SAMSUNG

SGH-B518
User's Guide

DRAFT Version
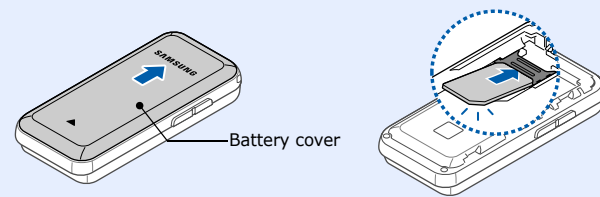
Some of the contents in this guide may differ from your phone depending on the software of the phone or your service provider.

Installing the SIM card and battery

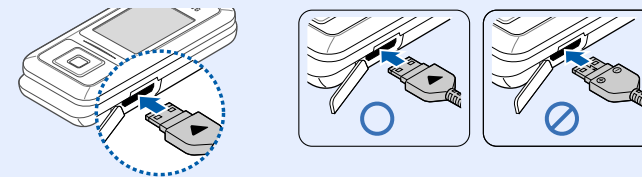1. Remove the battery cover and insert the SIM card.

Battery cover

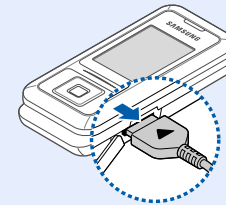2. Install the battery and reattach the battery cover.
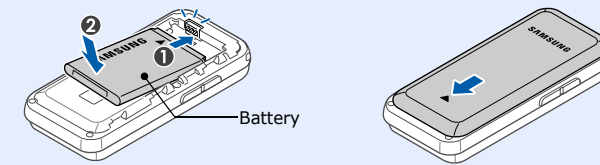
Battery

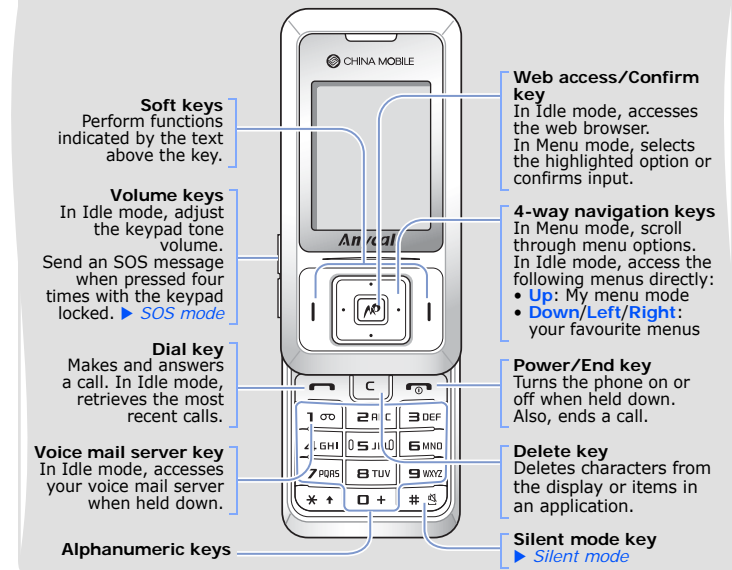## Charging the battery

1. Plug the supplied travel adapter.

With the triangle facing up

2. When charging is finished, unplug the travel adapter.

Note: Do not remove the battery from the phone without unplugging the travel adapter first. Otherwise, the phone may be damaged.

Phone layout and key functions

Soft keys
Perform functions indicated by the text above the key.

Volume keys
In Idle mode, adjust the keypad tone volume.
Send an SOS message when pressed four times with the keypad locked. ▶ SOS mode

Dial key
Makes and answers a call. In Idle mode, retrieves the most recent calls.

Voice mail server key
In Idle mode, accesses your voice mail server when held down.

Alphanumeric keys

Web access/Confirm key
In Idle mode, accesses the web browser.
In Menu mode, selects the highlighted option or confirms input.

4-way navigation keys
In Menu mode, scroll through menu options.
In Idle mode, access the following menus directly:
• **Up**: My menu mode
• **Down/Left/Right**: your favourite menus

Power/End key
Turns the phone on or off when held down. Also, ends a call.

Delete key
Deletes characters from the display or items in an application.

Silent mode key
▶ Silent mode

Silent mode
Press and hold **#** in Idle mode to disable all sounds on the phone. To exit, press and hold this key again.

Keypad lock mode
When you close the phone, it locks the exposed keys to ignore accidental key pressing. To unlock, press the **Unlock** soft key and then [✎].

SOS mode
With the phone closed, press the Volume keys 4 times when the keypad is locked to send an SOS message to preset numbers. Once the SOS message is sent, the phone will change to SOS mode and will receive calls only from the registered recipients. Upon receiving a call from the SOS message recipients, the phone will automatically answer the call. Press [☎] to exit SOS mode.

Display

Your phone is in Idle mode when you are not on a call or using a menu. You must be in Idle mode to dial a phone number.

Icons

Text and graphics

Soft key function indicators
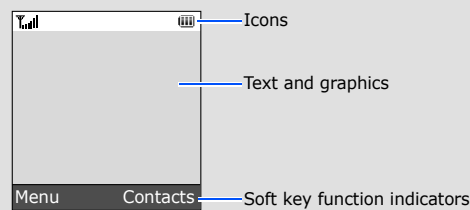
Your phone displays the following status indicators on the top of the screen:

Icon	Description	Icon	Description
	Signal strength		SOS message feature active
	GPRS (2.5G) network		Alarm set
	Connecting to GPRS (2.5G) network		FM radio on
	Transferring data in GPRS (2.5G) network		Silent mode (Vibration)
	Call in progress		Silent mode (Mute)
	Connected to secured web page		Call ringer set to vibrate
	Connected with PC		Whisper mode, during a call
	Call diverting active		Mute mode, during a call
	Home Zone		Battery power level
	Office Zone		
	Roaming network		
	New message		
	New voice mail		

Switching on or off the phone

1. Press and hold [☎] for more than one second to switch on the phone.

2. To switch off the phone, press and hold [☎] for more than two seconds.

Changing the display language

1. In Idle mode, press the **Menu** soft key.

2. Select **Settings** → **Phone settings** → **Language**.

3. Select a language.

Making a call

1. In Idle mode, enter an area code and phone number, and press [☎].

2. Press [☎] to end the call.

Answering a call

1. When the phone rings, press the **Accept** soft key or [☎] to answer a call.
   To reject the call, press the **Reject** soft key or [☎].

2. Press [☎] to end the call.

Adjusting the ringer volume

1. In Idle mode, press the **Menu** soft key.

2. Select **Settings** → **Sound settings** → **Incoming call** → **Volume**.

3. Press **Left** or **Right** to adjust the volume level.

4. Press the **Save** soft key.

While a call is in progress, press the Volume keys to adjust the earpiece volume.

Changing a ringtone for calls

1. In Idle mode, press the **Menu** soft key.

2. Select **Settings** → **Sound settings** → **Incoming call** → **Ringtone**.

3. Select a ringtone category → a ringtone and press the **Save** soft key.

Redialling recent numbers

1. In Idle mode, press [☎].

2. Press **Left** or **Right** to select a call type.

3. Press **Up** or **Down** to scroll to the number you want.

4. Press [✎] to view details of a call, or [☎] to dial the number.

Using the menus

In Idle mode, press the **Menu** soft key to enter the main menu.

Labels at the bottom corners of the display show the current soft key functions. Press the left soft key or right soft key to perform the function indicated.
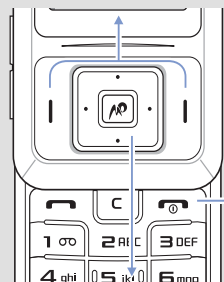
To exit the menu without changing the menu settings, press this key.

Use the 4-way navigation keys as shortcuts to access your favourite menus. **Up** is fixed as a shortcut to My menu mode.
1. In Idle mode, press the **Menu** soft key.
2. Select **Settings** → **Phone settings** → **Shortcuts**.
3. Select a key.
4. Select a menu to be assigned to the key.

To select or modify a menu or feature:

1. In Idle mode, press the **Menu** soft key.

2. Press the Navigation keys to reach a desired menu and then press the **Select** soft key or [✎].

3. If the menu contains any submenus, locate the one you want by pressing the Navigation keys. Press the **Select** soft key or [✎] to enter the submenu.
   If the selected menu contains additional submenus, repeat this step.

4. Press the Navigation keys to find the setting of your choice.

5. Press the **Select** soft key or [✎] to confirm your chosen setting.

Menu map

1. **Phonebook**

2. **Call records**

3. **Monternet**

4. **China Mobile In**
   4.1 M.Music
   4.2 Games
   4.3 News & Weather
   4.4 IM(Fetion)
   4.5 Mobile & TV
   4.6 Phonebook manager
   4.7 Finace online
   4.8 What's new
   4.9 STK applications
   4.10 My Monternet
   4.11 Monternet

5. **Messages**

6. **Customer service**
   6.1 Service guide

6.2 Mobile service center
6.3 Service hotline
6.4 Customer manager
6.5 My Monternet
6.6 Settings

7. **My favourites**
   7.1 My B518 zone
   7.2 Images
   7.3 Sounds
   7.4 Java box
   7.5 MMS card
   7.6 Hot message
   7.7 Internet connection
   7.8 Other files
   7.9 Memory status

8. **Applications**
   8.1 Voice recorder
   8.2 FM radio
   8.3 Calendar
   8.4 World clock
   8.5 Alarm

8.6 Calculator
8.7 Converter
8.8 Timer
8.9 Stopwatch
8.10 Memo

9. **Settings**
   9.1 Time and date
   9.2 Phone settings
   9.3 Display settings
   9.4 Sound settings
   9.5 Light settings
   9.6 Network services
   9.7 Security
   9.8 Connection settings
   9.9 Memory status
   9.10 Software update
   9.11 Reset settings

Entering text

Changing the text input mode

• Press **#** until the input mode indicator you want appears. Depending on your country, you may be able to access an input mode for your specific language.

• Press and hold **✳** to switch to Symbol mode.

Chinese Pinyin mode

1. Press the keys corresponding the phonetic spelling, pinyin, referring to the letters printed on the keys.
   Example: To enter "你", press **6** and **4** to enter "ni."

2. Press **Left** or **Right** to select alternative pinyins for the keys you pressed.

3. If you cannot find the character you want, press **Up** or **Down** to scroll through the word choices.

4. Press **1** to activate the character selection field.

5. Press the number key corresponding to the character you want.

Chines Stroke mode

1. Press the keys that corresponds to a character's component strokes.
   Example: To enter "力", press **5** for → and **3** for ╱.

2. If you cannot find the character you want, press **Up** or **Down** to scroll through the word choices.

3. Press the number key corresponding to the character.

Quick English mode

1. Press keys **2** to **9** to start entering a word. Press each key only once for one letter.

   The word you are entering appears on the display. It may change with each keypress. Finish entering the word before editing or deleting any keystrokes.

   Example: To enter "Hello" in T9 mode, press **4**, **3**, **5**, **5**, and **6**.

   If the word is not correct, press **0** to display alternative word choices for the keys that you have pressed.

2. When the word displays correctly, insert a space after it by pressing **#**.

English mode

Press the keys labelled with the letter you want once for the first letter, twice for the second letter, and so on.

For example, press **2** three times to enter the letter "C" and **5** two times to enter the letter "K."

Number mode

Press the keys corresponding to the digits you want.

Symbol mode

Press the number keys corresponding to the symbol you want. You can press **Up** or **Down** to display more symbols.

My Words mode

Menu	Description
Menu > Monternet	Access the monternet service, which is a WAP portal service of China Mobile.
Menu > China Mobile In	Access web links preset by your service provider.
Menu > Messages > Create message > Text message or Multimedia message	Create and send messages to other mobile phones.
Menu > Messages > My messages	Access messages that you have received, sent, or that you have failed in sending.
Menu > Messages > Templates	Preset templates of frequently used messages.
Menu > Messages > Delete all	Delete messages in each message folder, or all messages at once.
Menu > Messages > Settings	Set options for using messaging services.
Menu > Messages > SOS messages	Activate the SOS message feature. Enter recipients and select the repeat mode.
Menu > Messages > Memory status	Check information about the memory currently in use.
Menu > Customer service	Get a variety of information and convenient services provided by your service provider.
Menu > My favourites > My B518 Zone	Access the service link of your service provider. You can download a wide variety of Samsung customised mobile contents from it.
Menu > My favourites > Images, Sounds or Other files	Access media files and other files stored in the phone's memory.

Menu	Description
Menu > Settings > Connection settings	Create and customise the profiles containing the settings for connecting your phone to the network.
Menu > Settings > Memory status	Check information about the memory currently in use.
Menu > Settings > Software update	Access the homepage of your service provider and download the latest firmware for your phone.
Menu > Settings > Reset settings	Reset the phone to the factory default settings.

Important safety precautions

Read these guidelines before using your wireless phone. Failure to comply with them may be dangerous or illegal.

Drive safely at all times
Do not use a hand-held phone while driving; park your vehicle first.

Switching off when refuelling
Do not use the phone at a refuelling point (service station) or near fuels or chemicals.

Switching off in an aircraft
Wireless phones can cause interference. Using them in an aircraft is both illegal and dangerous.

Switching off near all medical equipment
Hospitals and health care facilities may be using equipment that could be sensitive to external RF energy. Follow any regulations or rules in force.

Interference

You can set up a list of phrases you use frequently in order to quickly enter characters.

To add a phrase:

1. Select **Add Word**.
2. Enter the phrase you want and press the **OK** soft key.
3. Enter the name for the phrase in English mode and press the **OK** soft key.
4. To insert an added phrase, select it from the My Words list.

Tips for entering text

- To move the cursor, press the Navigation keys.
- To delete characters one by one, press **C**. To delete all of the characters, press and hold **C**.
- To insert a space between characters, press **0**.
- To change case in T9 mode or ABC mode, press **#**.
- To enter punctuation marks in T9 mode or ABC mode, press **1**.

Sending an SMS message

1. In Idle mode, press the **Menu** soft key.
2. Select **Messages → Create message → Text message**.
3. Enter the message text.

Menu	Description
Menu > My favourites > Java box	Access the embedded Java games and download Java applications.
Menu > My favourites > MMS card	Send an MMS message using various kinds of default card images.
Menu > My favourites > Hot message	View the messages you have moved to this folder and organise then.
Menu > My favourites > Internet connection.	Launch teh web browser.
Menu > My favourites > Memory status	Check information about the memory currently in use.
Menu > Applications > Voice recorder	Record voice memos and listen to them.
Menu > Applications > FM radio	Listen to music or news via the FM radio on your phone. First, you must connect your phone with the headset, which serves as a radio antenna.
Menu > Applications > Calendar	Keep track of daily or monthly schedule.
Menu > Applications > Stopwatch	Measure elapsed time.
Menu > Applications > Memo	Make memos for things that are important and manage them.
Menu > Settings > Time and date	Set the time and date manually or set your local time zone.
Menu > Settings > Phone settings > Language	Select a language to be used for the display text.

All wireless phones may be subject to interference, which could affect their performance.

Special regulations
Follow any special regulations in force in any area and always switch off your phone whenever it is forbidden to use it.

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

Sensible use
Use only in the normal position (held to your ear). Avoid unnecessary contact with the antenna when the phone is switched on.

Emergency calls
Key in the emergency number for your present location, then press ☎. Do not end the call until given permission to do so.

Small children and your phone
Keep the phone and all its parts including accessories out of reach of small children.

Accessories and batteries
Use only Samsung-approved batteries and accessories, such as headsets and PC data cables. Use of any unauthorised accessories could damage your phone and may be dangerous.

> **CAUTION** Risk of explosion if a battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

> ⚠ At very high volume, prolonged listening to a headset can damage your hearing.

Qualified service

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4. Press the **Options** soft key and add items using the following options:
   - **Insert**: add text templates, phonebook or bookmark items
   - **Add image**: add images.
   - **Add animation**: add emotions or animations.
   - **Add melody**: add sounds.
   - **Attach**: attach a namecard , appointment, anniversary, memo, or task.
5. Press the **Options** soft key and select **Send only** or **Save and send**.
6. Enter a destination number.
7. Press 📞 to send the message.

Quick feature reference

This section provides brief explanations of features on your phone.

Menu	Description
Menu > Phonebook > Contact list	Search for contacts in Phonebook.
Menu > Phonebook > Create contact	Add a new contact to Phonebook.
Menu > Phonebook > Group	Create a group and select a ringtone for incoming calls from members of a group. Also, change the group name.
Menu > Phonebook > Speed dial	Assign speed dial numbers of your most frequently dialled numbers.

Menu	Description
Menu > Settings > Phone settings > Slide settings	Set how the phone reacts when you open it for an incoming call, and when you close it while using a function.
Menu > Settings > Phone settings > Shortcuts	Set the Navigation keys as shortcuts to access your favourite menus directly.
Menu > Settings > Phone settings > My menu	Set up a menu of your own using your favourite menu items.
Menu > Settings > Phone settings > Volume key	Set whether the phone mutes the call ringer or rejects a call if you press and hold the Volume keys when a call comes in.
Menu > Settings > Phone settings > Extra settings	Set the automatic redialling feature or the answering method.
Menu > Settings > Phone settings > Offline mode	Switch the phone to Offline mode. This mode is helpful when you want to use your phone in a place where you are not allowed to use mobile devices, such as in an aeroplane and at a hospital.
Menu > Settings > Display settings	Change the settings for the display.
Menu > Settings > Sound settings	Change the settings for the various sounds.
Menu > Settings > Light settings	Change the settings for the backlight and keypad light.
Menu > Settings > Network services	Access network services offered by your service provider.

Only qualified service personnel may repair your phone.

Menu	Description
Menu > Phonebook > My namecard	Create a name card and send it to other people.
Menu > Phonebook > Own numbers	Check your phone numbers or assign a name to them.
Menu > Phonebook > Management	Copy all contacts on the SIM card to the phone's memory, or delete all Phonebook contacts. You can also check memory information for Phonebook contacts.
Menu > Phonebook > Service number	Access the list of service numbers assigned by your service provider.
Menu > Phonebook > Phonebook update	Initiate synchronisation of Phonebook with the online Phonebook.
Menu > Phonebook > Online inquiry	Access the online phonebook to store contacts and manage them.
Menu > Call records > Recent contacts, Missed calls, Dialled calls, or Received calls	View the most recent calls you have dialled, received, or missed.
Menu > Call records > Delete all	Delete the call logs in each call type, or all logs at once.
Menu > Call records > IP call	Select a default IP call prefix number. You can also add new prefix numbers. This function is avaliable only if supported by your network.
Menu > Call records > Call manager	View the duration of calls you have dialled and received, and the cost of your calls, if supported by your SIM card. Also, make a list of the phone numbers from which you want to reject calls.

Menu	Description
Menu > Settings > Security > PIN check	Activate your PIN to protect your SIM card against unauthorised use.
Menu > Settings > Security > Change PIN code	Change the PIN.
Menu > Settings > Security > Phone lock	Activate your phone password to protect your phone against unauthorised use.
Menu > Settings > Security > Change password	Change the phone password.
Menu > Settings > Security > Privacy	Lock access to messages, files, or all menu functions on the phone, except for call functions.
Menu > Settings > Security > SIM lock	Set the phone to work only with the current SIM card by assigning a SIM lock password.
Menu > Settings > Security > Fixed dialling mode	Set the phone to restrict calls to a limited set of phone numbers, if supported by your SIM card.
Menu > Settings > Security > Change PIN2 code	Change your current PIN2, if supported by your SIM card.
Menu > Settings > Security > Mobile tracker	Track your phone when it is stolen or lost. When someone tries to use your phone with other SIM card, the phone will automatically send the preset tracking message to your family or friends. This feature may be unavailable due to certain features supported by your service provider.

Menu	Description
Memory status	Check memory information for each items in the phone's memory or on a memory card.
Reset settings	Reset the phone's settings you have changed.
Key management	Manage the licence keys you have acquired to activate media files locked by DRM systems.

Health and safety

Exposure to Radio Frequency (RF) Signals

Certification Information (SAR)

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the exposure limits for radio frequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. government. These FCC exposure limits are derived from the recommendations of two expert organizations, the National Counsel on Radiation Protection and Measurement (NCRP) and the Institute of Electrical and Electronics Engineers (IEEE). In both cases,

the recommendations were developed by scientific and engineering experts drawn from industry, government, and academia after extensive reviews of the scientific literature related to the biological effects of RF energy.

The exposure limit set by the FCC for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate (SAR). The SAR is a measure of the rate of absorption of RF energy by the human body expressed in units of watts per kilogram (W/kg). The FCC requires wireless phones to comply with a safety limit of 1.6 watts per kilogram (1.6 W/kg). The FCC exposure limit incorporates a substantial margin of safety to give additional protection to the public and to account for any variations in measurements.

SAR tests are conducted using standard operating positions accepted by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although the 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. This is because the phone is designed to operate at

multiple power levels so as 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 new model phone is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the exposure limit established by the FCC. Tests for each model phone are performed in positions and locations (e.g. at the ear and worn on the body) as required by the FCC.

The highest SAR values for this model phone as reported to the FCC are : GSM1900 Mode Head: 1.28W/Kg, Body-worn: 0.680W/Kg.

For body worn operations, this model phone has been testde and meets the FCC exposure guidelines when used with a Samsung accessory designated for this product or when used with an accessroy that contains no metal and that positons the handset a minimum 1.5 cm from the body.

Non-compliance with the above restrictions may result in violation of FCC RF exposure guidelines.

SAR information on this and other model phones can be viewed on-line at www.fcc.gov/oet/fccid. This site uses the phone FCC ID number A3LSGHB518. Sometimes it may be necessary to remove the battery pack to find the number. Once you have the FCC ID number for a particular phone, follow the instructions on the website and it should provide values for typical or maximum SAR for a particular phone. Additional product specific SAR information can also be obtained at www.fcc.gov/cgb/sar.

Consumer Information on Wireless Phones

The U.S. Food and Drug Administration (FDA) has published a series of Questions and Answers for consumers relating to radio frequency (RF) exposure from wireless phones. The FDA publication includes the following information:

What kinds of phones are the subject of this update?

The term wireless phone refers here to hand-held wireless phones with built-in antennas, often called "cell," "mobile," or "PCS" phones. These types of wireless phones can expose the user to measurable radio frequency energy (RF) because of the short distance between the phone and the user's head. These RF exposures are limited by Federal Communications Commission safety guidelines that were developed with

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the advice of FDA and other federal health and safety agencies. When the phone is located at greater distances from the user, the exposure to RF is drastically lower because a person's RF exposure decreases rapidly with increasing distance from the source. The so-called "cordless phones," which have a base unit connected to the telephone wiring in a house, typically operate at far lower power levels, and thus produce RF exposures well within the FCC's compliance limits.

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 radio frequency energy (RF) in the microwave range while being used. They

also emit very low levels of RF when in the stand-by mode. Whereas high levels of RF can produce health effects (by heating tissue), exposure to low level RF that does not produce heating effects causes no known adverse health effects. Many studies of low level RF exposures have not found any biological effects. Some studies have suggested that some biological effects may occur, but such findings have not been confirmed by additional research. In some cases, other researchers have had difficulty in reproducing those studies, or in determining the reasons for inconsistent results.

What is FDA's role concerning the safety of wireless phones?

Under the law, FDA does not review the safety of radiation-emitting consumer products such as wireless phones before they can be sold, as it does with new drugs or medical devices. However, the agency has authority to take action if wireless phones are shown to emit radio frequency energy (RF) at a level that is hazardous to the user. In such a case, FDA could require the manufacturers of wireless phones to notify users of the health hazard and to repair, replace or recall the phones so that the hazard no longer exists.

Although the existing scientific data do not justify FDA regulatory actions, FDA has urged the wireless phone industry to take a number of steps, including the following:

- "Support needed research into possible biological effects of RF of the type emitted by wireless phones;
- "Design wireless phones in a way that minimizes any RF exposure to the user that is not necessary for device function; and
- "Cooperate in providing users of wireless phones with the best possible information on possible effects of wireless phone use on human health.

FDA belongs to an interagency working group of the federal agencies that have responsibility for different aspects of RF safety to ensure coordinated efforts at the federal level. The following agencies belong to this working group:

- "National Institute for Occupational Safety and Health
- "Environmental Protection Agency

- "Federal Communications Commission
- "Occupational Safety and Health Administration
- "National Telecommunications and Information Administration

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

FDA shares regulatory responsibilities for wireless phones with the Federal Communications Commission (FCC). All phones that are sold in the United States must comply with FCC safety guidelines that limit RF exposure. FCC relies on FDA and other health agencies for safety questions about wireless phones.

FCC also regulates the base stations that the wireless phone networks rely upon. While these base stations operate at higher power

than do the wireless phones themselves, the RF exposures that people get from these base stations are typically thousands of times lower than those they can get from wireless phones. Base stations are thus not the primary subject of the safety questions discussed in this document.

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 radio frequency 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 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 phones 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.

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 ten 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.

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

FDA is working with the U.S. National Toxicology Program and with groups of investigators around the world to ensure that high priority animal studies are conducted to address important questions about the effects of exposure to radio frequency energy (RF).

FDA has been a leading participant in the World Health Organization international Electromagnetic Fields (EMF) Project since its inception in 1996. An influential result of this work has been the development of a detailed agenda of research needs that has driven the establishment of new research programs around the world. The Project has also helped develop a series of public information documents on EMF issues.

FDA and Cellular Telecommunications & Internet Association (CTIA) have a formal Cooperative Research and Development Agreement (CRADA) to do research on wireless phone safety. FDA provides the scientific oversight, obtaining input from experts in government, industry, and academic organizations. CTIA-funded research is conducted through contracts to independent investigators. The initial research will include both laboratory studies and studies of wireless phone users. The CRADA will also include a broad assessment of additional research needs in the context of the latest research developments around the world.

What steps can I take to reduce my exposure to radio frequency 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 radio frequency 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.

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 radio frequency 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.

Do hands-free kits for wireless phones reduce risks from exposure to RF emissions?

Since there are no known risks from exposure to RF emissions from wireless phones, there is no reason to believe that hands-free kits reduce risks. Hands-free kits can be used with wireless phones for convenience and comfort. These systems reduce the absorption of RF energy in the head because the phone, which is the source of the RF emissions, will not be placed against the head. On the other hand, if the phone is mounted against the waist or other part of the body during use, then that part of the body will absorb more RF energy. Wireless phones marketed in the U.S. are required to meet safety requirements regardless of whether they are used against the head or against the body. Either configuration should result in compliance with the safety limit.

Do wireless phone accessories that claim to shield the head from RF radiation work?

Since there are no known risks from exposure to RF emissions from wireless phones, there is no reason to believe that accessories that claim to shield the head from those emissions reduce risks. Some products that claim to shield the user from

RF absorption use special phone cases, while others involve nothing more than a metallic accessory attached to the phone. Studies have shown that these products generally do not work as advertised. Unlike "hand-free" kits, these so-called "shields" may interfere with proper operation of the phone. The phone may be forced to boost its power to compensate, leading to an increase in RF absorption. In February 2002, the Federal trade Commission (FTC) charged two companies that sold devices that claimed to protect wireless phone users from radiation with making false and unsubstantiated claims. According to FTC, these defendants lacked a reasonable basis to substantiate their claim.

What about wireless phone interference with medical equipment?

Radio frequency energy (RF) from wireless phones can interact with some electronic devices. For this reason, FDA helped develop a detailed test method to measure electromagnetic interference (EMI) of implanted cardiac pacemakers and defibrillators from wireless telephones. This test method is now part of a standard sponsored by the Association for the Advancement of Medical instrumentation (AAMI). The final draft, a joint effort by FDA, medical device manufacturers, and many other groups, was completed in late 2000. This standard will allow manufacturers to ensure that cardiac pacemakers and defibrillators are safe from wireless phone EMI. FDA has tested 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.

FDA continues to monitor the use of wireless phones for possible interactions with other medical devices. Should harmful interference be found to occur, FDA will conduct testing to assess the interference and work to resolve the problem.

Additional information on the safety of RF exposures from various sources can be obtained from the following organizations:

- FCC RF Safety Program:
  http://www.fcc.gov/oet/rfsafety/
- Environmental Protection Agency (EPA):
  http://www.epa.gov/radiation/
- Occupational Safety and Health Administration's (OSHA):
  http://www.osha.gov/SLTC/radiofrequencyradiation/index.html
- National institute for Occupational Safety and Health (NIOSH):
  http://www.cdc.gov/niosh/emfpg.html
- World health Organization (WHO):
  http://www.who.int/peh-emf/
- International Commission on Non-Ionizing Radiation Protection:
  http://www.icnirp.de
- National Radiation Protection Board (UK):
  http://www.nrpb.org.uk
- Updated 4/3/2002: US food and Drug Administration
  http://www.fda.gov/cellphones

Road Safety

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

When driving 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. If available, these features help you to place your call without taking your attention off the road.

2. When available, use a hands-free device. If possible, add an additional layer of convenience and safety to your wireless phone with one of the many hands free accessories available today.

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3. Position your wireless phone within easy reach. Be able to access your wireless phone without removing your eyes from the road. If you get an incoming call at an inconvenient time, let your voice mail answer it for you.

4. 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, ice and even heavy traffic can be hazardous.

5. Do not take notes or look up phone numbers while driving. Jotting down a "to do" list or flipping through your address book takes attention away from your primary responsibility, driving safely.

6. Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan calls when your car will be stationary. If you need to make a call while moving, 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. Make people you are talking with aware you are driving and suspend conversations that have the potential to divert your attention from the road.

8. Use your wireless phone to call for help. Dial 9-1-1 or other local emergency number in the case of fire, traffic accident or medical emergencies. Remember, it is a free call on your wireless phone!

9. Use your wireless phone to help others in emergencies. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 9-1-1 or other local emergency number, as you would want others to do for you.

10. Call roadside assistance or a special non-emergency wireless assistance number when necessary. 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 number.

"The wireless industry reminds you to use your phone safely when driving."

For more information, please call 1-888-901-SAFE, or visit our web-site www.wow-com.com

Provided by the Cellular Telecommunications & Internet Association

Operating Environment

Remember to follow any special regulations in force in any area and always switch your phone off whenever it is forbidden to use it, or when it may cause interference or danger. When connecting the phone or any accessory to another device, read its user's guide for detailed safety instructions. Do not connect incompatible products.

As with other mobile radio transmitting equipment, users are advised that for the satisfactory operation of the equipment and for the safety of personnel, it is recommended that the equipment should only be used in the normal operating position (held to your ear with the antenna pointing over your shoulder).

Using Your Phone Near Other Electronic Devices

Most modern electronic equipment is shielded from radio frequency (RF) signals. However, certain electronic equipment may not be shielded against the RF signals from your wireless phone. Consult the manufacturer to discuss alternatives.

Pacemakers

Pacemaker manufacturers recommend that a minimum distance of 15 cm (6 inches) be maintained between a wireless phone and a pacemaker to avoid potential interference with the pacemaker.

These recommendations are consistent with the independent research and recommendations of Wireless Technology Research.

Persons with pacemakers:

- should always keep the phone more than 15 cm
  (6 inches) from their pacemaker when the phone is switched on.
- should not carry the phone in a breast pocket.
- should use the ear opposite the pacemaker to minimize potential interference.

If you have any reason to suspect that interference is taking place, switch your phone off immediately.

Hearing Aids

Some digital wireless phones may interfere with some hearing aids. In the event of such interference, you may wish to consult your hearing aid manufacturer to discuss alternatives.

Other Medical Devices

If you use any other personal medical devices, consult the manufacturer of your device to determine if it is adequately shielded from external RF energy. Your physician may be able to assist you in obtaining this information. Switch your phone off in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

Vehicles

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. Check with the manufacturer or its representative regarding your vehicle. You should also consult the manufacturer of any equipment that has been added to your vehicle.

Posted Facilities

Switch your phone off in any facility where posted notices require you to do so.

Potentially Explosive Environments

Switch 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.

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

Areas with a potentially explosive atmosphere are often but not always clearly marked. They include below deck on boats, chemical transfer or storage facilities, vehicles using liquefied petroleum gas (such as propane or butane), 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.

Emergency Calls

This phone, like any wireless phone, operates using radio signals, wireless and landline networks as well as user programmed functions, which cannot guarantee connection in all conditions. Therefore, you should never rely solely on any wireless phone for essential communications (medical emergencies, for example).

Remember, to make or receive any calls the phone must be switched on and in a service area with adequate signal strength. Emergency calls may not be possible on all wireless phone networks or when certain

network services and/or phone features are in use. Check with local service providers.

To make an emergency call:

1. If the phone is not on, switch it on.
2. Key in the emergency number for your present location (for example, 911 or other official emergency number). Emergency numbers vary by location.
3. Press   .

If certain features are in use (call barring, for example), you may first need to deactivate those features before you can make an emergency call. Consult this document and your local cellular service provider.

When making an emergency call, remember to give all the necessary information as accurately as possible. Remember that your

phone may be the only means of communication at the scene of an accident; do not cut off the call until given permission to do so.

Restricting Children's access to your Phone

Your phone is not a toy. Children should not be allowed to play with it because they could hurt themselves and others, damage the phone or make calls that increase your phone bill.

FCC Notice and Cautions

FCC Notice

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

- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.This equipment generates, uses and can radiate radio frequency energy and,f not installed and used in accordance with the instructions, may cause harmful interference to radio communications

However, there is no guarantee that interference will not occur in a particular installation.If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct theinterference by one or more of the following measures:-Reorient or relocate the receiving antenna. - Increase the separation between the equipment and receiver.-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. - Consult the dealer or an experienced radio/TV technician for help.

The phone may cause TV or radio interference if used in close proximity to receiving equipment. The FCC can require you to stop using the phone if such interference cannot be eliminated.

Vehicles using liquefied petroleum gas (such as propane or butane) must comply with the National Fire Protection Standard (NFPA-58). For a copy of this standard, contact the National Fire Protection Association, One Battery march Park, Quincy, MA 02269, Attn: Publication Sales Division.

Cautions

Changes or modifications made in the radio phone, not expressly approved by Samsung, will void the user's authority to operate the equipment.

Only use approved batteries, antennas and chargers. The use of any unauthorized accessories may be dangerous and void the phone warranty if said accessories cause damage or a defect to the phone.

Although your phone is quite sturdy, it is a complex piece of equipment and can be broken. Avoid dropping, hitting, bending or sitting on it.

Other Important Safety Information

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

- Check regularly that all wireless phone equipment in your vehicle is mounted and operating properly.

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

- For vehicles equipped with an air bag, remember that an air bag inflates with great force. Do not place objects, including both installed or portable wireless equipment in the area over the air bag or in the air bag deployment area. If wireless equipment is improperly installed and the air bag inflates, serious injury could result.

- Switch your phone off before boarding an aircraft. The use of wireless phone in aircraft is illegal and may be dangerous to the aircraft's operation.

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

Product Performance

Getting the Most Out of Your Signal Reception

The quality of each call you make or receive depends on the signal strength in your area. Your phone informs you of the current signal strength by displaying a number of bars next to the signal strength icon. The more bars displayed, the stronger the signal.

If you're inside a building, being near a window may give you better reception.

Understanding the Power Save Feature

If your phone is unable to find a signal after 15 minutes of searching, a Power Save feature is automatically activated. If your phone is active, it periodically rechecks

service availability or you can check it yourself by pressing any key.

Anytime the Power Save feature is activated, a message displays on the screen. When a signal is found, your phone returns to standby mode.

Maintaining Your Phone's Peak Performance

For the best care of your phone, only authorized personnel should service your phone and accessories. Faulty service may void the warranty.

There are several simple guidelines to operating your phone properly and maintaining safe, satisfactory service.

• Hold the phone with the antenna raised, fully-extended and over your shoulder.

- Try not to hold, bend or twist the phone's antenna.
- Don't use the phone if the antenna is damaged.
- Speak directly into the phone's receiver.

- Avoid exposing your phone and accessories to rain or liquid spills. If your phone does get wet, immediately turn the power off and remove the battery. If it is inoperable, call Customer Care for service.

Availability of Various Features/ Ring Tones

Many services and features are network dependent and may require additional subscription and/or usage charges. Not all features are available for purchase or use in all areas. Downloadable Ring Tones may be available at an additional cost. Other conditions and restrictions may apply. See your service provider for additional information.

Battery Standby and Talk Time

Standby and talk times will vary depending on phone usage patterns and conditions. Battery power consumption depends on factors such as network configuration, signal strength, operating temperature, features selected, frequency of calls, and voice, data, and other application usage patterns.

Battery Precautions

- Never use any charger or battery that is damaged in any way.
- Use the battery only for its intended purpose.
- If you use the phone near the network's base station, it uses less power; talk and standby time are greatly affected by the signal strength on the cellular network

and the parameters set by the network operator.

- Battery charging time depends on the remaining battery charge and the type of battery and charger used. The battery can be charged and discharged hundreds of times, but it will gradually wear out. When the operation time (talk time and standby time) is noticeably shorter than normal, it is time to buy a new battery.
- If left unused, a fully charged battery will discharge itself over time.
- Use only Samsung-approved batteries and recharge your battery only with Samsung-approved chargers. When a charger is not in use, disconnect it from the power source. Do not leave the battery connected to a charger for more

than a week, since overcharging may shorten its life.

- Extreme temperatures will affect the charging capacity of your battery: it may require cooling or warming first.
- Do not leave the battery in hot or cold places, such as in a car in summer or winter conditions, as you will reduce the capacity and lifetime of the battery. Always try to keep the battery at room temperature. A phone with a hot or cold battery may temporarily not work, even when the battery is fully charged. Li-ion batteries are particularly affected by temperatures below 0 °C (32 °F).
- Do not short-circuit the battery. Accidental short- circuiting can occur when a metallic object (coin, clip or pen) causes a direct connection between the + and - terminals of the battery (metal strips on the battery), for example when you carry a spare battery in a pocket or bag. Short-circuiting the terminals may damage the battery or the object causing the short-circuiting.

- Dispose of used batteries in accordance with local regulations. In some areas, the disposal of batteries in household or business trash may be prohibited. For safe disposal options for Li-Ion batteries, contact your nearest Samsung authorized service center. Always recycle. Do not dispose of batteries in a fire.

Care and Maintenance

Your phone is a product of superior design and craftsmanship and should be treated

with care. The suggestions below will help you fulfill any warranty obligations and allow you to enjoy this product for many years.

- Keep the phone and all its parts and accessories out of the reach of small children.
- Keep the phone dry. Precipitation, humidity and liquids contain minerals that will corrode electronic circuits.
- Do not use the phone with a wet hand. Doing so may cause an electric shock to you or damage to the phone.
- Do not use or store the phone in dusty, dirty areas, as its moving parts may be damaged.
- Do not store the phone in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.

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- Do not store the phone in cold areas. When the phone warms up to its normal operating temperature, moisture can form inside the phone, which may damage the phone's electronic circuit boards.
- Do not drop, knock or shake the phone. Rough handling can break internal circuit boards.
- Do not use harsh chemicals, cleaning solvents or strong detergents to clean the phone. Wipe it with a soft cloth slightly dampened in a mild soap-and-water solution.
- Do not paint the phone. Paint can clog the device's moving parts and prevent proper operation.
- Do not put the phone in or on heating devices, such as a microwave oven, a

stove or a radiator. The phone may explode when overheated.

- When the phone or battery gets wet, the label indicating water damage inside the phone changes color. In this case, phone repairs are no longer guaranteed by the manufacturer's warranty, even if the warranty for your phone has not expired.
- If your phone has a flash or light, do not use it too close to the eyes of people or animals. This may cause damage to their eyes.
- Use only the supplied or an approved replacement antenna. Unauthorized antennas or modified accessories may damage the phone and violate regulations governing radio devices.
- If the phone, battery, charger or any accessory is not working properly, take it to your nearest qualified service facility. The personnel there will assist you, and if necessary, arrange for service.

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