

WELCOME

Congratulations on your purchase of a cellular telephone from *Motorola*, the world leader in cellular technology.






All Motorola cellular telephones are designed and manufactured to meet Motorola's exacting specifications and world-class quality standards. This product is no exception.

This cellular telephone has been manufactured to withstand rigorous durability tests including temperature, humidity, shock, dust, vibration and a drop test.







Our testing standards, our commitment to *Total Customer Satisfaction* and over sixty five years of experience in personal communications means you can depend upon the quality of this Motorola product.

WELCOME

To Turn On





1. Insert SIM Card.
2. Turn on:  
3. If prompted:  PIN Code  & Unlock Code 

To Make a Call

1. Check  is off.
2.  Telephone number (No dial tone).
3.  
4. To end the call:  

Quick User Guide

To Answer a Call

 To end the call:   

To Recall a Short-number

By short-number:   Short-number

By name:    First letter

Emergency Call

Inform operator about your subscriber number, position and the type of emergency. Stay by the telephone.

Quick User Guide

SIM Card Data

Subscriber number: _____

PIN Code * (4 to 8 digits): _____

Unlocking Code (8 digits): _____

Barring Password * (4 digits): _____

* Changeable

Press out and keep in a secure place

Telephone Data

Serial number: _____

Unlock Code * (3 or 4 digits): _____

Security Code ** (6 digits): _____

* Changeable, upon delivery = 1 2 3

** Changeable, upon delivery = 0 0 0 0 0 0

Press out and keep in a secure place

SAFETY

IMPORTANT READ THIS INFORMATION BEFORE USING YOUR PORTABLE/PERSONAL CELLULAR TELEPHONE

First introduced in 1984, the portable cellular telephone is one of the most exciting and innovative electronic products ever developed. With it you can stay in contact with your office, your home, emergency services, and others.

General

For the safe and efficient operation of your phone, observe these guidelines.

Your portable/personal cellular telephone is a radio transmitter and receiver. When the phone is ON, it sends out and receives radio frequency (RF) energy. The phone operates in the GSM frequency range of 890MHz to 960MHz (or DCS 1800 frequency range of 1710MHz and 1880MHz) and employs commonly used Time Division Multiple Access (TDMA) digital modulation techniques. When you use your phone, the cellular system handling your call controls the power level at which your phone transmits. The pulsed power level can range from 0.02 of a watt to 2 watts.

SAFETY

Exposure to Radio Frequency Energy

Research on health effects from RF energy has focused for many years on FM radio technology. That research and studies regarding newer radio technologies, such as TDMA, have found no credible scientific evidence that adverse health effects result from the use of a portable cellular telephone.

In 1991 the Institute of Electrical and Electronic Engineers (IEEE), and 1992 the American National Standards Institute (ANSI) adopted the 1982 ANSI Standard for safety levels with respect to human exposure to RF energy.

Over 120 scientists, engineers, and physicians from universities, government health agencies, and industry, after reviewing the available body of research, developed this updated Standard. In March, 1993 the Federal Communications Commission (FCC) of N. America proposed the adoption of this updated Standard. The design of your phone complies with this updated Standard. Of course, if you want to limit RF exposure even further than the updated ANSI Standard, you may choose to control the duration of your calls and operate your phone in the most power efficient manner.

SAFETY

Efficient Phone Operation

For your phone to operate at the lowest power level, consistent with satisfactory call quality:

If your phone has an extendable antenna, extend it fully. Some models allow you to place a call with the antenna retracted. However, your phone operates more efficiently with the antenna fully extended.

Hold the phone as you would any other telephone. While speaking directly into the mouthpiece, position the antenna up and over your shoulder.

Do not hold the antenna when the phone is "IN USE". Holding the antenna affects call quality and may cause the phone to operate at a higher power level than needed.

Antenna Care and Replacement

Do not use the phone with a damaged antenna. If a damaged antenna comes into contact with the skin, a minor burn may result. Replace a damaged antenna immediately. Consult your manual to see if you may change the antenna yourself. If so, use only a manufacturer-approved antenna. Otherwise, have your antenna repaired by a qualified technician.

Use only the supplied or approved antenna. Unauthorised antennas, modifications or attachments could damage the phone and may contravene local RF emission regulations or invalidate type approval.

SAFETY

Driving

Check the laws and regulations on the use of cellular telephones in the areas where you drive. Always obey them. Also, when using your phone while driving, please:

- give full attention to driving,
- use hands-free operation, if available, and
- pull off the road and park before making or answering a call if driving conditions so require.

Electronic Devices

Most electronic equipment, for example in hospitals and motor vehicles is shielded from RF energy. However, RF energy may effect some malfunctioning or improperly shielded electronic equipment.

Vehicle Electronic Equipment

Check with your vehicle manufacturer's representative to determine if any on board electronic equipment is adequately shielded from RF energy.

Medical Electronic Equipment

Consult the manufacturer of any personal medical devices (such as pacemakers, hearing aids, etc) to determine if they are adequately shielded from external RF energy.

SAFETY

Turn your phone **OFF** in health care facilities when any regulations posted in the area instruct you to do so. Hospitals or health care facilities may be using RF monitoring equipment.

Aircraft

Turn your phone **OFF** before boarding any aircraft.

- Use it on the ground only with crew permission.
- Do not use in the air.

To prevent possible interference with aircraft systems, Federal Aviation Administration (FAA) regulations require you to have permission from a crew member to use your phone while the plane is on the ground. To prevent interference with cellular systems, local RF regulations prohibit using your phone whilst airborne.

Children

Do not allow children to play with your phone. It is not a toy. Children could hurt themselves or others (by poking themselves or others in the eye with the antenna, for example). Children could damage the phone, or make calls that increase your telephone bills.

SAFETY

Blasting Areas

To avoid interfering with blasting operations, turn your unit **OFF** when in a "blasting area" or in areas posted: "turn off two-way radio". Construction crews often use remote control RF devices to set off explosives.

Potentially Explosive Atmospheres

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

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

Do not transport or store flammable gas, liquid, or explosives, in the compartment of your vehicle which contains your phone or accessories.

Before using your phone in a vehicle powered by liquefied petroleum gas (such as propane or butane) ensure that the vehicle complies with the relevant fire and safety regulations of the country in which the vehicle is to be used.

SAFETY

This Cellular Telephone complies with all applicable RF safety standards.

This cellular telephone meets the standards and recommendations for the protection of public exposure to RF electromagnetic energy established by governmental bodies and other qualified organisations, such as the following:

- **Verband Deutscher Elektroingenieure (VDE) DIN-0848**
- **Directives of the European Community, Directorate General V in Matters of Radio Frequency Electromagnetic Energy**
- **National Radiological Protection Board of the United Kingdom. GS-11, 1988.**
- **American National Standards Institute (ANSI)/IEEE. C95. 1-1992**
- **National Council on Radiation Protection and Measurements (NCRP). Report 86**
- **Department of Health and Welfare Canada, Safety Code 6.**

MANUAL UPDATES

Overnight Charger

The charger's slot accepts batteries alone or while attached to the telephone.

Please see table for approximate recharge times.

Battery Type	Approx. Recharge Time.
700 mAh	5 hours
1500 mAh	10 hours

The yellow lamp on the charger indicates that the telephone or battery is properly inserted and charging.

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INTRODUCTION

This cellular telephone is designed for the GSM System. Using this telephone makes it possible to contact any telephone in the world, provided you are in an area covered by the GSM system.

The cellular telephone does not contain your GSM-subscriber number, this information is contained on your SIM card supplied by your local network operator. All billing will be registered, when the conversation takes place, to the subscriber number on the SIM card which is inserted in the telephone.

DISPLAY, INDICATORS AND KEYPAD

See flap at the front cover.

Display




1. The 16-character display is used to show telephone numbers, short-numbers and messages which inform you of the operation of the telephone. When the display is not in use for other purposes it will show the country code and the identity of the network operator.

Indicators

2. ▲ Roam
Steady symbol: You are registered on a preferred system different from your home system.
Flashing symbol: You are registered on a non-preferred system.

1

ESSENTIAL INFORMATION

3.  In Use
Shown whenever a call is in progress.
4.  No Service
Steady symbol: Indicates that the telephone is outside any system coverage.
Flashing symbol: Indicates that the telephone is in an area with coverage, but is not registered with the system. You are able to place emergency calls using the special GSM emergency number 112, but you are unable to place/receive ordinary calls.
5.  Short Message
This icon is used to support various SMS features.



Keypad
















The keypad and the display are back lit whenever the telephone is switched on. If no key is pressed within 6 seconds the light will turn off. Pressing any key will turn the lighting back on.

The upper portion of the keypad (12 keys) is used for telephone number and letter entries.

The lower portion (9 keys) is used to enable specific functions.

The following paragraphs describe the major uses of these keys.

6.  Scroll Backward in memory / menus.
7.  Scroll Forward in memory / menus.

8.  Memory Recall
 Press  and hold to recall last number entered.
 Press  followed by the short number you want to recall from memory.
9.  Store
 Used when storing telephone numbers into the memory and to confirm choices in menus.
10.  On-Off
11.  Menu / SMS
Menu.
 Initiates selection of features in the menus.
 Selected by pressing   .
Short Message Service (SMS).
 Use to initiate SMS features.
12.  Letter entry / Clear
Letter entry:
 Letter entry is used when programming and recalling names with short-numbers.
 Enabled by pressing   .
Clear:
 Short press on  clears last digit.
 Long press on  clears entire display.
13.  Send
 Initiates call to the entered number.
 Answers incoming calls.
14.  End
 Terminates calls.



1

ESSENTIAL INFORMATION

15.  Mute / Secondary functions.

Mute:

Switches the microphone off/on during conversation.

Selected by pressing  

Secondary functions:

Initiates the following functions:

Mute, menu, letter entry, adjustment of ringer volume and adding of international prefix.

Volume Control

16.  Volume

The volume key adjusts the earpiece and ringer volume levels. Holding down the volume key will either increase or decrease the volume until the key is released. To reverse the direction of adjustment, release and press the volume key again.

To adjust earpiece volume:



To adjust ringer volume:



BASIC OPERATION

About the SIM Card

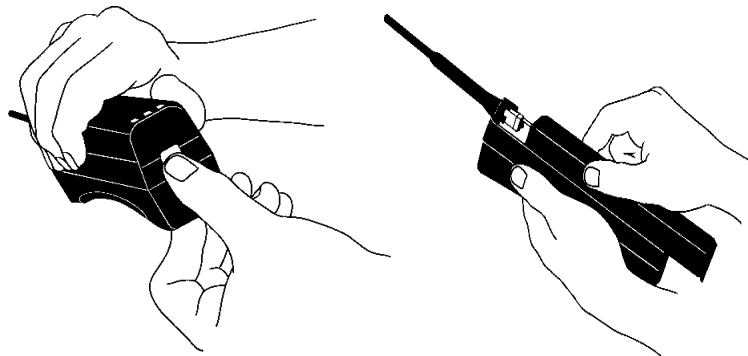
Your network operator has provided you with a subscription card generally known as a **Subscriber Identity Module Card** or SIM Card. The SIM Card is your personal key to accessing GSM services and contains all of your personal data including:

- subscriber number,
- home system,
- services subscribed to,
- PIN and Unblocking codes.

Your valid SIM Card must be correctly inserted into the card reader to access services.

Inserting the SIM Card

Remove the battery as shown below.

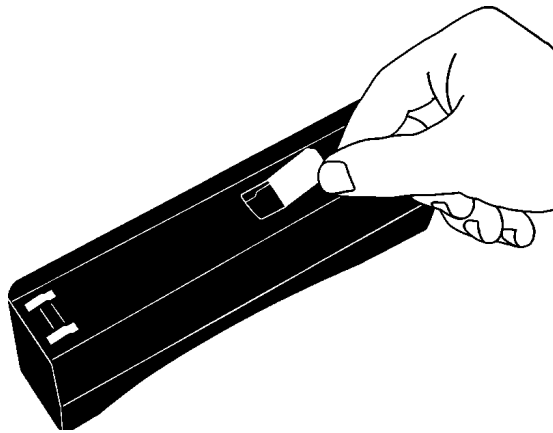


Removing the battery.

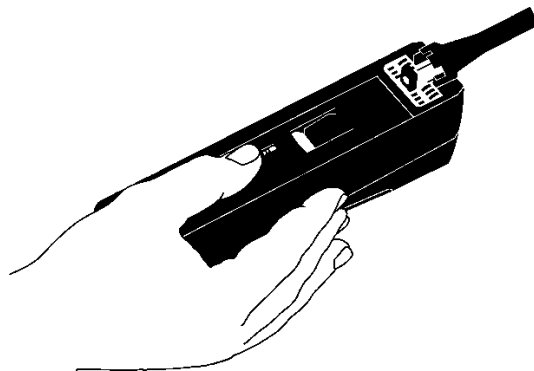
1

ESSENTIAL INFORMATION

Insert the SIM card in the card reader located behind the battery as shown below.



Inserting the SIM Card




Removing the SIM Card

When the SIM Card is inserted slide the battery back on.

If the SIM card is missing or not correctly inserted, e.g. inserted upside down or backwards, the display reads:

'Check Card': Check for proper orientation and re-insert the SIM Card

On/Off

Switch-on:  

If the SIM card is not already inserted the display will prompt you to do so.

The telephone then checks the validity of the SIM card.

If the validation is OK, the display may show:

'Enter PIN': This indicates that the SIM Card is protected by a PIN Code. See the section, "Entering the PIN Code".

'Enter Unlock Code': This indicates that the telephone is protected by an electronic lock.

To unlock:  Unlock Code 

See the section, "Electronic Lock".

If a problem exists with the SIM Card, the display shows one of the following messages:

'Blocked': See the section, "Unblocking the SIM Card".

'Bad Card' or **'Blocked'**, then **'See Supplier'**
Please seek help from your network operator.

Switch-off:  

After switch-off there may be a 2-3 second delay before it is possible to switch-on again.

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ESSENTIAL INFORMATION

Entering the PIN Code

PIN is an abbreviation of **P**ersonal **I**dentification **N**umber. The PIN Code is a 4 to 8 digit code which protects your SIM card from unauthorized use.

The first PIN Code is selected by the SIM card provider. It may be changed or disabled. See the sections, "Changing the PIN Code" or "PIN Code Enable/disable".



If the SIM card is protected by a PIN Code, the display shows:

'Enter PIN'

Each time the telephone is switched on or the SIM card is inserted, you must enter:

 PIN Code 

The PIN Code will be displayed as stars.

If you make a mistake while entering the PIN Code, you may correct it by  

If the PIN Code is accepted, the display shows:

'OK'

If the PIN Code is not accepted, the display shows:

'Wrong PIN' followed by **'Enter PIN'** and you must re-enter the PIN Code.

If you do not succeed after three attempts the display shows:

'Blocked'

and the SIM card is blocked from further use until it has been unblocked by a special unblocking procedure. See the section, "Unblocking the SIM Card".

Electronic Lock

The electronic lock protects your phone from unauthorized use. If locked, a three digit unlock code must be entered before the telephone can be used. If the display shows:

'Enter Unlock Code'

the telephone is protected by the electronic lock.

To unlock:  Unlock Code 

To lock:   

If you want to change the unlock code see the section, "Changing the Unlock Code".

Note: Upon delivery the unlock code is set to 123. If you forget the unlock code, the electronic lock will not prevent you from entering menu mode to access the display/change unlock code option. Your security code will be required to change the unlock code.

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Automatic Lock

The phone can be set to automatically lock every time the phone is turned off.

To enable/disable automatic lock:

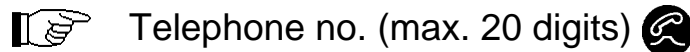


To toggle the function on/off:



Placing a Call

When the \emptyset indicator is off, you may place a call as follows:



Telephone no. (max. 20 digits)

Converse when answered.

End the conversation by: 

If a call is temporarily interrupted, the display may show:

'Retrying'

The GSM system will automatically re-connect the call if possible.

Receiving a Call

When the telephone is called, the alert signal for incoming calls is heard.

Answer by:




End the conversation by:



To stop alert signal without answering:



Call in Absence

When a call has been received but the phone has not been answered, the message “*CALL*” will be displayed. If the phone is locked the message “LOCKED” will appear after pressing the  button to clear the “*CALL*” message from the display.



ADVANCED CALL PLACEMENTS

Automatic Redial

If a call attempt is unsuccessful, you may enable an automatic redial procedure. The telephone will then initiate multiple redial attempts until the call is connected, a call is received, or the redial procedure times out.

How to operate:

After a failed attempt, such as subscriber busy,

  Before ending the call

The display will show: ‘Redial’ as long as the automatic redial procedure is active.

When the redial is successful, your phone will ring once to alert you.

1

ESSENTIAL INFORMATION

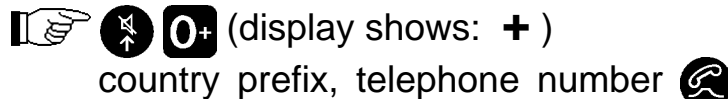
To cancel the automatic redial procedure:





International Calls

Just like using the ordinary telephone system, you must add an international prefix before dialling the country prefix and the telephone number. The international prefix will automatically be added if you use this feature.

How to operate:



Note that it is possible to store the   sequence in the short-number memory and still have the maximum of 20 digits.

Emergency Calls

Emergency calls may be placed in two ways.

To dial the GSM emergency number, 1 1 2,



This call may be initiated with or without a SIM card inserted and despite electronic lock activation. The call is directed to a central emergency operator if the \emptyset indicator is either flashing or off.

To dial the local emergency number of the ordinary telephone system,



The SIM card must be inserted and the \emptyset indicator switched off.
This call is completed like any ordinary call.



SHORT-NUMBERS

The telephone has storage locations (referred to as short-numbers) for 100 telephone numbers and names which can be used to quickly dial frequently called telephone numbers. Each location can hold a telephone number up to 20 digits in length and a name up to 16 characters long.
Short-numbers stored in the telephone are labelled from 1 through 100.

The SIM card may be capable of storing additional short-numbers. Your card provider will inform you of your card's capacity for storing short-numbers. SIM card short-numbers are labelled from 101 and up.
For convenient recall, you may store your own telephone number into a short-number, which is easy to remember e.g. (1 or 101).

Short-number Programming

Programming a name and number:

   Name 
Telephone number  Short-number

Programming a number without a name:

 Telephone number  Short-number


1

ESSENTIAL INFORMATION

Below you will find a more detailed explanation and examples of the short-number programming.

Entering a Name

Enter first character (such as "N")


 and hold down

Display will show: M - N - O - 5 - M - N -.....


Release key when wanted character is shown.

Pressing a new key will cause cursor to move to next position.

Repeat the procedure for next character.


You may also select the character by pressing the  key repeatedly.

 To move the cursor.

 To correct mistakes:



Entering the Short-number

If you have no preference for a particular short-number,

 as the short-number.

The telephone number and name will then automatically be stored in the next available short-number location. This feature is most often used when programming short-numbers with names.

If you want the next available short-number location in a particular decade like the fifties,

  as the short-number.

ESSENTIAL INFORMATION

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If you want a specific short-number like 2,



Programming Examples

Example no. 1.

Short-number: Next available.
Name: Peter
Telephone no.: 1 3 5 7 9 2 4

This is what you do:	Action:
	Enter Letter mode
	Select P
 and hold	Select E
 and hold	Select T
 and hold	Select E
 and hold	Select R
	Leave Letter mode
	
	Store
	Next available *

* Entering    will speed up storage.

To confirm storage the display shows, for short-number 1:

'Stored At 1'

If the memory is completely full the display shows:

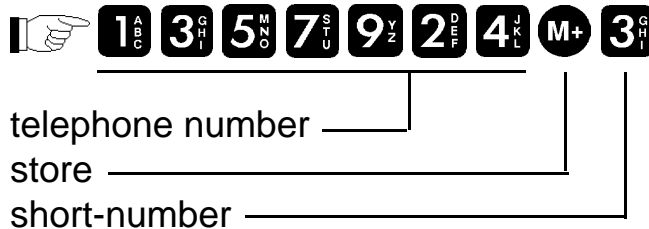
'Full'

1

ESSENTIAL INFORMATION

Example no. 2.

Short-number: 3.
Name: None
Telephone no.: 13 5 7 9 2 4



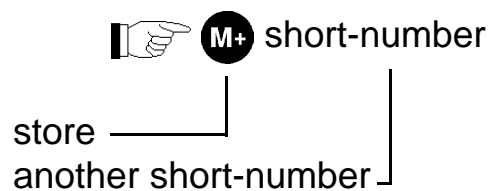
If the selected short-number is unoccupied
the display shows:

'Stored At 3'

If the selected short-number is occupied the
display shows:

'3 In Use'

Choose another short-number by:



Short-number Recalling/Dialling

Short-numbers can either be recalled by
name or by the short-number itself.

To recall by the short-number:



The name (if any), short-number and tele-
phone number will appear in the display.

ESSENTIAL INFORMATION

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When the short-number is recalled you can:

Review the recalled short-number:



Scroll forward in short numbers:



Scroll backward in short-numbers:



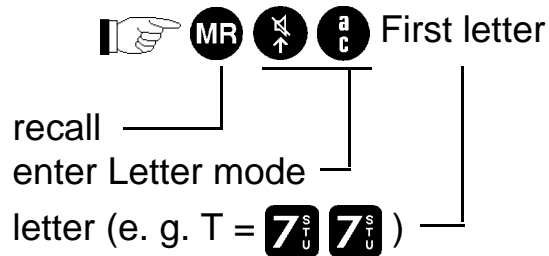
Call the recalled short-number:



Exit short-numbers:



To recall by name:



The name, short-number and telephone number will appear in the display.

When recalled you can:

Review the recalled short-number:



Scroll forward in alphabetic order:



Scroll backward in alphabetic order:



Call the recalled short-number:



1

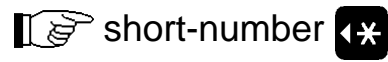
ESSENTIAL INFORMATION

Exit short-numbers:



Speed Dialling

It is possible to dial a short-number directly from memory. This is done as follows:



The called number is displayed.

Short-number Clearing

Recall the short-number. Check that it is the number you want to clear.



The display then shows:

'Clear?'



Last Number Entered

To view the last number entered:




MEMORY FEATURES**Notepad**

To store a telephone number during conversation, simply enter the number and end the conversation the usual way.

You may next call the telephone number or store it as a short-number.

Call the number by:  



Store the number by:

  short-number




Recall the number by:  

Last Number Dialed

Recall the number by:   

Call the recalled number by:  

For security reasons, you may wish to clear the last number dialed by:

 any invalid number  

2 ADVANCED INFORMATION

SYSTEM REGISTRATION

Automatic Roaming

The SIM Card memory contains space for a list of "preferred" network operators. If coverage on your home system becomes unavailable, the telephone will automatically try to establish contact with one of the preferred network operators on this list. This is done in the order that they are listed. If automatic roaming is successful, the ▲ indicator will light up indicating that you are registered on a preferred system different from your home system.

If service from one of the preferred network operators is not available, the display shows:
'Select Service'


To defer service selection:




To see a list of available network operators in the area where you are located:



The display shows the first network operator on the list. Operators are listed in order of decreasing signal strength.

Scroll forward in the list: 

Scroll backward in the list: 

Select displayed network operator: 

If you are accepted by the system, the display will show the network operator code and the ▲ indicator will start flashing indicating that you are registered on a non-preferred system.

If you are not accepted by the system, the Ø indicator will flash.

You may then continue as described in the section, "Manual Roaming".

Manual Roaming

You may manually select a network operator from a list of those providing coverage at your immediate location.

To see the list of available network operators:



Operators are listed in order of decreasing signal strength. The display shows the first network operator as:

Position of list (1-9, A-W) _____
 Star = Preferred Operator _____
 Blank = Non-Preferred Operator _____
 Network Operator Code _____

1*234-01

The lower line of the display may show the name of the network operator or the country abbreviation with the network number.

The procedure for scrolling/selecting is described in the section "Automatic Roaming"

2 ADVANCED INFORMATION



Displaying the Preferred List



To see the list of preferred network operators:



The display shows the first network operator on the list.

Position on list | 1+234-81 | Network Operator Code

Scroll forward in the list:  

Scroll backward in the list:  

When network operators have not been programmed, those positions will appear empty.

To programme a network operator see the section, "Changing the Preferred List".

Changing the Preferred List

Note: A list of international network operators and their codes can be obtained from your network operator.

Enter the preferred list and scroll to the position you want to change as described in the section, "Displaying the Preferred List".

To change the displayed network operator:

  Network Operator Code

ADVANCED INFORMATION

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Example:

Network Operator Code = 234-01



To clear the displayed network operator:

Check that it is the network operator you want to clear.

If OK, touch screen (If not touch screen)

The display then shows:

'Clear?'

Confirm by touch screen (otherwise touch screen)

MENU OPERATION

Menu operation allows you to select and cancel features by following the prompts in the display.

To enter menu mode: touch screen

The features are grouped under menu headings.

Menu headings: *Entered by:*

General Features touch screen 1

Interface Features touch screen 2

Call Monitor Features touch screen 3

Call Restriction Features touch screen 4

Secure Features touch screen 5

Other Features touch screen 6

2 ADVANCED INFORMATION

To enter a feature from menu heading:

 a digit between 1 and 8 *

* See the next pages for an overview


Once the desired feature is displayed:


 **M+** and follow the prompts



Many features are simply toggled on/off using the **M+** key. Some features will prompt for further information such as the security code.

To scroll in the menu headings/features:

 **#>** to go forward












 ***←** to go backward

To return to menu headings:  **a**

To exit menu mode:  

Overview Menu Headings and Features

Key Press: **Menu heading/Feature:**

- 1**  **General Features**
- + **1**  Status Review
 - + **2**  Automatic Answer
 - + **3**  Manual Roaming
 - + **4**  Preferred List Display/Change
- 2**  **Interface Features**
- + **1**  Silent Ringer
 - + **2**  Silent Keypad
 - + **3**  Silent Notepad
 - + **4**  Long tone DTMF
 - + **5**  PIN Code Enable/Disable

Key Press: **Menu heading/Feature:**

- + **6**_{PR} Language Selection
- + **7**_{ST} Safety Timer Setting

3_{GH} **Call Monitor Features**

- + **1**_{AB} 1 minute Audible Timer
- + **2**_{MMO} Programmable Audible Timer
- + **3**_{GH} Once Only Audible Timer
- + **4**_{JKL} Automatic Monitor Displays
- + **5**_{OME} Display Call Timers
- + **6**_{PR} Display Call Meters
- + **7**_{ST} Rate Programming
- + **8**_{XSE} Timers/Meters Reset

4_{JKL} **Call Restriction Features**

- + **1**_{AB} Restrict Keypad Dialling
- + **2**_{MMO} Restrict Memory Access
- + **3**_{GH} Restrict Incoming Calls
- + **4**_{JKL} Restrict Phone No. Length
- + **5**_{OME} No Restrictions, Full Service




5_{OME} **Secure Features**

- + **1**_{AB} Change/Display Unlock Code
- + **2**_{MMO} Master Reset
- + **3**_{GH} Master Clear
- + **4**_{JKL} Change Security code
- + **5**_{OME} Automatic Lock



2 ADVANCED INFORMATION

Key Press: **Menu heading/Feature:**

Other Features

- +  Display Signal Strength
- +  Battery Meter*
- +  Battery Save Feature (DTX)*

SMS Features

- +  Automatic Cell Broadcast
- +  Short Message Alert Tone

* Not displayed when used with Hands Free Car Kit

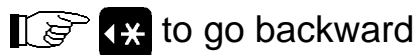
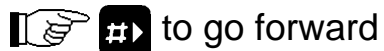
Status Review

The Status Review feature allows you to review any features changed from their default state.

To review the features selected:



To scroll:



If the display shows:

'Standard': No default settings have been changed

To exit status review: 

Master Reset

USE THIS FEATURE WITH CAUTION

Using this feature you can reset all of the features back to their default settings.

Which means:

Cancellation of:

- Automatic Answer
- Long Tone DTMF
- Safety Timer
- All Audible Timers
- Automatic Call Monitor Display
- Battery Saving Feature (DTX)
- Selected Language (Default: English)

Restoring of:

- Ringer
- Notepad Tones
- No restrictions on calls
- Unlocks the telephone
- Volume Levels to medium

To carry out a Master Reset:



Security Code

The reset is confirmed in the display by:

'Reset Complete'

Master Clear

USE THIS FEATURE WITH CAUTION

Using this feature you perform the same function as Master Reset plus these additional functions:

2 ADVANCED INFORMATION

Clears: - All 100 short-numbers
- Last number called
- Home Charge Rate
- Roam Charge Rate

Resets: - Resettable Call Timers
- Resettable Call Meters

To carry out a Master Clear:



Security Code

When a Master Clear is completed the display shows:

'Clear Complete'

INTERFACE FEATURES



The interface features allow you to customize the telephone to meet your needs.

Silent Ringer

The ring tone heard in connection with incoming calls can be muted.

To enable/disable the ring tone:



  to toggle the function on/off.

With the ring tone muted an incoming call is only announced by the normal display reading:

'Call'



Note: It is not recommended to use "Silent Ringer" and "Automatic Answer" features at the same time.

Silent Keypad

Mutes the tone heard when keys are pressed.

To enable/disable the keypad tone:



  to toggle the function on/off.

Tone Signalling Features



The tone signalling features allow you to communicate with external devices that respond to DTMF tones.

Silent Notepad

If you regularly use the Notepad feature which allows you to store a telephone number during conversation, it might be irritating for the other party to listen to the DTMF tones when you press the keys. To avoid this you may enable the silent notepad feature.

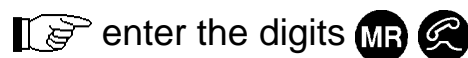
To enable/disable the silent notepad:



  to toggle the function on/off

When "Silent Notepad" is enabled you will hear a feed-back tone whereas the other party will not hear anything.

If you want to transmit DTMF tones while "Silent Notepad" is enabled you simply:



2 ADVANCED INFORMATION

Memory Linking

Memory linking allows you to append a short-number from memory to a number already in the display.






To link numbers:

 enter digits  **MR** short-number

Pauses in Memory

This feature allows you to construct and dial sequences of digits separated by pauses. A pause in the number sequence will stop the transmission at that point to allow for a system response, such as a second dial tone. An additional 12 digits may be appended to the standard length of 20 digits for a total of 32 digits. The international prefix (+) and pause(s) characters (□) each represent one digit.

To construct sequences:

 enter digits  
pause _____
enter digits   etc.
pause _____



Note: If you want to recall a short-number instead of entering the digits after a pause has already been inserted:

  **MR** short-number


The sequence may be stored in short-number 1 through 100 like any ordinary telephone number.

Short-numbers above 100 (those on your SIM Card) cannot be used to store sequences containing pauses.

To make a call with a sequence:

 Construct or recall sequence 

Digits prior to pause are transmitted.

Await response (dial tone) 

Digits prior to next pause are transmitted.


Repeat until all digits have been transmitted.

DTMF Signalling

DTMF signalling is used, for example, when you want to use the public paging service. See also the section "Long Tone DTMF".

DTMF dialling from the keypad:

1. Place the call and wait for the receiving party to accept data.
2. Enter the digits you want to transmit on the keypad. Each key press transmits the digit as a DTMF tone.

Note: Do not use the  key

DTMF dialling from short-number memory:

1. Place the call and wait for the receiving party to accept data.
2. Recall the desired short-number.

2 ADVANCED INFORMATION

3.

Repeat 2 and 3, if necessary, until all data have been transmitted.



Long Tone DTMF

Some electronic equipment such as answering machines may require longer tones.

By enabling the long tone DTMF feature the DTMF tone is transmitted as long as you press the key.

To enable/disable the long tone DTMF:



  to toggle the function on/off.

PIN Code Enable/Disable

You may enable/disable the PIN Code if your SIM Card allows it.

When disabled you do not have to enter the PIN Code when the telephone is turned on.

To enable/disable the PIN Code:



PIN Code 

The display may show;

'Not Allowed': Disabling the PIN Code is not allowed by the network operator.

Wrong PIN': The PIN Code was wrong and you must start all over.

'Blocked': Three unsuccessful attempts of entering the PIN Code have been carried out. See the section, "UNBLOCKING THE SIM CARD".

ADVANCED INFORMATION

2

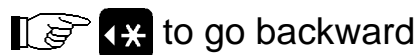
Language Selection

Using this feature it is possible to select the language in which the prompts are to be displayed.

To select language:



Scroll to preferred language:



CALL MONITORING

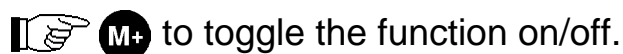
The telephone has a variety of features to help you monitor time and costs accumulated when using the telephone for outgoing calls. Two types of call monitoring features are available: audible and visual. They may be active concurrently.

Note: Depending upon your model, the phone will monitor either all calls or only outgoing calls.

One Minute Audible Call Timer

A beep is heard 10 seconds before the end of each minute of a call.

To enable/disable:



2 ADVANCED INFORMATION


Programmable Audible Call Timer

A beep is heard 10 seconds before **each** expiration of a time period (Up to 999 seconds), which you may programme.

To enable/disable:



time period in seconds **M+**

 **M+** to toggle the function on/off.


One Time - Prog. Audible Call Timer

A beep is heard 10 seconds before the **first** expiration of a time period (Up to 999 seconds) which you may programme.

To enable/disable:



time period in seconds **M+**

 **M+** to toggle the function on/off.

Visual Call Timers and Meters

The visual call monitors consist of seven call timers and seven call meters (see Note, CALL MONITORING). To utilize the seven call meters you must programme a rate-per-minute into your phone, using charge units or currency.

ADVANCED INFORMATION

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Three types of timers and meters are available.

Individual call timers/meters:

Shows call time and charge for the most recently made call. They are automatically reset before each call.

To see time/charge for a call see the section, "Automatic Monitor Displays".

Resettable call timers/meters:

Shows call time and charge for the period since you last reset the timers.

You will find the following resettable call timers/meters in the telephone:

Home: Shows time and charge for home system since last reset.

Roam: Shows time and charge for other systems since last reset.

Total: Shows the sum of Home and Roam.

To reset all resettable call timers/meters:



Cumulative call timers/meters:

Shows the total time and charge for the life of the telephone.

You will find the following cumulative call timers/meters in the telephone:

Home: Shows time and charge for home system since the telephone was put into service.

Roam: Shows time and charge for other systems since the telephone was put into service.

Total: Shows the sum of Home and Roam.

2

ADVANCED INFORMATION



To Display Call Timers



Select by scrolling to the desired timer in the list of call timers:

- Individual Call Timer
- Total Resettable Call Timer
- Home Resettable Call Timer
- Roam Resettable Call Timer
- Total Cumulative Call Timer
- Home Cumulative Call Timer
- Roam Cumulative Call Timer

  to go forward

  to go backward



To Display Call Meters



Displaying meters requires that the telephone is programmed with a home and roam rate. See the section, "Programming of Rates".



Select by scrolling to the desired meter in the list of call meters:

- Individual Call Meter
- Total Resettable Call Meter
- Home Resettable Call Meter
- Roam Resettable Call Meter
- Total Cumulative Call Meter
- Home Cumulative Call Meter
- Roam Cumulative Call Meter

  to go forward

  to go backward

ADVANCED INFORMATION

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Programming of Rates

To display call meters, the home and the roam rate must be programmed. The rates can be entered in either currency per minute or charge units per minute.

To programme the rates:



Security Code

Home Rate **M+** Roam Rate **M+**

Note: The roam rate initially defaults to the home rate to prevent you from setting it to zero by mistake.

Automatic Monitor Displays


This feature can be used to automatically display the time or charge for a call during and after each call (see note, CALL MONITORING).

To enable/disable:



Select auto timer or auto meter using the scroll keys.

 **M+** to confirm the selection.

 **M+** to toggle the function on/off.

2

ADVANCED INFORMATION

CALL RESTRICTIONS

Call restriction settings are stored in the telephone, but may affect usage of the SIM card.

Four types of restrictions are available.

- Restricted Keypad Dialling
- Restricted Memory Access
- Restricted Incoming Calls
- Restricted Phone Number Length

They may be enabled/disabled independently to suit your needs.

Restricted Keypad Dialling

Prevents any keypad dialling except for “112” emergency dialling. Short-numbers, which have not been prohibited by the Restricted Memory Access feature, may be called but not programmed.

To enable/disable:



To toggle the function on/off:



ADVANCED INFORMATION

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Restricted Memory Access

With restricted memory access you select a range of short-numbers which should always be accessible for storing and recalling.

For the short-numbers outside the range you have the following alternatives:

Protect: Storing and recalling are not allowed.

Recall Only: Only recalling is allowed.

To enable/disable:



M+ Security Code

Select “protect” or “recall only” using the scroll keys and then **M+**

Lower limit **M+** Higher limit **M+**

Restricted Incoming Calls

Only outgoing calls are allowed.

To enable/disable:



To toggle the function on/off:

M+ Security Code

2

ADVANCED INFORMATION

Restricted Phone Number Length

Among other uses, this feature can be used to prevent international calls. Only phone numbers less than or equal to the selected maximum number of digits may be called.

To enable/disable:



M+ Security Code

Display shows present maximum

To enter new maximum:

New maximum (1 to 20) **M+**

Note: DTMF signalling is disabled.
“112” emergency calls are still possible. Digits after pauses in telephone numbers do not count towards length limit.

Full Service

Use of this feature removes all restrictions previously selected.



M+ Security Code

CALL BARRING

Call barring applies only to the SIM Card, not the telephone.

By subscribing to call barring, you may bar incoming and/or outgoing calls by entering a special key sequence. The key sequence includes a “barring code” indicating which calls should be barred and a password.

The first password is provided by the network operator when you subscribe to the service.

The most common types of call barring are:

All outgoing calls Barring code: 33

Note: If barring of all outgoing calls is activated, activating other types of outgoing call barring will not make sense.

All outgoing Barring code: 331
international calls

All outgoing Barring code: 332
international calls
except those to
home network operator

All incoming calls Barring code: 35

Note: If barring all incoming calls is activated, activating other types of incoming call barring will not make sense.






All incoming calls Barring code: 351
when roaming

Additional call barring services may be provided. Consult your network operator for further information.

2 ADVANCED INFORMATION

Call barring of all incoming calls is used in the following examples. For other types of call barring replace the barring code with the appropriate code for the type in question.

Activating Call Barring

  Barring code 
Password  

Possible display messages:

'Please wait': Your request is being processed.

'Barring On': Barring has been enabled.

Example:

Barring: All incoming calls (code: 35)

Password: 2468






    
     

ADVANCED INFORMATION

2

lab Cancellng Call Barring

To cancel a single type of call barring:

  Barring code 
Password  

To cancel all types of call barring:


     
Password  

Display message:

‘Barring Off’: Barring has been disabled.

lab Status of Call Barring

If you have forgotten whether call barring has been activated you can check the status of the different types of call barring.

   Barring code  

Possible display messages:

‘Barring On’: Call barring activated.

‘Barring Off’: Call barring not activated.

Example:

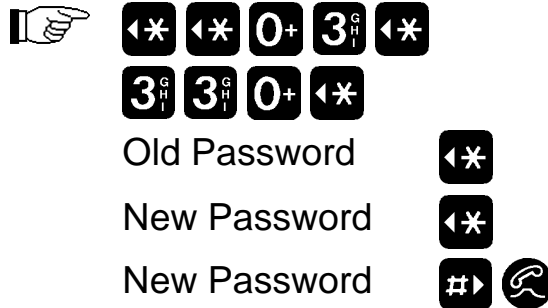
Check: Barring all incoming calls (code: 35)

2

ADVANCED INFORMATION

Changing Call Barring Password



Possible Display messages:

'Password Changed': Password changing was successful.

'Matching Error': The two entries of the new passwords did not match. Try again.

Special Call Barring Messages

One or more of the following messages may appear when operating call barring. Additional special messages are described in the section "Special Call Forward Messages".

'Outgoing Call Barred': You have tried to make a call with barring of outgoing calls enabled.

'Wrong Password': Wrong barring password entered. Try again.

'Call Barred': The number you dialled has barred incoming calls.

CALL FORWARDING

Call forwarding applies only to the SIM Card, not the telephone. By subscribing to call forwarding, you may forward incoming calls to another telephone number by entering a special key sequence. The key sequence includes a “forwarding code” indicating when an incoming call should be forwarded.

The most common types of call forwarding:

Unconditionally **Forwarding code: 21**
Forwards all incoming calls.

Note: If Unconditional call forwarding is activated, activating other types of call forwarding will not make sense.

No answer **Forwarding code: 61**
Forwards calls which you do not answer.

Not reachable **Forwarding code: 62**
Forwards calls which you cannot answer.

For example:

- if your telephone is out of coverage
- if your telephone is switched off
- if your SIM Card is not inserted







Busy **Forwarding code: 67**
Forwards calls received while your phone number is busy.

Additional call forwarding services may be provided. Consult your network operator for further information.

Call forwarding “on busy” is used in the following examples. For other types of call forwarding replace the forwarding code with the appropriate code for the type in question.

2 ADVANCED INFORMATION

Activating Call Forwarding

   Forwarding code 
Phone no.  

Possible display messages:

'Please Wait': Your request is being processed.

'Forward On': Activation was successful. Also displayed each time you place a call if call forwarding is enabled.









'Invalid Number': The telephone number entered to receive the call is invalid.

Note: You may use different phone numbers for different types of call forwarding.

Example:

When: Forwarding, if busy (code: 67)

Telephone no. to receive call: 13579246

     
1 3 5 7 9 2 4 6  
|
Telephone no.

Cancelling Call Forwarding

To cancel a single type of call forwarding:



To cancel all types of call forwarding:



Display message:

'Forward Off': Cancellation was successful.
Also displayed if the network cancels the call forwarding.

Example:

Cancellation of: Forwarding, if busy (code: 67)



Status of Call Forwarding

If you have forgotten whether call forwarding is active or to which phone number calls are being forwarded, you can check the status of the different types of call forwarding.



Possible display messages:

'Forward On 13579246': Call forwarding activated to the shown phone number.

'Forward Off': Call forwarding not activated.

Example:

Check: Call forwarding, if busy (code: 67)



2

ADVANCED INFORMATION

Special Call Forwarding Messages

One or more of the following messages may appear when using call forwarding.

'Call Forward': A call placed to you has been forwarded or a phone number you have called has been forwarded.

'Busy Try Later': The network is currently processing your earlier request. Try again later.

'Not Allowed': You cannot activate this service. Possible reasons:

- Service subscription problems.

- Incompatible service(s) activated, e.g. Call barring for incoming calls prohibits call forwarding.

'Network Problem': Communication with the network failed. Try again.

'Invalid Command': Failure in key sequence. Try again. May also indicate that the attempt was unsuccessful. If the message appears after repeated attempts consult your network operator.

'Not Available': This service is not available.

ADVANCED INFORMATION

2

DISPLAY SIGNAL STRENGTH

The signal strength is shown as a relative scale, from 1 to 8 segments. A long bar line indicates good conditions for calls.

To display signal strength:



CHANGING THE UNLOCK CODE

To change the Unlock Code:



Display shows current Unlock Code



2

ADVANCED INFORMATION

CHANGING THE PIN CODE

The first PIN Code is selected by the SIM card provider. The PIN Code must be enabled before it may be changed.

To change the PIN Code:



display shows: **'Enter Old PIN'**



display shows: **'Enter New PIN'**



display shows: **'Repeat New Pin'**



If the display shows:

'OK': the PIN Code has been changed.

'Matching Error': the two new PIN codes did not match and you must start all over.

'Wrong PIN': your old PIN Code was wrong and you must start all over. If you do not succeed after three attempts the SIM card is blocked. See the section: "Unlocking the SIM Card".

Note: If you have forgotten your old PIN Code you may choose a new PIN Code by using the procedure described in the section, "UNBLOCKING THE SIM CARD".

UNBLOCKING THE SIM CARD

The SIM card is blocked from use when three unsuccessful attempts to enter the PIN Code have been carried out.

To unblock the SIM card again you must choose a new PIN Code by following the procedure described below. Use the Unblock Code supplied by the SIM card provider.

To unblock the SIM Card:

When display shows: **'Blocked'**



display shows: **'Enter Unblock Code'**



display shows: **'Enter New PIN'**



display shows: **'Repeat New PIN'**



If the display then shows:

'OK': you have unblocked the SIM card and entered a new PIN Code.

'Matching Error Blocked': the two new PIN codes did not match and you must start all over.

'Wrong Code Blocked': your unblock code was wrong and you must start all over.

2 ADVANCED INFORMATION

If you do not succeed after ten attempts the SIM card is permanently blocked. The display shows:

'Blocked See Supplier'

You must then seek help from your network operator.

CHANGING THE SECURITY CODE

Upon delivery, your security code is "000000"

To change the security code:

     
Security code

Display shows current security code

 New security code 

In case you have forgotten the programmed security code please contact your telephone dealer's service center.

SHORT MESSAGE SERVICE (SMS)

The Short Message Service (SMS) is comprised of a set of features which enables your GSM phone to send and receive messages to and from the network. This model phone is designed to support both the Cell Broadcast and Point to Point Mobile Terminated portions of the SMS feature set.

Automatic Cell Broadcast

Your Network Operator may wish to send you important messages using a GSM feature called 'Cell Broadcast.' The Network Operator sends the information to your phone over a 'broadcast channel' (similar to television or entertainment radio transmissions. This channel may also be referred to as a 'Message Identifier' by some publications). By selecting 'Auto Cell Broadcast' and entering the appropriate broadcast channel number, these messages will scroll across your phone's display whenever you are not in a call.

There may be multiple broadcast channels in your service area. Please contact your Network Operator for a list of available channels and the information they supply.

To select:



(**a** **c**) can be used to correct undesired channel number entries)

2

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The phone will display the selected channel for a few seconds and then revert back to the ON/OFF menu heading.

To select/cancel:



 **M+** to toggle feature on/off

To change broadcast channel:

First ensure that the feature is turned off, using the cancel sequence as shown above.

Then:



new cell broadcast channel **M+**

To exit Cell Broadcast menu:



To scroll through complete message (when not in a call):





Point to Point Short Messages

Your phone can also receive Point to Point Short Messages. These messages are not the same as the Cell Broadcast messages, as they are transmitted to your phone only. The received messages are stored on your SIM card and they can be retrieved at a later date.

Receiving Point to Point Messages

When your phone receives a message, it will follow the procedure below.

1. There will be an alert signal of three short tones.
2. The Short Message Service icon will light.
3. The display will show **'Message'** if the phone is not in a call.
4. The message will be stored in the SIM card. Up to a maximum of 35 messages may be stored this way. The maximum number of messages stored will also depend upon the SIM card, since some SIM cards will have a lower capacity.


If the display shows **'Message'**, when you are using the feature menu, pressing the  key will return you to the feature menu, but pressing  will display the new message.

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ADVANCED INFORMATION


Storage of Point to Point Messages

When a message is received, the phone will check to see if there is a location available for storing the message in the SIM card.

If the SIM card is full then the  icon will flash. No more messages can be stored in the SIM card, until one or more of the stored messages are removed.

The new messages may be saved by your Network Operator and sent, at a later date, when a location becomes available in the SIM card. If a message location is not made available within a set time period, the Network Operator may remove the new messages.

Reading Point to Point Messages

Pressing the  key will show the number of messages you have at present. The top line shows the number of new messages and the bottom line indicates the number of older messages. This display will go out after two seconds.

Up to 35 messages can be stored, depending upon the SIM card capacity. These messages will be identified by a number between 1 and 35. The oldest unread message will be in location 1.

The bottom line of the display will display the message. The message will automatically scroll twice from right to left.

To stop the message scrolling:



To start the message scrolling over again:



To view other messages:



To delete the message:



The next message will be displayed, if there is one, or the menu will exit if there are no further messages.

All messages have the date, time and caller's phone number printed at the end in the following format:

<Day/Month/Time><Caller's Phone Number>. Note the availability of the caller's phone number is controlled by the Network Operator.

Clearing Messages From Memory

To remove a message from memory:



The phone will show the following message - **'Clear?'**

To confirm the deletion:



or




to cancel.

When a message has been deleted the next message will be displayed, if there is one. If there are no further messages the menu will be exited.

2

ADVANCED INFORMATION

Embedded Callback Numbers

If a phone number is included in the message, within quotation marks, the phone has the ability to call the number by simply pressing the  key.

For example the following message would permit the callback feature.

Phone "MCSG" on "0555 444 333" by 12:00

The first section within quotation marks would be ignored, because it does not start with a number.

Be warned, however, in the event of receiving the following message:

Phone "1st National" on "0555 666 777"

The callback feature would attempt to call **1!** If there is no phone number in quotation marks, then the callback feature will call the <caller's phone number> at the end of the message, if it is supported by the Network Operator.

Short Message Alert Tone

You have the option to turn the Short Message Alert Tone on or off.

To turn the alert tone on or off:



  to toggle feature on/off.

CALL WAITING AND CALL HOLDING

This model phone supports the GSM 'Call Hold' and 'Call Waiting' features. In order to use these features the following conditions must be met. Firstly, the Network Operator has made the feature available and secondly, you have subscribed to the feature. Using these features you may place a current call on hold and either accept an incoming call or start a second call.

Call Waiting

You have the option to turn the call waiting feature on or off, for future calls.

To turn call waiting on:



The display will show **'Call Waiting On'** if the activation is successful.

To turn call waiting off:



The display will show **'Call Waiting Off'** if the deactivation is successful.

To check call waiting status:



The display will show **'Call Waiting On'** or **'Call Waiting Off'**.

When the Call Waiting feature is on and a call is in progress, a second caller to your phone will hear the ring tone. Your phone will produce a single beep, followed by a double beep every eight seconds and the display will show **'Call Waiting'**.

2

ADVANCED INFORMATION

If however the feature is off, a second caller will hear the busy tone.

Call Holding

This feature is controlled by your Network Operator and is used in conjunction with the call waiting feature to produce several different results.

Call Hold and Waiting Combinations

If a call is active and there is no call waiting:



The active call will be placed on hold and the display will show '**Holding**' to indicate that the hold request is in progress. The display will show '**Call Holding**' when the process is complete.

or



The active call will end and the phone will be available for further calls.

If a call is active and there is a call waiting:



The active call will be placed on hold and the display will show '**Holding**' to indicate that the hold request is in progress. When the call has been held, the display will show '**Accepting**' to show that the waiting call is being connected. '**Call Holding**' will be shown when the process is complete.

or



The display will show '**Please Wait**' while

the active call is ending. When the call has been ended, the display will show '**Accepting**' to show that the waiting call is being connected.

If a call is active and there is a held call:



The display will show '**Switching**' as the held call becomes active and the previously active call is held. '**Call Holding**' will be shown when the process is complete.

or



The active call will end and the currently held call will become active.

If a call is held and there is no call waiting:



The display will change from '**Call Holding**' to '**Connecting**' as the held call becomes active.

or



The held call will end and the phone will be available for further calls.

If a call is held and there is a call waiting:



The display will show '**Accepting**' to show that the waiting call is being connected. The currently held call will remain held and '**Call Holding**' will be shown when the process is complete.

2

ADVANCED INFORMATION

or

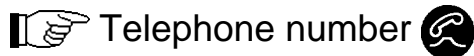


The display will show **'Please Wait'** while the held call ends. When the call has been ended, the display will show **'Accepting'** to show that the waiting call is being connected.

Call Hold and Making New calls

If a call is active and there is no call waiting:

Place the call on hold as described above and then:



The **'Dialling'** message will be shown, to indicate that the new call is being attempted. The display will show **'Call Holding'** when the process is complete.

Call Hold and Call Waiting Messages

There are several messages which may appear during call hold and call waiting operations.

'Hold Fail': an active call could not be put on hold.

'Connect Fail': a held call could not be made active again.

'Answer Waiting Call': an attempt to make a new call was made whilst a call is waiting. The waiting call must be answered first.

‘Cannot Hold Second Call’: a call is already on hold, you cannot place two calls on hold at the same time.

‘Busy Try Later’: the phone is still working on a previous command. Wait for a short time before repeating the command.

Emergency Calls and Call Hold/Wait



If you make a call to the GSM emergency number, then any currently active, held or waiting calls will end.

You cannot use the hold or waiting features when you are making an emergency call.

2

ADVANCED INFORMATION

BATTERY OPERATION**Battery Maintenance**

The only maintenance required for the batteries is to keep them charged and the contacts clean. A pencil eraser works well.

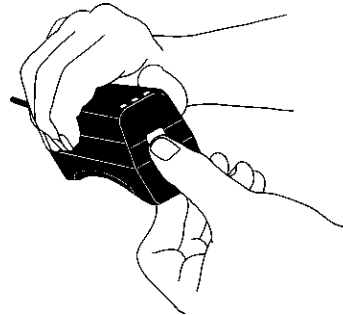
Warning!

Batteries may explode if disposed of in fire.

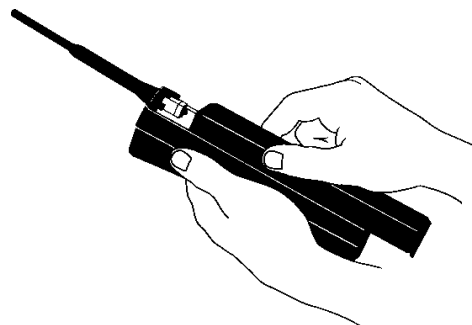
Replacing the Battery

To remove a battery:

- 1) Switch off the telephone.
- 2) Press the battery lock on the bottom of the telephone.



- 3) Slide the battery away from the antenna.



To attach a battery:

- 1) Place the battery on the guides.
- 2) Slide the battery towards the antenna until the battery locks.

3 ACCESSORIES AND OPTIONS

Battery Meter

The battery meter is shown as a relative scale, from 1 to 8 segments. A long bar line indicates a long remaining operating time.

When the battery needs to be charged a warning tone is heard and the display shows:

'Low Battery'

When the battery strength drops below the lowest level for normal operation, the telephone is switched off automatically.

To display the battery meter:





Battery Saving Feature (DTX)

The Battery Saving Feature, also known as Discontinuous Transmission, allows the telephone to operate at reduced power when conversation is not taking place.

To enable/disable the DTX feature:



  to toggle the feature on/off

BATTERY CHARGING

The telephone uses a rechargeable battery. The life of a battery can be greatly affected by the charging method as well as the use.

To maximise battery life:

- Charge new batteries before use.
- Turn the telephone off while charging.
- Charge at or near room temperature.
- Store batteries fully charged.

Overnight Internal Charger

Your telephone is equipped with an internal charging unit which makes it possible to charge the battery while it is fitted in place on your telephone. To utilise this feature, insert the transformer plug into the small socket on the side of the telephone. The LED indicator above it will illuminate to show correct connection and will remain on until your battery is fully charged.

Please see table for approximate recharge times.

Battery Type: Approx. Recharge Time:

700 mAh	8 hours*
1500 mAh	17 hours

* The internal charger is equipped with a timer which accommodates the 1500 mAh battery. Consequently, the LED will remain lit to indicate charging for approximately 17 hours, even though the 700 mAh battery will be charged in approximately 8 hours.

3

ACCESSORIES AND OPTIONS

Single Pocket Desktop Rapid Charger

The charger's slot accepts batteries alone or while attached to the telephone.

Please see table for approximate recharge times.

Battery Type: Approx. Recharge Time:

700 mAh	1 hour
1500 mAh	2 hours

The tri-colour indicator lamps show the charging status as follows:

Charging Status:	Indicator Display:
Rapid Charge Mode	Steady Red
Trickle Charge Mode	Steady Green
Waiting to Rapid Charge	Flashing Yellow

BATTERY SAVER

The Battery Saver requires no installation and allows you to power the telephone and charge the telephone's battery from the car's electrical system. One end of the battery saver plugs into your phone and the other end snaps into the vehicle's cigarette lighter.

To attach the Battery Saver.

1. Always start by making sure that the telephone is switched off.
2. Remove the protective cover on the base of your telephone to reveal the connector beneath.

3. Orient the connector of the Battery Saver coil cord so that it lines up correctly with the connector of your phone and insert it until the locking devices click into place.
4. Plug the other end of the Battery Saver into your vehicle's cigarette lighter socket. An LED indicator on the Battery Saver case indicates that the battery is being charged and will remain on while the battery is charging.

HANDS FREE CAR KIT

The Hands Free Car Kit provides:

- Full Duplex Hands Free operation.
- Power to the phone from the car's battery.
- Connection to an outside antenna.
- Constant illumination of the keypad while car ignition is on.
- In car battery charging.

Note: If your car kit has been installed with Ignition Sense Activation, the telephone will switch on and off with the car's ignition switch, as long as the telephone was switched on before the ignition was last switched off.

Note: When your telephone is connected to the Hands Free Car Kit, you cannot use the battery strength indicator feature to check the charge level of the battery.

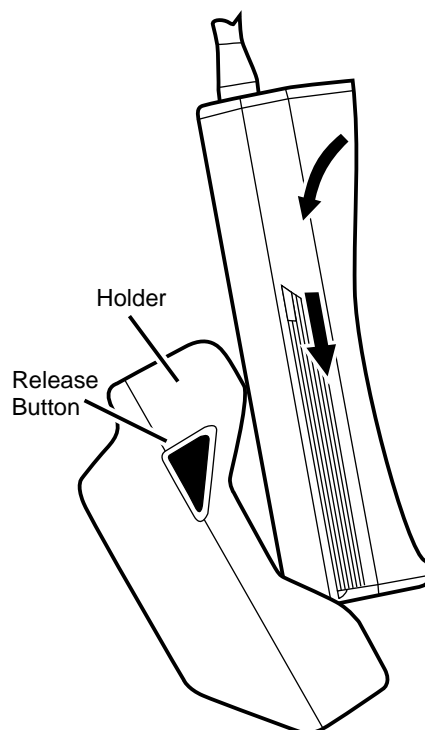
3 ACCESSORIES AND OPTIONS

Insertion / Removal

Insertion:

Your telephone connects to the Hands Free Car Kit via a coil cord. This cord attaches to the special connector at the base of your telephone.

1. Always start by making sure that the telephone is switched off and that the battery is properly attached to the telephone (the Hands Free Car Kit will not operate unless the battery is on the telephone).
2. Remove the protective cover on the base of your telephone to reveal the connector beneath.
3. Orient the plug of the coil cord so that it lines up correctly with the connector of your telephone and insert it until the locking devices click into place.



4. Once the coil cord is attached, your telephone can be placed into the Hands Free Car Kit holder. To do this, place the bottom of the phone in the holder and push the phone back until it snaps into place.

Removal:

1. Always start by making sure that the telephone is switched off.
2. To remove the telephone from the holder, press the release buttons on the side of the holder.
3. While your telephone is switched off, the coil cord can be detached by squeezing the two locking devices until they release.
4. Replace the protective cover on the base of your telephone.

Car Kit Functions



The car kit functions are comprised of:

- Handsfree Calls
- Automatic Answer
- Safety Timer

Handsfree Calls*Outgoing calls:*

The telephone must be in the hang-up cup.

When the \emptyset indicator is off, you may place a call as follows:

 Telephone number 



Direct conversation to the microphone.

End the conversation by:  

3 ACCESSORIES AND OPTIONS

Incoming calls:

The telephone must be in the hang-up cup. When the telephone is called, the alert signal for incoming calls is heard. Answer by:

  or any of the 12 upper keys
Direct conversation to the microphone.

End the conversation by:  

Switching from Hands Free to "Handset":

- Lift the telephone

Switching from "Handset" to Hands Free:

Place the telephone in hang-up cup, which automatically enables Hands Free operation.

Automatic Answer

This feature allows you to reply to an incoming call without pressing any keys.

How to operate:

When the telephone is called, the alert signal for incoming calls rings twice. Then simply talk into the microphone to answer the call.

End the conversation by:  

To enable/disable the feature:

Safety Timer

The safety timer allows the phone to remain on for a specified period of time after the vehicle's ignition has been turned off. To prevent draining the vehicle's battery, the safety timer will turn the phone off after the time period has expired. If you are in a call when the timer expires, the phone will power down after the call is completed. This feature prevents the user from having to re-enter the electronic unlock code and the PIN number for the SIM card every time the vehicle's ignition is turned off. At the time of purchase, the timer is set for one hour. You can, however, adjust the length of the safety timer from zero (0) minutes to 999 minutes. When set for zero (0) minutes, this feature is effectively disabled and the phone powers off with the ignition. If, however, you switch the phone on again whilst the ignition remains off, the safety timer will reset to one hour.

To change the length of time of the safety timer to 1 hour, select the safety timer feature:



The display shows the present time period.

To change the time period:



3 ACCESSORIES AND OPTIONS

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