

ENGLISH

GPRS Phone

USER'S MANUAL

MODEL: G7200

Please read this manual carefully
before operating your mobile phone.
Retain it for future reference.



For Your Safety



Important Information

This user guide contains important information on the use and operation of this phone. Please read all the information carefully for optimal performance and to prevent any damage to, or misuse of, the phone. Any changes or modifications not expressly approved in this user guide could void your warranty for this equipment.

Before You Start

Safety Instructions

WARNING! To reduce the possibility of electric shock, do not expose your phone to high humidity areas, such as the bathroom, swimming pool, etc.

Always store your phone away from heat. Never store your phone in settings that may expose it to temperatures less than 32°F or greater than 104°F, such as outside during a snowstorm or in your car on a hot day. Exposure to excessive cold or heat will result in malfunction, damage and/or catastrophic failure.

Be careful when using your phone near other electronic devices. RF emissions from your mobile phone may affect nearby inadequately shielded electronic equipment. You should consult with manufacturers of any personal medical devices such as pacemakers and hearing aides to determine if they are susceptible to interference from your mobile phone. Turn off your phone in a medical facility or at a gas station. Never place your phone in a microwave oven as this will cause the battery to explode.

IMPORTANT! Please read the TIA SAFETY INFORMATION on page 95 before using your phone.



For Your Safety

Safety Information

Please read and observe the following information for the safe and proper use of your phone and to prevent any unanticipated damage. Also, keep the user's manual in an accessible place at all the times after reading it.

- Unplug the power cord and charger during a lightning storm to avoid electric shock or fire.
- Do not use your phone in high explosive areas as the phone may generate sparks.
- Do not put your phone in a place subject to excessive dust, and keep the minimum required distance between the power cord and heat sources.
- Unplug the power cord prior to cleaning your phone, and clean the power plug pin when it is dirty.
- Do not damage the power cord by bending, twisting, pulling, or subjecting it to heat. Do not use the plug if it is loose as it may cause fire or electric shock.
- Hold the power cord plug firmly to plug and unplug the power cord. Ensure the plug is firmly connected. If it is not firmly connected, it may cause excessive heat or fire.
- Do not place a heavy item on the power cord. Do not allow the power cord to be crimped as it may cause fire or electric shock.
- Be careful not to let the battery contact metal conductors such as a necklace or coins. When shorted, it may cause an explosion.
- Do not disassemble or impact the battery as it may cause electric shock, short-circuit, and fire. Store the battery in a place out of reach of children.
- Using a damaged battery or placing a battery in your mouth may cause serious injury.



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- Do not place items containing magnetic components such as a credit card, phone card, bank book or a subway ticket, near your phone. The magnetic strip can be damaged by the phone.
 - Do not hold or let the antenna come in contact with your body during a call.
 - Talking on your phone for a long period of time may reduce the call quality due to heat generated during the use of the phone.
 - Do not allow excessive vibration or impact to the phone.
 - When you do not plan to use the phone for a long period of time, store it in a safe area with the power cord unplugged.

FCC RF Exposure Information

WARNING! Read this information before operating the phone. In August 1996, the Federal Communications (FCC) of the United States, with its action in Report and Order FCC 96-326, adopted an updated safety standard for human exposure to radio frequency (RF) electromagnetic energy emitted by FCC regulated transmitters. Those guidelines are consistent with the safety standard previously set by both U.S. and international standards bodies.

The design of this phone complies with the FCC guidelines and these international standards.

CAUTION

Use only the supplied and approved antenna. Use of unauthorized antennas or modifications could impair call quality, damage the phone, void your warranty and/or result in violation of FCC regulations. Do not use the phone with a damaged antenna. If a damaged antenna comes into contact with skin, a minor burn may result. Contact your local dealer for a replacement of antenna.



For Your Safety

Body-worn Operation

This device was tested for typical body-worn operations with the back of the phone kept 0.59 inches (1.5 cm) from the body. To comply with FCC RF exposure requirements, a minimum separation distance of 0.59 inches (1.5 cm) must be maintained between the user's body and the back of the phone. Third-party belt-clips, holsters, and similar accessories containing metallic components should not be used. Body-worn accessories that cannot maintain 0.59 inches (1.5 cm) separation distance between the user's body and the back of the phone, and have not been tested for typical body-worn operations may not comply with FCC RF exposure limits and should be avoided.

Vehicle Mounted External Antenna (optional, if available)

A minimum separation distance of 8 inches (20 cm) must be maintained between the user/bystander and the vehicle mounted external antenna to satisfy FCC RF exposure requirements. For more information about RF exposure, visit the FCC website at www.fcc.gov

FCC Part 15 Class B Compliance

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

Cautions for Battery

- Do not disassemble.
- Do not short-circuit.
- Do not expose to high temperature: 60°C (140°F).
- Do not incinerate.



Battery Disposal

- Please dispose of your battery properly or bring to your local wireless carrier for recycling.
- Do not dispose in fire or with hazardous or flammable materials.

Adapter (Charger) Cautions

- Using the wrong battery charger could damage your phone and void your warranty.
 - The adapter or battery charger is intended for indoor use only.
- Do not expose the adapter or battery charger to direct sunlight or use it in places with high humidity, such as the bathroom.



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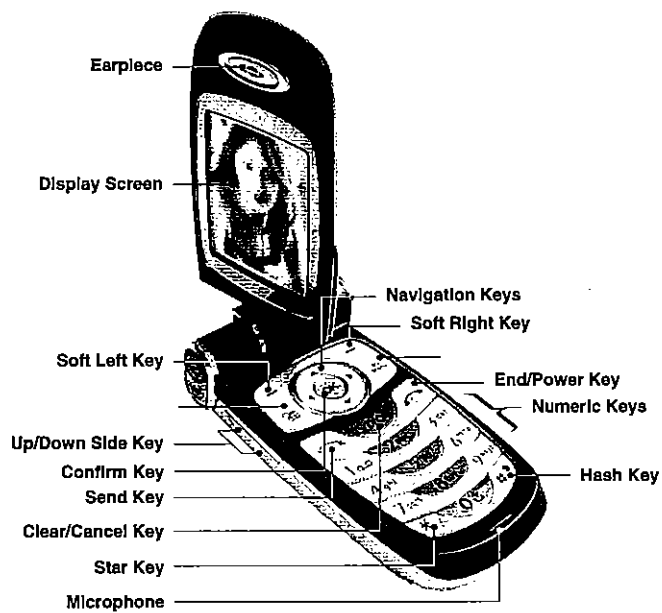


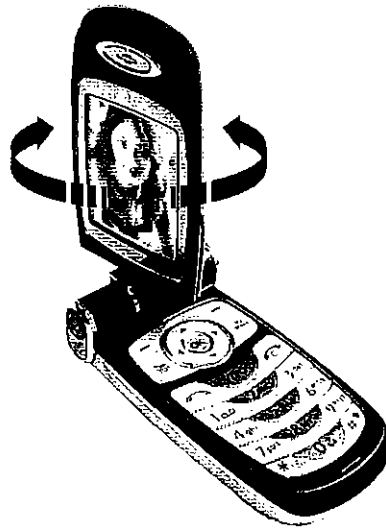
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Part of the Phone

Main body of the Phone



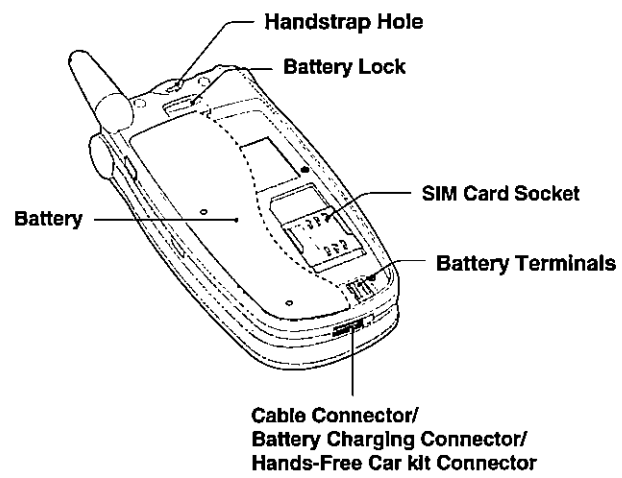


You can rotate LCD clockwise an angle of 90 degrees and counter-clockwise an angle of 180 degrees. However, if you turn it by force, it can cause serious damage.



Part of the Phone

Outside of the Phone







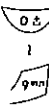



Key Description





The following shows key components of the phone.

Keypad Description



Key	Description
	<p>Soft Left Key / Soft Right Key Each of these keys performs the function indicated by the text on the display immediately above it.</p>
	<p>Vibration key You can activate the vibration directly by holding down this key.</p>
	<p>Message key You can go to Message menu (Inbox, Memory status, Scheduler or Alarm) directly.</p>
	<p>Navigation Keys Used to scroll through name, phone numbers, menus or setting options. When you press down key, you can view Favorites menu list.</p>
	<p>WAP Hot key (=Confirm key) If you press this key for a while, you can connect to WAP directly.</p>
	<p>Send Key You can dial a phone number and answer a call. If you press this key without entering a number, your phone shows the most recently dialed, received and missed numbers.</p>
	<p>Numeric Keys These keys are used mainly to dial in standby mode and enter numbers or characters in editing mode. When you press these keys for a long time.</p> <ul style="list-style-type: none"> Used to call your voicemail box by [1*]. Used to call for international call by [0*]. Used to call Speed dials by from [2*] to [9*].
	<p>END/PWR Key Used to end or reject a call. This key is also used as Power Key by pressing this key for a few seconds.</p>



Key Description

Key	Description
	You can delete the characters, go back the menu. In addition, you can view voice memo list when you press this key shortly in a standby mode.
	If you press this key for a long time, you can activate voice recognition.











Side of the Key

Key	Description
	Up/Down Side Key On closing a flip, when you press this key sequently, time, date, my display, and greeting note is displayed respectively. If you press this key once, time is displayed. It will show up depending on setting "Show time".
	Camera key This key is used to take a picture and save it.



Letter Keys

Each key can be used for several symbols. There are shown below.

Key	Description
	.,/?!-:'"_
	A B C 2 Å Ä Å Ä Å Ä Æ Ç a b c ä å ä å ä æ ç
	D E F 3 È É Ê Ë d e f è é ê ë
	G H I 4 Ì Í Î Ï Ğ g h i ï ï ğ
	J K L 5 j k l
	M N O 6 Ñ Ò Ó Ô Õ Œ m n o ñ ò ó ô õ œ
	P Q R S 7 Þ Š p q r s þ š
	T U V 8 Û Ü Ú t u v ù ú ú
	W X Y Z 9 w x y z
	[space] 0



Display Information

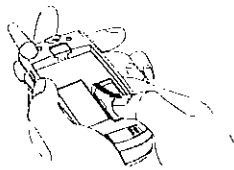
The screen displays several icons. There are described below.

On-Screen Icons

Icon/Indicator	Description
	Tells you the strength of the network signal.
	Call is connected.
	You can use GPRS service.
	Shows that you are using a roaming service.
	Line 1/2 is in use for outgoing calls – If you subscribe to the Two Line Service.
	The alarm has been set and is on.
	Tells you the status of the battery.
	You have received a text message.
	You have received a voice message.
	You have received an push message.
	You can view your schedule.
	All audible signals are turned off.
	General menu in profile.
	Loud menu in profile.
	Silent menu in profile.
	Headset menu in profile.
	Car menu in profile.
	You can divert a call.



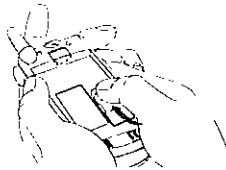
1. Inserting the SIM Card



Locate the SIM card socket in the back of the phone. Follow the steps below to install the SIM card.

1. Remove the battery if attached.
2. Slide the SIM card into the slot, under the silvery holders, with the golden connectors facing down and the cut corner to the right.

2. Removing the SIM Card



Follow the steps below to Remove the SIM card.

1. Remove the battery if attached.
2. Take out the SIM card from the slot.

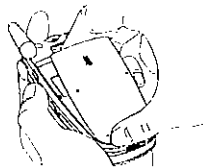
Notice

- Removing the battery from the phone whilst it is switched on may cause it to malfunction.
- The metal contact of the SIM card can be easily damaged by scratches. Pay special attention to the SIM card when you handle and install. Follow the instructions supplied with the SIM card.

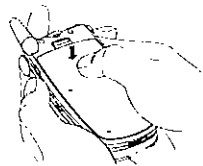


Installation

3. Installing the Battery



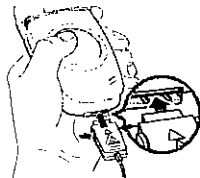
1. Position the lugs on the bottom of the battery into the retaining holder.



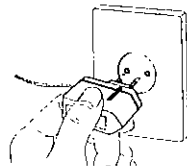
2. Then push to the half of the battery into position.

4. Charging the Battery

To connect the travel adapter to the phone, you must have installed the battery.



1. With the arrow facing you as shown in the diagram push the plug on the battery adapter into the socket on the bottom of the phone until it clicks into place.



2. Connect the other end of the travel adapter to the mains socket. Use only the included packing charger.





- Do not force the connector as this may damage the phone and/or the travel adapter.

5. Disconnecting the charger



Disconnect the travel adapter from the phone by pressing its side buttons as shown in the diagram.



- Ensure the battery is fully charged before using the phone.
- Do not remove your battery or the SIM card while charging.
- The moving bars of battery icon will stop after charging is complete.



- If the battery does not charge,
- switch the phone off.
 - ensure the battery is correctly fit.



Making and Answering Calls

Making a call

1. Key in phone number including the area code. If you want to delete number, press **C**.
2. Press **☎** to call the number.
3. Press **☎** to end the call.

International Calls

1. Press and hold the **☎** key for the international prefix.
“+” character may replace with the international access code.
2. Enter the country code, area code, and the phone number.
3. Press **☎**.

Making a call using the Phonebook

1. In standby mode, press **☎** [Names].
2. When the menu is displayed, you select Search by pressing **☎**.
3. If you find out the desired item through searching by a name or a number, press **☎** to call.

In call Menu



The menu displayed on the handset screen during a call is different to the default main menu reached from the idle screen, and the options are described here.

1 During a call

1-1 Putting a Call on Hold

When a call is made or answered, press the [Send] to place it on hold. When a call is held, press the [Send] to make it active.

1-2 Making a Second Call

You can get a dial number from phonebook to make a second call. Press [Names] then select **Search**. To save the dial number into phonebook during call, press [Names] then select **Add new**.

1-3 Swapping Between Two Calls

To switch between two calls, select [Options], then select **Swap** or just press [Send] key.

You can make one of two calls focused by pressing up/down arrow key. If you want to end one of two calls, make the call you want to end focused, then press [End] key when the call you want to end is focused.

1-4 Answering an Incoming Call


To answer an incoming call when the handset is ringing, simply press the [Send] key.

The handset is also able to warn you of an incoming call while you are already in a call. A tone sounds in the earpiece, and the display will show that a second call is waiting. This feature, known as Call Waiting, is only available if your network supports it. For details of how to activate and deactivate it see Call waiting [Menu 4-4-4].



If Call Waiting is on, you can put the first call on hold and answer the second, by pressing [Send] or by selecting [Answer], then **Hold & Answer**.





In call Menu



You can end the current call and answer the waiting call by selecting  [Munu], then **End & Answer**.

1-5 Rejecting an Incoming Call

When not in a call you can reject an incoming call without answering it by simply pressing the  [End] or  for a long time when the flip is closed.


When in a call you can reject an incoming call by pressing the  [Munu] key and selecting **Multiparty/Reject** or by pressing  [End] key.

1-6 Muting the Microphone


You can mute the microphone during a call by pressing the  [Options] key then selecting **Mute**. The handset can be unmuted by pressing the  [Unmute].

When the handset is muted, the caller cannot hear you, but you can still hear them.

1-7 Switching DTMF Tones on During a Call

To turn DTMF tones on during a call, for example, to allow your handset to make use of an automated switchboard, select  [Options], then **DTMF On**. DTMF tones can be turned off the same way.

1-8 Calling up Messages and SIM Tool kit main menu

The Messages and SIM Tool kit main menu options can be reached from the in-call menu by selecting  [Options]. SIM Tool kit menu is shown only when SIM in the handset supports SIM Tool kit service.





2 Multiparty or Conference Calls

The multiparty or conference service provides you with the ability to have a simultaneous conversation with more than one caller, if your network service provider supports this feature.


A multiparty call can only be set up when you have one active call and one call on hold, both calls having been answered. Once a multiparty call is set up, calls may be added, disconnected or separated (that is, removed from the multiparty call but still connected to you) by the person who set up the multiparty call.

The maximum callers in a multiparty call is five. Once started, you are in control of the multiparty call, and only you can add calls to the multiparty call.


2-1 Making a Second Call

You can make a second call while you are already in a call. To do this, enter the second number and press  [Send]. When you get second call the first call is automatically put on hold. You can swap between calls by selecting  [Options] then **Swap**.


2-2 Setting up a Multiparty Call

You can connect a call on hold to the currently active call to form a multiparty call by selecting  [Options] then **Multiparty/Join all**.

2-3 Putting the Multiparty Call on Hold

To put a multiparty call on hold, select  [Options] then **Multiparty/Hold all**.

2-4 Activate the Multiparty Call on Hold

To make a multiparty call on hold active, select  [Options] then **Multiparty/Join all**.



In call Menu

2-5 Adding Calls to the Multiparty Call

To join an active call to the held multiparty call, select [Options] then **Multiparty/Join all**.

2-6 Displaying Callers in a Multiparty Call

To scroll through the numbers of the callers who make up a multiparty call on the handset screen, press and keys.

2-7 Putting a Member of a Multiparty Call on Hold

To place one selected caller (whose number is currently displayed on-screen) of a multiparty call on hold, select [Options] then **Multiparty/Exclude**.

2-8 A Private Call in a Multiparty Call

To have a private call with one caller of a multiparty call, display the number of the caller you wish to talk to on the screen, then select [Options] and **Multiparty/Private** to put all the other callers on hold.

2-9 Ending a Multiparty Call

The currently displayed caller of a multiparty call can be disconnected by pressing the [End] key. To end a multiparty call, press [Options] then select **Multiparty/End multiparty**.

Selecting [Options] then **Multiparty/End all**, will end all the active and held calls.

Access Codes



You can use the access codes described in this section to avoid unauthorized use of your phone. The access codes (except PUK and PUK2 codes) can be changed by using [Menu 4-5-5].

PIN code (4 to 8 digits)

The PIN (Personal Identification Number) code protects your SIM card against unauthorized use. The PIN code is usually supplied with the SIM card. When **PIN code** is set **On**, your phone will request the PIN code every time it is switched on. On the contrary, when **PIN code** is set **Off**, your phone connects to the network directly without the request PIN code.

PIN2 code (4 to 8 digits)

The PIN2 code, supplied with some SIM cards, is required to access some functions such as Advice of call charge, Fixed Dial number. These functions are only available if supported by your SIM card.

PUK code (4 to 8 digits)

The PUK (PIN Unblocking Key) code is required to change a blocked PIN code. The PUK code may be supplied with the SIM card. If not, contact your local service provider for the code. If you lose the code, also contact your service provider.

PUK2 code (4 to 8 digits)

The PUK2 code, supplied with some SIM cards, is required to change a blocked PIN2 code. If you lose the code, also contact your service provider.

Security code (4 to 8 digits)

The security code protects the unauthorized use of your phone. It is usually supplied with the phone. This code is required to delete all phone entries and to activate "Reset settings" menu. The default number is "0000".



Menu Tree



1 Messages

- 1 Write short message
- 2 Write multimedia message
- 3 Inbox
- 4 Outbox
- 5 Voice mail
- 6 Info service
- 7 Templates
- 8 Settings



2 Call register

- 1 Missed calls
- 2 Received calls
- 3 Dialed calls
- 4 Delete recent calls
- 5 Call charges
- 6 GPRS information



3 Profiles

- 1 Vibrate only
- 2 Quiet
- 3 General
- 4 Loud

- 5 Headset
- 6 Car



4 Camera & VOD

- 1 Take picture
- 2 Take in modes
- 3 Take continuously
- 4 My album
- 5 Settings



5 Settings

- 1 Alarm clock
- 2 Date & Time
- 3 Phone settings
- 4 Call settings
- 5 Security settings
- 6 Network settings
- 7 Reset settings



6 Organiser

- 1 Scheduler
- 2 Phonebook



7 Fun & Tools

- 1 Games
- 2 Calculator
- 3 My folder
- 4 Melody composer
- 5 Unit converter
- 6 World time
- 7 Voice recorder
- 8 Activate IrDA



9 Java

- 1 Applications
- 2 Download
- 3 Memory status



10 Favorites



8 Internet

- 1 Home
- 2 Bookmarks
- 3 Push messages
- 4 Profiles
- 5 Go to URL
- 6 Cache settings
- 7 Security certification
- 8 Reset profiles
- 9 Browser version



11 SIM Service

This menu depends on SIM and the network services.





Messages [Menu 1]

This menu includes functions related to SMS (Short Message Service), MMS (Multimedia Message Service), voice mail, as well as the network's service messages.

Write short message [Menu 1-1]

You can write and edit text message, checking the number of message pages.

1. Enter the **Messages** menu by pressing  [Select].
2. If you want to write a new message, select **Write short message**.
3. To make text input easier, use T9. For details, see **How to use T9** (Page 33).
4. Press [Insert] to attach the followings.
5. If you want to set option for your text, or to finish your writing, press  [Options].



- The phone which supports EMS release 5 is available to send colour pictures, sounds, text styles, etc.. The other party may not receive pictures, sounds or text styles you sent properly if the phone does not support such options.



Insert

- **Symbol**

You can add special characters.

- **Picture**

You can insert the **Default** pictures or pictures in **My folder** that are available for short messages.

- **Sound**

You can insert sounds that are available for short messages.

- **Text templates**

You can use **Text templates** already set in the phone.

- **Phonebook**

You can add phone numbers or e-mail addresses in **Phonebook**.

- **Business card**

You can add your contact information to the message.





Messages [Menu 1]

Options

- **Send**

Sends text messages.

1. Enter numbers of recipient.
2. Press  key to add more recipients.
3. You can add phone numbers in the phone book.
4. Press  after entering numbers.

- **Save**

Stores messages in Outbox.

- **Font**

You can select **Size** and **Style** of fonts.

- **Colour**

You can select **Colour** of foreground and background.

- **Alignment**

You can make the message contents aligned **Right**, **Centre** or **Left**.

- **Add T9 dictionary**

You can add your own word. This menu can be shown only when edit mode is **Predictive (T9Abc/T9abc/T9ABC)**.

- **T9 language**

Select a T9 input mode.


- **Exit**

If you press **Exit** while writing a message, you can end the writing message and back to the Message menu. The message you have written is not saved.



Write multimedia message [Menu 1-2]

You can write and edit multimedia messages, checking message size.

1. Enter the **Messages** menu by pressing  [Select].
2. If you want to write a new message, select **Write multimedia message**.
3. You can create a new message or choose one of the multimedia message templates already made.
4. Press **Insert** to add **Symbol, Photo, Picture, Sound, Text template, Phonebook** or **Business card**.

Options

- **Preview**

You can preview multimedia messages you wrote.

- **Send**

You can send multimedia messages to multiple recipients, prioritise your message, and make it sent later as well.

- **Save**

You can save multimedia messages in the outbox or as templates.

- **Add slide**

You can add a slide before or after current slide.

- **Move to slide**

You can move to previous or next slide.

- **Delete slide**

You can delete current slides.



Messages [Menu 1]

- **Set slide format**
 - **Set timer**
You can set timer for slide, text, picture and sound.
 - **Swap picture and text**
You can switch the position of picture and text of the message.
- **Remove media**
You can remove pictures or sounds in the slide. This option can be shown only when any media exists.
- **Add T9 dictionary**
You can add your own word. This menu can be shown only when edit mode is **Predictive (T9Abc/T9abc/T9ABC)**.
- **T9 language**
Select a T9 input mode.
- **Exit**
You can back to the Message menu.

Reference!

- Be sure to select the appropriate profile for your particular network. These profiles are to be found under the following sub menus: Messages (1) a Settings (8), Multimedia Message a Network Settings (4) for MMS settings. And Internet (8) a Profiles (4) for GPRS settings.

Note

- If you select the picture (15K) on writing multimedia message, loading duration will take around 15 seconds at least. Furthermore, you can't activate any key during loading time. After 15 seconds, it is available to write multimedia message.



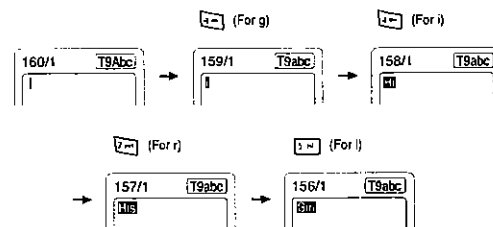
How to Use T9

T9 allows you to input text quickly.

In T9, you only need to press the key with the corresponding letter once. This is based on a built-in dictionary to which you can also add new words.

• Writing words by using T9.

1. Start writing a word by using the keys to . Press each key only once for one letter. To write for instance 'GirI', press , , , . The characters that you enter appear blocked.



The word changes after each keystroke. Therefore you shouldn't pay too much attention to how the word appears on the display until you have pressed all the appropriate keys.

To delete a character to the left, press .

To insert several numbers, hold down and key in the numbers.

If you hold down, you can change the type of language. (You can also use options.)

Also, the phone supports three modes: **Predictive** (T9Abc, T9ABC, T9abc), **Multitap** (ABC, abc), **Numeric** (123). If you want to change a mode, press key.



Messages [Menu 1]

Alternatively : Press key and select insert symbols.
Select the desired character and press
select.

2. When you have finished writing a word, check whether the word is correct.

If the word is correct : Press and write the next word.

If the word is not correct : Search by , (**Previous** and **Next word**).

Alternatively : If there is no word you want you can add your own word.
Press [Options] in the Predictive edit mode. Select Add T9 dictionary Menu. You can see the following.



3. To insert a punctuation mark, press repeatedly until the desired mark appears.

T9 languages

- You can select T9 Languages by selecting Menu.
(Default is T9 On)








Inbox [Menu 1-3]

You will be alerted when you have received messages. They will be stored in Inbox.

In Inbox, you can identify each message by icons. For detail, see the icon directive.

Icon directive


- [] Multimedia message
- [] Short message
- [] SIM message
- [] Read
- [] Notified multimedia message

If the phone shows 'No space for SIM message', you have to delete only SIM messages from Inbox. If the phone displays 'No space for message', you can make space of each repository as deleting messages, media and applications.

÷ SIM message

SIM message means the message exceptionally stored in SIM card.

For notified multimedia message, you have to wait for downloading and processing of the message. For notification setting, see [Menu 1-8-2] for detail.

To read a message, select one of the messages by pressing .

Reply

You can reply to the sender.



Messages [Menu 1]

Forward

You can forward the selected message to another party.

Return call

You can call back to the sender.

Delete

You can delete the current message.

Extract

You can extract picture, sound and text. They will be saved in My folder or Phonebook.

View information

You can view information about received messages; Sender's address, Subject (only for Multimedia message), Message date & time, Message type, Message size.

Replay (applicable to Multimedia message only)

You can replay multimedia messages.

⌘ Receive (In the case of notification message)




If **Multimedia message** is set to **Auto download off**, you can get only Notification. To receive a message, you need to select [Receive].

Outbox [Menu 1-4]

You can see sent and unsent messages here. For sent message, you can see the delivery status.

The browsing is same as that for the inbox message.



- [] Sent
- [] Unsent
- [] Delivery confirmed

*** When you already sent the message:**

Forward

You can forward the current message to other recipients.

Delete

You can delete the current message.

View information

You can view information about outbox messages; Recipient's address, Subject (only for Multimedia message), Message date & time, Message type, Message size.

*** When you didn't send the message:**

Edit

You can edit the message.

Send

You can send the message.

Delete

You can delete the current message.

View information

You can view information about outbox messages.



Messages [Menu 1]


Voice mail [Menu 1-5]

Listen to voice mail [Menu 1-5-1]

You can listen to voice mail.

Voice mail centre [Menu 1-5-2]

You can receive the voicemail if this feature is supported by your network service provider. When a new voicemail is arrived, the symbol will be displayed on the screen. Please check with your network service provider for details of their service in order to configure the phone accordingly.

1. Hold down  key in standby mode.
2. You can check the following submenus.

- **Home**

You can listen to voice mails by selecting **Home**.

- **Roaming**

Even when you are in abroad, you can listen to voice mails if roaming service is supported.


Info service [Menu 1-6]

(Dependent to network and subscription)

Info service messages are text messages delivered by the network to GSM. They provide general information such as weather reports, traffic news, taxis, pharmacies, and stock prices. Each type of information has the number; therefore, you can contact service provider as long as you have input the certain number for the information. When you have received an info service message, you can see the popup message to show you that you have received a message or the info service message is directly displayed. To view the message again or not in standby mode, follow the sequence shown below;



Read [Menu 1-6-1]

1. When you have received an info service message and select **Read** to view the message, it will be displayed on the screen. You can read another message by scrolling (←, →) or  [Next].
2. The message will be shown until another message is reached.

Receive [Menu 1-6-2]

- **Yes**

If you select this menu, your phone will receive Info service messages.

- **No**

If you select this menu, your phone will not receive Info service messages any more.

Alert [Menu 1-6-3]

- **Yes**

Your phone will beep when you have received Info service message numbers.

- **No**

Your phone will not beep even though you have received info service messages.

Languages [Menu 1-6-4]

You can select the language you want by pressing [On/Off]. Then, the info service message will be shown in the language that you selected.




Messages [Menu 1]

Topics (Dependent to network and subscription) [Menu 1-6-5]

- **Add new**

You can add Info service message numbers in the Phone memory with its nickname.

- **View list**

You can see Info service message numbers which you added. If you press  [Options], you can edit and delete info message category which you added.

- **Active list**

You can select Info service message numbers in the active list. If you activate an info service number, you can receive messages sent from the number.

Templates [Menu 1-7]

Text [Menu 1-7-1]

You have 11 text templates. You can change the predefined templates into your favorite ones or fill the <empty>s.

Multimedia [Menu 1-7-2]

You can use the following options.

Edit : You can edit multimedia templates.

Add new : Allows you to add new multimedia templates.

Write message : You can write multimedia messages using multimedia templates.

Delete : You can delete multimedia templates.



Business card [Menu1-7-3]

You can make your business card. Key in Name, Phone number, Fax number and Email.

Settings [Menu 1-8]

Short message [Menu 1-8-1]

- **Message types**

Text, Voice, Fax, Natl. paging, X.400, E-mail, ERMES

Usually, the type of message is set to **Text**. You can convert your text into alternative formats. Contact your service provider for the availability of this function.

- **Validity period**

This network service allows you to set how long your text messages will be stored at the message centre.

- **Delivery report**

If you set to **Yes**, you can check whether your message is sent successfully.

- **Reply via same service centre**

When a message is sent, it allows the recipients to reply and charge the cost of the reply to your telephone bill.

- **SMS centre**

If you want to send the text message, you can receive the address of SMS centre through this menu.



Messages [Menu 1]

Multimedia message [Menu 1-8-2]

- **Validity period**

This network service allows you to set how long your text messages will be stored at the message centre.

- **Delivery report**

If it is set to **Yes** in this menu, you can check whether your message is sent successfully.

- **Auto download**

If you select **On**, you receive multimedia messages automatically. If you select **Off**, you receive only notification message in the inbox and then you can check this notification.

- **Network settings**

If you select multimedia message server, you can set URL for multimedia message server.

- **Permitted message types**

Personal : Personal message.

Advertisements : Commercial message.

Information : Necessary information.

Memory status [Menu 1-8-3]

You can check free space and memory usage of each repository, SIM memory. You can go to each repository menu.

Call register [Menu 2]



Missed calls [Menu 2-1]

This menu shows recently missed numbers. You can call these numbers, save and view the date and the time.

Received calls [Menu 2-2]

This menu shows recently received numbers. You can call these numbers, save and view the date and the time.

Dialled calls [Menu 2-3]

This menu shows the latest dialled numbers up to 20.

Delete recent calls [Menu 2-4]

You can delete recent calls of **Missed calls**, **Received calls**, **Dialled calls** or **All calls**.

Call charges [Menu 2-5]

Within these submenus, you can view the duration and the call cost of your calls.



Call register [Menu 2]

Call duration [Menu 2-5-1]

This function allows you to view the duration of your Last Call, All Calls, Received calls and Dialed calls in hours, minutes and seconds. You can also reset the call timers.

1. Press [Menu] in standby mode.
2. Press for direct access or use {←(and →)} to enter **Call register**, then select **Call charges**.
3. Scroll to highlight **Call duration** and Press [Select].

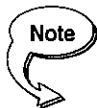
The following 5 submenus: **Last call**, **All calls**, **Received calls**, **Dialed calls** and **Reset all**.

Call costs [Menu 2-5-2]

This function allows you to check the cost of your last call, all calls, remaining and reset the cost. To reset the cost, you need the PIN2 code.

1. Press [Menu] in standby mode.
2. Press for direct access or use {←(and →)} to enter **Call register**, then select **Call charges**.
3. Scroll to highlight **Call costs** and Press [Select].

The following 4 submenus: **Last call**, **All calls**, **Remaining** and **Reset all**.





- The actual cost invoiced for calls by your service provider may vary, depending upon network features, rounding-off for billing, tax, and etc.



Settings [Menu 2-5-3] [SIM Dependent]

- **Set tariff**

You can set the currency type and the unit price. Contact your service providers to obtain charging unit prices. To select the currency or unit in this menu, you need the PIN2 code.

If you want to input €, £, \$ symbol, clear all currency strings and then press  key. If you want to change symbol, press  key again.



Note

- When all units have been used, no calls can be made except emergency calls. Depending on the SIM card, you need the PIN2 code to set a call cost limit.

- **Set credit**

This network service allows you to limit the cost of your calls by selected charging units. If you select **Read**, the number of remaining unit is shown. If you select **Change**, you can change your charge limit.

- **Auto display**

This network service allows you to see automatically the cost of your last calls. If set to **On**, you can see the last cost when the call is released.



Call register [Menu 2]

GPRS information [Menu 2-6]

You can check the amount of data transferred over the network through GPRS. In addition, you can view how much time you are online.

Call duration [Menu 2-6-1]

You can check the duration of **Last call** and **All calls**. You can also reset the call timers.

Data volumes [Menu 2-6-2]



You can check the **Sent**, **Received** or **All data volumes** and reset all.



Profiles [Menu 3]



In this menu, you can adjust and customize the phone tones for different events and environments.

1. Press  [Menu] in standby mode.
2. Press  for direct access or use {↶ and ↷}.
3. You can also enter this menu directly by pressing {↶ key in standby mode.
4. When you press side key for a long time with closing the flip, you can use Profile menu.

Vibrate only [Menu 3-1]

You can adjust the profile as **Vibrate only** if you need vibration mode. In the mode, all kinds of alert are Vibrate or Silent.

Quiet [Menu 3-2]

You can adjust the profile as **Quiet** if you are in quiet place.

General [Menu 3-3]

You can adjust the profile as **General**.

Loud [Menu 3-4]

You can adjust the profile as **Loud** if you are in a noisy environment.

Headset [Menu 3-5]

You can adjust the profile as **Headset** when you put on a headset.

Car [Menu 3-6]

You can adjust the profile as **Car** when you activate Handsfree kit.



Profiles [Menu 3]



- Headset and Car profiles can be activated only when Handsfree kit or Ear microphone put on the handset. However, their properties can be personalised.

Activate [Menu 3-x-1]

Activates the selected Profile.

Personalise [Menu 3-x-2]

Each has the submenus as shown below except for **Vibrate only**.

Call alert type

Allows to select alert type such as Ring, Vibrate, etc. for the incoming for adjusting environment.

Ring tone

Allows to set the ring tone for adjusting environment.

Ring volume

Allows to set the ring volume for adjusting environment. The volume of Power on / off sound and all the alert sounds set according to **Ring volume**.

Message alert type

Allows to alert when receiving a message for adjusting environment.

Message tone

Allows to select the alert tone for message reception.

Keypad volume

Allows to set the keypad volume for adjusting environment.



Keypad tone

Allows to select the keypad tone for adjusting environment.

Flip tone

Allows to set the flip tone for adjusting environment.

Effect sound volume

Allows to set the effect sound volume for adjusting environment.

Power on/off volume

Allows to set the power on/off volume for adjusting environment.

Auto answer

This function will be activated only when your phone is connected to the headset or handsfree kit.

- **Off** : The phone will not answer automatically.
- **After 5 secs** : After 5 seconds, the phone will answer automatically.
- **After 10 secs** : After 10 seconds, the phone will answer automatically.

Rename [Menu 3-x-3]

You can change the default profile name except of Vibrate only, Headset, and Car menus.



Note

- If you set the Handsfree kit to the phone, you can't use the vibrate mode related with Call alert type or Message alert menu. In car menu, the following submenus are available;
 - **Call alert type** : Ring, Silent
 - **Message alert type** : Ring once, Ring periodically, Silent



Camera & VOD [Menu 4]

With the camera you can take pictures of people and events while on the move.

Take picture [Menu 4-1]

1. Select **Camera**, and then press . If you want to reach this menu directly, press for a long time.
2. Focus on the subject to capture the image, and then press or .
3. If you want to save it, press or .

Reference!







- **Settings window**

You can control the image size, flash, brightness, colour, rotating and zooming by pressing side up key or or .



- **Resolution** : VGA 640*480, QVGA 320*240, QQVGA 160*120, PB : 48*48, Flash: On, Off.
- **Flash** : On, Off
- **Rotating** : Rotate an image 90 degrees anticlockwise.
- **Image quality** : High, Normal, and Low
- **Zooming** : x1, x2, x4. The default value is x1.
- **Brightness** : -2, -1, Standard, +1, +2.
- **Colour** : True colour, Sepia, Black/ White.



Activating a key

-  : Move the item which you set.
-  : Take and save a picture.
-  : Go back to the previous menu or exit from camera mode.
-  : In application setting, you can change the default value.
-  : Move the item which you set.
-  : Take and save a picture

Take in modes [Menu 4-2]

You can take a picture on the various of backgrounds. Furthermore, you can select a frame by pressing  , .

TAKING PICTURES FOR SENDING VIA MMS OR E-MAIL

Caution should be taken when taking pictures in the "Take in modes" mode. If planning to send these pictures via MMS or e-mail, these pictures should always be taken at 0 degrees. When taking pictures in the normal picture mode the rotation can be 0, 90, 180 or 270 degrees.






Reference!

- In this mode, you can't change the settings of resolution.



Camera & VOD [Menu 4]

Take continuously [Menu 4-3]

You can take the maximum of 9 pictures subsequently at the same time. After taking a picture, you can view it by pressing  ,  . You can also save it by pressing .

Reference!

- If you set 640x480 in resolution, you can take only 3 pictures. In case of 320x240, it is available to 6 pictures.

My album [Menu 4-4]

You can view and send a picture. In addition, you can set the window as a background.

All pictures [Menu 4-4-1]

You can view the maximum of 9 pictures in order.

General pictures [Menu 4-4-2]

You can view all pictures except of frame and phone book ones.

Mode pictures [Menu 4-4-3]

You can view all frame pictures.



Phonebook pictures [Menu 4-4-4]

You can view all phonebook pictures.

• Option

- **Multi view** : You can view the maximum of 9 thumbnails in a screen.
- **Write multimedia messages** : You can send a picture thru MMS.
- **Set as wallpaper** : You can set a picture as a wallpaper.
- **Delete** : You can delete a picture.
- **Edit title** : You can edit the title of picture.

Settings [Menu 4-5]

Memory status [Menu 4-5-1]

You can check the capacity of total, used, and free memory.

Clear album [Menu 4-5-2]

You can delete all pictures which saved in a memory.



Camera & VOD [Menu 4]

Playing a video

1. Press the VOD hot key in stand-by mode or select the 'Camera & VOD' in the top menu.
2. Select the menu 'Video viewer'.
3. Press the $\overline{\text{H}}$ key or the $\overline{\text{V}}$ key to select a video file and press the Ⓢ key.

VOD option menu

To access the VOD option menu, press the left soft key after selecting a file in the VOD list.

To play video file, select **Play**.

To delete a video file, select **Delete** and select **Yes** to confirm.

To rename a video file, select **Rename** and edit the title.

To delete all the video files, select **Delete all** and select **Yes** to confirm.

In playing state

To give pause to the video, press the Ⓢ key.

To resume the video, press the Ⓢ key.

To terminate video player, press the $\overline{\text{V}}$ key or the $\overline{\text{C}}$ key.

For fast forward, press the $\overline{\text{F}}$ key.

For fast rewind, press the $\overline{\text{R}}$ key.

To increase the volume, press the $\overline{\text{H}}$ key or the volume up key.

To decrease the volume, press the $\overline{\text{V}}$ key or the volume down key.

To play in the full screen mode, press the VOD key.



For pause or resume in the full screen mode, press the VOD key.

To return the normal play mode in the full screen mode, press the $\overline{\text{F}}$ key or the $\overline{\text{C}}$ key.

Settings [Menu 5]





You can set the following menus for your convenience and preferences.

1. Press  [Menu] in standby mode.
2. Press  for direct access to enter **Settings**.

Alarm clock [Menu 5-1]

You can set up to 5 alarm clocks to go off at a specified time.

1. Select **On** and enter the alarm time you want.
2. Select the repeat period: **Once, Mon~Fri, Mon~Sat, Everyday**.
3. Select the alarm tone you want and press  [OK].
4. Edit the alarm name and press  [OK].
5. If you set **Alarm clock** to **Power off alarm** the alarm goes off at a specified time even though the phone is switched off.

Date & Time [Menu 5-2]

You can set functions relating to the date and time.

Set date [Menu 5-2-1]

You can enter the current date.

Date format [Menu 5-2-2]

You can set the Date format such as **DD/MM/YYYY, MM/DD/YYYY, YYYY/MM/DD**. (D: Day / M: Month / Y: Year)

Set time [Menu 5-2-3]

You can enter the current time.

Time format [Menu 5-2-4]

You can set the time format between 24-hour and 12-hour.



Settings [Menu 5]

Phone settings [Menu 5-3]

You can set functions relating to the phone.

Display settings [Menu 5-3-1]

- **Wallpaper**

You can select the background pictures in standby mode.

- **Default**

You can select a picture or an animation of wallpaper by pressing [← or →].

- **My folder**

You can select a picture or an animation as wallpaper.

- **Incoming calls**

You can set the animation as getting a call.

- **Outgoing calls**

You can set the animation as making a call.

- **Greeting note**

If you select **On**, you can edit the text which is displayed in standby mode.

- **Backlight**

You can set the light-up duration of the internal display.

- **LCD contrast**

You can set the brightness of LCD by pressing [← (,) →].

- **Information window**

You can preview the current state of the selected menu before open the menu. The state is shown at bottom of the display.



- **Menu colour**

You can select the preferred menu colour among various combination.


- **Sub LCD [Menu 5-3-2]**

- **My display** : You can set the animation when you press side key.
- **Show time** : You can set the duration when you scroll sub LCD.
- **Brightness** : You can set the brightness when you scroll sub LCD.
- **Font colour** : You can set the font colour which is displayed on sub LCD.

- **Language [Menu 5-3-3]**

You can change the language for the display texts in your phone. This change will also affect the Language Input mode.

- **Call settings [Menu 5-4]**

You can set the menu relevant to a call by pressing  [Select] in the Setting menu.

- **Call divert [Menu 5-4-1]**

The Call divert service allows you to divert incoming voice calls, fax calls, and data calls to another number. For details, contact your service provider.

- **All voice calls**

Diverts voice calls unconditionally.

- **If busy**

Diverts voice calls when the phone is in use.

- **If no reply**

Diverts voice calls which you do not answer.



Settings [Menu 5]

- **If out of reach**
Diverts voice calls when the phone is switched off or out of coverage.
- **All data calls**
Diverts to a number with a PC connection unconditionally.
- **All fax calls**
Diverts to a number with a fax connection unconditionally.
- **Cancel all**
Cancels all call divert service.
- **The submenus**
Call divert menus have the submenus shown below.
 - **Activate**
Activate the corresponding service.

To voice mail centre
Forwards to message centre. This function is not shown at All data calls and All fax calls menus.
 - To other number**
Inputs the number for diverting.
 - To favourite number**
You can check recent 5 diverted numbers.
 - **Cancel**
Deactivate the corresponding service.
 - **View status**
View the status of the corresponding service.




Answer mode [Menu 5-4-2]


- **Flip open**

If you select this menu, you can receive an incoming call by only opening the flip.

- **Press any key**

If you select this menu, you can receive a call by pressing any key except  [End] key.

- **Send only**

If you select this menu, you can receive a call by only pressing  [Send] key.

Send my number [Menu 5-4-3]

(network and subscription dependent)

- **On**

You can send your phone number to another party. Your phone number will be shown on the receiver's phone.

- **Off**

Your phone number will not be shown.

- **Set by network**

If you select this, you can send your phone number depending on two line service such as line 1 or line 2.



Settings [Menu 5]

Call waiting [Menu 5-4-4]

(network dependent)

- **Activate**

If you select Activate, you can accept a waiting (receiving) call.

- **Cancel**

If you select Cancel, you cannot recognize the waiting (receiving) call.

- **View status**


Shows the status of Call waiting.

Minute minder [Menu 5-4-5]

If you select **On**, you can check the call duration by deep sound every minute during a call.

Voice dial [Menu 5-4-6]

- **Automatic** : You can enter the voice dial mode whenever you open the flip.

- **Manual** : You can enter the voice dial mode by holding down  key.

Auto redial [Menu 5-4-7]

- **On**

When this function is activated, the phone will automatically try to redial in the case of failure to connect a call.

- **Off**

Your phone will not make any attempts to redial when the original call has not connected.



Closed User Group [Menu 5-4-8]

(network dependent)


Restricts usage of the phone with numbers that belong to certain user groups. When this function is used, every outgoing call is associated with a group index. If a group index is specified, it is used for all outgoing calls. If no group index is specified, the network will use the preferential index (a specific index that is stored in the network).

- A. Default** : Activate the default group agreed on with the network operator.
- B. Set** : Setting the selected CUG Index.
- C. Edit** : Editing the CUG name and CUG Index.
- D. Delete** : Deleting the selected CUG.
- E. Delete all** : Deleting All CUG.

Security settings [Menu 5-5]

PIN code request [Menu 5-5-1]

In this menu, you can set the phone to ask for the PIN code of your SIM card when the phone is switched on. If this function is activated, you'll be requested to enter the PIN code.

1. Select PIN code request in the security settings menu, and then press  [Select].
2. Set **On/Off**.
3. If you want to change the setting, you need to enter PIN code when you switch on the phone.
4. If you enter wrong PIN code more than 3 times, the phone will lock out. If the PIN is blocked, you will need to key in PUK code.
5. You can enter your PUK code up to 10 times. If you put wrong PUK code more than 10 times, you can not unlock your phone. You will need to contact your service provider.



Settings [Menu 5]

Phone lock [Menu 5-5-2]

You can use security code to avoid unauthorized use of the phone. Whenever you switch on the phone, the phone will request security code if you set phone lock to **On**. If you set phone lock to **Automatic**, your phone will request security code only when you change your SIM card.

Call barring [Menu 5-5-3]

The Call barring service prevents your phone from making or receiving certain category of calls. This function requires the call barring password. You can view the following submenus.

- **All outgoing**

The barring service for all outgoing calls.

- **Outgoing international**

The barring service for all outgoing international calls.

- **Outgoing International except home country**

The barring service for all international outgoing calls except home network.

- **All incoming**

The barring service for all incoming calls

- **Incoming when abroad**

The barring service for all incoming calls when roaming

- **Cancel all**

You can cancel all barring services.

- **Change password**

You can change the password for Call Barring Service.



Each call barring menu has following submenus:

- **Activate**
Allows to request the network to set call restriction on.
- **Cancel**
Set the selected call restriction off.
- **View status**
View the status whether the calls are barred or not.

Fixed dial number [Menu 5-5-4] (SIM dependent)


You can restrict your outgoing calls to selected phone numbers. The numbers are protected by your PIN2 code.

- **Activate**
You can restrict your outgoing calls to selected phone numbers.
- **Cancel**
You can cancel fixed dialling function.
- **Number list**
You can view the number list saved as Fixed dial number.

Change codes [Menu 5-5-5]

PIN is an abbreviation of Personal Identification Number used to prevent use by only unauthorized person.

You can change the access codes: **PIN code, PIN2 code, Security code.**

1. If you want to change the Security code/PIN/PIN2 code input your original code, and then press  [OK].
2. Input new Security code/PIN/PIN2 code and verify them.



Settings [Menu 5]

Network settings [Menu 5-6]

You can select a network which will be registered either automatically or manually. Usually, the network selection is set to **Automatic**.

Automatic [Menu 5-6-1]

If you select Automatic mode, the phone will automatically search for and select a network for you. Once you have selected "Automatic", the phone will be set to "Automatic" even though the power is off and on.

Manual [Menu 5-6-2]

The phone will find the list of available networks and show you them. Then you can select the network which you want to use if this network has a roaming agreement with your home network operator. The phone let you select another network if the phone fails to access the selected network.

Preferred [Menu 5-6-3]

You can set a list of preferred networks and the phone attempts to register with first, before attempting to register to any other networks. This list is set from the phone's predefined list of known networks.

Reset settings [Menu 5-7]

You can initialize all factory defaults. You need Security code to activate this function.









Organiser [Menu 6]



Scheduler [Menu 6-1]

When you enter this menu a Calendar will show up. On top of the screen there are sections for date. Also on bottom of the screen there are sections for icons (schedule, memo). Whenever you change the date, the calendar will be updated according to the date. And square cursor will be used to locate the certain day. If you see under bar on the calendar, it means that there is a schedule or memo that day. This function helps to remind you of your schedule and memo. The phone will sound an alarm tone if you set this for the note.

To change the day, month, and year.

Key	Description	Key	Description
 	Yearly	 	Weekly
 	Monthly	 	Daily

Note

- Your phone should be switched on to use this function.



Organiser [Menu 6]

Add new [Menu 6-1-1]

You can edit maximum 39 characters and take up to 20 notes.

• Schedule

Input the subject, the schedule time, the repeat, the alarm by pressing allowed keys.

• Memo

1. Select **Add new** by pressing [Select].
2. Press **Memo**.
3. Input the memo and then press [OK].

View [Menu 6-1-2]

Shows the note for the chosen day. Use , to browse through the note lists. If you set alarm for the note, Alarm watch is displayed. At that time, if you press [Select], you can see the note in detail. Press [Options] to delete, edit the note you selected.

View all [Menu 6-1-3]

Shows the notes that are set for all days. Use , to browse through the note lists. You can use the same menu as “View” by pressing [Options].

Delete past [Menu 6-1-4]

You can delete the past schedule that has been already notified you.

Delete all [Menu 6-1-5]

You can delete for the all note(s).



Phonebook [Menu 6-2]

1. To use **Phonebook**, press [Names] in standby mode.
2. To use **Phonebook**, press [Menu] in standby mode and select **Organiser**.

Search [Menu 6-2-1]

(Calling from phonebook)

1. In standby mode, press [Names].
2. **Search** by pressing [Select].
3. Enter the name whose phone numbers or e-mail address you want to search or Select 'List' to view phonebook.
4. Instant searching is available by inputting the initial letter of the name or number you want to search.
5. If you want to edit, delete, copy an entry, or to add the voice to one, select [Options]. The following menu will be displayed.
 - **Edit** : You can edit the name, number, E-mail and fax by pressing [OK].
 - **Write message**: After you have found the number you want, you can send a message to the selected number.
 - **Copy** : You can copy an entry from SIM to phone or from phone to SIM.
 - **Voice** : You can add the voice to the entry or change the voice tag.
 - **Main number** : You can select the one out of mobile, home, office that you often use. The main number will be displayed first, if you set this.
 - **Delete** : You can delete an entry.



Organiser [Menu 6]

Add new [Menu 6-2-2]

You can add phonebook entry by using this function.

Phone memory capacity is 200 entries. SIM card memory capacity depends on the cellular service provider.

You can also save 20 characters of name in The Phone memory, and save characters in the SIM card. The number of character is SIM dependent feature.

1. Open the phonebook first by pressing [Names] in standby mode.
2. Scroll to highlight **Add new**, and press [Select].
3. Select the memory you want to save: **SIM** or **Phone**. If set to Phone, you need to select which number you want as Main number.
 - a. Press [OK] to input a name.
 - b. Press [OK], then you can input a number.
 - c. Press [OK].
 - d. You can set a group for the entry by pressing [Left, Right]:
 - e. You can set a character and a picture for the entry by pressing [Up, Down, Left, Right].
 - f. If you want to add the voice, press [Yes].



- When you save text and picture in a phone book at the same time, you can view a picture on any condition.

You should speak words within 2 seconds, and the phone asks you to speak it again to ensure the accuracy of voice recognition. After voice recognition has finished, Voice is attached successfully.



Note

- The voice can only be attached to the main number which you set. For example, if you change the main number, voice will be automatically attached to the changed number. This means that you cannot attach voice to mobile, office, home number simultaneously.
- You can add voice tag to phone number in SIM card. The voice tag can be erased if you remove or change SIM card.

Caller Groups [Menu 6-2-3]

You can list up to 20 members per one group. There are 7 groups you can make lists to.

1. In standby mode, press [Names].
2. Scroll to **Caller groups** item then press [Select], and every Group list will be displayed.
3. Select Group name you want by pressing [Select].

- **Member list**

Shows the group members you have selected.

- **Group ring tone**

Allows you to specify ring tone for the group members' call.

- **Group icon**

Allows you to select the icon dependent on Group.

- **Add member**

You can add group members. Each group member shouldn't be exceeded 20.



Organiser [Menu 6]

- **Remove member**

You can remove the member from the Group member list. But the name and the number still remain in phonebook.

- **Rename**

You can change a group name.

Speed dials [Menu 6-2-4]

You can assign any of the keys, [2-9] to [9] with a Name list entry. You can call directly by pressing this key for 2-3 seconds.

1. Open the phonebook first by pressing [Names] in standby mode.
2. Scroll to **Speed dial**, then press [Select].
3. If you want to add Speed dial, select **(Empty)**. Then, you can search the name in phonebook.
4. Select allocated a name by speed dial, and choose **Change** or **Delete** to edit the name.

- **Change**

You can allocate a new phone number to the dial key.

- **Delete**

You can remove the allocated phone number from the dial key.

Voice list [Menu 6-2-5]

You can see all phone numbers which contain voice. After selecting phone number by using [Up] and [Down] and press [Options], you can see the following submenus.

- **Play** : You can play voice which is attached to phone number.
- **Change** : You can change voice.
- **Delete** : You can delete voice.
- **Call** : You can call by selecting this menu.



Settings [Menu 6-2-6]

1. Press [Names] in standby mode.
2. Scroll to **Settings**, then press [Select].

- **Set memory**

Scroll to highlight **Set memory**, then press [Select].

- If you select **Variable**, when adding entry, the phone will ask where to store.
- If you select **SIM** or **Phone**, the phone will store an entry to SIM or phone.

- **Search by**

Scroll to highlight **Search by**, then press [Select].

- If you select **Variable**, the phone will ask how to search.
- If you select **Name** or **Number**, the phone will search an entry by Name or Number.

- **View options**

Scroll to highlight **View options**, then press [Select]

- **Name only** : Set the phonebook list with displaying only name.
- **With pictures** : Set the phonebook list with the information of character and picture.



Organiser [Menu 6]

Copy all [Menu 6-2-7]

You can copy/move entries from SIM card memory to Phone memory and vice versa.

1. Open the Phonebook first by pressing [Names] in standby mode.
2. Scroll to **Copy all**, then press [Select] to enter this menu.
 - **SIM to Phone** : You can copy the entry from SIM Card to Phone memory.
 - **Phone to SIM** : You can copy the entry from Phone memory to SIM Card.
3. You can see the following submenus.
 - **Keep original** : When copying, Original Dial Number is kept.
 - **Delete original** : When copying, Original Dial Number will be erased.

Delete all [Menu 6-2-8]

You can delete all entries in SIM, Phone, and Voice. This function requires Security code except for voice.

1. Press [Names] in standby mode and select Delete all, press [Select].
2. Then select a memory to erase.
3. Enter security code and Press [OK] or [Back].



Information [Menu 6-2-9]

- **Service dial number**

Use this function to access a particular list of services provided by your network operator (if supported by the SIM card).

1. Open the phonebook first by pressing [Names] in standby mode and select **Information**.
2. Scroll to **Service dial number**, then press [Select] to enter.
3. The names of the available services will be shown.
4. Use and to select a service. Press [Send].

- **Memory status**

This feature allows you to see how many free and in-use are in your phonebook.

1. Open the phonebook first by pressing [Names] in standby mode. Select **Information** by pressing [Select].
2. Scroll to **Memory status**, then press [OK].

- **Own number (SIM dependent)**

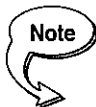
You can check your own number in SIM card.



Fun & Tools [Menu 7]




Games [Menu 7-1]

The phone offers you the games to play with.








- The control keys are different depending on a game. However, each one has an introduction to explain the main control keys. The rest ones are as follows.

[Common Key Function]

-  : Game menu,
-  : Back
-  : Pause or resume a game

Calculator [Menu 7-2]

This contains the standard functions such as $+$, $-$, \times , \div : **Addition, Subtraction, Multiplication, and Division.**

1. Input the numbers by pressing numeric keys.
2. Use a navigation key to select a sign for calculation.
3. Then input the numbers.
4. Press  [Result] to view the result.
5. Press [Reset] or enter numbers to repeat the procedure above.
6. Use  key to erase any numbers or signs.
7. If you press  key, you can input a minus number. In addition, If you press  key, you can input a decimal number.
8. To end **Calculator**, press  [Back].



My folder [Menu 7-3]

Enables you to view the downloaded pictures and sounds. They can be set as Wallpaper or Ring tone. You can view, listen, delete or rename downloaded data.

Pictures [Menu 7-3-1]

Sound [Menu 7-3-2]

The Submenus for each main one

- **Edit title**

You can edit the title for each download contents.

- **Write message**

You can write Short message/Multimedia message(available depending on type of Media) with attachment pictures or sounds.

- **Set as Wallpaper/Set as ring tone**

You can set downloaded sounds or pictures as wallpaper or Ring tone.

- **Delete**

You can delete each downloaded content.

- **Delete all**

You can delete all downloaded contents.



Fun & Tools [Menu 7]

Melody composer [Menu 7-4]

You can compose a ring tone melody which you want. When you enter this function, the tones that you composed before are played. To enter a new or edit an existing tone:

1. Enter the desired notes. (F1 ~ F7) : CDEFGAB)
2. To adjust the characters of the note, do as follows:
 - **Duration** : [B-] shortens and [B+] lengthens the duration of the note or rest.
 - **Rest** : [R] inserts a rest of the same duration as the previous note.
 - **Octave** : [O] sets the octave for new notes.
 - **Sharp note** : [S] makes the note sharp.

Unit converter [Menu 7-5]

This converts any measurement into a unit you want. There are 4 types that can be converted into units: **Length, Area, Weight, and Volume.**

1. You can select one of four unit types by pressing [Unit] key.
2. Select the standard value by using [← , →].
3. Select the unit you want to convert by pressing [u] and [v].
4. You can check the converted value for the unit you want. Also, you can input a decimal number by pressing [.]

World time [Menu 7-6]

You can view clocks of the world's major cities.

1. Select the city belonged to the time zone by pressing [← , →] key.
2. You can set the current time to the city time you select by pressing [Set].



Voice recorder [Menu 7-7]

The voice memo feature you to record up to 10 voice messages and each memo is up to 20 Seconds.

Record [Menu 7-7-1]

1. You can record voice memo in Voice recorder menu and also holding down **C** in the standby mode.
2. Once recording is started, the message Recording and the remaining time is displayed.
3. If you want to finish recording, press **↵** [Save].
4. Key in Voice memo title, press **↵** [OK].

View list [Menu 7-7-2]

The phone shows voice memo list. You can Playback and Delete the recorded voice memo.

Activate IrDA [Menu 7-8]

If you activate this function, you can use PC-Sync by infrared. You can't use serial port and infrared function at the same time.

PC Sync

PC Sync is a program for data exchange between PC and the phone by data cable. For more information, you can use the guide of PC Sync Help file in CD.



Internet [Menu 8]

The phone supports services based on Wireless Application Protocol (WAP). You can access services supported by your network. The services menu allows you to get the information such as news, weather reports, and flight times.

Home [Menu 8-1]

Connect to a homepage. The homepage may be the site which is defined in the activated profile. It will be defined by Service Provider if you don't make in activated profile.

Bookmarks [Menu 8-2]

Press  [Select] to access available options, or press  [Back] to exit.

- **Connect** : Connect to the selected bookmark.
- **Add new** : Add a new bookmark manually.
- **Edit** : Edit the title and the address of the selected bookmark.
- **Delete** : Delete the selected bookmark from the bookmark list.

Push messages [Menu 8-3]

Inbox [Menu 8-3-1]

You can read or delete push messages.


- **Information** : Show the information of received push messages.
- **Load** : You can connect to a specific site using the information in the received push message.
- **Delete** : Delete the selected push message.

Receive [Menu 8-3-2]

You can set the option whether you will receive the message or not.



Profiles [Menu 8-4]

You can make up to 10 profiles and activate only one out of them. Scroll to the desired profile and press  to access available options.

- **Activate**

You can activate the profile you want.

- **Settings**

You can edit and change WAP settings of the selected profile.

- **Homepage**

This setting allows you to enter the address (URL) of a site you want to use as homepage. You do not need to type "http://" at the front of each URL as the WAP Browser will automatically add it.

- **Bearer**

You can set the bearer data service.

- **Data**

- **GPRS**

- **Data settings**

Appears only if you select Data settings as a Bearer service.

IP address : Enter the IP address of the WAP gateway you want.

Dial number : Enter the telephone number to dial to access your WAP gateway.

User ID : The users identity for your dial-up server (and NOT the WAP gateway).

Password : The password required by your dial-up server (and NOT the WAP gateway) to identify you.

Call type : Select the type of data call: Analogue or Digital (ISDN).



Internet [Menu 8]

Call speed : The speed of your data connection;9600 or 14400.

Linger time : You need to enter timeout period.After entering that, the WAP navigation service will be unavailable if any data is not input or transferred.

- GPRS settings

The service settings are only available when GPRS is chosen as a bearer service.

IP address : Input the IP address of the WAP gateway you access.

APN : Input the APN of the GPRS.

User ID : The users identify for your APN server.

Password : The password required by your APN server.

- Display Image

You can select whether images on WAP cards are displayed or not.

- Connection type

The options for connection type are Temporary or Continuous and depend on the gateway you are using.

Continuous

A confirmed delivery mechanism but generates more network traffic.

Temporary

A non-confirmed (connectionless) service.



- **Secure settings**

According to the used gateway port, you can choose this option as **On** or **Off**.

- **Rename**

Edit the Profile Name.

- **Delete**

Delete the Profile.

- **Add new**

You can add a new profile manually.

- **Email server**

- **Connect**

Connect to the E-mail server that you configured.

- **Edit address**

Edit the E-mail address.



Internet [Menu 8]

Go to URL [Menu 8-5]

You can directly connect to the site you want. You need to enter a specific URL.

Cache settings [Menu 8-6]

You can remove the contents of Cache memory or change the Cache mode.

Clear cache [Menu 8-6-1]

The contents of Cache memory will be removed.

Check cache [Menu 8-6-2]

You can set the option whether you will check the cache memory or not.

Security certification [Menu 8-7]

A list of the available certificates is shown.

Reset profiles [Menu 8-8]

You can reset profiles to return to original settings.

Browser version [Menu 8-9]

The WAP Browser version is displayed.

On browsing menu



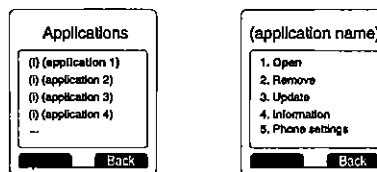
If you are on line, you can view the following menus.

- **Home**
Refer to [Menu 8-1].
- **Reload**
Reloads the current page.
- **Bookmarks**
See [Menu 8-2].
- **Save as bookmark**
You can save a site as bookmark.
- **Messages**
During Wap connection, you can see the Short messages.
- **Push messages**
See [Menu 8-3].
- **Go to URL**
You can move to the site you want. In this menu, you can also edit the site address.
- **Go to email server**
You can move to the E-mail server that you configured.
- **Set as email server**
You can set the address of current site as E-mail server.
- **Clear cache**
The contents of cache memory will be removed.
- **Save Images**
You can save the image which is provided by the WAP.



Java [Menu 9]

Applications [Menu 9-1]



Java Menu Options

Scroll to an application and select Options.

- 1. Open** : Launches the selected MIDlet.
- 2. Delete** : Deletes the selected MIDlet.
- 3. Update** : Accesses the server and updates the selected MIDlet.
- 4. Information** : Displays information about the selected MIDlet.
- 5. Phone settings** : Allows you to set backlight and sound for java game.

Download [Menu 9-2]

You can edit and set MIDlet server address. Download MIDlets using WAP Browser and store them in the phone. You can also view the list of MIDlets stored on the Applications screen.

Memory status [Menu 9-3]

Shows the size of memory available for game and application installations. You can also see the whole memory status of Handset.



JAVA™ is a trademark of Sun Microsystems, Inc.

Favorites [Menu 10]



You can set up to 9 menus which you have used often in Favorites. You can connect this menu directly by pressing hot key F.

If you want to register the menu in favorites, select <Empty> on a list. If the menu is already registered, the options are displayed as follows:

- **Select** : Activate the registered menu.
- **Change** : Change the menu.
- **Delete** : Delete the registered menu.
- **Delete all** : Delete all menus which are registered in Favorites.
- **Information** : View the information of registered menu.



Accessories

There are various accessories for your mobile phone. You can select these options according to your personal communication requirements.



Standard Battery



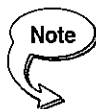
Portable Handsfree

This connects to your phone, allowing handsfree operation.



Travel Adapter

This charger allows you to charge the battery while away from home or your office.



Note

- Always use genuine LG accessories.
- Failure to do this may invalidate your warranty.
- Accessories may be different in different regions; please check with our regional service company or agent for further enquires.



Safety Guidelines

TIA Safety Information

Provided herein is the complete TIA Safety Information for Wireless Handheld phones. Inclusion of the text covering Pacemakers, Hearing Aids, and Other Medical Devices is required in the owner's manual for CTIA Certification. Use of the remaining TIA language is encouraged when appropriate.

Exposure to Radio Frequency Signal

Your wireless handheld portable telephone is a low-power radio transmitter and receiver. When it is ON, it receives and also sends out radio frequency (RF) signals. In August, 1996, the Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for handheld wireless phones. Those guidelines are consistent with the safety standards previously set by both U.S. and international standards bodies:

ANSI C95.1 (1992) *

NCRP Report 86 (1986)

ICNIRP (1996)

Those standards were based on comprehensive and periodic evaluations of the relevant scientific literature. For example, over 120 scientists, engineers, and physicians from universities, government health agencies, and industry reviewed the available body of research to develop the ANSI Standard (C95.1).

*American National Standards Institute; National Council on Radiation Protection and Measurements; International Commission on Non-Ionizing Radiation Protection

The design of your phone complies with the FCC guidelines (and those standards).



Antenna Care

Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the phone and may violate FCC regulations.

Phone Operation

NORMAL POSITION: Hold the phone as you would any other telephone with the antenna pointed up and over your shoulder.

Tips on Efficient Operation

For your phone to operate most efficiently:

- Antenna is fixed and does not extend. This line is not necessary.
- Do not touch the antenna unnecessarily when the phone is in use. Contact with the antenna affects call quality and may cause the phone to operate at a higher power level than otherwise needed.

Driving

Check the laws and regulations on the use of wireless phones in the areas where you drive. Always obey them. Also, if using your phone while driving, please:

- Give full attention to driving — driving safely is your first responsibility;
- Use hands-free operation, if available;
- Pull off the road and park before making or answering a call if driving conditions so require.

Electronic Devices

Most modern electronic equipment is shielded from RF signals. However, certain electronic equipment may not be shielded against the RF signals from your wireless phone.



Safety Guidelines

Pacemakers

The Health Industry Manufacturers Association recommends that a minimum separation of six (6") inches be maintained between a handheld 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.

Persons with pacemakers:

- Should ALWAYS keep the phone more than six inches from their pacemaker when the phone is turned ON;
- Should not carry the phone in a breast pocket.
- Should use the ear opposite the pacemaker to minimize the potential for interference.
- If you have any reason to suspect that interference is taking place, turn your phone OFF immediately.

Hearing Aids

Some digital wireless phones may interfere with some hearing aids. In the event of such interference, you may want to consult your service provider.

Other Medical Devices

If you use any other personal medical device, consult the manufacturer of your device to determine if they are adequately shielded from external RF energy. Your physician may be able to assist you in obtaining this information.

Turn your phone OFF 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.



Vehicles

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. Check with the manufacturer or its representative regarding your vehicle.

You should also consult the manufacturer of any equipment that has been added to your vehicle.

Posted Facilities

Turn your phone OFF in any facility where posted notices so require.

Aircraft

FCC regulations prohibit using your phone while in the air. Turn your phone OFF before boarding an aircraft.

Blasting Areas

To avoid interfering with blasting operations, turn your phone OFF when in a "blasting area" or in areas posted: "Turn off two-way radio". Obey all signs and instructions.

Potentially Explosive Atmosphere

Turn your phone OFF when in any area with a potentially explosive atmosphere and obey all signs and instructions. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

Areas with a potentially explosive atmosphere are often, but not always, marked clearly. Potential areas may include: fueling areas (such as gasoline stations); below deck on boats; fuel or chemical transfer or storage facilities; vehicles using liquefied petroleum gas (such as propane or butane); areas where the air contains chemicals or particles (such as grain, dust, or metal powders); and any other area where you would normally be advised to turn off your vehicle engine.



Safety Guidelines

For Vehicles Equipped with an Air Bag

An air bag inflates with great force. DO NOT place objects, including either 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.

TIA Safety Information

The U.S. Food and Drug Administration's Center for Devices and Radiological Health Consumer Update on Mobile Phones.

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 standby 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 the FDA's role concerning the safety of wireless phones?

Under the law, the 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, the 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, the 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.

The 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
- Occupational Safety and Health Administration
- National Telecommunications and Information Administration



Safety Guidelines

The National Institutes of Health participates in some interagency working group activities, as well.

The 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. The FCC relies on the FDA and other health agencies for safety questions about wireless phones.

The 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 handheld 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 FCC safety guidelines that were developed with the advice of the 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.



Safety Guidelines

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 the FDA doing to find out more about the possible health effects of wireless phone RF?

The 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). The 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.

The FDA and the Cellular Telecommunications & Internet Association (CTIA) have a formal Cooperative Research and Development Agreement (CRADA) to do research on wireless phone safety. The FDA provides the scientific oversight, obtaining input from experts in government, industry, and academic organizations. CTIA-funded research is conducted through contracts with 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 radio frequency 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 radio frequency energy (RF) exposures. The FCC established these guidelines in consultation with the 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 the FDA done to measure the radio frequency energy coming from wireless phones?

The Institute of Electrical and Electronic Engineers (IEEE) is developing a technical standard for measuring the radio frequency 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.



Safety Guidelines

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?

Radio frequency energy (RF) from wireless phones can interact with some electronic devices. For this reason, the 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 the 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. The 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).



Safety Guidelines

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 “compatible” hearing aid at the same time. This standard was approved by the IEEE in 2000.

The FDA continues to monitor the use of wireless phones for possible interactions with other medical devices. Should harmful interference be found to occur, the 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.nrp.org.uk/>)



Consumer Information on SAR (Specific Absorption Rate)

This Model Phone Meets the Government's Requirements for Exposure to Radio Waves.

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. Government. These limits are part of comprehensive guidelines and 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 standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg. * Tests for SAR are conducted using standard operating positions specified by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. Because the phone is designed to operate at multiple power levels to use only the power required to reach the network, in general, the closer you are to a wireless base station antenna, the lower the power output.

Before a phone model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government-adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model.



Safety Guidelines

The highest SAR value for this model phone when tested for use at the ear is 1.38 W/kg and when worn on the body, as described in this user's manual, is 0.33 W/kg. (Body-worn measurements differ among phone models, depending upon available accessories and FCC requirements.) While there may be differences between SAR levels of various phones and at various positions, they all meet the government requirement for safe exposure.

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF emission guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of <http://www.fcc.gov/oet/fccid> after searching on FCC ID BEJG7200.

Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications Industry Association (CTIA) website at <http://www.wow-com.com>

*In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

Technical Data



General

Product name : G7200

System : GSM 900 / DCS 1800

Ambient Temperatures

Max : +55°C

Min : -10°C



Memo
