- \* Depending on the software installed or your service provider or country, some of the descriptions in this guide may not match your phone exactly.
- \* Depending on your country, your phone and accessories may appear different from the illustrations in this guide.

### **SAMSUNG ELECTRONICS**



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# Pocket PC Phone SGH-I770

### Welcome

This quick reference guide for SGH-I770 contains information on basic features and uses for your phone, such as installing the battery and SIM card, charging the battery, and making calls. This Guide will help you to get to know your phone quickly and easily.

### What's in the box?

Your package contains the following items: Some accessories may not match your package.

PDA phone with a stylus pen

Battery

Travel charger CD-ROMs\* Extra stylus pen

### **Getting to know your phone**

### Keys

Key	Description
	Opens the associated application or menu 恒: Contacts - 図: Messaging
	Displays the list of options available for the current command bar (Smart menu key).
4	Moves up or down and left or right through any of the applications, records, or options.
	Opens the Application Launcher.
	<ul> <li>Open the Dialler screen.</li> <li>Sends or answers a call.</li> <li>Activates the Speakerphone feature when held down during a call.</li> </ul>

Key	Description
(a)	<ul> <li>Ends a call.</li> <li>Returns the phone to Idle mode.</li> <li>Press and hold to turn the phone functions off or on.</li> </ul>
Numeric keys	<ul> <li>Enters alphanumeric characters.</li> <li>Select options when they are numbered.</li> </ul>
* key	Changes case when entering text using the keypad.
# key	<ul> <li>Enters or exits Vibration mode when pressed and held.</li> <li>Enters a space when entering text using the keypad.</li> </ul>

Key	Description
	<ul> <li>Turns on the camera.</li> <li>Takes a photo in Camera mode or records a video in Camcorder mode.</li> <li>Press this key halfway down to adjust the focus.</li> </ul>
9	<ul> <li>Opens the voice recorder application to allow you to record a voice memo.</li> <li>Records a voice memo when pressing and holding.</li> </ul>
Volume keys	<ul> <li>Adjusts the system volume.</li> <li>Adjusts the voice volume during a call.</li> <li>Adjusts the media volume in Media player.</li> <li>Scrolls through records or options.</li> <li>Mutes the call ringer when a call comes in.</li> </ul>

## Getting your phone ready to go

### Install the battery

- Put the battery on the back of the phone, lining it up with corresponding slot on the phone.
- 2. Press the battery until it clicks into place.

### Charge the battery

### Using the travel charger

- Plug the connector of the travel charger into the bottom of the phone. Check that the arrow on the connector is facing up.
- Plug the charger into a standard AC wall outlet.

The LED on the charger shows the status of the battery being charged.

- Red: the battery is charging.
- Green: the battery is fully charged.
- Orange: the charger is not plugged in correctly.
- When charging is finished, first unplug the charger from the AC wall outlet and from the phone.

## Getting to know your phone's screen

### **Using the Today screen**

You will see the Today screen when you first turn on your phone's power. You can also display it by tapping  $\textbf{Start} \rightarrow \textbf{Today}$  from the any application.

On the Today screen, you can see important information for the day, at a glance.



#### Status bar

On the top line of the screen, the status bar displays icons to show your phone's current status.

Indicator	Meaning
16:02	Shows the current time. When you tap this icon, a pop-up message shows the current time and date, an upcoming appointment, and the battery status:  •  : Main battery is full.  •  : Main battery is low.  •  : Main battery is very low.  •  : Main battery is charging.  Tap and hold this icon to change the clock type to <b>Analog</b> or <b>Digital</b> .
<b>A</b>	Appears when you're roaming outside of your home area and logged onto a different network.

Indicator	Meaning
<b>4</b> €	Adjusts the levels of the system volume and the ringer volume. You can also turn the sound off or switch to Vibration mode.
	If you select <b>Off</b> , $\blacktriangleleft$ appears. If you select <b>Vibrate</b> , $\blacktriangleleft$ appears.
Ÿ.il	Shows the signal strength. When you tap this icon, you can show the connection to your mobile phone service provider is on and customise the connection settings. You can also turn on or off the phone functions.  When you are outside a service area or in a limited service area, appears. In that case, you cannot use mobile services, but you can make emergency calls. When the phone functions are switched off, appears.

Indicator	Meaning	
×	Appears when you are outside a service area. When it appears, you cannot make or receive calls. When the SIM card is not installed in your phone, this icon is greyed.	
E <u>6</u> ,	Appears when connection with a GPRS network is active. When you tap this icon, a pop-up message shows the connection profile you are currently using and customise the connection settings.	
Appears when connection we computer is active. When you this icon, a pop-up message shows the connection to you computer is on and customit connection settings.		
t <del>)</del>	Appears when synchronisation is processing.	
ŕ×̇́×	Appears when connection with another device or a network is inactive.	

Indicator	Meaning	
1	Indicates that a new instant message has been received.	
M	Appears when a new e-mail or SMS message has been received.	
团	Appears when a new MMS message has been received.	
<b>3</b>	Indicates that your phone is charging.	
<b>?</b> ill	Appears when a call is in progress.	
ų!	Appears when there is a call you have missed. Tap to view the details of the missed call.	
O <sub>2</sub>	Appears when a Bluetooth headset is connected to your phone.	
i	Appears when Wi-Fi connection is enabled.	

Indicator	Meaning
₽	Appears when more status icons need to be displayed than there is room to display them. Tap to view all of status icons.
<b>.</b>	Appears when your phone has some problem; for example, when you have entered an incorrect number. Tap to show a command.

### **Using phone functions**

## Turning the phone functions on or off

As indicated previously, your phone will turn on when you insert a SIM card and install the battery. However, you can choose to turn off your phone and just use the Pocket PC features at any time – and then turn it back on when you want.

**Note**: In many countries you are required by law to turn off your phone when you fly. Turning off the display of your phone doesn't actually turn off your phone; you must turn off your wireless connection to your operator's network.

### Turning the phone functions off

- $\bullet$  Press and hold  $\ensuremath{\mbox{\@red}{\circ}}$  .
- Tap 📶 on the status bar and then **Turn on flight mode** in the dialogue box.

When the phone is turned off,  $\mathbf{Y}_{\mathbf{X}}$  appears on the status bar of the screen.

### Turning the phone functions on

- Press and hold <a>\textsic</a>.
- Tap Y<sub>X</sub> on the status bar and then Turn off flight mode in the dialogue box.

When the phone is turned on, I appears on the status bar of the screen.

### Making a call

- 1. On the Dialler screen, enter a phone number.
- 2. Tap **Talk** or press ( to make a call.
- 3. When you are finished, tap **End** or press

### Answering or rejecting a call

To answer a call, tap **Answer**, or press 🕝.

To reject a call, tap **Ignore**, or press <a>¬</a>.

**Note**: When the phone rings, you can mute the ringer by pressing the Volume keys.

### Switching quickly to Vibration mode

When you are in Vibration mode, incoming calls, alarms, or messages will cause the phone to vibrate. This feature is best used in situations where the phone might disturb others, such as in a meeting, at a library, or in a theatre.

To enter Vibration mode on the Today screen, press and hold # key. The Vibration icon (\*\*\_\*\*) appears on the status bar.

To exit Vibration mode, press and hold # key.

## Locking or unlocking the function keys

To lock the function keys and the touch screen, close the phone.

To unlock the function keys and the touch screen, slide the **Power** key to the middle.

### **Customising your phone**

You can customise the phone settings to suit the way you work.

### Setting the time and date

- From the Start menu, tap Settings → System tab → Clock & Alarms → Time tab.
- Tap the time zone down arrow to select your location and time zone.
- Tap the hour, minutes, or seconds, then tap the up or down arrow to change the time setting.
- Tap the down arrow in the Date field to display a calendar. Then, select the current date.
- 5. Tap 💁
- 6. Tap **Yes** to save your time and date settings.

### **Entering owner information**

1. From the **Start** menu, tap **Settings** → **Personal** tab → **Owner Information**.

You can also enter the owner information by tapping **Tap here to set owner information** on the Today screen.

- 2. From the **Identification** tab, fill in each input field.
- 3. Tap 💁.

### Using a security password

- From the Start menu, tap Settings → Password → Password tab.
- Tap the **Prompt if device unused for** check box and select the length of time of inactivity the phone waits before asking you for the password.

You can choose from 0 minute to 24 hours.

- Select a password type, 4 digit or alphanumeric password in the **Password** type field.
- 4. Enter a password in the **Password** field.
- If necessary, tap the **Hint** tab and enter a password hint in case you forget your password.
- 6. Tap 💁.
- When a confirmation message displays, tap Yes.

### **Setting sounds and notifications**

- From the Start menu, tap Settings → Sounds & Notifications.
- 2. Choose the options. The options you choose here apply throughout the phone.

In the **Sounds** tab, select the actions for which you want to hear sounds.

In the **Notifications** tab, set the notifications for different events.

3. Tap 💁.

**Note**: You can adjust the system volume by tapping ◀ € on the status bar and then move the slider under the □ € icon.

### Realigning the screen

When you turn on your phone's power for the first time, you are guided through the alignment process. Realign your screen if:

- your phone does not respond accurately to your screen taps.
- you perform a hard reset of your phone.

To realign the screen:

- From the Start menu, tap Settings → System tab.
- In the System tab, tap Screen → General tab.

- Tap Align Screen to begin the realignment process.
- Tap the cross-hair object as it appears at each location. Be precise when you tap the cross-hair object.
- 5. Tap 💁.

### **Customising the application buttons**

Customising the application buttons allows you to associate different applications with the programmable buttons on the your phone.

To reassign a button:

- From the Start menu, tap Settings → Personal tab → Buttons → Program Buttons tab.
- 2. Tap the button you want to reassign.
- Select the application you want to assign to the selected button from the Button assignment drop-down list.

4. Tap 💁.

### Opening the Application Launcher

Press no open the Application Launcher. Using the Application Launcher, you can view the applications on your phone categorised by type, and quickly access the application you want.

To customise the Launcher, tap **Setting**.

To view the screen vertically, tap **Rotate**.

### **Synchronising information**

Using Microsoft<sup>®</sup> ActiveSync<sup>®</sup>, you can synchronise the information on your computer with the information on your phone. Synchronisation compares the data on your phone with your computer and updates both computers with the most recent information.

### **Installing ActiveSync**

- Insert the CD-ROM into the CD-ROM drive of your computer.
  - Alternatively, double-click the downloaded ActiveSync installer.
- Follow the instructions on the screen for installing Microsoft ActiveSync.
  - For more help, click on **Microsoft ActiveSync Help** during installation.

### Synchronising information

- 1. Connect your phone to a computer.
- If you are using a USB connection, the ActiveSync window on the computer automatically appears and the synchronisation begins.
- If you are using an IrDA connection, from the Start menu, tap Programs → ActiveSync and then tap Tools → Connect via IR...
- Once the synchronisation is complete, the phone stay connected to the computer. If any change is made, ActiveSync automatically begins synchronisation.

### **Entering text**

Your phone provides you with the two main ways of text input: using the touch screen and using the keypad.

### Using the touch screen

You can enter text easily by writing on the touch screen of your phone. Your phone provides you with the following touch screen input modes:

Kevboard

- Letter Recognizer
- Block Recognizer
- Transcriber

To change the text input mode, tap the up arrow next to the Input Panel button ( $\stackrel{\longleftarrow}{\longleftarrow}$ ,  $\stackrel{\frown}{}$ , or  $\stackrel{\blacktriangleleft}{}$ ) on the command bar and select the method you want.

### Using the keypad

You can enter text easily by pressing the keys on your phone, labeled with the alphabet.

From any application, tap the up arrow next to the Input Panel button and tap **T9** (**19**).

Your phone has the following keypad input modes:

- T9 mode
- ABC
- Symbol
- Number

To change the text input mode:

- Press and hold #key to switch to T9 mode, ABC mode, or Number mode.
- Press and hold \*key to switch to Symbol mode.

### Using the camera

### Taking a picture

 From the **Start** menu, tap **Camera**, or press and hold to turn on the camera.



You can switch to Landscape mode by tapping for or pressing 7key.

2. Adjust the camera settings using the onscreen icons or using the keypad:

Icon	Key	Description
1632	1	Selects an image resolution.
∎ijB	2	Selects an image quality setting.
ŻA	3	Adjusts the image brightness.
AWB	4	Adjusts the white balance.
<b>Ž</b> A	5	Changes the flash setting.
		Changes a storage location.

Tap the up arrow or down arrow on the right side of the screen, or press the Up or Down navigation key to zoom in or out.

Press 8key to change the colour tone or apply a special effect to the image.

Pressing halfway down automatically adjusts the focus. The colour of the focus

frame changes briefly to green and back to white.

- 3. Tap (i), press the **OK/Confirm** key, or press and hold to take a photo. The taken photo displays on the preview screen.
- 4. Tap **Save** or press the **OK/Confirm** key to save the photo. The photo is saved in My Pictures.

### Viewing a picture

From the **Start** menu, tap **MyItems** → **Photo** tab. You can also access this by tapping at the bottom of the screen or press 0key from the Camera preview screen. Tap the picture you want.

### Recording a video

- 1. Turn on the camera. You can view the image to be captured.
- Switch to Camcorder mode by tapping .



3. Adjust the camcorder settings using the onscreen icons or using the keypad:

Icon	Key	Description
320	1	Selects an image resolution.
∎ÿв	2	Selects an image quality setting.
ŻA	3	Adjusts the image brightness.
AWB	4	Adjusts the white balance.
<b>Ž</b> A	5	Changes the flash setting.
		Changes a storage location.
9		Turns audio on or off.

Tap the up arrow or down arrow on the right side of the screen, or press the Up or Down navigation key to zoom in or out.

Press 8key to change the colour tone or apply a special effect to the image.

Pressing halfway down automatically adjusts the focus. The colour of the focus frame changes briefly to green and back to white.

- 4. Tap and hold to start recording.
- When you have finished recording, tap , press the **OK/Confirm** key, or press and hold .
- Tap Save or press the OK/Confirm key to save the video. The video is saved in My Videos.

### Playing a video

From the **Start** menu, tap **MyItems**  $\rightarrow$  **Video** tab. You can also access this by tapping  $\blacktriangleright$  at the bottom of the screen or press 0key from the Camcorder preview screen. Tap the video you want to play.

### For more information

For information on:	see this source:
Programmes on your phone	The User's Guide and online help. To view the online help, tap <b>Start</b> → <b>Programs</b> → <b>Help</b> .
Additional programmes that can be installed on your phone,	the supplied CD-ROM.

For information on:	see this source:
connecting to and synchronising with a computer,	the User's Guide or Microsoft ActiveSync Help on your computer. To view the Microsoft ActiveSync Help, click the ActiveSync icon on the Windows task bar and click Open Microsoft ActiveSync → Help → Microsoft ActiveSync Help.
last-minute updates and detailed technical information,	the Read Me files, located in the <b>Microsoft ActiveSync</b> folder on the computer and on the supplied software CD-ROM.
up-to-date information on your phone,	http:// www.microsoft.com/ windowsmobile/pocketpc.

## Health and Safty Information

### 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: Head:0.558 W/Kg, Bodyworn:0.391 W/Kg.

For body worn operation, this model phone has been tested and meets the FCC RF exposure guidelines whenused with a Samsung accessory designated for this product or when used with an accessory that contains no metal and that positions the handset a minimum of 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, A3LSGHI770. 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/cqb/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 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:

- 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.
- 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.

- 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.
- 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.
- 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.

- 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!
- 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 nonemergency 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 nonemergency 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.
- 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,

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 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.

#### **Understanding How Your Phone Operates**

Your phone is basically a radio transmitter and receiver. When it's turned on, it receives and transmits radio frequency (RF) signals. When you use your phone, the system handling your call controls the power level. This power can range from 0.006 watts to 0.2 watts in digital 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, fullyextended 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 Samsungapproved 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.
- 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.