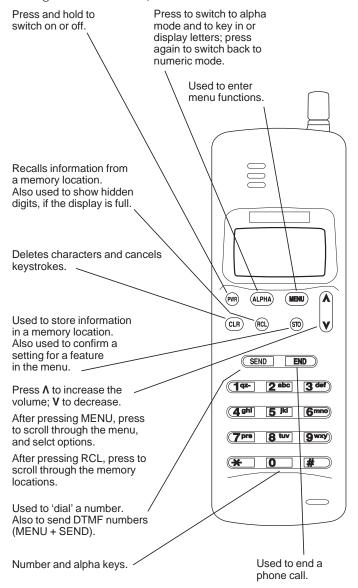
OWNER'S MANUAL

# NOKIA 101



#### **DESCRIPTION OF KEYS**

(More detailed information on each key is given throughout the manual.)



Issue No. 2 9350128 en-sp

#### **IMPORTANT SAFETY INFORMATION**

# **Traffic Safety**

Do not use a hand-held telephone while driving a vehicle. If using a hand-held phone park the vehicle before conversing.

Always secure the phone in its holder; do not place the phone on the passenger seat or where it can break loose in a collision or sudden stop.

The use of the alert device to operate a vehicle's lights or horn on public roads is not permitted.

Remember, road safety always comes first!

# **Operating Environment**

Remember to follow any special regulations in force in any area and always switch off your phone whenever it is forbidden to use it, or when it may cause interference or danger.

Operation of any radio transmitting equipment, including cellular phones, may interfere with the functionality of inadequately protected medical devices. Consult a physician or the manufacturer of the medical device if you have any questions. Other electronic equipment may also be subject to interference.

As with other mobile radio transmitting equipment, users are advised that for the satisfactory operation of the equipment and for the safety of personnel, it is recommended that the equipment should only be used in the normal operating position.

Users are advised to switch off the phone when at a refuelling point. Users are reminded of the need to observe restrictions on the use of radio equipment in fuel depots, chemical plants or where blasting operations are in progress.

Do not store or carry flammable liquids, gases or explosive materials in the same compartment as the phone, its parts or accessories.

Only authorized personnel should install or service the phone in a vehicle. Faulty installation or service may be dangerous and may invalidate the warranty. Electronic fuel injection systems, electronic anti-skid braking systems, electronic cruise control systems and other electronic systems can malfunction due to the lack of protection from radio signals. Check regularly that all cellular phone equipment in your vehicle is mounted and operating properly.

Switch off your cellular phone when in an aircraft. The use of cellular telephones in an aircraft may be dangerous to the operation of the aircraft, disrupt the cellular network and is illegal.

Failure to observe these instructions may lead to suspension or denial of cellular telephone services to the offender, or legal action or both.

# Emergency Calls IMPORTANT!

This phone, like any cellular phone, operates using radio signals, cellular and landline networks, and user-programmed functions which cannot guarantee connection in all conditions. Therefore you should never rely solely upon any cellular phone for essential communications (e.g. medical emergencies).

Locking the phone or restricting calls do not prevent making emergency calls with the phone. If the ALPHA indicator is shown on the display, you must clear it by pressing the **ALPHA** key. If there are any characters on the display, clear them with the **CLR** key. Otherwise simply key in 911 (or other official, programmed emergency number) and press the **SEND** key.

Emergency calls may not be possible on all cellular phone networks or when certain network services are in use. Check with local cellular service providers.

Note that in uneven terrain or close to large buildings the operating range of the base stations can be limited affecting the connection. When making an emergency call, remember to give the location of the emergency, as accurately as possible. Remember that your cellular phone may be the only means of communication at the scene of an accident – do not cut off the call until given permission to do so.

# **FUSE REPLACEMENT**

The cigarette lighter charger (LCH-2) contains a protective fuse. The fuse is located in the charger tip. If the charger does not work, the fuse may be blown. If blown, replace it with a 3.0 amp, 125 volt fuse. Never use a fuse with a higher rating.

# Regulations

# **FCC/Industry Canada Notice**

Your phone may cause TV or radio interference (e.g. when using telephone in close proximity of receiving equipment). The FCC/Industry Canada can require you to stop using your telephone if such interference cannot be eliminated. If you require assistance, contact your local dealer.

This device complies with part 15 of the FCC rules. Operation is subject to the condition that this device does not cause harmful interference.

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#### **GETTING STARTED**

Your phone is powered by a rechargeable battery.



TO ACHIEVE FULL BATTERY CAPACITY, NEW BATTERIES MUST BE CHARGED WITH THE PHONE OFF FOR AT LEAST 24 HOURS BEFORE INITIAL USE.

If left unused, a fully charged battery will discharge itself in about a month. Store batteries uncharged in a cool, dark, and dry place.

The battery pack is a sealed unit with no serviceable parts inside. Do not attempt to open the case.

WARNING: Use only Nokia-approved batteries, antennae and chargers. The use of any other types will invalidate any approval or warranty applying to the telephone, and may be dangerous.

#### **INSTALLING AND REMOVING THE BATERY**

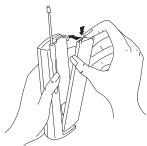
#### To Install the Battery:

- 1) Insert the bottom of the battery into the base of the phone.
- **2)** Fasten it to the phone by pressing slightly downwards on the battery and in at the top until the locking catch snaps into place.
- **3)** Make sure the battery is properly installed.

# To Remove the Battery:

Remember to switch the power off before removing the battery.

1) Depress the locking catch at the top of the battery and gently pull it away from the phone.



#### THE BATTERY CHARGE INDICATOR

The bars on the right hand side of the display screen indicate the battery charge level. The more bars, the higher the battery charge. When the battery charge falls to less than



10%, the phone displays a warning message: **BATTERY LOW**, and an audible "beep" will be heard.

It will be repeated every 5 minutes if the phone is in standby mode and every minute if the phone is in use.

When the battery is fully discharged, the message **RECHARGE** 

**BATTERY** is displayed and you will hear three short "beeps". The message will remain on the display for 10 seconds before the



display for 10 seconds before the phone switches itself off.

#### CHARGING AND RECHARGING THE BATTERY

- 1) Plug the AC charger into a standard 110V AC outlet.
- 2) Connect the lead from the charger to the bottom of the phone. (A short "beep" will sound to indicate charging is in progress.)
- **3)** When the phone is switched on, the battery charge indicator will scroll the bars on the right hand side of the display screen. When the battery is fully charged, the scrolling will stop and all the bars are displayed.

Detailed information on a variety of available Battery Chargers is included in the 'Accessories Section'.



A new battery must be fully charged before being used for the first time.

You can use the phone during recharging, but the charging process will be interrupted for the duration of the call.

Batteries last longer and perform better if allowed to discharge fully at least once a week. You can do this by leaving the phone switched on overnight, or until the message **RECHARGE BATTERY** is displayed and the phone shuts itself off.

NOTE: If the battery is too hot or cold, charging will be interrupted until the battery reaches a normal temperature.

#### **DISPLAY INDICATORS**

#### AB

Shows which network is in use

A - A system only B - B system only AB - both systems

AB

Blank - home area only

#### **ALPHA**

Shows that the phone is in ALPHA mode and letters can be keyed in or displayed.

#### MENU

Shows that the MENU key has been pressed.



Shows battery charge.

#### IN USE

Shows that a call is in progress.



Shows cellular signal strength.

#### ON

Shows that the phone is switched on.

#### ROAM

Appears when the phone is outside its home service area.

#### 88

ALPHA MENU 88

ON ROAM IN USE NO SVC

Indicates which menu function is on display; or which memory location is currently being used.

#### NO SVC

Shows that the phone is outside cellular service area.



# **QUICK REFERENCE GUIDE**

Switch on/off Press and hold **PWR**.

Place call Key in area code and number, press

SEND.

End call Press **END**.

Answer call Press **SEND**.

Clear digit Press **CLR**.

Clear display Press and hold **CLR**.

Last number redial Press **SEND**. Adjust volume Press  $\mathbf{V}$  or  $\mathbf{\Lambda}$ .

# - The Memory -

Store a phone

number

Key in area code, number (and name). Press **STO**. Press **STO** again.

The number is stored in the first empty

memory location.

Speed Dialing Key in the number of the memory

location. Press **SEND**.

Scan through

memory.

Press RCL,  $\Lambda$ ,  $\Lambda$ ,  $\Lambda$  ...

Scan for a name Press **ALPHA**.

Press **RCL**, **\Lambda**, \Lambda, \Lambda \...

# -The Menu —

Enter menu Press **MENU**.

Scroll Press  $\Lambda$ ,  $\Lambda$ ,  $\Lambda$  ...

Select function Press **STO**.

Set status Press  $\Lambda$ ,  $\Lambda$ ,  $\Lambda$  ... Confirm with **STO**.

Shortcut facility Press **MENU**. Press the number of the

function.

# ——— List of Menu Functions ————

Menu Function/Description LOCK PHONE lock phone, unlock phone	Shortcut MENU+0
SYSTEM SELECT (system feature) select roaming option	MENU+1
RECALL LAST recall last number	MENU+2
CALL TIMERS displays length of calls; reset timers	MENU+3
LIGHTS ON OFF set lights off; or off after 15 sec	MENU+4
KEYPAD TONES switch keypad tones on/off	MENU+5
RINGING VOLUME select volume of ringing tone	MENU+6
NAM SELECT view and select cellular number, network	MENU+7
SEND DTMF send DTMF tones (during a call)	MENU+8
KEYGUARD lock/unlock the keypad	MENU *

# **OPERATION OF THE PHONE**

# SWITCHING ON (OR OFF)

Extend the antenna fully.

As with any other radio transmitting device, avoid prolonged contact with the antenna when the phone is switched on.

1) Press the **PWR** key and hold it for at least 2 seconds.

The phone will carry out a short self-test sequence, then briefly display its programmed name or number.

**2)** When the **ON** indicator appears on the display, the phone is ready for use.

If **NO SVC** appears it likely means that you are outside the cellular service area and the network cannot serve you.

A cellular phone can only send and receive calls when it is switched on.

**3)** Press the **PWR** key and hold it for at least 2 seconds to switch the phone off.

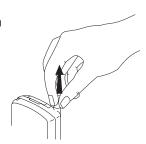
#### **PLACING A CALL**

Fully extend the antenna before sending or receiving a call.

**Note:** Push in the antenna when you are not using the phone.

You can use the phone without extending the antenna in a good coverage area (see 'Signal Strength').

1) Key in the number (include the area code, if you're making a long distance call).



If you make a mistake, press the **CLR** key to delete the last keystroke; or to clear the whole display, press and hold the **CLR** key.

- **2)** The number will appear on the display.
- Press SEND.

- **4)** The **IN USE** indicator will appear, and the number will disappear from the display.
- **5)** Lift the phone to your ear, and wait until your call is answered.
- **6)** When you have finished the call, press **END**.

If the message **NO SERVICE** appears, you are outside the cellular service area.

If the message **LOCKED** appears on the display when you try to make a call, your phone has been electronically **LOCKED** see ('Locking the Phone'). You can still make emergency calls and calls to the number in memory location 48, when the phone is locked.

#### **RECEIVING A CALL**

1) When there is an incoming call, the phone rings and the **CALL** message flashes on the display.

If the ringing tone has been switched off – the **SILENT SERVICE** feature has been selected for privacy or other reasons – the keypad and display lights will flash instead and only one short "beep" will be given. (see 'Setting the Ringing Volume').

- **2)** Press **SEND** and lift the phone to your ear. (For your comfort do not lift the phone to your ear before pressing **SEND**.)
- **3)** When you have finished speaking, press **END**.

If you don't answer the call, the **CALL** message will remain on the display (showing that someone has tried to phone you). Press any key to clear the display.

#### SIGNAL STRENGTH

The quality of your call depends on the strength of the cellular signal in your area. The phone displays current signal strength as a series of bars on the left side of the display screen. The more bars, the better the signal. If the signal is poor, try moving the phone slightly to improve reception. If you are using the phone in a building, it may be necessary to move near a window, or outdoors for better reception.

#### **VOLUME KEYS**

The earpiece volume can be controlled by the volume keys  $\mathbf{V} \mathbf{\Lambda}$ .

Use  $\Lambda$  key to increase and V key to decrease volume level. The volume level is shown on the display. **VOLUME 1** indicates the lowest and **VOLUME 5** the highest volume level. If you try to increase or decrease the volume level over these values, an error "beep" is given. (Note that these keys also act as scroll keys within the recall and menu operations.)

#### LAST NUMBER REDIAL

The last number dialed can be redialed automatically, without re-entering it. (The number can still be retrieved even if the phone has been switched off and back on.)

- 1) With the display clear, press **SEND**.
- **2)** The number you last called will appear on the display and is automatically redialed.

Last number redial can also be used from the menu:

- 1) Press MENU.
- 2) Press V or  $\Lambda$  repeatedly, until **RECALL LAST** appears on the display.
- **3)** Press **STO**. The last number you dialed will appear on the display.
- 4) Press **SEND** to make the call.

#### **SPEED DIALING**

Speed dialing is the quickest way to recall and dial a telephone number.

When you have stored a frequently used phone number in the memory you can use the memory location number or name when dialing the stored number. (See 'Storing Information').

- **1)** Key in the number of the memory location (eg. 0,2) or the name stored there (name uses the **ALPHA** mode).
- **2)** Press **SEND**.

The phone will recall the telephone number or name from memory, display it briefly, and then dial it.

Wait until your call is answered.

# THE MENU FACILITY

The menu allows you to operate or check the setting of certain features. Although the menu method can take longer than the alternative shortcut, it is often easier to remember.

- 1) Press MENU.
- 2) The display will read 'USE TO VIEW'. Use either V or  $\Lambda$  to step forward or backward through the list of functions available. Press



**STO** when the desired function is displayed.

- **3)** Use the V or  $\Lambda$  to change the setting of the function. (The current setting is displayed first).
- **4)** Press **STO** to set the new status (the one which is displayed).
- **5)** Use the **CLR** key to exit the menu function.

Each menu function can also be controlled by a shortcut; the phone displays the shortcut number at the top right corner of the display.

# **MENU SHORTCUTS**

To activate the shortcut function simply press **MENU** followed by the shortcut number, (e.g. **MENU 5** for keypad tones).

The menu functions available are:

Menu Function/Description LOCK PHONE lock phone, unlock phone	Shortcut MENU+0
SYSTEM SELECT (system feature) select roaming option	MENU+1
RECALL LAST recall last number	MENU+2
CALL TIMERS displays length of calls; clear timer	MENU+3
LIGHTS ON OFF set lights off; or off after 15 sec	MENU+4
KEYPAD TONES switch keypad tones on/off	MENU+5
RINGING VOLUME select volume of ringing tone	MENU+6
NAM SELECT view and select cellular number, network	MENU+7
SEND DTMF send DTMF tones (during a call)	MENU+8
KEYGUARD lock/unlock the keypad	MENU *

For further information on menu functions see the 'Additional Features' section.

#### THE MEMORY

Your phone has 48 standard memory locations which allow you to store phone numbers of up to 32 digits or names of up to 16 letters together with phone numbers of up to 32 digits.

Only numbers or letters can be displayed at any one time. To switch between them press **ALPHA**.

In addition, memory location 0 stores the last number dialed and memory location 49 stores your phone's own number.

#### STORING INFORMATION

S

ON

- 1) Key in the area code and phone number.
- 2) Press ALPHA.
- 3) Key in the name (see 'Keying in Names').
- 4) Press STO.
- 5) The display will read 'STORE'.
- **6)** If you want the information stored in the first available memory location shown on the upper right corner of the display, simply press **STO**.

Otherwise, key in a memory location number and press **STO**.

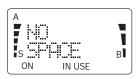
- 7) The message **STORED** will be shown on the display, confirming that the information has been stored in the memory location specified in the upper right corner of the display.
- **8)** Note, if all the memory locations are used, the display will read **'NO SPACE'**.
- **9)** If you try to store information in a memory location that is already used, the phone will display the memory location number and the **REPLACE CONTENT?** message.

If you want to replace the existing information, press **STO** (within 8 seconds).



0 1

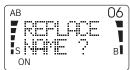
В





If you do not want to delete the existing information, either press **CLR** or wait until the message **STORE NOT DONE** appears on the display. The information you tried to store will then reappear on the display, and you can store it in a different memory location as described above.

**10)** If you attempt to store a name that has previously been stored, the display will read '**REPLACE NAME?**'.



**Note:** You may also begin the memory store procedure in the **ALPHA** mode, followed by the phone number.

#### **KEYING IN NAMES**

- 1) Press **ALPHA**. The **ALPHA** indicator will appear on the display to show that the phone is in the alpha mode. When you press a key, letters will appear instead of numbers.
- **2)** Select the key labeled with the letter you want. Press it once to obtain the first letter, twice (before the **ALPHA** indicator flashes) to obtain the second, and three times (before the **ALPHA** indicator flashes) to obtain the third. If you miss the letter you want, continue pressing until it is displayed again.
- 3) Select further letters in the same way.
- **4)** If you want the same letter twice, either select it as above, wait until the **ALPHA** indicator flashes once and select it again; or select the letter, press \*, then select it again.
- **5)** Note that in **ALPHA** mode the 0 key provides a space, and the 1 key provides a '-' (hyphen).
- **6)** Note that you can enter up to 16 characters (8 per each line of the display). Each "space" and "hyphen" entry is included as part of the maximum 16 characters.
- 7) If you begin your memory store procedure in **ALPHA** mode when you have finished keying in the name, exit **ALPHA** mode by pressing **ALPHA** again. Now you can key in numbers.

#### **EDITING NAMES OR NUMBERS**

If you make a mistake while keying in a name or a number, you can correct it as follows:

- 1) Press **CLR** to delete the last number or digit.
- **2)** Press and hold **CLR** to clear the whole display. Note that this clears both the name and the number entered.

#### **DISPLAYING "HIDDEN" NUMBERS**

The phone can display up to 16 digits. If you key in more than this, the first digits will disappear off the side of the display.

If you want to check these hidden digits, press and hold **RCL** and they will appear on the display. When you release the **RCL** key, the original display will reappear.

Remember to clear the whole display (press and hold **CLR**) after having displayed a long number.

#### **DELETING INFORMATION FROM MEMORY LOCATIONS**

- 1) Press and hold **CLR** to clear display.
- 2) Press STO.
- 3) The display will read **STORE**.
- **4)** Key in the number of the memory location you want to delete.
- 5) The message REPLACE CONTENT? will appear.
- 6) Press STO.
- **7)** The message **STORED** and the memory location number will be displayed briefly, confirming that the memory location has been deleted. (Alpha Characters are also deleted from the memory location).

# **RECALLING INFO. BY MEMORY LOCATION NUMBER**

- 1) Press RCL. The display will read RECALL.
- **2)** Key in the memory location number (eg. 0,2).



**3)** The telephone number stored in that memory location will appear on the display.

If the memory location is empty, the message **EMPTY** will appear.



- **4)** If you want to check the name stored against the number, press **ALPHA**. (If a name was not stored with the number, the display will be blank). Press **ALPHA** again to return to the number display.
- **5)** Call the number by pressing **SEND**. (You can place your call with either the number or the name displayed).

#### **RECALLING INFORMATION BY NAME**

- 1) Press ALPHA.
- **2)** Key in the name you want to recall (see **'Keying in Names'**).
- 3) Press RCL.
- **4)** The name, and the location number of the memory it is stored in, will appear on the display.
- **5)** If you want to check the phone number, press **ALPHA** again.
- **6)** Call the number by pressing **SEND.** (You can place your call with either the name or the number displayed).
- **7)** Note that if you enter a name that does not exist in the memory, the display will read '**NOT FOUND**'.



#### **SCANNING FOR A NUMBER**

1) To scan the entire memory, press **RCL** and **V** to display the contents of the first memory location. Use **V** or  $\Lambda$  to display the next or previous memory location.

If you recall a memory location by number, (eg. RCL,0,2), you can start scanning from that memory location.

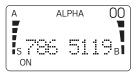
**2)** When you find the number you want, press **SEND** to make the call.

#### **SCANNING FOR A NAME**

- 1) Press ALPHA.
- 2) Press RCL and V or Λ to display the contents of the first memory location, then press V or Λ to display the next or previous, and so on. In alpha mode, the memories are arranged in alphabetical order by the first character.



3) If you want to check the phone number stored against a name, press **ALPHA**. Press it again, then use **V** or Λ to carry on scanning through the names.



**4)** When you find the name you want, make the call by pressing **SEND**.

If you want to 'speed search' names, key in the first letter of the name you are looking for and then press **RCL**. The first name beginning with this letter will appear on the display.



To scan forward press V, to scan backwards press  $\Lambda$  (within 15 seconds).

#### THE SCRATCHPAD MEMORY

In addition to the 48 permanent memory locations, the phone has one short term memory location to temporarily store numbers keyed in during a call. **The scratchpad location is cleared when the phone is switched off.** 

**Note:** You may wish to turn the **'Keypad Tones'** off, (Menu 5), to store numbers during your call.

- **1)** Key in the area code and phone number.
- 2) Press STO ##.
- **3)** The phone will store the number in the scratchpad memory location.

# Any number previously stored in the scratchpad memory will be lost.

- **4)** To recall the number, press **RCL ##**, then to call the number, press **SEND**.
- **5)** To move a number from scratchpad memory to a permanent memory location, recall it, then store it as described in **'Storing Information'**.

#### **DISPLAYING YOUR OWN NUMBER**

Your phone number is stored in memory location 49.

1) Press RCL 49 to display it OR Press MENU, then press V or  $\Lambda$  keys until NAM SELECT appears. Press STO.

Note that if your phone is registered on two cellular networks, the number displayed will be for the network that is currently being used (see section 'Using The Phone on Two Networks').

## **ADDITIONAL FEATURES**

#### LOCKING/UNLOCKING THE PHONE

Your phone has a simple security system. It can be locked by using a four-digit lock code to prevent unauthorized use.

The lock code is supplied by the dealer. If you forget your lock code contact your dealer. The factory default lock code is 1234.

When the phone is locked, only emergency calls (911, \*911) and calls to the number in memory location 48 can be made, but any call can be received. Storing to the memory is also prevented.

1) Press MENU 0. OR Press MENU, then press V or  $\Lambda$  keys until LOCK PHONE appears. Press STO.

S

ON

В

2) The display will read 'LOCKCODE?'.

**3)** Key in your four-digit code. It will appear on the display as a series of stars.

4) Press STO.

If you make a mistake, the phone will display a **CODE ERROR** message – to retry, start again from the beginning.

**5)** If you key in the correct code, **LOCKED** will appear on the display and remain there to remind you that the phone is locked.

Unlocking is carried out in the same way. When the lock is cleared the message **UNLOCKED** will appear briefly on the display.









#### **LENGTH OF YOUR CALLS**

The phone allows you to check the duration of your calls.

- 1) Press MENU 3. OR Press MENU, then press V or Λ keys until CALL TIMERS appears.
  Press STO.
- **2)** The display will show the duration of your last call, in hours, minutes and seconds **(LAST ......)**.
- **3)** Press **V** to display the same information for all the calls you have made for your own number (OWN). The cumulative duration is displayed in hours, minutes and seconds.
- **4)** Press **V** to display the same information for your optional own number (OPT) (see **'Using the Phone on Two Networks'**).







# **RESETTING THE CALL TIMERS**

Using the **RESET TIMERS** option, you can reset the call duration timers to zero.

 Press MENU 3 to activate the call timers menu. OR

Press **MENU**, then press V or  $\Lambda$  keys until **CALL TIMERS** appears. Press **STO**.

2) Use V or  $\Lambda$  to scroll through the list to **RESET TIMERS**.



- 3) Press STO.
- **4)** The display will read **'LOCKCODE?'**. Key in your lock code and press **STO**.
- **5)** The phone will display a **TIMERS CLEARED** message, confirming that the timers have been set to zero.



#### **SETTING THE LIGHTS**

The phone's keypad and display are illuminated to make them easy to read. The backlights come on when you press a key, and go off 15 seconds after your last key press. To turn them on again, simply press another key. Alternatively you can switch them off altogether.

# To adjust the lights:

- 1) Press MENU 4. OR Press MENU, then press V or  $\Lambda$  keys until LIGHTS ON OFF appears. Press STO.
- 2) Use V or  $\Lambda$  to select **LIGHTS ON** (with 15 second timer) or **LIGHTS OFF**. Press **STO**





#### SETTING THE KEY TONES

These tones sound each time you press a key. You can turn the keypad tones on or off.

- 1) Press MENU 5. OR Press MENU, then press V or  $\Lambda$  keys until KEYPAD TONES appears. Press STO.
- 2) Use V or Λ to switch them ON or OFF.
- 3) Press STO.

**Note:** When the key tones are switched off, DTMF tones can still be sent.





#### **SETTING THE RINGING VOLUME**

The ringing tone sounds when there's an incoming call. You can select the volume of the tone or switch it off, (SILENT SERVICE).

- 1) Press MENU 6. OR Press MENU, then press V or  $\Lambda$  keys until RINGING VOLUME appears. Press STO.
- 2) Use V or Λ to select HIGH, LOW or SILENT SERVICE.
- 3) Press STO.







If you select **SILENT SERVICE** the message **SILENT** is displayed after a brief delay. This will remind you that the ringing tone is off. When a call is coming in, a short "beep" will sound and the display and keypad lights will flash. (The **CALL** message will also appear on the display.)

Note: All other tones will also be turned off.

#### **USING THE PHONE ON TWO NETWORKS**

The phone's two number capability feature lets you subscribe to both cellular services in your area or a cellular service in two different cities. This means that your phone can have two numbers, usually one for each network. (**NAM** stands for Number Assignment Module.)

**Note:** You cannot change from one network to the other during a call. (If you are only registered on one network, you cannot access the other.)

# To Change the Network

- 1) Press MENU 7. OR Press MENU, then press V or Λ keys until NAM SELECT appears. Press STO.
- 2) The phone will display the number currently in use. Press **V** or **Λ** to select the other number. Then press **STO**.

#### **DTMF DIALING**

You can transmit numerical information as a series of tones using the DTMF facility (for example to check for messages in your answering machine).

There are two alternative ways to use the DTMF facility.

(I) Make the call in the usual way (see 'Placing a Call').

Key in numbers onto the display. Each number is directly sent as a DTMF tone. The length of the tone depends on how long you press the key.

(II) Or you can also recall a number from a memory location and send it as a DTMF tone.

Make the call in the usual way (see 'Placing a Call').

Recall the DTMF number from the memory (**RCL**, and the memory location number).

Send the DTMF tones – either by pressing **MENU** followed by **SEND** or **MENU 8**.

A series of tones, each representing a number, will be heard.

# Hints for Storing a DTMF Number in the Memory

If you need to place a pause (P - 2.5 seconds) between DTMF digits press **MENU #**.

If you want to add DTMF numbers to a stored phone number place a wait (W) character in front of the DTMF numbers. Press **MENU** ##.

When you recall the information (telephone number and DTMF numbers) from the memory (RCL), press **SEND** to call the number stored before the wait character.

The telephone number disappears from the display. Wait for answer.

Send the last part as DTMF tones by pressing **MENU** followed by **SEND** or **MENU 8**.

Note that when the key tones are turned off the DTMF tones are still sent even though you cannot hear them.

#### **ROAMING**

Each cellular service area can have two cellular service suppliers called carriers. One carrier is called the 'non-wireline' or 'A' system and the other carrier is called the 'wireline' or 'B' system. Your phone is designed to work with either or both carriers.

The system priority feature allows you to program your phone for optimum operation when in your home serving area or when away from your home area. This is called roaming. When you buy your phone, you may register (receive a phone number) with either or both of your local carriers.

Contact the office of your home cellular phone company for information about the roaming agreements they have with other cellular phone companies.

In some areas, roaming telephones are automatically recognized by the cellular system's computer. In other areas, you must contact the cellular phone operator before it can recognize your phone. The company needs to know your telephone number, your phone's ESN (electronic serial number), and how you plan to pay for your calls. There is usually an additional charge for roaming calls.

**Note:** The ESN for your mobile phone is located in the battery compartment of the phone.

# To Select the Roaming Mode:

1) Press **MENU** 1. OR Press **MENU**, then press **V** or  $\Lambda$  keys until **SYSTEM SELECT** appears. Press **STO**.

# 2) The phone will display its current roaming mode

#### **HOME TYPE**

phone uses only home system



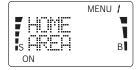
#### NONHOME TYPE

phone uses only non home system



### **HOME AREA**

phone uses only home area and home system



#### **BOTH SYSTEMS**

phone may use either of the systems A or B.



The home system depends on the current NAM selection.

- 3) Press V or  $\Lambda$  to change the mode.
- **4)** Store your choice with **STO**.

For the function of the ROAM indicator on the display (see 'Display Indicators').

The ROAM indicator flashes when you are using a system that is not your home system. The indicator lights steadily if you are outside your home area.

#### **CALL FORWARDING**

Your cellular system may offer a call forwarding service. Contact your cellular service provider for further details.

#### **FLASH FUNCTION**

Your cellular system may offer a flash function service. This system feature lets you accept a second call when you already have a call in process. Contact your cellular service provider for further details.

#### **KEYGUARD**

**Note:** Keyguard function is only available for version THA-6/B and THA-62/B. Please see type label of the phone.

The phone is equipped with a handy keyguard function which, when activated, prevents accidental keypresses for example, when the phone is in your pocket. When the keyguard function is activated, no keybeeps are heard and no keypresses are accepted, except emergency numbers.

To activate the keyguard function:

1) Press **MENU** \*. The **KEYGUARD ACTIVE** message appears on the display.

If activation takes place during a call, the message is shown for a while and the keyguarding begins just after the call is ended.

When the keyguard is active the **KEYGUARD ACTIVE** message is shown. When any key is pressed the **PRESS MENU** \* message is shown.

If you receive a call the phone starts to ring and the blinking **CALL** message is shown. To answer the call, with keyguard activated, press **SEND** (anykey answer is disabled). During a call the keyguard is not active and you can operate the phone in the usual way. If the incoming call is not answered the **CALL** message will remain on the display.

Calls to emergency numbers can be made as usual. After the emergency call, keyguard function becomes active again.

To deactivate the keyguard function:

1) Press **MENU** \*. The **KEYGUARD OFF** message appears and the phone starts to operate in the usual way.

After power-off the keyguard deactivates itself.

#### **ACCESSORIES**

#### **IMPORTANT!**

Use only accessories approved by the phone manufacturer. The use of any other types will invalidate any approval or warranty applying to the phone, and may be dangerous.

When you disconnect the power cord of any accessory, grasp and pull the plug, not the cord.

Your cellular phone will be equipped with one of the following battery chargers. Check with your dealer for availability of the other styles. Charging times given are for approximately 80% capacity.

# **TRAVEL CHARGER (ACH-3U)**

This light and compact AC charger is an economical charging option. Approximate charging time for each of the batteries while using the ACH-3U:

Standard (BTH-2L) 4 hours Extended (BTH-2S) 8 hours Extended (BTH-2HE) 11 hours

To use the travel charger, simply plug it into a standard 110V AC outlet, and connect the lead from the charger to the bottom of the phone.

# **FAST TRAVEL CHARGER (ACH-4U)**

This light and compact fast AC charger is ideal for active users. Approximate charging time for each of the batteries while using the ACH-4U:

Standard (BTH-2L) 30 minutes Extended (BTH-2S) 60 minutes Extended (BTH-2HE) 80 minutes



**To use the travel charger**, simply plug it into a standard 110V AC outlet, and connect the lead from the charger to the bottom of the phone.

The charger can also be used in conjunction with the desktop charging stand (DCH-1U).

# **DESKTOP CHARGING STAND (DCH-1U)**

The desktop charging stand makes recharging easier, and allows you to charge both the phone and a spare battery.

#### To use the charging stand,

1) Connect the AC power supply (ACS-3U) or the AC fast travel charger (ACH-4U) to the stand, then plug it into a standard 110V AC outlet.

**2)** Place the phone in the charging stand.

If a spare battery is also placed in the charging stand,

the battery connected to the phone is always charged first.

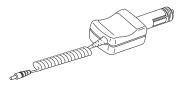
The battery charging times are the same as those for the ACH-4U Fast Travel Charger shown on the previous page.

The charging stand is equipped with a deep discharge switch for the spare battery. Press the switch to start discharging the spare battery. After discharge, the spare battery will automatically begin to charge.

This way you will obtain maximum battery life.

# **CIGARETTE LIGHTER CHARGER (LCH-2)**

You can also charge the battery from your vehicle battery using the LCH-2 rapid cigarette lighter charger. The charger should be connected to the phone in the same way as the travel charger. You can also connect the cigarette lighter charger to the desktop charging stand.



During charging, the phone can still be used.

Note that the input voltage range must be 12 V or 24 V DC, negative grounding.

The battery charging times are the same as those for the ACH-4U Fast Travel Charger shown on the previous page.

#### **CHARGING INDICATORS**

A red indicator on the charger (DCH-1U and LCH-2) and scrolling battery bars on the phone's display show that charging is in progress. When the phone's battery is fully charged, the battery indicator on the display will constantly show all three bars and the indicator on the charger will be green.

If the indicator is green but the bars on the display are scrolling, the charging is temporarily disabled (eg. battery too hot or too cold).

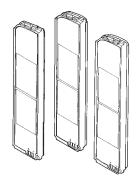
The spare battery in the charging stand is charged when the green indicator is on.

#### **BATTERIES**

- Standard 380 mAh NiCd Battery BTH-2L
- Extended 800 mAh NiCd Battery BTH-2S
- Extended 1100 mAh NiMH Battery BTH-2HE

Do not dispose of the batteries in a fire.

Fully charged (new) batteries will provide exceptional talk time or standby time as follows:



Talk Time	Standby Time
45 min.	11 hrs.
95 min.	22 hrs
130 min.	30 hrs.
	45 min. 95 min.

#### Notes:

- 1. Standby time will be reduced by approximately 1 hour for every 6 minutes of talk time.
- 2. The following conditions will reduce battery performance:
- Temperature extremes.
- Poor charging or discharging practices.
- Improper storage.

- 3. Do not short circuit the battery. Accidental short circuit may happen e.g. if you have a spare battery in the pocket or bag where a metallic object (coin, clip or pen) causes direct connection of the + and terminals of the battery (metal strips on the back of the battery). Short circuiting the terminals may damage the battery or the connecting object.
- 4. Do not attempt to discharge the battery with any other method or system other than those approved by the phone manufacturer.
- 5. NiCd and NiMH battery performance will vary with condition of battery.
- 6. Do not use the charger or battery if either is damaged.
- 7. Recycle all batteries. Many batteries contain Nickel Cadmium (NiCd) and therefore must be recycled. Dispose of a NiCd battery in accordance with local regulations.
- 8. Do not dispose of batteries in a fire!

## **VEHICLE MOUNTING BRACKET (MBH-2)**

Your vehicle can be fitted with a special mounting bracket (MBH-2) to hold the phone in place, while travelling or during charging. Slide the phone in the bracket and tilt it back. The phone locks firmly in place. The phone can be picked up with a simple one hand motion.



# **BATTERY CHARGER ADAPTER (CXH-1)**

The battery charger adapter, CXH-1, will charge your battery without it being attached to the phone. Connect the ACH-3U, ACH-4U, or LCH-2 charger to the adapter. Insert the battery into the charging adapter. The green LED will light and the battery will be charged in less than 12 hours (depending on capacity, temperature, and charger used).

#### **CARRY CASE**

There is a range of carry cases available for added protection.

#### **CARRY STRAP**

The strap allows you to hold the phone safely and securely.

#### **APPENDIX**

#### **DISPLAY MESSAGES**

#### **BATTERY LOW**

Appears when battery charge is down to 10%, then every 5 minutes if the phone is on standby; every minute if it is in use.

#### CALL

When flashing indicates that you are receiving a call. If you do not answer the call, the CALL message will remain on the display. Press any key to clear the display.

#### **CALL IN PROGRESS**

Appears if you try to change from one cellular network to the other, in mid call.

#### **CODE ERROR**

Indicates you have keyed in the wrong lock code.

#### **EMPTY**

Displayed when you try to recall information from an empty memory location.

#### **KEYGUARD ACTIVE**

The keyguard feature is turned on.

#### **KEYGUARD OFF**

The keyguard feature is turned off.

#### LOCKCODE?

Asks you to enter your secret lockcode.

#### **LOCKED**

The phone is locked.

#### NAM ERROR

The NAM module contains erroneous data, contact your dealer.

#### **NO SERVICE**

Appears if you try to make a call when no cellular service is available.

#### **NO SPACE**

Indicates that all memory locations are full.

#### **NOT ALLOWED**

Indicates you have tried to store a number to an illegal location (eg. 49).

#### **CALL ROAMED**

Displayed when you have "roamed" to a non-home system.

#### **PRESS MENU \***

You pressed a key while keyguard was on – press **MENU** \* to unlock the keypad.

#### **NOT FOUND**

Indicates that you tried to recall an invalid memory location. Indicates that the name you are trying to recall does not exist.

#### **RECALL**

Asks you to enter the desired memory location number when wishing to recall information from the memory.

#### **RECHARGE BATTERY**

Appears for 10 seconds before the phone switches itself off and all operation ceases.

#### **REPLACE CONTENT?**

Indicates that the memory location you are trying to store information in, is already used.

#### **REPLACE NAME?**

Indicates that the name you are trying to store is already used.

#### **SILENT**

Indicates that the ringing tone volume is turned off to SILENT SERVICE mode.

#### **STORE**

Asks you to enter the desired memory location number when storing information in the memory.

#### STORE NOT DONE

Indicates that you chose not to store new information in a memory location that was already used.

#### **STORED**

Indicates that storing to memory was successful.

#### **TIMERS CLEARED**

Indicates that call timers have all been set to zero.

#### **UNLOCKED**

The phone has been unlocked.

#### USE < > TO VIEW

Indicates that you have entered the menu. Press V or  $\Lambda$  to scroll the functions.

#### **VOLUME**

Indicates at which volume level the earpiece volume is set.

#### **TONES**

# The Ringing Tone

• - - - - • • - - - - • • - - - - •

The ringing tone sounds when there's an incoming call.

## The Key Tones

• - - •

These sound each time you press a key. You can turn the keypad tones on or off.

#### The Reorder Tone

•--• •--•

This sounds if the network is busy, or terminates a call for any reason.

# **The Low Battery Tone**

• - - - •

Sounds every 5 minutes (or every minute when a call is in progress) to indicate that the battery is low. The message 'BATTERY LOW' is displayed at the same time.

# The Recharge Battery Tone

• - - - • • - - - •

This sounds when the battery is extremely low and will no longer operate the phone. The message 'RECHARGE BATTERY' is displayed at the same time. The phone will shut off within 10 seconds.

#### **CARE AND MAINTENANCE**

Your phone is a product of superior design and craftsmanship and should be treated with care. The suggestions below will help you to fulfill the warranty obligations and to enjoy this product for many years.

Keep the phone and all its parts and accessories out of small children's reach.

Keep the phone dry. Liquids contain minerals that will corrode electronic circuits.

Do not use or store the phone in dusty, dirty areas. Its moving parts can be damaged.

Do not store the phone in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.

Do not attempt to open the phone. Non-expert handling of the phone may damage it.

Do not use any other battery charger to recharge the battery than the type specified in the instructions. Use the battery only for its intended purpose.

Do not drop, knock or shake the phone. Rough handling can break internal circuit boards.

Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the phone. Wipe it with a soft cloth slightly dampened in a mild soap-and-water solution.

If the unit is not working properly, take it to your nearest authorized dealer. The personnel there will assist you, and if necessary, arrange for service.

#### TROUBLESHOOTING

# If the power does not come on or stay on:

Make sure the battery is installed in the phone properly.

Be sure the contacts are clean on the battery and the charging stand.

Battery charge may be too low for operation. Listen for the low battery warning tones.

# If the power comes on, but the phone does not work:

Check the **NO SERVICE** message, you might be out of the cellular service area.

Make sure that the antenna is extended to its full length.

#### **TECHNICAL INFORMATION**

Dimensions 170 x 57 x 22 mm\*

(6.6" x 2.2" x 0.8")

Transmitting Power 0.6 W max. ERP

Operating Voltage 7.2 V (int. battery), 110 V (AC),

12 V (car)

Frequency Band 824.040 - 848.970 MHz (TX)

869.040 - 893.970 MHz (RX)

Standard Battery

Capacity

380 mAh

Number of Channels 832 Memory Locations 50

Memory Capacity Numeric: 32 digits per location

Alpha: 16 digits per location

#### **USA**

NOKIA MOBILE PHONES - 2300 Tall Pines Drive, Suite 120, P.O. Box 2930, Largo, FL. 34649-2930 Tel. (813) 536-5553

#### **CANADA**

NOKIA PRODUCTS LTD.- 575 Westney Rd. South, Ajax, Ontario, L1S 4N7, Tel. (905) 427-6654

#### ASIA/PACIFIC

NOKIA (S.E.A.) Pte. Ltd. - 541 Orchard Road #12-03, Liat Towers, Singapore 0923

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<sup>\*</sup> Maximum thickness 27mm (at earpiece)
Not including antenna.