NOKIA
2190

OWNER'S MANUAL
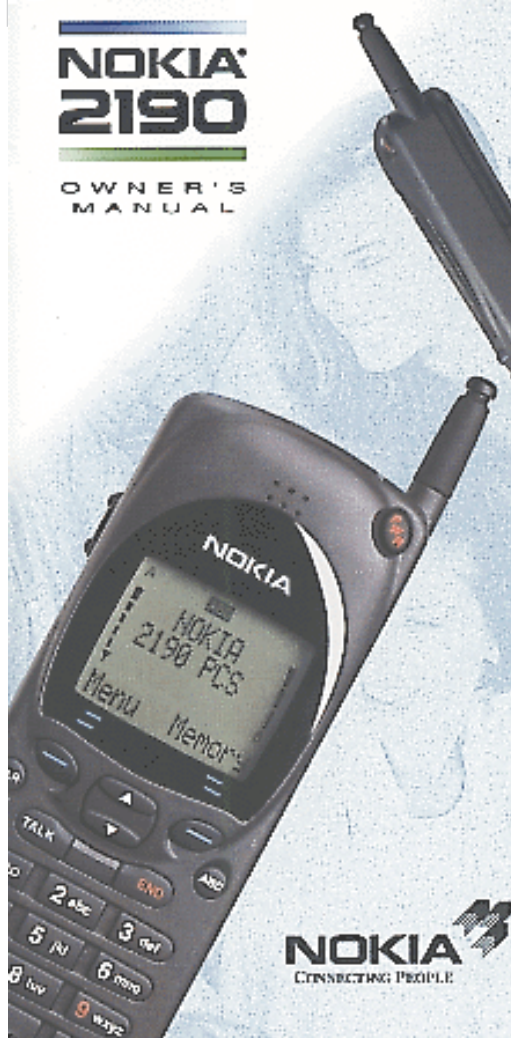
NOKIA
CONNECTING PEOPLE

Keys and the Display

Switches phone on/off when you press and hold.

Adjusts volume of the earphone or handsfree speaker.

These keys perform the function shown on the display directly above them (e.g., here the keys are the "Menu" and "Memory" keys.)

Menu   Memory

PWR

CLR   ABC

TALK   END

1 ◌◦ 2 abc 3 def
4 ghi 5 jkl 6 mno
7 pqrs 8 tuv 9 wxyz
*   0   #
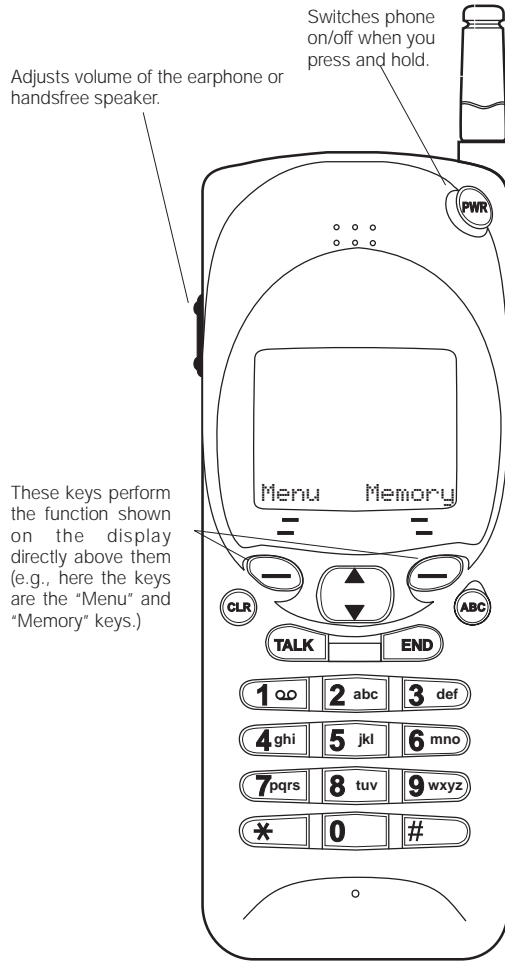
A: *SIM Card memory is in use OR*
B: *The phone's internal memory is in use.*

A call is in progress.

A data call is in progress.

The phone is in alpha mode.

You have a voice message.

You have a text message. If flashing, text memory is full.

Memory location, menu, or option number. "AL": Alternate Line is in use.

AB D ABC ᴑᴑ ✉ 𝟾𝟾

▶

▶

▶

Menu   Memory

Battery charge.

Signal strength.
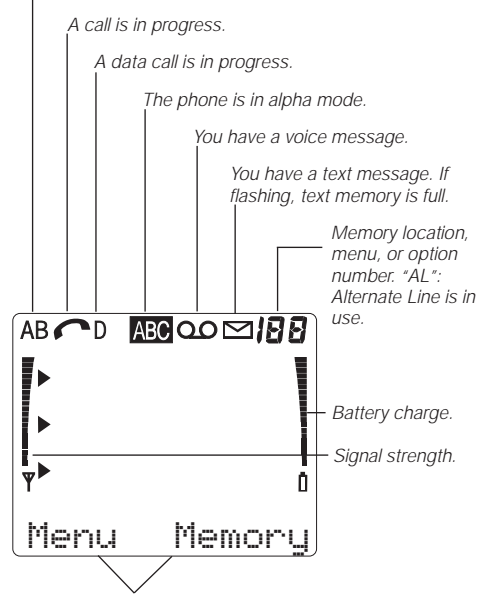
*These words change; they determine the function of the keys below them (see previous page).*

▲ ▼ scroll the menu and memories. Press and hold for continual scrolling.

(CLR) Press and hold to clear the display; press once to delete numbers and characters one at a time.

(TALK) gives dial tone and prompts you to enter a number; or, "dials" the number on the display.

(END) ends a phone call.

(ABC) toggles between alpha mode and numeric mode. In alpha mode, the number keys enter letters, and the phone displays the name associated with a phone number.
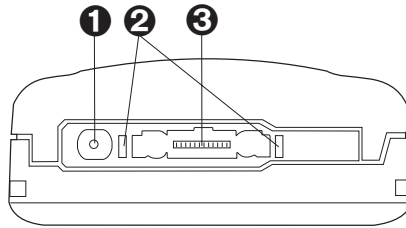
① For Rapid Cigarette Lighter Charger and Rapid Travel Charger

② Power connector for Desktop Charger CHH-2/CHH-2L

③ System and data connector for accessories and desktop chargers

Contents

1. Important Safety Information

Traffic Safety

Do not use a hand-held telephone while driving a vehicle. If using a hand-held telephone park the vehicle before conversing.

Always secure the phone in its holder; do not place the phone on the passenger seat or where it can break loose in a collision or sudden stop.

The use of an alert device to operate a vehicle's lights or horn on public roads is not permitted.

Remember road safety always comes first!

Operating Environment

Remember to follow any special regulations in force in any area and always switch off your phone whenever it is forbidden to use it, or when it may cause interference or danger.

Operation of any radio transmitting equipment, including PCS1900 telephones, may interfere with the functionality of inadequately protected medical devices. Consult a physician or the manufacturer of the medical device if you have any questions. Other electronic equipment may also be subject to interference.

As with other mobile radio transmitting equipment, users are advised that for the satisfactory operation of the equipment and for the safety of personnel, it is recommended that the equipment should only be used in the normal operating position.

Users are advised to switch off the phone when at a refueling point (service station). Users are reminded of the need to observe restrictions on the use of radio equipment in fuel depots (fuel storage and distribution areas), chemical plants or where blasting operations are in progress.

Do not store or carry flammable liquids, gases or explosive materials in the same compartments as the phone, its parts or accessories.

Only qualified personnel should install or service the phone in a vehicle. Faulty installation or service may be dangerous and may invalidate the warranty.

Electronic fuel injection systems, electronic anti-skid braking systems, electronic cruise control systems and other electronic systems can malfunction due to the lack of protection from radio signals.

Check regularly that all PCS1900 phone equipment in a vehicle is mounted and operating properly.

Switch off your PCS1900 phone when in an aircraft. The use of PCS1900 telephones in an aircraft may be dangerous to the operation of the aircraft, disrupt the PCS1900 network, and is illegal.

Failure to observe these instructions may lead to suspension or denial of PCS1900 telephone services to the offender, or legal action or both.

Emergency Calls
IMPORTANT!

This phone, like any PCS1900 telephone, operates using radio signals, PCS1900 and landline networks, and user-programmed functions which cannot guarantee connection in all conditions. Therefore you should never rely solely upon any PCS1900 phone for essential communications (e.g. medical emergencies).

Remember, to make or receive any calls this phone must be switched on and in a service area with adequate PCS1900 signal strength. Emergency calls may not be possible on all PCS1900 networks or when certain network services and/or phone features are in use. Check with local service providers.

When making an emergency call, remember to give all the necessary information as accurately as possible. Remember that your PCS1900 phone may be the only means of communication at the scene of an accident – do not cut off the call until given permission to do so.

If certain features are in use (such as Key Lock), you may first need to turn those features off before you can make an emergency call. Consult this document and your local PCS1900 service provider.

To Make an Emergency Call

① If phone is not on, press and hold Ⓟ𝗪𝗥.

② Press and hold Ⓒ𝗟𝗥 to clear the display.

③ Key in *emergency number* for your present location (e.g. *911* or other official emergency number).

④ Press Ⓣ𝗔𝗟𝗞.

If you dial **911** Ⓣ𝗔𝗟𝗞 during a call, the phone terminates the current call and attempts to make a call to the emergency number 911.

Using this Owner's Manual

The PCS1900 phone described in this manual is approved for use in PCS1900 networks. A number of features included in this guide are called Network Services. They are special services provided by PCS1900 service providers.

Before you can take advantage of any of these Network Services, you must subscribe to them through your home service provider. You can then activate these functions as described in this guide. The manual activation commands for various services are not presented in this guide (e.g. ∗ and # characters for activating or deactivating services). The phone nevertheless is capable of handling commands given in that form. For these commands please consult with your service provider.

IMPORTANT!

Use only accessories approved by the phone manufacturer. The use of any other types will invalidate any approval or warranty applying to the telephone, and may be dangerous. When you disconnect the power cord of an accessory, grasp and pull the plug, not the cord.

FCC/INDUSTRY CANADA NOTICE

Your phone may cause TV or radio interference (e.g. when using telephone in close proximity of receiving equipment). The FCC/Industry Canada can require you to stop using your telephone if such interference cannot be eliminated. If you need assistance, contact your local dealer.

This device complies with part 15 and 68 of the FCC rules. Operation is subject to the condition that this device does not cause harmful interference.

**NiCd
NiMH**

Nickel Cadmium and Nickel Metal Hydride Batteries must be recycled or disposed of properly! Must not be disposed of in municipal waste!

2. The Battery and SIM Card

The Battery

Your phone is powered by a rechargeable battery. Use only batteries approved by the phone manufacturer and recharge your battery only with the chargers approved by the manufacturer. See "Important Battery Information" later in this section.

STOP — **New batteries must be charged with the phone off for at least 24 hours before initial use. A new battery's full performance is achieved only after two or three complete charge and discharge cycles!**

Note: See "Accessories" for more information on chargers and other accessories.

Installing a Battery
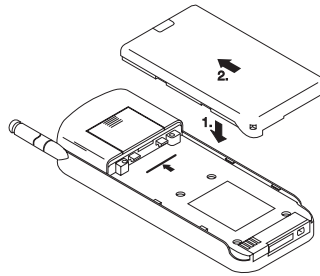
Removing a Battery

Switch off the phone before removing the battery.

5

Charging a New Battery or Recharging a Battery
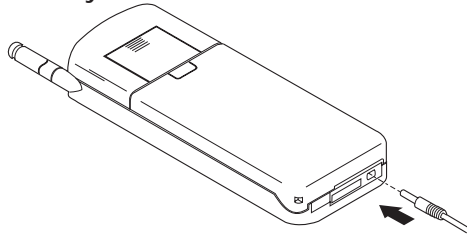
Connect the charger to the phone before plugging the charger into a standard 120V AC outlet.

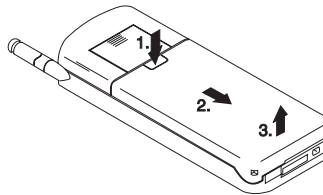The battery segments scroll to show that the battery is charging. Allow the battery to completely charge. See the "Accessories" chapter for information on battery charging times.
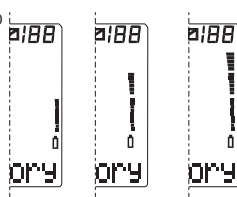
Charging is finished when the segments stop scrolling.

When charging is finished, disconnect the charger from the AC outlet and from the phone.

Using the phone near the network's base station consumes less power. Keeping the antenna fully extended whenever possible maintains the connection to the network with less power.
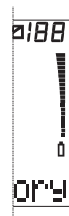
Discharging the Battery

Either leave your phone switched on until it turns itself off or use the battery discharge facility of any approved accessory available for your phone. The battery can be charged and discharged hundreds of times but it will

eventually wear out. When the operating time is noticeably shorter than normal, it is time to buy a new battery.

Battery Low/Recharge

You get this message and hear two short beeps when a couple of minutes of talk time remain. When no more battery power remains, you get another tone and the message `RECHARGE BATTERY`. The phone switches itself off.

```
A ⌒
  ▌ BATTERY
  ▌ LOW
  ▌                    !
  Y                    ᐃ
  Menu      Memory
```

If the message `NOT CHARGING` is displayed, charging is suspended. Check that the battery is not overheated (over 104°F/40°C), too cold,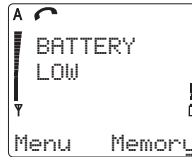 or connected to a non-approved charging device. Wait for a while, connect the charger to the phone again and retry. If charging still fails, contact your dealer.

Important Battery Information

For good operation times, discharge the battery from time to time by leaving your phone switched on until it turns itself off or by using the battery discharge facility of any approved accessory available for your phone. Do not attempt to discharge the battery by any other means.

When a charger is not in use, disconnect it from the power source. Do not leave the battery connected to a charger for longer than a week; overcharging may shorten its life.

If left unused, a fully charged battery will discharge itself in about a week at room temperature.

It is recommended that you allow your battery to fully discharge before you recharge it.

When the battery is not in use, store it uncharged in a cool, dark and dry place.

Temperature extremes affect the ability of your battery to charge: it may require cooling or warming first.

Do not short circuit the battery. Accidental short circuiting can occur when a metallic object (e.g. coin, clip, or pen) causes direct connection of the + and - terminals of the battery (metal strips on the back of the battery), for example when you carry a spare battery in your pocket or purse. Short circuiting the terminal may damage the battery or the connecting object.

Use the battery only for its intended purpose.

Never use any charger or battery that is damaged or worn out.

Leaving the battery in hot or cold places, such as in a closed car in summer or winter conditions, reduces the capacity and lifetime of the battery. Always try to keep the battery between 59°F and 77°F (15°C and 25°C). A phone with a hot or cold battery may temporarily not work, even if the battery is fully charged. NiMH battery performance is particularly limited in temperatures below 14°F (-10°C).

The battery is a sealed unit with no serviceable parts. Do not attempt to open the case.

Do not dispose of a battery in a fire! Dispose of used batteries in accordance with local regulations. Recycle!

The SIM Card

The SIM card and its contacts can be easily damaged by scratches or bending, so be careful when you handle the card.

Note: Keep all miniature SIM cards out of small children's reach.

Comes from your operator; is required for phone use.

Stores subscriber Info.

Provides Memory "A".

Installing the SIM Card

Switch off the phone, wait for a few seconds, and remove the battery before installing or removing the SIM card.

Open the cover of the SIM Card reader and open the SIM holder.
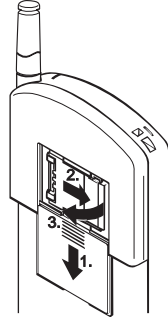
Slide the card into the holder. The beveled corner of the card faces up and you should be able to see the metal contacts.
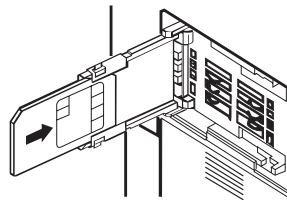
Close the holder by pushing it towards the phone.

Pull the catch gently toward "Lock" (1). When you are sure that the holder is firmly engaged, slide the cover of the SIM card reader back into place (2).
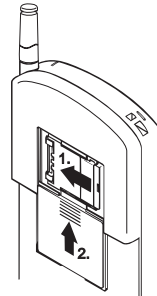
PIN and PIN2 Codes (4 to 8 digits)

A PIN (Personal Identity Number) code comes with the SIM card. The phone requires this code each time you switch the phone on if you enable PIN Code Request (in Menu 5 1).

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The PIN2 code comes with some SIM cards and is required to access some functions, such as charging unit counters, which must be supported by the SIM card.

If you enter a wrong PIN or PIN2 code three times in a row, that PIN or PIN2 code is disabled. You will be prompted for the PUK code (for the PIN) or the PUK2 code (for the PIN2) and a new PIN or PIN2 code.

PUK and PUK2 Codes (at least 8 digits)

The PUK (Personal Unblocking Key) is required to change a disabled PIN code. The PUK2 code is required when you want to change a disabled PIN2 code.

If you enter a wrong PUK code ten times in succession, you cannot use the SIM card any more. Contact your network operator for a new card.

If you enter a wrong PUK2 code ten times in succession, you cannot access the functions that require the PIN2 code. Contact your network operator.

You cannot change the PUK or PUK2 code. If you lose or do not know the code, contact your network operator.

3. The Basics

Switching On or Off

Press and hold the (PWR) button.

When switching on, extend the antenna
fully. As with any other radio transmitting
device, avoid unnecessary contact with
the antenna when the phone is switched
on.

The phone displays a Reminder Note if you have
programmed one with Menu 9 1. Press Keep to save it
or Erase to delete it. The phone may also display a
Welcome Message preprogrammed in your SIM card.

If there is not a SIM card in the phone, you will be
prompted to insert it. Switch off the phone and insert
the card. If you get the message INVALID SIM CARD,
contact your dealer or operator.

Signal Strength

The stronger the radio signal, the
better the call quality. The higher the
column on the left side of the phone
display, the better the signal at your
location.
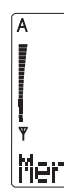
If the signal strength is not good, try
moving the phone slightly. In a building, reception may
be better near a window.

If you are in the service area of a PCS1900 network
that can serve you, the network operator's name and
the Y indicator appear.

*Note: The phone can make and receive calls only when
it is switched on, has a valid SIM card inserted and is
located in the PCS1900 network's service area.
However, calls to the emergency number 911 can
usually be made without the SIM card. Check with your
network operator.*

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Making a Call - Method 1

Note: Whenever Find *appears at the bottom of the display, you can press ▼ or ▲ to scroll through stored numbers.*


```
B
  Number:



Find      Quit
```

After you key in the number you want to dial (at the Number: prompt), the phone dials the number.

Making a Call - Method 2

Key in number, or recall stored number

TALK
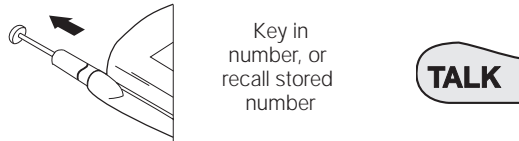
Note: Check with your PCS1900 system operator for information about when you need to dial a '1' and/or an area code in addition to the number.

Answering a Call

Press any key (except (PWR), (END), or volume keys).

Ending a Call

END

Key Lock

Key Lock prevents accidental key presses (e.g. when the phone is in your pocket). Key Lock cannot be activated when the phone is in an office handsfree kit.

Menu

✳

12
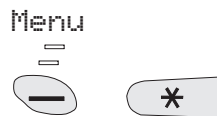
Unlock

To unlock, press the `Unlock`
key then *.

Note: With KEYS LOCKED,
calls may be possible to the emergency number 911.
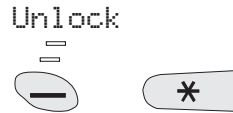
Answering a Call with Key Lock Active

During the call the keypad remains
unlocked. After you end the call, Key Lock
becomes active again.

Access Codes

Your phone comes with a Security
Code of 12345. See the
description of Menu 5, Security
Options, for details on Security
functions, including how to
change the Security Code.
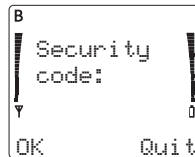
If you enter an incorrect security code *(`CODE ERROR`)*
five times in a row, the phone won't accept any entries
for the next five minutes.

If you make a mistake while keying in an access code,
press (CLR) repeatedly to erase digits one at a time.

Note: Avoid using access codes similar to emergency
numbers such as 911 to prevent accidental dialing of
the emergency number.

See "The Battery and SIM Card" for information about
the PIN, PIN2, PUK, and PUK2 codes. These codes
come with the SIM Card.

Network Password (4 digits)

The network password is required by the Restrict Calls
network service only. The network operator gives you
the code. You can change the password in Menu 5.

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4. For Your Convenience. . .

These extra features can simplify using your phone.

On-Line Quick Guide

Menu 14 contains on-line descriptions of 11 of the phone's functions.

Last Number Redial

The display must be clear of names or numbers for this to work.

To redial any of the last 10 dialed numbers, after you press (TALK) (TALK), press ▼ until you see the number you want. The phone dials the number after a few seconds.

1-Touch Dialing

Press and hold key 2 to 8 for a few seconds until the call is started. The phone dials the number stored in the corresponding memory location (2-8).

Note: If you press and hold 1, the phone dials your voice mailbox number.

Speed Dialing

The phone recalls the number from memory location 1-99, displays it briefly, then dials it.

1-99 **TALK**

Note: If you press 1 (TALK), the phone dials your voice mailbox number. If you press 9 (TALK), the phone attempts to make a call to the emergency number 911. See the chapter "Using the Memory" for details on storing numbers.

Emergency Key 9

Official emergency numbers vary by location (e.g. 911). Only one emergency number is programmed into your phone to be dialed automatically by Emergency Key 9, which may not be the proper number in all circumstances.

Voice Mail Key 1

Hold the key for a few seconds. The phone dials your voice mailbox number. Note that your voice mailbox number must be stored in the phone to use this feature. See "Voice and Text Messages" for details.

International Dialing Prefix

This creates a "+", which the phone recognizes as the international dialing prefix. Then enter the complete number and make the call.

Note: If you use the "+" prefix, you cannot use the calling card dialing method described in Menu 4 8.

Muting/Unmuting the Phone's Microphone

To get this menu, press and hold left ⊖ (Menu) for few seconds.

Muting and unmuting may be done only during an active call.

```
  Send DTMF
▶Mute
  Hold

OK         Quit
```
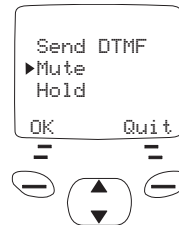
Calling Line Identification

The phone may display the caller's phone number if you have subscribed to and activated Calling Line Identification. The phone displays the caller's name if you have stored that caller's name and number, and the system is able to identify the calling number.

CALL displays when the number is not available.

Note: For information about availability of and subscription to Calling Line Identification Presentation, contact your system operator.

Received Calls List

The phone automatically stores the last 10 numbers that have called you and you've answered. You can press ⒶⒷⒸ to see the caller's name, if it is available. Press ⓣⒶⓛⓚ to dial.

Note: The Received Calls list appears only if supported by your operator and SIM card.

Missed Calls List

The phone automatically stores the last 10 numbers that have called you but you haven't answered.

Note: The phone number of a received or missed call is displayed only if the PCS1900 system is able to identify the caller. The phone displays the caller's name only if you have stored the calling person's name and number in memory.

Note: The Missed Calls list appears only if supported by your operator and SIM card.

Distinct Ringing

You may set your phone to ring distinctly when certain people call. Three different distinct ringing tones are available.

Store the person's name and number in your phone and include either one, two, or three "!" characters anywhere in the person's name. Your phone rings distinctly when there is an incoming call from that person's number. The distinct ringing tone depends on the number of "!" characters you have stored.

For details on storing names and numbers, see the chapter "Using the Memory".

Note: Distinct Ringing works only when Calling Line Identification is active.

Multiple and Conference Calls

The phone lets you have one "active" call and one "on-hold" call (this is a network service). You can join up to five calls together to create a conference call. For subscription information, contact your network operator.

Answering a Waiting Call

To be able to use this feature, you must subscribe to and activate Call Waiting through your network operator. The active call is put on hold as you answer the waiting call.

TALK

Making a Call With One Already in Progress

① Dial or recall from memory the number you want to call. This puts the current call on hold.

② Press (TALK).

The held call's identification blinks on the display.

Swapping Active and Held Calls

This makes the held call active and the active call held.

TALK

Ending the Active Call Only

This ends the active call and retrieves the held call.

1 ⚬ꙮ **TALK**

Ending the Held Call Only

This ends the held call only and has no effect on the active call.

0 **TALK**

Creating a Conference Call

You must have an active call and a held call for this to work. To add an incoming call to the Conference, press **3** def **TALK** again.

3 def **TALK**

For more information see Menu 10, In-Call Options.

5. Voice and Text Messages

Please check with your operator for the availability of message features.

Note: The Messages menu items appear only if supported by your operator and SIM card.

Voice Messages

When you receive a voice message, the phone beeps and lights the voice message indicator (shown).

To Call Your Voice Mailbox

Hold the key for a few seconds. The phone dials your voice mailbox number. Note that your voice mailbox number must be stored in the phone (see below) for this to work.

To Store Your Voice Mailbox Number in the Phone

```
A                        A                    2
|                    |   | MESSAGES        |
|                    |   |                 |
Y                    0   Y                 0
Menu      Memory         Select    Quit
        ▼▼                     ▼▼▼▼
```

```
A                    4   A                    5
| MESSAGE          |     | SET VOICE       |
| SETTINGS         |     | MAILBOX         |
Y                  0     | NUMBER          |
Select    Quit           Y                 0
                         Select    Quit
     ▼▼▼▼▼                     ▼▼▼▼▼
```
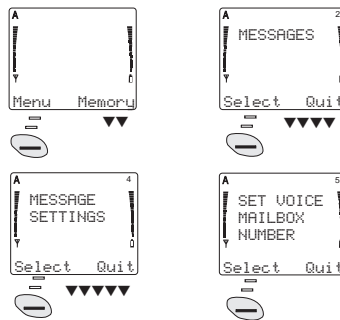
After the last step, key in your voice mailbox number and press OK. Once you enter the number, it is used until you change it again. The voice mailbox number may be up to 30 digits long.

Note: The voice mailbox may be provided by the network (and the network operator gives you the

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number to call) or you may use your own answering
machine or voice mailbox number.

Text Messages

When the text messaging network service is available
and you have subscribed to it, your phone can send,
receive, and store text messages. The text messaging
function is a network service and may not be supported
by your network. Your network operator gives you your
Message Center number (see Menu 2 4 later in this
chapter), which you need to send messages.

The maximum length of a text message is 160
characters. The phone has space for five full-length
messages. `NO SPACE: MESSAGE WAITING` means
you need to delete current messages from your
memory to make space in the phone for new
messages.

Reading Text Messages

When your phone receives a
Short Message Service (SMS)
text message, the message is
stored in the currently-selected
memory (A or B).

You can read messages immediately with the `Read` key,
or `Quit` and read the message later using Menu 2.

To read messages with Menu 2

20
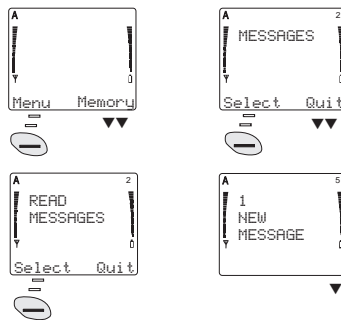
▼ scrolls through message screens. Press or press
and hold ▼ to read messages.

The messages are shown in the order that they were
received or stored, and begin with a message header
that shows message status (described below).

| NEW: | This is followed by the receipt date and time. |

| OLD: | The message has already been read. |

| OLD:
OWN OR
EDITED | The message was created or edited by you. |

The Option Key

When you are reading a
message, you can press Option.
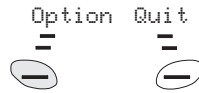
Use the ▼ key to scroll through
available options.

Read next shows the next
message.

Erase deletes the current
message from memory.

Reply sends a reply message to the sender of the
displayed message. Key in your message. Press OK to
send it.

Call back copies the phone number from the current
message onto the display. You can then dial it or store it
in the normal way.

Edit allows you to make changes in the message. ▼
and ▲ move the cursor right and left. (CLR) deletes single
characters. To save an edited message press Option,
then press ▼ to move the pointer to Store and press
OK.

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Send sends the message. At the prompt Number:, key in the recipient's phone number, or scroll through numbers in memory with ▼. Press OK when the number you want is displayed. You need to store your message center phone number (described later in this section) to send messages.

Writing and Sending Text Messages

When you send a text message, the message center tries to deliver the message to the receiving phone. If the recipient cannot be reached, the message is stored in the message center and delivered to the recipient as soon as the receiving phone is available.

To Write a Message
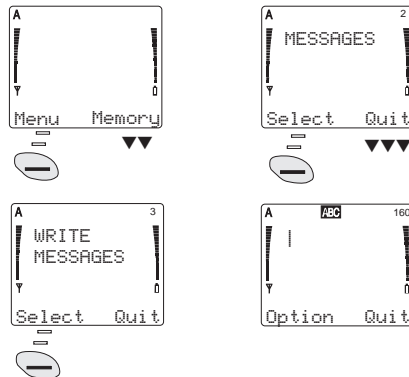
After the last step, key in the message. To include numbers in the message, press ⒶⒷⒸ to enter number mode. See "The Memory" chapter for details on how to enter letters. ▼ and ▲ move the cursor right and left. To scroll the message quickly, press and hold either ▼ or ▲.

See the previous description of the Option key.

If you have not specified the message center number with Menu 2 4 1, the phone prompts you to do so.

Key it in and press `OK`. `MESSAGE SENT` appears after the message is delivered to the message center.

Message Settings (Menu 2 4)

MESSAGE CENTER NUMBER

Your network operator gives you this when you subscribe to Text Messaging.

To send text messages, the phone needs to know the number of your message center. You can either set the phone number with this menu or enter it when prompted to do so.

MESSAGES SENT AS

`Text`, `Fax`, `X400`, `Paging`, `E-mail`, or `Voice`

The network may be able to convert your text message into one of the above formats. The selected format applies to all messages until you change it. To receive a converted message, the recipient must have an appropriate terminal device available.

ACCEPT REPLY COST

`Yes` or `No`

This network service allows the recipient of your message to send you a reply message at your expense. The selected option applies to all messages until you change it.

MESSAGE VALIDITY

`1`, `6`, or `24 hours`; `1 week`; or `Max. time`

This is the amount of time that the messages you send are stored at the message service center. If the receiving end cannot be reached within this period of time, the message is deleted. To find out the `Max. time` setting, contact your network operator.

```
SET VOICE
MAILBOX
NUMBER
```

See the first page of
this chapter.

6. The Memory

The phone uses either the memory locations on the SIM card ("A") or those in the phone ("B"). A or B will appear in the upper left corner of the display. Use Menu 8 1 to select either Memory A or B.

Memory B holds up to 125 numbers and names. The capacity of Memory A varies by SIM card manufacturer.

Alpha Mode

To enter names, retrieve numbers based on names, and view names, press ⒶⒷⒸ. The phone displays **ABC** to indicate that you can use keys to enter letters as well as numbers, and that you are viewing names rather than numbers.
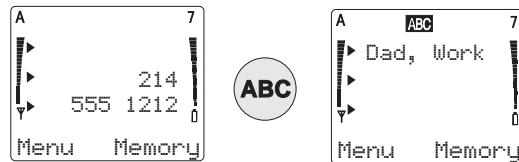
When a name is displayed you can also press ⒶⒷⒸ to see the associated number.

To Enter Letters

Put the phone in Alpha mode by pressing ⒶⒷⒸ. You can then enter letters. See the table on the next page.

Note: If you include one, two, or three "!" characters (available on the 0 key while in alpha mode) in a stored name, the phone rings distinctly when receiving calls from that number. See "For Your Convenience" for more information about Distinct Ringing.

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	One Press	Two Presses	Three Presses	Four Presses	Five Presses
1 ⌒⌒	**1**	**1**	**1**	**1**	**1**
2 abc	**a**	**b**	**c**	**2**	**a**
3 def	**d**	**e**	**f**	**3**	**d**
4 ghi	**g**	**h**	**i**	**4**	**g**
5 jkl	**j**	**k**	**l**	**5**	**j**
6 mno	**m**	**n**	**o**	**6**	**m**
7 pqrs	**p**	**q**	**r**	**s**	**7**
8 tuv	**t**	**u**	**v**	**8**	**t**
9 wxyz	**w**	**x**	**y**	**z**	**9**

✱	**enter another letter from same key**
0	**- ? ! , . : " ' & $ ( ) O**
#	**blank space**

When entering letters, press and hold the key to switch between upper and lower case letters. Press ⒞ⓛⓡ to correct a mistake.

When **ABC** is not displayed, you can use the ✱ key to enter these special characters:

✱✱	+, links memory locations or creates the international dialing prefix
✱✱✱	p, creates a pause
✱✱✱✱	w, causes the phone to wait for input

The identical name may be used only once in memory. REPLACE? appears when you try to store a name already in memory.

Storing Numbers and Names

1.

```
B
            800
      555 1212
Menu    Memory
```

2.

```
B
            800
      555 1212
Store     Find
```

Key in number, then ⬭

3.

```
B
  Name:

Store   Quit
```

4.

```
B      ABC
  |

Store     Quit
```

Key in name, then ⬭

5.

```
B
  STORE IN
  LOCATION
  4?

OK      Quit
```

6.

```
B

  STORED

```
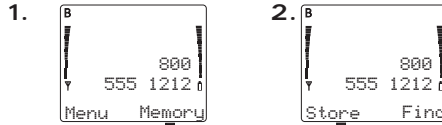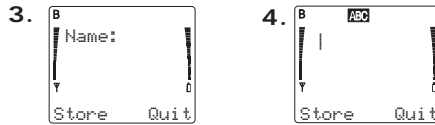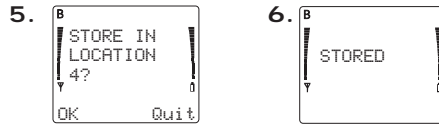
You can enter another location number or scroll through available location numbers with ▼ or ▲ after STORE IN LOCATION n?. You may group stored numbers, such as storing family numbers in locations 40-49. At STORE IN LOCATION n?, you would key in 4*, and the phone would store the number in the first available 2-digit location beginning with a 4 (such as 41).

Note: Entering the name in step 4 is optional; you can just press Store to not enter a name.

To Add a Name to a Stored Phone Number

① Recall the number from memory.

② Repeat steps 1-4, but key in a name.

③ At the STORE IN LOCATION n? prompt, key in the location number that currently stores the phone number, then press OK (as in step 5).

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④ At the REPLACE? prompt, press OK.

To Change the Number Stored With a Name

① Recall the number from memory.

② Use the CLR key to erase the current number one digit at at time.

③ Repeat steps 1 and 2 shown in the picture on the previous page.

④ At the REPLACE? prompt, press OK.

To Erase Stored Names and Numbers

1.
```
B
┃
┃
▼              0
Menu    Memory
```

2.
```
B        ABC
┃ Name:
┃
▼              0
Store      Find
```

3.
```
B
┃ Number:
┃
▼              0
Store     Quit
```

4.
```
B        ABC
┃ Name to be
┃ erased:
▼              0
Erase     Quit
```
▼
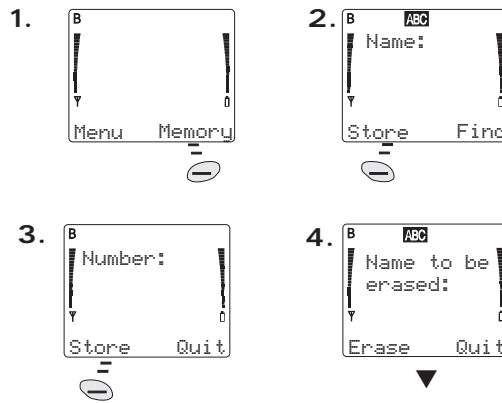
① Do steps 1-4 as shown.

② At the prompt shown in step 4, use the ▼ key to scroll through stored names, OR press ABC then scroll through stored numbers.

③ When you see the name or number to be erased, press Erase.

Press Quit if you change your mind, or when you are finished erasing. You may also use Menu 8 4 to erase names and numbers from memory.

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To Fast Save

Key in the number to be saved, then press and hold
`Memory`.

Recalling Numbers from Memory	With the display empty, press ▼ or ▲.

1.

```
B
        12 0
Menu   Memory
```

2.

```
B
Store    Find
```
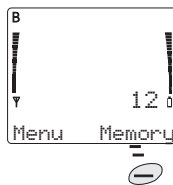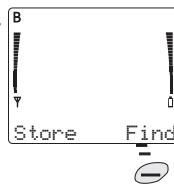
The top right corner of the display shows the location
number.

Recalling Numbers by Memory Location

① Key in the location number (e.g., 12 in the picture)
then press `Memory` then `Find` , *OR*

② Press (TALK), at the `Number:` prompt, key in a
location number then press `Find`. If you use this
method, the phone automatically dials the number
in a few seconds.

Recalling Names from Memory	Press (ABC) then press ▼ or ▲.

This method scrolls alphabetically through the stored
names. You may also use the method shown below.

1.

```
B
Menu   Memory
```

2.

```
B      ABC
  Name:
Store    Find
```
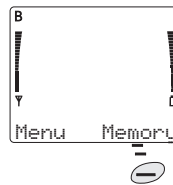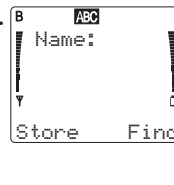
After step 1, you can key in the name, or the first few letters of the name, and press `Find`. Scrolling begins at the alphabetic location closest to the name you enter.

Press ▼ or ▲ to continue scrolling through names.

Notepad Memory Locations

The phone can temporarily store up to 10 phone numbers and associated names in a "Notepad".

To Store Numbers and Names in Notepad

① Do steps 1-4 in "Storing Numbers and Names".

② At the `STORE IN LOCATION n?` prompt, press # then press `OK`.

To Recall Numbers and Names in Notepad

Press # then ▼ or ▲.

The top right corner of the display shows the location number of the notepad (o0 - o9).

To Erase Notepad Memory

You can erase Notepad Memory by using Menu 01 4. This also erases the lists of Received Calls, Dialed Calls, and Missed Calls.

Note: The Notepad memory, as well as the lists of Received Calls, Dialed Calls, and Missed Calls, are erased whenever you use a SIM card that is not included in the phone's SIM card list. The phone numbers are also erased when you change the Security Level (Menu 5 2).

7. Touch Tones

Your phone is a "Touch Tone" phone. Touch Tones can be used for many automated phone services such as checking your bank balance and using voice mailbox options.

Touch Tones are called "DTMF" (Dual Tone Multi Frequency) tones in the phone.

Sending Individual Touch Tones

Pressing the keys during call sends Touch Tones.

Sending a String of Touch tones

During a call, with the display empty:

① Press Menu then (TALK).

② Press ▼ to scroll through stored numbers.

③ Press OK when you see the number (string) you want to send. The phone sends (as DTMF tones) the digits you recall from memory.

You may also use Menu 10, In-Call Options, to send a string of DTMF digits.

To store a Touch Tone string

Store Touch Tone strings the same way as you store phone numbers.

To store Touch Tone strings with a phone number

*** creates a p (pause character)
**** creates a w (wait character)

① Key in the phone number

② Press *** (p) or **** (w)

③ Key in the Touch Tone (DTMF) digits

④ Store the number in the normal way

∗∗∗ creates a "p" (pause) of 2.5 seconds. When you recall this number sequence from memory and press (TALK), the phone dials the phone number, and after the call is answered, pauses 2.5 seconds, then sends the DTMF digits. You can add as many "p" characters as you need.

∗∗∗∗ creates a "w" (wait). When you recall this number sequence from memory and press (TALK), the phone dials the phone number, and after the call is answered, waits for you to press DTMF. This is handy if you are calling a number that then prompts you to enter information, such as your bank account number.

Touch Tone Settings in the Phone

Your phone's Touch Tones settings are in Menu 4 5, Auto DTMF Length. This determines the length of each Touch Tone.

Short	Sets the DTMF tone length to 100 ms.
Long	Sets the DTMF tone length to 500 ms.

8. The Menu

The phone's menus and submenus allow you to tailor the phone to suit your tastes.

Scrolling Through the Menus

```
┌─────────────────┐   ┌─────────────────┐
│A                │   │A  View ▲        │
│█             █  │   │█  Menu ▼     █  │
│█             █  │   │█            █  │
│                 │   │                 │
│Y             □  │   │Y            □  │
│Menu    Memory   │   │          Quit   │
└─────────────────┘   └─────────────────┘
```
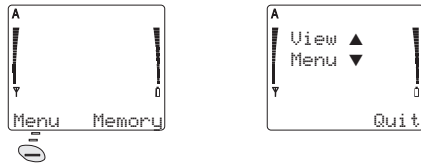
① To use the Menu, start by pressing the Menu key.

② Use the ▼ or ▲ key to scroll through the Menu.

③ When you see the Menu you want, press Select.

④ To choose submenus or options, scroll through them with ▼ or ▲, then press Select to choose.

To Go Back One Step in the Menus

Quit

To Get Help on Menus

This gives you help on menu items. Press this to get help and to go to the next screen of help.

ABC

To Exit Menus Without Making Changes

CLR

Entering Menus by Number

The menus, submenus and setting options are numbered. The number is shown in the display's top right corner. Press Menu then the menu number, then the submenu number, then the setting option number. Once you reach the menu or submenu you want, you can also use ▼ or ▲ to see options.

Note: Press the menu, submenu, and setting option numbers within a couple of seconds of each other when using this method.

Menu Summary

*Note: Items shown with an * appear on the menu ONLY if supported by your operator and SIM card.*

1 Recent Calls

1 Dialed Calls
2 Received Calls*
3 Missed Calls*
4 Clear All Call Lists

2 Messages*

1 Listen to Voice Messages*
2 Read Messages*
3 Write Messages*
4 Message Settings*
   1 Message Center
     Number*
   2 Messages Sent As*
   3 Accept Reply Cost*
   4 Message Validity*
   5 Set Voice Mailbox
     Number*

3 Call Forwarding*

1 Forward All Calls*
2 Forward If Busy*
3 Forward If Not Answered*
4 Forward If Out of Reach*
5 Cancel All Forwarding*

4 Phone Settings

1 Lights
2 Ringing Volume
3 Ringing Tone
4 Keypad Tones
5 Auto DTMF Length
6 Automatic Redial
7 Automatic Answer
8 Calling Card
9 Send Own Number*
10 Call Waiting*
11 Restore Factory Settings
12 Menu List
13 Network Selection*
14 Language

5 Security Options

1 PIN Code Request
2 Security Level
3 Restrict Calls*
   1 Outgoing Calls*
   2 International Calls*
   3 Int. Except to Home
     Country*
   4 Incoming Calls*
   5 Incoming Calls if
     Roaming*
   6 Cancel All
     Restrictions*
4 View Fixed Dialing List*
5 Fixed Dialing*
6 Change Access Codes
   1 Change Security Code
   2 Change PIN Code
   3 Change PIN2 Code
   4 Change Network
     Password*

6 Duration and Cost

1 Call Duration
   1 Last Call Duration
   2 All Calls Duration
   3 Clear Timers
2 Call Costs∗
   1 Last Call Units∗
   2 All Calls Units∗
   3 Clear Counters∗
3 Call Costs Limit∗
4 Show Costs In∗

7 Phone Line Selection∗

Selects which line to use.

8 Memory Functions

1 Memory Selection
2 Memory Status
3 Copy Between Memories
4 Memory Erase Options
5 Display Own Number

9 Personal Reminders

1 Reminder Note
2 Countdown Timer

10 In-Call Options

Mute/Unmute
Hold/Unhold*
Swap*
Drop Call
Send DTMF
Join
Private

11 Fax or Data Call∗

12 Number Editor

13 Ringing Options

1 Ring
2 Beep Once
3 Silent
4 Vibrate
5 Ring & Vibrate

14 Quick Guide

1 How to Make a Call
2 How to Answer a Call
3 How to Redial
4 How to Dial Emergency No.
5 How to Access Voice Mail
6 How to Store Name and Number
7 How to Use Memory
8 How to Use In-Call Operations
9 How to Use One-Touch Dialing
10 How to Use Key Lock
11 How to Use Personal Alert Tone

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Network Services

Some of the menu functions are network services. These functions can be utilized only if provided by your PCS1900 network. To make use of a network service, you must first subscribe to it. Note that a network service is specific to the SIM card you are using. If you change the SIM card and have not purchased the service for that card, you will not be able to utilize the service.

For availability and subscription, contact your network operator.

Menu 01, Recent Calls

This menu gives you access to Dialed Calls, Received Calls, and Missed Calls which are automatically stored by the phone. You can also erase these lists with this menu.

Note: Received Calls and Missed Calls appear only if supported by your operator and SIM card.

Menu 2, Messages

See the chapter "Voice and Text Messages" for a description of the items in this menu.

Note: The Messages menu and all suboptions appear only if supported by your operator and SIM card.

Menu 3, Call Forwarding

Note: The Call Forwarding menu and all suboptions appear only if supported by your operator and SIM card.

① Enter Menu 3

② ▼ to forwarding option (described next) then Select.

③ ▼ to Activate, Cancel, or Status. (Status is described on the next page).

④ Press OK.

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⑤ If you choose `Activate` in Step 3, key in the number to forward to at `Number:`. You can optionally press the ▼ or ▲ key to scroll through stored numbers until you reach the one you want.

⑥ Press `OK`.

Forwarding Options

`FORWARD ALL CALLS` forwards all incoming calls. `FORWARD IF BUSY` forwards calls only when you are on the phone. `FORWARD IF NOT ANSWERED` forwards calls if you don't answer. `FORWARD IF OUT OF REACH` forwards calls if you are out of the serving network. `CANCEL ALL FORWARDING` cancels all active call forwarding options.

The phone calls the network operator after you make your selection and asks it to perform the selected forwarding mode (`REQUESTING...`). After receiving a response, the message `FORWARDING ACTIVE` or `FORWARDING CANCELED` appears. If the request fails, the phone displays `NOT DONE`.

The Status Option

① If you choose `Status`, the phone requests information from the network (`REQUESTING...`) then you get a `View list` window. Press ▼ to the required call type.

② Press `Detail`.

③ ▼ to `To number` or `Delay`, then `OK`.

`To number` option shows the phone number to which the calls are currently forwarded. `Delay` indicates the period of time after which your incoming calls are forwarded if unanswered (applicable only to `FORWARD IF NOT ANSWERED`).

Note: Instead of using this menu, you may control call forwarding with manual command strings. For command strings, contact your network operator.

Menu 4, Phone Settings

Menu 4 01, Lights

With lights on, the keypad lights come on when you press a key or have an incoming call, and go off 15 seconds later.

Note: You can turn on the lights for 15 seconds by pressing (PWR) *quickly regardless of this setting.*

Menu 4 2, Ringing Volume

You hear each ringing level as you scroll through the volume levels.

Note: When the phone is using an accessory, this option sets the ringing volume separately for that accessory.

Menu 4 3, Ringing Tone

The phone plays a sample of each pattern as you scroll.

Note: The ringing tone is the same for all accessories.

Menu 4 4, Keypad Tones

You can select the volume level or turn off the sound the phone makes when you press a key.

Note: The keypad tone volume is set separately for each accessory you use.

Menu 4 5, Auto DTMF Length

Auto DTMF is for sending strings of tones rather than individual tones. This menu determines the length of DTMF tones.

Short sets the DTMF tone length to 100 ms. Long sets the DTMF tone length to 500 ms.

Menu 4 6, Automatic Redial

When this is on, your phone redials the number you are trying to call (if the call didn't go through) up to 10 times. Press (END) to end the call attempts.

Menu 4 7, Automatic Answer

With this on, the phone answers calls automatically after one ring. Note that this works with the headset only when Ringing Option `Ring` or `Ring&Vibra` is selected.

Menu 4 8, Calling Card

If you store Calling Card information in your phone, you can make automatic Calling Card calls.

To Store a Calling Card

① Enter Menu 4 8.

② ▼ to `Card`.

③ Key in security code at `Security code:` then press `OK`.

④ Key in access number at `Access Number:` then press `OK`. To change the text "`Card`" to the name of the card you entered, press ⒶⒷⒸ at the prompt `Access Number:`, then key in the card's name and press `OK`.

⑤ Key in card number at `Card ID code:` then press `OK`.

To change stored calling card information, use the ⒸⓁⓇ key.

Making Calling Card Calls

① Key in phone number.

② Press and hold Ⓣⓐⓛⓚ for a few seconds until the phone displays `CARD CALL`.

③ Press `OK` after `Wait For Tone, Then Press OK` prompt.

Depending on the type of calling card, there may be an additional prompt, `Wait For Tone, Press OK Again` after which you press any key except the power key or Ⓔⓝⓓ.

You cannot use this method to call numbers beginning with "+" (the international prefix). Use the actual international prefix (e.g., 011) to make calling card calls to international numbers.

Menu 4 9, Send Own Number

Note: Send Own Number appears only if supported by your operator and SIM card.

This specifies whether or not to display (i.e., Send) your phone number to the person you are calling. You must be subscribed to Temporary Calling Line Identification Restriction (CLIR) service to use this feature.

① Key in the number you are calling.

② Enter Menu 4 9, make your choice (Preset, On, or Off) by pressing OK, then quit the menus.

③ Press (TALK) to make the call.

Preset resets the phone to the default setting (On or Off) that you have agreed upon with your network operator. For details, contact your network operator. On means the number is sent. Off means the number is not sent.

Menu 4 10, Call Waiting

Note: Call Waiting appears only if supported by your operator and SIM card.

If you activate Call Waiting, you receive a tone during a call to let you know you have a waiting call. To answer the waiting call, press (TALK). The current call is put on hold. See "Multiple and Conference Calls" in "For Your Convenience" for details on handling two calls.

Menu 4 11, Restore Factory Settings

Menu 4 11 changes these options to the default values: Automatic Answer, Auto Redial, Keypad Tones, Lights, Ringing Options, Ringing Tone, and Ringing Volume.

Menu 4 12, Menu List

If you do not use all of the menu functions frequently, you may hide some of the menus and submenus.

Complete shows all menu functions. Short shows only the major functions. The function numbering is not affected - the hidden functions are simply skipped.

Menu 4 13, Network Selection

Note: Network Selection appears only if supported by your operator and SIM card.

This menu specifies how the phone should choose a network when you are roaming, as there may be more than one network available. The selection you make stays active until you change it or change the SIM card.

In Manual mode, the phone prompts you to select a network when it loses contact with its current network. Press Select to begin the selection process. If you press Quit, the phone looks for its current network but does not repeat the notification.

In Automatic mode, the phone automatically selects one of the available networks. The phone beeps to indicate a switch to another network.

Menu 4 14, Language

You can choose the language your phone uses for all of its displays. English, French, and Spanish are available.

Menu 5, Security Options

Access codes are required for Security Options. The phone prompts you for the specific access code required.

Note: The default Security Code is 12345.

Menu 5 1, PIN Code Request

With this submenu you can set the phone to request a PIN code when your phone is switched on. Note that some SIM cards do not allow you to turn the PIN code request off.

You must enter the PIN code to change this setting.

Menu 5 2, Security Level

The three levels of security are None, Memory and Phone. The following table summarizes the security levels.

The phone keeps a list of up to five different SIM cards used with the phone. When the phone asks for a security code and you enter the correct code, the SIM card is added to the phone's SIM card list and the SIM card becomes an 'Owner's card'. The phone also memorizes which memory - A or B - is selected for use.

Regardless of the selected security level, all temporarily stored phone numbers are erased when a new SIM card is installed. On the other hand, these phone numbers are not erased when a previously used SIM card is inserted, regardless of the selected security level.

Note: Whenever you change the security level, all temporarily stored phone numbers are erased.

With the setting below:	Is Security Code required when switching on?	Is Security Code required when selecting Memory B?	What is Default Memory selection?
None	NO	NO	Previous setting, or Memory A when card is changed.
Memory	NO	YES	Previous setting if Owner Card; Memory A if non-Owner Card.
Phone	YES, but only if a non-Owner's card is used.	NO	Same as above.

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Menu 5 3, Restrict Calls

Note: When calls are restricted, calls may be possible to the emergency number (i.e., 911).

Note: Restrict Calls appears only if supported by your operator and SIM card.

For each of the restriction options you specify `Activate`, `Cancel`, or `Status`.

`OUTGOING CALLS` prevents all outgoing calls. `INTERNATIONAL CALLS` prevents all outgoing international calls. `INT EXCEPT TO HOME COUNTRY` prevents outgoing international calls unless they are directed to your home country.

`INCOMING CALLS` prevents you from receiving all incoming calls. `INCOMING CALLS IF ROAMING` prevents you from receiving incoming calls if you are roaming. `CANCEL ALL RESTRICTIONS` cancels all active call restricting options.

The phone calls the network operator after you make your selection and asks it to perform the selected forwarding mode (`REQUESTING...`). After receiving a response, the phone ends the call automatically.

If you select `Status` the phone lists the call types (e.g. voice calls, data calls, fax calls) to which call restricting applies. Press ▲ or ▼ to scroll through the list.

If you attempt to call a restricted number, the phone displays `Reminder: RESTRICTIONS ON`.

Note: Instead of using this menu, you may control call restricting by using manual command strings. For required command strings, contact your network operator.

Menu 5 4, View Fixed Dial List

This lets you review the contents of the Fixed Dialing List created with Menu 5 5.

① Enter Menu 5 4 .

② ▼ to scroll through the Fixed Dialing List.

③ Press OK to exit.

Menu 5 5, Fixed Dialing

Fixed Dialing allows outgoing calls to a only specific set of phone numbers (i.e., those you put in a "Fixed Dialing" list). This function works only with a SIM card that supports it.

When on, you can call only phone numbers included in the Fixed Dialing List or those that begin with the same digit(s) as a number on this list.

For example, if you have the number "55" stored in your Fixed Dialing List, you can call any phone number beginning with the number "55", e.g., 556-7653.

Note: When Fixed Dialing is on, calls may be possible to the emergency number (i.e. 911).

Numbers shows you the first name included in the list (or NO PHONE NUMBERS if the list is empty) and gives you Option. Press ▼ or ▲ to scroll the list; press (ABC) to see the associated numbers.

To Create or Modify the Fixed Dialing List

① Enter Menu 5 5.

② Key in PIN2 number then press OK.

③ ▼ to Numbers then press OK.

④ Press Option.

⑤ Press ▼ to your choice (Erase all, Add, Remove, Edit) then press OK.

Erase all permanently removes all names and phone numbers from the list. Add adds a name (and a phone number) to the list. Remove removes the name (and phone number) that was on the display when you pressed Option.

Edit allows you to make changes in the name (and the associated phone number) that was on the display when you pressed Option.

Menu 5 6, Change Access Codes

Use this to change the following access codes: Security Code, PIN Code, PIN2 Code, and network password.

Note: The access codes may only include characters 0 to 9. To change the PIN Code the PIN Code Request must be turned on in Menu 5 1.

Menu 6, Duration and Cost
Menu 6 1, Call Duration

You can view LAST CALL DURATION, or ALL CALLS DURATION. You can also CLEAR CALL TIMERS. ALL CALLS DURATION provides the total duration of calls made or received with any SIM card that you have used with the phone.

Note: The actual invoice for calls and services from your service provider may vary, depending upon network features, rounding-off for billing, and so forth.

Menu 6 2, Call Costs

Note: Call Costs appears only if supported by your operator and SIM card.

This service allows you to check the cost of the last or current call or the total cost of all calls that you have

made or received since the counters were last reset. The call cost is shown for each SIM card separately.

Note: The Call Costs function is a network service and may not be supported by your network. The actual invoice for calls and services from your service provider may vary, depending upon network features, rounding-off for billing, and so forth.

LAST CALL UNITS shows the cost of the last or current call. ALL CALLS UNITS shows the total cost of all calls. CLEAR COUNTERS permanently resets all cost counters. The PIN2 code is required to clear counters.

Menu 6 3, Call Costs Limit

Note: Call Costs Limit appears only if supported by your operator and SIM card.

This allows you to limit the total costs of outgoing calls to a number of dollars or charging units.

Note: Calls to the emergency number 911 may be possible even if there are no charging units left.

To Set a Charging Limit

① Enter Menu 6 3. The phone requests the PIN2 code. Enter it and press OK.

② Press ▲ to reach Set then press OK.

③ Key in the limit in units or dollars. Enter # for a decimal point.

④ Press OK.

Select None in Step 2 to return to unlimited charging.

If you activate the cost limit, the quantity of remaining charging or currency units is continuously displayed. When all units have been used, no calls can be made except for emergency call attempts to the number 911.

Menu 6 4, Show Costs In

Note: Show Costs In appears only if supported by your operator and SIM card.

With this submenu you select whether the call costs and limits (and the amount of remaining talk time) are displayed in charging units or dollars.

When you select `Currency`, you are prompted for the unit price. Press # to enter a decimal point. Contact your network operator for charging unit prices. Call costs and remaining cost units are then displayed in dollars.

If you select `Units`, call costs limits and the number of remaining cost units are shown in charging units.

Menu 7, Phone Line Selection

Note: Phone Line Selection appears only if supported by your operator and SIM card.

Use Menu 7 to select `Primary` or `Alternate`.

You may have two different subscriptions on your SIM card, each with different services, a unique phone number, unique voice mailbox number, and separate call timers. The two lines share the Fixed Dialing List (if used) and Data Service. Call charging information is available only for the primary line.

To select which line to use, the phone must be idle. You cannot swap between lines during a call. The phone displays AL in the index area of the display if you are using the Alternate Line.

Only one line can be used at a time, and when that line is selected, the services for that line are available during the call. You can receive calls on the non-selected line only when you do not have any calls active or held.

Each phone line has its own ringing tone. When you answer the phone, the call is on the non-selected line,

and the phone returns to the selected line when you finish the call.

If you replace the SIM card, Menu 7 is automatically set to Primary.

Menu 8, Memory Functions

Menu 8 1, Memory Selection

You can select either the SIM card memory ("A") or the phone's internal memory ("B"). See "The Memory" for details.

Menu 8 2, Memory Status

① Enter Menu 8 2.

② Press ▼ to see the number of empty locations.

③ Press ▼ again to see the number of full locations.

Menu 8 3, Copy Between Memories

This function allows you to copy numbers and names between Memory A and Memory B. You can choose to copy individual numbers (One by One) or all numbers (Copy all).

If a name is too long to fit in the destination Memory, it is shortened. This can happen when you copy names and numbers from Memory B to Memory A.

If you select One by One, you can scroll through the stored names until the one you want appears, then press Copy. Once you have copied all of the desired location, press Quit or (CLR).

Memory 8 4, Memory Erase Options

This removes phone numbers and names from the currently selected memory. You cannot undo the operation, so be careful!

If you select One by One, you can either enter a name at the Name to be erased: prompt or press ▼ or ▲

until the name you want appears. Then press `Erase`.
If you change your mind, press `Quit` instead of `Erase`.

Press `Quit` or Ⓒ when you are finished erasing.

`Erase all` clears all locations.

Menu 8 5, Display Own Number

This shows you the phone number(s) assigned to the
current SIM card. Note that some SIM cards do not
show the phone number.

Menu 9, Personal Reminders

Menu 9 1, Reminder Note

The Reminder Note displays when the phone is
switched on. The maximum length is 30 characters.

① Enter Menu 9 1.

② Key in a new message or edit the existing one.

Characters you key in are added to the left of the cur-
sor. Press Ⓒ to delete characters to the left of the cur-
sor. Press ▼ or ▲ to move the cursor right or left.

③ `Press Option`.

④ Press ▼ to reach `Store` or `Erase` then press `OK`.

Store stores the new or edited message for later use.
The message is displayed each time you switch the
phone one. `Erase` removes the message from the
display and from the memory.

Next time you switch the phone one, the stored
message displays. Once you have read the message,
press `Keep` to save it or `Erase` to delete it. It displays
each time you turn the phone on until you erase it.

Menu 9 2, Countdown Timer

① Enter Menu 9 2.

② Key in the time to count down at `Set timer:`
(appears in h and m) then press `OK`.

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The phone sounds an alarm and displays `COUNTDOWN COMPLETED` when it finishes counting down the amount of time you enter. The timer stops if the battery runs out or if you turn the phone off.

To Stop the Timer Before it Alarms

Follow the steps above, but key in 0000 at `Set timer:`.

To Clear the Alarm When it is Sounding

Press `OK` or any key.

Menu 10, In-Call Options

These are options to be used during calls.

① Press and hold the `Menu` key during a call to access this menu.

② Press ▼ to get to the option you want (`Mute, Unmute, Hold, Unhold, Swap, Drop Call, Send DTMF, Join, Private`), then press `OK`.

`Mute` or `Unmute` switches off or on the phone's microphone. If the phone is connected to a handsfree desktop charger, `Mute` turns off the microphone of this accessory.

`Hold` allows you to put a currently active call on hold. Once the new call has been terminated, you can make the original call active again by selecting `Unhold`.

`Swap` makes a held call active and puts the currently active call on hold.

Note: The Hold/Unhold and Swap options appear only if supported by your operator and SIM card.

`Drop Call` ends the currently active call.

`Send DTMF` transmits the numbers on the display as Touch Tones. If there are no numbers on the display, the phone prompts you to enter a location number. Enter a location number or use the ▼ or ▲ keys to

scroll through stored numbers. Press OK when the number you want to send as Touch Tones is displayed.

Conference Calls

Join creates a conference call by joining together an active call and a held call. Then to add more parties to the call, put the conference call on hold, create another call, then select Join again. There may be up to 5 parties in a conference call.

Private lets you have a private conversation with one party from the conference call. The conference call is put on hold while you have the private conversation. After you select Private, the phone displays all conference call parties. Use ▼ to choose the party with whom you want the private conversation then press OK.

To rejoin the rest of the conference call, select Join again.

Menu 11, Fax or Data Call

Note: Fax or Data Call appears only if supported by your operator and SIM card.

Your phone supports the sending and receiving of data via an optional data adapter that connects to the base of your phone.

If there is no data adapter connected to the phone when you enter this menu and dial the number, the message CONNECT TERMINAL appears. Check that the data adapter is properly set up.

The phone automatically recognizes the type of connected terminal.

To Create a Data or Fax Connection

① Enter Menu 11.

② Key in the phone number at Number: or press the ▼ or ▲ keys to scroll through stored numbers until you reach the one you want.

③ Press OK.

During a transmission, the message DATA CALL or FAX CALL and the D indicator are displayed. For more information, refer to any documentation or instructions supplied with your data adapter, data application, or fax application.

Menu 12, Number Editor

This function lets you edit a phone number. You can press (TALK) to dial the edited number. You can also store it.

① The number you want to edit must be on the display.

② Enter Menu 12.

③ (CLR) removes the digit left of the cursor.

④ ▼ moves the cursor right; ▲ moves the cursor left. Press OK when you are finished editing the number. You can then dial or store the edited number if you want to.

Menu 13, Ringing Options

With this menu you can choose Ring, Beep Once, Silent, Vibrate, or Ring & Vibra. Note that if you choose Silent, the phone flashes its lights when you have an incoming call.

Note: The vibrating option is available only with a special battery. Consult your dealer.

Note: When the phone is connected to a handsfree desktop charger, the indication mode is set separately for that accessory.

Menu 14, Quick Guide

① Enter Menu 14.

② Press ▼ to get to the desired topic then press Select.

③ Press More to read help screens.

④ Press Quit when you are finished.

The following Help topics are available:

- How to Make a Call
- How to Answer a Call
- How to Redial
- How to Dial Emergency No.
- How to Access Voice Mail
- How to Store Name and Number
- How to Use Memory
- How to Use In-Call Operations
- How to Use One-Touch Dialing
- How to Use Key Lock
- How to Use Personal Alert Tone

9. Accessories

An extensive range of accessories is available for your phone. You can select the accessories that accommodate your specific communication needs.

For availability of the accessories, please check with your local dealer.

A few practical rules for accessory operation:

- Keep the accessories out of the reach of small children.
- When you disconnect the power cord of any accessory, grasp and pull the plug, not the cord.
- Check regularly that all PCS1900 phone equipment in a vehicle is mounted and operating properly.
- Installation of complex car equipment must be made by qualified personnel only.

Use only batteries, chargers and accessories approved by the phone manufacturer. The use of any other types will invalidate any approval or warranty applying to the phone, and may be dangerous.

See "The Battery and SIM Card" chapter for important battery usage information!

Batteries

The following table shows battery options that are available for your phone, charging times with the ACH-4U or LCH-2 charger, talk times, and standby times. Consult your dealer for more information. The charging times are approximate.

Charging, Standby, and Talk Times

Battery Option	Charging Time	Talk Time	Standby Time
Slim BBH-1S 600 mAh NiMH	1 hour	110 min.	25 hrs.
BBT-1XV Vibrating 600 mAh NiMH	1 hour	110 min.	25 hrs.
Extended BBH-2H 1100 mAh NiCd	2 hours	220 min.	50 hrs.
Ultra Extended BBH-1H 1700 mAh NiMH	2 hours, 30 min.	300 min.	68 hrs.

Note: Battery operation times vary according to signal conditions, network parameters set by the operator, and how you use the batteries. Follow the guidelines in "The Battery and SIM Card."

Rapid Travel Charger (ACH-4U)

This lightweight AC charger can be used with all battery options. Calls can be made during charging, even with a fully discharged battery.
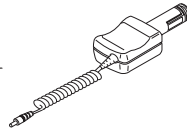

To use the Rapid Travel Charger (ACH-4U), plug it into a standard 120V AC wall outlet, and connect the lead from the charger to the base of the phone.

The charger can also be used together with the optional Compact Desktop Charging Stand (CHH-2) and Light Desk Stand (CHH-2L). Approximate charging times for discharged batteries are shown at the beginning of this section.

Rapid Cigarette Lighter Charger (LCH-2)

You can charge the phone battery from your vehicle battery by using the Rapid Cigarette Lighter Charger (LCH-2). You can also use the charger with the Light Desk Stand (CHH-2L) and the Compact Desktop Charging Stand (CHH-2). Calls are possible during charging.

A green light indicates the charger is ready for charging (when not charging) or finished charging (if it has been charging). A red light indicates charging. The battery charging times are the same as those for the Rapid Travel Charger (ACH-4U).

The input voltage range is from 10 to 30V DC, negative grounding. Avoid prolonged charging with the Rapid Cigarette Lighter Charger (LCH-2) when the car engine is not running; this may cause the battery of your car to drain. Note also that in some cars the cigarette lighter plug is not provided with electricity if the ignition is not switched on.

Fuse Replacement

The Rapid Cigarette Lighter Charger contains a protective fuse. The fuse is located in the charger tip. If the charger does not work, the fuse may be blown, in which case replace it with a 3 amp. 125 volt fuse. Never use a fuse with a higher rating.

Light Desk Stand (CHH-2L)

The Light Desk Stand (CHH-2L) offers support for the phone during charging. Used together with the Rapid Travel Charger (ACH-4U) or the Rapid Cigarette Lighter Charger (LCH-2), this drop-in stand is an economical choice when you need your phone close at hand, always ready for calls.
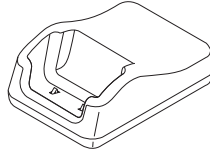
Charging is indicated by the scrolling battery bars on the right side of the phone's display. Charging is finished when the scrolling stops.

Compact Desktop Charging Stand (CHH-2)

The Compact Desktop Charging Stand (CHH-2) allows you to place both the phone and a spare battery for charging at the same time in the stand. It is compatible with all battery options.
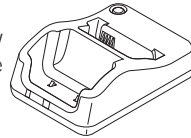
The charger starts to charge the spare battery as soon as it has finished charging the phone battery.

Connect either the Rapid Travel Charger (ACH-4U) or the Rapid Cigarette Lighter Charger (LCH-2) to the stand, and then plug the Rapid Travel Charger or Rapid Cigarette Lighter Charger into a wall outlet or vehicle respectively. Place the phone and/or the spare battery in the stand.

To discharge the spare battery, press the blue button on the stand. When the battery is totally discharged, recharging starts automatically. (If you wish to stop discharging, press the button again to start the

charging right away.) Only the spare battery can be discharged.

The blinking red light indicates discharging, the continuous red light indicates recharging and the green light indicates trickle charging. The phone is ready for use when the green light appears (check the charge on the phone display).

The charging times are the same as those for the Rapid Travel Charger.

Handsfree Desktop Charger Kit
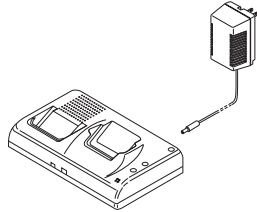
In the U.S., this kit (EDC-20P) consists of the Handsfree Desktop Charger (CHH-8P) and the AC Adapter (ACS-6U). In Canada, this kit (CHH-8PK) consists of the Handsfree Desktop Charger (CHH-8P) and the AC Adapter (ACS-3U).

As with the Compact Desktop Charging Stand (CHH-2), you can charge both the phone and the spare battery at the same time. The spare battery is charged only after the phone battery is charged.

The HF Desktop Charger offers you a handsfree microphone and loudspeaker for office use. You may switch to handsfree and back simply by putting down or picking up the phone, even during your call.

The stand can be connected only to the AC Adapter (ACS-6U in the U.S., or ACS-3U in Canada). Connect the adapter to the back of the stand and then plug the

adapter into a wall outlet. Place the phone and/or the spare battery in the stand.

The stand also provides a connector for PCS Card, Data and Fax facilities. *Note that this connector is not compatible with landline facilities. Do not connect your landline phone to CHH-8P.*

The buttons on the stand are for discharging spare batteries ✻, for calling your voice mailbox ◖◗, and for muting the microphone during a call ✻ .

The voice mailbox number must be stored in the memory of the phone (Menu 2 4 5).

When muting the microphone the first press mutes the call and the second unmutes it.

Once the phone is placed in the HF Desktop Charger, you may set the *Lights* (Menu 4 01), *Ringing Volume* (Menu 4 2), *Keypad Tones* (Menu 4 4), *Ringing Options* (Menu 13) and earpiece volume (side buttons on phone) differently from the settings selected for handportable use.

The phone memorizes these desktop settings and uses them whenever the phone is placed in the HF Desktop Charger again. The charger also memorizes the adjusted earpiece volume and uses it for the built-in speaker. Otherwise, the charger acts similarly to the Compact Desktop Charging Stand (CHH-2).

The battery charging times are the same as those for the Rapid Travel Charger (ACH-4U).

Mini Headset Car Kit (CARK-83)

This kit includes the Mobile Holder (MBH-6), Swivel Mount (HHS-1), Rapid Cigarette Lighter Charger (LCH-2), Mini Headset (HDC-2), and Headset Adapter (HDC-1).

Note: In Canada, items can be purchased separately to form the car kit option.
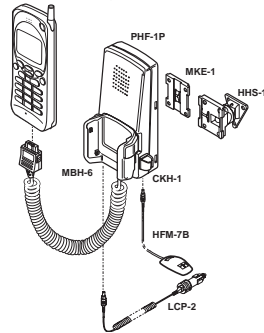
Mobile Holder (MBH-6)

The Mobile Holder holds the
phone in place, for example,
during charging with the Rapid
Cigarette Lighter Charger (LCH-2).
The Mounting Plate (MKE-1)
comes with the Mobile Holder.
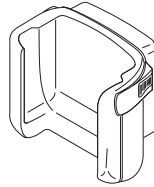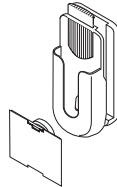
Compact Handsfree Car Kit (CARK-10P)

(PHONE NOT INCLUDED)

PHF-1P

MKE-1

HHS-1

MBH-6

CKH-1

HFM-7B

LCP-2

The portable handsfree car kit CARK-10P provides a
flexible approach to simple car installation with charging
and handsfree facility.

Belt Clip (BCC-1)

A belt clip makes your phone easier to
carry. This convenient snap-on belt
clip holds the phone securely.

Accessories for Data Communications

The phone can be used in connection with various data
accessories. Please contact your dealer for further
details.

10. Care and Maintenance

Your phone is a product of superior design and craftsmanship and should be treated with care. The suggestions below will help you to fulfill the warranty obligations and to enjoy this product for many years.

Keep the phone and all its parts and accessories out of small childrens' reach.

Keep the phone dry. Precipitation, humidity and liquids contain minerals that will corrode electronic circuits.

Do not use or store the phone in dusty, dirty areas. Its moving parts can be damaged.

Do not store the phone in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.

Do not store the phone in cold areas. When the phone warms up (to its normal temperature), moisture can form inside the phone, which may damage electronic circuit boards.

Do not attempt to open the phone. Non-expert handling of the phone may damage it.

Do not drop, knock or shake the phone. Rough handling can break internal circuit boards.

Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the phone. Wipe it with a soft cloth slightly dampened in a mild soap-and-water solution.

If the phone or any of its accessories are not working properly, take them to your nearest qualified service facility. The personnel there will assist you, and if necessary, arrange for service.

11. Technical Data

PCS System	PCS1900
Weight	8.3 oz (235g) with 600mAh NiMH battery
Capacity	179 cm3
Frequency Range	1850 - 1910 MHz (TX) 1930 - 1990 MHz (RX)
Transmitter Output Power	1 watt
Battery Voltage	6 V nominal
Charging current	800mA typical
Operating Temperature	+14° F to +131° F (-10° C to +55° C)
Number of Channels	299
Memory Locations	125
Memory Capacity	Alpha: 20 characters per location Numeric: 32 digits per location

USA
NOKIA MOBILE PHONES - 6200 Courtney Campbell
Causeway, Suite 900, P.O. Box 303730, Tampa, FL 33630
Tel: 1-800-666-5553.

CANADA
NOKIA PRODUCTS LTD. - 575 Westney Rd. South
Ajax, Ontario L1S 4N7. Tel: (905) 427-6654

The information contained in this User's Guide was written for the phone NHB-3NB.

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