



BENEFON ESC! Owner's Manual

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FCC/INDUSTRY CANADA NOTICE

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

CERTIFICATION INFORMATION:

FCC ID: QFPTGP77AU

IC: 4350ATGP77AU

Manufacturer: Benefon Oyj

P.O.Box 84

24101 Salo

Finland

QUICK GUIDE

POWER ON/OFF

- Press  for a few seconds.

EMERGENCY CALL TO LOCAL EMERGENCY NUMBER (E.G. 112)

- Press  SOS and  OK, or
- Dial normally by keying in the local emergency number (e.g. 112) and pressing .

MAKING A CALL

- Call directly by keying in the number (including the area code) and pressing .
- Recall the number from redial memory by first pressing , scrolling to the desired number with  and pressing .
- Call to the number just dialled by pressing  twice.
- Quick dial the phone number by selecting the memory slot number (between 2 and 9) and pressing the corresponding numeric key for a few seconds.
- Use the **Phone book**, **Messages** or **Recent calls** menus for recalling numbers and making calls.

ANSWERING A CALL

- To answer a call, press .

ENDING A CALL

- To end a call, press .

IGNORING A CALL

- If you do not want to answer an incoming call, press .

CORRECTING ERRORS

- Correct typing errors by pressing  CLEAR.

CLEARING THE DISPLAY

- Press and hold  CLEAR for a few seconds.

TURNING THE KEYLOCK ON/OFF

- In stand-by mode or on the navigator pages, enter the **Quick menu** by pressing  downwards, and lock the keypad by pressing  OK.
- Open the keylock by pressing  UNLOCK and  OK.

TURNING THE SILENT ALERT ON/OFF

- In stand-by mode or on the navigator pages, enter the **Quick menu** by pressing  upwards. Enter the **Environment** selection by pressing  CHANGE. Select the option **Silent** with the help of  and press  OK.

TURNING THE GPS RECEIVER ON/OFF

1. In stand-by mode or on the navigator pages, enter the **Quick menu** by pressing .
2. Find **GPS receiver** with the help of  and press  **CHANGE**.
3. Select the desired activity with the help of  and press  **OK**.

ACCESSING MENUS

- In stand-by mode, enter the **GSM menu** by pressing  **GSM**.
- In stand-by mode (or on the navigator pages), enter the **Quick menu** by pressing .
- In stand-by mode (or on the navigator pages), enter the **Main menu** by pressing  **MENU**.
- In stand-by mode, enter the **navigator pages** (or browse them) by pressing the lower side keys  and . Another way: in stand-by mode, first enter the **Main menu** by pressing  **MENU**, then highlight the desired navigator page (i.e. **Map**, **Guide**, **Position**, or **Movement**) with  and press  **SELECT**.
- On any of the navigator pages, enter the **GPS menu** by pressing  **GPS**.

- You can **return to stand-by mode** from all menu levels by pressing . Another way: first enter the main menu by pressing  **MENU**, in which you select the option **Phone**.

USING MENU FUNCTIONS

1. The menu items are shown as a list which can be scrolled with the help of .
2. To choose one of these items, highlight the item and press the right function key, e.g.  **SELECT**. You will then enter a sub-menu or have some other appropriate options.
3. Press  **QUIT** to return to the previous menu level or  to return to stand-by mode.

READING NEW SHORT MESSAGES AND RESPONDING TO UNANSWERED CALLS

Unanswered calls and new short messages you have recently received are shown in "a traffic list" in stand-by mode.

1. Select an unanswered call, marked with , with the help of . Press  to call its number. You can also save it at once.
2. Select a message, marked with , with the help of . Press  **SELECT** to read or otherwise process it.
3. Exit the list by pressing  **QUIT**.

4. You will later find the calls and messages in their respective menus, **Recent calls** and **Messages**, in **GSM** menu.

Other received message types (such as received **Friend Find** updates) are also listed in the stand-by mode.

EMPTYING THE SHORT MESSAGE MEMORY

A flashing envelope () in stand-by mode is a sign of error in receiving the last short message. In most cases it means that your short message memory is full: you cannot receive new messages until you have first deleted some old ones.

1. In stand-by mode, press  **GSM**. Find **Messages** with . Press  **SELECT**.
2. Select **Inbox** or find **Outbox** with . Press  **SELECT**.
3. Find the message which you wish to remove with . Press  **SELECT** twice.
4. Find **Delete** with  and press  **OK**. Confirm the deletion by pressing  **OK** again.

DELETING ALL MESSAGES FROM INBOX OR OUTBOX AT ONCE

1. In stand-by mode, press  **GSM**. Find **Messages** with . Press  **SELECT**.

2. Select **Inbox** or find **Outbox** with . Press  **SELECT**.
3. Find **Delete all** with  and press  **OK**. Confirm the deletion by pressing  **OK** again or cancel the deletion by pressing  **NO**.

LISTENING TO MESSAGES LEFT IN YOUR VOICEMAIL SERVICE

In stand-by mode, press  **GSM**. Find **Messages** with  and press  **SELECT**. Find **Call voicemail** with  and press  **SELECT**.

KEY FUNCTIONS FOR THE T9 SHORT MESSAGES

key	function	display shows
	verify the word and make space	cursor moving forward
	turn the T9 mode on/off	T9
	change the character forms	AB, Ab, ab, 12
1-2 sec.	change the language	available languages
ACCEPT	verify the compound word	
	scroll the alternative words or sub-menu	selection list in the sub-menu
1-2 sec.	access the whole selection of special characters	lines 1/5, 2/5, 3/5, 4/5, 5/5 (scroll with) press the numeric key, which corresponds to the desired character

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INTRODUCTION

BENEFON ESC!



Congratulations on your purchase of the Benefon Esc! Personal Navigation Phone, a revolutionary communication instrument you will never get lost with.

This phone is designed for use on the GSM (Global System for Mobile Communications) 1900 MHz networks. You can use it in all countries where the GSM network operators have a roaming contract with your network operator.

The instrument features a powerful GPS navigator that works even if you are outside GSM coverage. The unique combination of GPS and GSM equipment in this

phone also enables several innovative new features like tracking other Benefon Esc! phones.

SOME KEY FEATURES

- advanced dual band GSM900/1800 phone
- 12-channel, high-performance GPS receiver
- Mobile Map Service: download maps to the phone using any PC with Internet browser
- Friend Find: track and find another Benefon Esc! navigation phone
- send waypoints and routes to other Benefon Esc! navigation phones
- emergency calls and messages with a special emergency key
- new location-based services
- personal organizer: calendar with reminders, notepad, calculator and alarm clock with snooze
- built-in GSM data and fax modem
- dimensions: 49 x 129 x 23 mm
- weight: 177 g with 900 mAh Li-Ion battery
- tough and splash proof.

The high quality Benefon Esc! is developed and manufactured by Benefon Oyj. Benefon is a company operating worldwide and specializing in wireless communication instruments. The high-quality and user-friendly Benefon products are developed and manufactured in Finland.

T9 text input technology

This phone has one of the world's most developed text input software systems - T9. The T9 Text Input software is a technology for enabling rapid entry of text on reduced-key keypads - one press for each letter is enough.

On phone keypads, as well as in other reduced-key keypads, one key is assigned more than one letter or function, and selecting a letter is normally done by pressing the key however many times necessary to get the letter desired. T9 removes this necessity by using a database with a vocabulary and linguistic rules that recognizes which word you are writing.

If there is more than one word possible for the key combination, T9 will choose the most commonly used word and also allow selection from a list.



T9 is a trademark of Tegic Communications, Inc. For further information about T9, please see www.tegic.com

(T9 is patented under the following U.S. Patents: 5,818,437, 5,953,541, 5,187,480, 5,945,928, 6,011,554 and additional patents are pending worldwide.)

Global Positioning System (GPS)

The Global Positioning System is a worldwide system of 24 satellites which orbit the earth twice a day, transmitting precise time and position information. The system is operated and maintained by the government of the United States.

The GPS receiver in your Benefon Esc! receives signals from up to twelve satellites at once, and using this information calculates your position and tracks your movement on Earth, and also sets your phone's clock on time.

Benefon Esc! is able to translate and use the changing position information from the satellites up to 23 different types of navigation-related data items,

including speed and heading, average and top speed, trip odometer, waypoints and routes, direction, ETA, and distance to a waypoint. Esc! also supports the NMEA 0183 interface.

Information must be received from at least three suitably positioned satellites for position calculation. The signals sent by the GPS satellites are quite weak and do not travel through solid objects.

New services

REGISTER FOR FREE SERVICES

Register as a user of Benefon Esc! at www.genimap.com and get access to free benefits, including a choice of free maps included with Esc! and the Help desk service. The free maps are re-downloadable at no extra cost within one year from registration.

Registration does not cost anything and the information given in registration is confidential.

MOBILE MAP SERVICE

Benefon Esc! is the first navigation instrument to support the Genimap® Mobile Maps service. The phone can be connected to the service for easy downloading of maps, using any PC with an Internet browser.

By downloading the map of a given location to their phones, Benefon Esc! owners are able to see how they themselves, as well as the person they are trying to reach are situated on the map and thus be easily guided to their destination.

The service covers road maps, city maps, nautical charts and topographical maps from around Europe. Check www.genimap.com from time to time for geographical coverage of maps in other areas. Maps are provided by Genimap and other leading suppliers of geographical data.

HELP DESK

As a registered user you are authorized to use Help desk services. You can get assistance in using the phone and maps (usage limitations). Just select **Help desk** from the GSM menu, and an expert help desk operator will call you in a few minutes.

MORE SERVICES TO COME

Check www.benefon.com periodically for tips about location-based services.

For service providers

NEW LOCATION SERVICES

Benefon Esc! utilizes Mobile Phone Telematics Protocol (MPTP) and Mobile Maps Service Protocol (MMSP) which provide a sophisticated set of telematics commands and a map protocol for service integrators and providers to build and provide location-based value added services for consumers and businesses. MPTP makes it possible to send position, tracking and route messages between service center and MPTP enabled terminals by using SMS. For information and specifications visit Benefon Esc! Partners Area at www.benefon.com.

SAFETY AND PRECAUTIONS

General

The phone may cause TV or radio interference if used in close proximity to receiving equipment. The FCC can require you to stop using the phone if such interference cannot be eliminated.

Vehicles using liquefied petroleum gas (such as propane or butane) must comply with the National Fire Protection Standard (NFPA-58). For a copy of this standard, contact the National Fire Protection Association, One Batterymarch Park, Quincy, MA 02269, Attn: Publication Sales Division.

- **Road traffic:** There are reasons to be concerned about traffic safety when using a mobile phone or other similar instrument while driving a motor vehicle. While the actual risk varies greatly according to the conditions and the driver, it is advisable to strictly adhere to all eventual European and national legislation and also honour other eventual safety recommendations. It is specifically advisable to install and use a hands-free operating system in a car for minimizing the distraction from using the phone. When receiving a call in an awkward driving situation, you should always put safety before other priorities and

courtesy. If you feel uncomfortable about using an instrument while driving, you simply should not use it.

• **External alert:** Use of the alert device to operate a vehicle's lights or horn on public roads is not permitted.

• **Children:** Keep your phone and its accessories away from small children to avoid causing injury to themselves or others. Damage to the phone or its accessories is also thus avoided.

• **Power supplies:** This equipment is intended for use with the following power supplies: batteries BBL-77-N and BBL-77-P, mains charger

CMA-70-230 (with cable FMC-70), and cigarette lighter charger CCS-71-12. Any other usage will invalidate any approval given to this apparatus and may be dangerous. Only use approved batteries, antennas and charges. The use of any unauthorized accessories may be dangerous and voids the phone warranty if said accessories cause damage or a defect to the phone.

• **Other accessories:** Any other accessories used should also be approved by the phone manufacturer. Check the compatibility of new power supply units and other accessories at the dealer.

• **Magnetic fields:** Benefon Esc! contains small magnetic components. Even though the magnetic fields of the components are weak, they might damage magnetic cards, such as bank and credit cards. We recommend that you keep your mobile phone away from magnetic cards.

Radio frequency (RF) energy

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.
- Connect the equipment into outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any changes or modifications to your phone not expressly approved in this document could void your warranty for this equipment and void your authority to operate this equipment.

• **Aircrafts:** Turn your phone off before boarding any aircraft and do not use the phone while in the air. **Also make sure that the automatic power on or alarm clock functions will not activate the phone during the flight.** Besides being illegal, the use of a mobile phone in an aircraft may endanger the operation of the aircraft or disrupt the mobile network. Failure to comply with this instruction may lead to suspension or denial of mobile phone services, and possibly even legal action.

• **Hospitals:** Turn your phone off before entering hospitals or other health care facilities where medical electronic equipment may be in use. Such devices are extremely sensitive to radio fre-

quency interference. Only use the phone with permission and under instruction of the hospital staff.

- **Medical devices:** Remember that any personal medical devices (such as hearing aids or pacemakers) may be affected by RF energy if they are not adequately shielded. Consult the manufacturer or vendor of the equipment to determine the proper shielding.
- **Explosive atmospheres:** Turn off the phone at refuelling points, e.g. gas stations. Also observe restrictions on the use of radio equipment in fuel depots, chemical plants or where blasting operations are in progress because remote control RF devices are often used to set off explosives.
- **Other electronical equipment:** Using the phone may cause interference with a vehicle's electronic equipment if it is not adequately shielded. Consult the manufacturer or the vehicle seller to determine the proper shielding.
- **Computers:** Remember that using the phone close to a computer may cause interference. When using your phone near such equipment keep a distance of about one meter.

- **Body parts:** When the phone is in operation do not touch the antenna with eyes, mouth or bare skin to guarantee proper function.

Always follow the country-specific regulations applicable to where you are using the phone.

Body-Worn Operation

For body worn operation, this phone has been tested and meets the FCC RF exposure guidelines when used with the Benefon accessories supplied or designated for this product. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

For more information about RF exposure, please visit the FCC website at www.fcc.gov.

Specific Absorption Rate (SAR) for Wireless Phones

The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg. This SAR is value that corresponds to the relative amount of RF energy absorbed in the head of a user of a wireless handset.

The SAR value of a phone is the result of an extensive testing, measuring and calculation process. Tests for SAR are conducted using standard operating positions accepted by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output. While there may be differences between the SAR levels of various phones and at various positions, they all meet the government requirement.

All phones must meet the federal standard, which incorporates a substantial margin of safety. As stated above, variations in SAR values between different model phones do not mean variations in safety.

FCC Radio Frequency Emission

This phone meets the FCC Radio Frequency Emission Guidelines. FCC ID number: QFPTGP79AE. More information on the phone's SAR can be found from the following FCC website:
<http://www.fcc.gov/oet/fccid>.

GPS and map data

- The Global Positioning System (GPS) is operated by the government of the United States, which is solely responsible for its accuracy and maintenance. The system is subject to changes that could affect the accuracy and performance of all GPS equipment.
- GPS signals are weak and do not penetrate solid objects such as people, buildings, rocks, or heavy tree cover. This may affect GPS receiver performance indoors, in urban areas with tall buildings, or whenever the GPS antenna doesn't have an unobstructed view of the sky.
- Roadways and other map data are constantly being modified, so the maps in your Benefon Esc! may not always reflect the latest changes. No warranty, express or implied, is given for completeness or accuracy of the map data in this product.
- Benefon Esc! supports some third-party services such as the **Request route** and **Request service** features. Benefon is not responsible for the content and accuracy of such services.

Privacy

- Using some of Benefon Esc!'s features, such as **Request route** and **Request service**, may reveal your position to a service provider.
- All **Friend Find** functions require authorization, so only people you have specifically authorized can learn your position.

Emergency calls and messages

Benefon Esc! is an aid and should never be relied upon as an only emergency device. Its functionality is dependent on GSM network and GPS satellites which may not be available at all times.

The unique combination of GSM and GPS features does, however, make Benefon Esc! helpful in emergencies as long as one does not depend one's life on it.

Splash proofness

Benefon Esc! is splash proof only when the battery and its rubber seal have been properly attached. Even then, the phone must not be immersed in liquid.

QUICK START

WHAT TO DO FIRST

Inserting the SIM card

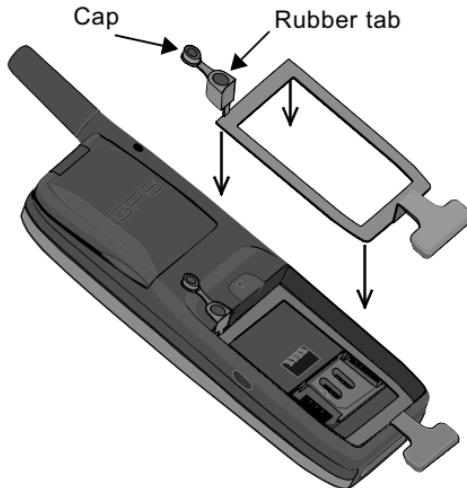
First remove the battery.



1. Slide the SIM card holder to the right. Lift the holder into an upright position.
2. Insert the card into the holder. Check that the cut corner is at the lower left corner of the holder.



Inserting the rubber seal



3. Close the holder by pushing it towards the phone. Slide the holder back to the left until it locks.

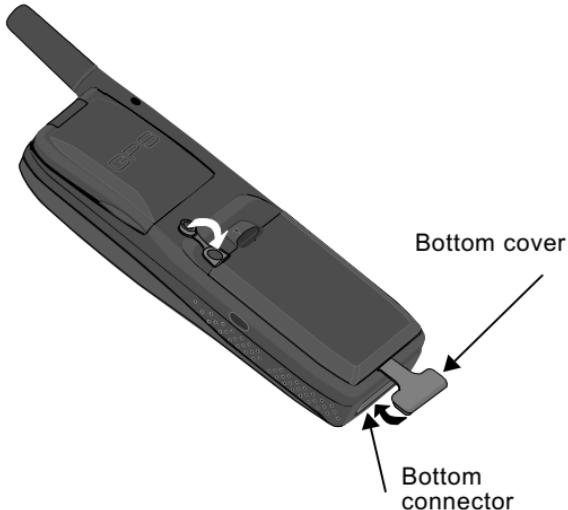
After inserting the SIM card, fit the battery back into place.

Installing the rubber seal is optional. Please note, however, that the phone is splash proof only when the rubber seal is inserted correctly in the phone.

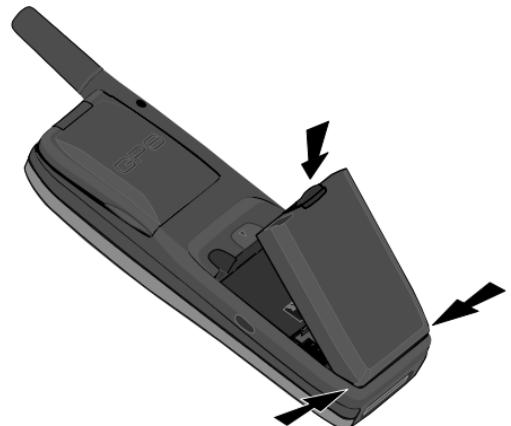
First make sure that the battery has been removed.

1. Place the rubber seal so that it lies in the bottom of the battery hole.
2. Fit the rubber tab into the recess in the upper left corner.

Fitting the battery

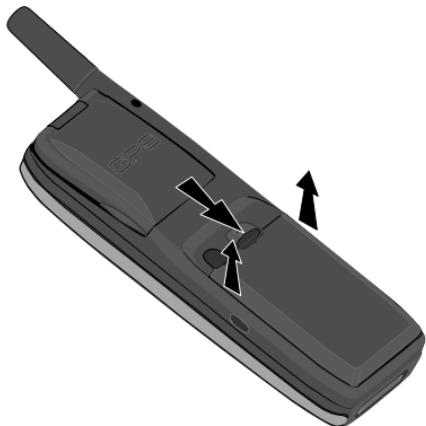


3. Lift the cap on the top of the rubber tab.
4. Fit the battery into place as described in the next chapter. The idea is that the battery will be securely fastened in the battery hole.
5. Finally stuff the bottom cover into the bottom connector so that the cover will be firmly secured around the connector.



1. Place the bottom of the battery into the small hollows at the bottom of the phone.
2. Push the battery towards the rear of the phone until it locks into place.

Removing the battery



1. Push the release catch downwards.
2. Pull the battery carefully away from the rear of the phone.

Initializing the phone

Before starting to use the phone for the first time, please note the following:

- The battery of the phone should be charged overnight before taking the phone into use for the first time.
- The battery will reach its full capacity only after a couple of charging - discharging times.
- If the phone is kept in storage with its battery removed for a prolonged period of time, the phone's internal memory backup battery might be discharged. It may cause that the power of the phone will not turn on. In this case, charging the battery normally will fix the problem.

Turning the phone on

1. Press the power button (ø) for about two seconds to turn the phone on. If the SIM card is not inserted, the phone will prompt you to insert it. Turn the phone off and insert the card.
2. Enter the PIN code if the phone prompts for it. If you make a mistake press CLEAR to remove the wrong digits. When the correct PIN code has been keyed in, press OK.

3. Enter the phone code if the phone prompts for it. When the phone code has been keyed in, press  **OK**.
4. The abbreviations of the country and network operator are displayed immediately or after the **Searching for networks...** message. ESC! logo, time, date and some symbols are also displayed. If you are outside the network's coverage area, the message **Searching for networks...** will remain in the display and you cannot make or receive calls.

The power will also turn on when the phone is connected to a charger, or when the timer options **Power ON timer** or **Alarm clock** are set on.

Turning the phone off

Press and hold the power button () down for a couple of seconds to turn the phone off.

The power will also turn off when the battery is completely empty or when the timer option **Power OFF timer** is set on.

Changing the language

When the menu language is set to **Automatic**, the language is chosen according to your SIM card's language preference. In case the information is not available, a default language setting is used.

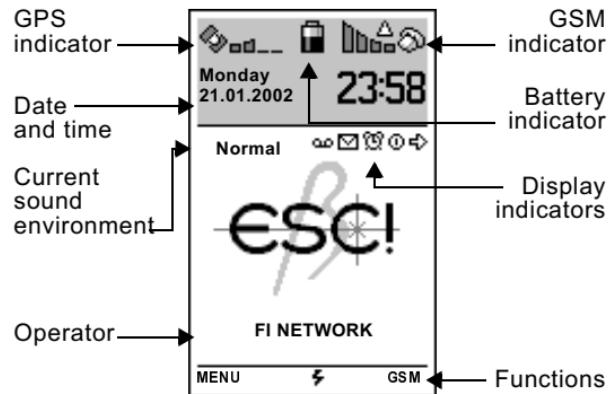
Once you have turned your phone on, you can change the language in the **Main menu**.

1. Press  **MENU** to enter the **Main menu**.
2. Select the **Settings** menu with the help of  . Press  **SELECT**.
3. Select the **User interface** menu with the help of  . Press  **SELECT**.
4. Enter the **Language** sub-menu by pressing  **CHANGE**.
5. Select the desired language with the help of  . Press  **OK**.
6. Press  to exit the menu.

OVERVIEW

Stand-by mode

When the phone is turned on, it enters the stand-by mode shown below.



The operator information consists of country code (such as FI) and network operator's name. This area may hold other information when a valid SIM card is missing, or when a network is missing or is not available.

INDICATORS

GPS indicator

The GPS indicator consists of a satellite symbol and a bar graph.



GPS turned on
GPS turned off
Searching for position
Sleeping
Position found at the latest search attempt

- When the GPS receiver is active, i.e. **turned on**, the number of bar segments gives the accuracy of position determination, if any.
- When the GPS receiver is inactive, i.e. **turned off**, no bars are shown and the satellite symbol is greyed.
- When the GPS receiver is active, and **searching for satellites**, the satellite symbol is normal but no bars are shown.
- When the GPS receiver is **sleeping**, a ZZZ symbol is shown instead of the bars. The GPS receiver starts sleeping during poor satellite coverage and will attempt to calculate your position periodically or when requested to do so.
- When the GPS receiver is in **Economy** or **At inter-**

vals mode, and it has searched and found position at the latest attempt, the bars are shown greyed.

GSM indicator

The GSM indicator consists of a phone symbol and a bar graph.



- The number of bar segments gives the signal strength, if any.
- When the phone is in stand-by mode, i.e. no call is coming or in progress, the phone symbol is shown with hook down.
- When a call is in progress, the phone symbol is shown with hook up.
- When the phone is searching for networks or outside network's coverage area, no bars are shown.
- When the GSM is inactive, i.e. turned off, no bars are shown and the phone symbol is greyed.

When you are roaming, i.e. in an area of a network other than your own, the Δ symbol is shown in the GSM indicator.

Battery indicator

The battery indicator is a battery symbol with a moving "liquid level".



- The higher the liquid level, the more charge is left in the battery.
- When the battery is being charged, the liquid level will repeatedly rise from bottom to top.

Display indicators

Some of the following symbols may be shown in stand-by mode:

-  Envelope. This symbol indicates, you have received a new short message. The symbol flashes when the short message memory is full. Flashing also means, you cannot receive or store any new messages unless you first delete some old ones.
-  Tape recorder. This symbol indicates, you have received a new voice mail and it is waiting for you in the **Call voice mail** menu. Voice mail service is a network feature. It depends on the operator, whether you will receive an sms of the voice mail waiting, as well.
-  I Automatic power on. The phone will automatically turn itself on at the set time.
-  O Automatic power off. The phone will automatically turn itself off at the set time.
-  ① Automatic power on/off. Shown when both automatic power on and off timers are set.
-  ② Alarm clock. Shown when the alarm clock is turned on.
-  + All calls diverted. Shown only when Divert **all** calls option is used. Incoming calls can be

diverted to another phone number or to a voicemail service. The type of service depends on your network operator.

Navigator pages

The four navigator pages of Benefon Esc! can be used for GPS navigation, with or without a map.

The stand-by mode and navigator pages can be browsed directly by pressing and in any of them. They can also be accessed via **Main menu**.

Data on the navigator pages will not be updated unless the GPS receiver has been turned on. For further information about the navigator pages and the GPS receiver, please see the chapter *Brief overview of navigator use*.

Map page

If a map is available, your immediate surroundings can be viewed on the **Map** navigator page. Also shown on the map are various navigational symbols like waypoints and routes.

Guide page

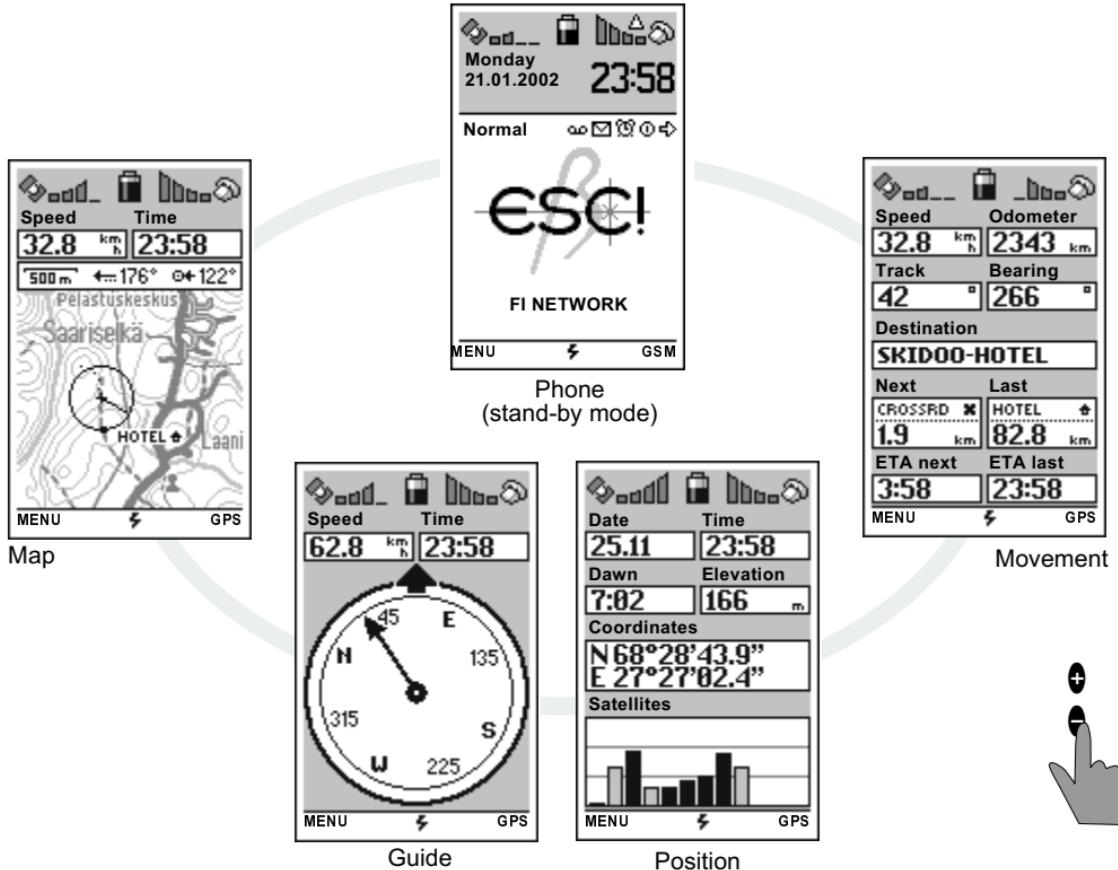
The **Guide** page is typically used when navigating to a destination without a map.

Position page

The **Position** page shows various data fields related to your present position and time. The status of individual satellites can also be viewed on this page.

Movement page

The **Movement** page shows various data fields related to your movement and destination.

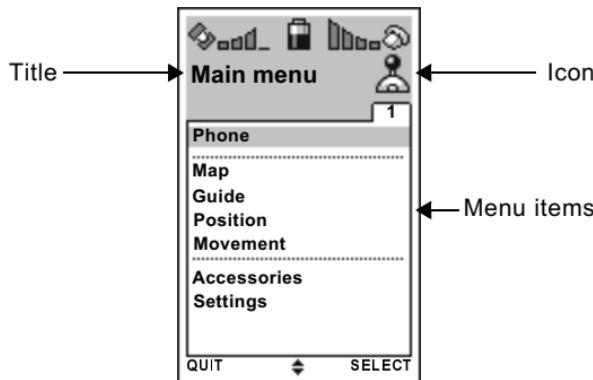


Menus

Most features of Benefon ESC! can be accessed via menus. There are four of these: Main menu, Quick menu, and GSM and GPS-specific menus. Each menu contains its own menu items and sub-menus.

When the phone is in stand-by mode, you can access the following menus:

- Enter the **Main menu** by pressing  MENU.
- Enter the **Quick menu** by pressing .
- Enter the **GSM menu** by pressing  GSM.



Each menu has a title, an icon and some menu items. You can select one of these items by highlighting it with  and pressing .

You can exit a menu by pressing  QUIT.

Main menu

The menu items of the main menu are

- Phone (stand-by mode)
- Map (navigator page)
- Guide (navigator page)
- Position (navigator page)
- Movement (navigator page)
- Accessories
- Settings.

Quick menu

The menu items of the quick menu are

- Lock keypad
- GPS receiver
- Environment.

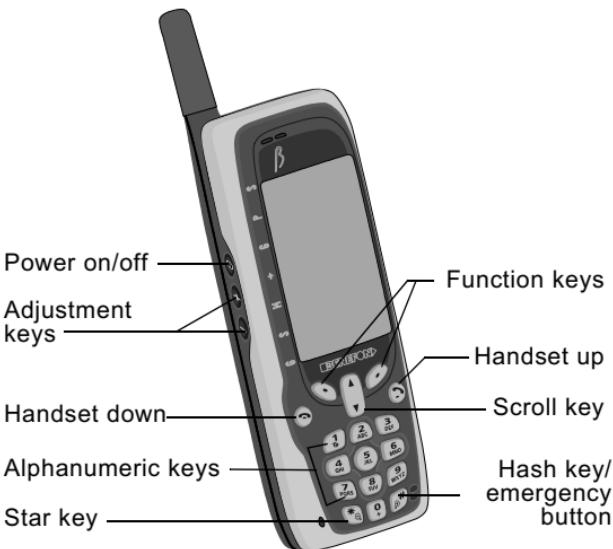
GSM menu

The menu items of the GSM menu are

- Phone book
- Messages
- Recent calls
- Network services
- Help desk.

- Skip route point
- Clear destination
- Reset meters.

Keypad



GPS menu

The **GPS menu** can be accessed through the Navigator pages as follows: in stand-by mode first press a side key (– or +). Then press  GPS.

The menu items of the GPS menu are

- Waypoints
- Routes
- Friend Find
- Maps
- SMS with coords
- Request service
- Request AGPS
- Update position

- ① Power on/off. Press and hold to turn the phone on or off.
- ② Adjustment keys. Press to adjust earpiece volume during a call. By pressing these keys you can also access the navigator pages from stand-by mode and browse the navigator pages.
- ③ Handset up. Press to make a call.
- ④ Handset down. Press to disconnect a call, and to return to stand-by mode at any time.
- ⑤ Function keys. The function of these keys depends on the guiding texts on the bottom line of the display.
- ⑥ Scroll key. The function of this key depends on the guiding symbol on the bottom line of the display. It is usually used for scrolling through a list of menu items and moving a cursor, or entering the Quick menu.
- ⑦ Star. Press to get a space character when writing text, or to zoom out when viewing a map. Pressing this key for five seconds changes the language to English and resets the phone to factory installed settings. This reset does not affect phone book entries, maps, and navigational data such as waypoints, routes, and friend points.
- ⑧ Hash. Press to switch between upper case letters, lower case letters and numbers when writing text, or to zoom in when viewing a map. This key is also needed when using some memory functions and network features.
- ⑨ ...  Alphanumeric keys. Press to enter numbers, or letters when writing text. These keys can also be used for scrolling a map.

ALPHANUMERIC KEYS AND T9

You need the alphanumeric keys for entering text.

• **Traditional spelling mode:** In traditional spelling mode you get the first letter of the key when pressing the key once, the second letter when pressing the key twice, and so on. When the cursor appears to right of the letter just entered you can enter the next character.

• **T9 text input mode:** You can also use the T9 text input tools for keying in the letters. Turn the T9 mode on or off by pressing  when editing text. By pressing  for a few seconds, languages for the T9 are available. For further information about using T9, please see the chapter *Main menu, Accessories, Notepad, Writing a note in T9 mode*.

- **Special characters:** By pressing  for a few seconds, all the special characters are available. You may select a row of characters with , and make the final selection by pressing the numeric key, which corresponds the desired character.
- **Character forms:** You can enter both upper case and lower case letters as well as numbers. You can switch between them by pressing . When upper case letters are in use the symbol **AB** is highlighted in the upper row and when lower case letters are in use the symbol **ab** is highlighted. The **Ab** symbol is useful when writing words which start with a capital letter (so that you do not need to switch between the upper case and lower case letters). When the symbol **12** is displayed, entry of any number is direct.
- **Spacebar:** Enter a space by pressing .
- **Corrections:** In case of a misspelling, move with  to the letter you wish to correct and press  **CLEAR**. Pressing  **CLEAR** for a few seconds will clear the whole text.

EMERGENCY KEY

The hash key  is also used as an emergency key, so that pressing and holding it for five seconds starts making emergency calls and sending emergency messages. For further information about the emergency key, please see the chapter *Main menu, Settings, Emergency calls*.

PAUSE AND SUB-ADDRESS CHARACTERS

The hash key  can be used for keying in the pause (**P**) and sub-address (**S**) characters. These characters can be used in a phone number.

If your answering machine has a remote-retrieve function, you can listen to the voice messages left for you in your answering machine at home. First key in the home phone number. When the line is connected, key in the code number of your answering machine. Within a few seconds you will hear the recordings. If you wish to store the string in the phone book, do as follows: key in your home phone number, press the  key twice (the letter **P** will be displayed) and key in the code number of your answering machine. Store the string in the phone book normally. For further information about storing a number in

the phone book, please see the chapter *GSM menu, Phone book, Storing a phone number*.

- If you wish to make a direct call to an ISDN sub-number or store the sub-number in your phone book, key in the string as follows: key in the main phone number, press the  key three times, (the letter S will be displayed) and key in the sub-number.

CHARACTERS AVAILABLE

1 Tg											
2 ABC	A a	B b	C c	2	Ä ä	Å å	Æ æ	à	ß	ç	
3 DEF	D d	E e	F f	3	É é	è					
4 GHI	G g	H h	I i	4	Ì						
5 JKL	J j	K k	L l	5							
6 MNO	M m	N n	O o	6	Ñ ñ	Ö ö	Ø ø	ò			
7 PQRS	P p	Q q	R r	S s	7	ß					
8 TUV	T t	U u	V v	8	Ü ü	ù					
9 WXYZ	W w	X x	Y y	Z z	9						
0 +	0										

BRIEF OVERVIEW OF PHONE USE

MAKING A CALL

You can call a number in stand-by mode by entering the number, including the area code, and pressing . The text **Calling** and the number you are calling will be displayed and a call will be set up.

You can also make a call by using the phone book, quick dialling, redialling, short messages, or recent calls functions.

International calls

You can use the + character when making international phone calls. When the + character is in use, the call centre will automatically select the correct international prefix.

1. Press  for a few seconds until the + character is displayed.

2. Enter the country code, the area code (without the first number), and the phone number.
3. Press .

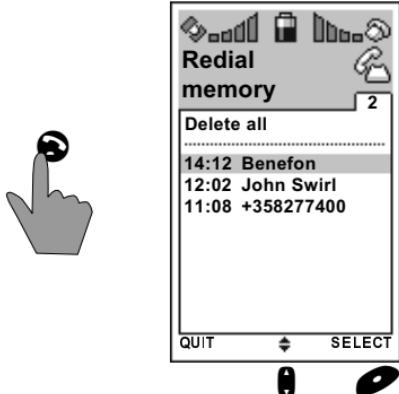
If the network operator does not implement this function and you try to make a call by using the + character, a message **Illegal** will be displayed.

You can also make international calls without the + character, by making the call as any conventional international phone call.

Redialling

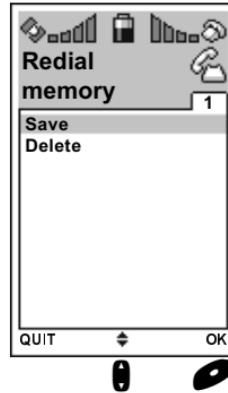
The latest numbers dialled are stored in the redial memory.

In order to use this function, you need to turn the **Redial memory** option on in the **Main menu**, under **Settings** and **GSM**.



1. Press to enter the redial memory when the phone is in stand-by mode and there are no phone numbers displayed.
2. A list of recent outgoing calls will be opened. If the call is older than 24 hours, date will be displayed instead of time.
3. Use to scroll through the numbers. If the numbers in question are stored in the phone book, names will be displayed instead of numbers.

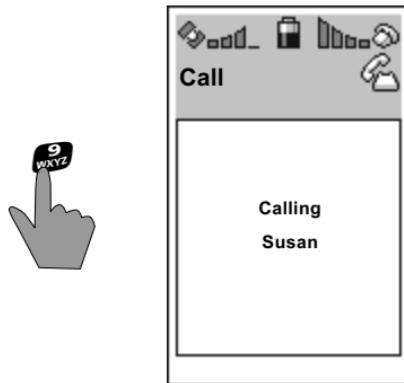
4. Press to call the number displayed. You can also call directly to the number last dialled by pressing .
5. By pressing **SELECT** you will enter the sub-menu where you can store the number or remove it from redial memory.



6. Use to scroll through the functions of the sub-menu and press **OK** to accept your choice. Press **QUIT** to exit the sub-menu.
7. You can clear all numbers from the redial memory by selecting **Delete all**.
8. Press **QUIT** to exit the redial memory.

Quick dialling

The quick dialling function works on the phone book memory slot numbers 2...9.



If you wish to make a call by using quick dialling, press the desired number (between 2 and 9) and hold it down for a few seconds. The phone makes a call to the phone number stored in that memory slot.

In order to use this function, you need to turn on the **Quick dialling** option on in the **Main menu**, under **Settings** and **GSM**. Also note that the desired memory slot (the number to which you are calling) cannot be empty.

RECEIVING A CALL

When your phone receives a call, it rings and the text **Call is coming** is shown.

If you have set the phone to be silent, the text will still be shown normally.

Call Line Identification (CLI)

If the CLIP (Call Line Identification Presentation) is activated as a network feature and your phone receives a call, the number of the caller is shown in the display.

Instead of the phone number, the name of the caller is displayed if you have stored the name and number in question in the phone book and if the caller does not have the CLIR (Call Line Identification Restriction) feature in use.

These CLI features are usually active only when the phone is used to make and receive domestic calls.

Answering a call

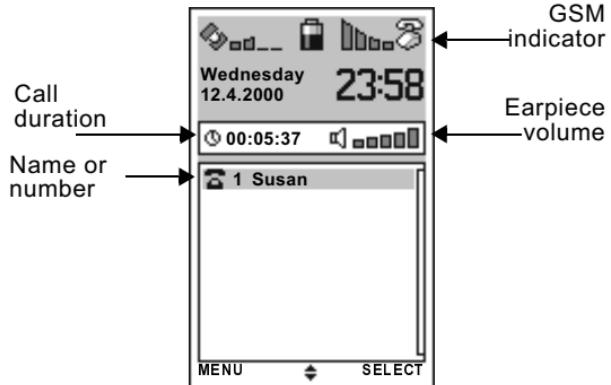
- To answer, press . If **Anykey answer** is turned on in the **Main menu** under **Settings** and **GSM**, you can also answer by pressing , , or
- If you do not wish to answer an incoming call, press .
- You can always turn off the ringing tone, without dropping the call, by pressing **QUIET**.

Answering when the keypad is locked

- If you have locked the keypad you can answer only by pressing .
- With the keypad locked, you can turn off the ringing tone by pressing **QUIET**.

ACTIVE CALL

When a call is in progress, the display will look like the one below.



The number to which you are calling is shown on the display. If the number in question is stored in the phone book with a name, the name will be shown instead of the number.

If you have received a call, there are two cases when the number of the caller will not be displayed: if the caller has the CLIR (Call Line Identification Restriction) feature in use, or if your network operator does not supply the CLIP (Call Line Identification Presentation) feature.

You can adjust earpiece volume during a call by pressing and . However, adjusting the volume is not possible if the microphone is muted.

Advanced options during a call

Several advanced options, such as muting the microphone, managing multiple calls, and accessing the phone book are available during a call.

NEW CALL

Use this function to make a new call during an active call. The currently active call will be put on hold.

1. Press MENU to access the **Call menu**.
2. Use to select **New call**. Press SELECT.
3. Key in the desired phone number. If the number is stored in the phone book, you can recall it from there by pressing SEARCH. For further information about using the phone book, please see the instructions in the chapter *GSM menu, Phone book, Recalling a phone number*.
4. When the number has been keyed in, press to initiate the call.

You can also make a new call by dialling the number directly, without selecting **New call** first.

All calls are shown in the active call display and can be selected there with . The currently active call is marked with the symbol, while held ones are marked with .

CONFERENCE CALL

Use this function if you wish combine all simultaneous calls to a conference call. This function is only available when at least one of the calls is active and another is put on hold.

1. Press MENU to access the **Call menu**.
2. Combine the desired calls together by using to select **Conference** and press SELECT.

Depending on the state of the conference call, some of the functions may not be available even if you select them. In a case like that the text **Not allowed** will be displayed.

SELECTING A CALL

When there are several simultaneous calls, you can make one of them active as follows:

1. Use  to select a call and press  SELECT.
2. Press  OK to select **Select**. The selected call will be made active, while the previously active call is put on hold.

You can also make a call active directly by selecting it with  and pressing .

ENDING A CALL

1. Use  to select a call and press  SELECT.
2. Use  to select **End** and press  OK. The selected call will be ended.

PICKING A WAITING CALL

Use this function if you wish to pick up an incoming call and put the currently active call on hold.

When a call is in progress and you have another incoming call, the network will notify you of a call waiting. The waiting call will also appear in the active call display, accompanied by a  symbol.

To pick up a waiting call, do as follows:

1. Use  to select the waiting call and press  SELECT.

2. Press  OK to select **Pick**. The waiting call will be made active, while the previously active call is put on hold.

You can also pick up a waiting call directly by selecting it with  and pressing .

Please note that in order to use this function, the **Call waiting** option must be turned on in the **GSM** menu, under **Network services**.

DROPPING A WAITING CALL

If you do not want to pick up a waiting call, you can drop it as follows:

1. Use  to select the waiting call and press  SELECT.
2. Use  to select **Drop** and press  OK. The waiting call will be dropped, and the caller will hear a busy signal.

MUTING A CALL

1. Press  MENU to access the Call menu.
2. Use  to select **Mute** and press  OK. Calls will be muted.

Muting can later be turned off in a similar manner.

CALL MENU

The **Call menu** is a special menu, which is only available during an active call. It provides access to some common menus like Phone book, Messages, Recent calls, Call costs, Calendar, Calculator and Notepad. For further information about using these menus, please see the instructions in chapters *Main menu* and *GSM menu*.

You can access the **Call menu** during a call by pressing  **MENU**.

ENDING CALLS

To end a call, press . When the call ends, the GSM indicator will return to the usual hook-down position.

Please note that if there are several simultaneous calls, pressing  will end them all at once.

EMERGENCY CALLS

With a SIM card

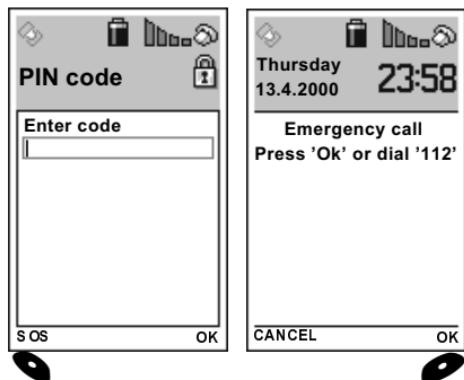
When the SIM card is inserted, you can make an emergency call as a normal phone call to the emergency number (e.g. 112).

With the keypad locked, you can still make an emergency call directly by keying in the emergency number and pressing .

If the PIN code is requested when the phone is turned on, you can make an emergency call without entering any access codes as follows:

1. Select  **SOS**.
2. Press  **OK**.

Without a SIM card



This is another way to do it:

1. Select SOS.
2. Key in the emergency number (e.g. 112).
3. Press OK or .

An emergency call can always be made as any other call, even without a SIM card, by keying in the emergency number (e.g. 112) in stand-by mode and pressing . This can be done directly even when the keypad is locked.

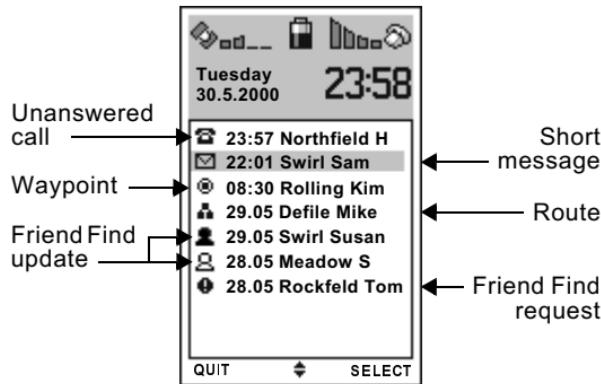
Remember that a mobile phone connection is not guaranteed in all conditions. Rough terrain or large buildings may limit the operation of your phone. Never completely rely on a mobile phone for essential communications.

INCOMING TRAFFIC

Besides incoming calls, you may also receive regular short messages and special, navigation-related messages. For further information about these messages and the events that take place upon their receipt, please see the chapters *GSM menu* and *GPS menu*.

Any traffic that you do not handle at once will eventually end up in the incoming traffic list.

- Use to select items from the list.
- Press QUIT to exit to stand-by mode. The list is cleared as soon as you exit it.



Unanswered calls (

- To call the phone number of the unanswered call, press .
- To save the phone number, press SAVE.

For further information, please see the chapter *GSM menu, Recent calls, Unanswered calls*.

Short messages (

1. To read the message, press SELECT.
2. By scrolling with , you are able to read the whole message.
3. To process the message, press SELECT.
4. You have several options to choose from, such as replying to the message or deleting it.
5. Select the desired option with and press SELECT.
6. Press QUIT when you are finished.

For further information, please see the chapter *GSM menu, Messages, Inbox*.

Waypoints (

A waypoint can be received as a message from another Benefon ESC! phone.

To view the waypoint on map, press SELECT.

1. You will see a map with the waypoint in its center.
2. Use and to zoom in and out.

3. Use **1**, **2**, **3**, **4**, **6**, **7**, **8**, and **9** to scroll the map.
4. To process the waypoints, press **SELECT**.
5. You have several options to choose from, such as setting waypoints or deleting them.
6. Select the desired option with **OK** and press **OK**.
7. Press **QUIT** when you are finished.

For further information, please see the chapter *GPS menu, Waypoints*.

Routes (

A route and its waypoints can be received as one or more messages from another Benefon ESC! phone.

To view the route on map, press **SELECT**.

1. You will see a map with the first waypoint of the route in its center.
2. Use ***** and **#** to zoom in and out.
3. Use **1**, **2**, **3**, **4**, **6**, **7**, **8**, and **9** to scroll the map.
4. Use **OK** to trace the route one waypoint at a time.

5. To process the routes, press **SELECT**.
6. You have several options to choose from, such as setting routes or deleting them.
7. Select the desired option with **OK** and press **OK**.
8. Press **QUIT** when you are finished.

For further information, please see the chapter *GPS menu, Routes*.

Friend Find updates (

A Friend Find update may be either a position update or a tracking update.

A position update refreshes the position of a friend point in your phone. A tracking update works similarly, but it is a part of a series of updates, i.e. tracking. Only the latest update from a phone is shown in the incoming traffic list.

To view the update, press **SELECT**.

1. You will see a map with the updated position in its center.
2. Use ***** and **#** to zoom in and out.

3. Use **1**, **2**, **3**, **4**, **5**, **6**, **7**, **8**, and **9** to scroll the map.
4. To process the friend points, press **SELECT**.
5. You have several options to choose from, such as setting friend points or deleting them.
6. Select the desired option with **1** and press **OK**.
7. Press **QUIT** when you are finished.

For further information, please see the chapter *GPS menu, Friend Find*.

Friend Find requests (•)

A Friend Find request may be a position request or a tracking request.

By sending a position request, another Benefon ESC! user may ask you to send a position update. Similarly, a tracking request is sent to ask for a series of tracking updates. Only the latest request from a phone is shown in the incoming traffic list.

To respond to the request, press **SELECT**.

1. You will be asked if you want to respond to the request. Press **OK** to send an update to the

sender of the request, or **NO** to decline from sending an update.

2. If the request was a tracking request, you will also be asked for an interval for sending the updates, and the number of updates to send.
 - Use the numeric keys to key in the interval and press **NEXT**.
 - Then, key in the number of tracking updates that you want to send and press **OK**.

For further information, please see the chapter *GPS menu, Friend Find*.

USE WITHOUT A SIM CARD

Benefon ESC! can be used even when a SIM card has not been inserted. Most GPS features, calendar, notepad and menu functions can be used normally; only SIM related functions such as making phone calls, using messages or accessing the phone book will be unavailable.

Emergency calls can always be made even when no SIM card is inserted.

BRIEF OVERVIEW OF NAVIGATOR USE

FIRST STEPS

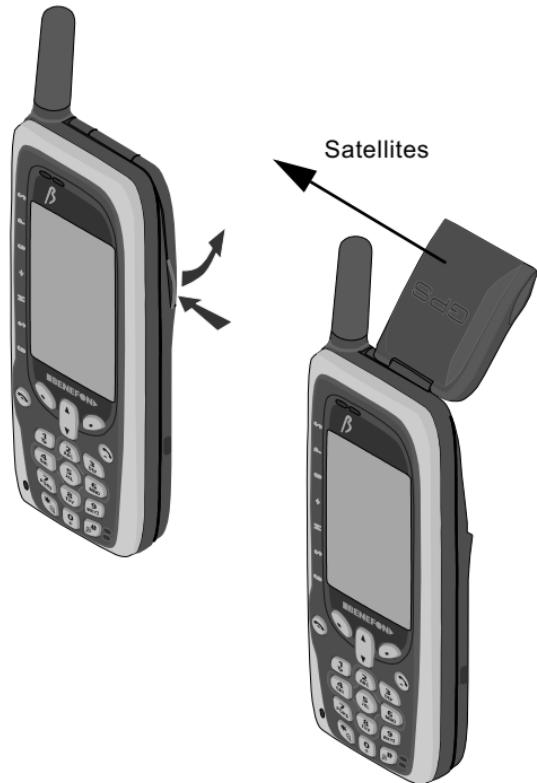
Positioning the GPS antenna

You should lift the GPS antenna so that it faces open sky whenever you want to use any of Benefon Esc's position dependent features.

The antenna needs an unobstructed view of the sky. The signals sent by the GPS satellites do not penetrate solid objects such as people, buildings, rocks, or heavy tree cover.

Note that the GPS receiver can be active even when the antenna is not lifted. In this case, finding satellites may still be possible, but positioning accuracy is likely to be worse than usual unless the rear of the phone is facing an open sky.

The external GPS antenna accessory can be used to receive GPS signals even when the phone's own GPS antenna is unable to see satellites.



Turning the GPS receiver on or off

You need to turn on the GPS receiver to make position determination possible. Once activated, the receiver will calculate your position at given intervals.

To keep power consumption as low as possible, it is advisable to turn the GPS receiver off when no GPS features are being used.

1. In stand-by mode or on any of the navigator pages, press  to enter the **Quick menu**.
2. Use  to select **GPS receiver**. Press  **CHANGE**.
3. Select a GPS operating mode by using , and press  **OK**. Note that all the GPS modes described below are not available in all phone models.
 - **Off**. No satellites are tracked; your position is not calculated.
 - **Full power**. The GPS receiver monitors the satellites constantly, calculating your position at short intervals. Using this mode consumes more power than the other modes but it has the best accuracy and it works even in limited satellite coverage.
 - **Low power**. Satellites are tracked at slightly

longer intervals. While this mode has the lowest power consumption, it may not be reliable in limited satellite coverage.

- **Economy**: Tracking satellites is adapted to the present circumstances. This mode uses no fixed interval for tracking satellites; tracking is optimized according to the power consumption.
- **At intervals**: You can select the interval, which determines the frequency for the GPS receiver to search for position. Select the time and confirm it by pressing  **OK**.
- 4. Press  **QUIT** to exit the menu.

GETTING FIRST GPS POSITION

The GPS receiver normally stores the last known position and satellite data so as to help reacquisition of position after loss of satellite signals or power down. When the GPS receiver is used for the first time, it has no previous position information and position acquisition takes longer.

When using the GPS receiver for the first time, do as follows:

1. Go to an open site outdoors, with unobstructed view of the sky.
2. Position the GPS antenna and turn the GPS receiver to **Full power** mode.
3. Hold the phone still and wait until the GPS indicator shows bars, signifying that your position has been successfully calculated. This may take a few minutes.
4. Wait one more minute before turning the GPS receiver off, changing it to **Low power** mode, or going indoors.

GPS RECEPTION

Once the GPS receiver has been activated, finding satellites and locking to them usually happens within a few minutes. At least three suitably positioned satellites are needed for two-dimensional position calculation, while four or more make three-dimensional calculation (including elevation) possible.

The GPS indicator shows no bars while the GPS receiver is searching for satellites. As soon as position has been determined, the accuracy of position determination is shown by the bars in the indicator. The more bars the better the accuracy.

You can also view the status of individual satellites on the **Position** navigator page. For further information, please see the following chapter *Position*.

POOR GPS COVERAGE

If the GPS receiver is unable to determine your current position within a few minutes, the text **Poor GPS coverage** will be shown. This happens when not enough satellites are visible.

If the GPS has been set to **Economy**, **At intervals**, or **Low power** mode, the GPS starts sleeping to conserve battery as soon as it detects poor GPS coverage. This is indicated by a **ZZZ** symbol in the place of the GPS indicator bars.

When sleeping, the GPS receiver will wake up automatically every few minutes and look for satellites. It will go back to sleep if adequate satellite coverage is not available.

When using the **Economy** or **At intervals** mode, position found at the latest attempt is indicated by a grey bar symbol. When using the **Low power mode**, previously searched and found position is indicated by a black bar symbol.

You can also wake up the GPS receiver manually as follows:

1. Make sure that the GPS antenna has an unobstructed view of the sky. The GPS receiver does not work indoors.
2. On any of the navigator pages, press  **GPS** to enter the **GPS menu**.
3. Use  to select **Update position** and press  **OK**.

INITIALIZING THE GPS RECEIVER

The GPS receiver may experience trouble in a calculating your position e.g. after long international flights or when it has been off for an extended period of time.

If this happens, you can speed up the position acquisition as follows:

1. On any of the navigator pages, press  **GPS** to enter the **GPS menu**.
2. Use  to select **Maps** and press  **SELECT**.
3. Show the **World** map by pressing  **SELECT**.

4. Use , , , , , , , and  to move the pointer on the map to your present position.
5. Press  **SELECT**.
6. Initialize the GPS receiver by selecting **Set as position**. Press  **OK**.
7. Do as described under *Getting first GPS position* above.

In case the problem persists, you can reset the GPS receiver by selecting **Reset position** from the *Main menu, Settings, GPS*, and try again.

USING THE NAVIGATOR PAGES

The navigator pages of this phone are:

- Map page
- Guide page
- Position page
- Movement page.

You can access and browse the different navigator pages through the Main menu, as follows:

1. In stand-by mode or on any of the navigator pages, press MENU to enter the **Main menu**.
2. Use to select either **Map**, **Guide**, **Position**, or **Movement**. Press SELECT.

Another way: Press the lower sidekeys and .

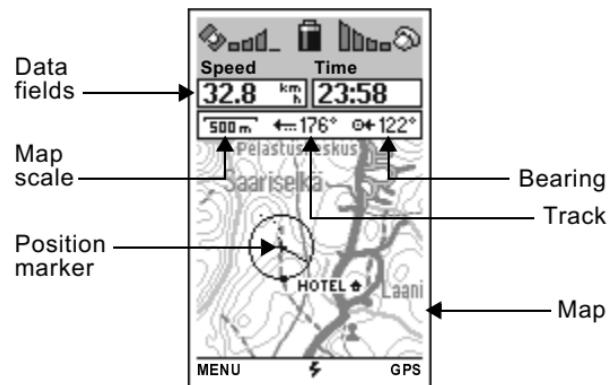
You can always return to stand-by mode either by pressing or through the **Main menu**, by selecting the item **Phone**.

From the navigator pages you also have access to the following menus: **Main menu**, **Quick menu**, and **GPS menu**.

For further information about the GPS functions and datafield details, please see the chapters *GPS menu* and *Main menu, Settings, GPS*.

MAP

The **Map** navigator page shows your position and surroundings on a map.



Data fields

The two changing data fields contain information such as current speed, time, and next destination.

Map scale, track and bearing

- **Map scale** is shown as a scalebar. It changes as you zoom the map by pressing  and .
- **Track** () is your direction of movement. It is given in degrees.
- **Bearing** () is the direction to your destination, if any. It is given in degrees.

Position marker

Your position is shown on the map with a circular position marker.

- Your **direction** of movement is shown with a black spot on the marker's edge.
- If you have set a **destination** for navigation, a radial line will show the direction to there.
- The marker will leave a **trace** of your movements on the map.

Map symbols

- **Waypoints** are used for marking points of interest or as destinations for navigation. They are shown as an identifying symbol (e.g. ) and a title.

• **Friend points** mark the known positions of other Benefon ESC! phones. They are shown as a symbol ( or ) accompanied by some identifying text.

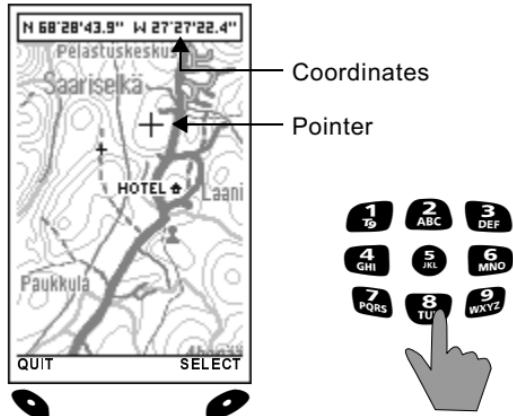
• **Routes** are combinations of several waypoints and can be used as destinations for navigation. They are shown as interconnected waypoints.

The following options are available to you on the Map page:

- Press  and  to zoom the map.
- Press , , , , , , , or  to enter pointing mode.
- Press  to hide and show the data fields.

Pointing mode

In pointing mode, you can move a pointer to scroll the map and use it to create and process waypoints, set a point for use as destination, measure distances, and send your position in a short message - to give a few examples.



- Use the numeric keys to move the pointer. The map will be scrolled if you try to move out of it.
- Press or **SELECT** to select a point on the map and get a list of functions such as creating a new waypoint, setting a point as destination and so on.

- Highlight the desired option with and press the function keys or according to the guiding texts on lower part of the display.

- Exit pointing mode by pressing **QUIT**.

The map will not automatically scroll when you are in pointing mode. Your position will be updated as soon as you exit it, however.

FRIEND FIND OPTIONS

The **Friend Find** features are designed to take advantage of the unique combination of GPS and GSM equipment of Benefon ESC!. Based on position information and the short message service (SMS), they make functions such as accurate locating or tracking a friend possible.

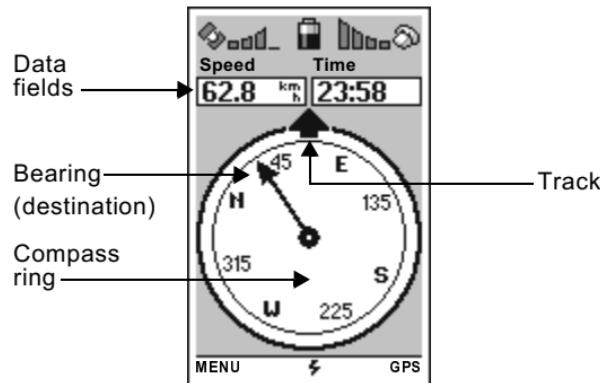
You can point at a friend point in pointing mode to use any of the **Friend Find** features: request or send a position update, request or send tracking, cancel your request, or save the friend point as a waypoint.

1. In pointing mode, select a friend point.
2. Use to select an option and press **OK**.

For further information about the **Friend Find** features, please see the chapter *GPS menu, Friend Find*.

GUIDE

The **Guide** page gives you steering guidance when you are navigating to a destination.



When using this page, you should position your phone so that the arrow on the top of the compass ring points to your direction of movement. The guide will then show you the direction to destination as follows:

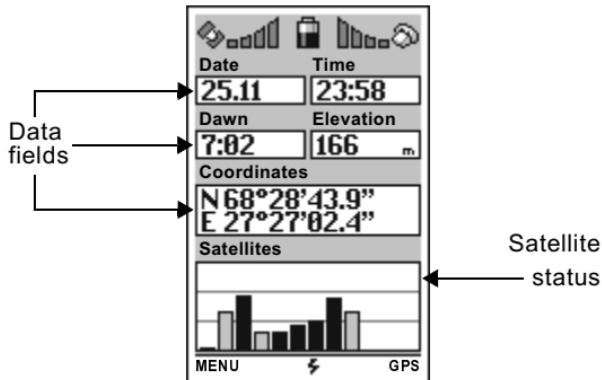
- The arrow shows the direction to destination. If it points straight up, you are going directly towards the destination.
- The numbers on the edge of the rotating compass ring show you your track and bearing.

The guide is dependent on movement, and the compass ring will be blank when the phone is not moving. It is not a magnetic compass, and should not be relied on as one.

The arrow is not shown if you have not set a destination. Moreover, the compass ring is totally blank when you are not moving at all.

POSITION

The **Position** page shows various data fields related to your present position, time, and satellite status.



The data fields are constantly changing, and show information such as date, time, sunrise, elevation above sea level, coordinates, and satellite status.

The satellite status field can hold up to twelve bars; one for each visible satellite. Bar height signifies signal strength - the higher the bar, the stronger the signal. Satellites with black bars are currently

used for navigation, while grey bars signify satellites that are still being locked to.

Depending on currently used GPS operating mode, the satellite status text buffer may also show, how old the last found position is.

Some of the data on this page depends the GPS receiver's ability to determine your position.

MOVEMENT

The **Movement** page shows various data fields related to your movement and destination.

Movement-related data fields



Destination-related data fields

The data fields are constantly changing, and show information such as speed, odometer, track, bearing, next/last destination, distance to next/last destination, ETA (estimated time of arrival) and ETE (estimated time enroute) to next/last destination.

The "last destination" fields only apply when your current destination is a route. When you are navigating to a waypoint or a friend point, those data fields will be left blank.

Many data fields on this page are dependent on movement, so they will be blank when you are not moving or when the GPS receiver is unable to determine your position.

QUICK MENU

When the phone is in stand-by mode or in one of the navigator pages, you can open the **Quick menu** by pressing **0**. The first item to be selected depends on the direction of your keypress:

- If you press **0** upwards, the first item to be highlighted will be **Environment**.
- If you press **0** downwards, the first item to be highlighted will be **Lock keypad**.

However, if you have locked the keypad, you cannot enter **Quick menu** unless you first open the keypad.

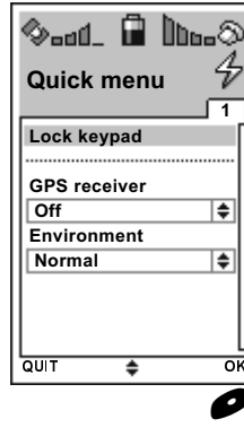
KEYPAD LOCK

The keypad lock is used to prevent accidental key strokes.

When automatic keylock is turned on, the keypad will be locked in approximately 20 seconds if no key is pressed during that time. You can turn this feature on by setting **Keylock mode** to **Automatic** in the **Main menu**, under **Settings** and **User interface**.

To lock the keypad manually for a single time, please see the following instructions.

LOCKING THE KEYPAD

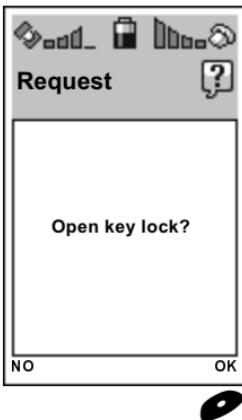


1. Press **0** to enter the **Quick menu**.
2. Use **0** to select **Lock keypad** and press **OK** to lock the keypad. If you change your mind and do not want to lock the keypad, press **QUIT** to exit the menu.
3. Shortcut to lock the keypad: when the phone is in stand-by mode or in any of the navigator pages, press **0** downwards for a few seconds. The keypad will be locked.

- As you lock the keypad, you will automatically exit the **Quick menu**. The left function key will then have the text **UNLOCK**.

When the keypad is locked, you can answer an incoming call only by pressing . You can turn off the ringing tone by pressing **QUIET**.

UNLOCKING THE KEYPAD



- Press **UNLOCK**.
- Confirm the opening by pressing **OK**. If you change your mind and do not want to unlock the keypad, press **NO** instead.

While the keypad is locked, pressing or will set the lights on for 10 seconds. This way, you are able to see how to unlock the keypad even when it is dark.

GPS RECEIVER ACTIVITY

The GPS receiver receives signals from the satellites and calculates your position from the information.

In this menu, you can select the GPS receiver activity. The selection affects the accuracy and power consumption of your phone.

- Press to enter the **Quick menu**.
- Use to select **GPS receiver**. Press **CHANGE**.
- Use to make your choice and press **OK**.
- Press **QUIT** to exit the **Quick menu**.

For further information, please see the chapter *Brief overview of navigator use, Turning the GPS receiver on*.

SELECTING AN ENVIRONMENT

An environment is a combination of tone and light settings made suitable for particular situations. For information about **editing** the environment settings, please see the instructions in the chapter *Main menu, Settings, Environments*.

In this menu you can **turn on the environment** you wish to use. The default setting is **Normal**.

1. Press  to enter the **Quick menu**.
2. Use  to select **Environment**. Press  **CHANGE**.
3. The shortcut to access the environment selection list: when the phone is in stand-by mode or in any of the navigator pages, press  upwards for a few seconds. The environment list will be displayed.
4. Use  to select the desired environment and press  **OK**.
5. You will automatically exit the menu.

The currently used environment is shown in stand-by mode.

MAIN MENU



- Use **▲** to scroll through the menu items and sub-menus.
- To select one of the items, press **OK**. This way, you can enter sub-menus, activate commands and turn options on or off.
- Press **OK QUIT** to return to the previous menu level from a sub-menu.
- You can return to stand-by mode either by pressing **OK** or going through the **Main menu**, and selecting the item **Phone**.

ACCESSORIES

The **Accessories** menu contains some useful applications, such as **Alarm clock**, **Notepad**, **Calendar**, **Calculator**, and some entertaining **Games**. You can access the menu and its sub-menus via the **Main menu**.

- Press **OK SELECT** to enter the **Accessories** menu.
- Use **▲** to scroll and select (highlight) the menu items and sub-menus.
- Press **OK QUIT** to cancel the operation and return to previous menu level.

The **Main menu** allows you to access the stand-by mode, the various navigator pages, and several useful functions, which you can set and adjust to make the phone suit your particular needs.

- Press **OK MENU** to enter the **Main menu**. It can be accessed from the stand-by mode and any of the navigator pages.

Alarm clock

In this menu, you can turn the alarm clock on or off and adjust its settings.

Press  **SELECT** to open the **Alarm clock** from the **Accessories** menu.

You can scroll and select functions and items with .



Current alarm settings are displayed in the **Alarm clock** menu. There are four alarm settings which you can adjust.

Turning alarm on or off

You can turn the alarm on or off by selecting **Active** and pressing  **CHANGE**.

Adjusting alarm time

By selecting **Time** and pressing  **CHANGE** you can adjust the time. Key in the time with numeric keys and press  **OK**.

Selecting repeat alarm

By selecting **Repeat** and pressing  **CHANGE** you can determine whether the alarm clock should alert you only once or on specified days.

Selecting snooze interval

By selecting **Snooze** and pressing  **CHANGE** you can determine whether the phone alerts you repeatedly, e.g. every 10 minutes. Select the desired option and press  **OK**.

If you do not want to use the snooze option at all, choose **Off**.



- To make the alarm clock alert only once, mark **Once** by selecting it and pressing  **CHANGE**.
- To make the alarm clock alert on selected days, mark the desired days by highlighting them and pressing  **CHANGE**.
- When ready, press  **DONE**.

ALARM CLOCK ALERT

When the alarm clock alerts, you will hear the alarm tone and the text **Wake up** will be shown.

- You can end the alert by pressing any key.
- If snooze was used, the phone will show the text **Snooze off?** and will alert you again after a while.
- To turn off the alarm once and for all, press  **OK** when the **Snooze off?** text is shown.

NotePad

The **NotePad** can be used for writing and saving short notes.

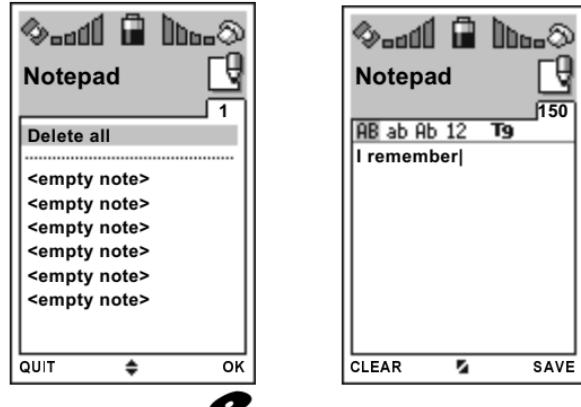
Use and press to open the **NotePad** from the **Accessories** menu. You will enter a menu titled **Notes** which contains several notes.

- Use to select a note and press to edit it.
- Select **Delete all** to clear all notes. Confirm the deletion by pressing or cancel the operation by pressing .

Writing mode

You have two ways to write notes:

- When writing in T9 mode you need to press a key just **once** to enter the desired letter - please note, however, that a single word takes its form only after you have entered all the letters, so do not worry if you see some gibberish first.
- When writing with spelling mode you get the first letter of the key when pressing the key once, the second letter when pressing the key twice, and so on.



Writing a note in T9 mode

A note can have a maximum of 160 characters. When editing, the number of characters left is shown in the upper right corner of the note.

Selecting T9 language

Press and hold for a few seconds. Select the desired T9 language with and press . This T9 language selection does not affect the menu language you are using.

Turning T9 mode on or off

Press . When the T9 mode is on, the symbol is shown on the display.

Switching character forms

Press to switch the character forms. Selected form is shown highlighted. The symbol stands for upper case letters, for lower case letters, and for numbers.

The form is useful when writing a sentence and you want to key in just one upper case letter and let the rest of the letters to be lower case.

Writing text with T9 text input

Use the letter keys (...) for writing. Press the key just **once** to enter the desired letter. The maximum amount of characters in one word is 32.

A single word takes its form only after you have entered the whole word. If you are satisfied with the word the phone offers you, accept it by pressing or ACCEPT. The key also serves as a space-bar.

Writing compound words

When writing a compound word, you are assumed to press ACCEPT after each part of the word until the whole compound word has been entered.

Looking for alternative words

If the final word is incorrect, scroll through the alternatives with to find the right one and press to accept it.

In case the phone cannot find the correct word, switch into the spelling mode by pressing . Write the whole word (or words) once again. As you switch back into T9 mode, the new word (or words) will be saved automatically into memory.

Saving new words

T9 has an automatic saving system, which means that it will learn the most frequent words you use, even if they are not used in common language.

The automatic saving takes place when switching from the spelling mode to the T9 mode or when pressing QUIT or SAVE.

Beeping sounds

In case you try to do an illegal action, such as continue writing the note when there is no space left, or press a key that does not match to the keystroke sequence entered, the T9 will beep and ignore the action.

Adding special characters

By pressing and holding **9** for a few seconds, a wide selection of special characters is made available to you.

Select a row with **1** and press the numeric key which corresponds to the desired character.

For example, when you wish to add the & character into text, first press and hold **9** for a few seconds. Then scroll to the second row by pressing **1** and press **5**.



When the key has been pressed, you will automatically return to the text you are writing at the moment.

Making final corrections

You can scroll through your note by pressing **1**. To change a word, move the cursor to the right side of the incorrect word and press **1** CLEAR.

Write the word once again. You can also switch into the spelling mode (by pressing **1**).

If the word is still incorrect, find an alternative word with .

Finally verify the correct word by pressing  or  **ACCEPT**.

- Use  to enter special characters. For further information, please see the T9 instructions above in the chapter *Writing a note in T9 mode, Adding special characters*.

- When the note is ready, press  **SAVE** to save it.

Further actions

When the note is ready, press  **SAVE** to save it. You will return to the previous menu level.

If you want to delete your note, first open the note and clear it by pressing and holding  **CLEAR** for a few seconds. Press  **QUIT**.

Writing a note in spelling mode

The editing tools are basically the same in spelling mode and in T9 mode. The only difference is the way to key in letters.

- Turn T9 mode off by pressing . When the T9 mode is off, no **T9** symbol is on the display.
- Use  to move back and forth in the text.
- Press  **CLEAR** to erase text.
- Press  to enter a space.
- Press  to switch between upper case letters, lower case letters and numbers.

Calendar

You can write down your own appointments, events and anniversaries in the calendar. Reminders can also be associated with these entries. Please note that if the power of the phone is turned off, the calendar alarms do not automatically turn the phone on and you will miss the alarm.

Press **SELECT** to open the **Calendar** from the **Accessories** menu.

Month view



Day view



The main calendar page shows a calendar page for one month. Each day that has any calendar entries is marked with a small black triangle in its lower left corner.

- Use and to switch between months.
- Use to select a day. If you scroll this way past the first or the last day of the month, the page is changed to display another month.
- Press **SELECT** to view a single day's page.

DAY VIEW

The day view shows you all calendar entries for a single day, if any. You can also see the dawn, sunrise, and sunset times for the day.

Now you have three options to choose from: **Choose date**, **Agenda**, and **New entry**. Highlight the desired option with and press **SELECT**.

CHOOSE DATE

Choose date shows you quickly what is the schedule for a specific day. Press **SELECT** and specify the desired day as follows:

- Select one of these: **Next day**, **Previous day** or **Today** and press **OK** or

- Select **Go to date** by pressing CHANGE. Key in the date you wish to view and press OK.

VIEWING ALL ENTRIES (AGENDA)

By selecting **Agenda**, you can view all your calendar entries at once.



- Select **Delete all** to remove all calendar entries. Confirm the deletion by pressing OK or cancel the operation by pressing NO.
- Select an existing entry to view, edit or delete it.

ADDING A NEW CALENDAR ENTRY

By selecting **New entry** you can add a new event to your calendar.

Changing entry text

You can give the calendar entry a title text by selecting **Text** and pressing CHANGE. Key in the text with alpha-numeric keys. Press OK.

Adjusting entry time

You can adjust the time of the event by selecting **Time** and pressing CHANGE. Key in the numbers and finish by pressing OK.

Changing entry date

You can adjust the date of the event by selecting **Date** and pressing CHANGE. Key in the numbers and finish by pressing OK.

Selecting entry repeat

By selecting **Repeat** and pressing CHANGE you can determine whether the entry should apply only once or on specified days.

- To make the entry apply only once, mark **Once** by highlighting it and pressing **CHANGE**.
- To make the entry apply on selected days, mark the desired days by highlighting them with and pressing **CHANGE**.
- When ready, press **DONE**.

Selecting alarm

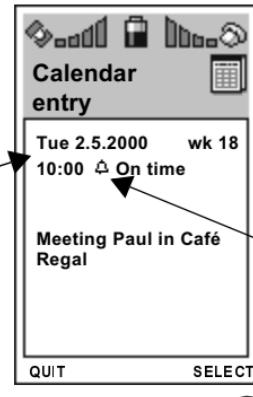
You can make the phone sound an alarm, either on time of the calendar event or some minutes before it. The alarm melody depends on the current **Environment** settings.

- Select **Alarm** and press **CHANGE**.
- Next select the alarm time and press **OK**. If you do not want to use the alarm option, choose **No alarm**.

When you are finished, press **DONE**. You will be asked if you want to save the entry. Make a selection by pressing **NO** or **OK**.

VIEWING A CALENDAR ENTRY (AGENDA)

To view a calendar entry with details, select a *Day view* and then the item **Agenda** by pressing **SELECT**. **Agenda** shows all the events made. Find the desired entry with and press **SELECT**.



If the calendar has an active **repeat** option, the point of time shown here is the next point of time that the calendar entry is due.

The symbol indicates, the alarm is turned on for this calendar entry.

Editing a calendar entry

To edit a calendar entry, do as follows:

- Press **SELECT** when viewing a calendar entry.

- Select **Edit** and press  **SELECT**.

Editing a calendar entry is done just like adding a new one. For further information, please see the chapter *Adding a new calendar entry* above.

Deleting a calendar entry

To delete a calendar entry, do as follows:

- Press  **SELECT** when viewing a calendar entry.
- Select **Delete** and press  **OK**.
- Confirm the deletion by pressing  **OK** or cancel the operation by pressing  **NO**.

CALENDAR ALERT

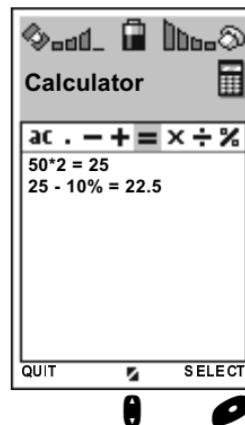
When a calendar entry with alarm occurs, you will hear the calendar tone and the entry's text will be shown.

- You can quiet the tone by pressing  **QUIET**, and dismiss the reminder by pressing  **OFF**.

Calculator

With the calculator you can perform the basic mathematical operations such as addition, subtraction, multiplication, and division. You are also able to use decimal points and the percent operator.

Press  **SELECT** to open the **Calculator** from the **Accessories** menu.



- The operators available for calculating are displayed on the top of the display. You can access them with the  key.
- The  +,  x, and  % can alternatively be keyed in

by subsequent presses of the key. Similarly, $-$ and \div can be keyed in with .

- A decimal point can also be keyed in by pressing and holding the key.
- By pressing CLEAR you can correct any incorrect numbers and symbols you may have keyed in.

sign	function
	resets the display
.	decimal point
$-$	subtraction
$+$	addition
$=$	gives result
\times	multiplication
\div	division
$\%$	percent

The maximum size of a number is 8 digits. When using a decimal point, the amount of digits will be 7 plus the decimal point (for example: 123456.7).

In case you try to key in an illegal mathematical expression (for example 5/0), the text **Error** is displayed.

The accuracy of the calculation is up to 6-digits. When needed, the result will be displayed with the exponent (for example: the result 1234567 is displayed as 1.23457E6).

An example of the percent calculation $50.2 + 50 - 6\% = 94.188$

1. Enter the number 50.2 by pressing the numeric keys. Press and hold to get the decimal point.
2. Select the desired operator ($+$) with and press SELECT. The chosen operator appears on the display.
3. Enter the number 50 by pressing .
4. Select the desired operator ($-$) with and press SELECT.
5. Enter the number 6 by pressing .
6. Select the desired operator ($\%$) with and press SELECT.
7. Select the equal sign ($=$). Press SELECT to get the result.

Calculation can be continued from the last result.

Games

Press  **SELECT** to open the **Games** list from the **Accessories** menu.

- Start a game by pressing  **SELECT**.
- Pause or finish a game by pressing .
- Continue a paused game by using  to select **Continue** and pressing  **SELECT**.

GALACTIC GUNNER

The idea is to shoot the enemy above you while avoiding the bombs being dropped onto you. The enemy moves from side to side and after each sweep it comes closer to you.

If you manage to shoot the whole enemy fleet, the game goes on to the next level, which is slightly faster than the previous level.

The game is over when the enemy bombs you or lands on the row right next to your ship.

Key functions

- Move left by pressing , , , or .
- Move right by pressing , , , or .

- Shoot by pressing , , , or .

Scoring

- Hit an enemy bomb: 1 point.
- Hit an enemy ship: 5 points.

BLASTER MASTER

The idea is to clear a mine field of mines without being blown away as quickly as possible. You can complete the game by managing to clear the field and marking all the mines with flags.

You lose the game if you open a square with a mine on it.

Key functions

- Move the cursor by pressing , , , ,
, , , or .
- Open a square by pressing .
- Mark a mine with a flag by pressing  or .

Scoring

Your score is the time you needed to complete the game. The shorter the time, the better the score.

WORM

The idea is to control a worm around the display, eating small cookies and avoiding walls. The worm will grow and gain speed with each cookie it eats.

The game is over when the worm hits a wall or itself.

Key functions

Steer the worm by pressing **2**, **4**, **6** and **8**.

Scoring

Eat a cookie: 1 point.

PICTURE PUZZLE

The idea is to put together a picture by moving a piece of it around the playing area. When the piece is moved it changes place with the piece that occupies the square being moved into. You can complete the game by putting all the pieces in the right order.

Key functions

- Move the piece by pressing **2**, **4**, **6** and **8**.
- Preview the complete picture by pressing *****, **0** or **#**.

Scoring

Your score is the time you needed to complete the game. The shorter the time, the better the score.

WALL BREAKER

The idea is to hit and clear all the tiles in the ceiling. You have a paddle and a ball to play with. You may catch the bouncing ball by moving your paddle from side to side.

When there are no tiles left in the ceiling, the game goes on to the next level which is slightly faster

than the previous one. After reaching a certain level, the speed will stay the same but the width of your paddle will be decreased.

The game is over when you miss a ball when it bounces back to you.

Key functions

- Release the ball by pressing , , , or .
- Move left with wide steps by pressing .
- Move left normally by pressing  or .
- Move left with tiny steps by pressing .
- Move right with wide steps by pressing .
- Move right normally by pressing  or .
- Move right with tiny steps by pressing .

Scoring

- 1 point for one tile.
- 5 points for clearing the level.

LABYRINTH

The idea is to walk through the labyrinth starting from the upper left corner, going to the lower right corner as fast as possible. Only part of the labyrinth is displayed at once, in fact the whole labyrinth is much larger. There is only one way to go through the labyrinth, no shortcuts are available.

Please note, that it might take few seconds to load the game on the display for playing.

Key functions

Move by pressing , ,  and .

Scoring

Your score is the time you needed to complete the game. The shorter the time, the better the score.

TICTACTOE

The idea is to add crosses in the grid, taking turns with your opponent. The winner of the game is the one who first manages to get five marks in a row. The row can be formed either horizontally, vertically or diagonally. Only part of the grid is displayed at once, in fact the whole grid is much larger.

Key functions

- Move the cursor by pressing ,
 or .
- Place a cross by pressing .

SETTINGS

You can access the settings of the phone via the **Settings** menu. The settings are divided into sub-categories, such as **Environments**, **User interface**, **Time**, **Units**, **Power**, **GSM**, **GPS**, **Help Desk**, **Emergency calls**, and **Security**.

You can access the menu and its sub-menus via the **Main menu**.

- Press **SELECT** to enter the **Settings** menu.
- Press **QUIT** to cancel the operation and return to previous menu level.

Environments

An environment is a combination of sound and lights settings. Different environments can be used for different situations, such as attending a meeting or going outdoors.

There are several default environments available: e.g. **Normal**, **Silent**, **Discreet**, **Noisy**, and **Night**. Additionally, you can create up to two environments of your own.

Environments have default settings, so you may use them as they are. However, in this menu you

can **customize** these environments to your own needs, if you so desire.

You can **turn on** a specific environment in the **Quick menu**. For further information about it, please see the instructions in the chapter *Quick menu, Selecting an environment*.

The environment you are currently using is shown in stand-by mode.

Press  **SELECT** to open the **Environments** menu from **Settings**.

EDITING NORMAL ENVIRONMENT

To view or adjust the normal environment, select **Normal** and press  **SELECT**.

When you are finished, press  **DONE**. If you have made any changes to the environment, you will be asked if you want to save them. Make a selection by pressing  **NO** or  **OK**.

Renaming the environment

The **default** environments, **Normal**, **Silent**, **Discreet**, **Noisy** and **Night**, cannot be renamed.

Editing incoming call, alarm, messages or calendar settings

Select either **Incoming call**, **Alarm**, **Messages** or **Calendar**, and press  **SELECT**. The current environment settings for the chosen option are displayed.

Setting tone

1. Select **Tone** and press  **CHANGE**.
2. You will hear samples of each tone listed as you scroll them with  **OK**. Make a selection and press  **OK**.

Setting volume

1. Select **Volume** and press  **CHANGE**.
2. Use  **OK** to set the volume level. You can also set it to zero level, i.e. totally silent.
3. Press  **OK** when done.

Volume level can also be set by pressing  and  when the **Volume** menu item is selected.

Setting ringing mode

Ringing mode is not available in message setting.

1. Select **Ringing mode** and press **CHANGE**.
2. Select either **Fixed** or **Increasing** and press **OK**.

Changing use of vibration

You can turn vibrating alert on or off by selecting **Vibration** and pressing **CHANGE**.

Changing volume for key tones or notifications

Select either **Key tones** or **Notifications** and press **CHANGE** to adjust the selected option.

1. Use to set the volume level. You can also set it to zero level, i.e. totally silent.
2. Press **OK** when done.

Volume level can also be set by pressing and when either **Notifications** or **Key tones** is selected.

Changing use of lights

1. Select **Lights** and press **CHANGE**.
2. Select an option and press **OK**.
 - To have the lights always off, select **Off**.

- To have the lights always on, select **On**.
- To have the lights automatically turn on when keys are pressed or important notifications are displayed, select **Automatic**.

Keeping lights constantly on will rise the power consumption of the phone considerably.

Resetting an environment

To reset the environment settings to factory defaults, do as follows:

1. Select **Reset** and press **OK**.
2. Confirm the reset by pressing **OK** or cancel the operation by pressing **NO**.

EDITING SILENT, DISCREET, NOISY AND NIGHT ENVIRONMENTS

You can edit these environments in the same way as the **Normal environment**. For detailed information, please see the previous chapter *Editing normal environment*.

CAR KIT ENVIRONMENT

In this menu you can set one of the environments to be the default environment for the car kit. Each time when you connect the phone to a car kit, the default car kit environment will be turned on automatically. As you disconnect the phone from the car kit, previously used environment will be turned on.

Select **Car kit** and press CHANGE. Highlight the desired environment with and press OK.

If you do not want to use any specific environment with the car kit, select the option **None**. This way, the environment will not be changed automatically when the phone is connected to the car kit.

If you want to use some other environment than the default car kit environment while the phone is connected to the car kit, you may select another environment in the **Quick menu**.

CREATING NEW ENVIRONMENT

To create an environment of your own, select **New**. At most two additional environments can be made.

Naming the environment

You can change the name of an environment, which you have created yourself.

1. Select **Name** and press CHANGE.
2. Key in a new name with alphanumeric keys and press OK.

Changing base environment

You can select which one of the default environments your new environment is based on. The initial values of all the environment settings will be copied from that environment.

1. Select **Based on** and press CHANGE.
2. Select the base environment and press OK.
3. When you are finished, press DONE. If you have made any changes to the environment, you will be asked if you want to save or discard them. Make your choice and press OK.

Editing your own environment

You can edit your own environment in the same way as the default environments, by selecting it

with  **SELECT**. The only difference is that you can also change the name of the environment.

For further information about editing an environment, please see the instructions in the chapter *Editing normal environment*.

DELETING AN ENVIRONMENT

The default environments cannot be deleted. To delete one of your own environments, do as follows:

1. Select the environment you wish to delete with .
2. Select **Delete** and press .
3. Confirm the deletion by pressing  **OK** or cancel the operation by pressing  **NO**.

User interface

This menu contains settings that have to do with the general outlook and functionality of the phone.

Press  **SELECT** to open the **User interface** menu from **Settings**.

SELECTING LANGUAGE

You can change the language the phone uses.

1. Select **Language** and press .
2. If the current menu language is not the one you wish to use, select the desired language with  and press  **OK**.

When the language is set to **Automatic**, it means the language is chosen according to your SIM card's language preference. If the information is not available, a default menu language is used.

This setting does not affect the language used when writing in T9 mode.

ADJUSTING CONTRAST

In this menu you can adjust display contrast.

1. Select **Contrast** and press  **CHANGE**.
2. Use  to set the contrast level. Press  **OK**.

Contrast level can also be set by pressing  and  when the **Contrast** menu item is selected.

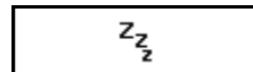
SCREEN SAVER

The screen saver can be used to reduce the power consumption of the phone by clearing the display when the equipment is not continuously used. The saver will be started when the phone has not been used for a specified time.

The saver will not be started during a call or when the phone is connected to a car kit.

To set the idle time or disable the feature, select **Screen saver** and press  **CHANGE**. Select an option and press  **OK**.

Screen saver display



The screen saver display can be exited by pressing any key.

AUTOMATIC KEYLOCK

In this menu you can turn the automatic keylock on or off.

When automatic keylock is turned on, the keypad will be locked in approximately 20 seconds if no key is pressed during that time.

1. Select **Keylock mode** and press  **CHANGE**.
2. Make a selection of either **Manual** or **Automatic** and press  **OK**.

Time settings

This menu allows you to set the time, time zone and date.

The time information determined here is used together with call logging, incoming messages as well as alarm clock and timers.

Time and date information can be read from the GPS, so they will be automatically set whenever you receive signals from the satellites. This way, your phone will always stay on time as long as you have set your time zone correctly. However, this menu also allows you to set time and date manually if so desired.

Press  **SELECT** to open the **Time** menu from **Settings**.

TIME

This item allows you to set the clock manually. Please note, however, that the time will always be automatically set if you are using *Satellite time* (see the following instructions).

1. Select **Time** and press  **CHANGE**.
2. Key in the time with numeric keys. Press  **OK**.

DATE

This item allows you to set the date manually. Please note, however, that the date will always be automatically set if you are using *Satellite time* (see the following instructions).

1. Select **Date** and press  **CHANGE**.
2. Key in the date with numeric keys. Press  **OK**.

SATELLITE TIME

You can have the time and date automatically set to satellite time, which is received from the GPS.

Select **Satellite time** and press  **CHANGE**.

TIME ZONE

The GPS satellites broadcast Coordinated Universal Time (UTC), the standard time common to every place in the world. To make automatic clock resetting possible, this data needs to be corrected to match your local time zone.

1. Select **Time zone** and press  **CHANGE**.
2. Key in your local time zone shift with numeric keys. If needed, change the +/- sign with .
3. Press  **OK**.

DAYLIGHT-SAVING TIME

If the daylight-saving time is in use in your country, you need to change the time zone manually each time, when shifting from winter time to summer time and vice versa. E.g. in Finland time zone in winter is +2:00 but time zone in summer is +3:00.

Units

The **Units** menu allows you to set the measurement systems for distance, speed and elevation and currency unit for call cost counters.

Press  **SELECT** to open the **Units** menu from **Settings**.

DISTANCE & SPEED

1. Select **Distance & speed** and press  **CHANGE**.
2. Select the units you wish to use for distance and speed measurements: **Meters**, **Miles**, **Yards**, or **Nautical**. Press  **OK**.

ELEVATION

1. Select **Elevation** and press  **CHANGE**.
2. Select the units you wish to use for elevation measurements: **Meters**, or **Imperial feet**. Press  **OK**.

CURRENCY

The currency unit is used for call costs. Use a 3-letter abbreviation for the currency.

1. Select **Currency** and press  **CHANGE**. You may need the PIN2 code for changing the setting.
2. Key in the currency unit with alphanumeric keys. Press  **OK**. If needed, you can clear the buffer by pressing  **CLEAR** few times.

Power

In this menu you can make the phone turn itself on and off at specified times.

Press  **SELECT** to open the **Power** menu from **Settings**.

POWER ON TIMER

When the **Power on timer** is activated, the phone turns itself on every day at the same time.

- To change the set time of the timer, select **Power ON timer** and press  **CHANGE**. Key in a time with the numeric keys, and press  **OK**.
- To turn the timer on or off, select **Active** and press  **CHANGE**.

POWER OFF TIMER

When the **Power off timer** is activated, the phone turns itself off every day at the same time.

The **Power off timer** is set in the same way as the **Power on timer**.

GSM

This menu contains settings related to calls and messages.

Press  **SELECT** to open the **GSM** menu from **Settings**.

MESSAGE SETUP

In this menu you can store and change the number of your voicemail service and the number of the short message centre. You can also determine settings for other message operations, such as message type and validity.

The Short Message Service (SMS) and the Voicemail Service are network features.

SMS service number

You need to set the correct SMS number to send messages. The SMS number can be found e.g. in the manual of your local network operator.

Press  **CHANGE**. Press  **CLEAR** to remove any incorrect digits and key in the correct number. Press  **OK** when done.

Message type

In this sub-menu you can choose the kind of message type you are processing from these options: text, fax, X.400, email, ernes, or data.

Press  CHANGE. Select an option with . Press  OK.

Message validity

In this sub-menu you can choose the validity period for messages from these options: 1 hour, 6 hours, 24 hours, 1 week, or maximum time.

Press  CHANGE. Select an option with . Press  OK.

Voicemail number

You need the voicemail number to listen to the messages left for you. The same number is also used in connection with the function **Call diverts**.

Press  CHANGE. Key in the correct number and press  OK.

BROADCAST SETUP

This menu contains settings related to broadcast messages.

Accept broadcasts

This option lets you specify whether you wish to accept broadcast messages such as advertisements, weather forecasts, traffic reports and sports results.

Press  CHANGE to turn this option on or off.

Base station ID

Base station ID indicates the area in which your phone is at the very moment. If the option is set on, the identifier text of the base station is shown in stand-by mode. Note that not all networks use an identifier.

Press  CHANGE to turn this option on or off.

Message types

If you have turned on the option **Accept broadcasts**, all kinds of general messages can be broadcast to you. In this sub-menu you can add or delete certain message types, e.g. advertisements, which you do or do not want to accept.

The broadcast message types are identified by numbers. In order to find out which number corresponds to a certain message type, please contact your network operator.

Select **Types** and press  **SELECT** to enter this menu.

Deleting a message type

1. Use  to select the number of a type which you do not want to accept, and press  **DELETE**.
2. Confirm the deletion by pressing  **OK** or cancel the operation by pressing  **NO**.

Adding a new message type

1. Select **New** and press  **SELECT**.
2. You will be asked for the new broadcast message type. Key in the number and press  **OK**.

Message languages

As a default setting, broadcast messages will be broadcast in all possible languages. To ignore the messages sent in an unfamiliar language, do as follows:

1. Select **Languages**. Press  **SELECT**.
2. Use  to select a language and press  **CHANGE** to turn it on or off.
3. When finished, press  **DONE**.

ANYKEY ANSWER

If the **Anykey answer** is turned on, you can answer an incoming call by pressing any key, not just .

Press  **CHANGE** to turn this option on or off.

AUTO ANSWER

If the **Auto answer** is turned on, an incoming call is automatically answered after certain number of rings.

Press  **CHANGE** to turn this option on or off.

DIALLING PREFIX

A dialling prefix is sent to the network before any dialled number. This kind of prefix could be e.g. #31#, which tells the network not to show the callers number when making calls. *31# works the other way around.

In this menu you can add dialling prefixes and select one of them for use.

Press  CHANGE to enter this menu.

Using a prefix

Select a prefix from the list and press  OK. If you do not want to use a dialling prefix at all, choose Off.

Adding a prefix

1. Select New and press  SELECT.
2. You will be asked for a new dialling prefix. Key it in and press  OK.

REDIAL MEMORY

If the **Redial memory** is turned on, the last dialled numbers are stored into memory. These numbers can be recalled by pressing  in stand-by mode when no numbers have been keyed in.

Press  CHANGE to turn this option on or off.

QUICK DIALLING

When the quick dialling option is turned on, you can call quickly to those phone numbers stored in the phone book entries 2 - 9.

Press  CHANGE to turn this option on or off.

GSM MODULE

In this menu you can turn the GSM module on or off.

1. Select **GSM module** and press  CHANGE.
2. Make a selection of either **On** or **Off** and press  OK.

When the GSM module is off it will not send or receive radio frequency signals. This has the following effects:

- No calls (including emergency calls) can be made or received. It will seem to anyone trying to call you as if your phone is off.
- No short messages (including Friend Find messages, etc.) can be sent or received.
- Power consumption of the phone is lowered, especially when in areas with no GSM network coverage.

GPS

In this menu you can adjust map and navigation settings.

Press  **SELECT** to open the **GPS** menu from **Settings**.

MAP DETAILS

In this menu you can determine the outlook of the **Map** navigator page.

Select **Map details** and press  **SELECT** to enter the menu.

Auto scrolling

When the auto scrolling option is turned on, the map will be constantly scrolled to keep the position marker in the middle. Otherwise, the map is only scrolled when the marker is about to move off the display.

Press  **CHANGE** to turn this option on or off.

Show data fields

This option allows you to specify whether you want to see the two additional data fields on the **Map** navigator page.

Press  **CHANGE** to turn this option on or off.

You can also quickly turn the data fields on or off by pressing  on the **Map** navigator page.

Show labels

This option allows you to specify whether you want to see waypoint and friend point labels on the map.

Press  **CHANGE** to turn this option on or off.

Show route

This option allows you to specify whether you want to see the waypoints of the destination route joined by lines on the map.

Press  **CHANGE** to turn this option on or off.

Show trace

This option allows you to specify whether you want to see the trace left by your movement on the map.

Press  **CHANGE** to turn this option on or off.

Clear trace

This option allows you to clear your trace on the map and start drawing it from this point onwards. To hide the trace altogether, also turn off the **Show trace** option.

Press  **OK** to clear the trace.

Preferred map type

When you have more than one map loaded into your phone, the most accurate one available for your position will generally be used. In this submenu, you can set the map type you prefer. You can choose from the following options:

- **Any.** The phone will always use the most accurate map available.
- **City, Road, Topographic or Nautical.** The phone will use a map of the chosen type when available. If not, it will choose another map according

to its similarity to the preferred type.

- **None.** The phone never uses a map, even when one is available.

To change the preferred map type, do as follows:

1. Select **Preferred map type**. Press **CHANGE**.
2. Select an option and press **OK**.

POSITIONING

When using the mobile phone positioning along with some separate map, e.g. a paper map, the GPS position format and map datum need to match the position format and map datum listed on the corresponding paper map.

The settings below are correction factors, which will be applied to GPS position fixes before they are displayed.

Position format

Position format indicates the way the position will be displayed. The position can be displayed either by the most common latitude/longitude system or some other coordinate measuring system.

1. Select **Position format** and press **CHANGE**.

2. Select an option with . Press **OK**.

You can choose in which format you want to see the coordinates:

- In degrees, minutes and seconds (**hhdd°mm'ss.s'**).
- In degrees and minutes (**hhdd°mm.mmm'**).
- In degrees only (**hhdd.ddddd°**).
- In one of the pre-defined grid formats.
- In **User UTM grid**. In case you need to use a grid which is not available in the list, you can create a user UTM grid to match your paper map. Select a line by pressing and **CHANGE**. Fill in the digits and press **OK**. Complete the grid by pressing **DONE**.

On the Position page and in other similar places selected position format is shown abbreviated.

Map datum

Map datum, such as WGS84, determines a starting reference point for selected position format as well as the shape of an ellipsoid.

1. Select **Map datum** and press **CHANGE**.
2. Select an option with . Press **OK**.

- You can select one of the pre-defined map datums shown in the list.
- You can create your own datum, i.e. **User datum**, as well. When creating the user datum, the first two lines indicate the starting point of the coordinates while the rest two lines indicate the shape of the ellipsoid, which is used to represent the shape of the Earth.

COURSE ALERTS

In this menu, you can set up alerts to be used when you are going off course, or arriving at your destination.

Select **Course alerts** and press  **SELECT** to enter the menu.

Arrival alert

This option allows you to specify whether you want to get an alert when you arrive at your destination. The destination can be a waypoint, a friend point, or the last point of a route.

Press  **CHANGE** to turn this option on or off.

Arrival distance

In this menu you can choose the distance to use for arrival alerts.

1. Select **Arrival distance** and press  **CHANGE**.
2. Select an option. Press  **OK**.

Confirm arrival

This option allows you to specify whether you want to confirm the arrival to a point on a route before starting to navigate to the next one.

Press  **CHANGE** to turn this option on or off.

Off course alert

This option lets you specify whether you want to get an alert when you deviate too much from the direct path to the point you are navigating to.

Press  **CHANGE** to turn this option on or off.

Off course distance

In this sub-menu you can choose the distance to use for off course alerts.

1. Select **Off course distance**. Press  **CHANGE**.
2. Select an option and press  **OK**.

LEFT AND RIGHT DATA FIELD

You can see two data fields on the **Map** and **Guide** navigator pages. In these two menus, you can specify the type of information you want to see in each of them. You can choose more than one option for each data field, in which case the contents of the field change cyclically.

You can select the data field contents as follows:

- Select either **Left data field** or **Right data field** and press  **SELECT** to enter the appropriate submenu.
- Use  to select an option and press  **CHANGE** to turn it on or off.
- When finished, press  **DONE**.

Data field contents

Speed: Current ground speed.

Average speed: Average ground speed.

Top speed: Top ground speed.

Odometer: Ground distance travelled.

Travel time: Time travelled since the meters were last reset.

Elevation: Elevation from hypothetical sea level.

Next destination: Name of next waypoint on route; or name of waypoint or friend point set as destination.

Last destination: Name of last waypoint on route.

Distance to next: Ground distance to next waypoint on route; or distance to waypoint or friend point used as destination.

Distance to last: Ground distance to last point on route.

ETE to next (Estimated Time Enroute): Estimated time needed to reach next waypoint on route; or to reach a waypoint or a friend used as destination.

ETE to last: Estimated time needed to reach last waypoint on route.

ETA at next (Estimated Time of Arrival): Estimated time of arrival at next waypoint on route; or at waypoint or friend used as destination.

ETA at last: Estimated time of arrival at last waypoint on route.

Off course: distance from correct course (left or right).

Turn: Angle between bearing to destination and current track, including a letter (left / right) indicating the recommended direction to turn to.

Date: Current date.

Time: Current time.

UTC (Universal time constant): World standard time. Also known as Greenwich Mean Time (GMT).

Dawn: Time of dawn (end of darkness) on current day.

Sunrise: Time of sunrise on current day.

Sunset: Time of sunset on current day.

Dusk: Time of dusk (beginning of darkness) on current day.

Maidenhead: Current position in Maidenhead co-ordinates.

NMEA OUTPUT

In this menu you can turn the NMEA output on or off. This phone supports the NMEA protocol, which is used for transferring position data between the phone and some navigation systems, e.g. a map software. For the connection you also need a separate NMEA cable, which is sold as an accessory.

Press  CHANGE to turn the option on or off. Highlight the desired option with  and press  OK. By selecting a transferring speed you will turn the NMEA output on.

When the NMEA output is turned on, the phone will consume slightly more power.

AGPS

In this menu you can specify settings for ordering assisted GPS (AGPS) information from a service provider. The AGPS contains ephemeris information from a given number of satellites. It is used for speeding up the initial position fix. The AGPS information may also help in finding satellites and getting position in difficult conditions.

Enter the AGPS menu by pressing  SELECT.

- Press  **CHANGE** and key in the phone number of the AGPS service. By pressing  **READ** you can also recall the number from your phone book. The number is needed for sending an AGPS request.
- Press  **CHANGE** and select with  the number of satellites. However, please note that the more satellites selected, the higher the charge will be.

RESET POSITION

This option allows you to reset your position information. Use it if the GPS receiver has trouble calculating your position, this could happen e.g. after long international flights or extended periods of time when the GPS receiver has not been used at all.

Reset position by pressing  **OK**.

Help desk

If you need assistance when using your Benefon Esc! phone and maps, you can send a help request to Benefon Esc! Help desk service. A technical support person will then give you a call. There are usage limitations to this service.

Enter the Help desk settings menu by pressing  **SELECT**.

NUMBER

This option allows you to set the phone number of the Help desk service. The default phone number is Benefon Esc! international Help desk service number, which you may want to change to a region specific one, if available.

1. Select **Number**. Press  **CHANGE**.
2. Key in the number and press  **OK**.

LANGUAGE

This options allows you to select the language that you prefer speaking with the technical support person.

1. Select **Language**. Press  **CHANGE**.
2. Select an option with  and press  **OK**.

Emergency calls to pre-determined numbers

In a case of dire emergency, it is useful to have your phone send your position information and make calls to pre-determined phone numbers at a press of a single button. In this menu, you can set the options related to this emergency cycle.

Press  **SELECT** to open the **Emergency calls** menu from **Settings**.

The emergency calls described here have nothing to do with calling the **local** emergency number (e.g. 112 in Finland).

EMERGENCY KEY

This option allows you to specify whether you want the  key to be used as an emergency key. When this option is not used, the emergency cycle cannot be started at all.

Press  **CHANGE** to turn this option on or off.

EDIT MESSAGE

You can specify the short message that will be automatically sent to numbers specified in the call list in case of emergency.

The emergency message will always contain your position and other relevant data, but by writing this message you can add text to it. Some suggestions for this additional information include medical allergies, heart disease, diabetes, and so on.

1. Select **Edit message** and press  **SELECT**.
2. The message is edited like a standard note. For further information, please see the chapter *Main menu, Accessories, Notepad*.
3. Press  **SAVE** when you are finished.

CALL LIST

The emergency call list is an ordered list of phone numbers which are used for sending messages and making calls. Initially the call list is empty but you can add, edit or remove information in it.

The number of entries in the call list is limited.

Select **Call list** and press  **SELECT**.

Adding an emergency call

To add the first call to the list, press **INSERT**. Press **CHANGE** and key in the receiver's phone number. You can also recall it from the phone book by pressing **SEARCH**.

Next you can choose whether the phone number should receive a call, the emergency short message, or both. Scroll and check the desired options. Exit the menu by pressing **DONE**. Save the current settings by pressing **OK** or cancel them by pressing **NO**.

To add more calls to the list, select an existing number and press **SELECT**. Select the calling order: whether you want to insert this new call before or after the selected call in the list. Press **SELECT**.

Editing an emergency call

To edit a number in the list, select the number in question and press **SELECT**.

Scroll and select **Edit**.

- To change the phone number, select **Number** and press **CHANGE**. Remove numbers by pressing **CLEAR**. Add numbers by pressing numeric

keys. To add a prefix, press . Press **OK**.

- Scroll and check the other options by pressing and **CHANGE**.

Finally exit the menu by pressing **DONE**. Save the current settings by pressing **OK** or cancel them by pressing **NO**.

Deleting an emergency call

To remove a number in the list, select the number in question and press **SELECT**.

Scroll and select **Delete**.

Confirm the deletion by pressing **OK** or cancel the operation by pressing **NO**.

MAKING EMERGENCY CALLS

To start making emergency calls, press and hold for five seconds. This works in stand-by mode or in any of the navigator pages, and even when the keyboard is locked. **Please note, however, that the Emergency key option has to be turned on for this to work.**

After pressing the emergency key for a few seconds, you will see the following text: **Starting emergency calls in 15 seconds**.

You have then fifteen seconds to cancel the operation by pressing  CANCEL. If you do not do this, or if you press  OK, the emergency cycle will be started.

First, emergency short messages containing your position and any additional text you may have provided, will be sent to all numbers in the call list specified as message recipients.

Next, a voice call is made to each number in the list specified as a voice call recipient. A call will be attempted to a number three times, after which the number is skipped and the next number will be tried.

You can stop the emergency cycle, and thus stop sending any more messages and making any more calls, by pressing  CANCEL at any time.

Security

This menu contains settings related to managing security codes.

Press  SELECT to open the **Security** menu from **Settings**.

ASK PIN CODE

This option allows you to specify whether you want the PIN code to be asked when the phone is turned on.

1. Select **Ask PIN code** and press  CHANGE to turn this option on or off.
2. You will be asked for the PIN code. Key it in and press  OK.

Please note that some SIM cards do not allow turning this option off.

ASK PHONE CODE

This option allows you to specify whether you want the phone code to be asked when you are resetting the call counters. The phone code is associated with the phone itself, not the SIM card.

1. Select **Ask phone code** and press **CHANGE** to turn this option on or off.
2. You will be asked for the phone code. Key it in and press **OK**.

CHANGE PIN CODE

In this menu you can change the PIN code in your SIM card.

1. Press **CHANGE**.
2. First key in the current PIN code, then the new code, and finally repeat the new code by keying it in again. Press **NEXT** after each level.
3. If the current PIN code matches the PIN code stored in the SIM card, and the two new PIN codes match each other, the text **PIN code changed** will be displayed.

When changing the PIN code, the **Ask PIN code** option needs to be turned on.

CHANGE PIN2 CODE

In this menu you can change the PIN2 code in your SIM card. You need the PIN2 code for setting and resetting functions in the **Call cost** menu, and also for using most of the FDN phone book functions.

The menu works in the same way as the PIN code menu. However, if the SIM card does not support the PIN2, the text **Feature not on available on SIM** will be shown.

CHANGE PHONE CODE

In this menu you can change the phone code. You need the phone code for resetting the call counters.

The menu works in the same way as the PIN code menu.

CHANGE NETWORK CODE

In this menu you can change the network code. You need the network code for **Call barring** and some other functions governed by the operator.

The menu works in the same way as the PIN code menu.

FIXED DIALLING (FDN)

Fixed Dialling Numbers (FDN) is a special phone book in which you can only store a few numbers. The amount of numbers depends on your SIM card. Please note that you need your PIN2 code for turning fixed dialling on or off, and also for storing, modifying and deleting numbers from the FDN phone book. The PIN2 code is supplied by your network operator.

When fixed dialling is turned on in this menu, you can only call numbers stored in the FDN phone book, or numbers that start with the same number you have stored in the FDN phone book. E.g. if you have stored the number 040 in the FDN phone book, you can call any number that starts with 040.

1. Press  **CHANGE**.
2. Key in the PIN2 code and press  **OK**.

IMEI

The International Mobile Equipment Identity code (IMEI) identifies your mobile phone uniquely. The 15-digit code is also printed in the type label of the phone. It cannot be changed.

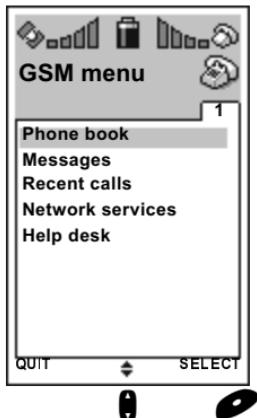
Press  **SELECT** to check your phone's IMEI code.

Reset default settings

Use this option if you wish to restore all settings to factory default settings. This reset will also restore all environments to their default values.

1. Select **Reset settings** and press  **SELECT**.
2. Confirm the reset by pressing  **OK**. The text **Restoring default settings** will be shown and you will be returned to stand-by mode.

GSM MENU



- Press **GSM** to enter the **GSM menu** from stand-by mode.
- Use to scroll through the items and sub-menus.
- To select an item, press . This way, you can enter sub-menus, activate commands and turn options on and off.
- Press **QUIT** to return to the previous menu level., press to return to stand-by mode.

PHONE BOOK

You can store phone numbers in the phone book entries on the SIM card. The actual number of entries and the length of names and numbers which can be stored on the SIM card depends on the card's storage capacity.

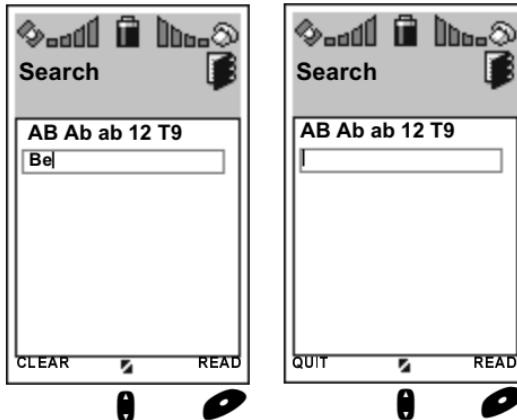
If there are no free memory slots left, **No free memory** will be shown. You cannot store any new phone numbers unless you first delete some old ones.

If the text (**Fixed**) is displayed, the function called **Fixed dialling** has been turned on. Fixed dialling sets some restrictions for using the phone book, e.g. you cannot store, edit, or delete any phone book information without the PIN2 code. For further information about Fixed dialling, please see the chapter *Main menu, Settings, Security, Fixed dialling (FDN)*.

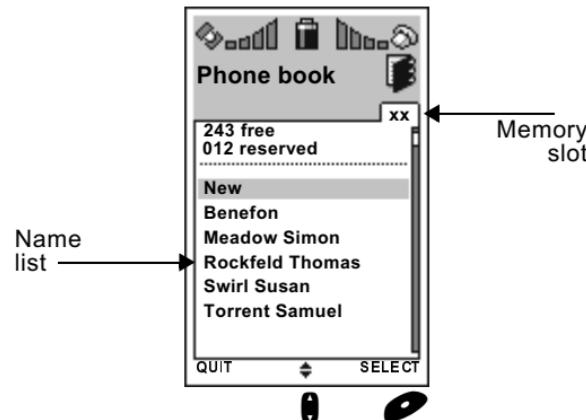
- Press **SELECT** to open the **Phone book**.
- The shortcut to access the phone book name list (with the option **New**) is to press **GSM** for a few seconds.
- Press **QUIT** to cancel the operation and return to the previous menu level.

Recalling a phone number

In this menu you can search for a phone number stored in your phone book. You can also add names to the phone book.



- Or, you can press **READ** directly. Do it this way if your phone book list is quite short or you wish to add (store) a new phone number in your phone book. The first line in the phone book will offer you the option **New**.



- You can key in the desired name or its initials and press **READ**. Do it this way if you wish to search for a number already stored in the phone book, especially if your phone book list is very long. The first line in the phone book will show the desired phone number or its closest matches.

A list of all names in the phone book is shown.

If **Fixed dialling** is turned on, the numbers displayed here are the numbers stored in FDN phone book. The names are listed in alphabetical order.

You can scroll through the name list with . Scrolling over the top to the bottom is possible.

If you stop on a name for a few seconds, you will see the phone number associated with the name. The memory slot taken up by the name is always shown in the small tab.

1. If you wish to make a call, press .
2. If you wish to edit or delete (empty) the chosen phone book entry, press **SELECT**.

EDITING A PHONE BOOK ENTRY

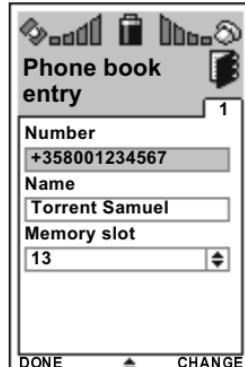
1. Select **Edit** by pressing **SELECT**.
2. The phone number, name and memory slot number are displayed and can be edited. Select an option to edit with and press **CHANGE**.

Editing phone number

Add numbers by pressing the numeric keys and remove them by pressing **CLEAR**. A long press of **CLEAR** empties the whole line. Press **OK** when done.

Editing name

Editing name is done in the same way as editing number. Press **OK** when done.



Changing memory slot

The free memory slots are listed. Select a slot with and press **OK**.

3. When you are finished, press **DONE**. You will be asked if you want to save the changes. Make your choice by pressing **NO** or **OK**.
4. If you have changed the memory slot number, you will be asked if you want to move or copy the phone book entry.

- By selecting **Move**, the information stored in the original phone book entry will be lost. As a result of that, the old slot will be freed.
- By selecting **Copy**, the information stored in the original phone book entry will be preserved. As a result of that, both slots will be reserved: one with the original information and another with the recently stored and possibly modified information.

DELETING A PHONE BOOK ENTRY

1. Select **Delete** with and press **OK**.
2. Confirm the deletion by pressing **OK**, or cancel the operation by pressing **NO**.

Storing a phone number

You have several ways to store phone numbers into the phone book. You can:

- key in the desired number in stand-by mode (please see the following instructions)
- save the number by using **New** option (please see the following instructions)
- pick up numbers from an SMS message, including the sender's phone number (for further information, please see the chapter *GSM menu, Messages, Inbox, Reading and processing an incoming message, Pick number*)
- pick up a caller's number (for further information, please see the chapter *GSM menu, Recent calls*)
- save the receiver's number by using redial memory (for further information, please see the chapter *Brief overview of phone use, Making a call, Redialling*).

In all of the cases above, the storing is eventually done in the same way.

KEYING IN A NEW NUMBER IN STAND-BY MODE

1. When the phone is in stand-by mode, key in the desired number and press **SAVE**.
2. A new phone book entry will be displayed. Key in the desired name and press **OK**.
3. Press **CHANGE** and select a memory slot with **1**. Press **OK**. Only free memory slots are available.
4. When you are finished, press **DONE**. Save changes by pressing **OK** or cancel them by pressing **NO**.
5. You can then edit the phone number, memory slot number, or the name. Select an option to edit with and press **CHANGE**.
6. When you are finished, press **DONE**. Save changes by pressing **OK** or cancel them by pressing **NO**.

ADDING A NEW NUMBER IN THE NAME LIST

1. In stand-by mode, press **GSM** and then **SELECT** to select **Phone book**.
2. Press **READ** directly. The phone will offer you the name list, including the option **New**.
3. Choose **New** by pressing **SELECT**.
4. A new phone book entry will be displayed. First, key in the desired name and press **OK**.

MESSAGES

The Short Message Service (SMS) is a network feature.

- Press  **SELECT** to enter the **Messages** menu.
- Press  **QUIT** to cancel the operation and return to previous menu level.

Inbox

In this menu you can read a message you have received. You can send a message back to its sender or forward it to someone else. You can also pick phone numbers and coordinates from a message for further use, or delete messages either one at a time or all at once.

The **Inbox** menu item in GSM menu has some additional information after it: [MM] is the number of all incoming messages, and the presence of the  symbol shows that there are one or more unread messages in the inbox.

The settings for incoming messages are found in the **Message setup** menu, under **Main menu**, **Settings**, **GSM**.

Press  **SELECT** to open the **Inbox** menu.

If there are neither new nor read incoming messages, **No incoming messages** is displayed and the menu cannot be entered.

RECEIVING A NEW MESSAGE

When receiving a new message, an alert sound is heard, and the text **New message** is shown.

New messages are accessible in stand-by mode immediately after they are received. For further information, please see *Brief overview of phone use, Incoming traffic*.

All new messages will also be stored into the **Inbox** where they can be recalled at a later time.

RECALLING INCOMING MESSAGES

The inbox contains all the incoming messages. The name or the number of the sender and the delivery time of the message are displayed.

If the message is older than 24 hours, the delivery time is replaced by the delivery date.

Closed envelope () on the left indicates that the message is new and unread. Open envelope () on the left indicates that the message is old and read.

If you wish to delete all the messages displayed in this list, select the option **Delete all** with and press **OK**. Confirm the deletion by pressing **OK** again, or cancel the operation by pressing **NO**.

READING AND PROCESSING AN INCOMING MESSAGE

1. Highlight the desired message with , and press **SELECT**.
2. By scrolling with , you are able to read the whole message.
3. To process the message, press **SELECT**.
 - Select the desired function with and press .
4. If you do not want to process the message, press **QUIT** to return to the previous menu level.

Reply

Use this option if you wish to send a message back to the sender. That way, you do not need to key in the phone number or recall it from phone book.

Write and edit the text as follows:

- To remove letter(s), press **CLEAR** shortly.
- To add letters into text, press **2 ABC ... 9 WXYZ**.
- To add special characters into text, press **0** for a few seconds. Use to select a line and then press the numeric key, which corresponds to the desired character.
- To enter a space, use .
- To move inside the text, press .
- You may also modify the text with the T9 text input tools (for further information about using the T9 text input, please see the chapter *Main menu, Accessories, Notepad, Writing a note in T9 mode*).

When the message is written, press **SELECT** to send, save or postpone it.

If you do not want to go further, press **QUIT** to cancel the operation and return to the message processing list.

Sending and saving the message

You have four options to choose from: send and save, send only, send with position, and postpone. Select an option with and press **OK**.

- By selecting **Send**, you can send the message without saving a copy of it for yourself.
- By selecting **Send and save**, you can send the message and also save it to your SIM card. The message is stored into the outbox. The original message sent to you is still kept in the inbox.

However, if there is not enough free memory space to save the message, **No free memory** will be displayed and you will return to previous menu level. The message will not be sent either. In this case you may delete some old messages to make some free memory space or select the **Send** option.

- By selecting **Send with position**, you can send a message to the operator with a request for position information.

The default destination number for the reply message is the number from where the original message was sent. If the number in question is stored in the phone book, the name of the caller is displayed instead of the number.

To change the number, press  **CLEAR** for a few seconds. You can then either key in another number, or press  **SEARCH** to look for the desired number in the phone book.

To send the message, press  **SEND**.

If there is SMS transmission failure, the text **Error in sending** will be displayed. In this case, make sure the receiver's phone number (including prefix) and the message box number are correct and there is enough network coverage for radio communication.

Postponing the message

By selecting **Postpone**, you can save the message (as a draft) without immediately sending it to anyone. If you wish to finish or send the message later, you can recall a postponed message through **Write message** menu.

Forward

Use this option if you wish to send the selected message to a new receiver. Forwarded messages are not stored as extra copies into SIM card.

Key in another number, or press  **SEARCH** to look for the desired number in the phone book.

To send the message, press  **SEND**.

If there is SMS transmission failure, the text **Error in sending** will be displayed. In this case, make sure the receiver's phone number (including prefix) and message box number are correct and there is enough network coverage for radio communication.

If you do not want to forward the message, press **CLEAR** for a few seconds to empty the display and right after **QUIT** to return to the previous menu level. You can also press to return directly to stand-by mode.

Pick number

With this option you can pick the phone number of the sender and save it into your phone book or make a call to the number in question. If the message itself contains numbers, you can also select them for later use.

If the picked number is stored in the phone book, the associated name is shown instead of the number.

1. To call a number, select it with and press .
2. To save the number into the phone book, select it with and press **SAVE**.

Saving a picked number into the phone book

1. First, key in the desired name and press **OK**.
2. You can then edit the phone number, memory slot number, or the name. Select an option to edit with and press **CHANGE**.

Editing phone number

Add numbers by pressing the numeric keys and remove them by pressing **CLEAR**. A long press of **CLEAR** empties the whole line. Press **OK** when done.

Changing memory slot

The free memory slots are listed. Select a slot with and press **OK**.

3. When you are finished, press **DONE**. You will be asked if you want to save or discard the phone book entry. Make your choice and press **OK**.

Pick coordinates

With this option you can pick any coordinates the message may contain, and save them as a waypoint.

To save the coordinates, select them with and press **SAVE**.

Saving coordinates as a waypoint

1. First, key in the desired name and press **OK**.
2. You can then change the symbol, the coordinates, or the name. Select an option to edit with and press **CHANGE**.

Changing waypoint symbol

- Use to select a line and then press the numeric key, which corresponds to the desired character.

Changing coordinates

- Edit the digits by pressing the numeric keys and to select the digit to edit.
- Press **OK** to accept the new coordinates.

3. When you are finished, press **DONE**. Save the waypoint by pressing **OK** or cancel the operation by pressing **NO**.

Delete

With this option you can delete the selected message from your SIM card. Confirm the deletion by pressing **OK**, or cancel the operation by pressing **NO**.

Outbox

In this menu you can read, edit, and forward any of your own messages you have saved. You can also pick phone numbers and coordinates from a message for further use, or delete messages either one at a time or all at once.

The **Outbox** menu item in GSM menu has some additional information after it: **[MM]** is the number of all saved outgoing messages.

The settings for outgoing messages are found in the **Message setup** menu, found under *Main menu, Settings, GSM*.

Press  **SELECT** to open the **Outbox** menu.

If there are no saved outgoing messages, **No outgoing messages** is displayed and the menu cannot be entered.

RECALLING OWN MESSAGES

The outbox contains all your saved outgoing messages. The messages are shown in their order in the SIM.

If you wish to delete all the messages displayed in this list, select the option **Delete all** with  and press  **OK**. Confirm the deletion by pressing  **OK** again, or cancel the operation by pressing  **NO**.

READING OR PROCESSING OWN MESSAGES

1. Select one of the messages with the help of  and press  **SELECT**.
2. By scrolling with , you are able to read the whole message.
3. Press  **SELECT** to enter the own message processing list.
 - Select the desired function with  and press .
4. If you do not want to process the message, press  **QUIT** to return to the outbox.

Edit

Use this option if you wish to edit the message. After that, you can send the edited message to someone or just save it for further use.

- To remove letter(s), press  **CLEAR** shortly. To clear all characters at once, press  **CLEAR** for a few seconds. When the display is empty, the left

function key shows QUIT.

- To add letters into the text, press ABC ... WXYZ.
- To add special characters into text, press for a few seconds. Use to select a line and then press the numeric key, which corresponds to the desired character.
- To make space, use .
- With you can move inside the text.
- You may also modify the text with the T9 text input tools (for further information about using the T9 text input, please see the chapter *Main menu, Accessories, Notepad, Writing a new note in T9 mode*).

When the message is written, press SELECT to send, save or postpone it.

If you do not want to go further, press QUIT to cancel the operation and return to the message processing list.

Sending and saving the message

You have four options to choose from: send and save, send only, send with position, and postpone. Select an option with and press OK.

- By selecting **Send**, you can send the edited mes-

sage without saving a copy of it for yourself. Please note that by using this option the edited message will be lost.

- By selecting **Send and save**, you can send the edited message and also save it to your SIM card.
- By selecting **Send with position**, you can send a message to the operator with a request for position information.

Key in a number and press SEND, or press SEARCH to look for one in the phone book.

If there is SMS transmission failure, the text **Error in sending** will be displayed. In this case, make sure the receiver's phone number (including prefix) and message box number are correct and there is enough network coverage for radio communication.

Postponing the message

By selecting **Postpone**, you can save the message (as a draft) without immediately sending it to anyone. If you wish to finish or send the message later, you can recall a postponed message through **Write message** menu.

Forward

Use this option if you wish to send a selected message to a new receiver. Forwarded messages are not stored as extra copies in SIM card.

In order to send the message to another receiver, the number need to be changed:

1. Key in the desired number or recall the desired number from the phone book (assuming you have stored it in there). To recall the number from the phone book, press **SEARCH**.
2. If desired, key in the initials of the name.
3. Scroll through the phone book with until the correct number is selected.
4. Press **SEND**.

If you do not want to forward the message, press **CLEAR** for a few seconds to empty the display and right after that **QUIT** to return to the outbox.

Pick number

With this option you can pick a phone number from the message and save it in your phone book or make a call to the number in question.

If a picked number is stored in the phone book, the associated name is shown instead of the number.

1. To call a number, select it with and press .
2. To save the number into the phone book, select it with and press **SAVE**.

Saving a picked number into the phone book

1. First, key in the desired name and press **OK**.
2. You can then edit the phone number, memory slot number, or the name. Select an option to edit with and press **CHANGE**.

Editing phone number

Add numbers by pressing the numeric keys and remove them by pressing **CLEAR**. A long **CLEAR** empties the whole line. Press **OK** when done.

Changing memory slot

The free memory slots are listed. Select a slot with and press OK.

3. When you are finished, press **DONE**. Save the entry by pressing OK, or discard the entry by pressing **NO**.

Pick coordinates

With this option you can pick any coordinates the message may contain, and save them as a waypoint.

To save the coordinates a waypoint, select them with and press **SAVE**.

Saving coordinates as a waypoint

1. First, key in the desired title and press OK.
2. You can then change the symbol, the coordinates, or the name. Select an option to edit with and press **CHANGE**.

Changing waypoint symbol

- Use to select a line and press the numeric key, which corresponds to the desired symbol.

Changing coordinates

- Edit the digits by pressing the numeric keys and to select the digit to edit.
 - Press OK to accept the new coordinates.
3. When you are finished, press **DONE**. Save the waypoint by pressing OK, or discard it by pressing **NO**.

Delete

With this option you can delete the selected message from your SIM card. Confirm the deletion by pressing OK, or cancel the operation by pressing **NO**.

Broadcasts

Cell broadcasts are general messages, which are broadcast to all receivers within a particular region. They may contain advertisements, local weather reports and information about road traffic, stock exchange and sport results, etc.

Cell Broadcast Service categorizes the type of information that these messages contain and the language in which the message has been compiled. According to your choice, you are then able to ignore certain message types, e.g. advertising information or messages in an unfamiliar language.

Cell Broadcast Service is a network feature. For further information, please contact your network operator.

The **Broadcasts** menu item in GSM menu has some additional information after it: [MM] is the number of all broadcast messages, and the presence of the symbol shows that there are one or more unread messages.

The settings for broadcast messages are found in the **Broadcast setup** menu, found under *Main menu, Settings, GSM*.

In this menu you can view, save or delete the general messages broadcast to you, assuming you have

set on the option **Accept broadcast messages** in the **Broadcast setup** menu.

Press  **SELECT** to open the **Broadcasts** menu.

If there are neither new nor read broadcast messages, **No broadcast messages** is displayed and the menu cannot be entered.

RECEIVING A NEW BROADCAST

When receiving a new message, an alert sound is heard, and the text **New message** is shown.

New messages are accessible in stand-by mode immediately after they are received. For further information, please see *Brief overview of phone use, Incoming traffic*.

All new broadcast messages will also be stored into the **Broadcasts** where they can accessed at a later time.

RECALLING BROADCASTS

The **Broadcasts** menu contains all the broadcast messages. The type numbers of the messages are displayed from the newest to the oldest.

If you wish to delete all the messages displayed in this list, select the option **Delete all** with and press **OK**. Confirm the deletion by pressing **OK** again, or cancel the operation by pressing **NO**.

You can read single messages as follows:

1. Select a message with , and press **READ**.
2. By scrolling with , you are able to read the whole message.
3. To read the next message, press **NEXT**. When all the messages are read, the right function key shows **OK**.

Call voice mail

With this option you can listen to the messages left on your voice mail service. Press **SELECT** or and the phone will call the number of your voice mailbox service. To disconnect the call press .

Make sure you have stored your voice mail number correctly. The setting can be adjusted in the **Message setup** menu, found under *Main menu, Settings, GSM*.

Voice mail service is a network feature.

Write message

In this menu you can:

- write new messages
- edit postponed messages.

NEW MESSAGE

Press **SELECT** to enter the **Write message** menu. Alternatively, you can press in the stand-by mode and hold it for a few seconds.

If there are no postponed messages, the display is empty and you can start writing new message immediately.

If there are postponed messages, the selection list with the messages will be displayed. Select **New** by pressing **SELECT**.

POSTPONED MESSAGES

The maximum number of postponed messages is limited. If the limit is reached, the oldest postponed message is overwritten by the newest one. Turning the phone off does not clear the postponed messages, however.

1. Press **SELECT** to enter the **Write message** menu.
2. Select one of the postponed messages with and press **SELECT**.

Deleting a postponed message

If you want to remove a postponed message without sending it to anyone, open the message and press **SELECT**.

Scroll the function list with and highlight the option **Delete**. Press **OK**.

WRITING A MESSAGE

The maximum amount of characters in one message is 160. The number in the upper right corner of the display indicates how many characters can still be used for the message. For example, when you start writing the message, you have space for 160 characters. The more you write, the smaller the number the indicator shows. When there is no space left, it shows 0.

- To remove letter(s), press **CLEAR** shortly.
- To add letters into the text, press **2 ABC ... 9 WXYZ**.
- To add special characters into the text, press

for a few seconds. Select a line with . Press the numeric key, which corresponds to the desired character.

- To make space, use .
- With you can move inside the text.
- You may also modify the text with the T9 text input tools (for further information about using the T9 text input, please see the chapter *Main menu, Accessories, Notepad, Writing a note in T9 mode*).
- If you wish to start writing a totally empty message, press **CLEAR** for a few seconds. When the display is empty, the left function key shows **QUIT** and pressing it allows you to cancel writing if desired.

When the message is written, press **SELECT** to send, save or postpone it.

SENDING AND SAVING THE MESSAGE

You have four options to choose from: send and save, send only, send with position, and postpone.

- By selecting **Send**, you can send the message without saving a copy of it for yourself.
- By selecting **Send and save**, you can send the message and also save it to your SIM card. The message is stored into the outbox.

However, if there is not enough free memory space to save the message, **No free memory** will be displayed and you will return to previous menu level. The message will not be sent either. In this case you may delete some old messages to make some free memory space or select the **Send** option.

- By selecting **Send with position**, you can send a message to the operator with a request for position information.
- By selecting **Postpone**, you can save the message (as a draft) without immediately sending it to anyone. If you wish to finish or send the message later, you can recall a postponed message through **Write message** menu.

Select an option with and press OK.

Key in a number and press **SEND**, or press **SEARCH** to look for one in the phone book.

Recall a phone number from the phone book as follows:

If desired, key in the initials of the name.

Scroll through the phone book with until the correct number is highlighted.

Press **SEND**.

If there is SMS transmission failure, the text **Error in sending** will be displayed. In this case, make sure the receiver's phone number (including prefix) and message box number are correct and there is enough network coverage for radio communication.

RECENT CALLS

This menu and its sub-menus allow you to keep track of unanswered and received calls.

- Press  **SELECT** to enter the **Recent calls** menu.
- Press  **QUIT** to cancel the operation and return to previous menu level.

Unanswered calls

In this menu you can manage any calls you may have recently missed.

The **Unanswered calls** menu item in GSM menu has some additional information after it: **[MM]** is the number of all unanswered calls listed, and the presence of the  symbol shows that there are one or more unanswered calls you have not called, saved or deleted yet.

Press  **SELECT** to open the **Unanswered calls** menu.

Unanswered calls are only detected when the phone is turned on and in the network coverage area.

PROCESSING UNANSWERED CALLS

The unanswered call list contains all the unanswered calls. The calls are sorted in order from the newest to the oldest.

You can scroll through the numbers with .

Displayed are the number or the name of the caller (depending on whether you have stored the caller's name and number in your phone book) and also the delivery time of the call.

If a call attempt is older than 24 hours, the delivery time is replaced by the delivery date.

In two cases neither the number nor the name of the caller will be displayed: if the caller has the CLIR (Call Line Identification Restriction) feature in use, or if your network operator does not supply the CLIP (Call Line Identification) option. In these cases your phone counts and displays only one call, which is the last one you have received.

If you wish to delete all the calls displayed in this list, select the option **Delete all** with  and press  **OK**. Confirm the deletion by pressing  **OK** again, or cancel the operation by pressing  **NO**.

You can also process single calls as follows:

- To call a number in the list, press .
- To save a phone number from the list, select a call and press **SELECT**. Then select **Save** and press **SELECT**.
- To delete a call, select it with **SELECT**. Then select **Delete** and press **OK**. Confirm the deletion by pressing **OK**, or cancel the operation by pressing **NO**.

Received calls

In this menu you can manage any calls you may have recently received.

The **Received calls** menu item in GSM menu has some additional information after it: **[MM]** is the number of all received calls listed.

Press **SELECT** to open the **Received Calls** menu.

PROCESSING RECEIVED CALLS

This received call list contains all the received calls.

You can process received calls in the same way as unanswered calls.

Call counters

Information about call durations is shown at the bottom of the **Recent calls** menu.

The **Last call** item shows you the duration of the last call in hours and minutes. The call can be either outgoing or incoming call.

The **Total calls** item shows the total duration of all calls in hours and minutes.

You can reset the total calls counter in the **Network services** menu, under the **Call cost** sub-menu. Please note that you need the PIN2 code to reset the counter.

NETWORK SERVICES

This menu and its sub-menus allow you to access various network services such as call diversions, call barrings, call waiting and call costs.

- Press  **SELECT** to enter the **Network services** menu.
- Press  **QUIT** to cancel the operation and return to previous menu level.

Network selection

You can change the network you are using with this item. By pressing  **CHANGE** the phone starts scanning available networks. After that, a list of available networks will be displayed.

If you select **Automatic**, the phone selects the most suitable allowed network for you.

When travelling abroad use of the **Automatic** is recommended.

If you select any of the named networks, the network selection mode is changed to manual and the phone always tries at first to connect with the chosen network and if it is not available, the list of available networks will be displayed.

Select the desired option with  and press  **OK**. The phone will register with the chosen network.

The * symbol indicates that use of the operator is not allowed. If you choose this operator, you can only make emergency calls.

Call diverts

Press  **SELECT** to open the **Call diverts** menu.

(DIVERT) ALL

By selecting **All** and pressing  **SELECT** you can view and set up the phone number that is used as a target for call diverts.

To clear the diversion, select **Clear** and press  **OK**. The text **Divert "All" cleared** will be shown.

To set up a diversion, select **Divert calls to** and press  **CHANGE**. Key in a phone number and press  **OK**. You can also select a number from the phone book by pressing  **SEARCH**.

Recalling a phone number from the phone book is done as follows:

1. If desired, key in the initials of the name. If you do not provide any initials, you will start searching at the top of the phone book list.
2. Scroll through the phone book with until the correct number is selected. The first item in the list is **Voice mailbox**.
3. Press OK.

When the divert is successfully set up, a text such as **Divert "All" active to +358277400** will be shown. If the number which the calls are diverted to is stored in the phone book, the name is displayed instead of the number (e.g. **Divert "All" active to Benefon**).

As a sign of diverting **all** calls, an arrow () will be displayed when the phone is returned to standby mode.

(DIVERT) NOT ANSWERED

The call will be diverted when you do not answer it after certain number of rings. This sub-menu functions as the **All** sub-menu.

(DIVERT) NOT REACHABLE

The call will be diverted when the phone is outside the network coverage area or is turned off. This sub-menu functions as the **All** sub-menu.

CLEAR ALL DIVERTS

Use this option if you wish to clear all diverts at once. Press OK, and confirm your choice by pressing OK again.

(DIVERT) BUSY

The call will be diverted when the phone is busy. This sub-menu functions as the **All** sub-menu.

Call barrings

In this menu you can bar both outgoing and incoming calls. Please note that call barring also affects call diverts.

The call barring option is usually a network feature and you need the network code for activating the call barring option. The network code is given you by the operator when the barring service is subscribed.

Press  **SELECT** to open the **Call counters** menu.

OUTGOING CALLS

The first section of the menu allows you to set barrings that concern outgoing calls only.

Bar all outgoing calls

With this option you can bar all outgoing calls, so you can only receive incoming calls.

1. Press  **SELECT** to select **All**.
2. You will see a checkbox that indicates whether the barring is on or off.
3. Press  **CHANGE** to turn the option on or off.

4. Key in the network code and press  **OK**.
5. When finished, press  **QUIT** to return to the **Call barrings** menu.

Bar outgoing international calls

With the **International** option you can bar all outgoing international calls. You can still make domestic calls and receive both domestic and international calls.

This sub-menu functions as the *Bar all outgoing calls* feature described above.

Bar all outgoing international calls except to home country

With the **Int'l except home** option you can bar all outgoing international calls, except calls to your home country. You can also make domestic calls and receive both domestic and international calls.

This sub-menu functions as the *Bar all outgoing calls* feature described above.

INCOMING CALLS

The second section of the menu allows you to set barrings that concern incoming calls only.

Bar all incoming calls

With the **All** option you can only make calls, not receive them. This sub-menu functions as the *Bar all outgoing calls* feature described above.

Bar incoming calls when roaming

With the **When roaming** option you can receive calls only when you are within the area of your own network operator.

You may need this option when you are roaming because many network operators and service providers charge for receiving calls when you are roaming.

This sub-menu functions as the *Bar all outgoing calls* feature described above.

CLEAR BARRINGS

Use this option if you wish to clear all call barrings at once. Press  **OK**, enter the network code and press  **OK** again.

Call waiting

If a call is in progress and you have an incoming call, the network will notify you if you have the call waiting option turned on. Call waiting is a network feature.

1. Press  **SELECT** to select **Call waiting**.
2. You will see a checkbox that indicates whether call waiting is on or off.
3. Press  **CHANGE** to turn the option on or off.

Call cost

This menu contains information on the call charges. It also provides options for resetting the charge counter and setting a charge limit for calls. These options are useful especially when the user is not the subscriber.

Call cost is a network feature. In order to use some of these options, you need to have a specific SIM card as well as a PIN2 code. For further information on these charging services, please contact your network operator.

If the call cost feature is not enabled on your SIM card, you cannot enter the **Call cost** menu at all.

1. Press  **SELECT** to enter the **Call cost** menu.
2. You will see a menu with the items **Last call**, **Total calls**, **Money left**, **Maximum units**, and **Price/unit**.
3. Select one of the four options with . Press .

LAST CALL COST

Use this option to check the cost of the last call.

Last call counter value is displayed in currency if you have determined price for unit in **Price/unit** (and set value for currency in **Main menu**, under **Settings, Units, Currency**).

The counter value of the last call will be reset automatically when the SIM is removed, or a new call attempt is made or call is received.

TOTAL CALLS COST

This menu item shows the cost of all preceding calls including the last call.

Counter value for total calls is displayed in currency if you have determined currency and set value for unit price in **Price/unit** (and set value for curren-

cy in the **Main menu**, under **Settings, Units, Currency**).

Resetting the cost of total calls

1. Press  **RESET** to reset the counter.
2. You are asked the PIN2 code. Key it in and press  **OK**.
3. The text **Counter reset** will be displayed.

MONEY LEFT

Use this option to check the amount of money you have left.

The amount of money left is displayed if you have determined price for unit in **Price/unit** (and set value for currency in the **Main menu**, under **Settings, Units, Currency**).

MAXIMUM UNITS

Use this option if you wish to view, set or change the credit limit for total calls.

If the counter reaches the limit during a chargeable call, the call will be terminated. As soon as the limit has been exceeded, only local emergency calls and

other non-chargeable calls can be made. If you try to make or receive a chargeable call under these conditions, the text **No money** will be displayed.

You can check the maximum call cost in your selected currency by using to select **Maximum units** and waiting for a few seconds. If you wish to find out when the cost of your calls is about to reach the limit, you may subtract the total calls cost from the maximum cost. E.g. if the maximum cost is 500.00 FIM and the total calls counter shows that you have already spent 300.00 FIM, it means you still have 200.00 FIM to spend for calls.

1. The maximum credit that can be used for non-free calls is shown. The credit limit for total calls is displayed in currency if you have set value for unit price in **Price/Unit**. Otherwise, the credit for total calls will be displayed in units.
2. If you wish to set or change the limit, press **CHANGE**.
3. Key in the PIN2 code and press **OK**.
4. If the limit has been set previously, the current setting is shown here. If you wish to change the limit, key in the new limit value and press **OK**. In case the limit is set to zero (0), it is assumed that there is no limit in use.

PRICE/UNIT

Charging information is calculated and stored as charging units. Units are independent of any currency.

Use this option if you wish to read and set price for unit. After completing the setting, the call cost information will be displayed in currency instead of units.

1. If you wish to set or change the price per unit, press **CHANGE**.
2. Key in the PIN2 code and press **OK**.
3. Key in the desired price per unit and press **OK**. To add a decimal point, press .
4. The price per unit depends on your operator. The price per unit can be set higher than the actual charge, so that all the extra costs will also be covered. In case the price per unit is set to zero (0), this feature is not in use.

Changing the price of an unit may cause minor inaccuracies in the result displayed. However, rounding the number does not affect counter values, which are stored in units.

HELP DESK

If you need assistance in using your Benefon Esc! phone or maps, you can send a help request, containing your current position and preferred language, to Benefon Esc! Help desk service. After a while, a technical support person will give you a call. There are usage restrictions to this service.

You will have to be a registered user to use this service. Please check the Internet site
www.genimap.com for more information.

Please see the chapter *Main menu, Settings, Help Desk* for further information on setting up the preferred language and the Help desk number.

To send a help request, do as follows:

1. Use to select **Help desk**.
2. Confirm sending the request by pressing **OK**
or cancel the operation by pressing **NO**.

GPS MENU



The GPS menu tree allows you to access and manage the waypoints and routes, use the various Friend Find features; and send or update your position. You can also request a route or waypoints from a service provider, clear your destination or reset all navigator counters.

- Press **GPS** to enter the GPS menu from any of the navigator pages.
- Use to scroll through the menu items and sub-menus.

- To select one of the items, press . This way, you can enter sub-menus, activate commands and turn options on and off.
- Press **QUIT** to return to the previous menu level from a sub-menu.

WAYPOINTS

A **waypoint** is a location or spot that consists of a **label**, a **symbol** for showing it on the map, **and a pair of coordinates** (e.g. latitude and longitude). Waypoints are used for navigation purposes, i.e. to mark spots and use them as destinations, or to combine several waypoints to a route.

The **Waypoints** menu item in GPS menu has some additional information after it: **[WW]** is the number of all waypoints stored in the memory.

- Press **SELECT** to open the **Waypoints** menu.
- Press **QUIT** to cancel the operation and return to previous menu level.

The waypoints menu shows you all the waypoints that are currently stored in your phone's memory.

- To delete all waypoints at once, select **Delete all** and press **OK**. Confirm the deletion by press-

ing OK again, or cancel the operation by pressing NO.

- To change the order in which waypoints are listed, select **Order** and press CHANGE. Waypoints can be ordered by title, proximity, or symbol.

Please note that most of the waypoint functions can also be used by pointing at a waypoint on the **Map** navigator page. For further information, please see *Brief overview of navigator use, Map, Pointing mode*.

CREATING A NEW WAYPOINT

- Choose **New** by pressing SELECT.
- If there is no free memory for waypoints left, the text **No free memory** will be shown. In this case, you cannot store any new waypoints unless you first delete some old ones.
- Otherwise, you will enter a menu where waypoint title, symbol, and coordinates are displayed and can be edited.
- Select an option to edit with and press CHANGE.

Editing waypoint title

Key in a new title and press OK.

Changing waypoint symbol

Select a line with and press the numeric key which corresponds the desired symbol.

Editing coordinates

The coordinates are those of your present position. You can key in new coordinates by pressing the numeric keys. Press OK when ready.

- When you are finished with editing the new waypoint, press DONE.
- You are asked if you want to save the new waypoint. Make a selection by pressing NO or OK.

SETTING DESTINATION

You can set any waypoint to be used as destination. The phone will then give you directions to navigate to that point.

1. Select a waypoint from the list and press SELECT.
2. Select Set as destination and press OK..

SETTING POSITION

You can trick the phone into believing that the selected waypoint is your current position. This is useful e.g. when you want to use the map while conserving the battery by not having the GPS on, or when you want to speed up the initial position calculations of the GPS.

1. Select a waypoint from the list and press SELECT.
2. Select Set as position and press OK.

This option is only available when the GPS module is not active or has no valid position.

SENDING SMS WITH COORDINATES

You can send the coordinates of a waypoint as a part of a short message.

1. Select a waypoint from the list and press SELECT.
2. Select SMS with coords and press SELECT.

3. You can now enter a short message to accompany the coordinates. This can be done the same way as writing any short message. For further information, please see the chapter *GSM menu, Messages, Write message*.

SENDING A WAYPOINT

You can send a waypoint to another Benefon ESC! phone.

1. Select a waypoint from the list and press SELECT.
2. Use to select Send waypoint and press SELECT.
3. Key in the receiver's phone number, using numeric keys and CLEAR, or select a number from the phone book.

To recall a phone number from the phone book, please do as follows:

- Clear any numbers by pressing and holding CLEAR for a few seconds.
- Press SEARCH. If desired, key in the initials of the name.
- Press READ.

- Scroll through the phone book with until the correct number is selected.
- Press .

4. Press SEND.

Please note that waypoint is sent as a short message, so the price of a regular short message will be charged from you for each waypoint you send.

REQUESTING A ROUTE

You can request a service provider to send you a route to the selected point.

1. Select a waypoint from the list and press SELECT.
2. Use to select **Request route** and press SELECT.
3. Key in receiver's phone number, using numeric keys and , or select the number from the phone book.
4. Press SEND.

Please note that request is sent as a short message, so the price of a regular short message will be charged from you for each request you send. More-

over, the service provider may charge you for sending the route.

This service is only available from certain service providers.

VIEWING THE MAP

1. Select a waypoint from the list and press SELECT.
2. Select **Show on map** and press SELECT.
3. You will see a map, with the selected waypoint shown in the middle.
 - Use and to zoom in and out.
 - Use , , , , , , , and to scroll the map.

MOVING A WAYPOINT

1. Select a waypoint from the list and press SELECT..
2. Select **Move** and press SELECT. Selected waypoint starts to blink.

3. The selected waypoint, its label and symbol will move along with the pointer on the map. Coordinates are displayed on the top of the display.

EDITING

1. Select a waypoint from the list and press **SELECT**.
2. Select **Edit** and press **SELECT**.
3. You can now choose whether you want to change the title, symbol, or coordinates of the waypoint. Choose the item you want to edit by selecting it with . Press **CHANGE**.

Editing waypoint title

Remove characters by pressing **CLEAR**. Key in a new title and press **OK**.

Changing waypoint symbol

Select a line with and press the numeric key which corresponds the desired symbol.

Editing coordinates

As a default setting, the coordinates are those of your present position. You can key

in new coordinates by pressing the numeric keys. Press **OK** when ready.

4. When you are finished with editing the waypoint, press **DONE**.
5. Save the changes by pressing **OK** or cancel the operation by pressing **NO**.

DELETING

1. Select a waypoint from the list, and press **SELECT**.
2. Select **Delete** and press **OK**.
3. Confirm the deletion by pressing **OK** again, or cancel the operation by pressing **NO**.

ROUTES

A route is a combination of two or more waypoints, combined to define a course of travel. Routes are used for navigation purposes as destinations.

The **Routes** menu item in GPS menu has some additional information after it: [RR] is the number of all routes stored in the memory.

- Press  **SELECT** to open the **Routes** menu.
- Press  **QUIT** to cancel the operation and return to previous menu level.

The routes menu shows you all the routes that are currently stored in your phone's memory.

To delete all routes at once, select **Delete all** and press  **OK**. Confirm the deletion by pressing  **OK** again, or cancel the operation by pressing  **NO**.

CREATING A NEW ROUTE

Choose **New** by pressing  **SELECT**. If there is no free memory for routes left, the text **No free memory** will be shown. In this case, you cannot store any new routes unless you first delete some old ones.

Initially, there are no waypoints on a new route, but you can add and remove them as you like.

Adding a waypoint

1. To add the first waypoint to the route, press  **INSERT**.
2. To add more waypoints to the route, select a row and press  **SELECT**. Select whether you want to add a waypoint before or after the selected waypoint on the route, and press  **SELECT**. You will enter a menu in which you can select a waypoint. Make a choice and press  **OK**.

Deleting a waypoint

Select a waypoint from the route. Press  **SELECT**. Select **Delete** and press  **OK**.

Finishing route creation

1. When you are finished with creating the new route, press  **DONE**.
2. If there are several waypoints on the route, you will enter a menu in which you can name the

route, and choose whether you want to save or discard it.

3. As a default setting, the route name will consist of the first and last waypoint on the route.

- Select **Name** and press **CHANGE** if you wish to edit the name.

- Use **CLEAR** to delete characters, and alpha-numeric keys to enter new ones.

4. You are asked if you want to save the route. Make a selection by pressing **NO** or **OK**.

SETTING DESTINATION

You can set a route to be used as destination. Benefon ESC! will then give you directions to navigate the route, from point to point.

1. Select a route from the list. Press **SELECT**.

2. Select **Set as destination** and press **OK**.

3. You will enter a menu where you can choose the starting point and travelling direction you wish to use when navigating.

Changing starting point

- Select **Starting point** and press **CHANGE**.

- Select a waypoint and press **OK**.

Changing travelling direction

- Select **Travelling direction** and press **CHANGE**.

- Travelling direction can be chosen from two options, where the direction is implied by the first and last point on a route. Make a choice and press **OK**.

4. When you are finished, press **DONE**.

VIEWING THE MAP

1. Select a route from the list. Press **SELECT**.

2. Select **Show on map** and press **SELECT**.

3. You will see a map, with the first waypoint of the selected route shown in the middle.

- Use to move between the waypoints.

- Use and to zoom in and out.

- Use **1**, **ABC**, **DEF**, **GHI**, **MNO**, **PQRS**, **TUV**, and **WXYZ** to scroll the map.

WAYPOINT LIST: VIEWING AND EDITING

1. Select a route from the list. Press  **SELECT**.
2. Select **List waypoints** and press  **SELECT**.
3. You can now view a list of route waypoints, and add and remove waypoints from it. This submenu functions as the *Creating a new route* feature described above.

SENDING A ROUTE

You can send a route with all its waypoints to another Benefon ESC! phone.

1. Select a route from the list and press  **SELECT**.
2. Use  to select **Send route** and press  **SELECT**.
3. Key in receiver's phone number, using numeric keys and  **CLEAR**, or select a number from the phone book.

Recall a phone number from the phone book as follows:

Clear any numbers by pressing  **CLEAR** for a few seconds. Then press  **SEARCH**.

If desired, key in the initials of the name. Press  **READ**.

Scroll through the phone book with  until the correct number is selected. Press  **OK**.

4. Press  **SEND**.

Please note that route is sent in one or more short messages, so the price of a regular short message will be charged from you for each message you send. You can cancel the sending whenever you want by pressing  **CANCEL**.

MEASURING LENGTH

1. Select a route from the list. Press  **SELECT**.
2. Select **Measure length** and press  **SELECT**. You will see the route length.
3. Press  **QUIT** when done.

RENAMING

1. Select a route from the list. Press  **SELECT**.
2. Select **Rename** and press  **SELECT**. You will enter a menu in which you can rename the route.
3. Use  **CLEAR** to delete characters, and alphanumeric keys to key in new ones. Press  **OK** when done.

DUPLICATING

1. Select a route from the list. Press  **SELECT**.
2. Select **Duplicate** and press  **OK**.
3. The selected route is duplicated, and will be named after the original route, with a running number included.

DELETING

1. Select a route from the list. Press  **SELECT**.
2. Select **Delete** and press  **OK**.
3. Confirm the deletion by pressing  **OK** again, or cancel the operation by pressing  **NO**.

FRIEND FIND

The Friend Find features are designed to take advantage of the unique combination of GPS and GSM equipment of Benefon Esc!. Based on position information and the short message service (SMS), they make functions such as accurate locating or tracking a friend possible.

The basic principle of the Friend Find functions is storing the positions of other Benefon ESC! phones in a Benefon Esc!, along with other information such as their speed and direction of movement. This information can later be updated by position updates.

Position updates

A phone can update its position information in another phone by sending a position update. Such updates can be sent whenever desired, but a phone can also ask for an update by sending a request.

Tracking

Sending repeated position updates is called tracking, in which case the updates are known as tracking updates. A phone can start sending tracking

updates whenever desired, but tracking can also be requested by another phone.

The following restrictions apply to sending and receiving tracking updates:

- You can send tracking updates to one phone number at a time. To start sending tracking to another phone, you need to cancel the original tracking.
- You can receive tracking from any number of phones.

The position information from position and tracking updates is stored as a friend point, which can be viewed on a map, used as a destination, or saved as a regular waypoint.

None of the Friend Find features allow your position to be revealed to anyone else without your specific consent.

As the Friend Find features are based on short messages, the price of a regular short message will be charged from you for each Friend Find message you send, whether it be an update or a request.

Friend list

The **Friend Find** menu item in GPS menu has some additional information after it: **[FF]** is the number of all friend points stored in the memory.

- Press  **SELECT** to open the **Friend Find** menu.
- Press  **QUIT** to cancel the operation and return to previous menu level.

The Friend Find menu shows you all the friend points.

To delete all friend points at once, select **Delete all** and press  **OK**. Confirm the deletion by pressing  **OK** again, or cancel the operation by pressing  **NO**.

Please note that many Friend Find functions can also be used by pointing at a friend point on the **Map** navigator page.

For further information, please see *Brief overview of navigator use, Map, Pointing mode*.

TRACKING INFO

If you are being tracked by another phone, you can find out information about this as follows:

1. Select **Tracking info** by pressing **SELECT**.
2. You will see the phone number you are sending tracking updates to, or the name if it is available in the **Phone book**. You will also see the number of tracking updates you have sent. If you are not constantly sending tracking updates, you will just see the text **No active tracking**.
3. To stop sending updates, press **CANCEL**.

CREATING A NEW FRIEND POINT

Each phone to which you want to send updates or requests is assumed to be specified as a friend point.

1. To create a new friend point, choose **New** by pressing **SELECT**.
2. If there is no free memory for friend points left, the text **No free memory** will be shown. In this case, you cannot store any new friend points unless you first delete some old ones.

3. If there is enough memory, you will be asked for the phone number of the friend. Key it in and press **OK**. You can also recall a number from the **Phone book** by pressing **SEARCH**.

Recalling a phone number from the phone book is done as follows:

- If desired, key in the initials of the name. Press **READ**. If you do not provide any initials, you will start searching at the top of the phone book list.
 - Scroll through the phone book with until the correct number is selected.
 - Press **OK**.
4. Having pressed **OK**, you will be returned to the **Friend Find** menu, where you will see the new friend point.
- The position of a new friend point will initially be unknown, so you may want to send a position request to it.
- A new friend point is also always "unauthorized", which means that you will under no circumstances respond to any requests sent by it automatically. For further information, please see *Authorizing* below.

Please note that a new, unauthorized friend point is also automatically created whenever you receive a request or an update from a phone number that has not previously been specified as a friend point.

SETTING DESTINATION

You can set any friend point to be used as destination. Benefon ESC! will then give you directions to navigate to that point.

1. Select a friend point from the list and press  **SELECT**.
2. Select **Set as destination** and press  **OK**.
3. If the position of the friend point is unknown (i.e. no updates have been received from it yet), the text **Position unknown** will be shown and destination will not be changed.

Please note that a friend point's position may change while you are using it as destination. In this case, navigating will be automatically continued towards the new, updated position.

SETTING POSITION

You can trick the phone into believing that the selected friend point is your current position. This is

useful e.g. when you want to use the map while conserving the battery by not having the GPS on, or when you want to speed up the initial position calculations of the GPS.

1. Select a friend point from the list and press  **SELECT**.

2. Select **Set as position** and press  **OK**.

This option is only available when the GPS module is not active or has no valid position.

AUTHORIZING

When you receive a request from another phone, asking that you send a position update or start sending tracking updates, you will usually be asked for a confirmation.

Sometimes, however, you may want to make a friend point **authorized** so that all requests from that friend's phone number will be automatically responded.

To authorize a friend, do as follows:

1. Select a friend point from the list and press  **SELECT**.
2. Select **Authorize** and press  **CHANGE**.

To unauthorized a friend again, select **Unauthorize** and press  **CHANGE**.

Authorized friends are shown in the **Friend Find** menu with the  symbol beside them, while unauthorized ones have the  symbol.

SENDING A POSITION UPDATE

1. Select a friend point from the list and press  **SELECT**.
2. Select **Send update** and press  **OK**.
3. The text **Sending...** will be shown, followed by the text **Position update sent**.
4. Your position will be updated in the receiving Benefon ESC! phone.

REQUESTING A POSITION UPDATE

1. Select a friend point from the list and press  **SELECT**.
2. Select **Request update** and press  **OK**.

SENDING TRACKING

1. Select a friend point from the list and press  **SELECT**.
2. Select **Send tracking** and press  **SELECT**.
3. You can only send tracking to one friend at a time. If you are already sending tracking to some other phone, the text **Tracking is already active** is shown. In this case, you will have to cancel the currently active sending before you can start to send tracking to another phone.
4. You will be asked to specify an interval for sending position updates. Key it in with the numeric keys and press  **NEXT**.
5. You will be asked to specify the number of updates that will be sent. Key it in with the numeric keys and press  **OK**.
6. Tracking will start. Your phone will automatically send tracking updates at the set interval, until you either cancel the sending, or the receiver requests to stop it, or the set number of updates have been sent.
7. Whenever a tracking update is sent, the text **Sending...** will be shown.

CANCELLING SENDING

Once you have started sending tracking updates to a phone, the phone will go on tracking until you stop it manually, or the set number of updates have been sent. You may stop the tracking as follows:

1. Select the friend point to which you are sending tracking from the list and press **SELECT**.
2. Select **Cancel sending** and press **OK**.

Moreover, the receiving party can send a request that you stop sending updates, which will also end tracking at once.

REQUESTING TRACKING

1. Select a friend point from the list and press **SELECT**.
2. Select **Request tracking** and press **SELECT**.
3. Key in the desired interval for receiving tracking updates. Press **NEXT** when you are done.
4. Specify the number of updates that will be sent. Key it in with the numeric keys and press **OK**.

CANCELLING A TRACKING REQUEST

You may request a phone to stop sending you tracking updates at any time.

1. Select friend point from which you are receiving tracking. Press **SELECT**.
2. Select **Cancel request** and press **OK**.

Moreover, the receiving party can send you a request to stop sending updates. In this case, tracking will end at once.

SENDING SMS WITH COORDINATES

You can send the coordinates of a friend point as a part of a short message.

1. Select a friend point from the list and press **SELECT**.
2. Select **SMS with coords** and press **SELECT**.
3. You can now enter a short message to accompany the coordinates. This can be done the same way as writing any short message. For further information, please see the chapter *GSM menu, Messages, Write message*.

REQUESTING A ROUTE

You can request a service provider to send you a route to the selected point. This is done as follows:

1. Select a friend point from the list and press **SELECT**.
2. Use to select **Request route** and press **SELECT**.
3. You will be requested to select a receiver for the request. Either key in a phone number, using numeric keys and **CLEAR**, or select a number from the phone book.
4. Press **OK**.

Please note that request is sent as a short message, so the price of a regular short message will be charged from you for each request you send. Moreover, the service provider may charge you for sending the route.

This service is only available from certain service providers.

SHOWING ON MAP

1. Select a friend point from the list and press **SELECT**.

2. Select **Show on map** and press **SELECT**.
3. You will see a map, with the selected friend point shown in the middle.
 - Use and to zoom in and out.
 - Use 1, ABC, 3 DEF, 4 GHI, 6 MNO, 7 PQRS, 8 TUV, and 9 WXYZ, and to scroll the map.

SAVING AS A WAYPOINT

1. Select a friend point from the list and press **SELECT**.
2. Select **Save as waypoint** and press **SELECT**.
3. If there is no free memory for waypoints left, the text **No free memory** will be shown. In this case, you cannot store any new waypoints unless you first delete some old ones.
4. You can now choose whether you want to change the title or symbol of the waypoint. Choose the item you want to edit by selecting it with . Press **CHANGE**.

Editing waypoint title

Remove characters by pressing **CLEAR**. Key in a new title and press **OK**.

Changing waypoint symbol

A total of five rows of waypoint symbols with nine icons on each are available to you. Select a row with . Press the numeric key which corresponds the desired symbol.

5. When you are finished with editing the new waypoint, press **DONE**.
6. You are asked if you want to save the new waypoint or discard it. Use to make the selection and press **OK**.

DELETING

1. Select a friend point from the list and press **SELECT**.
2. Select **Delete** and press **OK**.
3. Confirm the deletion by pressing **OK** again, or cancel the operation by pressing **NO**.

MAPS

You can view and manipulate the maps in the phone's memory by accessing them via this menu.

The **Maps** menu item in GPS menu has some additional information after it: **[MM]** is the number of all maps stored in the memory.

- Press **SELECT** to open the **Maps** menu.
- Press **QUIT** to cancel the operation and return to previous menu level.

Viewing and processing maps

1. Use to select the world map or one of the additional maps from the list and press **SELECT**.
2. The selected map will be shown in a mode similar to *Pointing mode*. In it you can move a pointer to scroll the map, or use it to manipulate the waypoints and other data. For further information, please see the chapter *Brief overview of GPS use, Map, Pointing mode*.

SENDING SMS WITH COORDINATES

You can send the coordinates of your present position as a part of a short message.

1. Press  GPS to enter the GPS menu.
2. Use  to select **SMS with coords** and press  SELECT.
3. You can now enter a short message to accompany the coordinates. This can be done the same way as writing any short message. For further information, please see *GSM menu, Messages, Write message*.

REQUESTING SERVICE

You can request service provider to send you a waypoint or a route to a point, defined by some text; e.g. a street address.

1. Press  GPS to enter the GPS menu.
2. Use  to select **Request service** and press  SELECT.

3. You will then be able to enter some text. Key it in with the alphanumeric keys and press  SELECT.
 4. You will be requested to choose the type of service:
 - To request one or more waypoints, e.g. positions of local pizzerias, select **Request waypoint** and press  SELECT.
 - To request a route to a specific point, e.g. nearest local pizzeria, select **Request route** and press  SELECT.
 5. You will be requested to select a receiver for the request. Either key in a phone number, using numeric keys and  CLEAR, or select a number from the phone book.
 6. Press  SEND.
- Please note that request is sent as a short message, so the price of a regular short message will be charged from you for each request you send. Moreover, the service provider may charge you for sending a route or waypoints.
- In order for these services to work, your position is sent to the service provider each time you use

the services. The services are only available from certain service providers.

REQUESTING AGPS

You can request the service provider to send you assisted GPS information. Before sending the request, make sure, the AGPS settings are correctly done. For further information, please see the chapter *Main menu, Settings, GPS, AGPS*.

1. Press  GPS to enter the GPS menu.
2. Use  to select **Request AGPS** and press  SELECT.
3. Confirm the request by pressing  OK.

UPDATING POSITION

You can make the GPS receiver to update your position at once.

1. Press  GPS to enter the GPS menu.
2. Use  to select **Update position** and press  OK.

SKIPPING ROUTE POINT

Use this option if your current destination is a route and you want to skip a route point.

1. Press  GPS to enter the GPS menu.
2. Use  to select **Skip route point** and press  SELECT.
3. Select your next route point by scrolling the list and highlighting the point with  . Press  SELECT.

CLEARING DESTINATION

When you no longer want to use a point as destination, do as follows:

1. Press  GPS to enter the **GPS** menu.
2. Use  to select **Clear destination**. Press  OK.

After clearing the destination, the navigator pages will no longer provide any guidance in navigating to a destination.

You do not need to clear the destination to be able to select a new destination.

Destination can only be cleared when a point is being used as destination.

RESETTING METERS

To reset the speed and odometer information in your phone, do as follows:

1. Press  GPS to enter the **GPS** menu.
2. Use  to select **Reset meters**. Press  SELECT.
3. Select which meters you want to reset. Turn the options on and off by selecting them with  and pressing  CHANGE.
4. Press  DONE when you are finished.

BATTERY

FITTING AND REMOVING

Fitting: Place the bottom of the battery into the corners at the bottom of the phone. Push the battery towards the rear of the phone until it locks into place.

Removing: Push the release catch downwards and pull the battery carefully away of the phone.

TYPES AND SIZES

There are two kinds of batteries available for this phone:

- Li-Ion 900 mAh
- Li-Ion 1200 mAh.

TEMPERATURE

Batteries function best at room temperature (+20°C).

At temperatures below 0°C, use a battery which is freshly recharged.

At temperatures below -25°C the battery will not supply power and the phone cannot be used. Upon warming up, the phone will function properly again.

Use of the phone is prevented at temperatures above +60°C to ensure equipment safety. After cooling off, the phone will function properly.

At room temperature (+20°C) the Li-Ion battery loses more than 15% of its capacity in a month. During the first two days the loss of a capacity is usually several percent.

Higher temperatures will accelerate the discharging process.

EMPTY BATTERY

The battery symbol is shown in the display. The "liquid level" in the symbol shows how full the battery is.

When the battery is almost empty a beep is heard and the text **Battery low** will be displayed.

When the battery is totally empty the power will turn off. Charge the battery or replace it with a recharged battery.

MAINS CHARGERS

The mains charger available for this phone is the quick charger CMA-70-230 with its cable FMC-70.

The mains charger should only be used indoors. Make sure that the voltage in the country which you are staying corresponds to the voltage (230 V) of the charger.

When charging, connect the round end of the cable into the charger and lock it by turning it half a turn clockwise. Plug the square end of the cable (with the arrow facing down) into the left side of the bottom connector on the phone.

Plug the charger into a mains outlet. Charging will start automatically.

The mains charger is usually provided with the phone, but is also available from the assortment of Benefon accessories.

Other charger types are introduced in the chapter *Accessories*.

CHARGING

The phone controls the charging status, battery temperature and power supply during the charging operation.

The phone will turn on when the charger is connected.

However, when charging a totally empty battery, the phone might not turn on immediately.

The phone and the battery can be left in the charger even for several days without any fear of damage.

The ideal temperature range for charging is +10°...+30°C. If charging the battery above or below these temperatures the life of battery may be shortened. Also, the battery may not reach full capacity.

When charging, the display will repeatedly show the "liquid level" rising from top to bottom.

When the battery is fully charged, the charging status will remain on the display.

Please note, that in case you change the battery to another battery, we cannot guarantee that the battery indicator will show the right state of charge au-

tomatically. To reset the battery indicator to correspond with the "new" battery, you must charge the "new" battery until it is full.

Charging times

Charging time depends on what kind of charger and battery you have in use. E.g. when charging the Li-Ion batteries with the quick charger, about 70% of the battery capacity will be charged quickly, but charging the remaining 30% takes a relatively longer time.

Also please note, that the following charging times are approximate and measured at room temperature (+20°C) with the GPS turned off.

Quick mains charger CMA-70-230:

- about 2...3 hours with an empty Li-Ion battery, size 900 mAh
- about 2,5...3,5 hours with an empty Li-Ion battery, size 1200 mAh

CARE AND MAINTENANCE

Note, that if you use an old battery, the continuous operating time is less than when using a new battery.

The battery must be cared for and stored properly to ensure that the battery reaches and maintains the fullest possible capacity. Proper care and storage also guarantee maximum battery life.

Sometimes a new or a long-stored battery has a voltage so low that the phone will not turn on immediately after you have fitted the battery. Wait and the phone will turn on after a few moments.

When storing batteries for a long time, it is recommended that the batteries are kept cool and fully charged in a dry place.

Safety regulations (applying to batteries in use as well as batteries taken out of use):

- Protect the battery from heat. High temperatures may damage batteries. Do not warm up the battery or use it near a fire.
- Do not open the battery by yourself or pierce holes in it.

- Do not drop, knock, twist or shake the battery or otherwise handle the battery roughly.
- Do not wet the battery or immerse it in water.
- Charge and recharge the battery only with a charger specified in the manual. Use the battery only for the purpose it is intended for.
- Only allow service personnel authorised by Benefon to service your phone.

DISPOSAL

Li-Ion batteries do not contain heavy metals which can damage the environment. Batteries should be disposed of according to the country-specific regulations.

OPERATING TIME

To conserve battery, you may consider the following:

- Use **Low power** or **Economy** GPS receiver mode when you do not need the best possible accuracy and reliability provided by the **Full power** mode. For further information, please see the chapter *Brief overview of navigator use, First steps, Turn-*

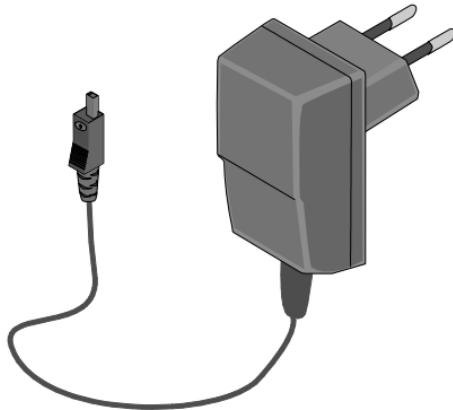
ing the GPS receiver on.

- Keep the GPS receiver **Off** when you are not actively navigating.
- You can view maps even without running the GPS receiver. You may also use the **Set as position** feature to set your position manually if desired (for further information, please see the chapters *GPS menu* and *Brief overview of navigator use, Map, Pointing mode*).
- Use the **Screen saver**. For further information, please see the chapter *Main menu, Settings, User interface, Screen saver*.
- Turn off the lights of the phone. Especially, only use the **Night environment** when you specifically need to have the lights on all the time. For further information, please see the chapter *Main menu, Settings, Environments*.
- Turn off the GSM module when in an area with no GSM network coverage. For further information, please see the chapter *Main menu, Settings, GSM, GSM module*.

ACCESSORIES

This is a short introduction about the accessories available for this phone. You may also check www.benefon.com for a complete list of accessories.

MAINS CHARGER CMA-70-230

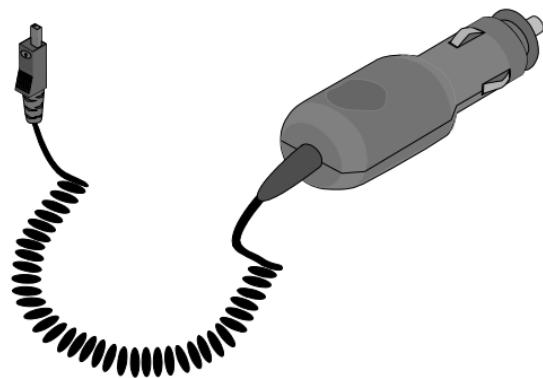


The mains charger available for this phone is quick charger CMA-70-230 with its cable FMC-70.

The mains charger should only be used indoors. Make sure that the voltage in the country which

you are staying corresponds to the voltage (230 V) of the charger.

CIGARETTE LIGHTER CHARGER CCS-71-12



You can charge the phone battery with the cigarette lighter charger using your vehicle's cigarette lighter.

Plug the charger into the cigarette lighter outlet in the vehicle and into the socket at the bottom of the phone. Charging will start automatically. The charger takes its power from the vehicle battery.

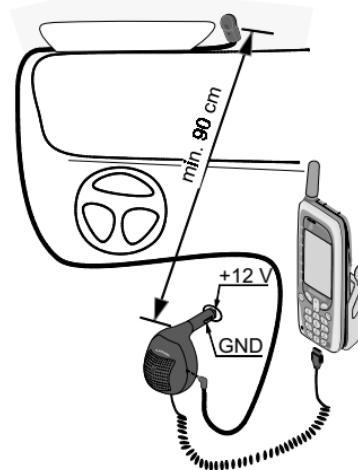
PORTRABLE HANDS FREE EHE70



The portable hands free kit is designed to make the use of the phone easier in various working situations.

When you use the earpiece and microphone, you can make and answer phone calls and work with your hands at the same time. This light weight accessory also comes with an adjustable clothes clip.

PLUG-IN HANDS FREE GMA70

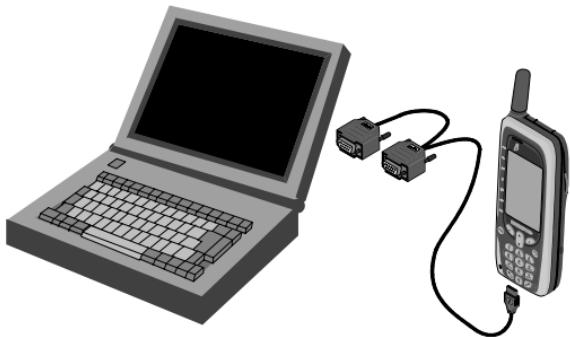


With the plug-in hands free car kit, using the phone is easier and safer while driving.

The portable car kit needs no permanent installation. This makes it easy to install: all you need to do is plug the car kit into the cigarette lighter outlet in the car and into the bottom connector of the phone. Make sure the microphone is placed in an audible position.

With the plug-in hands free car kit you can also charge the battery of your phone by using your vehicle's cigarette lighter.

BENEWIN PRO WITH NMEA 0183 CABLE



This package includes BeneWin Pro software, modem drivers, and NMEA 0183 cable (with data and NMEA adapters).

BeneWin Pro is a PC-based program that allows you to access the memory data of your phone. With the help of BeneWin Pro, you can also compose your own alert tone for your phone. Using the BeneWin Pro and a PC, you can easily edit, read and

save the phone book, phone settings, short messages, environments, and calendar data.

The BeneWin Pro also includes some additional functions, such as settings for maps, routes, and waypoints as well as settings for telematics. It depends on your phone model whether you can use these functions or not.

With **the data adapter** you can connect the phone to a computer and transfer BeneWin-based data between a PC and your phone.

You do not need a separate modem for using this equipment. **The modem drivers** included in the package offer you access to your email, fax and Internet. By using the modem drivers with the data adapter you can, e.g. check your email or surf in the Internet, assuming an Internet browser has been installed in your computer (a browser is not included in the package).

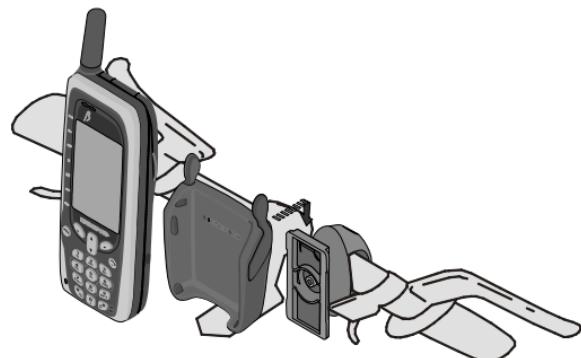
The NMEA 0183 adapter is used for transferring position data between the phone and some navigation systems (e.g. a map software). A map software is sold separately, it is not included in this package.

LIGHT HOLDER KGC70



The light holder holds your phone steadily in place when you are driving. The holder is also very useful when, for example, you are charging the battery with the cigarette lighter charger.

BICYCLE HOLDER



The bicycle holder holds your phone steadily in place on your bike's handlebar so it can be easily viewed while riding.

CARRYING CASE

A carrying case can be used for carrying the phone. It also protects the phone from impacts.

A carrying case can be fastened to e.g. a belt or a backbag for easy carrying.

There are two different carrying case models available: trendline and outdoor.

EXTERNAL GPS ANTENNA



CROSS-COUNTRY ANTENNA

The cross-country (power) antenna can be used to replace the regular GSM antenna. It is useful in areas where the GSM network signal strength is weak.

The external (active) GPS antenna can be used when reliable satellite signals for navigation are needed. In addition for being more powerful than the regular GPS antenna, it can also be placed as far as five meters away from the phone. This way, it can be placed for example on the roof of a car or a boat. The antenna can be attached to a backbag strap, as well.

APPENDIXES

CARE AND MAINTENANCE

- Dust and dirt may damage the moving parts of your phone. Do not use or keep the phone in dusty or dirty surroundings.
- Protect the phone from heat. High temperatures may shorten the life of the electronical devices, melt or warp plastics and damage batteries. Do not use the battery near fire.
- Only allow service personnel authorised by the dealer to service your phone. Do not open the phone or battery by yourself.
- Charge and recharge the battery only with the charger specified in the manual. Use the battery only for the purpose it is intended.
- Rough handling may break the circuitry inside the phone. Do not drop, knock or shake the phone or its battery.
- Keep the phone dry. Although the phone is splash water proof, you should not let it get completely soaked. Liquids contain minerals which could corrode electronic circuits. If the phone gets wet, turn it off and dry the phone and the battery immediately. Put the phone into an

upright position and let it dry. It is recommended that a dealer or service personnel check that the phone functions properly.

- Clean the phone with a soft cloth, dampened slightly with mild soapy water. Do not clean the phone with harsh chemicals, solvents or other corrosive substances.

PROBLEMS YOU CAN SOLVE

If the phone will not turn on

Make sure that,

- the battery is correctly in place
- the battery is not totally empty.
- the battery contacts are clean.

If the SIM card has been blocked

If the PIN code has been entered incorrectly three times in a row, the PIN code will be locked. To unlock the code you must enter the PUK code.

If you fail to enter the correct PUK code within ten attempts, your SIM card will be permanently

blocked. In that case the text **Card blocked** will be displayed. Contact your network operator to get a new SIM card.

If you lose your SIM card

Contact your network operator to invalidate the card and get a new one. A lost card can be misused if you have disabled the **Ask PIN code** option.

Even though you find the lost card later, it cannot be used if it has once been invalidated.

If your phone gets lost

Contact your network operator immediately and let them know the IMEI code to prevent the unauthorized use of the phone.

You find the 15-digit IMEI code easily from the type label of the phone. It is recommended to write down the IMEI code and store it in a safe place right after you have bought the phone.

Let the network operator know if the SIM card was in the phone. If the phone has been stolen, notify the police.

If your phone does not function

Make sure that

- your phone is turned on
- you are in the network operator's coverage area
- the malfunction is not caused by the **Call barring** or **Call divert** options
- the SIM card is correctly inserted and it is not damaged or invalidated.

If you cannot read, store or modify information in phone book

The FDN phone book may be in use. You need the PIN2 code for turning it off. For further information about the FDN phone book, please see the chapters *Main menu*, *Settings*, *Security*, *Fixed Dialing* and *GSM menu*, *Phone book*.

Wrong language

If the language of the phone has changed for some reason, pressing  for five seconds will change the language to English.

At the same time the settings will be reset to the factory ones. Use of this key does not affect the contents of the phone book entries.

"Searching for network"

The message **Searching for network** is displayed when you are outside the network operator's coverage area. You are in a "shadow area" where signal strength is too weak for radio communication.

In any unclear situation, you are always welcome to contact your dealer, an authorized Benefon service centre or the network operator.

"Poor GPS coverage"

The text **Poor GPS coverage** is displayed when the GPS receiver is active and unable to determine your current position within a few minutes. This happens when not enough satellites are visible.

Make sure that the GPS antenna is pointing up and that it has an unobstructed view of the sky. The GPS receiver does not work indoors.

VOCABULARY OF GSM TERMS

SIM card

The SIM card supplied by your network operator contains all subscriber-related information, for example, your international mobile subscriber identity (IMSI) number. The SIM card memory can store phone numbers and names.

If your SIM card gets lost or misplaced contact your network operator immediately.

A phone without a SIM card can be used to make only emergency calls, although many other features such as GPS navigation will work normally.

PIN code

Your SIM card is protected by a PIN (Personal Identification Number) code of 4 to 8 digits. Using this code prevents unauthorized use of your phone and SIM card. Your PIN code is normally supplied with the SIM card.

Your phone prompts you to enter your PIN code when you turn on the phone. You can disable the **Ask PIN code** option from the menu, but it is rec-

ommended you keep the request on. You can change the PIN code in the menu.

If the correct PIN code is not entered after three attempts the SIM card will be disabled. You then must use your PUK code to enable the PIN code and the SIM card.

PIN2 code

You need a PIN2 code for setting and resetting certain SIM functions, e.g. charge counters and limits.

The PIN2 code (4 to 8 digits) is supplied by your network operator.

PUK code

The PUK code is used to open the disabled SIM card. The 8-digit PUK code is normally supplied with the SIM card.

The SIM card will be permanently disabled after entering wrong PUK code ten times. After that only emergency calls can be made. Contact your network operator for a new SIM card.

PUK2 code

The PUK2 code is used to open the disabled PIN2 code. The 8-digit PUK2 code is supplied with the PIN2 code.

In case your PUK2 code gets lost, contact your network operator.

Phone code

The phone code (4 - 8 digits) is used to prevent the unauthorized use of the phone. When the phone code request is set on in the menu the phone prompts you to enter the phone code when you turn the phone on. If you wish, you can also turn the phone code request off as well as change the phone code in the menu.

The phone code is a security code, which is associated with the phone itself, not with the SIM card.

The code is given by the manufacturer and provided in the sales package of the phone. Keep the code in the safe place, separate from the phone.

Network code

You need a network code for certain network services, e.g. call barring. The network code (4 digits) is supplied by your network operator.

You can set **Call barring** options and change the network code from the menu.

IMEI code

An IMEI (International Mobile Equipment Identity) code is used to identify the mobile phone. You will find your 15-digit IMEI code easily from the type label of the phone.

It is also recommended that you write down your IMEI code and store it in a safe place. This will help prevent unauthorized use of the phone if it gets lost or stolen.

Network operator

An organization which maintains a mobile network providing telecommunication connections and services.

Service provider

The service provider is an organization which provides telecommunication services to the users. The service provider can also be a network operator.

In this manual the term ‘network operator’ indicates both the network operator and the service provider.

VOCABULARY OF GPS TERMS

Waypoint

A waypoint is a location or spot that consists of a label, a symbol for showing it on the map, and a pair of coordinates (e.g. latitude and longitude). Waypoints are used for navigation purposes, i.e. to mark spots and use them as destinations, or to combine several waypoints to a route.

For further information about waypoints, please see the chapter *GPS menu, Waypoints*.

Route

A route is a combination of two or more waypoints, combined to define a course of travel. Routes are used for navigation purposes as destinations.

For further information about routes, please see the chapter *GPS menu, Routes*.

Friend Find

The Friend Find features are based on sharing position information via the short message service (SMS). Friend Find makes functions such as accurate locating or tracking a friend possible.

For further information about Friend Find, position updates and tracking, please see the chapter *GPS menu, Friend Find*.

Friend point

The position information of another Benefon Esc! user. It can be used for navigation as a waypoint, but can be updated by using the Friend Find features.

Destination

Benefon Esc! can give you navigational guidance to a point or along a route. That point or route is called destination.

The terms "next destination" and "last destination" refer to the next waypoint and last waypoint on a route used as destination, respectively.

Track

Compass direction of movement, in degrees.

Bearing

Compass direction to destination, in degrees.

Estimated Time Enroute (ETE)

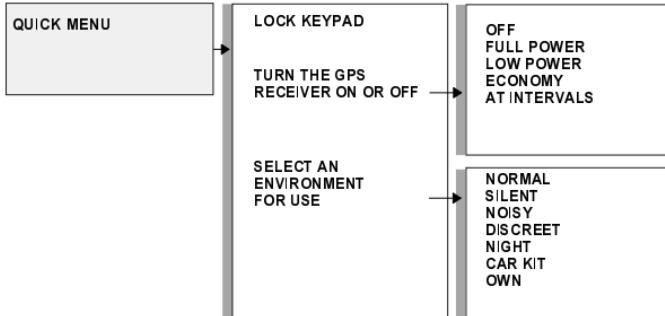
Approximate time needed to travel to the destination, calculated using average speed and distance to the destination.

Estimated Time of Arrival (ETA)

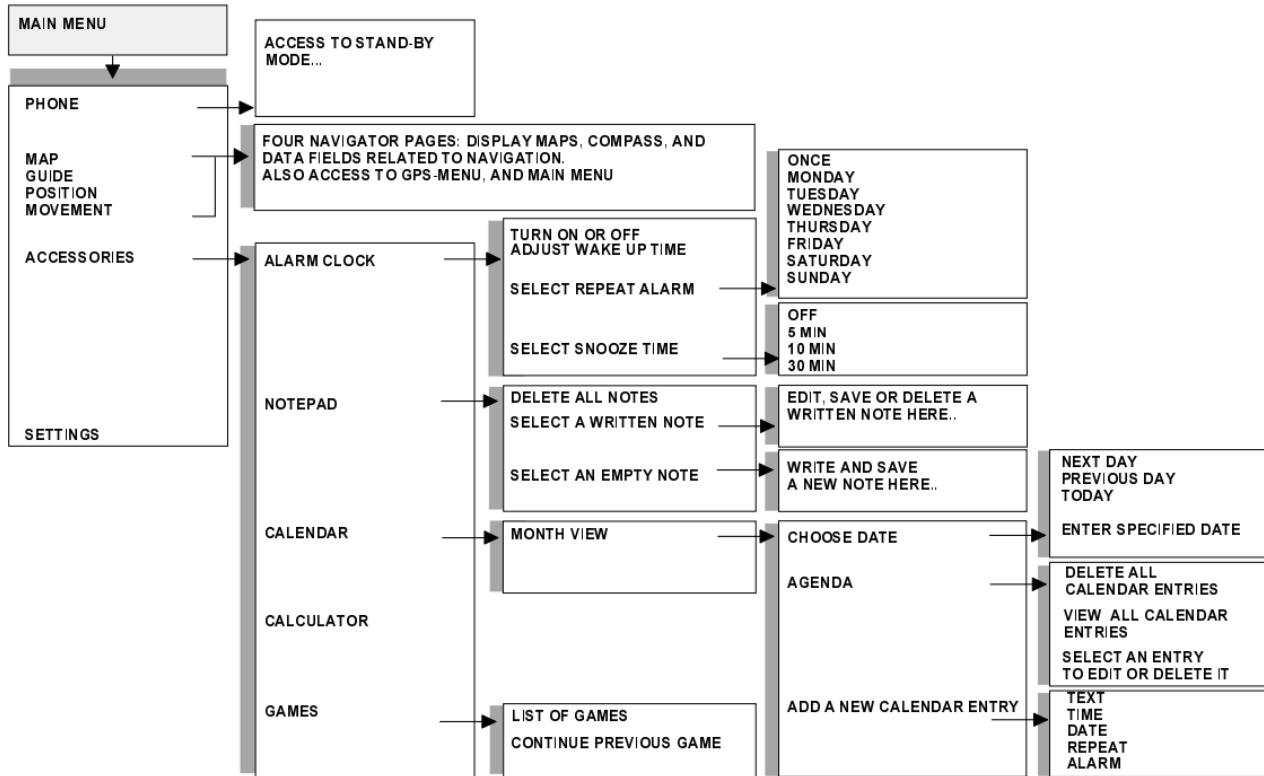
Approximate time of arrival at the destination, calculated using average speed and distance to the destination.

MENU CHARTS

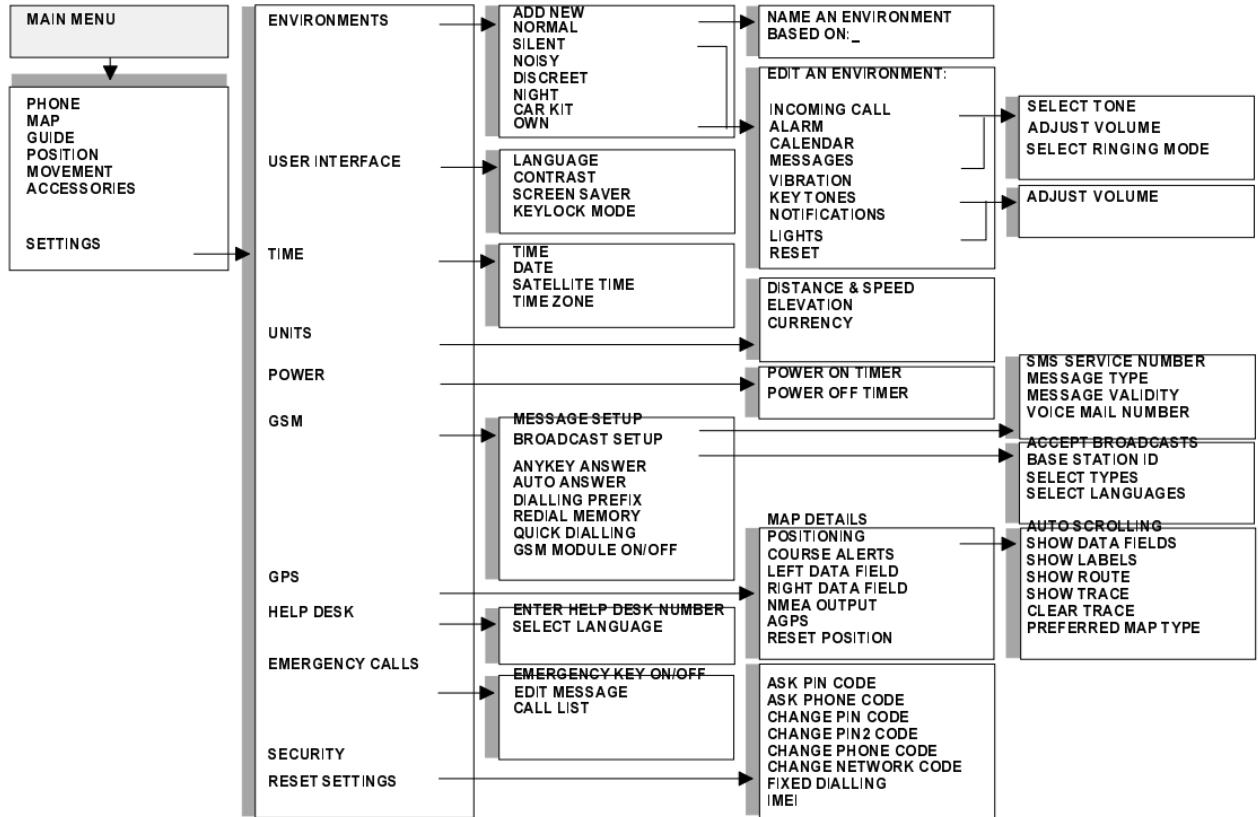
QUICK MENU



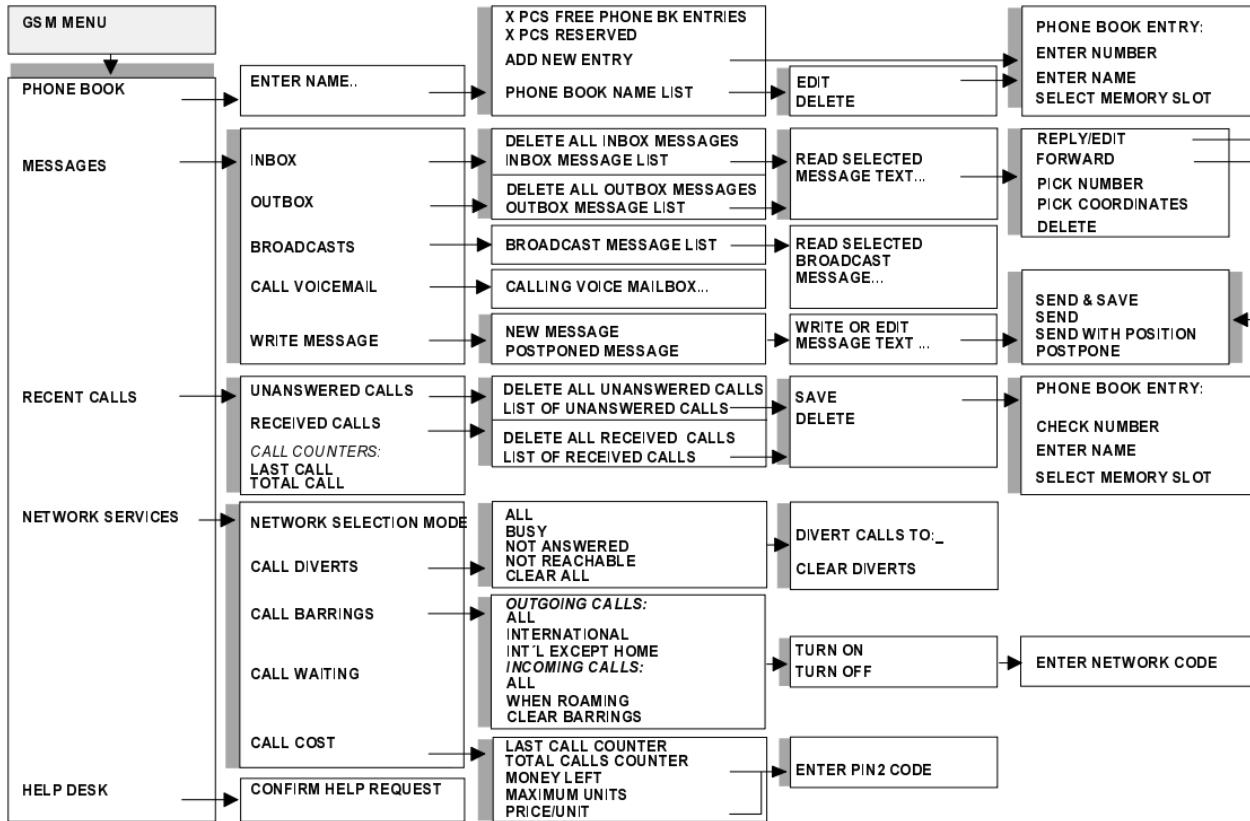
MAIN MENU



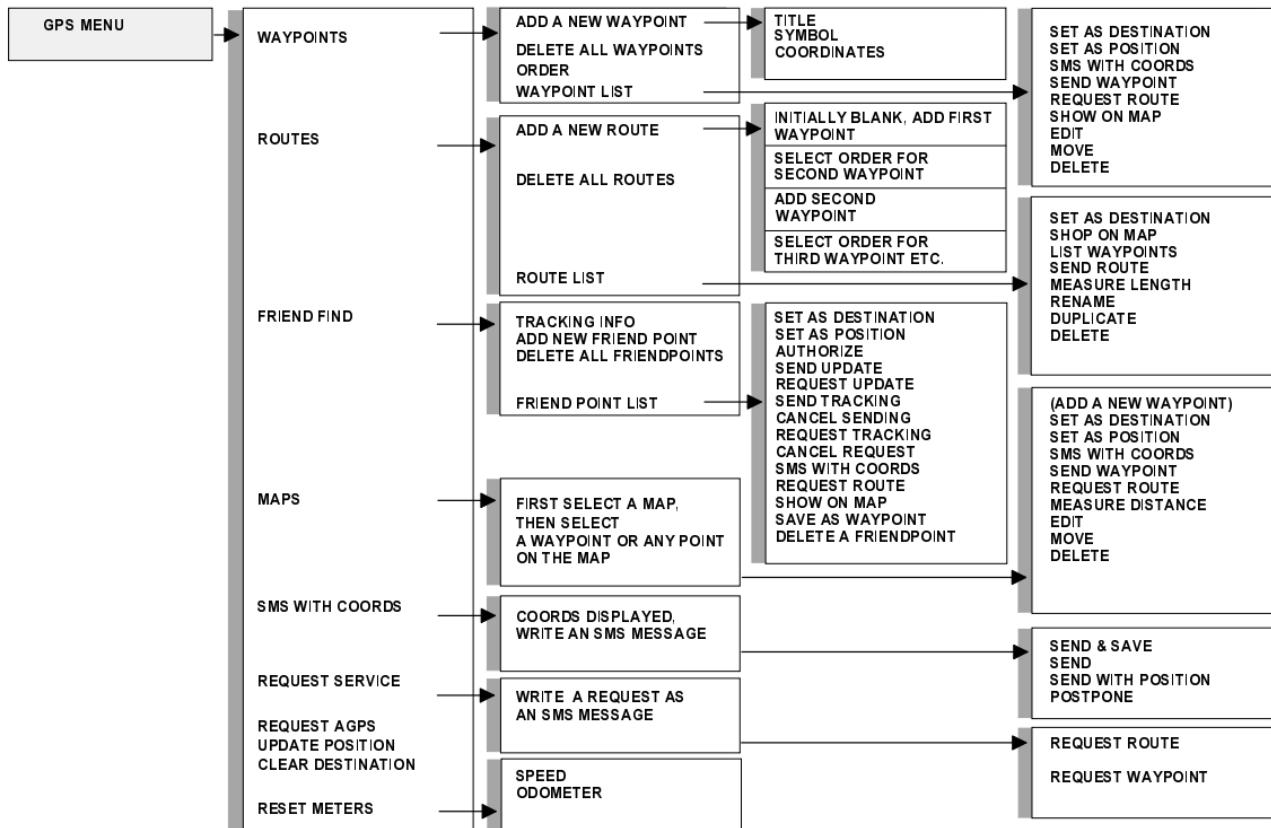
SETTINGS



GSM



GPS



CYRILLIC CHARACTER SET

This guide includes some additional information and specifications applying to the Benefon Esc! phone model sold in some market areas of Eastern Europe.

GENERAL INFORMATION

With this phone model you can use cyrillic characters. The cyrillic character set is available in the normal text input mode, i.e. the spelling mode.

When writing text with **the T9 text input mode**, the character set is determined according to the chosen T9 language.

Also note that the maximum amount of characters in one message is limited to 160.

If you write a long message mainly with *cyrillic* characters, the message will be sent in several packages (i.e. the charge of this message might be increased).

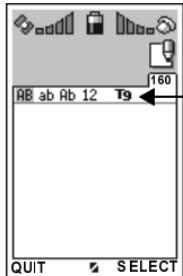
Cyrillic and latin characters can be mixed in one word or message.

Cyrillic characters can be used with these functions, whenever alpha keys are normally available:

- Short messages
- Phone book
- Calendar
- Environments.

SELECTING CYRILLIC CHARACTERS

1. First turn the T9 mode off by pressing .



When the **T9** is turned on,
T9 is visible.

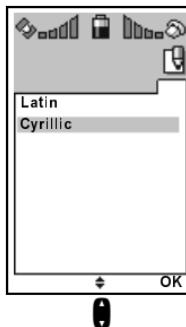
When the **T9** is turned off,
T9 is invisible.

2. Enter the character set menu by pressing  for a few seconds.



Press and hold for 1-2 sec.

3. Highlight the desired character set with  and press  OK.



4. The character set has been changed.

- **Direct access to numbers:** Press  until 12 is displayed.
- **Always key in number 1 as follows:** Press  until the character form is switched to 12. Press .
- **Always key in number 0 as follows:** Make sure, the **T9** is turned off. Press .
- **Direct access to special characters:** Press  for a few seconds. Scroll through the selection with  and press the corresponding key when the desired character is displayed.

For further information, please see the chapter *Quick start, Overview, Keypad* in the *Benefon Esc! Owner's Manual*.

CYRILLIC CHARACTERS

1 Tg											
2 ABC	А а	Б б	В в	Г г	Г г		2	A a	B b	C c	
3 DEF	Д д	Е е	Ё ё	Ж ж	З з	Є є	3	D d	E e	F f	
4 GHI	И и	Й й	К к	Л л	I i	Ї ї	4	G g	H h	I i	
5 JKL	М м	Н н	О о	П п			5	J j	K k	L l	
6 MNO	Р р	С с	Т т	Ү ү			6	M m	N n	O o	
7 PQRS	Ф ф	Х х	Ц ц	Ч ч			7	P p	Q q	R r	S s
8 TUV	Ш ш	Щ щ	ТЬ ъ	Ы ы			8	T t	U u	V v	
9 WXYZ	Ь ъ	Э э	Ю ю	Я я			9	W w	X x	Y y	Z z
0 +	0										