# User manual

- \* 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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Draft version

# SGH-X481 User's Guide

# Important safety precautions

 $\checkmark$ 

Failure to comply with the following precautions may be dangerous or illegal.

# Drive safely at all times

Do not use a hand-held phone while driving. Park the vehicle first.

# Switch off the phone when refuelling

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

#### Switch off in an aircraft

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

# Switch off the phone near all medical equipment

Hospitals or health care facilities may be using equipment that could be sensitive to external radio frequency energy. Follow any regulations or rules in force.

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

## Be aware of special regulations

Meet any special regulations in force in any area and always switch off your phone whenever it is forbidden to use it, or when it may cause interference or danger.

#### Water resistance

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

#### Sensible use

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

# **Emergency calls**

Key in the emergency number for your present location, then press \( \subseteq \).

# Keep your phone away from small children

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

#### Accessories and batteries

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

- The phone could explode if the battery is replaced with an incorrect type.
- Dispose of used batteries according to the manufacturer's instructions.



At very high volumes, prolonged listening to a headset can damage your hearing.

#### **Qualified service**

Only qualified service personnel may repair your phone.

For more detailed safety information, see "Health and safety information" on page 61.

# About this Guide

This User's Guide provides you with condensed information about how to use your phone. To quickly learn the basics for your phone, please refer to "Get started" and "Step outside the phone."

In this guide, the following instruction icons appear:

- Indicates that you need to pay careful attention to the subsequent information regarding safety or phone features.
- Indicates that you can get more information on the referenced page.
- → Indicates that you need to press the Navigation keys to scroll to the specified option and then select it.
- [ ] Indicates a key on the phone. For example, [ i ]
- Indicates a soft key, whose function is displayed on the phone screen. For example, < Menu>

# Simple, compact design with Intenna

Samsung's powerful intenna technology allows the best call quality without an annoying external antenna.

# Special features of your phone



#### Web browser

Access the wireless web to get up-to-the-minute information and a wide variety of media content.



#### Java

Enjoy Java™-based embedded games and download new games.



**Phonebook** Store home, office, or cellular phone numbers for your entries.



Alarm

Use your phone as an alarm clock to wake you up in the morning or notify you of an event.





Calculator

Perform basic calculations and do currency conversions.





Voice recorder Record memos or sounds.



Calendar and to do list Keep track of your daily and monthly schedules and tasks.

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# Overview of menu functions

To access Menu mode, press < Menu > in Idle mode.

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3 4 5	Missed calls Received calls Dialled calls Delete all Call time Call cost*	<ul> <li>p. 25</li> <li>p. 26</li> <li>p. 26</li> <li>p. 26</li> <li>p. 26</li> <li>p. 26</li> <li>p. 27</li> </ul>
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4 5 6	Delete all	<ul><li>▶ p. 33</li><li>▶ p. 33</li><li>▶ p. 33</li></ul>
7	Organiser	▶ p. 34
3 4 5 6	Alarm Calendar Time & Date Calculator To do list Voice memo Currency exchange	<ul> <li>p. 34</li> <li>p. 34</li> <li>p. 34</li> <li>p. 34</li> <li>p. 35</li> <li>p. 35</li> <li>p. 35</li> </ul>
8	Phonebook	▶ p. 35
2 3 4 5	Search New entry Group search Edit group Speed dial Delete all Memory status	<ul> <li>p. 35</li> <li>p. 36</li> <li>p. 36</li> <li>p. 36</li> <li>p. 36</li> <li>p. 36</li> <li>p. 36</li> </ul>

▶ p. 36

8 SDN\*

9	Phone settings	▶ p. 37
1	Display settings	▶ p. 37
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6	Extra settings	▶ p. 38
7	Volume key	▶ p. 38
8	Short cut	▶ p. 38
9	Reset settings	▶ p. 38

\* Shows only if supported by your SIM card.



Make sure you have each item

Phone Travel Adapter
Battery User's Guide

You can obtain various accessories from your local Samsung dealer.



The items supplied with your phone and the accessories available at your Samsung dealer may vary, depending on your country or service provider.

# Your phone

Buttons, features, and locations

# Get started

First steps to operating your phone

#### SIM card information

When you subscribe to a cellular network, you receive a plug-in SIM (Subscriber Identity Module) card loaded with your subscription details, such as your PIN, and available optional services.

# Install and charge the phone

- Remove the battery.
   Insert the SIM card.
   If the phone is already on, first turn it off by holding [♣].
   Make sure that the gold-coloured contacts on the card face down into the phone.
   Install the battery.
   Plug the travel adapter into the phone.
- Plug the adapter into a standard AC wall outlet.
  When the phone is completely charged (the battery icon becomes still), unplug the adapter from the power outlet.
  Remove the adapter from the phone.

# Low battery indicator

When the battery is low:

- a warning tone sounds,
- · the battery low message displays, and
- the empty battery icon blinks.

If the battery level becomes too low, the phone automatically turns off. Recharge your battery.

# Power on or off

Power on	1. Open the phone.
Do not turn on the phone when	2. Press and hold [
mobile phone use is prohibited.	<ol> <li>If necessary, enter the PIN and press &lt; OK &gt;.</li> </ol>
Power off	1. Open the phone.
	2. Press and hold [ ? ].

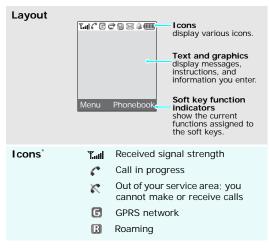
# **Keys and display**

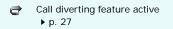
# Keys

Soft keys	Perform the function indicated on the bottom line of the display.
Navigation keys	In Idle mode, access your favourite menus directly. ▶ p. 38 In Menu mode, scroll through menu options.
Web key	In Idle mode, launch the web browser. In Menu mode, select the highlighted menu option or confirm input.
Send key	Make or answer a call.  In Idle mode, retrieve numbers recently dialled, missed, or received.
C(Clear) key	Delete characters from the display. In Menu mode, return to the previous menu level.

End key	End a call.  Press and hold to switch the phone on or off.  In Menu mode, cancel input and return the phone to Idle mode.
Numeric keys	Enter numbers, letters, and some special characters. In Idle mode, press and hold [1] to access your voicemail server. Press and hold [0] to enter an international call prefix.
Special key	Enter special characters.  In Idle mode, press and hold [#] to activate or deactivate Silent mode. Press and hold [*] to enter a pause between numbers.
Volume key	Adjust the phone volume. In Idle mode, adjust the keypad tone volume. In Menu mode, scroll through menu options.

# Display





Silent mode or call ringer set to vibrate ▶ p. 12, p. 30

Mute mode ▶ p. 24

New text message

New voicemail message

New multimedia message

Alarm set ▶ p. 34

Battery power level

## Access menu functions

Use the soft keys	The roles of the soft keys vary depending on the function you are using. The bottom line of the display indicates their current role.	
	Press the left soft key to select the highlighted option.	Press the right soft key to return to the previous menu level.

<sup>\*</sup> Depending on your country or service provider, the icons shown on the display may vary.

# 1. Press the appropriate soft key. 2. Press the Navigation keys to move to the next or previous option. 3. Press < Select > or [ i ] to confirm the function displayed or option highlighted. 4. To exit, choose either of the following methods: Press < ⋄ > or [C] to move up one level. Press [ ] to return to Idle mode. Press the number key corresponding to the option you want.

# **Customise your phone**

Display language	1.	In Idle mode, press < <b>Menu&gt;</b> and select <b>Phone settings</b> → <b>Language</b> .
	2.	Select a language.
Call ringer melody and volume	1.	In Idle mode, press <menu> and select Sound settings → Ring tone.</menu>
	2.	Select a ringtone.
	3.	Select Ring volume.
	4.	Adjust the volume level.
	5.	Press < <b>OK</b> >.

# Idle mode wallpaper

You can set wallpaper for the idle screen.

- In Idle mode, press <Menu> and select Phone settings → Display settings → Wallpaper → Wallpaper list.
- 2. Select the image you want.
- Press [Up] or [Down] to scroll through images until you find the one you want.
- 4. Press < Select >.

# Menu shortcuts

You can set Navigation keys to function as shortcuts to access your favourite menus.

- In Idle mode, press <Menu> and select Phone settings → Short cut.
- Select a key.
- 3. Select a menu to be assigned to the key.

# Silent mode

You can switch the phone to Silent mode to avoid disturbing other people.

Press and hold [#] in Idle mode.

### Phone lock

You can protect the phone against unauthorised use with a phone password. The phone will require the password on power-up.

- In Idle mode, press <Menu> and select Phone settings → Security → Change password.
- Enter the default password, 00000000, and press < OK >.
- Enter a new 4- to 8-digit password and press < OK >.
- 4. Enter the new password again and press < **OK** > .
- Select Phone lock.
- Select Enable.
- 7. Enter the password and press <**OK**>.

# Make/Answer calls

# Make a call

- Enter an area code and phone number.
- 2. Press [ ].
- 3. To end the call, press [ ].

# Answer a call

- When the phone is ringing, press [ ↑].
- 2. To end the call, press [ ].

# Adjust the volume during a call

Press [▲/▼].

# Step outside the phone

Begin with games, the web, and other special features

# Play games

# Launch a game

- In Idle mode, press <Menu> and select Funbox → Games → a game.
- 2. Scroll to **START GAME** and press [ *i*].
- 3. Select a game mode or press any key to start the game.
- To end the game, press [
   and then < Yes>.

#### Browse the web

Using a built-in web browser, you can easily access the wireless web to get a variety of up-to-date services and information and to download web content.

# Launch the web browser

In Idle mode, press [ i ].

# Navigate the web

- To scroll through browser items, press [Up] or [Down].
- To select an item, press [ i].
- To return to the previous page, press [C].
  To access options, press and
- To access options, press and hold [\*].
- To access the Favorite list, press and hold [#].

#### **Use Phonebook**

# Add an entry

- In Idle mode, enter a phone number and press < Save>.
- 2. Select a number type.
- 3. Select Phone or SIM.
- Enter a name and press < OK >.
- 5. Press **OK** > to save the entry.

# Find an entry

- In Idle mode, press
   Phonebook > and select
   Search.
- 2. Enter the first few letters of the name you want.
- Select an entry.
- Scroll to a number and press
   [ ↑] to dial, or press

   Options > to access options.

# **Send messages**

# Send a text message (SMS)

- In Idle mode, press <Menu> and select Messages → Text messages → Write new.
- 2. Enter the message text.
- Press < Options > and select Save and send or Send only.
- If you selected Save and send, select a memory location.
- Enter a destination number and press < OK >.

# Send a multimedia message (MMS)

- In Idle mode, press <Menu> and select Messages → Multimedia messages → Write new.
- Enter the message subject press < OK >.
- 3. Select Add here.

- 4. Select an adding option and add message contents.
- 5. When you have finished, press < Options > and select Send.
- 6. Select a destination type.
- Select one of Phone number, E-mail address, or Phonebook.
- Enter a destination number or address and press < OK>, or select a number from Phonebook.
- To add other destinations, select Add destination and repeat from step 7.
- 10. When you have finished, select **Send message**.

# View messages

# View a text message

When a notification appears:

Press **View**>. The message displays.

#### From the Inbox:

- In Idle mode, press <Menu> and select Messages → Text messages → Inbox.
- 2. Select a message.

# View a multimedia message

# When a notification appears:

- 1. Press < View >.
- Press < Options> and select Retrieve. The message displays.

#### From the Inbox:

- In Idle mode, press < Menu> and select Messages → Multimedia messages → Inbox.
- 2. Select a message.

# Enter text

ABC, T9, Number, and Symbol mode

You can enter text in some features, such as Messages, Phonebook, or Organiser, using ABC mode, T9 mode, Number mode, and Symbol mode.

# Changing the text input mode

The text input mode indicator displays when the cursor is in a text field

Example: Writing an SMS message



Press the right soft key to change the input mode:

• 19: T9 mode

III: ABC mode

1 Number mode

None: Symbol mode

# **Using ABC mode**

Press the appropriate key until the character you want appears on the display.

Key	Characters in order displayed		
Key	Upper case Lower case		
1	. , - ? ! @: ( ) / 1	_	
2	А В С 2 Ä Å Æ Ç Г	ab c 2 à ä å æ Γ	
3	DΕF3ÉΔΦ	d e f 3 è é Φ	
4	G H I 4 Θ Ψ	ghi4ìΨ	
5	J K L 5 A	j k l 5 Λ	
6	MNO6ÑØÖö	m n o 6 ñ ø ò ö	
7	PQRS7П $\Sigma$ Е	рqгs7βΣΞ	
8	TUV8Üü	tuv8ùü	
9	W X Y Z 9 $\Omega$	w x y z 9 $\Omega$	
0	space + = < > € £ \$ °	% & ¥ ¤ 0	

(Creating an SMS message with GSM-alphabet encoding)

# Other ABC mode operations

- To enter the same letter twice or to enter a different letter on the same key, wait for the cursor to move to the right automatically or press [Right]. Then, enter the next letter.
- Press [#] to insert a space.
- Press [\*] to change case. Initial capital (111), Capital lock (113), and Lower case (111) are available.
- Press the Navigation keys to move the cursor.
- Press [C] to delete characters one by one. Press and hold [C] to clear the display.
- Depending on your country, you may be able to access an input mode for your specific language by press and holding [\*].

# Using T9 mode

T9 is a predictive text input mode that allows you to key in any character using single keystrokes.

## Entering a word in T9 mode

- 1. Press [2] to [9] to start entering a word. Press each key once for each letter.
  - For example, press [4], [3], [5], [5], and [6] to enter *Hello* in T9 mode.
  - T9 predicts the word that you are typing, and it may change with each key that you press.
- 2. Enter the whole word before editing or deleting characters.
- When the word displays correctly, go to step 4.
   Otherwise, press [0] to display alternative word choices for the keys that you have pressed.
   For example, Of and Me use [6] and [3].
- Press [#] to insert a space and enter the next word.

# Other T9 mode operations

- Press [1] to enter periods or apostrophes automatically.
- Press [\*] to change case. Initial capital (111), Capital lock (113), and Lower case (111) are available.
- · Press [Left] or [Right] to move the cursor.
- Press [C] to delete characters one by one. Press and hold [C] to clear the display.

# Adding a new word to the T9 dictionary

This feature may not be available for some languages.

- Enter the word that you want to add.
- Press [0] to display alternative words for your key presses. When there are no more alternative words, Add displays on the bottom line.
- 3. Press < Add >.
- Enter the word you want using ABC mode and press < OK >.

# **Using Number mode**

Number mode enables you to enter numbers.

Press the keys corresponding to the digits you want.

# **Using Symbol mode**

Symbol mode enables you to insert symbols.

То	Press
display more symbols	[Up] or [Down].
select a symbol	the corresponding number key.
clear the symbol(s)	[C].
insert the symbol(s)	< <b>OK</b> >.

# Call functions

Advanced calling features

# Making a call

- In Idle mode, enter the area code and phone number.
  - $\sqrt{}$
- Press [C] to clear the last digit or press and hold [C] to clear the whole display. You can move the cursor to edit an incorrect digit.
- Press and hold [\*] to enter a pause between numbers.
- 2. Press [**↑**].
- 3. To end the call, press [ ].

# Making an international call

- In Idle mode, press and hold [0]. The + character appears.
- 2. Enter the country code, area code, and phone number, then press [ \scalen].

# Redialling recent numbers

- In Idle mode, press [ ] to display the list of recent numbers.
- 2. Scroll to the number you want and press [►].

# Making a call from Phonebook

Once you have stored a number in Phonebook, you can dial the number by selecting it from Phonebook. ▶ p. 35

You can also use the Speed dial feature to assign your most frequently called numbers to specific number keys. ▶ p. 36

You can quickly dial a number from Phonebook using its location number assigned when stored.

To dial a number from the phone's memory:

- In Idle mode, press and hold [0]. The + character appears.
- 2. Enter the location number for the phone number you want and press [#].

# Call functions

- 3. Press [Up] or [Down] to scroll through other numbers, if necessary.
- 4. Press <**Dial**> or  $[\]$  to dial the number you want.

To dial a number from the SIM card:

- 1. In Idle mode, enter the location number for the phone number you want and press [#].
- 2. Press [Up] or [Down] to scroll through other numbers, if necessary.
- 3. Press <**Dial**> or  $[\]$  to dial the number you want.

# Answering a call

When you receive an incoming call, the phone rings and displays the incoming call image.

Press <**Accept**> or [↑] to answer the call.

# Tips for answering a call

- When Anykey answer is active, you can press any key to answer a call, except for <Reject> and
   [♠]. ▶ p. 58
- When **Active folder** is active, you can simply open the phone. ▶ p. 58
- Press < Reject > or [♠] to reject a call.
- Press and hold [A/V] to reject a call or mute the ringer, depending on the Volume key setting.
   p. 38

# Viewing missed calls

If you have missed calls, the screen displays how many calls you have missed.

- 1. Press < View >.
- 2. If necessary, scroll through the missed calls.
- 3. Press [↑] to dial the number you want.

# Using the headset

Use the headset to make or answer calls without holding the phone.

Connect the headset to the jack on the left side of the phone. The button on the headset works as follows:

То	Press
redial the last call	the button twice.
answer a call	and hold the button.
end a call	the button.

# Options during a call

You can access a number of functions during a call.

# Adjusting the volume during a call

Use  $[ \blacktriangle / \blacktriangledown ]$  to adjust the earpiece volume during a call. Press  $[ \blacktriangle ]$  to increase the volume level and  $[ \blacktriangledown ]$  to decrease the volume level.

# Placing a call on hold/Retrieving

Press < Hold > or < Unhold > to place the call on hold or retrieve the call.

# Making a second call

You can make another call if your network supports this function.

- Press < Hold> to put the call on hold.
- 2. Make the second call in the normal way.
- 3. Press < Swap > to switch between the calls.
- To end the current call, press [ ].

# Answering a second call

You can answer an incoming call, if your network supports this function and you have activated the Call waiting feature. ▶ p. 28

- Press [~] to answer the call. The first call is automatically put on hold.
- 2. Press **<Swap>** to switch between the calls.
- To end the current call, press [ ].

# Using the speakerphone feature

Use the speakerphone feature to talk and listen with the phone a short distance away.

Press [  $\pmb{t}$  ] and then <  $\pmb{\mathsf{Yes}}$  > to activate the speakerphone feature. Press the key again to switch back to the earpiece.

# Using In-call options

Press < Options > to access the following options during a call:

- Menu: access the phone's menu functions.
- Mute/Unmute: switch off the phone's microphone so that the other person on the phone cannot hear you, or switch it back on.
- Mute keys/Send keys: switch the key tones on or off.
  - ✓ To communicate with answering machines or computerised telephone systems, Send keys must be selected.

- Send DTMF: send the DTMF (Dual tone multi-frequency) tones as a group. The DTMF tones are the tones used in phones for tone dialling, sounding when you press the number keys. This option is helpful for entering a password or an account number when you call an automated system, like a banking service.
- Phonebook: access the contact list.
- Join: set up a multi-party call by adding a caller on hold to a currently active call. You can include up to 5 people on a multi-party call.
- Select one: select one of multi-party call participants. You can then use the following options:

**Private**: have a private conversation with one multi-party call participant. The other participants can converse with each other. After the private conversation, select **Join** to return to the multi-party call.

**Remove**: disconnect one multi-party call participant.

# Menu functions

All menu options listed

# SIM AT (Menu 1)

This menu is available if you use a SIM AT card that supports SIM Application Toolkit menus and provides additional services, such as news, weather, sports, entertainment, and location services. Available services may vary, depending on your service provider's plans. For details, see your SIM card instructions or contact your service provider.

To access this menu, press < Menu> in Idle mode and select SIM AT.

# Call records (Menu 2)

Use this menu to view the calls you have dialled, received, or missed, and the length of calls. You can also check the cost of your calls, if your SIM card supports this function.

To access this menu, press < Menu> in Idle mode and select Call records.

# Missed calls (Menu 2.1)

This menu displays the most recent calls you did not answer.

# Menu functions

#### Received calls (Menu 2.2)

This menu displays the most recent calls you have received.

# Dialled calls (Menu 2.3)

This menu displays the most recent calls you have dialled.

# Delete all (Menu 2.4)

Use this menu to delete all of the records in each call type.

#### Call time (menu 2.5)

This menu displays the time log for calls made and received. The actual time invoiced by your service provider will vary.

#### Call cost (Menu 2.6)

This network feature displays the cost of calls. This menu is available only if your SIM card supports this feature. Note that this is not intended to be used for billing purposes.

# **Network services** (Menu 3)

Use this menu to access network services. Please contact your service provider to check their availability and subscribe to them, if you wish.

To access this menu, press < Menu> in Idle mode and select Network services.

# Call diverting (Menu 3.1)

This network service reroutes incoming calls to a phone number that you specify.

# Menu functions

# Call barring (Menu 3.2)

# Call waiting (Menu 3.3)

This network service informs you when someone is trying to reach you while you are on another call.

# Network selection (Menu 3.4)

This network service allows you to select the network used when roaming outside of your home area, or let the network to be chosen automatically.

You can select a network other than your home network only if there is a valid roaming agreement between the two.

# Caller ID (Menu 3.5)

This network service allows you to hide your phone number from the person you are calling. If you select **Default**, the phone will use the default setting provided by the network.

# Closed user group (Menu 3.6)

Use this menu to set incoming and outgoing calls to be restricted to a selected user group. For details about how to create a closed user group, contact your service provider.

# Band selection (Menu 3.7)

For the phone to make and receive phone calls, it must register with an available network. Your phone can handle any of the following types of networks: GSM 1900 and Combined GSM 900/1800.

The country where you purchased your phone determines the default band that it uses. When you travel abroad, you must remember to change to an appropriate band.

# Menu functions

# Sound settings (Menu 4)

Use this menu to customise various sound settings. To access this menu, press <**Menu>** in Idle mode and select **Sound settings**.

# Ring tone (Menu 4.1)

Use this menu to select a ringtone for the call ringer. You can select one of the embedded ringtones or downloaded sounds.

# Ring volume (Menu 4.2)

Use this menu to adjust the ringtone volume.

# Alert type (Menu 4.3)

Use this menu to specify how you are to be informed of incoming calls.

# Keypad tone (Menu 4.4)

Use this menu to select the tone that the phone sounds when you press a key.

# Message tone (Menu 4.5)

Use this menu to change the sound settings for incoming SMS messages, MMS messages, and cell broadcast (CB) messages individually.

# Folder tone (Menu 4.6)

Use this menu to select the tone that the phone sounds when you open or close the phone.

# Alert on call (Menu 4.7)

Use this menu to select whether or not the phone informs you when you receive a new message or when the time for an alarm comes during a call.

# Power on/off (Menu 4.8)

Use this menu to select the melody that the phone plays when it is switched on or off.

#### Extra tones (Menu 4.9)

Use this menu to customise additional tones for the phone.

- Error tone: set the phone to beep when you make a mistake.
- Minute minder: set the phone to beep every minute during an outgoing call to keep you informed of the length of your call.
- Connect tone: set the phone to beep when an outgoing call is connected to the system.

# Messages (Menu 5)

Use the **Messages** menu to send and receive short messages, and multimedia messages. You can also access push messages from web servers.

To access this menu, press < Menu > in Idle mode and select Messages.

# Text messages (Menu 5.1)

Short Message Service (SMS) allows you to send or receive text messages including simple pictures, melodies, and animated images.

# Multimedia messages (Menu 5.2)

Multimedia Message Service (MMS) delivers messages containing a combination of text, an image, and an audio, from phone to phone or from phone to e-mail.

# Menu functions

# Push messages (Menu 5.3)

Use this menu to access push messages from the wireless web server or change the settings for receiving push messages.

# Funbox (Menu 6)

The **Funbox** menu allows you to use the web browser, play Java games, and access images and sounds stored in the phone's memory.

To access this menu, press < Menu> in Idle mode and select Funbox.

### WAP browser (Menu 6.1)

The Wireless Application Protocol (WAP) browser on your phone allows you to access the wireless web. From the wireless web, you can access up-to-date information and a wide variety of media content, such as games, wallpapers, and ringtones.

#### Games (Menu 6.2)

You can download Java applications from various sources using the web browser, and store them in your phone. Use this menu to access and play Java games.

#### Sounds (Menu 6.3)

Use this menu to access sounds downloaded from the wireless web or received in messages.

#### Images (Menu 6.4)

Use this menu to access images downloaded from the wireless web or received in messages.

#### Delete all (Menu 6.5)

Use this menu to delete all of the downloaded items in the **Games**, **Sounds**, and **Images** folders.

#### Memory status (Menu 6.6)

Use this menu to check the total amount of memory for media items and the amount of memory currently in use in each media box.

#### Organiser (Menu 7)

The **Organiser** menu enables you to keep track of your schedule and tasks, and to record voice memos. You can also set the time and date and use convenient features, such as an alarm clock, a calculator, and a currency converter.

To access this menu, press < Menu> in Idle mode and select Organiser.

#### Alarm (Menu 7.1)

Use this menu to set alarms to sound at a specific time.

#### Calendar (Menu 7.2)

Use this menu to write memos on your schedule or set alarms to act as a reminder.

When you access the **Calendar** menu, the calendar in Month view appears with today's date highlighted.

#### Time & Date (Menu 7.3)

Use this menu to change the time and date displayed on your phone. Before setting the time and date, specify your time zone in **World time**.

#### Calculator (Menu 7.4)

Use this menu to perform basic arithmetic functions such as addition, subtraction, multiplication, and division.

#### To do list (Menu 7.5)

Use this menu to create tasks and manage them.

#### Voice memo (Menu 7.6)

Use this menu to record and play voice memos.

#### Currency exchange (Menu 7.7)

Use this menu to do currency conversions.

#### Phonebook (Menu 8)

You can store phone numbers on your SIM card and in your phone's memory. The SIM card and phone's memory are physically separate, but they are used as a single entity called Phonebook.

To access this menu, press < Menu> and select Phonebook, or press < Phonebook> in Idle mode.

#### Search (Menu 8.1)

Use this menu to search for numbers in Phonebook.

#### Menu functions

#### New entry (Menu 8.2)

Use this menu to add a new entry to Phonebook.

#### Group search (Menu 8.3)

Use this menu to search for your numbers in Phonebook in caller groups.

#### Edit group (Menu 8.4)

Use this menu to edit your caller groups' properties.

#### Speed dial (Menu 8.5)

Use this menu to assign speed dial numbers (2 to 9) to eight of your most frequently called numbers.

#### Delete all (Menu 8.6)

Use this menu to delete all of the entries from your phone's memory, your SIM card, or both.

#### Memory status (Menu 8.7)

Use this menu to check the number of entries you have stored in the phone's memory and on the SIM card.

#### **SDN** (Menu 8.8)

Use this menu to view the list of Service Dialling Numbers (SDN) assigned by your service provider, including emergency numbers and numbers for directory enquiries. This menu is available if your SIM card supports SDN.

Scroll to the number you want and press <**Dial**> or  $[\ \ \ \ \ ]$ .

#### Phone settings (Menu 9)

The **Phone settings** menu provides you with various setting options to customise the phone to your preferences and needs. You can also reset the settings to their default status.

To access this menu, press < Menu> in Idle mode and select Phone settings.

#### Display settings (Menu 9.1)

Use this menu to change settings for the display and light.

#### Greeting message (Menu 9.2)

Use this menu to enter the greeting that is displayed briefly when the phone is switched on.

#### Own number (Menu 9.3)

Use this feature to check your phone numbers, or to assign a name to each of the numbers. Changes made here do not affect the actual subscriber numbers on your SIM card.

#### Language (Menu 9.4)

Use this menu to select one of several languages for the display text. If you select **Automatic**, the phone uses the same language as the SIM card.

#### Security (Menu 9.5)

Use this menu to protect the phone against unauthorised use by managing the several access codes of your phone and SIM card.

#### Menu functions

#### Extra settings (Menu 9.6)

You can turn the automatic redialling or answering feature on or off.

#### Volume key (Menu 9.7)

Use this menu to set whether the phone mutes the call ringer or rejects a call if you press and hold  $[ {\tt A}/{\tt T}]$  when a call comes in.

#### Short cut (Menu 9.8)

You can use the Navigation keys as shortcut keys to access specific menus directly from Idle mode. Use this menu to change the shortcut assignments for [Up], [Down], [Left] and [Right].

#### Reset settings (Menu 9.9)

Use this menu to reset the phone to its default settings.

Enter the 4- to 8-digit phone password and press < **OK**>.

### Solve problems

#### Help and personal needs

To save the time and expense of an unnecessary service call, perform the simple checks in this section before contacting a service professional.

### When you switch on your phone, the following messages may appear:

"Insert SIM card"

Be sure that the SIM card is correctly installed.

#### "Phone locked"

The automatic locking function has been enabled.
 You must enter the phone's password before you can use the phone.

#### "Enter PIN"

- You are using your phone for the first time. You must enter the PIN supplied with the SIM card.
- The PIN check feature is enabled. Every time the phone is switched on, the PIN has to be entered.
   To disable this feature, use the PIN check menu.

#### "Enter PUK"

 The PIN code has been entered incorrectly three times in succession, and the SIM card is now blocked. Enter the PUK supplied by your service provider.

## "No service," "Network failure," or "Not done" displays

- The network connection has been lost. You may be in a weak signal area. Move and try again.
- You are trying to access an option for which you have no subscription with your service provider.
   Contact the service provider for further details.

#### You have entered a number but it was not dialled

- Be sure that you have pressed [►].
- Be sure that you have accessed the right cellular network.
- Be sure that you have not set an outgoing call barring option.

#### Your correspondent cannot reach you

- Be sure that your phone is switched on. ([ ] pressed for more than one second.)
- Be sure that you are accessing the correct cellular network.
- Be sure that you have not set an incoming call barring option.

#### Your correspondent cannot hear you speaking

- Be sure that you have switched on the microphone.
- Be sure that you are holding the phone close enough to your mouth. The microphone is located at the bottom of the phone.

### The phone starts beeping and "Warning Low battery" flashes on the display

 Your battery is insufficiently charged. Recharge the battery.

#### The audio quality of the call is poor

Check the signal strength indicator on the display (\(\mathbb{T}\_{\text{trial}}\)). The number of bars indicates the signal strength from strong (\(\mathbb{T}\_{\text{trial}}\)) to weak (\(\mathbb{T}\_{\text{t}}\)).

 Try moving the phone slightly or moving closer to a window if you are in a building.

#### No number is dialled when you re-call a Phonebook entry

- Use the Search menu to ensure the number has been stored correctly.
- · Re-store the number, if necessary.

### The battery doesn't charge properly or the phone sometimes turns itself off

 Wipe the charging contacts both on the phone and on the battery with a clean soft cloth.

#### If the above guidelines do not help you to solve the problem, take note of:

- The model and serial numbers of your phone
- Your warranty details
- A clear description of the problem

Then contact your local dealer or Samsung after-sales service.

# xposure 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.

When approval test is done, no Samsung supplied accessories are avialable but maybe available later after approval.

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

The highest SAR values for this model phone as reported to the FCC are: GSM1900 Head: 0.808W/Kg; GSM1900 Body-worn: 0.247W/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, A3LSGHX481. Sometimes it may be necessary to remove the battery pack to find the number. Once you have the FCC ID number for a particular phone, follow the instructions on the website and it should provide values for typical or maximum SAR for a particular phone. Additional product specific SAR information can also be obtained at www.fcc.gov/cgb/sar.

#### **Consumer Information on Wireless Phones**

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

### What kinds of phones are the subject of this update?

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

- 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.
- Use your wireless phone to call for help. Dial 9-1-1 or other local emergency number in the case of fire, traffic accident or medical emergencies.
   Remember, it is a free call on your wireless phone!
- 9. Use your wireless phone to help others in emergencies. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 9-1-1 or other local emergency number, as you would want others to do for you.
- 10. Call roadside assistance or a special 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-andwater solution.
- Do not paint the phone. Paint can clog the device's moving parts and prevent proper operation.
- Do not put the phone in or on heating devices, such as a microwave oven, a stove or a radiator.
   The phone may explode when overheated.
- When the phone or battery gets wet, the label indicating water damage inside the phone changes color. In this case, phone repairs are no longer guaranteed by the manufacturer's warranty, even if the warranty for your phone has not expired.
- If your phone has a flash or light, do not use it too close to the eyes of people or animals. This may cause damage to their eyes.

- Use only the supplied or an approved replacement antenna. Unauthorized antennas or modified accessories may damage the phone and violate regulations governing radio devices.
- If the phone, battery, charger or any accessory is not working properly, take it to your nearest qualified service facility. The personnel there will assist you, and if necessary, arrange for service.

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