KG189 USER GUIDE
- ENGLISH

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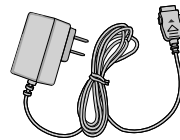# TABLE OF CONTENTS

Important Information

Handset   **Standard Battery**   **Travel Adapter**   **User Guide**

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 extreme weather conditions 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 in adequately 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 78 before using your phone.*

Safety Information

Read these simple guidelines. Breaking the rules may be dangerous or illegal. Further detailed information is given in this user guide.

- Never use an unapproved battery since this could damage the phone and/or battery and could cause the battery to explode.

- Never place your phone in a microwave oven as it will cause the battery to explode.

- Do not dispose of your battery by fire or with hazardous or flammable materials.

- Make sure that no sharp-edged items come into contact with the battery. There is a risk of this causing a fire.

- Store the battery in a place out of reach of children.

- Be careful that children do not swallow any parts such as rubber plugs (earphone, connection parts of the phone, etc.). This could cause asphyxiation or suffocation.

- Unplug the power cord and charger during lightning storms to avoid electric shock or fire.

- When riding in a car, do not leave your phone or set up the hands-free kit near to the air bag. If wireless equipment is improperly installed and the air bag is activated, you may be seriously injured.

- Do not use a hand-held phone while driving.

- Do not use the phone in areas where its use is prohibited. (For example: aircraft).

- Do not expose the battery charger or adapter to direct sunlight or use it in places with high humidity, such as a bathroom.

- Never store your phone in temperatures less than-4˚F or greater than 122˚F.

- Do not use harsh chemicals(such as alcohol, benzene, thinners, etc.) or detergents to clean your phone. There is a risk of this causing a fire.

- Do not drop, strike, or shake your phone severely. Such actions may harm the internal circuit boards of the phone.

- Do not use your phone in high explosive areas as the phone may generate sparks.

- Do not damage the power cord by bending, twisting, pulling, or heating. Do not use the plug if it is loose as it may cause a fire or electric shock.

- Do not place any heavy items on the power cord. Do not allow the power cord to be crimped as it may cause fire or electric shock.

- Do not handle the phone with wet hands while it is being charged. It may cause an electric shock or seriously damage your phone.

- Do not disassemble the phone.

- Do not place or answer calls while charging the phone as it may short-circuit the phone and/or cause electric shock or fire.

• Only use the batteries, antennas, and chargers provided by LG. The warranty will not be applied to products provided by other suppliers.

• Only authorized personnel should service the phone and its accessories. Faulty installation or service may result in accidents and consequently invalidate the warranty.

• Do not hold or let the antenna come in contact with your body during a call.

• An emergency call can be made only within a service area. For an emergency call, make sure that you are within a service area and that the phone is turned on.

FCC RF Exposure Information

WARNING! *Read this information before operating the phone.*

In August 1996, the Federal Communications (FCC) of he 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 antenna.

Body-worn Operation

This device was tested for typical body-worn operations with the back of the phone kept 0.6 inches (1.5cm) between the user's body and the back of the phone.
To comply with FCC RF exposure requirements, a minimum separation distance of 0.6 inches(1.5cm)

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 0.6 inches(1.5cm) 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 (20cm) 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.

YOUR PHONE

Phone Components

1. Earpiece

2. Left soft key

3. Send key

4. Alphanumeric keys

5. Microphone

6. Display screen

7. Navigation key

8. Camera key

9. Right soft key

10. Message key

11. End/Power key

12. Clear key

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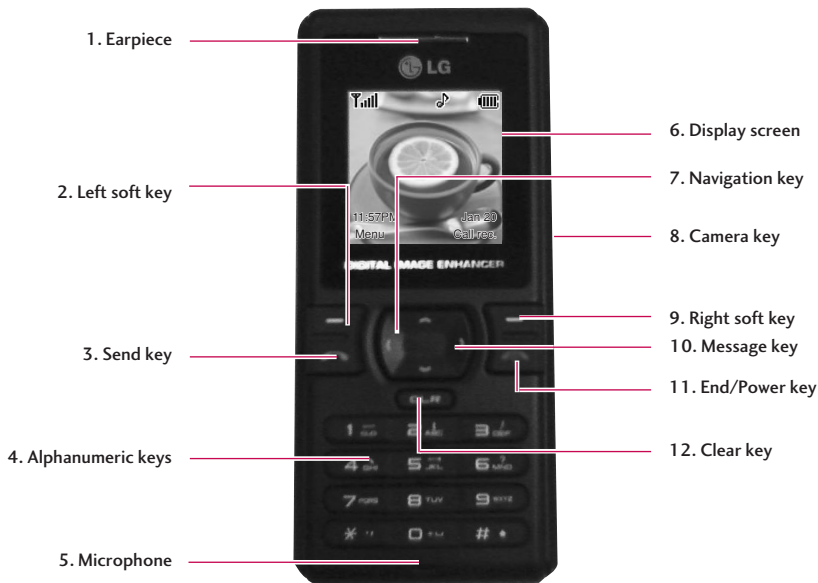
Your Phone's Features

1. Earpiece

2, 9. Left soft key/Right soft key: Each of these keys perform the functions indicated by the text on the display immediately above them.

3. Send key: You can dial a phone number and answer incoming calls. Press this key in standby mode to quickly access the most recent incoming, outgoing and missed calls.

4. Alphanumeric keys: These keys are used to dial a number in standby mode and to enter number or characters in edit mode.

5. Microphone: Can be muted during a call for privacy.

6. Display screen: Displays phone status icons, menu items, Web information, pictures and more in full color.

7. Navigation key: Use for quick access to phone functions.

8. Camera key: Long pressing this key to use the camera feature. Directly goes to the camera mode.

10. Message key: Use to retrieve or send text messages.

11. End/Power key: Allows you to power the phone on or off, end calls, or return to Standby Mode.

12. Clear key: Allows you to delete the characters entered or return you to the previous screen.

DISPLAY INFORMATION

Icon area

Text and graphic area

11:57PM   Jan 20
Menu   Call reg.

Soft key indications
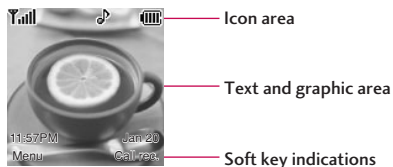
Area	Description
First line	Displays various icons.
Middle lines	Display messages, instructions and any information that you enter, such as number to be dialed.
Last line	Shows the functions currently assigned to the two soft keys.

On-Screen Icons

The table below describes various display indicators or icons that appear on the phone s display screen.

| Icon	Description
Y.ıll	Indicates the strength of the network signal.
☎	Indicates a call is in progress.
G.ıll	Indicates that GPRS service is available.
⏰	Indicates the alarm has been set and is on.
▥	Indicates the status of the battery charge.
✉	Indicates the receipt of a text message.
▦	Indicates the receipt of a MMS message.
◌◌	Indicates the receipt of a voice mail.
ᵥ⊡ᵥ	Indicates that the vibration has been set for alert.
☸	Indicates the silent has been set for alert.
⌁	Indicates the volume when using a headset.
♪	Indicates Ring has been set for alert.
◀)))	Indicates the speakerphone has been activated.
⒲	Indicates that you received new download message.
▦	Indicates the Schedule function.

GETTING STARTED

INSTALLING THE SMARTCHIP

When you subscribe to a cellular network, you are provided with a plug-in SIM loaded with your subscription details, such as your PIN, any optional services available and many others.

Important!

▸ The plug-in SIM and its contacts can be easily damaged by scratches or bending, so be careful when handling, inserting or removing the card. Keep all SIM out of the reach of small children.

1. If necessary, switch off the phone by holding down the 🔄 key until the power-off image displays.

2. Remove the battery. To do so:

① Pull and hold the battery lock above the battery toward the top of the phone.

② Lift the battery away, as shown.
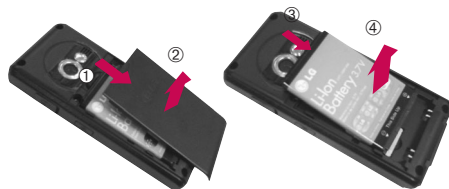
3. Slide the SIM into the SIM socket so that it locks the card into place. Make sure that the notched corner is bottom left and the gold contacts of the card face into the phone.

Note

When you need to remove the SmartChip, slide it, as shown, and take it out of the socket.

4. To insert the battery, align the golden contacts of the battery with the corresponding connectors on the battery compartment. Press down on the opposite end of the battery until it snaps into place.

5. Attach back cover by sliding up into position until it clicks.
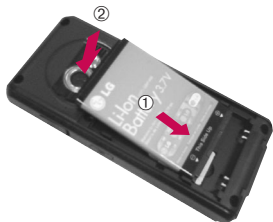
CHARGING THE BATTERY

Use of unauthorized accessories could damage your phone and void your warranty.

To use the travel charger provided with your phone:

1. With the battery in position on the phone, connect the lead from the travel charger to the bottom of the phone. Check that the arrow on the lead connector is facing towards the front of the phone.

2. Connect the travel charger to a standard AC wall outlet. Only use the travel charger that comes included with the package.

Warning
The travel charger must be unplugged before you remove the battery, otherwise, the phone could the damaged.

3. When charging is finished, disconnect the travel charger from the phone by pressing on the gray tabs on both sides of the connector while pulling the connector out.

Notice
▶ If your phone is powered on while charging, you'll see the bars in the battery indicator icon cycle. When the battery is fully charged, the bars in the battery indicator icon will flash on and off.

If the battery fails to charge completely:

▶ After turning the phone on and off, please attempt to recharge the battery.

▶ After detaching and reattaching the battery, please attempt to recharge the battery.

TURNING YOUR PHONE ON AND OFF

1. Hold down the 📟 [END] key until the phone switches on.

2. If the phone asks for a PIN, enter the PIN and press the ⊗ key.

The phone searches for your network and after finding it goes to the idle screen as illustrated below. From the idle screen, you can make or receive a call.

Note
The display language is preset to Automatic at the factory. To change the language, use the Languages menu option (Menu 7.2.5).

3. When you wish to switch the phone off, hold down the 📟 [END] key until the power-off image displays.

ACCESS CODES

You can use the access codes described in this section to avoid unauthorized use of your phone. The access codes can be changed by using the **Change Codes** feature (Menu 7.5.6).

Security code (4 digits)

The security code protects the unauthorized use of your phone. The default security code is set to '0000' and the security code is required to delete all phone entries and to activate the Restore Factory Settings menu. The security code default setting can be modified from the Security Settings menu.

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GENERAL FUNCTIONS

MAKING A CALL

1. Make sure your phone is powered on.

2. Enter a phone number including the area code. To edit a number on the display screen, simply press the ⌫ key to erase one digit at a time.

   ▶ Press and hold the ⌫ key to erase the entire number.

3. Press the 📞 [SEND] key to call the number.

4. When finished, press the 📞 [END] key.

Making a Call by Send Key

1. Press the 📞 [SEND] key, and the most recent incoming, outgoing and missed phone numbers will be displayed.

2. Select the desired number by using the navigation key.

3. Press the 📞 [SEND] key.

Making International Calls

1. Press and hold the ⬚ key and the international access character '+' will appear.

2. Enter the country code, area code, and the phone number.

3. Press the 📞 [SEND] key.

Ending a Call

When you have finished a call, press the 📞 [END] key.

Making a Call From the Contacts

You can store names and phone numbers dialed frequently in the SmartChip as well as in the phone memory known as the Contacts.

You can dial a number by simply selecting a name in the contacts and pressing the 📞 [SEND] key.

ADJUSTING THE VOLUME

During a call, if you want to adjust the earpiece volume, use the side keys of the phone.

In idle mode, you can adjust the ring volume using the side keys.

ANSWERING A CALL

When you receive a call, the phone rings and the flashing phone icon appears on the screen. If the caller can be identified, the caller's phone number (or name if stored in your Address Book) is displayed.

1. Open the Slide and press the [SEND] key or the left soft key to answer an incoming call. If **Any Key** has been set as the answer mode (Menu 9.4.2), any key press will answer a call except for the [END] key or the right soft key.

2. End the call by closing the phone or pressing the [END] key.

Notice
You can answer a call while using the Address Book or other menu features.

Using the Speakerphone

You can use the integrated Speakerphone during a call by pressing the [**OK**] key . The loudspeaker is automatically deactivated when you end the call.

Warning
Due to higher volume levels, don't place the phone near your ear while the speakerphone is enabled.

Vibrate Mode (Quick)

Vibrate Mode can be activated by pressing and holding down the[Star] key.

Signal Strength

If you are inside a building, being near a window may give you better reception. You can see the strength of your signal by the signal indicator on your phone's display screen.

ENTERING TEXT

You can enter alphanumeric characters by using the phone's keypad. For example, storing names in the Address Book, writing a message, or creating scheduling events in the calendar all require entering text. The following text input methods are available in the phone.

T9 Mode

This mode allows you to enter words with only one keystroke per letter. Each key on the keypad has more than one letter. The T9 mode automatically compares your keystrokes with an internal linguistic dictionary to determine the correct word, thus requiring far fewer keystrokes than the traditional ABC mode.

ABC Mode

This mode allows you to enter letters by pressing the key labeled with the required letter once, twice, three or four times until the letter is displayed.

123 Mode (Numbers Mode)

Type numbers using one keystroke per number.

To change to 123 mode in a text entry field, press   key until 123 mode is displayed.

A long press changes mode to 123.

Symbolic Mode

This mode allows you to enter special characters.

Changing the Text Input Mode

Change the text input mode by pressing [key] .
You can check the current text input
mode in the upper right corner of the screen.

Using the T9 Mode

The T9 predictive text input mode allows you to enter
words easily with a minimum number of key presses. As
you press each key, the phone begins to display the
characters that it thinks you are typing based on a
built-in dictionary. As new letters are added, the word
changes to reflect the most likely candidate from the
dictionary.

1. When you are in the T9 predictive text input mode,
   start entering a word by pressing keys [2abc] to [9wxyz]
   Press one key per letter.

   ▶ The word changes as letters are typed - ignore
     what's on the screen until the word is typed
     completely.

   ▶ If the word is still incorrect after typing
     completely, press the [Star] key once or more
     to cycle through the other word options.

   ▶ If the desired word is missing from the word
     choices list, add it by using the ABC mode.

2. Enter the whole word before editing or deleting any
   keystrokes.

3. Complete each word with a space by pressing the
   [key] key or the right navigation [key] key.

To delete letters, press [key] .
Press and hold down [key] to erase the letters
continuously.to erase entire words.

Notice

To exit the text input mode without saving your
input, press the [END] key.

Using the ABC Mode

Use the keypad keys to enter your text.

1. Press the key labeled with the required letter:

   ▶ Once for the first letter

   ▶ Twice for the second letter

   ▶ And so on

2. To insert a space, press the ▢ key once. To delete letters, press the ▭ key. Press and hold down the ▭ key to erase the letters continuously.

Notice

Refer to the table below for more information on the characters available using the keys.

Key	Characters in the Order Display	
	Upper Case	Lower Case
1	. , - ¿ ? ¡ ! @ 1	. , - ¿ ? ¡ ! @ 1
2	A B C Á Ã Ç 2	a b c á ã ç 2
3	D E F É 3	d e f é 3
4	G H I Í 4	g h i í 4
5	J K L 5	j k l 5
6	M N O Ó Ñ 6	m n o ó ñ 6
7	P Q R S 7	p q r s 7
8	T U V Ú Ü 8	t u v ú ü 8
9	W X Y Z 9	w x y z 9
0	Space Key, 0 (Long press)	Space Key, 0 (Long press)

Using the 123 (Numbers) Mode

The 123 Mode enables you to enter numbers in a text message (a telephone number, for example) more quickly.

Press the keys corresponding to the required digits before manually switching back to the appropriate text entry mode.

Using the Symbol Mode

The Symbol Mode enables you to enter various symbols or special characters.

To enter a symbol, press the [Star] key. Use the navigation keys to select the desired symbol and press the [OK] key.

SELECTING FUNCTIONS AND OPTIONS

Your phone offers a set of functions that allow you to customize the phone. These functions are arranged in menus and sub-menus, accessed via the two soft keys marked the left soft ▭ key and the right soft ▭ key. Each menu and sub-menu allows you to view and alter the settings of a particular function.

The soft key functions vary depending on the mode of the phone. The label on the bottom of the display screen immediately above the soft keys indicates current function.

Press the left soft key to access the available Menu.

Press the right soft key to access the available Call register.

IN-CALL MENU

Your phone provides a number of control functions that you can use during a call. To access these functions during a call, press the right soft key [**Options**].

DURING A CALL

The menu displayed on the handset screen during a call is different than the default main menu displayed when in idle screen, and the options are described below.

Making a Second Call

You can select a number you wish to dial from the Address Book to make a second call. Press the right soft key then select Contacts.

Swapping Between Two Calls

To switch between two calls, press the right soft key or the ⬙ [SEND] key, and then select Swap.

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 on 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.

If Call Waiting is on, you can put the first call on hold and answer the second call, by pressing the ⬙ [SEND] key.

Rejecting an Incoming Call

You can reject an incoming call without answering by simply pressing the ⬙ [END] key.

During a call, you can reject an incoming call by pressing the ⬙ [END] key.

Muting the Microphone

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

the Unmute menu or the left soft key [Unmute]. When the handset is muted, the caller cannot hear you, but you can still hear the caller.

CONFERENCE CALLS

The conference service provides you with the ability to have a simultaneous conversation with more than one caller. The conference call feature can be used only if your network service provider supports this feature. The conference call can only be set up when you have one call active and one call on hold, meaning both calls must have been answered. Once a conference call is set up, calls may be added, disconnected or separated (that is, removed from the conference call but still connected to you) by the person who set up the conference call. These options are all available from the In-Call menu. The maximum number of callers in a conference call is five. Once started, you are in control of the conference call, and only you can add calls to the conference call.

Making a Second Call

You can make a second call while currently on a call simply by entering the second number and pressing

the [SEND] key. When the second call is connected, the first call is automatically placed on hold. You can swap between calls, by pressing the [SEND] key.

Setting Up a Conference Call

To set up a conference call, place one call on hold, conference in the second active call by pressing the right soft key and select the Join Calls sub menu option from the Conference Call menu.

Activate the Conference Call on Hold

To activate a conference call on hold, press the [SEND] key.

Adding Calls to the Conference Call

To add a call to an existing conference call, press the right soft key, and then select the Join Calls sub menu from the Conference Call option.

Private Call in a Conference Call

To have a private call with one caller from a conference call, press the right soft key and select the Private Menu from the Conference Call option. When the numbers of the callers are displayed, select the one you wish to speak in private.

Ending a Conference Call

Currently active conference call can be disconnected by pressing the ⬙ [END] key.

The following illustration shows the available menu structure and indicates the:

▶ Number assigned to each menu option.

▶ Page where you can find the feature description.

1. Contacts
1.1 Contacts
1.2 New Contact
1.3 Speed Dial List
1.4 Caller Groups
1.5 Copy All Contacts
1.6 Delete All Contacts
1.7 Settings
1.8 Information

2. Call register
2.1 Missed Calls
2.2 Dialed Calls
2.3 Received Calls
2.4 Delete Recent Calls
2.5 Call Duration
2.6 Data Information

3. Tools
3.1 Voice Memo
3.2 Calculator
3.3 Notepad
3.4 World Clock
3.5 Unit Converter
3.6 Tip Calculator

4. Organizer
4.1 Alarm Clock
4.2 Calendar

5. Messages
5.1 New Message
5.2 Inbox
5.3 Drafts
5.4 Outbox
5.5 Sent
5.6 Listen Voicemail
5.7 Info Service
5.8 Templates
5.9 Settings
5.0 Check Memory

6. Multimedia
6.1 Camera
6.2 Photo Album
6.3 Check Memory

7. Settings
7.1 Profiles
7.2 Display
7.3 Date & Time
7.4 Call
7.5 Security
7.6 Connection
7.7 Reset Default

8. Browser
8.1 Home
8.2 Favorites
8.3 Go To URL
8.4 Settings

9. My Stuff
9.1 Games & Apps
9.2 Audio
9.3 Graphics

CONTACTS MENU 1.1

This menu allows you to save and manage contact address information. The Contacts functions allow you to add a new address or search saved contact addresses by name.

NEW CONTACT MENU 1.2

This menu allows you to add a new contact address. You can input contact address information including name, phone numbers, email addresses, group information items, memos, ringtones, and image (photograph).

You have to select the Handset or the SmartChip memory using the left and right navigation keys.

SPEED DIAL LIST MENU 1.3

This menu allows you to configure the speed dial numbers. You can select a number as a speed dial from 2 to 9. You can configure speed dial numbers for any of the 8 numbers for a specific contact address so that a contact address may have multiple speed dial numbers.

CALLER GROUPS MENU 1.4

There are 6 predefined groups as well as one additional group labeled Others where you can create your own lists.

1. You can set the phone to ring in a specific way and display a preselected graphic icon when a particular person calls you.

2. Scroll to **Caller Groups** then press the left soft key [**OK**] to enter this menu.

3. Every Group list will be displayed : **Family**, **VIP**, **Friends**, **Colleague**, **Group 1**, **Group 2**, **No Group**.

4. Select the Group name that you want to manage by pressing the right soft key [**Options**].

5. You will see the following submenus under the predefined groups except for the **No Groups** group.

• **View:** Allows you to see the member list in the group.

• **Group Ring Tone:** Allows you to select the ring tone to be used when you receive a voice phone call from a person in the group.

• **Group Icon:** Allows you to select the graphic icon to be displayed when you receive a call from a person in the group.

• **Add Member:** Allows you to add the member to the group.

• **Remove Member:** Allows you to delete the member in the group.

• **Rename:** Allows you to assign a name to the group.

COPY ALL CONTACTS   MENU 1.5

This menu allows you to copy all of the information from your SmartChip, e.g. name, handset number, etc., to your handset. If a name is duplicated during the copying operation, the information is also duplicated.

SIM to Phone (Menu 1.5.1)

You can copy the entry from the SmartChip card to the phone memory.

Phone to SIM (Menu 1.5.2)

You can copy the entry from the handset memory to the SmartChip card (not all the data will be copied).

▶ **Keep Original:** When copying, Original Dial Number is kept.

▶ **Delete Original:** When copying, Original Dial Number will be erased.

DELETE ALL CONTACTS   MENU 1.6

You can delete all entries in the **SIM** and the **Phone**.

Press the 📞 [END] key to return to standby mode.

SETTINGS   MENU 1.7

Set Memory (Menu 1.7.1)

Scroll to highlight the **Set Memory** option, then press the left soft key [**OK**].

▶ If you select **Ask Always** when adding entry, the phone will ask where to store.

▶ If you select **SIM** or **Phone**, the phone will store an entry to the SmartChip or the phone.

Set View Detail (Menu 1.7.2)

INFORMATION

Service Dial Number (Menu 1.8.1)

You can view the list of Service Dialing Numbers (SDN) assigned by your network provider. Such numbers could include the emergency, directory assistance and voice mail numbers.

1. Select the Service dial number option.

2. The names of the available services will be shown.

3. Use the up/down navigation keys to select a service. Press the 📞 [SEND] key.

Check Memory (Menu 1.8.2)

You can check how many names and numbers are stored in the Contacts (SIM card and phone memories).

My Numbers (Menu 1.8.3)

This displays your phone numbers stored in the SmartChip.

CALL REGISTER

You can check the record of missed, received, and dialed calls only if the network supports the Calling Line Identification (CLI) within the service area.

The number and name (if available) are displayed together with the date and time of the call. You can also view call times.

MISSED CALLS
MENU 2.1

• View the number, if available, and call it or save it in the Address Book

• Enter a new name for the number and save both in the Address Book

• Send a message by this number

• Delete the call from the list

DIALED CALLS
MENU 2.2

• View the number, if available, and call it or save it in the Address Book

• Enter new name for the number and save both in the Address Book

• Send a message by this number

• Delete the call from the list

RECEIVED CALLS
MENU 2.3

• View the number, if available, and call it or save it in the Address Book

• Enter a new name for the number and save both in the Address Book

• Send a message by this number

• Delete the call from the list

DELETE RECENT CALLS
MENU 2.4

Allows you to delete **Missed**, **Received** and **Dialed call** lists. You can delete all call lists at one time.

CALL DURATION
MENU 2.5

This allows you to view the duration of the incoming and outgoing calls. You can also reset the call times. The following timers are available:

Last Call (Menu 2.5.1)

Length of the last call.

Dialed Calls (Menu 2.5.2)

Length of the outgoing calls.

Received Calls (Menu 2.5.3)

Length of the incoming calls.

All Calls (Menu 2.5.4)

Total length of all calls made and incoming calls received since the timer was last reset.

DATA INFORMATION   MENU 2.6

You can check the amount of data transferred over the network through the GPRS (General Packet Radio Service) information option. In addition, you can also view how much time you are online.

Web Data (Menu 2.6.1)

You can check the data volume and the duration through WAP.

Data Call (Menu 2.6.2)

You can check the data volume and the duration through GPRS by using an external device such as a serial port.

Total Data (Menu 2.6.3)

You can check the total amount of data through WAP and an external device.

TOOLS

VOICE MEMO

MENU 3.1

Allows you to record a memo. You can record up to 3 voice messages with each message up to 30 seconds.

You can use the Voice Memo feature to:

• Play the recorded voice memos

• Delete one or all voice memos

1. Once recording is started, the message '**Recording...**' and the remaining time is displayed.

Note

If all memo locations are full, you must delete an old memo before recording a new one.

2. If you want to finish recording, press the left soft key [**Save**].

▶ **Play:** Allows you to play back all memos recorded, starting with the most recent memo. The screen displays the date and time when the memo was recorded.

▶ **Delete:** Allows you to delete a specific memo. All memos recorded are played back, starting with the most recent one.

▶ **New Voice Memo:** Allows you to record a memo.

▶ **Rename:** Allows you to rename a specific memo.

▶ **Send Via Multimedia Message:** Sends the selected voice memo by MMS.

▶ **Delete All:** Allows you to delete all memos.

CALCULATOR

MENU 3.2

The calculator function allows you to add, subtract, multiply and divide. You can input numbers using the number keys, and input operators using the up, down, left, and right navigation keys.

You can input a decimal point by pressing the [Star] key.

Whenever you press the key, characters are sequentially deleted in reverse direction.

NOTEPAD

To write, edit and delete a memo on a specific date, proceed as follows.

1. Press the left soft key [**New**].

2. Input the memo and press the right soft key [**Options**].

The following options are available.

▶ **Save:** Allows you to save the memo.

▶ **Set T9:** Allows you to select the T9 language to use in memo.

▶ **Cancel:** Allows you to exit in memo editor.

Or

1. Select a Memo.

2. Press the right soft key [Options].

The following options are available.

▶ **View:** Allows you to view the memo.

▶ **Delete:** Allows you to delete the memo. You can press the right soft key [Options ' Delete] to edit the memo displayed.

▶ **New Notepad:** Add a new memo, up to 20 memos and 40 characters per each memo.

▶ **Edit:** If you select a memo that already exists, you can press the right soft key [Options ' Edit] to edit the memo displayed.

▶ **Delete All:** Allows you to delete all memos. You are asked to confirm your action.

WORLD CLOCK

Allows you to check the current Greenwich Mean Time(GMT) and major cities around the world, using the left/right navigation keys.

The screen shows the city name, current date and time.

To select the time zone in which you are located, proceed as follows:

1. Select the city corresponding to your time zone by pressing the left/right navigation keys one or more times. The local date and time are displayed.

2. If you want to set, press the key.

3. If you want to set Daylight Savings, press the key in Options menu.

Note

The time zone setting of each city in World time menu may be affected by network condition.

UNIT CONVERTER   MENU 3.5

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

1. You can select one of four unit types by pressing the left soft key [**Unit**].

2. Select the standard value by using the left/right navigation keys.

3. Select the unit you want to convert by pressing the up/down navigation keys.

4. You can check the converted value for the unit you want. Also, you can input a decimal number by pressing the   key.

TIP CALCULATOR   MENU 3.6

This feature allows you to quickly and easily calculate the tip amount based on the total bill as well as the split of the total bill based on the number of people.

ALARM CLOCK

MENU 4.1

Set the alarm to ring at a specific time. In the **Alarm Clock** menu, the following options are available:
On: Set the time(hour and minute) for activating the alarm.

1. Enter the menu.

2. Select [**On**] by pressing the right/left navigation keys.

3. If you want to set the time for activating the alarm, press the down navigation key.

4. Enter the required time, press the down navigation key.

5. The following options are available.

• **Once:** The alarm rings only once and is then deactivated.

• **Daily:** The alarm rings every day at the same time.

• **Weekly:** The alarm rings every week on the same day and at the same time.

• **Monthly:** The alarm rings every month on the same day and at the same time.

6. Allows you to select the alarm melody by using the right/left navigation keys.

7. Press the left soft key [**Set**].

Off: Cancel the alarm.

Notice

If this option is set to On, the alarm will ring at the specified time, even when the phone is switched off. To stop the alarm when it rings, open the phone and press the right soft key [**Quit**].

CALENDAR

MENU 4.2

When you enter this menu a calendar will be displayed. The square cursor is used to locate a particular day. The under bar on the calendar indicates schedule(s) on for that day. This function helps to remind you of the schedule. The phone will sound an alarm tone if it has been set for a specific schedule item.

Key	Description
up/down navigation key	Weekly
left/right navigation key	Daily
key/ key	Yearly
key/ key	Monthly

The following [Options] are available:

▶ **View:** Press the right soft key [Options] to delete or edit the note you selected.

▶ **Delete:** Allows you to delete the schedule.

▶ **New Schedule:** You can edit maximum of 30 characters and create up to 30 notes.

▶ **Edit:** Allows you to edit the schedule.

▶ **Calendar:** Allows you to consult the calendar.

▶ **Scheduler Tone:** The phone can sound an alarm tone when the scheduled date for an event has been reached with this option.

▶ **All Schedules:** Shows the notes that are set for all days. Use the up/down navigation keys to browse through the note lists.

▶ **Go To Date:** Allows you to jump to a specific date.

▶ **Delete Old:** Delete past schedule event that has already been notified.

▶ **Delete All:** Delete all schedules. You are asked to confirm your action.

Note

You can see Edit, Delete, View all schedules, Delete past, and Delete all menus dependent on setting of the schedule.

NEW MESSAGE

MENU 5.1

Text (Menu 5.1.1)

You can write and edit text messages of up to 918 characters.

1. Type in a message using key presses. For details on how to enter text, refer to page 22 (**Entering Text**).

2. After completing the message select the required option by pressing the right soft key [**Options**].

The following options are available.

▶ **Insert**

  • **Symbol:** Attach special characters.

  • **Picture:** Send and receive text messages that contain pictures, known as Enhanced Messaging Service. Several preset pictures are available in the phone and they can be replaced with new ones received from other sources.

  • **Animation:** Attaching an animation in a message can be done through EMS(Enhanced Messaging Service).

  • **Sound:** Attach sounds that are available for short message.

  • **Text Template:** Use the text templates already set in the phone.

  • **Contacts:** Attach a phone number.

  • **Business Card:** Attach your name card.

▶ **Save To Drafts:** Save the message so that it can be sent later.

▶ **Set T9:** Allows you to select the T9 language to use in memo.

▶ **Clear Text:** Deletes the written message.

▶ **Cancel:** Exit the text editor.

Press the right soft key [Send].

▶ **Send:** Enter the phone number or select the number from the contacts.

Multimedia (Menu 5.1.2)

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

You can create a new message or choose one of the multimedia message templates already made.

Press the right soft key [Send].

▶ **Send:** You can send multimedia messages to multiple recipients, prioritize your message, and make it sent later as well.

The following options are available.

▶ **Insert:** Symbol, Graphic, Sound, New Slide, Text Template, Contact or Business card.

▶ **Preview:** You can preview multimedia messages you wrote.

▶ **Save:** You can save multimedia messages To Drafts or As Template.

▶ **Move to:** You can move to previous or next slide.

▶ **Delete Slide:** You can delete current slide.

▶ **Set Timer:** You can set timer for slide, text, picture and sound.

▶ **Set T9:** Select a T9 input mode.

▶ **Cancel:** You can back to the Message menu.

Note

If you select the photo on writing multimedia message, loading duration will take about 5 seconds. At that time, you can't activate any key during loading time. After that time, it is available to write multimedia message.

INBOX   MENU 5.2

You will be alerted when you receive a message. They will be stored in the Inbox.
In the Inbox, you can identify each message by icons. If you are notified that you have received a multimedia message, you can download the whole multimedia message by selecting it in the Receive menu.
The following [Options] are available in the Inbox list.

▶ **Reply:** Replies to the received message.

▶ **Delete:** You can delete the current message.

▶ **Forward:** You can forward the selected message to another party.

▶ **Extract:** Extract picture, sound, text webpage and email address from the message.

▶ **Return Call:** Call back the sender.

DRAFTS   MENU 5.3

You can view the messages saved as a draft.

The following [Options] are available.

▶ **Edit:** You can edit a selected message.

▶ **Delete:** Deletes the selected draft mesage.

OUTBOX   MENU 5.4

Outbox is a temporary storage place for messages waiting to be sent.

When you press the [SEND] key, the message moves to the Outbox and from there the message is sent.

If the message fails to be sent from the Outbox, you will receive a sound alert along with a Message Sending Fail notice on the screen.

Another attempt will be made to send the failed message and after two unsuccessful attempts, the message will no longer be sent automatically.
In order to send the message that has failed, you must press **Resend**.

After the maximum number of **Send** attempts has been reached the Send function has failed.

If you were trying to send a text message, open the message and check that the Sending options are correct.

When the message Send has failed, the following [options] are available.

▶ **Resend:** Allows you to send the message again after a time-out period.

▶ **Edit:** You can edit a selected message.

▶ **Delete:** Deletes the selected message which has been failed to send.

SENT
MENU 5.5

This is where you can view the lists and contents of sent messages and also verify if transmission was successful.

▶ **Forward:** Forwards the current message to other recipients.

▶ **Delete:** Deletes the selected message from the Sent list.

LISTEN VOICEMAIL
MENU 5.6

This menu provides you with a quick way of accessing your voice mailbox (if provided by your network).

Before using this feature, you must enter the voice server number obtained from your service provider.

This may already be available; to check the voicemail, press and hold the ⊡ key

When new voicemail is received, the symbol ⊡ will be displayed on the screen.

INFO SERVICE
MENU 5.7

Info service messages are text messages sent by the network to GSM phone users. They provide general information such as weather reports, traffic news, taxis, pharmacies, and stock prices. Each type of information is associated with a number, which can be obtained from the service provider. When you receive an info service message, a popup message will indicate a new message receipt or the info service message will be displayed directly. In standby mode, the following options are available when viewing the info service message.

Receive (Menu 5.7.1)

Ability to enable or disable the reception of broadcast messages.

Inbox (Menu 5.7.2)

The list of received broadcast messages can be searched and the contents viewed.

Topics (Menu 5.7.3)

To create new topics, press the left soft key [**OK**] and then select the new topics menu by pressing the left soft key [**Options**].

Alert (Menu 5.7.4)

Ability to select the alert type for a new message.

Auto Display (Menu 5.7.5)

This option will automatically display all broadcast messages received.
Scroll through the messages using the up/down navigation keys.

Languages (Menu 5.7.6)

This option allows you to select the language preferred. The cell broadcast message will be displayed in the language selected.
If you use all languages supported by phone, select '**Automatic**' at the bottom of the list.

TEMPLATES

There are 6 predefined messages in the list. You can view and edit the template messages or create new messages.

Text (Menu 5.8.1)

- **Please call me back**
- **I'm late. I will be there at**
- **Where are you now?**
- **I'm on the way.**
- **Urgent! Please contact.**
- **I love you**

The following options are available.

▶ **Edit:** Allows you to write a new message or edit the selected template message.

▶ **Send Via**

- **Text Message:** Sends the selected template message by SMS.

- **Multimedia Message:** Sends the selected template message by MMS.

▶ **Delete:** Allows you to delete the selected template message.

Multimedia (Menu 5.8.2)

For further details, see page 41.

Business Card (Menu 5.8.3)

This option allows you to make your own name card. Key in the Name, Mobile number, Office number, Fax number and E-mail address.

▶ **Edit:** Allows you to write a new message or edit the selected name card.

▶ **Send Via**

- **Text Message:** Sends the selected name card by SMS.

- **Multimedia Message:** Sends the selected name card by MMS.

▶ **Delete:** Allows you to delete the selected name card.

SETTINGS   MENU 5.9

Text Message (Menu 5.9.1)

▶ **Message Types:** Allows you to set the default message type (Text, Voice, Fax, Paging, X.400, E-mail, ERMES). The network can convert the messages into the selected format. The type of message you desire can be set to Text Type.

▶ **Validity Period:** Allows you to set the length of time for which your text messages will be stored at the SMS center while attempts are made to deliver them to the recipient. Possible values are Maximum, 30 Minutes, 1 Hour, 6 Hours, 1 Day and 1 Week which can be authorized by your service provider.

▶ **Delivery Reports:** Allows you to activate or deactivate the report function. When this function is activated, the network informs you whether or not your message has been delivered.

▶ **Reply With Same Service:** Allows the recipient of your SMS message to send you a reply via your message center, if the service is provided by the network.

- **Message Center Number:** If you want to send the text message, you can receive the address of the SMS center through this menu.

- **Email Gateway:** You can send the text message to an Email Address via this gateway.

- **Subject:** If you set it to on, allows you to enter the subject.

- **Bearer Setting:** You can select GPRS or GSM. Contact your network operator or service provider for information related to setting a selected bearer, pricing and connection speed.
GSM Preferred/GPRS Preferred

Multimedia Messages (Menu 5.9.2)

Via this menu, you can set up default multimedia message information.

The following options are available:

- **Subject:** Enter the message title.

- **Slide Duration:** Display the duration of each page when writing the message.

- **Priority:** You can set the priority of the message you choose.

- **Validity Period:** This network service allows you to set how long your multimedia messages will be stored at the message center.

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

- **Read Receipts:** This menu allows you to determine whether to request a read confirmation mail to a recipient.

- **Auto Download**

  • **On:** You can always receive multimedia messages automatically.

  • **Off:** You receive only notification messages in the inbox and then you can check the notifications.

- **Network Profile:** For further details, see page 45.

Voicemail Number (Menu 5.9.3)

This menu allows you to get the voice mail if this feature is supported by the network service provider. Please check with your network service provider for details of their service in order to configure the handset accordingly.

Download Messages (Menu 5.9.4)

You can set the Service option to determine whether you will receive the service messages or not.

You can set the Automatic Download option to determine whether you will automatically connect to the service or not.

▶ **Receive:** You can set the option whether you will receive the message or not.

CHECK MEMORY   MENU 5.0

You can check the current memory status of each memory for Text Messages and Multimedia.

CAMERA

MENU 6.1

The phone supports 4 modes that can be set to capture images and they are 128X128, 160X120, 320X240 and 640X480.

You can access camera feature directly by pressing and holding the about 🔘 (camera key) 2 seconds.

Note

If the battery is too low, you may not use the Camera feature.

Take Photo

Using the camera module built in your phone, you can take pictures of people or events while on the move. Additionally, you can send photos to other people in a picture message.

Before shooting, you can set the following values. Each setting value is remembered even after you close the camera module and reopen it. But the timer and zooming ratio goes back to the default setting value (Off and x1 respectively).

① **Mode** ( ): Select one of the camera modes using the up/down navigation keys.

( ): Select this to take a single shot.

( ): Select this to take multiple shots.

( ): Select this to take a still image with various frames.

Note

Taking pictures in the phone closed state does not support this mode.

② **Resolution** ( ): 640x480(VGA), 320x240(QVGA), 128x160(Screen), 96x96(Phonebook)

Note

The multiple shot mode does not support the 96x96(Phonebook) resolution.

③ **Image quality** ( ): Fine/Normal/Basic
④ **Digital zoom** ( ): x1, x2

MULTIMEDIA

Note

The maximum zoom scale depends on the resolution as follows.

Resolution	Zoom scale
640x480	x1, x2
320x240	x1, x2
128x160	x1, x2
96x96	x1, x2

⑤ **Tone** ($\boxed{\blacksquare\div}$): Colour ($\boxed{\blacksquare\div}$)/Sepia
($\boxed{\blacksquare\div}$)/Black and white ($\boxed{\blacksquare\div}$)

⑥ **Brightness** ($\boxed{\diamond^{0}\div}$): +2, +1, 0, -1, -2

⑦ **Timer** ($\boxed{\circlearrowright\div}$): Off, 3 sec., 5 sec.

⑧ **White balance** ($\boxed{\text{A·WB}\div}$): Auto ($\boxed{\text{A·WB}\div}$), Daylight
($\boxed{\diamond\div}$), Incandescent ($\boxed{\diamond\div}$), Cloudy ($\boxed{\clubsuit\div}$),
Flourescent ($\boxed{\text{⚌}\div}$)

1. Center the desired option menu using the left/right navigation keys.

2. Select the desired value with the up/down navigation keys.

3. After finishing all the settings, focus on the subject to capture and press the Camera key or OK key. With a click, the image is captured and the following menu bar appears.

MMS message
Save
Delete
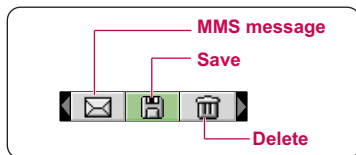
Note

When the resolution is set to 96x96 (Phonebook), the following menu bar appears.

Phonebook entry
Save
Delete
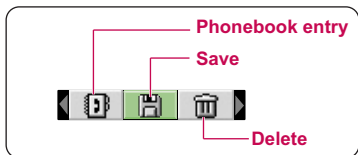
4. To save the image, centre the " 🖫 " and press the OK key. If you don't want to save the image, centre the " 🗑 " and press the OK key.

You can also send the image via multimedia message by selecting " ✉ ". For further information regarding multimedia message writing, refer to page 70-71.

After taking a picture in 96x96 (phonebook), you can directly save the image in the phonebook by selecting " 🔳 ".

Note

his feature links only the phonebook in the phone memory.

PHOTO ALBUM   MENU 6.2

In this menu, you can review the pictures you have taken. This feature offers the ability to store all captured photo images in an album. When no images have been captured, the **Empty** message will be displayed. The picture will display the last image viewed. The title of the image will be displayed on top as well as the index number of the displayed image. The left or right navigation key is used to view previous or next image.

▶ **View:** You can view one image at a time.

▶ **Send Photo:** Allows you to send a multimedia message using the taken picture.

▶ **Set As Wallpaper:** Set selected photo image as a wallpaper.

▶ **Set As Photo ID:** You can add the selected image to a address book contact to use Photo Caller ID feature.

▶ **Delete:** Delete current image.

▶ **Slideshow:** The Slide Show mode will display the images in slide show format. The images are shown every 1.5 second intervals.

▶ **Rename:** Allows you to rename the taken picture.

▶ **Delete All:** Deletes all the images in your phone.

▶ **Information:** Displays Title, Size, Date and Time information on selected image.

CHECK MEMORY   MENU 6.3

You can check the current memory status on the phone.

Note

The phone has built-in 1 MB memory for photos, in which maximum 300 photos can be stored. But note that you cannot take pictures any more if the memory is full, even if you've taken less than 300 photos. And vice versa: you can take no more pictures if you've already taken 300 photos even though the memory is available.

PROFILES MENU 7.1

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

Vibrate Only (Menu 7.1.1)

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

Silent (Menu 7.1.2)

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

General (Menu 7.1.3)

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

Loud (Menu 7.1.4)

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

Headset (Menu 7.1.5)

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

Activate

Activates the selected Profile.

Personalise

Each has the submenus as shown below except for **Vibrate Only and Silent.**

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 tone

Allows to select the keypad tone for adjusting environment.

Keypad volume

Allows to set the keypad volume 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.

Rename

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, No alert
- **Message alert type :** Ring once, Ring periodically, No alert

DISPLAY

Wallpaper (Menu 7.2.1)

You can select the background picture in standby mode.

Menu Colour (Menu 7.2.2)

You can select the preferred menu colour among various combination.

Backlight Timer (Menu 7.2.3)

Use this to select whether or not the phone uses the backlight.

Contrast (Menu 7.2.4)

This option allows you to adjust the brightness level of the display screen.
You can adjust by using the right/left and up/down navigation key.

Languages (Menu 7.2.5)

You can change the language for the the display text in your phone.

DATE & TIME

Set Date (Menu 7.3.1)

This allows you to enter the day, month and year. You can change the date format via the Date Format menu option.

Date Format (Menu 7.3.2)

YYYY/MM/DD(year/month/day)
DD/MM/YYYY(day/month/year)
MM/DD/YYYY(month/day/year)

Set Time (Menu 7.3.3)

This allows you to enter the current time. You can choose the time format via the Time Format menu option.

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Time Format (Menu 7.3.4)

24 Hours/12 Hours

CALL   MENU 7.4

Call Forwarding (Menu 7.4.1)

SeleWhen this network service is activated, you can direct your incoming calls to another number, for example, to your voice mailbox number. For details, contact your service provider. Select one of the divert options, for example, select If busy to divert voice calls when your number is busy or when you reject incoming calls.

The following options are available:

▶ **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.

▶ **If Out Of Reach:** Diverts voice calls when the phone is switched off or out of coverage.

▶ **All Fax Calls:** Diverts to a number with a fax connection unconditionally.

▶ **Cancel All:** Cancels all call divert service.

Answer Mode (Menu 7.4.2)

This allows you to determine when to answer the phone.

▶ **Any Key:** You can answer an incoming call by pressing any key, except the [END] key.

▶ **Send Key Only:** You can answer an incoming call by only pressing the [SEND] key.

Send My Number (Menu 7.4.3)

This network service allows you to set your phone number to be displayed (**On**) or hidden (**Off**) from the person to whom you are calling. You can select **Set by Network** if you prefer to have different settings for different service provider.

Call Waiting (Menu 7.4.4)

The network will notify you of a new incoming call while you have a call in progress. Select **Activate** to request the network to activate call waiting, **Cancel** to request the network to deactivate call waiting, or **View Status**, to check if the function is active or not.

Minute Minder (Menu 7.4.5)

This option allows you to specify whether the phone will beep every minute during an outgoing call to keep you informed of the length of the call.

Auto Redial (Menu 7.4.6)

Select On, your phone redials the number you're trying to call up to 10 times after you hear a quick, busy signal. Press ✆ [END] to stop the call attempts.

This feature attempts to redial numbers that are busy due to the wireless network. It does not redial numbers to a busy party.

Note

There will be no alert indicating the call has been connected. You must stay on the line to hear when the call is connected.

Closed User Group (Menu 7.4.7)

Closed user group is a network service that specifies the group of people whom you can call and who can call you. For more information contact your network operator or service provider. 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).

▶ **Preset:** Setting the selected CUG Index.

▶ **On:** Activating and editing the CUG Index.

▶ **Off:** Deleting the selected CUG.

Send DTMF (Menu 7.4.8)

You can send the DTMF (dual tone multi-frequency) tones of the number on the display during a call.

This option is helpful for entering a password or account number when you call an automated system, like a banking service.

SECURITY   MENU 7.5

Various codes and passwords are used to protect the features of your phone. They are described in the following sections (see pages 25).

PIN Code Request (Menu 7.5.1)

When the PIN code request feature is enabled, you must enter your PIN each time you switch the phone on. Consequently, any person who does not have your PIN cannot use your phone without your approval.

Note

Before disabling the PIN code request feature, you must enter your PIN

The following options are available:

▶ **Enable:** You must enter the PIN each time the phone is switched on.

▶ **Disable:** The phone connects directly to the network when you switch it on.

Phone Lock (Menu 7.5.2)

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.

Auto Key Lock (Menu 7.5.3)

When you enable Automatic key lock, keypad will be locked automatically on an idle screen after 30 seconds without any key requesting.

Note

▶ If you want to lock your phone keypad manually, enter Top menu and press ✳ key.

▶ If you want to unlock your phone keypad, press ◁ [unlock] key and then press ✳ key. But if you enabled Automatic key lock before, your phone keypad will be unlock and then after 30 seconds the keypad will be lock up again automatically.

Call Barring Services (Menu 7.5.4)

Call barring allows you to restrict from making and receiving calls with your phone. For this function, you need the barring password, which you can obtain from your service provider.

The following options are available:

▶ **All Outgoing:** Calls cannot be made.

▶ **Outgoing International:** International calls cannot be made.

▶ **O/G** (Outgoing) **International Except Home Country:** When abroad, calls can be made only to numbers within the current country and to your home country, which is where your home network provider is located.

▶ **All Incoming:** Calls cannot be received.

▶ **Incoming When Abroad:** Calls cannot be received when you are using your phone outside your home service area.

▶ **Cancel All Barrings:** All call barring settings are deactivated; calls can be made and received normally.

▶ **Change Password:** You can set and change the call barring password obtained from your service provider using this option. You must enter the current password before you can specify a new one.Once you have entered a new password, you are asked to confirm it by entering it again.

Note

To use Call Barring service, you must input the network password. When calls are barred, calls may be possible to certain emergency numbers in some networks.

SETTINGS

Fixed Dial Number (Menu 7.5.5)

Allows you to restrict your outgoing calls to selected phone numbers, if this function is supported by your SIM card. The PIN2 code is required.

The following options are available:

▶ **Enable:** You can only call phone numbers stored in the Address Book. You must enter your PIN2.

▶ **Disable:** You can call any number.

▶ **Number List:** You can view the number list saved as fixed dial number.

Note

Not all SIM cards have a PIN2. If your SIM card does not, this menu option is not displayed.

Change Codes (Menu 7.5.6)

The Change codes feature allows you to change your current password to a new one. You must enter the current password before you can specify a new one.

You can change the access codes: **Security Code**, **PIN1 Code**, **PIN2 Code**.

Note PIN

Personal Identification Number.

Note

Be sure to store any changes you make in a place you can remember or contact your service provider if you need to reset your security codes.

CONNECTION   MENU 7.6

Network Selection (Menu 7.6.1)

The Network Selection feature allows you to indicate how the network you will use is selected when roaming outside your home area.
Options are: Automatic, Manual, and Preferred.

Note

You can select a network other than your home network only if it has a valid roaming agreement with your home network.

▶ **Automatic:** Allows you to set the phone to automatically search for and select one of the cellular networks available in your area.
The phone will be set to **Automatic** by default.

▶ **Manual:** Allows you to select the desired network manually from a list of networks. If the connection to the manually selected network is lost, the phone will sound an error tone and ask you to select a network again. The selected network must have a roaming agreement with your home network, that is, the operator whose SIM card is in your phone.
The phone lets you select another network if the phone fails to access the selected network. If you switch off the phone, the phone will be reset to **Automatic**.

▶ **Preferred:** You can set a list of preferred networks the handset should attempt to register with first, before attempting to register to any other networks. This list is created from the handset's predefined list of known networks.

Change Freqency Band (Menu 7.6.2)

When the America(1900) option is selected the device can be used in the US, and when the Europe(900/1800) option is chosen the device can be used in European countries.

Note

The US frequency is set at 1900 MHz and the European frequency is set at 900/1800 MHz.

Note

of caution that depending on the SIM card, the order of the menu can differ. The World Phone menu option sets the GSM frequency band between the GSM 1900 used in the US or GSM 900/1800 used in Europe.

This phone does not automatically search and set the GSM frequency. Instead the user must manually set the frequency band based on his/her location. The default setting is "America (1900)" so in order to switch to the European frequency, simply select the "Europe (900/1800)" option from the World Phone Setting menu. After the selection, turn the phone off and on again to begin using the new frequency setting. When traveling to different parts of the world, you must always set the World Phone Setting to the correct frequency band.

GPRS Attach (Menu 7.6.3)

If you select **Power On** and you are in a network that supports packet data, the phone registers to the GPRS network and sending short messages will be done via GPRS. Also, starting an active packet data connection, for example, to send and receive e-mail, is quicker. If you select **When Needed**, the phone will use a packet data connection only if you start an application or action that needs it. The GPRS connection is closed after it is not used by any application.

Note

If there is no GPRS coverage and you have chosen **Power On**, the phone will periodically try to establish a packet data connection.

Network Profile (Menu 7.6.4)

This feature sets the Profile during the WAP and MMS connections. The Profile menu under the Access Point feature will display Add, Delete and Editor options, but the reason why Activate option is not available is because there is no way of knowing whether WAP or MMS will be used to activate the content.

Reset Network Profile (Menu 7.6.5)

This allows Profile information to be restored to original setting.

RESET DEFAULT   MENU 7.7

You can easily reset your phone to its default configuration. To do so, proceed, as follows.

1. Select the Reset Settings menu option.

2. Enter the 4-digit phone password.

Note
The password is preset to **0000**.

BROWSER

You can access various WAP (Wireless Application Protocol) / Web services such as news, and weather. These services are specially designed for mobile phones and they are maintained by the service providers.

Note

Check the availability of WAP services, pricing and tariffs with your network operator and/or the service provider whose service you wish to use. Service providers will also give you instructions on how to use their services.
Please contact your service provider to open an Internet account.

Once connected, the homepage is displayed. The content depends on the service provider.

To exit the browser at any time, press the ⦸ [END] key. The idle screen is displayed.

Menus for the Browser

You can surf the Internet using either the phone keys or the WAP Browser menu.

Using the Navigation Keys

When surfing the Internet, the keys function differently than when in the phone mode.

Key	Description
up/down navigation key	Scroll each line of the content area

Using the WAP Browser Menu

There are various menus available when surfing the Internet.

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 the Service Provider if you have not defined it in the activated profile.

FAVORITES

This function allows you to store and edit frequently accessed sites. The following [Options] are available.

Note

Your phone may have some pre-installed bookmarks for sites not affiliated with LG. LG does not warrant or endorse these sites. If you choose to access them, you should take the same precautions for security or content as you would with any site.

Options in the Favorites view

- **Connect:** Connect to the URL address to download the ringtone.
- **View:** Display the bookmark title and URL.
- **Delete:** Allow you to erase the selected bookmark.
- **Edit:** Modify the existing bookmark item.
- **Move to Folder:** Move the Favorite to other folder.
- **New Favorite:** Create new Favorite in current folder.
- **New Folder:** Create new sub-folder.
- **Send URL:** Allows the bookmark information to be sent via SMS to another person.
- **Delete All:** Allows you to erase all bookmarks.

GO TO URL

You can directly connect to the site you want by entering a specific URL.

SETTINGS

Profiles (Menu 8.4.1)

A Profile is the network information used to connect to the internet.

Because Claro also selects a bearer automatically according to the current network status, the user doesn't need to select any of them.

BROWSER

Each profile has submenus as follows:

▶ **Activate:** Set a current profile as a default.

▶ **Edit:** Edit the various items of the current profile.

▶ **Rename:** Revise the name of profile.

▶ **New Network Profile:** Create new profile.

▶ **Delete:** Delete the profile.

▶ **Delete All:** Allows all Profiles within the Access Point to be deleted so please take precaution prior to using this option.

Note
The changes using these options may affect the other application function.

Cache Check (Menu 8.4.2)

Set a value whether a connection attempt is made through cache or not.

Note
A cache is a buffer memory, which is used to store data temporarily.

Clear Cache (Menu 8.4.3)

Remove all cached data in the memory.

Security Certificates (Menu 8.4.4)

A list of the available certificates is shown.

WAP Information (Menu 8.4.5)

The WAP Browser version is displayed.

GAMES & APPS MENU 9.1

Java is a technology developed by Sun Microsystems. Similar to the way you would download the Java Applet using the standard Netscape or MS Internet Explorer browsers, Java MIDlet can be downloaded using a WAP enabled phone. Depending on the service provider, Java based programs such as Java games can be downloaded and run on a phone. Once downloaded, the Java program can be viewed within the Games & Apps menu where you can select, execute or delete. The Java program files saved in the phone are in .JAD and .JAR formats.

Note

The JAR file is a compressed format of the Java program and the JAD file is a description file that includes all detailed information. From the network, prior to download, you can view all detailed file descriptions from the JAD file.

Warning

Only J2ME (Java 2 Micro Edition) based programs will run in a phone environment.
The J2SE (Java 2 Standard Edition) based

Games & Apps (Menu 9.1.1)

Games & Apps menu displays the list of Java programs downloaded using the WAP. All previous downloaded programs can be selected, deleted or viewed in detail within the Games & Apps menu.

Favorites (Menu 9.1.2)

When a new Java program is downloaded using WAP, the address from which a download takes place is known as a bookmark. The Java menu includes a bookmark list for downloading Java programs and this bookmark list can be viewed from the Favorites menu.

▶ **Connect:** Selected address in the bookmark is used for data connection. After successful connection, desired Java program can be downloaded from the list.

▶ **View:** Detailed information on a bookmark can be viewed such as name of bookmark and address of bookmark.

▶ **Delete:** Selected bookmark is deleted. Deleted bookmark cannot be restored so caution is required when deleting bookmarks.

▶ **Edit:** Selected bookmark can be edited. Editing a bookmark is done in the order of URL → Title → Profile(Access Point) → User ID→ Password. When creating a new bookmark, same order is followed. The service provider can require user ID and password information, but if none is provided, no input is necessary.

▶ **New Favorite:** New bookmark is added. If there is no Bookmark, you get a display indicating that there is no Bookmark. Bookmarks can be added by pressing the left soft key[Add].

▶ **Send URL:** Selected bookmark URL can be sent via SMS.

▶ **Delete All:** This deletes all of the selected bookmark as well as the bookmarks directory within the Games & Apps menu.

Note

After selecting the Connect function to access the Java MIDlet Provider's server, you may choose one of many Java programs to download and install into your phone.

Once connected to the server, the Go button can be pressed to view the JAD information on a desired program. The Get button will begin the download and install process. The download and install process will take place simultaneously and once download is complete you can immediately run the Java program. The installed Java program can be selected to run at a later time from the **Games & Apps** menu.

Information (Menu 9.1.3)

The downloaded programs using WAP are stored in the phone memory. There is a maximum memory capacity in a phone and once you exceed this memory, you will not be able to store any more programs. The View Information menu allows you to check the available memory capacity in a phone.

Check Memory

Displays maximum memory capacity and total available memory information.

Java Version

Displays current Java version.

AUDIO

MENU 9.2

▶ **Send via**

- Text Message: iMelody Sound can be sent via SMS.

- Multimedia Message: Downloaded Sound can be sent via MMS.

▶ **Set As Ring Tone:** This sets the Ring Tone with currently selected Sound.

▶ **Delete:** This deletes currently selected Sound.

▶ **Rename:** This deletes the Title of currently selected Sound.

▶ **Delete All:** This deletes all sounds.

Note

Sounds supplied as default can only be used under the Set As Ring Tone mode.

GRAPHICS

MENU 9.3

▶ **View:** You can view selected graphics.

▶ **Send Via Multimedia Message:** Downloaded Picture can be sent via MMS.

▶ **Set As Wallpaper:** Currently selected Picture can be set as a Wallpaper.

▶ **Delete:** Currently selected Picture can be deleted.

▶ **Edit Title:** Title of currently selected Picture can be edited.

▶ **Delete All:** All Pictures can be deleted.

▶ **List / Icon View:** You can set the view style as List and Icon.

Note

Pictures supplied as default can only be used under the Set As Wallpaper mode.

Q&A

Please check to see if any problems you have encountered with the phone are described in this section before taking the phone in for a service or calling a service engineer.

Q How do I view the list of outgoing calls, incoming calls and missed calls?

A Press the ⌨ key.

Q How do I clear all call history?

A Press the left soft key [Menu] and then the ▭ ▭ ▭ key.

Q How do I view all numbers stored in memory?

A Press right soft key [Names] and then ▭ .

Q Why is the connection inconsistent or not audible in certain areas?

A When frequency environment is unstable in a certain area, connection may be inconsistent and not audible. Relocate to another area and try again.

Q Why is the connection not consistent abruptly disconnects even when established?

A When frequency is unstable or weak or if there are too many users, connection may be cut off even after it was established. Please try again later or attempt after relocating to other areas.

Q Why does the LCD not turn on?

A Remove the battery and turn on the power after placing it back on. If there is no change, fully charge the battery and try again.

Q Why is there an echo when a connection is made with certain telephones in a certain area?

A This is called the 'Echo Phenomenon', where it occurs if connection volume is too high or caused by special properties (semi electronic telephone exchange) of the equipment on the other end.

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Q&A

Q Why does the phone heat up?

A The phone may get hot when there is a very long call duration or when games are played or even when surfing the Internet for a long time. This has no effect upon the life of the product or performance.

Q Why does the battery life get shorter in standby mode?

A The battery is worn out. As time passes, the battery life gradually becomes shorter. If the battery lasts about half the amount of time as when first purchased, it's time to purchase a new battery.

Q Why does the battery run out so quickly during normal use?

A It is due to the user environment or a large number of calls or weak signal.

Q Why is no number dialed when you recall a Address Book entry?

A Check that the number has been stored correctly by using the address book Search feature. Re-store them, if necessary.

Q Why can't my correspondent reach me?

A Is you phone switched on (pressed for more than three seconds)?Are you accessing the right cellular network? Or, you may have set an incoming call barring option.

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; NationalCouncil on Radiation Protection and Measurements;International Commission on Non-Ionizing RadiationProtection

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:

▶ 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.

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.

SAFETY GUIDELINES

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.

Health Care Facilities

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 use 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 areaí 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.

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.

Safety Information

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

Charger and Adapter Safety
▶ The charger and adapter are intended for indoor use only.

Battery Information and Care
▶ Please dispose of your battery properly or take it to your local wireless carrier for recycling.

▶ The battery does not need to be fully discharged before recharging.

▶ Use only LG-approved chargers specific to your phone model since they are designed to maximize battery life.

▶ 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.

▶ Keep the battery's metal contacts clean.

SAFETY GUIDELINES

- Replace the battery when it no longer provides acceptable performance. The battery can be recharged several hundred times before replacement.

- Recharge the battery after long periods of non-use to maximize battery life.

- Battery life will vary due to usage patterns and environmental conditions.

- Use of extended backlighting,MEdia Net Browsing, and data connectivity kits affect battery life and talk/standby times.

- The self-protection function of the battery cuts the power of the phone when its operation is in an abnormal state. In this case, remove the battery from the phone, reinstall it, and turn the phone on.

Explosion, Shock, and Fire Hazards

- 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.

- When using the power plug, ensure that it is firmly connected. If it is not, it may cause excessive heat or fire.

- If you put your phone in a pocket or bag without covering the receptacle of the phone (power plug pin), metallic articles (such as a coin, paperclip or pen) may short-circuit the phone. Always cover the receptacle when not in use.

- Do not short-circuit the battery. Metallic articles such as a coin, paperclip or pen in your pocket or bag may short-circuit the + and − terminals of the battery (metal strips on the battery) upon moving. Short-circuit of the terminal may damage the battery and cause an explosion.

General Notice

▶ Using a damaged battery or placing a battery in your mouth may cause serious injury.

▶ Do not place items containing magnetic components such as a credit card, phone card, bank book or subway ticket near your phone. The magnetism of the phone may damage the data stored in the magnetic strip.

▶ Talking on your phone for a long period of time may reduce call quality due to heat generated during use.

▶ When the phone is not used for a long period time, store it in a safe place with the power cord unplugged.

▶ Using the phone in proximity to receiving equipment (i.e., TV or radio) may cause interference to the phone.

▶ Do not use the phone if the antenna is damaged. If a damaged antenna contacts skin, it may cause a slight burn. Please contact an LG Authorized Service Center to replace the damaged antenna.

▶ Do not immerse your phone in water. If this happens, turn it off immediately and remove the battery. If the phone does not work, take it to an LG Authorized Service Center.

▶ The power cord on this product will expose you to lead, a chemical known to the State of California to cause (cancer) birth defects or other reproductive harm. Wash hands after handling.

▶ Do not paint your phone.

▶ The data saved in your phone might be deleted due to careless use, repair of the phone, or upgrade of the software. Please backup your important phone numbers. (Ring tones, text messages, voice messages, pictures, and videos could also be deleted.) The manufacturer is not liable for damage due to the loss of data.

▶ When you use the phone in public places, set the ring tone to vibration so as not to disturb others.

▶ Do not turn your phone on or off when putting it in your ear.

FDA Consumer Update

The U.S. Food and Drug Administrationís 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

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. 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. 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). 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.nrpb.org.uk/)

10 Driver Safety Tips

Your wireless phone gives you the powerful ability to communicate by voice almost anywhere, anytime. An important responsibility accompanies the benefits of wireless phones, one that every user must uphold.

When operating a car, driving is your first responsibility.

When using your wireless phone behind the wheel of a car, practice good common sense and remember the following tips:

1. Get to know your wireless phone and its features such as speed dial and redial. Carefully read your instruction manual and learn to take advantage of valuable features most phones offer, including automatic redial and memory. Also, work to memorize the phone keypad so you can use the speed dial function without taking your attention off the road.

2. When available, use a hands-free device. A number of hands-free wireless phone accessories are readily available today. Whether you choose an installed mounted device for your wireless phone or a speaker phone accessory, take advantage of these devices if available to you.

3. Position your wireless phone within easy reach. Make sure you place your wireless phone within easy reach and where you can reach it without removing your eyes from the road. If you get an incoming call at an inconvenient time, if possible, let your voicemail answer it for you.

4. Suspend conversations during hazardous driving conditions or situations. Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow and ice can be hazardous, but so is heavy traffic. As a driver, your first responsibility is to pay attention to the road.

5. Do not take notes or look up phone numbers while driving. If you are reading an address book or business card, or writing a "to-do" list while driving a car, you are not watching where you are going. It is common sense. Don't get caught in a dangerous situation because you are reading or writing and not paying attention to the road or nearby vehicles.

6. Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic.

SAFETY GUIDELINES

Try to plan your calls before you begin your trip or attempt to coincide your calls with times you may be stopped at a stop sign, red light or otherwise stationary. But if you need to dial while driving, follow this simple tip— dial only a few numbers, check the road and your mirrors, then continue.

7. Do not engage in stressful or emotional conversations that may be distracting. Stressful or emotional conversations and driving do not mix; they are distracting and even dangerous when you are behind the wheel of a car. Make people you are talking with aware you are driving and if necessary, suspend conversations which have the potential to divert your attention from the road.

8. Use your wireless phone to call for help. Your wireless phone is one of the greatest tools you can own to protect yourself and your family in dangerous situations — with your phone at your side, help is only three numbers away. Dial 911 or other local emergency number in the case of fire, traffic accident, road hazard or medical emergency. Remember, it is a free call on your wireless phone!

9. Use your wireless phone to help others in emergencies. Your wireless phone provides you a perfect opportunity to be a "Good Samaritan" in your community. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 911 or other local emergency number, as you would want others to do for you.

10. Call roadside assistance or a special wireless nonemergency assistance number when necessary. Certain situations you encounter while driving may require attention, but are not urgent enough to merit a call for emergency services. But you can still use your wireless phone to lend a hand. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured or a vehicle you know to be stolen, call roadside assistance or other special non-emergency wireless number.

For more information, please call to 888-901-SAFE, or visit our website www.wow-com.com

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. The highest SAR value for this model phone when tested for use at the ear is **0.504**W/kg and when worn on the body, as described in this user's manual, is **0.462**W/kg. (Body-worn measurements differ amongphone 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.

SAFETY GUIDELINES

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 BEJ**KG189**

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.

GLOSSARY

To help you understand the main technical terms and abbreviations used in this booklet and take full advantage of the feature on your mobile phone, here are a few definitions.

Call Barring
Ability to restrict outgoing and incoming calls.

Call Divert
Ability to reroute calls to another number.

Call waiting
Ability to inform users that they have an incoming call when engaged on another call.

GPRS (General Packet Radio Service)
GPRS guaranties continuous connection to the Internet for mobile phone and computer users. It is based on the Global System for Mobile Communication (GSM) circuit-switched cellular phone connections and the Short Message Service (SMS).

GSM (Global System for Mobile Communication)
International standard for cellular communication, guaranteeing compatibility between the various network operators. GSM covers most European countries and many other parts of the world.

Java
Programming language generating applications that can run on all hardware platforms, whether small, medium or large, without modification. It has been promoted for and geared heavily to the Web, both for public Web sites and Intranets. When a Java program runs from a Web page, it is called a Java applet. When it is run on a mobile phone or pager, it is called a MIDlet.

Line Identification Services (Caller ID)
Service allowing subscribers to view or block the telephone numbers of callers.

Multiparty Calls
Ability to establish a conference call involving up to five additional parties.

GLOSSARY

Phone Password

Security code used to unlock the phone when you have selected the option to lock it automatically each time it switches on.

Roaming

Use of your phone when you are outside your home area (when traveling for example).

SDN (Service Dial Number)

Telephone numbers supplied by your network provider and giving access to special services, such as voice mail, directory inquiries, customer support and emergency services.

SmartChip

Card containing a chip with all the information required to operate the phone (network and memory information, as well as the subscriber's personal data). The SmartChip fits into a small slot on the back of the phone and is protected by the battery.

SMS (Short Message Service)

Network service sending and receiving messages to and from another subscriber without having to speak to the correspondent. The message created or received (up to 160 characters long) can be displayed, received, edited or sent.