Nokia 6255, Nokia 6255i, Nokia 6256, and Nokia 6256i User Guide

Earpiece

Display screen

Power key

Headset connector

Five-way scroll and selection key

Left selection key

Right selection key

End key

Call key

Microphone

Keypad

Charger port
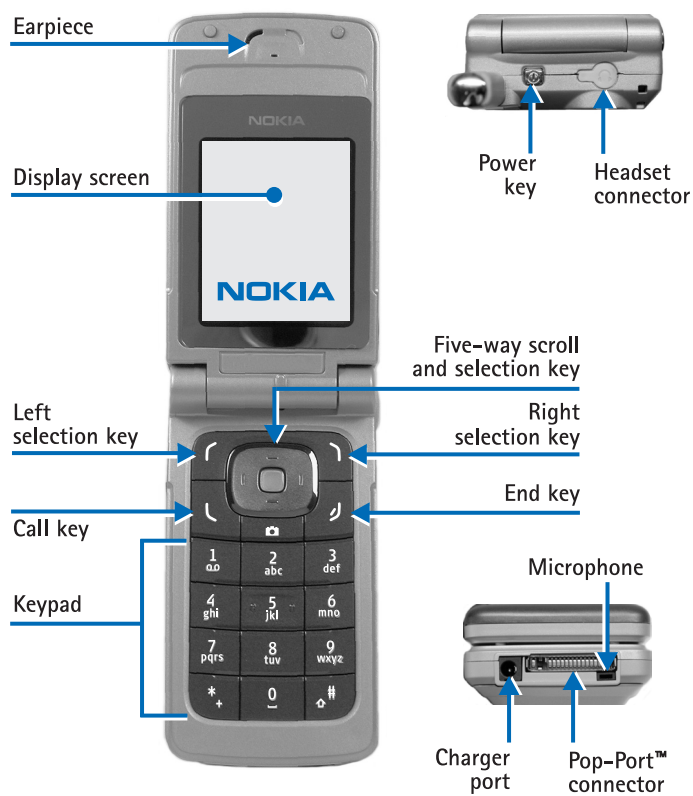
Pop-Port™ connector

Note: Spanish translation of this guide begins on page 121.

EXPORT CONTROLS

This device may contain commodities, technology or software subject to export laws and regulations from the US and other countries. Diversion contrary to law is prohibited.

FCC/INDUSTRY CANADA NOTICE

Your phone may cause TV or radio interference (for example, when using a telephone in close proximity to receiving equipment). The FCC or Industry Canada can require you to stop using your telephone if such interference cannot be eliminated. If you require assistance, contact your local service facility. This device complies with part 15 of the FCC rules. Operation is subject to the condition that this device does not cause harmful interference.

Contents

NOTES

For your safety

Read these simple guidelines. Not following them may be dangerous or illegal. Read the complete user guide for further information.

SWITCH ON SAFELY
Do not switch the phone on when wireless phone use is prohibited or when it may cause interference or danger.

ROAD SAFETY COMES FIRST
Obey all local laws. Always keep your hands free to operate the vehicle while driving. Your first consideration while driving should be road safety.

INTERFERENCE
All wireless phones may be susceptible to interference, which could affect performance.

SWITCH OFF IN HOSPITALS
Follow any restrictions. Switch the phone off near medical equipment.

SWITCH OFF IN AIRCRAFT
Follow any restrictions. Wireless devices can cause interference in aircraft.

SWITCH OFF WHEN REFUELING
Don't use the phone at a refuelling point. Don't use near fuel or chemicals.

SWITCH OFF NEAR BLASTING
Follow any restrictions. Don't use the phone where blasting is in progress.

USE SENSIBLY
Use only in the normal position as explained in the product documentation. Don't touch the antenna unnecessarily.

QUALIFIED SERVICE
Only qualified personnel may install or repair this product.

ENHANCEMENTS AND BATTERIES
Use only approved enhancements and batteries. Do not connect incompatible products.

WATER–RESISTANCE

Your phone is not water-resistant. Keep it dry.

BACKUP COPIES

Remember to make back-up copies or keep a written record of all important information stored in your phone.

CONNECTING TO OTHER DEVICES

When connecting to any other device, read its user guide for detailed safety instructions. Do not connect incompatible products.

EMERGENCY CALLS

Ensure the phone is switched on and in service. Press the **End** key as many times as needed to clear the display and return to the main screen. Enter the emergency number, then press the **Call** key. Give your location. Do not end the call until given permission to do so.

Welcome

Congratulations on your purchase of the Nokia 6255, Nokia 6255i, Nokia 6256, or Nokia 6256i mobile phone. Your phone provides many functions which are practical for daily use, such as a hands-free loudspeaker, alarm clock, calculator, calendar, and more. Your phone can also connect to a PC, laptop, or other device using a data cable, Bluetooth, or Infrared. To personalize your phone, you can set your favorite ring tones.

■ About your device

The Nokia 6255, Nokia 6255i, Nokia 6256, or Nokia 6256i wireless phone described in this guide is approved for use on the CDMA 800, 1900 and AMPS networks.

Contact your service provider for more information about networks.

When using the features in this device, obey all laws and respect privacy and legitimate rights of others.

Warning: To use any features in this device, other than the alarm clock, the phone must be switched on. Do not switch the device on when wireless phone use may cause interference or danger.

■ Network Services

To use the phone you must have service from a wireless service provider. Many of the features in this device depend on features in the wireless network to function. These Network Services may not be available on all networks or you may have to make specific arrangements with your service provider before you can utilize Network Services. Your service provider may need to give you additional instructions for their use and explain what charges will apply. Some networks may have limitations that affect how you can use network services. For instance, some networks may not support all language-dependent characters and services.

Your service provider may have requested that certain features be disabled or not activated in your device. If so, they will not appear in your device menu. Contact your service provider for more information.

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■ Shared memory

The following features in this device may share memory: contacts, text messages, photos, images, and tones in gallery, calendar notes, games, and applications. Use of one or more of these features may reduce the memory available for the remaining features sharing memory. Your phone may display a message that the memory is full when you try to use a shared memory feature. In this case, delete some of the information or entries stored in the shared memory features before continuing. Some of the features, such as photos, images, tones in gallery, text messages, and applications may have a certain memory specially allotted to them in addition to the memory shared with other features.

■ Register your phone

Make sure to register your phone at **www.warranty.nokiausa.com** or call 1-888-NOKIA-2U (1-888-665-4228) so that we can serve your needs better if you should need to call a customer center or to have your phone repaired.

■ Getting help

Find your phone label

If you need help, Nokia Customer Care is available for assistance. Before calling, we recommend that you write down the following information and have it available:

- Electronic serial number (ESN)
- Your zip code (only in the US)

The ESN is found on the type label, which is located beneath the battery on the back of the phone. See "Remove the back cover", page 16 and "Remove the battery", page 16 for more information.
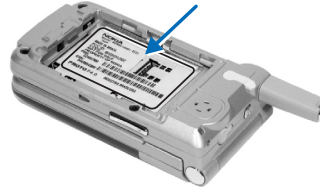
Contact Nokia

Please have your product with you when contacting either of theses numbers:

Nokia Customer Care Center, USA
Nokia Inc.
7725 Woodland Center Boulevard, Suite #150
Tampa, Florida 33614
Tel: 1-888-NOKIA-2U (1-888-665-4228)
Fax: 1-813-249-9619
TTY/TDD users: 1-800-24-NOKIA (1-800-246-6542)

Customer Care, Canada
Nokia Products Ltd.
601 Westney Road South
Ajax, Ontario L1S 4N7
Tel: 1-905-427-1373 or 1-888-22-NOKIA (1-888-226-6542)
Fax: 1-905-619-4360

Updates

From time to time, Nokia updates this guide to reflect changes. The latest version may be available at **www.nokia.com**. An interactive tutorial for this product may be available at the Web site **www.nokiahowto.com**.

Accessibility solutions

Nokia is committed to making mobile phones easy to use for all individuals, including those with disabilities. For more information visit the Web site at **www.nokiaaccessibility.com**.

1. Phone at a glance

■ Keys and parts
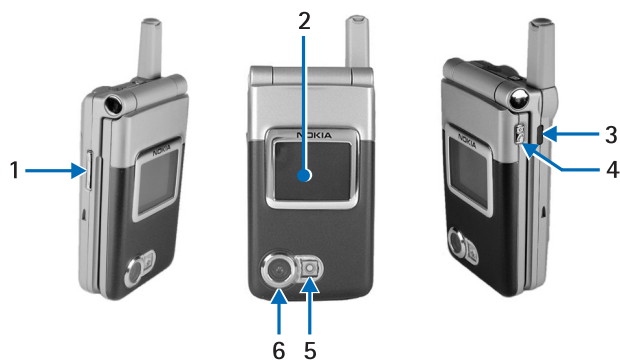
1	Volume key
2	Front display/viewfinder
3	Infrared
4	Voice/shutter key
5	Flash
6	Camera lens

Voice/shutter key

- Short press—Starts and stops voice memo recorder.

- Long press—Answer or make a call using the loudspeaker when the fold is closed.

- Capture a picture when the camera is active.

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■ The start screen

Note: Depending on your wireless service provider and the model number of your phone, some or all of the following selection keys may appear on the start screen.

The start screen is home base and indicates your phone is in idle mode.

Signal strength (1)—A higher bar indicates a stronger network signal.

Menu (2)—Press the **Center selection** key to select this option.

Go to (3)—Press the **Left selection** key to select this option.

Names or **network operator menu** (4)—Press the **Right selection** key to select this option.

Battery level (5)—A higher bar indicates more power in the battery.
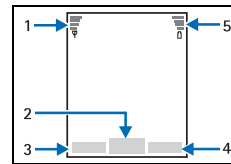
■ Quick keys

Note: Depending on your wireless service provider and the model number of your phone, some or all of the following Quick keys may appear on the start screen.

At the start screen, the **Five-way scroll** key instantly takes you to frequently-accessed menus:

Scroll up key—Go to the contacts list or **network operator menu**.

Scroll right key—View the calendar.

Scroll down key—Go to the contacts list.

Scroll left key—Quickly create a text message.

Center selection key—Selects highlighted menus and submenus.

Camera key—Quickly activates the viewfinder.

Indicators and icons

Note: Depending on your wireless service provider and the model number of your phone, some or all of the following indicators and icons may appear on the start screen.

✉	You have new text or picture messages. See "Text messages", page 25.
⌒⌒	You have new voice messages. See "Voice messages", page 34.
⛏0	Your phone keypad is locked. See "Keyguard", page 21.
⚡	Your phone is set to the silent profile. See "Profiles", page 61.
⚑	The alarm clock is set to on. See "Alarm clock", page 78.
⏱	The countdown timer is running.
⏱	The stopwatch timer is running in the background.
◁))	Integrated hands-free is active. See "Using the loudspeaker", page 20.
⏱	The timed profile is selected. See "Profiles", page 61.
⌂ ◁)) ⌨ or 🖅	An enhancement is connected to the phone. See "Enhancement settings", page 71.
🔒 or 🔓	Voice privacy encryption is active (or is not active) in the network.
⚝ or ⬧	Location info sharing is set to Emergency or On. See "Location info sharing", page 65.
D	You are in a digital network. See "Network Services", page 7.
A	You are in an analog network. See "Network Services", page 7.
1x	You are in a 1XRTT network. See "Network Services", page 7.
△	You are roaming outside your home network. See "Roaming options", page 75.

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■ Get the most out of this guide

The following sections illustrate the various components of your phone. Familiarize yourself with these sections to help you understand the instructions that follow.

This guide uses certain terms for the steps that you are asked to perform.

- Press means to press and release a key quickly (short press). For example, Press 7 means press the key on the keypad that is labeled with the number 7 and the letters "pqrs".

- Press and hold means to press and hold a key for 2–3 seconds; then release the key (long press).

- Selection keys are used to select a menu option. To select an option, press the selection key below the menu item on the phone screen.

- Scroll keys are used to move up, down, left, or right in the menus.

- Call and End keys: Press the **Call** key to place a call or to answer an incoming call. Press the **End** key to end a call or press and hold to return to the idle screen.

■ Phone menus

Phone features are grouped according to function and are accessed through the main menus. Each main menu contains submenus and lists from which you can select or view items and customize your phone features. You can access these menus and submenus by using the scroll method or by using a shortcut.

Note: Some features may not be available, depending on your network. For more information, contact your wireless provider.

The scroll method

1. At the start screen, select *Menu* and scroll through the main menus using the up and down **Five-way scroll** key.

   As you scroll through the menus, the menu number appears in the upper right corner of the display. Below the number is a scroll bar with a tab that moves up or down on the right side of the display screen as you scroll through the menus, providing a visual representation of your current position in the menu structure.

2. When you arrive at a menu, press *Select* (the **Center selection** key) to enter submenus.

   - Press *Back* (the **Right selection** key) to return to the previous menu.

   - Press the **End** key to return to the start screen from any menu or submenu.

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In-phone help

Many features have brief descriptions (help text) which can be viewed on the display. To view these descriptions, scroll to a feature and wait for about 10 seconds. Use the **Scroll down** key to view all of the description, or press *Back* to exit.

In order to view the descriptions, you must first activate help text.

At the start screen, select *Menu* > *Settings* > *Phone settings* > *Help text activation* > *On* or *Off*.

■ 'Go to' functions

The *Go to* menu allows you to change the function of the **Left selection** key on your phone so that your most frequently used functions can be quickly accessed from the *Go to* menu on the start screen.

Choose 'Go to' functions

1. At the start screen, select *Go to* > *Options* > *Select options*.

2. Use the **Scroll up** key and the **Scroll down** key to highlight the desired functions from the list of available functions.

3. Press *Mark* to add a function. Use *Unmark* to remove a function.

4. Select *Done* when you have added all desired functions.

5. Select *Yes* to save the changes.

6. At the start screen, press *Menu* > *Go to* to display a list of the functions that you selected in step 3.

Organize functions

1. At the start screen, select *Go to* > *Options* > *Organize*.

2. Use the **Scroll up** key or the **Scroll down** key to highlight the function you wish to rearrange, and select *Move*.

3. Select *Move up, Move down*, *Move to top*, or *Move to bottom*.

4. Press *Done* > *Yes* to save the changes.

2. Set up your phone

■ Antenna

Your device has two antennas:

• The fixed antenna is active unless the extendable antenna is fully extended.

In the Nokia 6255i and 6256i phone, the GPS antenna is also internal and is activated when placing emergency calls or when *On* is selected from the *Location info sharing* menu. For more information on location info sharing, see "Location info sharing", page 65.

Your device has a fixed and extendable antenna located towards the top of the phone when the fold is closed. Hold the phone as you would any other telephone with the antenna area pointed up and over your shoulder.

Note: As with any other radio transmitting device, do not touch the antenna unnecessarily when the device is switched on. Contact with the antenna affects call quality and may cause the phone to operate at a higher power level than otherwise needed. Not touching the antenna area during a phone call optimizes the antenna performance and the talktime of your device.
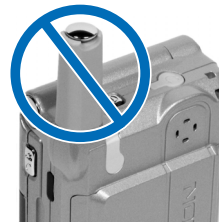
■ Battery

Note: Before removing the cover, always switch off the power and disconnect the charger and any other device.

Avoid touching electronic components while changing the covers. Always store and use the device with the covers attached.

Remove the back cover

1. With the back of the phone facing you, push down on the back cover.

2. Slide the back cover toward the bottom of the phone and remove.

Remove the battery

After you have removed the back cover, insert your finger into the finger grip, and lift the battery from its compartment.

UIM (CDMA SIM) card slot

Your phone has a UIM card slot built into the mechanics. However, the UIM is not functional in this phone model. Avoid placing anything into the UIM card slot.

Install the MMC card

Before installing the MMC card, always make sure that the phone is switched off and that you have removed the cover and battery.

Open the MMC holder by lifting the latch(1) and lifting the holder up (2).

Insert the MMC card into the holder with the gold–colored contacts facing down, matching up with the gold–colored contacts on the phone. The beveled corner of the card fits into the beveled corner of the slot.

Close the UIM/MMC holder and replace the battery.

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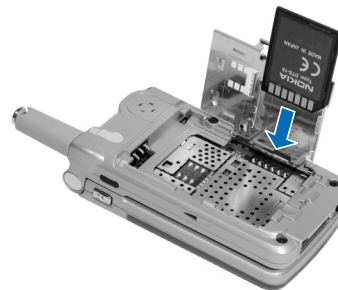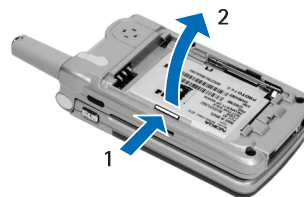
Replace the battery

1. Insert the battery, gold-colored contact end first, into the battery slot.

2. Push down on the other end of the battery to snap the battery into place.

Replace the back cover

Set the back cover on the phone with the cover tabs aligned with the slots in the phone.
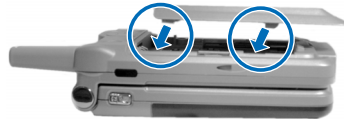
Slide the back cover toward the top of the phone until the back cover is securely in place.

Charge the battery

1. Plug the charger transformer into a standard ac outlet.

2. Insert the charger output plug into the round jack at the bottom end of the phone.

   After a few seconds, the battery indicator in the display starts to scroll from bottom to top. If the battery is completely discharged, it may take a few minutes before the charging indicator appears on the display or before any calls can be made.

■ Turn your phone on or off

1. To turn your phone on or off, press and hold the **Power** key on top of the phone for at least 3 seconds.

2. Enter the security code, lock code, or PIN code, if necessary, and press *OK*.

■ Connect the headset

A compatible headset, such as HS-5, may be purchased with your phone or separately as an enhancement. See "Enhancement settings", page 71 for information.

1. Plug the headset connector into the Pop-Port™ connector at the bottom end of your phone. The 🎧 icon appears on the start screen.

2. Position the headset on your ear.

   With the headset connected, you can make, answer, and end calls as usual.

   • Use the keypad to enter numbers.

   • Press the **Call** key to place a call.

   • Press the **End** key to end a call.

You can also plug a compatible headset, such as the HS-9 Universal Headset, into the 2.5mm headset jack on the top of your phone to allow hands-free operation. See "Enhancement settings", page 71.

■ Make a call

Note: Before making or receiving a call, fully extend the whip antenna.

Using the keypad

1. Enter the phone number (including the area code), and press the **Call** key. (To delete a character to the left of the cursor, press *Clear*.)

2. Press the **End** key or to end the call or *End call* to cancel the call attempt.

Using the contacts list

At the start screen, use the **Scroll up** key or **Scroll down** key to scroll to the entry you wish to view. Press the **Call** key to make the call, or press *Details* to view details of the entry.

Using the last dialed number

At the start screen, press the **Call** key to display the last 30 numbers dialed. Scroll to the number (or name) you wish to redial, and press the **Call** key.

Conference calling

Conference calling is a network service that allows you to take part in a conference call with two other participants.

1. Make a call to the first participant.
2. With the first participant on the line, select *Options* > *New call.*
3. Enter the phone number of the second participant, or press *Search* to retrieve a number from the contacts list. Press *OK*. The first participant is put on hold.
4. When the second participant picks up, press the **Call** key to connect the calls.
5. To end the conference call, press *Options* > *End all calls* or press the **End** key.

■ Answer calls

Answer or silence an incoming call

1. Press the **Call** key or *Answer* to answer the call.
2. With the fold open:

   Press the **End** key to reject the call.

   Press *Silence* to mute the ringing tone, then press *Dismiss*, or do nothing, and the call is eventually diverted to voicemail.

   If your phone is set to *Silent* in the *Profiles* menu, press *Dismiss*, and the call is diverted to voicemail.

3. With the fold closed:

   Press the **Volume** key to mute the ringing tone.

   A long press of the **Voice/shutter** key answers an incoming call with the loudspeaker.

Your phone answers an incoming call when you open the fold. This is the default setting, but you can change the setting to *Phone will not answer calls when fold is opened*.

From the start screen, select *Menu* > *Settings* > *Call settings* > *Answer when fold is opened* > *On* or *Off*.

Adjust the earpiece volume

While in a call, press the **Up arrow** or **Down arrow** on the volume key located on the left side of your phone to adjust the volume of the earpiece.

When adjusting the volume, a bar chart appears in the display indicating the volume level.

Answer a call with the keypad locked

To answer a call with the keypad locked, simply press the **Call** key with fold open. To answer a call with the fold closed and with the keypad locked, press and hold the **Voice/shutter** key to answer with the loudspeaker. During the call, all features function as normal. When you end or reject the call, the keypad automatically re-locks. See "Keyguard", page 21 for details.

When the keypad lock is on, calls still may be possible to the official emergency number programmed into your device.

Key in the emergency number and press ⎣ .

Using the loudspeaker

⚠ **Warning:** Do not hold the device near your ear when the loudspeaker is in use, because the volume may be extremely loud.

You can use your phone as a loudspeaker during a call. While in a call:

- To activate the loudspeaker while in a call with the fold open, press *Loudspeaker*.
- To activate the loudspeaker when answering a call with the fold closed, press the **Voice/shutter** key.
- To deactivate the loudspeaker during a call, press *Handset*.

The loudspeaker is deactivated automatically when a call (or a call attempt) ends or when certain enhancements are connected.

Options during a call

Many of the options that you can use during a call, are network services. Check with your wireless service provider for more information.

1. Press *Options* during a call to display the following options:

   Loudspeaker/*Handset*—Activate or deactivate the loudspeaker while in a call.

   New call—Initiate a conference call. See "Conference calling", page 19 for information.

   Save—Save a number entered during a call.

   Add to contact—Add a number entered during a call to a contact in your list.

   End all calls—Disconnect from all active calls.

   Touch tones—Enter the number(s), and press *Tones* to send the number(s) as tones.

   Contacts—View the contacts list.

   Menu—View the phone menu.

2. Scroll to an option, and press *Select* to activate the option or enter its submenu.

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■ Keyguard

With keyguard, you can lock the keypad to prevent keys from being pressed accidentally. If the keypad is locked, it unlocks when you receive a call. After the call, the lock automatically reactivates.

When the keyguard is on, calls still may be possible to the official emergency number programmed into your phone. Key in the emergency number, and press the **Call** key.

Lock the keypad

Select *Menu* with the **Center selection** key; then press the ***** key within two seconds.

Unlock the keypad

Select *Unlock* with the **Center selection** key; then press the ***** key within two seconds.

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3. Text entry

You can use two methods for entering text and numbers:

- Standard mode is the only way to enter text into the contacts list and to rename caller groups.
- Predictive text input is a quick and easy method for writing messages or creating a calendar note.

■ Standard mode

Text (Abc)

- Press a key once to insert the first letter on the key, twice for the second letter, etc. If you pause briefly, the last letter in the display is accepted and your phone awaits the next entry.
- Press *Clear* to backspace the cursor and delete a character.
- Press and hold *Clear* to backspace continuously and delete characters.
- Press the **0** key to enter a space, thereby accepting a completed word.
- Press the **1** key as many times as necessary to scroll through a list of commonly used characters.
- Press the * key to display a complete list of special characters.
- Press and hold the **#** key to bring up the *Editor settings* (*Number mode*, *Predictive text on*/*Predictive text off*, *Writing language*).
- Press the **#** key to switch between uppercase, lowercase, and sentence case text. As you press the **#** key, the following icons (not the descriptions) appear in the upper left of the display screen:

  ✎ ABC   Uppercase text: standard mode is on

  ✎ abc   Lowercase text: standard mode is on

  ✎ Abc   Sentence case text: standard mode is on

Numbers (123)

To switch to 123 mode from Abc mode, press and hold the **#** key at any message entry screen to bring up the *Editor settings* menu list of *Number mode*, *Predictive text*, and *Writing language*. Select *Number mode*, and the phone will return to the message entry screen and switch the ABC icon in the upper left corner of the display to the 123 icon.

Punctuation and special characters

While at any text entry screen, press the * key to display special characters (press and hold the * key if predictive text is on). Press the ***** key again to cycle through all available characters. You can navigate through the list of special characters by using the **Five-way scroll** key. Once a character is highlighted, press *Insert* to insert the character into your message.

■ Predictive text input

Predictive text input allows you to write messages quickly using your keypad and the built-in dictionary. It is much faster than the standard mode method, because for each letter, you only press the corresponding key on your keypad once.

When you use *Predictive text*, as you press the **#** key, the following icons (not the descriptions) appear in the upper left of the display screen:

Uppercase text: predictive text is on

Sentence case text: predictive text is on

Lowercase text: predictive text is on

Activate/deactivate

At any text entry screen, press and hold *Options*. Predictive text is turned on and off, depending on its previous mode.

OR

1. At any text entry screen, select *Options* > *Predictive text*.
2. Scroll to the language of your choice, and press *Select*.

Text entry

The illustration below simulates your display each time a key is pressed. For example, to write Nokia with predictive text on and with the English dictionary selected, press each of the following keys once:

the **6** key	the **6** key	the **5** key	the **4** key	the **2** key
O,	**On,**	**Onl,**	**Onli,**	**Nokia,**
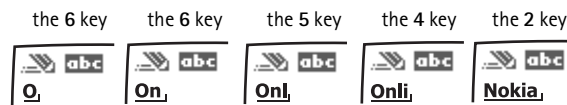
- Press the **0** key to enter a space, and begin writing the next word.

- If a displayed word is not correct, press the ***** key to see other matches. To return to the previous word in the list of matches, press *Previous*.

- If **?** appears after a word, press *Spell* to add the word to the dictionary.

- Press the **1** key to insert a period into your message.

- Press and hold the ***** key to display special characters. Press the ***** key again to cycle through all available characters.

4. Messages (Menu 1)

If you have subscribed to a message network service, you can send and receive messages to compatible phones that are also subscribed to a message service. You can also send and receive picture messages, multimedia messages, and e-mail if supported by your service provider. Also, you can make distribution lists that contain phone numbers and names from your contact list. See "Text entry", page 24 for more information.

When composing text messages, picture messages, or multimedia messages, check the number of characters allowed in the top right corner of the message. Using special (Unicode) characters takes up more space. If there are special characters in your message, the indicator may not show the message length correctly. Before the message is sent, the phone will tell you if the message exceeds the maximum length allowed for one message.

Note: When sending messages, your device may display *Message sent*. This is an indication that the message has been sent by your device to the message center number programmed into your device. This is not an indication that the message has been received at the intended destination. For more details about messaging services, check with your service provider.

Important: E-mail messages or multimedia message objects may contain viruses or otherwise be harmful to your device or PC. Do not open any attachment if you are not sure of the trustworthiness of the sender.

■ Text messages

Write and send

1. At the start screen, select *Menu* > *Messages* > *Text messages* > *Create message*.

   To go quickly to the *Create message* display, press the **Scroll left** key from the start screen.

2. Compose or reply to a message using the keypad, and select *Send*.

   For other options while composing the message, select *Options* and one of the following:

   Preview—Preview the message when sending a picture message.

   Sending options—Mark/Unmark options Urgent, Delivery note, Callback no., and Signature.

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Clear text—Erase the text from the message editor.

Insert picture—Insert a picture from a Templates folder into your message.

Change picture—Change the picture in a picture message.

Delete picture—Delete the picture in a picture message.

Insert contact—Insert a name from your contacts list into your message.

Insert number—Insert a phone number or find a phone number in the contacts list.

Save message—Select *Drafts* to save the message in the *Drafts* folder; select *Templates* to save the message as one of your predefined templates in the *Templates* folder. If you have defined any folders under My folders, they also appear in the list and you can save the message to one of them.

Exit editor—Exits the message editor.

Use template—Insert a predefined template into your message.

Insert smiley—Insert a smiley into your message.

Writing language—Choose the language you want to use.

Predictive text—Turn predictive text on or off.

Insert word—Enter a word and insert it into your message. This option is available if predictive text is on.

Insert symbol—Insert a special character into your message. This option is available if predictive text is on.

Matches—View matches found in the dictionary for the word you want to use.

3. To send the message, select *Send* > *Send to number*, *Send to e-mail*, or *Send to many*. Enter the recipient's phone number or e-mail address or select *Search* to retrieve a number or e-mail address from *Contacts*, and select *OK*.

Templates

Templates are short, prewritten messages which can be recalled and inserted into new text messages when you are short on time.

1. At the start screen, select *Menu* > *Messages* > *Text messages* > *Create message*.

2. Select *Options* > *Use template*.

3. Scroll to one of the available templates, and press *Select*.

4. Select *Send* > *Send to number* , *Send to e-mail* , *Send to many* , or *Send to distrib. list* (only when a distribution list has been created) and press *Select*.

5. Enter the recipient's phone number or e-mail address, or select *Search* to retrieve a number or e-mail address from your contacts list, and select *Send*.

Read and reply

When you receive a message, a notification message and the unopened letter icon
(⊠) appear in the display.

1. Press *Show* to read the message, or *Exit* to move it to your inbox.

   When you have unopened messages in your inbox, ⊠ is shown in the upper
   left corner of the start screen as a reminder.

   Use the **Scroll down** key to view the whole message if necessary.

2. Select *Reply* > *Empty screen*, *Original text*, *Template*, or one of the predefined
   answers, then compose your reply using the keypad.

3. Press *Send*.

Options

When you read a text message, some or all of the following options are available:

Delete—Discard the message.

Use number—Choose *Add to contact*, *Send message*, or *Call*.

Save—Save the message to *Sent items*, *Archive*, *Templates*, or a folder you have created.

Forward—Forward the message to another phone number or e-mail address.

Rename—Edit the title of the message.

Reply—Reply to the message. Create the message, and select *Options* > *Send*.
The sender's phone number or e-mail is used as the default.

Resend—Send the message again.

Change sending options

1. At the start screen, select *Menu* > *Messages* > *Text messages* > *Message settings* >
   Sending options to change sending options for all text messages.

2. To change sending options for one message, at the start screen, select *Menu* >
   Messages > *Text messages* > *Create message* > *Options* > *Sending options*.

3. Select the setting you wish to change:

   Priority—Set the priority of the note as *Normal* or *Urgent*.

   Delivery note—A note is sent to you confirming delivery of the message.
   Select *On* or *Off*.

   Send callback number—A callback number is sent to the recipient. Select *Off* or
   your phone number.

   Signature:—Write a Signature to send with text messages, or select *Off*.

Change message settings

1. At the start screen, select *Menu* > *Messages* > *Text messages* > *Message settings* > *Other settings*.

2. Select the setting you wish to change:

   Message font size—Select *Small font* or *Large font*.

   Message overwriting—Select *Sent items only*, *Inbox only*, *S. items & Inbox*, or *Off*.

   > **Note:** When the message memory is full, your phone cannot send or receive any new messages. However, you can set your phone to automatically replace old messages in the *Inbox* and *Outbox* folders when new ones arrive.

   Save sent messages—Select *Always save*, *Always prompt*, or *Off*.

   Queue msgs. when digital unavailable—Select *On*, *On prompt*, or *Off*. Messages are stored in the Outbox until they can be sent with digital service.

■ Picture messages

Your phone comes with 5 preloaded pictures. You can save more pictures. If necessary, you can overwrite any of the preloaded pictures. Pictures can be attached to a message and sent using a text message to compatible phones. Picture messages behave the same as text messages, but pictures take up more space than text. Pictures are stored in the Templates folder under *Messages* > *Text messages* > *Templates*.

You cannot send a picture message using e-mail.

Download pictures

> **Note:** This function can be used only if it is supported by your service provider. Only phones that offer compatible picture message features can receive and display picture messages. Contact your service provider for details.

Receive and save a picture message

When you receive a picture message, your phone beeps and *Message received* appears in the display as well the message icon 📩 .

When you have unopened picture messages in your inbox, 📩 is shown in the upper left corner of the start screen as a reminder.

Select *Show* to view the picture message. If you have more than one picture message, scroll and select the message you want to view. Use the scroll keys to view the whole picture if necessary.

You can save a received picture in your templates folder by selecting *Options* > *Save picture* Enter a title and select *OK*. If your templates folder is full of pictures, you can scroll to the picture you want to replace and select *Select*.

Compose and send a picture message

One picture message is equivalent in size to three text messages. When you insert a picture into a message, you will have enough remaining space for about 121 characters in the message. If you try to insert a picture into a message that is almost full of text, a beep sounds, and you are prompted to delete some text before proceeding.

1. From the start screen, select *Menu* > *Messages* > *Text messages* > *Create message*.

2. Write the message, and select *Options* > *Insert picture*.

3. Scroll to a picture, and select *View* > *Insert*.

   To view another picture, select *Back*, scroll to another picture, and select *View* > *Insert*.

4. Select *Send* and enter the phone number of the recipient, or select *Find* to retrieve a number from contacts, and select *OK*.

After a picture has been inserted into your message, you can select *Options* > *Preview*, *Change picture*, or *Delete picture*.

■ Multimedia messages

A multimedia message can contain text, sound, and a picture. Or a multimedia message can contain a video clip. Your phone supports multimedia messages that are up to 300 KB. If the maximum size is exceeded, the phone may not be able to receive the message. Depending upon your network, you may receive a message that includes an Internet address where you can go to view the multimedia message. Pictures are scaled to fit the display area of the phone. Your phone has a multimedia message viewer for playing messages and a multimedia inbox for storing saved messages. Once you save the multimedia message, you can use the image as a screen saver or the sound as a ringing tone.

Important: Multimedia message objects may contain viruses or otherwise be harmful to your device or PC. Do not open any attachment if you are not sure of the trustworthiness of the sender.

Copyright protections may prevent some images, ringing tones, and other content from being copied, modified, transferred, or forwarded.

Note: This function can be used only if it is supported by your service provider or network operator. For availability and a subscription to the multimedia messaging service, contact your service provider or network operator. Only compatible devices can receive and display multimedia messages.

Multimedia messaging supports the following formats:

- Picture: JPEG, GIF, animated GIF, WBMP, BMP, and PNG
- Sound: SP-MIDI, AMR audio, QCELP, and monophonic ringing tones
- Video: clips in H.263 format with SubQCIF image size and AMR audio

Note: If a received message contains unsupported elements, these elements may be replaced with the text **Object format not supported**.

You cannot receive multimedia messages if you have a call in progress, games or other applications running, or an active browsing session. Because delivery of multimedia messages can fail for a variety of reasons, do not rely solely upon them for essential communications.

MMS settings

Before you can use the multimedia message feature, you must specify whether you want to receive message at all times or only if you are in the service provider's home system. This is a network service. Check with your service provider for more information.

The default setting of the multimedia message service is generally on. The appearance of a multimedia message may vary depending on the receiving device.

Allow or block multimedia reception

You can choose to receive all messages, to block all messages, or to receive messages only when you are in the service provider's home network.

1. From the start screen, select *Menu* > *Messages* > *Multimedia msgs.* > *Message settings* > *Allow multimedia reception* and one of the following:

   Yes—Allow all incoming messages.

   No—Block all incoming messages.

   In home network—Allow incoming messages only if you are in the service provider's home system. This is a network service. Check with your service provider for more information.

2. Select *Incoming multi- media messages* > *Retrieve* to automatically retrieve all messages to your inbox. When new messages arrive, you are notified *Multimedia message received*, or *Multimedia messages received*.

Select *Manual retrieval* to choose which messages you want to retrieve to your inbox. When messages are available, you are notified *1 multimedia message available*, or *%N multimedia messages available*.

3. If you choose to automatically retrieve messages, you can select *Show* to read the multimedia message, or *Exit* to view them in your inbox later.

   If you select to manually retrieve messages, select *Show* to open the message notification, and then select *Retrieve*. Or select *Exit* to save the notification to your inbox, and retrieve the message later.

Allow or block advertisements

This setting is not available if multimedia reception is blocked.

From the start screen, select *Menu* > *Messages* > *Multimedia msgs.* > *Message settings* > *Allow advertisements* > *Yes* or *No*.

This is a network service. Check with your service provider for more information.

Other MMS settings

Other multimedia settings include saving your messages to the *Sent items* folder and editing your connection settings.

From the start screen, select *Menu* > *Messages* > *Message settings* > *Multimedia msgs.* and one of the following:

Save sent messages—Select *Yes* to save sent multimedia messages to the *Sent items* folder or *No* to discard.

Delivery reports—Select *On* to be informed if the message was delivered or *Off* to not be informed.

Default slide timing—Set the default time in mm:ss format for each slide in an MMS to remain on the screen.

Folders

Your phone has the following folders under *Messages* > *Multimedia msgs.*:

Inbox—Contains received multimedia messages.

Outbox—Contains multimedia messages which you have sent and are still waiting to be transmitted.

Sent items—Contains sent multimedia messages.

Saved items—Contains saved multimedia messages that you can send later.

Delete messages—Delete messages in the *Inbox*, Outbox, *Sent items*, or *Saved items*.

Message settings—Select settings for *Save sent messages*, *Delivery reports*, *Default slide timing*, *Allow multimedia reception*, *Incoming multi- media messages*, and *Allow advertisements*.

Write and send multimedia messages

1. From the start screen, select *Menu* > *Messages* >*Multimedia msgs.*> *Create message*.

2. Enter the text of your message, and select *Options* > *Insert* > *Image*, *Sound clip*, or *Video clip*.

   The list of available folders in the *Gallery* is shown.

3. Open the desired folder, scroll to the image, sound clip, or video clip, and select *Options* > *Insert*.

   The indicator in the header of the message indicates that a picture, sound clip, or video clip has been attached.

   Copyright protections may prevent some images, ringing tones, and other content from being copied, modified, transferred, or forwarded.

4. To add a new page (also called a slide) to the message, select *Options* > *Insert* > *Slide*.

   Each slide can contain text, one image, and one sound clip. If the message contains several slides, you can open the desired slide by selecting *Previous slide*, *Next slide*, or *Slide list*.

5. To set the time interval between the slides, select *Options* >*Slide timing*, enter the time interval, and select *OK*.

6. To move the text to the top or bottom of the message, select *Options* > *Place text first or Place text last*.

7. To insert a name from contacts, select *Options* > *More options* > *Insert contact*, scroll to the desired name, and select *Select*.

8. To insert a number, select *Options* > *More options* > *Insert number*, enter the number or search for it in contacts, and select *OK*.

9. To insert a calendar note, select *Options* > *Insert* > *Calendar note*.

10. To insert a business card, select *Options* > *Insert* > *Business card*.

11. To delete an image, slide, video clip, or sound clip from the message, select *Options* > *Delete* > *Image*, *Sound clip*, *Video clip*, or *Slide*.

12. To add a subject to the message, select *Options* > *More options* > *Edit subject*, enter a subject, and select *OK*.

13. To view the message or slide presentation before sending it, select *Options* > *Preview*.

14. To save the message to the *Saved items* folder, select *Options* > *Save message*.

15. To send the message, select *Send*, *Send to album*, or select *Options* > *Send to e-mail* or *Send to many*.

    Send to album is an online network service. Check with your service provider for more information.

16. Enter the recipient's number or e-mail address, or search for it in contacts, and select *OK*.

    The message is moved to the *Outbox* folder for sending.

It takes more time to send a multimedia message than to send a text message. While the multimedia message is being sent, the animated indicator is displayed and you can use other functions on the phone. If there is an interruption while the message is being sent, the phone automatically tries to resend it a few times. If this fails, the message remains in the Outbox folder and you can try to manually resend it later. Check your *Outbox* folder for unsent messages.

> **Note:** When sending messages, your device may display the words *Multimedia message sent*. This is an indication that the message has been sent by your device to the message center number programmed into your device. This is not an indication that the message has been received at the intended destination. For more details about messaging services, check with your service provider.

Messages that you have sent are saved in the *Sent items* folder if the setting *Save sent messages* is set to *Yes*. See "Other MMS settings", page 31. This is not an indication that the message has been received at the intended destination.

Read and reply to multimedia messages

When a multimedia message is being received, appears (blinking) in the display along with the percentage display indicating the sending progress. Once the message has been fully downloaded, and *1 multimedia message available* or *Multimedia messages available* appears in the display.

1. To view the message immediately, select *Show*.

   To save the message to the inbox for later viewing, select *Exit*.

2. To view a saved message, select *Messages* > *Multimedia msgs.* > *Inbox* and scroll to view the message.

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3. While viewing the message, select *Play* to view the entire MMS, or select *Options* and one of the following:

View text—View only the text included in the message.

Open image, *Open sound clip*, or *Open video clip*—View or listen to the corresponding file.

Delete message—Delete the message you are viewing.

Reply or *Reply to all*—Enter a reply and send it to the original sender and any other recipients of the message.

Forward to no., *Forward to e-mail*, or *Forward to many*—Forward the message to a phone number, to an e-mail address, or to multiple recipients.

Message details—View the sender's name and phone number, the message center used, reception date and time, message size and type.

Save image, *Save sound clip*, or *Save video clip*—Save the corresponding file to the gallery. Images, sound clips, and video clips must be opened before you can save them.

If ⊠ blinks and *Multimedia me- mory full, view waiting msg.* appears in the display, memory for multimedia messages is full. To view the waiting message, select *Show*. Before you can save the message, you need to delete some of your old messages. See "Delete messages", page 37 for more information.

■ Voice messages

If you subscribe to voice mail, your wireless provider will furnish you with a voice mailbox number. You need to save this number to your phone to use voice mail. When you receive a voice message, your phone lets you know by beeping, displaying a message, or both. If you receive more than one message, your phone shows the number of messages received.

Save voice mailbox number

Your wireless provider may have already saved your voice mailbox number to your phone. If so, the number will appear in the display in step 1. Press *OK* to leave the number unchanged.

1. At the start screen, select *Menu* > *Messages* > *Voice messages* > *Voice mailbox number*.

   The *Voice mailbox number* screen appears in the display.

2. If the box is empty, enter the voice mailbox area code and number.

3. Press *OK*.

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Call and setup your voice mail

1. Once you have saved the voice mailbox number, press and hold the **1** key.
2. When you connect to voice mail and the prerecorded greeting begins, follow the service's automated instructions to setup your voice mail.

Listen to your voice messages

Once you have setup voice mail, you can dial the voice mailbox number in one of five ways:

- Dial the number using the keypad.
- Press and hold the **1** key.
- Press the **1** key and the **Send** key.
- Press *Listen* if there is a notification message in the display.
- At the start screen, select *Menu* > *Messages* > *Voice messages* > *Listen to voice messages*.

  Once you connect and the prerecorded greeting begins, follow the automated instructions to listen to your voice messages.

Automate voice mail

You can insert special characters called dialing codes into phone numbers such as voice mail, and save the number to a 1-touch dialing location. Dialing codes instruct the receiving system to pause, wait, bypass, or accept the numbers that follow them in the dialing string.

> **Note:** Voice mail services vary by service provider. The following instructions are examples of common operations. Please check with your service provider for specific instructions for using your voice mail service.

Write down voice mailbox number and process

1. Write down your voice mailbox number.
2. Call and check your voice mail as you normally would.
3. Write down your interaction with the recorded prompts step-by-step. Keep in mind that each voice mail service may vary. However, it should look something like this:

   Dial 8585551212, pause 5 seconds, press 1, pause 2 seconds, press 1234, press pound key.

Be precise; you will need this information in "Setup voice mail with dialing codes", page 36.

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Insert dialing codes

Press the ***** key repeatedly to cycle through dialing codes. Once the desired code appears in the display, pause briefly and the code is inserted into the dialing string.

The following dialing codes are available:

*—Bypasses a set of instructions.

p—Pauses for 2.5 seconds before sending any numbers that follow.

w—Waits for you to press the **Call** key before sending the numbers or codes that follow.

Setup voice mail with dialing codes

> **Note:** If the Right selection key on your phone has a network operator menu, select *Menu* > *Contacts* instead of *Names*.

1. At the start screen, select *Names* > *1-touch dialing*.

2. Scroll to an *(empty)* 1-touch dialing slot and press *Assign*.

3. Enter your voice mailbox number, including the area code.

4. Refer to dialing codes and enter any codes as necessary using the information that you wrote down from "Setup voice mail with dialing codes", page 36.

   For example, if you pause for 5 seconds after connecting to voice mail, enter p twice after the voice mailbox number, for example, 2145551212pp.

5. Enter any remaining pauses or other information that allows you to listen to your messages, and press *OK*.

6. Enter a name (such as Voice Mail), and press *OK*.

To dial and listen to your voice mail, press and hold the assigned 1-touch dialing key at the start screen.

■ Web messages

Web messaging is a network service. See "Network Services", page 7 for more information.

If your wireless service provider supports this feature, you can use the Minibrowser to check for e-mail messages. At the start screen, select *Menu* > *Messages* > *Web messages* > *Connect*.

See "Mobile Web (Menu 9)", page 83 for more information on using the Minibrowser in your phone to access web pages.

■ Message folders

Save drafts and received messages to folders

You can save drafts of messages or received messages to an existing folder or to a folder that you have created.

1. Open the received message or create a new message, and press *Options*.

2. To save a received message, select *Save message* > *Sent items*, *Archive*, *Templates*, or a folder you have created on your own.

3. To save a draft of a message you are creating, select *Save message* > *Drafts* or *Template.*

View saved messages

1. At the start screen, select *Menu* > *Messages* > *Text messages*.

2. Select the folder containing the message you wish to view:

    Inbox—Messages are automatically stored in this folder after they have been read or if you press *Back* when the message notification appears on the start screen.

    Sent items—Messages that have been sent are automatically stored in this folder.

    Drafts—Messages created, but not sent are automatically stored in this folder.

    Archive—Store messages that have been read and that you want to keep in this folder.

    Templates—Pictures and prewritten templates are stored in this folder. Preloaded templates can be edited and customized.

    My folders—Keep your messages organized by creating custom folders and saving some of your messages here. Select *Options* > *Add folder* to add a custom folder. You can also select *Options* > *Rename folder* or *Options* > *Delete folder* to rename or delete a folder you have created.

3. Once the folder opens, scroll to the message you wish to view, and press *Select*.

■ Delete messages

If your message memory is full and you have more messages waiting at the network, *No space for new messages* appears on the start screen. You can do the following:

- Read some of the unread messages, and delete them individually.

- Delete messages from some of your folders.

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A single message

To delete a single message, you need to open it first.

1. At the start screen, select *Menu* > *Messages* > *Text messages*.
2. Scroll to the folder containing the message you wish to delete, and press *Select*.
3. Scroll to the message you wish to delete, and press *Select*.
4. Select *Options* > *Delete*.
5. Press *Yes* to delete the message or *Back* to exit.

All messages in a folder

1. At the start screen, select *Menu* > *Messages* > *Text messages* > *Delete messages*.
2. Scroll to the status of the messages you wish to delete, and press *Select*:

   All—Deletes all messages in all of the folders.

   All read—Deletes any messages which have been read in all of the folders.

   All unread—Deletes any messages which have not been read in all of the folders.

   Mark the folders that have messages you want to delete:

   Inbox—Deletes all messages from the *Inbox* folder.

   Sent items—Deletes all messages from the *Sent items* folder.

   Outbox—Deletes all messages from the *Outbox* folder.

   Drafts—Deletes all messages from the *Drafts* folder.

   Archive—Deletes all messages from the *Archive* folder.

3. Press *Done* > *Yes* to empty the marked folder.

   Note: Only folders created in *My folders* can be deleted. The *Inbox*, *Sent items*, *Archive*, and *Templates* folders are protected. When you delete a folder, all messages in the folder are also deleted.

■ Voice tags

You can dial up to 25 stored numbers using voice dialing.

Before using voice tags, note that:

- Voice tags are not language dependent. They are dependent on the speaker's voice.
- You must say the name exactly as you said it when you recorded it.
- Voice tags are sensitive to background noise. Record voice tags and use them in a quiet environment.

- Very short names are not accepted. Use long names and avoid similar names for different numbers.

> **Note:** Using voice tags may be difficult in a noisy environment or during an emergency, so you should not rely solely upon voice dialing in all circumstances.

Assign a voice tag to an entry

Before you can use voice dialing, you must first assign a voice tag to the number.

1. At the start screen, use the **Scroll up** key or **Scroll down** key to enter the contacts list.

2. Highlight the contact you want to assign a voice tag, press *Details* > *Options* > *Add voice tag* > *Start*.

3. Speak clearly into the microphone.

> **Note:** Do not press *Quit* unless you want to cancel the recording.

The phone automatically stops recording and saves and replays the voice tag. The ⟳ icon appears next to commands which have voice tags assigned.

If recording is not successful, your phone displays *Voice system error*. Press *Options* > *Add voice tag*, and repeat Step 3.

Dial a number

1. Press and hold *Names*.

2. When you hear several beeps and *Please speak now* appears, release the key.

3. Pronounce the voice tag clearly into the microphone.

   When the phone finds the voice tag, *Found:* appears, and the phone automatically dials the number. If the phone does not locate a number or recognize the voice tag, *No match found* appears.

Voice tags

After you have associated a voice tag to a contact, you can choose one of the following options:

Play back

1. Select *Menu* > *Contacts* > *Voice tags*.

2. Press *Select*, then scroll to the name with the voice tag you want to hear.

3. Select *Options* > *Playback*.

Change

1. Select *Menu* > *Contacts* > *Voice tags*.

2. Press *Select*, then scroll to the name with the voice tag you want to change.

3. Select *Options* > *Change*.

4. Press *Start*. The phone repeats your voice tag, and *Voice tag saved* appears.

Delete

1. Select *Menu* > *Contacts* > *Voice tags*.

2. Press *Select*, then scroll to the name with the voice tag you want to erase.

3. Select *Options* > *Delete* > *OK*.

5. Call log (Menu 2)

Call log stores information about the last 30 missed, 30 received, and 30 dialed calls. It also adds the total duration of all calls. When the number of calls exceed the maximum, the most recent call replaces the oldest.

Whether viewing missed, received, or dialed calls, the menu options are the same:

Time of call—Display the date and time of the call.

Send message—Send a message to the number.

Use number—Edit the number and associate a name with the number.

Save—Enter a name for the number and save it to your contacts list.

Add to contact—Add a number to a contact saved it to your contacts list.

Delete—Clear the number from memory.

Call—Call the number.

■ View missed calls

Note: The missed calls feature does not function when your phone is switched off.

Missed calls are calls that were never answered.

1. If the message notification display appears in the display, press *List*.
2. When the phone number appears in the display, press *Options*.
3. Scroll to an option, and press *Select* to activate the option.

   OR

1. At the start screen, select *Menu* > *Call log* > *Missed calls*.
2. Scroll to a name or number, and press *Options*.
3. Scroll to an option, and press *Select* to view or activate the option.

■ View received calls

Received calls are calls that have been answered.

1. At the start screen, select *Menu* > *Call log* > *Received calls*.
2. Scroll to a name or number, and press *Options*.
3. Scroll to an option, and press *Select* to view or activate the option.

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■ View dialed numbers

Dialed calls are previous numbers you have dialed from your phone:

1. At the start screen, press the **Call** key.

   OR

   At the start screen, select *Menu* > *Call log* > *Dialed numbers*.

2. Scroll to a name or number, and press *Options*.

3. Scroll to an option, and press *Select* to view or activate the option.

Call times

You can make or receive calls to or from the same number and view up to five calls with the time each call occurred. Your phone clock must be set for this feature to work accurately.

1. From the start screen, select *Menu* > *Call log* > *Missed calls*, *Received calls*, or *Dialed numbers* > *Options* > *Time of call*.

2. While viewing a missed or received call, select *Options* > *Call time*.

3. Press the **Scroll down** key to view the most recent call times from this number; press *Back* to return to the options list.

■ Delete call logs

You can delete any missed, dialed, or received calls from phone memory.

1. At the start screen, select *Menu* > *Call log* > *Delete recent call lists*.

2. Select the call type you would like to clear (*All*, *Missed*, *Received* or *Dialed*).

■ View duration of calls

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

Last call

To view the duration of the last call, at the start screen, select *Menu* > *Call log* > *Call timers* > *Last call duration*. To activate the call timer on the start screen while in a call, select *Details* > *Show call time on display* > *On* or *Off*.

Dialed calls

To view the duration of all dialed calls, at the start screen, select *Menu* > *Call log* > *Call timers* > *Dialed calls' duration*. To view the duration of dialed calls placed while in the home network or while roaming, select *Details* > *Home* or *Roaming*.

Received calls

To view the duration of all received calls, at the start screen, select *Menu* > *Call log* > *Call timers* >*Received calls' duration* for more information. To view the duration of received calls placed while in the home network or while roaming, select *Details* > *Home* or *Roaming*.

All calls

At the start screen, select *Menu* > *Call log* > *Call timers* > *All calls' duration*.

Life timer

At the start screen, select *Menu* > *Call log* > *Call timers* > *Life timer*. Some timers, including the life timer, may be reset during service or software upgrades.

Clear timers

At the start screen, select *Menu* > *Call log* > *Call timers* > *Clear timers* > *OK*. Enter your security code, and press *OK*. See "Security settings", page 72 for more information. All call timers, except the life timer, are reset to zero when *Clear timers* is selected.

■ View duration of data/fax calls

Data/fax calls are a network service. See "Network Services", page 7 for more information. If your wireless service provider supports this feature, you can view the size or duration of sent or received data and fax calls.

Note: The actual time invoiced for calls and services by your service provider may vary, depending on network features, rounding off for billing, taxes, and so forth.

1. At the start screen, select *Menu* > *Call log* > *Data/fax calls*.

2. Scroll to one of the following options:

   Last sent data/fax—View the size (KB) of the last send data/fax call.

   Last received data/fax—View the size (KBKB) of the last received data/fax call.

All sent data/fax—View the size (KB) of all sent data and fax calls.

All received data/fax—View the size (KB) of all received data and fax calls.

Duration of last data/fax call—View the duration time of the last data or fax call.

Duration of all data/fax calls—View the duration time of all calls.

Clear all data/fax logs—Press *OK* > *Yes* to clear all data/fax logs.

■ View duration of minibrowser

Minibrowser is a network service. See "Network Services", page 7 for more information. If your wireless service provider supports this feature, you can view the size or duration of sent or received data from the Minibrowser.

Note: The actual time invoiced for calls and services by your service provider may vary, depending on network features, rounding off for billing, taxes, and so forth.

1. At the start screen, select *Menu* > *Call log* > *Minibrowser calls*.

2. Scroll to one of the following options:

Last sent browser data—View the size (KB) of the last send browser data.

Last received browser data—View the size (KB) of the last received data.

All sent browser data—View the size (KB) of all sent browser data.

All received browser data—View the size (KB) of all received browser data.

Last browser session—View the duration time of the last browser session.

All browser sessions—View the duration time of all browser sessions.

Clear all browser logs—Press *OK* > *Yes* to clear all browser logs.

6. Contacts (Menu 3)

The contacts list can hold up to 500 contacts with multiple numbers and text notes for each contact. The amount of numbers and text entries that you can save may vary, depending on length and the total number of entries in the contacts list.

In the main menu, names and numbers are stored in the *Contacts* list. If you select *Contacts* as the **Right selection** key, *Names* is shown. Selecting *Names* at the start screen has the same functions as selecting *Contacts* in the main menu.

■ Add new contacts

Note: If the Right selection key on your phone has a network operator menu, select *Menu* > *Contacts* instead of *Names*.

Save a name and number

1. At the start screen, use the keypad to enter the phone number you wish to save.
2. Press *Save*.
3. Enter the name, and press *OK*.

Save (only) a number

1. At the start screen, use the keypad to enter the phone number you wish to save.
2. Press and hold *Options*.

Save an entry

1. At the start screen, select *Names* > *Add new*.
2. Enter the name, and press *OK*.
3. Enter the phone number, and press *OK* > *Done*.

Save multiple numbers and text items

You can save different types of phone numbers and short text items per name to the contacts list. The first number you save for any entry is automatically set as the default, or primary number, but the primary number can always be changed.

1. At the start screen, use the **Scroll up** key or **Scroll down** key to scroll to the entry to which you wish to add a phone number or text item.

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2. Select *Details* > *Options* > *Add number* or *Add detail*.

   If you selected *Add number*, select *General*, *Mobile*, *Home*, *Work*, or *Fax*.

   If you selected *Add detail*, select *E-mail*, *Web address*, *Street address*, or *Note*.

3. Enter the number or text for the type you have selected, and press *OK*.

4. To change a number type (*General*, *Mobile*, *Home*, *Work*, or *Fax*), select *Change type* in the options list.

You can also change which phone number is the default (primary) number for the contact entry.

1. At the start screen, press the **Scroll up** key or **Scroll down** key to select the number you wish to change, and press *Details*.

2. Scroll to the number you wish to set as default, and select *Options* > *Set as default*.

Set up voice tags

For more information on setting up voice tags and other voice features, see "Voice tags", page 38.

Caller groups

You can add contacts list entries to any of five caller groups, and then assign a unique ringing tone or graphic to that group. This enables you to identify callers from the group by their unique ringing tone or graphic.

Setup a group

1. At the start screen, press the **Scroll up** key or **Scroll down** key to display a list of entries in your contacts list.

2. Scroll to a name you would like to add to a caller group, and press *Details*.

3. Select *Options* > *Caller groups*.

4. Scroll to the caller group to which you would like to add the name, and press *Select*.

Options

1. At the start screen, select *Names* > *Caller groups*.

   Family, *VIP*, *Friends*, *Business*, and *Other* are the available caller groups.

2. Use the **Five-way scroll** key to highlight a group, and press *Select* to display the following caller group options:

   Rename group—Rename the group to your preference.

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Group ringing tone—Set the ringing tone for the group.

Group logo—Turn the graphic for the caller group on or off or view the graphic.

Group members—Add or remove members from the caller group.

Set up 1-touch dialing

You can associate any entry in the contacts list with a key from **2**–**9**; then dial those entries by pressing and holding the assigned key. T o activate or deactivate, see "1-touch dialing", page 66.

Assign a key to 1-touch dialing

1. At the start screen, select *Names* > *1-touch dialing*.

2. Scroll to an *(empty)* 1-touch dialing slot, and press *Assign*.

3. Enter the number (including the area code), and press *OK*; or press *Search* to retrieve a number from the contacts list.

4. Enter a name for the number, and press *OK*.

    If 1-touch dialing is off, the phone displays a prompt asking if you would like to turn 1-touch dialing on.

5. Press *Yes* to activate 1-touch dialing.

Change 1-touch dialing numbers

1. At the start screen, select *Names* > *1-touch dialing*.

2. Scroll to the 1-touch dialing entry you wish to change, and select *Options* > *Change*.

3. Enter the new number; or press *Search* to retrieve a number from the contacts list, and press *OK*.

4. Enter a name for the entry, and press *OK*.

Delete 1-touch dialing numbers

1. At the start screen, select *Names* > *1-touch dialing*.

2. Scroll to the 1-touch dialing location you wish to delete, and press *Options*.

3. Select *Delete* > *Yes*.

■ Edit contacts list entries

1. Use the **Scroll up** or **Scroll down** key to highlight the entry you would like to edit, and press *Details*.

2. Scroll to the phone number or detail you wish to edit, and press *Options*.

3. Select one of the following options. Some of the options may be available:

Add voice tag—Highlight a number in your contacts details and add a voice tag to the contact.

Edit number/*Edit detail*—Edit an existing phone number or the details attached to the contact.

Delete number / *Delete detail*—Delete a phone number or the details attached to the contact.

Copy number—Copy the number to the UIM (SIM card) from the phone memory or vice versa.

Use number—Edit the number and and press *Options* to use the number.

Change type—Change the number type to *General*, *Mobile*, *Home*, *Work*, or *Fax* or the detail type to *E-mail*, *Web address*, *Street address*, or *Note*.

Set as default—Change the default number of the contact.

Add number—Add a number to the contact.

Add detail—Add an address or note to the contact.

Add image-Add a photo to the contact.

Caller groups—Add the contact to an existing caller group.

Custom tone—Set a ringing tone to the contact different than the default.

Send bus. card—Send the contact as a business card to another phone.

Send message—Create and send the contact a text message.

1-touch dialing—Add the contact to your 1-touch dialing list.

Edit name—Edit the name of the contact.

View name—View the name of the contact.

Delete—Delete the entire contact entry from your contacts list.

4. Edit the option to your preference, and press *OK*.

■ Delete contacts list entries

1. At the start screen, select *Names* > *Delete*.

2. To delete individual entries, select *One by one*.

3. Scroll to the entry you wish to delete, and select *Delete* > *Yes* to confirm.

4. To delete the entire contents of your contacts list, select *Delete all* > *Yes*.

5. Enter the lock code, and press *OK*. See "Security settings", page 72 for more information.

■ View the contacts list

1. At the start screen, select *Names*. The following options are displayed:

   Search—Find a name or select from a list.

   Add new—Add a contact to your contacts list.

   Edit name—Edit an existing name.

   Delete—Delete a name and its associated numbers.

   Add number—Add a number to an existing name.

   Settings—Change the contacts list view or check the memory status of your phone.

   1-touch dialing—View or modify the list of 1-touch dialing numbers.

   Voice tags—Attach, listen to, or modify a voice tag to a contact in the contacts list.

   My number—View your own phone number.

   Caller groups—View and edit the properties for any of the caller groups, including *Family*, *VIP*, *Friends*, *Business*, or *Other*.

2. Scroll to an item, and press *Select* to activate the feature or enter its submenu.

Search for a name

1. At the start screen, press the **Scroll up** key or **Scroll down** key to display the contents of your contacts list.

2. Press the key which corresponds to the first letter of the name for which you are performing a search.

3. Scroll up and down to select a contact, and press *Details* to view the details.

Configure settings

You can select how the contacts appear in your contacts list and view the amount of memory used or available in your phone.

1. At the start screen, select *Names* > *Settings*.

2. Select one of the following options:

   Scrolling view—Select *Name list, Name and number, Name only*, or *Name and image* view.

   Memory status—View the amount of phone memory used as well as the amount of phone memory available

■ Send and receive contacts (business cards)

You can send and receive an entry in your contacts list using text messaging, if supported by your wireless provider.

Send a business card

You can send a business card as a text message to a compatible phone or other handheld device.

1. Highlight the entry from the contacts list that you wish to send, and select *Details* > *Options* > *Send bus. card* > *Via infrared*, *Via text message*, *Via Bluetooth* or *Via multimedia*.

2. Enter the number for your recipient, or press *Search* to retrieve a number from your contacts list.

3. Press *OK* and the business card is sent.

7. Camera (Menu 4)

You can take photos and record video clips with the built-in camera and adjust its settings. The camera lens is on the front of the phone. The color display and the mini display on the front of the phone work as a viewfinder. The camera produces photos in JPEG format and video clips in H.263 (SubQCIF) format. After you take a picture or video, you can attach it to a multimedia message, send it with MMS, save it as a wallpaper, save it in a compatible PC using Nokia PC Suite software, and upload it to a Web address with the content image uploader. When you attach a picture to an entry in your list of contacts, the picture is displayed when the contact calls you.

If there is not enough memory to take a new photo, delete old photos or other files in the gallery.

The Nokia 6255, Nokia 6255i, Nokia 6256, and Nokia 6256i devices support an image capture resolution of 128 x 160 pixels on the Main display and 96 x 65 pixels on the Mini display. The image resolutions in these materials may appear different.

■ Take a photo

1. Press the **Camera** key, or at the start screen, select *Menu* > *Camera* > *Options* > *Change mode* > and scroll to *Standard photo*, *Portrait photo*, *Night mode*, or *Video* and press *Select*. Or use the **Left/Right** scroll keys to change mode.

   Standard photo–When you want to take normal landscape photos.

   Portrait photo—When you want to take a smaller icon-sized, vertical photo, which can be added to an entry in your contacts list.

   Night mode—To take a photo when the lighting is dim and the camera needs a longer exposure time for the photo to be of good quality

   or Video—To record a video.

2. Press *Capture* to take the photo.

   When taking a photo, a shutter sound is heard. The phone saves the photo in the *Images* folder of the *Gallery* menu. The saved photo is shown on the display.

3. Select *Back* to take another photo, or press *Options* and choose from one of the following:

   Zoom—Zoom in closer before capturing a photo or get a closer look at the captured photo; use the **Up/Down** scroll keys to navigate around the photo.

   Send—Select *Via multimedia*, *Via infrared*, or *Via Bluetooth* to send a photo to a compatible phone or PC.

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Rename—Enter or edit the name of the captured photo and press *OK*.

Open Gallery—Open the *Gallery* to view saved images, videos, and recordings.

Set contrast—Use the Right or Left scroll keys to adjust the contrast of the captured photo.

Set as wallpaper—Use a captured photo for wallpaper.

Details—View the *Name*, *Size*, *Created*, *Format*, *Resolution*, or *Copyright* of a captured photo.

Other options

At the start screen, select *Menu* > *Camera*, or press the **Camera** key and *Options*:

Change mode—Switch between *Standard photo*, *Portrait photo*, *Night mode or Video*.

Zoom—Zoom in closer before capturing a photo or get a closer look at the captured photo; use the **Up/Down** scroll keys to navigate around the photo.

Flash on or *Flash off*—Select to capture a photo using the flash, or without the flash.

Self-timer—Set a timer to delay capturing a photo for 10 seconds.

Use main display/*Use mini display*—Change the viewfinder. Use the main display or the mini display. Use the mini display to take a self-portrait.

View previous—View the previously captured photo.

Open Gallery—Open the *Images* folder in the *Gallery* menu.

Settings—Select the *Default mode*, *Image quality*, *Video clip length*, *Camera sounds*, *Default title*, and *Image storage*.

Self-timer

You can set the timer on the camera to delay for approximately 10 seconds before capturing the photo.

1. At the start screen, select *Menu* > *Camera* > *Options* > *Self-timer*.

2. Press *Select* > *Start*.

   A beep sounds while the self-timer is running, and beeps faster when the camera is about to capture the photo. After the timeout, the camera takes the photo and saves the photo in the *Images* folder of the *Gallery* menu.

■ Record a Video clip

1. From the start screen, select *Menu* > *Camera* > *Options* > *Change mode* > *Video* > Record.

   While you are recording, the indicator and the remaining recording time are shown at the top of the display.

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2. Select *Pause* to pause the recording, *Continue* to resume the recording, or *Stop* to stop the recording.

    The phone saves the recording in the *Video clips* folder of the *Gallery* menu.

3. Select *Back* to record another video.

    OR

    Select *Options* and one of the following:

    Delete—Delete the video clip.

    Send—Send the video clip to another device as a multimedia message or using IR or Bluetooth connectivity.

    Rename—Rename the video clip.

    Open Gallery—Go to the Video clips folder in the gallery.

    Mute audio or *Unmute audio*—Turn the sound on or off.

    Set contrast—Increase or decrease contrast of the selected video using the **Scroll right** and **Scroll left** keys.

    Details—View details of the selected video, such as name, size, time and date created, length, file format, and copyright information.

■ Settings

At the start screen, select *Menu* > *Camera* > *Options* > *Settings*.

Scroll to one of the following options and press *Select*:

Default mode—Scroll to *Standard photo*, *Portrait photo*, *Night mode* or *or Video* as the default and press *Select*.

Image quality—Define file compression when saving the image. Scroll to *High*, *Normal*, or *Basic* and press *Select*. High has the least file compression and provides the best image quality, but takes more memory.

Video clip length—Scroll to *Default* or *Maximum* and press *Select*. The maximum is approximately 4 minutes depending on conditions. Only video clips that are default length or shorter can be sent in a multimedia message.

Camera sounds—Scroll to *On* or *Off* and press *Select*.

Default title—Select *Automatic* to use a predefined title or*My title*to key in or edit a new title.

Image storage—Select *Default folder* or *Other folder* and press *Select*. This option is available on when using a multimedia card.

8. Gallery (Menu 5)

You can save pictures, video clips, recordings, and ringing tones
to folders in the gallery, and add new folders to the ones already there. You can
download images and tones using MMS, SMS, mobile Internet sites, or Nokia PC
Suite.

Note: Only devices that offer compatible multimedia message or e-mail
features can receive and display multimedia messages.

Your phone supports a digital rights management system to protect content that
you have acquired. A piece of content, such as a ringing tone, can be protected and
associated with certain usage rules, for example, the number of usage times or a
certain usage period. The rules are defined in the content activation key that can be
delivered with the content or separately, depending on the service provider. You
may be able to update these activation keys. Always check the delivery terms of any
content and activation key before acquiring them, as they may be subject to a fee.

Copyright protection may prevent some images, ringing tones, and other content
from being copied, modified, transferred, or forwarded.

Your phone has about 7.5 MB of memory for storing files in the gallery. This memory
is not shared with other functions, such as contacts. If the phone displays a message
that the memory is full, delete some existing files before proceeding. You can also
use a compatible MultiMediaCard to add memory.

Warning: Use only compatible Multimedia cards (MMC) with this device.
Other memory cards, such as Secure Digital (SD) cards, do not fit in the MMC
card slot and are not compatible with this device. Using an incompatible
memory card may damage the memory card as well as the device, and data
stored on the incompatible card may be corrupted.

■ Folders

1. At the start screen, select *Menu* > *Gallery*.

   A list of folders is displayed. *Images*, *Video clips*, *Music files*, *Graphics*, *Tones*, and
   Recordings are preset in the phone. If there is a MultiMediaCard in the phone, a
   MultiMediaCard icon is also displayed.

2. Scroll to a folder, and select *Open* to view a list of the files in the folder.

   OR

   Select *Options* to access the following:

Delete folder—Delete a folder you have created. You cannot delete a preset folder.

Move—Move the selected folder into another folder. After selecting *Move*, scroll to another folder, and select *Options* > *Move* here. You cannot move a preset folder.

Rename folder—Rename a folder you have created. You cannot rename a preset folder.

Set password—Create a password (1–8 characters) for the MultiMediaCard, to protect it against unauthorized use. This option is available only for the MultiMediaCard folder.

Change password—Change the MultiMediaCard password that you have created. This option is available only for the MultiMediaCard folder.

Delete password—Delete the MultiMediaCard password that you have created. This option is available only for the MultiMediaCard folder.

Rename mem. card—Enter a name for the MultiMediaCard. This option is available only for the MultiMediaCard folder.

Format mem. card—Delete all files and folders stored on the MultiMediaCard. This option is available only for the MultiMediaCard folder.

Details—Show the name, size, and date of creation of the selected folder.

Type of view—Select *List*, or *Grid* to determine how the folders and the files within folders are displayed.

Sort—Sort the contents of the selected folder by name, date, format, or size.

Add folder—Create a new folder.

Memory status—Check the available memory for the phone handset or the MultiMediaCard.

Activation key list—View the list of available activation keys. You can delete activation keys if desired.

9. Media (Menu 6)

■ Media player

With the media player you can download, view, and play compatible images, audio and video files, and animated images from a variety of sources.

The media player allows you to play streaming videos and streaming audio from a network server. Streaming functionality is a network service and requires network support. Check the availability of these services, pricing, and tariffs with your network operator or the service provider whose service you wish to use. Service providers will also give you instructions on how to use their services.

From the start screen, select *Menu* > *Media* > *Media player* and one of the following:

Online media—Connects to the operator's network. This is a network service. Check with your service provider for pricing and information.

Open Gallery—Open the gallery. From the gallery, you can play stored audio and video files. See "Gallery (Menu 5)", page 54.

Go to address—Enter the address of a mobile Internet service, and select *OK*.

■ Music player

Your phone includes a music player for listening to music or other tracks in MP3 or AAC format. You can transfer files from a PC to your phone using USB, infrared, or a Bluetooth connection. To transfer music tracks from a compatible PC and manage the music tracks and track lists, see the instructions for the Nokia Audio Manager application in the Nokia PC Suite online help. See "USB data transfer", page 88; "Transfer files using Windows Explorer", page 89; "Infrared", page 88; and "Bluetooth connectivity", page 85 for more information on transferring music tracks to your phone.

Music files stored in the *Music player* folder are automatically detected and added to the default playlist. Music files stored elsewhere, such as in a MultiMediaCard folder, must be defined in the playlist before you can listen to them.

You can listen to the sound files through a compatible headset or the phone loudspeaker.

You can make or answer a call while using the music player. During a call, the playback is paused. When the call ends, the music player restarts.

Play music tracks

From the start screen, select *Menu* > *Media* > *Music player*.

The details of the first track on the default track list are shown.

To play a track, scroll to the track that you want, and select *Play* or press the **Scroll right** key.

To adjust the volume level, use the volume keys on the side of the phone.

To stop the playing, select *Stop*, or press the **Scroll left** key.

To skip to the beginning of the next track, press the **Scroll down** key. To skip to the beginning of the previous track, press the **Scroll up** key twice.

To rewind the current track, press and hold the **Scroll up** key. To fast forward the current track, press and hold the **Scroll down** key. Release the key at the position you want.

Warning: Listen to music at a moderate level. Continuous exposure to high volume may damage your hearing.

Music player settings

From the start screen, select *Media* > *Music player* > *Options* and one of the following:

Track list—View all the tracks available on the track list and play the desired track. To play a track, scroll to the desired track, and select *Play* or press the **Scroll right** key. Select *Options* to refresh the track list (for example, after adding new tracks to the list), and change the track list that is shown when you open the *Music player* menu if several track lists are available in the phone.

Play options—Select *Random* to play the tracks on the track list in random order. Select *Repeat* to play the current track or the entire track list repeatedly.

Media equalizer—The equalizer enhances the sound quality when using the music player by amplifying or attenuating frequency bands. There are five preset equalizer settings (*Normal*, *Pop*, *Rock*, *Jazz*, and *Classical*) and two customizable settings.

Headset/*Loudspeaker*—With the headset attached, listen to the music player through a headset or the loudspeaker.

Send—Send music files to a compatible device *Via multimedia*, *Via infrared*, or*Via Bluetooth*.

Memory status—View used and free memory of *Handset* and *Memory card*.

Headset—Listen to the music player through a compatible headset connected to the phone. When using a compatible headset, you can skip to the next track by pressing the headset key quickly. To stop the playing, press and hold the headset key.

Warning: When using the stereo headset your ability to hear outside sounds may be affected. Do not use the stereo headset where it can endanger your safety.

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■ Radio

Your phone has an FM radio that also functions as an alarm clock radio. You can listen to the FM radio on your phone through the hands-free speaker or with a headset. For FM stereo, connect a compatible music stand or stereo headset to the connector on the bottom of the phone.

The FM radio uses the wire of the headset as an antenna. A compatible headset needs to be attached to the device for the FM radio to function properly.

The quality of a radio broadcast depends on coverage of the radio station in that particular area.

Warning: Listen to music at a moderate level. Continuous exposure to high volume may damage your hearing.

Turn the radio on and off

1. Connect the phone to a compatible headset or music stand.
2. From the start screen, select *Menu* > *Media* > *Radio*.
3. To turn off the radio, press and hold the **End** key.

Use the radio

With the radio on, select *Options* and one of the following:

Turn off—Turn off the radio.

Save channel—Save the current station to one of 20 locations.

Automatic tuning:—Briefly press the **Scroll up** key or the **Scroll down** key to start the channel search up or down. Select *OK* when a channel is found.

Manual tuning:—Press the **Scroll up** key or the **Scroll down** key to search in increments of 0.05 MHz.

Set frequency—Manually enter the frequency of a known radio station.

Delete channel—Delete a saved channel.

Loudspeaker / Headset—Listen to the radio through the speakerphone or through the headset.

Mono output/*Stereo output*—Listen to the radio in monaural mode (default) or in stereo. Stereo output is available through a stereo enhancement.

Rename—Enter a new name for the saved channel, and select *OK*.

To set the radio frequency, press the * key and use the keypad to enter the frequency of a known radio station. To tune the radio manually, press the **#** key; then press the **Scroll up** key or the **Scroll down** key to search in increments of 0.05 MHz.

To adjust the radio volume, press the **Volume up** and **Volume down** keys.

When an application using a browser connection is sending or receiving data, it may interfere with the radio.

When you place or receive a call, the radio automatically mutes. Once the call is ended, the radio switches back on.

Save a radio channel

You can save a preset station to any one of 20 locations in memory, and then tune to that station by pressing the **Scroll up** key or the **Scroll down** key with the radio on.

1. With the radio on, press and hold the **Scroll up** key or the **Scroll down** key to start the channel search.

   Searching stops when a channel is found.

2. To save the channel, select *Options* > *Save channel*.

3. Enter a name for the channel, and select *OK*.

4. Select an (empty) location to save the channel.

To save an FM station quickly to 1–9 memory locations, press and hold the corresponding number key while the radio is playing. Then, enter the name of the channel, and select *OK*.

■ Voice recorder

You can make a short (up to 3 minutes) recording and save it to the *Recordings* folder or another folder in the *Gallery*.

A short press of the **Voice/shutter** key starts and stops voice memo recorder.

Make a recording

1. From the start screen, select *Menu* > *Media* > *Voice recorder*.

2. To start the recording, select *Record*.

3. Hold the phone in the normal position near your ear, and record your message.

4. To stop the recording, select *Stop*.

   The recording is saved in the *Recordings* folder of the *Gallery*.

5. To replay the latest recording, select *Play last recorded*.

6. To send the latest recording as a multimedia message or by IR or Bluetooth connectivity to a compatible phone, select *Send last recorded*.

Define a storage folder

You can select a folder other than Recordings as the default folder to store your voice recordings.

1. From the start screen, select *Menu* > *Media* > *Voice recorder* > *Select memory*.
2. Scroll to a folder in the gallery, and select *Options* > *Select*.

Manage recordings

1. From the start screen, select *Menu* > *Media* > *Voice recorder* > *Recordings list*.
2. Scroll to the Recordings folder or the folder that you have defined for storing recordings, and select *Open*.
3. Use the options available in the *Gallery*.

■ Media equalizer

The equalizer enhances the sound quality when using the music player by amplifying or attenuating frequency bands. There are five preset equalizer settings (*Normal*, *Pop*, *Rock*, *Jazz*, and *Classical*) and two customizable settings.

Activate an equalizer set

From the start screen, select *Menu* > *Media* > *Media equalizer*, scroll to the desired setting, and select *Activate*.

Create a custom equalizer set

1. From the start screen, select *Menu* > *Media* > *Media equalizer*.
2. Scroll to *Set 1* or *Set 2*, and select *Options* > *Edit*.

    The selected set appears in the display with the bar on the far left highlighted.The bars adjust frequencies, from the lowest (the leftmost bar) to the highest (the rightmost bar). The higher the indicator on a particular bar, the more that frequency is amplified.
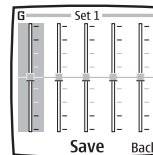
3. To adjust the lowest frequency, use the **Scroll up** and **Scroll down** keys to move the indicator up and down on the bar.
4. To adjust other frequencies, use the **Scroll left** and **Scroll right** keys to move to the other bars.
5. Repeat steps 3 and 4 to adjust the setting for each frequency.
6. When you are finished, select *Save*.
7. To rename the setting, select *Options* > *Rename*, enter a new name, and select *OK*.
8. To activate the setting, select *Activate*.

10. Settings (Menu 7)

Use this menu to change profiles, main display settings, mini display settings, tone settings, time and date settings, call settings, phone settings, voice commands, enhancement settings, security settings, application settings, network settings, network services, and restore factory settings.

■ Profiles

Profiles define how your phone reacts when you receive a call or message, how your keypad sounds when you press a key, and more. Ringing options, keypad tones, and other settings for each of the available profiles can be left at their default setting, or customized to suit your needs. The following profiles are available: *Normal*, *Silent*, *Meeting*, *Outdoor*, and *Pager*.

Profiles are also available for enhancements such as a headset and car kit. See "Enhancement settings", page 71 for more information about enhancement profiles.

1. At the start screen, select *Menu* > *Settings > Profiles*.

2. Scroll to the profile of your choice, and press *Select*.

3. Select *Activate*.

Customize a profile

You can customize any of the profiles a variety of ways.

1. At the start screen, select *Menu* > *Settings* > *Profiles*.

2. Select the profile you wish to customize.

3. Select *Customize*.

4. Select the option you want to customize (*Incoming call alert*, *Ringing tone*, *Ringing volume*, *Vibrating alert*, *Message alert tone*, *Keypad tones*, *Warning tones*, *Alert for*, or *Profile name*).

> **Note:** You cannot rename the *Normal* profile.

Set a timed profile

Timed profiles can be used to prevent missed calls. For example, suppose you attend an event that requires your phone be set to *Silent* before the event starts, but you forget to return it to *Normal* until long after the event. A timed profile can prevent missed calls by returning your phone to the default profile at a time you specify.

> **Note:** Timed profiles can be set up to 24 hours in advance.

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1. At the start screen, select *Menu* > *Settings* > *Profiles*.

2. Select the profile you wish to activate and set for timed expiration.

3. Select *Timed*.

4. Enter the time for the profile to expire, and press *OK*.

■ Main display settings

Wallpaper

You can set your phone to display a background picture (wallpaper) on the start screen.

1. At the start screen, select *Menu* > *Settings* > *Main display settings* > *Wallpaper* > *Select wallpaper*.

2. Highlight the *Graphics* folder, and press *Open*.

3. Browse the folder.

4. When you arrive at the image of your choice, select *Options* > *Set as wallpaper*.

To activate/deactivate wallpaper, at the start screen, select *Menu* > *Settings* > *Main display settings* > *Wallpaper* > *On* or *Off*.

Color schemes

You can change the color of some display components in your phone, such as indicators and signal bars.

1. At the start screen, select *Menu* > *Settings* > *Main display settings* > *Color schemes*.

2. Scroll to the color scheme of your choice, and press *Select*.

Choose a banner

Banner is a network service. See "Network Services", page 7 for more information.

If your wireless service provider supports this feature, you can choose whether the display shows the operator logo when the phone is in the idle state.

At the start screen, select *Menu* > *Settings* > *Main display settings* > *Banner* > *Default* or *Customize*.

Menu view

You can change the view of the main menu. The grid view shows menu icons only, and the list view shows a list of icons with the names.

At the start screen, select *Menu* > *Settings* > *Main display settings* > *Menu view* > *List* or *Grid*.

■ Mini display settings

You can select display settings for the mini display on the front of your phone.

Wallpaper

From the start screen, select *Menu* > *Settings* > *Mini display settings* > *Wallpaper* > *Select wallpaper*.

Color schemes

From the start screen, select *Menu* > *Settings* > *Mini display settings* > *Color schemes* > *Blue*, *Brown*, *Gray*, *Green*, *Orange*, *Pink*, *Red*, or *Violet*.

Screen saver

From the start screen, select *Menu* > *Settings* > *Mini display settings* > *Screen saver* > *On*, *Off*, *Select s. saver*, or *Time-out*.

■ Tone settings

You can adjust the ringing volume, keypad tones, and more for the active profile.

Select *Menu* > *Settings* > *Tone settings* and one of the following:

Incoming call alert—Select how the phone notifies you of an incoming call.

Ringing tone—Select the ringing tone for incoming calls.

Ringing volume—Set the volume of your ringing tone.

Vibrating alert—Turn the vibrating alert on or off.

Message alert tone—Select the tone for received messages.

Keypad tones—Set the volume of your keypad tones (or turn them off).

Warning tones—Turn warning and confirmation tones on or off.

Alert for—Define which caller groups the selected profile will accept or decline. See "Caller groups", page 46 for more information.

■ Time and date settings

Clock

Show/hide the clock

At the start screen, select *Menu* > *Settings* > *Time and date settings* > *Clock* > *Show clock* or *Hide clock*.

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Set the time

1. At the start screen, select *Menu* > *Settings* > *Time and date settings* > *Clock* > *Set the time*.

2. Enter the time (in hh:mm format), and press *OK*.

3. Select *am* or *pm* (if *12-hour* format is selected).

Time zone

Select your time zone based on Greenwich Mean Time (GMT), plus or minus hours in your time zone. For example, GMT - 8 is US Pacific time in Los Angeles, CA. GMT does not include Daylight savings time, so add or subtract accordingly.

Time format

At the start screen, select *Menu* > *Settings* > *Time and date settings* > *Clock* > *Time format* > *24-hour* or *12-hour*.

Date

Show/hide the date

At the start screen, select *Menu* > *Settings* > *Time and date settings* > *Date* > *Show date* or *Hide date*.

Set the date

1. At the start screen, select *Menu* > *Settings* > *Time and date settings* > *Date* > *Set the date*.

2. Enter the date, and press *OK*.

Change the date format

1. At the start screen, select *Menu* > *Settings* > *Time and date settings* > *Date*.

2. Scroll to the *Date separator*, and press *Select*.

3. Select the separator of your choice.

4. Scroll to *Date format*, and press *Select*.

5. Select the format of your choice.

Set the auto-update of date and time

Auto-update is a network service. See "Network Services", page 7 for more information.

If your wireless service provider supports this feature, you can allow the digital network to set the clock, which is useful when you are out of your home area, for instance when you have traveled to another network or time zone.

At the start screen, select *Menu* > *Settings* > *Time and date settings* > *Auto-update of date & time* > *On*, *Confirm first*, or *Off*.

If you use the *Auto-update of date & time* option while outside your digital network, you may be prompted to enter the time manually. Network time will replace the time and date when you re-enter your digital network.

If your battery has been removed or has drained outside the digital network, you may be prompted to enter the time manually (once the battery is replaced/recharged, and you are still outside of the digital network).

■ Call settings

Location info sharing

Location info sharing is only available for the Nokia 6255i and Nokia 6256 i phone. Location info sharing is a network service. See "Network Services", page 7 for more information.

If your wireless service provider supports this feature, then location info sharing allows the phone to share position information over the network. For calls to emergency numbers, this position information may be used by the emergency operator to determine the position of the phone. The functionality and accuracy of this feature is dependent on the network, satellite systems, and the agency receiving the information. It may not function in all areas or at all times.

At the start screen, select *Menu* > *Settings* > *Call settings* > *Location info sharing* > *Emergency* or *On* > *Yes* or *No*.

Emergency—This is the default profile. The phone location information is shared only during an emergency call to the official emergency number programmed into your phone. The phone screen displays ⚙ in the upper left hand corner of the start screen.

On—The phone location information is shared with the network whenever the phone is powered on and activated. The screen displays ✛ in the upper left hand corner of the start screen.

> **Note:** Location information will always be shared with the network during emergency calls to the official emergency number programmed into the phone, regardless of which setting is selected. After placing an emergency call the phone remains in emergency mode for five minutes. During this time, the location information will be shared with the network. For more information, see "Emergency calls", page 98.

Anykey answer

Anykey answer allows you to answer an incoming call by briefly pressing any key except the **Power** key, **Right selection** key, or **End** key.

At the start screen, select *Menu* > *Settings* > *Call settings* > *Anykey answer* > *On* or *Off*.

Automatic redial

Occasionally, your network may experience heavy traffic, resulting in a fast busy signal when you dial. With automatic redial activated, your phone redials the number (number of times is specified by the network), and notifies you once the network is available.

At the start screen, select *Menu* > *Settings* > *Call settings* > *Automatic redial* > *On* or *Off*.

1–touch dialing

You can activate or deactivate 1-touch dialing. At the start screen, select *Menu* > *Settings* > *Call settings* > *1-touch dialing* > *On* or *Off*. For more information on entering 1-touch dialing numbers, see "Set up 1-touch dialing", page 47.

Automatic update of serivce

Your phone is capable of receiving updates to wireless services sent to your phone by your service provider.

At the start screen, select *Menu* > *Settings* > *Call settings* > *Auto-update of service* > *On* or *Off*.

Answer when fold is opened

Set your phone to answer a call when you open the fold. If the setting is off, you must press the **Call** key after you open the fold.

At the start screen, select *Menu* > *Settings* > *Call settings* > *Answer when fold is opened* > *On* or *Off*.

Calling card

If you use a calling card for long distance calls, you can save the calling card numbers in your phone. Your phone can store up to four calling cards.

Note: Contact your calling card company for more information.

Save information

1. At the start screen, select *Menu* > *Settings* > *Call settings* > *Calling card*.

2. Enter your lock code, and press *OK*. See "Security settings", page 72 for more information.

3. Scroll to one of the four card memory locations, and select *Options* > *Edit* > *OK* > *Dialing sequence*.

4. Select one of the following sequence types:

   Access no.+ phone no.+ card no.—Dial 1-800 access number, phone number, then card number (+ PIN if required)

   Access no.+ card no.+ phone no.—Dial 1-800 access number, card number (+ PIN if required), then phone number

   Prefix+ phone no.+ card no.—Dial the prefix (numbers that must precede the phone number) and phone number you want to dial, then card number (+ PIN if required)

5. Enter the required information (access number or prefix and card number), and press *OK* to confirm your entries.

6. Select *Card name*.

7. Enter the card name, and press *OK*.

Make calls

After you have saved your calling card information in your phone, you can make a call using your calling card.

1. At the start screen, select *Menu* > *Settings* > *Call settings* > *Calling card*.

2. Enter your lock code, and press *OK*. See "Security settings", page 72 for more information.

3. Scroll to the calling card of your choice, select *Options* > *Select* > *OK*.

4. Press the **End** key to return to the start screen; then enter the phone number, including any prefix (such as **0** or **1**) that your calling card may require when you make a calling card call.

   See your calling card for instructions.

5. Press and hold the **Call** key for a few seconds until *Card call* is displayed.

6. When you hear the tone or system message, press *OK*.

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Call summary

Your phone can display the time spent on a call when you hang up.

At the start screen, select *Menu* > *Settings* > *Call settings* > *Call summary* > *On* or *Off*.

Ringing tone for no caller ID

You can select a different ringing tone for calls received with no caller ID.

From the start screen, select *Menu* > *Settings* > *Call settings* > *Ringing tone for no caller ID* > *On* or *Off*. See "Customize a profile", page 61 for more information on selecting a ringing tone.

■ Phone settings

Phone language

1. At the start screen, select *Menu* > *Settings* > *Phone settings* > *Phone language*.

2. Scroll to the language of your choice and press *Select*.

The phone language affects the time and date formats of the clock, alarm clock, and calendar.

Touch tones

Touch tones, or DTMF tones, are the tones that sound when you press the keys on your phone keypad. You can use touch tones for many automated dial-up services such as banking and airlines, or for entering your voice mailbox number and password.

Touch tones are sent during an active call. You can send them manually from your phone keypad, or send them automatically by saving them in your phone.

Set type
1. At the start screen, select *Menu* > *Settings* > *Phone settings* > *Touch tones* > *Manual touch tones*.

2. Select one of the following options:

   Continuous—The tone sounds for as long as you press and hold a key.

   Fixed—Used to send tones of the duration you specify in the *Touch tone length* option.

   Off—Used to turn off tones. No tones are sent when you press a key.

Set length

You can also specify touch tone length when using the *Fixed* option.

At the start screen, select *Menu* > *Settings* > *Phone settings* > *Touch tones* > *Touch tone length* > *Short* (0.1 seconds) or *Long* (0.5 seconds).

Start-up tone

You can select to have a start-up tone when you first turn on your phone.

At the start screen, select *Menu* > *Settings* > *Phone settings* > *Start-up tone* > *On* or *Off*.

Help text activation

Your phone displays brief descriptions for most menu items. When you arrive at a feature or menu, pause for about 10 seconds and wait for the help text to display. Use the scroll keys to page through the full help text, if necessary.

The default setting for help text is on. However, you can turn help text on or off.

At the start screen, select *Menu* > *Settings* > *Phone settings* > *Help text activation* > *On* or *Off*.

■ Voice commands

You can set as many as five voice commands, which allow handsfree operation of certain phone features.

Assign a voice tag to a command

Before using voice commands, you must first add a voice tag to the phone function.

1. At the start screen, select *Menu* > *Voice* > *Voice commands*.
2. Select the phone function you wish to tag (*Profiles*, *Voice mailbox*, *Radio, Infrared* or *Voice recorder*).
3. If necessary, scroll to an option associated with that function, and press *Select*.
4. Select *Options* > *Add*.
5. Press *Start*, and speak the voice tag clearly into the microphone.

> **Note:** Do not press *Quit* unless you want to cancel the recording.

The phone replays and then saves the recorded tag. The ⟳ icon appears next to commands which have voice tags assigned.

Activate a voice command

After you have associated a voice tag with a phone function, you can issue a command by speaking the voice tag.

1. Press and hold *Names*.

2. When *Please speak now* appears, pronounce the voice tag clearly into the microphone.

When the phone finds the voice tag, *Found:* appears, and the phone plays the recognized voice tag through the earpiece. The function you requested is activated.

Options

After you have associated a voice tag to a command, you can choose one of the following options:

- Select *Playback* to listen to the voice command tag.

- Select *Change* to change the voice command.

- Select *Delete* to erase the voice command tag.

Voice recorder

This feature allows you to record pieces of speech or sound with your phone and listen to them later. The total available time is 30 seconds if no memos have been stored. The maximum length of a recording depends on how much memory remains available.

Record speech or sound

1. At the start screen, select *Menu* > *Media* > *Voice recorder* > *Record*.

2. After the recorder start tone is heard, begin recording speech or sound.

3. When you are finished recording, press *Stop*.

4. Enter the title you wish to assign to the recording, and press *OK*.

Options

After you have saved the recording to the *Recordings list*, highlight the recording, and choose one of the following options:

- Select *Playback* to listen to the recording using the earpiece.

- Select *Delete* to erase the recording.

- Select *Edit title* to rename the recording.

- Select *Add alarm* to add an alarm to the recording.

■ Enhancement settings

The enhancement settings menu is shown only if the phone is or has been connected to a compatible enhancement.

At the start screen, select *Menu* > *Settings* > *Enhancement settings* > *Headset*, *Handsfree*, *Loopset*, *TTY/TDD*, or *Charger*.

Headset

Scroll to the option of your choice, and press *Select* to enter the submenu and modify its settings.

Default profile—Choose the profile you wish to be automatically activated when a headset is connected

Automatic answer—Calls are answered automatically after one ring when a headset is connected. Select *On* or *Off*.

Handsfree

Scroll to the option of your choice and press *Select* to enter the submenu and modify its settings.

Default profile—Choose the profile you wish to be automatically activated when your phone is connected to a car kit.

Automatic answer—Calls are answered automatically after one ring when a car kit is connected. Select *On* or *Off*.

Lights—Choose to keep the phone lights always on, or to shut off automatically after several seconds. Select *On* or *Automatic*.

Loopset

The LPS-4 Loopset is recommended for use with your phone. Scroll to the option of your choice, and press *Select* to enter the submenu and modify its settings.

Default profile—Choose the profile you wish to be automatically activated when your phone is connected to a loopset.

Automatic answer—Calls are answered automatically after one ring when a loopset is connected. Select *On* or *Off*.

TTY/TDD

• Check with the manufacturer of the TTY/TDD device for a connecting cable that is compatible with the Nokia phone.

• TTY/TDD communications depend on network availability. Check with your service provider for availability and description of services.

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Charger

Scroll to the option of your choice, and press *Select* to enter the submenu and modify its settings.

Default profile—Choose the profile you wish to be automatically activated when your phone is connected to the charger.

Lights—Choose to keep the phone lights always on, or to shut off automatically after several seconds. Select *On* or *Automatic*.

■ Security settings

Activate or deactivate phone lock

The phone lock feature protects your phone from unauthorized outgoing calls or unauthorized access to information stored in the phone. When phone lock is activated, *Phone locked* is displayed each time you turn your phone on or off.

When the phone is locked, calls still may be possible to the official emergency number programmed into your phone.

1. At the start screen, select *Menu* > *Settings* > *Security settings*.

2. Enter the lock code, and press *OK*.

3. Select *Phone lock* and one of the following options:

   Off—Immediately turns off the phone lock feature.

   Lock now—Immediately turns on the phone lock feature.

   On power-up—Turns on the phone lock feature the next time you turn the phone on.

If you selected *Lock now*, you must enter your lock code before the phone will function normally. Once the lock code has been accepted, your phone functions normally.

> **Note:** *Call not allowed* is displayed if you attempt to place a call while phone is locked.

To answer a call with phone lock on, press *Answer* or the **Call** key.

Allow numbers when phone locked

When phone lock is on, the only outgoing calls that can be made are to the following numbers:

• The emergency number programmed into your phone (for example, 911).

• The number stored in the *Allowed number when phone locked* location.

1. At the start screen, select *Menu* > *Settings* > *Security settings*.

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2. Enter the lock code, and press *OK*.

3. Select *Allowed no. when phone locked*. Select *Assign* and enter the phone number; or press *Search*, recall the number from *Contacts*, and press *OK*.

Call the allowed phone number

1. At the start screen, press the **Scroll down** key.

2. Press the **Call** key to place the call.

Change lock code

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

The preset lock code is 1234 or the last four digits of your phone number. If you enter an incorrect lock code five times in a row, your phone will prompt you for the security code.

> **Note:** If you enter the wrong lock code 5 times in succession, you will not be able to enter a code for 5 minutes, even if you power off the phone between incorrect entries.

1. At the start screen, select *Menu* > *Settings* > *Security settings* > *Change lock code*.

2. Enter the current (or default) lock code, and press *OK*.

3. Enter the new lock code (must be 4 characters in length), and press *OK*.

4. Reenter the new lock code for verification, and press *OK*.

> **Note:** When you change your lock code, make sure you store it in a safe place, away from your phone. Avoid entering access codes similar to emergency numbers to prevent accidental emergency calls.

■ Call restrictions

Call restrictions is a network service. See "Network Services", page 7 for more information.

If your wireless service providers supports this feature, then you can restrict the calls your phone can make and receive. When calls are restricted, calls still may be possible to the official emergency number programmed into your device.

> **Note:** Contact your service provider for the restriction password.

1. At the start screen, select *Menu* > *Settings* > *Security settings* > *Call restrictions*.

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2. Enter the lock code, and press *OK*. See "Change lock code", page 73 for more information.

3. Select the types of calls you wish to restrict:

Restrict outgoing calls—Calls cannot be made.

Restrict incoming calls—Calls cannot be received.

4. Select an option (*Select*, *Add restriction*, *Edit*, or *Delete*).

> **Note:** When calls are restricted, calls still may be possible to the official emergency number programmed into your phone.

Voice privacy

Voice privacy is a network service. See "Network Services", page 7 for more information. If your wireless service provider supports this feature, the voice privacy feature protects the privacy of your current phone conversation from other callers placing phone calls on your same network.

At the start screen, select *Menu* > *Settings* > *Security settings* > *Voice privacy* > *On* or *Off*.

■ App. settings

1. At the start screen, select *Menu* >*Settings* > *App. settings*.

2. Scroll to one of the following submenus to activate options for games.

Application sounds—Select *On* or *Off*.

Application lights—Select *App. defined* or *Default*.

Application shakes—Select *On* or *Off*.

■ Network

The menu options you see in your phone are based on your service provider's network. The network determines which options actually appear in the phone menu. Check with your service provider for more information.

The *Network* menu allows you to customize the way your phone chooses a network in which to operate while you are within or outside of your primary or home system. Your phone is set to search for the most cost-effective network. If your phone cannot find a preferred network, it selects a network automatically based on the option you choose in the *Network* menu.

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Roaming options

You can set your phone to "roam" or search for another network when you are not in your home area.

1. At the start screen, select *Menu* > *Settings* > *Network* > *Roaming options*.

2. Select one of the following options:

   Home only—You can make and receive calls in your home area only.

   Automatic—The phone automatically searches for service in another digital network. If one is not found, the phone uses analog service. The roaming rate applies when not in the home service area.

3. Press *OK*, if necessary, to confirm the activation.

Mode

You can choose whether your phone uses digital or analog service.

1. At the start screen, select *Menu* > *Settings* > *Network* > *Mode*.

2. Select one of the following service options:

   Digital preferred—The phone works in digital mode, but will also work in analog mode when digital mode is unavailable.

   Digital only—The phone only works in digital mode.

   Analog only—The phone only works in analog mode.

■ Network services

The following features are network services. See "Network Services", page 7 for more information.

Store a feature code

1. At the start screen, select *Menu* > *Settings* > *Network services* > *Network feature setting*.

2. Enter the feature code from your service provider (for example, *633), and press *OK*.

3. Select the type of forwarding that matches the feature code you entered (for example, *Call forwarding*).

   The activated feature code is now stored in your phone, and you are returned to the *Feature code:* field. Continue entering other feature codes (for example, *633), or press the **End** key to return to the start screen.

   Note: Once you enter a network feature code successfully the feature becomes visible in the *Network services* menu.

Call forwarding

Call forwarding tells your network to redirect incoming calls to another number. Call forwarding is a network service and may not work the same in all networks, so contact your wireless provider for availability.

Activate

Note: This is a network service. All options listed may not appear in the display. Contact your wireless provider for more information.

1. At the start screen, select *Menu* > *Settings* > *Network services* > *Call forwarding*.

2. Select one of the following options:

   Forward all calls—Forward all calls to the number you specify.

   Forward if busy—Forward incoming calls when you are in a call.

   Forward if not answered—Forward incoming calls to another number if you are unable to answer. You can set a delay before forwarding takes place.

   Forward if out of reach—Forward incoming calls when your phone is off.

   Cancel all call forwarding—Cancel any call forwarding options you have set.

3. Select *Activate*.

4. Scroll to the destination to which your calls will be forwarded, and press *Select*.

5. Enter the number to which your calls, data, or other information will be forwarded, and press *OK*.

Cancel

At the start screen, select *Menu* > *Settings* > *Network services* > *Call forwarding* > *Cancel all call forwarding*.

Note: *Cancel all call forwarding* may affect your ability to receive voice mail messages. Contact your wireless provider for specific details.

Call waiting

If your wireless provider supports this feature, call waiting notifies you of an incoming call even while you are in a call. You can then accept, reject, or ignore the incoming call.

1. At the start screen, select *Menu* > *Settings* > *Network services* > *Call waiting* > *Activate* or *Cancel*.

2. During a call, press *Answer* or the **Call** key to answer the waiting call.

   The first call is put on hold.

3. Press the **End** key to end the active call.

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Send own caller ID when calling

If your wireless service provider supports this feature, then you can prevent your number from appearing on the receiving party's caller ID.

At the start screen, select *Menu* > *Settings* > *Network services* > *Send my caller ID* > *Yes* or *No*.

View your own phone number

At the start screen, select *Menu* > *Settings* > *Network services* > *Own number selection*.

■ Restore factory settings

You can reset some of the menu settings to their original values. Data that you have entered or downloaded is not deleted, for example, entries in your contacts list are not affected.

1. At the start screen, select *Menu* > *Settings* > *Restore factory settings*.

2. Enter the lock code, and press *OK*. See "Security settings", page 72 for more information.

■ Choose 'Go to' funtions

Note: Go to is the **Left selection** key on the start screen.

1. At the start screen, select *Go to* > *Options* > *Select options*.

2. Use the **Scroll up** key or **Scroll down** key to highlight the desired functions from the list of available functions.

3. Press *Mark* to add a function. Use *Unmark* to remove a function.

4. Select *Done* when you have added all desired functions.

5. Select *Yes* to save the changes.

6. At the start screen, press *Menu* > *Go to* to display a list of the functions that you selected in step 3.

Organize functions

1. At the start screen, select *Go to* > *Options* > *Organize*.

2. Use the **Scroll up** key or the **Scroll down** key to highlight the function you wish to rearrange, and select *Move*.

3. Select *Move up*, *Move down*, *Move to top*, or *Move to bottom*.

4. Press *Done* > *Yes* to save the changes.

11. Organizer (Menu 8)

Your phone contains features to help organize your everyday life, including an alarm clock, calendar, calculator, countdown timer, and stopwatch.

■ Alarm clock

Set an alarm

The alarm clock is based on the phone clock. It sounds an alert any time you specify and even works if the phone is turned off.

1. At the start screen, select *Menu* > *Organizer* > *Alarm clock* > *Alarm time*.
2. Enter the time for the alarm in hh:mm format, and press *OK*.
3. Select *am* or *pm* (if *12-hour* format is selected).

   Alarm on appears briefly in the display and 🐾 appears on the start screen.

Change the time

1. At the start screen, select *Menu* > *Organizer* > *Alarm clock* > *Alarm time* > *On*.
2. Enter the time for the alarm in hh:mm format, and press *OK*.
3. Select *am* or *pm* (if *12-hour* format is selected).

   Alarm on appears briefly in the display and 🐾 appears on the start screen.

Set the alarm tone

You can set which tone is played when the alarm sounds.

1. At the start screen, select *Menu* > *Organizer* > *Alarm clock* > *Alarm tone*.
2. Highlight *Standard*, *Radio*, *Ringing tone*, or *Open Gallery* to choose the tone of your choice, and press *Select*.

Alarm conditions

When the alarm sounds, your phone beeps, vibrates, and the display lights up.

With the phone on, press *OK* to shut the alarm off, or press *Snooze*. The alarm stops for 10 minutes and *Snooze on* appears in the display.

If you do not press a key, the alarms stops (snoozes) for 10 minutes, then sounds again.

If the alarm time is reached while the device is switched off, the device switches itself on and starts sounding the alarm tone. If you press *Stop*, the device asks whether you want to activate the device for calls. Press *No* to switch off the device or *Yes* to make and receive calls. Do not press *Yes* when wireless phone use may cause interference or danger.

Turn an alarm off

At the start screen, select *Menu* > *Organizer* > *Alarm clock* > *Alarm time* > *Off*.

■ Calendar

The calendar keeps track of reminders, calls you need to make, meetings, and birthdays. It can even sound an alarm for any of these events.

Monthly view provides an overview of the selected month and weeks. It also allows you to jump to a specific date. Any days or dates that appear in bold font contain calendar notes such as a meeting or reminder.

Open

At the start screen, select *Menu* > *Organizer* > *Calendar*.

Go to a date

1. At the start screen, select *Menu* > *Organizer* > *Calendar* > *Options* > *Go to date*.
2. Enter the date (for example, 07/15/2004), and press *OK*.

Note a specific date

You can choose from five types of notes: *Meeting*, *Call*, *Birthday*, *Memo*, and *Reminder*. Your phone asks for further information depending on which note you choose. You also have the option to set an alarm for any note that you select.

1. Go to the date for which you want to set a reminder. See "Go to a date", page 79 in the previous section if you need more information.
2. From the monthly view (with the go to date highlighted), select *Options* > *Make a note*.
3. Select one of the following note types:

   Meeting—You are prompted to enter a subject, location, and a start/end time. You are then given the option to set an alarm.

   Call—You are prompted to enter a phone number, a name, and the time. You are then given the option to set an alarm.

   Birthday—You are prompted to enter the person's name, and year of birth. You are then given the option to set an alarm.

Memo—You are prompted to enter a subject and an end date. You are then given the option to set an alarm.

Reminder—You are prompted to enter the subject you wish to be reminded about, you are then given the option to set an alarm.

4. Enter your note, and select *Options* > *Save*.

View notes (day view)

After you have created some calendar notes, you can view them as follows:

1. At the start screen, select *Menu* > *Organizer* > *Calendar*.
2. Scroll to the date containing the note. (Any days containing notes will be in bold font.)
3. Select *Options* > *View day*.
4. To view a highlighted note, select *Options* > *View*.

Options while viewing a list of notes

1. Press *Options* while viewing a day's notes to display the following options:

   The options listed below are available either while viewing the body of a note or viewing the header of a note.

   View—View the full note.

   Make a note—Create a new note for the selected date.

   Delete—Delete the note.

   Edit—Edit the note.

   Move—Move the note to another date on your calendar.

   Repeat—Enable the note to recur on a regular basis (daily, weekly, biweekly, monthly, and yearly).

   Go to date—Jump to another date on your calendar.

   Go to today—Jump to the current day on your calendar.

   Go to to-do list—Jump to the to-do list on your calendar.

   Send note—Send the note to another device as a text message or in calendar-to-calendar (vCal) format.

   Copy—Copy the note. You can then paste the note to another date.

   Settings—Set the date and time, date and time format, the day each week starts and whether you want your notes to auto-delete after a specified time.

2. Scroll to an option, and press *Select* to activate it or enter its submenu.

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Send a note

1. At the start screen, select *Menu* > *Organizer* > *Calendar*.

2. Scroll to the date containing the note you wish to send. (Any days containing notes will be in bold font.)

3. Select *Options* > *View day*.

4. Scroll to the note you wish to send, and select *Options* > *Send note* > *Via calendar*, *Via text message*, *Via infrared*, or *Via Bluetooth*.

5. If you selected *Via calendar*, enter the number for the recipient, or press *Search* to retrieve a number from the contacts list, and press *OK*. The note is sent.

6. If you selected *Via text message*, the note appears as a text message in the display.

7. Select *Send to number*, *Send to e-mail*, *or Send to many*.

8. Enter the number for the recipient, or press *Search* to retrieve a number from the contacts list, and press *OK*. Select *Options* > *Send*.

Receive notes

When you receive a calendar note in calendar-to-calendar (vCal) format, your phone displays *Calendar note received*. When you receive a calendar note as a text message, a message notification appears on the start screen. You can then save the note in your calendar and set an alarm for any date and time.

View notes

When your phone displays *Calendar note received*, press *Show*. Scroll to view the entire message, if necessary.

Save notes

After viewing the calendar note, select *Options* > *Save*.

Discard notes

After viewing the calendar note, select *Options* > *Discard*.

■ To-do list

Use the to-do list feature to keep track of your tasks. You can save a note for a task, select a priority level for the note and mark it as done when you have completed it. You can sort the notes by priority or by date.

Add a To-do note

1. From the start screen, select *Organizer* > *To-do list*.

2. If there are no notes, select *Add note*.

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3. Or, enter the subject of the to-do note, and select *Save*.

4. Select either *High*, *Medium*, or *Low* priority.

   The to-do note is saved. The phone automatically sets the deadline.

View a To-do note

From the start screen, select *Organizer* > *To-do list*. Scroll to a to-do note, and select *View*. The to-do note appears in the display.

Options while viewing to-do notes

Add—Add another note (available only in header view).

Deadline—Set a deadline for the note (available only in body view).

Delete—Delete the note.

Mark note as done—Mark a note or task as complete; no more reminders will follow.

Sort by deadline—Sort the notes according to their deadline.

Send note—Send the note to another device using IR or Bluetooth, as a text or multimedia message, or as a calendar note to another compatible phone.

Edit priority—Change the priority to high, medium, or low (available only in body view).

Go to calendar—Leave the to-do list, and go to the calendar.

Save to calendar—Save the to-do note to a date on your calendar.

Delete all notes—Delete all the to-do notes in the list (available only in header view).

■ Calculator

The calculator in your phone adds, subtracts, multiplies, divides, calculates the square and the square root and converts currency values.

1. At the start screen, select *Menu* > *Organizer* > *Calculator*.

2. Enter the first number in the calculation. (Press the **#** key for a decimal point if necessary.)

   To perform a square or square root calculation, select *Options* > *Square* or *Square root*.

3. Press the ***** key to cycle through the add (+), subtract (-), multiply (*), and divide (/) characters. Pause briefly to select the displayed character.

4. Enter the second number in your calculation.

5. Press *Options* (equals is highlighted), and press *Select*.

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12. Mobile Web (Menu 9)
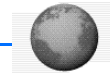
Minibrowser is a network service. See "Network Services", page 7 for more information.

Your phone has a built-in browser you can use to connect to selected services on the mobile internet. If your wireless service provider supports this feature, then you can view weather reports, check news or flight times, view financial information, and much more. The web browser on your phone can display WAP-based content.

Your device may have some bookmarks loaded for sites not affiliated with Nokia. Nokia does not warrant or endorse these sites. If you choose to access them, you should take the same precautions, for security or content, as you would with any internet site.

The security icon does not indicate that the data transmission between the gateway and the content server (or place where the requested resource is stored) is secure. The service provider secures the data transmission between the gateway and the content server.

■ Mobile internet access

Because mobile internet content is designed to be viewed from your phone, your wireless provider is now your mobile internet service provider as well.

It is likely that your wireless provider has created a home page and set up your browser to go to this page when you log on to the mobile internet. Once at your service provider's home page, you may find links to a number of other sites.

It should not be necessary to manually configure the browser on your phone. Normally this is done by your wireless provider once you have subscribed to the feature. Contact your wireless provider if you have problems using the browser.

■ Sign on to the mobile internet

At the start screen, select *Menu* > *Mobile Web* > *Minibrowser* > *Connect*.

After a brief pause, your phone attempts to connect to your wireless provider's home page. If you receive an error message, your phone may not be set up for browsing. Contact your wireless provider to make sure that your phone is configured properly.

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■ Navigate the mobile internet

Since your phone screen is much smaller than a computer screen, mobile internet content is displayed differently than you may be accustomed to seeing. This section contains guidelines for using phone keys to navigate a WAP site.

Phone keys

- To display the Minibrowser home screen, press the **Power** key.
- To browse the WAP site, press the **Scroll up** or **Scroll down** key.
- To select a highlighted item, press *Select*.
- To enter letters and numbers, press a key from **0–9**.
- To enter special characters, press the ***** key.

Receive a call while online

Depending on your wireless service provider, you may still be able to receive a voice call while using the WAP browser.

- To answer the incoming call, press the **Call** key.
- To reject the incoming call, press the **End** key.

After you end your voice call, the mobile internet connection automatically resumes.

Note: If your wireless service provider does not support incoming calls while browsing, then the incoming calls are automatically diverted to voice mail.

Make an emergency call while online

You can end your data connection and then make an emergency call.

1. To close your mobile internet connection, simply press the **End** key.
2. Press the **End** key as many times as needed to clear the display and ready the phone for calls.
3. Enter the emergency number for your present location (for example, 911). Emergency numbers vary by location.
4. Press the **Call** key.

13. Connectivity (Menu 10)

You can connect the phone to a compatible device using an IR or Bluetooth connection. You can also connect the phone to a compatible PC using IR, Bluetooth, or a data cable; and use the phone as a modem to enable connectivity from the PC.

For more information, see the Nokia PC Suite online help. Nokia PC Suite and all related software can be downloaded from the U.S. Mobile Phone products section of **www.nokia.com**.

■ Bluetooth connectivity

Bluetooth connectivity enables cost-free wireless connections between electronic devices within a maximum range of 30 feet. A Bluetooth connection can be used to send and receive images, texts, gallery files, voice recordings, video clips, notes, business cards, and calendar notes. It can also be used to connect wirelessly to products that use Bluetooth wireless technology, such as computers. You can synchronize your phone and your PC using a Bluetooth connection.

Since devices with Bluetooth connectivity communicate using radio waves, your phone and the other device do not need to be in direct line-of-sight.

The two devices only need to be within a maximum of 30 feet (10 meters) of each other, although the connection can be subject to interference from obstructions such as walls or from other electronic devices.

The Bluetooth application consumes the battery and reduces the operating time of the phone. Take this into account when performing other operations with your phone.

There may be restrictions on using devices with Bluetooth connectivity. Check with your local authorities.

These devices are compliant with Bluetooth specification 1.1 supporting the following profiles:

- Object push profile (OPP)
- File transfer profile (FTP)
- Dial-up networking profile (DUN)
- Generic object exchange profile (GOEP)
- Headset profile (HSP)
- Hands-free profile (HFP)

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- Generic access profile (GAP)
- Serial port profile (SPP)

To ensure interoperability between other devices supporting Bluetooth technology, use Nokia approved enhancements for this model. Check with the manufacturers of other devices to determine their compatibility with this device.

There may be restrictions on using Bluetooth technology in some locations. Check with your local authorities or service provider.

Features using Bluetooth technology, or allowing such features to run in the background while using other features, increase the demand on battery power and reduces the battery life.

Pairing

You can set up a permanent association (pairing) between your phone and another device with Bluetooth connectivity. Some devices may require pairing before data transfer can take place.

To pair with a device, you and the owner of the other device must agree on a passcode of 1–16 numeric characters. The first time you try to connect the devices, you must each enter the same passcode. Once the devices are paired, you will not need to use the passcode again, so there is no need to remember it.

Paired devices are placed in your paired device list. You can view the list even when Bluetooth is not active or when the devices in the list are not available for connection.

To view the paired device list:

1. From the start screen, select *Menu* > *Connectivity* > *Bluetooth* > *Paired devices*.

2. Scroll to the desired device, and select *Options* and one of the following

   Assign short name—Give a nickname to the selected device (visible to you only).

   Request conn. authorization—Select *No* if you want the phone to connect to the selected device automatically or *Yes* if you want the phone to ask for your permission first.

   Delete pairing—Delete the pairing to the selected device.

   Pair new device—Search for active devices with Bluetooth connectivity within range, scroll to the desired device, and select *Pair* to establish pairing with that device.

Settings

You can define how your phone is shown to other devices with Bluetooth connectivity.

From the start screen, select *Menu* > *Settings* > *Connectivity* > *Bluetooth* > *Bluetooth settings* and one of the following:

My phone's visibility—Select *Shown to all* to show the phone to all other devices with Bluetooth connectivity or *Hidden* to show the phone only to the paired devices.

My phone's name—Change your phone name that is seen by other users.

Set up a Bluetooth connection

1. From the start screen, select *Menu* > *Settings* > *Connectivity* > *Bluetooth*.

2. Select *Bluetooth* > *On*. The active Bluetooth connection is indicated by ⟪◉⟫ at the top of the display.

3. Select *Search for audio enhancements* to search for compatible devices with Bluetooth connectivity.

   The list of found devices appears in the display.

4. Select the desired device.

5. If required, enter the Bluetooth passcode of the device to pair with the device.

   Your phone connects to the device. You can start data transfer.

6. To view the device you are connected to, select *Active device*.

7. To deactivate Bluetooth, select *Bluetooth* > *Off*.

Send data

Instead of using the *Settings* menu, you can use other phone menus to send various types of data to other devices with Bluetooth connectivity. For example, you can send a video clip from the *Video clips* folder of the *Gallery* menu. See the appropriate sections of the user guide for information about sending different types of data.

Receive a data transfer

When a Bluetooth connection is active in your phone, you can receive notes, business cards, video clips, and other types of data transfers from another device with Bluetooth connectivity. When you receive a data transfer, an alarm sounds, and a message appears in the start screen.

To view the transferred item immediately, select *Show*.

To save the item for later viewing, select *Exit*.

Depending on the nature of the item it is saved in the appropriate menu in your phone. For example, a business card would be saved in *Contacts*, and a calendar note would be saved in *Calendar*.

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Infrared

You can set up the phone to receive data through its IR port. To use an IR connection, transmission and reception must be to or from an IR compatible phone or device.

Do not point the IR (infrared) beam at anyone's eye or allow it to interfere with other IR devices. This device is a Class 1 laser product.

Send and receive data

1. Ensure that the IR ports of the sending and receiving devices are pointing at each other and that there are no obstructions between the devices.

   The preferable distance between the two devices in an IR connection is from 3 inches to 3 feet.

2. Activate IR in your phone by selecting *Menu* > *Settings* > *Connectivity* > *Infrared*.

3. The user of the other device should activate IR as well.

If data transfer is not started within two minutes after the activation of the IR port, the connection is cancelled and must be restarted.

Connection indicator

- When ▶▪▪▪ is shown continuously, the IR connection is activated and your phone is ready to send or receive data using its IR port.

- When ▶▪▪▪ blinks, your phone is trying to connect to the other device or a connection has been lost.

USB data transfer

You can transfer data such as music, photos and videos from your phone to a compatible PC, or from a compatible PC to your phone using a DKU-2 USB data cable. The cable is connected to your phone correctly when the arrowhead points toward the mini display screen, or the display screen if the fold is opened.

Important: Disconnect the USB data cable from the phone to make a call.

Transfer files using Windows Explorer

You can use Windows Explorer to transfer music, photo, and video files to your phone, and from your phone to your PC.

1. Connect your PC and your phone with a DKU-2 USB cable.

    Data enhancement connected is displayed on your phone.

2. Open Windows Explorer. Your phone will appear as a local drive (named by Nokia 6255, Nokia 6255i, Nokia 6256, or Nokia 6256i), and with a drive letter assigned to it.

3. Click on the folders to display a window that shows the contents of the folder on the phone memory card.

4. Open a second instance of Windows Explorer and display the contents of the folder on your PC where you have MP3 files, photo files, or video files stored.

5. Select the files on your PC that you wish to transfer to the phone.

6. Drag and drop the files from the second window into the first window and place in a folder.

7. The files are transferred to the phone and can be played by the Music player, or accessed by the Media player.

8. If you selected files with more memory than can fit on the phone memory, you get an error note. Deselect some of your selected files until the selection fits.

9. Disconnect the USB cable by double-clicking the green arrow on the taskbar at the bottom of your PC screen.

    A window pops up that shows **Unplug** or **Eject Hardware**.

10. Click on **USB Device** in the Hardware devices window.

    A popup window shows **Stop a Hardware device**.

11. Highlight **USB device** and click **OK**.

    The popup window **Safe to Remove Hardware** is shown with the message **"The 'USB Device' device can now be safely removed from the system**.

12. Click **OK**.

> **Important:** To ensure that all memory card operations are completed in a controlled way, do not unplug the connectivity cable until Windows notifies you that it is safe to do so. Uncontrolled completion of the memory card operations may cause the memory card and the information stored on it to become corrupted. A corrupted memory card may have to be formatted before it can be used again. When a memory card is formatted, all information on the card is permanently lost.

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■ Data/fax calls

Data or fax calls is a network service. See "Network Services", page 7 for more information.

If your wireless service provider supports this feature, you can set up the phone to send or receive data or fax calls when a terminal, such as a PDA or PC, is connected.

Note: For more information on connectivity, refer to the PC/PDA Connectivity Guide. The PC/PDA Connectivity Guide can be downloaded from the Nokia website at **http://www.nokia.com/us**.

1. At the start screen, select *Menu* > *Settings* > *Call settings* > *Data/fax calls* > *Incoming data/fax call*.

2. Select one of the following options:

   Normal—The phone receives incoming calls as usual.

   Data calls only—The phone receives only data calls.

   Fax calls only—The phone receives only fax calls.

3. When you are finished receiving the fax or data call, repeat Steps 1 and 2 and select *Normal*.

14. Extras (Menu 11)

■ Games

1. At the start screen, select *Menu* > *Extras > Games* > *Select game*.

2. Scroll to a game, and press *Open* or the **Call** key.

3. Select one of the following options (if supported by the particular game):

   New game—Launches a new game.

   High scores—View the high scores for this game (if previously played).

   Instructions—View instructions for playing the game. Use the **Scroll down** key to read more.

■ Collections

Select application

1. At the start screen, select *Menu* > *Extras* > *Applications* > *Select application*.

2. Scroll to an application, and press *Options*, highlight *Open*, and press *Select* or the **Call** key.

Download

> **Note:** Only install applications from sources that offer adequate protection against harmful software.

> **Note:** When you download a game or an application, it may be saved in the *Games* menu instead of the *Applications* menu.

Browser downloads

1. At the start screen, select *Menu* > *Extras* > *Applications* > *App. downloads*.

2. Press *Select* to access the list of web browser bookmarks.

3. Scroll to the appropriate bookmark that contains the application you wish to download, and press *Select* to connect to the web page.

   If the connection fails, you may enter the *Applications* menu and activate another set of service settings.

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Important: Note that even if the use of certificates makes the risks involved in remote connections and software installation considerably smaller, they must be used correctly in order to benefit from increased security. The existence of a certificate does not offer any protection by itself; the certificate manager must contain correct, authentic, or trusted certificates for increased security to be available. Certificates have a restricted lifetime. If Expired certificate or Certificate not valid yet is shown even if the certificate should be valid, check that the current date and time in your device are correct. Before changing any certificate settings, you must make sure that you really trust the owner of the certificate and that the certificate really belongs to the listed owner.

PC Suite

Nokia PC Suite software is available for the Nokia 6255, 6255i, 6256, and 6256i phone. Nokia PC Suite is a collection of powerful tools that you can use to manage your phone features and data. Each component is a separate program that includes online helps. Nokia PC Suite software, installation instructions, and other documentation is provided free of charge and can be downloaded from the software downloads of the Nokia web site: **www.nokia.com/us**.

Note: Some of the features in your phone require network support. Contact your service provider for availability and configuration instructions.

Memory status

You can view the size of memory available application installations. At the start screen, select *Menu* > *Extras* > *Applications* > *Memory*.

15. Enhancements

Check the model number of any charger before use with this device. This device is intended for use when supplied with power from ACP-7 or ACP-12.

Warning: Use only batteries, chargers and enhancements approved by Nokia for use with this particular model. The use of any other types may invalidate any approval or warranty, and may be dangerous. For availability of approved enhancements, please check with your dealer.

Your device and its enhancements may contain small parts. Keep them out of reach of small children.

A few practical rules about accessories and enhancements:

- Keep all accessories and enhancements out of the reach of small children.

- When you disconnect the power cord of any accessory or enhancement, grasp and pull the plug, not the cord.

- Check regularly that enhancements installed in a vehicle are mounted and are operating properly.

- Installation of any complex car enhancements must be made by qualified personnel only.

Power

- Standard 1070 mAh Li-Ion Battery (BL-6C)

- Standard Travel Charger (ACP-7)

- Travel Charger (ACP-12)

- Retractable Charger (AC-1)

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16. Reference information

This section provides information about your phone's batteries, enhancements, chargers, safety guidelines and technical information. Be aware that the information in this section is subject to change as batteries, chargers, and enhancements change.

■ Battery information

Your device is powered by a rechargeable battery. The full performance of a new battery is achieved only after two or three complete charge and discharge cycles. The battery can be charged and discharged hundreds of times but it will eventually wear out. When the talk and standby times are noticeably shorter than normal, buy a new battery. Use only Nokia approved batteries, and recharge your battery only with Nokia approved chargers designated for this device.

Unplug the charger from the electrical plug and the device when not in use. Do not leave the battery connected to a charger. Overcharging may shorten its lifetime. If left unused, a fully charged battery will lose its charge over time. Temperature extremes can affect the ability of your battery to charge.

Use the battery only for its intended purpose. Never use any charger or battery that is damaged.

Do not short-circuit the battery. Accidental short-circuiting can occur when a metallic object such as a coin, clip, or pen causes direct connection of the positive (+) and negative (-) terminals of the battery. (These look like metal strips on the battery.) This might happen, for example, when you carry a spare battery in your pocket or purse. Short-circuiting the terminals may damage the battery or the connecting object.

Leaving the battery in hot or cold places, such as in a closed car in summer or winter conditions, will reduce 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 device with a hot or cold battery may not work temporarily, even when the battery is fully charged. Battery performance is particularly limited in temperatures well below freezing.

Do not dispose of batteries in a fire! Dispose of batteries according to local regulations. Please recycle when possible. Do not dispose as household waste.

Care and maintenance

Your device is a product of superior design and craftsmanship and should be treated with care. The suggestions below will help you protect your warranty coverage.

- Keep the device dry. Precipitation, humidity and all types of liquids or moisture can contain minerals that will corrode electronic circuits. If your device does get wet, remove the battery and allow the device to dry completely before replacing it.

- Do not use or store the device in dusty, dirty areas. Its moving parts and electronic components can be damaged.

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

- Do not store the device in cold areas. When the device returns to its normal temperature, moisture can form inside the device and damage electronic circuit boards.

- Do not attempt to open the device other than as instructed in this guide.

- Do not drop, knock, or shake the device. Rough handling can break internal circuit boards and fine mechanics.

- Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the device.

- Do not paint the device. Paint can clog the moving parts and prevent proper operation.

- Use a soft, clean, dry cloth to clean any lenses (such as camera, proximity sensor, and light sensor lenses).

- Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the device and may violate regulations governing radio devices.

All of the above suggestions apply equally to your device, battery, charger, or any enhancement. If any device is not working properly, take it to the nearest authorized service facility for service.

Additional safety information

■ Operating environment

Remember to follow any special regulations in force in any area and always switch off your device when its use is prohibited or when it may cause interference or danger. Use the device only in its normal operating positions. This device meets RF exposure guidelines when used either in the normal use position against the ear of when positioned at least 7/8 inch (2.2 cm) away from the body. When a carry case, belt clip, or holder is used for body-worn operation, it should not contain metal and should position the device at least 7/8 inch (2.2 cm) away from your body.

In order to transmit data files or messages, this device requires a quality connection to the network. In some cases, transmission of data files or messages may be delayed until such a connection is available. Ensure the above separation distance instructions are followed until the transmission is completed.

■ Medical devices

Operation of any radio transmitting equipment, including wireless phones, may interfere with the functionality of inadequately protected medical devices. Consult a physician or the manufacturer of the medical device to determine if they are adequately shielded from external RF energy or if you have any questions. Switch off your device in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

PACEMAKERS

Pacemaker manufacturers recommend that a minimum separation of 6 in (15.3 cm) be maintained between a wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research by and recommendations of Wireless Technology Research. To minimize the potential for interference, persons with pacemakers should

- Always keep the device more than 6 inches (15.3 cm) from their pacemaker when the device is switched on
- Not carry the device in a breast pocket
- Hold the device to the ear opposite the pacemaker to minimize the potential for interference.

If you have any reason to suspect that interference is taking place, switch off your device immediately.

HEARING AIDs

Some digital wireless devices may interfere with some hearing aids. If interference occurs, consult your service provider.

■ Vehicles

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles such as electronic fuel injection systems, electronic antiskid (antilock) braking systems, electronic speed control systems, air bag systems. For more information, check with the manufacturer or its representative of your vehicle or any equipment that has been added.

Only qualified personnel should service the device, or install the device in a vehicle. Faulty installation or service may be dangerous and may invalidate any warranty that may apply to the device. Check regularly that all wireless device equipment in your vehicle is mounted and operating properly. Do not store or carry flammable liquids, gases, or explosive materials in the same compartment as the device, its parts, or enhancements. For vehicles equipped with an air bag, remember that an air bags inflate with great force. Do not place objects, including installed or portable wireless equipment in the area over the air bag or in the air bag deployment area. If in-vehicle wireless equipment is improperly installed and the air bag inflates, serious injury could result.

■ Potentially explosive environments

Switch off your device when in any area with a potentially explosive atmosphere and obey all signs and instructions. Potentially explosive atmospheres include areas where you would normally be advised to turn off your vehicle engine. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death. Switch off the device at refuelling points such as near gas pumps at service stations. Observe restrictions on the use of radio equipment in fuel depots, storage, and distribution areas, chemical plants or where blasting operations are in progress. Areas with a potentially explosive atmosphere are often but not always clearly marked. They include below deck on boats, chemical transfer or storage facilities, vehicles using liquefied petroleum gas (such as propane or butane), and areas where the air contains chemicals or particles such as grain, dust or metal powders.

FCC regulations prohibit using your wireless device while in the air. The use of wireless telephones in an aircraft may be dangerous to the operation of the aircraft, disrupt the wireless telephone network, and may be illegal.

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

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■ Emergency calls

Important: Wireless phones, including this phone, operate using radio signals, wireless networks, landline networks, and user-programmed functions. Because of this, connections in all conditions cannot be guaranteed. You should never rely solely on any wireless phone for essential communications like medical emergencies.

To make an emergency call:

1. If the device is not on, switch it on. Check for adequate signal strength.

2. Press the **End** key as many times as needed to clear the display and ready the device for calls.

3. Key in the official emergency number for your present location. Emergency numbers vary by location.

4. Press the **Call** key.

If certain features are in use, you may first need to turn those features off before you can make an emergency call. If the device is in an offline or flight mode you must change the profile to activate the phone function before you can make an emergency call. Consult this guide or your service provider. When making an emergency call, give all the necessary information as accurately as possible. Your wireless device may be the only means of communication at the scene of an accident. Do not end the call until given permission to do so.

■ Certification Information (SAR)

THIS MODEL PHONE MEETS THE GOVERNMENT'S REQUIREMENTS FOR EXPOSURE TO RADIO WAVES.

Your mobile device is a radio transmitter and receiver. It is designed and manufactured not to exceed the limits for exposure to radio frequency (RF) energy adopted by the governments of the USA through the Federal Communications Commission (FCC) and Canada through Industry Canada (IC). These limits establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure guidelines for mobile devices employ a unit of measurement known as the Specific Absorption Rate or SAR. The SAR limit adopted by the USA and Canada is 1.6 watts/kilogram (W/kg) averaged over one gram of tissue. The limit incorporates a substantial margin of safety to give additional protection for the public to account for any variations in measurements. Tests for SAR are conducted using standard operating positions with the device transmitting at its highest certified power level in all tested frequency bands. The actual SAR level of an operating device can be well below the maximum value because the device is designed to use only the power required to reach the network. That amount changes depending on a number of factors such as how close you are to a network base station.

The highest SAR value reported to the FCC and IC for this device type when tested for use at the ear is 1.30 W/kg, and when properly work on the body is 0.79 W/kg. SAR information on file with the FCC can be found under the Display Grant section of **http://www.fcc.gov/oet/fccid** after searching on FCC ID QMNRM-19. SAR values reported in other countries may vary depending on differences in reporting and testing requirements and the network band. Additional SAR information may be provided under product information at www.nokia.com.

■ Technical information

Feature	Specification	Feature	Specification
Dimensions	Width 1.86 in (47.4 mm) Length 3.44 in (87.3 mm) Depth 1 in (27 mm)	Frequency range (Tx)	AMPS: 824.04–848.97 PCS: 1851.25–1908.75 MHz Cellular: 824.70–848.37 MHz
Weight	4.40 oz (126 g) with BL-6C Li-Ion Battery	Frequency range (Rx)	AMPS: 869.04–893.97 PCS: 1931.25–1988.75 MHz Cellular: 869.70–893.37 MHz
Wireless networks	CDMA 800 and 1900 AMPS 800	GPS frequency Bluetooth	1575.42 MHz
Volume	104 cc		

■ Battery information

This section provides information about battery charging times with the Travel Charger (ACP-12) and the Standard Travel Charger (ACP-7), talk-times, and standby times. Be aware that the information in this section is subject to change. For more information, contact your service provider.

Charging times
The following charging times are approximate with the BL-6C 1070 mAh Li-Ion battery:

Travel Charger (ACP-12): 1 hour 35 minutes

Standard Travel Charger (ACP-7): 3 hours 45 minutes

Talk and standby times
Operation times are estimates only and depend on signal strength, phone use, network conditions, features used, battery age and condition (including charging habits), temperatures to which the battery is exposed, and many other factors.

Talk time: 3.25 hours
Standby time: 11 days

Note: Talk time and standby times may vary among service providers. Check with your service provider for more information.

■ Patent information

Manufactured or sold under one or more of the following US patents:

5889770	6148209	6072787	5802465	5596571	6128322	5991627	5699482
5754976	5701392	5859843	6078570	5924026	6510148	6009328	5930233
5793744	6556824	6775548					

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■ Nokia One-Year Limited Warranty

Nokia Inc. ("Nokia") warrants that this cellular phone ("Product") is free from defects in material and workmanship that result in Product failure during normal usage, according to the following terms and conditions:

1. The limited warranty for the Product extends for ONE (1) year beginning on the date of the purchase of the Product. This one year period is extended by each whole day that the Product is out of your possession for repair under this warranty.

2. The limited warranty extends only to the original purchaser ("Consumer") of the Product and is not assignable or transferable to any subsequent purchaser/end-user.

3. The limited warranty extends only to Consumers who purchase the Product in the United States of America.

4. During the limited warranty period, Nokia will repair, or replace, at Nokia's sole option, any defective parts, or any parts that will not properly operate for their intended use with new or refurbished replacement items if such repair or replacement is needed because of product malfunction or failure during normal usage. No charge will be made to the Consumer for any such parts. Nokia will also pay for the labor charges incurred by Nokia in repairing or replacing the defective parts. The limited warranty does not cover defects in appearance, cosmetic, decorative or structural items, including framing, and any non-operative parts. Nokia's limit of liability under the limited warranty shall be the actual cash value of the Product at the time the Consumer returns the Product for repair, determined by the price paid by the Consumer for the Product less a reasonable amount for usage. Nokia shall not be liable for any other losses or damages. These remedies are the Consumer's exclusive remedies for breach of warranty.

5. Upon request from Nokia, the Consumer must prove the date of the original purchase of the Product by a dated bill of sale or dated itemized receipt.

6. The Consumer shall bear the cost of shipping the Product to Nokia in Melbourne, Florida. Nokia shall bear the cost of shipping the Product back to the Consumer after the completion of service under this limited warranty.

7. The Consumer shall have no coverage or benefits under this limited warranty if any of the following conditions are applicable:

    a) The Product has been subjected to abnormal use, abnormal conditions, improper storage, exposure to moisture or dampness, unauthorized modifications, unauthorized connections, unauthorized repair, misuse, neglect, abuse, accident, alteration, improper installation, or other acts which are not the fault of Nokia, including damage caused by shipping.

b) The Product has been damaged from external causes such as collision with an object, or from fire, flooding, sand, dirt, windstorm, lightning, earthquake or damage from exposure to weather conditions, an Act of God, or battery leakage, theft, blown fuse, or improper use of any electrical source, damage caused by computer or internet viruses, bugs, worms, Trojan Horses, cancelbots or damage caused by the connection to other products not recommended for interconnection by Nokia.

c) Nokia was not advised in writing by the Consumer of the alleged defect or malfunction of the Product within fourteen (14) days after the expiration of the applicable limited warranty period.

d) The Product serial number plate or the enhancement data code has been removed, defaced or altered.

e) The defect or damage was caused by the defective function of the cellular system or by inadequate signal reception by the external antenna, or viruses or other software problems introduced into the Product.

8. Nokia does not warrant uninterrupted or error-free operation of the Product. If a problem develops during the limited warranty period, the Consumer shall take the following step-by-step procedure:

a) The Consumer shall return the Product to the place of purchase for repair or replacement processing.

b) If "a" is not convenient because of distance (more than 50 miles) or for other good cause, the Consumer shall ship the Product prepaid and insured to:
Nokia Inc., Attn: Repair Department
795 West Nasa Blvd.
Melbourne, FL 32901

c) The Consumer shall include a return address, daytime phone number and/or fax number, complete description of the problem, proof of purchase and service agreement (if applicable). Expenses related to removing the Product from an installation are not covered under this limited warranty.

d) The Consumer will be billed for any parts or labor charges not covered by this limited warranty. The Consumer will be responsible for any expenses related to reinstallation of the Product.

e) Nokia will repair the Product under the limited warranty within 30 days after receipt of the Product. If Nokia cannot perform repairs covered under this limited warranty within 30 days, or after a reasonable number of attempts to repair the same defect, Nokia at its option, will provide a replacement Product or refund the purchase price of the Product less a reasonable amount for usage. In some states the Consumer may have the right to a loaner if the repair of the Product takes more than ten (10) days. Please contact the Customer Service Center at Nokia at the telephone number listed at the end of this warranty if you need a loaner and the repair of the Product has taken or is estimated to take more than ten (10) days.

f) If the Product is returned during the limited warranty period, but the problem with the Product is not covered under the terms and conditions of this limited warranty, the Consumer will be notified and given an estimate of the charges the Consumer must pay to have the Product repaired, with all shipping charges billed to the Consumer. If the estimate is refused, the Product will be returned freight collect. If the Product is returned after the expiration of the limited warranty period, Nokia's normal service policies shall apply and the Consumer will be responsible for all shipping charges.

9. You (the Consumer) understand that the product may consist of refurbished equipment that contains used components, some of which have been reprocessed. The used components comply with Product performance and reliability specifications.

10. ANY IMPLIED WARRANTY OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OR USE, SHALL BE LIMITED TO THE DURATION OF THE FOREGOING LIMITED WRITTEN WARRANTY. OTHERWISE, THE FOREGOING LIMITED WARRANTY IS THE CONSUMER'S SOLE AND EXCLUSIVE REMEDY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. NOKIA SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOSS OF ANTICIPATED BENEFITS OR PROFITS, LOSS OF SAVINGS OR REVENUE, LOSS OF DATA, PUNITIVE DAMAGES, LOSS OF USE OF THE PRODUCT OR ANY ASSOCIATED EQUIPMENT, COST OF CAPITAL, COST OF ANY SUBSTITUTE EQUIPMENT OR FACILITIES, DOWNTIME, THE CLAIMS OF ANY THIRD PARTIES, INCLUDING CUSTOMERS, AND INJURY TO PROPERTY, RESULTING FROM THE PURCHASE OR USE OF THE PRODUCT OR ARISING FROM BREACH OF THE WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT TORT, OR ANY OTHER LEGAL OR EQUITABLE THEORY, EVEN IF NOKIA KNEW OF THE LIKELIHOOD OF SUCH DAMAGES. NOKIA SHALL NOT BE LIABLE FOR DELAY IN RENDERING SERVICE UNDER THE LIMITED WARRANTY, OR LOSS OF USE DURING THE PERIOD THAT THE PRODUCT IS BEING REPAIRED.

11. Some states do not allow limitation of how long an implied warranty lasts, so the one year warranty limitation may not apply to you (the Consumer). Some states do not allow the exclusion or limitation of incidental and consequential damages, so certain of the above limitations or exclusions may not apply to you (the Consumer). This limited warranty gives the Consumer specific legal rights and the Consumer may also have other rights which vary from state to state.

12. Nokia neither assumes nor authorizes any authorized service center or any other person or entity to assume for it any other obligation or liability beyond that which is expressly provided for in this limited warranty including the provider or seller of any extended warranty or service agreement.

13. This is the entire warranty between Nokia and the Consumer, and supersedes all prior and contemporaneous agreements or understandings, oral or written, relating to the Product, and no representation, promise or condition not contained herein shall modify these terms.

14. This limited warranty allocates the risk of failure of the Product between the Consumer and Nokia. The allocation is recognized by the Consumer and is reflected in the purchase price.

15. Any action or lawsuit for breach of warranty must be commenced within eighteen (18) months following purchase of the Product.

16. Questions concerning this limited warranty may be directed to:
Nokia Inc.
Attn: Customer Service
7725 Woodland Center Blvd., Ste. 150
Tampa, FL 33614
Telephone: 1-888-NOKIA-2U (1-888-665-4228)
Facsimile: (813) 249-9619
TTY/TDD Users Only: 1-800-24-NOKIA (1-800-246-6542)

17. The limited warranty period for Nokia supplied attachments and accessories is specifically defined within their own warranty cards and packaging.

Appendix A Message from the CTIA
(Cellular Telecommunications & Internet Association) to all users of mobile phones

Safety is the most important call you will ever make.

A Guide to Safe and Responsible Wireless Phone Use

Tens of millions of people in the U.S. today take advantage of the unique combination of convenience, safety and value delivered by the wireless telephone. Quite simply, the wireless phone gives people the powerful ability to communicate by voice--almost anywhere, anytime--with the boss, with a client, with the kids, with emergency personnel or even with the police. Each year, Americans make billions of calls from their wireless phones, and the numbers are rapidly growing.

But an important responsibility accompanies those benefits, one that every wireless phone user must uphold. When driving a car, driving is your first responsibility. A wireless phone can be an invaluable tool, but good judgment must be exercised at all times while driving a motor vehicle--whether on the phone or not.

The basic lessons are ones we all learned as teenagers. Driving requires alertness, caution and courtesy. It requires a heavy dose of basic common sense---keep your head up, keep your eyes on the road, check your mirrors frequently and watch out for other drivers. It requires obeying all traffic signs and signals and staying within the speed limit. It means using seatbelts and requiring other passengers to do the same.

But with wireless phone use, driving safely means a little more. This brochure is a call to wireless phone users everywhere to make safety their first priority when behind the wheel of a car. Wireless telecommunications is keeping us in touch, simplifying our lives, protecting us in emergencies and providing opportunities to help others in need.

When it comes to the use of wireless phones, *safety is your most important call.*

Wireless Phone "Safety Tips"

Below are safety tips to follow while driving and using a wireless phone which should be easy to remember.

1 Get to know your wireless phone and its features such as speed dial and redial. Carefully read your instruction manual and learn to take advantage of valuable features most phones offer, including automatic redial and memory. Also, work to memorize the phone keypad so you can use the speed dial function without taking your attention off the road.

2 When available, use a hands free device. A number of hands free wireless phone accessories are readily available today. Whether you choose an installed mounted device for your wireless phone or a speaker phone accessory, take advantage of these devices if available to you.

3 Position your wireless phone within easy reach. Make sure you place your wireless phone within easy reach and where you can grab it without removing your eyes from the road. If you get an incoming call at an inconvenient time, if possible, let your voice mail answer it for you.

4 Suspend conversations during hazardous driving conditions or situations. Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow and ice can be hazardous, but so is heavy traffic. As a driver, your first responsibility is to pay attention to the road.

5 Do not take notes or look up phone numbers while driving. If you are reading an address book or business card, or writing a "to do" list while driving a car, you are not watching where you are going. It's common sense. Don't get caught in a dangerous situation because you are reading or writing and not paying attention to the road or nearby vehicles.

6 Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan your calls before you begin your trip or attempt to coincide your calls with times you may be stopped at a stop sign, red light or otherwise stationary. But if you need to dial while driving, follow this simple tip--dial only a few numbers, check the road and your mirrors, then continue.

7 Do not engage in stressful or emotional conversations that may be distracting. Stressful or emotional conversations and driving do not mix-- they are distracting and even dangerous when you are behind the wheel of a car. Make people you are talking with aware you are driving and if necessary, suspend conversations which have the potential to divert your attention from the road.

8 Use your wireless phone to call for help. Your wireless phone is one of the greatest tools you can own to protect yourself and your family in dangerous situations--with your phone at your side, help is only three numbers away. Dial 9-1-1 or other local emergency number in the case of fire, traffic accident, road hazard or medical emergency. Remember, it is a free call on your wireless phone!

9 Use your wireless phone to help others in emergencies. Your wireless phone provides you a perfect opportunity to be a "Good Samaritan" in your community. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 9-1-1 or other local emergency number, as you would want others to do for you.

10 Call roadside assistance or a special wireless non-emergency assistance number when necessary. Certain situations you encounter while driving may require attention, but are not urgent enough to merit a call for emergency services. But you still can use your wireless phone to lend a hand. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured or a vehicle you know to be stolen, call roadside assistance or other special non-emergency wireless number.

Careless, distracted individuals and people driving irresponsibly represent a hazard to everyone on the road. Since 1984, the Cellular Telecommunications Industry Association and the wireless industry have conducted educational outreach to inform wireless phone users of their responsibilities as safe drivers and good citizens. As we approach a new century, more and more of us will take advantage of the benefits of wireless telephones. And, as we take to the roads, we all have a responsibility to drive safely.

The wireless industry reminds you to use your phone safely when driving.

For more information, please call 1-888-901-SAFE.

For updates: http://www.wow-com.com/consumer/issues/driving/articles.cfm?ID=85

Appendix B Message from the FDA

(U.S. Food and Drug Administration) to all users of mobile phones

©July 18, 2001 For updates: http://www.fda.gov/cdrh/phones

Consumer Update on Wireless Phones

U.S. Food and Drug Administration

1. **Do wireless phones pose a health hazard?**

   The available scientific evidence does not show that any health problems are associated with using wireless phones. There is no proof, however, that wireless phones are absolutely safe. Wireless phones emit low levels of radiofrequency energy (RF) in the microwave range while being used. They also emit very low levels of RF when in the stand-by mode. Whereas high levels of RF can produce health effects (by heating tissue), exposure to low level RF that does not produce heating effects causes no known adverse health effects. Many studies of low level RF exposures have not found any biological effects. Some studies have suggested that some biological effects may occur, but such findings have not been confirmed by additional research. In some cases, other researchers have had difficulty in reproducing those studies, or in determining the reasons for inconsistent results.

2. **What is FDA's role concerning the safety of wireless phones?**

   Under the law, FDA does not review the safety of radiation-emitting consumer products such as wireless phones before they can be sold, as it does with new drugs or medical devices. However, the agency has authority to take action if wireless phones are shown to emit radiofrequency energy (RF) at a level that is hazardous to the user. In such a case, FDA could require the manufacturers of wireless phones to notify users of the health hazard and to repair, replace or recall the phones so that the hazard no longer exists.

   Although the existing scientific data do not justify FDA regulatory actions, FDA has urged the wireless phone industry to take a number of steps, including the following:

   • Support needed research into possible biological effects of RF of the type emitted by wireless phones;

   • Design wireless phones in a way that minimizes any RF exposure to the user that is not necessary for device function; and

   • Cooperate in providing users of wireless phones with the best possible information on possible effects of wireless phone use on human health.

   FDA belongs to an interagency working group of the federal agencies that have responsibility for different aspects of RF safety to ensure coordinated efforts at the federal level. The following agencies belong to this working group:

   • National Institute for Occupational Safety and Health

   • Environmental Protection Agency

   • Federal Communications Commission

   • Occupational Safety and Health Administration

   • National Telecommunications and Information Administration

   The National Institutes of Health participates in some interagency working group activities, as well.

FDA shares regulatory responsibilities for wireless phones with the Federal Communications Commission (FCC). All phones that are sold in the United States must comply with FCC safety guidelines that limit RF exposure. FCC relies on FDA and other health agencies for safety questions about wireless phones. FCC also regulates the base stations that the wireless phone networks rely upon. While these base stations operate at higher power than do the wireless phones themselves, the RF exposures that people get from these base stations are typically thousands of times lower than those they can get from wireless phones. Base stations are thus not the subject of the safety questions discussed in this document.

3. What kinds of phones are the subject of this update?
The term wireless phone refers here to hand-held wireless phones with built-in antennas, often called cell mobile or PCS phones. These types of wireless phones can expose the user to measurable radiofrequency energy (RF) because of the short distance between the phone and the user's head. These RF exposures are limited by Federal Communications Commission safety guidelines that were developed with the advice of FDA and other federal health and safety agencies. When the phone is located at greater distances from the user, the exposure to RF is drastically lower because a person's RF exposure decreases rapidly with increasing distance from the source. The so-called cordless phones; which have a base unit connected to the telephone wiring in a house, typically operate at far lower power levels, and thus produce RF exposures far below the FCC safety limits.

4. What are the results of the research done already?
The research done thus far has produced conflicting results, and many studies have suffered from flaws in their research methods. Animal experiments investigating the effects of radiofrequency energy (RF) exposures characteristic of wireless phones have yielded conflicting results that often cannot be repeated in other laboratories. A few animal studies, however, have suggested that low levels of RF could accelerate the development of cancer in laboratory animals. However, many of the studies that showed increased tumor development used animals that had been genetically engineered or treated with cancer-causing chemicals so as to be pre-disposed to develop cancer in the absence of RF exposure. Other studies exposed the animals to RF for up to 22 hours per day. These conditions are not similar to the conditions under which people use wireless phones, so we don't know with certainty what the results of such studies mean for human health.

Three large epidemiology studies have been published since December 2000. Between them, the studies investigated any possible association between the use of wireless phones and primary brain cancer, glioma, meningioma, or acoustic neuroma, tumors of the brain or salivary gland, leukemia, or other cancers. None of the studies demonstrated the existence of any harmful

health effects from wireless phone RF exposures. However, none of the studies can answer questions about long-term exposures, since the average period of phone use in these studies was around three years.

5. What research is needed to decide whether RF exposure from wireless phones poses a health risk?

A combination of laboratory studies and epidemiological studies of people actually using wireless phones would provide some of the data that are needed. Lifetime animal exposure studies could be completed in a few years. However, very large numbers of animals would be needed to provide reliable proof of a cancer promoting effect if one exists. Epidemiological studies can provide data that is directly applicable to human populations, but 10 or more years follow-up may be needed to provide answers about some health effects, such as cancer. This is because the interval between the time of exposure to a cancer-causing agent and the time tumors develop - if they do - may be many, many years. The interpretation of epidemiological studies is hampered by difficulties in measuring actual RF exposure during day-to-day use of wireless phones. Many factors affect this measurement, such as the angle at which the phone is held, or which model of phone is used.

6. What is FDA doing to find out more about the possible health effects of wireless phone RF?

FDA is working with the U.S. National Toxicology Program and with groups of investigators around the world to ensure that high priority animal studies are conducted to address important questions about the effects of exposure to radiofrequency energy (RF).

FDA has been a leading participant in the World Health Organization International Electromagnetic Fields (EMF) Project since its inception in 1996. An influential result of this work has been the development of a detailed agenda of research needs that has driven the establishment of new research programs around the world. The Project has also helped develop a series of public information documents on EMF issues.

FDA and the Cellular Telecommunications & Internet Association (CTIA) have a formal Cooperative Research and Development Agreement (CRADA) to do research on wireless phone safety. FDA provides the scientific oversight, obtaining input from experts in government, industry, and academic organizations. CTIA-funded research is conducted through contracts to independent investigators. The initial research will include both laboratory studies and studies of wireless phone users. The CRADA will also include a broad assessment of additional research needs in the context of the latest research developments around the world.

7. **How can I find out how much radiofrequency energy exposure I can get by using my wireless phone?**

   All phones sold in the United States must comply with Federal Communications Commission (FCC) guidelines that limit radiofrequency energy (RF) exposures. FCC established these guidelines in consultation with FDA and the other federal health and safety agencies. The FCC limit for RF exposure from wireless telephones is set at a Specific Absorption Rate (SAR) of 1.6 watts per kilogram (1.6 W/kg). The FCC limit is consistent with the safety standards developed by the Institute of Electrical and Electronic Engineering (IEEE) and the National Council on Radiation Protection and Measurement. The exposure limit takes into consideration the body's ability to remove heat from the tissues that absorb energy from the wireless phone and is set well below levels known to have effects.

   Manufacturers of wireless phones must report the RF exposure level for each model of phone to the FCC. The FCC website (http://www.fcc.gov/oet/rfsafety) gives directions for locating the FCC identification number on your phone so you can find your phone's RF exposure level in the online listing.

8. **What has FDA done to measure the radiofrequency energy coming from wireless phones?**

   The Institute of Electrical and Electronic Engineers (IEEE) is developing a technical standard for measuring the radiofrequency energy (RF) exposure from wireless phones and other wireless handsets with the participation and leadership of FDA scientists and engineers. The standard, Recommended Practice for Determining the Spatial-Peak Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques, sets forth the first consistent test methodology for measuring the rate at which RF is deposited in the heads of wireless phone users. The test method uses a tissue-simulating model of the human head. Standardized SAR test methodology is expected to greatly improve the consistency of measurements made at different laboratories on the same phone. SAR is the measurement of the amount of energy absorbed in tissue, either by the whole body or a small part of the body. It is measured in watts/kg (or milliwatts/g) of matter. This measurement is used to determine whether a wireless phone complies with safety guidelines.

9. **What steps can I take to reduce my exposure to radiofrequency energy from my wireless phone?**

   If there is a risk from these products--and at this point we do not know that there is--it is probably very small. But if you are concerned about avoiding even potential risks, you can take a few simple steps to minimize your exposure to radiofrequency energy (RF). Since time is a key factor in how much exposure a person receives, reducing the amount of time spent using a wireless phone will reduce RF exposure.

If you must conduct extended conversations by wireless phone every day, you could place more distance between your body and the source of the RF, since the exposure level drops off dramatically with distance. For example, you could use a headset and carry the wireless phone away from your body or use a wireless phone connected to a remote antenna.

Again, the scientific data do not demonstrate that wireless phones are harmful. But if you are concerned about the RF exposure from these products, you can use measures like those described above to reduce your RF exposure from wireless phone use.

10. What about children using wireless phones?

The scientific evidence does not show a danger to users of wireless phones, including children and teenagers. If you want to take steps to lower exposure to radiofrequency energy (RF), the measures described above would apply to children and teenagers using wireless phones. Reducing the time of wireless phone use and increasing the distance between the user and the RF source will reduce RF exposure.Some groups sponsored by other national governments have advised that children be discouraged from using wireless phones at all. For example, the government in the United Kingdom distributed leaflets containing such a recommendation in December 2000. They noted that no evidence exists that using a wireless phone causes brain tumors or other ill effects. Their recommendation to limit wireless phone use by children was strictly precautionary; it was not based on scientific evidence that any health hazard exists.

11. What about wireless phone interference with medical equipment?

Radiofrequency energy (RF) from wireless phones can interact with some electronic devices. For this reason, FDA helped develop a detailed test method to measure electromagnetic interference (EMI) of implanted cardiac pacemakers and defibrillators from wireless telephones. This test method is now part of a standard sponsored by the Association for the Advancement of Medical instrumentation (AAMI). The final draft, a joint effort by FDA, medical device manufacturers, and many other groups, was completed in late 2000. This standard will allow manufacturers to ensure that cardiac pacemakers and defibrillators are safe from wireless phone EMI. FDA has tested hearing aids for interference from handheld wireless phones and helped develop a voluntary standard sponsored by the Institute of Electrical and Electronic Engineers (IEEE). This standard specifies test methods and performance requirements for hearing aids and wireless phones so that no interference occurs when a person uses a compatible phone and a accompanied hearing aid at the same time. This standard was approved by the IEEE in 2000.

FDA continues to monitor the use of wireless phones for possible interactions with other medical devices. Should harmful interference be found to occur, FDA will conduct testing to assess the interference and work to resolve the problem.

12. Where can I find additional information?

For additional information, please refer to the following resources:

- FDA web page on wireless phones
  http://www.fda.gov/cdrh/phones/index.html
- Federal Communications Commission (FCC) RF Safety Program
  http://www.fcc.gov/oet/rfsafety
- International Commission on Non-Ionizing Radiation Protection
  http://www.icnirp.de
- World Health Organization (WHO) International EMF Project
  http://www.who.int/emf
- National Radiological Protection Board (UK)
  http://www.nrpb.org.uk/

July 18, 2001   For updates: http://www.fda.gov/cdrh/phones

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