digit and then the all digits are displayed in two lines after about two seconds in step 2.

Making calls with one-touch dialing

1 Press (TALK) and wait until "TALK" appears on the display.

2 Press one of the ONE-TOUCH DIAL buttons (A) to (C).

The phone number stored on the one-touch dialing button will appear on the display and will be dialed.

To check the phone number before one-touch dialing

While the handset is not in use, press one of the ONE-TOUCH DIAL buttons (A) to (C).

The number stored on the button appears on the display for five seconds. To dial the number, press (TALK) while the number is displayed.

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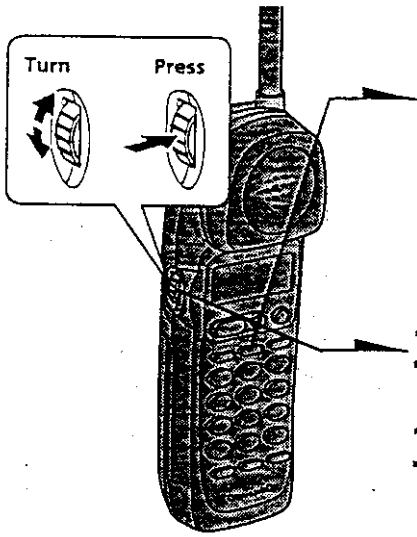
Phone Directory

You can dial a number by scrolling through the Phone Directory.
You can store up to 100 numbers.

Storing phone numbers and names



Example: to store "SONY" "123-4567".

1 Press (PGM).

If "DIRECTORY" is not flashing, turn Jog Dial down to make it flash.

2 Press Jog Dial.

"ENTER NAME" appears.

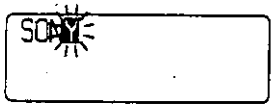
3 Enter the name using the dialing keys. You can enter up to 15 characters.

Press a dialing key until the desired character appears. (See the character table for details.)

Enter successive characters in the same way.

To enter two characters assigned to the same key, or to enter a "space", turn Jog Dial up to move the cursor to the right.

Example: to enter "SONY", press (7) four times (S), press (6) three times (O), turn Jog Dial up to move the cursor, press (6) twice (N), and press (9) three times (Y).



Character table

Key	Character
(1)	1
(2)	A → B → C → 2
(3)	D → E → F → 3
(4)	G → H → I → 4
(5)	J → K → L → 5
(6)	M → N → O → 6
(7)	P → Q → R → S → 7
(8)	T → U → V → 8
(9)	W → X → Y → Z → 9
(0)	0
(*)	*
(#)	& → ' → , → - → . → #

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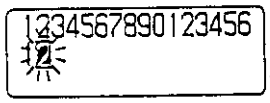
4 Press (PGM).

"ENTER NUMBER" appears.

5 Enter the phone number.

You can enter up to 20 digits, including a tone and a pause, each of which is counted as one digit.

When the phone number of more than 17 digits has been entered, the phone number appears in two lines.



6 Press (PGM).

You hear a long confirmation beep, and the name and the number are stored. The display goes off.

Notes

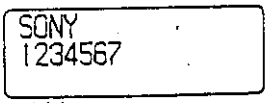
- If you try to save a 101st phone number, you will hear five short error beeps and "MEMORY FULL" will be displayed. You cannot store the phone number. To store another phone number, erase one of the stored phone numbers (see page 24).
- Do not allow more than 20 seconds to elapse between each step of the procedure.

Tips

- When the phone number of more than 17 digits has been entered, "–" is displayed next to 15th digit in step 6.
- If you have entered a wrong name or number in step 3 or 5, turn Jog Dial down to erase it. Then enter the correct name or number.
- You may press Jog Dial instead of (PGM) in steps 4 and 6.
- To store a number to be dialed via PBX, follow the steps on page 20 when entering a phone number.

Changing a stored name and/or phone number

1 Display the name and phone number you want to change by doing steps 1 and 2 on page 25.



2 Press Jog Dial.

continued

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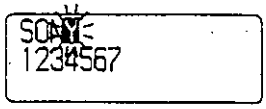
3 Turn Jog Dial up to make "EDIT" flash and press Jog Dial.

The cursor flashes at the last character of the name.



4 Turn Jog Dial down to erase the characters and enter the new name.

If you want to change only the number, skip this step.

5 Press Jog dial.

The cursor flashes at the last digit of the phone number.

6 Turn Jog Dial down to erase the number and enter the new number.

If you don't want to change the number, skip this step.

7 Press Jog Dial.

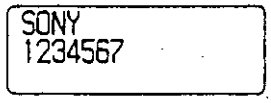
You hear a long confirmation beep and the name and/or the number is changed.

Tip

When the phone number of more than 17 digits has been entered, "–" is displayed next to 15th digit and then the all digits are displayed in two lines after about two seconds in step 5.

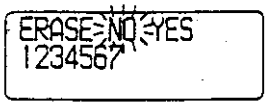
Erasing a memory location

1 Display the name and phone number you want to erase by doing steps 1 and 2 on page 25.



2 Press Jog Dial.

3 Turn Jog Dial up to make "ERASE" flash and press Jog Dial.



4 Turn Jog Dial up to make "YES" flash, then press Jog Dial.

You hear a long confirmation beep and the memory location is erased.

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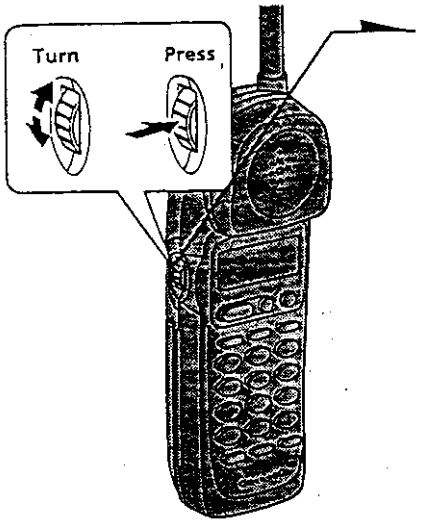
Making calls from the Phone Directory



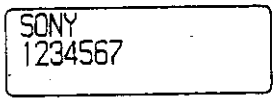
1 Press Jog Dial.

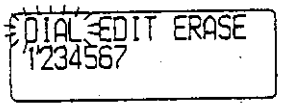
"DIRECTORY" appears on the display.

2 Display the name and phone number you want to call.

To search in alphabetical order: Turn Jog Dial up or down.

To search by entering the initial character: Press the dialing key of the desired character, then turn Jog Dial.





3 Press Jog Dial.

4 Press Jog Dial again.

The phone number will be dialed.

Tip

You may press (TALK) to make a call instead of doing steps 3 and 4.

About the search order

The names appear in the following order when you turn Jog Dial up or down.

- Alphabetical order: ABC...XYZ ⟷ * ⟷ # ⟷ 0 - 9

- Initial character: To search for "SONY" for example, press (7) and then turn Jog Dial to search through the names starting with P, Q, R, S or 7.

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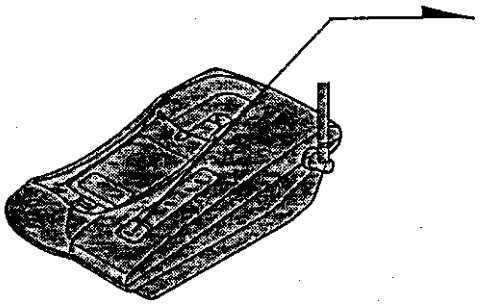
Paging

You can page the handset from the base unit.

Note that you can't page if the handset is in use.



To Page

Press HANDSET LOCATOR.

The handset rings.

When you keep pressing HANDSET LOCATOR, the handset rings continuously.

Note

You can page the handset even when its RING switch is set to OFF.

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Understanding the Caller ID service

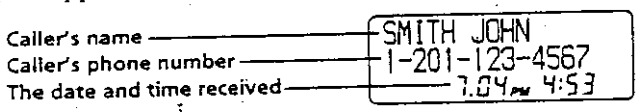
Caller ID allows the caller's phone number to be shown on the display before you answer the call. In order to use this feature, you must first subscribe to Caller ID service. The name of this service may vary depending on your telephone company.

To use this feature, be sure to enter your home area code (see page 14).

When you receive a call

The phone number appears on the display with the date and time as shown in the following example.

If your Caller ID service includes the caller name service, the caller's name also appears on the display (up to 15 letters).



When you answer the call, the Caller ID display changes to the "TALK" display.

Notes

- Even if the RING switch is set to OFF, you can receive Caller ID data.
- The caller's phone number and/or name will not appear in the following cases:
  - "OUT OF AREA": when the call is made through a telephone company which does not offer Caller ID service (including international calls).
  - "PRIVATE": when the call is "blocked." For privacy reasons, many states allow callers the option to prevent his or her telephone data from being displayed on the other party's Caller ID display.
- If the call is from an office which uses multiple lines, the displayed phone number may not match the number you use to call the extension.

About the memory match function

If you receive a call from a phone number which is stored on one of the ONE-TOUCH DIAL buttons (see page 20) or in the Phone Directory (see page 22), the ringer sound will change to a higher tone from the second ring.

Note

The memory match function does not work with "OUT OF AREA" or "PRIVATE" calls; and it may not work with calls made from an office which uses multiple lines because the number does not always match the one you stored in this phone.

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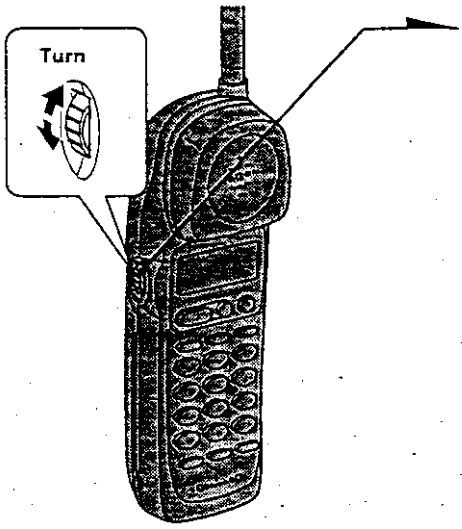
Looking at the Caller ID list

The phone stores the data of the last 20 calls received including "OUT OF AREA" and "PRIVATE" calls. It keeps track of all calls received; even if they were not answered.

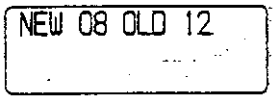
Viewing the Caller ID list

You can look through the Caller ID list to check the phone number and/or name of the calls received.



1 Turn Jog Dial.

The display shows the number of "NEW" (calls which you have not viewed) and "OLD" (calls which you have viewed) calls.



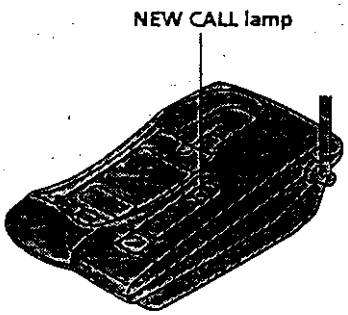
2 Turn Jog dial down to display older data or up to display newer data.

Notes

- If a 21st call is received, the oldest data is automatically erased.
- When you have checked all data , "END OF LIST" appears.

Tip

If there is a "NEW" data, the NEW CALL lamp of the base unit flashes.



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About the "*" mark

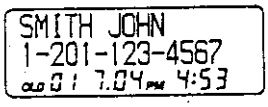
"*" appears if there are more than two calls from the same phone number. The older data will be replaced by the new data, so the calls are counted as only one call.

Erasing data from the Caller ID list

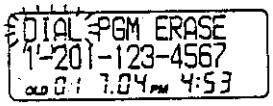
Old data will be erased automatically when a 21st call comes in, but you can also manually erase unnecessary data one by one or erase the entire list.

To erase the phone number one by one

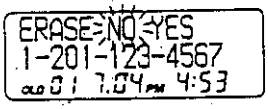
1 Display the phone number you want to erase from the Caller ID list (see page 28).



2 Press Jog Dial.



3 Turn Jog Dial up to make "ERASE" flash and press Jog Dial.



4 Turn Jog Dial up to make "YES" flash, then press Jog Dial.

You hear a long confirmation beep and the data is erased.

continued

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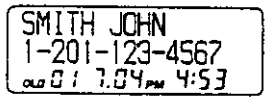
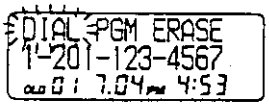
Looking at the Caller ID list (continued)

To erase the entire list at once

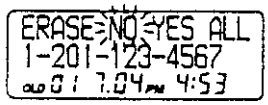
1 Display any Caller ID data.



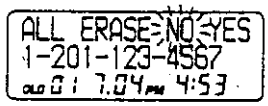
2 Press Jog Dial.



3 Turn Jog Dial up to make "ERASE" flash and press Jog Dial.

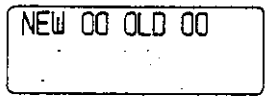


4 Turn Jog Dial up to make "ALL" flash, then press Jog Dial.



5 Turn Jog Dial up to make "YES" flash, then press Jog Dial.

You hear a long confirmation beep and the entire list is erased.



Note

"ALL" appears only when all the data had become "OLD" data. If there is any "NEW" data, you cannot erase the entire list.

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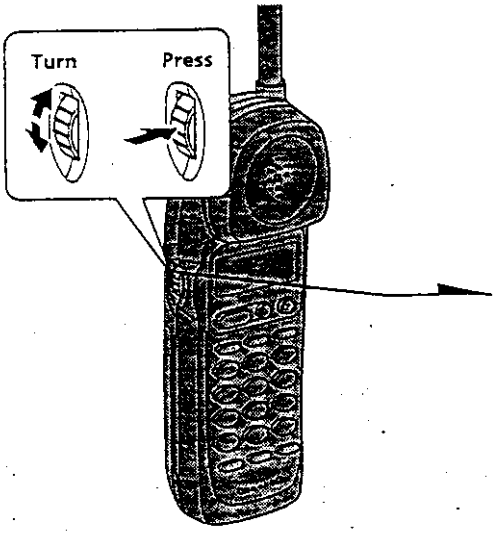
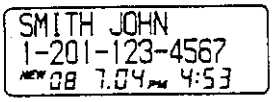
Using the Caller ID list

By using the Caller ID list, you can call back a phone number from the Caller ID list easily, or store numbers from the Caller ID list into the Phone Directory.

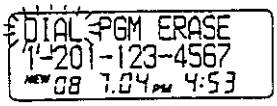
Calling back a number from the Caller ID list



1 Display the phone number you want to call from the Caller ID list (see page 28).



2 Press Jog Dial.



3 Press Jog Dial again.

The phone automatically dials the displayed number.

Notes

- If the number displayed in step 1 is not the one you should call back, you can change the number of digits of the phone number as described on page 33.
- If the phone is connected to a Private Branch Exchange (PBX), you may not be able to call back from the Caller ID list because an outside line access digit is necessary.

Tip

You may press TALK to make a call instead of doing steps 2 and 3.

continued

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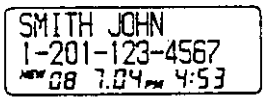
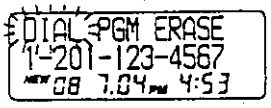
Storing a number of the Caller ID list into the Phone Directory

1 Display the name and phone number you want to store from the Caller ID list (see page 28).



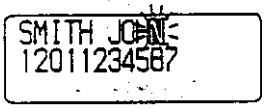
2 Confirm the number and press Jog Dial.



3 Turn Jog Dial up to make "PGM" flash and press Jog Dial.

The cursor flashes at the end of the name.

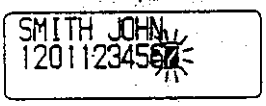
Enter or change the name, if necessary (see page 23).



4 Press Jog Dial.

The cursor flashes at the end of the phone number.

Enter or change the phone number, if necessary (see page 23).



5 Press Jog Dial again.

You hear a long confirmation beep and the name and number are stored.

Notes

- Do not allow more than 20 seconds to elapse between each step of the procedure.
- If the number displayed in step 1 is not the one you should call back, you can change the number of digits of the phone number as described on page 33.
- If the phone is connected to a Private Branch Exchange (PBX), you may need to add an outside line access digit.

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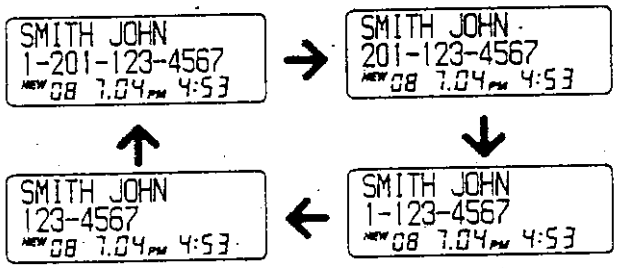
To change the number of digits of the phone number

If the number of digits of the phone number in the Caller ID list is different from the actual phone number, you need to adjust the number of digits of the phone number to call back or store into the Phone Directory.

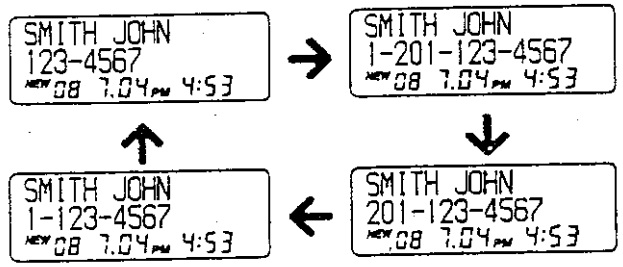
1 While the phone number from the Caller ID list is displayed, press (#) repeatedly until the phone number with the correct number of digits appears on the display.

Each time you press (#), the number of digits changes as follows.

When the home area code and the local area code do not match



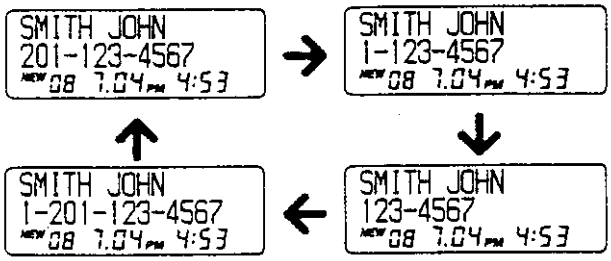
When the home area code matches



continued

Using the Caller ID list (continued)

When the local area code matches



2 Continue the operation to call or store the phone number with the correct number of digits (pages 31 and 32).

Notes

- You need to adjust the number of digits each time you call back from the Caller ID list as the changes to the Caller ID data is not stored in memory.
- You may not be able to change the number of digits depending on the Caller ID data.

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Using "Caller ID with call waiting" service

This telephone is compatible with the "Caller ID with call waiting" service. Make sure that your telephone company offers this service.

Like the basic Caller ID service, you need to subscribe to "Caller ID with call waiting" in order to use this service.

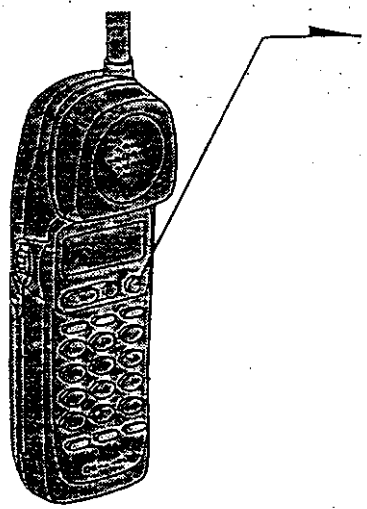
Even though you may have already subscribed to "Caller ID" and "call waiting" as two separate services, you need to request a subscription to "Caller ID with call waiting" as a single service.

This is a new service that combines the two services.

Even though you now have a "Caller ID with call waiting" compatible phone, unless you subscribe to the combined "Caller ID with call waiting" service, you will not be able to see the name and number of the second caller.

When a new call comes in while you are talking, the caller's name and/or phone number of the new call appears on the display for about 20 seconds.

To switch to another caller



1 To switch to the new caller, press CALL WAITING/FLASH.

2 To switch back to the first caller, press CALL WAITING/FLASH again.

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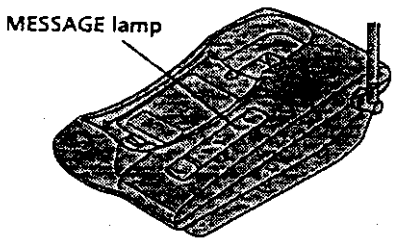
Using visual message waiting service

If you subscribe to your telephone company's message service which includes this feature, the display will show that you have messages waiting to be retrieved.



If you have messages

When the handset is placed on the base unit, the MESSAGE lamp on the base unit flashes.

"MESSAGES"ランプと
音声でしょうか.

When the handset is not placed on the base unit, "MESSAGE WAITING" will appear every five seconds on the display, and the MESSAGE lamp on the base unit flashes.

The display and the MESSAGE lamp will go off when you retrieve your messages.

Note

You cannot use this feature, if you have not subscribed to your telephone company's message service.
For details on the availability of this service, please ask your telephone company.

If the MESSAGE lamp remains flashing

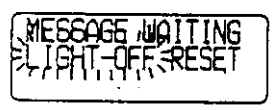
他機種に合わせ→
変更いたします.

You can go off the lamp manually.

To go off the MESSAGE lamp

1 Press (PGM).

2 Press (#).



3 Press Jog Dial.

The MESSAGE lamp on the base unit goes off, and you hear a long confirmation beep.

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If you move or change your telephone company

Message waiting signals are sent in one of two ways: FSK signaling or "stutter" signaling (Your telephone company can provide you with more information about your service).

The first time this phone receives a voice mail message, it will set itself to whichever service (FSK or stutter) your telephone company provides, and will lock out the other service.

When you move or change your telephone company, you need to reset this phone . To reset, perform the following procedure. The phone will returns to ready state for either FSK or stutter dial tone voice mail recognition.

To reset this unit

1 Press (PGM).

2 Press (#).

3 Turn Jog Dial up to make "RESET" flash and press Jog Dial.

You hear a long confirmation beep and the unit is reset.

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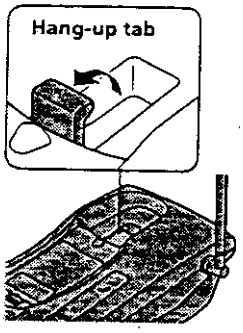
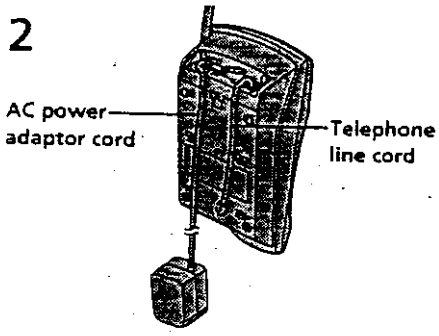
Mounting the base unit on a wall

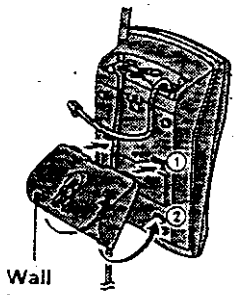
1



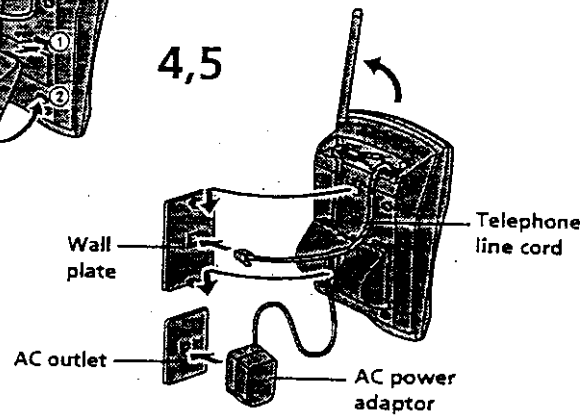
2



3



4,5



1 Raise the hang up tab.

2 Plug the telephone line cord to the LINE jack and the AC power adaptor to the DC IN 9V jack, and hook the cords. Use the shorter cord for mounting.

3 Attach the wall bracket to the center of the base unit.

Align the Δ marks of the wall bracket with those of the base unit.

4 Plug the telephone line cord to the telephone outlet, and hook the base unit to the wall plate.

5 Plug the AC power adaptor to an AC outlet. Then raise the antenna so that it points towards the ceiling.

Tip

To remove the wall bracket, press the lower tabs.

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Notes on power sources

On battery pack

- Store the battery pack at a temperature between 41°F (5°C) and 95°F (35°C) for best performance.
- If you do not use the handset for a long period of time, remove the battery pack from the handset after charging for more than 12 hours, and base unit after charging for more than 24 hours when you have a spare battery.

On power failure

During a power interruption, you cannot make or receive calls.

For the customers in the USA

RECYCLING NICKEL-CADMIUM BATTERIES

Nickel-Cadmium batteries are recyclable. You can help preserve our environment by returning your unwanted batteries to your nearest point for collection, recycling or proper disposal.

Note: In some areas the disposal of nickel-cadmium batteries in household or business trash may be prohibited.

RBRC (Rechargeable Battery Recycling Corporation) advises you about spent battery collection by the following phone number.

Call toll free number: 1-800-822-8837 (United States and Canada only)

Caution: Do not handle damaged or leaking nickel-cadmium batteries.

Maintenance

On cleaning

- Clean the cabinets with a soft cloth slightly moistened with water or a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine as they may damage the finish of the cabinet.
- If the charge terminals of the base unit and handset are soiled, wipe them with a soft cloth.

If you have any questions or problems concerning your phone, please consult your nearest Sony dealer.

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Troubleshooting

If you've experienced any of the following difficulties while using your phone, use this troubleshooting to help you remedy the problem. Should any problem persist, consult your nearest Sony dealer.

	Symptom	Remedy
Making calls	You hear five short error beeps when you press (TALK).	• Make sure you set up the base unit correctly (page 8). • Move the handset closer to the base unit.
	You hear no dial tone.	• Make sure the telephone line cord is securely connected to the telephone outlet. • Make sure the battery is fully charged (page 11).
	The phone does not connect at all, even though the number you dial is correct.	• Make sure the dialing mode is set correctly (page 10).
	The phone does not redial correctly.	• Make sure the last dialed number is really the one you want to dial.
	You hear five short error beeps when you try to redial.	• The number you last dialed exceeds 32 digits (including the tone and pause digits if used). • The number you last dialed is erased.
Receiving calls	The handset does not ring.	• Set the RING switch on the handset to ON. • The battery may be weak. Charge the battery for more than 12 hours (page 11). • Make sure you set up the base unit correctly (page 8). • Move the handset closer to the base unit.
During conversation	You hear interference during conversation.	• Move the handset closer to the base unit. • Place the base unit away from noise sources (page 8).
	You hear a beep every second during conversation and "OUT OF RANGE" appear on the display.	• It is an out-of-range alarm. Move the handset closer to the base unit within one minute.
	You hear a beep every three seconds and and "BATTERY LOW" appears on the display.	• The battery is weak. Charge the battery for more than 12 hours (page 11).

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	Symptom	Remedy
One-touch dialing/ Phone Directory	You hear five short error beeps and cannot store a number on a one-touch dial or in the Phone Directory.	• Make sure you follow the procedure in storing the number correctly (pages 20 and 22).
	You hear five short error beeps when you try to make a one-touch dial call.	• You entered a one-touch dialing button to which no phone number has been stored.
	One-touch dialing or Phone Directory dialing is incorrect.	• Store a correct number (pages 20 and 22).
Caller ID	The caller's name and/or phone number does not appear on the display.	• Make sure you have subscribed to Caller ID service. • Caller ID service may not work when the phone is connected to a Private Branch Exchange (PBX). • The call is made through company which does not offer Caller ID service. "OUT OF AREA" will appear on the display. • The call was "blocked". "PRIVATE" will appear on the display. • You answered the call while "** RINGING **" is displayed. Be sure to answer after the Caller ID data is displayed.
	The caller's name and/or phone number does not appear on the display during call waiting.	• Make sure you have subscribed to "Caller ID with call waiting" service (see page 35). • Make sure nobody is talking on another phone on the same telephone line.
	You cannot dial the number from the Caller ID list.	• Make sure you entered your home area code correctly (page 14). • You may need to change the number of digits of the phone number (page 33). • This function may not work when the phone is connected to a Private Branch Exchange (PBX).
	The memory match function does not work.	• If the call is from an office which uses multiple lines, the phone number may not match the number you put in the memory. • If you stored the phone number with an outside line access digit in the Phone Directory because the phone is connected to a Private Branch Exchange (PBX), the phone number will not match the Caller ID data.
	You cannot use visual massage waiting service.	• Make sure you have subscribed to visual message waiting service (see page 36). • If you move or change your telephone company, reset this phone (see page 37).

continued

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Troubleshooting (continued)

	Symptom	Remedy
Power source/battery	The CHARGE lamp does not light up when you place the handset to charge.	• Wipe the charge terminals of the base unit and the handset with a soft cloth or paper for better contact of the charge terminals. • Make sure the handset is placed on the base unit properly.
	The battery duration is short.	• The battery pack was charged less than 12 hours (due to power failure, etc.). • The usable life of the battery has expired and needs replacement.
	⌧ and "BATTERY LOW" do not appear on the display when you place the handset on the base unit to charge a new battery.	• When you charge a new battery for the first time, ⌧ and "BATTERY LOW" do not appear on the display. Charge the battery for more than 12 hours.

Note

If any of the remedy did not work, there may be something wrong with the handset.

Replace the handset on the base unit, then pick it up and try again. If the handset is on the base unit, pick up the handset and replace it again.

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Specifications

General

Spread method
  Direct-Sequence Spread-Spectrum
Access method
  FDMA-TDD
Operation frequency
  902 - 928 MHz (100 mW)
Operating channel
  14 channels
Dial signal
  Tone, 10 PPS (pulse) selectable
Supplied accessories
  See page 5.

Handset

Power source
  Rechargeable battery pack BP-T31
Battery charging time
  Approx. 12 hours
Battery life
  Standby: Approx. 10 days (RING ON Mode)
  Approx. 1 month (RING OFF mode)
  Talk: Approx. 6 hours
Dimensions
  Approx. 58 x 177 x 46 mm (w/h/d), antenna excluded (approx. 2 3/8 x 7 x 1 13/16 inches)
  Antenna: Approx. 72 mm (approx. 2 7/8 inches)
Mass
  Approx. 250 g (approx. 8.8 oz), battery included

Base unit

Power source
  DC 9V from AC power adaptor
Battery charging time
  Approx. 24 hours
Dimensions
  Approx. 128 x 58 x 208 mm (w/h/d), antenna excluded (approx. 5 1/8 x 2 3/8 x 8 1/4 inches)
  Antenna: Approx. 165 mm (approx. 6 1/2 inches)
Mass
  Approx. 320 g (approx. 11 oz), wall bracket excluded

Design and specifications are subject to change without notice.

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