

Some of the contents in this manual may differ from your device depending on the software of the device or your service provider.

SAMSUNG ELECTRONICS



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SGH-Z810
user manual



SAMSUNG

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safety and usage information

Comply with the following precautions to avoid dangerous or illegal situations and ensure peak performance of your device.

Instructional icons

Before you start, familiarise yourself with the icons you will see in this manual:



Warning—situations that could cause injury to yourself or others



Caution—situations that could cause damage to your device or other equipment



Note—notes, usage tips, or additional information



Safety warnings

Keep your device away from small children and pets

Keep your device and all accessories out of the reach of small children or animals. Small parts may cause choking or serious injury if swallowed.

Handle and dispose of devices with care

- Never dispose of the device in a fire. Follow all local regulations when disposing used devices.
- Never place your device on or in heating devices, such as microwave ovens, stoves, or radiators. Devices may explode when overheated.
- Never crush or puncture the device. Avoid exposing the device to high external pressure, which can lead to an internal short circuit and overheating.

Turn off the device in potentially explosive environments

Do not use your device at refuelling points (service stations) or near fuels or chemicals. Turn off your device whenever directed by warning signs or instructions. The device could cause explosions or fire in and around fuel or chemical storage and transfer areas or blasting areas. Do not store or carry flammable liquids, gases, or explosive materials in the same compartment as the device, its parts, or accessories.



CAUTION

Safety precautions

Drive safely at all times

Avoid using your device while driving and obey all regulations that restrict the use of devices while driving.

Follow all safety warnings and regulations

Comply with any regulations that restrict the use of a device in a certain area.

Use only Samsung-approved accessories

Using incompatible accessories may damage your device or cause injury.

Turn off the device near medical equipment

Your device can interfere with medical equipment in hospitals or health care facilities. Follow all regulations, posted warnings, and directions from medical personnel.

Turn off the device or disable the wireless functions when in an aircraft

Your device can cause interference with aircraft equipment. Follow all airline regulations and turn off your device or switch to a mode that disables the wireless functions when directed by airline personnel.

Protect the device from damage

Avoid exposing devices to very cold or very hot temperatures (below 0° C/32° F or above 45° C/113° F). Extreme temperatures can reduce the charging capacity and life of your devices.

Handle your device carefully and sensibly

- Do not allow your device to get wet—liquids can cause serious damage. Do not handle your device with wet hands. Water damage to your device can void your manufacturer's warranty.
- Avoid using or storing your device in dusty, dirty areas to prevent damage to moving parts.
- Your device is a complex electronic device—protect it from impacts and rough handling to avoid serious damage.
- Do not paint your device, as paint can clog moving parts and prevent proper operation.
- Your device and memory cards may be damaged by exposure to magnetic fields. Do not use carrying cases or accessories with magnetic closures or allow your device to come in contact with magnetic fields for extended periods of time.

Avoid interference with other electronic devices

Your device emits radio frequency (RF) signals that may interfere with unshielded or improperly shielded electronic equipment, such as pacemakers, hearing aids, medical devices, and other electronic devices in homes or vehicles. Consult the manufacturers of your electronic devices to solve any interference problems you experience.



Important usage information

Allow only qualified personnel to service your device

Allowing unqualified personnel to service your device may result in damage to your device and will void your warranty.

Handle USIM cards and memory cards with care

- Do not remove a card while the device is transferring or accessing information, as this could result in loss of data and/or damage to the card or device.
- Protect cards from strong shocks, static electricity, and electrical noise from other devices.
- Frequent writing and erasing will shorten the life span of memory cards.
- Do not touch gold-colored contacts or terminals with your fingers or metal objects. If dirty, wipe the card with a soft cloth.

Correct disposal of this product

(Waste Electrical & Electronic Equipment)



(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

introducing your dongle

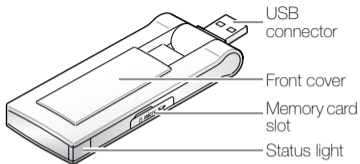
Learn about your dongle's layout and get started by assembling and setting up your device for its first use.

Unpack

Check your product box for the following items:

- HSDPA USB Dongle
- User manual

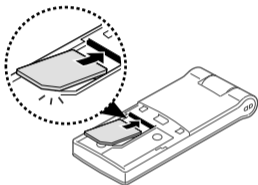
Dongle layout



Install the USIM card

When you subscribe to service, you will receive a Universal Subscriber Identity Module or USIM card, with subscription details, such as your personal identification number (PIN) and optional services.

Remove the rear cover and insert the USIM card.



Place the USIM card in the dongle with the gold-coloured contacts facing down.



- To prevent someone using your USIM card when it is stolen or lost, you can lock the card. See page 26.
- To purchase a USIM card or subscribe to a network, contact your service provider.

Insert a memory card (optional)

To store additional multimedia files, you must insert a memory card. Your dongle accepts microSD™ memory cards up to 8 GB (depending on memory card manufacturer and type).

1. Open the cover to the memory card slot on the side of the dongle.
2. Insert a memory card with the label side facing up.

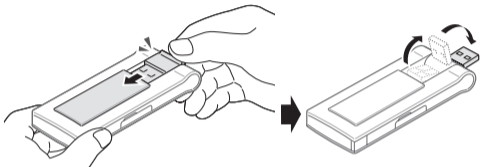


3. Push the memory card in the memory card slot until it locks in place.

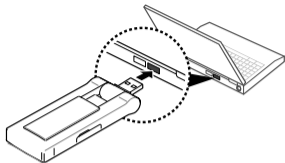
To remove the memory card, push it gently until it disengages from the dongle, and then pull the memory card out of the memory card slot.

Connect the dongle to your PC

1. Slide open the front cover until it locks in place and rotate the USB connector.



2. Connect the dongle to a USB port on your PC.



Connect the USB connector to the USB port carefully. Forcing the connector the wrong way may damage the USB connector or USB port.

Install the USB driver and connection manager program

1. Connect the dongle to a USB port on a PC.
When connected, an InstallShield Wizard window will appear on the PC.
2. Click [Next].
3. Click [Next], or click [Change] to change the location where you want to install files (if necessary).
4. Click [Install] to begin installing the USB driver and the connection manager program.
5. When the installation is finished, click [Finish].

Check the USB driver

Click [Start] and select [Settings] → [Control Panel] → [System] → [Hardware] → [Device Manger].

When the USB driver is successfully installed, you can check the name of the dongle on the Device Manager window.

using functions

Learn how to perform operations and use the features of your dongle.

Run the connection manager program




From the Start menu

Click [Start] and select [All programs] → [Connection Manager] → [Connection Manager].

From the desktop

Double-click the shortcut icon  on the desktop.

The main window of the connection manager program opens.

-  : check information about the dongle when it is activated.
-  : minimize the in the main window.
-  : exit the connection manager program.

Use the tray icon

1. Right click the icon  in the notification area.
2. Select the menu you want.
 - Connect to Internet : connect to the internet
 - Message, Phonebook, Messenger, Settings, Help : use functions and customise settings
 - Exit : exit the connection manager program

Connect to the Internet

Click the icon  in the main window to connect to the Internet using the HSDPA network.

You can check information about the current network connection in the main window.

To end the connection with the Internet, click the icon .







The WAP (Wireless Application Protocol) browser is not supported.

Use message functions

Send a text message and view the received messages. The EMS (Enhanced Messaging Service) and multimedia messages are not supported.


Create and send a text message

1. Click  in the main window.
2. Click .
3. Enter the message text.
 - Click  to insert symbols to your message text.
4. Enter phone numbers in the recipients list.
 - Click  to retrieve phone numbers from Phonebook.
5. Edit your phone number (if necessary).
6. Click [Send] to send the message.
 - Click [Rewrite] to delete the entire message text.
 - Click [Save] to send the message later.
 - Click [Cancel] to cancel the message composition.

Set junk message options

Set message options to filter out junk messages.

1. Click  in the main window.

2. Click .
3. Click [Add] to add phone numbers or sentences to be filtered.
4. Click [OK] to save options.
 - Click [Initialize] to delete the entire phone numbers and sentences.
 - Click [Cancel] to cancel the entire phone numbers and sentences composition.


Check messages

Access messages you have received, sent, or saved to send at a later time.

To view the messages you have received:

1. Click  in the main window.
2. Click [Inbox] from USIM or PC.
3. Check the message you want.

To view the messages you have sent:

1. Click  in the main window.
2. Click [Sent Box] from USIM or PC.
3. Check the message you want.

To view the messages that has failed to send or you have saved to be sent at a later time:

1. Click  in the main window.
2. Click [Drafts] from PC.
3. Check the message you want.

From message folders, you can use the following message options:

- Click [Reply] to reply to the sender.
- Click [Forward] to forward the message to other people.
- Click [Delete] to delete the message.

Create a new folder

Create new folders and organise messages.

To create a new folder:

1. Click  in the main window.
2. Click  to add a new folder.
 - Click right and select [Rename] to edit the folder name.

To move a message to the new folder, select and drag the message you want to the folder.






Use Phonebook functions

Store phone numbers and search for them in Phonebook.

Add a new contact

1. Click  in the main window.
2. Click .
3. Enter contact information.
4. Click [OK] to add the contact.


Find a contact

1. Click  in the main window.
2. Enter the first few letters of the name you want to find at the top right of the window and click .
3. Select the contact name on the search list and check the contact information.
 - Click  to send a text message to the selected contact.
 - Click  to send instant messages to the selected contact.
 - Click [Modify] to edit or  to delete the selected contact.

Create a new group

Create new groups and organise contacts.

To create a new group:



1. Click  in the main window.
2. Click  to add a new group.
 - Click right and select [Rename] to edit the group.

To move a contact to the new group, select and drag the contact you want to the folder.



Export or import contacts

Export contacts stored in the PC in digital files. Also, import contacts stored as digital files to the PC.

To export contacts:




1. Click  in the main window.
2. Click .
3. Select a location where contacts are stored and enter a file name.
4. Click [Save].

To import contacts:

1. Click  in the main window.
2. Click .
3. Select a CSV file to be imported and click [Open].
4. Select the information you want to import and click [OK].

Use Messenger

Send and receive instant messages with friends or family.

1. Click  in the main window.
2. Enter a phone number in the recipient field.
 - Click  to retrieve a phone number from Phonebook.
3. Enter the message text and click [Send Message].
 - Click  to insert symbols to your message text.
 - Click [Save chat] to save the text of your conversation.

Use a removable disk

Use the dongle as an external memory disk to access the folder directory.

1. When the dongle is connected to the PC, a pop-up window will appear on the PC.
If a memory card is inserted, another pop-up window will appear.
2. Select [Open folder to view files] in the pop-up window.
3. Copy files from the PC to the memory disk, or vice versa.


customising your dongle

Get more from your dongle by customising it to match your preferences.

Customise the settings

Customise various settings to use the program.

Set general settings

1. Click  and select [Settings] in the main window.
2. Select the options you want and click [OK].

Lock the USIM card


Lock the USIM card to keep it safe from unauthorised use. You must enter PIN (Personal Identification Number) to connect to the Internet when the USIM card is locked.

1. Click  and select [Settings] in the main window.

2. Click [USIM PIN Settings] → [Use PIN].
3. Enter the current PIN and click [PIN Use].
4. Click [Yes] to confirm.

Change the PIN

Change the PIN that is used to lock or unlock the USIM card.

1. Click  and select [Settings] in the main window.
2. Click the [USIM PIN Settings] → [PIN Change].
3. Enter the current PIN in Enter Current PIN.
4. Enter a new PIN in Enter New PIN.
5. Enter the new PIN again and click [PIN Change].
6. Click [Yes] to confirm.



If you enter an incorrect PIN three times, the USIM card is blocked. To unlock it, you need to enter your PUK (Personal Unblocking Key). The codes are supplied by your service provider.

Change the network


Change the network (if necessary). If you select the wrong network, your device may not work correctly.

1. Click  and select [Settings] in the main window.

2. Click [Network Settings].
 - Select [Automatic] or a network band from Network mode.
 - Select [Automatic] or [Manual] from Select Network to search for available networks.
If you select [Manual], click [Search] and double-click the network you want to connect.
3. Click [OK].


Configure Internet settings

Select a profile or enter information to connect to the Internet.

1. Click  and select [Settings] in the main window.
2. Click [Internet Settings].
3. Select a profile from the drop-down list.
Or, click [New], enter information you have received from your service provider, and click [Save].
4. Click [OK].


Set initialisation settings

Initialise Phonebook and Message in the USIM card or on the PC.

1. Click  and select [Settings] in the main window.
2. Click [Initialization Settings].
3. Select the options you want and click [OK].

Change the language

Change the language for the program.

1. Click  and select [Settings] in the main window.
2. Click [Language Settings].
3. Select a language from the drop-down list and click [OK].
4. Click [Yes] to confirm.
The program will restart automatically.

View the online help

Click  and select [Help] in the main window.

troubleshooting

If you are having trouble with your dongle, try these troubleshooting procedures before contacting a service professional.

Frequently asked questions

About the device and services

What is HSDPA?

HSDPA, short for High-Speed Downlink Packet Access, is a new protocol for mobile phone data transmission. This 3.5G technology allows for faster data transmission and streaming connections.

Will my dongle work without a USIM card?

No. You must insert a USIM card to use the dongle.

Is it okay to insert another type of USIM card when using the dongle?

No. The dongle only works with the USIM card provided by your service provider. It will not work with other USIM cards.

Why do I get a slow connection while I am using HSDPA?

HSDPA is a shared data service. You may experience slower connections when several users in the same area are accessing the HSDPA service.

Why won't my computer recognise my USB devices when I plug two of them together?

The computer cannot recognise two devices at the same time. Connect and disconnect USB device one at a time.

Can I connect the dongle to a printer or fax?

You must connect the dongle to a PC. Then, you can use a printer or fax that is also connected to the PC.

Will the dongle work with my PC operating system?

The dongle will work on Windows 2000/XP/Vista.

About the connection manager program

Will I still receive messages when the modem is offline?

Yes, but you cannot view those messages until you reconnect the modem. When you connect the modem to your PC, you can view any messages that have been received within the last 24 hours.

The program disappeared while I was using it.

You may have accidentally minimised or closed the program. If your taskbar shows the HSDPA Connection Manager icon, double-click it to restore the program. Otherwise, launch the program again.

How can I avoid losing the data on my USIM card?

If you disconnect the dongle from your PC while the device is on, you may lose the data on your USIM card. First, exit the connection manager program, then check the status light on the dongle. If the light is off, it is safe to disconnect it from the PC.

I entered the wrong PIN a few times. Why can't I use my device anymore?

If you enter the wrong PIN three times, your USIM card locks automatically. To unlock the card, you must enter a PUK, which you can get from your service provider.



If you enter the wrong PUK ten times, the USIM card will no longer work.

Can I connect to the Internet using Dial-up Networking?

No. You must use a wireless connection to access the Internet.

How many messages or contacts can I save on my USIM card?

The number of messages or contacts you can save depends on the type of USIM card you use. When you fill the card's memory, new messages or contacts will be saved on your PC.

Can I make voice calls with the connection manager program?

No. The connection manager program does not support voice calls.

Can I use SIM Application Toolkit menus?

No. The connection manager program and the dongle do not support SIM Application Toolkit menu.

Can I register my USIM card using a configuration message?

No. You cannot register your USIM card using a configuration message.

Health and safety information

Exposure to Radio Frequency (RF) Signals

Certification Information (SAR)

Your device 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 Council 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 devices 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 devices 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 device 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 device while operating can be well below the maximum value. This is because the device 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 device 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 device 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 modem as reported to the FCC are: **GSM1900 Body: 1.33 W/Kg.**

This USB modem has demonstrated compliance with FCC RF exposure limits in laptop computer configurations with side loading USB slots, and can be used in laptop computers with sub-stantially similar

physical dimensions, construction, and electrical and RF characteristics. This USB Modem must not be collocated or operate in conjunction with any other antenna or transmitter. Use of this device in any other configuration may exceed the FCC RF Exposure compliance limit.

SAR information on this and other model devices can be viewed on-line at www.fcc.gov/oet/fccid. [This site uses the device FCC ID number, A3LSGHZ810](#) Sometimes it may be necessary to remove the battery pack to find the number. Once you have the FCC ID number for a particular device, follow the instructions on the website and it should provide values for typical or maximum SAR for a particular device. Additional product specific SAR information can also be obtained at www.fcc.gov/cgb/sar.

Consumer Information on devices

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 devices. The FDA publication includes the following information:

What kinds of pdevices are the subject of this update?

The term device refers here to hand-held devices with built-in antennas, often called "cell," "mobile," or "PCS" devices. These types of devices can expose the user to measurable radio frequency energy (RF) because of the short distance between the device and the user's head. These RF exposures are limited by Federal Communications Commission safety guidelines that were developed with the advice of FDA and other federal health and safety agencies. When the device 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 devices," 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 devices pose a health hazard?

The available scientific evidence does not show that any health problems are associated with using devices. There is no proof, however, that devices are absolutely safe. devices 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 devices?

Under the law, FDA does not review the safety of radiation-emitting consumer products such as devices before they can be sold, as it does with new drugs or medical devices. However, the agency has authority to take action if devices 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 devices to notify users of the health

hazard and to repair, replace or recall the devices so that the hazard no longer exists.

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

- “Support needed research into possible biological effects of RF of the type emitted by devices;
- “Design devices in a way that minimizes any RF exposure to the user that is not necessary for device function; and
- “Cooperate in providing users of devices with the best possible information on possible effects of device 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 devices with the Federal Communications Commission (FCC). All devices 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 devices.

FCC also regulates the base stations that the device networks rely upon. While these base stations operate at higher power than do the devices themselves, the RF exposures that people get from these base stations are typically thousands of times lower than those they can get from devices. 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 devices 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 devices, 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 devices 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 devices RF exposures. However, none of the studies can answer questions about long-term exposures, since the average period of device use in these studies was around three years.

What research is needed to decide whether RF exposure from devices poses a health risk?

A combination of laboratory studies and epidemiological studies of people actually using devices 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 devices. Many factors affect this measurement, such as the angle at which the device is held, or which model of device is used.

What is FDA doing to find out more about the possible health effects of devices 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 wdevice 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 device 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 device?

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 device will reduce RF exposure.

- “If you must conduct extended conversations by device 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 device away from your body or use a device connected to a remote antenna.

Again, the scientific data do not demonstrate that devices 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 device use.

What about children using devices?

The scientific evidence does not show a danger to users of devices, 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 devices. Reducing the time of device 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 devices 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 device causes brain tumors or other ill effects. Their recommendation to limit device use by children was strictly precautionary; it was not based on scientific evidence that any health hazard exists.

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

Since there are no known risks from exposure to RF emissions from devices, there is no reason to believe that hands-free kits reduce risks. Hands-free kits can be used with devices for convenience and comfort. These systems reduce the absorption of RF energy in the head because the device, which is the source of the RF emissions, will not be placed against the head. On the other hand, if the device is mounted against the waist or other part of the body during use, then that part of the body will absorb more RF energy. Devices 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 device accessories that claim to shield the head from RF radiation work?

Since there are no known risks from exposure to RF emissions from devices, 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 device cases, while others involve nothing more than a metallic accessory attached to the device. 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 device. The device 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 device users from radiation with making false and unsubstantiated claims.

According to FTC, these defendants lacked a reasonable basis to substantiate their claim.

What about device interference with medical equipment?

Radio frequency energy (RF) from devices 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 device EMI. FDA has tested devices 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 devices so that no interference occurs when a person uses a compatible device 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 devices 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>

Your device gives you the powerful ability to communicate by voice, almost anywhere, anytime. But an important responsibility accompanies the benefits of devices, one that every user must uphold. When driving a car, driving is your first responsibility. When using your device behind the wheel of a car, practice good common sense and remember the following tips:

Exposure to Radio Frequency (RF) Signals

Your device gives you the powerful ability to communicate by voice, almost anywhere, anytime. But an important responsibility accompanies the benefits of devices, one that every user must uphold. When driving a car, driving is your first responsibility. When using your device behind the wheel of a car, practice good common sense and remember the following tips:

1. Get to know your device 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 device with one of the many hands free accessories available today.
3. Position your device within easy reach. Be able to access your device 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 device 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 device 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 device!
 9. Use your device 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 device 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 device off whenever it is forbidden to use it, or when it may cause interference or danger. When connecting the device 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 Device 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 device. Consult the manufacturer to discuss alternatives.

Pacemakers

Pacemaker manufacturers recommend that a minimum distance of 15 cm (6 inches) be maintained between a device 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 device more than 15 cm (6 inches) from their pacemaker when the device is switched on.

- should not carry the device 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 device off immediately.

Hearing Aids

Some digital devices 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 device 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 device off in any facility where posted notices require you to do so.

Potentially Explosive Environments

Switch your device 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 device 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 device, like any device, 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 device for essential communications (medical emergencies, for example).

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

To make an emergency call:

1. If the device 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 device 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 Device

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

FCC Notice and Cautions



- 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, if 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 the interference 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 device may cause TV or radio interference if used in close proximity to receiving equipment. The FCC can require you to stop using the device 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 Batterymarch 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 device warranty if said accessories cause damage or a defect to the device.

Although your device 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 device or install the device in a vehicle. Faulty installation or service may be dangerous and may invalidate any warranty applicable to the device.
- Check regularly that all device equipment in your vehicle is mounted and operating properly.
- Do not store or carry flammable liquids, gases or explosive materials in the same compartment as the device, its parts or 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 device off before boarding an aircraft. The use of device 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 device 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 device is unable to find a signal after 15 minutes of searching, a Power Save feature is automatically activated. If your device 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 device returns to standby mode.

Maintaining Your Device's Peak Performance

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

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

- Hold the device with the antenna raised, fully-extended and over your shoulder.
- Try not to hold, bend or twist the device's antenna.
- Don't use the device if the antenna is damaged.
- Speak directly into the device's receiver.

Avoid exposing your device and accessories to rain or liquid spills. If your device 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 device 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 device 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 device 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 device 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 device and all its parts and accessories out of the reach of small children.
- Keep the device dry. Precipitation, humidity and liquids contain minerals that will corrode electronic circuits.
- Do not use the device with a wet hand. Doing so may cause an electric shock to you or damage to the device.
- Do not use or store the device in dusty, dirty areas, as its moving parts may be damaged.
- Do not store the device in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.
- Do not store the device in cold areas. When the device warms up to its normal operating temperature, moisture can form inside the device, which may damage the device's electronic circuit boards.

- Do not drop, knock or shake the device. Rough handling can break internal circuit boards.
- Do not use harsh chemicals, cleaning solvents or strong detergents to clean the device. Wipe it with a soft cloth slightly dampened in a mild soap-and-water solution.
- Do not paint the device. Paint can clog the device's moving parts and prevent proper operation.
- Do not put the device in or on heating devices, such as a microwave oven, a stove or a radiator. The device may explode when overheated.
- When the device or battery gets wet, the label indicating water damage inside the device changes color. In this case, device repairs are no longer guaranteed by the manufacturer's warranty, even if the warranty for your device has not expired.
- If your device 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 device and violate regulations governing radio devices.
- If the device, 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.

Warranty and parts replacement

Samsung warrants this product as free of defects in material, design and workmanship for the period of one year from the original date of purchase. (Depending on your country or service provider, the length of warranty may vary.)

If during the period of warranty this product proves defective under normal use and service you should return the product to the retailer from whom it was originally purchased or qualified service centre. The liability of Samsung and its appointed maintenance company is limited to the cost of repair and/or replacement of the unit under warranty.

- The warranty is limited to the original purchaser
- A copy of your receipt or other proof of purchase is required for a proper warranty service
- The warranty is void if the serial number, date code label or product label is removed, or if the product has been subject to physical abuse, improper installation modification, or repair by unauthorised third parties
- Specifically exempt from any warranty are limited-life consumable components such as batteries and other accessories
- Samsung will not assume any responsibility for any loss or damage incurred in shipping. All repair work on Samsung products by unauthorised third parties voids any warranty