







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:

  or open the flip

To End a call:

  or close the flip

To Recall a phone number from memory

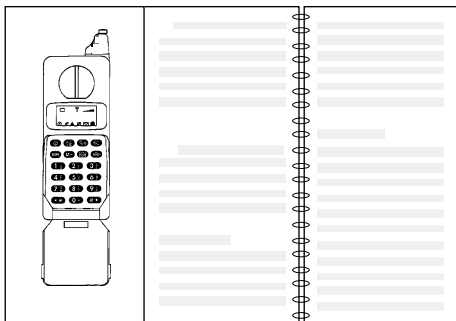
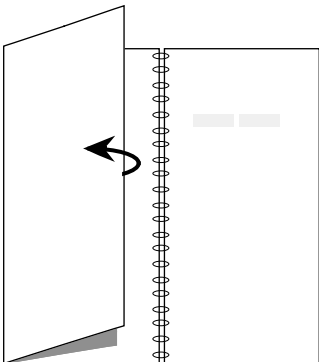
By location number:   location number

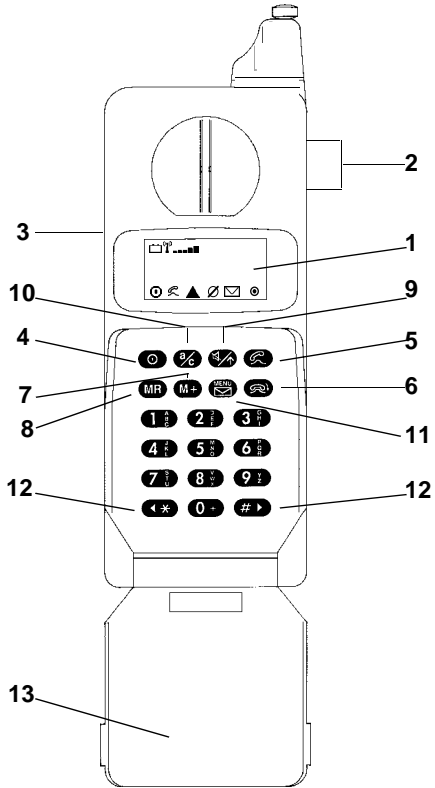
Emergency Call

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 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

MANUAL UPDATES

No user manual updates at this time.

MANUAL UPDATES

RF SAFETY

IMPORTANT

**For the efficient and safe operation of your GSM Hand-Held Portable Cellular Telephone,
*Read this information before use.***

Your GSM hand-held 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, wherever service is provided.

GENERAL

Your cellular telephone utilizes the GSM standard for cellular technology. GSM is a newer radio frequency ("RF") technology than the current FM technology that has been used for radio communications for decades. The GSM standard has been established for use in the European Community and elsewhere.

Your cellular telephone is actually a low power radio transmitter and receiver. It sends out and receives radio frequency energy. When you use your cellular telephone, the cellular system handling your call controls both the radio frequency and the power level of your cellular telephone.

RF SAFETY

EXPOSURE TO RF ENERGY

There has been some public concern about possible health effects of using portable hand-held cellular telephones. Although research on health effects from RF energy has focused for many years on the current RF technology, scientists have begun research regarding newer radio technologies such as GSM. After existing research had been reviewed, and after compliance to all applicable safety standards had been tested, it has been concluded that the product is fit for use.

If you are concerned about exposure to RF energy there are things you can do to minimize exposure. Obviously, limiting the duration of your calls will reduce your exposure to RF energy. In addition, you can reduce RF exposure by operating your cellular telephone efficiently by following the below guidelines.

RF SAFETY

EFFICIENT CELLULAR TELEPHONE OPERATION

For your cellular telephone to operate at the lowest power level consistent with satisfactory call quality, you should:

- Extend The Antenna Fully.
If your antenna is retractable, be sure the antenna is extended fully. Your cellular telephone operates efficiently with the antenna extended.
- Hold Your Cellular Telephone As You Would Any Other Telephone.
- Do Not Hold or Touch The Antenna When Your Cellular Telephone Is In Use.
Holding the antenna affects call quality and may cause the cellular telephone to operate at a higher power level than otherwise needed.

RF SAFETY

ANTENNA CARE AND REPLACEMENT

- Do Not Use The Cellular Telephone With A Damaged Antenna.
Electricity from an exposed metal inner conductor may cause a minor burn. 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, take your cellular telephone to a qualified service centre.
- Use Only The Supplied Or Approved Antenna.
Unauthorized antennas, modifications or attachments could damage your cellular telephone and substantially affect its efficient operation.

Following these guidelines will help assure the efficient and safe use of your cellular telephone.

RF 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 organizations, 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**

RF SAFETY

SAFETY FIRST

GENERAL

The following provides advisory and cautionary instructions to users of GSM mobile stations regarding their own and third party safety.

ELECTRICAL SAFETY

This apparatus is intended for use when supplied with power from:

Battery Chargers:

SLN9347 + SPN4161A or SPN4069A
or SPN4038A or SPN4037A

SLN5039 + SPN4181A or SPN4030A
or SPN4026A or SPN4034A

SLN5262 + SPN4028A or SPN4037A

Battery Savers:

SKN4292, SKN4591

Car Kits/Vehicular Chargers:

S3060, S3285, S1759, S1758, S3512, S3717

Other usage will invalidate any approval given to this apparatus and may be dangerous.

SAFETY FIRST

AIRCRAFT SAFETY

Switch off your cellular telephone when in an aircraft. The use of cellular telephones in an aircraft may be dangerous to the operation of the aircraft, disrupt the cellular network and is illegal. Failure to observe this instruction may lead to suspension or denial of cellular telephone services to the offender, or legal action or both.

EXPLOSIVE ATMOSPHERES

- Users are advised not to use the equipment when at a refuelling point.
- Users are reminded of the need to observe restrictions on the use of radio equipment in fuel depots, chemical plants or where blasting operations are in progress.

ROAD SAFETY

- The use of the Alert device to operate a vehicle's lights or horn on public roads is not permitted.
- It is advised that a hand-held microphone or telephone handset should not be used by the driver while the vehicle is moving, except in an emergency. Speak only into a fixed, neck slung or clipped-on microphone when it would not distract your attention from the road.

SAFETY FIRST

USAGE INSIDE A VEHICLE

If operating a cellular telephone inside the vehicle without utilizing an external antenna, the functionality of inadequately shielded equipment (such as antilock braking and fuel injection systems, etc.) in your vehicle may be impaired.

Consult your vehicle owner's manual or ask your automobile dealer if you have questions about your vehicle.

MEDICAL ELECTRONICS

Operation of any radio transmitting equipment, including cellular telephones, may interfere with the functionality of inadequately shielded medical devices (such as pacemakers, hearing aids, etc.) Consult your physician or ask the manufacturer of the medical device if you have questions.

SAFETY FIRST

CONTENTS

ESSENTIAL INFORMATION

1

INTRODUCTION	7
Telephone Overview	8
Display	8
Volume Keys	10
SIM Card Release	10
Keypad	10
BASIC OPERATION	12
Inserting the SIM Card	13
Switch Phone On/Off	14
Entering the PIN Code	15
Making Calls	16
Dialling Errors	16
Ending Calls	16
Receiving Calls	16
Call in Absence	17
Automatic Redial	17
International Calls	18
GSM Emergency Calls	18
Storing Telephone Nos. into Memory	19
Recalling Telephone Nos. from Memory	21
Speed Dial	22
Clearing Numbers Stored in Memory	22

CONTENTS

ADVANCED INFORMATION

2

FEATURE MENUS	23
STATUS REVIEW	25
MASTER RESET	26
MASTER CLEAR	27
SYSTEM REGISTRATION	28
Automatic Roaming	28
Manual Roaming	30
Displaying Preferred Operator List	31
Changing Preferred Operator List	32
MEMORY FEATURES	33
Notepad	33
Recall Last Number 'Called'	33
Memory Linking	34
INTERFACE FEATURES	34
Electronic Lock	34
Automatic Lock	35
Changing the Unlock Code	35
Ringer On/Off	35
Keypad Tones On/Off	36
Tone Signalling Features	36
Notepad Tones On/Off	36
Pauses in Memory	37
DTMF Signalling	38
Long Tone DTMF	39
Language Selection	39
PIN Code Enable/Disable	40
Changing the PIN Code	41
Unblocking SIM Card	42
Changing the Security Code	43

CONTENTS

ADVANCED INFORMATION

2

CALL MONITORING	43
One Minute Audible Call Timer	43
Programmable Audible Call Timer	44
Visual Call Timers & Meters	45
Displaying Call Timers	46
Displaying Call Meters	46
Programming Rates	47
Automatic Monitor Displays	47
CALL RESTRICTIONS	48
Restrict Keypad Dialling	48
Restrict Memory Access	49
Restrict Incoming Calls	49
Restrict Phone Number Length	50
Full Service	50
CALL BARRING	51
Activating Call Barring	52
Cancelling Call Barring	52
Call Barring Status	53
Changing Call Barring Password	53
Special Call Barring Messages	54
CALL FORWARDING	54
Activating Call Forwarding	55
Cancelling Call Forwarding	56
Call Forwarding Status	56
Special Call Forwarding Messages	57

CONTENTS

ADVANCED INFORMATION

2

SHORT MESSAGE SERVICE (SMS)	58
Automatic Cell Broadcast.....	58
Point to Point Messages	60
Receiving Point to Point Messages	60
Storage of Point to Point Messages.....	61
Reading Point to Point Messages.....	61
Clearing Messages From Memory	62
Embedded Callback Numbers	63
Short Message Alert Tone	63
CALL WAITING AND CALL HOLDING	64
Call Waiting	64
Call Holding.....	65
Call Hold and Waiting Combinations	65
Call Hold and Making New calls	68
Call Holding and Call Waiting Messages	68
Emergency Calls and Call Hold/Wait	69

CONTENTS

ACCESSORIES AND OPTIONS

3

BATTERY OPERATION	70
Low Battery Warning	70
Battery Saving Feature (DTX)	70
Replacing Battery	71
Important Charging Information	71
Overnight Desktop Battery Charger	72
Rapid Desktop Battery Charger	72
BATTERY SAVER	73
ULTRA SAVER	73
CAR KIT FEATURES	74
Automatic Answer	74
Entertainment Mute / Auxiliary Alert	75
Entertainment Mute	75
Auxiliary Alert	75
Safety Timer	76
MICRO CAR KITS	77
Simple Micro Car Kit	77
Coupled Micro Car Kit	77
Micro Car Kit Operation	78
Micro Car Kit Vehicular Charger	79
Switching Phone On/Off	80
Adjusting Volume	81
Automatic Hands Free	81
Standard Hands Free	82
Micro Car Kit Rear Panel	82

CONTENTS

ACCESSORIES AND OPTIONS

3

BASIC CAR KIT	83
Basic Car Kit Operation	83
Basic Car Kit Vehicular Charger	84
Switching Phone On/Off	85
Adjusting Volume	85
Automatic Hands Free	86
Switching Between Hands Free and Handset	87
INDEX	88

**The Manufacturer reserves the right to
make changes in technical and product
specifications without prior notice.**



INTRODUCTION

This cellular telephone is designed for the GSM System. Using this phone makes it possible to contact any phone 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 phone.

Instruction sequences shown in this manual are presented in the following format:



This format indicates that you should press the  key and then the  key (one, then the other, not simultaneously).

For your protection, some features require a 6-digit security code.

- Your security code is initially set to '000000'. To program a unique security code, please see section, 'Changing the Security Code.'

CAUTION

This phone contains a magnet. Do not place the phone next to magnetic storage media such as computer diskettes.

1

ESSENTIAL INFORMATION

Telephone Overview

See flap at the front page.

Display

The display and keypad are back lit whenever the telephone is switched on. After several seconds, the back lighting will turn off.

Pressing any key will return the back lighting.

1. Displays the entered telephone number or alpha message. The following indicators may also appear in the display:

 **Power on**

Stays lit while the phone is on.

 **In Use**

Symbol lights when a call is in progress.

 **No Service**

Fixed symbol: You are out of cellular system coverage and cannot make calls.

Flashing: You are in an area with coverage but not registered on the system. You can make emergency calls using the special GSM emergency number, 112, but cannot make/receive ordinary calls.

 **Roam**

Fixed Symbol: You are registered on a preferred system different from your home system.

Flashing: You are registered on a non-preferred system.

**Signal Strength**

The more segments displayed in the bar graph, the better the signal strength and call quality.

**Battery Level**

Fixed symbol: Battery charge level is sufficient for normal operation.

Slow flash: Warning! Battery charge level becoming low.

Rapid flash: Battery charge level is nearly depleted. Replace or recharge battery.

**Short Message Service**

This icon is used to support various SMS features.

Cold Temperature Note

This phone is equipped with the latest in display technology. This "supertwist" liquid crystal display (LCD) provides superior performance, viewing angle and viewing contrast over previous LCD technologies. At extremely cold temperatures, it is normal for the display to respond more slowly to key presses. *When entering numbers under these circumstances, the audible tones will still indicate that a key has been depressed and the visual indication will follow shortly.*

1

ESSENTIAL INFORMATION



Volume Keys

2. The push buttons on the right side of the phone adjust the earpiece and ringer volume levels. Press the top button to increase, or the bottom button to decrease the volume level.

To adjust earpiece volume:

Operate the volume buttons with the phone held to your ear.






To adjust ring alert volume:











-   Operate the volume buttons to the desired volume level for the ring tone of incoming calls.

SIM Card Release

3. To remove SIM card, slide button down, then pull SIM card out.

Keypad

4.  Press to turn phone on or off.
5.  Press to make and receive calls.
6.  Press to end calls.
7.  Use to store numbers and names into memory.
8.  Use to recall numbers and names from memory.

9.  *Microphone mute* 
Switches microphone off/on during conversation.
Select by pressing  
- Secondary features* ↑
Use in sequence with other keys to initiate features.
10.  *Letter entry (a):*
Use to store and recall phone numbers with names.
Clear (c):
Clears the display. Press and release to clear last digit. Press and hold to clear entire display.
11.  *Menu:*
Use to initiate menu features
Short Message Service (M):
Use to initiate SMS features.
12.     Press to move forward and backward through memory locations and feature menus.
13. **Flip** The flip can be used to answer and end calls.

1

ESSENTIAL INFORMATION

BASIC OPERATION

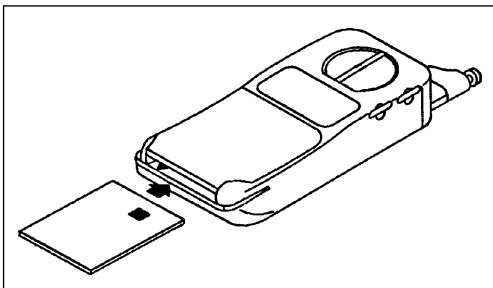
Your network operator supplied you with a subscription card known as a Subscriber Identity Module card or **SIM** card. The SIM card is your key to accessing GSM services and contains the following personal data:

- subscriber number
- home system
- services subscribed to
- PIN and unblocking codes

Your valid SIM card must be correctly inserted into the phone's card reader to access services.

Inserting the SIM Card

Insert the SIM card into the phone's card reader either before or after turning the phone on.



If the SIM card is missing, '**Insert Card**' will appear in the phone's display.

If the SIM card is damaged or not correctly inserted, (e.g. inserted upside down or backwards) '**Check Card**' will appear in the display. Check for proper orientation and re-insert the SIM card.

To remove SIM card, slide SIM card release button down, then pull SIM card out.

1

ESSENTIAL INFORMATION

Switch Phone On/Off

Switch on:



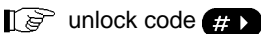
If the SIM card is not inserted the display will prompt you to do so. The telephone then checks the validity of the SIM card.

If '**Enter PIN**' appears in the display, the SIM card is protected by a PIN code.



For more information on PIN codes, see section, "Entering the PIN Code".

If '**Enter Unlock Code**' appears in the display, the phone is protected by an electronic lock.



For more information on lock features, see section, "Electronic Lock".

If '**Blocked**' appears in the display, your SIM card is blocked from use. Please see section, "Unlocking the SIM card".

If '**Bad Card**' or '**Blocked**' then '**See Supplier**' appears in the display, a problem exists with your SIM card. Please seek help from your network operator.

Switch off:




Entering the PIN Code

Your Personal Identification Number (PIN) is a 4-8 digit code that protects your SIM card from unauthorised use.

The first PIN code is selected by the SIM provider. To change or disable the PIN code, see sections, "Changing the PIN Code" or "PIN Code Enable/Disable".

When the SIM card is protected by a PIN code, **'Enter PIN'** appears in the display whenever the phone is switched on or the SIM card is inserted.

 PIN code 

The PIN code will appear as 

If you make a mistake while entering the PIN code,

If the PIN code is accepted, **'OK'** will appear in the display.

If the PIN code is not accepted, **'Wrong PIN'** then **'Enter PIN'** will appear in the display. Re-enter PIN code.



If you do not succeed after three attempts, **'Blocked'** will appear in the display. The SIM card is blocked from further use. To unblock the SIM card, see section, "Unblocking the SIM card".

1

ESSENTIAL INFORMATION

Making Calls

The  indicator must be off.



 Telephone number 

Phone numbers up to 20 digits long may be dialed.

If a call is temporarily interrupted, **'Retrying'** may appear in the display. The system will automatically reconnect the call if possible.



Dialling Errors



To erase last digit:  

To erase entire display:   and hold

Ending Calls

Either



  or close the "flip".

To retry if number is busy:  

Receiving Calls

Your phone must be on, unlocked, and in service.

To answer calls:

  or open the "flip".


To stop alert signal without answering:

ESSENTIAL INFORMATION

1

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.

Automatic Redial

Before ending an unsuccessful call attempt:



'**Redial**' will appear in the display.

Your phone will continuously attempt to complete the call until the redial procedure times out. When the call is successful, your phone will ring once to alert you.

To cancel:



or turn the phone off.




1


ESSENTIAL INFORMATION

International Calls

Just like the ordinary telephone system, you must add an international prefix before dialling the country prefix and the telephone number. This feature automatically adds the international prefix.

To select:


  **0 +** (display shows '+')
country prefix, telephone number 

It is possible to store the  **0 +** sequence into memory and still have the maximum of 20 digits.

GSM Emergency Calls

To dial the GSM emergency number, 112:

 **1** **1** **2** 

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

Storing Telephone Nos. into Memory

Your phone can store up to 100 telephone numbers and names. Each memory location can hold a number up to 20 digits long and a name up to 16 characters long. The phone's memory locations are labelled from 1 to 100.

Additionally, your SIM card may also store telephone numbers. Please contact your card provider for details. SIM card memory locations are labelled 101 and up.

To store phone number with name:



Enter person's name.

To enter names, the characters on the number keys are used.

For example,


to enter character 'N'.




and hold down.

Display shows: M-N-0-5-M-N

Release key when desired character appears.

To advance to the next position, either press a new key or press .

Repeat procedure for the next character.

You could have also selected the character 'N' by pressing  repeatedly.

To correct mistakes:



When name is complete:



1

ESSENTIAL INFORMATION

Next,



phone number



memory location number

(1-100 or 101 and up for SIM card locations)

To store phone number without name:




phone number  memory location

number (1-100 or 101 and up for SIM card locations)

The name (if entered) and phone number will be stored in the selected memory location. If the selected memory location is already occupied, **'In Use'** will appear in the display;




 new memory location number.

If all memory locations are filled, **'Full'** will appear in the display.

If you have no preference for a memory location number:



 as the memory location number.

The phone number and name will be stored in the next available memory location.

If you desire a memory location in a particular decade like 50-59:




MEMO



as memory location number.

Recalling Telephone Nos. from Memory

To recall by memory location number:

 **MR** memory location number

The name (if any), memory location number, and phone number will appear in the display.

To review name (if any) and entire phone number:

 **MR**
and hold

To scroll through directory:

 **< ***
or **# >**

To call number:

 **↻**

To exit and clear display:

 **↻**
a/c and hold

To recall by persons name:

 **MR** **↕** **a/c**

Enter the digit key having the first letter of the person's name.

For example;

 **2** **MR** **2** **MR** to recall a name beginning with letter "E"

1

ESSENTIAL INFORMATION

The name, memory location number, and last digits of the phone number will appear in the display.

To review name and entire phone number:



To scroll through directory:



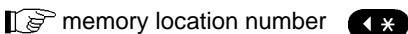
To call number:



To exit and clear display:



Speed Dial



The called number is displayed.

Clearing Numbers Stored in Memory

Recall the number from memory first.



'Clear?' will appear in the display.



to confirm deletion

or



if you do not want to clear

FEATURE MENUS

Feature menus allow you to select and cancel features by following prompts in the display.

To enter feature menus:



At the **Menu** prompt, either



to scroll through all menus,

or

enter the menu number for direct access.

The following is an overview of all menus:

Menu 1 - General Features

































- 1**
- Status Review + **1**
- Automatic Answer + **2**
- Manual Roaming (Select Service) + **3**
- Preferred Provider List
- Display/Change + **4**
- Auxiliary Alert ¹ + **5**

Menu 2 - Interface Features

- 2**
- Ringer On/Off + **1**
- Keypad Tones On/Off + **2**
- Notepad Tones On/Off + **3**
- Long Tone DTMF + **4**
- PIN Code Enable/Disable + **5**
- Language Selection + **6**

2

ADVANCED INFORMATION

- Safety Timer Setting ¹ + **7** 
- Menu 3 - Call Monitor Features**  **3** 
- 1 Minute Audible Timer + **1** 
 - 'Repeat' Audible Timer + **2** 
 - Once Only Audible Timer + **3** 
 - Automatic Monitor Displays + **4** 
 - Display Call Timers + **5** 
 - Display Call Meters + **6** 
 - Rate Programming + **7** 
 - Reset Timers/Meters + **8** 
- Menu 4 - Call Restriction Features**  **4** 
- Restrict Keypad Dialling + **1** 
 - Restrict Memory Access + **2** 
 - Restrict Incoming Calls + **3** 
 - Restrict Phone Number Length + **4** 
 - No Restrictions, Full Service + **5** 
- Menu 5 - Secure Features**  **5** 
- Change/Display Unlock Code+ **1** 
 - Master Reset + **2** 
 - Master Clear + **3** 
 - Change Security Code + **4** 
 - Automatic Lock + **5** 
- Menu 6 - Other Features**  **6** 
- Battery Save Feature (DTX) ²⁺ + **1** 
 - Automatic Hands Free ³ + **2** 
- Menu 7 - SMS Features**  **7** 
- Automatic Cell Broadcast + **1** 

ADVANCED INFORMATION

2

Note

1. Only displayed when used with the GSM Micro Car Kits.
2. Not displayed when used with Car Kits.
3. Only displayed when used with the Basic Car Kit.

To access features within a menu:

Enter feature number (or 1 to review features from beginning)

To scroll through features:



The display will show the feature name, number and status (if applicable).

Once the desired feature is displayed:



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

To exit menu operation:






STATUS REVIEW

Status review allows you to review any features changed from their original settings.

To review these features:



 **or**  to move through the messages.

 to exit status review.

2

ADVANCED INFORMATION

If **'Standard'** appears in the display, no default settings have been changed.

MASTER RESET

USE THIS FEATURE WITH CAUTION.

You can reset all features that you may have changed back to their original settings.

Cancels the following:

- Automatic Answer
- Long Tone DTMF
- Safety Timer
- All Audible Call Timers
- Automatic Call Monitor Display
- Battery Saving Feature (DTX)
- Selected Language
- Auxiliary Alert
- Auto Hands Free
- Electronic Lock
- Restricted Calls
- Auto Cell Broadcast

Restores the following:

- Keypad tones
- Ringer
- Notepad tones
- Volume level to medium

To select:



'Reset Complete' will appear in the display.

MASTER CLEAR

USE THIS FEATURE WITH CAUTION.

Performs the same function as 'Master Reset' plus these additional functions;

- Clears:**
- All 100 memory locations*
 - Notepad
 - Last Number Called
 - Home Charge Rate
 - Roam Charge Rate

- Resets:**
- Resettable Call Timers
 - Resettable Call Meters

To select:



'Clear Complete' will appear in the display.

Note

* SIM card memory locations are not cleared

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 operator locations 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, **'Select Service'** will appear in the display.

To defer service selection:  

To see a list of network operators available in your immediate area:

The display shows the first network operator on the list.

Example:

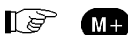
	1	234-01
Position on list (1-9, A-W)	—	
Star = Preferred Operator		
Blank = Non-Preferred Operator		
Network operator Code		—

Operators are listed in order of decreasing signal strength.

To scroll through operator list:



To select displayed network operator:



If you are accepted by the system, the display will show the 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 ∅ indicator will flash. To select a different network operator, continue as described in the section, "Manual Roaming".

2

ADVANCED INFORMATION

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:



The display shows the first network operator on the list.

Example:

Position on list (1-9, A-W) 1 **234-01**
Star = Preferred Operator
Blank = Non-Preferred Operator
Network operator Code _____

The display may also show the network operator name or the country abbreviation with the network number.

Operators are listed in order of decreasing signal strength.

To scroll through operator list:



To select displayed network operator:



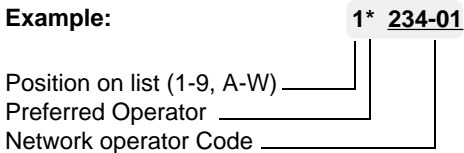
Displaying Preferred Operator List

To see the list of preferred network operators:



The display shows the first network operator on the list.

Example:



To scroll through operator list:



Where no network operator has been programmed, e.g. position 7, the display will show: 7*

To exit preferred provider list:



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

2


ADVANCED INFORMATION

Changing Preferred Operator List

A list of international network operators and their codes may 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 Preferred Operator List".

To change the displayed network operator:

 **M+** Network Operator Code

Example:

Network Operator Code = 234-01

To access preferred list:

   **1**  **4**  **M+**

To scroll to position:

 **#** 




To enter new network operator code:

 **M+** **2**  **3**  **4**  **0+** **1** 

To clear the displayed network operator:

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

If OK,

 **a/c** (If not,  )

If **a/c** is pressed, 'Clear?' will appear in the display.

Confirm by  **a/c**

(otherwise  )

To exit preferred operator list:

MEMORY FEATURES


Notepad

During a call, if you need to record a phone number, you can enter it into the display as a form of electronic notepad. Once you have ended the call, this number can then either be called by:



or stored into memory by:

 **M+** memory location number.

Recall the number by:  **MR** and hold

Recall Last Number 'Called'



The last number called will appear.

For security reasons, you may wish to clear the last number called. You can do so by entering any invalid number, and then:



2

ADVANCED INFORMATION

Memory Linking

Memory linking allows you to "link" a number from memory to a number already in the display.

To link numbers:

 digits  memory location number.



INTERFACE FEATURES

Electronic Lock

Protects your phone from unauthorised use.

To lock:   4

To unlock:

 3 or 4 digit unlock code 

Upon delivery, the unlock code is set to 123.

If you forget the unlock code, you can still access the "Change Unlock Code" feature to display the current unlock code. Your security code will be required.

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:



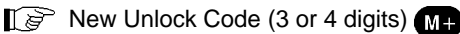
Changing the Unlock Code

To change the unlock code:



security code.

Display shows current unlock code.



Your new unlock code will display for six seconds.

Avoid using the GSM emergency number as your unlock code.

Ringer On/Off

To mute the ring tone of incoming calls and replace with the word 'Call' in the display:



M+ to toggle ringer on/off.

If "Automatic Answer" has been selected, then muting the ring tone is not recommended.


2

ADVANCED INFORMATION

Keypad Tones On/Off

To mute the tones heard when pressing keys:



 **M+** to toggle tones on/off.

Tone Signalling Features

Tone signalling features allow you to communicate with external devices that respond to Dual Tone Multi-Frequency (DTMF) tones.

Notepad Tones On/Off

If you use the "Notepad" feature often, the DTMF tones heard while pressing keys may irritate the called party. To avoid this, you can mute these tones:



 **M+** to toggle tones on/off.

With the notepad tones muted, you will still hear a feedback tone whenever you press a key, but the called party will not. If you wish to transmit DTMF tones while the notepad tones are muted, simply:






Pauses in Memory

This feature makes two part calling more convenient by allowing you to dial sequences of numbers separated by pauses. The pause in the number sequence will stop transmission at that point to allow for a system response, such as a second dial tone.

To construct sequences:




Enter the first numbers you wish to send, or recall them from memory by:

  memory location number.

1. Then to insert a pause:   

A small square will appear after the number to represent the pause.

2. Enter the next number, or recall from memory by:

   memory location number.

Repeat steps 1 and 2 for a maximum of 32 digits. An additional 12 digits may be appended to the standard 20 digits. The international prefix (+) and a pause each count as 1 digit.

You can store this number sequence in memory locations 1-100. Number sequences containing pauses cannot be stored to your SIM card.

2

ADVANCED INFORMATION

To make calls using number sequences:

Construct or recall sequence first.



Digits prior to pause are transmitted.

1. Await system response.



Digits prior to next pause are transmitted.

Repeat the steps 1 and 2 until all digits have been transmitted.

DTMF Signalling

DTMF tones used to signal pagers, access computers, etc., can be sent using your phone.

DTMF dialling from keypad:

Once the call is established, press the keypad digit keys to transmit DTMF tones. Do not use the key.

DTMF dialling from memory:

1. Establish the call.
2. Recall from memory the number you wish to transmit as DTMF digits.



ADVANCED INFORMATION

2

Repeat steps 2 and 3 as necessary, to send separate groups of numbers.

Actual DTMF tone sent over the air lasts about a tenth of a second. If you require longer tones use the "Long Tone DTMF" feature.

Long Tone DTMF

Certain electronic devices require longer tones e.g. answering machines. This feature allows you to transmit a DTMF tone for as long as the key is depressed.

To select/cancel:



Language Selection

You can select the language in which the prompts are displayed.

To select language:



To scroll to preferred language:



2

ADVANCED INFORMATION

PIN Code Enable/Disable

You may enable or disable (if the SIM card allows) the PIN code. When disabled, you do not have to enter the PIN Code when the phone is turned on.

To enable/disable PIN code:



If the display shows;

'Not Allowed', disabling the PIN code is not allowed by the network operator.

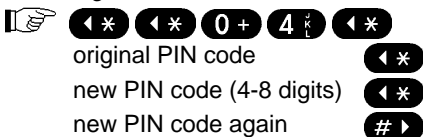
'Wrong PIN', the PIN code was wrong. You must start over. If you have forgotten your PIN code, you may choose a new PIN code by using the procedure described in the section, "Unlocking the SIM Card".

'Blocked', three unsuccessful attempts at entering the PIN code have been tried. See section, "Unlocking the SIM Card".

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:



If the display shows:

'OK' the PIN code has been changed.

'Matching Error', the two new PIN codes did not match. You must start over.

'Wrong PIN', the original PIN code was wrong. You must start over.

If you have forgotten your PIN code, you may choose a new PIN Code by using the procedure described in the section, "Unblocking the SIM Card".

'Blocked', three unsuccessful attempts at entering the PIN code have been tried. See section, "Unblocking the SIM Card".

2

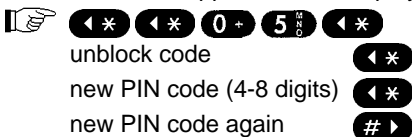
ADVANCED INFORMATION

Unlocking SIM Card

The SIM card is blocked from use upon three unsuccessful attempts at entering the PIN code. To unblock the SIM card, you must choose a new PIN code following the procedure below. Use the unblock code supplied by the SIM card provider.

To unblock SIM card:

When **'Blocked'** appears in the display,



If the display shows;

'OK', you have unblocked the SIM card and entered a new PIN code.

'Matching Error,' the two new PIN codes did not match. You must start over.

'Wrong Code,' your unblock code was wrong. You must start over.

If you do not succeed after 10 attempts, the SIM card is permanently blocked. **'Blocked, See Supplier'** will appear in the display. 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:



Display shows current security code

Enter new security code **M+**

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

CALL MONITORING

The phone has a variety of features to help you monitor time and costs accumulated when making calls.

These features provide both audible and visual call monitoring.

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

One Minute Audible Call Timer

You can programme the phone to emit a beep 10 seconds before the end of each minute of a call.

To select/cancel:



M+ to toggle feature on/off.

2

ADVANCED INFORMATION

Programmable Audible Call Timer

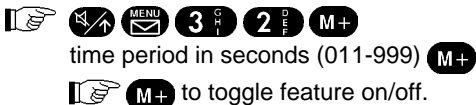
You can programme the phone to signal you two different ways:

1. Every X seconds during a call.
2. Once after Y seconds during a call.

The value of X and Y are programmed by you. The phone will emit a beep ten seconds before the interval X or Y is reached.

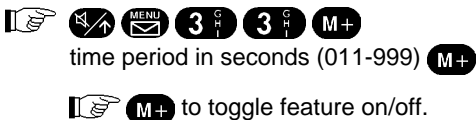
Option 1

To select/cancel:



Option 2

To select/cancel:



Visual Call Timers & Meters

The visual call monitors consist of seven call timers and seven call meters. To use the call meters you must programme a rate-per-minute into the phone, using either charge units or currency.

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

Descriptions of the various call timers/meters are as follows:

Individual - Accumulates time and charge for the most recent call made. Automatically returns to zero before each call.

Resettable - Accumulates time and charge for calls made since last reset. There are three types of resettable call timers/meters:

Home Accumulates time and charge for calls made on your home system, since last reset.

Roam Accumulates time and charge for calls made while roaming, since last reset.

Total Sum of Home and Roam call timers/meters.

To reset all resettable call timers/meters:



2

ADVANCED INFORMATION

Cumulative - Accumulates the total time and charge for all calls made and cannot be reset. There are three types of cumulative call timers/meters:

Home Accumulates time and charge for all calls made on your home system.

Roam Accumulates time and charge for all calls made while roaming.

Total Sum of Home and Roam call timers/meters.

Displaying Call Timers



or to scroll through all call timers.

to exit call timers.

Displaying Call Meters

A rate-per-minute (either currency or charge unit) must be programmed into the phone. See the section, "Programming Rates".



or to scroll through all call meters.

to exit call meters.

Programming Rates

Call meter rates can be programmed as either currency-per-minute or charge units-per-minute. In either case, the minimum time interval increment is 30 seconds.

To programme rates:



The roam rate is initially set to the home rate to prevent you from setting it to zero by mistake.

Automatic Monitor Displays

You can automatically display the time or charge of each outgoing call both during and after the call.

To select/cancel:



To toggle feature on:



Select either '**Auto Timer**' or '**Auto Meter**' using the scroll keys.



to confirm selection.

To toggle feature off:



2

ADVANCED INFORMATION

CALL RESTRICTIONS

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

The following restrictions are available:

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

These may be selected/cancelled independently to suit your needs.

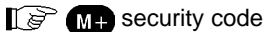
Restrict Keypad Dialling

Prevents any keypad dialling except for '112' emergency calls and recall from memory.

To select/cancel:



To toggle feature on/off:



Restrict Memory Access

Only those memory locations selected by you are accessible for storing and recalling. Memory locations outside this range are programmed as either:

Protect: Storing and recalling are barred.

Recall Only: Only recalling is allowed.

To select/cancel:



To toggle feature on:

M+ security code
Select either '**Protect**' or '**Recall Only**' using the scroll keys.

M+ to confirm selection.

Enter low limit **M+**

Enter high limit **M+**

To toggle feature off:

M+ security code.

Restrict Incoming Calls

Only outgoing calls are allowed.

To select/cancel:



To toggle feature on/off:

M+ security code.

2

ADVANCED INFORMATION

Restrict Phone Number Length

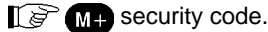
This can be done to prevent long distance and international calls.

DTMF signalling is also disabled.

To select/cancel:



To toggle feature on:

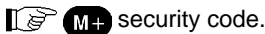


Display will show maximum number of digits that can be sent.

To change this maximum:

Enter new maximum number (up to 20) **M+**

To toggle feature off:



'112' emergency calls are still possible.

Digits after pauses in phone numbers do not count toward length limit.

Full Service

Permits full keypad and memory usage.

To select:



If selected, this service will remove all call restrictions previously selected.

CALL BARRING

Call barring is a SIM card feature. If you subscribe to call barring, you may bar incoming and/or outgoing calls by entering a special key sequence. The key sequence includes a "barring code" and a password.

The first password is supplied by the network operator.

Common types of barring:






all outgoing calls	barring code: 33
all outgoing international calls	barring code: 331
all outgoing international calls except those to home network operator	barring code: 332
all incoming calls	barring code: 35
all incoming calls when roaming	barring code: 351

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

2

ADVANCED INFORMATION

Activating Call Barring

  barring code 
password  

If display shows;

'Please Wait', your request is being processed.

'Barring On', barring has been enabled.

Example






Bar all incoming calls.

barring code: 35
password: 2468

Cancelling Call Barring

To cancel a single type of call barring:

  barring code 
password  

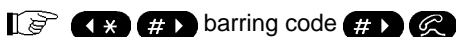
To cancel all types of call barring:

     
password  

'Barring Off' will appear in the display.

Call Barring Status

To check whether call barring is on or off:



If display shows;

'Barring On', call barring is on.

'Barring Off' call barring is off.

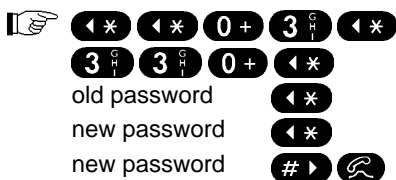
Each call bar type must be checked individually.

Example

Check status of 'barring all incoming calls'.
barring code: 35



Changing Call Barring Password



If display shows;

'Password Changed', password changing was successful.

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

2

ADVANCED INFORMATION

Special Call Barring Messages

While call barring is active, the following messages may appear in the display;

'Outgoing Call Barred', you have tried to make a call while outgoing calls are barred.

'Wrong Password', you have entered the wrong call barring password. Try again.

'Call Barred', you have made a call to someone who has barred incoming calls.

CALL FORWARDING

Call forwarding is a SIM card feature. If you subscribe to call forwarding, you may forward incoming calls to another phone number by entering a special key sequence. The key sequence includes a "forwarding code".

Common types of call forwarding:

unconditionally forwarding code: 21
Forwards all incoming calls.

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:

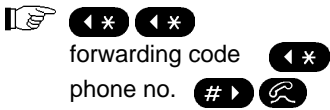
- your phone is out of coverage.
- your phone is switched off.
- your SIM card is not inserted.

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.

Activating Call Forwarding



If display shows,

'Please Wait', your request is being processed.

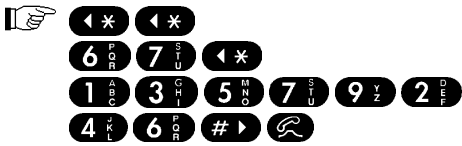
'Forward On', forwarding has been enabled. This message also appears each time you make a call if call forwarding is on.

'Invalid Number', The phone number you have chosen to receive your calls is invalid.

You may use a different phone number for each call forwarding type.

Example

Forward calls if busy.
 forwarding code: **67**
 phone no. to receive calls: **13579246**



2

ADVANCED INFORMATION

Canceling Call Forwarding

To cancel a single type of call forwarding:

 # ▶ # ▶
forwarding code # ▶ 

To cancel all types of call forwarding:

 # ▶ # ▶
0 + 0 + 2 ^{LINE} # ▶ 

'Forward Off' will appear in the display. This message also appears if the network cancels call forwarding.

Example

Cancel call forwarding if busy.

forwarding code: 67

 # ▶ # ▶
6 ^P_R 7 ^S_T # ▶ 

Call Forwarding Status

To check whether call forwarding is on or off:

 ◀ * # ▶
forwarding code # ▶ 

If display shows:

'Forward On, 13579246', call forwarding is on to number shown.

'Forward Off', call forwarding is off.

Each call forwarding type must be checked individually.

Example

Check status of 'call forwarding if busy'.
forwarding code: 67



Special Call Forwarding Messages

While call forwarding is active, the following messages may appear in the display;

- 'Call Forward', either a call made to you or a call you have made has been forwarded.
- 'Busy Try Later', the network is processing your earlier request. Please try again later.
- 'Not Allowed', you cannot activate this service.
- 'Network Problem', communication with the network failed. Please try again.
- 'Invalid Command', either a key sequence failure or an unsuccessful attempt. If the message appears after repeated attempts, please consult your network operator.
- 'Not Available', this service is not available.

2

ADVANCED INFORMATION

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)

ADVANCED INFORMATION

2

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):



2

ADVANCED INFORMATION



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.


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.

2

ADVANCED INFORMATION

To stop the message scrolling:



To start the message scrolling 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 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



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.

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 call back 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.

2

ADVANCED INFORMATION

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**'.

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.

2

ADVANCED INFORMATION

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.

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.



2

ADVANCED INFORMATION

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:

 Telephone number 

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 Failed': 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.

3 ACCESSORIES AND OPTIONS

BATTERY OPERATION

The only maintenance required for the batteries is to keep them charged and the contacts clean (a pencil eraser works well). The battery pack should be near room temperature when charging.

WARNING !

Batteries may explode if disposed of in fire.

Low Battery Warning

When the battery level becomes too low for normal operation, a warning signal (two double beeps) will sound. **'Low Battery'** will appear in the display. When the battery is almost completely discharged, the phone will turn off.

Battery Saving Feature (DTX)

The Battery Saving Feature, also known as Discontinuous Transmission (DTX), allows the phone to operate at reduced power when you are not talking.

To select/cancel:



  to toggle feature on/off.

Replacing Battery*To remove battery:*

Grasp the phone in one hand, push the thumb catch on the back of the phone, and slide the battery down and off.

To attach battery:

Line up the top of the battery with the horizontal line on the back of the phone. Place the battery on the guides and push up until the battery locks into place.

Important Charging Information

- Both NiCAD and NiMH batteries can be used with your phone.
- It is normal for the battery to become warm during charging.
- Do not leave batteries charging for more than 24 hours.
- NiMH batteries have a high rate of self-discharge compared to NiCAD batteries. Battery capacity can be restored by recharging.

3 ACCESSORIES AND OPTIONS

Overnight Desktop Battery Charger

The charger's front pocket accepts batteries either alone or while attached to the phone. The charger's rear pocket accepts batteries alone.

Slow charging will typically take 10 to 15 hours depending on the type of battery being charged.

The yellow lamps indicate that the phone or batteries are properly inserted and charging.

When charging a battery attached to the phone, turn the phone off. Leaving your phone on while charging could extend the recharge time.

Rapid Desktop Battery Charger

The charger's front pocket accepts batteries either alone or while attached to the phone. The charger's rear pocket accepts batteries alone.

Rapid charging will typically take approximately 90 minutes for all battery types. Small batteries will be charged simultaneously in the charger. Larger batteries are charged sequentially, front pocket first followed by the rear pocket.

Each pocket has its own three-colour lamp to indicate that the phone or battery is properly inserted in the charger pocket and either rapid charging (red), finished charging (green), or trickle charging (flashing yellow).

BATTERY SAVER

The Battery Saver requires no installation and allows you to power your phone from the car's electrical system. The Battery Saver does not charge the phone's battery, but saves it from use.

Attach the Battery Saver by sliding the flat end of the Battery Saver connector into the connector slot on the back of the phone. You will hear a click when proper connection is made. Plug the cigarette lighter adaptor into the car's cigarette lighter socket.

To unplug the Battery Saver from the phone, squeeze both sides of the connector until the tabs release, then remove the connector from the phone.

ULTRA SAVER

The Ultra Saver requires no installation and allows you to power your phone from the car's electrical system. The Ultra Saver also charges the phone's battery in addition to saving it from use.

Attach the Ultra Saver by sliding the flat end of the Ultra Saver connector into the connector slot on the back of the phone. You will hear a click when proper connection is made. Plug the cigarette lighter adaptor into the car's cigarette lighter socket.

To unplug the Ultra Saver from the phone, squeeze both sides of the connector until the tabs release, then remove the connector from the phone.

3 ACCESSORIES AND OPTIONS

CAR KIT FEATURES

The following features are only available when your phone is used with the optional car kits.

Automatic Answer

When using your phone with a Car Kit this feature allows your phone to automatically answer calls (no keypress required). An incoming call will ring twice, then simply talk into either the telephone mouthpiece or the hands free microphone.

Automatic answer will not operate with the *Simple Micro Car Kit*.

To select/cancel automatic answer:



If you are using the *Coupled Micro Car Kit*, make sure the phone is resting in the cradle for automatic answer to work properly.

If you are using the *Basic Car Kit*, select the automatic hands free feature before selecting automatic answer.

If automatic answer is selected while the phone's ringer has been switched off, incoming calls will only be announced by the message **'Call'** flashing in the display. The ring tone will not be heard.

Entertainment Mute / Auxiliary Alert

Depending on the option selected for your phone, only ONE of these two features will be supported. Also, the *Coupled Micro Car Kit* is required to use either of these features.

Entertainment Mute

If your phone has this feature and your car installation supports it, the car stereo will mute whenever a call is made or received. Also note that this feature CANNOT be disabled.

Auxiliary Alert

If your phone has this feature, Auxiliary Alert informs you of an incoming call when outside your car by activating an external alerting device (horn, lights).

To select/cancel:



to toggle feature on/off.

Note: With Auxiliary Alert enabled you will not turn off the telephone by switching off the vehicle's ignition.

Instead the display shows: **"Alert"**

Turning the car ignition back on will cancel Auxiliary Alert.

3 ACCESSORIES AND OPTIONS

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, it 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.

To select:



The current time period will appear in the display. If no keys are pressed within 6 seconds, this time will be retained.

To change time:

Enter new time period (up to 999).



MICRO CAR KITS**Simple Micro Car Kit**

The **Simple Micro Car Kit** provides:

- A holder (cradle) for the phone.
- Charging of the phone's battery while the phone is mounted in the holder.
- Charging of the phone's battery while separated from the phone.

*When used along with the optional **Battery Saver** accessory, this kit also provides:*

- Power to the phone from the car battery.
- Immediate communications regardless of the phone battery charge level.

Coupled Micro Car Kit

*In addition to the above features, the **Coupled Micro Car Kit** provides:*

- Connection to an outside cellular antenna during hands free calls.
- Automatic Hands Free operation.
- Built-in hands free speaker.
- Automatic car stereo muting (entertainment mute) when receiving incoming calls.

Note:

This feature is compatible with only certain car stereos. Your phone must also be programmed to support this feature. If your phone does support this feature, you will not be able to activate 'auxiliary alert'.

3 ACCESSORIES AND OPTIONS

Micro Car Kit Operation

Turn off your phone before attaching or detaching the car kit coil cord (or optional *Battery Saver* coil cord if using the *Simple Micro Car Kit*). Attach the coil cord by sliding the flat end of the connector into the connector slot on the back of the phone. You will hear a click when proper connection is made.

To unplug the coil cord, squeeze both sides of the connector until the tabs release, then remove from phone. When not in use, place the coil cord connector into the storage slot located on the top surface of the telephone holder.

Place your phone (bottom end first) into the holder,¹ then pivot the phone's top backwards until it clicks into place as shown in figure 1.²

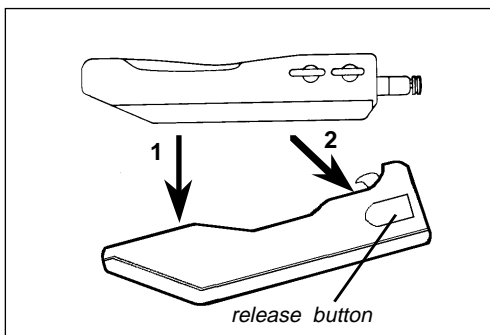


Figure 1. Insertion of Pocket Telephone into Car Kit Charger/Holder

The phone's flip can be opened and closed while in the holder. To release the phone, press the button(s) on the side(s) of the holder. Pivot the top of the phone towards you and slide it upwards out of the holder.

Micro Car Kit Vehicular Charger

Your Car Kit includes a rapid vehicular charger. The charger will fast charge all approved pocket phone batteries whenever either the battery alone, or the battery connected to the phone is placed in the holder. The LED light located next to the holder button will light up to indicate the following:

- flashing red:** "Alert" - charging problem!
Check to ensure that the metal contacts on the battery and on the holder are clean. Then re-insert your phone or battery back into the holder. If there is still no change, try a different battery, or contact your dealer.
- steady red:** rapid charging
- green:** done charging
- yellow:** "Waiting" to charge (battery too hot/too cold).

Charge times will vary depending on the type of battery used and the vehicle's electrical system. Note that charging stops in most permanent installations when the vehicle's ignition is turned off.

3 ACCESSORIES AND OPTIONS

Switching Phone On/Off

Simple Micro Car Kit:

The phone must be turned on or off manually by



Coupled Micro Car Kit:

If your car kit has been installed with *Ignition Sense Activation*, the phone will turn on or off with the car's ignition switch, as long as the phone was powered on before the ignition was last turned off.

If you turn your car ignition off during a call, the phone will remain on until you end the call.

If you have purposely or unintentionally left your phone on while connected to the Car Kit, the safety timer will turn the phone off after a user selected time period (or four hours if no time period has been selected) to prevent draining the car's battery.

Adjusting Volume

To adjust hands free speaker volume:

Operate the phone's volume buttons with the phone in the cradle. If you are not in a call, a representative tone will be heard.

To adjust earpiece volume:

Operate the volume buttons with the phone held to your ear.

Automatic Hands Free

Hands Free operation is enabled or disabled automatically by the phone holder (not applicable for the Simple Micro Car Kit). When your phone is inserted into the holder, and the coil cord is attached to the phone, your phone will automatically operate in hands free mode. When the phone is removed from the holder the phone will revert to normal handset mode.

For the 'Coupled' Micro Car Kit, the phone will only operate with the outside cellular antenna while the phone is mounted in the holder.

3 ACCESSORIES AND OPTIONS

Standard Hands Free

This feature is available when you need to enter and exit hands free without the use of the cradle. For example, you may want to use the cradle to charge a second battery while still communicating in hands free mode.

To select/cancel hands free while your phone is out of the cradle and in a call:

Either

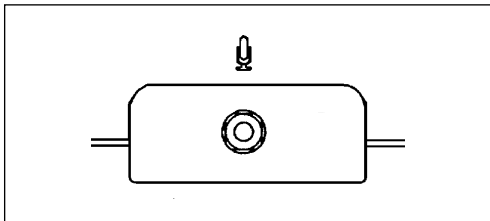
Close and then open the phone's flip within one second.

or



Micro Car Kit Rear Panel

The Coupled Micro Car Kits come with a rear panel as shown below:



Indicates the car kit microphone. All Coupled Micro Car Kits come standard with a microphone, which is plugged into the car kit in this panel and mounted above your front windshield.

BASIC CAR KIT

The **Basic Car Kit** provides:

- Full Duplex Hands Free operation.
- Power to the phone from the car's battery.
- Connection to an outside cellular antenna during hands free calls.
- Constant illumination of the phone's keypad and display while the car is on.
- Charging of the phone's battery while mounted in the holder.

Basic Car Kit Operation

Turn off your phone before attaching or detaching the Car Kit coil cord. Attach the coil cord by sliding the flat end of the connector into the connector slot on the back of the phone. You will hear a click when proper connection is made.

To unplug the coil cord, squeeze both sides of the connector until the tabs release, then remove from phone. When not in use, place the coil cord connector into the storage slot located on the top surface of the telephone holder.

Place your phone (bottom end first) into the holder, then pivot the phone's top backwards until it clicks into place as shown in figure 2.

3 ACCESSORIES AND OPTIONS

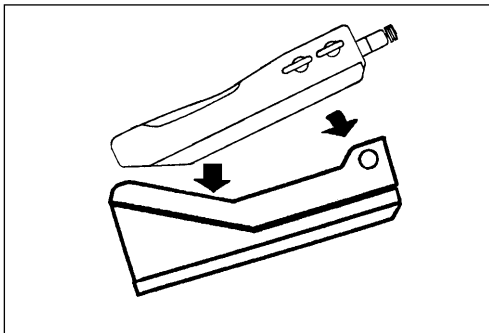


Fig. 2 Insertion of Personal Telephone into Car Kit charger/holder.

The phone's flip can be opened and closed while in the holder. To release the phone, press the button on the right side of the holder. Pivot the top of the phone toward you and lift.

Basic Car Kit Vehicular Charger

The Basic Car Kit Vehicular Charger will charge the phone's battery in the car whenever the phone is placed in the holder.

When the charger's 2-colour lamp is red, the battery is fast charging. When the lamp turns green, the battery has finished fast charging and is trickle charging. Charging stops in most permanent installations when the car's ignition is turned off.

Battery charging using the vehicular charger will achieve charge times approximately equal to those of the Rapid Desktop Charger.

Switching Phone On/Off

If your Car Kit has been installed with *Ignition Sense Activation*, the phone will turn on or off with the car's ignition switch, as long as the phone was powered on before the ignition was last turned off.

If you turn your car ignition off during a call, the phone will remain on until you end the call.

Adjusting Volume

To adjust hands free speaker volume:

Operate the phone's volume buttons either during a hands free call or before placing the call with auto hands free selected. If you are not in a call, a representative tone will be heard.

To adjust earpiece volume:

You must be in a call using the handset. Operate the volume buttons with the phone held to your ear.

3 ACCESSORIES AND OPTIONS

Automatic Hands Free

Hands free operation can be enabled two different ways:

1. Automatically by selecting the *Auto Hands Free* feature.
2. Manually, during a call, either by closing and then opening the phone's flip within one second.

or by



To select Automatic Hands Free:

Your phone must be connected to the Basic Car Kit.



You may wish to select this feature the first time you use the Car Kit.

To make calls with Auto Hands Free on:

Enter telephone number (or recall one from memory).





You will hear call through the hands free speaker. When call is answered, leave phone in holder and speak normally.

ACCESSORIES AND OPTIONS

3

To receive calls with Auto Hands Free on:

Either:

  or open the "flip".

Leave phone in holder and speak normally.

Switching Between Hands Free and Handset

During a call, either close and then open the phone's flip within one second or

INDEX

A

Automatic Answer	74
Automatic Cell Broadcast	58
Automatic Handsfree	
Basic Car Kit	86
Micro Car Kit	81
Automatic Lock	35
Automatic Monitor Displays	47
Automatic Redial	17
Automatic Roaming	28
Auxiliary Alert	75

B

Barring password.	<i>See Data card</i>
Basic Car Kit	83
Basic Car Kit Operation	83
Basic Car Kit Vehicular Charger	84
Battery Charging	71
Battery Level	9
Battery Operation	70
Battery Saver	73
Battery Saving Feature (DTX)	70

C

Call Barring	51-54
Activating	52
Cancelling	52
Changing Password	53
Special Messages	54
Status	53
Call Forwarding	54-57
Activating	55
Cancelling	56
Special Messages	57
Status	56
Call in Absence	17
Call Meters	46

INDEX

Call Monitoring	43
Call Restrictions	48
Call Timers	43-46
Call Waiting and Call holding	64
Waiting	64
Holding	65
Hold & Waiting Combinations	65
Hold & make new calls	68
Hold & Call waiting Messages	68
Car Kit Features	74
Clearing Numbers Stored in Memory	22
Clearing Point to Point	
Clearing Messages from Memory	62
D	
Dialling Errors	16
Display	8
DTMF Signalling	38
DTX.	<i>See Battery Saving Feature</i>
E	
Electronic Lock	34
Embedded Call Back Numbers	63
Emergency Calls	18
Emergency Calls and Call Hold/Wait	69
Ending Calls	16
Entering the Pin Code	15
Entertainment Mute	75
F	
Feature Menus	23
Full Service	50

INDEX

H

Handset	<i>See figure on front flap</i>
Handsfree Operation	
Auto Handsfree	81, 86
Handsfree to Handset Switching	87
Standard Hands Free	82

I

Indicators	8 - 9
Interface Features	34
International Calls	18

K

Keypad	10
Keypad Tones On/Off	36

L

Language Selection	39
Last Number Called	33
Long Tone DTMF	39
Low Battery Warning	70

M

Manual Roaming	30
Master Clear	27
Master Reset	26
Memory Features	33
Memory Linking	34
Micro Car Kits	77
Coupled	77
Simple	77
Micro Car Kit Operation	78
Micro Car Kit Rear Panel	82
Micro Car Kit Vehicular Charger	79
Microphone Mute	11

INDEX

N

Notepad	33
Notepad Tones On/Off	36

O

One Minute Audible Call Timer	43
Overnight Desktop Battery Charger	72

P

Pauses in Memory	37
PIN Code	15
Actual code.	<i>See Data card</i>
Changing	41
Enable/Disable	40
Entering	15
Point to Point Short Messages	60
Preferred Operator List	31
Changing	32
Displaying	31
Programmable Audible Call Timer	44
Programming Rates	47

R

Rapid Desktop Battery Charger	72
Reading Point to Point Messages	61
Recalling Telephone Nos. from Memory	21
Recall Last Number 'Called'	33
Receiving Calls	16
Receiving Point to Point Messages	60
Replacing Battery	71
Restrict Incoming Calls	49
Restrict Keypad Dialling	48
Restrict Memory Access	49
Restrict Phone Number Length	50
Ringer On/Off	35

INDEX

S

Safety Timer	76
Security Code	
Actual code.	<i>See Data Card</i>
Changing	43
Short Message Service (SMS)	58
Short Message Alert Tone	63
SIM Card	12
Inserting	13
Problems with	13
Unlocking	42
Releasing	10
Speed Dial	22
Status Review	25
Storing Names into Memory	19
Storing Point to Point Messages	61
Storing Telephone Nos. into Memory	19
Switch Phone On/Off	14
Basic Car Kit	85
Micro Car Kit	80
System Registration	28

T

Tone Signalling Features	36
--------------------------------	----

U

Ultra Saver	73
Unlock Code	
Actual Code.	<i>See Data Card</i>
Changing	35

V

Visual Call Timers & Meters	45
Volume Adjust (Basic Car Kit)	85
Volume Adjust (Micro Car Kit)	81
Volume Keys	10