



TDG-7050 User Manual

Reference :	TDG_7050 User Manual
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Date :	18 th September 2003



Document Information

Revision	Date	History of the evolution	
001	19 May 2003	TDG-7050 User Manual : Focus on the menu function	
002	20 June 2003	TDG-7050 User Manual : Full feature	
003	27 August 2003	TDG-7050 User Manual : Full feature modify	
004	18 September 2003	TDG-7050 User Manual : modify some features	

1. INTRODUCTIONS

2. GENERAL DESCRIPTION

2.1 Keyboard functions



2.1.1 Main Keypad

The main keypad is arranged in three sections:

2.1.1.1 The alphanumeric keys 0 - 9, *, #:

The 0 - 9, * and # keys are used to dial, enter security codes, phone numbers, and with their alphabetical extensions, names and short messages. They are also used to directly select an item in the menus (0 stands for menu item 10, * for menu item 11, and # for menu item 12)

- A long-press on the 0 key is used to input the international dialing symbol : +
- A long-press on the 1 key calls the voicemail box.
- A long-press on the 2 - 9 keys launches a quick-dial call.
- The function of * key

A long-press on the * key activates / deactivates vibrate mode.

- The function of # key

A long-press on the # key locks / unlocks the phone.



2.1.1.2 The communication control keys SEND, END/ON-OFF :

The SEND key initiates a call (when a number has already been entered) or activates the last called numbers menu.

While in communication, used with the 0 – 9 keys, it manages the call hold, retrieve, swap, and multiparty functions.

The END key terminates calls (while in communication) or returns the phone to idle mode from any menu. A long-press on the END/ON-OFF key turns on/off the phone.

2.1.1.3 The navigation/function keys: UP, DOWN, LEFT, RIGHT and the three softkeys

The UP/DOWN/LEFT/RIGHT keys are used to navigate in menus, lists, choice screens, and edited texts. In some screens, the LEFT key selects an item in a menu or in a list of choices; the RIGHT key allows going back in the tree menu or in a list of choices.

The softkeys' functions are displayed above their respective key on the LCD display.

Their functions are adapted to the current state of the phone.

The Ctr softkey is used in editors to delete input.

In idle screens UP/DOWN/LEFT/RIGHT keys provide direct access to important functions:

Idle screen navigation keys behavior	
UP	Games
DOWN	Main menu
LEFT	Messages
RIGHT	Agenda

In the main menu UP / DOWN / LEFT / RIGHT keys allow two-dimensional scrolling:

Main menu navigation keys behavior	
UP	Previous row
DOWN	Next row
LEFT	Previous item
RIGHT	Next item

2.1.1.2 The UP, DOWN, RECORD side-keys

The UP/DOWN/RECORD side-keys have different uses depending on the context



Context	Press	UP	DOWN
Idle	Short	Mode setting	Camera
	Long	Alert mode	
Incoming call	Short	Ringer off	
	Long	Refuse call	
Active call	Short	Speaker volume up (+)	Speaker volume down (-)
	Long	Hang up call	
Main Menu	Short	Previous item	Next item
	Long	Previous row	Next row

Remark: this table represents the MMI reference and can be adapted to each customer by customization

RECORD side-key provides direct access to voice recording.

2.2 Folder (Flap)

Closing the folder has the same behavior as using the END key, except while the mobile is in communication with the headset plugged in this case, the action is ignored and the communication continues.

Opening the folder may have effect depending on the context -see section about second LCD management (13-External LCD features)

2.3 LCD displays

This main LCD have the dimensions of 128*160 pixels.

Each line is 20 pixels high.

This allows 7 lines of text (6 lines of general-purpose text + 1 line of softkeys), for both Chinese and European languages, plus one line for icons.

15*16 fonts are used, as 3 pixels are needed for color and 3-D effects, 1 pixel is used for spacing.

Idle mode display:



- Icons
- Idle-screen wallpaper
- Currently registered network/service state
- User greeting
- Current time and date (in English or Chinese)
- Navigation key
- Phonebook

When the folder is closed, the main internal display is placed in a sleep/idle mode to reduce power consumption.

2.3.2 Icons(indicator)

There are eight, visible only in idle mode and during communications :

- Antenna & Signal strength : 4 levels
- Roaming
- Call divert indicator
- Keypad lock
- Alarm
- Voice message
- Short message
- Battery level

2.3.3 External LCD (fully graphic color display)

The second LCD uses the dimensions of 96 * 48.

2 lines of text and one for icons can be displayed.

2.4 Character set

This phone is UCS2 compliant, meaning that UCS2 coding can be used for :

- displaying the labels (texts) and menus
- sending / receiving short messages using the UCS2 alphabet
- displaying cell broadcasts using the UCS2 alphabet
- writing the names for phonebook entries
- displaying SIM-Toolkit menus and labels
- writing meeting notes



- displaying WAP pages

However, as it is not possible to integrate the entire UCS2 character set bitmaps (more than 65,000 characters), only a restricted part of the characters will be displayed depending on the embedded languages.

2.5 Language

This phone supports by default the English and Chinese languages.

2.5.1 Chinese input

This phone supports the Zicorp predictive input technology for simplified Chinese, providing << Stroke >>, << Pinyin >>, << Latin >> modes.

2.5.2 English input

This phone supports the Zicorp predictive English input engine and database.

2.6 Alert modes

This phone provides five Alert modes :

- Just ring
- Vibrate then ring
- Vibrate and ring
- Just vibrate
- Silent mode

2.7 SIM-Toolkit

This phone is SIM Application Toolkit release 99 class c compliant.

When a proactive SIM is detected, the SIM menu is accessible through the last item of the main menu.

2.8 Melodies / Sounds

This phone has built-in polyphonic melodies and a ring composer.

The ring composer is accessible from the Media Center melodies and sounds menu



only and can be used to add or modify the user melodies and sounds.

The melodies / sounds are stored in the Media Center.

This phone also has a set of pre-defined and user-defined sounds. A sound is a short melody (up to 5 notes). Sounds can be used for example for : SMS alert or Calendar meeting.

2.9 Phonebook in -phone memory

This phone provides an in -phone memory phonebook. It can store 255 records. Each record is composed of :

- A name of up to 30 Latin alphabet characters, or up to 13 simplified Chinese alphabet characters.
- A shortcut -key,
- A melody / sound selection,
- A picture / animation selection.
- Five phone numbers (of up to 20 digits) : home, mobile, office, fax, data,
- A not formatted input field called address (up to 56 bytes).
- A not formatted input field called e-mail (ASCII characters, up to 56 bytes).

2.10 Phonebook Groups

A Group principle based on names stored in the Phonebook has been added with functions related to phonebook, SMS and call alerting.

Each group record is composed of :

- An name of up to 30 Latin alphabet characters, or up to 13 simplified Chinese alphabet characters,
- A melody / sound selection when incoming call,
- A picture / animation selection when incoming call,
- A melody / sound when incoming SMS.

2.11 Agenda

This phone provides an integrated Agenda to record and schedule meetings, notes, tasks, call-reminder, birthdays, alarms, etc...



2.12 Media Center

This phone handles pictures, animations, sounds, My camera, My music, My voice melodies through a unique menu item called "Media Center".

This menu is accessed every time the user needs to have access to one of these objects.

For example, when in the phone settings Menu, an alerting Ring Tone is selected, the choice of the melody goes through the Media Center.

2.13 Memo list

This phone provides a MEMO list, which allows the user to manage work and home actives

2.14 Camera

Camera function is divided in two parts :

- The first part is about the shooter and its different options to take a picture.
- The second one is about the viewer (to see a picture)

2.15 Voice Memo

"Voice Memo" allows recording voice while the MS is in idle mode.

Playing features are also added to listen to voice memo. Moreover Voice Memo can be attached to different events (MMS, ringer, etc.).

2.16 Calculator

This phone provides a floating-point calculator with the four basic operations (addition, subtraction, multiplication, division) and one memory management.

2.17 Currency converter

This phone provides a tool to easily convert a price from one currency to another one. The user can modify currency rates and names.



2.18 Messaging

2.18.1 Short messaging

This phone provides common SMS implementation using the predictive text input method described in 12 "Predictive Text Input". It includes also EMS technology which supports inserting sound, melodies, pictures and animations into the messages.

This phone can handle up to 8 concatenated SMS messages.

2.18.2 Multimedia Messaging

This phone provides a MMS client. This client, using the WAP browser, allows the terminal to send and receive MMS messages to an MMS server on the Network. MMS client is compliant to MMS 1.1 specification.

MMS are messages composed by several slides as a slide show, each slide including up to one picture, one sound or voice memo and one text.

MMS menu is accessible from the Message Menu.

2.19 WAP

This phone provides a WAP 1.2.1 and 2.0 dual stack browser to access and display all WAP servers, with European and Chinese content.

The WAP features are available through a menu item in the main menu. (See WAP menu)

WAP works over CSD and GPRS. The User is able to configure the Data Mode through the associated menu. (See Connect Menu)

Moreover, the browser is able to read xHTML and cHTML pages.

2.20 JAVA™

2.20.1 Overview

This specification describes the Graphical User Interface of the JAVA MIDP 1.0 compliant JAM, called JAM 1.0 provided by the Esmertec Software.

The specification describes all screens and the navigation between screens.

This specification will also give a short presentation of the JAVA embedded S/W architecture.



- JAM : Java Application Manager
- JVM : Java Virtual machine
- JAD : Java Application Descriptor
- JAR : Java Archive

2.20.2 WM JAVA Access by the MultiMedia Box

With the Java softkey in MultiMedia Box, the user go to the Java Games menu then press the option softkey to select option of the Java Games or Press the Back softkey to go back to the MultiMedia menu.

2.20.3 Running a JAVA MIDlet

With the Start softkey in displayed menu, the user start MIDlet through the Specific MIDlet screen. There is a sample game on the list titled "WINK"

2.20.4 Deleting a JAVA MIDlet

With the Delete softkey in displayed menu, the user can see the message whether the user delete the MIDlet or not then press the OK softkey to delete the MIDlet or press the Cancel softkey not to delete.

2.20.5 Getting information on a JAVA MIDlet

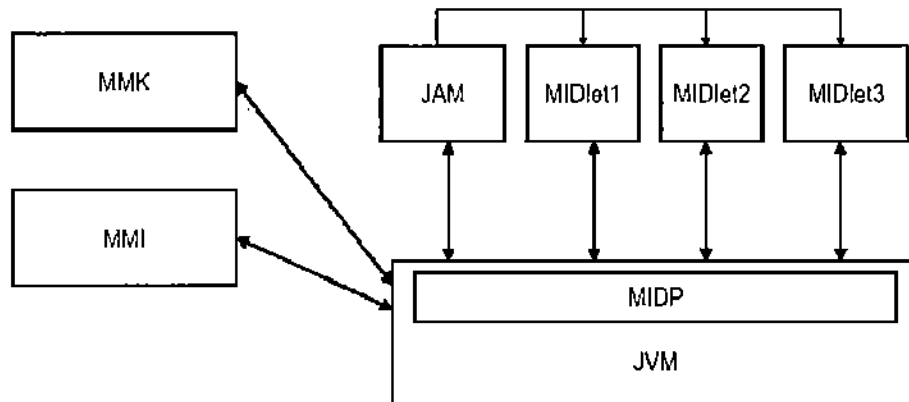
With the Information softkey in displayed menu, the user get information on a JAVA MIDlet.

2.20.6 Downloading a new JAVA MIDlet (via WAP)

JAVA MIDlets can be downloaded from several WAP site. With start WAP Browser, the user write URL which is possible to download JAVA MIDlet then select newJava Game.

If the Java Game is downloaded successfully, the user will see new downloaded game in Java Games menu.

2.20.7 JAVA Embedded S/W architecture



- The JAM is a specific MIDlet which is in charge of the Hand-User MIDlet management : Download, Run, ...
- The JAM provides the MIDP ITF to the JAM. This specific ITF support some specific graphical features, the HTTP protocol management and other facilities such as the flash recorder.
- The JAM can also used a specific WM Graphical API to create the GUI.
- Note that the WM JAVA embedded solution has good performance result (10 time higher than Standard SUN JAVA embedded solution) because all MIDlets are compiled when download. Their executions are then faster.
- WAP solution allows the JAVA MIDlet downloading feature. This feature is based on the HTTP MIME type Standard. The MIME file header points to the JAD and the JAD contains the location (URL) of the corresponding JAR that the JAM is in charge to download.

2.21 Games

This phone provide4 full graphical games :

- Labyrinthus?
- Stacker?
- Archery?
- Polygon pursuit?



2.22 Connect – Data / Fax / Infra Red

This phone includes a complete GSM/GPRS Modem. It can send data up to 14.400 kbits/s and is compatible with FAX class 1 and 2 and is Internet.

The connection with the terminal is made through a specific Data cable.

A set of AT commands is supported enabling easy use as a Modem.

The Connect Menu allows the user to set up parameters for the Data and the Fax functions, but also to define the GSM and GPRS Data accounts used for Data transfer and WAP connection.

This phone manages an Infra red interface to send and receive Data or FAX.

This interface can be used to send and receive Phonebook, Agenda, melodies, from other Wavecom based software phone or even any other peripheral Ir/Obex 1 compatible(PDA, PIM).



3. BASIC OPERATIONS

3.1 Turning On/Off the phone

3.1.1 Turning on the phone

Press and hold the ON/OFF key to start its initialization.

If neither the PIN code nor phone-lock are activated, the phone searches for an appropriate network. If the phone is in a GSM/GPRS service area, the name of the network will be shown along with signal strength bars. The phone is then in the idle mode, ready to make or receive calls.

3.1.2 Enter PIN code

After powering on, PIN code may be needed before calls can be made or received. The user must enter the correct code and press the OK softkey or the # key.

Then, the phone continues on to idle mode described above in 3.1.1.

3.1.3 Turning off the phone

Press and hold the ON/OFF key to turn off the phone.

The phone must not be turned off by removing the battery, as data that needs to be saved in the SIM may be lost.

Note : Greeting and good bye ring, text and picture or animation can be configured or removed by the user.

3.2 Making a call

3.2.1 Dialing a number

The numerical keys are used to enter the phone number. International numbers must be prefixed with a "+" (a long-press on the 0 key). A maximum of 20 digits can be entered.

The Ctr key deletes the current digit of the input field. Holding down the Ctr key will clear the whole display and return the phone in its idle mode.

The SEND key dials the number entered and displays the outgoing call animation—if the number matches a phonebook entry, the name of the person will be displayed below



it, otherwise just the number is displayed.

A ringing tone is heard once the call is properly setup. If the call could not be setup, the display can show:

- "User Busy", indicating that the called party is engaged. If the Autorecall function is activated, the phone will attempt to call again.
- "Forbidden" indicating that an outgoing call restriction is active— for example Fixed Dialing, or that an operation is prevented.

When the call is answered, a call timer and call cost (if activated) is displayed.

3.2.2 Ear-piece (speaker) volume control

The volume of the ear-piece can be adjusted during a call by using the 'UP / DOWN' side-keys.

3.3 Receiving a call

When a call is received, user is alerted using : ring (buzzer or synthesizer), LCD and Keypad backlight, vibrator depending of the phone configuration (alert mode setting, mode setting, communication specific settings), and "Answer ? " is displayed .

Melody and picture displayed may be activated when receiving a call.

- Pressing Send accepts the call (or open the folder if configured).
- Pressing End or a long-press on one of the side-keys rejects the call. In this case, a user busy indication will be sent to the network.

Some networks may transmit the caller's phone number (CLI) to the phone. In this case the number will be displayed during the call. If the number is stored in a phonebook, the name associated to it will be displayed instead of the number.

A press on the End key or a long=press on one of the side-keys hang up the received call.

3.4 Call option

3.4.1 One-Touch Speed Dialing

The user can associate 8 phonebook entries to one-touch speed dialing keys (see



section “Use of the phonebook”). The entries can be directly dialed by a long-press on the associated key: 2 thru 9.

Note: The speed-key (2-9) must be pressed for at least 1 second. If the speed-key selected has no entry associated to it, “Empty Location” is displayed; otherwise the call follows standard setup procedure.

3.4.2 Last Dialed numbers

This phone saves the 10 last numbers called. They can be accessed by pressing ‘Send’ in idle mode. For each record the name (if stored in the phonebook), date, time, and duration of the call are displayed.

If the same number is called several times, only the latest call information is displayed.

All nine numbers can be used for others ‘Last Dialed numbers’.

SEND key → Menu softkey

The Menu softkey allows the user to :

- Store the number in phonebook
- Edit the number before dialing
- Delete the record
- Delete all the last-dialed records

3.4.3 Sending DTMF Tones

DTMF tones are a way to communicate passwords and callback numbers, and are used to access answering machines, voicemail boxes, etc...

The DTMF tones are sent immediately when the user presses the numbers while in communication.

This functionality can be deactivated using the menu function (see chapter “Settings”).

After communication has ended, the numbers dialed during communication are displayed, allowing the user call or store them in the phonebook.

3.4.4 Call Menu(? ? ? ? ? ? ? ?)

During communication, the Menu softkey allows the user to manage two or more calls, browse the phonebook, go in the main menu, and mute the microphone. The menu



items displayed depend on the current state of the phone.

When one communication is active and no communications is on hold, the call menu displays:

- Phonebook
- Mute / Un-mute
- Hold
- Hang-up (active call)
- Main menu

When one communication is active and one is on hold, the call menu allows:

- Phonebook
- Mute / Un-mute
- Swap
- Hang-up
 - Active call
 - Hold call
 - All calls
- Main menu
- Multiparty
- Ect (Explicit call transfer) (? ? ? ? ? ?)

3.4.4.1 Call menu phonebook

During communication, the user can browse the phonebook and make a second call.

3.4.4.2 Call menu mute

During communication the microphone can be muted (turned off) to allow the user privacy. The ear-piece remains active.

An icon is displayed to indicate the microphone state.

Choose Un-mute in the menu or with the mute softkey : the microphone is turned back on, and the icon disappears.

3.4.4.3 Call menu hold, retrieve, swap

The active call may be put on hold by pressing the Send key or selecting Hold from the menu. (Note : subscription on the supplementary Call hold service is required)

Pressing the Send key again or selecting Retrieve from the menu reactivates the call.



If the user has subscribed to have two calls (one hold and one active), it is possible to switch between them – placing the active call on hold while reactivating the call on hold – by pressing the Send key again or selecting Swap from the menu.

3.5 Main event indications(? ? ? ? ? ? ? ?)

3.5.1 Short message indication and quick access

Upon short message arrival, the phone beeps, the message icon is displayed, and the “Message” softkey is displayed in the bottom-left corner of the screen.

Pressing the Envelope softkey directly accesses the first unread message – proceed with SMS handling as described in section “Short Message”.

The message icons remains displayed as long as an unread message exists.

The softkey remains as long as a new event with highest priority doesn't arrive.

The order of the Main event is (from the highest to the lowest):

- Voice mail
- Missed call
- SMS

3.5.2 Missed Calls indication

If there were any unanswered incoming calls the “Missed” softkey is displayed and shows the number missed.

The details (including the telephone number if CLI is available) of the last 10 unanswered calls can be stored. Their information can be accessed by pressing the “Missed” softkey or using the menu—see section “Missed calls”.

3.5.3 Voicemail box indication and access

If notification is send by the network to notify the user, then an icon is displayed.

Pressing the voicemail softkey calls the mailbox. A screen prompts for the mailbox number if is not already defined.

3.6 Keypad lock

Keypad lock is a feature that, when activated, prevents accidental calls or key-presses when carrying the phone in a pocket, briefcase or handbag. When activated, keypad



lock does not affect the way calls are received.

Keypad lock can be activated in two ways:

- from the Security menu, selecting "Keypad lock"
- from the main menu, by pressing the # key.

Once activated, the locked icon is displayed instead of Phonebook softkey.

To turn Keypad Lock off, user can either :

- press the Lock softkey and then the # key within 1 seconds.
- Or long press the # key.

Emergency calls can still be made even when keypad lock is on.

3.7 Charging the phone

Plug the charger.

If the phone is off : "Charging" is displayed blinking, the battery animation fills the battery, and the charging time is shown on the bottom row.

Note: if the phone is off, it won't be automatically turned on when plugging the charger. It cannot receive any calls, SMS, etc..

If the phone is already turned on, a flashing screen displays "Charging" during 1 second, and the battery icon starts an animation until the battery is fully charged.



4. USE OF THE PHONEBOOK

This phone supports SIM memory and "in-phone memory", each with capacities of up to 255 entries. (Note: the capacity of entries supported in SIM memory varies depending on the SIM card)

The phonebook is accessed by pressing the phonebook softkey.

Phonebook menu items are :

- Show details : View details on current entry
- Search : Search an entry by location or by name
- Add entry : Create a new entry
- Edit entry : Change the fields of the current entry
- Delete entry : Delete the current entry
- Groups : Groups management : Create, Delete, Edit, Add item
- Select memory : Select default memory for new entries. Display the capacity
- Copy/Move : Copy or move the current entry from SIM to In phone memory or from In phone memory to SIM
- Fast dial : Activate/Deactivate Fast dial in Idle screen
- Item transfer :
- List transfer :
- Send message : Send short message SMS/EMS to current entry
- Restrict call : Refused call list

4.1 Display records and calls a stored number

A phonebook record preview is displayed.

The first line displays the phone number and its type. If the record has several numbers available, the number displayed is the first non-empty of the following fields (in order): Home, Mobile, Office, Fax, and Data.

The second line displays the first non-empty of the following fields (in order): Address, E-mail, another phone number & its type (same order as second line)

On the third line:

- On the left side, an icon indicates the quick-dial key number



- In the right side, the number of the melody that plays when receiving a call from this person

On the title bar right side, an icon indicates if the record exists in phone memory or in the SIM; followed by a number showing its location.

Pressing Send makes a call to the record displayed. If several numbers are available, a pop-up menu proposes phone numbers from which to choose—either Send or the Ok softkey dials.

The Menu softkey brings up the phonebook functions menu.

The Back softkey returns to the idle screen.

4.2 Show details

The details of each phone number field are shown.

Pressing Send makes a call to the phone number of the displayed record.

The Menu softkey allow the user to modify the entry.

The Back softkey returns to phonebook preview screen .

4.3 Search for an entry

This phone provides two ways to search for a phonebook entry.

4.3.1 Find by name

The user enters with the alphanumeric keypad the name associated to the entry he's looking for.

A press on the OK softkey starts the search.

The first entry beginning with the same characters is then displayed.

4.3.2 Find by location

The user first enters the phonebook in which he wants to find a location : Phonebook SIM or "in-phone memory". Then he enters with the alphanumeric keypad the location associated to the entry he's looking for.

A press on the OK softkey starts the seach.



If the phone finds a valid entry, it is displayed on the screen.

After such a search, the phonebook is sorted by location until the next "find by name" search or the user quits the phonebook.

If the location is not used, the message `Empty location` is briefly displayed and the phone returns to the current entry.

If the location is not valid, the message `Invalid location` is briefly displayed and the phone returns to the current entry.

4.4 Store a new phonebook record

4.4.1 Enter the name

The alphanumeric keypad is used to enter the name associated to the number.

The `Clr` key deletes the current character.

Once the name entered, the user has to press the `Ok` or `Down` key to go to the home phone number entry.

To cancel the procedure, the user can press the `Back` softkey.

4.4.2 Enter phone numbers

The alphanumeric keypad is used to enter phone numbers.

The `Clr` key deletes current character.

Once a number is entered, the user has to press the `Ok` softkey or `Down` key to go to the next field.

If current field is `Data`, next field is the shortcut key.

To modify the previously entered name or number and keep the number entered, the user shall press the `Menu` key.

To cancel the procedure, the user can press the `Back` softkey.

To quickly finish and go to the second screen input, the user can press the `SEND` shortcut key.

Each card can be composed of five numbers : `Home`, `Gsm`, `Office`, `Fax` and `Data`.



4.4.3 Enter the shortcut key

If the user wants the current record phone number to be part of the quick dialing numbers, he should enter, with the numeric keypad, the associated (2 -9) key.

Once the key number entered, the user has to press the **Ok** softkey or **Down** key to go to the melody input field.

To modify the previously entered address, email, name and numbers and keep the quick dial entered, the user can press the **Up** key.

To cancel the procedure, the user can press the **Back** softkey.

4.4.4 Enter the speech line number

The '**Right**' or '**Left**' keys are used to select the Speech line number associated to the number. If the Speech line number is indifferent to user, no line is chosen.

To cancel the procedure, the user has first to press on the **Back** softkey.

4.4.5 Enter the melody/sound

If the user wants a special melody/sound associated to this number, he has to :

- Click on **right** navigation softkey : to get the list of the media center audio files.
- Click on **OK** to open the sub-directories and on **Up** and **Down** to scroll the files and **OK** to select the file.

By default "No choice" is proposed : phone will use the currently default melody/sound selected when the call arrives. The selected melody (if not default) is played to help the user to make his choice.

To modify the previous entered fields and keep the melody/sound selected, the user can make a press to the **Up** key.

To cancel the procedure, the user has to press the **Back** softkey.

To quickly finish and save the record input, the user can press the **SEND** shortcut key.

4.4.6 Enter the picture/animation

If the user wants a special picture/animation associated to this number, he has to select one in the available Media Center picture/animation list using navigation softkey. By default No choice is proposed : phone will use the currently default



picture/animation selected when the call arrives. The selected picture/animation (if not default) is played to help user making his choice.

To modify the previous entered fields and keep the picture/animation selected, the user can make a long-press to the Up key.

To cancel the procedure, the user has to press the Back softkey.

To quickly finish and save the card input, user can press SEND shortcut key.

4.4.7 Enter the group

If the user wants to associate an entry of the phonebook to a group, it must be defined before being used for an entry.

In the field 'Groups', the user has to select one group in the available group list using navigation softkey.

The list also proposes 'No group' because it is possible that an entry doesn't belong to a group.

When an entry is associated to a group, its melody is replaced by the melody of the group. However, if the user wants to associate this entry another melody, it's possible by changing the melody field.

To cancel the procedure, the user has to press the Back softkey.

To quickly finish and save the record input, the user can press SEND shortcut key.

For more detailed specifications see 5-USE OF GROUPS IN THE PHONEBOOK.

4.4.8 Enter email address

The alphanumeric keypad is used to enter the email address.

The Ctr key deletes the current character.

To modify the previous entered address, name or numbers and keep the email address entered, the user can make a press to the Up key.

To cancel the procedure, the user has to press the Back softkey.

To quickly finish and save the card input, user can press SEND shortcut key.

Note : To enter '@' select key 'P' and roll the choices.

4.4.9 Enter address

The alphanumeric keypad is used to enter the address.

The Ctr key deletes the current character.



Once the address is entered, the user has to press the Ok or Down key to go to the email address.

To modify the previous entered name or numbers and keep the address entered, the user can make a press to the Phonebook Menu

To cancel the procedure, the user has to press the Back softkey.

Once the 'Enter Address' is entered, the user has to press the Ok key to go to the confirmation screen and save the new record.

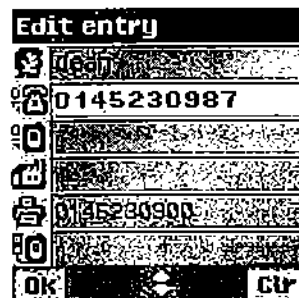
4.4.10 Save the new record

A press on the Save softkey confirms and saves the new card.

The Back softkey is used to return to the list of entries without saving the new record: all the inputs are lost !

To modify the previous field entered before saving, the user can make a press to the Up key.

4.5 Edit a phonebook record



The screen that had been already used for adding a new card is displayed. The fields are already filled with stored value. The user can modify the current field with the alphanumeric keypad.

The Left / Right keys can be used to move the cursor within the input field, the Clr key to delete the character/digit before the cursor and the Ok softkey to validate the changes.

The user then proceeds the same way as for a new entry, to validate its modification



or come back to a previous one.

To cancel the procedure, the user has to press the Back softkey : the fields are not modified.

Once all changes done, the user just presses the Save softkey to confirm all the modifications and return to the list of entries.

The Back softkey can be used to return to the list of entries without saving the new record (all the inputs are lost).

4.6 Delete a phonebook record

This menu is used to remove the current record

The user is asked for conformation before the record deletion.

The Ok softkey activates the deletion and the Back softkey cancels the action.

4.7 Groups of phonebook

If the phonebook is empty, 'Groups' is between 'Add entry' and 'Select memory'.

If there is one entry in the phonebook, 'Groups' is between 'Delete entry' and 'Select memory'.

When the user goes to the Groups menu, if there is no group he sees a popup with 'No groups' otherwise he sees the list of the groups. The group's properties are in the preview.

If there is no group :

- The Ok softkey allows to create a group.
- The Back softkey returns to the list of phonebook records

If there is a group :

- The menu softkey brings up the group functions menu.
- The Up / Down keys are used to scroll in the list of groups.
- The Back softkey returns to the list of phonebook records.

If there is between one and nine groups, the menu of the left softkey is the following :



- Add a group
- View group
- Delete group
- Properties

The Ok softkey validates user's choice.

The Back softkey returns to the list of groups.

4.7.1 Add a group

4.7.1.1 Properties

If the user adds a group, he must at first give a name to this group. A screen permits to define a name, a melody, a picture, a sound. A group cannot exist without name.

If new group name already exists, user must change :

The Ok softkey or the 'Down' key validates the name (not empty and check the uniqueness of the name).

The CLR softkey erases the character, the Back softkey returns to the list of groups.

The Back softkey returns to the list of phonebook records.

When the user has filled all the fields, he can record the group.

4.7.1.2 Fill

When the group is recorded, the user can add entries (100 maximum). If the phonebook is empty, the group can't be filled and a popup warns the user. Elsewhere a screen with 'Group empty'.

The user can 'add an entry' or 'delete an entry' by choosing 'menu' on the left softkey, else returns to the list of groups with Back in the right softkey.

The user can define a group and select the parameters without adding entries. When there are entries in the group, the list of the members appears in this screen.

The menu softkey brings up the menu of the accessible functions.

The back softkey returns to the list of groups and erase this new group.

If there is no entry, the menu of the left softkey is a popup as follows :

- Add entry to this group (list of the entries of the phonebook, the entries which belong to a group are in a different color).



When there is at least one entry, the menu of the left softkey is a popup as follows :

- Add entry to this group (list of the entries of the phonebook, the entries which belong to a group are in a different color).

Delete entry to this group :

The Ok softkey validates the user's choice.

The Back softkey returns to the list of entries of the group.

4.7.1.2.1 Add entry

When the user wants to add an entry, he sees the list of the entries of the phonebook, the entries which belong to a group are in a different color, because one entry can belong only to one group.

'SEND' or 'Menu > Select Number' enter the phonebook entry in the group.

4.7.1.2.2 Delete entry

The user wants to delete an entry of this group. He deletes the selected entry, which goes in No Group.

4.7.2 View a group

If the user chooses to view a group, he obtains a restricted list of the phonebook with the entries of the selected group :

The Menu softkey brings up the menu of the accessible functions.

The Back softkey returns to the list of groups.

The menu of the left softkey is as follows :

Add entry to this group (list of the entries of the phonebook, the entries which belong to a group are in a different color),

Delete entry to this group,

The Ok softkey validates user's choice.

The back softkey returns to the list of entries of the group.

4.7.2.1 Add entry

Behaviour is described in 4.7.1.2.1 Add entry.

4.7.2.2 Delete entry

Behaviour is described in 4.7.1.2.2 Delete entry.



4.7.3 Delete a group

A popup asks confirmation to delete the selected group.

When a group is deleted, all the entries of this group loose the properties they had from the group : melody, picture, sound

The Ok softkey deletes the group selected.

The Back softkey returns to the list of the groups.

4.7.4 Properties

The user can changed the name of the group. The new name must not already exist for an other group.

The user can also change the melody, the picture, the sound, ...for the group.

The Ok softkey validates the name of the group.

The Clr softkey deletes the character. The Back softkey returns to the list of the groups.

When the group properties are updated : all the phonebook entries for the group are also updated.

4.8 Service dialing numbers access

This menu is used to access the special SIM phonebook called SDN (Services dialing numbers).

This phonebook can not be modified by the user; it contains specific service numbers associated with the user subscription like charging information, mailbox number, and customer service.

The records are displayed with an alpha-tag read in the SIM card. The user can issue a call to the service using either the Send key or the Ok softkey.

Press the Quit softkey to return to the idle screen.

4.9 Selection of the phonebook / Check Phonebook capacity

The user can choose the default phonebook storage "SIM Memory" or "Phone Memory" in which numbers shall be stored.



The bottom of the screen displays the number of used entries and the total number of entries for each phonebook.

The Quit softkey is used to cancel the whole procedure.

4.10 Copy / Move of phonebook entries

This menu is used to copy or move the current entry in the other phonebook storage.

If several numbers are stored, the list of numbers will be displayed allowing the user to select the number he wants to copy.

A status screen informs the user where the current item has been stored.

4.11 Fast Dial

This menu is used to activate the fast dial functionality.

Fast dial functionality allows the user to directly call a phonebook entry from the idle screen :

4.12 Restricted incoming call

4.12.1 Menu

If there is no group, "Restrict Call" is not accessible.

By default, all the groups are accepted.

The menu proposes :

- All allowed

- All refused

- Add group (if one or more group is refused)

- Delete group (if one or more group is allowed)

The user can filter incoming calls, that means he can choose to receive or not the calls from one or several groups.

The choice 'No group' represents all the inputs of the phonebook, which are not associated to a group.

4.12.2 Incoming calls allowed

The user can choose to receive incoming calls only from a group, he must select Allowed.

He sees the list of the groups and can choose which he wants to select.



The choice 'No group' represents all the inputs of the phonebook, which are not associated to a group.

4.12.3 Incoming calls refused

In the same way, he can choose to not receive incoming calls from a group, for this he must select Refused.

4.12.4 Idle screen

A dedicated icon on the idle screen indicates that the restrictions of calls are activated.



5. USE OF GROUPS IN THE PHONEBOOK

5.1 Overview

The user can create up to ten groups of calls.

A group is a list of one or several entries of the phonebook.

A group can contain 100 entries maximum.

Each entry of the phonebook can be associated to a user group, an entry belonging to only one group.

Each group has its own properties (ring, picture...).

We choose to defined groups in the phonebook to send a SMS to several people, to distinguish the incoming calls, but also to accept the incoming calls of a group or on the contrary to prohibit the incoming calls of a group.

When a member of a group calls or sends a message text, the melody defined for this group rings and the corresponding picture is displayed, so that the user knows to which group the caller belongs before answering. (CLI-based).

All the people of a group have the same melody and the same picture. In this case a person of the phonebook can belong only to one group.

5.2 Phonebook

The field 'Groups' appears in each entry of the phonebook between melody and email address.

If no group is defined, the field is not accessible (grayed). The groups must be defined before being used in an entry but the group can be empty.

To define a group the user selects 'Groups' then 'Add a group'.

It is possible to define a group when the phonebook is empty.

5.3 Group -specific properties : melody, picture, alarm for message text and vibrator.

The user can associate a melody and a picture specific to each group and an alarm for message.

If an entry of a group has already an associated melody and an image, its parameters are replaced by those of the group.

When the user suppresses an entry of a group, its parameters are replaced by the



default parameters.

However these fields can be of the group, he can perform this action by changing the field melody in the phonebook.

5.3.1 Incoming Calls

When a group member calls, the group-specific melody rings, the picture appears if the functionality is available, so that the user knows to which group the caller belongs before answering.

5.3.2 Incoming Message text

When a group member sends a message, the group-specific alarm rings, so that the user can know from which group the message comes before reading it.

5.4 Message text

The user can choose to send the same message to all the persons of a group. If a member of a group has several numbers the user must select one, like for a call.

5.5 Restriction of incoming calls

It is possible to filter the incoming calls by group.

5.5.1 Accepted

The user can restrict the incoming calls to one or more groups.

All the other persons are prohibited, the phone doesn't ring but forward the call to the voicemail box.

For example, if the user is in meeting he does not want to be disturbed, but he waits for an important call. He can create a group in which he puts his interlocutor and then he chooses only this group for the accepted calls.

5.5.2 Refused

In the same way, the user can create a group of undesirable persons, if a person of this group calls, the phone doesn't ring but forwards the call to the voicemail box.

For example, when the user is on holidays, he does not want to receive professional calls. He prohibits the calls coming from the group 'WORK'.



6. USE OF MULTIMEDIA MESSAGES

6.1 Overview

The implemented generation of the multimedia message service (MMS) allows the sending and receiving of messages including text, image, and sound.

6.1.1 Message specifications

A multimedia message is composed of one or more message parts called "slides". There may be up to a maximum of 20 slides within a message.

Currently, the contents of a slide are limited to three elements: one text, one image, and one sound. Each element is optional, and may have a duration (begin and end-times) associated to it.

The entire slide may also have a duration associated to it. The minimum duration allowed is 0.10 seconds ($1/10^{\text{th}}$); the maximum is 25 seconds.

Up to 10 messages may be stored on the phone.

Messages up to 30 kilobytes in size may be sent and received.

6.1.2 Message types

The message types that can be read are:

- | | |
|--------------------------|---|
| <i>Single Part</i> | - a message containing only one image, text, or sound;
There is no presentation or duration data. |
| <i>Multipart</i> | - a message containing only one image, text, or sound
per slide, but may have multiple slides;
There is no presentation or duration data. |
| <i>Multipart/Related</i> | - a message containing a SMIL presentation part
describing the layout and durations of the one or more slides, each
with up to three elements. The SMIL part contains layout and
duration data. |

When user creates a message to send, only *Multipart/Related* message are created.



6.2 Receiving messages

All MMS message transactions occur via a remote MMS proxy-relay server. The messages are stored on the server until they are downloaded to the handset.

The server notifies handset of a new MMS via a *push* message. The user is notified of a new message and manually starts the download.

The user-message notification is stored in the Inbox folder, and is used for retrieval from the server. There are two ways to do this.

From Idle

An MMS-notification icon is displayed in the lower right-hand corner of the Idle screen to indicate the presence of a unread message notification.

The 'right' softkey activates a special popup-up screen with key information regarding the message (sender, subject, time/date, and size), and the choice to download it now.

- | | |
|-----|---|
| YES | softkey opens the MMS WAP session window and starts the download. Once the download is complete, the MMS Viewer launches automatically. |
| NO | softkey return to Idle. The notification is still in the MMS Inbox folder for later downloading. |

From the Main Menu

The MMS Inbox folder contains the notifications as well as downloaded messages (distinguished by their icons).

Select a notification and Download from the menu. This will open the MMS WAP session and start the download. Once the download is complete, the MMS viewer launches automatically.



6.3 MMS Viewer

The viewer permits the visualization of various types of multimedia media messages. It operates in full-screen mode, that is, without any title-bar or softkeys.

6.3.1 Starting the Viewer

The viewer may be started in two ways :

Main Menu

Select a message in the MMS folders (Inbox/Drafts/Outbox/Sent); then select View from the menu.

Remark/definition:

- Inbox : Stores all messages that you receive. Messages remain in the Inbox until you delete them
- Draft : Stores all messages that you save without sending. You can go back to these messages, edit them, and send them later.
- Outbox : Store all messages that they are sending.
- Sent : Stores all messages that you sent and saved.

Idle Notification

An icon is displayed in the bottom-right corner of the Idle screen.

The 'right' softkey accesses to view the message.

6.3.2 Quitting the Viewer

These actions are proposed to the user at the end of the message display : ? ? ?
inbox? ? ? ? ? ? ? .

View again	- replay the message
Browser object	- allows the user to detach the media objects (see MMS Browser)
Reply	- ? ? ? ? ? ? ? ? ? ? ? ? ? ?
Delete	- the user may immediately delete the message. After deleting the message the user returns to where the message was viewed(idle, mms folders, etc...)



6.4 MMS Editor

The MMS Editor allows the packaging of various multimedia items into a message, utilizing advanced functionality for inserting and deleting objects, time sequencing, previewing, and managing address lists.

6.4.1 Overview

6.4.1.1 Editing Modes

There are two modes for creating and editing a multimedia message.

The *Insert* mode (default mode) is used to create and add media objects and slides to the message. The message may contain up to 20 slides (screens) each with up to three elements (one text, one image, and one sound).

The *Slide Editor* mode (accessed via the *Slide Editor* menu) allows both direct and graphical manipulation of each slides' and elements' timing parameters. The minimum time is 0.1 seconds (1/10th); the maximum time is 25 seconds.

6.4.1.2 Ways to creating a message

This phone provides various ways to create a multimedia message :

6.4.1.2.1 Main menu

1) Messages → 2) MMS → 1) Write

An empty message is created. (1 slide / 0 elements / 0 addresses)

6.4.1.2.2 Phonebook

Choose an entry and select from the menu : Send → MMS

An empty message is created, but has addresses.

If the entry is a :

Single entry → 1 slide / 0 elements / 1 address

Group with *N*-entries → 1 slide / 0 elements / *N* addresses

6.4.1.2.3 Media Center

Choose a media object and select from the menu: Send → MMS

A message containing a media object (picture, animation, sound) is created

(1 slide / 1 element / 0 addresses)

6.4.2 Slide Editor

The Slide Editor provides the functionality for packaging multimedia objects into a slideshow message.

6.4.2.1 Overview

The *Slide Editor* screen displays slide information and element layout.



The current slide / total slides are indicated on the right side of the title bar.

The layout field contains the image and text elements.

The active element has a cursor around it.

An icon on the softkey bar represents a sound element

The softkey access the functionality menu and return to previous state.

UP / DOWN keys navigate the element selection cursor

LEFT / RIGHT keys navigate back and forth between the slides

MENU - gives access to the various functionalities:

- | | |
|--------------------|---|
| Insert Item | - add elements and slides to the message |
| Delete | - remove elements and slides from the message |
| Preview | - preview the message slideshow |
| Set timing | - modify the timings for current slide and its elements |
| Recipient | - send the message (goes to address entry) |



BACK - 1) returns to the **MMS main menu** (if a *new message* was created)

The message is saved to the **Drafts** folder if it is non-empty (i.e. has an element, address, or attachment)

2) returns to the **MMS folder** (if an existing message was edited)

The message is saved to **Drafts** (replacing the previous one) if something has changed (add/remove slide, element or address, timing, etc...)

Note: when editor is first started, there may be 0 elements and no element selection cursor.

6.4.2.2 Menu Functionality

Add additional elements and slides.

A sub-menu proposes	Add text	– insert a text element to the slide
	Add image	– insert an image element to the slide
	Add sound	– insert a sound element to the slide
	Add new slide	– add a new slide to the message

Add text

The user enters text via a standard full-screen text editor. UTF-8 character encoding enables support for both English and Chinese languages.

Add image / sound

The user enters the Media Center and navigates through the medias. The supported types are :

<u>Image</u>	JPEG	GIF87a	GIF89a	WBMP
Sound	i-melody	MIDI	AMR	

OK	softkey adds new element to the slide and return to slide editor
BACK	softkey returns to slide editor without adding

Add new slide

A new slide is inserted after the current slide, and becomes the one displayed. There are a maximum of 20 slides.

6.4.2.2.2 Delete

Remove a slide or an element from the message.

This table described the behavior of the Delete item.

	# Slides	# Elements	Action
A	1	0	No menu item
B	1	At least 1	Delete element
C	More than 1	0	Delete slide
D	More than 1	At least 1	Sub-menu

A) This item appears on the menu if there is:

- 1) more than one slide in the message, or
- 2) at least one element in the current slide

B) If there is only one slide, and at least one element,
this item deletes the selected element.

If there is more than one slide, and no elements on the current slide,
this item deletes the current slide. (which one next?)

If there is more than one slide, and at least one element,
a sub-menu proposes to remove the current slide, or selected element.

OK softkey opens delete confirmation window
YES softkey deletes the slide / element
NO softkey returns to the slide editor without deleting

BACK softkey returns to
1) slide editor without deleting (1st-level menu)
2) 1st-level menu (from sub-menu)

Note : Deleting a slide deletes all of its elements.

6.4.2.2.3 Preview



The viewer launches and displays each element and slide according to the message sequencing parameters. Once finished, it returns to the slide editor where the user was editing.

OK softkey previews the message
BACK softkey returns to the slide editor

6.4.2.2.4 Set Timing

Enter *Time Editor* mode to access the message sequencing parameters.

OK softkey enters the *Time Editor*
BACK softkey returns to the *Slide Editor*

6.4.2.2.5 Send

Add recipient information, subject, and attachments before sending.

OK softkey enters the send preparation screen
BACK softkey returns to the *Slide Editor*

6.4.3 Time Editor

The *Time Editor* provides the functionality for sequencing multimedia objects in a slideshow message.

6.4.3.1 Overview

The Slide Editor screen displays the timing information of the current slide and its elements.

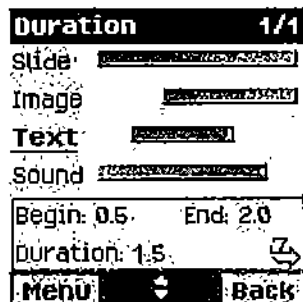
The current slide is indicated on the right side of the title bar.

Graphical bars show the time relations between the slide and elements.

The active item is underlined and in bold.

Its data is shown in the preview box below.

The icon in the preview box indicates the graphical





editing mode: *shift* or *scale*.

The softkeys provide menu access and return to the *Slide Editor*.

UP / DOWN keys navigate the active item.

LEFT / RIGHT keys change the time parameters of the active item, according to the graphical editing mode.

- 1) Shift mode - moves the entire bar left or right.
- 2) Scale mode - moves only the right end of the bar left or right

key toggles the graphical editing mode

MENU - gives access to the various functionalities:

- Enter times** - manually enter the begin and end-times
- Preview slide** - preview the sequencing of the current slide
- Save** - save the time parameters
- Options** - change the options for *Time Editor* mode
(auto-expand, and element proportion)

BACK - returns to *Slide Editor* mode. If any of the time parameters have changed, the user is proposed to save them.

Timing Rules

- ? the begin and end-times may be changed for each of the elements.
- ? only the end-time may be changed for the slide.
- ? the begin-time must be before the end-time.
- ? the minimum time increment is 0.1 seconds.
- ? the maximum end-time is 25.0 seconds.



Graphical Editing

Each LEFT/ RIGHT key press modifies the timing of the active item. The time is modified by increments of 0.5 seconds. Intermediate values must be entered manually.

In *Shift Mode*, the entire bar is shifted along the time-axis (both the begin and end-times are incremented/decremented). The result is modifying the moments of appearance and disappearance of the item in the slideshow sequencing—the duration remains the same.

In *Scale Mode*, only the end-time is incremented/decremented (begin-time remains anchored). The result is modifying the duration of the item in the slideshow sequencing—the item still appears at the same time.

Note: The slide graphical time-bar represents the total duration of the slide—while its duration may vary, its size on the screen does not change. As the duration of the slide increases, the number of pixels per time-unit decreases.

Graphically increasing the duration of the slide may give the effect of the element time-bars “moving”; when in fact, their values remain the same, and only their screen-scaling changes.

6.4.3.2 Menu Functionality

6.4.3.2.1 Enter times

Manually enter the time parameters for the active item.

UP / DOWN keys switch between the begin and end-time fields.

OK softkey validates the new values

BACK softkey returns to the *Time Editor* without the new values

Note: an error message is displayed if any of the Timing rules are violated.



(see above Timing rules).

6.4.3.2.3 Preview slide

The viewer launches to preview the current slide only. Once finished, it returns to the Time Editor.

6.4.3.2.3 Options

Options can be set to describe the behavior of the *Time Editor*.

Auto-Expand slide -allow elements to expand the slide duration.

- OFF - An element's end-time is limited to end-time of the slide.
- ON - An element's end-time is allowed to go beyond on the end-time of the slide. The slide's end-time is automatically updated.
- ASK - A popup confirms the expansion.

Example: A Slide ends at 5.0 seconds; its text element ends at 4.0 seconds. If the text end-time is changed to 7.0 seconds, with auto-expand:

OFF - this is denied (error beep), and no changes are made

ON - the slide's end-time is automatically expanded to 7.0

ElementProportions -keep the elements' times proportional to the slide duration

- OFF - The elements' begin and end-times do not change.
- ON - The elements' begin and end-times change in proportion to the slide's duration
- ASK - A popup confirms to maintain proportions or not

Example:

Item	Begin -time	End -time	Duration
Slide	0.0	10.0	10.0
Image	2.0	5.0	3.0



Text	4.0	8.0	4.0
------	-----	-----	-----

The slide's end-time is changed to from 10.0 to 15.0 seconds. Its new duration is 150% of the previous one: all elements' begin and end-times are adjusted by this factor. The new sequencing parameters are:

Item	Begin-time	End-time	Duration
Slide	0.0	15.0	15.0
Image	3.0	7.5	4.5
Text	6.0	12.0	6.0

6.4.4 Sending

The user must add at least one recipient to one of the address lists before the message can be set. A subject, attachments, and sending parameters can be set as well.

6.4.4.1 Overview

The first screen displays the list of recipients. 5 recipients are shown per screen. The user must use the menu functionality to add recipients.

The second screen displays the message's subject, any attachments, and the send-time options.

The *Sender address* is automatically filled according to the profile setting:

Sender information (Main Menu→ Messages→ MMS→ Settings→ Edit Profile)

6.4.4.2 Recipients

The user may use up to three address lists:

- ? TO – primary recipients
- ? CC – carbon-copy
- ? BCC – blind carbon-copy (not seen by other recipients)

An address can be either a MSISDN (phone number) or an e-mail address.

The maximum length for an address is 128 bytes.

6.4.4.2.1 Adding recipients

Recipients may be added in multiple ways:



- ? manual entry
- ? via phonebook
- ? via groups

- Manual Entry – the user selects the address type (MSISDN / e-mail) and inputs the address using a text-entry field
- Phonebook – the user enters the phonebook and selects the entry to add to the address list
- Groups – the user enters the list of groups and selects the one to add to the address list. If a member of a group has several numbers the user must select one, like for a call.

6.4.4.2.2 Removing recipients

Recipients may be removed via the item in the sending menu.

6.4.4.3 Subject

The user may add a subject to describe the nature of the message. The maximum length is to 40 characters.

6.5 MMS Browser

6.5.1 Overview

The MMS Browser allows the user to view and extract the multimedia objects embedded in a slideshow message.

The browser can be started in two ways:

- 1) From the menu after viewing a message
- 2) From the *MMS Folders* menu

6.5.2 Functionality

The MMS Browser will let the user manually navigate through the multimedia message, give him information about the objects and allow him to save them to the phone.



7. USE OF MEMO

The Memo manages a list of 50 notes also called memos. It is accessible through the main menu.

In ASCII/Latin mode (English) 250 characters can be store in one memo.

In UCS2 (Chinese) only 123 characters can be stored in one memo.

The first screen gives the complete list of memos.

Using the menu by pressing left softkey, it is possible to easily manage memos : view a memo, edit it, add a new one, delete it, delete all and call a phone number if there is one in the memo. It is also possible to check the space left(Memo Number).

When viewing a memo, the user may delete it, edit it, call a phone number if there is one in the text.



8. USE OF AGENDA

The Agenda manages events within a calendar.

Simple events can be created, as well as repeating events and/or events with alarms. An event is characterized by a text, date and time, frequency, type, an alarm, and a delay for the alarm.

An event is called "simple" when it is associated to a specific date, or "recurrent" when associated with a starting date and repeats either: daily, weekly, monthly, and yearly.

A recurrent event repeats indefinitely (in the limit of the calendar).

Meeting, Call, Restaurant, Entertainment, Birthday, Others

If set, the alarm can ring with a delay before the event :

- Immediately,
- 5 min. before,
- 15 min. before,
- 30 min. before,
- 1 day before.

The event management is as follow :

- 2 events can start at the same time,
- when a recurrent event is modified, all its occurrences are impacted,
- when a recurrent event is deleted, all its occurrences are deleted.

Up to 100 events are supported by the agenda.

The Agenda is accessible through the main menu.

8.1 Monthly view



2002 May							W22
SU	Mo	TU	We	Th	Fr	Sa	
			1	2	3	4	
5	6	7	8	9	10	11	
12	13	14	15	16	17	18	
19	20	21	22	23	24	25	
26	27	28	29	30	31		
Menu				Back			

The days of the current month are displayed. The navigation pad is used to move day-by-day and week-by-week.

The first line displays the month, year, and number of the week.

The days of the week are displayed on the second line.

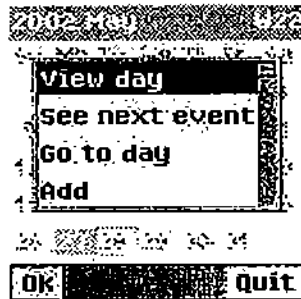
Each day may be displayed as follows:

- Bold indicates the day has at least one event attached
- "P" indicates there is a recurring event
- Today's date is **framed**
- The selected day is displayed in **reverse**
- The first column (Sunday) is darker than the rest

These attributes are not exclusive.

The menu accessible by pressing the left soft key allows to :

- View day
- See next event
- Go to day
- Add
- Delete all
- Next month
- Previous month
- Event ring type
- Check capacity



8.2 Daily view



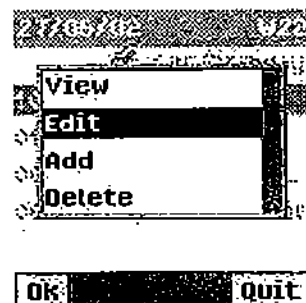
This screen displays the events for the selected day.

On the first line the date and the number of the week are displayed.

Then, the list of events appears ; each event, except Birthday, has a start time, a category and the first words of description.

A Birthday event has no start time and is displayed at the beginning of the list.

A Call event allows to call the phone number recorded by pressing the Send key.





Using the menu of the left soft key, the user is able to :

- View
- Edit
- Add
- Delete
- Delete day's events
- Next day
- Previous day,
- Event ring day,
- Check capacity.

8.3 Event view



- Date, time and number of the week are displayed on the first line ; then, the category and description are displayed on the next 4 lines

8.4 Event's edition





All the fields of an event are gathered to be edited : Category, Description, Date, Time, Alarm, Recurrence.

The fields Category, Description, Date, Time, Alarm and Recurrence are "choice fields" : pressing LEFT or RIGHT keys, the user turns out all the possibilities.

To validate the current field and enter the next one use UP / DOWN keys.

The Save soft key is used to store the event whatever the current field is.



9. USE OF THE MEDIA CENTER

9.1 Media Center presentation

The Media Center allows a global vision of all objects saved in the phone. The purpose is to manage the stored objects in the easiest way possible, gathering them in a single menu, and using this menu to access objects from other areas of the phone.

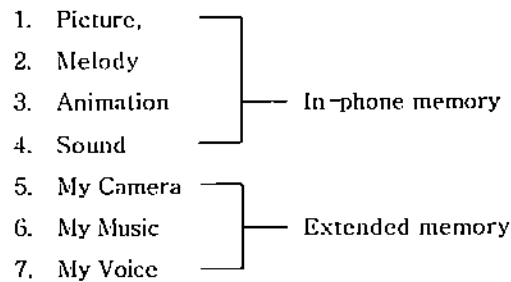
Handset Memory is physically divided in two parts :

- In-phone memory
- Extended memory, part of the memory seen by a PC via USB link.

The following chapters describe the features of the Media Center management :

- 'In-phone memory' objects
- 'Extended memory' objects
- Copy of objects from the 'In-phone memory' to 'Extended memory'
- Storage of camera pictures, voice memos and synthesized midi files.

In the media center, the user can choose between 7 media categories (objects):



9.2 In-phone memory

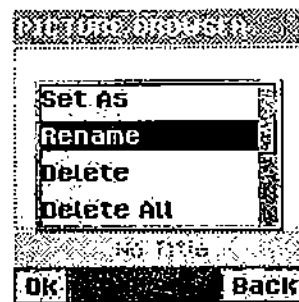
9.2.1 Generals actions

In each category, all available objects are listed : played for melodies and sounds, displayed for pictures and animations.



In each category, all available objects are listed. A dialog box presenting the object properties is shown. Properties are different depending on the object source :

- pre-defined object → Pre-defined indicator and object description
- object saved from a message → Sender and date



Each category of the media center allows the following actions:

1. Assign an object to every possible event (Set as ...) : melody to ring or alarm, animation to greetings, etc.
2. Send an object through an EMS message (the object is inserted in a message editor, the user switches directly from the Media Center to the Short Message editor screen), (? , Melody→Predef melodies? ? ? ?)
3. Edit : only for user melodies,
4. Create : only for user melodies,
5. Rename : change object name,
6. Delete : only for stored objects (user objects),
7. Delete all stored objects of the current media type,
8. Copy objects to store them in Extended Memory (see '9.2.2-Copy action



on Picture and on Melody objects' for more details)

9. View the memory state.

Delete, Delete All, Rename are not visible to pre-defined objects.

If a media is used by an application (a sound is set as calendar alarm) and the user wants to delete this specific one, the software replaces in the application, the former object in use by a default one (except for picture / phone book entry association, where the link is lost and set to empty).

Stored objects are not deleted if the EMS/MMS source from which it has been detached is deleted.

The Media Center has a global capacity for the objects it contains. The memory space is shared between all different kinds of objects.

9.2.2 Copy action on Picture and on Melody objects

Picture and Melody objects are the objects stored in :

- Media Center/Picture/Pre-defined :
 - Bmp objects
 - Installed during customization
- Media Center/Picture/My Picture :
 - Bmp, gif, jpeg, png objects
 - Downloaded via WAP or MMS
- Media Center/Melody/Pre-defined : proprietary this phone's format objects.
 - Proprietary this phone's format objects
 - Installed during customization
- Media Center/Melody/My Melody :
 - Synthesizer MIDI ROHM format or voice memo format.
 - Downloaded via WAP or MMS

In order to see non -proprietary Phone's objects of these directories from a PC connected to the handset, they to be placed in the 'Extended memory'.

Then a new action is created to copy them and to store them in 3 new directories created in 'Extended memory'.



- My Camera
- My Music
- My Voice

These directories are described in the following chapters.

According to the object type, the copy is done automatically to the appropriate directory of the extended memory :

- Picture (bmp, gif, jpeg, png formats) in 'My camera'
- Melodies (Synthesizer MIDI ROHM format) in 'My Music'
- Voice (voice memo format) in 'My Voice'
- Other formats are not supported

For example, to copy an image :

Press OK to select an image in Pre-defined or My picture option.

Select copy function from the menu button.

Its name appears without extension

The user can change the name. The correct extension will be automatically added.

If the file name already exists, confirm to overwrite this object.

9.2.3 Media center objects' use

9.2.3.1 Pictures

Pictures can be set as :

- Incoming Call,
- Phone Book
- Idle picture
- Power on
- Power off

If picture height is smaller than or equal to 3 lines, picture is displayed as idle screen and replace the 4 keys direction.



If picture height is higher than 3 lines picture is displayed as wallpaper and positioned at screen center. The 4 keys direction are hidden.



9.2.3.2 Sounds

Sounds can be set as :

- Ring
- Phone Book
- Greeting ring
- Bye ring
- Agenda event
- New SMS tone
- SMS CB tone

9.2.3.3 Melodies



Melodies can be set as :

- Ring
- Phone Book
- Greeting ring
- Bye ring
- Agenda event
- New SMS tone
- SMS CB tone

▼

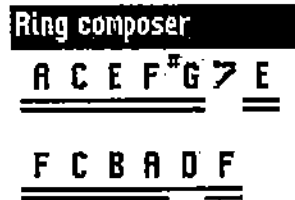
9.2.3.3.1 Personal Melody Composer

The personal melody composer is only available in 'My melodies' list menu.

If this list is empty when user tries to display the personal melody list, the user is prompted to confirm the creation of a new melody. He has to press 'Yes' softkey to launch the Ring composer or 'No' to cancel current operation.

If the list contains at least one melody, user can edit or create new personal melody by pressing the menu softkey displayed.

This graphical option allows the user to create two personal ring melodies (up to 80 notes).



The way to proceed is:

- Select one of the 7 frequencies with the keys "1~ 7" (2 octaves).
- Press the same key again (before 1 second) to change the letter from the upper to lower case thereby changing the octave (higher to lower).
- Key mapping:

Key	Display		Action / Note
1	A	a	LA
2	B	b	SI
3	C	c	DO
4	D	d	RE
5	E	e	MI
6	F	f	FA
7	G	g	SOL

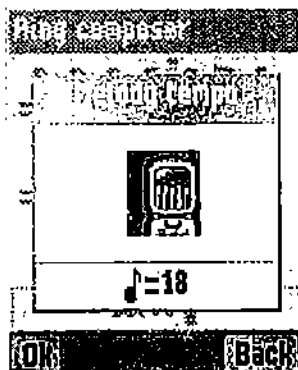
- Select the half tones (flat and sharp) by using the "*" / "#" keys.
- Select one of the four note duration by using the "9" key (1/4, 1/2, 1 and 1 1/2 time),
- Select one of the four pause length by using the "0" key (1/4, 1/2, 1 and 2 time),
- Scroll in edited melody using LEFT and RIGHT keys

Each new note is displayed on the screen. The number of entered notes is displayed at the bottom of the screen.



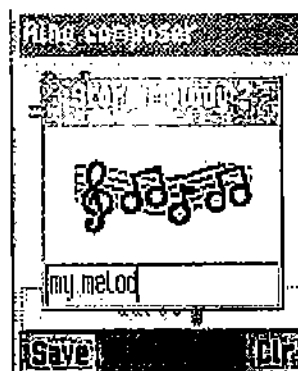
The CLR key deletes the current note.

The Ok softkey is displayed ends the edition, plays the written melody and displays a screen to save modifications or Back to the melody edition.



In this screen :

- UP and DOWN keys to adjust the melody tempo,
- Back softkey return to the editor without saving,
- Ok softkey displays the 'store melody?' screen.
- stores the current melody.



The SAVE softkey is displayed ends the edition, plays the written melody and displays a screen to save modifications or Back to the melody edition.

In this confirmation screen :

- CLR softkey delete default melody title,
- Back softkey (case no more character displayed) return to the melody tempo



editor without saving.

- Ok softkey stores the current melody in Media Center 'My melodies' list.

9.2.3.4 Animations

Animations can be set as :

- Incoming Call.
- Phone Book
- Idle picture
- Idle picture
- Power on
- Power off

9.3 Extended Memory

9.3.1 My Camera, My Music and My Voice description

Three default directories are present :

- My Picture
- My Music
- My Voice

They will be re-created by the handset if they have been deleted from a PC

9.3.1.1 Camera files

The pictures taken with the camera are stored in the directory 'My Camera'.

In the example below, the detailed window just above the "Menu" and "Back" softkey contains :

- File size
- File date

When a picture file is selected, the different menu options are :

- View
- Set as...
- Send
- Rename



- Delete

9.3.1.2 Music File

In the following picture, the detailed window just above the 'Menu' and 'Back' softkey contains :

- File size

When a MIDI file is selected, its music is played and the menu items are :

- Set as...
- Rename
- Delete
- Delete all

9.3.1.3 Voice Memo

Voice Memos are stored in 'My Voice' directory.

The detailed window just above the 'Menu' and 'Back' softkey contains :

- File size
- Remaining capacity

For AMR files, the different menu items are :

- Set as...
- Rename
- Delete
- Delete all

9.3.2 Inter-connection PC/Handset

The access to the extended memory from PC can be done via the USB link.

By this way, the memory is seen as its own hard disk and the user can do all the actions proposed by his PC navigator (copy, move, delete, ... , etc).

If a connection via a USB port is done, the items

- My Camera
- My Music
- My Voice



are disabled on the handset.

If the handset is connected to a PC via the USB port, accesses to My Camera, My Music, My Voice can only be done from the PC. (Impossible to write or read the files of the extended memory from the handset).

If when the phone user visualizes data stored in the extended memory, a connection via a USB port is done, then he has no more access to this data and return to the Media Center menu.

If when an object copy is in progress, a connection to a PC via an USB is done, then the access to the extended memory can be done only when the copy is finished.



10. SYSTEM MENU

10.1 Basic operation

This phone offers functions and features that are accessible through a menu system.

The user has to press the main keypad DOWN key or the DOWN side-key to enter the menu on the first item.

In the main menu (first level) :

- The UP, DOWN, RIGHT and LEFT keys are used to scroll the menu display,

In other levels:

- The UP and DOWN keys are used to scroll the menu display,
- The UP and DOWN side-keys are used to scroll the menu display,
- The RIGHT key is used to enter the selected menu item
- The LEFT key is used to go back the previous menu level.

The possible actions are also associated to the two softkeys.

Note : The main menu can also be accessed while in communication using the contextual menu.

11. MENU FUNCTIONS

11.1 Mode Setting

This menu proposes five different modes to define the general behavior of the phone (modifying the user settings defined with the main menu settings) depending on the user situation.

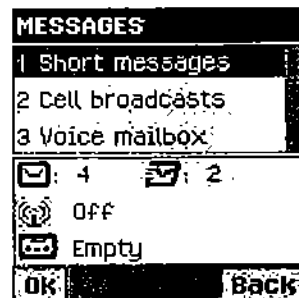
In normal mode, the user settings defined in the main menu are applied without modification.

The proposed settings are :

- Normal : No modification of the user settings.
- Meeting : Vibrate alert mode, no ring level, no key sound tone, no auto-answer.
- In car : Ring only alert mode, max ring level, auto-answer on.
- Pocket : Ring and vibrate alert mode, max ring level, no auto-answer.
- Silent : no ring level, no message tone, no key sound tone, no auto-answer

11.2 Messages

The Message menu gives access to Short Messages, MMS, Cell Broadcasts and Voice Mailbox parameters.



11.2.1 Messages Type

The Short Message menu allows the user to access through a unique inbox SMS, concatenated SMS and EMS.



11.2.1.1 Short Messages (SMS)

SMS messages are personal short text messages, of up to 160 characters long that the user can send to, or receive from, another GSM phone user. The messages are not sent directly to the other GSM phone but go via a Service center, which keeps the message while the destination phone is unreachable (within the validity period of the message).

When an incoming message has arrived, the phone beeps and the message icon is displayed. The message is directly stored into the SIM if this one is not full. The user has, then, the choice to keep or delete it.

When the SIM is full, the message icon blinks to alert the user he has to delete some messages in the SIM card if he wants to receive the new one.

The sender can be informed when the destination phone receives the message if the phone has been configured to do it (SMS receipt function).

11.2.1.2 Concatenated SMS and Enhanced messages (EMS)

This phone follows the EMS standards described in GSMA 23.040 Release 4. This service handles concatenated SMS up to 8 messages.

This phone supports an upgraded version of the EMS 4.0: it handles color pictures sending/receiving. Color picture format and color definition is described in EMS release 5.0 (pictures up to 32x32 in 64 colors).

The EMS and concatenated SMS are stored in the flash memory.

They are handled in the same Inbox/Outbox as SMS. They can be distinguished from a normal SMS by a special icon in the message list.



The EMS function allows the user to insert pictures, melodies, sounds and animations in its messages. New functions have been added in the editor menu to allow the user to insert media object in its message. All objects are stored in the Media Center menu.

When an EMS has been received, if it includes media objects (pictures, sounds,...), they can be detached and stored in the media center through the editor menu.

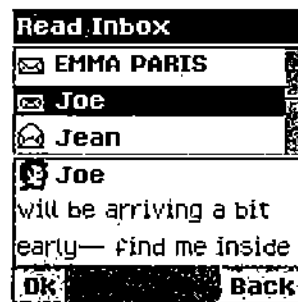
11.2.2 Inbox (Read)



When the user chooses this item the list of all the read and unread (unread first) messages is displayed. This list contains all SMS, EMS and concatenated SMS received by the user. The messages are sorted by date. A "E" in the top left corner of the message icon identifies an EMS message.

The phone indicates the originating address of the received message(s) or the associated alpha-tag if this address is found in the phonebook. It displays the beginning of the not already sent messages and the destination number of the sent messages.

A preview of the message is show in the low part of the screen. Preview is not available for EMS containing media objects.



The icon before the number (or the alpha-tag) indicates if the message is:

- not read (close envelope)
- read (open envelope)

The Back softkey is used to return to the Short messages menu.

Using the Up / Down keys the user highlight the message he wants to operate on and the Menu softkey to display the possible actions popup menu.

This menu gives the following choices :

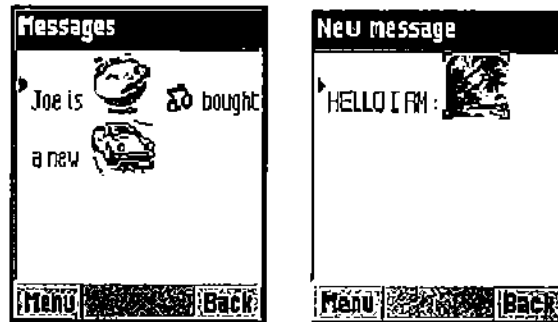
- Read the current message Read
- Delete the current message Delete
- Delete all the message except the not read Delete all
- Display the properties of the current message Properties

11.2.2.1 Read a SMS

The message starts with the contents followed by the properties: sender / receiver number or name if found in the phonebook, date and time of reception / transmission. If the message doesn't fit in the screen the Up / Down keys scroll the display.

At any moment, the user can press the Back softkey to return to the Inbox menu.

The Menu softkey displays the list of the possible actions related to the currently displayed message.



The user can then:

- | | |
|---|------------|
| ● Delete the message | Delete |
| ● Forward the message as it is or modified | Forward |
| ● Reply to message | Reply |
| ● Call the sender or dial a quoted number within the text numbers | Extract |
| ● Display the properties of the current message: | Properties |

If the sender number is displayed at the end of the message or a number is quoted within the text, the choice of the item Extracts numbers displays the list of the available numbers. With the UP / DOWN keys, the user choose the number to dial then press the Send key or press the Back softkey to go back to the message.

11.2.2.2 Read an EMS

The phone processes an EMS reception in the same way as a SMS. But an EMS is saved in the ME flash memory whereas SMS are stored in the SIM card.

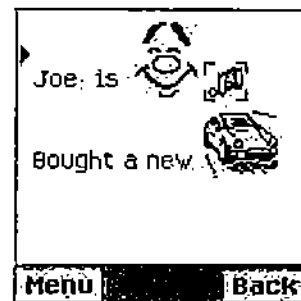
The user can read EMS/SMS through the standard short messages menu (Messages/Short messages/Inbox).

The user can forward or reply to the message help to the menu.

When the user is reading an EMS, UP and DOWN keys allow to modify the active line (go to previous/next line).



Picture 1

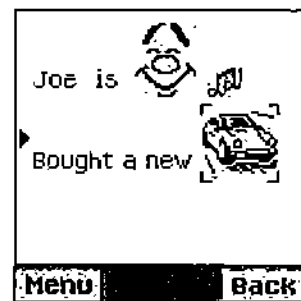


Picture 2

If the active line contains an attachment, LEFT and RIGHT keys are used in order to navigate through them (Picture 1 and 2). If the pressed key goes to the end of the line, it behaves the same as with UP or DOWN keys (=> go to the next line - (Picture 3 and 4).



Picture 3



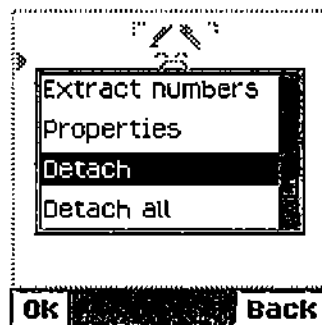
Picture 4

When the cursor is on a melody/sound icon, the melody/sound is played.

It is possible to directly detach all the objects (only objects that can be detached) included in the message using Menu/Detach All.

When the cursor is on an object:

- the object is played (animation, sound, melody)
- the menu includes "detach" and "set as" items ("set as" saves the object).



EMS attachments are not saved (detached) at the reception. The user can store the current object using menu/detach or menu/set as.

The ME warns the user if there is not enough free space to store the attachment. If the user detaches all objects (more than 1) and the ME cannot save all of them (but at least one), it does not save any attachment at all and warns the user. Before saving these objects, the user has to free some memory in the Media Center.

If the user deletes an EMS, detached objects are not deleted. Detach is not available if the object has already been detached and exists in the Media Center.

11.2.2.3 Delete



A special screen asks for the user's confirmation to delete the current messages

11.2.2.4 Delete all

A special screen asks for the user's confirmation to delete all the messages.

N.B. : The unread messages can't be deleted this way.
To delete an unread message the user select 'Delete' Item.

11.2.2.5 Reply

Using the option, the user can reply to the message without searching for the destination number.

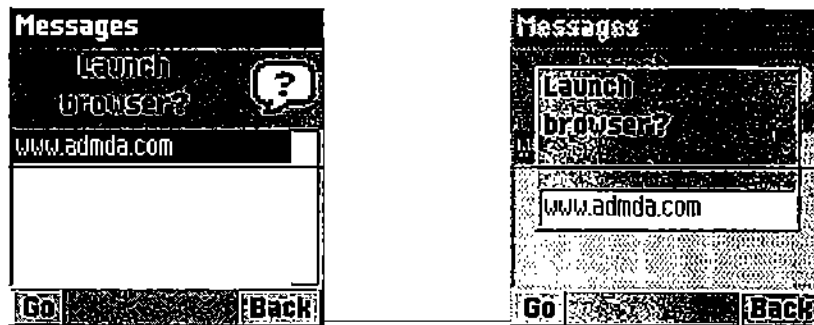
11.2.2.6 Extract Number



Using the option, the user can extract numbers from the message such as :

- Originating number
- Any numbers that were in the body of the SMS text





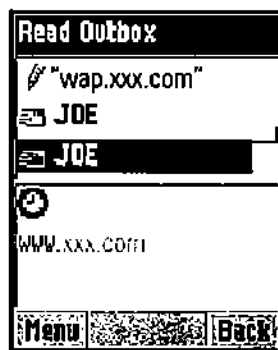
11.2.2.8 Properties

Using the option, the user can display the special properties of the message such as :

- Time and date
- Originating address / Destination address

11.2.2.9 Outbox (Send)

When the user chooses this item the list of all the stored outgoing short messages is displayed. The mobile indicates the destination address of the sent message(s) or the associated alpha-tag if this address is found in the phonebook. It displays the beginning of the messages not sent.



Sent messages with the receipt notification activated are identified with a special icon in the message sent list.

When a receipt notification arrives, the message status changes in the message sent list : the message is identified with a different icon.

The icon before the number (or the alpha-tag) indicates if the message is:

- not sent (pencil)
- sent (moving envelope)
- sent receipt asked (question tag mailbox)
- sent receipt received (letter in mailbox)

The Back softkey is used to return to the Short messages menu.

Using the UP / DOWN keys the user highlights the message he wants to operate.

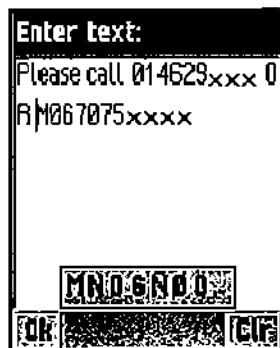
Press on the Ok softkey to allow the selected message to be edited.

Once the message is edited, the user can press the Ok softkey to :

- Store the modified message Store
- Send the message Send

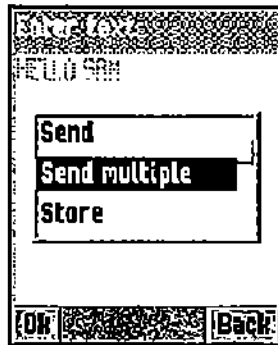
Note : If there is not enough space in the SIM card to store a new message, the first item is not proposed to the user.

11.2.2.10 Write



The user chooses this item to write a new message.

The text is entered using the alphanumeric keypad. The CLR key deletes the current character entered. The Back softkey is used to return the Short message menu. By pressing the Menu softkey, the user access the following functionality.



The phone then displays a menu to :

- Store (the message in SIM before sending),
- Send (without saving it)
- Send multiple(without saving it). If no group is defined in the phonebooks, the menu doesn't contain 'Send multiple'

The Ok softkey is used to choose an action and the Back softkey cancels the procedure.

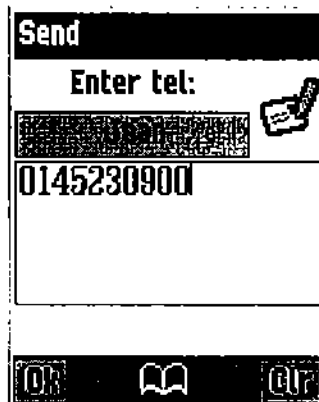
11.2.2.10.1 Store

If the user chooses to store the message, he will have to confirm that he still wants to send it.

If receipt is requested, all sent message will be stored.

If the user does not store the message, the message won't appear in the message sent list.

11.2.2.10.2 Send

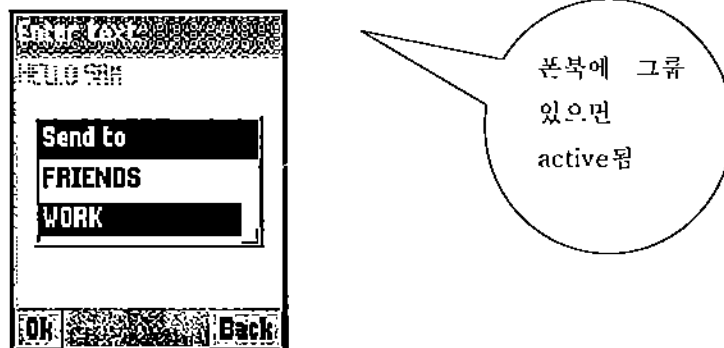


The user now has to enter the destination number with the alphanumeric keypad or selecting it in the phonebook, accessible with a press on the up / down arrow, and pressing the Ok softkey.

While sending the message, the Please wait indication is displayed and a little animation is played on the screen. The transmission can be stopped by pressing the End key. At the end of transmission, the indication Message sent is displayed for 3 seconds; otherwise a message error is displayed.

11.2.2.10.3 Send multiple

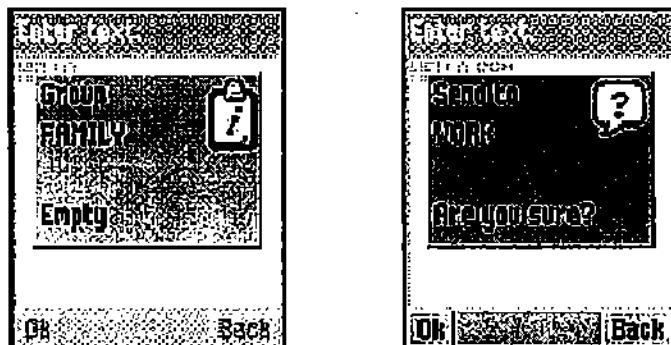
If the user chooses to send his message to several persons, he chooses a group in the list of the groups which appears on the screen before sending his message.



The up/down keys are used to scroll in the list.

The ok softkey asks for a confirmation to send the message to the selected group. If the group is empty, a popup informs the user.

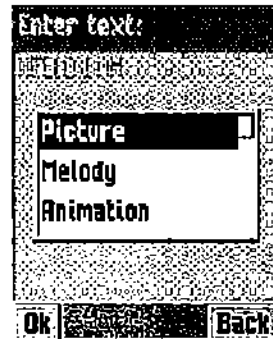
The back softkey returns to the message text.



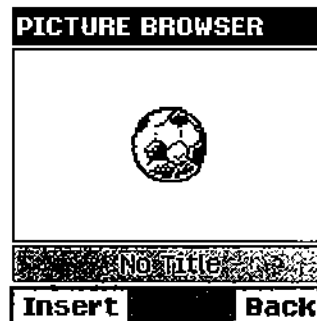
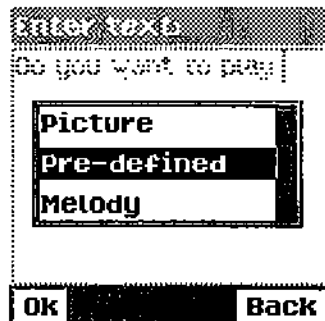
If a member of a group has several numbers, the user must select one of them, like for a call.

11.2.2.11 Write options for EMS

The SMS editor allow also writing of EMS. To insert an object in the message, the user has to press the “Menu” softkey and then select the “Insert” item.



Selecting the Insert Item leads the user to the Media Center Menu. He is then free to select an object and insert it into its message. He can browse the Media Center as described in the section, but the only actions allowed are the one that are dedicated to attachment.



EMS does not limit the number of objects attached to a message. The only restriction is the number of SMS messages that can be concatenated.

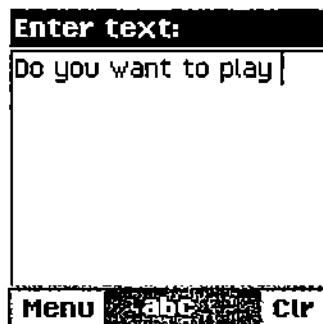
An estimation of the number of used SMS and the number of characters left in the current SMS are displayed after a new letter or object is inserted in the message.

Special functions for EMS:

- Inserted picture: the picture is displayed in the text.
- Sound icon: when a sound is inserted in a message, a special icon

represents it.

- Melody icon: when a melody is inserted in a message, a special icon represents it.



Picture1



Picture2

The Clear softkey has a normal behavior, but it can also delete the previous object (for example, in the former two pictures, two press on the Clear softkey gets back from Picture2 to Picture1).

The Back softkey is used to return the Short message menu. By pressing the Menu softkey, the user access the following EMS specific functionality:

Attach:

- Insert picture: Insert a picture at the cursor position. A picture has the same behavior as a text word. The picture selection is performed by viewing the picture thanks to the UP, DOWN side keys,
- Insert animation: Same behavior as pictures,
- Insert sound: Insert a sound. The sound is represented on the screen thanks to an icon put at the cursor position. The sound selection is performed in a list. The active sound in the list is played thanks to the RIGHT key (LEFT key: stop). The UP, DOWN side keys turns the volume up/down. The volume is restored after the sound selection (the phone stop playing the sound),
- Insert melody: Same behavior as sound,
- Insert text (the user can choose predefined text in a list, ie: thanks you, I'm waiting for you.)



Attachments that can't be displayed (melody and sound) are displayed with a special icon.

11.2.2.12 Options

11.2.2.12.1 New message tone

The user can configure his phone to play a specific melody/sound or not when a new message arrives.

The melody/sound choice is made browsing the Media Center available list.

To deactivate the current melody/sound selected, user has to select the 'None' item from this menu.

11.2.2.12.2 Service Center

This item is used to enter the number of the Service center using the alphanumeric keypad.

The Clr key deletes the current digit.

The Ok softkey stores the number and the Back softkey is used to go back to the Short messages menu.

11.2.2.12.3 Validity period

The user can choose a period during which the message is still relevant (an hour, a day, a week, a month, a year).

Use UP / DOWN keys to select the appropriate period.

The Ok softkey stores the period and the Back softkey is used to go back to the Options menu.

11.2.2.12.4 Message type

The user can also select the type of equipment he wants to send the message.

Message types are:

- Automatic
- E-mail
- Fax group 3
- Fax group 4
- Voice

- ERMES Pager
- Other Pager
- GSM mobile

Use UP / DOWN keys to select the appropriate standard.

The Ok softkey stores the message type and the Back softkey is used to go back to the Options menu.

11.2.2.12.5 Activate/Deactivate Receipt

This menu item allows the user to activate or not a message receipt to be informed when the message has been delivered.

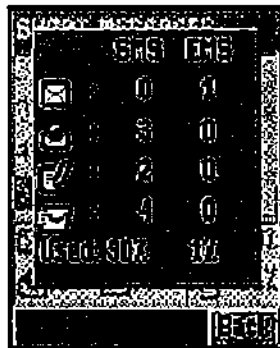
11.2.2.12.6 SMS access

This menu item allows the user to select if the message is delivered only by the GSM (default) or GPRS network. In the last case if the handset is attached on a GPRS network, the send will be done by GPRS, otherwise it will be done by GSM.

The Ok softkey stores the SMS access type and the Back softkey is used to go back to the Options menu.

11.2.2.13 Check capacity

This menu gives the a detailed status about the SMS/EMS folders:



화인 불가...

11.2.3 Voicemail box

11.2.3.1 Call voicemail box

This menu dials automatically the number of the user's voicemail box.

If the number of the voicemail box is not already stored in the phone, the user will have to enter it.

11.2.3.2 Voicemail box number

The number is entered using the alphanumeric keypad and stored by pressing the **Ok** softkey.

The **Clr** key deletes the current digit. When the input field is empty the **Back** softkey is displayed and allows the user to go back to the Voicemail box menu.

11.2.4 Voice/Data/Fax mailbox

Depending on the SIM type and user subscription to specific services like ALS, Fax Line and Data Line, this menu could display until 4 sub menus. Each sub menu allows user to call and configure the mailbox number for the mailbox type.

11.2.4.1 Call Line 1 Voicemail box

This menu dials automatically the number of the user's Line 1 voice mailbox.

If the number of the voicemail box is not already stored in the phone, the user will have to enter it.

11.2.4.2 Enter Line 1 Voicemail box number

The number is entered using the alphanumeric keypad and stored by pressing the **Ok** softkey.

The **Clr** key deletes the current digit. When the input field is empty the **Back** softkey is displayed and allows the user to go back to the Voicemail box menu.

NB: The sub menu description for Line 2, Data and Fax are the same as for Line1

11.2.5 MMS

This section provides an overview of the menu functions, for more detailed specification see 6 – USE OF MULTIMEDIA MESSAGES

11.2.5.1 Write

The user chooses this item to create a new multimedia message with the MMS Editor. The **Menu** softkey loads a menu with editor functionality; the **Back** softkey returns to the Messages menu.



Initially the message is one empty slide. Add elements (text, image, sound, more slides) to the slide by using menu: Insert

The Media Center is used to browse for images and sounds; a standard text editor (predictive input possible) is used to enter text.

The UP / DOWN navigation-pad buttons are used to move the selection from one element to the next.

- Delete selected item by using the menu: Delete → Delete Element
- Delete current slide (and its elements) by using the menu: Delete → Delete Slide
- Preview the message by using the menu: Preview

The viewer is loaded and shows all the slides of the message in sequential order, and then returns to the editor where the user left off.

Modify the timing of the slides and elements by using the menu: Timing

A special graphical duration-editor is used to change the begin and end-times for each element and slide (note, only the end-time may be changed for a slide). The Menu softkey provides additional duration-editor features. The Back softkey returns to the MMS Editor (the user is proposed to save the change, if there were any)

Proceed to add recipients to the message by menu item: Recipients

A new screen appears where the user can manage multiple address-lists (TO, CC, BCC) of recipients. A following screen permits to add a subject and attachments.

Send the message by using the menu: Send now

Store the message (for sending or editing later) by using the menu: Store

If the user is interrupted, all the sender data is saved as well.

11.2.5.2 Inbox

The inbox folder is where incoming messages are stored. There are three types of messages that may be found in the Inbox:



- 1) Notifications – Notifications indicate a new message is available on the server and gives the user the choice to download it. (Notifications are used if auto-download is not active— the messages remain on the server until downloaded by the user)
- 2) Unread – A newly downloaded MMS message (either by auto-download or via a notification) has the status "Unread". If a notification was used to download the message, it is replaced by the "Unread" message.
- 3) Read – Once a message has been viewed its status becomes "read". At this point, there are no user-customizable folders for storage.

Each type of message has a special icon.

The folder can list up to four messages per screen. Each message's respective icon and its subject text are listed. Some information of the selected message is shown in the preview box:

- Time / Date – the time and date the message was sent
- Sender – the name (phone number or email address) of the sender
- Size – the size of the message in kilobytes

If a message is a notification, the **Menu** softkey provides functionality to:

- Download – get the message from the server
- Delete – delete the notification (becomes impossible to retrieve message)
- Delete all – delete all notifications
- Information – see message details

If a message is Unread or Read, the **Menu** softkey provides functionality to:

- View – view the message
- Browse – browse the message to detach media objects
- Forward – send this message (can be modified) to someone else
- Reply – create a new message, addressed to the sender
- Reply all – create a new message, addressed to all the recipients
- Delete – delete message
- Delete all – delete all messages in the folder (does not include notifications)
- Information – see message details

The **Back** softkey returns to the MMS menu.

11.2.5.3 Drafts

The Drafts folder is where messages being created are stored. There are two ways to save messages to the Drafts folder :

- Pressing **Back** from the MMS Editor
- Select the **Store** menu item from the editor's recipient / subject screen

The message will also be saved to Drafts if an asynchronous event occurs (auto-download, incoming call, etc...)

The display is the same as the Inbox folder.

Note: A message must be non-empty to be stored

(i.e. must have an element, recipient, subject, or attachment)

The **Menu** softkey provides functionality to:

- View** – view the message
- Open** – continue creating the message
- Browse** – browse the message to detach media objects
- Delete** – delete message
- Delete all** – delete all messages in the folder
- Move** – move to phone
- Information** – see message details

The **Back** softkey returns to the MMS menu.

11.2.5.4 Outbox

The Outbox folder is temporary storage for messages waiting to be sent. Typically messages are directly moved to the Sent folder; however, if there is an error during sending (no network present, server error, etc...) the message is placed in Outbox for future sending.

The display is the same as the Inbox folder.

The **Menu** softkey provides functionality to:

- Resend** – send the message
- View** – view the message
- Open** – open the message for editing



Browse – browse the message to detach media objects
Delete – delete message (prevents it from being sent)
Delete all – delete all messages in the folder
Move – move to phone
Information – see message details

The **Back** softkey returns to the MMS menu.

11.2.5.5 Sent

The Sent folder is where messages that have been sent are stored.

The display is the same as the Inbox folder.

The **Menu** softkey provides same functionality as for Outbox

The **Back** softkey returns to the MMS menu.

11.2.5.6 Manage MMS Profiles

A list of the MMS profiles (up to 5) is displayed.

If the manufacturer or operator has configured a default MMS profile, it is the first one listed. It is possible for this profile to be permanent and never deleted.

The user may create additional profiles.

The **Send** key selected the highlighted profile

The **Menu** softkey accesses the menu

The **Back** softkey returns to the MMS main menu.

11.2.5.6.1 Select profiles

Selects the highlighted profile (same as Send)

11.2.5.6.2 Add new profiles

Create a new MMS profile. The user is prompted for the display name of the new profile. The default values are:

Server Url	<blank>
WAP profiles	Monternet

Sender information	blank
Delivery Report	OFF
Read report	OFF
Hide Address	OFF
Validity Period	MAX

11.2.5.6.3 Delete MMS Profiles

Deletes the highlighted profile. The previous profile becomes the selected one.

11.2.5.7 Settings

11.2.5.7.1 Edit MMS Profile

Modify the settings of the active profile.

- 1 Rename - Change the display name of the profile
- 2 Connection Settings - Modify the way MMS's connect
 - 1 Server url - Server and port to use for the connection
 - 2 WAP profile - MMS 사용시 사용하는 WAP profile
- 3 Sender options - Modify the Sender options
 - 1 Sender information - Set the name and address on sent messages
 - 2 Delivery report - Receive notification of message delivery
 - 3 Read report - Request notification of message viewing
 - 4 Hide address - Hide senders address from the recipient(s)
 - 5 Validity period - How long server should try to deliver message
- 4 Retrieval options - Modify settings for downloading messages
 - 1 Delivery report - delivery report에 대해 세팅

11.2.5.7.2 Select WAP Profile

The user selects from the list WAP connections. This connection is used for all MMS Profiles.

The OK softkey selects the profile

The Back softkey returns to the MMS menu.

11.2.6 Cell broadcast

Cell broadcast messages are text messages of up to 93 characters long sent at regular intervals by the networks to all GSM terminals located in the same cell. These messages can provide general information about local area dialing codes, weather reports, traffic news, etc... Each type of information is associated to an identifier, which is a three-digit number. By selecting up to 5 identifiers, the user can choose which type of information he wants to receive.

11.2.6.1 Status

This menu item allows the user to activate or deactivate the Cell broadcast reception.

The screen displays the current status and proposes the user to change it.

The Ok softkey toggles the current status and the Back softkey is used to go back to the Cell broadcast menu without any change.

11.2.6.2 Read

This menu item displays the last received Cell broadcast messages.

The Back softkey is used to go back to the Cell broadcast menu, use UP / DOWN keys to move within the message. At the end of the message, the ▼ key jumps to the next stored message. At the beginning of the message, the ▲ key jumps to the previous stored message.

11.2.6.3 Message ID

This menu item allows the user to select up to 5 type of Cell broadcast message by entering the corresponding three-digit identifier.

The Back softkey is used to go back to the Cell broadcast menu, use UP / DOWN keys to display the stored identifiers.

If a message ID is displayed, the “ Menu ” softkey displays a menu which allows to :

- Modify
- Remove

the current message ID from the reception list.

If the screen displays "empty", the user can insert a new identifier by pressing the Add softkey.

A menu allows to add:

- standard ID (like Weather forecast),
- specific ID (like 257),
- All (to receive all the cell broadcast messages)

SMS Cell broadcast menu item could be hidden according to service groups and related services accessibility.

11.2.6.4 SMS-CB tone

The user can configure his phone to play a specific melody/sound or not when a new SMS-CB message arrives.

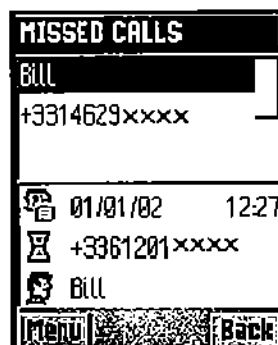
The melody/sound choice is made browsing the Media Center available list.

To deactivate the current melody/sound selected, user has to selected the 'None' item from this menu.

11.3 Call records

11.3.1 Missed calls

If a call is left unanswered, the " missed " softkey appears in the Idlc screen. The Missed calls menu can be accessed by pressing this soft key or through the menu system.



If some missed calls are stored, the list of the ten last missed calls is displayed.

For each record, the name (if stored in the phonebook), date, time, and duration of the call are displayed.

If the same number is called several times, it will appear only once associated with the last call information's (date, time and duration, line number).

The UP / DOWN keys are used to access to the previous or next missed numbers. Pressing the Send key will initiate a call to that number.

The Menu soft key display the missed calls menu which allows the user to :



- Store the number (if available) in the phonebook : Store,
- Call number can be edited before calling : Call?
- Erase the current missed call : Delete,
- Erase all the records : Delete all,

11.3.2 Last incoming calls

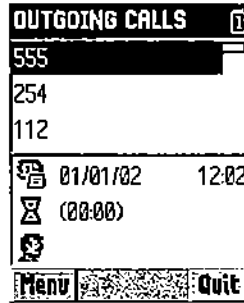
This phone automatically stores the ten last incoming calls. This functionality has the same options as the missed calls.

11.3.3 Last outgoing calls

This phone automatically stores the ten last outgoing calls.

This list is accessed through the menu system or by pressing the Send key in idle mode.

This functionality has the same options as the missed calls.



11.3.4 Call timers

11.3.4.1 Last call time

This item displays the number, time, date and duration of the last outgoing/incoming call.

11.3.4.2 Total incoming

This item displays the number and the total duration of all the incoming calls since the last reset.

11.3.4.3 Total outgoing

This item displays the number and the total duration of all the outgoing calls since the last reset.

11.3.4.4 Reset timer

This item resets the counter for the last incoming and outgoing calls. This function is protected by the Phone code (default value : 0000).

11.3.4.5 Display timer

A two choice menu (On/Off) allows the user to display or not the " in call timer ".

Use the UP / DOWN keys to highlight the selection.

The Ok softkey is used to save modifications and the Back softkey to return to the Call time menu without saving.

11.3.5 Charge rate

This menu provides the last calls charging information and the way to set the Advice of charge parameters.

N.B. : This functionality is optional depending on the SIM card capabilities and the service provider.

11.3.5.1 Last call

This item displays the cost of the last call.

11.3.5.2 All calls

This item displays the total cost of all the calls since the last time the user set credits or since the last reset.

11.3.5.3 Set credit

This function is protected by the PIN1 or the by PIN2 code (SIM phase 2 and more).
The user has to enter the maximum number of units to be consumed, using the alphanumeric keypad.

The Ok softkey is used to validate and the Back key to go back to the Charge rate menu.

11.3.5.4 Cost and currency

This function is protected by the PIN1 or the PIN2 code (SIM phase 2 and more).
The user first enters the price of one unit using the alphanumeric keypad. The * key is used to enter the point of a decimal number.
A press on the Ok softkey validates the input while the Clr key deletes the current digit.

Then, the user has to enter the currency name in three characters, using the alphanumeric keypad.

11.3.4.6.5 Display credit

Set the remaining amount of units to be displayed in the communication screen and its format (currency or units).

The UP / DOWN keys can be used to select the type of display.

The Ok softkey saves the modifications and the Back softkey is used to return to the Charging rate menu without any change.

11.3.4.6.6 Reset

This function is protected by the PIN1 or the PIN2 code (SIM phase 2 and more).
This item allows the user to reset the total call cost.

11.4 Communication Settings

This menu provides options that the user can set to customize his handset for communication purpose.

11.4.1 Alert mode

This phone (TDG-7050) provides five types of alert :

Just ring

Just vibrate

Vibrate and ring

Vibrate then ring

Silent

The UP / DOWN keys are used to highlight the language to select.

The Ok softkey is used to save modifications and the Back softkey to return to the Settings menu without saving.

11.4.2 Ring setup

11.4.2.1 Ring level

Sets the ring volume to the appropriate level.

Use UP / DOWN keys to change the level.

The first level corresponds to ring off.

The last level corresponds to a progressive ringing : while the melody is played the ring level will be progressively increased from minimum to maximum level.

The Ok softkey is used to save modifications and the Back softkey to return to the Settings menu without saving.

11.4.2.2 Ring type

Selects one of the phone melodies by using the UP / DOWN keys.

The highlighted melody is played at the current level.

Selects one of the phone melodies by using the UP / DOWN keys.

The highlighted melody is played at the current level.



The **Ok** softkey is used to save modifications and the **Back** softkey to return to the Settings menu without saving.

11.4.3 Caller pictures

It provides four menus.

Picture

Animation

My Camera

None

11.4.4 Answer mode

This item gives the opportunity to the user to select the way to answer to an incoming call.

11.4.3.1 Auto answer

A two choice menu (On/Off) allows the user to activate or deactivate the auto-answer mode.

When activated, the phone will automatically accept an incoming call after 6 seconds.

The **UP / DOWN** keys are used to select the answer mode.

The **Ok** softkey is displayed to save modifications and the **Back** softkey to return to the Answer mode menu without saving.

11.4.3.2 Folder

A two choice menu (On/Off) allows the user to activate or to deactivate the folder mode. When activated, the phone will automatically accept an incoming call when the user open the folder.

If the folder is already opened, he will have to press the **Send** key to accept the call of close the folder to reject it (the **End** key can also be used).

The **UP / DOWN** keys are used make a selection.

The **Ok** softkey is displayed to save modifications and the **Back** softkey to return to the Answer mode menu without saving.

11.4.5 Beep timer

This phone is able to generate a beep sound during a call to inform the user on the



duration of the current call.

11.4.5.1 None

Deactivate, periodic and one beep.

11.4.5.2 One beep

When activated, the phone generates a single beep sound after 1 to 255 seconds.

The previous duration in seconds is displayed.

A press on the Ok softkey validates this duration, the Clr key deletes the current digit and the alphanumeric keypad is used to enter the duration value.

To cancel any modification, press the Back softkey and return to the Beep timer menu without saving.

11.4.5.3 Period beep

When activated the phone generates a beep sound every minute spent in communication after the one beep delay.

The one beep delay can also be changed with this menu item.

A press on the Ok softkey validates this duration, the Clr key deletes the current digit and the alphanumeric keypad is used to enter the duration value.

To cancel any modification, press the Back softkey and return to the Settings menu without saving.

11.4.6 DTMF

A two choice menu (On/Off) enables the transmission of DTMF tone while in communication.

UP / DOWN keys are used to make a selection.

The Ok softkey is displayed to save modifications and the Back softkey to return to the Settings menu without saving.

11.4.7 Autore dial

A two choice menu (On/Off) activate the autore dial mode that allows the phone to automatically redial a busy number.

UP / DOWN keys are used to make a selection.

The Ok softkey is displayed to save modifications and the Back softkey to return to the Settings menu without saving.

11.5 Security

11.5.1 Phone lock

If the user activates this function, each time he will turn on the phone, he will have to enter a four digit code, whatever the SIM inserted, to operate.

11.5.1.1 Lock? / Unlock?

If the phone lock is currently activated, the phone will ask the user for an unlock procedure. Otherwise, the lock procedure will be proposed.

The user has to enter the current phone code with the alphanumeric keypad (default : 0000). The Clr key deletes the current digit and the Ok softkey confirm the code.

If the entered code is correct, the lock function is activated/deactivated.

11.5.1.2 Change password

The user can personalize his phone code with this feature. The default code is 0000. He first enters the current code then press the Ok softkey.

Then he enters the new code and the Ok softkey to validate.

The user must enter this new code again to confirm and to avoid any mistake and then press the Ok softkey to store the new phone code.

11.5.2 PIN options

This menu item includes the PIN1 and PIN2 management functions.

The SIM card is protected against unauthorised use by a secret PIN code (PIN1) stored in the SIM. This code is supplied by the service provider and must be kept secret.

If the PIN1 is enabled, it must be entered each time the phone is turned on. This code can be disabled or changed by the user.

The PIN2 code is an extension of the PIN1 used to access to some SIM related functions. This code is supplied by the service provider and can't be disabled but the user can modify it.

11.5.2.1 Activate / Deactivate PIN1

The user enters the current phone code with the alphanumeric keypad. The Clr key deletes the last entered digit and the Ok softkey validates the code.

If the code entered is correct, the PIN code is activated/deactivated.

N.B. : Some SIM card does not allow the user to deactivate the PIN code.

11.5.2.2 PIN1 change

The user can personalize his PIN1 code using this feature. The PIN1 code must be activated to be changed.

He must first enter the current PIN code then press the **Ok** softkey.

Then, the user must enter the new code and press the **Ok** softkey to validate.

This new code must be confirmed to avoid any mistake. The **Ok** softkey starts the procedure : If the old code is correct and the two input for the new code are the same, the new PIN1 code is activated.

At each step, the **Back** softkey ends the change procedure.

11.5.2.3 PIN2 change

The user can personalize his PIN2 code with this feature

He must first enter the current PIN2 code then press the **Ok** softkey.

Then, the user must enter the new code and press the **Ok** softkey to validate.

This new code must be confirmed to avoid any mistake. The **Ok** softkey starts the procedure : If the old code is correct and the two inputs for the new code are the same, the new PIN2 code is activated.

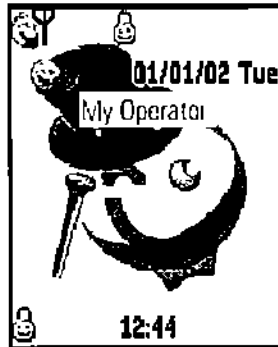
At each step, the **Back** softkey ends the change procedure.

11.5.3 Keypad lock

This feature prevents from accidental calls or actions being made by the phone when being carried in a pocket or a handbag.

The user can quickly lock the keypad by pressing the **#** key in the main menu.

To unlock the keypad : If the lock code is activated, the user has to press the **" lock "** softkey then enter the phone lock code and press the **Ok** softkey otherwise, he has to press the **" lock "** softkey then press the **#** key.



11.5.3.1 Manual

This option is used to immediately lock the keypad. The phone then return in idle keypad locked mode.

11.5.3.2 Automatic lock

This option enables the phone to automatically lock the keypad after 30 seconds in idle mode.

A two choice menu (On/Off) allows the user to activate the function.

UP / DOWN keys to highlight the choice to select.

The Ok softkey is used to activate or deactivate the function and the Back softkey to return to the Keypad lock menu without any change.

11.5.3.3 Lock code

A two choice menu (On/Off) allows the user to use or not the phone lock code to unlock the keypad.

UP / DOWN keys to highlight the choice to select.

The Ok softkey is used to activate or deactivate the function and the Back softkey to return to the Keypad lock menu without any change.

11.5.4 Activate FDN

It is an optional service upon the user's subscription and the SIM used. It represents a second Phonebook which, when activated, controls which outgoing calls can be made from the phone.

The current state of the Fixed dialing is displayed.

The Ok softkey is used to activate/deactivate the Fixed dialing or the Back softkey to go back to the Security menu.

11.5.5 Closed User Group



The Closed User Group (CUG) enables subscribers to form closed user groups to and from which access is restricted. Members of a specific group can communicate among each other but not, in general, with users outside the group. Each Closed User Group is identified by a unique number (CUG index) of up to 5 digits between 0 and 32767. An user can be a member of up to 10 CUG and the CUG index are given by the service provider.

Trough this feature, users can select in what group they want to use their phone and, if they're allowed to by subscription, to suppress additional capabilities.

11.5.5.1 group index

This item is used to enter and select the group in which the user wants its phone to operate.

UP / DOWN keys to display the stored indexes.

The **Back** softkey is used to go back to the Closed user group menu.

To activate a group, modify or delete a group index the **Menu** softkey has to be pressed. The user then choose the right action in the menu.

The **Activate** item selects the displayed group.

The **Edit** item is used to modify the displayed group index.

If the **Delete** item is selected, a confirmation screen will be displayed. The **Ok** softkey goes on with deletion or the **Back** softkey cancel the operation.

11.5.5.2 Preferential

If the user took by subscription the option Preferential CUG, he can use this feature to select it.

11.5.5.3 Suppress options

If the user took by subscription the option Outgoing Access or Preferential CUG, this menu allows him to suppress on a per call basis one or both options.

11.5.5.3.1 Outgoing access

A two choice menu gives the user the way to activate or deactivate the Outgoing Access. If he suppresses this options he won't be anymore able to make a call outside the selected group.

The **Ok** softkey is used to activatc or deactivate the option and the **Back** softkey to

go back to the Suppress options menu.

11.5.5.3.2 Preferential

A two choice menu gives the user the way to activate or deactivate the Preferential CUG. If he suppresses this options, he won't be anymore able to make a call without selecting a particular group.

The Ok softkey activate or deactivate the option while the Back softkey put back the phone in the Suppress options menu.

11.5.5.4 None

If the user took by subscription the option Outgoing Access, he can make calls without any CUG information.

The Ok softkey is used to deactivate the CUG operating mode while the Back softkey to go back to the Security menu.

Closed User Group menu item or sub menu items could be hidden according to service groups and related services accessibility.

11.6 Phone Settings

This menu provides options that the user can set to customize his handset.

11.6.1 Language

Select the language from a given list.

UP / DOWN keys are used to make a language selection.

The Ok softkey selects the new language and the Back softkey is used to return to the Settings menu without saving.

11.6.2 Connect Settings

Those features control the type of the next data/fax/lrda call and the serial connection parameters to the external terminal.

11.6.2.1 Data / Fax Settings

This menu allows to control the serial link parameters in case of data cable communication :

- Speed : baud rate
- Framing : data length, parity, stop bits



Two standards configuration are proposed, and two customs user defined.

UP / DOWN keys to choose the configuration to use with the external terminal.

The Ok softkey is used to validate and the Back softkey to go back to the Data / Fax menu.

11.6.2.1.1 Standard Data/ Fax

If the user select this item, the handset will set the serial link parameters to « AutoBauding ». This configuration is the default one : it should work with almost every application.

11.6.2.1.2 Internet

Serial link parameters are adapted to the highest speed supported by the handset : 115200 bauds, 8 bits data, no parity bit, 1 stop bit.

The user can select this item if the standard doesn't work with its familiar PC Internet software.

11.6.2.1.3 Custom 1 and Custom 2

Custom1	
Baud rate	
1200 bps	
Data length	stop bit(s)
8	1
Parity	
None	
Menu	Back

The user can enter two custom configurations : for each one, he can choose baud rate, data length, parity and number of stop bits.

Data/ Fax menu item or sub menu items could be hidden according to service groups and related services accessibility.

11.6.2.2 Irda

This menu allows to Activate / Deactivate the IrDA LED to start or stop an IrDA connection.

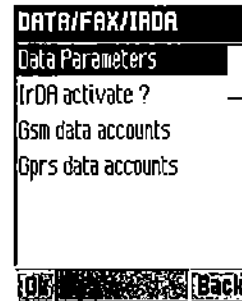
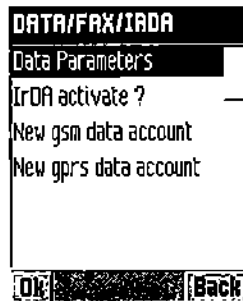
The IrDA link can be in three main states :

- IrDA off : the LED is off. No connection possible
- IrDA activated : the LED is on, can be connected by any other IrDA device.
No transmission possible
- IrDA connected : transmissions are possible.

11.6.2.3 GSM and GPRS Data Accounts

11.6.2.3.1 GSM and GPRS Accounts list

If no GSM/GPRS account exists, the user is invited to create a new one. Once a data account is created, it can be edited.



When entering the GSM/GPRS account menu, the phone displays the list of the existing GSM/GPRS accounts. The total number of GSM/GPRS accounts defined at the same time is limited to 48.

This menu is used to add a new account, or edit/delete an existing one.

These accounts will then be selected by the user in the WAP menu and associated with a WAP profile through an attachment to the gateway (see Edit Profiles).

11.6.2.3.2 Accounts options



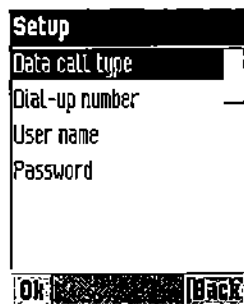
The user has the ability to rename an account, to create a new account, to edit the set-up and to delete an account.

Set-up options for the GSM account are:

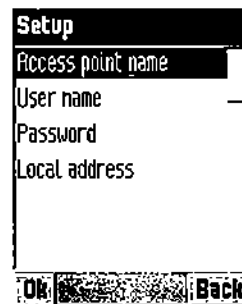
- Dial-up number: the number to be dialed while establishing the CSD data call.
- Data Call Type: to chose between an ISDN and an analogue connection.
- User Name and Password: to identify the user for the IP connection

Set-up options for the GPRS account are:

- Access point name: to select the access point for the GPRS connection.
- User Name and Password: to identify the user for the GPRS connection
- Local IP address: to establish the GPRS connection with this address. By default it is a dynamic IP address.



GSM account setup



GPRS account setup

11.6.3 Keysound

This phone gives the opportunity to configure the key sound.

11.6.3.1 Keysound level

There are three levels for the key sound.

- low
- medium
- high

UP / DOWN keys to highlight the sound to select.

The Ok softkey is displayed to save modifications and the Back softkey to return to the Keysound menu without saving.



11.6.3.2 Keysound type

This Phone provides three types of sound to play when a key is pressed.

- none
- tone
- Voice

UP / DOWN keys to highlight the sound to select.

The Ok softkey is displayed to save modifications and the Back softkey to return to the Keysound menu without saving.

11.6.4 Display

11.6.4.1 Backlight

This menu allows to activate or not the backlight, and to adjust the duration between 0 and 15 seconds.

The Ok softkey is displayed to save modifications and the Back softkey to return to the Display menu without saving.

11.6.4.1.1 Backlight settings

LEFT / RIGHT are used to activate / deactivate the backlight.

DOWN key saves the new selection and enters in the duration selection.

11.6.4.1.2 Backlight duration

LEFT / RIGHT are used to activate / deactivate the backlight.

UP key keeps the modifications and goes back to the backlight activation choice.

11.6.4.2 Backlight Level

The user can choose one of the 11 levels of LCD backlight level.

The Ok softkey saves the settings;

The Back softkey returns to the Display menu without saving.

11.6.4.3 Dual backlight level

There are 3 levels of quick-contrast to choose from.

The LEFT / RIGHT navigation keys move the contrast cursor.

The DOWN key saves the quick setting and enters the fine settings mode.

11.6.4.4 Clock

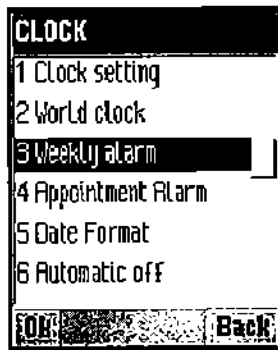
Selects the clock modes.

Digital Clock

Analog Clock

11.6.5 Clock

This Phone provides a " Real Time Clock " which provides many functions such as:



- Current time and date displayed in idle screen,
- Date format is like dd/mm/yy(dd=day, mm=month, yy=year)
- Time format is like hh:mn(hh=0 to 23 hours, mn=0 to 59 minutes),
- World clock to program time zone,
- 16 special alarms,
- Safety timer to automatically witch off the phone.

11.6.5.1 Clock setting

It allows the user to enter its home time and date, and select its home time zone.



The Ok softkey validates the new time and date. The Back softkey is displayed to go back to the Clock menu without any change.

Time field first :

Use LEFT / RIGHT keys to scroll in the time edition.

DOWN key to save the new time value and enter the next date edition.

Date field :

Use LEFT / RIGHT keys to scroll in the date edition.

DOWN key to save the new date value and enter the time zone selection.

UP key to keep the new date value and modify the previously entered time.

Time zone field :

UP / DOWN keys to scroll in the time zone list.

LEFT key to keep the new field value and enter the previous one : date

RIGHT key to validate the new time and date.

Note : New time and date set can invalidate pending alarms. In this case the phone display Check Alarm message to alert the user.

11.6.5.2 World clock

It allows the user to enter a time zone different from the home time zone when he is abroad.



The Ok softkey validates the new time and date. The Back softkey is displayed to go back to the Clock menu without any change.

UP / DOWN keys to scroll in the time zone list.

LEFT key to keep the new field value and enter the previously entered date

RIGHT key to validate the new time and date.

11.6.5.3 Weekly alarm

This function allows the user to set an alarm on some selectable days of the week at the same time.



11.6.5.3.1 Activate/ deactivate

This item is used to activate/deactivate the weekly alarm.

11.6.5.3.2 Set the time

This item is used to set the alarm time.

11.6.5.3.3 Days of week

A press on the Ok softkey on the days of week alternately select or deselect the

day for which the alarm must be activated. The selected days are preceded by the symbol ☒. If the weekly alarm is not activated this symbol is replaced by ☐.

The **Back** softkey is used to return to the Clock menu.

When the weekly alarm is activated and at least one day is selected, the alarm clock icon is displayed.

11.6.5.4 Appointment alarm

The user can set up to 16 different alarms. In the simple alarm screen, the first alarm set is displayed.

UP / DOWN keys to display the next one.

The **Back** softkey is displayed to go back to the Clock menu.

The **Menu** softkey is used to set a new alarm, modify or cancel an existing one.

When at least one simple alarm is activated, the alarm clock icon is displayed.

An alarm is defined by :

- A date
- A time
- A melody used when the alarm expires.

The **Ok** softkey validates the new time and date. The **Back** softkey is displayed to go back to the Alarm menu without any change.

Field time first :

- Use **LEFT / RIGHT** keys to scroll in the time edition.
- **DOWN** key to save the new time value and enter the next date edition.

Field date :

- Use **LEFT / RIGHT** keys to scroll in the date edition.
- **DOWN** key to save the new date value and enter the melody selection.
- **UP** key to keep the new date value and modify the previously entered time.

Field Melody :

- **UP / DOWN** keys to scroll in the melody list.



- LEFT key to keep the new melody value and enter the previously entered date
- RIGHT key to validate the input

Note : An alarm can not be set for a past date and time. In this case the phone display Expired Alarm message to alert the user.

11.6.5.5 Date Format

Selects the one out of two format.

DD/MM/YY

YY/MM/DD

11.6.5.6 Automatic off

With this functionality, the user can program a time to automatically turn off the phone.

11.6.5.5.1 Activate/ deactivate

This item activate/deactivate the safety timer. If the user activate the timer and no time has been programmed, he will have to enter it as described below.

11.6.5.5.2 Set timer

The user has to enter the turn off time using the alphanumeric keypad.

The Ok softkey is displayed to validate the entered time.

The Back softkey is displayed to go back to the Safety timer menu without any change.

11.6.6 Greeting

11.6.6.1 Greeting & Bye ring

The user can choose a melody/sound from the Media Center played when he turns on / off .

To deactivate it, user has to select the 'None' item for each greeting.

11.6.6.2 Greeting & Bye picture

The user can choose a picture/animation from the Media Center displayed when he turns on / off .



To deactivate it, user has to select the 'None' item for each greeting.

11.6.6.3 Startup & Standby Message

The startup greeting message is displayed when the user turns on its phone.

The standby greeting message can be displayed on the idle screen (one line maximum).

The user has to enter the text he want to be displayed.

The alphanumeric keys are used to enter the text.

The Clr key deletes the current character.

A long-press on the Clr key erases the whole text.

The Ok softkey saves the modifications

To return to the Greeting menu without saving, press the Back soft key.

11.6.6.4 Idle picture

The user can choose an idle picture from the Media Center to be played in Idle screen.

The '4 menus keys direction' displayed by default are replaced by this selected picture.

To display again the default menu keys, user has to select the 'None' item for this greeting.

11.6.7 Information

11.6.7.1 Own number

This item displays the user's own number. It is stored in the SIM's record called MSISDN.

A press on the Edit softkey allows the user to store/update his own number.

11.6.7.1.1 Speech Line MSISDN

This item displays the Speech line number stored in the SIM's record called Speech MSISDN.

11.6.7.1.2 Auxiliary Speech Line MSISDN

With standard SIM card, this kind of record will never be displayed.



A press on the **Edit** softkey allows the user to store/update this SIM record.

11.6.7.1.3 Data Line MSISDN

This item displays the Data line number stored in the SIM's record called Data MSISDN, specific Data line bearer icon is displayed.

A press on the **Edit** softkey allows the user to store/update the SIM record.

11.6.7.1.4 Fax Line MSISDN

This item displays the Fax number stored in the SIM's record called Fax MSISDN, specific fax line bearer icon is displayed.

A press on the **Edit** softkey allows the user to store/update the SIM record.

NB: When no bearers are defined in SIM, only names and numbers are displayed and can be edited/updated by the user.

11.6.7.2 Mobile ID

This item displays the phone identification (IMEI).

11.6.7.3 SIM information

This item displays the SIM card properties : Sim Phase, Home network informations (MCC, MNC), Maximum number of entries and number of free entries of SIM Phonebook and short messages

11.6.7.4 Flash informations

This item displays the flash informations.

11.6.7.5 Software Version (Vx.xx)

This item displays the phone version.

11.8 Net services

11.8.1 Call divert

This option allows the user to automatically transfer calls to another number upon

particular conditions.

11.8.1.1 Activate

The activation is a three-step procedure.

① Selection of the condition of transfer.

The activate menu is constituted of the different conditions of automatic transfer.

The conditions are :

- Unconditional divert (All calls),
- On busy (When the user is already on line),
- No reply (The user is under coverage, but doesn't answer),
- Unreachable (The phone is switched off or is not registered on any network).

UP / DOWN keys to highlight the appropriate condition. The Ok softkey is used to continue with the activation and the Back softkey to return to the Call divert menu without saving.

② Type of calls to transfer

For each condition, the user can, then, transfer the call to different number depending on the type of call received. The different types are :

- All calls (voice, fax and data calls),
- Voice calls (only),
- Fax calls (only),
- Data calls (only).

UP / DOWN keys to highlight the selected call type. The Ok softkey is used to continue with the activation and the Back softkey to return to the previous step menu.

③ Number to transfer to

The user has to enter the number to which the calls will be transferred with the keypad. The Clr key deletes the current digit. The Back softkey can be used to go back to previous step menu. The Ok softkey confirm the configuration.

■ Note : When the call forward condition 'unconditional divert' is activated, a specific call divert icon indicator is displayed in idle mode:



11.8.1.2 Deactivate

The deactivation of call divert follows the same procedure as the Activation. Moreover, the user can deactivate all in once all the divert programmed.

11.8.1.3 Status

This option allows the user to interrogate his provider for the activated diverts. While receiving the information the message Please wait is displayed on the screen, an hourglass is moving and a progress bar is filling. After a few seconds, the user can check the information using the UP / DOWN keys. The Back softkey is used to go back to the Call divert menu.

11.8.2 Call barring (Service is not supply)

Call barring is a network feature which, when activated, can disable some outgoing/incoming calls to/from phone. This feature requires a network code supplied by the service provider when the user subscribes to this service.

11.8.2.1 Activate

The activation is a three-step procedure.

① Selection of the condition of barring

The activate menu is constituted of the different condition of barring. The conditions are :

- All outgoing calls,

- International outgoing calls (outgoing call to a foreign country),
- All incoming calls,
- Roaming calls (when the phone is registered on a foreign network),
- International except home(Only allows calls to the user's home country)

UP / DOWN keys to highlight the appropriate condition. The Ok softkey validate the user's choice and continue with the activation procedure and the Back softkey is used to return to the Call barring menu without saving.

② Type of calls to bar

For each condition, the user can, then, bar the call depending on the type of call. The different types are :

- All calls (voice, fax and data calls),
- Voice calls (only),
- Fax calls (only),
- Data calls (only).

UP / DOWN keys to highlight the appropriate condition. The Ok softkey validate the user's choice and continue with the activation procedure and the Back softkey is used to return to the previous step of activation.

After those steps, the phone sends to the network the activation request. Depending on the network answer, the user will have to enter his network secret code with the alphanumeric keypad followed by a press on the Ok softkey. At the end, the new status of the call barring is displayed for three seconds.

11.8.2.2 Deactivate

The deactivation of call barring follows the same procedure as the Activation. Moreover, the user can deactivate in once all the barring programmed.

11.8.2.3 Status

This option allows the user to interrogate his provider for the activated barring. While receiving the information the message Please wait is displayed on the screen, an hourglass is moving and a progress bar is filling. After a few seconds, the user can check the information using the UP / DOWN keys. The Back softkey is displayed

to go back to the Call barring menu.

11.8.2.4 Change password

As the Call barring is protected by a network code, it can be changed using this feature. The phone first interrogates the network for the ability to use the call barring. At that time, the screen displays the message Please wait. Then the user will have to enter his current network password, then the new one and finally to confirm this new password.

The codes are entered through the alphanumeric. The Clr key deletes the current digit and the Ok softkey validate the entry. If the transaction is successful, a status screen notifies the change of password.

11.8.3 Call waiting

The network will notify User of a new incoming call while he has a call in progress.

11.8.3.1 Activate

This item activates (if subscribed to) the Call wait service.

11.8.3.2 Deactivate

This item deactivates (if subscribed to) the Call wait service.

11.8.4 Caller Identity

If the user subscribed to the CLI service, he can choose to send or not to send its number to his interlocutor.

UP / DOWN keys to select :

- Network default,
- Withhold number,
- Send number,
- Status

The Ok softkey stores the option and the Back softkey is used to return to the Net services menu. The last item of this menu allows the user to interrogate his



subscription options.

The **Ok** softkey starts the interrogation procedure and the **Back** softkey is used to return to the Net services menu.

11.8.5 Preferred net List

This item allows the user to create, modify, and consult the preferred networks list, used in the automatic network selection process.

11.8.6 Net selection mode

Two networks selection modes are available. For both a list of the existing network in the area is displayed.

11.8.6.1 Automatic

In the automatic mode, if the user subscription doesn't allow your phone to work on the network you selected, the phone will automatically search for others networks. After this operation, the phone will automatically register on the most appropriate network.

11.8.6.2 Manual

In the Manual mode, the phone will try to register on the network you selected. If not possible, the phone won't search for another network and will stay in Emergency calls only mode. If registration is successful, the phone will always try to register on the selected network, even if not available in the area. This option is useful near the borders to avoid a non-necessary registration on a foreign network.

11.8.7 Net access mode

11.8.7.1 GSM only

In this mode, the phone will propose only the GSM features. This mode is useful if GPRS is not available in the user subscription.

11.8.7.2 GSM and GPRS

In this mode the phone will propose all GSM and GPRS features. The phone will try to attach to both networks at switch on.

11.8.8 Band selection

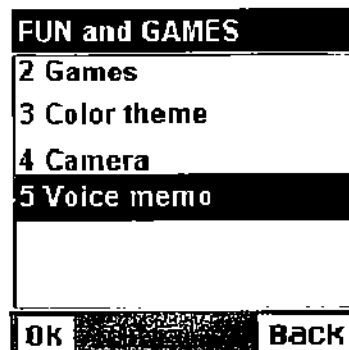
In this mode, the menu has two lists, 850/1900Mhz and 900/1800Mhz.

11.9 Camera

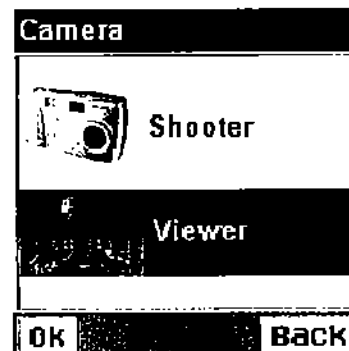
The camera function, if available, is divided in two parts:

- The first part is about the shooter and its different options to take a picture.
- The second one is about the viewer to see a picture.

The camera menu is part of "Multimedia Menu":



Then, two options are displayed in "Multimedia /Camera" sub-menu:



The following chapters describe these items.

11.9.1 Shooter

Press "i" softkey to take a picture. The Menu softkey allows to access to the different actions available for the selected file. When clicking on the menu, the following items appear:

- Shooting mode
- Image quality
- Zoom
- Rotate
- Night mode

11.9.1.1 Shooting mode

Wallpaper, Thumbnail, Landscape 3가지 mode를 선택할 수 있다.

11.9.1.2 Image quality

Picture의 Image quality를 Low, Normal, High로 선택할 수 있다.

11.9.1.3 Zoom

This phone의 camera는 ZoomX1, ZoomX2, ZoomX3를 지원한다.

11.9.1.4 Rotate

피사체를 0 DEG, 180 DEG로 rotate 할 수 있다.

11.9.1.5 Night mode

Activate, Deactivate 두가지 mode를 선택할 수 있다.

11.9.1.6 Save a picture

Press **Save** softkey to record the picture in the directory 'My Picture'.

11.9.2 Viewer

The list of all the pictures stored in 'My picture' directory is displayed when clicking on "Multimedia/Camera/Viewer". A line indicates the number of files and the memory left.



The date, the size of the picture is automatically displayed for the selected file. The **Menu** softkey allows to access to the different actions available for the selected file.

When clicking on the menu, the following items appear:

- View
- Set as...
- Send
- Rename
- Delete
- Delete all

11.9.2.1 View

OK softkey를 누르면 사진과 파일 이름이 display 된다.

11.9.2.2 Set as

picture를 Incoming call, Phone Book, Idle picture, Power on, Power off 등에 등록할 수 있다.

11.9.2.3 Send

- EMS
- MMS

11.9.2.3.1 MMS

MMS를 선택한 후 **Menu** softy key를 누르면 아래와 같은 리스트가 나타난다.

- Insert Item
- Delete
- Preview
- Set timing

- Recipients

Insert Item은 Add text, Add image, Add sound, Add new slide의 sub-menu를 가진다.

11.9.2.4 Rename

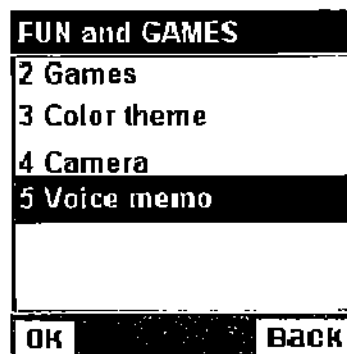
저장된 사진의 파일 이름을 수정할 수 있다.



11.10 Voice Memo

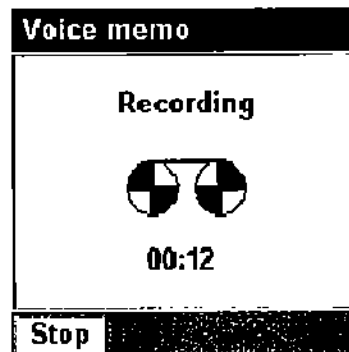
"Voice Memo" is part of the "Multimedia" menu. It gives access to a sub-menu composed of the items:

- Record
- Voice Memo Center
- Settings



11.10.1 Memo Recording

The menu "Multimedia/Voice memo/Record" can start a record while in idle mode. A window indicating that a record is running and its elapsed time is displayed. The phone user can then speak and press Stop softkey when the record is finished.



11.10.2 Voice memo center

'Voice memo center' gives access to all the Voice Memo files stored in 'Voice Memo Browser' and to the permitted actions on these files.

11.10.2.1 Navigator

The list of all the 'Voice' files are stored in 'Voice Memo Browser' and displayed in choosing the item "Multimedia/Voice Memo/Voice Memo Center".



The UP and DOWN navigation keys allows the file selection. 재생 및 정지는 각각 RIGHT, LEFT navigation key로 동작한다. Volume 조절은 side UP and DOWN key로 수행한다.

A sub-menu is displayed when clicking on the Menu button. It contains the following items:

- Send
- Rename
- Delete
- Delete all



11.11 Games

The games main screen displays the game's bitmaps, with the selected one blinking. The user can navigate using the Up / Down / Left / Right navigation keys. If the game is interrupted by an incoming call, user will be able to resume it.

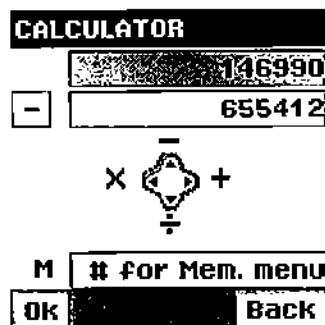
- Stacker
- Labyrinthus
- Archery
- Polygon pursuit

■ Note: Games should be defined according to the available memory size. These 4 games are available for a total of memory size of 100Kb.

11.12 Tools

This Phone provides a four-operation calculator with one memory management and a currency converter and Memos and Todolist.

11.12.1 Calculator



The top of the screen is used to enter the numbers and to display the results. The possible operations are mapped on the following keys :

Key	Operation
UP	- (subtraction)
RIGHT	+ (addition)
DOWN	/ (division)
LEFT	X (multiplication)
* KEY	Decimal point
LONG * KEY	+/- (add or remove negative sign)
# KEY	MR (memory recall)
LONG # KEY	MS (memory store)

If no number is entered, no operation can be done. When a number is entered and an operation is selected, user can enter the second operand in the second input field. Side UP and DOWN key를 사용하여 first operand and second operand를 선택한다. Back softkey returns Tools menu.

In the second input field :

- Operation can be changed
- Back softkey cancel the operation selection and returns to first

To enter numbers : 0-9 enter digits, * is used to enter the decimal point. Ctr key deletes the last digits. Calculate the operation result with Ok soft key. The bottom of the screen display the number memorized if exists.

■ Note : Due to floating point emulation, some results may be rounded, or some calculation impossible : user is informed.

11.12.2 Currency converter

This item allows the user to convert a price into another currency. The Rate soft key allows to enter / change the currency exchange rate. The user first enters the currency to convert abbreviation (3 English letters). For example, EUR for European Euro. He then enters the currency abbreviation of the result. For example, USD for US dollars. At last he enters the exchange rate using the 0 to 9 keys to enter the number and the * key to enter a decimal point. In our example, the following screen

will then appear.

CURRENCY CONVERTER	
Enter money	
EUR	500
USD	543.4
Change rate	
EUR	0.92
USD	1
Rate	Back

If he wants an US dollars into French Francs conversion, he presses the UP keys to put the cursor on the first line (in front of USD) then enter the amount. The conversion is automatically made and displayed.

If he wants a French Francs into US dollars conversion, he presses the DOWN keys to put the cursor on the second line (in front of FRF) then enter the amount. The conversion is automatically made and displayed.

11.12.3. Memos

최대 50개의 text memo를 저장할 수 있다. Menu softkey를 누르면 View, Edit, Add, Delete, check capacity의 sub-menu를 사용할 수 있다.

11.12.4 Todolists

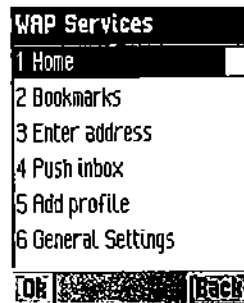
A menu is displayed when clicking on the Menu button. It contains the following items:

- View
- Edit
- Add
- Delete
- Delete all
- Display all
- Check capacity
- Check

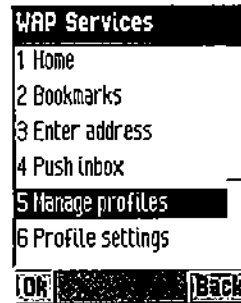
List를 선택하면 Delete, Edit, Uncheck, IrDA 등의 sub-menu를 사용할 수 있다.

11.13 WAP Menu

As no profile is defined the user is invited to create a new one through the 5th item of the menu : "Add Profile". Once this profile is created, the fifth item is renamed "Manage Profiles" and a new item appears next to it : "Profile Settings"



no profile defined



a profile exists

11.13.1 Home

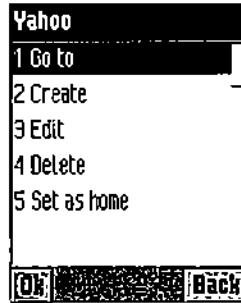
When selecting the item "Home", the user establishes a direct connection to the home page of the current profile. The homepage name and URL can be defined in the "Profile Settings" menu. After selecting this item, the phone displays a WAP connection screen: a data call is in establishment and the WAP browser is launched.

11.13.2 Bookmarks



Up to 20 bookmarks can be stored. Accessing this menu item gives the user the list of the stored bookmarks.

- BACK soft key allows to go back to the WAP main menu.
- selecting a bookmark with the OK soft key leads to the following submenu:



11.13.2.1 Go to

Allows the user to connect to the page stored at the address set in the bookmark.

11.13.2.2 Create

Allows the user to create a new bookmark, entering a new name and address. The bookmark is stored if there is still a location left in the 20 bookmarks list. Otherwise, the user will have to delete first an existing bookmark and enter again the new address.

11.13.2.3 Edit

Allows the user to edit the URL address and name of the current bookmark.

11.13.2.4 Erase

Erases the current bookmark.

11.13.2.5 Set as home

Allow to store the bookmarks name and URL as the profiles homepage name and URL.

11.13.3 Enter Address

Selecting the "Enter Address" item leads the user to an empty URL address editor. He can then begin to write directly the new address. See the picture 1.

By keeping the down arrow pressed, the user can access to a list of the former addresses he has entered. Navigation DOWN key를 long press 하면 아래 list가 선택 된다. See the picture 2.

To edit one of these saved addresses, the user needs just to press the Back softkey.

It is useful to save some time to edit the address (No need to write “wap.” and “.com” for example). See Picture 3.

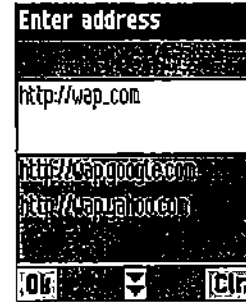
Ok softkey tries to establish a connection to this page. Back to go back to the address editor and then to the WAP main menu.



Picture 1



Picture 2



Picture 3

11.13.4 Push Messages

Contains a list of all the received Push Message. Push Messages are sent by the Gateway/Network to give some information to the user and invite him to connect to some WAP sites. They can be of 4 different types :

- Push Service Indication : gives an URL where to connect
- Push Service Initiation Application : to launch an application on the handset.
- Push Service Loading : asks the phone to connect and retrieve some data at a given address.
- Push Cache Operation: asks the phone to empty its cache memory.

Push Option can be activated and deactivated by a menu in the Setting menu of WAP (see Push access).

11.13.5 Manage Profiles

Up to 5 fully programmable profiles for connection to a WAP gateway are available on the phone.

This menu displays a list of existing profiles. Selecting a profile in this list gives access to three items in order to manage the profiles.



11.13.5.1 Select profile

Set the selected profile as the current profile used for editing (see Profile Settings) and browsing.

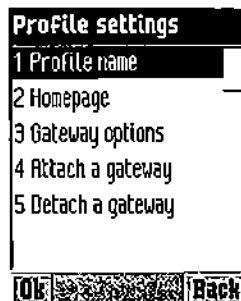
11.13.5.2 Add profile

Adds a profile if there is no more than four existing profiles.

11.13.5.3 Delete profile

Can only delete a profile that is not the active one.

11.13.6 Profile Settings



The menu is composed of 5 main items what are described in the following paragraphs:

11.13.6.1 Profile name

In this menu, the user can rename the active profile.

11.13.6.2 Homepage

Allow to edit the homepages name, URL, username and user password.

11.13.6.3 Gateway options

This menu allows to setup the gateways attached to the profile. If no gateway is attached, the user should do it through the “Add a gateway” menu.

Once a gateway is selected by the user, the following menu appears:



11.13.6.3.1 Gateway name

Allow to give a specific name to the gateway

11.13.6.3.2 Connect mode

Allows to set the service needed : connection oriented/less, TCP.

11.13.6.3.3 Gateway address

The user must give the Gateway address of the gateway he wants to connect to .*

11.13.6.3.4 Security

Allows the user to precise the way security protocols are used during transfers: only on https request (normal) or for all requests (strong).

11.13.6.3.5 Attach a data account

The user can attach up to two data accounts per gateway (GSM or GPRS). The data accounts are defined in the Phone Setting/ Connect Settings.

11.13.6.3.6 Detach a data account

Allows to detach a data account in order to attach another.

11.13.6.4 Attach a gateway

The user can attach up to seven gateways per profile. The browser will automatically choose the appropriated one during connection to a WAP page. The first item of this menu allow to add a gateway. It is useful when no gateway already

exists.



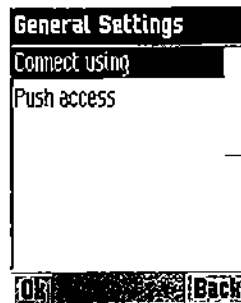
11.13.6.5 Detach a gateway

Displays all the gateways attached to the profile and allows the user to detach them one by one. A gateway can not be attached to several profile, therefore to use a gateway in another profile, it has to be detached before.

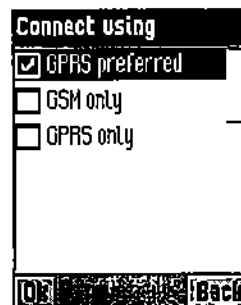
11.13.6.6 Add a gateway

new gateway를 추가할 수 있다.

11.13.7 General Settings



11.13.7.1 Connect using

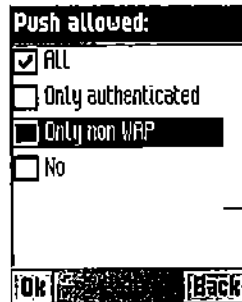


This menu allows the user to precise how the bearers are used:

- GPRS preferred : try to connect in GPRS, if failed try in GSM.

- GSM only: try only to connect in GSM. No connection is possible If no GSM data account is attached to the gateway of the profile, it won't work.
- GPRS only : try only to connect in GPRS. If no GPRS data account is attached to the gateway of the profile, it won't work.

11.13.7.2 Push access



The user defines what kinds of push are allowed.

11.13.7.3 Load images

Load and display image / Do not load images를 선택한다.

11.13.8 Manage security

- Gen. Auth. Keypair
- Gen. NR Keypair
- Change PIN
- Delete Keys/ user ce
- Server Certificates
- User Certificates

11.13.9 Clear Cache

Selecting this item empties the cache memory stored in the phone. This should be done when the user has been browsing a lot and thinks he is slowed down by too large data stored in cache. The cache size is limited to 50 Kbytes on this phone.

11.14 About the WAP browser

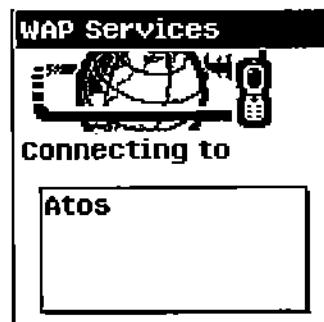
11.14.1 General information about the browser

The WAP browser included in this phone is WAP 1.2.1 and 2.0 compliant. This means, it integrates the following functionalities:

- WTAI public: make call, phonebook entry and send DTMF. The user is able, while browsing, to set up a call with a number presented as a link on a WML card, he is able to access the phonebook options and send DTMF.
- Push: see section Push Inbox
- UA Profile: provides mechanism through which the device can fully advertise the application servers its capability.
- WTLS Class 2: secures the transport layer between the gateway and the device and adds server authentication.
- WAP over CSD and GPRS
- Markup Languages supported: WML 1.3 and WML 2. WML Script is also supported. xHTML and cHTML languages are also supported.
- The browser includes an HTTP stack.
- Data Provisioning: parameters for the WAP browser and the WAP connection can be set by the Network Operator.
- Download through Segmentation and Reassembly (SAR) and HTTP Get and Post Request (M-Services requirements).

11.14.2 While Connecting:

There is a "timeout" timer (see Browsing options) that stops the connection if the gateway and the browser don't manage to set up the connection during this initialization phase. This can also be useful if some connection parameters are wrong or if the gateway contacted does not answer.



You can stop the connection at any time by using the Red End button.

11.14.3 While browsing / key actions



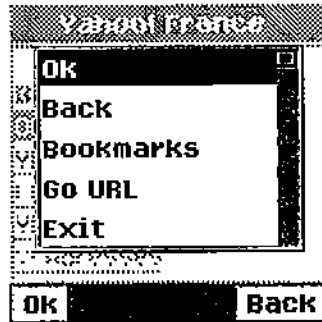
Two soft keys are available. The first soft key is dedicated to an access to the Wap browsing menu (see The browsing Menu). The second displays the first soft key of the WML card that is displayed. All the soft keys displayed on the card are accessible from the browsing menu.

Short press on green SEND key validates the highlighted/underlined link. Short press on red END key makes a BACK action (goes to previous page). Long-press on red END key is a Disconnect action. The Up, Down, Right and Left keys help you to scroll horizontally and vertically. When entering an editor, the phone acts like with another normal text editor (uses Soft keys for OK or BACK.).

While retrieving data from a new page, an icon will indicate that the browser is alive and working. This icon will disappear when the new WML card will be displayed. Even while browsing, the first line of the display will be dedicated to the basic icons (see section Icons) giving information about the battery life, the antenna, short messages, MMS message, net services.

11.14.4 The browsing Menu

This menu gives the user the ability to access more actions then only the right soft key and the "Go" and "Back" actions of the Green and Red keys. This menu is accessed by the left soft key while browsing on a WML page.



Here are the main items of this menu and their behaviors:

- Go to : If the active item in the WAP page is a link, the first item is "Go to".
- Home : 프로파일에 정의되어 있는 홈페이지로 이동
- Edit URL : allows the user to enter a new address and to visit the corresponding page.
- Mark site : 현재의 페이지를 북마크에 등록한다.
- Bookmarks : allows the user to change WAP site without initializing a new connection and to go to the existing bookmarks.
- Reload : reloads the current page.
- Push Menu: access to the Push list
- Security : displays the certificates
- Download : allows to download the images contained in a page
- Quit : Disconnects the WAP browser.

11.14.5 Events during a WAP connection

While connecting or browsing on a WAP page, the following events are handle in the described way:

- WAP이 GPRS통해 연결시 통화 가능함
- SMS나 MMS가 왔을 때 메시지 사운드와, 위쪽에 icon을 통해 유저에게 메시지가 왔음을 알림.
- 알람 울리고, 중지시킨 후 웹집속이 지속된다.

11.14.6 WAP over CSD/GPRS

By selecting a data account, the user chooses between CSD and GPRS connection.

If a GPRS connection fails, the user will be prompted and asked if he would like to



try a CSD connection. In this case, he will be asked to select a new Data account inside the GSM data account list.



12. PREDICTIVE TEXT INPUT

The ZiCorp standard predictive input engine is used for simplified Chinese and English text input. It is available in many text input fields, such as:

- SMS
- Phonebook name entry
- Agenda event description
- Todo list
- SIM Toolkit applications
- Greeting message

The following illustrations are for text input for an SMS.

12.1 Chinese Input

There are three input modes: .Stroke., .Pinyin., and .Latin...

Each LONG-PRESS on .#. cycles to the next mode as follows:

Pinyin -> Stroke-> Latin(ABC -> abc -> Abc -> 123)

OK - validates / inserts a character (candidate window shown)

- validates text and goes to next field / menu

BACK - returns to the previous screen / menu

CLR - erases strokes / characters

12.1.1 Stroke mode

The user inputs the strokes gathering the simplified Chinese character desired. The Zi8 engine displays a window of character candidates. The user continues entering more strokes, or may use the **UP / DOWN / LEFT / RIGHT** navigation pad to select the desired character - the **OK** softkey is used to validate.

12.1.2 PinYin mode

As the user inputs Latin characters the Zi8 engine displays a window proposing a corresponding syllable-sound. The user may continue entering Latin characters, or use the **UP / DOWN / LEFT / RIGHT** navigation pad to have more syllable-sounds proposed. The **OK** softkey validates the syllable-sound.

The Zi8 window now proposes simplified Chinese characters sounding similar to the syllable. The user may use the **UP / DOWN / LEFT / RIGHT** navigation pad to



select the desired character.the OK softkey validates.

12.1.3 Latin mode

While in the Chinese language mode, the Latin input mode is non-predictive.

The first press on any number-key displays a window showing the number and following ones. The user may use the UP / DOWN / LEFT / RIGHT navigation pad to scroll through the entire Latin / numeric character set – the OK softkey validates.

Subsequent presses on the same number-key then propose the respective Latin characters, first in upper-case then in lower-case. The user may use the UP / DOWN / LEFT / RIGHT navigation pad to scroll through the entire Latin / numeric character set – the OK softkey validates.

12.2 English Input

There are three input modes in English: .Zi8., .ABC., and .abc..

Each LONG-PRESS of .#. cycles to the next mode as follows:

ABC -> abc -> Abc -> 123 -> Zi8 -> (Pinyin -> Stroke)

OK - validates / inserts a word (mode Zi8)

– validates text and goes to next field/menu

BACK – returns to the previous screen/menu

CLR – erases candidates (Zi8)/characters

12.2.1 Zi8 mode

As the user types a word, using one key-press per character, the Zi8 window proposes a completed word. The user may continue completing the word by entering more characters, or may use the UP / DOWN / LEFT / RIGHT navigation pad to see more possible matches. The OK softkey validates the word shown in the window.

12.2.2 ABC mode

This is the standard multi-tap alphanumeric input mode. Each press on a key cycles through its upper-case Latin characters, followed by numbers. A window displays the current and subsequent characters. The user may use the UP / DOWN / LEFT / RIGHT navigation pad to move the cursor within the text body.

12.2.3 abc mode

This mode is the same as .ABC., except in lower-case.

12.2.4 Abc mode

이 mode는 한 문장의 첫 알파벳만 대문자로 표시하고 문장의 나머지는 소문자로 표시한다. 한 문장이 끝나고 다음 문장이 시작된 때도 동일하다. 문장의 종결을 나타내는 문자는 “.”, “!”, “?” 등이다.

13. EXTERNAL LCD FEATURES

This second LCD is used to display important events (message received, missed call) even when folder is closed and also to allow the user to make a call from phonebook if headset is plugged.

13.1 Idle Screen

In idle mode it is used to indicate time, date and icons (Antenna, battery, short message, alert mode, voice message).

- Phonebook name entry
- First line display icons
- Second line displays date
- Third line displays time
- Top of screen is filled with an alert mode icon.

13.2 Missed calls screen

This screen is displayed if some missed calls are unread.

첫번째 라인은 Missed call의 icon이 나온다. 둘째 라인은 "Missed calls"라는 메시지를 보여준다

If the user opens the folder : the phone directly goes into the missed calls menu.

13.3 Short message unread screen

This screen is displayed if some short messages are unread. First line displays icons. Second and third lines display an image and the number of unread messages.

Open the folder : directly goes in the first unread short message display screen.

13.4 Agenda event

This screen is displayed if agenda event occurs.

Short press to UP/DOWN side-key : stop the melody.

Long press to UP/DOWN side-key : release the event, and back to idle screen.

If the user opens the folder : stop the melody and directly goes into the view event screen.



13.5 Immediate display message

This screen is displayed if a immediate display message is not released.

UP/DOWN side-keys can be used to display the message.

Long-press to UP/DOWN side-key : release the message, and back to idle screen.

13.6 Short message cell broadcast

This screen is displayed if a cell broadcast is unread.

If the user opens the folder : directly goes into the cell broadcast read screen.

Remark : priority is the same as for the main display – agenda event first, missed calls, voicemail, short message, immediate display message, cell broadcast.

13.7 Phonebook

Folder closed user can enter phonebook list pressing DOWN side-key. Then UP/DOWN keys are used to scroll in the list.

To launch a call if headset plugged : The user makes a long-press on DOWN side-key.

If several numbers are stored for the record : A list is show to the user, he can select the number to call.

To quit the phonebook : long-press to UP side-key.



FCC Compliance Information

This device complies with Part 15 of FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received.
Including interference that may cause undesired operation.

Information to User

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ tv technician for help.



SAFETY INFORMATION FOR RF EXPOSURE

Body worn operation

This device was tested for typical body-worn operations with the back of the phone kept 15 mm. from the body. To maintain compliance with FCC RF exposure requirements, use only belt-clips, holsters or similar accessories that maintain a 15 mm. separation distance between the user's body and the back of the phone, including the antenna. The use of belt-clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

SAR INFORMATION

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

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radiofrequency (RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health. The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg. * Tests for SAR are conducted with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In



general, the closer you are to a wireless base station antenna, the lower the power output. Before a phone model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model. The highest SAR value for this model phone when tested for use at the ear is **1.26 W/Kg** and when worn on the body, as described in this user guide, is **0.655 W/Kg**. (Body-worn measurements differ among phone models, depending upon available accessories and FCC requirements). While there may be differences between the SAR levels of various phones and at various positions, they all meet the government requirement for safe exposure. The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of <http://www.fcc.gov/oet/fccid> after searching on **FCC ID: MC6TDG-7050**.

Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications Industry Association (CTIA) web-site at <http://www.wow-com.com>.

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