Telit Sat 550

Dual Mode Globalstar/GSM Telephone

USER GUIDE

English

Telit

Mobile Terminals SpA

DECLARATION OF CONFORMITY

We,

Telit Mobile Terminals SpA

Of:

V.le Stazione di Prosecco 5/b
34010 Sgonico TS
Italy

declare under our sole responsibility that the product

Telit Dual Mode GSM 900/Globalstar Phone type SAT550

to which this declaration relates is in conformity with all the essential requirements of Directive 1999/05/EC

We hereby also declare that all essential [radio] test suites have been carried out and that the above named product is in conformity to all the essential requirements of Directive 1999/5/EC.

The conformity assessment procedure referred to in Article 10 and detailed in Annex V of Directive 1999/5/EC has been followed with the involvement of the following Notified Body:
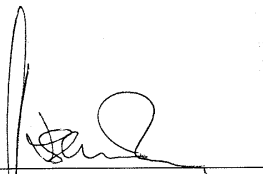
BABT, Claremont House, 34 Molesey Road, Walton-on-Thames, KT12 4RQ, UK

Identification mark: **168**

The technical documentation relevant to the above equipment will be held at:

Telit Mobile Terminals SpA
V.le Stazione di Prosecco 5/b
34010 Sgonico TS
Italy

Trieste, *12/07/00*

< C.E.O>

MOD.003 05/00 REV.2

Introduction

Thank you for having chosen Telit. Please read this manual carefully in order to be in a position to make full use of your telephone's capabilities.

Using your dual mode Satellite/GSM Telit Sat 550 Telephone, calls may be made and received using both the GSM, 900 MHz cellular networks (on condition that an agreement exists between your network operator and the network on which you are about to operate) and using the Globalstar $^{®}$ satellite network.

Despite your Sat 550's advanced technology, it is extremely simple to use. It offers the functions typical of a GSM telephone but in addition, using a very simple menu, it allows you to make use of the enormous potential offered by Globalstar* network's satellite coverage.

On reading the first few pages of this manual, you will already be able to make and receive calls, memorise and recall telephone numbers in your telephone directory, and send and receive short messages text (SMS).

* Find out about the coverage offered by the Globalstar network by speaking to your operator or service provider.

The Sat 550 telephone may be used in all European Union Countries. You may not be able to use it in other countries or regions due to local telecommunication regulations.

EC Conformity Mark

$$C\hspace{-2pt}\in 168$$

This telephone complies with European Community Standards
ETS 300342 and ETS 300831; EN 60950 in terms of the provisions of European Directives:

99/5/EC
89/336/EEC
73/23/EEC

and USA standards:

FCC part 2
FCC part 15
FCC part 25

In the quest for continuous improvements in specification, design and other areas, the contents of this manual are subject to change without notice.

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Patent Information

This unit has been produced in terms of the following licences held by QUALCOMM Inc. (other licences in progress):

4,901,307	5,487,175	5,603,096
5,056,109	5,490,165	5,604,730
5,099,204	5,497,395	5,617,060
5,101,501	5,499,280	5,621,784
5,103,459	5,504,773	5,621,853
5,107,225	5,506,865	5,625,876
5,109,390	5,509,015	5,627,857
5,228,054	5,511,067	5,629,955
5,257,283	5,511,073	5,629,975
5,265,119	5,528,593	5,633,881
5,267,261	5,544,196	5,638,412
5,267,262	5,546,459	5,640,414
5,283,536	5,561,618	5,642,398
5,289,527	5,566,000	5,644,591
5,307,405	5,566,206	5,644,596
5,309,474	5,566,357	5,646,991
5,339,046	5,568,483	5,652,599
5,341,456	5,572,172	5,654,979
5,373,259	5,574,773	5,655,220
5,383,219	5,576,662	5,657,420
5,392,287	5,577,022	5,666,122
5,396,516	5,577,025	5,673,259
5,408,697	5,581,575	5,675,644
5,414,796	5,588,043	5,687,229
5,416,797	5,590,069	5,689,557
5,426,392	5,590,406	5,691,974
5,442,627	5,590,408	5,692,006
5,452,473	5,592,481	
5,461,639	5,592,548	
5,469,115	5,594,718	
5,475,870	5,596,570	
5,479,475	5,600,754	
5,485,486	5,602,833	

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1. Introducing the telephone

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Key

Special Keys

Message Menu
Key

Phone book
Key

Alpha-numeric
Keyboard

Microphone

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Key	Feature
⓪	Switches the telephone on and off. During a conversation it enables or disables the *mute* feature
✐	To make a call, confirm a selection, access information, and for quick access to the call records
✐	To end or reject a call, reject a choice, exit menus without changing settings. When pressed for 1 second it activates the automatic locking of the keyboard (if activated, see page 36 "Automatic locking")
Ⓜ	Press to access the Main menu, move to the next entry, access further options. When pressed for 1 second, activates/deactivates the phone's ring
📖	Press to access the phone book (memorised on the SIM card). When pressed for 1 second allows access to the phone book menu
✉	Allows access to the Message Menu
🛰	Press to access Satellite menu. When pressed for more than 1 second, allows the passage from satellite mode to GSM and vice versa
Ⓒ	To cancel a character on the display (all characters if pressed for a long time), a missed call, an SMS, the content of an entry in the phone book memory, to reject a choice or when pressed for a long time, to exit the menus
▼✳	To key in an asterisk. Permits the pauses (P) and waits (W) in the DTMF tone sequence to be inserted in stand-by, after having entered at least one number and on pushing in quick succession. To reduce a value, to scroll menu choices down
♯▲	To key in a hatch character. When preceded by a number, used to recall the telephone number relating to the position in the phone book. In stand-by mode allows the keyboard to be locked or unlocked. Allows a value to be increased or a menu choice to be scrolled upwards

Special keys

Soft keys

The Soft keys ✐Ⓜ✐ carry out the functions that appear above the keys themselves

on the display (e.g. ✐ for **OK**).

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Indicators

The telephone is fitted with indicators (LED, icons) that provide information as to the phone's status and main features activated.

Telephone status indicator

The LED that indicates the mode telephone (land or satellite) is positioned below the display.

If the LED is...	
Red	The telephone is in Globalstar satellite mode
Flashing Red	The telephone is searching for the Globalstar satellite network
Off	The telephone is in GSM mode

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Indicators on the display

The telephone's display includes indicators that provide information on its functioning. Other indicators will be illustrated later in the manual.

```
    ▼ıl    ⟨▨⟩    00:00

         X NET
```

Indicator	Description
🔔	**Alarm indicator.** Shows up when the alarm has been activated
⟨◁	**External device indicator**. Shows up when the telephone is connected to automobile kit (optional) or other accessories
▼ıl	**Signal strength indicator.** Indicates the strength of the signal sent by the network to which it is connected. The more bars visible (maximum 3) the stronger the signal. When the antenna symbol is not visible, but there are bars, only emergency calls can be made
✉	**Message indicator.** Indicates that there is a new message. Flashes when the memory on your SIM card is full. This means that one or more SMS messages must be cancelled
▨	**Battery charge indicator.** Indicates the battery's charge. Comprising from 3 fixed segments (battery charged) to 0 flashing segments (battery not charged). While charging the battery an animation of the inside of the battery is seen, which remains fixed when the battery is fully charged
12:00	**Clock indicator.** Indicates the time in a 24 hour format

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Indicator	Description
⟡	**Call transfer indicator**. Displayed when the call transfer feature has been activated
▪|←	**Incoming call bar indicator**. Displayed when the incoming call bar feature has been activated
→|▪	**Outgoing call bar indicator**. Displayed when the outgoing call bar feature has been activated
▬▬▬	**Network maintenance indicator**. Displayed when maintenance of the satellite network is in progress. In this case the telephone is not able to access the Globalstar network. Switch the phone off and try again later. If the problem persists, contact your network operator or service provider
▬▬▪	**Telephone block indicator**. Displayed when the telephone has been blocked by the satellite network. In this case switch the tele-phone off and on again, waiting for an un-blocking message from the network. If the block persists, contact your network operator or serv-ice provider
⟿	**Recharging indicator (only with the telephone on)**. Displayed when the telephone is connected to the battery charger, and the bat-tery is being charged. When this flashes, it indicates that the battery has been fully charged
🔒	**Keyboard locked indicator**. Displayed when the keyboard has been locked
▬o	**Call, SMS and phone book bar indicator**. Displayed when the out-going call, SMS and phone book features have been barred
▬	**Automatic answering indicator**. Displayed when the automatic an-swering feature has been activated
▪▾▪	**Satellite mode indicator**. Displayed when the telephone is in satel-lite mode
X NET	**Network indicator**. Indicates the nationality and network to which the telephone is connected
✕	**Forbidden network indicator**. Displayed when the telephone is connected to a forbidden network. In such a case only emergency calls can be made
▲	**Roaming indicator**. Displayed while roaming a GSM cellular net-work or the Globalstar satellite network

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Indicator	Description
♪	**Ring active indicator.** Displayed when the telephone's ring is active
♪	**Ring off indicator.** Displayed when the telephone's ring has been deactivated
↗	**Outgoing call indicator.** Indicates that an outgoing call is in progress
↙	**Incoming call indicator.** Indicates that an incoming call is in progress
↗	**Outgoing call on hold.** Indicates that an outgoing call has been put on hold
↙	**Incoming call on hold indicator.** Indicates that an incoming call has been put on hold

The following messages may appear in the middle of the display:

Message	Description
DATE	Depending on what is set on the menu, this indicates the day of the week and the date, or a personal message defined in the relevant menu (Ⓜ ᴅᴇꜰ3 ① ᴅᴇꜰ3 ①)
£	Indicates credit remaining (the feature and symbol depend on the SIM card used)
SUBJECT	Indicates the Cell Broadcast subject (e.g. the name of the city), depending on those activated and the service offered (when viewing of Cell Broadcast messages is enabled, information and other messages are hidden. To view them press Ⓒ)

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The Main Menu is accessed by pressing the Ⓜ key. The display will read as follows:

```
┌─────────────────────────────┐
│      ▼ıl   ⫿▦⫿  00:00      │
│ ▲▼              0-0-0-█     │
│        Menu                 │
│  ▐OK▌    ▐ ↓ ▌    ▐ ⏋➤▌     │
└─────────────────────────────┘
```
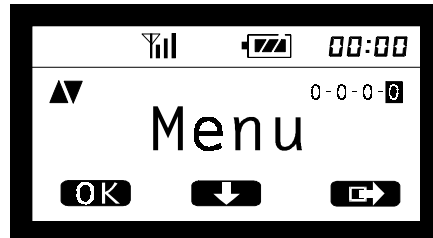
▲▼   Indicates that further fields are available (above or below) on the same menu level.

0-0-0-0   The number indicated negatively shows which menu level is active.

Menu   Indicates the name of the current menu.

OK ↓ ⏋➤   Indicates the features that can be activated using the corresponding Soft Keys ⬠Ⓜ⬠.

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Satellite Antenna

When in satellite mode, it is important that the satellite antenna be used correctly to allow you to make full use of the potential offered by the Globalstar network.

Position of the antenna while in use

Before beginning a satellite call, the antenna must be rotated to the left or right until it is against the stop (as shown in the figure below), so that it is always vertical to the ground, pointing up to the sky, while the conversation is in progress.
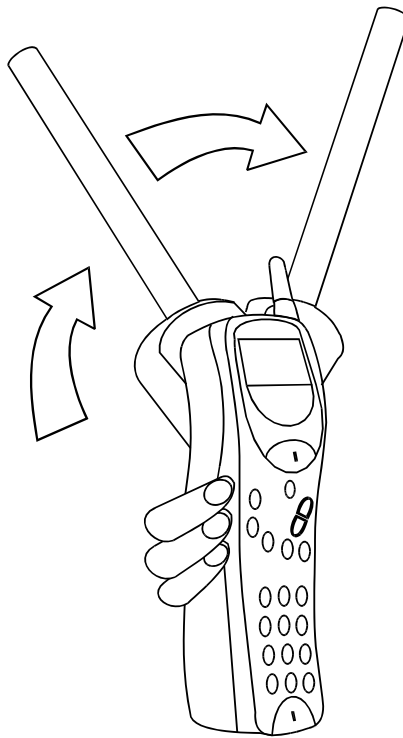
NOTE: In satellite mode it is important that the telephone and the satellite are in "sight" of each other, to achieve maximum quality service. Highest quality is therefore obtained outdoors.

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Installation of the SIM card

To be able to use the telephone, a valid format "plug-in" SIM card must be obtained.
The SIM card is supplied by the network operator or the service provider.

① Switch the telephone off. Extend the satellite antenna and rotate it counter-clockwise.
Remove the battery while holding down the release key as shown in the figure below.
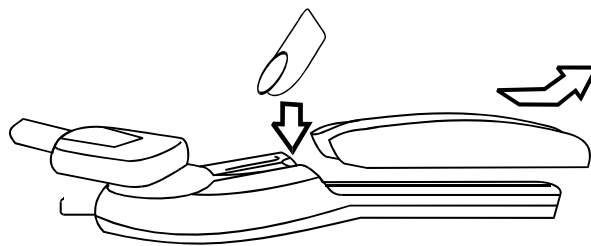
② To insert the SIM card, use the relevant guides ensuring that the bevelled edge of the
SIM card is facing the upper part of the telephone and that the gilded contacts are facing
the telephone (and thus not visible).

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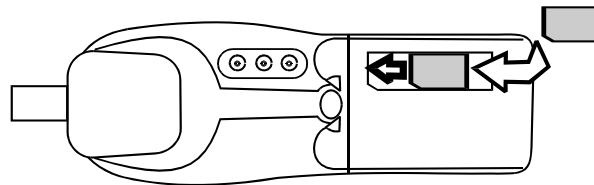
Installing the battery

① Extend the satellite antenna and rotate it in a counter-clockwise direction. The battery must be positioned in the relevant space on the back of the telephone, being careful to press the battery down until a click is heard indicating that it is in position.
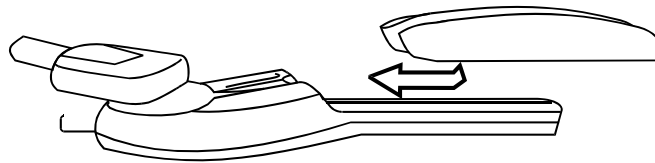
NOTE: For correct recharging the ambient temperature (**not** that on the display) must be between 0° and +45° C.

Accessory connector

The connector for accessories is on the bottom of the telephone. The connectors for the car kit (optional) are on the back of the telephone.

connections for the car kit

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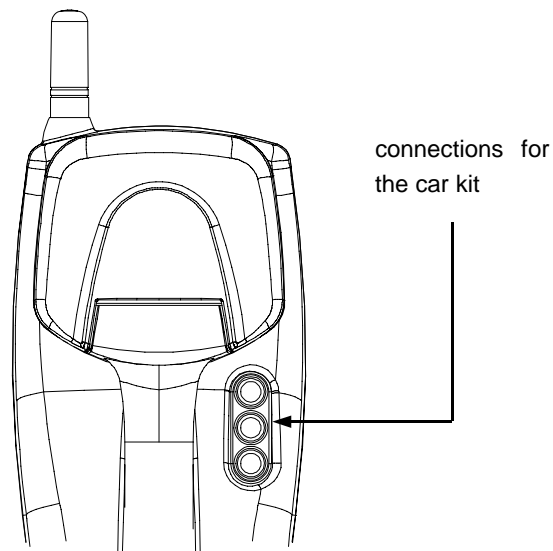
Recharging the battery

This telephone is powered by a Lithium Ion rechargeable battery (which does not effect the memory).

NOTE: Only use original batteries and battery chargers.

① Insert the appropriate battery charger plug (among the 4 provided) depending on the type used in the country in which the telephone is used, into the socket.
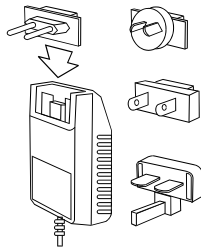
② Connect the battery charger cable to the lower end of the telephone (the arrow printed on the connector must **not** be visible when the plug is inserted) and the other end into a power supply socket (100V – 240V).
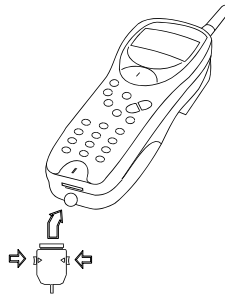
With the telephone off, the image below is shown on the display while the battery is being charged. The segments of the battery icon ( ) are animated:

With the telephone on, the symbol is shown on the display while the battery is being charged. The segments of the battery icon ( ) are animated.

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③ Recharging has been completed when the animation of the battery icon (P) stops and the symbol 𝔇 flashes when the telephone is on. When the telephone is off, the following symbol is displayed:

NOTE: The time taken for the Lithium Ion battery to recharge completely is around 3 hours, but the battery will already be at 80% charge after an hour.

④ Once recharging has been completed, disconnect the battery charger from the power supply socket and then from the telephone (by pressing the release button on the battery charger connector).

Irregularity during recharging

Any irregularity (excessive temperature, damaged battery, etc.) will be indicated on the display by the following symbol:

Battery low charge indicator

When the battery's charge has been completely used up, and it needs to be recharged, an acoustic signal will be heard and the following symbol will be displayed for a few seconds:
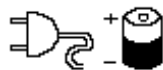
The battery must be recharged or replaced immediately.

2. Quick guide for first use

Making your first call

① **With the telephone switched off, insert a valid SIM card** (see **"Installation of the SIM card"**).

② **Insert the battery** (see **"Installing the battery"**).

③ **Charge the battery by connecting the telephone to the battery charger**.
The telephone can be used while it is being recharged but this will prolong charging time.

④ **Switch the telephone on by holding the o key down**. If the telephone displays **PIN▶**, enter the PIN code provided with the SIM card and press ✎**OK** or ⌗.

The telephone automatically sets the text language according to the information contained on the SIM card.
To change the language used on the display press ⓜ③ⁿ②ᴬᴮᶜ in sequence. Scroll the languages available using the ⓜ⬇ key and confirm the new language by pressing ✎**OK**.
To change the connection mode between the GSM network and the Globalstar satellite network, hold the ↻. key down.

NOTE: The negative symbols (e.g. **OK**) appears on the lower part of the display.

⑤ If the PIN code has been inserted correctly the display will show:

☺ 👍

⑥ When **the name of the network operator** that provided the SIM card appears on the display, the telephone is ready to use, and it is possible to make or receive phone calls.
To make a call, enter the area code and the telephone number and press ✎. The display will read **Call** and the symbol ↗ will appear.
When the call is answered the display will read **Connected** for a few seconds and then the duration of the call will be indicated.

When using satellite mode, the telephone number must be dialled in its international format: **+ [country code] [area code] [telephone number]**

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Receiving your first call

① With the telephone on, and in an area covered by the satellite or cellular radio signal, you are informed that a call is coming in either by means of a message on the display or by an acoustic signal.

NOTE: The acoustic signal can be silenced quickly by pressing ⓜ⏸ or if the one-key answering feature has been selected, any key may be pressed except for ✐☎.
This feature is temporary and does **not** exclude ringing for subsequent incoming calls.

② Turn the antenna if the telephone is in satellite mode.

Press ✐**OK** to reply and ✐☎ to end or reject the call.
If you do not answer the call, the display will show a message that reads `N.[n] missed`, where `[n]` indicates the number of calls not answered.

Emergency calls

Emergency calls can be made (even without unlocking the telephone) both in satellite and in GSM mode by entering the number **112** and pressing the ✐ key.

NOTE: Please do not abuse this service.
Read the network operator or service provider's documentation on emergency calls.

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Storing a number in the phone book

① **Enter the telephone number**, (it is better to use the "**+**" for country codes rather than the double zero: 0039…= +39…) and press ⓫.

NOTE: "**+**" is obtained by pressing the ⓪ key for more than one second.

② **Enter the name** and press ✎ⓄⓀ.
The display will read `store in` [memory position number].
The letters available can be seen on each key. Pressing once will give the first letter, the second on pressing again and so on.

③ **Enter the position** in the memory in which the new number should be stored or leave the position assigned by the telephone and press ✎ⓄⓀ.

NOTE: It is possible to store the numbers only on the SIM card.

Recalling a name in the phone book

① Press ⓫.

② Enter the initial letter of the stored name

OR

Scroll the names saved in the phone book on the SIM card using the ⓧ and ⓘ keys.

③ Press ✎☎ to make the call.

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Sending your first short text message (SMS)

① Press ✉.

② Press ①‌ (**Write new**) then ⑥ (**Telephone parameters**) and confirm by pressing ✏**OK**.

③ Press ②, then enter the **Service Centre number** (provided by the network operator or service provider) and press ✏**OK**.

④ Press ✏ for at least one second to exit the **Messages** menu.

You can now send your first text message.

⑤ Press ✉.

⑥ Press ①‌ ①. And the message **Send to:** will appear.

⑦ Enter the destination telephone number or access the phone book by pressing ⓘ. Scroll the names stored in the phone book using the ✱ and #⌐ keys, then confirm by pressing ✏**OK**. Confirm the addressee's number by pressing ✏**OK** again.

⑧ Write the message (the characters are entered following the same criteria described for entering names in the phone book, as described in the "**Using the Phone book**" chapter). Confirm by pressing ✏**OK**.

⑨ Press ✏**OK** to send the short text message (SMS).

NOTE: The operations described under points ①, ②, ③ and ④ are **only** used for the first SMS and can be omitted thereafter.

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Reading your first short text message (SMS)

① If the telephone is switched on and connected to a satellite or cellular network, an acoustic signal will indicate the arrival of a new SMS message. For a few seconds the following symbol will be displayed:
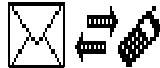
NOTE: The presence of SMS messages that have not been read is indicated by the icon ✉.

② To read the message press ✉. The following will be displayed:

```
        Yıl   ▪︎▨▨   00:00
 N/N              ▨▨◼︎◼︎◀︎

 01/01/2000       00:00
   ✉         ⬕         ⬔
```
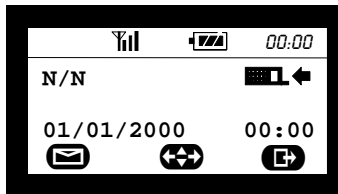
N/N indicates the number of the current SMS message out of the total number of messages, **01/01/2000** indicates the date and **00:00** indicates the time it was received.
The sender's telephone number is also displayed, and if this is stored in the phone book, the sender's name also appears.
To **read** and scroll the content of the SMS message press ⓜ⬕.
To return to the message's setting or to the **Messagge** menu, press ✐⬔.
To **reply** to the message press ✐✉. The display will read:

```
        Yıl   ▪︎▨▨   00:00
 ▤           ABC       160

   OK        123        ⬔
```
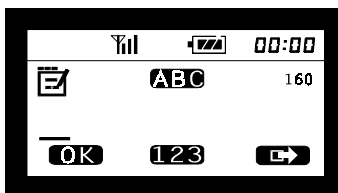
Key in your reply. Press ⓜ⑫③ ⒶⒷⒸ to move from keying in the text to inserting the destination telephone number and vice versa. To include a series of numbers in the text press ⊙ for one second. In place of ⒶⒷⒸ the ⑫③ symbol will appear.

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Confirm by pressing ✐ **OK** then press ⊂1 to send.

To scroll the list of SMS messages received, press ⌧* or #↓.

To **delete** a message, press ©️ until the display reads `Delete?`. Confirm by pressing ✐ **OK** or cancel by pressing ✐ **⬗**.

To read a message that you have read previously, press ✉, then ⊂1 ABC2.

NOTE: Messages are stored on the SIM card. So as not to take up memory unnecessarily, it is best to delete messages once they have been read.

To enable the automatic delete feature (✉ ⊂1 JKL5) see the relevant paragraph in the "**Message Menu**" Chapter.

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3. Important Warnings

In your car

Always check on the laws and regulations governing the use of cellular telephones in force in the country in which you are driving. Should you use the telephone while driving, the following should always be adhered to:

- Always pay maximum attention to your driving.
- Only use your automobile kit where available.
- Do not stop your car in the emergency lanes on a motorway to make or receive calls, only stop the vehicle in parking areas provided.

Electronic devices

Most electronic devices are protected by RF signals. Some electronic apparatus may not be sufficiently protected against RF signals emitted by the cellular telephone.

Pacemakers

- When the telephone is switched on **always** keep it at least 30 cm from pacemakers.
- Do not keep the telephone in pockets near the thorax.
- Use the ear on the opposite side from the pacemaker when using the telephone.
- If you suspect any interference with the pacemaker, switch the telephone off immediately.

Other medical devices

If you are using the telephone near medical equipment, consult the manufacturer to ensure that it is adequately protected from RF signals.

The telephone must be switched off in medical centres where this is expressly indicated. It is possible that medical equipment in use in hospitals and medical centres may be sensitive to RF signals.

Vehicles

The use of cellular telephones inside vehicles may have a negative effect on their functioning, where these have not been correctly installed, and where RF signals emitted by the cellular phone have not been sufficiently shielded.

Where there are warnings

Always keep your telephone switched off wherever notices are posted expressly requesting this.

Aircraft

Standards set by aeronautical authorities forbid the use of telephones while an aircraft is flying.
Telephones must always be switched off before boarding an aircraft.

Locations where there is a danger of explosion

The telephone must be switched off, and the battery must not be removed wherever there is a danger of explosion. Always comply with warnings and instructions. In such locations the smallest spark may cause explosion or fire.
Areas that are subject to the danger of explosion are usually, but not always, clearly marked. These include, but are not limited to: filling stations like petrol garages, between decks on ships, depots or transhipment areas for fuels or chemicals, areas subject to the emission of fuel vapours, areas where the air contains chemical products, and any other area where the request is made that vehicles be switched off.

Other warnings

Keep the telephone out of reach of children.

Only use original spares and accessories. The use of any other components shall cause the guarantee to lapse.

Do not try to dismantle the telephone. It does not contain any parts that can be repaired by clients.

Avoid the telephone coming into contact with liquids. Should this happen it must be removed from the power supply if on charge, and the supplier must be contacted.

Avoid using the telephone beyond the temperature limits: -10°C and +55°C.

Never leave the telephone in direct sunlight or in very humid or dusty areas.

The telephone can be cleaned using a moist, soft cloth, dampened with a very diluted detergent solution.

No definite data is available as to any harmful effects related to the electromagnetic waves generated by cellular telephones. Exposure to such waves can be drastically reduced by using the car kit.

4. Main Features

Switching on

① Hold the Ⓞ key down to switch the telephone on.
If the telephone displays the message **PIN▶** key in the code (provided with the SIM card) and press the ✎**OK** or ⌗ key.

NOTE: The telephone can make and receive calls only when it is switched on, a valid SIM card has been inserted, and if the user is in an area covered by the GSM land-based network or Globalstar satellite network.

② If necessary change the language on the display by pressing Ⓜ ᴅᴇꜰ3 ᴀʙᴄ2.

Switching off

Hold the Ⓞ key down for at least 2 seconds.

Access codes

The telephone and SIM card use various access codes to prevent unauthorised use. When the message requesting these (**PIN**, **PUK**, **Code**) is displayed, key in the code (displayed as a series of asterisks) and press ✎**OK**.
If an error is made in keying the digits, these can be cancelled by pressing Ⓒ as many times as required.

Security Codes (6 digits)

The security code programmed by the manufacturer is **000000** and this controls access to the **Telephone Security** (Ⓜ ᴘǫʀs7 ᴀʙᴄ2) sub-menu.

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PIN and PIN 2 codes (from 4 to 8 digits)

The PIN code (Personal Identity Number) is a private numeric password that is provided by the network operator or service provider along with the SIM card, and serves to protect the telephone against unauthorised use.
When the display shows a message requesting the PIN, key it in and press ✐▩ or ⊞. If an incorrect PIN is inserted three times in succession, the SIM card is blocked, and cannot be used any more.
The PUK code must be keyed in to set a new PIN and to unblock the SIM card.
The PIN 2 code, which is provided by the network operator or service provider, is required to gain access to certain protected services and features (FDN, unit counters, etc.), that have to be supported by the SIM card.

Deactivating and activating the PIN code

When the PIN code is activated, the telephone asks for it to be keyed in each time it is switched on. To avoid the PIN being requested on switching on the telephone, press the following keys in sequence: Ⓜ ⑦ ① ③ ②.

PUK and PUK 2 codes (8 digits)

The PUK Code (Personal Unblocking Key) is provided by the network operator or service provider along with the SIM card, and is required for unblocking locked SIM cards.
The PUK 2 Code is only provided with some SIM cards and is required for changing or unlocking PIN 2 Codes.
For further information, contact your network operator or service provider.

Password to bar calls

This 4-digit password is only required by the network service to bar calls. It is provided by the network operator or service provider at the time of subscribing to the service.

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Making a call

Key in the telephone number, preceded by the area code, and press ✎.
Information on the call status will be displayed and on completion the duration and cost will be displayed.
NOTE: The cost shown is transmitted by the network or is calculated by the telephone on the basis of data entered (Ⓜ ④ ③ ③).

International calls

Hold the + key down until the ✚ sign is displayed.
Enter the country code, area code, and telephone number and press ✎.
Example: to call the Rome number 06123456, enter + 39 06123456; to call the Paris number 123456 enter + 33 1 123456.

Automatic redialling

When a called number is found to be engaged, the telephone can be set to redial the number 10 times automatically, by pressing ✎ OK **after the message requesting you to do so is displayed**.
NOTE: To refuse the automatic redialling feature immediately (or later while the attempts are being made) press ✎ ⏹.

Correcting entering errors

To delete the last character displayed, press Ⓒ.
To cancel the display altogether hold down Ⓒ.

Recalling a number in the phone book

For information relating to storing names and numbers see the **"Using the phone book"** Chapter.

Rapid dialling

Enter the position number against which the telephone number was stored in the phone book and press ✎.

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One-key dialling

Hold the position number key (from 1 to 9) down, that relates to the position in which the telephone number was stored in the phone book. The display will read `Call` and, where stored, the name of the person being called will also be displayed.

Sending DTMF tones

DTMF multi-frequency signals allow you to communicate with answering machines, computerised telephone systems, etc.. Inserting pauses and waits in selecting DTMF tones is therefore useful for gaining access to certain services.

The DTMF tones are active (unless deactivated using ⓜ ⓐⓑⓒ2 ⓙⓚⓛ5 ⓐⓑⓒ2) and may be sent as explained below.

Where invalid sequences are sent, the display will read `Wrong Input`.

When making a call containing pauses and/or waits, it is possible to end the transmission of DTMF tones by pressing ✐ or ©.

If the DTMF tones have been deactivated a DTMF sequence can be emitted by pressing ⓜ, scrolling using ⓜ⬇, and confirming `Send DTMF` by pressing ✐🆗.

After entering at least one number, to enter tone pauses and/or waits, press the ⓣ✳ key in quick succession. The display will first show the symbol `P` (pause) and then `W` (wait).

Where the ⓗ♪ and ⓣ✳ keys are used to scroll up and down or to the left and right, `P` is entered by pressing the 7 key in quick succession. `W` is entered by pressing 9 in quick succession.

It is possible to emit a sequence of DTMF tones before making a call. Enter the telephone number, then the symbol `P` followed by the DTMF sequence.

Once completed, dialling can follow immediately or be stored in the usual way.

NOTE: Waits always continue until ✐ is pressed before proceeding.

Pauses proceed automatically after 3 seconds.

Pauses and waits cannot be set at the beginning of a number.

The `P` command cannot be inserted in succession.

Storing of pauses and waits depends on the SIM card used. Not all cards are enabled to offer these features.

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Notes during a call

While a conversation is in progress, it is possible to enter a telephone number to be called later or to be stored. If the number is simply entered, it will appear on the display a few seconds after completion of the call.

Answering a call

When a call is received, the telephone begins to ring, and the text **>>>CALL<<<** flashes on the display.
If the caller can be identified, the display will also show their telephone number (or name if this is stored in the phone book).
Press ✐**OK** to answer, ⓜ**❙❙** to silence the ring, and, ✐**☎** to reject the call.
To end the call press ✐.
For further information see the "**Main Menu**" Chapter.

Automatic answering (▨▨)

If this feature has been activated (ⓜ **3** **5** **2**) incoming calls will be answered automatically after about 6 seconds, without pressing any key. When the automatic answering feature is activated, the display shows the icon ▨▨.

Setting loudspeaker volume

The loudspeaker volume can be set using the **#** (increase) and **＊** (decrease) keys, only while a conversation is in progress and where held down for 1 second.

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Activating and deactivating the microphone

The microphone can be activated/deactivated by pressing Ⓞ for a second (only during a conversation). The display will read: `Phone muted`.

Protecting the keyboard (🔒)

Protecting the keyboard prevents accidental or involuntary pressing of keys, including the Ⓞ key.
To lock the keyboard. With the display on stand-by, hold the ⌗ key down. The display will show the symbol 🔒.
To unlock the keyboard press ⌗ for one second, followed by ⑤.
If the automatic keyboard locking feature has been activated (Ⓜ ③ ④ ①) the keyboard will be locked whenever a key is not pressed within 30 seconds.

NOTE: When the keyboard protection feature has been activated, calls can only be made to emergency numbers.

Self-locking (🔑)

If this feature has been activated (Ⓜ ⑦ ② ④ ①) a code will be requested (that preset by the manufacturer is **1 2 3**) to access certain services (outgoing calls, access to the phone book, the `Message` menu and various menu features).
Once the correct code has been entered, the Self-locking feature is deactivated. To reactivate, hold down the ⌀ key.
When the self-locking feature is active, the display will show the symbol 🔑.

Cancelling units in credit

Press © to cancel the amount of units remaining. To access the cost control feature, press (Ⓜ ④ ③).

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PNP (Private Numbering Plan)

Where provided by the network operator or service provider, this feature allows calls to be made without entering the entire telephone number. Instead only a few digits that have been agreed with the network operator or service provider are entered.
To activate the service press:

⊙✱ ⊙0 ⊙7 [n] ⊞ ⊘.

To deactivate the service press:

⊞ ⊙0 ⊙7 [n] ⊞ ⊘.

To view the state of the service (active/inactive) press:

⊙✱ ⊞ [n] ⊞ ⊘.

[n] is the number on the keyboard between 0 and 9 that corresponds to the box (group of telephone numbers) number made available by and agreed with the network operator or service provider.
The network operator assigns a group of telephone numbers to each box, that can be called by entering a short number of a few digits.

For example: A PNP call to number 123 (which corresponds to a complete telephone number) stored in the network operator's box no. 2:

⊙✱ ⊙0 ⊙7 ⊙2 ⊙✱ ⊙1 ⊙2 ⊙3 ⊘

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5. Managing calls

The telephone has call management features that can be used while a call is in progress.
During a call the list of available conversation management commands can be accessed by pressing Ⓜ.
If a second call arrives while one is in progress, the display shows the message `Call waiting` accompanied by an acoustic signal.
If the Ⓜ key is pressed, a three-option menu will appear (use Ⓜ to select one of the options, then ✎**OK** to confirm).

`Swap to waiting`
The incoming call is taken, putting the first call on hold.
If you wish to return to the first call, press Ⓜ and then ✎**OK**.

`Accept waiting`
Take the incoming call, and end the first call.

`Reject waiting`
Reject the incoming call and continue with the one in progress.

During a call, further options may be available:

Swap to [n]	Exchange with call [n]
Retrieve to [n]	Return to call [n]
Disconnect [n]	Ends call [n] which may also be a multi-conference call
Swap to multi	Adds the call to a multi-conference
Split to [n]	During a multi-conference call, allows you to speak to caller [n] in private
Send DTMF	Allows figures to be written and sent in DTMF
Info [n]	Provides information on call [n]
ECT	Where provided by the network operator, this feature allows you to conclude a conversation with two callers, and permit them to continue speaking to each other
Standard Menu	Allows access to the Main Menu

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6. Using call logging

The telephone can store the information relating to the most recent calls received and missed. Information relating to the most recent calls made is stored on the SIM card.
NOTE: When the SIM card is changed, this data is removed from the call log.
On pressing s the display will show the following information on calls made (▦L➡):

```
┌─────────────────────────────────┐
│      Y.ıl    ◄▨▨    00:00        │
├─────────────────────────────────┤
│  N/N              ▦L➡           │
│                                 │
│  01/01/2000       00:00         │
│   ◀⌐        ⬇         ⬄         │
└─────────────────────────────────┘
```
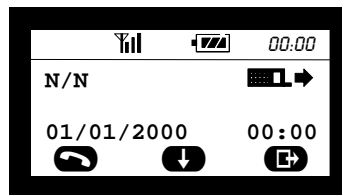
`N/N` indicates the call number out of the total number of calls in the call log, `01/01/2000` and `00:00` indicate date and time the call was made respectively .
The telephone number (if available) will appear in the centre of the display, followed by the name, if this is stored in the phone book. The number displayed can be stored in the phone book, by simply pressing ⓜ and entering the name to be associated to the number. To confirm press ⟋⬛.
The list of calls can be scrolled using ⓜ⬇ or the keys ⌗ and ⁕.

Most recent calls made (▦L➡)

The telephone can store the last 20 calls made.
Press the ⟋◀⌐ key twice to call the last number entered, or press ⟋ once and scroll the list of calls made using the ⌗ and ⁕ keys or the ⓜ⬇ key.
To make a call to the number selected, press ⟋◀⌐.

Most recent calls missed (✖)

The telephone can store the last 20 calls missed. Missed calls can be viewed by pressing ⟋ when the message `N [n] Missed` appears on the display. The calls can be scrolled using the ⌗ and ⁕ keys or the ⓜ⬇ key. To call the number displayed, press ⟋◀⌐.

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7. Using the phone book

Telephone numbers and related names can be stored on the SIM card, using the phone book feature.
The number of memory positions available on the SIM card varies, depending on the type of SIM card provided by the network operator or service provider.

Storing names and numbers

Adding a name and number

① With the telephone on stand-by, enter the telephone number.
② Press ⓘ.
③ Enter the name and press ✎ OK.
④ Enter a memory position or accept the memory position automatically assigned by the telephone (first available position). Confirm by pressing ✎ OK.
The message **Record written** will be displayed.

NOTE: If a position that is already full is entered, the display will read **Replace?**
Confirm by pressing ✎ OK or exit by pressing ✎ ⤵.
If confirmed, the content of the memory position will be deleted.

Entering names

All the letters of the alphabet can be entered. For example use key 3 to enter the letters D, E, F as follows:

- Press once to enter a "D"
- Press twice to enter an "E"
- Press three times to enter an "F"
- Press four times to enter a "2"

NOTE: To enter a small case letter, hold any numeric key down. All subsequent letters will be in lower case until a key is held down again. The upper/lower case status is indicated by an icon in the centre of the display.
The other letters are selected in the same way.

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Correcting a name/number

To edit:

① Use the ⟨1✳⟩ key to move the cursor to the left, and the ⟨#⟩ key to move it to the right, until the character **to the right** of the character to be cancelled.

② Press ⓒ to cancel the character.

NOTE: If you hold ⓒ down, the entire content of the display will be cancelled.

Characters available

Use the following table as a reference guide for producing characters (for each key the upper line contains the upper case characters, and the lower line the lower case characters).

Key	Characters
(1)	Space 1 , . : ; ! ¡ ? ¿ ' @ # $ £ ¥ % & *( ) − + = < > " / _ ¤ § Space 1 , . : ; ! ¡ ? ¿ ' @ # $ £ ¥ % & *( ) − + = < > " / _ ¤ §
(ABC 2)	A B C 2 Ä β Ç Å Æ A b c 2 ä à Ç å æ
(DEF 3)	D E F 3 (€) È Δ Φ d e f 3 (€) è é
(GHI 4)	G H I 4 Γ { ¦ } ~ g h i 4 ì] \ [^
(JKL 5)	J K L 5 Λ j k l 5
(MNO 6)	M N O 6 Ñ Ö Ø Ω m n o 6 ñ ò φ ö
(PQRS 7)	P Q R S 7 Π Σ P q r s 7
(TUV 8)	T U V 8 Ü t u v 8 ù ü
(WXYZ 9)	W X Y Z 9 Ψ = Θ w x y z 9
(+ 0)	0 + 0 +

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Recalling a telephone number from the phone book

Searching by name

To recall a telephone number from the phone book based on the initial of the name against which it was stored:

① Press Ⓜ.
② Enter the initial letter of the stored name.

<div align="center">OR</div>

Scroll the names listed in the phone book on the SIM card, using the ⑴⁕ and ⊞ keys.
③ Press ✐☎ to make the call.

NOTE: When you are in the memory position in the phone book, press Ⓜ» to move onto the position number, and then onto the telephone number. Press Ⓒ to change the number, then press ✐🆗 to confirm the edited number. When the message **Replace?** appears, store the edited number by pressing ✐🆗 or reject by pressing ✐⤇.

Searching by position

If you know the position in which a telephone number is stored, the number can be re-called as follows:
① Press Ⓜ.
② Press Ⓜ» once to move to the position indicator, then scroll the phone book positions using the ⑴⁕ and ⊞ keys, or enter the position number and press ✐🆗.
Make the call by pressing ✐☎.

If you wish to view the contents of a memory position before making a call, simply enter the memory position number and then the ⊞ key.

<div align="center">42</div>

Phone book menu

This menu can be accessed by pressing Ⓑ and then Ⓜ for one second.
The options on the `Phone book` Menu include:

`Delete record`	After requesting a second confirmation (`Delete?`), this allows the content of the memory position selected to be deleted
`New record`	Allows new numbers to be added to the phone book
`Fixed Dial`	Displays the status (`On` / `Off`) of FDN – Fixed Dialling Numbers
`SIM Info`	Provides information on the SIM card, such as: phase, number of ADN (Abbreviated Dialling Numbers), and MAX to indicate the maximum number of characters available for entering names and telephone numbers
`MAIN MENU`	Allows access to the **"Main Menu"**

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8. Message Menu

Access the **Message** menu by pressing ✉.

This menu allows you to send and receive SMS (Short Message Service) messages, to receive Cell Broadcast messages sent to all subscribers in a particular area by the network, as well as to gain access to the call mailbox feature.

To send SMS messages, the SMS Service Centre number must be entered. This number is provided by the network operator or service provider.

NOTE: SMS and Cell Broadcast messages are services that may not be supported by the network. Consult your network operator or service provider in this regard.

Structure of the "Message" Menu

MESSAGES

- ① Messages
  - ❶ Write new
    - **1** Send
    - **2** Store
    - **3** Send and store
    - **4** Parameters
  - ❷ Received
  - ❸ Written
  - ❹ Parameters
    - **1...5** User defined
      - 1 Name
      - 2 SMS Center Number
      - 3 Validity
      - 4 Destination
      - 5 Protocol identification
      - 6 Default
    - **6** Telephone Parameters
      - 1 Name
      - 2 SMS Center Number
      - 3 Validity
      - 4 Destination
      - 5 Protocol identification
      - 6 Default
  - ❺ Automatic Deletion
    - **1** On
    - **2** Off
  - ❻ Reply Path
    - **1** On
    - **2** Off
  - ❼ Report
    - **1** On
    - **2** Off
  - ❽ SMS Information
- ② Call Mailbox
  - • Call ?
- ③ Broadcast
  - ❶ Activation
    - **1** Off
    - **2** On
  - ❷ Subject

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In the **Message** menu the Soft Keys ✐Ⓜ✐ provide further features on the basis of the symbol shown above them on the display:

🔁 Enlarge and scroll the contents of a message.
✉ Reply to a message received, or update one already written.
🆎 Enter the message
🔢 Enter the telephone number
↪ Exit from the menu
⬇ Move to the next subject on the same menu level.

Messages (⊠ ①)

Write new (⊠ ① ①)

Firstly, this feature allows you to enter the destination telephone number (or to recall a number directly from the phone book by pressing Ⓜ), when the display reads **Send to:** and then, having confirmed by pressing ✐**OK**, you can write the text for the message (maximum 160 characters):
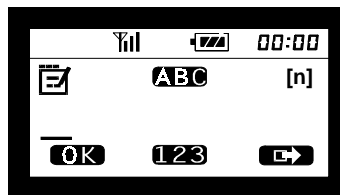
The counter **[n]** on the display indicates the number of characters that can still be inserted in writing the SMS message.
Pressing Ⓜ**123 ABC** allows you to pass from entering the text to entering the destination telephone number and vice versa.
The text characters are entered in the same way as that described for entering names in the phone book.
To enter a series of numbers in the text, press ⊙⓪ for a second: the top centre of the display will read: **123**.

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As soon as the text for the new SMS message has been confirmed, (by pressing ✎ OK)
the following options can be accessed:

Send (①)

To send the message immediately.
The display will read **Message sent** if the message has been transmitted correctly, or
Message not sent (with the reason) if it has not been transmitted correctly.

Store (②ABC)

To store a message without sending it (it can be sent at a later date).

Send and store (③)

To send and store the message.

Parameters (④)

To assign the **Parameters** (Ⓜ ① ④) while entering the SMS message, as described
later in this manual.

Received (✉ ① ②)

When a new text message is received, the telephone emits an acoustic signal and dis-
plays the following image:
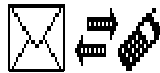
After a few seconds the image disappears and the symbol ✉ remains on the display to
indicate that a new message that has not been read has been received.

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To **read** the new SMS message press ⊠.
The following message settings will appear:

```
 ┌─────────────────────────────────┐
 │          Yᵢₗ   ⟨▓▓⟩   00:00      │
 │                                 │
 │  N/N                  ▦▋←       │
 │                                 │
 │  01/01/2000           00:00     │
 │    ✉         ⟨✦✦⟩        ⟼      │
 └─────────────────────────────────┘
```
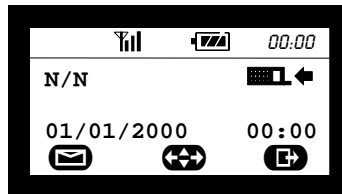
N/N indicates the number of the current SMS message out of the total number stored.
01/01/2000 indicates the date the SMS message was received, and **00:00** indicates the time it was received.
The sender's telephone number is displayed, and if this is stored in the phone book, the sender's name.
To read and scroll the SMS message's content press ⓜ⟨✦✦⟩.
To return to the message settings or to the `Messages` menu, press ⊘⟼.
To scroll the list of SMS messages (indicated by **N/N**) press ⑴✳ and ⑴♯.
To delete a message hold the ⓒ key down until the display reads `Delete?`. Confirm by pressing ⊘OK or cancel using ⊘⟼.
To read a message that has already been read, press ⊠ ① ²ᴬᴮᶜ.

NOTE: Some network operators or service providers send particular SMS messages called **Class 0 SMS messages**.
These messages are displayed automatically but are not stored on the SIM card (and are thus deleted automatically when the telephone is switched off).
To **reply** to the message, press ⊘✉. The display will show:

```
 ┌─────────────────────────────────┐
 │          Yᵢₗ   ⟨▓▓⟩   00:00      │
 │  ▤                ABC      160   │
 │                                 │
 │  ─                              │
 │    OK        123        ⟼       │
 └─────────────────────────────────┘
```
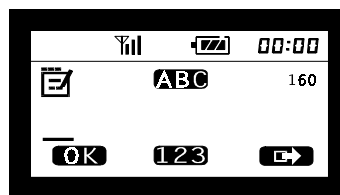
Enter your message. Enter the destination telephone number (if not included, or different from that of the sender) by pressing ⓜABC 123.
Confirm by pressing ⊘OK then press ⊘OK again to send.

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Written (✉ ① ☎3)

To read messages written and stored previously.

Parameters (✉ ① ☎4)

Before sending your first SMS message, all the data required to activate this feature must be entered, or **at least** the SMS Service Centre Number provided by the Network operator or service provider. If these are not changed, these parameters remain valid for successive SMS messages received.

NOTE: Different parameters for the transmission of SMS messages can be set from the `User defined` position (scrolling by pressing Ⓜ ① ☎4 [①...☎5]).
The number of parameters that can be stored depends on the SIM card.
The `Telephone Parameters` (✉ ① ☎4 ☎6) option stores the parameters in the telephone's memory and not on the SIM card.

Name (✉ ① ☎4 [User defined 1...5] ①)

This allows a name to be allocated to the parameter, such as the network operator or service provider's name. This is useful in that it allows a set profile comprising data entered in the next five sub-menus (`Service Center Number`, `Validity`, `Destination`, `Protocol, Default`) to be associated to each parameter, when working with a number of parameters.
Once the name has been entered, confirm by pressing ✎ OK.

Service Center Number (✉ ① ☎4 [User defined 1...5] ☎2)

Enter the SMS Service Centre Number provided by the network operator or service provider. The SMS Service Centre Number can also be viewed by pressing ✉ when a message has been received or written.
NOTE: Do not confuse this number with the destination telephone number.

Validity (✉ ① ☎4 [User defined 1...5] ☎3)

This service allows the length of time (`minutes`, `hours, days, weeks`) the SMS message is to be stored by the SMS Service Centre. To move between the sections press Ⓜ» and use ①✳ and ⌗① to change the unit of time.

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NOTE: If the maximum time entered exceeds that set by the SMS Service Centre, the time will automatically be reduced to meet the latter.

Destination (⌨ ① ⌨ [User defined 1...5] ⌨)

This feature allows the destination telephone numbers for all new SMS messages to be stored.
The number appears automatically under `Send to:` when you are compiling a new SMS message, while it is always possible to change this by pressing ©.
This feature is particularly useful when you send a number of messages to the same destination.
Once the destination telephone number has been entered, confirm by pressing ✐ OK or exit without confirming by pressing ✐ ◖.

Protocol (⌨ ① ⌨ [User defined 1...5] ⌨)

This network service allows an SMS Message to be converted into other formats such as:
`Class 0 SMS, ISDN and PSTN Services, Pagers, e-mail`, `Fax`, etc..

NOTE: Only change the preset value `0_Text` after having contacted the network operator or service provider's SMS Service Centre.

Default (⌨ ① ⌨ [User defined 1...5] ⌨)

This feature automatically sets all of the parameters defined in the previous menus.
Where there are a number of profiles stored, it allows you to choose and apply (until another is defined as being the default) the most suitable on the basis of the SMS Service Centre used, the destination telephone number, the protocol that you intend using, etc. .

Automatic deletion (⌨ ① ⌨)

This allows automatic deletion of SMS Messages that have been read to be activated or deactivated.

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Reply Path (✉ ① ⑧)

This is a network service that allows an SMS message to be sent in reply, using the same SMS Service Centre as the sender. To activate press ✉ ① ⑧ ①.

Report (✉ ① ⑦)

This network service allows you to obtain confirmation from the SMS Service Centre that your SMS message has been received. To activate press ✉ ① ⑦ ①.

NOTE: Check whether this service is offered free of charge or against payment by contacting your network operator or service provider.

Information (✉ ① ⑧)

Provides information on SMS messages on the SIM card. The first line indicates the number of messages on the card and the maximum number allowed, the second line indicates the number of SMS messages received, while the third line shows the number of written and stored messages.

NOTE: Since all SMS messages (`Written` and `Received`) are stored on the SIM card, these use up memory space. It is therefore advisable to delete them when you decide not to use them.

Call Mailbox (✉ ②)

This feature allows you to listen to voice messages stored in your own mailbox or answering machine.
To access the call mailbox service, the number provided by your network operator or service provider must be entered. Alternatively enter the number for your own answering machine.
Enter the `Mailbox number`, confirm by pressing ✎ 𝗢𝗞 and call the call mailbox number when the display shows `Call?` by pressing ✎ 𝗢𝗞.
Press ⓜ ⬛ to edit the answering machine number.
To exit without making the call press ✎ ⬛.

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Broadcast (✉ ⏎3)

The network operator or service provider sends messages to all subscribers in an area using the Cell Broadcast service.

NOTE: The Cell Broadcast number, and language used for the subjects it deals with are strictly dependent on the type of SIM card used. These vary on the basis of the type of service set up by the network operator or service provider.
The Cell Broadcast service and the related menu are only available in GSM mode.

Activation (✉ ⏎3 ①)

If confirmed when ✎OK is pressed, this feature offers the following options:
Off (✉ ⏎3 ① ①), Cell Broadcast messages are not displayed.
On (✉ ⏎3 ① ⏎2), Cell Broadcast messages are displayed.

Subject (✉ ⏎3 ⏎2)

Various subjects can be chosen for Cell Broadcast messages.

① Choose the subject by scrolling using ⓜ⬇ or using ⓣ* and #↓.

② Confirm by pressing ✎OK.

NOTE: Setting a specific subject means that only Cell Broadcast messages dealing with that subject will be received. To receive all Cell Broadcast messages, set **All** on the **Subject** sub-menu.

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9. Main Menu

The way the telephone operates can be modified to suit your specific needs using the Main Menu.

The features are divided into the main menu (first level) and various sub-menus (lower levels) which are accessible by pressing Ⓜ and following the indications given by using the Soft Keys.

It is possible to change the settings for the various features on each menu and sub-menu. Menus and sub-menus are accessible via both the **Dialogue Method** and the **Numbering Method**.

Dialogue Method

① Press Ⓜ to access the menu feature.

② Press Ⓜ⬇ to scroll the menu items, until the required section is found.

<div align="center">OR</div>

press ①✳ (scrolling down) or #① (scrolling up).

③ Once the required section has been found press ✐OK to access the corresponding sub-menu, or to confirm the choice.

<div align="center">OR</div>

Briefly press ✐⤵ to exit and return to the previous menu level without changing any settings.

Hold ✐⤵ down to exit the menu feature altogether, and to return to the display on stand-by.

NOTE: In some cases, after an option has been selected, one of the following requests will be displayed: `Security Code, Insert PIN, Insert PIN2`.
In these cases enter the code requested and press ✐OK.

<div align="center">53</div>

Numbering method

The menus, sub-menus, and settings are all numbered, with the number appearing in the top right of the display.
To access a menu feature using the corresponding number, press ⓜ followed by the corresponding menu, sub-menu and setting numbers. For example, press ⓜ and then ⌨3 ⌨5 ⌨3 to activate the **Answer mode: automatic** setting.

Network services

Some menu features correspond to network services that can only be used if provided by the network operator or service provider that supplied your SIM card.

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Menu Structure

The menu structure is represented below. Access is gained by pressing ⓜ.
Under the various sections of the **"Main menu"**, the various sub-menu levels can be found.
To access the lower levels, press ✐**OK** when the section is indicated. The menu level displayed is indicated by the number at the top right of the display.
To move between the sections at the same menu level press ⓜ⬇ (only to move down) or 🔄✳ and #🔄 (for down and up respectively).
Starting from the **"Main menu"** menu, the three Soft Keys - ✐ ⓜ ✐ - provide further features on the basis of the symbol shown above them on the display.

▢   Other choices are available
ⓘ   Consult the network for the status of an option
»   Move to the next section of the same menu
⬇   Move to the next menu section
☎   Make the call to the number indicated
⬌   Enlarge or scroll the information on the display
⬆   Exit the current menu level

MAIN MENU (overall view)

MAIN MENU

● ⓪ Network services

● ① List of Calls

● ② Audio

● ③ Settings

● ④ Call control

● ⑤ Clock

● ⑥ Phone information

● ⑦ Security

● ⑧ Call divert
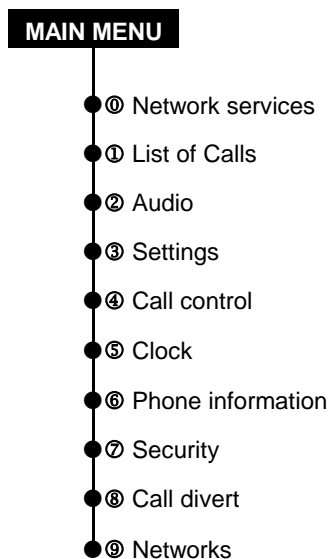
● ⑨ Networks

Caption

① =	1st menu level
❶ =	2nd menu level
1 =	3rd menu level
1 =	4th menu level

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MAIN MENU

- ⓪ **Network services**
- ① **List of Calls**
  - ❶ All
  - ❷ Unanswered
  - ❸ Received
  - ❹ Outgoing
- ② **Audio**
  - ❶ Ringing
    - **1** Tone (User defined, Standard 1...19)
    - **2** Volume
      - 1 Off
      - 2 Low
      - 3 Medium
      - 4 High
      - 5 Incremental
  - ❷ Keypad volume
    - **1** Off
    - **2** Low
    - **3** High
  - ❸ Warning tones
    - **1** On
    - **2** Off
  - ❹ Service Beep
    - **1** On
    - **2** Only No Service
    - **3** Off
  - ❺ DTMF
    - **1** On
    - **2** Off

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MAIN MENU

- ③ **Settings**
  - ❶ Display
    - **1** Brightness
    - **2** Brightness Time
      - 1 Off
      - 2 Short
      - 3 Long
    - **3** Text
      - 1 Personalized
      - 2 Date
    - **4** Welcome
    - **5** Set contrast
  - ❷ Language
    - **1** Automatic
    - **2** English
    - **3** Italiano
    - **4** Español
    - **5** Français
    - **6** Deutsch
    - **7** Português
    - **8...** Other languages
  - ❸ Call Waiting
    - **1** On
    - **2** Off
    - **3** Status
  - ❹ Keypad Lock
    - **1** On
    - **2** Off
  - ❺ Answer Mode
    - **1** One key
    - **2** Automatic
    - **3** Any key
- ④ **Call Control**
  - ❶ Minute beep
    - **1** On
    - **2** Off

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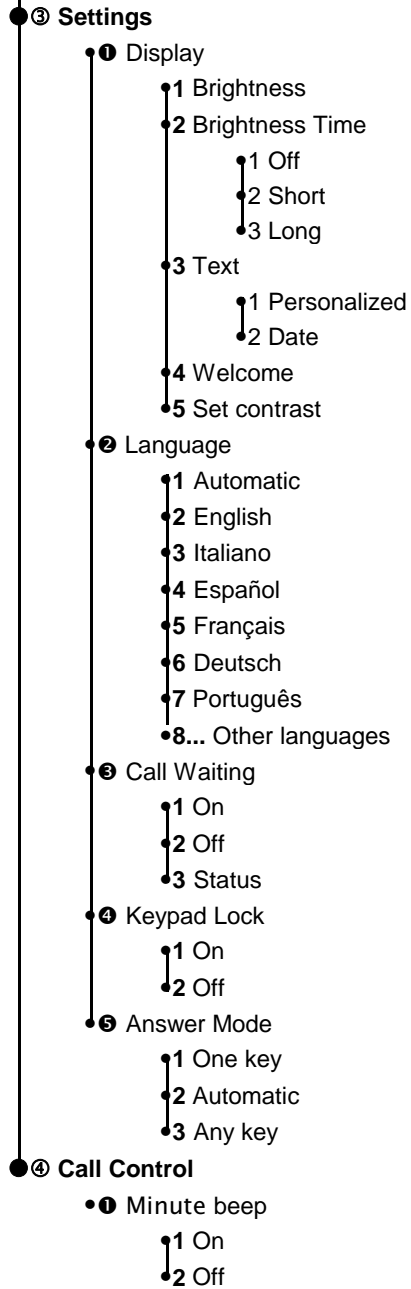
MAIN MENU

- ④ **Call Control**
  - ❷ Call Duration
    - **1** Last call
    - **2** Received
    - **3** Outgoing
    - **4** Total time
    - **5** Clear timers
  - ❸ Charging
    - **1** Last call
    - **2** All calls
    - **3** Cost control
    - **4** Reset
    - **5** Units account
  - ❹ Send own number
    - **1** Send
    - **2** Don't send
    - **3** Net default
  - ❺ CUG
    - **1** CUG Index
    - **2** Suppress CUG
    - **3** Suppress OA
  - ❻ NITZ
    - **1** Enable
    - **2** Disable
- ⑤ **Clock**
  - ❶ Set
    - **1** Enter Time, Date, Day
  - ❷ Alarm
    - **1** Time
      - 1 On
      - 2 Off
  - ❸ Date format
    - 1 dd/mm/yy
    - 2 mm/dd/yy

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MAIN MENU

● ⑥ **Phone Information**
- ❶ Own number
- ❷ IMEI
- ❸ Software
- ❹ SIM Information
- ❺ Total life

● ⑦ **Security**
- ❶ PIN control
  - **1** Change PIN1
  - **2** Change PIN2
  - **3** PIN Request
    - 1 Enable
    - 2 Disable
- ❷ Telephone security (requires the security code to be entered)
  - **1** Type
    - 1 On
    - 2 Off
    - 3 SIM List
  - **2** Delete list
  - **3** Change code
  - **4** Autoblock
    - 1 On
    - 2 Off
    - 3 Change Code
  - **5** Use default
- ❸ Call barring
  - **1** Outgoing (Outgoing calls, International, Only domestic)
  - **2** Incoming (Incoming calls, International)
  - **3** Cancel (Incoming calls, International, Outgoing calls, International, Only domestic)
  - **4** Change code
- ❹ Fixed dial
  - 1 On
  - 2 Off

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MAIN MENU

- ⑧ **Call divert**
  - ❶ Divert Always
    - **1** All teleservices
    - **2** Speech
    - **3** Fax
    - **4** Asynchronous data
  - ❷ Missed Calls
    - **1** If busy
    - **2** If unreached
    - **3** If no reply
    - **4** All missed
  - ❸ Cancel
    - **1** All
    - **2** Missed calls
    - **3** If busy
    - **4** If unreached
    - **5** If no reply
- ⑨ **Networks**
  - ❶ Net Search
  - ❷ Selection
    - **1** Automatic
    - **2** Manual
  - ❸ Network list
  - ❹ Home network

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Network services (Ⓜ ⓪)

The presence, name and configuration, and the number and type of features offered on this menu depends on the SIM card used.
Contact the network operator or service provider to obtain information on services offered.

List of Calls (Ⓜ ①)

Allows the last 20 outgoing (▦**1**➡) and last 20 answered incoming calls (▦**1**◀) or un-answered calls (✖) to be displayed.
Also refer to the **"Using call logging"** Chapter.
The options available are: **All** (Ⓜ ① ①) to display all calls in the memory, **Unanswered** (Ⓜ ① ②) to display only incoming calls that were not answered, **Received** (Ⓜ ① ③) to display incoming calls answered, and **Outgoing** (Ⓜ ① ④) to display all the calls made.
To display the sequence of telephone calls press ✳ and # or Ⓜ⬇.
To make a call to a selected number press ✎📞.

Audio (Ⓜ ②)

This menu contains 5 sub-menus: **Ringing**, **Keypad volume**, **Warning Tones**, **Service Beep** and **DTMF**.
Under **Ringing** (Ⓜ ② ①) the **Tone** (Ⓜ ② ① ①) can be used to set the type of acoustic signal to be used to indicate an incoming call, and its **Volume** (Ⓜ ② ① ②): Off, Low, Medium, High and Progressive.
When **Tone** is selected, keys ✳ and # can be used to choose the various melodies (**Standard 1...19**) available. Alternatively, using the **To be defined** option and pressing Ⓜ⬜, a personal melody may be created.
Enter the notes required (maximum of 80 including pauses) and confirm. The composition of a note presupposes the obligatory entering of its duration and sharps where required. By pressing the same key a second time the letter changes from upper to lower case indicating a change of octave (higher frequencies). The sharp must be placed immediately after the letter. The length of notes and pauses can be lengthened by pushing keys ⑨ and ⓪ respectively, a number of times (to a maximum of four). Movement within the composition is achieved by pressing the ✳ and # keys. Any errors are indicated by an acoustic signal and the cursor automatically moves to the first wrong note. The key Ⓜ» reproduces the composition.

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Key	Display		Action
1	A	a	LA
ABC 2	B	b	TI
DEF 3	C	c	DO
GHI 4	D	d	RE
JKL 5	E	e	MI
MNO 6	F	f	FA
PQRS 7	G	g	SOL
TUV 8	#		Sharp
WXYZ 9	♪ ♪ ♩ ♩		Note length
+ 0	𝄾 𝄾 𝄾 -		Pause length

The other options in the sub-menu make it possible to set the **Keypad Volume** (Ⓜ ᴬᴮᶜ2 ᴬᴮᶜ2), the options being (**Off**, **Low**, **High**), the **Warning Tones** (Ⓜ ᴬᴮᶜ2 ᴰᴱᶠ3) which indicate the connection to the line, the switching on and off of the telephone, the connection and disconnection of the battery charger, as well as a low charge in the battery.

Using **Service Beep** (Ⓜ ᴬᴮᶜ2 ᴳᴴᴵ4) the tones that indicate the absence or presence of radio signals, or the absence of cover can be activated.

The **DTMF** (Ⓜ ᴬᴮᶜ2 ᴶᴷᴸ5) option allows you to send the tone corresponding to the key pushed in multi-frequency transmissions immediately.

Settings (Ⓜ ⌫3)

Display (Ⓜ ⌫3 1)

This function allows the display **Brightness** (Ⓜ ᴰᴱᶠ3 1 1) to be set using the ✱ and # keys. The duration of this lighting after the last key is pressed can be set using **Brightness Time** (Ⓜ ᴰᴱᶠ3 1 ᴬᴮᶜ2). It is also possible to set the **Text** (Ⓜ ᴰᴱᶠ3 1 ᴰᴱᶠ3) that will appear on the display when on stand-by, choosing between **Personalized** (maximum 16 characters) and **Date**. The **Welcome** (Ⓜ ᴰᴱᶠ3 1 ᴳᴴᴵ4) option allows a welcome message to be entered when the telephone is switched on. Finally, **Contrast** (Ⓜ ᴰᴱᶠ3 1 ᴶᴷᴸ5) allows the display contrast to be set.

NOTE: If the personalised text exceeds 16 characters it will scroll on the display. The maximum length is 40 characters.

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Language (Ⓜ ⌾3 ⌾2)

This feature allows the language in which display messages will appear to be chosen. When `Automatic` (Ⓜ ⌾3 ⌾2 ⌾1) is selected, the telephone automatically recognises the nationality of the SIM card, and displays the messages in the jargon associated with this language (provided the language is stored in the telephone) .

Call Waiting (Ⓜ ⌾3 ⌾3)

When activated (Ⓜ ⌾3 ⌾3 ⌾1 this network service allows you to be notified of a call waiting during a conversation, by means of an acoustic signal. To deactivate press Ⓜ ⌾3 ⌾3 ⌾2, to check the `status` of the service (`On` or `Off`) press Ⓜ ⌾3 ⌾3 ⌾3.

Keypad Lock (Ⓜ ⌾3 ⌾4)

This feature allows automatic locking of the keyboard following 30 seconds of inactivity. Unlocking and manual locking is done by pressing ⌾#⌾ for 1 second and then ⌾5.

Answer Mode (Ⓜ ⌾3 ⌾5)

This allows the mode in which incoming calls are answered to be set. If One Key (Ⓜ ⌾3 ⌾5 ⌾1) is chosen it is possible to answer calls only by pressing ⌾⌾. In Automatic (Ⓜ ⌾3 ⌾5 ⌾2) the telephone will answer automatically after about 6 seconds. Any key (Ⓜ ⌾3 ⌾5 ⌾3) allows you to answer by pressing any key excepting Ⓜ, ⌾, ⓪.

Call Control (Ⓜ ⌾4)

Minute beep (Ⓜ ⌾4 ⌾1)

This feature activates an acoustic signal to mark each minute of conversation.

Call Duration (Ⓜ ⌾4 ⌾2)

This feature indicates the duration of the `Last` call (Ⓜ ⌾4 ⌾2 ⌾1), of all the calls `Received` (Ⓜ ⌾4 ⌾2 ⌾2), of `Outgoing` calls (Ⓜ ⌾4 ⌾2 ⌾3), as well as total conversation time (`Total Time` Ⓜ ⌾4 ⌾2 ⌾4).
The `Reset` (Ⓜ ⌾4 ⌾2 ⌾7) option allows all counters to be reset on confirmation by pressing ⌾ **OK**.

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Charging (Ⓜ ⓪4 ⓪3)

This network service indicates the amount debited for the **Last call** made (Ⓜ GHI4 DEF3 ①) and for **All calls** (Ⓜ GHI4 DEF3 ABC2).

The **Cost Control** (Ⓜ GHI4 DEF3 DEF3) option allows you to set the currency and amount for each unit. This requires the PIN 2 to be entered first.

The **Reset** (Ⓜ GHI4 DEF3 GHI4) option along with entering the PIN 2 resets all calculations, while **Units account** (Ⓜ GHI4 DEF3 JKL5) allows the number of units to be limited to a maximum preset number, upon expiry of which the call will be interrupted.

NOTE: This feature depends on the SIM card and the network operator or service provider.

Send own number (Ⓜ ⓪4 ⓪4)

This service allows you to choose whether to **Send** (Ⓜ GHI4 GHI4 ①) or **Don't send** (Ⓜ TUV8 GHI4 ABC2) your own telephone number **for all outgoing calls.** Choosing **Automatic** (Ⓜ TUV8 GHI4 DEF3), the network's settings remain unchanged.

CUG (Closed User Group) (Ⓜ ⓪4 ⓪5)

This network feature allows calls to be made to one or more groups of pre-defined users.

CUG Index (Ⓜ GHI4 JKL5 ①) permits the code attributed to a group of users by the network operator or service provider to be set.

Where activated, the **Suppress CUG** (Ⓜ GHI4 JKL5 ABC2) feature **does not** allow user groups other than those set as preferred to be called.

Where activated the **Suppress OA** (Ⓜ GHI4 JKL5 DEF3) feature, **does not** allow users not belonging to the selected group to be called.

NOTE: When making calls outside of your own group, the code for the new group must be entered in the **CUG Index**.

NITZ (Network Identity Time Zone) (Ⓜ ⓪4 ⓪6)

A network service that allows you to see the time in the zone you are in without having to change the relevant menu, where enabled (Ⓜ GHI4 MNO6 ①).

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Clock (Ⓜ ⊸5)
Set (Ⓜ ⊸5 ①)

This feature always sets the time (always shown in the top right of the display) the date and the day of the week, in that order.
To move from one number to another press Ⓜ⟫.
To scroll the values press the ①✻ and #↵ keys, or Ⓜ⬇.

Alarm (Ⓜ ⊸5 ⊸2)

The alarm works even when the telephone is switched off.
The alarm time can be set, and subsequently it can be activated (Ⓜ ⊸5 ⊸2 ①) or not (Ⓜ ⊸5 ⊸2 ⊸2). To switch the alarm off press any key. The display will read `switch on?` Which can be confirmed by pressing ✎OK or the telephone can be left off by pressing ✎⏏.

Date Format (Ⓜ ⊸5 ⊸3)

This feature sets the date format as: `day - month - year` (Ⓜ ⊸5 ⊸3 ①) or as `month – day – year` (Ⓜ ⊸5 ⊸3 ⊸2).

Phone Information (Ⓜ ⊸6)

Own number (Ⓜ ⊸6 ①)

Allows your own telephone number stored on the SIM card to be displayed. Should the display read `Own number:` enter your own number and confirm by pressing ✎OK.

NOTE: Not all SIM cards allow your own number to be written on them. Ask your network operator or service provider whether this feature is available with your SIM card.

IMEI (Ⓜ ⊸6 ⊸2)

This displays the telephone's serial number. Should the telephone be lost or stolen, this number (printed on a card on the box when it's sold) should be given to your network operator or service provider to bar the use of the telephone on GSM or satellite networks that offer this service.

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Software (Ⓜ 💬8 💬3)

Displays the telephone's software version.

SIM Information (Ⓜ 💬6 💬4)

Displays the SIM phase (1 or 2), followed by the country code (MCC) and GSM network code (MNC) one after the other.

Total life (Ⓜ 💬6 💬5)

Displays the total time of calls received and made. This cannot be reset.

Security (Ⓜ 💬7)

PIN control (Ⓜ 💬7 ①)

This feature allows the 4-8 digit PIN code to be personalised, by changing PIN 1 (Ⓜ 💬7 ① ①) and PIN 2 (Ⓜ 💬7 ① 💬2 . Where the SIM card permits, the `PIN Request` (Ⓜ 💬7 ① 💬3) feature allows the PIN request on switching on the telephone to be enabled or disabled.

Phone security (Ⓜ 💬7 💬2)

Access to this sub-menu is subject to the **security code** (set by the manufacturer as **000000**) being correctly entered.
Once the security code has been entered (represented by a series of asterisks) and confirmed by pressing ✎🆗, the following options are offered: `Type` (Ⓜ 💬7 💬2 ①) to activate or deactivate the request for the security code each time the telephone is switched on, or to allow the telephone to work only with one of the last 10 SIM cards inserted (Ⓜ 💬7 💬2 ① 💬3). `Delete List` (Ⓜ 💬7 💬2 💬2), is used to cancel the list of the last 10 SIM cards inserted. `Change Code` (Ⓜ 💬7 💬2 💬3) allows the security code to be changed. `Autoblock` (Ⓜ 💬7 💬2 💬4) activates or deactivates automatic locking and is used for editing the relative code (set by the manufacturer as **1 2 3**).
The `Default` (Ⓜ 💬7 💬2 💬5) option allows all the factory settings to be reinstated.

Call barring (Ⓜ 💬7 💬3)

This network service allows `Outgoing` (Ⓜ 💬7 💬3 ①) calls to be barred, and the `Code` to be requested. Press ✎❓ for information regarding the status of call barring: all

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the **Outgoing calls**, **International** calls, and calls within the country (**Only domestic**). It is also possible to select the type of calls you intend to bar (**All**, **Voice**, **Fax**, **SMS**, **Asynchronous Data**).

It is possible to bar **Incoming** (Ⓜ ⓟ⒎ Ⓓ⒠⒡⒊ ⒜⒝⒞⒉) calls, using Ⓜ⬛ to choose whether to bar all **Incoming calls** or **International** calls. It is also possible to select the type of call you intend barring.

Using **Delete** (Ⓜ ⓟ⒎ Ⓓ⒠⒡⒊ Ⓓ⒠⒡⒊) the call bar can be eliminated.

Change code (Ⓜ ⓟ⒎ Ⓓ⒠⒡⒊ ⒼⒽⒾ⒋) allows you to change the access code for call barring.

NOTE: When requested to **Enter code** enter the code provided by the network operator or service provider to bar calls.

Fixed dial (Ⓜ ⓟ⒎ ⒼⒽⒾ⒋)

This feature calls for PIN2 and, when activated (Ⓜ ⓟ⒎ ⒼⒽⒾ⒋ ①), permits calls to be made only to telephone numbers stored in the fixed dial number (FDN) memory. It also only allows numbers in the FDN memory to be recalled.

NOTE: FDN feature numbers are only stored on the SIM card, and can only be edited using the PIN 2 code.

Call divert (Ⓜ ⓣⓤⓥ⒏)

Divert Always (Ⓜ ⓣⓤⓥ⒏ ①)

This network service allows incoming calls to be diverted to another telephone number. Before activating the call deviation feature, the number to which the calls must be diverted must be entered.

Using the Ⓜ⬛ key it is possible to divert calls depending on the type of service: **All** calls, only **Voice**, **Fax** and **Asynchronous Data** calls.

Missed calls (Ⓜ ⓣⓤⓥ⒏ ⒜⒝⒞⒉)

This network service allows calls that are unanswered to be diverted (if engaged, not reached, if there is no reply, and all missed calls) and on the basis of the type of call. Before activating this feature the number to which the calls must be diverted is to be entered.

NOTE: The option of diverting calls that are **Missed** must include the time lapse before these are to be diverted.

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Cancel (Ⓜ ⓽ ⓷)

Deletes all diversions activated or the various types of diversion activated (all calls, missed calls, if busy, if not reached, if no reply is received).

Networks (Ⓜ ⓽)

Net search (Ⓜ ⓽ ①)

This feature searches for 900 MHz GSM networks in the area in which it is being used if it is in GSM mode.
The icon ✕ with a network's name indicates that it is not possible to subscribe to that network.
The icon 🏠 with a network's name indicates that, that network issued the SIM card.
The icon ▲ with a network's name indicates that, that network permits roaming.
Using Ⓜ⬇ or the ⓧ and ⌗ keys, choose a network and confirm by pressing ✎ⓄⓀ to register the telephone with that network.
NOTE: In satellite mode, pressing Ⓜ ⓽ ① will launch a search for network operators and service providers that offer the Globalstar network in the geographical area in which you are using the telephone.

Selection (Ⓜ ⓽ ②)

This feature activates the `Automatic` selection of the network. Where this function is active (Ⓜ ⓽ ② ①) the telephone automatically searches the network, if it is not activated (Ⓜ ⓽ ② ②) the network will have to be set manually when the telephone is switched on or when the network signal is lost.

Network List (Ⓜ ⓽ ⓷)

This feature allows the insertion of networks onto a SIM card to provide a priority list that the telephone will follow when searching for a network in the absence of that provided by the network that issued the SIM card.
Press Ⓜ⬇ to scroll the network search priority list. Using the Ⓜ⬇ key, highlight the `Empty` section, and press ✎▢ to display the preset networks that may be added to the priority list.
The ⓧ and ⌗ keys can be used to scroll the list.
Press ✎ⓄⓀ to add the selected network to the priority list.
By holding Ⓒ down, it is possible to cancel a network from the priority list after being

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asked for confirmation.
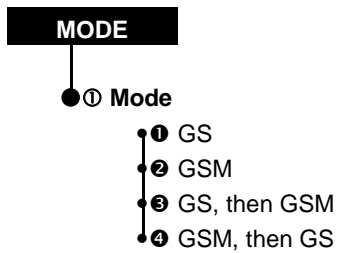
Home Network (Ⓜ 📧 📟④)

This feature displays the network operator that issued the SIM card.

10. Satellite Menu

The Satellite Menu gives quick access to satellite features.
The Satellite Menu can be accessed by briefly pressing ✆.
To move between the GSM and Satellite modes quickly, hold the ✆ key down.

MODE

● ① **Mode**
    ❶ GS
    ❷ GSM
    ❸ GS, then GSM
    ❹ GSM, then GS

NOTE: The telephone's four operating modes will **only** come into effect on switching the telephone on again after having been set.
If you are using a SIM card issued by a GSM operator, the Satellite Menu will be displayed in the following form.

MODE

● ① **Mode**
    ❶ GS
    ❷ GSM
    ❸ GSM, then GS

Mode (✆ 1)

GS (✆ 1 1)
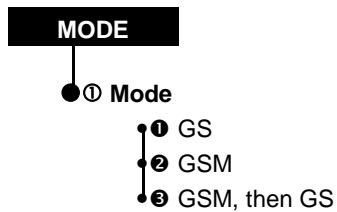
If this feature is selected the telephone will only use the Globalstar satellite network. When you are in satellite mode and the LED is permanently lit (see page 12) the display will show the symbol: ▰▱▪

GSM (✆ 1 2)

If you choose this mode, the telephone will only access the GSM cellular network.

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GS then GSM (🚫 ① ☎3)

If this feature is selected, the telephone will try to connect to the Globalstar satellite network.
If it is not able to access a satellite, the telephone will automatically switch over to a cellular mode.

NOTE: Normally every 30 minutes (although this time may be changed by the network operator) the telephone will search for the Globalstar satellite network. If it is successful in finding it, the telephone will connect to this network, otherwise it will remain on the GSM land-bound network.

GSM then GS (🚫 ① ☎4)

Where this feature is selected, the telephone will try to connect to the GSM land-bound network.
If it is not possible to connect to a GSM network, the telephone will connect to the Globalstar satellite network.

NOTE: Normally every 30 minutes (although this time may be changed by the network operator) the telephone will search for the GSM land-bound signal. If it finds the signal it will connect to the GSM network, if not it will remain on the Globalstar satellite network.

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Technical characteristics

Dual Mode Satellite / GSM 900 MHz, Phase II, Telephone

Dimensions:	224 x 65,5 x 50 mm	
Weight:	415 g (con batteria standard)	
Standard battery:	Lithium Ions (1600 mAh)	
Standby:	GSM	83 hours
	Satellite	10 hours*
Conversation:	GSM	9,5 hours
	Satellite	3,5 hours
Data Transmission:	9600 bps (cellular and satellite mode)	
Satellite Antenna:	rotating with three position locking	
SIM Card:	"plug-in" type	
Temperature:	- 10 °C / + 55 °C	

* Up to 24 hours where the satellite network offers the Slotted Mode Paging feature