

The phone that lets you stay in touch
with the rest of the world

ACeS R190 Satellite

Satellite/GSM 900 Cellular Phone

User's Guide

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October 2001

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Publication Number EN/LZT 123 3714 R3A

Declaration of Conformity

ACeS International Limited hereby declares that the phone described in this user's guide is in compliance with the essential requirements and other relevant provisions of Radio Equipment and Telecommunication Equipment directive 1999/5/EC (R&TTE).

The declaration of conformity (DoC) concerned has been signed. Please visit our Internet Web Site: www.acesinternational.com if you require a copy of the original.

The SAR recommendations of ICNIRP are met.

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Welcome...

*and thank you for choosing the Satellite phone
- the revolutionary mobile phone that lets you
stay in touch with the rest of the world.*

The R190 Satellite handheld phone (referred to as “your phone” throughout this manual), which operates in satellite or cellular mode, literally puts the world at your fingertips. Your phone is small enough to fit in the palm of your hand or slip into a shirt pocket, yet the technology built into the phone allows you to receive and send phone calls from remote areas of Asia where there are no telephone systems or cellular transmitters. When you make a call, your phone transmits a signal to a satellite, which then beams the signal back to your network service provider who forwards the signal to the number you dialed.

Your phone operates in ACeS (Satellite) or GSM mode, allowing you to place satellite calls from remote areas of Asia. When you return to an area with reliable cellular service, it allows you to switch back. You can set your phone to four different modes: Satellite only, Satellite preferred, GSM only, or GSM preferred.

Your phone is designed to roam the remote areas of Asia with you, whether you are travelling on international business, for pleasure, or because of an emergency. Your phone is a valuable communication tool whether you are on holiday, a world business traveller, or a member of a geological survey, disaster relief, or search and rescue team. Whether you are a scientist, an explorer, or a retired person living out your dream of travelling around the world, you are no longer limited by ordinary telecommunications systems, which may be inconvenient or out of reach.

Your phone sets a new standard for others to follow while meeting the highest standards of durability, service and sound. It comes packed with features that let you stay in touch with the world.

These features include:

- Satellite mode for areas where cellular service is not available.
- Cellular service for areas where it is available.
- Voice.
- Data and Fax – currently supported by GSM at 9.6 kbs.
- A phone book in which you can store names and phone numbers.
- An alarm clock and calculator.
- SMS (Short Message Service) – supported by GSM.
- CLI (Caller Line Identification) – supported by GSM.

This guide introduces you to your phone and shows you how to get the most out of it. Before you start, read “Guidelines for Safe and Efficient Use” on page 106.

About Your Phone

Operators & Subscriptions

Before you can use your phone you must obtain a subscription to a network. The services included in your subscription depend on your choice of operator and/or subscription. Therefore, some of the services and functions described in this manual may not be accessible to you. For a complete list of the services included in your subscription, please contact your network operator.

GSM 900/ACeS

Your phone operates in either GSM 900 or ACeS (Satellite) mode.

GSM (Global System for Mobile Communication) networks allow cellular subscribers to roam between GSM systems, and also within countries covered by GSM systems. GSM also provides user services such as high-speed data communication, facsimile, short message service (SMS), and caller line identification (CLI).

The SIM Card

You receive a SIM (Subscriber Identity Module) card with your subscription.

The SIM card contains a computer chip that keeps track of your phone number, the services you order from your network operator and your Phone Book information, among other things.

Your PIN

Your operator provides you with a security code or Personal Identity Number (PIN) when you receive your SIM card. This number allows you to lock your SIM card. See “The SIM Card Lock” on page 98.

Store your PIN in a safe place. It is your protection against unauthorised use of your phone. Do not write it on your phone or place it where someone might see it.

The first time you turn on your phone, you are prompted to enter your PIN (if the PIN is activated.) Your PIN may also be required when you change settings in your phone. Some services require a second PIN, the PIN2.

Enter your PIN carefully. If you enter your PIN incorrectly three times in a row, the SIM card is blocked. If this happens, you can unlock it by using a Personal Unblocking Key (PUK) code. You must contact your operator to obtain this code. See “Unlocking the SIM Card” on page 98.

For information on changing your PIN, see “Changing the PIN Code” on page 99.

The Keypad



Preparing Your Phone for Use

Before you can use your phone for the first time, you should do the following in the order listed:

- install the SIM card if it is not already installed.
- install the battery.
- charge the battery.
- set default parameters for the phone and networks.

The SIM Card

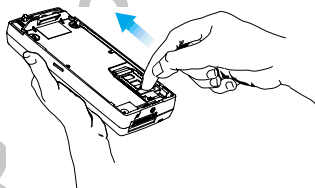
When you register as a subscriber with a network service, you receive a SIM card. The SIM card stores information about your phone number and your subscription, among other things.

If you purchased your phone from your network service provider, the SIM card may already be installed. If not, you must install it before you can use your phone.

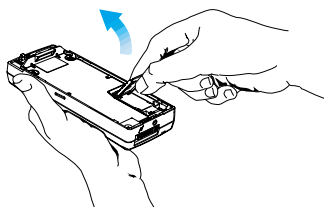
The SIM card that comes with your subscription is about the size of a postage stamp. Many services give you a larger card, containing a smaller, postage stamp-sized SIM card that you can punch out.

Opening the SIM Card Holder

To open the SIM card holder, remove the battery if attached, then:



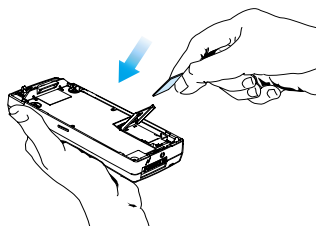
1. Release the SIM card holder by sliding it towards the top of the phone.



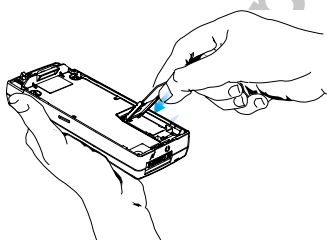
2. Fold out the holder as shown.

Inserting the SIM Card

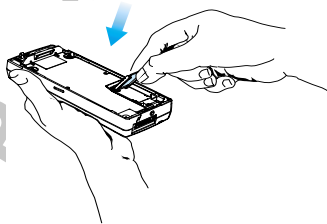
To insert the SIM card:



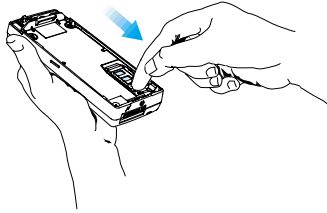
1. Hold the SIM card with the angled corner at the top right. The metal side should be facing downwards towards the metal contacts in the phone.



2. Slide the card into the holder.



3. Fold down the holder.



4. Lock the holder by pressing it down and sliding it towards the bottom of the phone.

Operating without a SIM Card

When operating in GSM mode, you can make emergency calls on your phone without a SIM card by dialling 112 or an alternative emergency number. (See “Locating a Network” on page 31 and “Emergency Calls” on page 41.)

If you turn on the phone without a SIM card installed the message “Insert card” appears and you will only be able to make emergency calls on your phone in GSM mode.

Note: *You cannot access satellite mode-related services without a SIM card.*

Operating with a Standard GSM SIM Card

Your phone will operate in ACeS mode with a Standard GSM SIM card. You can change the default GSM or Satellite mode parameters to suit your personal preferences. See “Roaming with a Standard GSM SIM Card” on page 45.

When turning your phone on for the first time, or inserting a new SIM, the display will show:

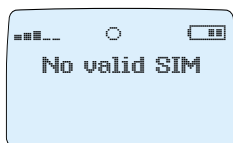
SET UP NEW SIM
ACeS
Subscription?

Press YES to set up for ACeS Subscription or NO for an alternative subscription. When you have made your choice your phone will immediately search for the recognised network.

The R190 factory System Mode default is set for SAT pref, this means that your phone will always search for a satellite network first. In the event that it cannot find a satellite network, it will switch mode and attempt to find a GSM network, this search will take approximately three minutes.

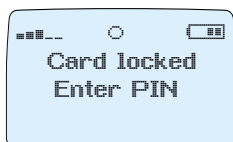
For more information on setting system mode preferences, see “Select a Network Preference” on page 27, “Set Satellite Search Preferences” on page 27, and “Set GSM Search Preferences” on page 28.

SIM Card Rejected



Your SIM card may be rejected by the phone if you are operating in Satellite mode and a faulty SIM card is installed.

SIM Locked

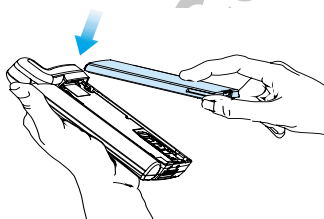


If the SIM card is locked, you are prompted to enter your PIN code. See “The SIM Card Lock” on page 98 for more information about locking and unlocking the SIM card.

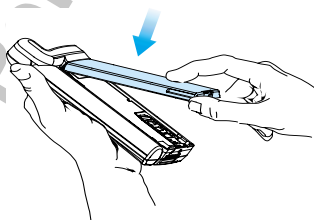
The Battery

Your mobile phone comes with a nickel metal hydride (NiMH) battery. The battery is not charged when purchased, but there may be enough power to turn on the phone. You will need to charge the battery after you attach it to the phone. See “When to Charge the Battery” on page 18.

Attaching the Battery



1. Place the battery on the back of the phone.

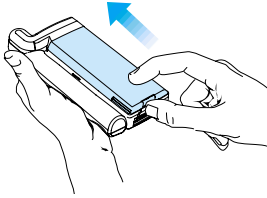


2. Press the battery forward and down until you hear a click.

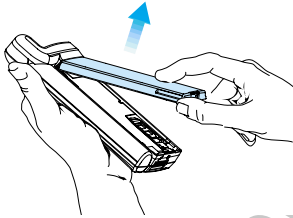
Removing the Battery

Make sure that the phone is turned off before removing the battery, and then:

1. Press the battery forward.



2. Lift the battery up and away from the phone.



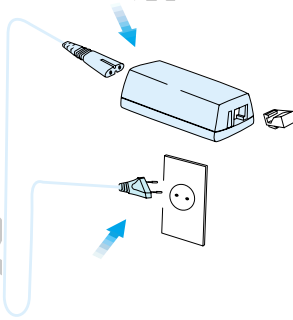
Charge the Battery

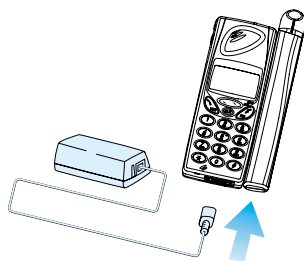
The phone comes with an AC battery charger. You will need to charge the battery before using your phone for the first time.

Attaching the AC charger

Follow these steps to connect the charger:

1. If applicable, connect the plastic plug on the power cable to the charger.
2. Connect the charger to the socket.





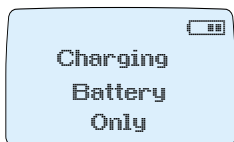
3. Connect the other end of the charger cable to the phone.

Note: *The flash symbol on the plug must face upwards. You may have to press hard.*

The battery starts charging as soon as you attach the charger. (A green indicator on the phone lights up.)

If it does not, disconnect the charger from the phone and try attaching it again, pressing hard. You should hear a click.

You can charge the phone when it is ON or OFF.



- If a charger is attached but the phone is turned OFF, the message “Charging Battery Only” is displayed.
- If the phone is ON, the display will continue to operate normally.

Charging is indicated by the following:

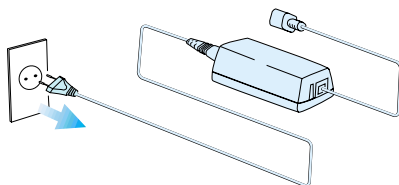
- the battery meter in the display shows fill level.
- the indicator on top of the phone shows a steady red light if the phone is off, and green if the phone is on.



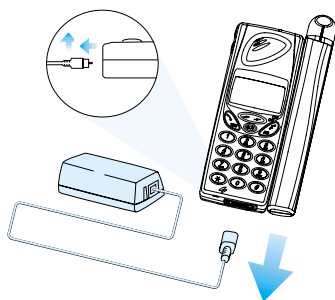
When the battery is fully charged, the battery meter in the display shows full and the indicator on top of the phone shows a steady green light.

It is possible to use the phone while the battery is being charged. However, the charging time is increased.

Disconnecting the Charger



1. Disconnect the charger from the electrical socket.



2. Lift the plug connected to the phone upwards and pull it out.

When to Charge the Battery

The nickel metal hydride (NiMH) battery that comes with your phone can be charged as often or as long as you wish without losing performance. This is not the case with the nickel cadmium type batteries, often sold as accessories from other suppliers.

Note: *For optimal talk and standby time, it is recommended that you use only nickel metal hydride (NiMH) batteries with your phone.*

When the battery needs charging the following happens:

- An alarm signal (a long beep) sounds and the message **Battery low** appears for ten seconds in the display.
- The indicator light on top of the phone starts blinking red.
- The alarm may sound again after 10 minutes, depending on the battery type and how fast it is being discharged.

Low Battery Alarm

When the battery has discharged, the low battery alarm sounds, then the phone automatically shuts off. You might be able to turn the phone on again, but you cannot make or receive any calls until the battery has been charged, or replaced with a charged one.

The Antenna

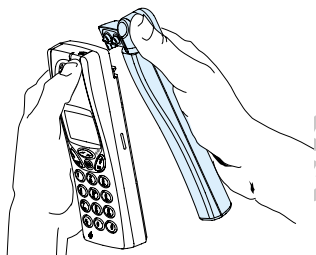
Your phone can be fitted with one of two antennas: one for GSM mode only (the *GSM antenna*) and one that will work in both GSM and Satellite modes (the *dual mode antenna*).

You will need to have either of the antennas attached to your phone in order to receive a signal strong enough for your phone to operate properly.

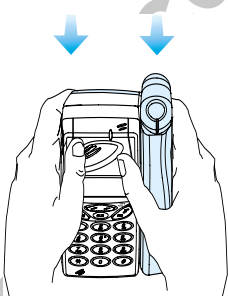
Attaching an Antenna

To attach an antenna:

1. Place the phone in front of the antenna.



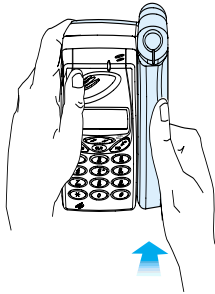
2. Press together as shown. You hear a click when the two are attached properly.



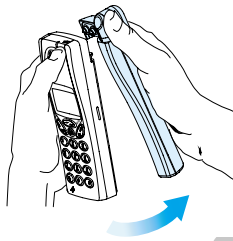
Removing an Antenna

To remove an antenna from your phone (for storage or shipping, or to fit the other antenna), proceed as follows:

To remove the antenna:



1. Grasp the phone with both hands.
2. Place your right thumb on the lower part of the antenna.
3. Press back on the antenna.



4. Lift off the antenna with a slight rotation from bottom to top.

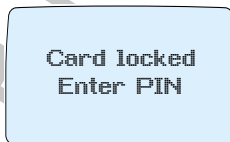
Note: *Damage will occur if the antenna is removed incorrectly.*

Turning the Phone ON and OFF

Note: *The first time you turn ON your phone, or the first time you turn on your phone after inserting a new SIM card, you have to enter the PIN (SIM lock code) given to you by your network service provider. You may change your PIN or turn the SIM lock off. See "The SIM Card Lock" on page 98 for instructions.*

The digits appear as stars (*) in the display. If you make a mistake while entering your PIN, erase the wrong digit by pressing the CLR key.

To turn ON the phone:



1. Press and hold down the NO (ON/OFF) key until you hear a click.
2. Enter your PIN (if set up).
3. Press YES.

If you enter your PIN correctly, you see a greeting text.

To turn your phone OFF, press and hold the NO (ON/OFF) key until the display is turned off.

Navigating the Menu System

You should become familiar with menus, display text, and indicators (icons or symbols) in order to operate your phone efficiently.

Display Text and Symbols

When you navigate the menus, the following guidelines apply:

- Letters in the **HELVETICA** font indicate a menu, function or key.
- The slash character (/) is used to separate menus from submenus. For example, **Networks/New search** indicates that you should select the **Networks** menu option and then **New search** in the sub-menu.
- Text within brackets ([]) indicates the current setting for the function displayed; < and > indicate that you can scroll through more options.
- The term “select” implies moving to the specified item in the menu or submenu, and pressing the **YES** key.

How to Scroll

To scroll to a menu or function, press the **LEFT** or **RIGHT** arrow key. You can also use the **UP** or **DOWN** volume keys on the side of the phone to scroll to a menu, except during a call.

Indicators in the display

See the table “Indicators in the Display” on page 115 for examples of symbols used in the display.

Menu Mode

The menus are arranged in a continuous loop, which you move through with the **YES**, **NO**, **CLR** and **Navigation** (arrow) keys.

To select a menu or make a setting:

1. Scroll to a menu or function and press **YES**.
2. Press **YES** to select the function.
3. Scroll to the desired submenu.
4. Press **YES** to enter the submenu or to confirm the setting.

Note: Unless you are in menus relating to Text Messages, the phone will eventually return to standby if you do not press any key. This occurs after 60 seconds for the first menu level, or 240 seconds for other menu levels.

Menu Keys

Press to:



Activate menu mode and scroll through the menus and sub-menus.



Answer a call, select a menu or function, or send a call when digits are displayed.



End a call, turn the phone ON or OFF, go back one level, clear digits from the display or leave a setting unchanged.



Return to the standby menu, mute the ring signal during a call or call pending notification, turn the ring signal off in standby mode, delete one digit or character at a time or hold down to delete all at once.



Adjust the volume during a call, or set the earpiece volume from the SETTINGS/Ear Volume menu, activate menu mode and scroll through menus and sub-menus.

Initial Phone Settings

You need to set certain parameters before using your phone for the first time; other parameters need to be set up before you use some of the features. You can also personalise your phone by changing settings such as the ring tone or melody, ring level or display light. See “Personalising Your Phone” on page 48.

Master Reset

If you should make changes and then decide that you do not want to keep those changes, you can reset your phone to the default factory settings accessing:



1. By the **SETTINGS** menu and selecting **Master reset**.
2. Entering your phone lock code and pressing **YES**. (The default code is 0000).

Lock and Unlock Your Phone

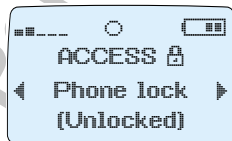
Keypad Lock



Use the **SETTINGS** menu to lock the keypad on your phone so keys cannot be accidentally pressed. See “The Key Lock” on page 102 for instructions on locking and unlocking the keypad.

Phone Lock

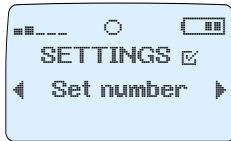
The phone lock protects the phone against unauthorised use in the event of theft. It is not on when you purchase the phone.



Use the **ACCESS** menu to set a Phone lock or Key lock code, to change your code, lock your SIM card, or to bar certain incoming or outgoing calls. See “The Phone Lock” on page 100 for detailed instructions.

Set Phone Numbers

You may have as many as three different phone numbers associated with your satellite or GSM subscription. If the phone numbers exist on your SIM card and your subscription allows you to change the numbers, you can store them and display them when needed.

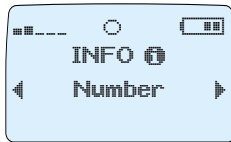


1. From the **SETTINGS** menu, select **Set number**.
2. Select the type of phone number that you want to set:
 - SAT (or GSM) Phone no.
 - SAT (or GSM) Fax no.
 - SAT (or GSM) Data no.

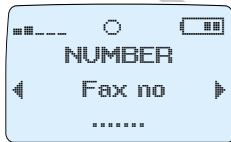
Display Phone Number

If you forget one of your phone numbers, you can display it.

To display a number:



- From the **INFO** menu select **Number**.

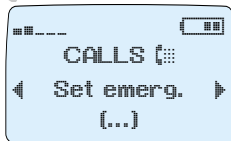


- Scroll to **Phone no**, **Fax no**, or **Data no**.

Set an Emergency Number

The emergency number 112 is pre-stored in your phone memory for easy access.

You can change this number from the **CALLS** menu.



1. Scroll to **CALLS/Set emerg.** The current number is displayed.
2. Press **YES**.
3. Enter the new number at the **Enter number** prompt.
4. Press **YES** to confirm.

You can dial this number, or the standard emergency number 112, to make an emergency call in either GSM or Satellite mode.

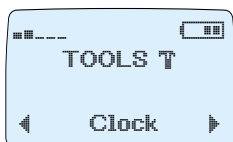
Set Language

English is the default language in your phone display. In some phones it is the only language available. In phones with more than one language available, you may change the language from the SETTINGS menu.

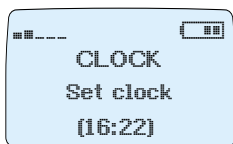
Set Clock

Your phone displays the time when in standby mode. During a call, it displays the time elapsed since the call began. You can also set other clock-related functions such as date, time and date format and the alarm. See “Time and Date” on page 48.

To set the time:



1. From the TOOLS/Clock menu select Set Clock.
2. Press YES.

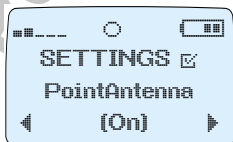


3. Enter the time in hours and minutes.
If CLOCK/Clockmode is set to AM/PM, you can switch between AM and PM by pressing * or #.
4. Press YES.

Set Satellite Antenna Pointing

When the satellite signal is not strong enough for the phone to receive calls or register with the network, the Antenna Pointing function sounds to assist you with positioning the antenna when receiving or placing a call. See “Point Antenna” on page 32.

To activate the antenna pointing function:



1. Scroll to display SETTINGS/PointAntenna/ON.
2. Press YES to turn on this function.

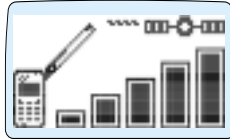
Note: *This menu item is only available in Satellite mode.*

To turn off the Antenna Pointing function:



1. Scroll to display **SETTINGS/PointAntenna/OFF**.
2. Press **YES**.

- If set to **ON**, you hear the satellite assist signal consisting of different tones (depending on the signal strength) when receiving notification of a pending call. The satellite assist signal tone continues until time-out, a full satellite signal is received, or until you press **CLR** to turn it off. Pressing **CLR** will turn it on again.
- If set to **OFF**, instead of the signal described above, the call pending notification signal of three short tones is repeated every 5 seconds until time-out or your phone locks onto a signal that is strong enough for your phone to respond to it.



- If set to **ON**, you see the display shown on the left when antenna pointing assistance is needed.

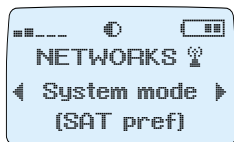
The volume for the Antenna Pointing signal is the same as the ring volume. To change the setting, see “Set the Ring Signal Level” on page 54.

Network Settings

You will need to set defaults for the networks you will use before you can make or receive your first call.

Select a Network Preference

You can select the networks you want to use and the order in which you want your phone to search for them. You only need to do this once unless you want to change your preference.



1. Select NETWORKS from the menu.
2. Select System mode.
3. Press YES.

The current setting appears. The default is SAT pref mode.

To change the mode, press YES. Select one of the following options and press YES again:

- **Satellite only:** searches only for a satellite network.
- **Satellite pref:** searches first for a satellite network. If none is found, it searches for a GSM network.
- **GSM only:** searches only for a GSM network according to the search pattern set in GSM Search Options.
- **GSM pref:** searches for a GSM network. If none is found, the phone searches for a satellite network.

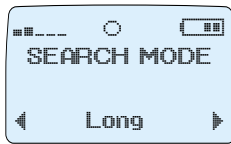
Set Satellite Search Preferences

You can set a default search pattern for a Satellite network. Your phone uses this search pattern to search for a satellite network each time you turn your phone on.

You only need to do this once unless you want to change your defaults. You must be in Satellite mode to set satellite search preferences. (You must be in GSM mode to set GSM preferences.)



1. Select NETWORKS/Search opt Satellite.
2. Scroll to Search mode (...), where is the current search mode: Short or Long.
3. Press YES to change the mode.



- Select **Long** for a long search pattern. This can take up to 12 minutes.



- Select **Short** for a short search pattern. This normally takes less than two minutes if successful.

Your phone remembers successful short search patterns. Therefore, you only need to use the long search option if you travel long distances to a new location without maintaining satellite service for the duration of the trip.

Set GSM Search Preferences

You can set a default search pattern for a GSM network. Your phone uses this search pattern to find a GSM network each time you turn your phone on. You only need to do this once unless you want to change your defaults.

You must be in GSM mode for GSM search options to appear. (You must be in Satellite mode to set SAT preferences.)



1. From the **NETWORKS** menu, select **Search opt GSM**.
2. Press **YES**.
3. Scroll to **Search mode (...)**, where ... is the current setting.
4. Press **YES**.



5. Select one of the following search modes, and then press **YES**:
 - Auto.
 - Manual.

Network List

For both satellite and GSM networks, you can create a list of networks to select from manually when your home network is not within range. This will be especially useful in the future when more satellite networks become available.

Note: *This list does not define the order in which your phone selects a network, as the strongest radio signal is always selected.*

The number of networks that can be stored in the list depends on your SIM card.

The example below describes editing the network list for satellite networks; the procedure for GSM is identical except that you start in GSM mode and the first option is NETWORKS/Search opt GSM.



1. Select NETWORKS/Search opt Satellite.
2. Press YES.



3. Select SEARCH OPT/Edit list. If only one network is listed, press YES.



4. Scroll through the list of network names. Press * to display the complete network name (the display reverts to the abbreviated version after a few seconds).



5. To add a new entry to the list, scroll to the last number in the list, which is blank (unless all available numbers are in use, in which case you must overwrite an existing entry). Press YES, and then YES again at the prompt Add net?



6. In GSM mode, the system displays a list of known networks; select Other? if you want to enter the codes for a different network. In satellite mode, you are prompted to enter the codes for the new network. Then press YES. When you add a new entry, a new blank entry is automatically created.



7. To move an existing entry to a different position within the list, scroll to the entry and press **YES**. Scroll to the **Move** option and press **YES** again.
8. To erase an entry, scroll to the **Erase** option and press **YES**.

Locating a Network

When you have installed the SIM card, charged the battery, attached the antenna, and completed the initial setup as explained in “Initial Phone Settings” on page 23, you are ready to use your phone. A network search begins as soon as you turn on your phone. When a network is found, the phone beeps three times.

The indicator light on top of the phone flashes green once every second and your network operator’s name (in most cases abbreviated) is shown in the display. If the charger is connected, the indicator displays a steady green light instead of a flashing green light.

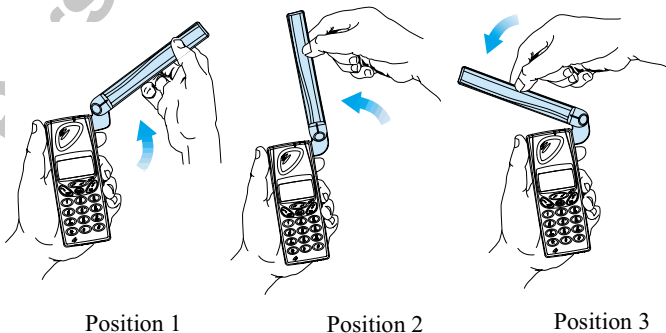
(If this is the first time you have used your phone, see “Set Satellite Search Preferences” on page 27, and “Set GSM Search Preferences” on page 28.)

Position the Antenna

In satellite mode, you must fit the dual-mode antenna. You need to position the antenna in order to receive a full satellite signal. Grasp the antenna and flip it upward until it clicks into one of the three upward positions shown in the figure below.

Important: *You may be able to receive a network signal without raising the antenna. However, the antenna should be in one of the three upward positions shown for your phone to work most efficiently.*

Whether in Satellite or GSM mode, deploying the antenna in one of the three upward positions improves the performance of the phone, and minimises your exposure to radio frequency (RF) energy.

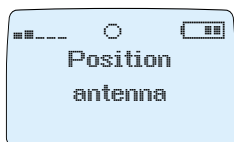


For more information on positioning the antenna properly, see “Point Antenna” on page 32, and “Satellite Indicators” on page 33.

Point Antenna

If you activate the Antenna Pointing function, you can use it to help you locate a full-strength satellite signal. See “Set Satellite Antenna Pointing” on page 25.

Point Antenna At End of Search



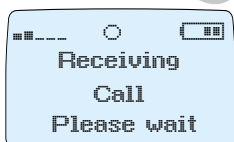
If your phone finds a satellite network but the signal is weak, the message “Position antenna” and the empty circle service indicator appear.

The Antenna Pointing function can help you register with a satellite network signal.

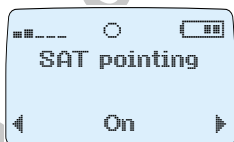
1. Make sure the Antenna Pointing feature is set to ON in the SETTINGS menu.
2. Position the phone with the antenna pointing up, and re-position until a strong satellite signal is received and you hear three beeps.

Until a sufficiently strong signal is located, the messages “No Network” and “Position Antenna” appear.

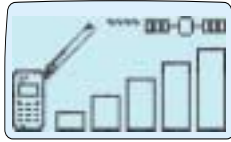
Point Antenna to Receive Call



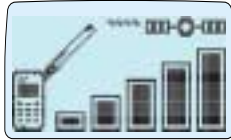
- If a satellite network is in range but signal reception is not strong enough for you to receive a call, you can only receive notification of a pending call.



- If the Antenna Pointing function is ON, you hear the satellite assist signal consisting of different pitches (depending on the signal strength) when receiving notification of a pending call. The satellite assist signal tone continues until time out, a sufficiently strong satellite signal is located, or until you press CLR to turn it off. Pressing CLR will turn it on again.



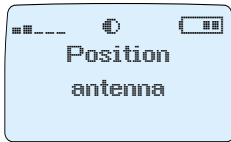
- If set to OFF, instead of the signal described above, the call pending notification signal of three short tones is repeated every 5 seconds until time out or your phone finds a signal that is sufficiently strong enough for your phone to respond to it.



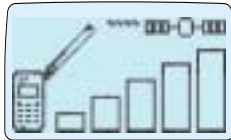
Move the phone and antenna to different positions until the **Position antenna** message disappears.

If the phone receives a full service signal before time out, **Connecting** appears, the phone rings, and you can answer the call.

Point Antenna to Make Call



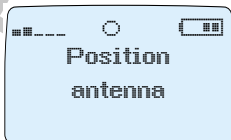
If you receive a satellite signal, but it is not strong enough to make a call (a half circle is displayed), **Position antenna** appears when you initiate a call. The call is pending until a sufficiently strong signal is received.



If the **Antenna Pointing** function is ON, and you press YES again, the **Antenna Pointing** function is activated to help you place the call. Re-position the phone until you hear a beep and **Calling** appears.

Satellite Indicators

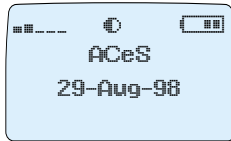
The following satellite service indicators appear:



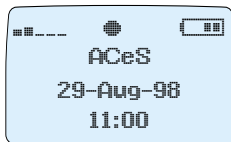
- An empty circle indicates limited or no satellite service.
- An empty circle with the message **Position antenna** indicates you should position the antenna to obtain a better signal and full satellite service for both making and receiving calls.



- An empty circle with the message **No network** indicates you can make emergency calls only.



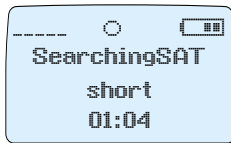
- A half circle indicates you can receive notification of an incoming satellite call. You cannot receive the complete call, however, until you position the antenna to obtain full service.



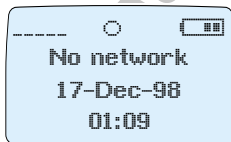
- A full circle indicates full satellite service. All types of calls can be made and received.

Search for a Network

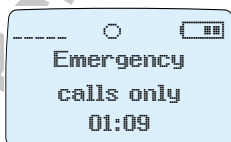
One of the following messages appears during the network search:



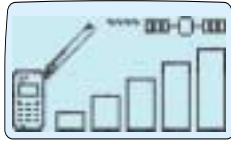
- **Searching Sat** or **No network** appears while the phone is searching for satellite service.
- **Searching GSM** or **No network** is displayed while the phone is searching for GSM service.



- **No network** indicates that no network was found.



- **Emergency calls only** indicates that a network was found, but you do not have permission to use it except to make emergency calls.



- **Position Antenna** indicates a satellite network was found but your radio signal is not strong enough to make or receive calls. You must position your antenna until a full circle is displayed.

Selecting Phone Mode

You can set your phone to four modes: **Satellite Pref**, **Satellite Only**, **GSM Pref**, and **GSM Only**.

To set your phone to one of these modes:

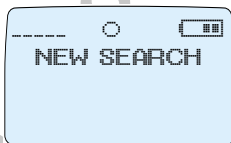
1. Select **Networks** from the menu.
2. Select **System mode** from the options.
3. Scroll to the mode you want to set your phone to and press **YES**.

Satellite Only Mode

If you have selected **Satellite Only** as your default mode, a search for a satellite signal begins with the message **Searching Sat short** or **Searching Sat long**, depending upon the search pattern you set as a default. See “Set Satellite Search Preferences” on page 27 for more information.

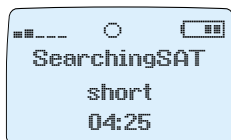


- If the last search finishes without finding a satellite, **No network** is displayed. After a short while, the search is repeated.



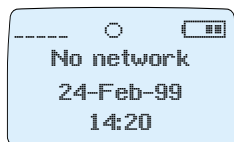
- If you want to restart the search process at any time, select **NEW SEARCH**. (See “New Search” on page 37.) If you do nothing, the search repeats.

Satellite Preferred Mode

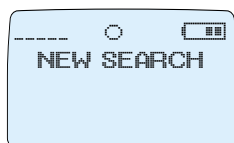


When you select **Satellite Pref** mode as the default, and a search for a satellite begins, your phone displays the messages **SearchingSAT short** or **SearchingSAT long**.

If no satellite network is found, the phone begins a search for a GSM network. If no GSM network is found, **No network** is displayed and the search restarts after a short while.



If no network is located, **No network** appears and the search restarts after a short while.



You can enter **NETWORKS/New Search** at any time to restart the search process or change it.

GSM Only Mode



When you select **GSM only mode**, a search begins for a GSM network.

If no network is found, **No network** is displayed.



You can enter **NEW SEARCH/GSM** at any time to restart the search process.

GSM Preferred Mode



In **GSM pref mode**, the phone searches first for a GSM network.

If no GSM network is found, the phone begins a search for a satellite network. If no satellite network is found, **No network** is displayed and the search restarts after a short while.



You can enter NETWORKS/New Search at any time to restart the search process or change it.

New Search



If no network is found using the above searches, or you want to change the current network, you can initiate a new search in the mode opposite to the one you are currently in, or you can initiate another search in the current mode.

This allows you to do a quick search without changing any of the defaults in the NETWORKS/System mode menu.

New Search In Opposite Mode

If you are operating in Satellite Preferred mode or GSM Preferred mode and want to switch to the opposite mode:



1. Scroll to the NETWORKS menu. Select New search/<opposite mode>.
2. Press YES.
A search begins for a network in the opposite mode.

New Search In Current Mode

If you are operating in Satellite Only or GSM Only mode, you can initiate a new search in the current mode.



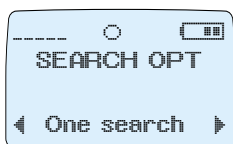
1. Scroll to the NETWORKS menu, select New search/<current mode>.
2. Press YES.
A search begins for a network in the current mode.

Single Search for a Satellite Network

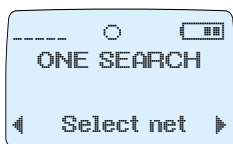
Note: Contact your operator for a Channel number. If you are unsure of the Spot beam and Channel numbers, you may attempt to use the data displayed with each prompt. You must be in Satellite

mode to attempt to access the NETWORKS/Search opt/One search menu.

To select a network:



1. Select NETWORKS/Search opt Satellite and press YES.
2. Select SEARCH OPT/One search.
3. Press YES.



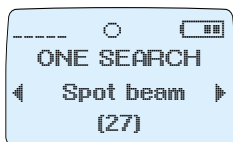
4. Select ONE SEARCH/Select net. The list of satellite networks is displayed.
5. Use the navigation keys to scroll through the Satellite network list that appears.

6. Press YES to search for the network that is displayed.

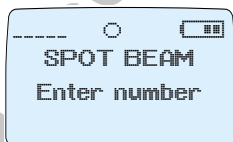
Search for a Spotbeam Number

If you know the spotbeam number of your location, you can search for it. If you do not know the spotbeam number, contact your service provider.

1. Scroll to NETWORKS/Search opt Satellite and press YES.
2. Scroll to SEARCH OPT/One search and press YES.



3. Scroll to ONE SEARCH/Spot beam/(current number) and press YES.



4. SPOT BEAM Enter number appears. You can enter up to 3 digits or use the default number that is displayed. The highest spotbeam number is 140.
5. Press YES to search for the selected spotbeam.

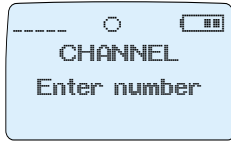
Select a channel number

You can also search for a particular satellite channel. If you do not know the channel number, contact your service provider.

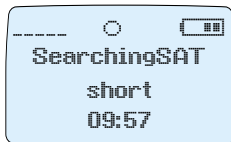


1. Select **ONE SEARCH/Channel**.
The current channel number appears.
Press **YES**.

You are prompted to enter your Channel number. Contact your operator for this number.



2. Enter the Channel number.

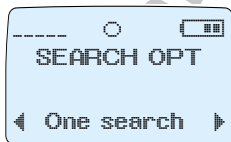


3. Press **YES** to search for the selected channel.

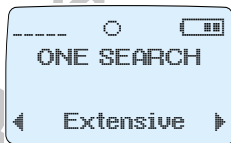
Extensive Search

If no other satellite search is suggested you can select an Extensive search.

To select an Extensive search (this may take several minutes):



1. Select **NETWORKS/Search opt Satellite** and press **YES**.
2. Scroll to **SEARCH OPT/One search** and press **YES**.



3. Scroll to **ONE SEARCH/Extensive** and press **YES**. **SearchingSAT extensive** appears.



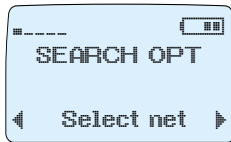
4. When a network is located, you are prompted to select or reject it. The information displayed refers to:
 - System operator: Home or Roam.
 - Press YES to accept the Satellite Network displayed.
 - Press NO to continue the search.

Single Search for a GSM Network

You must be in GSM mode to attempt to access the NETWORKS/Search opt GSM menu. To perform a single search for a GSM network:



1. Scroll to NETWORKS/Search opt GSM and press YES.



2. SEARCH OPT/Select net appears. Press YES. The list of GSM networks is displayed.
3. Scroll through the list of networks until the network you want to use is displayed.
4. Press YES to search for this network.

Search Without Changing Defaults

You can search for a satellite or GSM network without changing the default search pattern with the New Search option. See “New Search” on page 37.

Update the Network Lists

You can update the GSM and the Satellite network lists, which are used when searching for service, one list at a time. For details of how to this, see “Network List” on page 28.

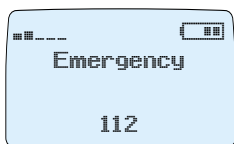
Making and Receiving Calls

The instructions in this chapter assume that you have performed the setup procedures described in the previous sections, have turned on your phone, and that you are within range of a network. See also “Select a Network Preference” on page 27 and “Locating a Network” on page 31.

Note: *Whether in Satellite or GSM mode, deploying the antenna in one of the three upward positions improves the performance of the phone, and minimises your exposure to radio frequency (RF) energy.*

Emergency Calls

To make an emergency call:



1. Turn the phone ON and wait for service.
2. Enter 112 (or the additional emergency number you programmed into your phone, where applicable. See “Set an Emergency Number” on page 24.) Press YES.

The display shows **Emergency**.

When you make an emergency call while in Satellite mode, the call is routed to your home network.

Note: *You can make emergency calls in GSM mode without a SIM card, but the satellite network requires that you have a SIM card installed to make emergency calls in satellite mode.*

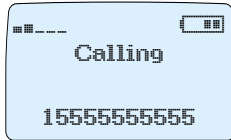
Domestic GSM Calls

If you set your network search preference to “GSM pref” or “GSM only”, the search for a network begins as soon as you turn your phone on. See “Locating a Network” on page 31.

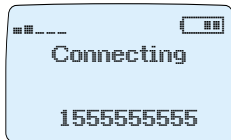
The network search proceeds according to the preferred search pattern you choose when setting your phone’s defaults. See “Set GSM Search Preferences” on page 28.

To make a domestic call, enter the area code and phone number, or dial the number from your phone-book (see “The Phone Book” on page 81). You can see the numbers in your display.

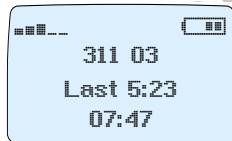
- If you need to erase a digit, press CLR.
- To erase all digits, press and hold the CLR key.



1. Press YES to make the call. The message **Calling** appears, followed by **Connecting**.



2. When the call is answered, the display starts to show the elapsed call time in minutes and seconds.
3. If nobody answers, the number is busy, or the call does not go through, press NO. The number is stored in the phone memory. See “Re-dial a Number” on page 56.



4. Press NO to end the call.

The Call Time meter displays the duration of the call for three seconds. You can also check the duration of the call later. See “Call Time/Call Cost Information” on page 69.

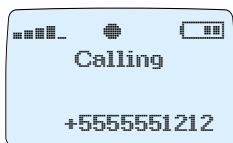
Domestic Satellite Calls

Your phone must receive a full strength satellite signal before you can make or receive a satellite call. It is assumed that you have read “Set Satellite Search Preferences” on page 27 and “Locating a Network” on page 31 before you attempt to make a satellite call.

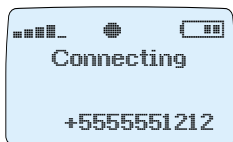
The ACeS satellite is located in a geostationary orbit. When a satellite is in this type of orbit, it moves at the same rate as that of the earth’s rotation and appears at the same spot over the earth’s surface. While using the handset in ACeS mode, the signal strength can be maximized by having the antenna pointed in the general direction of the satellite. The satellite’s approximate location in the sky is supplied by your service provider.

- If you set your network search preference to “Satellite pref” or “Satellite only”, the search for a satellite begins as soon as you turn your phone on. See “Set Satellite Search Preferences” on page 27.
- Your phone displays indicators for service level and satellite strength. See “Satellite Indicators” on page 33 and “Indicators in the Display” on page 115 for an explanation of the indicators displayed.
- If a network is located, the network type and service level symbols are displayed.

To make a domestic satellite call whether you are in your home country or a foreign country:



1. Dial the International dialling prefix, area code and phone number or re-dial a domestic number from the phone book.



2. Press YES. Calling appears, followed by Connecting.
 - If fixed dialling is on, the numbers are verified against the FDN (Fixed Dial Number) list.
 - In satellite mode, if you are calling another phone that operates in ACeS mode, a direct mobile to mobile connection is shown in the display by a handset icon and the message Connecting....
3. Press NO to end the call.

The number is stored in the phone memory, enabling you to re-dial the call (see “Re-dial a Number” on page 56).

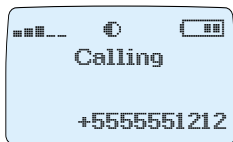
If you make a mistake when dialling a number, you can correct it.

- To erase a digit, press CLR.
- To erase all digits, press and hold the CLR key.

When your call is answered, the call time appears. You can also check the duration of the call later.

Satellite Calls Without a Full-Strength Signal

You cannot make or receive a satellite call if your phone does not lock onto a signal strong enough to establish full service. If you are receiving a signal but it is not strong enough to make or receive calls (a half circle is displayed), you can do the following:



- Initiate a call. The call is pending for a short time or until you obtain full service. The call is automatically placed if full service is established before the time expires. See "Point Antenna to Make Call" on page 33.



- If you make a call and full service cannot be established, Full service unavailable appears and the phone returns to standby. You must reposition the antenna until full service is established.
- Receive notification of pending calls. However, you cannot receive the complete call or reply to it until you establish full satellite service. See "Point Antenna" on page 32.

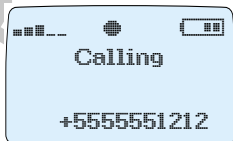
Satellite or GSM International Calls

When you make a call to a country other than the one in which you have your subscription, whether you are in your home country or in a foreign one, you must use the international format: country code, national destination code (AREA), and phone number.

To make an international call:



1. Press and hold the 0 key until the International dialing prefix + is displayed, or enter the prefix.



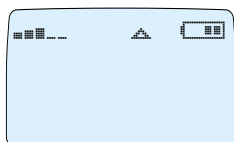
2. Enter the country code, the area code (without the leading zero), then the phone number and press YES, or you may re-dial the number from the phone book.

When you store non-home country numbers in your phone book, be sure to store them in international formats, + (plus sign), country code, national destination code (area code), then the phone number.

Important: All foreign phone numbers should be dialled as international numbers no matter which country you are in, either by pressing and holding down the 0 to generate the international prefix: (+) for the country you are in, or by entering the prefix using the keypad. This applies to both Satellite and GSM modes. These numbers should also be stored in international format in your phone book.

Note: If you dial the international prefix instead of generating the international prefix by holding down the + key, the call will go to the home network on your SIM card. This may not be the home network of the person you are calling and you will not be able to take advantage of the cost saving feature, Optimal Call Routing.

Roaming



When you travel outside your home network area, or switch to your secondary subscription, your phone will be in Roam mode. The triangular roaming indicator will display. You must dial the complete phone number of the person you are calling, including area and country code.

Roaming in Satellite Mode

This feature may not yet be available.

When roaming in satellite mode, you will only be able to receive service from an ACeS-compatible system, or from a non-home ACeS satellite in the ACeS system. SAT will be displayed instead of ACeS.

Roaming in GSM Mode

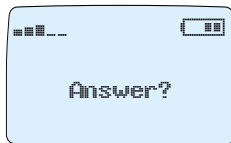


When roaming in a non-home system, the national roaming indicator is displayed, together with the abbreviated country and network name.

Roaming with a Standard GSM SIM Card

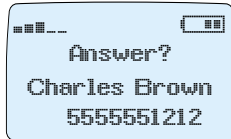
Your phone operates in ACeS mode with a standard GSM SIM card. You can change certain preset parameters to set your personal preferences for use in GSM or Satellite mode. See also “Operating with a Standard GSM SIM Card” on page 14.

Receive a Call



Note: *The phone must be turned on and within range of a network before a call can be received.*

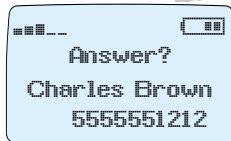
When you receive a call, the phone rings and the indicator light on top of the phone rapidly blinks green. The display shows **Answer?**.



If you are in GSM mode and your subscription includes the service Calling Line Identification (CLI), and the caller's network sends the number, you see the caller's number on the bottom row of the display. If the number is stored with a name in your phone book, the name is also shown in the display.

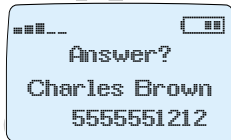
Note: *Calling Line Identification is not currently available in Satellite mode.*

To Answer the Call



- When your phone rings, press YES.
- To end the call, press NO.

To Reject the Call



- Press the NO key.

The caller hears a busy tone, if the network supports this function, and the phone returns to standby.

Direct Mobile-to-Mobile Calls

If you make or receive a satellite call to or from another phone that also operates in satellite mode, the network sets a direct mobile-to-mobile connection over the satellite.



The display shows a handset icon during the entire call and no cell-related supplementary services are available.

Only for Personal Copies – Not for Sale

Personalising Your Phone

You can personalise your phone by changing the settings listed in this section. For other settings, see “Initial Phone Settings” on page 23.

You can return your phone to the factory default settings from the Master Reset menu. See “Master Reset” on page 23.

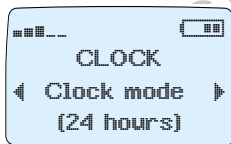
Time and Date

The TOOLS/Clock menu lets you set (or reset) the time, date, date and time format, and alarm.

You should set the clock during the initial setup, as the phone displays the time continuously when in standby mode. You will need to reset the time when you travel to different time zones.

Set Time Format

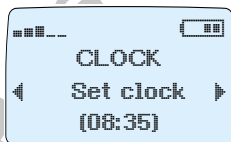
To change the time format:



1. From the TOOLS menu, select Clock/Clock mode.
2. Select the desired clock mode, AM/PM or 24 hours.
3. Press YES.

Set Time

To set the clock:



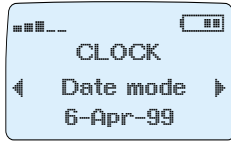
1. From the TOOLS/Clock menu select Set clock.
2. Enter the time in hours and minutes.
3. Press YES.

If you have selected the 12-hour format in the Clock mode function, you can alternate between am and pm by pressing # or *.

Set Date Mode

It is possible to have the current date appear in the middle of the display when the phone is in standby mode.

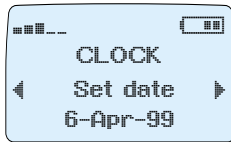
To set the date format:



1. Select **Date mode** from the TOOLS/Clock menu.
2. Scroll to the required date format.
3. Press **YES** to select a date format.

Set Date

To set the date:



1. Select **Set date** from the TOOLS/Clock menu.
2. Enter the year (two digits).
3. Press **YES**.
4. Enter the month and day using two digits for each.
5. Press **YES** to confirm your setting.

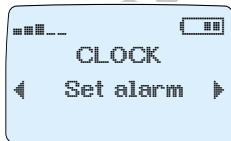
The Alarm

Your phone has an alarm. When it is turned on, an icon in the shape of a bell is shown next to the current time in the display. See "Indicators in the Display" on page 115 for an example of the icon.

The alarm sounds at the set time even if the phone is turned off. The keypad and display flash. The volume of the alarm signal depends on the ring signal setting.

The alarm sounds for 60 seconds and is repeated every nine minutes until you turn it off.

To Set the Alarm



1. Select **Set alarm** from the TOOLS/Clock menu.
2. Scroll to the **New time** option.
3. Press **YES**.



4. Enter the time in hours and minutes.
5. Press **YES**.

If you choose the 12-hour format in the Clock mode function, you can alternate between am/pm by pressing * or #.

To Turn the Alarm Off



1. Press any key to turn the alarm off when it sounds.
2. Press YES if you do not want the alarm to be repeated.

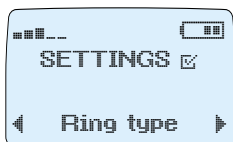
To Turn the Alarm Function Off

1. Select Set alarm from the TOOLS/Clock menu.
2. Scroll to the Off option.
3. Press YES.

Select Ring Type

You can select from several ring signals, including 10 prestored melodies, or you can compose your own melody. You can use different ring signals for different call types: voice, data or fax, if your subscription provides these services.

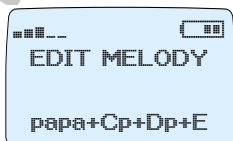
To select a signal:



1. From the SETTINGS menu, select Ring type.
2. Press YES.
3. Scroll to select from Mix, High, Low, Own melody, or Melody 1 to Melody 10.
4. Press YES to store your selection.

Compose Your Own Melody

To compose your own melody:



1. From the SETTINGS menu, select Edit melody.
2. Press YES. The current melody is shown.
 - Press YES to hear the melody. Ready? appears. Press YES.
 - Press CLR to clear the old melody from the display.

Note: You can clear one letter at a time or hold down the CLR key to clear all at the same time.

- The keypad now functions as a keyboard. Pressing a key produces a note. Press and hold a key to create a long note. See the table below for an explanation. Press CLR to erase a note.
- Press YES to store your new melody.

Notes

Use the following table to compose your own melody. Press CLR to erase a note. Press and hold down CLR to clear the display.

Key	Note	Press (1/8)	Hold (1/4)
1	DO	c	C
2	RE	d	D
3	MI	e	E
4	FA	f	F
5	SO	g	G
6	LA	a	A
7	TI	b	B
8	DO (2nd octave)	+c	+C
9	RE (2nd octave)	+d	+D
0		Change octave (+)	P (pause)
*		p (pause 1/8)	
#		1 press=# 2 press=b	

Change the Earpiece Volume

Note: Before changing the earpiece volume (if it is too low), check that you have put the earpiece next to your ear correctly.

To change the earpiece volume:



1. Select Ear volume from the SETTINGS menu.
2. Press the volume keys on the side of the phone to adjust the volume.
 - Press the top key to increase the volume.
 - Press the lower key to decrease the volume.
3. Press YES when you reach the volume you want. Stored appears.



Tip! *During a call you can use the volume keys on the side of the phone to adjust the volume.*

Set Handsfree Volume

You can set independent volume settings when you use the phone as a handheld unit or with handsfree equipment. This means that if you set the earpiece volume when the phone is connected to handsfree equipment, the volume setting for the phone when handheld is not affected and vice versa.

Set Answer Mode

This menu is available **only** in GSM mode. For more information about these settings, see “Handsfree Calling” on page 74.

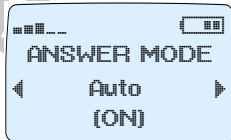
The Any key function

If the Any key function is turned on, you can answer an incoming call by pressing any key except the NO key.

The Auto function

If the Auto function is on, an incoming call is automatically answered after one ring signal.

To select Answering Mode:

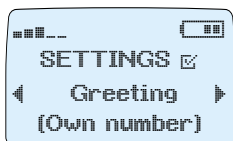


1. Select Answering mode from the SETTINGS menu.
2. Choose Any key or Auto.
3. Press YES to change the setting (ON or OFF) or NO to accept the default.
4. Press YES again to confirm your setting.

Change the Greeting Text

When you turn on your phone, a greeting text appears in the display. If your operator allows it, you can write your own greeting text.

To enter your own greeting:



1. Select Greeting from the SETTINGS menu.
2. Scroll to New text.
3. Press YES.



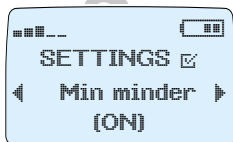
4. Write your new greeting using the numeric keys. Use the 1 key to enter a space. Use the * key to toggle upper and lower case.
5. Press YES to confirm your new greeting.

- You can choose your own phone number as your greeting by selecting SETTINGS/Greeting/Own number.
- You can choose the ACeS logo as your greeting by selecting SETTINGS/Greeting/Logo.

Set the Minute Minder

This function indicates the time spent during a conversation by entering a short beep every minute.

To set the Minute Minder:



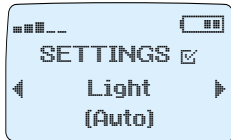
1. Select Min minder from the SETTINGS menu.
2. Choose between ON or OFF.
3. Press YES to confirm your selection.

Change the Display Backlight

The display backlight can be set to automatic, off or on.

In automatic mode, the display backlight is turned off automatically 10 seconds after the last key has been pressed. It comes on again when you press a key or receive a call or message.

To set the display light:



1. Select Light from the SETTINGS menu.
2. Use the navigation key to choose the backlight setting you want.
3. Confirm your selection by pressing YES.

You can have one setting when the phone is used as a handheld unit and another setting when the phone is used with a handsfree kit, powered from an external source.

If you place the phone in a vehicle handsfree cradle and make a selection, the setting applies only to handsfree mode. You can set the display backlight so that it is always on in handsfree mode and still have it in automatic mode otherwise.

Set the Ring Signal Level

You can change the ring signal volume level.



1. From the SETTINGS menu, select Ring level.
2. Press YES. The ring level indicator appears.



3. Press the navigation key to set the ring signal level. The phone rings once as you increase the volume.
- Press the left key to decrease the volume.
- Press the right key to increase the volume.
4. Press YES. Stored appears.

Tip! Use the volume keys to change the ring level silently.

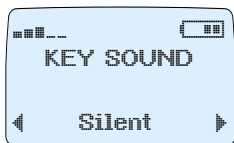
Instant Silent Ring Mode

You can put your phone in silent ring mode instantly by pressing and holding the CLR key (Long CLR). The Silent Ring icon (Ⓢ) appears in the bottom line of the display.

Press and hold the CLR key when you receive a call to mute the ringer for the incoming call only.

Set the Key Sound Preference

You can set the sound the keys make when you press them.

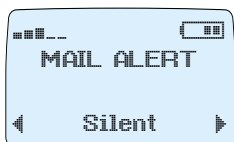


1. Select **SETTINGS/Key Sound**.
2. Press **YES**.
3. Select **Silent, Tone, or Click**.
4. Press **YES**. Stored appears.

During a call, you can send DTMF tones regardless of Key Sound selection. Press a key to generate a tone, or re-dial a number from the phone memory and press **YES** to generate a tone sequence.

Set Mail Alert

To set the Mail Alert signal:



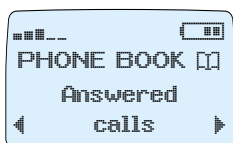
1. From the **SETTINGS** menu select **Mail Alert**.
2. Press **YES**.
3. Select **Silent, Tone, or Click**.
4. Press **YES**. Stored appears.

Features

Your phone has many features that make sending and receiving calls of all types easy. Some features and menus are operator-dependent. Check with your operator for a list of features available to you.

Return Calls

Your phone automatically stores the numbers of the last 10 phone calls you answered. To re-dial one of the last answered numbers:



1. Scroll to the PHONE BOOK menu and press YES. Then scroll to the Answered calls option and press YES.
2. Scroll to the number you want to call.
3. Press YES to dial.

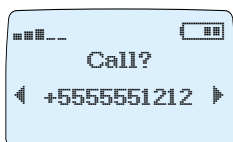
Re-dial a Number

If your SIM card supports this feature you can use the re-dial function to do the following:

- Automatically re-dial the last number you dialed that failed.
- Recall the last 15 phone numbers you called and automatically dial them.
- Recall the last 10 phone calls you answered and automatically dial them.
- Recall the last 10 missed calls and automatically dial them.

If your subscription supports Calling Line Identification, and the caller's network sends the number and caller identification, this information is stored. If the number and name are stored in your phone book, the name is displayed with the number.

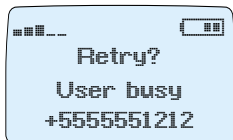
Re-dial Previously Called Numbers



1. Press YES. Call? is displayed together with the last number you dialed.
2. Scroll to display the number you want to call. Press YES to send the call.

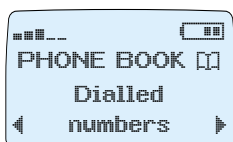
The Automatic Re-dial Function

If the connection fails, the display shows **Retry?** and the reason why the connection was unsuccessful.



- Press **YES** to automatically re-dial the number 10 times or until the call is answered.
- If you press any key or receive a call, re-dialling is interrupted.
- If the re-dial is successful the phone beeps, then rings.
- Press **NO** if you do not want to retry.

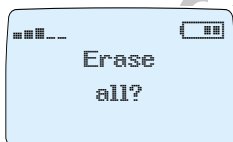
Clear Call Memory



To clear the **Answered calls** or **Dialled numbers** memory:

From the **Phone Book** menu select the memory you want to clear:

- Answered calls.
- Dialled numbers.



1. Press **YES**. Details of the last call are displayed.

2. Press and hold the **CLR** key.

3. **Erase all?** appears.

Press **YES** to erase all.

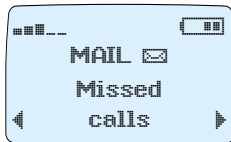
Press **CLR** or **NO** to return to standby mode.

Missed Calls

If you receive calls but are unable to answer, the number of unanswered calls is displayed until you press the **CLR** key.

Information about the last 10 missed calls is saved, allowing you to check when the calls were received. If your GSM subscription includes the service **Calling Line Identification** and the caller's network sends the number, you can also find out who called.

To recall information about the missed calls:



1. From the MAIL menu, select Missed calls.
 2. Press YES. Information about the last missed call appears.
- Press YES to dial the number displayed, or

- Press the navigation key to display additional calls, and press YES to call the number displayed.
- Press CLR (followed by YES to confirm) to erase the number and return to standby mode.

If no information about the caller's number was received, the display shows one of the following:

- Unidentified – no information is available.
- Restricted – the caller wants to withhold the number.

Note: *If you check a missed call within 24 hours, the time of the call is displayed. Otherwise, the time is replaced by the date. You can toggle between date and time by pressing *.*

To Clear Missed Call Memory

To erase a number from the Missed Calls Memory, press CLR when information about the call is shown, followed by YES at the Erase? prompt. To clear all calls from the memory, repeat for each missed call.

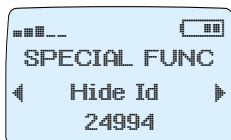
Hide or Show Your Number

With most subscriptions, your number is sent when you make a call. This means that the person you call can see your phone number. However, some operators offer subscriptions where your phone number is hidden.

You may alter the normal setting (according to your subscription) for a particular call.

Note: *This feature is not available in Satellite mode, as Calling Line Identification is not supported.*

Hiding Your Phone Number for a Particular Call



1. Enter the phone number.
2. Scroll to the TOOLS/Special functions menu and press YES.
3. Scroll to Hide Id.
4. Press YES to make the call.

Showing Your Number for a Particular Call

You can show your number for one call only:



1. Enter the phone number you wish to call.
2. Scroll to the TOOLS/Special functions menu and press YES.
3. Scroll to Send Id.
4. Press YES to make the call.

Change Functions During a Call

You can perform several functions while engaged in conversation.

Changing Earpiece Volume

To change the earpiece volume during a call:

- Press the top volume key on the side of the phone to increase the volume.
- Press the bottom volume key to decrease the volume.

Muting the Microphone

To mute the microphone temporarily during a call, press and hold the CLR key. Mute is shown in the display. To resume conversation, release the CLR key.

Use the Display as a Scratch Pad

To write down a phone number during a call, enter the number using the numeric keys.

When you end the call, the number remains in the display. To call the number, press YES. You can also save it in the Phone Book (see “Store a Name and Phone Number” on page 83).

Send Tone Signals

In order to carry out telephone banking or control a phone answering machine, you need to send tone signals (also called DTMF or Dual Tone Multi-Frequency tones).

To send tone signals/codes during a call, press the appropriate keys (0-9, * and #).

Indicating a Pause

To indicate a pause between two numbers:



1. Enter the numbers before the pause.
2. Select TOOLS/Special functions.
3. Select Pause and press YES.
4. Enter any additional digits and press YES.

Sending DTMF Tones in Number with a Pause

When dialling a number with pauses in standby mode, the first part of the number is sent as a telephone number. Any numbers after the pause are sent as DTMF tones. A three-second pause is generated for each pause sign. You can cancel the pause by pressing and holding YES.

Sending DTMF Tones During a Call

Digits entered during an active call are automatically sent as DTMF.

Sending Digits from Your Phone Book During a Call

During a call, you can recall a phone book entry. A second call can be placed by pressing and holding the YES key.

Tip! *You can also enter the code before you make the call or store it in the Phone Book. See "Create Your Personal Phone Book" on page 83.*

Tone Sending Failure



If the tone signal fails, the message Tone sending Aborted appears.

Call Divert

The call Divert option is only available if your network and subscription support it. Divert is available in Satellite and GSM modes.

The Call Divert service lets you:

- Divert calls if you already are engaged in a call.
- Divert calls that you do not answer within 30 seconds.
- Divert calls if your phone is turned off or if you are unreachable.
- Divert all calls.

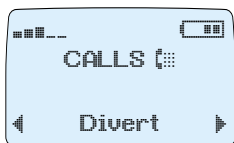
You can choose to use all of the above Call Divert options or only one or two, and you may want to divert calls to different phone numbers, depending on the situation.

You may also divert all calls regardless of whether your phone is turned on or off, or you cannot be reached. If this function is on, the phone does not ring when you receive a call.

Note: *In satellite mode, make sure you have a full service satellite signal before you try to change or check your Divert selections.*

Activating the Divert Option

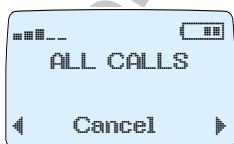
From the CALLS\Divert menu, select the desired option:



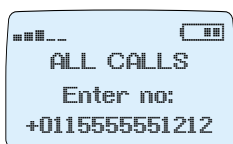
- If DATA menus are ON, the following options are available: All numbers, Phone number, Fax number, Data number.
- If DATA menus are OFF, only Phone number is available (no menu is displayed and you go straight to the menu described at step 2).



1. Select one of the number options listed below and press YES.
 - All numbers.
 - Phone number.
 - Fax number.
 - Data number.
2. Select a sub-option, if applicable.



- If you select Phone number or All numbers (or data menus are off), the following sub-options are available: All calls, On busy, No reply, Unreachable, Cancel all or Check all.
- If you then select All calls, On busy, No reply or Unreachable, the following sub-options are available: Activate, Cancel, or Get status.



- If you select Data number or Fax number the following options are available: All calls, Unanswered, Cancel all, or Check all.

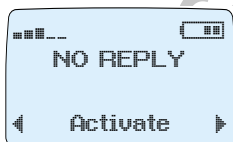
All calls, On Busy, Unreachable, or Cancel All



If you select All Calls, On busy, Unreachable or No Reply, and there is a phone number in the display when you select the Activate option, it appears with the Activate option.

Press YES to activate the option and divert calls to the number displayed. Usually the last number you diverted calls to is displayed but you can replace the number with a new one.

If there is no number in the display and you select the Activate option, Enter No appears. Enter the number that you want calls diverted to and press YES to activate.



There may be a short delay before the network responds. Please wait is displayed, followed by On busy/ No reply - Divert ON, depending on which divert option you choose. The selected phone number is also displayed.

Your phone displays information about any activated call divert each time you turn it on.

Checking the Divert Status

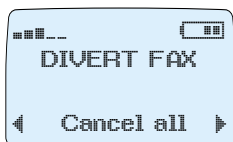
To check the status of Call Divert:



1. Select the CALLS/Divert menu.
2. Select the call type you want to check.
3. Scroll to the Check all option and press YES.

Canceling A Call Divert

To cancel a Call Divert:



1. From the CALLS/Divert menu, select the call divert you want to cancel. To cancel all call diverts, select All numbers/Cancel all.
2. Press YES.

The message Please wait appears followed by Cancel all, Fax confirmed, Speech confirmed.

Call Waiting

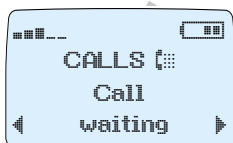
Your R190 Satellite phone allows you to handle more than one call simultaneously. This means that you may hold a call that is in progress and make or answer a second call, and then switch between the two calls.

The Call Waiting service is dependent on your network and/or the network you are roaming in.

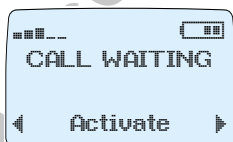
Note: *In Satellite mode make sure you have a full-strength satellite signal before you try to change or check your Call Waiting selection.*

Activate the Call Waiting Service

To receive a second call, you must activate the Call Waiting service.

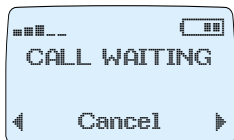


1. From the CALLS menu, select Call waiting.
2. Scroll to Activate, using the navigation key.

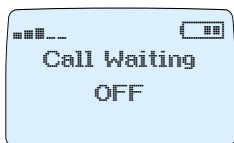


3. Press YES to activate the call waiting service.
There may be a short delay before the network responds. In the meantime, the message Please wait is displayed. This is followed by the message Call waiting ON.

Cancel the Call Waiting service



1. From the CALLS menu, select Call Waiting.
2. Scroll to Cancel, using the navigation key.



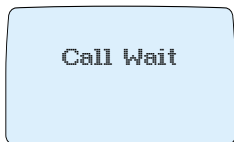
3. Press YES. Call Waiting is cancelled.

Check Call Waiting Status

You can check whether the call waiting service is on or not via the Get status option.

To check the status, select Get Status from the CALLS/Call waiting menu. The current status appears.

Receiving a Second Call



If the Call Waiting function is activated, a tone sounds when a second call is received, and the message Call Wait appears.

- To end the current call and accept the waiting call, press NO. Answer? appears.
- To answer the waiting call, press YES.
- To put the current call on hold and accept the Waiting call press YES. The message 1 on hold appears.

Reject Waiting Call

Press 0 followed by YES to reject the waiting call and continue the current call. The waiting call is cleared.

- If the caller's network supports it, the caller hears a busy tone.
- If Divert On busy is activated, the waiting call is diverted to the number you specified.

Switching Between Two Calls

Press YES to switch between the active call and the call on hold.

Ending the Current Call.

1. Press **NO** to end the current call. The message **Retrieve held call?** appears and you hear a beep.
2. Press **NO** to end the held call, or press **YES** to return to the held call.

If you do not press **YES** or **NO** within three seconds, the message **Retrieve held call?** disappears from the display. The held call is then ended automatically.

Receiving a Third Call

If your Call Waiting function is on, you may receive a third call when you are engaged in one call and have a second call on hold. You hear a tone and the message **Call Wait** appears in the display.

Only one call can be on hold at a time. If you wish to accept the third call, you must end one of the existing calls, or both.

- If you end one of the existing calls, press **YES** to accept the waiting call.
- If you end both calls, the phone rings and **Answer?** is displayed.

To answer the waiting call, press **YES**.

To reject the call, press **0** followed by **YES**.

The third call is cleared. If the caller's network supports this function, the caller hears a busy tone.

If **Divert On busy** is activated, the waiting call is diverted to the number you specified.

Making a Second Call

While the first call is in progress:

1. Press **CLR** to clear the display.
2. Press **YES** to put the current call on hold.

The message **1 on hold** is displayed.

3. Enter the number (or recall it from the phone book).
4. Press **YES**.

Or you may do the following instead:

1. Enter the number you wish to call while the first call is in progress.
2. Press **YES** to put the first call on hold and to make the call. The message **1 on hold** is displayed.

Connecting Two Calls (Call Transfer)

If you have one active call and one call on hold, you can connect the two calls.

- Press 4 followed by YES.
- The two calls are now connected, and you are disconnected.

Note: *This service may not be available in all networks. Contact your operator for more information.*

Conference Calls

This feature is available only if your network and/or the network you are roaming in supports it. Contact your operator for more information.

The Conference Call service allows you to have a joint conversation with up to four other people. You may put an individual or a group of conference members on hold while you add other people to the conference call. You may also put conference members on hold while you talk to someone privately.

Initiating a Conference Call

To initiate a conference call:

1. Call the first person.
2. Press YES to put this person on hold.
3. Call the second person.
4. Press 3, followed by YES to include the two people in the conference.

You can put the conference group on hold and then add a third member by repeating steps 2 to 4. It is possible to add up to four members using the same method. Each person in the call is referenced by the sequence number in which they were added.

It is good to idea to write down each person and their number as they are added in case you want to release one of the members or have a private conversation with one.

Private Conversations

If you wish to have a private conversation with one of the members in the conference call, you can put the other members on hold.

To do this:

1. Press 2, then YES.
2. Press the number of the member you want to have a private conversation with. For example, if you wish to talk to the third person you brought into the conference, press 3.
3. Press YES.

To join the member to the conference call again, press the number of the member and then YES.

Releasing One of the Members

To release one of the members in a conference call:

1. Press the number 1 key.
2. Press the number of the member you want to release. For example, you wish to release member number three, press the number 3 key.
3. Press YES.

Making a Call while a Conference Call is in Progress

To make a call while participating in a conference call, do the following:

- Enter the number you wish to dial and press YES. The conference call is put on hold.
- To switch between calls, press YES.
- To end the new call and return to the conference call, press 1 and YES.

See “Conference Calls” on page 66 for more details.

Switching Between a Conference Call and a Held or Waiting Call

To put an active conference call on hold and accept a waiting call or a call on hold, press 2, then YES.

Ending a Conference Call

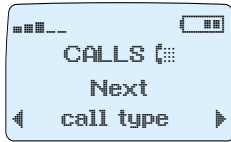
Press NO to end the conference call and disconnect all members.

Set Next Call Order and Type

This option is valid only for GSM mode and only if you have a single number for both speech and data/fax services. If someone is sending a fax or data to you they may call (speech call) you first to alert you so you can be prepared to receive the call. This lets you connect your phone to a computer for a fax or data call.

You can set the order in which you wish to receive calls, no matter which type is sent first, with the Next call type option.

You must have the same phone number for both voice and non-voice services, and data services must be detected on your SIM card. Also, SETTINGS/Data menus must be ON.



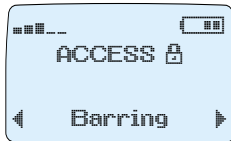
From the CALLS/Next call type menu select

- Speech
- Speech/Fax
- Fax/Speech
- Fax
- Data

Tip! *If you expect two calls to arrive close together, with a speech call followed by a fax call, select CALLS, then Next call type, then Speech/Fax.*

Calls Barring

You can Bar (restrict) some or all incoming or outgoing calls.



1. Select Barring from the ACCESS menu.
2. Scroll to one of the following and press YES.

- All outgoing calls
- Outgoing international calls
- International outgoing when roaming.
- All incoming calls.
- Incoming when roaming.
- Cancel all.

3. Press YES twice. Type in your password when prompted and press YES again.

You can also change your password for the Barring feature.



1. Select Barring from the ACCESS menu.
2. Scroll to Change password.
3. Press YES.
4. Enter your old password and press YES.

5. When prompted, enter your new password and press YES.

6. Enter your new password again to verify it, and press YES again.
If you subscribe to this service, your service provider will provide your password.

Note: *In Satellite mode, make sure you receive a full-strength satellite signal before you try to change or check your Call barring selection.*

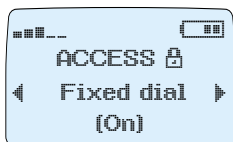
Caller ID

If your subscription and the subscription of the person you are calling supports the Caller ID service, that person's name and number will appear on your phone.

You can turn the Caller ID function on or off for a particular call. See "Hide or Show Your Number" on page 58.

Fixed Numbers Dialling

If you have a SIM card with FDN (Fixed Dial Number) you can turn the feature on or off.



1. From the ACCESS menu, select Fixed dial.
2. Enter your PIN when prompted.
3. Select On or Off.

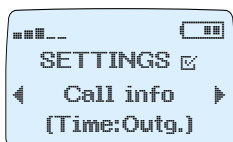
See also "Fixed Number Dialling" on page 102 in the "Security" section.

Call Time/Call Cost Information

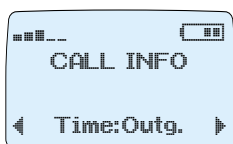
You can display the call time for satellite or GSM calls (both incoming and outgoing), or for outgoing calls only, as well as the cost of GSM calls. First you must set what type of information you want to display. The Satellite mode does not display cost information.

To set the call information you want displayed:

1. For GSM calls, select INFO/GSM calls. For satellite calls, select INFO/ACeS calls (but bear in mind that for satellite calls, no cost information is available)



2. Select Call info from the SETTINGS menu.
3. Select Time:Outg., Time: All or Cost.



- **Time:Outg.** displays the duration of the outgoing calls.
 - **Time:** All displays the accumulated length of time of all calls.
 - **Cost** displays the cost of the last GSM call, or the accumulated cost of all GSM calls.
4. Confirm your selection by pressing YES.

Check Call Time

Before you can use this feature you must set **SETTINGS/Call info** to **Time:Outg.** or **Time: All**.

To display call time, scroll to one of the following options from the **INFO** menu:

- Last call.
- GSM calls.
- ACeS calls.
- Tot calls.

Press **YES** to confirm your choice.

Check GSM Call Cost

Note: *Call Cost information is not available in Satellite mode.*

In GSM mode, this function may not be available on all SIM cards (this service is network operator dependent).

In GSM mode, you can check the cost of the last outgoing GSM call or the accumulated cost of all outgoing GSM calls. You can also change the call cost per unit and store credit card numbers.

First you must turn the Call Cost feature on by selecting **SETTINGS/CALLINFO/COST/YES**.



1. From the **INFO** menu, select **GSM calls**.
2. Press **YES**.
3. Select **Last call** or **Tot calls**.
4. Press **YES**.

Check or Change Available Credit

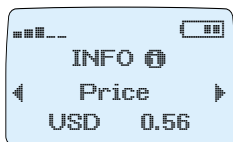
To check the amount of prepaid credit remaining, select **Credit** from the **INFO** menu. The amount of credit remaining is displayed.

- Select **New credit** to update credit amount.
- Select **Unlimited** if your account is paid by credit card or open account and is not prepaid.

Check or Change Price Per Unit

The **Price** option lets you enter and vary the price per call unit. The price entered is stored on your SIM card.

To enter the Price per Call Unit:



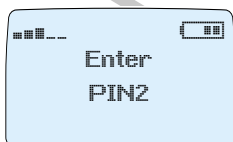
1. From the **INFO** menu, scroll to **Price** and press **YES**. The price per unit is displayed.



2. Scroll to **New price** and press **YES**. Enter the code for the desired currency, for example **USD** for US Dollar, and press **YES**.



3. Enter the price per call unit, for example **0.5**, and press **YES**. (Use the ***** or **#** keys for the decimal point.)



4. Enter your **PIN 2** code. (The **PIN 2** code prompt may not appear in some networks.)

Calling or Credit Card Calls

When making international or long distance calls, you may not want your operator to charge you for these calls on your normal account. If you have a credit card or a calling card, you may redirect the charges to one of those accounts instead.

Before you can make calling card or credit card calls, you must turn this feature on.

Activate Calling Card Feature

1. From the **ACCESS** menu, select **Call cards security** and press **YES**.
2. Enter your security code and press **YES**.
3. Scroll to **Call cards** and press **YES**.
 - If **OFF** is displayed, press **YES** to turn it **ON**.
 - If **ON** is displayed, press **YES** to turn it **OFF**.

The **Call card** function is now activated and the sub-menu **Call card numbers** is visible in the **Phone book** menu.

You can store two separate card numbers in your phone. These numbers are protected by a 4- to 8-digit security code that you choose.

Change Security Codes

1. From the **ACCESS** menu, select **Call cards security** and press **YES**.
2. Enter your security code and press **YES**.
3. Scroll to **Change code** and press **YES**.
4. Enter your new code and press **YES**. The code can consist of four to eight digits.
5. Confirm your new code by entering it again when **Repeat new code** appears in the display, and press **YES**. Your security code has now been changed.

Store Credit or Calling Card Numbers

Your phone allows you to store two calling card numbers in the phone book menu. This sub-menu is only visible if the **Call card** function is activated from the **ACCESS** menu.

To store a calling card number:

1. From the **PHONE BOOK** menu, select **Call card numbers** and press **YES**.
2. Enter your security code and press **YES**. To change security codes, see “Changing the Security Code” on page 101.
3. Scroll to the desired card position (**Card 1** or **Card 2**), and press **YES**.
4. Enter the Access number to the calling card server. You will use this number later to call your credit card server automatically. Enter the numbers as you would in the regular **Phone Book**.
5. Press **YES**.
6. Enter your calling card server Verification code.

- To store the calling card number, press **YES**.
- To change the dialling order, press the navigation key. **Called no** flashes in the display. Use the * or # key to change the order.

The dialling order may vary between calling card servers. If you are required to dial your verification code before or after the number you wish to dial, you can switch the order. To change the order, press the * or # key, when the **Called no** row flashes.

Your service provider will provide you with the Access number and Verification code.

Select the Card You Want To Use

If you have stored two card numbers, you must select the card you wish to use before making a Calling/Credit card call.

1. From the **PHONE BOOK** menu, select **Call card numbers**.
2. Enter your security code and press **YES**.
3. Scroll to the card you wish to use, using the navigation keys, and press **YES**. Your settings for the card appear.
4. To select the card, press **YES**.

Make a Credit or Calling Card Call

The access number to the calling card server is called first. During the connecting phase, you are prompted to send the called number and the verification code. You can press **YES** at the prompts or let the phone dial each set of numbers automatically.

1. Enter the number you wish to dial, or retrieve it from the Phone book.
2. Press and hold **YES**. The call is set up as a Credit/Calling Card Call.
3. Press **YES** after each **Send?** prompt, or allow the phone to send automatically after each time-out.

The Calculator

The phone's built-in calculator allows you to add, subtract, divide, multiply and calculate percentages. An example of how to use the calculator follows. In this example you are going to divide 134 by 32.

1. Scroll to the **TOOLS/Calculator** menu and press **YES**.
2. Enter 134.
3. Scroll with the navigation keys to the division sign (/), and press **YES**.
4. Enter 32.

5. Press #, or scroll with the navigation key to the equal sign (=) and press YES to get the result.
 - To clear the display, press CLR.
 - To enter a decimal point, press *.
 - To multiply, press * twice.

Handsfree Calling

Note: *Handsfree options are only available in GSM mode.*

You can answer a call and talk to the caller without holding your phone if you use one of the handsfree options. You can change the default settings for the handsfree related functions so that they suit your own requirements.

Handsfree Type 1

Handsfree Type 1 lets you talk in semi-duplex mode. In this case, you cannot speak at the same time as the other person.

Use this alternative only if Type 2 does not work properly (which might be the case in extremely noisy environments).

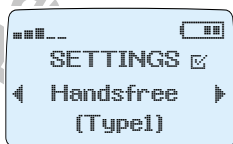
Handsfree Type 2

This is the standard setting. Handsfree Type 2 lets you talk in full duplex mode. This considerably increases the speech quality, as you do not have to wait until it is your turn to speak.

For Type 2 handsfree to work properly, your phone uses filters that adapt to the sound environment around the handsfree equipment. The adaptation might take a few calls, and during this learning phase, the person called might hear a voice echo. However, this echo disappears after a few calls.

Should the echo persist for a prolonged period, try Type 1 handsfree instead.

To Set the Handsfree Type:



1. Select SETTINGS/Handsfree.
2. If Type 1 is displayed press YES to toggle the selection to Type 2. If Type 2 is displayed press YES to toggle the selection to Type 1.
3. Press YES to accept the setting displayed.

Other Handsfree Related Settings

Apart from the above mentioned settings, you can change the following settings related to handsfree calling:

- Earpiece volume.
- Backlight.

You can specify different settings for the two types of handsfree operation. Changing one does not affect the other.

To change a setting:

1. Connect the phone to the handsfree equipment.
2. Change the setting according to the instructions in “Personalising Your Phone” on page 48, or “The Key Lock” on page 102 (the Keylock setting).

Both the Type 1 and Type 2 Earpiece volume settings have five levels. The four highest levels in Type 2 increase the clarity of speech, rather than the volume itself.

Select Answer Mode

The sub-menu **Answering mode** includes two functions: **Any key** and **Auto**, which are useful when the phone is used with handsfree equipment.

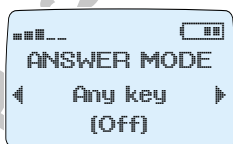
The Any Key Function

If the phone is used with handsfree equipment and this function is turned on, you can answer an incoming call by pressing any key except the NO key.

The Auto Function

If the phone is used with handsfree equipment in automatic answering mode, an incoming call is automatically answered after one ring signal.

To select Automatic Answering Mode:



1. Select ANSWER MODE from the SETTINGS menu.
2. Choose Any key or Auto.
3. Press YES to change the setting (ON or OFF) or NO to accept the default.
4. Press YES again to confirm your setting.

Area Information

The Short Message Service (SMS) is a personal service with messages specifically and exclusively directed to you. Area Information is another type of text message which is sent to all subscribers in a certain area of a network at the same time. This feature is only available in GSM mode. For example, the information may be a local road report or a local taxi phone number.

Note: *This feature may not be available in all networks.*

Turning Area Information ON



1. From the MAIL menu, select Area info.
2. Press YES.
3. Scroll to On and press YES.

Area information messages will now be presented in your display.

Turning Area Information Off



1. From the MAIL menu, select Area info.
2. Press YES.
3. Scroll to Off and press YES.

Area Information Message Types

Each type of Area Information message is identified by a three-digit code. At present the following message types exist:

Code	AI Messages Type
000	Index
010	Newsflashes
020	Hospitals
022	Doctors
024	Pharmacies
030	Long-distance road reports
032	Local road reports

Code	AI Messages Type
034	Taxis
040	Weather
050	District (base station identity)
052	Network information
054	Operator services
056	Directory enquiries (national)
057	Directory enquiries (international)
058	Customer care (national)
059	Customer care (international)

Your network operator will supply information about the Area Information services you can use.

The Area Information Message List

You can select the types of area information messages you wish to receive. In some cases, SIM cards are set up to store this list and the number of allowable entries varies from one SIM card to another. If the list cannot be stored on the SIM card, it is stored in the phone and can contain up to 32 codes.

Inserting an Area Information Code

Access the Area Info list from the Mail menu.



1. From the MAIL menu, select Area info.
2. Press YES.
3. Scroll to Edit list and press YES.

The digits to the left indicate the position in the list. You can scroll forward and backward through the list with the navigation key.

To insert a code:



1. Scroll to the first empty location (if there is no empty location, you will need to erase an existing entry first).
2. Press YES.
3. Enter the new code. (You only need to enter 40 for 040, since the phone adds the leading zero automatically.)
4. Press YES.

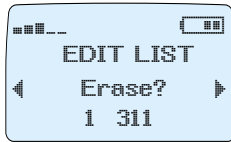
Erasing or Replacing a Code

You can edit a code or replace it with a new one.

To erase a code:



1. From the MAIL menu, select Area info.
2. Press YES.
3. Scroll to Edit list and press YES.



4. Scroll to the code you wish to erase and press YES. The message Erase? appears.
5. Press YES.

To edit a code:



1. Scroll to the code that you want to edit.
2. Press YES.
3. Ignore the Erase? message and start entering the new code. The screen changes to show Enter new code.
4. Enter the new code and press YES.

Receiving Area Information

Area information messages are stored in the phone memory. The phone only stores one message per code for the first two types on your message list, so the previously stored message is erased.

Voice Mail

Some GSM network answering services allow callers to leave a voice message when you cannot or do not answer your calls. You can call your answering service and listen to the recorded voice messages.

Note: *This service is not available on all networks and may require a separate subscription. Voice Mail may not yet be available in ACeS mode.*

An ACeS Voice Mail number may be programmed onto your SIM cards by your operator. You can also store a Voice Mail number in your Phone Book.



When you receive a message, Voice Mail/Check? appears. You may also hear an audible beep or a click, depending on the signal you set in the SETTINGS/Mail Alert menu. See "Set Mail Alert" on page 80.

Access Voice Mail

Access the Voice Mail function from the MAIL menu.

If the number to your answering service can be retrieved from your Phone Book, the number appears in brackets. (This also applies if you entered the number yourself earlier and then turned the Voice mail function off.) If no number is available you can enter one. See "Storing or Changing the Voice Mail Number" on page 80.

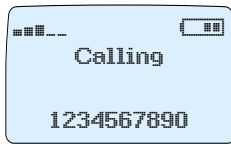
Calling the Answering Service

If the network receives and stores voice messages for you, you receive a voice mail indicator. Voice Mail appears with the number of messages waiting for you and the Voice mail alert sounds.

To listen to your recorded messages:



1. From the MAIL menu, select Voice mail and press YES.



2. The phone automatically calls your Voice mail service. Follow the instructions given to you by your operator's answering service.

For more information about the use of the answering service, see the operating instructions supplied by your network operator.

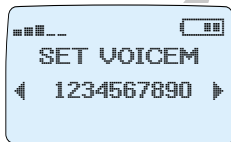
Storing or Changing the Voice Mail Number

If your SIM card does not already have a voice mail number stored, and it allows you to store one, you can enter a number. You can also change the number if you need to.

To store the number:



1. From the MAIL menu, scroll to see if the Set VoiceM menu is available. If it is, you can store or change the number to the service.



2. Select VM number and press YES.
 - If a number is stored it appears. If no number appears you can store one.
 - If a number appears but is incorrect, you may change it.

3. Key in the number and press YES.



Set Mail Alert

1. From the SETTINGS menu, select Mail Alert.
2. Scroll to Tone, Click, or Silent.
3. Press YES to confirm your selection.

The Phone Book

The Phone Book function lets you store and retrieve phone numbers. The Phone Book also keeps track of your last dialled numbers and, if you subscribe to the Calling Line Identification service, the last answered numbers. When you receive a call and the caller's number is in the Phone Book, the name appears in the display.

Before You Start

Before you start creating your personal Phone Book, you need to know about the two memory areas, and how to store numbers with the international prefix. See also "Enter Characters" on page 81.

Phone Book Memories

You can store the phone numbers in the following two places:

- SIM card memory.
If you store your numbers in the SIM card memory, you can retrieve the numbers even when you change phones; just insert your SIM card into the new phone.
- Phone memory.
If you store your numbers in the phone memory, your numbers are always available on your phone, even if you change SIM cards.

Your SIM card determines how many numbers you can store in the SIM memory and how long the numbers can be. You can store up to 99 phone numbers (1–99) in the phone memory.

In the Phone book menu, press # to enter the # character. Outside the Phone book menu, press and hold down # to enter the # character.

Fifteen of the numbers can be 80 digits long. The rest can be 20 digits long. You can attach 12-character-long names to all numbers stored in the SIM card memory. Eighteen characters can be stored in the phone memory.

Enter Characters

To enter names with the phone numbers:

- press the appropriate key, 1–9, 0 or #, repeatedly (without pausing) until the desired character appears in the display.

- pause until the display moves along by one character, then press the next key.

Press	to get...
1	Space - ? ! , . : ; " ' < = > () _ 1
2	A B C Ä Å Æ à ç 2 Γ
3	D E F è é Ê Ë 3 Δ Φ
4	G H I ì 4
5	J K L Λ 5
6	M N O Ñ Ö Ø Ó 6
7	P Q R S β 7 Π Σ
8	T U V Ü ù 8
9	W X Y Z 9
0	+ & @ / □ % \$ £ ¥ § ζ ÿ 0 Θ Ξ Ψ Ω
*	* p ¹
#	# * . 1

¹ The pause function can be used by pressing the asterisk key for two seconds. This function will not work when in text editing mode.

For example, to enter the character

- A, press 2 once.
- B, press 2 twice.
- 2, press and hold down 2.

Note: *If you pause more than 4 minutes after entering a character, the phone stores the data entered so far and returns to standby.*

Enter Lowercase Letters

Enter the letter, for example an 'A', and then press *. An 'a' appears. All letters appear in lowercase until you press * again.

Check the First Characters

If you enter more characters than can be seen in the display, the first characters are replaced by the left arrow symbol. To check the first characters you entered, scroll to the left.

Create Your Personal Phone Book

You can create a personal phone book containing the phone numbers you dial most often and the name associated with the numbers. You can easily retrieve the numbers by name or memory location.

Store a Name and Phone Number

1. Press the LEFT navigation key to access the Phone Book menu, and press YES.
2. Press the RIGHT navigation key until Store appears, and press YES. Name: appears.
3. Enter a name, using the keypad keys to enter characters, as described in "Enter Characters" on page 81. Press YES.
4. Enter a number.

You now have four SAVE options:

- a. To save the number in the card memory, in the first empty position (displayed in the top right-hand corner), press YES.
- b. To save the number in the card memory, in a position you decide:
 - Press the right navigation key.
 - Enter the position number.
 - Press YES.
- c. To save the number in the phone memory, in the first empty position:
 - Press the right navigation key.
 - Press the # key twice.
 - Press YES.
- d. To save the number in a specific phone memory position:
 - Press the right navigation key.
 - Press the # key once.
 - Enter the position number.
 - Press YES.

Tip! *If you enter a number in the scratch pad during a call, store it in the Phone Book by selecting Store from the Phone Book menu while the number is displayed.*

Overwrite Protection

If you try to store a phone number in a position which already contains a number, the message Used Overwrite? appears. You then have the following options:

To store the number in a different position:

1. Press NO.
2. Enter the new position number.
3. Press YES.

To store the number in the selected position, thus erasing the old number, press YES.

When the Memories are Full

- If all the positions in the card memory are full, a position number is suggested.
- If both memories are full, no position number is suggested.

To store the phone number:

1. Enter the number of an occupied position. **Overwrite?** appears.
2. Press YES to overwrite the old number.

Store a Number With a Tone Signal Code

In order to carry out telephone banking or control a phone answering machine, you need to use codes sent as tone signals (also called DTMF or Dual Tone Multi-Frequency tones).

Anything entered after a pause is sent as DTMF tones from the Phone Book.

To store the number and code in your Phone book:

1. Access the Phone book and select **Store**.
2. Enter the phone number. (See “Store a Name and Phone Number” on page 83.)
3. Press and hold the * key until the pause character ‘p’ appears.
4. Enter the code. If needed, insert another pause and another code.
5. Save the number to a memory as described in “Store a Name and Phone Number” on page 83.

Recall a Phone Number

You can retrieve a phone number in several different ways, depending on how it is stored in your phone.

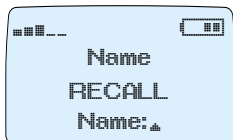
The Speed Dialling Function

Store important numbers in positions 1–9 in the card memory. You can use the Speed Dialling Function to dial them quickly by pressing the appropriate memory number.

For example: to call John, whose number is stored in position 3 in the card memory:

- Enter 3 and press YES.

Recalling a Phone Number Using the Name

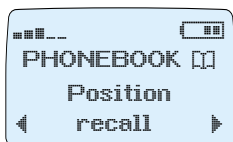


1. From the Phone Book menu, select Name recall.
2. Enter the name you want to recall (or the first letters of it) using the numeric keys. (See “Enter Characters” on page 81.) You do not have to enter the entire name.
3. When the correct name appears, press YES.
If the displayed name is not the one you want, press the navigation key repeatedly until you find the correct name and number. Names are listed alphabetically.
4. Press YES to make the call.

Shortcut: Press LEFT from the empty standby display, enter the name, and press YES.

Recalling a Phone Number Using the Position

If you know the memory position of a phone number, you can recall the number using the position number.

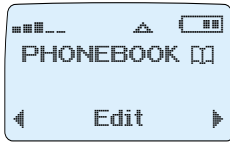


1. From the Phone Book menu, select Position recall.
 2. Enter the position of the stored number.
- For card memory, enter the position number.
 - For phone memory, press and hold down the # key until the icon appears and then enter the number.
3. Press YES to confirm.
The name and phone number appears.
If you enter the wrong position number, press the navigation key repeatedly until you find the correct phone number.
 4. To call the number, press YES.

Keeping Your Phone Book Up to Date

- You can change the names and numbers in your Phone Book, or add and delete entries as needed.
- You can edit an Entry in the Phone Book.
- You can access the Phone Book entry you wish to edit by using either the storage position number or the name.

To edit the entry using the position number:



1. From the Phone Book menu, select Edit.

2. Enter the position number, as follows:

For a position in the card memory:

- a. Press the LEFT navigation key.
- b. Enter the memory position number.

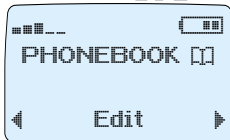
For a position in the phone memory:

- a. Press and hold down the # key until the # character appears and then enter the number.
- b. Press YES to select the entry. The name, phone number, and storage position appears.
- c. Select the row you wish to edit. Position the cursor to the right of the text or number you wish to edit.

Edit the row by:

- pressing the CLR key to erase letters or digits.
 - pressing the numeric keys to enter letters or digits.
- d. Press YES to save the changes.

Edit the Entry Using the Name

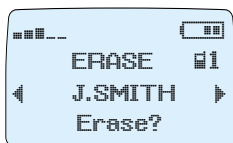


1. From the Phone Book menu, select Edit.
2. Press the LEFT navigation key. Find name appears in the middle row.
3. Enter the name for the entry you wish to edit, using the numeric keys.
4. Press YES to select the entry.

Tip! *When you edit using the name, you cannot scroll between the entries. Only the first match appears. Instead, recall the number by using the name to check the storage position, and then edit using the position.*

Erasing a Phone Number

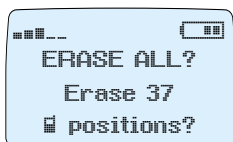
To erase an entry in the Phone Book:



1. Recall the number by entering the name or position.
2. Press and hold CLR. The message Erase? is displayed.
3. Press YES to erase the entry.

Note: *You can also select Erase from the Phone Book menu, enter the storage position, and press YES. The entry is then displayed, with the Erase? prompt. Press YES to erase the number.*

To erase all numbers from the phone memory (not possible from the card memory):



1. From the Phone Book menu, select Erase all from phone.
2. Press YES.
3. The number of phone entries appears in the display. Press YES.

Copying between Positions and Memories

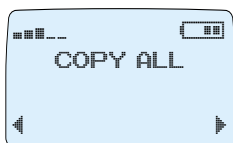
As you fill up the Phone Book memories, you might want to move entries from one memory to another or between positions.

Copying All from Card Memory to Phone Memory



1. From the Phone Book menu, select Copy all.
2. Scroll to Card to Phone and press YES.
3. Enter the number of the first position in the card memory you wish to copy and press YES.
4. Enter the number of the first position in the phone memory you wish to copy to and press YES.
5. Press YES to start copying.

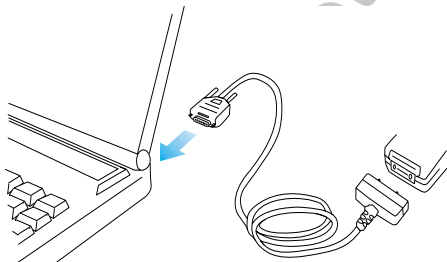
Copying All from Phone Memory to Card Memory



1. From the Phone Book menu, select Copy all.
2. Scroll to the option you want and press YES

Communicating Via Modem

You can expand your communication possibilities by connecting your phone to a computer with a modem.



Make Fax and Data Calls

To be able to use various communication services you need appropriate software, for example a fax program, an external fax adaptor, an e-mail program or an Internet browser.

You must have a subscription to these services. Check with your operator. Most phone network operators require that you have separate fax and data subscriptions. The default setting for the **SETTINGS/Data** menu is **OFF** for all phone modes. ACeS provides separate phone numbers for this service.

When a fax or data call is in progress, the phone displays the call type, Fax or Data.

Software-Initiated Fax and Data Calls

Fax and data calls are initiated from your computer.

To make a call, do the following:

1. Connect your computer to your phone.
2. Start the software program on your computer.
3. Follow the software prompts.

Note: *Make sure that you have selected the phone modem.*

If your SIM card allows it, you can make speech-then-fax calls. Initiate the speech part of the call from CALLS/Next call type then choose Speech/Fax. Then, initiate the fax transmission.

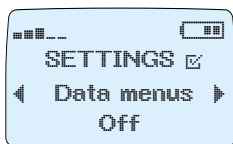
Communicate Via Modem—ACeS Mode

In ACeS mode you can connect your phone to a computer to send and receive fax and e-mail messages, browse the Internet and much more.

Data Menus

Some of the features described in this section require the Data menus in your phone be turned on.

To turn Data menus on:



1. Go to the **SETTINGS** menu.
2. Scroll to Data menus.

The current status (ON or OFF) appears:

- If OFF, press YES.
- If ON, press NO to exit the menu.

Making Fax and Data Calls

To make a fax or data call, initiate the call from your computer software. See “Software-Initiated Fax and Data Calls” on page 88.

Receiving Fax and Data Calls – Multi-Numbering

If your network and subscription support multi-numbering, the phone displays the type of incoming call. There are two possible types apart from speech calls:

- Fax calls.
- Data calls.

To receive a fax or data call:

1. Connect your computer to the phone.
2. Answer the call from within the software program (if it does not answer automatically).

Receiving Fax and Data Calls – Single Numbering

If your SIM card allows it, you can receive different types of calls, data, voice or fax, on the same telephone number.

Set the next call type via the CALLS/Next call type menu.

Note: *This setting remains until you change it.*

To receive a fax or data call:

1. Connect your computer to the phone.
2. Answer the call from within the software programs (if it does not answer automatically).

Communicate Via Modem—GSM Mode

In GSM mode you can connect your phone to a computer to send and receive fax and data calls.

Data Menus

The data menus in your phone apply only to Satellite mode.

Making Fax and Data Calls

To make a fax or data call, initiate the call from your computer software. See “Software-Initiated Fax and Data Calls” on page 88.

Receiving Fax and Data Calls – Single Numbering:

If your SIM card allows it, you can receive different types of calls (data, voice or fax) on the same telephone number.

Set the next call type via the CALLS/Next call type menu.

Note: *This setting remains until you change it.*

To receive a fax or data call:

1. Connect your computer to the phone.
2. Answer the call from within the software program (if it does not answer automatically).

Short Message Service (SMS)

SMS allows you to send and receive text messages consisting of up to 160 characters.

Text messages can be received when the phone is in standby mode, when the recipient is engaged in a call, or when incoming calls are forwarded to another phone number. If the recipient's phone is turned off when a message is sent, a notifying message is displayed shortly after the phone is turned on.

Apart from sending standard messages to phones, your phone can fax messages (groups 3 and 4), and send e-mails via SMS.

SMS is available in GSM mode only. You can, however, read, compose and save messages in Satellite mode. You can retrieve and send them when you return to GSM mode.

Two Memories

Your phone has two memories where text messages are stored: the Messages memory and the SIM card memory.

The Messages Memory

If you do not want to read an incoming message at once, it is automatically stored in the Messages memory. If there are any unread incoming messages in the Messages memory, a letter icon (✉) is displayed.

The Messages memory can hold up to 15 messages. When all memory positions are occupied, the oldest read message will be overwritten when a new message is received.

If the Messages memory becomes full with unread messages, new messages are automatically stored in the SIM card memory. If the SIM card memory becomes full, the letter icon starts blinking.

Messages remain in the Messages memory until you erase them, insert a different SIM card, or until read messages are overwritten by new messages. (See "Erasing a Phone Number" on page 87.)

The SIM Card Memory

If you receive an important message and want to make sure it is not erased from the Messages memory, you can store it on your SIM card. Messages that are saved in the SIM card memory remain there until you erase them, even if you transfer your SIM card to another phone.

Setting the Phone for Text Messaging

In order to reply to received messages you will need the phone number to your network. If it cannot be retrieved from your SIM card, you must specify the number yourself.



1. From the MAIL menu, select Send message.
2. Scroll to SEND MESSAGE/Options. Press YES.
3. Scroll to Serv center.

- If the phone number of your service centre is displayed, go to step 5.
- If there is no number in the display, or an incorrect number, press YES and enter the number of the service centre, including the international prefix, if necessary.

4. Press YES.

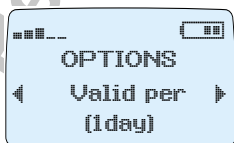
5. Press CLR to return to standby mode.

Your phone is now ready to send and receive messages.

Note: *Some network operators may only allow SMS messages to be sent within their own network.*

Setting Duration of Message

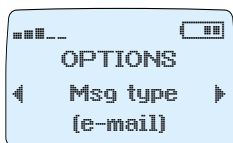
If your message cannot be delivered, you can instruct your Service Centre to repeat the message every hour, every 12 hours, once a day, once a week or the maximum period (determined by your service provider).



1. From the MAIL menu, select Send message.
2. Scroll to Options, and press YES.
3. To select the Valid per option, press YES.
4. Scroll to the duration you want and press YES.

Changing Message Types

Your network operator's Service Centre may be able to convert a text message into a format (fax, e-mail, telex, voice, etc.) that suits the equipment that is going to receive the message. Consult your operator for further information about the formats you can use.

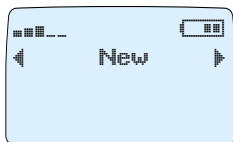


1. From the Mail menu, select Send message.
2. Scroll to Options and press YES.
3. Scroll to the Msg type option and press YES.
4. Select the required format and press YES.

Note: *Standard means an ordinary text message (SMS) to other phones and is the default message type.*

Compose and Send Messages

Sending Messages



1. From the MAIL menu, select Send message/New.
2. Press YES. An empty display appears.
3. Enter your message (see "Enter Characters" on page 81).

Note: *If there is a pause of more than 60 seconds between entering characters, the phone returns to the standby menu.*

4. You can scroll through the message text and erase or insert characters.
5. Press YES. Request reply? appears.
6. If you want to request that the recipient reply to the message, press YES. If not, press NO.
7. Enter the recipient's phone number or retrieve it from the phone book.
 - To send the message now, press YES.
 - To store the message for later use, press NO. The message is now stored in the messages memory.

The same procedure is used regardless of which type of message (e-mail, fax, etc.) you are sending.

Note: Reply *and* Send *are not available in Satellite mode.*

Reading a Message

When you receive a message, you hear a beep and see a message in the display. The indicator light on the top of the phone blinks rapidly green.

- If you want to read the message at once, press YES.
 - If you want to read the message later on, press NO. The message is stored in the Messages memory and a letter icon is shown to the left at the bottom of the standard display. Press NO to return to the idle display. If you press YES you will see the last 7 digits of the telephone number of the sender and when the message was received.
 - **New** stands for a new unread message.
 - If the message is older than 24 hours, the time is replaced by the date the message arrived. However, you can toggle between the date and time by pressing the * key.
1. Press YES to read the first line of the message.
 2. Scroll through the message using the navigation key. RIGHT takes you forward and LEFT takes you back through the message.
 - To move three lines forward, press 3.
 - To move three lines back, press 1.
 3. Press the navigation key to the left to return to the beginning of the message.

The message Reply? appears after the last line of the message. If the caller wants you to reply, the displayed message says Reply Requested, Reply?, provided your network supports this.

Replying to a Message

1. To reply to a message, press YES.
2. To enter your message, press YES and proceed as described in Compose and Send Messages.
3. If you do not want to reply, press NO.

If there is a phone number in the message you receive, you can call it by simply pressing YES. After the number has been called, the message is considered read and remains in the Messages memory.

Embedded Numbers in SMS

When sending a message to another wireless phone, or when asking someone to send a message to your phone, follow the guidelines listed below to ensure that the phone retrieves the entire number from the message, displays it, and allows the phone user to dial the number by pressing YES.

Note: *Your phone is only capable of receiving numbers embedded in a message if network operator has activated the service.*

Do not include spaces or non-numeric characters such as hyphens. If a number is received that has spaces separating parts of the number, such as 919 555 1212, only 919 will be dialed. Numbers separated by hyphens will not be recognized as valid numbers.

A phone number enclosed within double quotation marks has the highest probability of being recognized (e.g. "9195551212").

Include the international dialling code, area code, and area prefix as part of the number to help in the call back process. The recipient of the message can edit a number before calling back.

Note: *If the number embedded in the SMS matches a phone book entry, a name is associated with it.*

Press YES to call the embedded name/number. If there are multiple numbers in the display, the first number is dialed.

Erasing a Message

If you do not want to reply to a message:

1. Press NO.
The message Erase? appears.
2. To erase the message from the Messages memory, press YES.
The next message in the message list appears.

Note: *You can press CLR anywhere within the messages menu to erase a message. When Erase? appears, press YES.*

Storing a Received Message

All incoming messages are stored temporarily in the Messages memory until the memory space is needed for new messages. If you receive a message that you want to store safely, you can store it in the SIM card memory.

When you reach the end of the message, Erase? appears.

1. Press NO. The message Store? appears.
2. To store the message in the SIM card memory, press YES.
The message is automatically erased from the Messages memory.

The display now shows the position of the message. For example, if it is the third of five that you can store.

If you do not want to store the message in the SIM card memory, press NO. The message remains in the phone's Messages memory.

Tip! *You can also store messages you have composed yourself on the SIM card.*

Reading Stored Messages



1. From the MAIL menu, select Read messages and press YES.
2. Scroll to the message type you are looking for:
 - New (unread).
 - Old (read).
 - Sent.
 - To Send (unsent.)

3. Press YES.

If there is a  in front of the message, the message resides on the SIM card.

Calling a Phone Number in a Message

If a message contains a phone number, you can call it by pressing YES while it is displayed.

After the number has been called, the message is considered read and remains in the Messages memory.

Frequently Used Messages

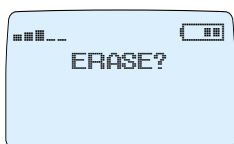
If you have one or more standard messages you use often, you can store them on the SIM card, to be re-used whenever you want.

Storing Frequently Used Messages

To make sure your standard messages are not erased when the Messages memory becomes full, you should store them in the SIM card memory. After saving the message in the Messages memory proceed as follows:



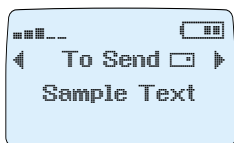
1. From the MAIL menu, select Read messages and press YES. The messages saved in your Messages memory appear.



2. Scroll to the message you wish to store in the SIM card memory and press YES.
3. Scroll to the end of the message. Erase? appears.
4. Press NO. Store? appears.
5. Press YES.

The message is now stored in the SIM card memory, if there is storage space available.

Sending Stored Messages



1. From the MAIL menu, select **Send message**. **New** appears. Press YES if you want to enter a new message.
2. If you want to send an existing message, scroll from **New** to the unsent messages; these are shown with the Queued mail icon (☐). Scroll to the message you wish to send and press YES. Now you can edit your message.



3. When the message is ready to be sent, press YES. **Request reply?** appears.
 - If you want the person you called to reply to the message, press YES.
 - If not, press NO.
4. Enter the phone number or retrieve it from the phone book.
5. Press YES to send the message.

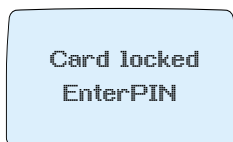
Security

Your phone is protected by two locks:

- a PIN code and, in some cases, a PIN2 code for the SIM card
- a phone lock code for the phone itself

The SIM Card Lock

When you purchase your phone, you receive a PIN code (Personal Identity Number) that is used to unlock your SIM card if your SIM card is locked. Every time you turn the phone on, you are prompted to enter the PIN code.

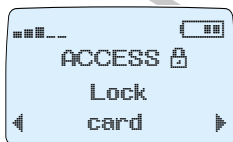


1. Enter the PIN Code.
2. Press YES.

Locking the SIM Card

You can lock your SIM card to prevent unauthorised use of your phone.

To lock the SIM card:

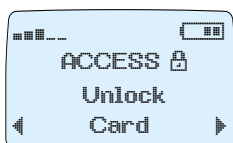


1. Select Lock card from the ACCESS menu.
2. Press YES.
3. Enter your PIN code and press YES. The message **Locked** confirms that the card lock is now activated.

Note: *This function only applies if your subscription allows you to deactivate the card lock.*

Unlocking the SIM Card

To unlock the SIM card, select Unlock card from the ACCESS menu.



1. Press YES.
2. Enter your PIN code and press YES. The message **Unlocked** confirms that the card lock is now deactivated.

PIN Blocked



1. If you enter your PIN code incorrectly three times in succession, the PIN is blocked. This is indicated by the message PIN Blocked/ Unblock? Should this happen, you need to unblock the SIM card as follows:

Unlocking the PIN

To unblock your PIN if you have entered the wrong PIN (or PIN2) code three times in succession:

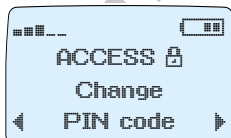
1. Press YES.
2. Enter your PUK (or PUK2) code (look in the information from your network operator).
3. Enter a new 4-to-8 digit PIN (or PIN2) code and press YES.
4. Re-enter the new PIN (or PIN2) code to confirm it and press YES.



Warning! *If you enter the wrong PUK code ten times in succession, your card will be permanently blocked. If this happens, contact your network operator for a new SIM card.*

Changing the PIN Code

You should change your PIN code on a regular basis to prevent unauthorized use of your subscription. To change your PIN code:



1. From the ACCESS menu, select Change PIN code.



2. Enter the old (current) PIN code and press YES.



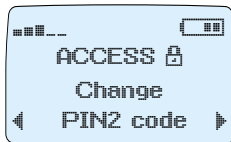
3. Enter the new PIN code and press YES.



4. At the prompt Repeat New PIN enter the new PIN a second time to verify it.
- The message New PIN confirms that the PIN code has been changed.
 - If the message Matching error appears, the new PIN was entered incorrectly.
 - If the message Wrong PIN appears, followed by Enter Old PIN the old PIN was entered incorrectly.

Changing the PIN2 Code

Depending on the network you use, some services require a second PIN code, the PIN2 code. If your SIM card allows it, you can change your PIN2 code.



1. Select Change PIN2 code from the ACCESS menu.
2. Follow the same procedure as described in "To Change the PIN code".

The Phone Lock

The phone lock protects your phone against unauthorised use in the event of theft. It is independent of the SIM card lock. When turned on, the phone checks the phone lock after the SIM card lock has been checked and only if the SIM card is unlocked. The phone lock is not activated when you purchase the phone.

As soon as possible you should do the following:

- activate the phone lock.
- change the factory-programmed security code to any 3-to-8 digit personalised code.

There are two ways of locking your phone:

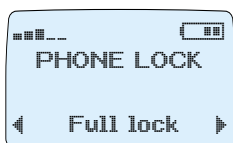
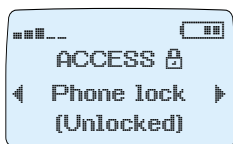
- Full Lock.
If Full Lock is activated and the phone turned on, the message Phone locked is displayed, then the prompt Enter lock code. Enter your security code and press YES.
- Autolock.
If the Autolock is activated, you must enter your security code

every time the SIM card is replaced. You will be prompted for the code.

Changing the Security Code

From the ACCESS menu, select Phone lock/Change code and follow the same procedure as that for changing the PIN code.

Locking and Unlocking the Phone



1. From the ACCESS menu, select Phone lock and press YES.
2. Select the current setting Locked/Unlocked and press YES.
3. Press the navigation keys to select Locked/Unlocked, Full lock or Autolock.
4. Enter your lock code and press YES.

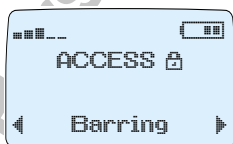
Call Barring Password

The Call Barring feature is supported by your phone, but it is dependent on your network and/or the network you are roaming in. Call Barring is a security feature that prevents someone from making unauthorised calls on your phone.

To ensure that Call Barring is not changed by someone else, a password, which comes with your subscription, is necessary in order to activate or cancel a call type that is barred.

Changing the Barring (Restrict) Password

The password for the Barring service comes with your subscription. You can easily change the password as often as you like.



1. Select Barring from the ACCESS menu.
2. Select the Change password option.
3. Enter the old (current) password and press YES.
4. Enter the new password and press YES.



5. Enter the new password a second time and press YES. The message **Please wait** appears followed by a message confirming that the password has been changed.

The Key Lock

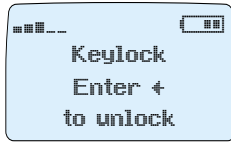
The Key Lock feature helps you to avoid accidental dialling if you keep your phone in a pocket. A key icon in the display informs you that the keypad is locked.

Calls to the emergency number 112 (or an alternate emergency number, where applicable) can be made when the keypad is locked. If the phone's alarm sounds, you can turn it off by pressing any key.

To lock the keypad:



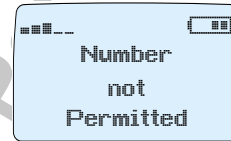
1. From the ACCESS menu press YES. Keylock On? is displayed.
2. Press YES to activate the key lock.



1. If you press a key while the keypad lock is on, **Keylock/Enter to unlock** is displayed. Press the left navigation key to unlock the keypad, followed by YES.

Fixed Number Dialling

Fixed Number Dialling restricts outgoing calls. It requires a SIM card that allows fixed numbers to be stored. The fixed numbers are protected by the PIN2 code.



The Fixed Dialling function allows calls to be made only to fixed numbers stored on the SIM card. If an attempt is made to call other numbers, the message **Number not permitted** appears in the display.



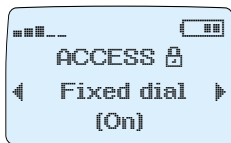
You can store partial numbers, for example an area code, or an area code followed by the first digits common to several numbers. Storing 919 472 allows calls to be made to any numbers in the 919 area code with a 472 prefix.

Wild Card

You can also store Fixed Number Dial numbers by replacing part of the number with a wildcard. To enter a wildcard, press and hold down the # key until a ? replaces the #. Any digit is allowed in the wildcard position (the wildcards 0-9, *, or # can be used).

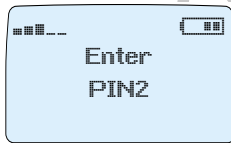
You can still make calls to the emergency number 911 (or 112 where applicable) and the Service Centre of the cellular network.

Activating Fixed Dialling



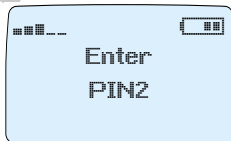
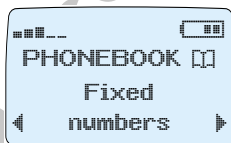
1. From the ACCESS menu, select Fixed dial.
2. Enter your PIN2 code and press YES.
3. Scroll to On and press YES.

Cancelling Fixed Dialling



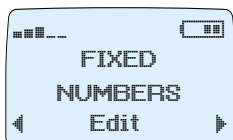
1. From the ACCESS menu, select Fixed dial.
2. Enter your PIN2 code and press YES.
3. Scroll to Off and press YES.

Storing Fixed Numbers



1. From the PHONE BOOK menu, select Fixed numbers.
2. Scroll to Store and press YES.
3. Enter your PIN2 code and press YES. Enter the name (optional) and the fixed number in the same way as when storing an ordinary phone number. You can include wildcard digits (?) by pressing and holding the # key.

Editing a Stored Fixed Number

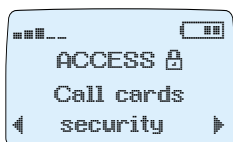


1. From the Phone book menu, select Fixed numbers.
2. Scroll to Edit and press YES.
3. Scroll to entry, update and press YES.

After you have entered your PIN2 code, you can change the position number, the name or the fixed number in the same way as that of an ordinary phone number.

Calling Cards Security

To change Calling Card Security Codes:



1. From the ACCESS menu, select Call cards security and press YES.
2. Enter your security code and press YES.
3. Scroll to Change code and press YES.

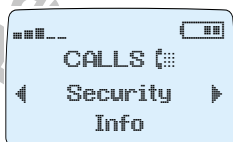


4. Enter your new code and press YES. The code can consist of four to eight digits.
5. When Repeat new code appears in the display, re-enter the new code, then press YES to confirm. Your security code has now been changed.

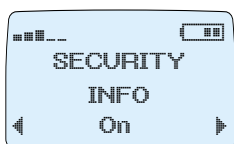
Call Security Information

Note: *This facility may not be available with all SIM cards.*

To see if a call connection is secure (encrypted), set Security Info ON.



1. From the CALLS menu select Security Info. The current status appears.
2. The current status is displayed. Scroll to ON or OFF as required.



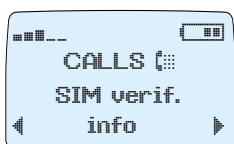
3. Press YES to confirm.
If security is on, the phone displays the message **Security On** at the beginning of an encrypted call. Otherwise, the phone displays **Security Off**.

Any change to the call encryption status is indicated in the display.

This feature can be turned OFF via your SIM card.

SIM Verification Information

A serving network can verify the subscription information on your SIM card. Networks do so to enhance safety and to fight fraud.



Select **CALLS/SIM verif. info**. Set to **ON** to have your phone display the message **SIM Verified** when you make a call and your subscription is verified by the network.

Guidelines for Safe and Efficient Use

Note: *Read this information before using your mobile phone.*

Your mobile phone is a highly sophisticated electronic device. To get the most out of your mobile phone read this text about product care, safety and efficient use.

Product Care

- **Do not** expose your product to liquid or moisture.
- **Do not** expose your product to extreme hot or cold temperatures.
- **Do not** expose your product to lit candles, cigarettes, cigars, open flames, etc.
- **Do not** drop, throw or try to bend the product since rough treatment could damage your product.
- **Do not** paint your product as the paint could obstruct the earphone, microphone or any moveable parts and prevent normal use.
- **Do not** attempt to disassemble your product, a broken warranty seal will void the warranty. The product does not contain consumer serviceable components. For service information contact ACeS or the retailer from where the phone was purchased.

Treat your product with care; keep it in a clean and dust free place. Only use a soft damp cloth to clean your product.

Antenna Care

- To avoid impaired performance, please ensure that your mobile phone's antenna is not bent or damaged.
- If your phone's antenna is damaged, please take it to an ACeS Certified Service Centre or Service Point.
- Unauthorised antenna modifications or attachments could damage the phone and may violate the appropriate regulations causing loss of performance and radio frequency (RF) energy above the recommended limits.

Efficient Phone Operation

To enjoy optimum performance with minimum power consumption please:

- Hold the phone as you would any other telephone. While speaking directly into the mouthpiece, angle the antenna in a direction up and over your shoulder. The antenna should be extended during a call.
- Do not hold the antenna when the phone is in use. Holding the antenna affects call quality, may cause the phone to operate at a higher power level than needed and shorten talk and standby times. If your mobile phone is equipped with an infrared eye, never direct the infrared ray at anyone's eye and make sure that it does not disturb any other infrared units.

Radio Frequency Energy

Your mobile phone is a radio transmitter and receiver. When the phone is turned on, it receives and transmits radio frequency (RF) energy. Depending on the type of mobile phone you possess, it operates on different frequency ranges and employs commonly used modulation techniques. The system that handles your call when you are using your phone controls the power level at which your phone transmits.

Note: *Whether in Satellite or GSM mode, deploying the antenna in one of the three upward positions improves the performance of the phone, and minimises your exposure to radio frequency (RF) energy.*

Exposure to Radio Frequency Energy

The International Commission on Non-Ionising Radiation Protection (ICNIRP), supported by the World Health Organisation (WHO), published during 1996 a statement and in 1998 guidelines which set recommended limits for exposure to RF fields from handheld mobile telephones. According to the ICNIRP statement, which is based on the available body of research, there is no evidence that mobile terminals meeting the recommended limits can cause any adverse health effects. All ACeS telephones conform to the ICNIRP guidelines and other international exposure standards, such as:

- CENELEC European Pre-standard ENV50166-2:1995 (Europe).
- ANSI/IEEE C95.1-1992 (USA, Asia-Pacific).

- AS2772.1 – 1990/NZS 6609.1:1990, Amdt. No.1 (Australia, New Zealand).

Driving

Check the laws and regulations on the use of mobile phones in the areas where you drive. If you are going to use your phone while driving, please:

- Give full attention to driving.
- Use an ACeS approved Vehicle Handsfree Solution, if available. The law in many countries requires the use of a vehicle Handsfree Solution. Read the installation instructions carefully before installing a vehicle Handsfree Solution.
- Pull off the road and park before making or answering a call if driving conditions so require.

RF energy may affect some electronic systems in motor vehicles such as car stereos, safety equipment etc. In addition, some vehicle manufacturers do not allow the use of mobile phones, unless the installation is supported by a handsfree kit with an external antenna, in their vehicles. Check with your vehicle manufacturer's representative to be sure that your mobile phone will not affect the electronic systems in your vehicle.

Vehicles Equipped with an Air Bag

An air bag inflates with great force. Do not place objects, including either installed or portable wireless equipment, in the area over the air bag or in the air bag deployment area. If in-vehicle wireless equipment is improperly installed and the air bag inflates, serious injury could result.

Electronic Devices

Most modern electronic equipment, for example equipment in hospitals and cars, is shielded from RF energy. However, certain electronic equipment is not. Therefore:

Do not use your mobile phone near medical equipment without requesting permission.

Mobile phones may affect the operation of some implanted cardiac pacemakers and other medically implanted equipment. Pacemaker patients should be aware that the use of a mobile phone very close to a pacemaker might cause the device to malfunction. Avoid placing the phone over the pacemaker, i.e. in your breast pocket. When using the phone, place it at your ear opposite the pacemaker. If a minimum

distance of 15 cm is kept between the phone and the pacemaker, the risk of interference is limited. If you have any reason to suspect that interference is taking place, immediately turn off your phone. Contact your cardiologist for more information.

Some hearing aids might be disturbed by mobile phones. In the event of such disturbance, you may want to contact your local Call-Centre to discuss alternatives.

Aircraft

- Turn off your mobile phone before boarding any aircraft.
- Do not use it on the ground without crew permission.

To prevent interference with communications systems, you must not use your mobile phone while the plane is in the air.

Blasting Areas

Turn off your mobile phone when in a blasting area or in areas posted “turn off two-way radio” to avoid interfering with blasting operations. Construction crews often use remote control RF devices to set off explosives.

Potentially Explosive Atmospheres

Turn off your mobile phone when in any area with a potentially explosive atmosphere. It is rare, but your phone or its accessories could generate sparks. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

Areas with a potentially explosive atmosphere are often, but not always, clearly marked. They include fuelling areas, such as petrol stations, below deck on boats, fuel or chemical transfer or storage facilities, and areas where the air contains chemicals or particles, such as grain, dust, or metal powders.

Do not transport or store flammable gas, liquid, or explosives in the compartment of your vehicle containing your mobile phone and accessories.

Power Supply

- Connect AC (Power supply) only to designated power sources as marked on the product.
- To reduce risk of damage to the electric cable, remove it from the outlet by holding onto the AC adaptor rather than the cable.

- Make sure the cable is positioned so that it will not be stepped on, tripped over or otherwise subjected to damage or stress.
- To reduce the risk of electric shock, unplug the unit from any power source before attempting to clean it.
- The charger must not be used outdoors or in damp areas.

Children

Do not allow children to play with your mobile phone since it contains small parts that could become detached and create a choking hazard.

Emergency Calls

Important: *This phone operates using radio signals, cellular, satellite and landline networks as well as user-programmed functions, which cannot guarantee connection under all conditions. Therefore you should never rely solely upon any mobile phone for essential communications (e.g. medical emergencies).*

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

Antenna Labelling

As an additional safety feature, your phone has a white band at the tip of the antenna; this is to clearly identify the antenna and to make it more noticeable. As with any product, the phone must be used in a safe manner. Do not remove or cover the white band, and avoid using or handling the phone in a threatening manner or so as to suggest that the phone is a weapon.

Battery Information

New Batteries

Your mobile phone comes with a nickel metal hydride (NiMH) battery. The battery supplied with your phone is not fully charged.

It does not, however, need to be conditioned as do nickel cadmium type batteries, often sold as accessories from other suppliers. You may charge the NiMH battery as often or as long as you wish without losing performance.

See “The Battery” on page 15 and “Charge the Battery” on page 16 for details on installing and charging the battery.

Battery Use and Care

A rechargeable battery has a long service life if treated properly. A new battery, or one that has not been used for a long period of time could have reduced capacity the first few times it is being used.

- The talk and standby times depend on the actual transmission conditions when using the phone.
- Use only ACeS approved batteries and the AC/DC adaptor supplied with your battery charger.
- Do not expose your battery to extreme temperatures, never above 60°C (140°F). For maximum battery capacity use your battery at room temperature. If the battery is used in cold temperatures the battery capacity will be reduced.
- The battery can only be charged when the temperature is between 5°C (41°F) and 45°C (113°F).
- Turn off your phone before removing the battery.
- Do not attempt to take the battery apart.
- Do not let the metal contacts on the battery touch another metal object. This could short-circuit and damage the battery.
- Do not expose the battery to open flames. This could cause the battery to explode.
- Do not expose the battery to liquid.
- Do not use the battery pack if it shows signs of rust, overheating, leakage or changes in colour or shape.
- Do not puncture the battery pack or expose it to strong shock.
- Do only use the battery for the intended purpose.
- Do not allow the battery to be placed into the mouth. Battery electrolytes may be toxic if swallowed.

Recycling Your Battery

Your phone manufacturer is a member of the Rechargeable Battery Recycling Corporation (RBRC), a non-profit public service organisation designed to assist in the recycling of rechargeable batteries. Many areas require recycling of rechargeable batteries. To find out how to recycle your battery, contact your local retailer for recycling instructions.

Please Note!

Some of the services mentioned in this manual are not supported by all networks or by all service agreements. This also applies to the International Emergency Number 112.

Please contact your network operator or service provider if you are in doubt whether you can use a particular service or not.

Warranty

Thank you for purchasing this ACeS product. To get maximum use of the features of this product, we recommend that you read the Guidelines for Safe and Efficient Use.

We also recommend that you read the terms and condition of your warranty card as supplied in the product package for the warranty services. Please consult with your seller for further information.

THERE ARE NO OTHER EXPRESS WARRANTIES, WHETHER WRITTEN OR ORAL, OTHER THAN THE WARRANTY CARD SUPPLIED IN THE PACKAGE. ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE WARRANTY CARD SUPPLIED. IN NO EVENT SHALL ACeS BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE WHATSOEVER, INCLUDING BUT NOT LIMITED TO LOST OF PROFITS OR COMMERCIAL LOSS.

The AMBE® voice compression software included in this product is protected by intellectual property rights including patent rights, copyrights and trade secrets of Digital Voice Systems, Inc.

The user of this software is explicitly prohibited from attempting to decompile, reverse engineer, or disassemble the object code, or in any other way convert the object code into a human-readable form. This software is licensed solely for use within the Communications Equipment. US Patent Nos. 5,870,405, 5,826,222, 5,754,974, 5,701,390, 5,715,365, 5,649,050, 5,630,011, 5,581,656, 5,517,511, 5,491,772, 5,247,579, 5,226,084, and 5,195,166.

Indicators in the Display

Symbol	Indicates condition	Symbol	Indicates condition
	Battery empty		Network signal (none)
	Battery strength		Network signal strength
	Battery strength		Network signal strength
	Battery strength		Network signal strength
	Battery full		Network signal strength
	Battery charging		Network signal (full)
	Access		Scroll text down
	Network		Scroll text up
	Keylock		Silent Ring
	Phone memory		UT to UT#
	Partial Sat service		Scroll for selections
	Full Sat service		Scroll for selections
	No Sat service*		Alarm set
	Timer		All Calls divert on
	Settings		Calls
	Scroll text left		Phone Book
	Scroll text right		Voice mail
	SIM card memory		Unsent (Queued) mail
	Roaming		New mail
	Info		

* Except possibly emergency.

No call-related supplementary services are possible.

List of Terms

Term	Function/Description
CFU	Call Forwarding Unconditional.
CLIP	Calling Line Identification Presentation.
CLIR	Calling Line Identification Restriction.
CSP	Customer Service Profile.
DDM	Dialled-digits memory.
EEPROM, E2	Electrically Erasable Programmable Read-Only Memory.
ESN	Electronic Serial Number.
ETSI	European Telecommunications Standard Institute.
FDN	Fixed Dialling Numbers.
HPA	High Penetration Alert.
PLMN	Public Land Mobile Network.
PSMN	Public Satellite Mobile Network.
PUK	Personal Unblocking Key.
RSSI	Received Signal Strength Indicator.
SAT	Satellite system mode, refers to ACeS.
Satellite mode	The phone is searching for or has acquired a satellite network.
SIM	Subscriber Identity Module.
SMS	Short Messaging Service.
SS	Supplementary Services.
UDUB	User Determined User Busy.
UT	User terminal.

Term	Function/Description
UT – UT	Direct user terminal-to-user terminal connection (Mobile-to-Mobile) when both terminals operate in satellite mode.

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