

\* Some of the contents in this manual may differ from your phone,  
depending on the software installed or your service provider.



**TRI BAND  
GPRS TELEPHONE  
SGH-E105**

Draft Version  
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# Important Safety Precautions

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

## **Road Safety at All Times**

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

## **Switching Off When Refueling**

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

## **Switching Off in Aircraft**

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

## **Switching Off in Hospitals**

Switch off your phone near medical equipment. Follow any regulations or rules in force.

## **Interference**

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


## **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 (in a hospital for example).

### 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 Call

Ensure the phone is switched on and in service. Key in the emergency number for your present location, then press the  key. If certain features are in use, deactivate those features before you can make an emergency call. Give all the necessary information as accurately as possible. Do not cut off the call until given permission to do so.

### Water Resistance

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

### Accessories and Batteries

Use only Samsung-approved accessories and batteries.

### Qualified Service

Only qualified service personnel may install or repair your phone.

For more detailed safety information, see "Health and Safety Information" on page 134.

## Unpacking

Your package contains the following items:



Handset



Travel Adapter



Battery



User's Manual

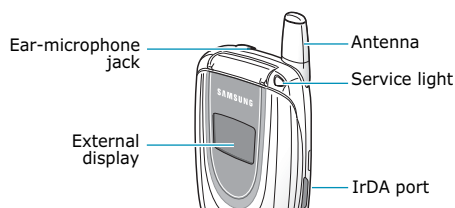
In addition, you can obtain the following accessories for your phone from your local Samsung dealer:

- Ear-microphone
- Travel adapter
- Battery charger
- Standard batteries
- Simple hands-free kit
- Cigarette lighter adapter
- Car holder
- Data kit

# Your Phone

## Phone Layout

The following illustrations show the main elements of your phone:



### Key Description



In Menu Mode, scroll through the menu options and the Phonebook memory.

In Idle Mode, allow you to access your favorite menu options directly. For further details about shortcuts, see page 104.



In Menu Mode, returns to the previous menu level and selects the current menu respectively.

When entering text, move the cursor to the left and right respectively.

In Idle Mode, allow you to access your favorite menu options directly. For further details about shortcuts, see page 104.



(soft keys)

Perform the functions indicated by the text above them, on the bottom line of the display.



In Idle Mode, launches the WAP (Wireless Application Protocol) browser directly.



Deletes characters from the display.

In Menu Mode, returns to the previous menu level.

**Key**

**Description** (continued)



Makes or answers a call.

In Idle Mode, recalls the last number dialed or received when held down.

In Menu Mode, selects a menu function or stores information that you have entered, such as a name in the phone or SIM memory.



Ends a call. Also switches the phone on and off when held down.

In Menu Mode, cancels your input and returns to Idle Mode.



In Idle Mode, quickly accesses your voice mail when held down.



Enter numbers, letters and some special characters.



Enter special characters.  
Perform various functions.



(on the left side of the phone)  
During a call, adjust the earpiece volume.

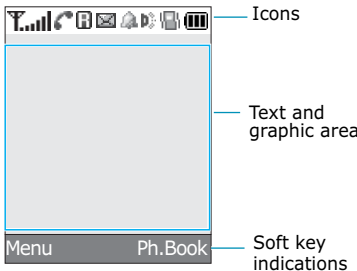
In Idle Mode, adjust the keypad tone volume.

In Menu Mode, scroll through the menu options and the Phonebook memory.

# Display

## Display Layout

The display has three areas:



Area	Description
First line	Displays various icons. See page 14.
Middle lines	Display messages, instructions and any information that you enter, such as number to be dialed.
Last line	Shows the functions currently assigned to the two soft keys.



## Icons

### Icon Description



Shows the received signal strength. The greater the number of bars, the stronger the signal.



Appears when a call is in progress.



Appears when you are connected to the GPRS network.



Appears when you are out of your home area and have logged on a different network; for example, when traveling in other countries.



Appears when a new text message has been received.



Appears when a new voice mail message has been received.



Appears when you set an alarm to ring at a specified time.



Appears when the silent mode is active or when you set the **Alert Type** menu option (**Menu 4.3**) so that the phone vibrates when you receive a call. For further details, see page 28 and page 91 respectively.



Appears when the IrDA port is active. For details, see page 95.



Appears when the mute mode is active.



Shows the level of your battery. The more bars you see, the more power you have left.

## Backlight

A backlight illuminates the display and the keypad. When you press any key or open the folder, the backlight turns on and remains for a given period of time, depending on the **Back Light** menu option. The display turns off after one minute to conserve your battery power.

To specify the length of time the backlight is active, set the **Back Light** menu option (**Menu 5.7.2**). See page 101 for further details.

You can also set the phone to use the backlight only during a specified period of time, in the **Auto Light** menu option (**Menu 5.7.3**). See page 102 for further details.

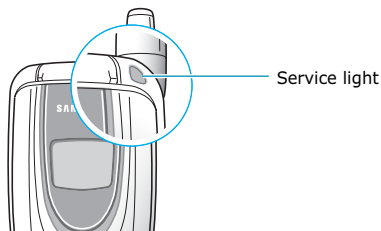
## External Display

Your phone has an external display on the folder. It indicates that you have an incoming call or message. It also alerts you at the specified time when you set an alarm.

## Service Light

The service light is on the top right-hand corner of the phone. It flashes when services are available on the phone.

To activate or deactivate the use of the service light, set the **Service Light** menu option (**Menu 5.7.4**). See page 102 for further details.




## Getting Started

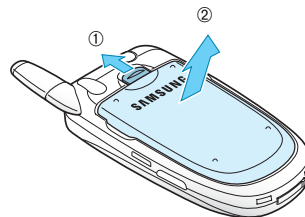
### Installing the SIM Card

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

**Important!** The plug-in SIM card and its contacts can be easily damaged by scratches or bending, so be careful when handling, inserting or removing the card.

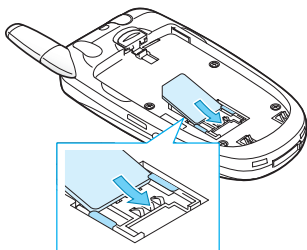
Keep all SIM cards out of the reach of small children.

1. If necessary, switch off the phone by holding down the  key until the power-off image displays.
2. Remove the battery. To do so:
  - ① Pull the catch above the battery toward the top of the phone and hold it in that position.
  - ② Lift the battery away, as shown.

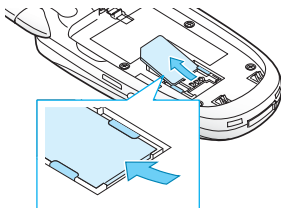


- Slide the SIM card into the SIM card socket so that it locks the card into position.

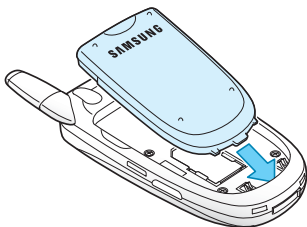
Make sure that the notched corner is top left and the gold contacts of the card face into the phone.



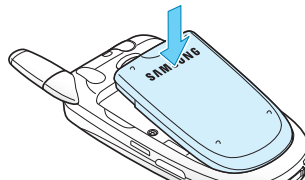
**Note:** When you need to remove the SIM card, slide it, as shown, and take it out of the socket.



- Place the battery back, taking care to match the tabs on the battery with the grooves on the phone.



- Press the battery down until it clicks into place. Make sure that the battery is properly installed before switching on the power.



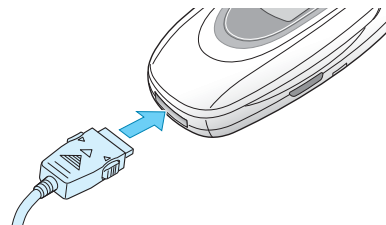
## Charging the Battery

Your phone is powered by a rechargeable Li-ion battery. A travel adapter comes with your phone for charging the battery. Use only approved batteries and chargers. Ask your local Samsung dealer for further details.

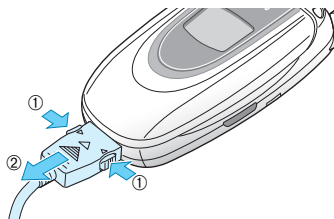
The travel adapter allows you to use the phone while the battery is charging, but this causes the phone to charge more slowly.

**Note:** You must fully charge the battery before using your phone for the first time. A discharged battery is fully recharged in approximately 200 minutes.

- With the battery in position on the phone, plug the connector of the travel adapter into the jack at bottom of the phone.



2. Plug the adapter into a standard AC wall outlet.
3. When charging is finished, unplug the adapter from the power outlet and from the phone by pressing the gray tabs on both sides of the connector and pulling the connector out.




**Note:** You must unplug the adapter before removing the battery from the phone during charging; otherwise, the phone could be damaged.

### Low Battery Indicator

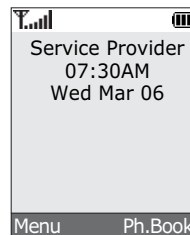
When the battery is weak and only a few minutes of talk time remain, you hear a warning tone and a message repeats at regular intervals on the display.

When the battery level gets too low, the phone automatically turns off.


## Switching the Phone On or Off

1. Open the folder.
2. Hold down the  key until the phone switches on.
3. If the phone asks you to enter the phone password, enter the password and press the **OK** soft key. The phone password is preset to "00000000" at the factory. For further details, see page 131.
4. If the phone asks for a PIN, enter the PIN and press the **OK** soft key. For further details, see page 132.

The phone searches for your network and, after finding it, the idle screen, illustrated below, appears on both displays. Now, you can make or receive a call.




**Note:** The display language is preset to English at the factory. To change the language, use the **Language** menu option (**Menu 5.5**). For further details, see page 98.

5. When you wish to switch the phone off, hold down the  key until the power-off image displays.


# Call Functions

## Making a Call

When the idle screen displays, enter the area code and phone number, and press the  key.

**Note:** If you checked the **Auto Redial** option in the **Extra Settings** menu (**Menu 5.8**), the phone automatically redials up to ten times when the person does not answer the call or is already on the phone. See page 103 for further details.


## Making an International Call

1. Press and hold the **0** key.  
The **+** character appears.
2. Enter the country code, area code and phone number and press the  key.

## Correcting the Number

To clear	Press the
the last digit displayed	<b>C</b> key.
any other digit in the number	Left or Right key until the cursor is immediately to the right of the digit to be cleared. Press the <b>C</b> key. You can also insert a missing digit simply by pressing the appropriate key.
the whole display	<b>C</b> key and hold it for more than one second.



## Ending a Call


When you want to finish your call, briefly press the  key.

## Redialing the Last Number

The phone stores the numbers you dialed, received or missed if the caller is identified. See "Call Records" on page 86 for further details.

To recall any of these numbers:

1. If you have typed characters on the display, press the  key to return to Idle Mode.
2. Press the  key to display a list of the last numbers in the order in which the calls were made.
3. Use the Up and Down keys to scroll through the numbers until the number you want highlights.

To	Press the
dial the number	 key.
delete the number	<b>Options</b> soft key and select <b>Delete</b> .
edit the number	<b>Options</b> soft key and select <b>Edit Number</b> . Change the number as required, referring to "Correcting the Number" on page 22 for further details.
delete all of the numbers on the Redial list	<b>Options</b> soft key and select <b>Delete All</b> . For details, see page 87.

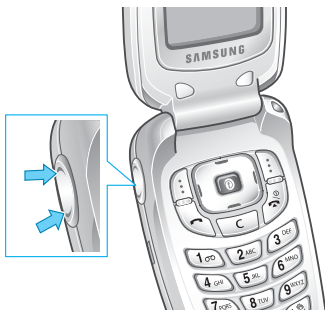
## Making a Call from Phonebook

You can store the phone numbers that you use regularly in the SIM card or the phone's memory, which are collectively called Phonebook. Simply select a name to recall the associated number. For further details about the Phonebook features, see page 31.

## Adjusting the Volume

During a call, if you want to adjust the earpiece volume, use the **▲** and **▼** keys on the left side of the phone.

Press the **▲** key to increase the volume level and the **▼** key to decrease the level.



In Idle Mode with the folder open, you can also adjust the keypad tone volume using the **▲** and **▼** keys.

## Answering a Call

When somebody calls you, the phone rings and shows the incoming call animation.

When the caller can be identified, the caller's phone number, or name if stored in your Phonebook, displays.

1. If necessary, open the folder. Press the **☎** key or the **Accept** soft key to answer the incoming call.

If the **Anykey Answer** option in the **Extra Settings** menu (**Menu 5.8**) is checked, you can press any key to answer a call except for the **☎**<sup>®</sup> key and the **Reject** soft key. See page 103.

If the **Active FLIP** option in the **Extra Settings** menu (**Menu 5.8**) is checked, you can answer the call simply by opening the folder. See page 103.

**Note:** To reject an incoming call, press and hold the volume keys on the left side of the phone before opening the folder.

2. End the call by closing the folder or pressing the **☎**<sup>®</sup> key.

**Note:** You can answer a call while using Phonebook or menu features.

## Viewing Missed Calls


When you are unable to answer a call for any reason, you can find out who is calling you, if this service is available, so that you can call the person back.

The number of missed calls displays on the idle screen immediately after a call is missed.

To view the missed call immediately:

1. If the phone is closed, open the folder.
2. Press the **View** soft key.

The number corresponding to the most recent missed call displays, if available.


To	Press the
scroll through the missed calls	Up or Down key.
call the number displayed	 key.
edit or delete a missed call number	<b>Select</b> soft key. See below.

## Editing a Missed Call Number

**Note:** When the number corresponding to the missed call is not available, the **Edit Number** option does not display.


1. Press the **Options** soft key.
2. Press the Up or Down key to highlight the **Edit Number** option.

3. Press the **Select** soft key.
4. Change the number, as required.

To	Press the
call the number	 key.
store the number	<b>Save</b> soft key and enter the name and location required. For further details, see page 31.

## Deleting a Missed Call

1. Press the **Options** soft key.
2. If necessary, press the Up or Down key to highlight the **Delete** option.
3. Press the **Select** soft key.

You can press the  key at any time to exit the Missed Call feature.

**Note:** You can access the Missed Call feature at any time by selecting the **Missed Calls** menu option (**Menu 3.1**). For further details, see page 86.

## Quickly Switching to the Silent Mode

Silent Mode is convenient when discretion is required and you wish to stop the phone from making noise, in a theater for example.



In Idle Mode, press and hold the # key until the "Silent Mode" message and the Vibration icon (📶) display.

In the silent mode, your phone changes the sound settings as follows:

Option	New Setting
Alert Type ( <b>Menu 4.3</b> )	Vibration
Keypad Tone ( <b>Menu 4.4</b> )	Off
Message Tone ( <b>Menu 4.5</b> )	Light Only
Folder Tone ( <b>Menu 4.6</b> )	Off
Power On/Off Tone ( <b>Menu 4.7</b> )	Off
Error Tone ( <b>Menu 4.8.1</b> )	Off

To exit and reactivate the previous sound settings, press and hold the # key again until "Exit Silent Mode" appears. The Vibration icon (📶) no longer displays.

## Selecting Functions and Options

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

The roles of the soft keys vary according to the current context; the label on the bottom line of the display just above each key indicates its current role.

Example:




Press the left soft key to access Menu Mode.

Press the right soft key to access the Phonebook feature.



To view various functions/options available and select the one required:

1. Press the appropriate soft key.

To	Press the
select the: <ul style="list-style-type: none"><li>• function displayed</li><li>• option highlighted</li></ul>	<b>Select</b> soft key or the Right key.
view the next function or highlight the next option on a list	Down key or <b>V</b> key on the left side of the phone.
move back to the previous function or option on a list	Up key or <b>^</b> key on the left side of the phone.
move back up one level in the structure	Left key, <b>U</b> soft key or <b>C</b> key.
exit the structure without changing the settings	 key.

In some functions, you may be asked for a password or PIN. Enter the required code and press the **OK** soft key.

# Phonebook

You can store phone numbers and their corresponding names in the memory of your SIM card. In addition, you can store up to 500 numbers in the phone's memory. The SIM card and phone memories, although physically separate, are used as a single entity, called Phonebook.

## Storing a Number with a Name

There are two ways to store a number:

- Using the **Save** soft key in Idle Mode
- Using the **New Entry** option in the Phonebook menu

## Storing a Number in Idle Mode




As soon as you start to enter a number, **Save** appears above the left soft key to allow you to store the number in Phonebook.

1. Enter the number you want to store.

**Note:** If you make a mistake while entering a number, correct it using the **C** key. For further details, see page 22.

2. When you are sure that it is correct, press the **Save** soft key.

3. Select an icon to identify the category of the number to be stored. Three categories are available:

-  : Mobile phone number
-  : Office number
-  : Home number

To select the category, press the Left or Right key and press the **Select** soft key.

4. Select a memory location, either **SIM** or **Phone**, by pressing the Up or Down key and press the **Select** soft key.


**Note:** If you change phones, any numbers stored in your SIM card memory will automatically be available with the new phone, whereas any numbers stored in the phone's memory must be reentered.

5. Enter a name and press the **OK** soft key.

The maximum length of a name depends on your SIM card. For further details about how to enter characters, see page 42.

6. If you do not want to save the number and name in the suggested location, press the **C** key to clear the location number and enter your preferred location by pressing the number keys.
7. Press the **OK** soft key to store the name and number.


After storing, the phone displays the Phonebook entry or name just created.

8. <b>To</b>	<b>Press the</b>
use the entry options	<b>Options</b> soft key. For further details, see page 34.
return to the idle screen	 key.

### Storing a Number Using the Phonebook Menu

1. When the idle screen displays, press the **Ph.Book** soft key.
2. Scroll to **New Entry** by pressing the Up or Down key and press the **Select** soft key.

3. Select an icon to identify the category of the number to be stored by pressing the Left or Right key, and press the **Select** soft key.

**Note:** The E-mail icon () is available in this step. It allows you to save an E-mail address instead of a phone number.

4. Select a memory location, either **SIM** or **Phone**, by pressing the Up or Down key and press the **Select** soft key

5. Enter a name and press the **OK** soft key.

The maximum length of a name depends on your SIM card. For further details about how to enter characters, see page 42.

6. Enter the number you want to store and press the **Save** soft key.
7. Continue the procedure from Step 6 on page 32 to store the number.

## Using Phonebook Entry Options

While accessing any Phonebook entry, press the **Options** soft key to access the options for the entry.

To	Press the
select the highlighted option	<b>Select</b> soft key or the Right key.
highlight a different option	Up or Down key until the option you want highlights.

The following options are available:

**Paste:** allows you to paste the number into the normal dialing mode. Use this option to dial a number similar to one in Phonebook, such as a different extension in the same office.

Use the **C** key to change the number as required; see page 22 for further details. When you are ready to dial, press the **Call** key.

**Edit:** allows you to edit the name and number.

**Delete:** allows you to delete the name and number from Phonebook. You are asked to confirm that you wish to delete the name and number by pressing the **Yes** soft key.

**Copy:** allows you to copy the number to another location. Use this option to store a number similar to one already in the memory; once copied, edit the number and store it in Phonebook.

**Caller Group:** allows you to organize your Phonebook entries in up to 10 caller groups so that the phone alerts you in a specific way when a person from one of your groups calls you. Select one of the ten groups available.

To remove an entry from a group, select the **No Group** option.

For further details about how to change caller group properties, see page 37.

**Add Entry:** allows you to add a new number to the selected name.

## Searching for a Number in Phonebook


After storing numbers in Phonebook, you can search for them in two ways; by name and by caller group.

### Searching for a Number by Name

1. When the idle screen displays, press the **Ph.Book** soft key.
2. Press the **Select** soft key when **Search** highlights. You are asked to enter a name.
3. Enter the first few letters of the name that you want to find.

The Phonebook entries are listed, starting with the first entry matching your input.


4.

To	Press the
view the highlighted entry	<b>View</b> soft key.
select a different entry	Up or Down key until the entry highlights.
look for a name starting with a different letter	key labeled with the letter you want to enter.
5. Once you have found the entry, press the  key to dial the number, or press the **Options** soft key to access the Phonebook entry options; for further details, see page 34.

Searching for a Number by Caller Group


1. When the idle screen displays, press the **Ph.Book** soft key.
2. Scroll to **Group Search** by pressing the Up or Down key and press the **Select** soft key. You are asked to enter a group name.
3. Enter the first few letters of the group name that you want to find.  
  
The caller groups are listed, starting with the first group matching your input.
4. If necessary, scroll to a group by pressing the Up or Down key and press the **View** soft key.  
  
The Phonebook entries in the caller group are listed.

5.

To	Press the
view the highlighted entry	<b>View</b> soft key.
select a different entry	Up or Down key until the entry you want highlights.
6. Once you have found the entry, press the  key to dial the number, or press the **Options** soft key to access the Phonebook entry options; for further details, see page 34.

Editing a Caller Group

1. When the idle screen displays, press the **Name** soft key.
2. Scroll to **Group Edit** by pressing the Up or Down key and press the **Select** soft key.
3. Scroll through the group list by pressing the Up or Down key.
4. When the group you want highlights, press the **Options** soft key.
5. Select each option and change the settings, as required. The following options are available:
  - **Call Ring Tone:** allows you to set a ring tone to be used when you receive a voice call from a person in the group.
  - **SMS Tone:** allows you to set a ring tone to be used when you receive a text message from a person in the group.

- **Graphic:** allows you to set a graphic icon to be displayed when you receive a voice call from a person in the group.
  - **Group Name:** allows you to assign a name to the group. For further details about how to enter characters, see page 42.
6. When you finish changing the settings, press the **C** or  key.


## Speed-dialing

Once you have stored phone numbers in the SIM card, you can set up to eight speed-dial entries and then dial them easily whenever you want, simply by pressing the associated number key.

### Setting Up Speed-dial Entries

1. When the idle screen displays, press the **Ph.Book** soft key.
2. Scroll to **Speed Dial** by pressing the Up or Down key and press the **Select** soft key.
3. Select the key to which you wish to assign the speed-dialing number, from **2** to **9** keys, and press the **OK** soft key.
 

**Note:** If you have already assigned a number to the key, the **Options** soft key replaces the **OK** soft key. Go to Step 6.
4. Select a Phonebook entry from the list and press the **View** soft key.

5. Select a number, if the entry has more than one number by pressing the Up or Down key and press the **Select** soft key.
6. Once you have assigned a number to the key, you can use the following options by pressing the **Options** soft key:
  - **Change:** allows you to assign a different number to the key.
  - **Delete:** allows you to clear the setting so that no number is assigned to the key.
  - **Delete All:** allows you to clear the settings for all keys so that no numbers are assigned to any of the keys.
  - **Number:** allows you to view the number assigned to the key.
7. When you finish setting the options, press the **C** or  key.

### Speed-dialing from Phonebook

To speed-dial the numbers assigned to keys, **2** to **9**, press and hold the appropriate key.

**Note:** Memory location 1 is reserved for your Voice Mail server number.

## Deleting All of the Phonebook Entries


You can delete all of entries in the selected memory or both memories.

1. When the idle screen displays, press the **Ph.Book** soft key.
2. Scroll to **Delete All** by pressing the Up or Down key and press the **Select** soft key.
3. To place a check mark on the memory you want to empty, **All**, **SIM** or **Phone**, press the **Mark** soft key.

You can remove the check mark by pressing the **Unmark** soft key.


4. When you are finished marking, press the **Delete** soft key to delete the entries in the selected memory.
5. Enter the phone password and press the **OK** soft key.

**Note:** The password is preset to "00000000" at the factory. To change it, see page 99.

6. When the confirming message appears, press the **Yes** soft key.
7. When you finish deleting, press the **C** or  key.

## Checking the Memory Status

You can check how many names and numbers are stored in Phonebook; SIM card and phone memories. You can also see the capacity of both memories.

1. When the idle screen displays, press the **Ph.Book** soft key.
2. Select the **Memory Status** option by pressing the Up or Down key and press the **Select** soft key.
3. Press the Up or Down key to view the number of existing and remaining entries in the card and phone memories.
4. When you finish checking, press the **C** or  key.

# Entering Text

When using your phone, you will often need to enter text, such as when storing a name in Phonebook, creating your personal greeting or scheduling events on your calendar. You can enter alphanumeric characters by using your phone's keypad.

Your phone has the following text input modes:

## • T9 mode

This mode allows you to enter words with only one keystroke per letter. Each key on the keypad has more than one letter – when you press the **5** key once, J, K or L displays. The T9 mode automatically compares your keystrokes with an internal linguistic dictionary to determine the correct word, thus requiring far fewer keystrokes than the traditional alphabet mode.

## • Alphabet mode

These modes allow you to enter letters by pressing the key labeled with the letter you want to enter once, twice, three or four times until it displays.

## • Symbol mode

This mode allows you to enter various symbols and special characters.

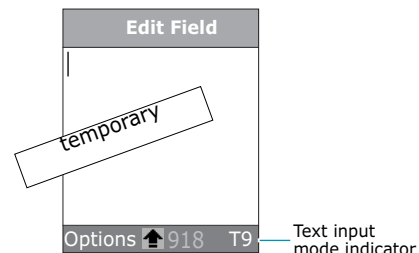
## • Number mode

This mode allows you to enter numbers.

## Changing the Text Input Mode

When you are in a field that allows characters to be entered, you will notice the text input mode indicator on the display.

Example: Writing a text message



To select the	Press the right soft key until
T9 mode	<b>T9</b> displays. See page 44.
Alphabet mode	<b>abc</b> displays. See page 45.
Symbol mode	the symbol list displays. See page 47.
Number mode	<b>???</b> displays. See page 47.

## Using the T9 Mode

The T9 predictive text input mode allows you to key in any character using single keystrokes. This text input mode is based on a built-in dictionary.

To enter a word in the T9 mode:

1. When you are in the T9 predictive text input mode, start entering a word by pressing the keys **2** to **9**. Press each key only once for one letter.

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

The word that you are typing appears on the display. It may change with each key that you press.

2. Enter the whole word before editing or deleting the keystrokes.
3. If the word is correct, start entering the next word.

Otherwise, press the **0**, Up or Down key repeatedly to display alternative word choices for the keys that you have pressed.

Example: Both "OF" and "ME" have the sequence **6** and **3**. The phone displays the most commonly used choice first.

4. Put a space between words by pressing the **#** key.

- To type words not found in the T9 mode, change the text input mode to the alphabet mode.
- To enter full stops, hyphens or apostrophes, press the **1** key. The T9 mode applies grammar rules to ensure that the correct punctuation is used.

Example: The **1** key is used twice to display two punctuation marks:



- To shift the case in the T9 mode, use the **✕** key. There are three cases; Lower case (No indicator), Initial Capital (**↑**) and Capital lock (**↑**).
- You can move the cursor by using the Left and Right keys. To delete letters, press the **C** key. Press and hold the **C** key to clear the display.

## Using the Alphabet Mode

Use the **1** to **0** keys to enter your text.

1. Press the keys labeled with the required letter:
  - Once for the first letter
  - Twice for the second letter
  - And so on
2. Select the other letters in the same way.

**Note:** The cursor moves to the right when you press a different key. When entering the same letter twice or a different letter on the same key, just wait for a few seconds for the cursor to move to the right automatically, and then select the next letter.



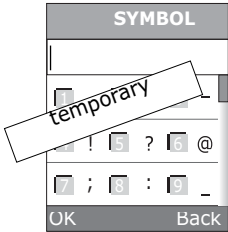
Refer to the table below for further details about the characters available.

Key	Characters in the Order Displayed	
	Upper Case	Lower Case
1	Space . 1 ! ? & i j	. % @ _ £ \$ ¥ ¤
2	A B C 2	a b c 2
3	D E F 3	d e f 3
4	G H I 4	g h i 4
5	J K L 5	j k l 5
6	M N O 6	m n o 6
7	P Q R S 7	p q r s 7
8	T U V 8	t u v 8
9	W X Y Z 9	w x y z 9
0	0 * # , ; ' "	/ : - + ( ) <

- To insert a space, press the # key.
- To shift the case in the alphabet mode, use the \* key. There are three cases; Lower case (No indicator), Initial Capital (⬆) and Capital lock (⬆).
- You can move the cursor by using the Left and Right keys. To delete letters, press the C key. Press and hold the C key to clear the display.

## Using the Symbol Mode

The symbol mode enables you to insert symbols into a text message.



To	Press the
select a symbol	corresponding number key.
display more symbols	Up or Down key.
insert the symbol(s) into your message	<b>OK</b> soft key.
cancel your input and return to the previous mode	<b>Back</b> soft key.

## Using the Number Mode

The number mode enables you to enter numbers into a text message. Press the keys corresponding to the digits you want to enter.

## Options During a Call


Your phone provides a number of control functions that you can use during a call.

### Putting a Call on Hold

You can place the current call on hold whenever you want. You can make another call while you have a call in progress if your network supports this service. When you have an active call and a call on hold, you may switch between the two calls, changing the one on hold to active and placing the other on hold.

To place a call on hold, simply press the **Hold** soft key. You can reactivate the call whenever you want, by pressing the **Unhold** soft key.

To make a call while you have a call in progress:


1. Enter the phone number that you wish to dial or look it up in Phonebook.
2. Press the  key to dial the second call.  
The first call is automatically put on hold.

Or alternatively,

1. Put the current call on hold by pressing the **Hold** soft key.
2. Make the second call in the normal way.

To switch between the two calls, simply press the **Swap** soft key.

The current call is placed on hold and the call on hold is reactivated so that you can continue conversing with the other person.

When you want to finish, end each call normally by pressing the  key.

### Switching the Microphone Off (Mute)

You can temporarily switch your phone's microphone off so that the other person cannot hear you.

Example: You wish to say something to another person in the room but do not want the other person to hear you.

To switch the microphone off temporarily:

1. Press the **Options** soft key.
2. If necessary, press the Down key to highlight the **Mute** option.
3. Press the **OK** soft key.

The other person can no longer hear you.

To switch the microphone back on:

1. Press the **Options** soft key.
2. If necessary, press the Down key to highlight the **Unmute** option.
3. Press the **OK** soft key.

The other person can hear you again.

## Muting/Sending Key Tones

These options allow you to turn the key tones off or on. If the **Mute Keys** option is selected, your phone does not transmit the key tones. It allows you to press keys without hearing annoying key tones during a call.

**Note:** To communicate with answering machines or computerized telephone systems, the **Send Keys** option must be selected.

## Searching for a Number in Phonebook

You can search for a number in Phonebook during a call.

1. Press the **Options** soft key.
2. Press the Down key to highlight the **Phonebook** option.
3. Press the **OK** soft key.

The Phonebook entries are listed.

4. Enter the name that you wish to find.

If you enter the first few letters of the name, the Phonebook entries are listed, starting with the first entry matching your input.

5. To view the highlighted entry, press the **View** soft key.

For further details about the Phonebook feature, see page 31.

## Using the Message Service


If you receive an SMS (Short Message Service) message during a call, the Message icon (✉) flashes on the display. The **SMS Service** option enables you to use this feature.


For further details about the Message feature, see page 61.

## Answering a Second Call

You can answer an incoming call while you have a call in progress, if your network supports this service and you have set the **Call Waiting** menu option (**Menu 7.2**) to **Activate**; see page 117. You are notified of an incoming call by a call waiting tone.

To answer a call while you have a call in progress:

1. Press the  key to answer the incoming call. The first call is automatically put on hold.
2. To switch between the two calls, press the **Swap** soft key.
3. To end the call on hold, press the **Options** soft key and select the **End Held Call** option.

To end the current call, press the  key.

## Making a Multi-party Call


A multi-party call is a network service that allows up to six people to take part simultaneously in a multi-party or conference call. For further details, contact your service provider.

### Setting up the Multi-party Call

1. Call the first participant in the normal way.
2. Call the second participant in the normal way. The first call is automatically put on hold.
3. To join the first participant to the multi-party call, press the **Options** soft key and select the **Join** option. Press the **OK** soft key.
4. To add a new person to the multi-party call, call the person in the normal way and press the **Options** soft key. Select the **Join** option and press the **OK** soft key.

You can add incoming callers by answering the call, pressing the **Options** soft key, and selecting the **Join** option. Repeat as required.

### Having a Private Conversation With One Participant

1. Press the **Options** soft key and choose the **Select One** option. Press the **OK** soft key.  
The list of call participants appears.
2. Highlight a person from the list by pressing the Up or Down key, and press the **Select** soft key or the  key.

3. When the **Private** option highlights, press the **OK** soft key.

Now you can talk privately with that person. The other participants can still converse with each other.


4. To return to the multi-party call, press the **Options** soft key and select the **Join** option. Press the **OK** soft key.

All the multi-party call participants can now hear each other.


### Dropping One Participant

1. Press the **Options** soft key and choose the **Select One** option. Press the **OK** soft key.

The list of call participants appears.

2. Highlight a person from the list by pressing the Up or Down key, and press the **Select** soft key or the  key.
3. Press the Down key to select the **Remove** option and press the **OK** soft key.

The call ends with that participant, but you can continue to talk with the other participants.

4. When you want to end the multi-party call, close the folder or press the  key.

# Using the Menus





The phone offers a range of functions that allow you to tailor it to your needs. These functions are arranged in menus and sub-menus.

The menus and sub-menus can be accessed by scrolling with the navigation keys or by using the shortcuts.


## Accessing a Menu Function by Scrolling

1. In Idle Mode, press the **Menu** soft key to access Menu Mode.
2. Scroll with the Up or Down key to reach a main menu, **Phone Settings** for example. Press the **Select** soft key or the Right key to enter the menu.
3. If the menu contains any sub-menus, **Language** for example, you can access them by scrolling with the Up or Down key and pressing the **Select** soft key or the Right key.

If the menu that you have selected contains further options, repeat this step.

To	Press the
scroll through the menus	Up or Down key, or use the  and  keys on the left side of the phone.
confirm the chosen setting	<b>Select</b> soft key or the Right key.
return to the previous menu level	 soft key or the Left key.
exit the menu without changing the settings	 key.

## Accessing a Menu Function by Using its Shortcut

The menu items, such as menu, sub-menus and options, are numbered and can be accessed quickly by using their shortcut numbers. The shortcut number is shown on the bottom right next to the  soft key on the display. Simply press the **Menu** soft key and enter the required number.

**Note:** The numbers assigned to each menu option are indicated on the list on page 56. They may not match the menu number on the phone, depending on the services supported by your SIM card.

Example: Accessing the **Language** option.

1. Press the **Menu** soft key.
2. Press the **5** key for **Phone Settings**.
3. Press the **5** key for **Language**.

The languages available display.

## List of Menu Functions

The following list shows the menu structure available and indicates the number assigned to each option and the page where you can find a description of each feature.

**Note:** If you use a SIM AT card that provides additional services, the **SIM AT** menu (**9**) displays when you press the **Menu** soft key to enter Menu Mode. For further details, see your SIM card instructions.

**1. Text Message (see page 61)**

- 1.1 Inbox
- 1.2 Outbox
- 1.3 Write New
- 1.4 Templates
- 1.5 Settings
  - 1.5.1 Setting 1\*
  - 1.5.2 Setting 2\*
  - 1.5.3 Common Settings
- 1.6 My Objects
  - 1.6.1 My EMS Melody
  - 1.6.2 My EMS Picture
  - 1.6.3 My EMS Animation
  - 1.6.4 Delete All
- 1.7 Memory Status
  - 1.7.1 SIM Memory
  - 1.7.2 PHONE Memory
  - 1.7.3 CB Memory
  - 1.7.4 Delete All
- 1.8 Voice Mail
  - 1.8.1 Connect to Voice Server
  - 1.8.2 Voice Server Number
- 1.9 Broadcast
  - 1.9.1 Read
  - 1.9.2 Receive
  - 1.9.3 Channel List
  - 1.9.4 Language
- 1.10 Location Service
  - 1.10.1 Services
  - 1.10.2 Setting
  - 1.10.3 Send Location

**2. Picture Message (see page 76)**

- 2.1 Inbox
- 2.2 Outbox
- 2.3 Draft
- 2.4 Write New
- 2.5 Template
- 2.6 Delete All

**2. Picture Message (continued)**

- 2.7 Setup
  - 2.7.1 Auto Download
  - 2.7.2 Hide ID
  - 2.7.3 Delivery Report
  - 2.7.4 Read Report
  - 2.7.5 Message Acceptance
  - 2.7.6 Expiry Date
  - 2.7.7 Delivery Time
  - 2.7.8 Priority
  - 2.7.9 Report Allowed
  - 2.7.10 Page Duration

**3. Call Records (see page 86)**

- 3.1 Missed Calls
- 3.2 Incoming Calls
- 3.3 Outgoing Calls
- 3.4 Delete All
- 3.5 Call Time
  - 3.5.1 Last Call
  - 3.5.2 Total Outgoing
  - 3.5.3 Total Incoming
  - 3.5.4 Reset Timers
- 3.6 Call Cost\*
  - 3.6.1 Last Call Cost
  - 3.6.2 Total Cost
  - 3.6.3 Max Cost
  - 3.6.4 Reset Counters
  - 3.6.5 Set Max Cost
  - 3.6.6 Price/Unit

\* Shown only if supported by your SIM card.

\* Shown only if supported by your SIM card.

**4. Sound Settings (see page 90)**

- 4.1 Ring Tone
- 4.2 Ring Volume
- 4.3 Alert Type
- 4.4 Keypad Tone
- 4.5 Message Tone
  - 4.5.1 SMS Tone
  - 4.5.2 SMS-CB Tone
- 4.6 Folder Tone
- 4.7 Power On/Off
- 4.8 Extra Tones

**5. Phone Settings (see page 95)**

- 5.1 Infrared Activate
- 5.2 My Settings
  - 5.2.1 Wallpaper
  - 5.2.2 Menu Style
- 5.3 Greeting Message
- 5.4 Own Number
- 5.5 Language
- 5.6 Security
  - 5.6.1 PIN Check
  - 5.6.2 Change PIN
  - 5.6.3 Phone Lock
  - 5.6.4 Change Password
  - 5.6.5 SIM Lock
  - 5.6.6 FDN Mode\*
  - 5.6.7 Change PIN2\*
- 5.7 Display Settings
  - 5.7.1 Brightness
  - 5.7.2 Back Light
  - 5.7.3 Auto Light
  - 5.7.4 Service Light
  - 5.7.5 Graphic Logo
- 5.8 Extra Settings

**5. Phone Settings (continued)**

- 5.9 Short Cut
  - 5.9.1 Key Up
  - 5.9.2 Key Down
  - 5.9.3 Key Right
  - 5.9.4 Key Left
- 5.10 Reset Settings

**6. Organizer (see page 105)**

- 6.1 Calendar
- 6.2 To Do List
- 6.3 Time & Date
  - 6.3.1 Set Time
  - 6.3.2 Set Date
  - 6.3.3 World Time
  - 6.3.4 Time Format
- 6.4 Alarm
  - 6.4.1 Once Alarm
  - 6.4.2 Daily Alarm
  - 6.4.3 Morning Call
  - 6.4.4 Remove Alarm
  - 6.4.5 Autopower
- 6.5 Calculator
- 6.6 Currency Exchange

**7. Network Services (see page 115)**

- 7.1 Call Forwarding
  - 7.1.1 Forward Always
  - 7.1.2 Busy
  - 7.1.3 No Reply
  - 7.1.4 Unreachable
  - 7.1.5 Cancel All
- 7.3 Call Waiting
- 7.4 Network Selection
- 7.5 Caller ID
- 7.7 Band Selection

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\* Shown only if supported by your SIM card.

**8. Funbox (see page 120)**

- 8.1 WAP Browser
  - 8.1.1 Home
  - 8.1.2 Favorite
  - 8.1.3 Clear Cache
  - 8.1.4 Push Message
- 8.2 Downloads
  - 8.2.1 Games & More
  - 8.2.2 Sounds
  - 8.2.3 Pictures



## Text Message

The SMS (Short Message Service) function is a network service that may not be supported by your network. You can send messages using text, fax, e-mail and paging messaging systems, provided that these services are supported by your network. To send text messages by phone, you must obtain the number of the SMS center from your service provider.

When the Message icon (✉) appears, you have received new text messages. If the memory is full, an error message displays and you cannot receive any new messages. Use the **Delete** option in each message box to delete obsolete ones.

### Inbox *(Menu 1.1)*

---

This message box is used to store the messages that you have received.

When you enter this menu, the list of messages in the box displays with the senders' phone numbers or names, if available in your Phonebook.

1. Select a message from the list and press the **View** soft key to read the message contents.
2. To scroll through the contents, press the Up or Down key.
3. To scroll to the previous or next message, press the \* or # key.



While reading a message, you can choose the following options by pressing the **Options** soft key:

**Delete:** allows you to delete the message.

**Send:** allows you to resend the message. For further details about how to send a message, see page 64.

**Reply:** allows you to reply to the sender by sending a text message.

**Call Back:** allows you to call the sender back.

**Cut Address:** allows you to extract the destination number and URL/e-mail addresses or phone numbers from the message text, so that you can save them in your Phonebook.

**Move To Phone/SIM:** allows you to move the message to another memory location, from the SIM card to the phone's memory or vice versa.

**Select Objects:** allows you to save media objects, such as sounds or images, from the message into your phone. You can use the objects when writing a message. For details, see page 66.

## Outbox *(Menu 1.2)*

---

This message box is used to store the messages that you have already sent or will send.

When you enter this menu, the list of messages in the box displays with the recipients' phone numbers or names, if available in your Phonebook.

1. Select a message from the list and press the **View** soft key to read the message contents.
2. To scroll through the contents, press the Up or Down key.
3. To scroll to the previous or next message, press the \* or # key.

While reading a message, you can choose the following options by pressing the **Options** soft key:

**Delete:** allows you to delete the message.

**Send:** allows you to resend the message. For further details about how to send a message, see page 64.

**Cut Address:** allows you to extract the destination number and URL /e-mail addresses or phone numbers from the message text, so that you can save them in your Phonebook.

**Move To Phone/SIM:** allows you to move the message to another memory location, from the SIM card to the phone's memory or vice versa.

**Select Objects:** allows you to save media objects, such as sounds or images, from the message into your phone. You can use the objects when writing a message. For details, see page 66.

## Write New *(Menu 1.3)*

In this menu option, you can write and send a text message.

**Note:** You can enter up to 918 alphanumeric characters for your message. When you add media objects to the message, the number of characters you can enter decreases.

### Creating a Simple Text Message

1. Create your message.

**Note:** For further details about entering characters, see page 42.

2. When you finish entering the message, press the **Options** soft key. The following options are available:

- **Send Only:** allows you to send the message. The message is deleted after sending.
- **Save and Send:** allows you to save a copy of the message and then send the message. You can read the message in your Outbox.
- **Save Only:** allows you to save the message so that it can be sent later. You can read the message in your Outbox.
- For further details about **Text Formatting**, **Add Objects**, **Add Templates**, **Add Phonebook**, **Add Bookmark** and **Language** options, see "Creating a Message Using the Options" on page 65.

3. Select **Send Only** or **Save and Send**, and press the **Select** soft key.

If you want to just save the message, select **Save Only**. After saving the message, the phone returns to the **Messages** menu.

4. If you select a save option, choose the memory where the message is saved and press the **OK** soft key.
5. Enter a destination number and press the **OK** soft key.

The message is sent.

When the phone fails to send the message, it asks you if you want to retry. Press the **OK** soft key to confirm. Otherwise, press the **Exit** soft key.

### Creating a Message Using the Options

1. Create a message.
2. Press the **Options** soft key.
3. Select one of the following options by using the Up and Down keys and pressing the **Select** soft key:
  - **Text Formatting:** allows you to format the style of the text. For the **Size** attribute, **Normal**, **Large** and **Small** sizes are available. For the **Underline** and **Strikethrough** attributes, select **On** or **Off**. The attributes can be combined.

- **Add Objects:** allows you to add the required sound, melody, picture or animation to the message. Select the category of the object to be added. In each category, you can select the various factory-set items or choose an item received from other sources, such as the Internet or other phones.
  - **Add Templates:** allows you to apply one of the preset message templates to the text. Select one of five messages stored in the **Templates** menu option (**Menu 1.4**). For further details, see page 67.
  - **Add Phonebook:** allows you to add a Phonebook entry in your message. Select one from the list.
  - **Add Bookmark:** allows you to add a web page's address stored in your Favorite list (**Menu 8.1.2**). Select one from the list.
  - **Language:** allows you to change the language to be used in the T9 input mode. Select the language to be used.
4. Complete the message, and send or save it by following the procedure from Step 2 on page 64.

## Templates *(Menu 1.4)*

---

Using this menu, you can preset up to five messages that you use most frequently.

Scroll through the template list using the Up and Down keys. When the message template you want highlights, press the **Options** soft key.

The following options are available:

**Edit:** allows you to write a new message or edit the message.

**Note:** For further details about how to enter characters, see page 42.

**Send Message:** allows you to recall the message. Once you have completed the message, you can send, save and send, or simply save it. For further details about how to send a message, see page 64.

**Delete:** allows you to delete the message. You are asked to confirm the deletion by pressing the **Yes** soft key.

## Settings *(Menu 1.5)*

---

In this menu, you can set up default SMS information. A setting group is a collection of settings required to send messages. The number of setting groups available depends on the capacity of your SIM card.

**Note:** The last setting you accessed is automatically activated for sending messages.

**Setting x** (where **x** is the setting group number): each group has its own sub-menu.

**Service Center:** allows you to store or change the number of your SMS center, which is required when sending messages. You must obtain this number from your service provider.

**Default Destination:** allows you to store the default destination number. The number will automatically display on the Destination screen when you create a message.

**Default Type:** allows you to set the default message type to **Text**, **Fax**, **Email** or **Paging**. The network can convert the messages into the selected format.

**Default Validity:** allows you to set the length of time your text messages are stored at the message center while attempts are made to deliver them.

**Setting Name:** allows you to give a name to the setting group currently being defined.

**Common Setting:** The following options are available:

**Reply Path:** allows the recipient of your SMS message to send you a reply message via your message center, if your network supports this service. You can enable or disable this option by pressing the **ON** or **OFF** soft key.

**Delivery Reports:** allows you to activate or deactivate the report function. When this function is activated, the network informs you whether or not your message has been delivered. You can enable or disable this option by pressing the **ON** or **OFF** soft key.

**Bearer Selection:** allows you to choose either **GSM** or **GPRS**, depending on your network.

## My Objects *(Menu 1.6)*

In this menu option, you can see the media objects you saved from messages into your phone's memory by using the **Select Objects** option.

Three categories of objects are available:

- **My EMS Melody**
- **My EMS Picture**
- **My EMS Animation**

To delete an item, press the **Delete** soft key while you are reviewing it.

You can delete all of the items using the **Delete All** option (**Menu 1.6.4**).

To	Press the
select a message box to clear	Up or Down key. To delete all of your messages, select <b>All</b> .
place a check mark	<b>Mark</b> soft key.
remove the check mark	<b>Unmark</b> soft key.
delete the marked messages	<b>Delete</b> soft key.

When a confirming message displays, press the **Yes** soft key to confirm.

**Memory Status** (Menu 1.7)

This menu option shows how many messages are currently stored in the SIM, phone and CB (cell broadcast) memories.

You can delete all of the messages in each message box using the **Delete All** option (**Menu 1.7.4**).

To	Press the
select a message box to clear	Up or Down key. To delete all of your messages, select <b>All Messages</b> .
place a check mark	<b>Mark</b> soft key.
remove the check mark	<b>Unmark</b> soft key.
delete the marked messages	<b>Delete</b> soft key.

When a confirming message displays, press the **Yes** soft key to confirm.

**Voice Mail** (Menu 1.8)

This menu provides you with a way of accessing your voice mailbox, if your network supports this service.

The following options are available:

**Connect to Voice Server:** before using this feature, you must enter the voice server number obtained from your service provider (see menu option **1.8.2**). You can then select a server number from the list and press the **OK** soft key to listen to your messages.

You can quickly connect to the voice server by pressing and holding the **1** key in Idle Mode.

**Voice Server Number:** allows you to change the voice mail server number, if necessary.

To	Press the
enter the server number	corresponding numeric keys.
correct a digit	<b>C</b> key.
move the cursor to the left/right without clearing the digit	Left or Right key.

**Note:** Voice Mail is a network feature. Please contact your service provider for further details.

## Broadcast *(Menu 1.9)*

---

This network service allows you to receive text messages on various topics, such as the weather or traffic. Messages display as soon as they are received, provided that:

- the phone is in Idle Mode.
- the **Receive** option is set to **Enable**.
- the message channel is currently active on the channel list.

The following options are available:

**Read:** lets you view the received message.

**Volatile** displays the messages from the network, but loses its contents as soon as the phone is switched off. Scroll through the message by using the Up and Down keys. While reading a message, press the **Save** soft key to store the message in the **Archive** box for later retrieval.

**Receive:** allows you to enable or disable the reception of broadcast messages.

**Channel List:** allows you to indicate the channels from which you wish to receive broadcast messages. The following options are available:

Select: use to enable or disable channels on the list by marking or unmarking them respectively. A check mark displays in front of each selected channel.

Add Channel: use to enter the ID and title for a new channel.

Delete: use to remove a channel from the list.

Edit: use to change the ID and title of an existing channel.

**Language:** allows you to select your preferred language to display cell broadcast messages.

Please contact your service provider for further details.

## Location Service *(Menu 1.10)*

---

In this menu, you can use the location service, which enables emergency call centers to locate you using the EOTD (Enhanced Observed Time Difference) feature.

The EOTD feature uses up to four cellular base stations to measure the arrival times of the call at various cellular antennas and pinpoints a cellular phone location. Emergency call centers can then locate a landline phone with saving the lives of those unaware of where they are or too injured or panicked to provide any details.

## Services *(Menu 1.10.1)*

You can configure various settings required when sending your location information to service centers.

For each service setting, the following options are available:

**Service Name:** allows you to store the service center name that you want to use.

**Service Number:** allows you to store the number of your service center required for emergency dialing.

**Service MO Set:** allows you to set whether or not the phone sends information about your location to the center.

**Service MT Set:** allows you to set whether or not your phone allows the center to scan information about your location.

**Service Periodic Set:** allows you to set your phone to send your location information to the service center at specified intervals.

**Service Type:** allows you to select how your phone sends your location to the service center. Select **Only SMS** to send by SMS messages only. Select **VoiceCall&SMS** to send by voice calls along with SMS messages.

### **Setting** *(Menu 1.10.2)*

In this menu, you can change the default settings required when using the location service. These settings are for the EOTD system. For further details, contact your service provider.

The following options are available:

**SMLC Address:** allows you to store the address of the system that processes your information and sends it to your service center.

**EOTD Setting:** allows you to select whether or not you use the location service. To use the service, you must set this option to **Enable**.

**MO Setting:** allows you to set whether or not the system sends information about your location to the service center. To use the location service, you must set this option to **Enable**.

**MT Setting:** allows you to set whether or not your phone allows the system to scan information about your location.

**Periodic Setting:** allows you to set the system to send your location information to the service center at specified intervals.

### **Send Location** *(Menu 1.10.3)*

You can select one of the service centers that you set up in the **Service** menu option. Your phone will send information about your location to the specified center.

# Picture Message

Multimedia Message Service (MMS) is a messaging service very similar to Short Message Service (SMS). It provides automatic and immediate delivery of personal multimedia messages from phone to phone or from phone to e-mail.

In addition to the familiar text content of text messages, multimedia messages can contain images, graphics, voice and audio clips. An MMS message is a multimedia presentation in a single entry. It is not a text file with attachments.

Using the MMS feature, your phone can receive multimedia messages. You can also send picture messages, which are short messages that contain images, such as your photos or graphics you downloaded from the Internet. This function is available only if it is supported by your service provider. Only phones that offer picture message features can receive and display picture messages.

## Inbox *(Menu 2.1)*

### Viewing a Message When You Receive it

When a new multimedia message comes in, the display shows the text notification along with the sender's number.

1. Press the **View** soft key to view the message.

The display shows brief information about the message, such as the sender's number, the message size and the subject.

If you want to view the message later in the Inbox, press the **Exit** soft key.

2. To scroll through the message information, press the Up or Down key.

While viewing the information, press the **Options** soft key to use the following options:



**Retrieve:** shows you the message contents.

**Delete:** deletes the message.

**More Information:** shows you detailed information about the message.

### Viewing a Received Message in the Inbox

When you access the **Inbox** menu option (**Menu 2.1**), the list of multimedia messages you received displays with the senders' phone numbers, if they are available in your Phonebook, or subjects. The icons on the left tells you the status of the messages.

- : Messages you already read.
- : Messages you haven't read yet.

1. Select a message and press the **Select** soft key to view the message.
2. To scroll through the message, press the Up or Down key.

If the message has more than one page, you can scroll through the pages by using the Left and Right keys.

3. Press the **OK** soft key on the message presentation screen.

While viewing a message, you can choose the Message options by pressing the **Options** soft key.

If you are viewing a new message, the options are the same as when you view a message as soon as you receive it. See the previous section.



When you are reviewing a message, the following options are available:

**Delete:** deletes the message.

**Reply:** allows you to reply to the sender by sending a text or picture message.

**Callback:** allows you to call the sender back.

**Cut Number:** allows you to extract the destination number from the message, so that you can call the number or save it in your Phonebook.

**Forward:** allows you to forward the message to another person.






**Save Picture:** allows you to save an image from the message into your phone. Images are stored in the **Pictures** folder in the **Downloads** menu option (**Menu 8.2**).

**Save Sound:** allows you to save a sound from the message into the **Sounds** folder in the **Downloads** menu option (**Menu 8.2**).

**Information:** shows you information about the message, such as subject, sender's address, message size, status and priority.

## Outbox *(Menu 2.2)*

When you access this menu option, the list of the picture messages you sent or saved displays. The icons on the left tells you the status of the messages.

-  : Messages currently being sent
-  : Messages sent
-  : Messages your phone couldn't send
-  : Messages to be send
-  : Messages deferred

1. Select a message and press the **Select** soft key to view the message contents.
2. To scroll through the message, press the Up or Down key.

If the message has more than one page, you can scroll through the pages by using the Left and Right keys.

3. Press the **OK** soft key on the message presentation screen.

While viewing a message, you can choose the following options by pressing the **Options** soft key:

**Delete:** deletes the message.

**Cut Number:** allows you to extract the destination number from the message, so that you can call the number save it in your Phonebook.

**Send:** allows you to resend the message.

**Edit Message:** allows you to change the message contents, sound, picture or text.

**Information:** shows you information about the message, such as subject, recipient's address, message size, status and priority.

## Draft *(Menu 2.3)*

After creating a picture message, you can store it in this message box for later sending. Or, if you are interrupted while making a message by an incoming call or message, your message is automatically saved in this box.

For further details about viewing a message, see "Outbox" on page 79.

## Write New *(Menu 2.4)*

This menu option allows you to create a new picture message and then send it to multiple destinations.

### Creating and Sending a Picture Message

1. Enter the subject of your message and press the **OK** soft key.

For further details about entering characters, see page 42.

2. When **Add Here** highlights, press the **Options** soft key and add the message contents using one of the following options:

- **Add Text:** Enter the message text and press the **OK** soft key.
- **Add Picture:** allows you to add a picture stored in the **Pictures** folder in the **Downloads** menu option (**Menu 8.2**). Choose a picture and press the **Select** soft key.

- **Add Sound:** allows you to add a sound. You can record a new voice memo or use a sound stored in the **Sounds** folder in the **Downloads** menu option (**Menu 8.2**).
- **Send:** allows you to send the message. Use this option when you finish creating the message. This option is activated after you add a content to the message.
- **Save:** saves the message in the **Draft (Menu 2.3)** or **Templates (Menu 2.5)** box for later use. This option is activated after you add a content to the message.
- **Settings:** allows you to change the message settings. For further details about each setting option, see page 85. After changing, you need to press the **U** soft key or the **C** key to go to back to the options screen.
- **Add Destination:** allows you to enter destination addresses. See steps 7 to 10. After adding, you need to press the **U** soft key or the **C** key to go to back to the options screen.
- **Preview:** shows your message as it will display on the recipient's phone.

**Note:** You can use the adding options only one time for one page.

3. When the added content displays, press the Down key to highlight **Add Here**.
4. Repeat steps 2 and 3 until you finish creating your message.

5. If you want to change the added items, press the Up or Down key to highlight one and press the **Options** soft key. The following options are available:

- **Edit Text/Picture/Sound:** allows you to change text or replace the image or sound with another one.
- **Add Page:** allows you to add more pages. You can move to each page using the Left or Right key when **Page** highlights on the message screen.
- **Delete:** deletes the item from your message.
- **Duration:** allows you to set how long one page displays. After a specified length of time, the display scrolls to the next page.
- **Send:** allows you to send the message.
- **Save:** saves the message in the **Draft (Menu 2.3)** or **Templates (Menu 2.5)** box for later use.
- **Settings:** allows you to change the message settings. For further details about each setting options, see page 85.
- **Add Destination:** allows you to enter destination addresses. See steps 7 to 10.
- **Preview:** shows your message as it will display on the recipient's phone.

**Note:** The options available are different depending on the item selected on the message screen.

6. When you finish creating the message, choose **Send** from the options and press the **Select** soft key.

7. Choose one of the following options and press the **Select** soft key:

- **Phone Number:** allows you to enter the phone number you want.
- **E-Mail:** allows you to enter the e-mail address of the recipient to send the message as an e-mail.
- **Phone Book:** allows you to recall a number from your Phonebook.

8. Enter a number or an e-mail address, or select a number in Phonebook.

9. When the correct number or address displays, press the **OK** soft key.

10. To send the message to multiple destinations, select **Add Destination** and press the **Select** soft key.

11. Repeat steps 7 to 10. You can enter up to 10(??) destinations.

If you want to edit the destinations, select one and press the **Select** soft key. You can change or delete it.

12. When you are finished entering the destinations, select **Send Message** and press the **Select** soft key.

Your phone sends the message.

## Template *(Menu 2.5)*

---

This menu option stores up to five messages you saved as templates. You can make a new message using the text of them.

Scroll through the template list using the Up and Down keys. When the message template you want highlights, press the **Select** soft key. The message text displays.

Press the **OK** soft key to use the following options:

**Edit Message:** allows you to send a message using the template. For further details about how to send a message, see page 80.

**Delete:** allows you to delete the message. You are asked to confirm the deletion by pressing the **Yes** soft key.

## Delete All *(Menu 2.6)*

---

This menu option allows you to delete all of the picture messages in each message box, Inbox, Outbox and Draft.

When a confirming message displays, press the **Yes** soft key to confirm.

## Setup *(Menu 2.7)*

---

You can change the default settings for sending or receiving picture messages.

The following options are available:

**Auto Download:** You can set whether or not, your phone automatically downloads the pictures or sounds from the messages. **When you select Ask, the phone asks you to download the items when you read the message(??).**

**Hide ID:** When this option is checked, your phone number dose not display on the recipient's phone.

**Delivery Report:** When this option is checked, the network informs you whether or not your message has been delivered.

**Read Report:** When this option is checked, (??).

**Message Acceptance:** You can specify the category of messages you want to receive.

**Expiry Date:** You can select the length of time your messages are stored at the message center after they were sent.

**Delivery Time:** You can set the delay time before the phone sends your messages.

**Priority:** You can select the priority level of your messages.


**Report Allowed:** You can set whether or not (??).

**Page Duration:** You can set how long one page of the received message displays. After a specified time, the display automatically scrolls to the next page.

# Call Records

In this menu, you can view the:

- calls you missed, received or dialed.
- length of your calls.
- cost of your calls.

**Note:** You can access the numbers in the three types of call records by pressing the  key in Idle Mode.

## Missed Calls *(Menu 3.1)*

This option lets you view the last 20 numbers of the calls you received, but did not answer.

The number and name, if available, display together with the date and time when the call was received.

By pressing the **Options** soft key, you can:

- delete the call from the list.
- edit the number, if available, and dial it or save it in Phonebook.

## Incoming Calls *(Menu 3.2)*

This option lets you view the last 20 numbers of the calls you received.

The number and name, if available, display together with the date and time when the call was received.

By pressing the **Options** soft key, you can:

- delete the call from the list.
- edit the number, if available, and dial it or save it in Phonebook.

## Outgoing Calls *(Menu 3.3)*

This option lets you view the last 20 numbers you dialed.

The number and name, if available, display together with the date and time when the call was made.

By pressing the **Options** soft key, you can:

- delete the call from the list.
- edit the number and dial it or save it in Phonebook.

## Delete All *(Menu 3.4)*

This menu option allows you to delete all of the records in each call type. You can also delete all of your call records at one time.

To	Press the
select a call type to clear	Up or Down key. To delete all of your call records, select <b>All Calls</b> .
place a check mark	<b>Mark</b> soft key.
remove the check mark	<b>Unmark</b> soft key.
delete the marked messages	<b>Delete</b> soft key.

When a confirming message displays, press the **Yes** soft key to confirm.

## Call Time *(Menu 3.5)*

---

This option lets you view the timers for calls made and received.

The following timers are available:

**Last Call:** length of the last call.

**Total Outgoing:** total length of all calls made since the timer was last reset.

**Total Incoming:** total length of all calls received since the timer was last reset.

**Reset Timers:** option used to reset the call timers. You must first enter the phone password (see page 131) and then press the **OK** soft key.

**Note:** The actual time invoiced for calls by your service provider may vary, depending on network features, rounding-off for billing purposes and others.

## Call Cost *(Menu 3.6)*

---

This network feature lets you view the cost of calls. This option may not be shown depending on your SIM card.

The following options are available:

**Last Call Cost:** cost of the last call made.

**Total Cost:** total cost of all calls made since the cost counter was last reset. If the total cost exceeds the maximum cost set in the **Set Max Cost** option, you can no longer make any calls until you reset the counter.

**Max Cost:** maximum cost set in the **Set Max Cost** option. See below.

**Reset Counters:** option used to reset the cost counter. You must first enter your PIN2 (see page 133) and then press the **OK** soft key.

**Set Max Cost:** option used to enter the maximum cost that you authorize for your calls. You must first enter your PIN2 (see page 133) and then press the **OK** soft key.

**Price/Unit:** option used to set the cost of one unit; this price per unit is applied when calculating the cost of your calls. You must first enter your PIN2 (see page 133) and then press the **OK** soft key.

# Sound Settings

You can use the Sound Settings feature to customize various settings, such as the:

- ring melody, volume and type.
- sounds made when you press a key, receive a message, open/close the folder or switch your phone on/off.
- alert tone made every minute during a call, when you make an error or when your call is connected to the system.

**Note:** When the phone is in the silent mode (see page 28), you cannot change the sound settings.

## Ring Tone *(Menu 4.1)*

This option allows you to select a ring melody.

You can choose between many different melodies. Each time you select a melody, it plays for a few seconds. If you have downloaded sounds from the Internet, you can use them in this menu.

## Ring Volume *(Menu 4.2)*

This option allows you to adjust the ring volume to one of five levels.

Use the Up and Down keys or the **▲** and **▼** keys on the left side of the phone to increase or decrease the volume.

## Alert Type *(Menu 4.3)*

This option allows you to specify how you are to be informed of incoming calls.

The following options are available:

**Light Only:** the service light flashes; the phone neither rings nor vibrates.

**Melody:** the phone rings using the ring melody selected in the **Ring Tone** menu option (**Menu 4.1**); see page 90.

**Vibration:** the phone vibrates but does not ring.

**Vibra+Melody:** the phone first vibrates three times and then starts ringing.

## Keypad Tone *(Menu 4.4)*

This option allows you to select a tone that the phone sounds when you press a key.

You can select an option from **Cool**, **Piano**, **Tone** and **Beep**. To turn the sound off, select **Off**.

**Message Tone** (Menu 4.5)

---

This option allows you to select how the phone informs you that a new message has been received.

**SMS Tone** (Menu 4.5.1)

This option allows you to select how the phone informs you that a new SMS message has been received.

The following options are available:

**Off:** the phone does not use the SMS tone.

**Light Only:** the service light flashes.

**Vibration:** the phone vibrates.

**Single Beep:** the phone beeps once.

**SMS Tone x:** the phone uses one of several SMS tones.

**SMS-CB Tone** (Menu 4.5.2)

This option allows you to select how the phone informs you that a new cell broadcast (CB) message has been received.

The following options are available:

**Off:** the phone does not use the CB tone.

**Light Only:** the service light flashes.

**Vibration:** the phone vibrates.

**Single Beep:** the phone beeps once.

**SMS-CB Tone x:** the phone uses one of several CB tones.

**Folder Tone** (Menu 4.6)

---

This option allows you to select a tone that the phone sounds when you open or close the folder.

You can choose either **Future** or **Crystal**. To turn the sound off, select **Off**.

**Power On/Off** (Menu 4.7)

---

This option allows you to select a melody that the phone sounds when it is switched on and off.

You can choose either **Classical** or **Cheerful**. To turn the sound off, select **Off**.

**Extra Tones** (Menu 4.8)

---

You can customize additional tones used for the phone.

To turn a given tone	Press the
on	<b>ON</b> soft key. A check mark displays in front of the option.
off	<b>OFF</b> soft key again. The check mark no longer displays.



The following options are available:

**Error Tone:** sets whether or not the phone informs you when you make a mistake.

**Minute Minder:** sets whether or not the phone beeps every minute during an outgoing call to keep you informed of the length of your call.


**Connect Tone:** sets your phone to beep when your call is connected to the system.

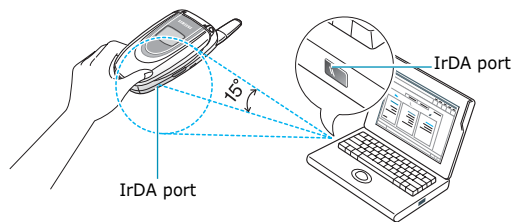
## Phone Settings

Many different features of your phone can be customized to suit your preferences. All of these features are accessed in the **Phone Settings** menu.

### Infrared Activate *(Menu 5.1)*

This feature allows you to send or receive data through the infrared port. To use an infrared connection, you must:

- configure and activate an IrDA-compliant infrared port on your PC.
- activate the infrared feature on the phone; the IrDA icon (  ) appears on the top line of the display.
- align the IrDA port on the phone with the IrDA port on your computer.



The connection is ready for data transmission.

If there is no communication between your phone and the IrDA-compliant device within 30 seconds of activating the feature, it is automatically deactivated.

**Note:** For the best performance, use an optional data link cable. You can buy one from your local Samsung dealer.

**My Settings** *(Menu 5.2)*

You can change the background image and the display style of Menu Mode according to your preference.

**Wallpaper** *(Menu 5.2.1)*

This menu option allows you to change the background image to be displayed in Idle Mode.

To change the background image:

1. Scroll through the list by pressing the Up or Down key.  
  
You have various preset images available. You can also select the blank background and any images downloaded from the Internet.
2. Press the **Select** soft key when the image you want highlights.
3. When the image displays, press the **Select** soft key to display it on the idle screen.
4. To display the current date and time on the wallpaper image, press the **Yes** soft key.

To display only the image, press the **No** soft key.

**Menu Style** *(Menu 5.2.2)*

This menu option allows you to select the menu display style. You can choose either **Film Style** or **Page Style**.

**Greeting Message** *(Menu 5.3)*

This menu option allows you to set a greeting to be displayed briefly when the phone is switched on.

To	Press the
clear the existing message	<b>C</b> key and hold it down until the message is cleared.
enter a new message	appropriate alphanumeric keys.
change the text input mode	right soft key.

For further details about how to enter characters, see page 42.

**Own Number** *(Menu 5.4)*

This feature allows you to:

- assign a name to each of your own phone numbers registered on your SIM card.
- edit the names and numbers.

This function is a memory aid, which you can use to check your own phone numbers if you need to do so.

Any changes made here do not in any way affect the actual subscriber numbers on your SIM card.

## Language *(Menu 5.5)*

---

You can select a display language. When the language option is set to **Automatic**, the language is automatically selected according to the language of the SIM card used.

## Security *(Menu 5.6)*

---

The Security feature enables you to restrict the use of your phone to the people and the types of calls of your choice.

Various codes and passwords are used to protect the features of your phone. They are described in the following sections. See also pages 131-133.

### PIN Check *(Menu 5.6.1)*

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

**Note:** Before disabling the PIN Check feature, you must enter your PIN.

To change your PIN, see the **Change PIN** menu option (**Menu 5.6.2**).

The following options are available:

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

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

### Change PIN *(Menu 5.6.2)*

This feature allows you to change your current PIN to a new one, provided that the PIN Check feature is enabled. You must enter the current PIN before you can specify a new one.

Once you have entered a new PIN, you are asked to confirm it by entering it again.

### Phone Lock *(Menu 5.6.3)*

When the Phone Lock feature is enabled, the phone is locked and you must enter the 8-digit phone password each time the phone is switched on.

The password is preset to "00000000" at the factory. To change the phone password, see the **Change Password** menu option (**Menu 5.6.4**) below.

Once the correct password has been entered, you can use the phone until you switch it off.

The following options are available:

**Disable:** you are not asked to enter the phone password when you switch the phone on.

**Enable:** you are required to enter the phone password when you switch the phone on.

### Change Password *(Menu 5.6.4)*

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

The password is preset to "00000000" at the factory. Once you have entered a new password, you are asked to confirm it by entering it again.

## **SIM Lock** (Menu 5.6.5)

When the SIM Lock feature is enabled, your phone only works with the current SIM card. You must enter the SIM lock code.

Once you have entered the lock code, you are asked to confirm it by entering it again.

To unlock the SIM, you must enter the SIM lock code.

## **FDN Mode** (Menu 5.6.6)

The FDN (Fixed Dial Number) mode, if supported by your SIM card, allows you to restrict your outgoing calls to a limited set of phone numbers.

The following options are available:

**Disable:** you can call any number.

**Enable:** you can only call phone numbers stored in Phonebook. You must enter your PIN2.

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

To change your PIN2, see the **Change PIN2** menu option (**Menu 5.6.7**) below.

## **Change PIN2** (Menu 5.6.7)

The Change PIN2 feature allows you to change your current PIN2 to a new one. You must enter the current PIN2 before you can specify a new one.

Once you have entered a new PIN2, you are asked to confirm it by entering it again.

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

## **Display Settings** (Menu 5.7)

---

### **Brightness** (Menu 5.7.1)

This menu option allows you to adjust the brightness of the display screens to see them better in different lighting conditions.

1. Select the display to be adjusted, **Main LCD** or **Front LCD**, and press the **Select** soft key.
2. Adjust the brightness by using the Up and Down keys or the **▲** and **▼** keys on the left side of the phone.
3. Press the **OK** key to save the setting.

### **Back Light** (Menu 5.7.2)

You can select whether or not the phone uses the backlight. A marginal increase in standby/talk time can be achieved by turning the backlight off.

Select the length of time the backlight is on. The backlight turns on when you press a key or receive a call or message and remains for the specified length of time. The display switches off after one minute.

If you do not want to use the backlight, select **Off**.

**Auto Light** (Menu 5.7.3)

Using this feature, you can specify the time for which the backlight is to be used. This feature helps you to conserve your battery power.

The following options are available:

**Disable:** the backlight is used according to the setting in the **Back Light** menu option (**Menu 5.7.2**); see page 101.

**Enable:** the backlight is used only during the specified period of time. Set the time when the phone turns the light on and then turns it off, using the appropriate number keys.

**Service Light** (Menu 5.7.4)

This menu option allows you to select whether or not the service light is used or in which color it flashes.

Select one from the seven color settings available. When the phone is ready for use, the service light flashes in the appropriate color.

If you do not wish to use the service light, select **Off**.

**Graphic Logo** (Menu 5.7.5)

This menu option allows you to display your operator's logo instead of its name.

**Off:** the operator name displays in Idle Mode.

**On:** the operator logo stored in your phone displays in Idle Mode; if no logo has been stored, the operator name displays.

**Extra Settings** (Menu 5.8)

You can turn the automatic redialing or answering features on or off.

To turn a feature	Press the
on	<b>ON</b> soft key. A check mark displays in front of the option.
off	<b>OFF</b> soft key. The check mark no longer displays.



The following options are available:


**Auto Redial:** when this option is checked, the phone makes up to ten attempts to redial a phone number after an unsuccessful call.

**Note:** The interval between two call attempts varies.

**Active FLIP:** when this option is checked, you can simply open the folder to answer a call.

When it is unchecked, you must open the folder and press a key, depending on the setting of the **Anykey Answer** option below.

**Anykey Answer:** when this option is checked, you can answer an incoming call by pressing any key, except the  key and the **Reject** soft key. To reject the call, press the  key or the **Reject** soft key.

When this option is unchecked, you can only press the  key or **Accept** soft key.

## Short Cut *(Menu 5.9)*

---

The navigation keys can be used as shortcut keys. In Idle Mode, they allow you to access specific menu options directly.

To assign a shortcut to a key:

1. Select the key to be used as a shortcut key by pressing the Up or Down key, and press the **Select** soft key.
  - **Key Up**
  - **Key Down**
  - **Key Right**
  - **Key Left**
2. Select the menu option to be assigned to the key by pressing the Up or Down key.
 

**Note:** To deactivate a shortcut key, select the **None** option.
3. Press the **Select** soft key to save the selection.

## Reset Settings *(Menu 5.10)*

---

You can easily reset your phone to its default settings. To reset your phone:

1. Select the **Reset Settings** menu option.
2. Enter the 8-digit phone password and press the **OK** soft key.
 

**Note:** The password is preset to "00000000." To change this password, see page 99.

# Organizer

The Organizer feature enables you to:

- view the calendar and organize your schedule.
- define a list of things to do.
- set the current date and time.
- set an alarm so that the phone rings at a specific time, such as to remind you of an appointment.
- use the phone as a calculator for basic mathematical equations or currency exchange operations.

## Calendar *(Menu 6.1)*

---

With the Calendar feature, you can:

- consult the calendar.
- write memos to keep track of your schedule.
- trigger an alarm, if necessary.

## Consulting the Calendar

When you select the **Calendar** menu option (**Menu 6.1**), the calendar displays with today's date highlighted. The following options are available when you press the **Options** soft key:

**Search All:** displays all of the memos, starting with the oldest, regardless of the day. To scroll through the memos, press the Up or Down key.

**Delete All:** allows you to delete all of the memos. You are asked to confirm your action.

**Go to Date:** allows you to go to a specific date.

**Exit:** exits the Calendar feature and returns to Idle Mode.

## Writing a Memo

To write or edit a memo on a specific date:

1. Select a date on the calendar, using the navigation keys.

**Note:** To skip to the previous or next month, press the **▲** or **▼** key on the left side of the phone.

2. Press the **Select** soft key.

An empty memo screen displays to allow you to enter your memo.

3. Enter your memo and then press the **OK** soft key.

**Note:** For further details about how to enter characters, see page 42.

You are asked if you wish to set an alarm.

4. If you want an alarm to ring on the chosen day, press the **Yes** soft key.

Otherwise, press the **No** soft key.

5. If you pressed the **Yes** soft key, set the time for the alarm and press the **OK** soft key.

You can also select the melody for the alarm by pressing the **Melody** soft key.

6. When you use the 12-hour time format, select **AM** or **PM** and press the **OK** soft key.

**Note:** The time format is preset to **12 Hours** by default. You can change it in the **Time Format** menu option (**Menu 6.3.4**).

The color of the date on the calendar changes to green to indicate that a memo exists.

## Viewing a Memo

When you select a day for which a memo already exists on the calendar, the latest memo of the day displays.

If more than one memo is stored, press the Up or Down key to scroll to the previous or next memo.

Press the **New** soft key to add a new memo to the day.

You can use the following options by pressing the **Option** soft key:

**Edit:** allows you to change the memo text.

**Alarm:** allows you to set an alarm to ring at the specified time to inform you of the memo. If you already set, you can change or delete the alarm.

**Delete:** allows you to delete the memo.

**Copy to:** allows you to copy the memo to another date.

**Move to:** allows you to change the date of the memo.

## To Do List *(Menu 6.2)*

This feature allows you to:




- enter a list of tasks to be done.
- assign a priority and a deadline to each task.
- sort the tasks by priority and status mark.

### Creating the To Do List

1. Press the **New** soft key.
2. Enter the first task.  
**Note:** For further details about how to enter characters, see page 42.
3. Press the **OK** soft key.
4. Select high, normal or low priority using the Up and Down keys and press the **Select** soft key.
5. Enter your deadline and press the **OK** soft key.

If you do not want to set a deadline, press the **Skip** soft key.

### Editing the To Do List

When you select the **To Do List** menu option (**Menu 6.2**), the current contents display with the status mark and priority;  for High,  for Normal and  for Low.

To view the details for a specific task	<ul style="list-style-type: none"><li>① highlight the task.</li><li>② press the <b>View</b> soft key.</li><li>③ scroll through the tasks using the Up and Down keys, if necessary.</li></ul>
To change the status of a specific task	<ul style="list-style-type: none"><li>① highlight the task.</li><li>② press the ✕ key to mark the task as completed as of the current date and time.</li></ul> <p><u>or</u></p> <ul style="list-style-type: none"><li>① highlight the task.</li><li>② press the <b>Options</b> soft key.</li><li>③ select the <b>Mark</b> option.</li><li>④ select the appropriate status (<b>Done</b> or <b>Undo</b>).</li></ul>
To create a new task	<ul style="list-style-type: none"><li>① press the <b>Options</b> soft key.</li><li>② select the <b>New</b> option.</li><li>③ enter the text, priority and/or deadline for the task.</li></ul>
To edit an existing task	<ul style="list-style-type: none"><li>① highlight the task.</li><li>② press the <b>Options</b> soft key.</li><li>③ select the <b>Edit</b> option.</li><li>④ change the text, priority and/or deadline for the task, as required.</li></ul>



To sort the existing tasks by priority or status	① press the <b>Options</b> soft key. ② select the <b>Sort</b> option. ③ select the sort criterion ( <b>High</b> , <b>Low</b> , <b>Done</b> or <b>Undo</b> ).
To copy a task	① highlight the task. ② press the <b>Options</b> soft key. ③ select the <b>Copy</b> option. ④ change the text, priority and/or deadline for the task, as required.
To copy a task to the calendar	① highlight the task. ② press the <b>Options</b> soft key. ③ select the <b>Copy to Calendar</b> option. ④ change the text and deadline for the task and set the alarm, as required.
To delete a task	① highlight the task. ② press the <b>Options</b> soft key. ③ select the <b>Delete</b> option.
To delete all tasks	① press the <b>Options</b> soft key. ② select the <b>Delete All</b> option. ③ confirm the deletion by pressing the <b>OK</b> soft key.
To exit the To Do list	① press the <b>Options</b> soft key. ② select the <b>Exit</b> option.

## Time & Date *(Menu 6.3)*

This option allows you to change the current time and date displayed. You can also use this option to find out what time it is in another part of the world.

The following options are available:

**Set Time:** allows you to enter the current time. You can choose the time format in the **Time Format** menu option (**Menu 6.3.4**). See below.

**Note:** Before setting the time, you must specify your time zone, in the **World Time** menu option (**Menu 6.3.3**).

**Set Date:** allows you to enter the day, month and year.

**World Time:** allows you to find out what time it is in another part of the world, using the Left and Right keys.

The screen shows the:

- city name.
- current date and time.
- time difference between the selected city and your city if you have set the local time (see below for further details) or GMT (by default).

To select your time zone:

1. Select the city corresponding to your time zone by pressing the Left or Right key one or more times. The local date and time display.
2. Press the **Set** soft key.

**Time Format:** allows you to change the time format to **24 Hours** or **12 Hours**.

## Alarm *(Menu 6.4)*

---

This feature allows you to:

- set the alarm to ring at a specific time.
- set the phone to switch on automatically and ring the alarm even if the phone is switched off (**Autopower** menu option set to **Enable**).

The following options are available:

**Once Alarm:** the alarm rings only once and is then deactivated.

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

**Morning Call:** the alarm rings to wake you up in the morning.

To set an alarm:

1. Choose the type of alarm to be set and press the **Select** soft key.
2. Enter the time for the alarm to sound and press the **OK** soft key.

If you want to use the alarm options, press the **Options** soft key. The following options are available:

- **Remove Alarm:** deactivates the current alarm.
  - **Alarm Sound Set:** allows you to select the alarm melody.
3. When you use the 12-hour time format, select **AM** or **PM** and press the **OK** soft key.

**Note:** The time format is preset to **12 Hours** by default. You can change it in the **Time Format** menu option (**Menu 6.3.4**).

4. If you select **Morning Call** in Step 1, choose the repeat option, **Monday to Friday** or **Monday to Saturday**, and press the **Select** soft key.

To stop the alarm when it rings, open the folder and press the **Exit** soft key.

**Remove Alarm:** deactivates all alarm settings.

**Autopower:** when this option is set to **Enable**, the alarm rings at the specified time, even if the phone is switched off.

If the menu option is set to **Disable** and the phone is switched off at the specified time, the alarm does not ring.

## Calculator *(Menu 6.5)*


---

With this feature, you can use the phone as a calculator. The calculator provides the basic arithmetic functions; addition, subtraction, multiplication and division.

1. Enter the first number using the numeric keys.

### Notes:

- To delete mistakes or clear the display, press the **C** key.
  - To include a decimal point or a bracket, press the left soft key until the symbol you want displays.
2. Press the right soft key until the required arithmetic symbol appears; **+** (addition), **-** (subtraction), **\*** (multiplication), **/** (division).
  3. Enter the second number.

4. To view the result, press the  key.
5. Repeat steps 2 to 4 as many times as required.

## Currency Exchange *(Menu 6.6)*

---

Using this menu option, you can make currency conversions.

1. Enter the current exchange rate of your source currency and press the **OK** soft key.

You can insert a decimal point by pressing the **#** key.

2. Enter the amount to convert and press the **OK** soft key.

The amount you entered and its equivalent value display.

3. Press the **Exit** soft key to exit the currency convertor.

## Network Services

These menu functions are network services. Please contact your service provider to check their availability and subscribe to them, if you wish.

### Call Forwarding *(Menu 7.1)*

---

This network service enables incoming calls to be rerouted to the number that you specify.

Example: You may wish to forward your business calls to a colleague while you are on holiday.

Call forwarding can be set up in the following ways:

**Forward Always:** all calls are forwarded.

**Busy:** calls are forwarded when you are already on another call.

**No Reply:** calls are forwarded when you do not answer the phone.

**Unreachable:** calls are forwarded when you are not in an area covered by your service provider.

**Cancel All:** all call forwarding options are canceled.

You can specify individual forwarding options for each of the following call types:

- Voice calls only
- Data calls only

To set your call forwarding options:

1. Select the type of call forwarding by pressing the Up or Down key, and then press the **Select** soft key.
2. Select the type of calls to be forwarded by pressing the Up or Down key, and then press the **Select** soft key.

The current status displays. If the option has already been set, the number to which the calls are forwarded displays.

To	Press the
activate call forwarding	<b>Activate</b> soft key. Go to Step 4.
change the call number	<b>Change</b> soft key. Go to Step 4.
deactivate call forwarding	<b>Remove</b> soft key.

4. Enter the number to which the calls are to be forwarded and press the **OK** soft key.  
To enter an international code, press the **0** key until the **+** sign displays.

The phone sends your settings to the network and the network's acknowledgement displays.

You can deactivate all call forwarding settings by selecting the **Cancel All** option.

### Call Waiting *(Menu 7.2)*

This network service informs you when someone is trying to reach you during another call.

You can specify individual call waiting options for each of the following call types:

- Voice calls only
- Data calls only

To set your call waiting options:

1. Select the type of calls to which the call waiting option is to be applied by pressing the Up or Down key, and then press the **Select** soft key.

The screen informs you whether call waiting is activated or deactivated.

2. You can activate or deactivate the call waiting feature as necessary by using the **Activate** or **Deactivate** soft key respectively.

To return to the previous screen, press the **Exit** soft key.

You can also deactivate all call waiting settings by selecting the **Cancel All** option.

### Network Selection *(Menu 7.3)*

The Network Selection feature enables you to automatically or manually select the network used when roaming outside of your home area.

**Note:** You can select a network other than your home network only if there is a valid roaming agreement between them.

To indicate to automatically or manually select the network when roaming:

1. When **Network Selection** displays, press the **Select** soft key.
2. Press the Up or Down key until the appropriate option highlights and then press the **OK** soft key.

If you select **Automatic**, you are connected to the first available network when roaming.

If you select **Manual**, the phone scans for the available networks. Go to Step 3.

3. Press the Up or Down key until the preferred network highlights and then press the **OK** soft key.

You are connected to that network.

## Caller ID *(Menu 7.4)*

You can prevent your phone number from being displayed on the phone of the person being called.

**Note:** Some networks do not allow the user to change this setting.

The following options are available:

**Default:** the default setting provided by the network is used.

**Hide Number:** your number does not display on the other person's phone.

**Send Number:** your number is sent each time you make a call.

## Band Selection *(Menu 7.5)*

For the phone to make and receive phone calls, it must register with one of the available networks. Your phone can handle either of the following types of networks:

- GSM 900
- GSM 1800
- Combined GSM 900/1800
- GSM 1900

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.

1. When **Band Selection** displays, press the **Select** soft key.
2. Press the Up or Down key until the appropriate option, **GSM 900/1800** or **GSM 1900**, highlights and press the **OK** soft key.


When you select a new band, your phone displays a confirmation message and then automatically searches for all of the available networks. Your phone registers with a preferred network within the band.

The **Funbox** menu contains several fun options.

## T-Zones *(Menu 8.1)*

Your phone is equipped with a WAP (Wireless Application Protocol) browser to allow you to access and navigation the Wireless Web via your phone.


### Home *(Menu 8.1.1)*

Selecting this option connects the phone to the network and loads the homepage of the Wireless Web service provider. You can also press the  key in Idle Mode.

The content of the WAP Browser startup home page depends on your Wireless Web service provider. To scroll through the screen, use the Up and Down keys.

**Note:** To access the startup home page from any other screen in the WAP browser, use the **Home** option. For further details about the WAP Browser menus, see page 122.

### Exiting the WAP Browser


To exit the browser at any time, simply press the  key.

## Navigating the WAP Browser

To	Press the
scroll through and select browser items	Up or Down key until the symbol ► points to the required item, and then press the <b>OK</b> soft key to confirm the selection.
select a numbered item	corresponding numeric key.
return to the previous page	<b>Back</b> soft key or the <b>C</b> key.
return to the startup homepage	* key and select the <b>Home</b> option. For further details about this option, see page 122.

## Entering Text in the WAP Browser

When you are prompted to enter text, the current text entry mode is indicated on the screen.

To change modes	press the  key one or more times.
To enter a space	press the # key.
To edit text	<ol style="list-style-type: none"> <li>① set the cursor to the right of the character(s) to be corrected.</li> <li>② press the <b>C</b> key as required.</li> <li>③ enter the correct character(s).</li> </ol>

For further details about each text input mode, see page 42.

Selecting and Using Browser Menu Options

Various menu options are available when you are using the WAP Browser to navigate the Wireless Web.

To access a menu option:

- 1. Press and hold the **✕** key.  
A menu displays.
- 2. Highlight a menu option by pressing the Up or Down key.
- 3. Select an option by pressing the **Select** soft key.
- 4. If necessary, select the secondary option using the Up and Down keys, and press the **Select** soft key to confirm.

**Note:** The menus may vary, depending on your version of the WAP browser.

The following menu options are available:

**Reload:** reloads the current page.

**Home:** takes you back at any time to the home page of the Wireless Web service provider.

**Go to URL:** allows you to manually enter the URL address of the required Web page. After entering an address, press the **OK** soft key to go there directly.

**Show URL:** displays the URL address of the site to which you are currently connected. It also enables you to set the current site as the startup home page.

To	Press the
set the current page as your startup home page	<b>Option</b> soft key, select the <b>Save to Home</b> option and press the <b>Select</b> soft key.
set a bookmark for the current page	<b>Option</b> soft key, select the <b>Save to Bookmark</b> option and press the <b>Select</b> soft key.
cancel your setting	<b>Back</b> soft key.

**Edit Home:** allows you to change the startup home page manually. Enter the required URL and press the **OK** soft key. For further details about entering text, see page 42.

**Inbox:** allows you to read messages received from the web server.

**Favorite** *(Menu 8.1.2)*

This option allows you to store the URL addresses of your favorite web sites. You can access this menu directly by pressing and holding the **#** key while using the WAP browser.

To store a URL address:

- 1. Select an empty location and press the **Options** soft key.
- 2. Enter the address and press the **Enter** soft key.
- 3. Enter a name for the favorite item and press the **Enter** soft key.



After saving favorite items, you can use the following options by pressing the **Options** soft key:

**Goto URL:** quickly accesses you to the site.

**Edit:** allows you to edit the address.

**Delete:** deletes the address.

### **Clear Cache** *(Menu 8.1.2)*

You can clear the information stored in the cache, the phone's temporary memory which stores the most recently accessed Web pages.

Press the **Yes** soft key to confirm the deletion. Otherwise, press the **No** soft key.

### **Push Message** *(Menu 8.1.3)*

In this menu option, you can receive and access web messages from the server.

The following options are available:

**Inbox:** allows you to read the messages received from the web server.

**Receive:** allows you to set whether or not your phone receives web messages.

**Delete All:** allows you to delete all of the web messages.

## **Downloads** *(Menu 8.2)*

---

You can download MIDlets (Java applications running on mobile phones) from various sources using the WAP Browser and store them in your phone. You can view the list of MIDlets stored on the Games & More screen.

**Note:** Java services may be unavailable depending upon the service provider.

### **Games & More** *(Menu 8.2.1)*

This menu option allows you to launch a MIDlet and access various menu options.

### **Launching a MIDlet**

To launch a MIDlet:

1. From the Downloads screen, select the **Games & More** option.
2. Scroll to the MIDlet you want and press the **Launch** soft key.
3. Start the MIDlet using the soft keys.

### **Using the Menus**

From the Main Screen, press the **Menu** soft key to access the following options. They are shown only when a MIDlet has been downloaded:

**Launch:** launches the MIDlet.

**Info:** displays information about the MIDlet, such as file size, application version, vendor, and location of the jad file, which is the MIDlet description file.

**Remove:** removes the MIDlet. When the confirmation message appears, press the **Remove** soft key. To cancel your selection, press the **Cancel** soft key.

**Update:** accesses the server and updates the MIDlet.

**Application Setting:** ???

**About:** shows the copyright information of the MIDlet.

### Entering Text

For entering text while using a MIDlet, the following input modes are available:

**Upper-case character (A):** allows you to enter upper-case English characters.

**Lower-case character (a):** allows you to enter lower-case English characters.

**Note:** In the upper/lower-case character mode, you can enter symbols by pressing the **1** or **0** key until the symbol you want displays.

**Number (1):** allows you to enter numbers.

**Symbol:** allows you to enter symbols. After highlighting a symbol by pressing the navigation keys, press the **⌂** key to insert it.

**T9 (75):** allows you to enter English characters by pressing one key per letter. In this mode, you can change the case by pressing the **0** key.

To change the text input mode, press the **✖** key until the appropriate indicator appears on the soft key area of the display.

### Sounds *(Menu 8.2.2)*

In this menu option, you can view the list of sounds downloaded from the web server. You can set the downloaded sounds as the current ring tone or send them to other phones.

When the memory is full, a warning message displays and the phone rejects additional sounds until you delete the obsolete ones.

### Pictures *(Menu 8.2.3)*

In this menu option, you can view the list of pictures downloaded from the web server. You can set the downloaded pictures as the current background image or send them to other phones.

When the memory is full, a warning message displays and the phone rejects additional pictures until you delete the obsolete ones.

# Solving Problems

Before contacting the after-sales service, perform the following simple checks. They may save you the time and expense of an unnecessary service call.

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

### Insert SIM Card

- Check that the SIM card is correctly installed.

### Phone Locked Enter Password

- 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 Personal Identification Number (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 option (**Menu 5.6.1**).


### Enter PUK

- The PIN code was entered incorrectly three times in succession and the phone is now blocked. Enter the PUK supplied by your network operator.


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

- The network connection was lost. You may be in a weak signal area (in a tunnel or surrounded by buildings). Move and try again.
- You are trying to access an option for which you have not taken out a subscription with your service provider. Contact the service provider for further details.

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

- Have you pressed the  key?
- Are you accessing the right cellular network?

## Your correspondent cannot reach you

- Is your phone switched on (the  key pressed for more than one second)?
- Are you accessing the right cellular network?

## Your correspondent cannot hear you speaking

- Have you switched off the microphone?
- Are you 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**

- The battery is insufficiently charged. Replace the battery and recharge it.

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

- Check the signal strength indicator on the display (📶); the number of bars indicates the signal strength from strong (📶) to weak (📶).
- Try moving the phone slightly or moving closer to a window if you are in a building.

**No number is dialed when you recall a Phonebook entry**

- Check that the number has been stored correctly, by using the Phonebook Search feature.
- Re-store the number, if necessary.

If the above guidelines do not help you to solve the problem, take a 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.

## Access Codes

There are several access codes that are used by your phone and its SIM card. These codes help you protect the phone against unauthorized use.

When requested for any of the codes explained below, enter the appropriate code (displayed as asterisks) and press the **OK** soft key. If you make a mistake, press the **C** key one or more times until the incorrect digit is cleared and then continue entering the correct code.

The access codes, except for the PUK and PUK2 codes can be changed using the **Security** menu option (**Menu 5.6**). See page 98 for further details.

**Important!** Avoid using access codes resembling emergency numbers, such as 911, so that you do not dial an emergency number accidentally.

## Phone Password

The Phone Lock feature uses the phone password to protect your phone against unauthorized use. The phone password is supplied with the phone and is preset to “00000000” at the factory.

To	See
activate/deactivate the Phone Lock feature	page 99 ( <b>Menu 5.6.3</b> ).
change the phone password	page 99 ( <b>Menu 5.6.4</b> ).

## PIN

The **P**ersonal **I**dentification **N**umber or PIN (4 to 8 digits) protects your SIM card against unauthorized use. It is usually supplied with the SIM card.

If you enter an incorrect PIN three times in succession, the code is disabled and cannot be used until you re-enable it by entering the PUK (see below).

To	See
activate/deactivate the PIN Check feature	page 98 ( <b>Menu 5.6.1</b> ).
change the PIN	page 99 ( <b>Menu 5.6.2</b> ).

## PUK

The 8-digit PUK (**P**IN **U**nblocking **K**ey) is required to change a disabled PIN. The PUK may be supplied with the SIM card. If not, or you have lost it, contact your service provider.

To re-enable your PIN:

1. Enter the PUK and press the **OK** soft key.
2. Enter a new PIN of your choice and press the **OK** soft key.
3. When the **Confirm New PIN** message displays, enter the same code again and press the **OK** soft key.

If you enter an incorrect PUK ten times in succession, the SIM card becomes invalid. Contact your service provider for a new card.

## PIN2

The PIN2 (4 to 8 digits), supplied with some SIM cards, is required to access specific functions, such as setting the maximum cost of a call. These functions are available if supported by your SIM card.

If you enter an incorrect PIN2 three times in succession, the code is disabled and you cannot access the functions until you re-enable it by entering the PUK2.

To change the PIN2, see page 100 (**Menu 5.6.7**).

## PUK2

The 8-digit PUK2 (**P**IN **U**nblocking **K**ey **2**), supplied with some SIM cards, is required to change a disabled PIN2. If you lose the code, contact your service provider.

To re-enable your PIN2:

1. Enter the PUK2 and press the **OK** soft key.
2. Enter a new PIN2 of your choice and press the **OK** soft key.
3. When the **Confirm PIN2** message displays, enter the same code again and press the **OK** soft key.

If you enter an incorrect PUK2 ten times in succession, you will not be able to access the functions requiring the PIN2. Contact your service provider for a new card.

## Health and Safety Information

### Exposure to Radio Frequency (RF) Signals

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Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on the safety standards that were developed by independent scientific organizations through periodic and through evaluation of scientific studies.

The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless phones employs a unit of measurement known as Specific Absorption Rate (SAR). The SAR limit recommended by the FCC is 1.6W/kg.\*

SAR tests are conducted using standard operating positions specified by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although 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 of the phone.

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 limit established by the government-adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model. While there may be differences between the SAR levels of various phones and at various positions, they all meet the government requirement.

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of <http://www.fcc.gov/oet/fccid> after searching on FCC ID printed in the label on the phone.

FCC certification information for this model phone is attached separation paper.

\* In the U.S. and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

## For Body Operation

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This device was tested for typical body-worn operations with the back of the phone kept 1.5 cm. from the body. To maintain compliance with FCC RF exposure requirements, use only belt-clips, holsters or similar accessories that maintain a 1.5 cm. separation distance between the user's body and the back of the phone, including the antenna. The use of belt-clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

For more Information concerning exposure to radio frequency signals, see the following websites:

Federal Communications Commission (FCC)  
<http://www.fcc.gov/rfsafety>

Cellular Telecommunications Industry Association (CTIA): <http://www.wow-com.com>

U.S.Food and Drug Administration (FDA)  
<http://www.fda.gov/cdrh/consumer>

World Health Organization (WHO)  
<http://www.who.int/peh-emf/en>

## Precautions When Using Batteries

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- Never use any charger or battery that is damaged in any way.
- Use the battery only for its intended purpose.
- If you use the phone near the network's base station, it uses less power; talk and standby time are greatly affected by the signal strength on the cellular network and the parameters set by the network operator.
- Battery charging time depends on the remaining battery charge and the type of battery and charger used. The battery can be charged and discharged hundreds of times, but it will gradually wear out. When the operation time (talk time and standby time) is noticeably shorter than normal, it is time to buy a new battery.
- If left unused, a fully charged battery will discharge itself over time.
- Use only Samsung-approved batteries and recharge your battery only with Samsung-approved chargers. When a charger is not in use, disconnect it from the power source. Do not leave the battery connected to a charger for more than a week, since overcharging may shorten its life.
- Extreme temperatures will affect the charging capacity of your battery: it may require cooling or warming first.
- Do not leave the battery in hot or cold places, such as in a car in summer or winter conditions, as you will reduce the capacity and lifetime of the battery. Always try to keep the battery at room temperature. A phone with a hot or cold battery may temporarily not work, even when the battery is fully charged. Li-ion batteries are particularly affected by temperatures below 0 °C (32 °F).

- Do not short-circuit the battery. Accidental short-circuiting can occur when a metallic object (coin, clip or pen) causes a direct connection between the + and – terminals of the battery (metal strips on the battery), for example when you carry a spare battery in a pocket or bag. Short-circuiting the terminals may damage the battery or the object causing the short-circuiting.
- Dispose of used batteries in accordance with local regulations. Always recycle. Do not dispose of batteries in a fire.

## Road Safety

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

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

1. Get to know your wireless phone and its features, such as speed dial and redial. If available, these features help you to place your call without taking your attention off the road.
2. When available, use a hands-free device. If possible, add an extra layer of convenience and safety to your wireless phone with one of the many hands-free accessories available today.
3. Position your wireless phone within easy reach. Be able to access your wireless phone without removing your eyes from the road. If you get an incoming call at an inconvenient time, let your voice mail answer it for you.
4. Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow, ice and even heavy traffic can be hazardous.
5. Do not take notes or look up phone numbers while driving. Jotting down a To Do list or flipping through your phonebook takes your 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 the people with whom you are talking aware that 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 the 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 a car accident, crime in progress or other serious emergency where lives are in danger, call the emergency number, as you would want others to do for you.



10. Call roadside assistance or a special non-emergency wireless assistance number when necessary. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured, or a vehicle you know to be stolen, call roadside assistance or any other special non-emergency wireless number.

## Operating Environment

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Remember to follow 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.

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).

## Electronic Devices

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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 off your phone 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 off your phone 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. You should also consult the manufacturer of any equipment that has been added to your vehicle.

### Posted Facilities

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

## **Potentially Explosive Atmospheres**

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


Areas with a potentially explosive atmosphere are often but not always clearly marked. They include below deck on boats, chemical transfer or storage facilities, vehicles using liquefied petroleum gas (such as propane or butane), areas where the air contains chemicals or particles, such as grain, dust or metal powders, and any other area where you would normally be advised to turn off your vehicle engine.

## Emergency Calls

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

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

To make an emergency call:

1. If the phone is not on, switch it on.
2. Key in the emergency number for your present location (for example, 999 or other official emergency number). Emergency numbers vary by location.
3. Press the  key.

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.

## 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 off your phone before boarding an aircraft. The use of wireless phones in aircraft may be dangerous to the operation of the aircraft, and is illegal.
- Failure to observe these instructions may lead to the suspension or denial of telephone services to the offender, or legal action, or both.

## Care and Maintenance

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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's.
- Keep the phone dry. Precipitation, humidity and liquids contain minerals that will corrode electronic circuits.
- Do not touch the phone with a wet hand while it is charging. 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.
- 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.

## Acknowledging Special Precautions and the FCC and Industry Canada Notice

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### Cautions

Modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### FCC Compliance Information

This device complies with Part 15 of 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.

## Information to User

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.

## Appendix A: CERTIFICATION INFORMATION (SAR)

THIS MODEL PHONE MEETS THE GOVERNMENT'S REQUIREMENTS FOR EXPOSURE TO RADIO WAVES.

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on safety standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate (SAR). The SAR limit set by the FCC is 1.6 W/kg. 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 limit established by the government-adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model.

The highest SAR values for this model phone as reported to the FCC are Head: 0.466W/Kg, Body-worn: 0.166W/Kg.

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of

<http://www.fcc.gov/oet/fccid> after searching on FCC ID A3LSGHE105.

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In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kilogram (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

## Appendix B: Guide to Safe and Responsible Wireless Phone Use

Cellular Telecommunications & Internet Association

"Safety is the most important call you will ever make."

### A Guide to Safe and Responsible Wireless Phone Use

TENS OF MILLIONS OF PEOPLE IN THE U.S. TODAY TAKE ADVANTAGE OF THE UNIQUE COMBINATION OF CONVENIENCE, SAFETY AND VALUE DELIVERED BY THE WIRELESS TELEPHONE. QUITE SIMPLY, THE WIRELESS PHONE GIVES PEOPLE THE POWERFUL ABILITY TO COMMUNICATE BY VOICE-ALMOST ANYWHERE, ANYTIME-WITH THE BOSS, WITH A CLIENT, WITH THE KIDS, WITH EMERGENCY PERSONNEL OR EVEN WITH THE POLICE. EACH YEAR, AMERICANS MAKE BILLIONS OF CALLS FROM THEIR WIRELESS PHONES, AND THE NUMBERS ARE RAPIDLY GROWING.

But an important responsibility accompanies those benefits, one that every wireless phone user must uphold. When driving a car, driving is your first responsibility. A wireless phone can be an invaluable tool, but good judgment must be exercised at all times while driving a motor vehicle-whether on the phone or not. The basic lessons are ones we all learned as teenagers. Driving requires alertness, caution and courtesy. It requires a heavy dose of basic common sense-keep your head up, keep your eyes on the road, check your mirrors frequently and watch out for other drivers. It requires obeying all traffic signs and signals and staying within the speed limit. It means using seat belts and requiring other passengers to do the same.

But with wireless phone use, driving safely means a little more. This brochure is a call to wireless phone users everywhere to make safety their first priority when behind the wheel of a car. Wireless telecommunications is keeping us in touch, simplifying our lives, protecting us in emergencies and providing opportunities to help others in need. When it comes to the use of wireless phones, safety is your most important call.

### Wireless Phone “Safety Tips”

Below are safety tips to follow while driving and using a wireless phone which should be easy to remember:

1. Get to know your wireless phone and its features such as speed dial and redial. Carefully read your instruction manual and learn to take advantage of valuable features most phones offer, including automatic redial and memory. Also, work to memorize the phone keypad so you can use the speed dial function without taking your attention off the road.
2. When available, use a hands free device. A number of hands free wireless phone accessories are readily available today. Whether you choose an installed mounted device for your wireless phone or a speaker phone accessory, take advantage of these devices if available to you.
3. Position your wireless phone within easy reach. Make sure you place your wireless phone within easy reach and where you can grab it without removing your eyes from the road. If you get an incoming call at an inconvenient time, if possible, let your voice mail answer it for you.
4. Suspend conversations during hazardous driving conditions or situations. Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow and ice can be hazardous, but so is heavy traffic. As a driver, your first responsibility is to pay attention to the road.
5. Do not take notes or look up phone numbers while driving. If you are reading an address book or business card, or writing a “to do” list while driving a car, you are not watching where you are going. It’s common sense. Don’t get caught in a dangerous situation because you are reading or writing and not paying attention to the road or nearby vehicles.
6. Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan your calls before you begin your trip or attempt to coincide your calls with times you may be stopped at a stop sign, red light or otherwise stationary. But if you need to dial while driving, follow this simple tip-dial only a few numbers, check the road and your mirrors, then continue.
7. Do not engage in stressful or emotional conversations that may be distracting. Stressful or emotional conversations and driving do not mix-they are distracting and even dangerous when you are behind the wheel of a car. Make people you are talking with aware you are driving and if necessary, suspend conversations which have the potential to divert your attention from the road.

8. Use your wireless phone to call for help. Your wireless phone is one of the greatest tools you can own to protect yourself and your family in dangerous situations-with your phone at your side, help is only three numbers away. Dial 9-1-1 or other local emergency number in the case of fire, traffic accident, road hazard or medical emergency. Remember, it is a free call on your wireless phone!
9. Use your wireless phone to help others in emergencies. Your wireless phone provides you a perfect opportunity to be a "Good Samaritan" in your community. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 9-1-1 or other local emergency number, as you would want others to do for you.
10. Call roadside assistance or a special wireless non-emergency assistance number when necessary. Certain situations you encounter while driving may require attention, but are not urgent enough to merit a call for emergency services. But you still can use your wireless phone to lend a hand. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured or a vehicle you know to be stolen, call roadside assistance or other special non-emergency wireless number.

Careless, distracted individuals and people driving irresponsibly represent a hazard to everyone on the road. Since 1984, the Cellular Telecommunications Industry Association and the wireless industry have conducted educational outreach to inform wireless phone users of their responsibilities as safe drivers and good citizens. As we approach a new century, more and more of us will take advantage of the benefits of wireless telephones. And, as we take to the roads, we all have a responsibility to drive safely.

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

Cellular Telecommunications & Internet Association  
For more information, please call 1-888-901-SAFE.  
For updates: <http://www.wow-com.com/consumer/issues/driving/articles.cfm?ID=85>

### Appendix C: Consumer Update on Wireless Phones

U.S. Food and Drug Administration

1. 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.



## 2. 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.

## 3. 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.

#### 4. 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 the 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.

#### 5. 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.

#### 6. 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.

7. 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.

8. 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.

9. 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 hearing aids for interference from handheld wireless phones and helped develop a voluntary standard sponsored by the Institute of Electrical and Electronic Engineers (IEEE). This standard specifies test methods and performance requirements for hearing aids and wireless phones so that no interference occurs when a person uses a compatible phone and a compatible hearing aid at the same time. This standard was approved by the IEEE in 2000.

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.

#### 10. 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 the absence of RF exposure. Other studies exposed the animals to RF for up to 22 hours per day. These conditions are not similar to the conditions under which people use wireless phones, so we don't know with certainty what the results of such studies mean for human health.

Three large epidemiology studies have been published since December 2000. Between them, the studies investigated any possible association between the use of wireless phones and primary brain cancer, glioma, meningioma, or acoustic neuroma, tumors of the brain or salivary gland, leukemia, or other cancers. None of the studies demonstrated the existence of any harmful health effects from wireless phone RF exposures. However, none of the studies can answer questions about long-term exposures, since the average period of phone use in these studies was around three years.

#### 11. What research is needed to decide whether RF exposure from wireless phones poses a health risk?

A combination of laboratory studies and epidemiological studies of people actually using wireless phones would provide some of the data that are needed. Lifetime animal exposure studies could be completed in a few years. However, very large numbers of animals would be needed to provide reliable proof of a cancer promoting effect if one exists. Epidemiological studies can provide data that is directly applicable to human populations, but 10 or more years follow-up may be needed to provide answers about some health effects, such as cancer. This is because the interval between the time of exposure to a cancer-causing agent and the time tumors develop - if they do - may be many, many years. The interpretation of epidemiological studies is hampered by difficulties in measuring actual RF exposure during day-to-day use of wireless phones. Many factors affect this measurement, such as the angle at which the phone is held, or which model of phone is used.

12. Which other federal agencies have responsibilities related to potential RF health effects?

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-slc.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>

## Glossary

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

### Active Flip

Ability to answer a call simply by opening the phone.

### Call Barring

Ability to restrict outgoing and incoming calls.

### Call Forwarding

Ability to reroute calls to another number.

### Call Holding

Ability to put one call on standby while answering or making another call; you can then switch between the two calls, as required.

### Call Waiting

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

### Caller Line Identification Services (Caller ID)

Services allowing subscribers to view or block the telephone numbers of callers.

**GPRS (General Packet Radio Service)**

New non-voice value-added service that allows information to be sent and received across a mobile telephone network. GPRS guarantees continuous connection to the Internet for mobile phone and computer users. It is based on the Global System for Mobile Communication (GSM) circuit-switched cellular phone connections and the Short Message Service (SMS).

**GSM (Global System for Mobile Communication)**

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

**Java**

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

**MMS (Multimedia Message Service)**

A message service for the mobile environment, standardized by the WAP Forum and the 3rd Generation Partnership Program (3GPP). For phone users, MMS is similar to Short Message Service (SMS)-it provides automatic, immediate delivery of user-created content from phone to phone. The message addressing used is primarily phone numbers, thus the traffic goes from phone to phone. MMS also provides support for e-mail addressing, so that messages can also be sent by e-mail. In addition to the text content of SMS, MMS messages can contain still images, voice or audio clips, and later also video clips and presentation information.

**Multi-party Calling**

Ability to establish a conference call involving up to five additional people.

**Phone Password**

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

**PIN (Personal Identification Number)**

Security code that protects the phone against unauthorized use. The PIN is supplied by the service provider with the SIM card. It may be a four to eight-digit number and can be changed, as required.

**PUK (PIN Unblocking Key)**

Security code used to unlock the phone when an incorrect PIN has been entered three times in succession. The eight-digit number is supplied by the service provider with the SIM card.

**Roaming**

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

**SDN (Service Dialing Numbers)**

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



**SIM (Subscriber Identification Module)**

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

**SMS (Short Message Service)**

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

**Soft Keys**

Two keys marked  and  on the phone, the purpose of which:

- varies according to the function that you are currently using.
- is indicated on the bottom line of the display just above the corresponding key.

**Tri Band**

Ability to handle any of the following types of network; GSM 900, GSM 1800, combined GSM 900/1800 and GSM 1900 MHz bands, for greater call success and wider roaming.

Your phone automatically searches for the last network used. If, for any reason, this network is unavailable, your phone will attempt to register onto a different network.

**Voice Mail**

Computerized answering service that automatically answers your calls when you are not available, plays a greeting (optionally in your own voice) and records a message.

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

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



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






### Tri Band SGH-E105 GPRS Telephone Quick Reference Card

Access the Menu Functions	<ol style="list-style-type: none"><li>① Press the <b>Menu</b> soft key.</li><li>② Scroll with the Up and Down keys through the list of the menus until you reach the required menu.</li><li>③ Press the <b>Select</b> soft key.</li><li>④ Scroll with the Up and Down keys through the list of the options until the required one is selected.</li><li>⑤ Press the <b>Select</b> soft key.</li></ol>
Each of the two soft keys (  and  ) perform the function indicated by the text above it, on the bottom line of the display.	

Switch On/Off	Press and hold the  key.
Make a Call	<ol style="list-style-type: none"><li>① Key in the number.</li><li>② Press the  key.</li></ol>
End a Call	Briefly press the  key.
View Missed Calls Immediately after Missing Them	<ol style="list-style-type: none"><li>① Open the phone and press the <b>View</b> soft key.</li><li>② Scroll with the Up and Down keys through the missed calls.</li><li>③ To return the call, press the  key.</li></ol>

Answer a Call	Open the phone or Press the  key.	Store Numbers in Phonebook (continued)	<ol style="list-style-type: none"> <li>⑥ Enter the name.</li> <li>⑦ Press the <b>OK</b> soft key.</li> <li>⑧ If necessary, change the location number.</li> <li>⑨ Press the <b>OK</b> soft key.</li> <li>⑩ Press the  key to return to Idle Mode.</li> </ol>
Adjust the Volume	Press the <b>Λ</b> or <b>∨</b> key on the left side of the phone.		
Choose the Alert Type	<ol style="list-style-type: none"> <li>① Select the <b>Alert Type</b> menu option (<b>Menu 4.3</b>).</li> <li>② Select an option: <ul style="list-style-type: none"> <li>• <b>Light Only</b></li> <li>• <b>Melody</b></li> <li>• <b>Vibration</b></li> <li>• <b>Vibra+Melody</b></li> </ul> </li> <li>③ Press the <b>Select</b> soft key.</li> </ol>	Search for a Number in Phonebook	<ol style="list-style-type: none"> <li>① Press the <b>Ph. Book</b> soft key.</li> <li>② Select the <b>Search</b> option.</li> <li>③ Enter the first few letters of the name.</li> <li>④ To scroll through the names, press the Up and Down keys.</li> <li>⑤ Press the <b>View</b> soft key.</li> <li>⑥ To scroll through the numbers, press the Up and Down keys.</li> <li>⑦ Press the  key to dial.</li> </ol>
Store Numbers in Phonebook	<ol style="list-style-type: none"> <li>① Enter the number and press the <b>Save</b> soft key.</li> <li>② Select an icon for label.</li> <li>③ Press the <b>Select</b> soft key.</li> <li>④ Select a memory.</li> <li>⑤ Press the <b>Select</b> soft key.</li> </ol>		