Operating Instructions Digital Cellular Telephone

EB-G450 Main Kit

Before operating this equipment please
read these instructions carefully

Contents

Before You Start

Thank you for purchasing this Panasonic G450 digital cellular telephone. This telephone is designed to operate on the Global System for Mobile Communications (GSM).

These operating instructions detail use of the equipment contained in the Main Kit.

Symbols Used

☞ Shows that you should press the following key(s).

☏ Shows that a service is network dependent or may only be available on a subscription basis. For more information contact your Service Provider.

▦ Shows that a function is SIM dependent. For more information contact your Service Provider.

Safety Information

This equipment is intended for use when supplied with power from the built-in charger or dual charger (EB-CR500) through the AC Adaptor (EB-CR400). Other usage will invalidate any approval given to this apparatus and may be dangerous.

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 may be illegal. Failure to observe this instruction may lead to the suspension or denial of cellular telephone services to the offender, or legal action or both.

You are advised not to use the equipment at a refuelling point. You 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.

You MUST exercise proper control of your vehicle at all times. Do not use a hand-held telephone or microphone while you are driving. Find a safe place to stop first. Do not speak into a hands-free microphone if it will take your mind off the road. Acquaint yourself thoroughly with restrictions concerning the use of cellular telephones within the country you are driving and observe them at all times.

Care must be taken when using the telephone in close proximity to personal medical devices, such as pacemakers and hearing aids.

Fitting/Removing the SIM

The SIM is fitted into a holder at the back of the telephone underneath the battery. Avoid touching the gold contacts of the SIM.

Fitting the SIM

1

2

3

Contacts
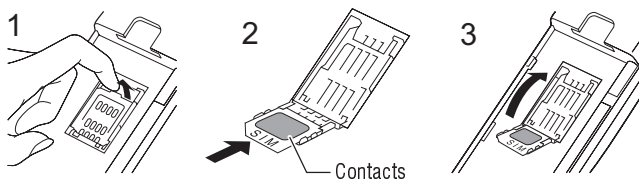
Removing the SIM

To remove the SIM follow the above steps in reverse.

Fitting/Removing the Battery

Fit a fully charged battery pack. If the battery pack is not fully charged then it must be charged as shown in "Charging the Battery" — page 24.

To maintain maximum performance always use until the low battery warning and then fully recharge the battery.

Switch off the telephone and turn face downwards.

Fitting the Battery

1

2

Removing the Battery

1

2
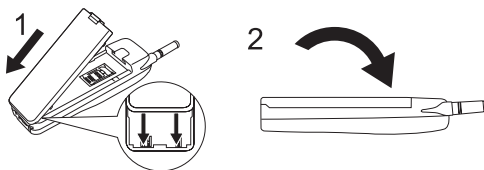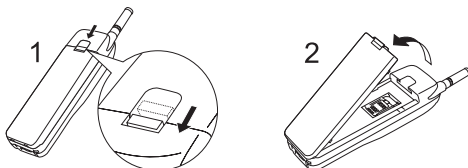
Your Telephone

Location of Controls

Incoming/
charging indicator

Antenna

Earpiece

Display

External
connector

Microphone
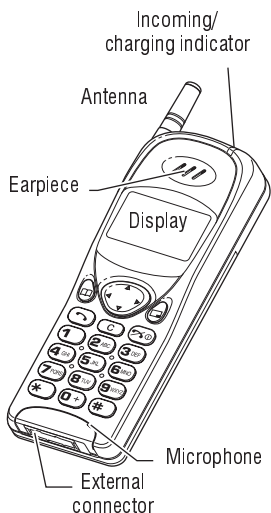
⊗	Navigation key
⊖	Select key
⊕	Phonebook key – browses through the Phonebook or stores a number in the Phonebook
⬛	Send key – makes a call
C	Clear key – clears the last digit entered, clears all digits when pressed and held or returns to the previous display
🔛	End key – ends a call or switches the telephone on/off when pressed and held

Digit keys **0+** to **9**, **✶** and **#**. Where appropriate the **0+** key will enter the international access code "+", "wild" numbers or pauses when pressed and held

Display

Received signal strength –
▯ weak signal, ▮▮▮▮▮ strong signal

Character area

Menu number

```
▸12345  ▮▮▮▮▮▮Y
▸123456789012
▸123456789012
8 ▥ GSM ✿ 023456
```

Option area

Indicates the battery level
– ▥ full, ⚡▭ low battery

Menu Icon

Indicates that the ⊗
key can be pressed
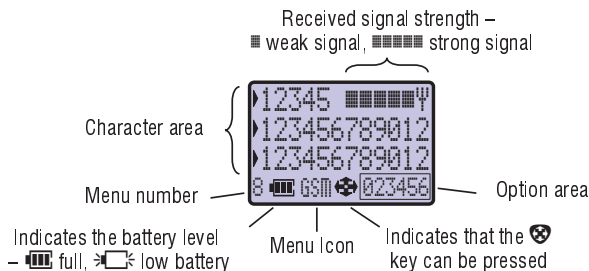
Following some operations the display will automatically clear after three seconds or after pressing any key except 🔛.

Basic Operation

Power on/off

☞ 🔊 and hold to switch power on

```
Welcome to
Panasonic
   GSM
▥▯
```

Registered

```
        ▮▮▮▮▮▮Ψ
  GSM 001
▥▯          Menu
```

☞ 🔊 and hold to switch power off.

Making a Call

Make sure that the signal strength meter is displayed.

1 ☞ area code and telephone number

2 ☞ 📞

Call successful

```
00:01 ▮▮▮▮▮▮Ψ
Voice call
▥▯   ←→   Hold
```

Emergency Calls

To make an emergency call ensure that the antenna symbol (Ψ) is present. However, the presence of the antenna symbol does not guarantee that an emergency call can be made.

☞ 1️⃣ 1️⃣ 2️⃣ 📞

```
        ▮▮▮▮▮▮Ψ
  Calling
 Emergency
▥▯
```

4

International Dialling

Using the Automatic International Access Code "+" you will be able to dial international numbers without having to know the code for the international exchange. Dialling national numbers using the "+" will have no affect on call charges.

1 ☞ 🔘 and hold until a "+" appears

2 ☞ international access code or
   ✪ to scroll through the abbreviated international names

3 ☞ area code and telephone number

4 ☞ 📞

NOTE: Many countries include an initial "0" in the area code. This should, in most cases, be left out when dialling international numbers. If you have difficulties making international calls, contact your Service Provider.

Ending a Call
☞ 📵

Answering a Call

To receive a call the telephone must be switched on and the signal strength meter must be displayed.

☞ any key except 📵 or ✪

☞ 📵 to reject the call

Calling Line Identification 📞

This feature allows you to identify incoming calls and accept or reject them. The caller's telephone number will be displayed. If the telephone number is stored in the Phonebook then the name for that number will be displayed.

Adjusting Volume

Earpiece Volume

Four levels of earpiece volume are available.

During a call:
☞ ● to decrease ● to increase

```
▮▮▮▮▮▮Ψ
Ear        ⊓
volume     ▮
▭▭▭▭   ↕   Ok
```

Ring and Key Volume

Ring and key volume be set to a preferred level and type by using Personalise in the Menu – see page 23.

Automatic Redial
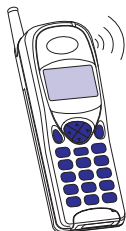
When a call is unsuccessful the telephone will ask if you want to redial the telephone number again automatically. Before each redial attempt the telephone will beep.

☞ any key to cancel

```
▮▮▮▮▮▮Ψ
Auto re-dial
    0:05
▭▭▭▭   Cancel
```

If a call is repeatedly unsuccessful you will not be able to automatically redial the telephone number. In this case you must redial the telephone number manually.

Advanced Operation

Concept of Operation

There is a close relationship between the select key, navigation key and the display.
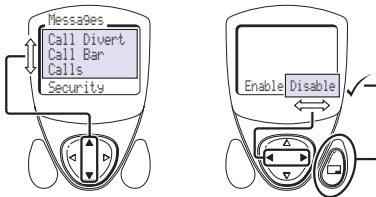
Pressing up and down (⊕) will move the pointer up and down and scroll through more information in the main area of the display.

Pressing left and right (⊕) will scroll through options in the option area of the display. To choose the option press the select key.

DTMF Tones

DTMF tones can be sent during conversation. These are often used to access voice mail, paging and computerised home banking.

Send DTMF Tones During a Call

☞ digits (0 to 9, # and *)

Pause Dial

Using pauses allows you to send DTMF tones automatically. Each pause will last for three seconds.

1 ☞ telephone number

2 ☞ 0️⃣ and hold to display "P"

3 ☞ DTMF digits after the pause

Repeat 2 for more pauses

4 ☞ 📞

When the call is successful DTMF tones will be sent every 3 seconds or when 📞 is pressed

+012345P

Call Hold

You can make a second call while speaking to an existing caller.

Holding/Resume a Call

☞ ☻ to display "Hold" in the option area of the display and press ⊖

☞ ☻ to display "Resume" in the option area of the display and press ⊖

Making a Second Call

1 ☞ telephone number, or recall from Phonebook

2 ☞ ☎

Operation During Two Calls

Held call ——————

Current call ——————

```
                    ▮▮▮▮▮▮📶
              Home
             ▸Call 2
              ▭ 2 ↔  Swap
```

Swap Between Calls

☞ ☻ to display "Swap" in the option area of the display followed by ⊖

End A Call

☞ ☻ to display "End" in the option area of the display followed by ⊖

End Both Calls

☞ ☎⓪

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Call Waiting ☏

A second call can be received, if call waiting is switched on. It is not possible to have more than one fax or data call. All voice calls must be ended before you can make or receive a fax or data call.

Receiving a Second Call

Accept a Second Call

☞ ⊖ to accept the call

When you accept the incoming call the current call will be placed on hold.

Reject a Second Call

☞ 😈 to display "Reject"

☞ ⊖

End Existing Call and Receive Second Call

1 ☞ 📞 with a waiting call

2 ☞ 📞

Stored Numbers

Note Pad

During a call you can enter numbers which you may wish to dial when the call has ended.

During a call:
☞ telephone number

When the call has ended ☞ 📞

Recent Numbers ☎

Recently dialled telephone numbers will be stored in "Last dialled".

If Calling Line Identification is available the caller's telephone number for an answered call will be stored in "Answered" and an unanswered call will be stored in "Unanswered".

When the store is full the next telephone number will overwrite the oldest.

1 ☞ 📞

2 ☞ ✚ to point at "Last dialled", "Answered" or "Unanswered"

3 ⊖

4 ☞ ✚ to point at the telephone number you wish to dial

5 ☞ 📞

Quick Tip for Calling Last Dialled Number

To redial your last called telephone number ☞ 📞 📞

Quick Tip for Returning an Unanswered Call ☎

When the display shows that you have received calls but not answered them.

1 ☞ ⊖

The last caller's telephone number will be displayed.

2 ☞ ✚ to point at the telephone number you wish to dial

3 ☞ 📞

Phonebook

Telephone numbers are stored on your SIM. Therefore, the number of locations, length of name and number of telephone numbers that can be stored are dependent on your SIM.

Adding a Telephone Number

1 ☞ telephone number

2 ☞ 📶

3 ☞ edit the displayed number

4 ☞ 🖶 to enter the telephone number

5 ☞ name — see "Alpha Entry" page 17.

6 ☞ 🖶 to enter the name

7 ☞ location number

```
Location:
 (1-250)
     -
📶 0-9      Any
```

Automatic Location

The telephone number can be stored automatically at the first available location. This can be done instead of entering a location number.

☞ 🖶 when "Any" is displayed in the option area of the display

Overwrite Protection

If a location is occupied you will be asked if you wish to overwrite the current information.

☞ 🖶 to overwrite the selected location
☞ 🅲 to choose another location number

```
Overwrite?
  Home
 (181)
📶 📖      OK
```

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Retrieving a Telephone Number

Browse Through the Phonebook

1 ☞ 📖

2 ☞ 😃 to browse through the Phonebook

When searching through the Phonebook telephone numbers will be listed in the order that was last used by "Phonebook/Browse" – see page 20.

When the telephone number has been retrieved it can be sent, edited or deleted.

Send a Retrieved Number

☞ 📞

Edit Retrieved Telephone Number

1 ☞ 😃 to display "Edit" in the option area

2 ☞ 📄

3 ☞ new telephone number

4 ☞ 📄

5 ☞ new name tag

6 ☞ 📄

Delete

1 ☞ 😃 to display "Delete" in the option area

2 ☞ 📄

Speed Dial

1 ☞ location number – leading zeros may be left out

2 ☞ #

3 ☞ 📞

Fixed Dial 🖭

The Fixed Dial Store is part of the Phonebook. However, the Fixed Dial Store has additional security. When the security feature "Fixed Dial" is switched on it is only possible to make calls with telephone numbers that are in the Fixed Dial Store.

Fixed Dial telephone numbers cannot be edited before they are dialled but "wild" numbers can be used.

The start of a telephone number can be stored in the Fixed Dial Store and when recalled the remainder added, e.g. calls made to a specific area code.

When Fixed Dial is switched on any manually dialled telephone numbers must match a telephone number in the Fixed Dial Store.

To add, edit or delete a telephone number in the Fixed Dial Store "Fixed Dial" must be switch on – see "Security" page 22. With Fixed Dial switched on all telephone numbers can be added to the Phonebook, edited or deleted as normal, but you will be asked for PIN2.

"Wild" Numbers

"Wild" numbers are spaces that can be stored in a telephone number. The "wild" numbers must be filled before the telephone number is dialled. In this way a call can be restricted to a specific area. The "wild" numbers can be anywhere within a stored telephone number.

☞ 🔟 and hold until "_" appears to enter a "wild" number

When the telephone number is recalled pressing a numeric key will fill in a "wild" number.
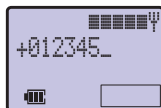
Service Numbers 🖭

Your Service Provider may program some special telephone numbers into the Service Dial area of the Phonebook. It is not possible to modify the telephone numbers stored in the Service Dial part of the Phonebook.

☞ 🔘 and hold
☞ ✴ to browse through the Service Dial list of telephone numbers

The telephone number pointed to can only be recalled or dialled.

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"Hot Key" Telephone Numbers ⊞

It is possible to dial telephone numbers from the Phonebook or Service Dial part of Phonebook very quickly. Some "Hot Key" telephone numbers may be reserved by the Service Provider, for example the first three "Hot Key" telephone numbers may be linked to the Service Dial part of the Phonebook. To select a source for the "Hot Key" telephone numbers see "Personalise" – page 23.

☞ **1** to **9**ᵂˣʸᶻ and hold

Alpha Entry

Alpha entry is used to enter alphanumeric characters into Phonebook, Short Messages and the Greeting Message.

Key	Character/Operation			
	ABC	ABΓ	AÄÅ	0–9
1	" @ – , . ; : ! ¡ ? ¿ ( ) ' & % + – / < > = £ $ ¥ ¤ §			1
2ᴬᴮᶜ	A B C a b c	Λ Β Γ	A Ä Å Æ B C Ç a à b c	2
3ᴰᴱᶠ	D E F d e f	Δ Ε Ζ	D E É F d e è é f	3
4ᴳᴴᴵ	G H I g h i	Η Θ Ι	G H I g h i ì	4
5ᴶᴷᴸ	J K L j k l	Κ Λ Μ	J K L j k l	5
6ᴹᴺᴼ	M N O m n o	Ν Ξ Ο	M N Ñ O Ö ø m n ñ o ò ö	6
7ᴾ�QᴿS	P Q R S p q r s	Π Ρ Σ	P Q R S p q r s ß	7
8ᵀᵁⱽ	T U V t u v	Τ Υ Φ	T U Ü V t u ù ü v	8
9ᵂˣʸᶻ	W X Y Z w x y z	Ξ Ψ Ω	W X Y Z w x y z	9
C	Deletes the character to the left of the cursor when or clears the entire entry when pressed and held			

Each time a key is pressed it will display the next character. When another key is pressed or no key is pressed for a short time the cursor will move to the next position.

To cycle between numerals (0–9), Greek characters (ABΓ), extended characters (AÄÅ) and standard characters (ABC) press 🔘.

Editing Alpha Entry

Pressing 🔘 will move you up or down one line. Pressing 🔘 will move you left or right one character.

When the cursor is moved over a character and another key pressed this will insert the new character.

Pressing **C** will delete the character to the left of the cursor.

Additional Features

When the word "Menu" is in the option area of the display pressing the select key will display a menu of telephone features. To select a features press the up or down (🔘) so that that pointer is showing next to the feature you require then press ⊜ or enter the feature number.

A quick way of selecting the menu is to enter the menu number.

To leave the menu press 🅲 repeatedly.

A menu item may not be available because the telephone is not in a service area or the SIM being used does not support that feature.

Key-guard 🔒

⬛ Key-guard

Key-guard will prevent any keys from being accidentally pressed e.g. when the telephone is being carried.

When a call is received key-guard will be disabled allowing you to press any key to answer the call. After the call has finished key-guard will be restored.

When the telephone is mounted in the optional Car Mount Kit key-guard will be disabled.

Emergency calls can still be made.

Phonebook 📖

⬛ Phonebook ⟹ ⬛ Browse
⬛ Create
⬛ Review
⬛ My Numbers
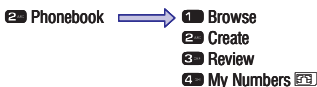
In the Phonebook menu you are able to browse through the Phonebook by location number or name, add more entries to the Phonebook and review how much space you have available.

Most common use of the Phonebook is covered in "Phonebook" – see page 11.

Messages ✉ ⟲

3️⃣ Messages ⟹ 1️⃣ Receive list
2️⃣ Send list
3️⃣ Create
4️⃣ Review
5️⃣ Parameters ⟹ 1️⃣ Auto delete
6️⃣ Broadcasts ⟹ 1️⃣ Receive 2️⃣ Lifetime
2️⃣ Message list 3️⃣ Messge Centre
3️⃣ Topics 4️⃣ Report
4️⃣ Languages 5️⃣ Protocol
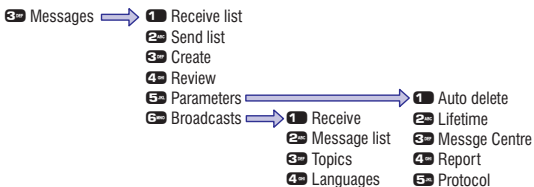
You can receive, display, edit and/or send short text messages, of up to 160 characters.

New messages will automatically be stored in the message area of your SIM. If the message area is full a new message will be rejected. To receive new messages you will have to erase unwanted messages, this can be done automatically.

Before you can send a message you must enter the Message Centre number into the parameters. The Message Centre number will be supplied by your Service Provider.

Broadcast messages can display information about your area, such as traffic or weather information – the information that is available is dependent on your network.

Call Service ☎

4️⃣ Call Service ⟹ 1️⃣ Last call
2️⃣ All calls
3️⃣ Call waiting
4️⃣ Display caller's ID
5️⃣ Withhold my ID
6️⃣ Call charge ⟹ 1️⃣ Cost left
2️⃣ Price/unit
3️⃣ Maximum cost
4️⃣ Warning at
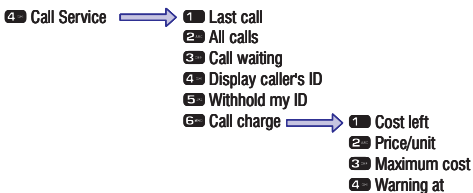
If you are given call charge information by your Service Provider the cost of your calls can be calculated. The call charge is specified in a price for each unit. The duration of one unit may vary during the day, peak and off-peak times. Therefore, the call charge can be calculated accordingly.

PIN2 is required to modify call charge information.

Call times are indicated as:
hours (0-99), minutes (0-59), seconds (0-59) — HH:MM:SS.

NOTE: Call charge information may not give an accurate reflection of the tariffs charged by the Service Provider.

Call Divert ↗: ⌾

```
5 Call Divert ━━━▶ 1 Voice calls
                  2 Fax calls
                  3 Data calls
                  4 Cancel all
                  5 Status
```

Divert can be used to forward incoming calls to mail box or another telephone, not necessarily a GSM telephone.

You can divert voice, fax and data call using different circumstances and to different telephone numbers.

When updating or checking the status of call divert the telephone must be registered with a network.

Security ⚬━

```
6 Security ━━━▶ 1 Phone lock
               2 Call bar ━━━▶ 1 Bar voice calls
               3 PIN             2 Bar fax calls
               4 PIN2            3 Bar data calls
               5 Fixed Dial      4 Cancel all
                                 5 Status
                                 6 Password
```

There are three types of security code for your telephone:
Phone Lock: Control by the lock code and controls telephone security. Factory-set to "0000".
PIN: Controls SIM security.
PIN2: Controls security for Fixed Dial Store and call charge metering.

It is recommended that you memorise your security codes. If you forget them contact your dealer for the lock code or your Service Provider for PIN and PIN2.

Call Bar is used to restrict certain outgoing and/or incoming calls. Any combination of call restrictions can be set. Different call bar restrictions can be used for voice, fax and data calls. Call Bar is controlled by a security password that is supplied by your Service Provider.

When updating or checking the status of call bar the telephone must be registered with a network.
When the telephone is locked enter the lock code to restore normal operation.
If the PIN is enabled it will be necessary to enter the PIN every time that the telephone is switched on.

Network GSM

7 Network ➡ **1** New Network
2 Search Mode
3 Network List
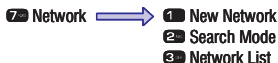
When not in your home country you may use a network that you do not directly subscribe to, this is called ROAMING. Roaming between networks in your home country may not be permitted by National Law.

When the search mode is set to automatic the telephone will search through the preferred network list and select a new network automatically. However, if the search mode is set to manual you will be asked to select a network from a list.

Personalise ☺

8 Personalise ➡ **1** Language
2 Tones ➡ **1** All tones
3 In car ➡ **1** Keep alive **2** Ring volume
4 Greeting **2** Auto answer **3** Ring type ➡ **1** Voice calls
5 Backlight **4** Key volume **2** Fax calls
6 DTMF tone length **5** Warning tones **3** Data calls
7 Defaults **4** Messages
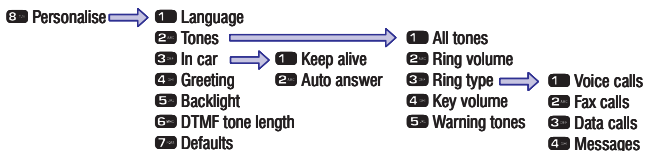
The personalise feature will enable you to customise the telephone to operate in a way that suits you.

The language that the telephone will use for display messages can be changed.

Tones will personalise sounds that the telephone will make during operation. A different ring can be used for voice, fax, data and messages.

The keep alive timer will delay switching off the telephone, when the telephone is mounted in the optional Car Mount Kit and the vehicle ignition is turned off. If a call is in progress after the ignition timer has elapsed the call will be maintained.

When automatic answer is switched on, and the telephone is mounted in the optional Car Mount Kit, a call can be answered without pressing any keys.

A personalised greeting message can be programmed for when the telephone is switched on.

Battery life can be increased by changing the brightness of the backlight.

Defaults will return your personal settings to their factory default.

The source for the "Hot Key" telephone numbers can be set using the Hot Key Dial menu.

Battery Information

Low Battery

When the battery power is low a warning tone will sound and a "LOW BATTERY" message will flash. The power will automatically shut off shortly after the battery warning tone. Fully charge the battery pack or replace it with a fully charged one.
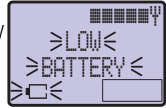
During Conversation

Finish your call immediately and fully charge the battery pack or replace it with a fully charged one.

During Standby

Incoming calls will be rejected and it is not possible to make a call.

Charging the Battery

The battery pack must be attached to the telephone followed the AC Adaptor or charging will not start.

To maintain maximum performance always use until the low battery warning and then fully recharge the battery.

To AC power
3 2
Press lock buttons to release
Charge indicator will be red while charging
4
Battery level indicator will show the status – see table below
1
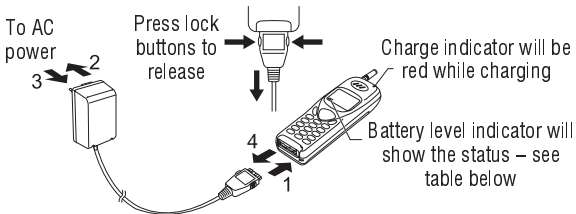
NOTE: DO NOT apply force to the connector as this may damage the telephone and/or the AC Adaptor.

Operation of Battery Level Indicator

	While charging	Charging complete
Telephone on	⫸▥⫷	▥
Telephone off	⫸▥⫷	OFF

When charging is complete remove the AC Adaptor.

Care and Maintenance

- Pressing any of the keys may produce a loud tone. Avoid holding the telephone close to the ear while pressing the keys.

- Extreme temperatures may have a temporary effect on the operation of your telephone. This is normal and does not indicate a fault.

- Do not disassemble the equipment. There are no user-serviceable parts.

- Do not subject the equipment to excessive vibration or shock.

- Avoid contact with liquids. If the equipment becomes wet immediately remove the power and contact your dealer.

- Always use approved accessories in order to maintain optimum performance and avoid damage.

- The equipment may be cleaned with a soft cloth dampened with a mild detergent and water. Petroleum based cleaners may damage the equipment.

- Do not leave the equipment in direct sunlight or a humid, dusty or hot area.

- Keep metallic items that may accidentally touch the terminals away from the equipment.

- Always charge the battery pack in a well ventilated area, not in direct sunlight, between +5°C and +35°C. It is not possible to recharge the battery pack if it is outside this temperature range.

- Avoid recharging battery packs for longer than recommended.

- Do not incinerate or dispose of the battery packs as ordinary rubbish. The battery packs must be disposed of in accordance with local legislation and may be recycled.

- When disposing of any packing materials or old equipment check with your local authorities for information on recycling.

Other Information

Glossary of Terms

DTMF	Dual Tone Multiple Frequency tones. The numeric keys 0 to 9, and * and # will generate different DTMF tones when pressed during conversation. These are used to access voice mail, paging and computerised home banking.
GSM	Global System for Mobile communications. The name given to the advanced digital technology that your telephone uses.
Home country	The country where your home network operates.
Home network	The GSM network on which your subscription details are held.
Lock code	Used for security of your telephone. Factory set to "0000".
Message Centre	Where messages are sent before they are forwarded onto their destination. The Message Centre number may be programmed into your SIM or supplied by your Service Provider.
Network operator	The organisation responsible for operating a GSM network. Each country will have a different network operator.
Password	Used for the control of the call bar. Supplied by your Service Provider.
PIN	Personal Identification Number used for SIM security. Supplied by your Service Provider.
PIN2	Personal Identification Number used for the control of Fixed Dial Store and call charge metering. Supplied by your Service Provider.
PUK/ PUK2	PIN/PIN2 Unblocking Key. Used to unblock the PIN/PIN2. Supplied by your Service Provider.
Registration	The act of locking on to a GSM network. This is usually performed automatically by your telephone.
Roaming	The ability to use your telephone on networks other than your Home network.
Service Provider	The organisation responsible for providing access to the GSM network.

SIM	Subscriber Identification Module. A small smart-card which stores unique subscriber and user-entered information such as Phonebook, Fixed Dial Store and short messages. Supplied by your Service Provider.
Supplementary service	Network-controlled GSM functions which your telephone will support. Supplementary services may only be available on a subscription basis.
"Wild" numbers	Spaces in a stored telephone number. When the telephone number is recalled pressing a numeric key will fill in a space. This can be used to restrict dialling.

Trouble Shooting

Should any problem persist contact your dealer.

Problem	Causes and Solutions
Telephone will not switch on	Check that the battery pack is fully charged and correctly connected to the telephone.
Short battery life	Battery life is affected by the network you are using and the condition of the battery pack. The life of the battery pack is affected by improper charging, this is inherent in all Ni-MH batteries. To maintain maximum performance always use until the low battery warning and then fully recharge the battery pack. To revive the battery pack use the telephone until it switches off and then fully recharge three times. However, the battery pack will eventually wear out and must be replaced with a new one.
Battery level indicator (▥) does not light when charging	If a battery is deeply discharged it will take a short time before there is sufficient power in the telephone to light the battery level indicator (▥). The battery pack must be charged in a temperature no lower than +5°C and no higher than +35°C.
Calls cannot be made	Calls cannot be made when the telephone is locked (Menu: Security/Mobile Lock) or outgoing calls are barred (Menu: Call Bar). Check that the telephone is registered to a network. Move to a coverage area and operate your telephone after it has registered with a network.

Calls cannot be made from Fixed Dial Store	Check the telephone number is stored in the Fixed Dial Store or your SIM supports Fixed Dial.
Calls cannot be received	To receive a call the telephone must be switched on. Calls cannot be received when incoming calls are barred (Menu: Personalise/Call Bar). Check that the telephone is registered to a network. Move to a coverage area and operate your telephone after it has registered with a network.
Emergency calls cannot be made	Check that the antenna symbol (Ψ) is displayed. Move to a coverage area and operate your telephone when the antenna symbol is displayed.
Telephone numbers cannot be recalled	Phonebook cannot be recalled when the telephone is locked (Menu: Security/Mobile Lock) or "Fixed Dial" is switched on (Menu: Security/Fixed Dial).

Error Messages

Area not allowed	Roaming in the selected area is not allowed
Enter PUK	The PIN has been entered incorrectly 10 times. To enter a new PIN you must first enter a PUK.
Network not allowed	Roaming with the selected network is not allowed
PUK blocked	The PUK has been entered incorrectly 10 times. Contact your Service Provider.
Security failure	The network has detected authentication failure because your SIM is not registered with that network. Contact your Service Provider
SIM blocked	The SIM is blocked because the wrong PUK has been entered ten times. Contact your Service Provider
SIM error	The telephone has detected a problem with the SIM. Switch the telephone off and then back on. If the message does not disappear contact your Service Provider

Specifications

Telephone

Type	GSM Class 4
SIM Type	Plug in type

Temperature range
  Charging
  Storage
	+5℃ to +35℃
	-20℃ to +60℃

AC Adaptor

Output voltage	6.7V DC, 550mA

Battery   Attached to Telephone

	Battery pack (EB-BS500)	Battery pack (EB-BS450)	Battery pack (EB-BM500)	Battery pack (EB-BX500)
Weight	185 g	175 g	210 g	250 g

Dimensions
  Height
  Width
  Depth
	141 mm
	46 mm
	21 mm
		141 mm
		46 mm
		25 mm
			141 mm
			46 mm
			23 mm
				141 mm
				46 mm
				32 mm

Supply voltage	4.8 V DC, 600mAh Ni-MH	4.8 V DC 650mAh Ni-MH	4.8 V DC, 850mAh Ni-MH	4.8 V DC, 1600mAh Ni-MH
Standby time Talk time	upto 70 h 3.0 h	upto 80 h 3.5 h	upto 100 h 4.5 h	upto 200 h 8.5 h
Charge time	90 min	100 min	140 min	260 min

NOTE:

Charge time will be longer when the telephone is turned on.

Battery life is affected by the network you are using and the condition of the battery pack.

Notes

The Serial Number can be found on the outside of the telephone under the battery. For your convenience we recommend that you note the following details as a record of your purchase.	
Part Number	EB-G450
Serial Number	
Dealer Name	
Purchase Date	

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